GRE AUGUST 2024

PROJECT ID: 1130-44-74

COUNTY: OUTAGAMIE

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (Includes Erosion Control Plans)
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 = 452



N

DESIGN DESIGNATION

A.A.D.T.	2023	=	74,000
A.A.D.T.	2045	=	94,900
D.H.V.		=	
D.D.		=	50/50
T.		=	12.9%
DESIGN SPEED		=	75 MPH
ESALS		=	17,000,000

BEGIN CONSTRUCTION
STA 20+00.00'A'
Y: 591163.88
X: 881451.06

CONVENTIONAL SYMBOLS

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

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

APPLETON-GREEN BAY

IH 41 WRIGHTSTOWN SWEF 34/POST - BLDG

IH 41

OUTAGAMIE COUNTY

STATE PROJECT NUMBER
1130-44-74

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1130-44-74	WISC 2024402	1



END CONSTRUCTION
STA 24+43.27'A'
Y: 591343.72
X: 881852.60

WRIGHTSTOWN SWEF #34 & DSP POST

LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), OUTAGAMIE 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 12A.

ORIGINAL PLANS PREPARED BY
KL Engineering
[A] Better Experience

WISCONSIN
JON P. BLOMQUIST
34305-006
MENOMONIE, WI
PROFESSIONAL ENGINEER
9-29-2024

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT/KL ENGINEERING
Designer	KL ENGINEERING
Project Manager	JOHN SPIELMACHER
Regional Examiner	
Regional Supervisor	

APPROVED FOR THE DEPARTMENT
DATE: 4/24/2024 (Signature)

E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\010101_TI.DWG PLOT DATE : 4/24/2024 1:01 PM PLOT BY : KL ENGINEERING PLOT NAME :

STANDARD ABBREVIATIONS

ADJ	ADJUST
AEW	APRON ENDWALL
ASPH	ASPHALT
AUX	AUXILLARY
AVG	AVERAGE
BAD	BASE AGGREGATE DENSE
BLDG	BUILDING
BM	BENCH MARK
C&G	CURB AND GUTTER
CONC	CONCRETE
COOP	COOPERATIVE
CP	CULVERT PIPE
CPRC	CULVERT PIPE REINFORCED CONCRETE
D	DEGREE OF CURVE
EAT	ENERGY ABSORBING TERMINAL
ELECT.	ELECTRIC
E-MAT	EROSION MAT
EXIST	EXISTING
HMA	HOT MIX ASPHALT
INCR.	INCREMENTAL
INV	INVERT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LT	LEFT
M/L	MATCHLINE
MAX	MAXIMUM
MGRS	MIDWEST GUARD RAIL SYSTEM
MIN	MINIMUM
NC	NORMAL CROWN
NOR	NORMAL
OH	OVERHEAD
PAVT	PAVEMENT
PC	POINT OF CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PNT	POINT
PT	POINT OF TANGENT
R	RADIUS OF CURVE
R/L OR RL	REFERENCE LINE
R/W	RIGHT OF WAY
RC	REVERSE CROWN
REQD	REQUIRED
RHF	RIGHT HAND FORWARD
RT	RIGHT
SALV	SALVAGED
SDD	STANDARD DETAIL DRAWINGS
SHLD	SHOULDER
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STA	STATION
SWEF	SAFETY WEIGHT ENFORCEMENT FACILITY
T	TANGENT LENGTH
TYP	TYPICAL
UG	UNDERGROUND
VCL	VERTICAL CURVE LENGTH
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPT	POINT OF VERTICAL TANGENT
Δ	DELTA

UTILITIES

COMMUNICATIONS

LEVEL 3 COMMUNICATIONS LLC (COMMUNICATIONS)
RYAN BIRDSALL
3235 INTERTECH DR.
SUITE 600
BROOKFIELD, WI 53045
(608) 658-2899
Ryan.Birdsall@lumen.com

ELECTRIC

KAUKAUNA UTILITIES (ELECTRIC)
RICH SORENSON
777 ISLAND ST., P.O. BOX 1777
KAUKAUNA, WI, 54130-7077
(920) 462-0260
RSORENSON@KU-WI.ORG

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.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 STRIPTURF:	.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 SLOPETURF:			.25 .32			.27 .34			.28 .36			.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 = 19.6 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 5.2 ACRES

GENERAL NOTES

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

ALL GRADES PROVIDED ALONG RADII ARE ALONG EDGE OF PAVEMENT AT PC, PT AND MIDPOINT.

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

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

AREAS GRADED TO FINAL GRADE SHALL BE SEEDED, MULCHED, AND FERTILIZED AS SPECIFIED IN PLANS WITHIN 5 DAYS AFTER COMPLETION OF GRADING.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS OR WITHIN 40' FROM EDGE OF IH 41 PAVEMENT.

THE EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

5 FOOT WIDE SIDEWALK REQUIRES TRANSVERSE JOINTS SPACED AT 5 FEET AND 6 FOOT WIDE SIDEWALK REQUIRES TRANSVERSE JOINTS SPACED AT 6 FEET, WIDER SIDEWALK AS ENGINEER DIRECTS.

WIRE MESH MAY BE ENCOUNTERED DURING "REMOVING CONCRETE PAVEMENT" AND IS INCLUDED IN PAYMENT OF THAT BID ITEM.

HMA PAVEMENT, WHEN INDICATED ON THE PLANS, SHALL CONSIST OF COURSES AS FOLLOWS UNLESS OTHERWISE NOTED ON THE PLANS.

ROADWAY	TOTAL PAVEMENT THICKNESS	LOWER LAYER THICKNESS & TYPE	UPPER LAYER THICKNESS & TYPE
ACCESS ROAD EMPLOYEE PARKING LOT EAST FRONTAGE RD	4 INCHES	2.25" 3LT 58-28S	1.75" 4LT 58-28S

DETAIL SHEET ORDER

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLAN
PLAN DETAILS
SIDEWALK DETAILS
EROSION CONTROL
STORM SEWER PLAN
UTILITY PLAN
SANITARY SEWER AND WATER PLAN
PLANTING PLAN
PERMANENT SIGNING & MARKING
LIGHTING REMOVAL
LIGHTING PLAN
TRAFFIC CONTROL
ALIGNMENT DIAGRAM
EARTHWORK MATCHLINES
SOIL BORINGS
COMMUNICATION TOWERS
SWEF/POST BUILDING

DNR LIAISON

DEPARTMENT OF NATURAL RESOURCES
MATTHEW SCHAEVE
2984 SHAWANO AVE.
GREEN BAY, WI, 54313
(920) 366-1544
MATTHEW.SCHAEVE@WISDOT.GOV

DESIGN CONTACT

KL ENGINEERING, INC.
JON BLOMQUIST, P.E.
393 RED CEDAR ST., SUITE 2
MENOMONIE, WI, 54751
(715) 231-1600
Jon.Blomquist@KLEngineering.com

WISDOT CONTACT

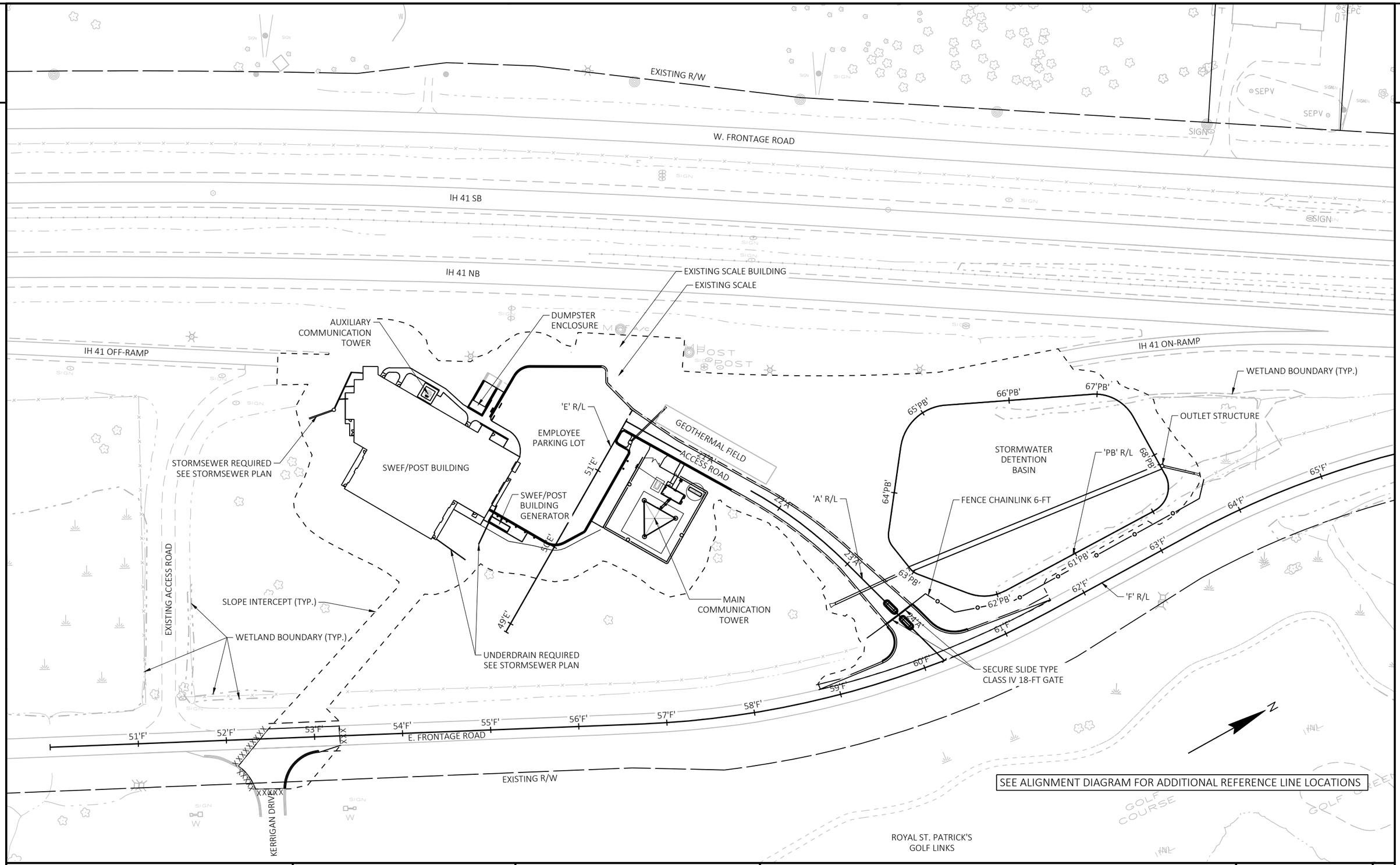
BUREAU OF HIGHWAY MAINTENANCE
JOHN SPIELMACHER, P.E.
944 VANDERPERREN WAY
GREEN BAY, WI, 54304
(920) 492-0134
JOHN.SPIELMACHER@DOT.WI.GOV

GAS CONTACT

WISCONSIN PUBLIC SERVICE CORPORATION (GAS/PETROLEUM)
ADAM VANDERHOUTEN
2850 S ASHLAND AVE
PO BOX 19001
GREEN BAY, WI, 54307-9001
(920) 617-5231
newserviceinstallation@wisconsinpublicservice.com

SEWER/WATER CONTACT

VILLAGE OF WRIGHTSTOWN PUBLIC WORKS (SEWER/WATER)
TRAVIS COENEN
352 HIGH ST.
WRIGHTSTOWN, WI, 54180
(920) 532-0434
TCOENEN@WRIGHTSTOWN.US



PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	SITE OVERVIEW	SHEET 3	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\020201_PO.DWG
LAYOUT NAME - 02

PLOT DATE : 4/25/2024 4:02 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

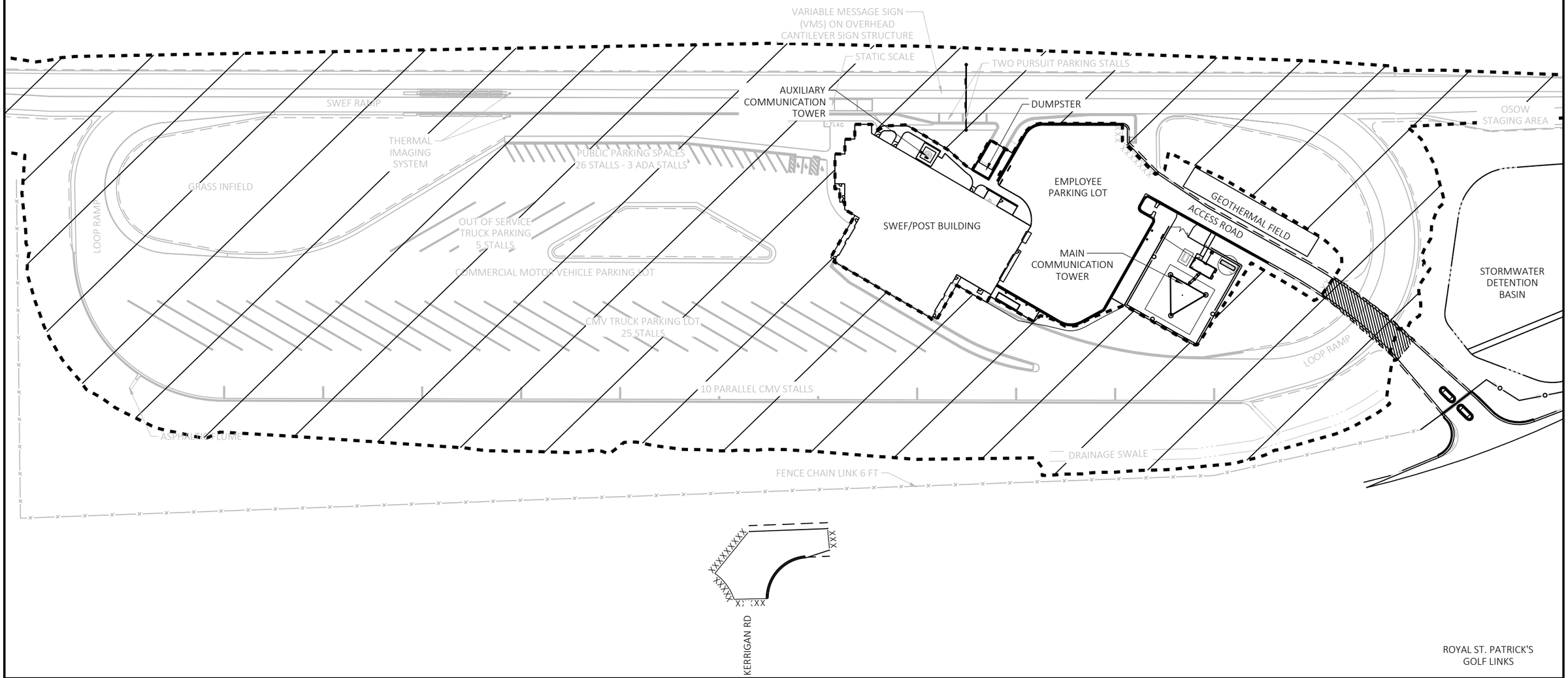
WISDOT/CADDS SHEET 42

2

2

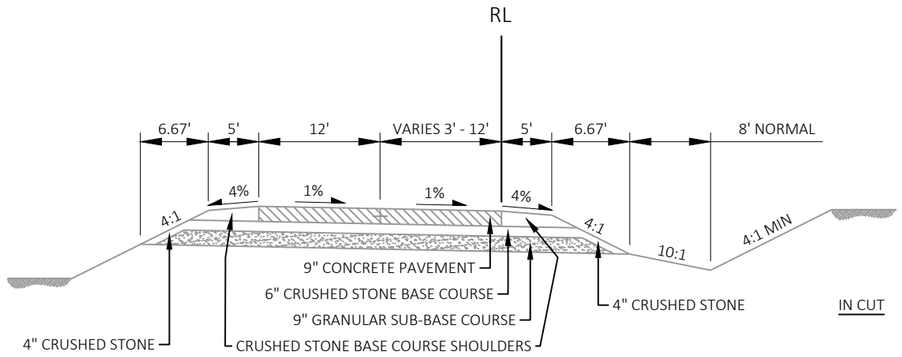
COMPLETED SITE OVERVIEW

- SCREENED OBJECTS ARE TO BE CONSTRUCTED WITH PROJECT ID 1130-44-75 HATCHED AREA IS 1130-44-75 WORK ZONE.
- ACCESS WILL BE ALOWED FOR THE DURATION OF THE PROJECT VIA EITHER THE NEW ACCESS ROAD, OR AS PROVIDED BY THE 1130-44-75 CONTRACT.
- RAMP ACCESS AT THE INITIATION OF THE 1130-44-75 CONTRACT WILL BE ALLOWED ONLY IF ALLOWED BY 1130-44-75 OPERATIONS.



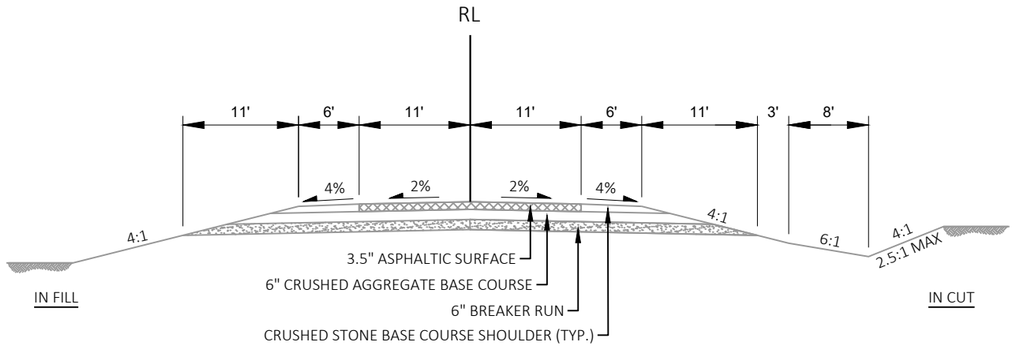
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	OVERVIEW: COORDINATION WITH OTHER CONTRACTS	SHEET 4	E

2



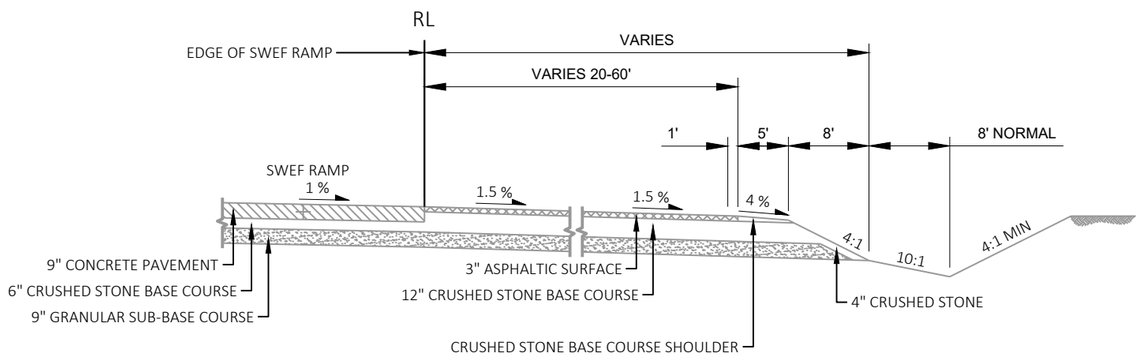
EXISTING TYPICAL SECTION, SWEF RAMP

STA 108+95 'TR' - 111+88, 6.37' RT 'TR'



EXISTING TYPICAL SECTION, EAST FRONTAGE ROAD

STA 58+76.85 'F' - 61+62.93 'F'

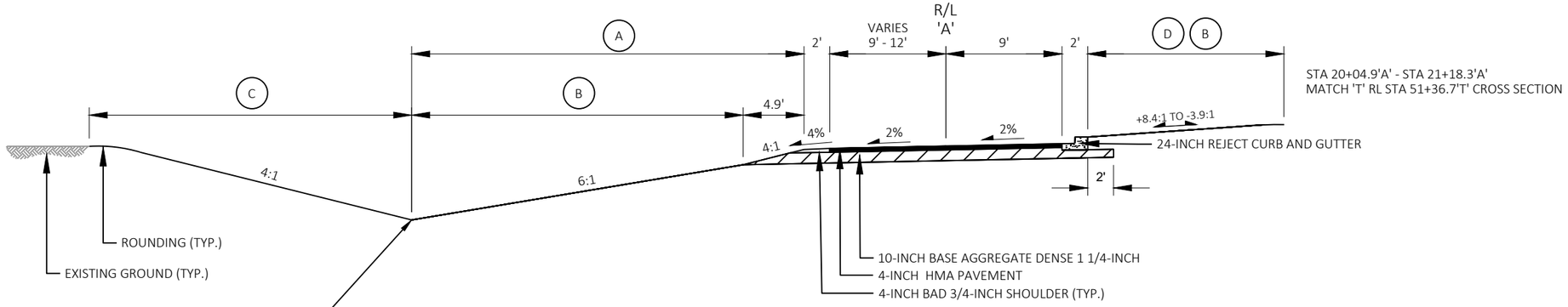


EXISTING TYPICAL SECTION, SWEF PARKING AREA

STA 111+88, 6.37' RT 'TR' - 119+08 'TR'

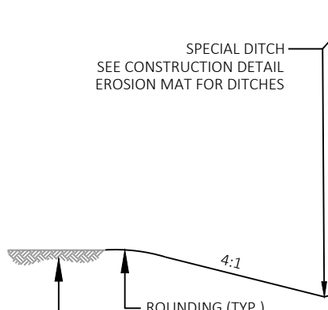
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	EXISTING TYPICAL SECTION	SHEET 5	E

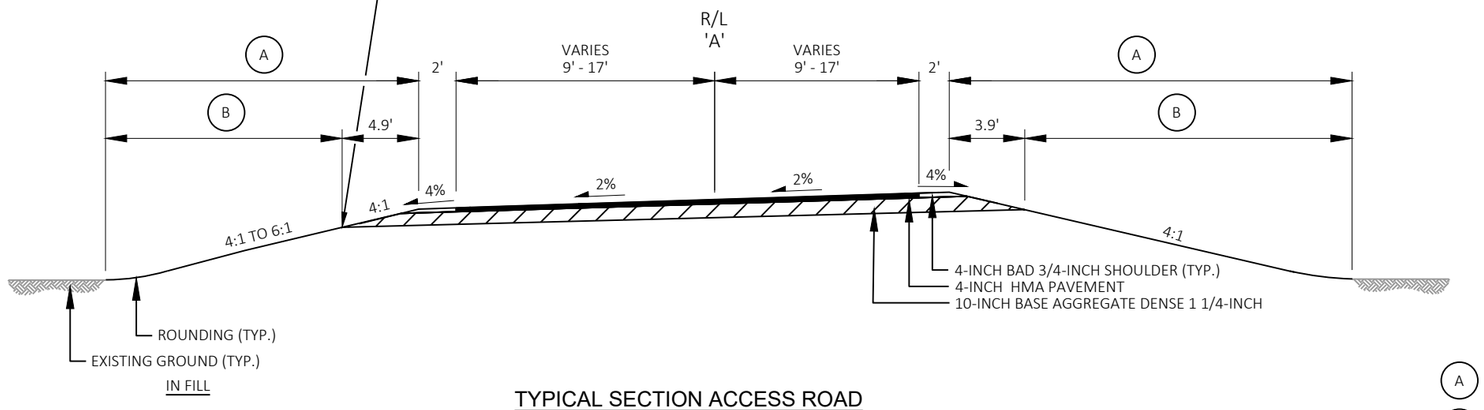
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TYPICAL SECTION ACCESS ROAD

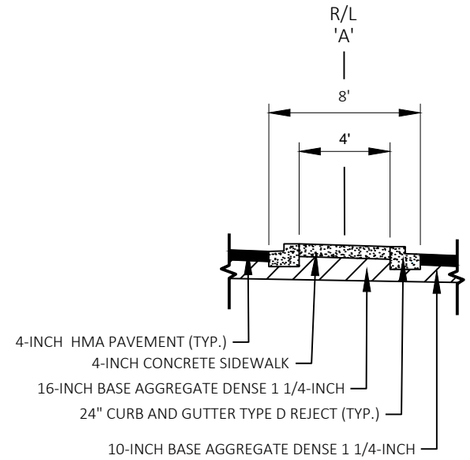
STA 20+04.9'A' - STA 21+42.2'A'





TYPICAL SECTION ACCESS ROAD

STA 21+42.2'A' - STA 24+13.6'A'



MEDIAN ISLAND

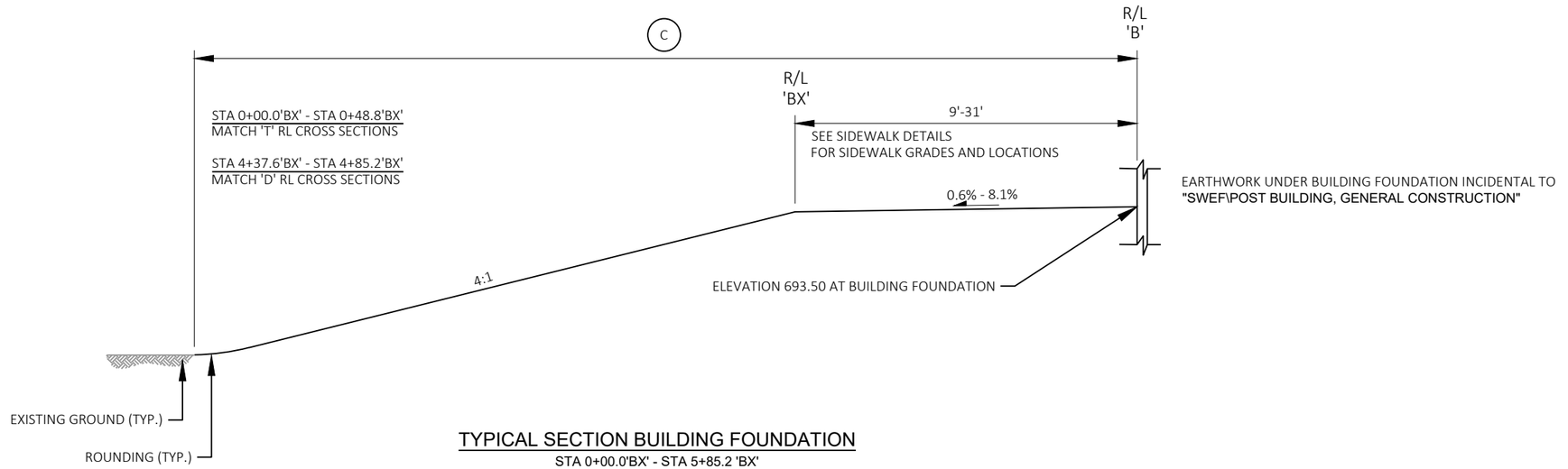
STA 23+59.23 'A' - STA 24+04.62 'A'

LEGEND

- A — SEEDING NO. 30 & FERTILIZER TYPE B
- B — SALVAGED TOPSOIL, EROSION MAT URBAN CLASS I TYPE A OR MULCH
- C — SEEDING TEMPORARY, SOIL STABILIZER TYPE B, MULCH
- D — SEEDING NO. 40, & FERTILIZER TYPE B

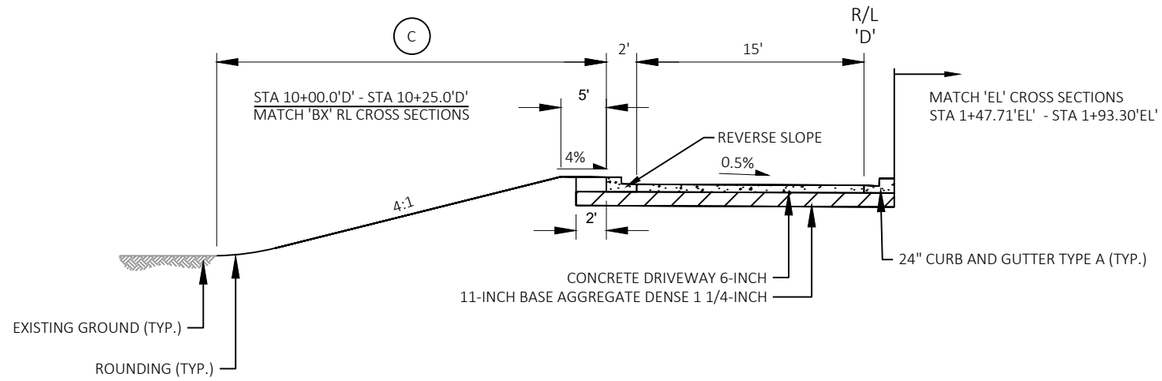
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	TYPICAL SECTIONS	SHEET 6	E

2



TYPICAL SECTION BUILDING FOUNDATION

STA 0+00.0'BX' - STA 5+85.2 'BX'



TYPICAL SECTION DUMPSTER PAD

STA 10+00.0'D' - STA 10+45.0'D'
CONCRETE DRIVEWAY, C&G AND BASE END AT 10+35.0'D'

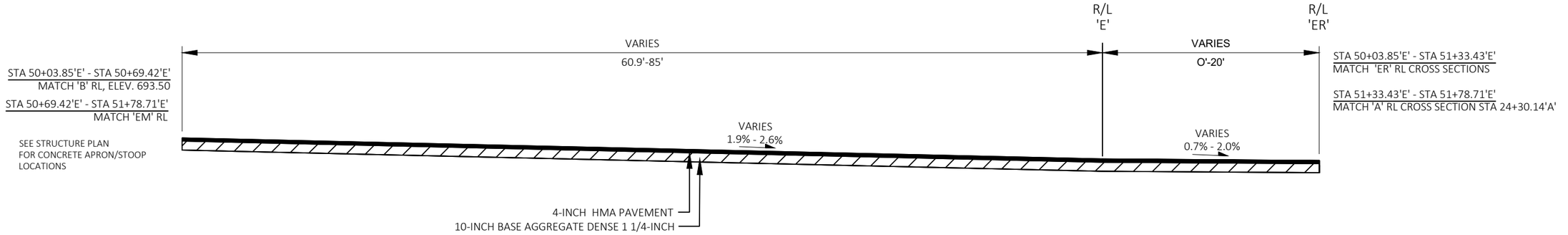
LEGEND

(C) SEEDING TEMPORARY, SOIL STABILIZER TYPE B, MULCH

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	TYPICAL SECTIONS	SHEET 7	E

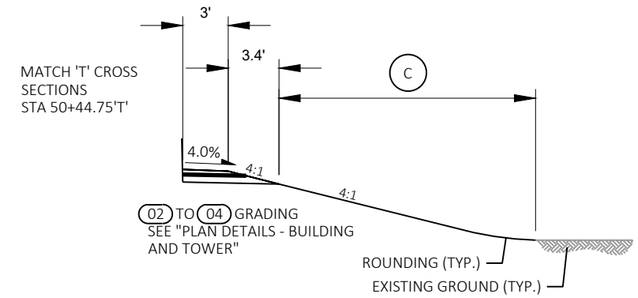
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\020302_TS_PR.DWG
LAYOUT NAME - 02
PLOT DATE : 6/5/2024 8:39 AM
PLOT BY : JON BLOMQUIST
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

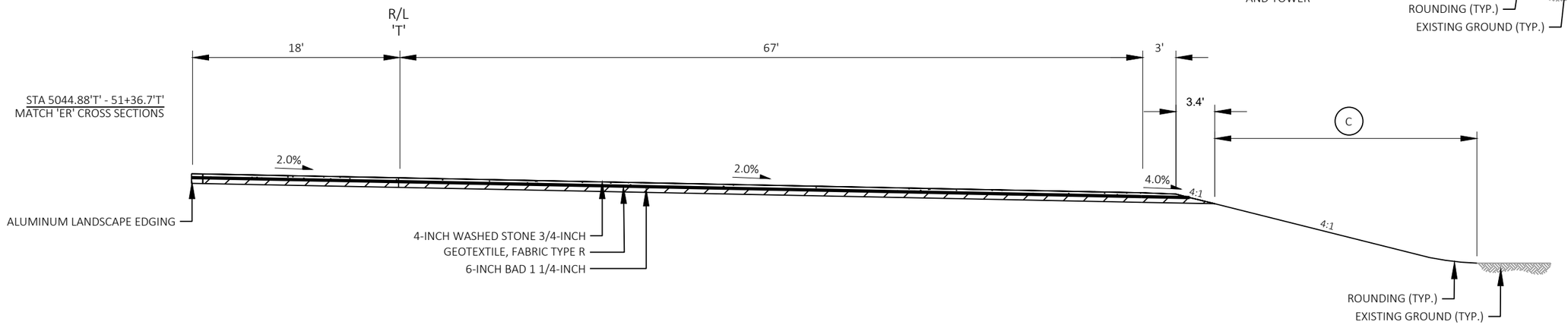
2



TYPICAL SECTION EMPLOYEE PARKING LOT

STA 50+03.8'E' - STA 51+78.7'E'





TYPICAL SECTION TOWER PAD

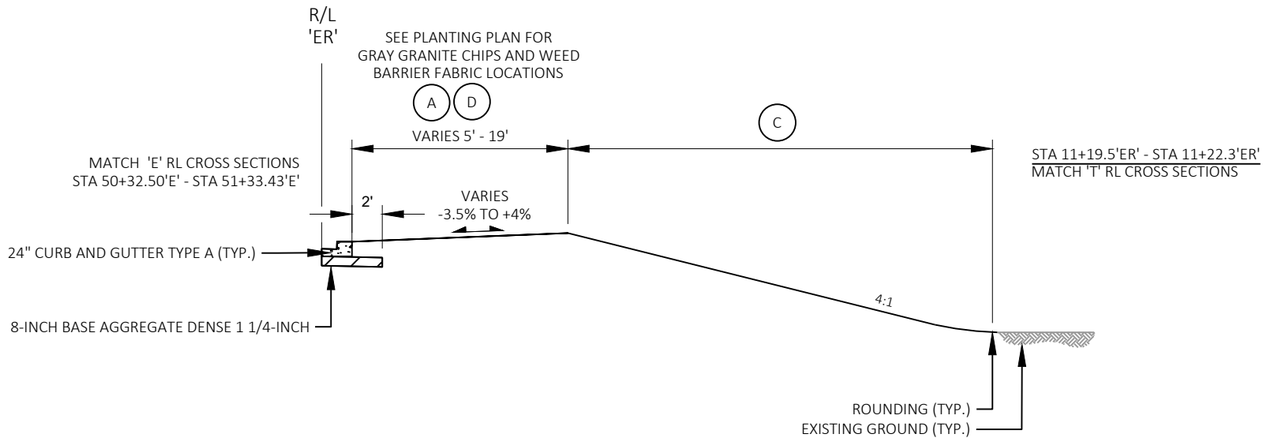
STA 50+39.5'T' - STA 51+36.7'T'

LEGEND

(C) SEEDING TEMPORARY, SOIL STABILIZER TYPE B, MULCH

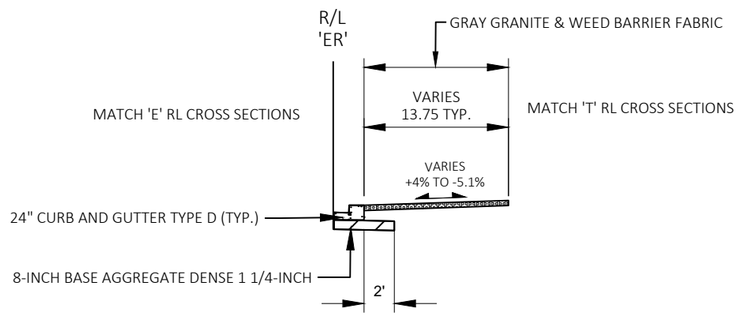
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	TYPICAL SECTIONS	SHEET 8	E

2



TYPICAL SECTION EMPLOYEE PARKING LOT

STA 10+00.00'ER' - STA 11+22.3'ER'



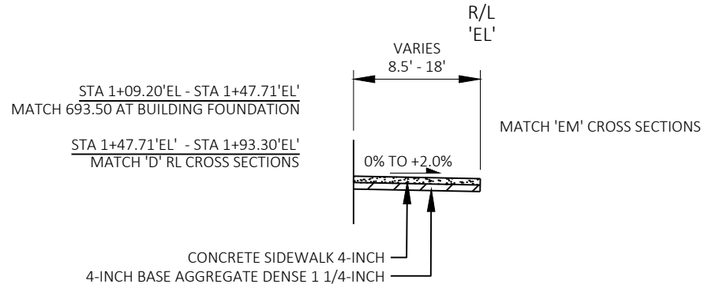
TYPICAL SECTION EMPLOYEE PARKING LOT

STA 11+22.3'ER' - STA 12+30.3'ER'

LEGEND

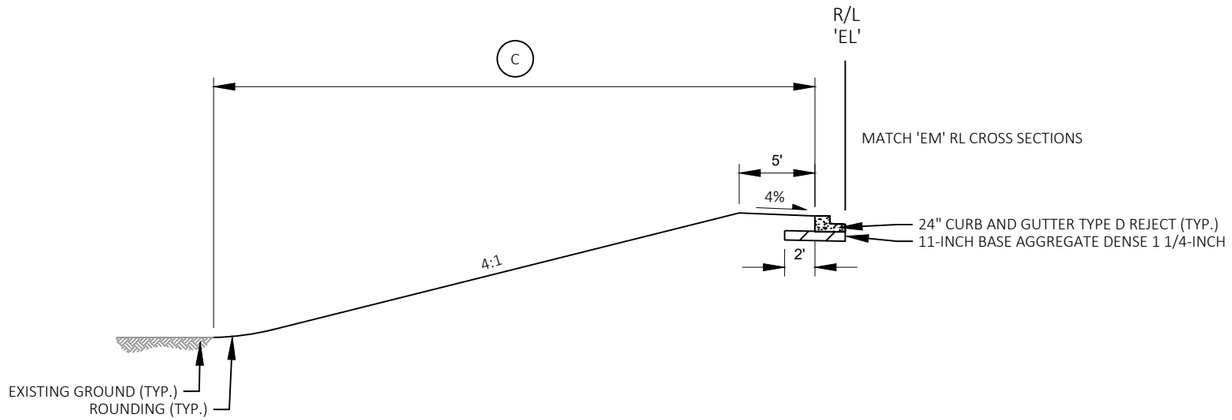
- (A) SALVAGED TOPSOIL, EROSION MAT URBAN OR MULCH
- (C) SEEDING TEMPORARY, SOIL STABILIZER TYPE B, MULCH
- (D) SEEDING NO. 40 & FERTILIZER TYPE B

2



TYPICAL SECTION EMPLOYEE PARKING LOT

STA 1+09.2'EL' - STA 1+93.3'EL'



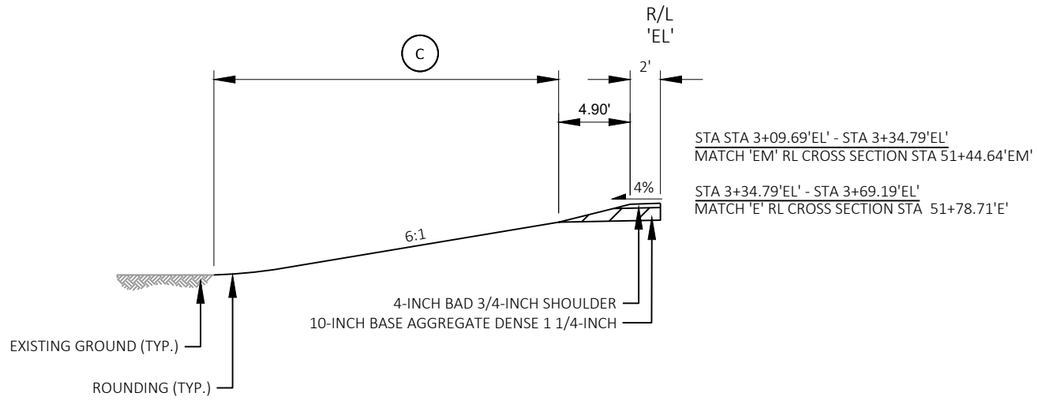
TYPICAL SECTION EMPLOYEE PARKING LOT

STA 1+93.3'EL' - STA 3+05.8'EL'

LEGEND

(C) SEEDING TEMPORARY, SOIL STABILIZER TYPE B, MULCH

2

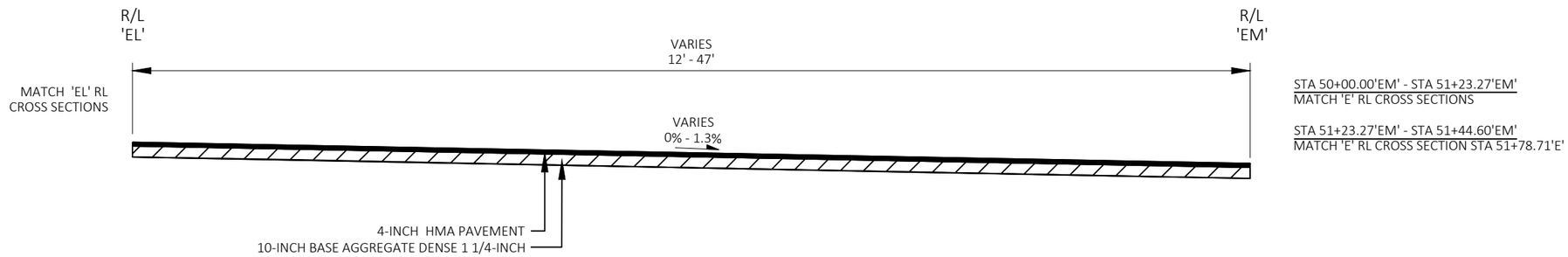


TYPICAL SECTION EMPLOYEE PARKING LOT

STA 3+05.8'EL' - STA 3+62.5'EL'

LEGEND

C SEEDING TEMPORARY, SOIL STABILIZER TYPE B, MULCH



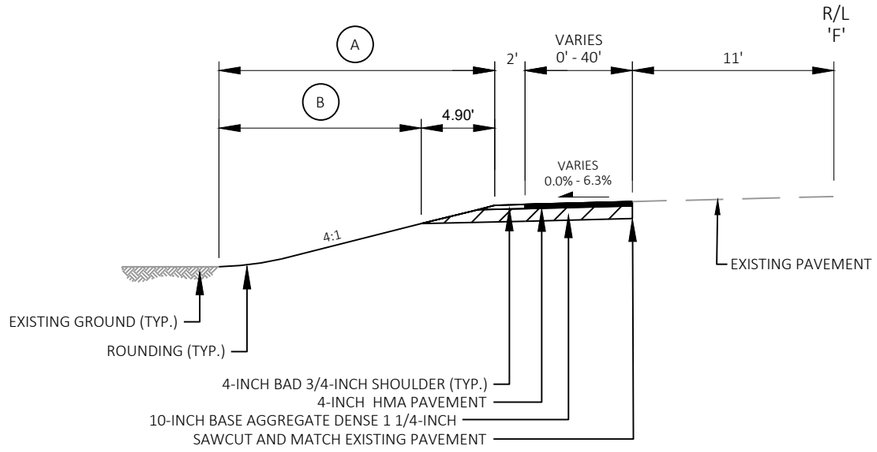
TYPICAL SECTION EMPLOYEE PARKING LOT

STA 50+00.6'EM' - STA 51+44.6'EM'

2

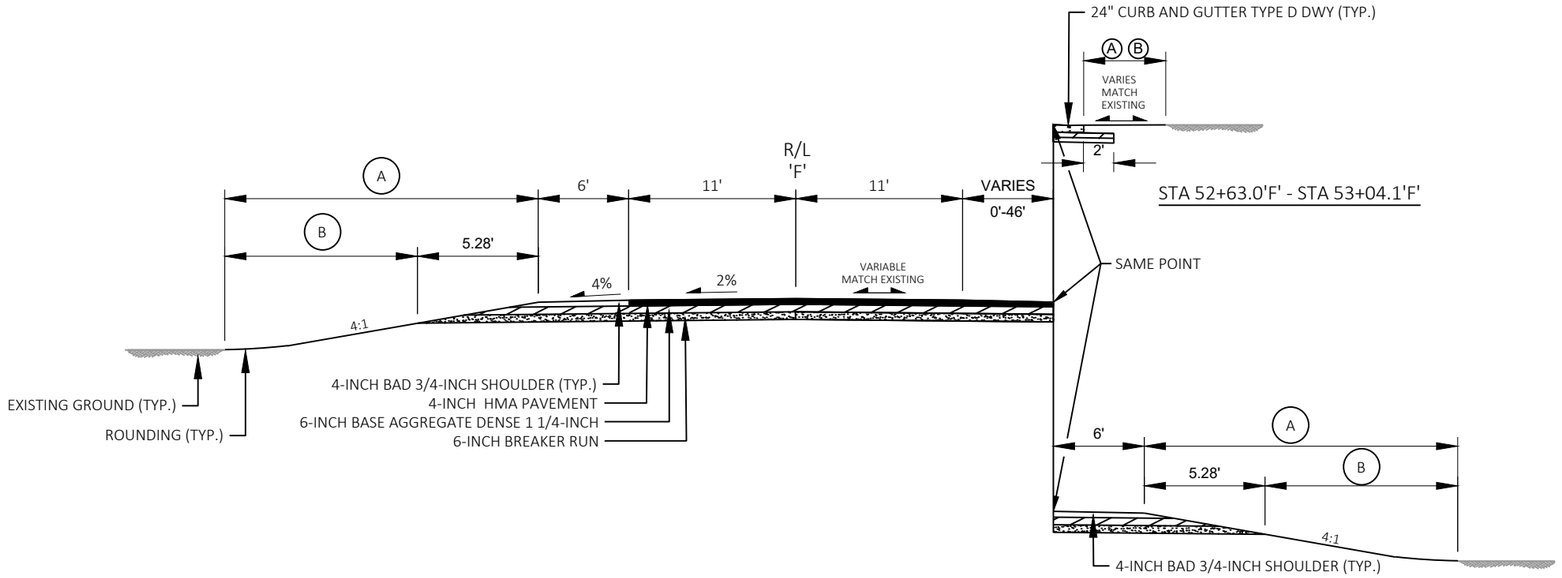
LEGEND

- (A) SEEDING NO. 30 & FERTILIZER TYPE B
- (B) SALVAGED TOPSOIL, EROSION MAT URBAN OR MULCH



TYPICAL SECTION EAST FRONTAGE ROAD

STA 58+76.5'F' - STA 61+62.6'F'

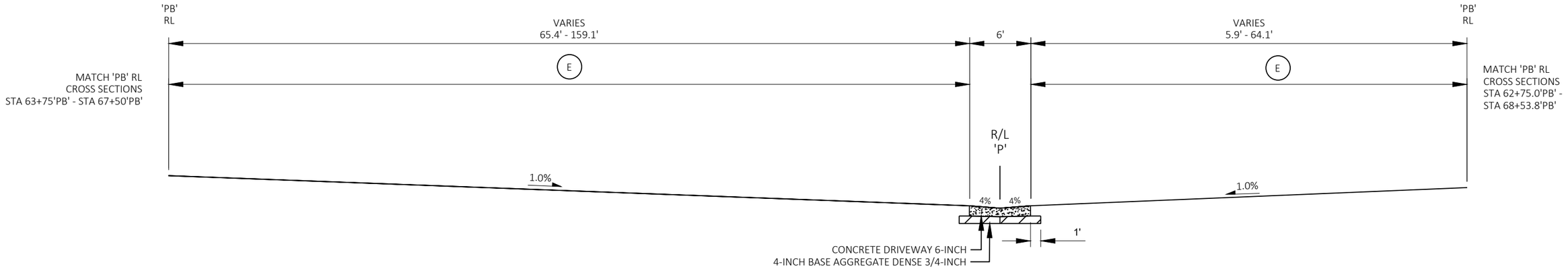


STA 52+63.0'F' - STA 53+04.1'F'

STA 53+04.1'F' - STA 53+29.1'F'

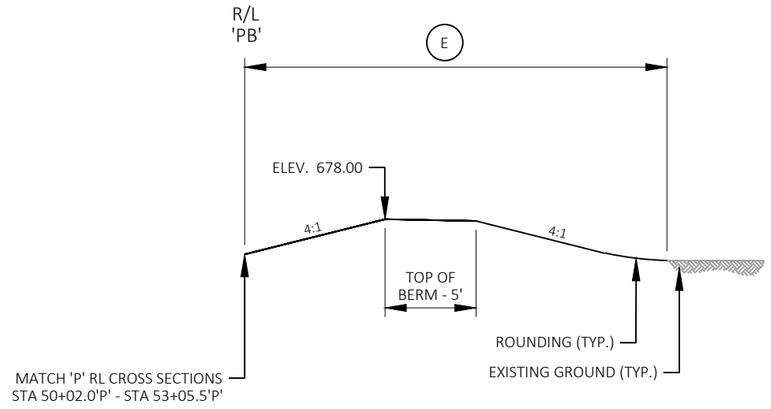
TYPICAL SECTION EAST FRONTAGE ROAD

STA 52+12.5'F' - STA 53+29.1'F'
NO ASSOCIATED CROSS SECTIONS
TYPICAL SECTION FOR AREA DISTURBED BY SANITARY AND
WATER MAIN CONSTRUCTION, REPLACE IN KIND

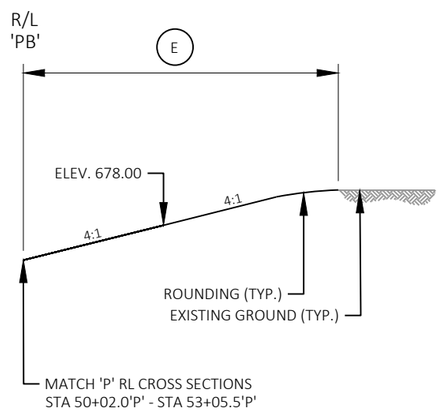


TYPICAL SECTION STORMWATER DETENTION BASIN

STA 50+04.5'P' - STA 53+05.0'P'



IN FILL



IN CUT

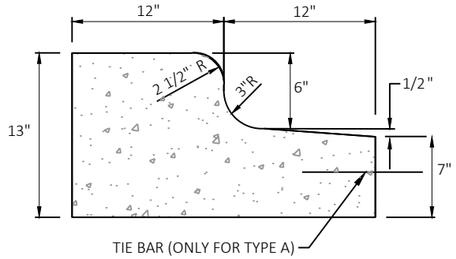
LEGEND

(E) SALVAGED TOPSOIL, SEEDING NO. 10, FERTILIZER TYPE B, SOIL STABILIZER TYPE B, EROSION MAT URBAN OR MULCH

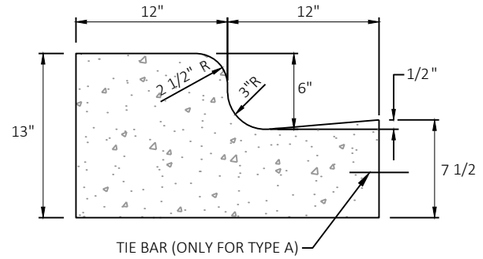
TYPICAL SECTION STORMWATER DETENTION BASIN

STA 60+05.9 'PB' - STA 63+72.6 'PB'

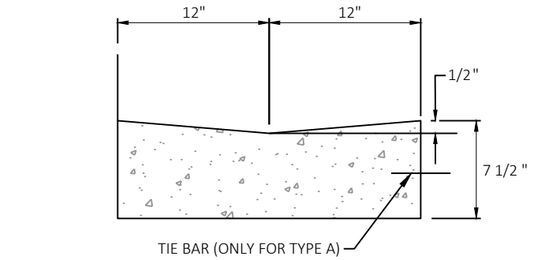
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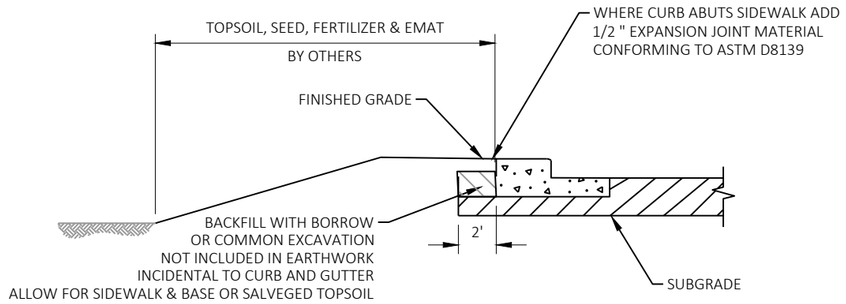
CONCRETE CURB & GUTTER 24-INCH TYPE A/D DETAIL
(REJECT)



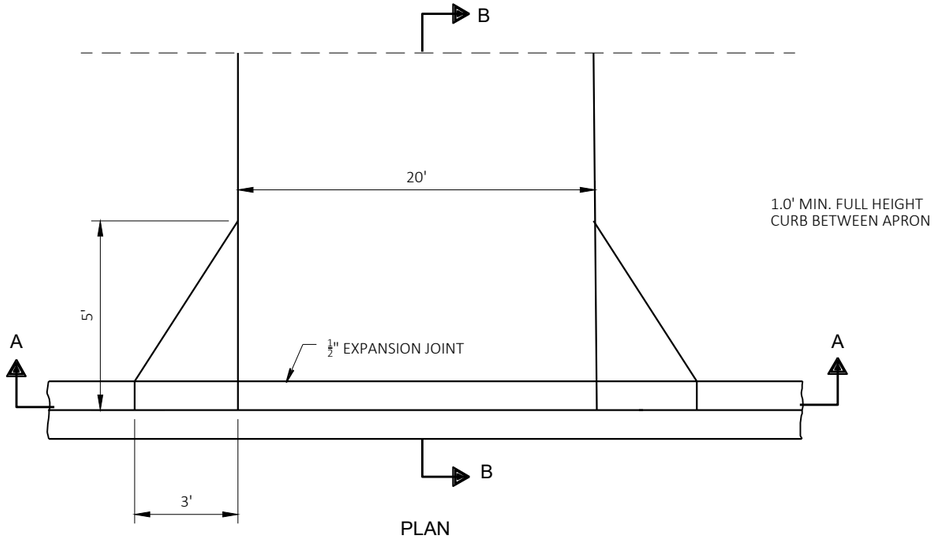
CONCRETE CURB & GUTTER 24-INCH TYPE A/D DETAIL
(STANDARD)



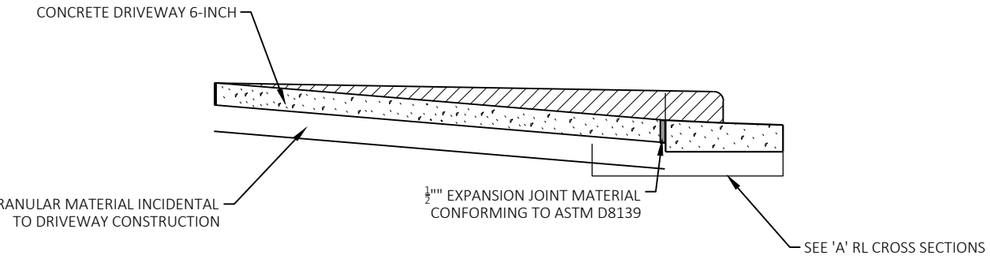
CONCRETE CURB & GUTTER 24-INCH TYPE A/D DETAIL
(DWY)



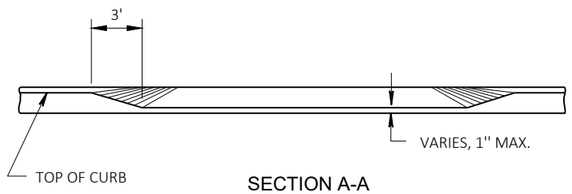
EXCAVATION BEHIND CURB & GUTTER



PLAN



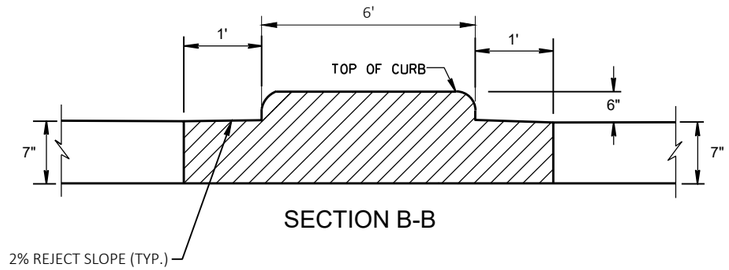
SECTION B-B



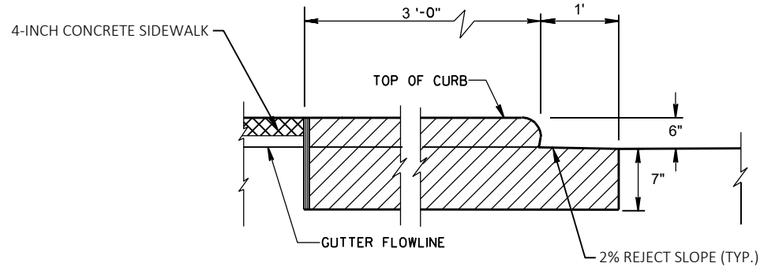
SECTION A-A

CONCRETE DRIVEWAY DETAIL

STA 20+48 'A' RIGHT



SECTION B-B

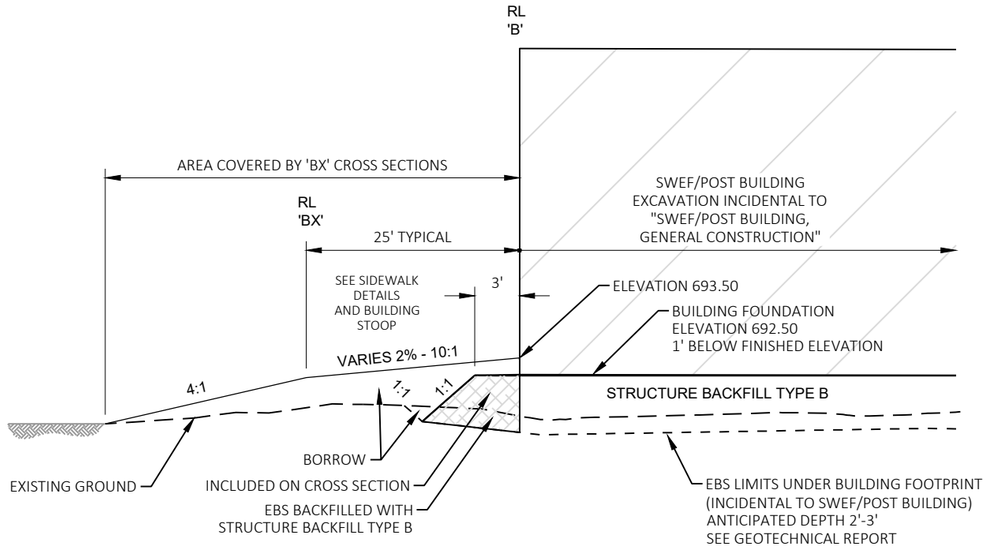


SECTION A-A

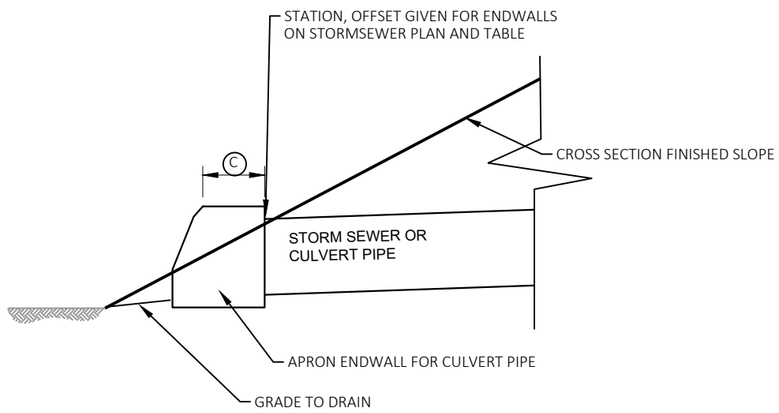
CONCRETE MEDIAN BLUNT NOSE

SEE S.D.D. "CONCRETE MEDIAN NOSE" FOR DETAILS NOT SHOWN

2

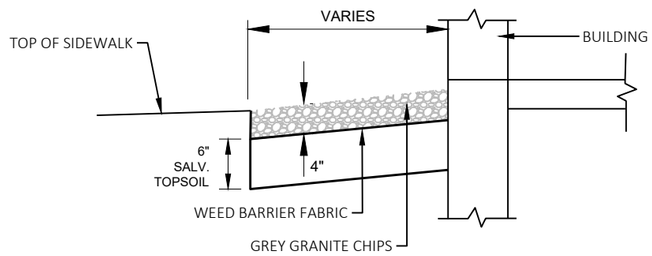


BUILDING GRADING



Ⓒ AS GIVEN ON SDD "APRON ENDWALLS FOR CULVERT PIPE"
IF ENDWALL MATERIAL OTHER THAN CONCRETE IS USED, ADD Ⓒ DISTANCE TO LENGTH OF PIPE REQUIRED

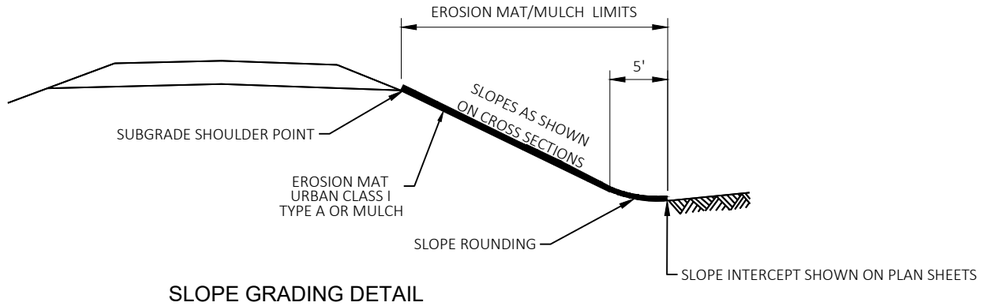
APRON ENDWALL PLACEMENT DETAIL



PLANTING BED DETAIL

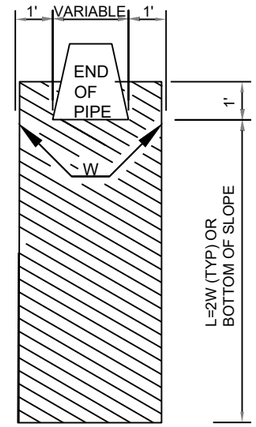
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CONSTRUCTION DETAILS	SHEET 16	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\021001_CD.DWG
LAYOUT NAME - 02
PLOT DATE : 4/25/2024 4:04 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

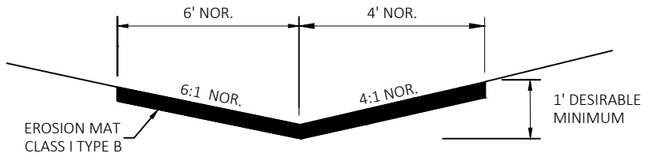


SLOPE GRADING DETAIL

SEE EROSION CONTROL PLAN FOR LOCATIONS
NOT TO SCALE

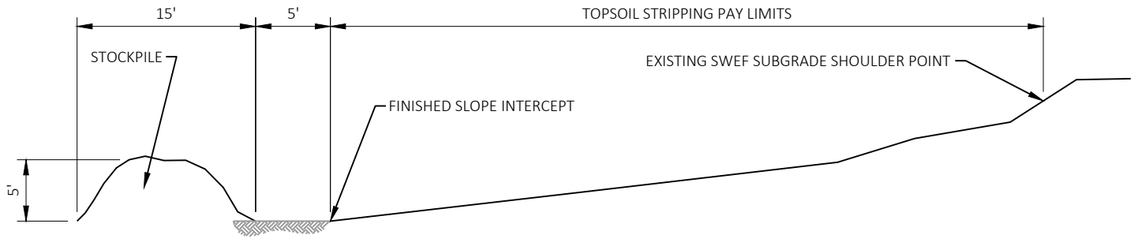


EROSION MAT TREATMENT AT PIPE ENDS



EROSION MAT DETAIL FOR DITCHES

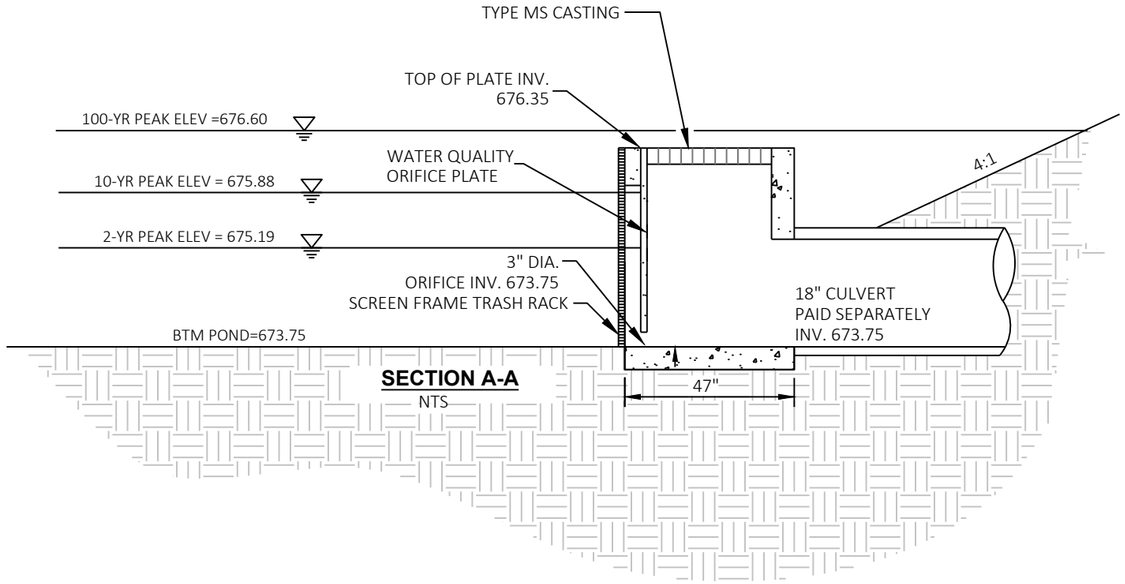
(REQ'D. IN ALL DITCHES)



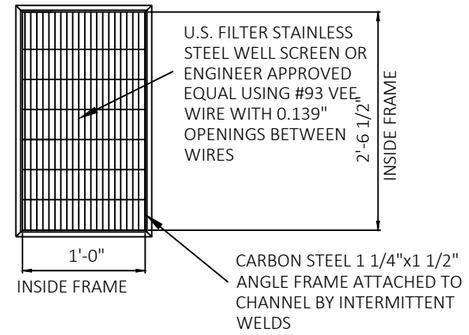
SEE EROSION CONTROL PLANS FOR STOCKPILE LOCATIONS. REMOVE EXCESS TOPSOIL FROM SITE. TEMPORARY SEED & MULCH REQUIRED

TOPSOIL STRIPPING



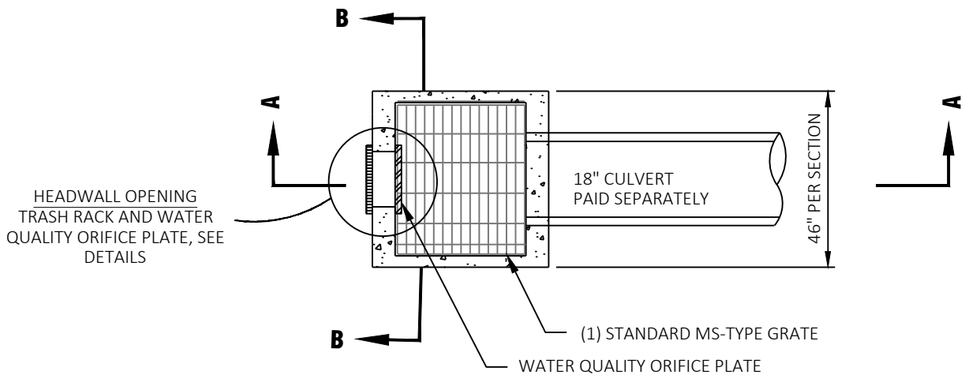


SECTION A-A
NTS

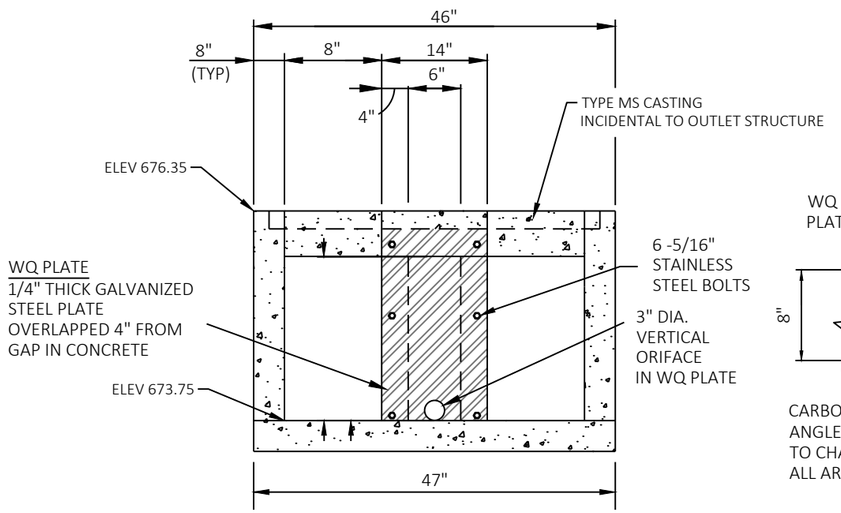


SCREEN FRAME TRASH RACK

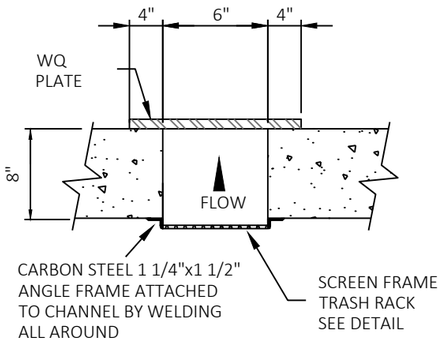
NOTES: STRUCTURE IS MODIFIED "INLETS MEDIAN 1 GRATE",
ALL ITEMS SHOWN ON THIS SHEET ARE INCIDENTAL TO
"OUTLET STRUCTURE" BID ITEM



PLAN
NTS



SECTION B-B
NTS

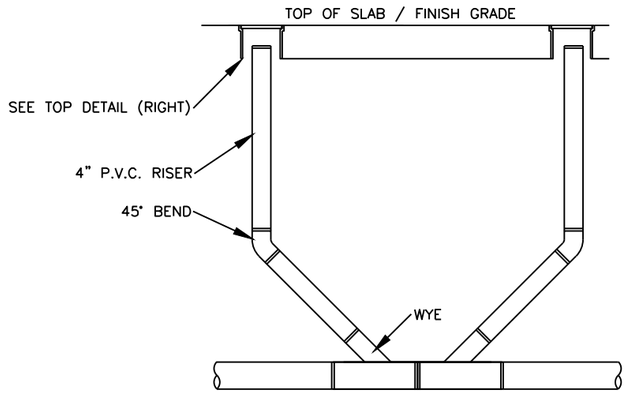


HEADWALL OPENING

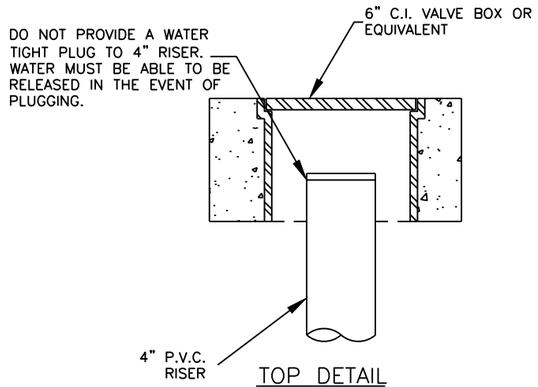
OUTLET STRUCTURE DETAIL
LOCATION: DETENTION POND

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CONSTRUCTION DETAILS	SHEET 18	E

2



SIDE VIEW

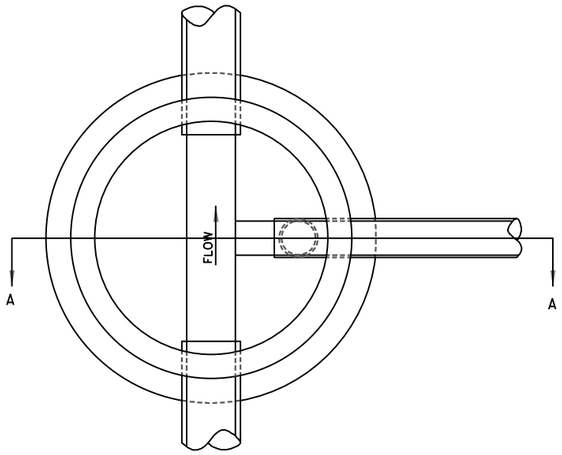


TOP DETAIL

LID FLUSH WITH TOP OF SLAB/FINISH GRADE (MIN. H-20 RATING)

(E) DUAL SWEEP PVC DOUBLE CLEAN-OUT DETAIL

N.T.S.



PLAN VIEW

GENERAL NOTES:

NEW REINFORCED CONCRETE MANHOLE SECTIONS SHALL MEET ASTM C-478

NEW MANHOLE SECTIONS SHALL BE REINFORCED, PRE-CAST CONCRETE

STEPS ARE PROHIBITED IN ALL MANHOLE SECTIONS

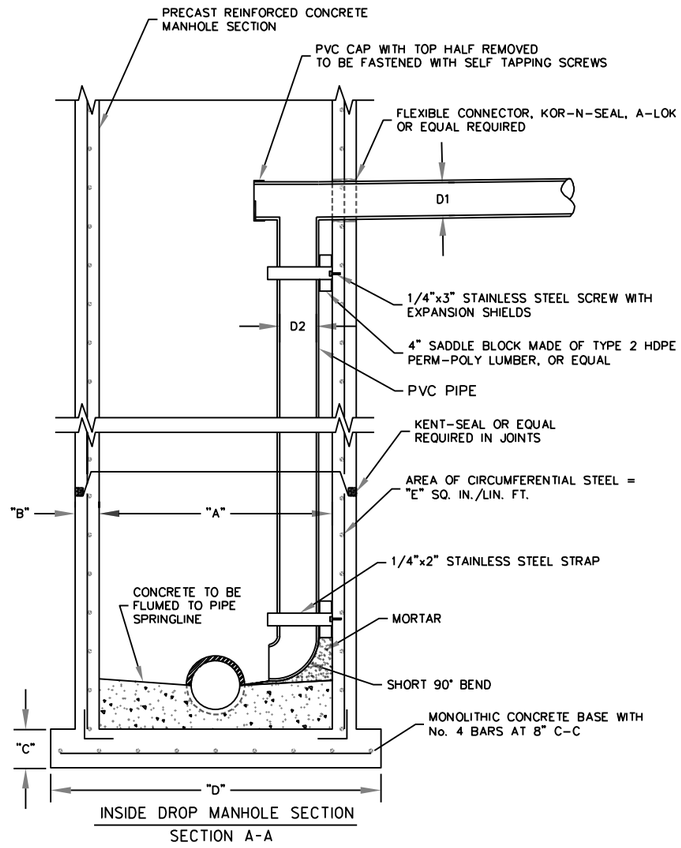
INSIDE DROP PVC SHALL BE STRAPPED EVERY 10 FEET AND AT EACH END OF PIPE BY THE JOINT

FLOWLINE OF DROP TO BE AT THE SAME ELEVATION AS SPRING LINE OF MAIN

INSIDE DROP MANHOLE MUST BE APPROVED BY ENGINEER PRIOR TO USE

MANHOLE INFORMATION KEY				
A	B	C	D	E
48"	5"	8"	68"	0.12
60"	6"	10"	80"	0.17
72"	7"	10"	96"	0.18
96"	9"	12"	126"	0.24

PIPE SCHEDULE FOR DROP MANHOLE	
LATERAL SEWER DIA. (D1)	DROP PIPE DIA. (D2)
4	6
6	6
8	8
10	8
12	10
15	10
18	12
21	15
24	18



INSIDE DROP MANHOLE SECTION

SECTION A-A

GENERAL NOTES:

NEW REINFORCED CONCRETE MANHOLE SECTIONS SHALL MEET ASTM C-478

NEW MANHOLE SECTIONS SHALL BE REINFORCED, PRE-CAST CONCRETE

STEPS ARE PROHIBITED IN ALL MANHOLE SECTIONS

ALL STANDARD TYPE "A" SPECIFICATIONS APPLY TO OUTSIDE DROP MANHOLES

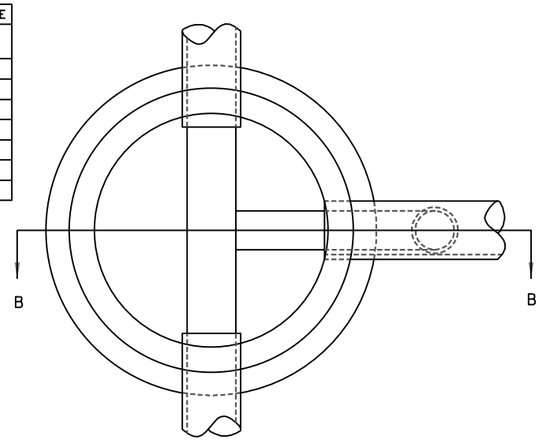
WHENEVER "X" IS GREATER THAN 2' AN OUTSIDE DROP MUST BE CONSTRUCTED AS SHOWN

WHEN POURING A CONCRETE DROP ON AN EXISTING MANHOLE USE A FIBEROUS TUBE FORM WITH A MIN. OF 6" DISTANCE AROUND PIPE. POUR CONCRETE INSIDE TUBE AND VIBRATE OR ROD CONCRETE IN 2' LIFTS FROM MANHOLE BASE TO BOTTOM OF SEWER MAIN

PRECAST DROP MANHOLES ONLY AVAILABLE FOR 8" & 10" PVC

PRE-CAST DROP SHOWN ON 48" MANHOLE, DROP ALSO AVAILABLE ON 60", 72", AND 96" MANHOLES

PIPE SCHEDULE FOR DROP MANHOLE	
LATERAL SEWER DIA. (D1)	DROP PIPE DIA. (D2)
8	8
10	8
12	10
15	10
18	12
21	15
24	18



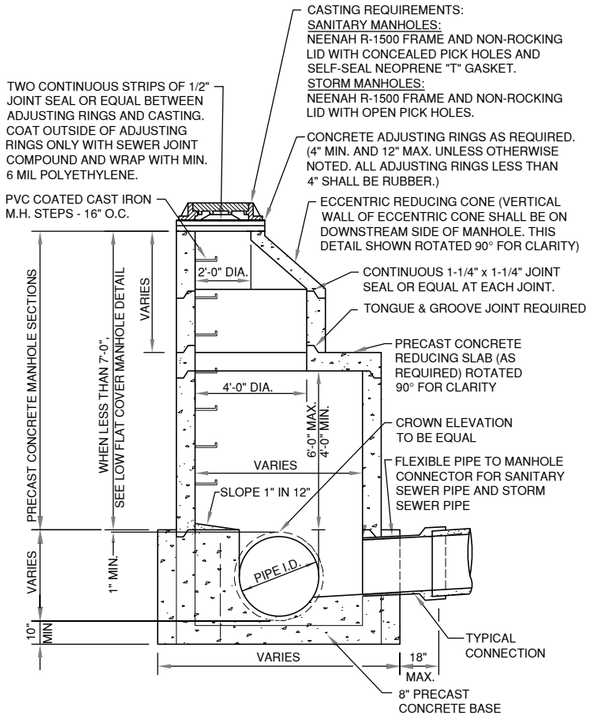
PLAN VIEW

OUTSIDE DROP MANHOLE SECTION

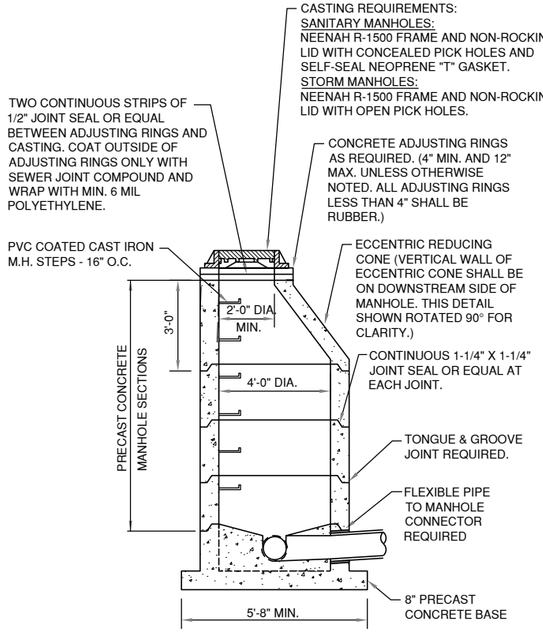
SECTION B-B

DROP MANHOLE

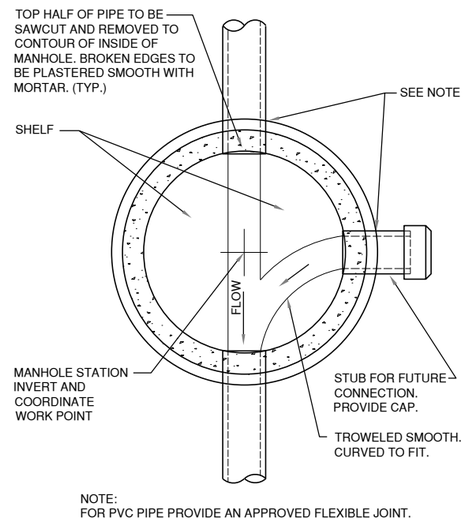
N.T.S.



SANITARYSTANDARD MANHOLE
27" - 60" (INCLUSIVE)

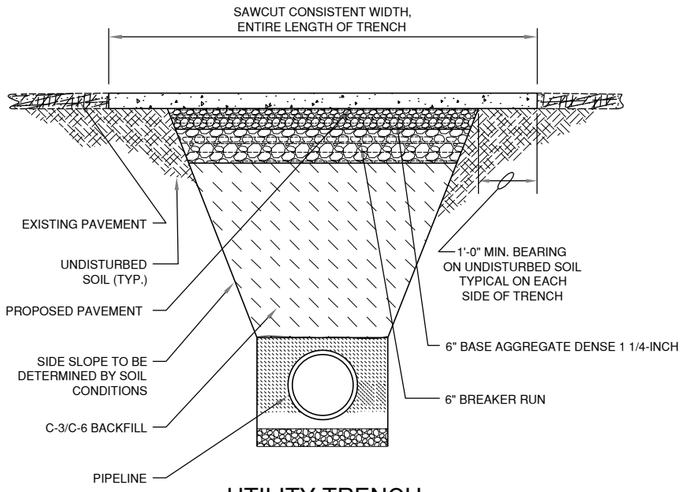


SANITARYSTANDARD MANHOLE
8"-24" (INCLUSIVE)

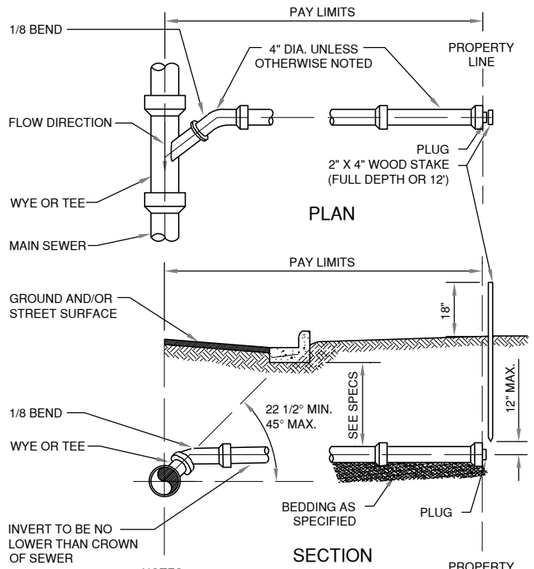


NOTE:
FOR PVC PIPE PROVIDE AN APPROVED FLEXIBLE JOINT.

MANHOLE BASE PLAN
8" - 60" (INCLUSIVE)

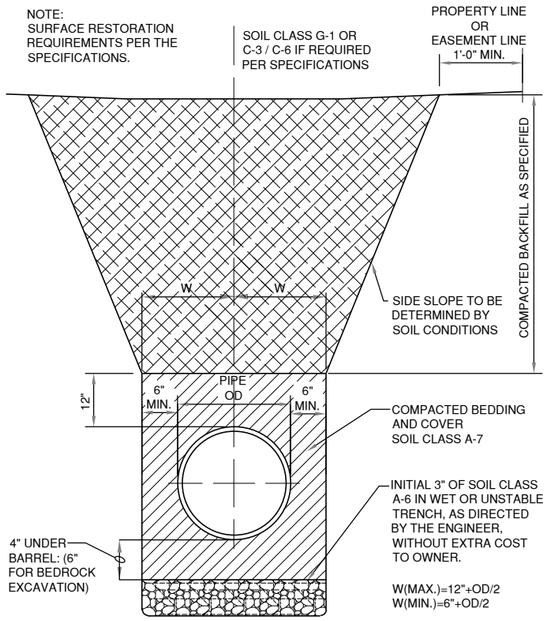


UTILITY TRENCH
PAVEMENT RESTORATION

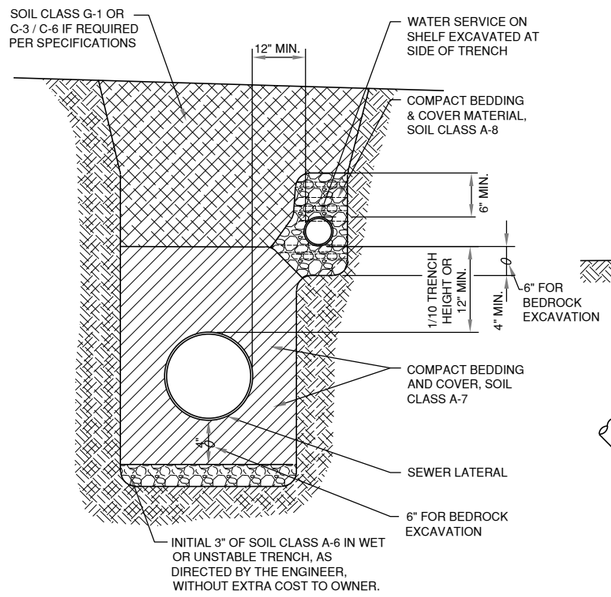


NOTES:
1. SADDLE CONNECTIONS NOT PERMITTED.
2. BACKFILL TO CONFORM TO MAIN SEWER.
3. MINIMUM SLOPE: 1/8 INCH PER FOOT.
4. MAXIMUM SLOPE: 1/2 INCH PER FOOT.

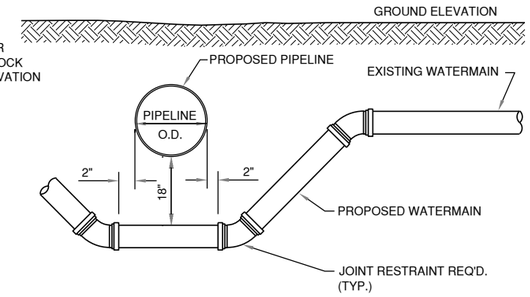
STANDARD SERVICE LATERAL



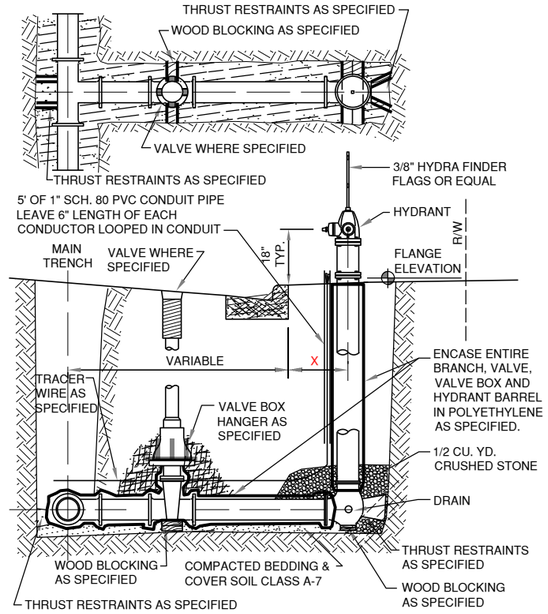
HDPE /PVC SEWER, WATERMAIN AND FORCEMAIN BEDDING AND TRENCH DETAIL



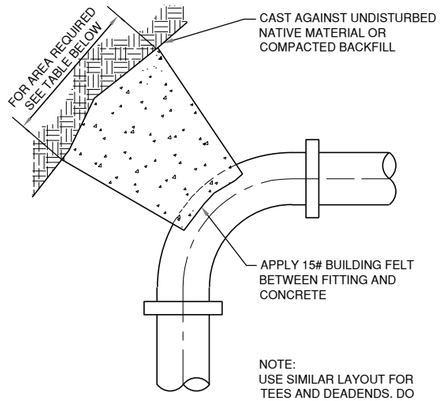
SEWER AND WATER LATERALS IN COMMON TRENCH



DETAIL FOR WATERMAIN OFFSET

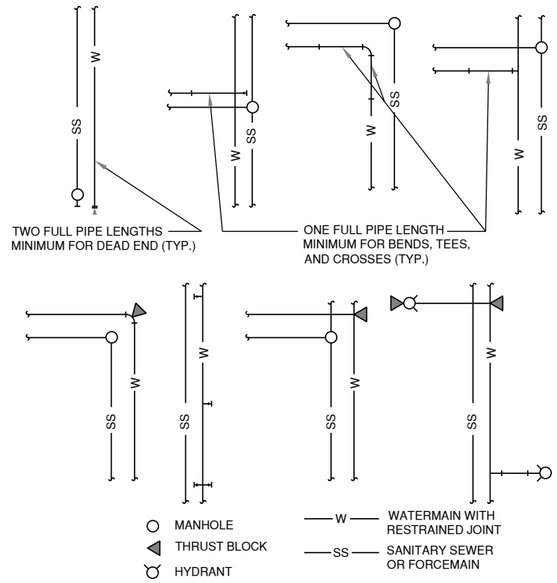


STANDARD HYDRANT SETTING CURB SECTION

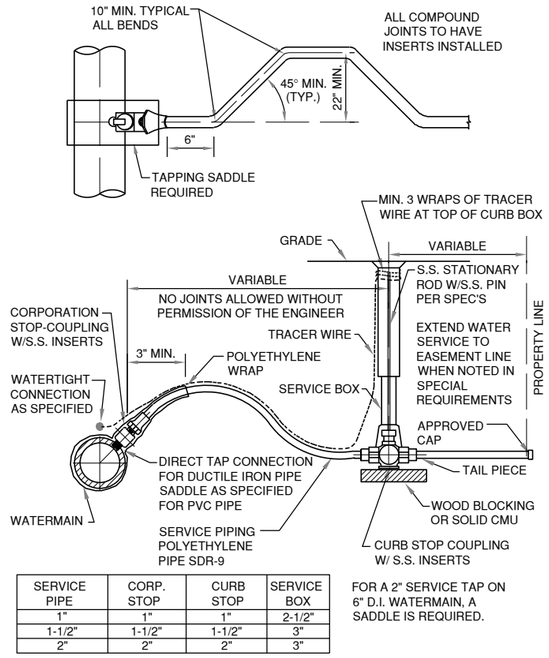


THRUST BLOCK AREA REQUIREMENTS, S.F.					
DEGREE OF BEND	4" PIPE	6" PIPE	8" PIPE	10" PIPE	12" PIPE
5° TO 22.5°	1.0	1.0	2.0	3.0	4.0
23° TO 45°	1.0	2.0	4.0	6.0	8.0
46° TO 90°	2.0	4.0	7.0	11.0	15.0
TEE OR DEAD END	2.0	3.0	5.0	8.0	10.0

TYPICAL THRUST BLOCK



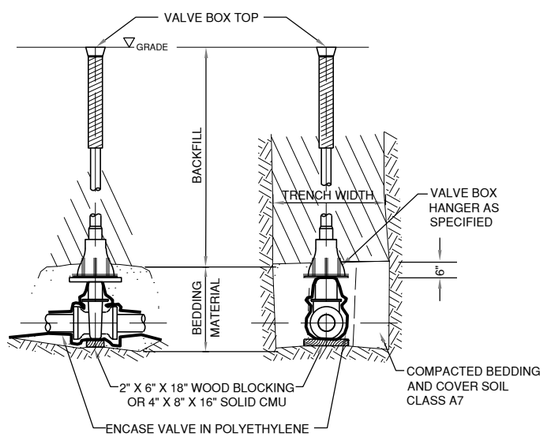
TYPICAL WATERMAIN RESTRAINT REQUIREMENTS FOR COMMON TRENCH CONSTRUCTION



SERVICE PIPE	CORP. STOP	CURB STOP	SERVICE BOX
1"	1"	1"	2-1/2"
1-1/2"	1-1/2"	1-1/2"	3"
2"	2"	2"	3"

FOR A 2" SERVICE TAP ON 6" D.I. WATERMAIN, A SADDLE IS REQUIRED.

TAP SERVICE PIPING (POLYETHYLENE)

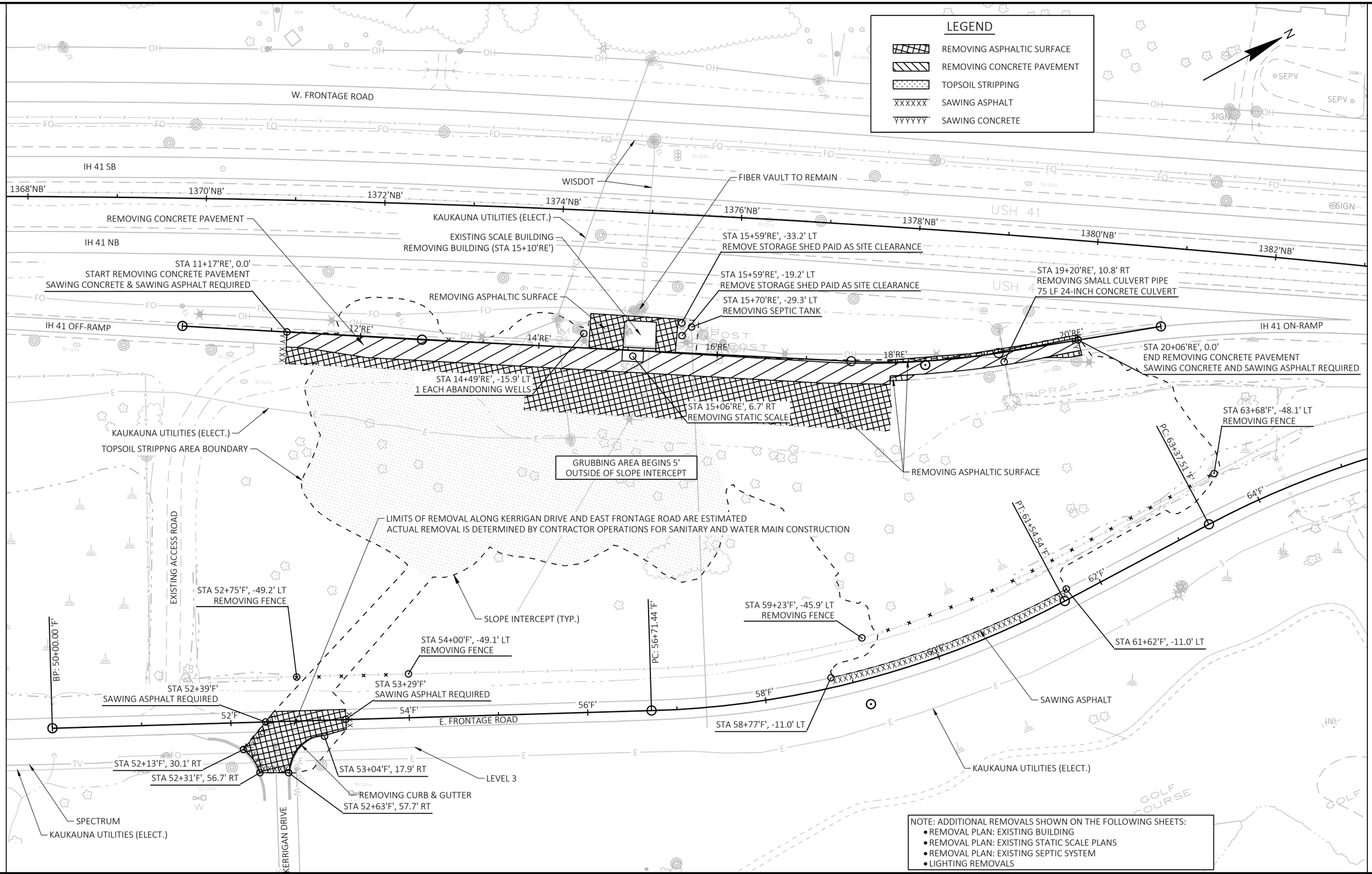


SIDE VIEW FRONT VIEW

VALVE BOX SETTING

2

MATCHLINE XX



NOTE: ADDITIONAL REMOVALS SHOWN ON THE FOLLOWING SHEETS:
- REMOVAL PLAN: EXISTING BUILDING
- REMOVAL PLAN: EXISTING STATIC SCALE PLANS
- REMOVAL PLAN: EXISTING SEPTIC SYSTEM
- LIGHTING REMOVALS

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	REMOVAL PLAN: MISCELLANEOUS REMOVAL	SHEET 23	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\021200-REMBLD.DWG
LAYOUT NAME - 01

PLOT DATE : 4/25/2024 4:07 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1"=50'

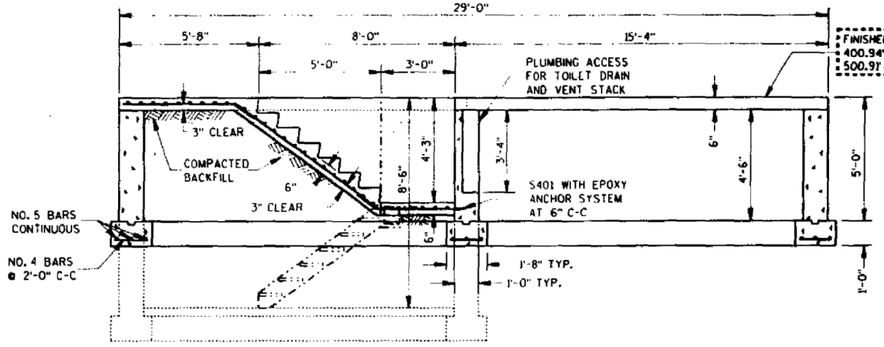
WISDOT/CADDS SHEET 44

2

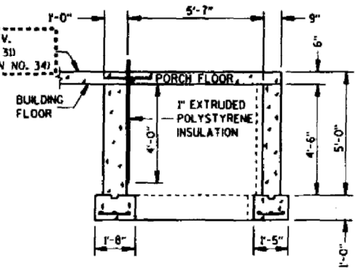
MATCHLINE XX

STATE PROJECT NUMBER	SHEET NO.
1131-07-71	2.1

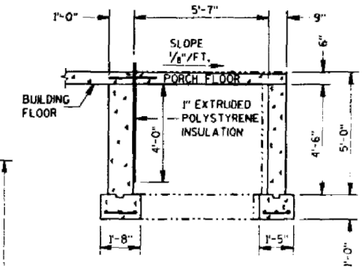
DEPERE-WRIGHTSTOWN SCALE NOS. 31, 34
FOUNDATION DETAILS
BROWN-OUTAGAMIE CO. DRAWING S-1



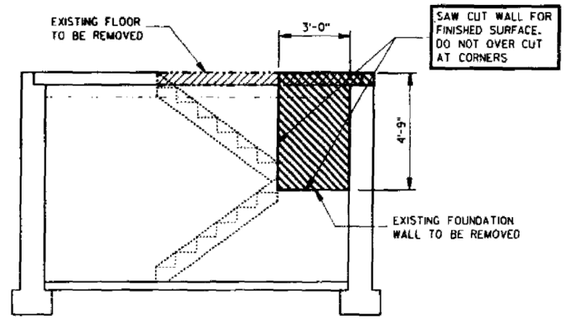
A S-1 SECTION THROUGH ADDITION



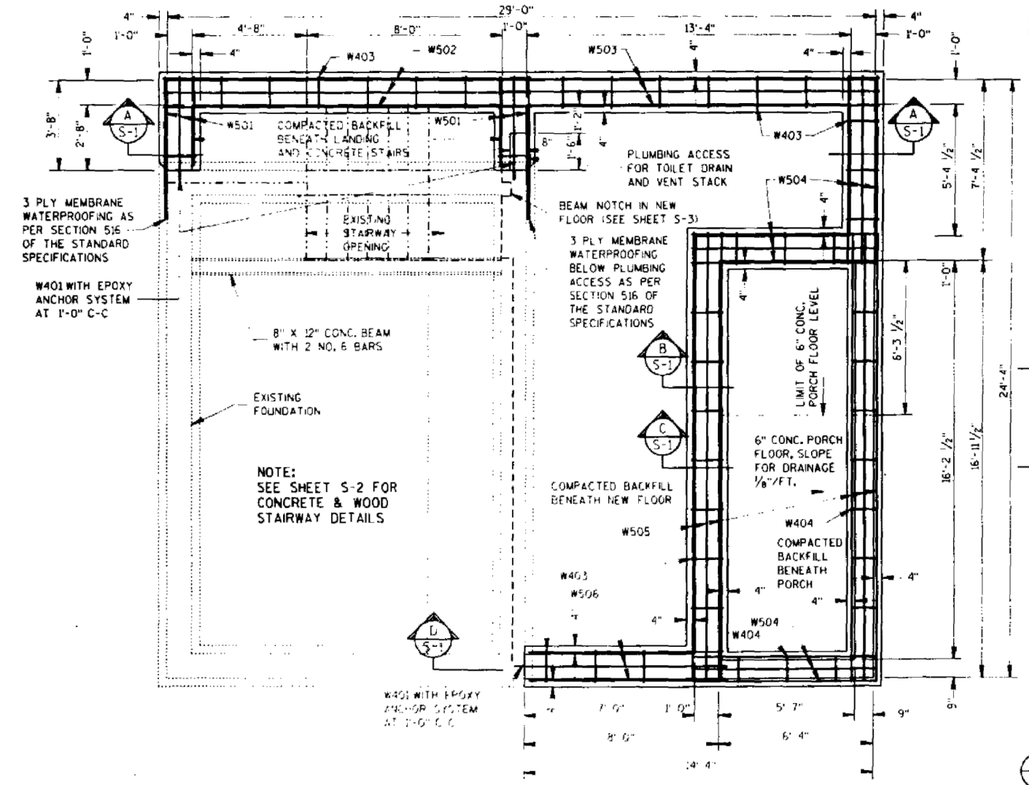
B S-1 SECTION AT ENCLOSED PORCH



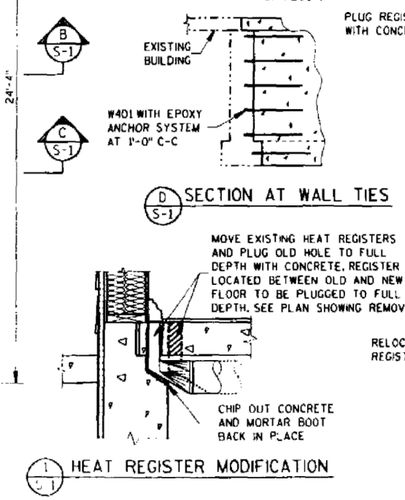
C S-1 SECTION AT OPEN PORCH



SECTION SHOWING REMOVALS

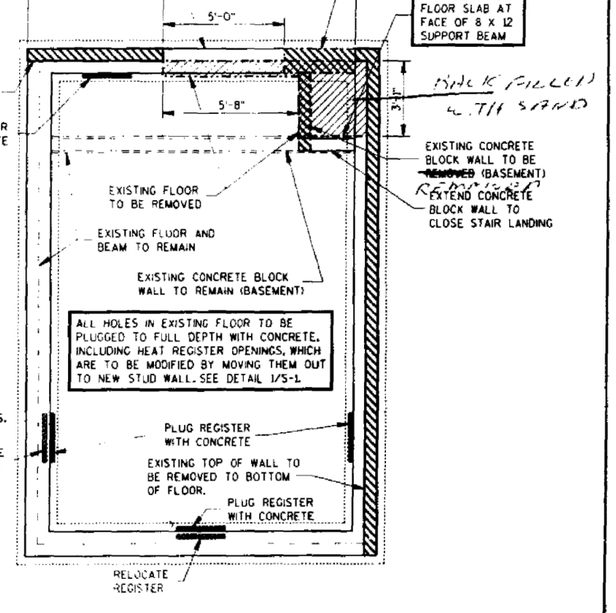


FOUNDATION PLAN



D S-1 SECTION AT WALL TIES

I S-1 HEAT REGISTER MODIFICATION



EXISTING PLAN SHOWING REMOVALS

LEVELS ON - 2,3,4,5.

FILE NAME: HDGN:DE_SCALE31_34:DPWTS1.DG

WISDOT/CADDS SHEET 42

6

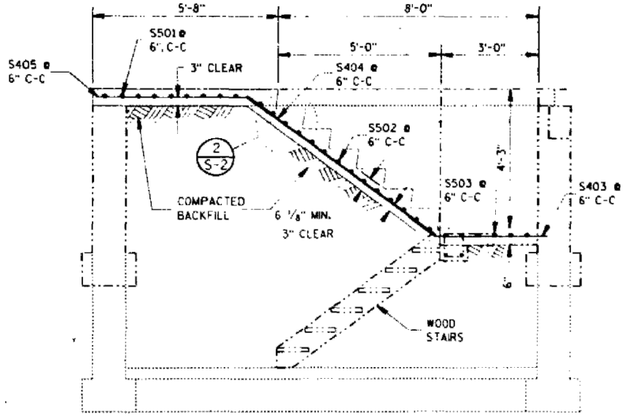
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	REMOVAL PLAN: EXISTING BUILDING	SHEET 24	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\021200-REMBLD.DWG
LAYOUT NAME - 02
PLOT DATE : 4/25/2024 4:07 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1"=50'

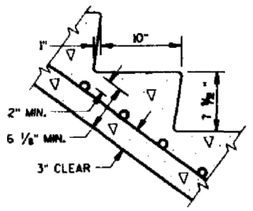
WISDOT/CADDS SHEET 44

STATE PROJECT NUMBER	SHEET NO.
1131-07-71	2.2

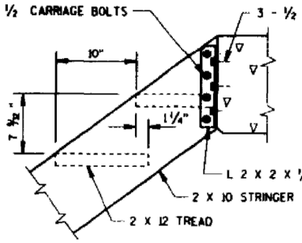
DEPERE-WRIGHTSTOWN SCALE NOS. 31, 34
STAIRS AND FOUNDATION DETAILS
BROWN-OUTAGAMIE CO. DRAWING S-2



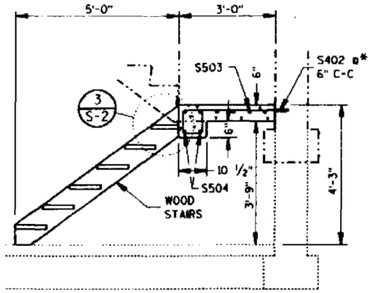
A S-2 CONCRETE STAIR & LANDING DETAIL



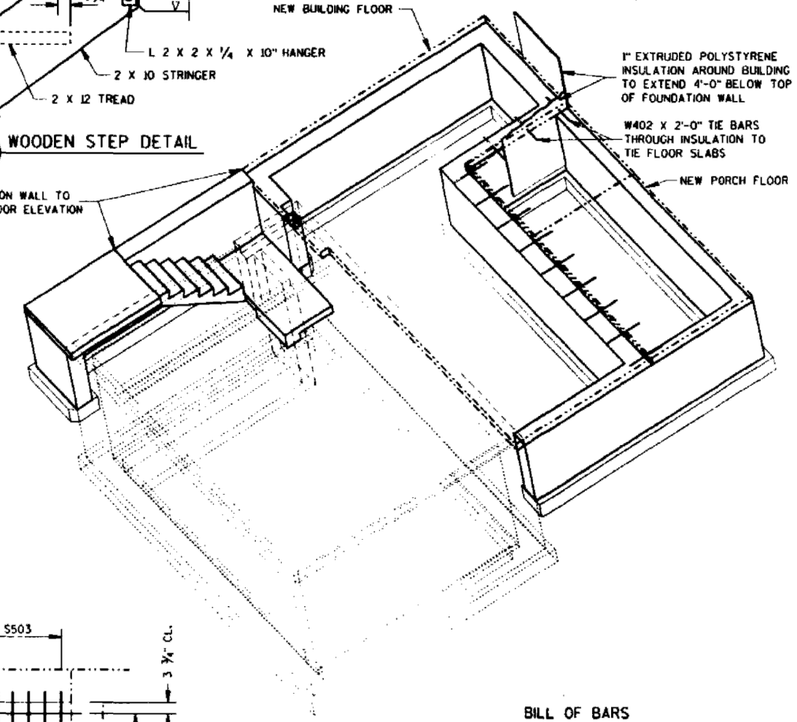
2 S-2 CONCRETE STEP DETAIL

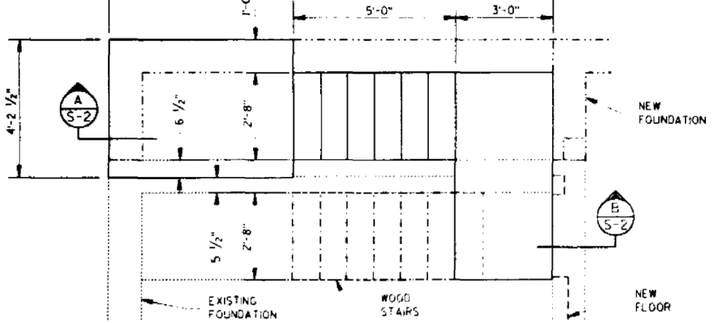


3 S-2 WOODEN STEP DETAIL

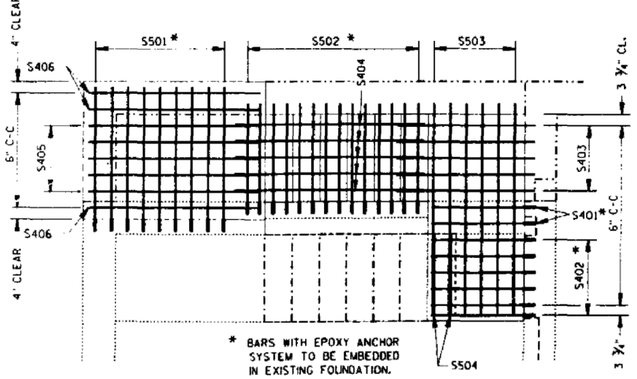


B S-2 WOODEN STAIR & CONCRETE LANDING DETAIL

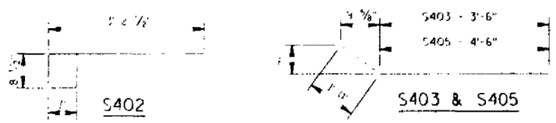




1 S-2 CONCRETE & WOOD STAIR DETAIL



CONCRETE STAIR REINFORCING



BAR BENDING DETAILS

BILL OF BARS

MARK	NUMBER	LENGTH	BENT	LOCATION
W401	17	2'-4"		TIE NEW WALL TO EXISTING WALL
W402	12	2'-0"		TIE BLDG FLOOR TO PORCH FLOOR
W403	29	1'-4"		BUILDING FOOTING
W404	10	1'-1"		PORCH FOOTING
W501	6	3'-8"		BUILDING FOOTING
W502	3	15'-0"		" "
W503	3	15'-6"		" "
W504	9	7'-8"		BUILDING & PORCH FOOTING
W505	6	18'-3"		" " " "
W506	3	8'-2"		BUILDING FOOTING
S401	2	3'-2"		BOTTOM STAIR LANDING
S402	6	5'-3"	X	" " "
S403	5	4'-6"	X	" " "
S404	5	7'-2"		LONGITUDINAL IN STAIRS
S405	5	5'-6"	X	TOP STAIR LANDING
S406	3	5'-4"		" " "
S501	9	4'-4"		TOP STAIR LANDING
S502	14	3'-4"		TRANSVERSE IN STAIRS
S503	6	6'-6"		BOTTOM STAIR LANDING
S504	2	5'-3"		BOTTOM STAIR LANDING

LEVELS ON ▪ 67.

FILE NAME: HDGNSDE.SCALE31_34:DPWTS2.DG

WISDOT/CADDS SHEET 42

7

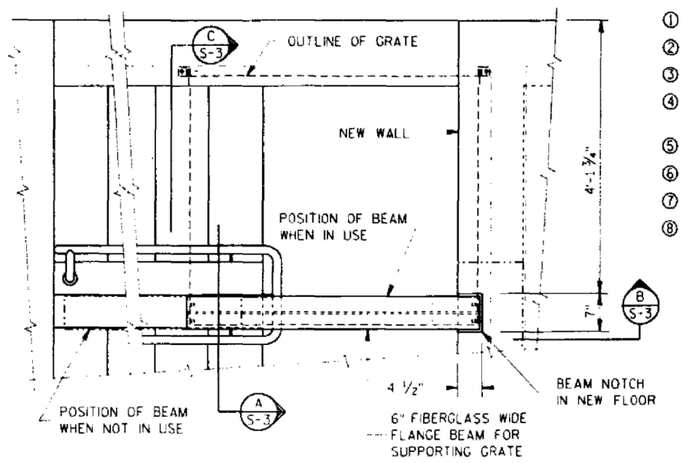
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	REMOVAL PLAN: EXISTING BUILDING	SHEET 25	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\021200-REMBLD.DWG
LAYOUT NAME - 03
PLOT DATE : 4/25/2024 4:07 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1"=50'

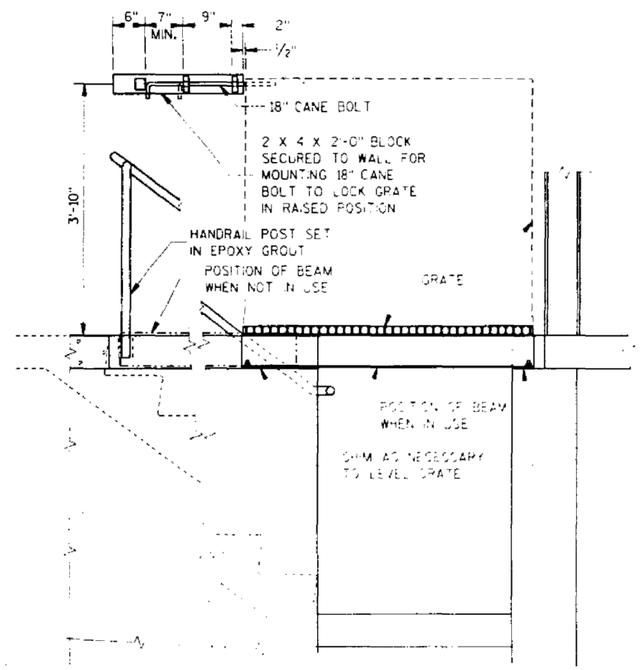
WISDOT/CADDS SHEET 44

STATE PROJECT NUMBER	SHEET NO.
1131-07-71	23

DEPERE-WRIGHTSTOWN SCALE NOS.31,34
HAND RAIL & MAINTENANCE GRATE DETAILS
BROWN-OUTAGAMIE CO. DRAWING S-3

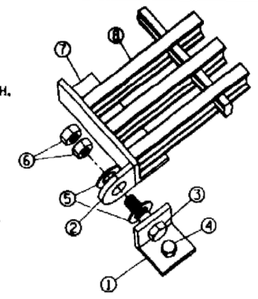


1 S-3 WIDE FLANGE SUPPORT MOUNTING DETAILS

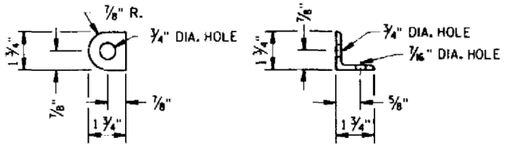


B S-3 WIDE FLANGE SUPPORT MOUNTING DETAILS

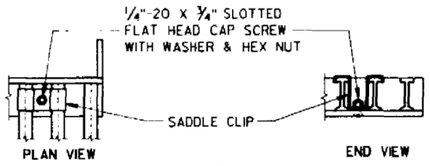
① L 1 3/4 X 1 3/4 X 1/4 X 1 3/4" ANGLE CLIP.
② 1 3/4 X 1 3/4 X 1/4 HINGE PLATE.
③ 1/2 X 1 3/4" HEX HEAD BOLT, 1" THREAD LENGTH.
④ 3/8 X 2 1/4" HEX HEAD BOLT AND EXPANSION ANCHOR SYSTEM.
⑤ 2 - 9/16" I.D. X 1 3/8" O.D. FLAT WASHERS.
⑥ 2 - 1/2" HEX HEAD NUTS FOR LOCKING.
⑦ L 1 3/4 X 1 3/4 X 1/4 X 4'-5 5/8" (1 REQ'D.).
⑧ FIBERGLASS DECKING.
4 - SADDLE CLIP HOLD DOWNS (SEE DETAIL).



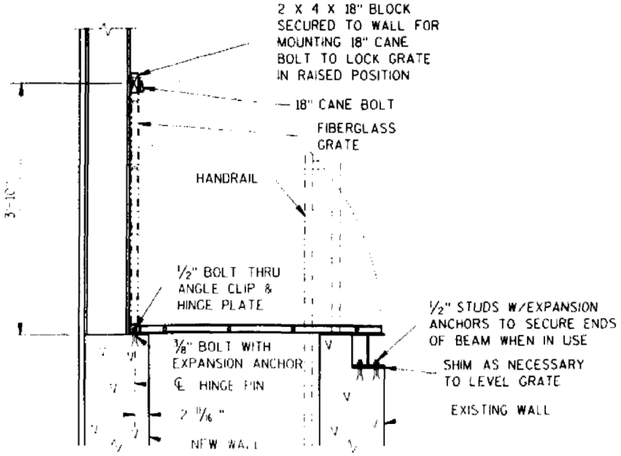
EXPANDED VIEW OF HINGE



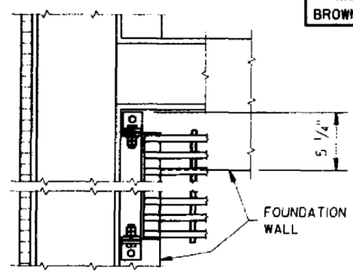
HINGE PLATE ANGLE CLIP



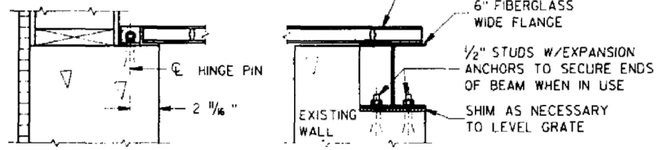
SADDLE CLIP HOLD DOWN
(FOUR REQUIRED)



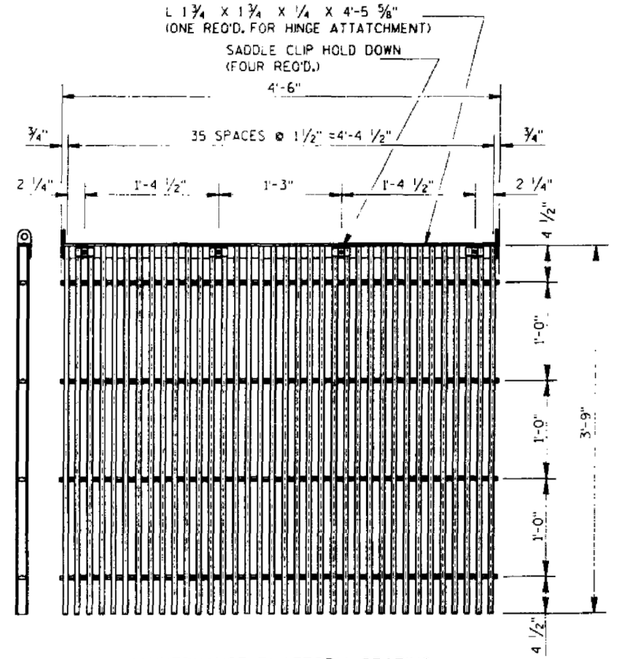
A S-3 MAINTENANCE GRATE MOUNTING DETAILS



PLAN OF HINGES



C S-3 HINGE & WIDE FLANGE SUPPORT



MAINTENANCE PLATFORM GRATING

LEVELS ON = 1.2.

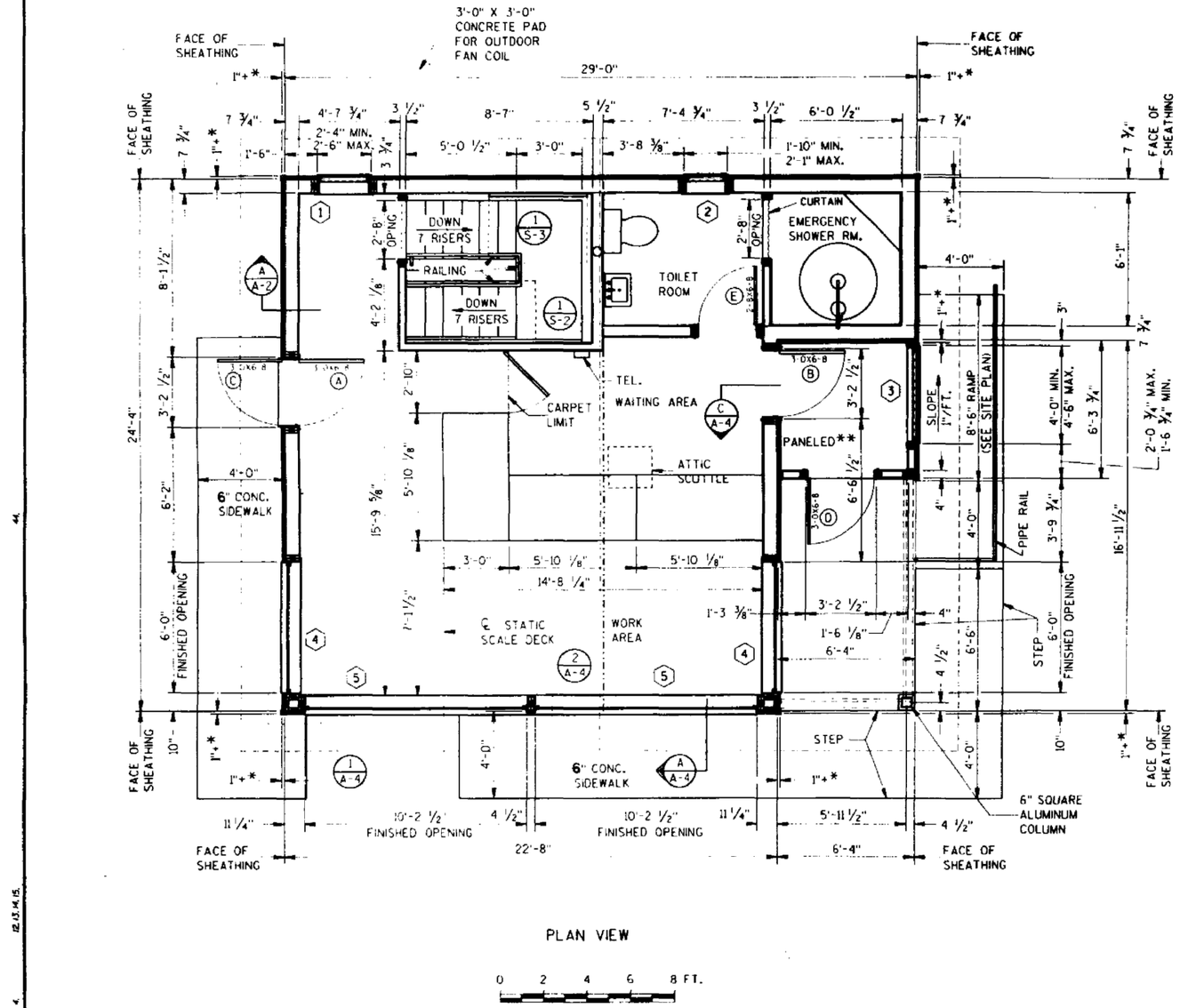
FILE NAME: HOGNIDE_SCALE31,34 DRWTS3.DGN

WISDOT/CADDS SHEET 42

8

STATE PROJECT NUMBER	SHEET NO.
1131-07-71	2.4

DEPERE-WRIGHTSTOWN SCALE NOS. 31,34
FLOOR PLAN
BROWN-OUTAGAMIE CO. DRAWING A-1



PLAN VIEW

0 2 4 6 8 FT.

WINDOW SCHEDULE

MARK	NO. REQ'D.	ROUGH OPENING WIDTH MIN.	ROUGH OPENING WIDTH MAX.	ROUGH OPENING HEIGHT MIN.	ROUGH OPENING HEIGHT MAX.	MATERIAL	REMARKS
1	1	2'-4"	2'-6"	3'-4"	3'-6"	VINYL CLAD OR ALUM. CLAD WOOD	CASEMENT
2	1	1'-10"	2'-1"	3'-0"	3'-2"	"	CASEMENT-OBSCURED GLASS IN TOILET RM
3	1	4'-0"	4'-6"	6'-0"	6'-3"	"	AWNING-PICTURE
4	2	AS RECOMMENDED BY WINDOW INSTALLER OR MANUFACTURER		ALUMINUM THERMAL BREAK WINDOW UNIT WITH 1" INSULATING GLASS			
5	2	AS RECOMMENDED BY WINDOW INSTALLER OR MANUFACTURER		ALUMINUM THERMAL BREAK WINDOW UNIT WITH 1" INSULATING GLASS			

DOOR SCHEDULE

MARK	NO. REQ'D.	WIDTH	HEIGHT	THICKNESS	MATERIAL	HAND[1] OF DOOR	REMARKS
A	1	3'-0"	6'-8"	1 3/4"	METAL	LH	ENTRANCE DOOR W/WINDOW
B	1	3'-0"	6'-8"	1 3/4"	METAL	RHR	ENTRANCE DOOR W/WINDOW
C	1	3'-0"	6'-8"	1 1/8"	METAL	LHR	COMB. STORM & SCREEN
D	1	3'-0"	6'-8"	1 1/8"	METAL	LHR	COMB. STORM & SCREEN
E	1	2'-8"	6'-8"	1 3/8"	WOOD	RH	TOILET ROOM

[1] DOOR HANDS:
FACE THE OUTSIDE OF THE DOOR TO DETERMINE ITS HAND. THE OUTSIDE IS THE STREET SIDE OF AN ENTRANCE DOOR AND THE CORRIDOR SIDE OF A ROOM DOOR. THE OUTSIDE OF A COMMUNICATING DOOR IS THE SIDE OPPOSITE THE HINGES.

ROOM FINISH SCHEDULE

ROOM	FLOOR FIELD	FLOOR BASE	WALL	CEILING	DECORATION WALL	DECORATION CEILING	DECORATION WOOD	REMARKS
WORK AREA	CARPET TILE ②	WOOD	½" DRYWALL	⅝" DRYWALL	LATEX	LATEX	STAIN & VARNISH	MOVABLE COUNTERS
WAITING AREA	CERAMIC TILE ②	WOOD	½" DRYWALL	⅝" DRYWALL	LATEX	LATEX	STAIN & VARNISH	
TOILET	CERAMIC TILE	TILE ①	½" ① DRYWALL	⅝" DRYWALL	LATEX & TILE	LATEX	STAIN & VARNISH	
EMERG'CY SHOWER	CERAMIC TILE	CERAMIC TILE	½" DRYWALL	⅝" DRYWALL	CERAMIC TILE	ENAMEL	STAIN & VARNISH	

① GLAZED CERAMIC TILE WAINSCOT 48" UP THE WALL.

② REMOVE ALL EXISTING FLOOR COVERING AND REPLACE WITH CERAMIC OR CARPET FLOOR TILE. ALL HOLES IN FLOOR MUST BE PLUGGED TO FULL DEPTH WITH CONCRETE PRIOR TO PLACING NEW FLOORING. SEE FOUNDATION PLAN.

* 1"+ = 1" EXTRUDED POLYSTYRENE INSULATION PLUS THICKNESS OF SIDING USED.

** ⅝" TEXTURE 1-11 EXTERIOR PLYWOOD SIDING INSIDE PORCH.

Paul J. Chastan

LEVELS ON - 2.4. 12.13.14.15.

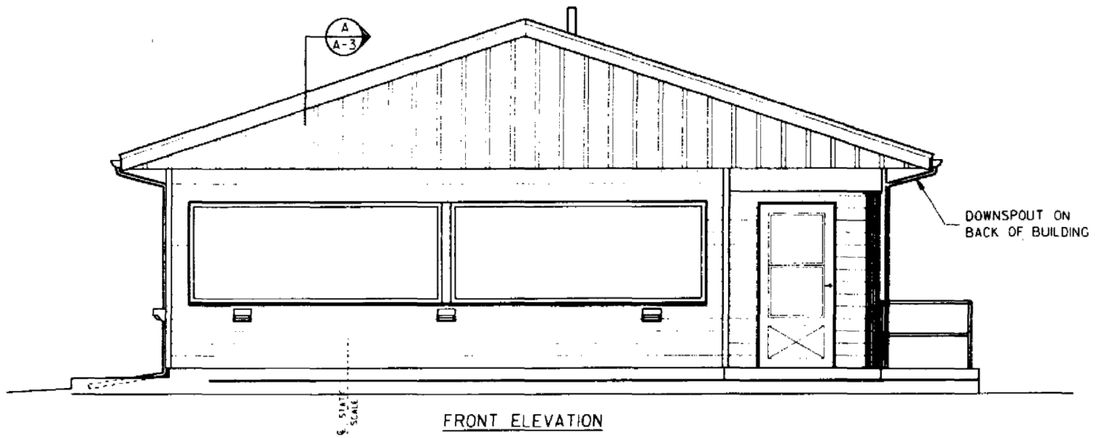
FILE NAME: HDGN:DE SCALE31 34\DPWTA1.DG

WISDOT/CADDS SHEET 42

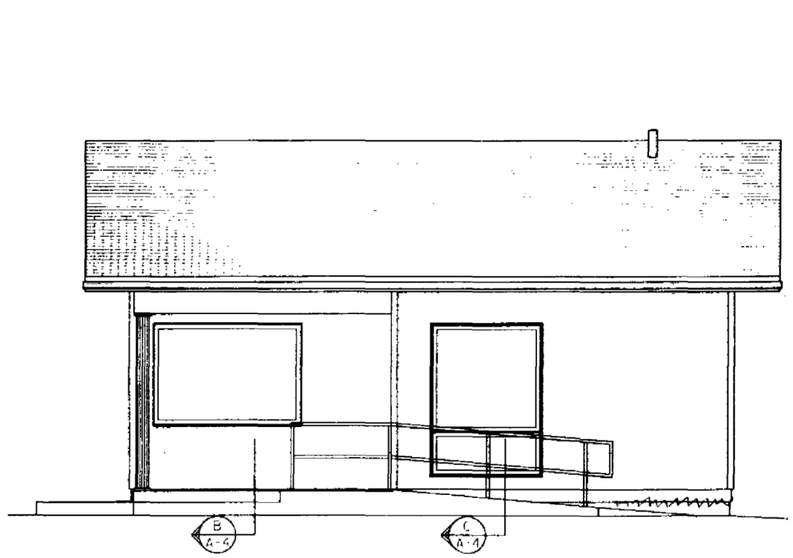
9

STATE PROJECT NUMBER	SHEET NO.
1131-07-71	2.5

DEPERE-WRIGHTSTOWN SCALE NOS. 31,34
BUILDING ELEVATIONS, WALL SECTION
BROWN-OUTAGAMIE CO. DRAWING A-2

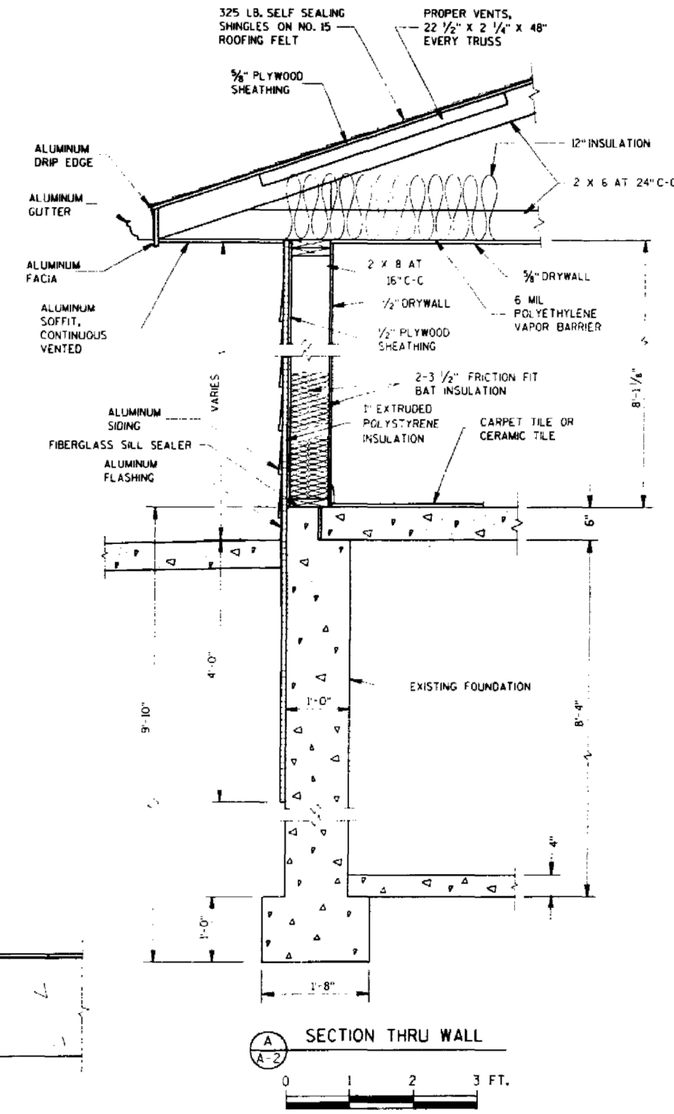


FRONT ELEVATION



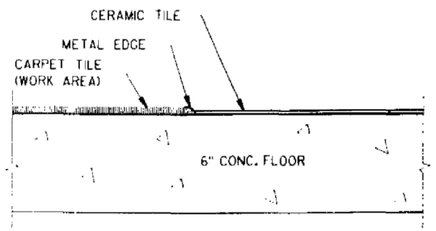
SIDE ELEVATION

0 2 4 6 8 FT.



A
A-2 SECTION THRU WALL

0 1 2 3 FT.



FLOORING DETAIL

LEVELS ON - 2, 4, 12, 20, 21, 22, 24,

FILE NAME: HDGNIDE SCALE31 34!DPWTA2.DG

WISDOT/CADDS SHEET 42

10

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	REMOVAL PLAN: EXISTING BUILDING	SHEET 28	E

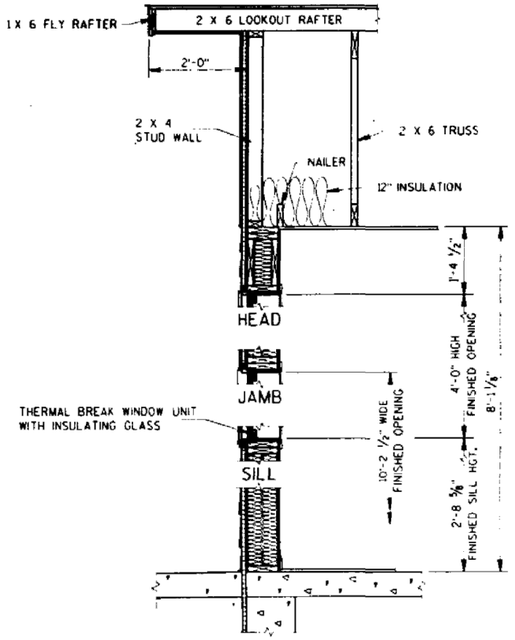
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\021200-REMBLD.DWG
LAYOUT NAME - 06

PLOT DATE : 4/25/2024 4:07 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1"=50'

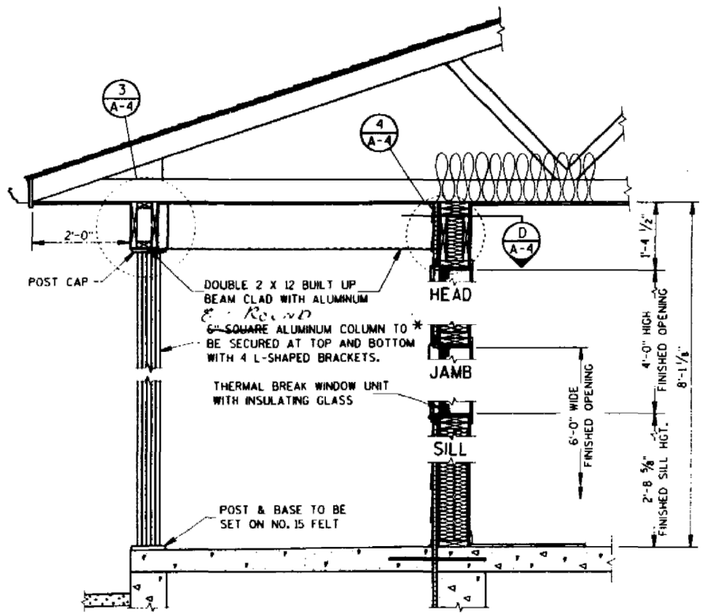
WISDOT/CADDS SHEET 44

STATE PROJECT NUMBER	SHEET NO.
1131-07-71	27

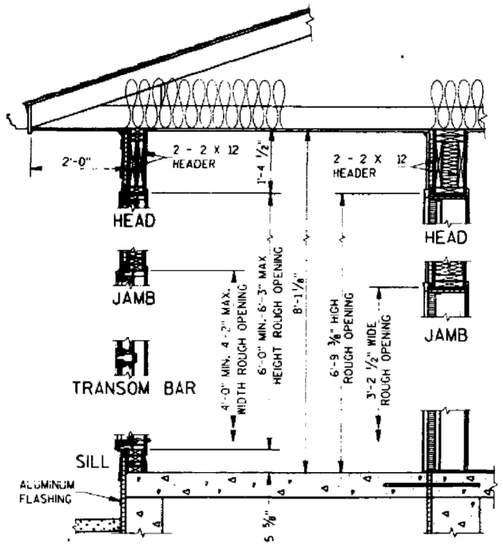
DEPERE-WRIGHTSTOWN SCALE NOS. 31, 34
DOOR, WINDOW AND PORCH DETAILS
BROWN-OUTAGAMIE CO. DRAWING A-4



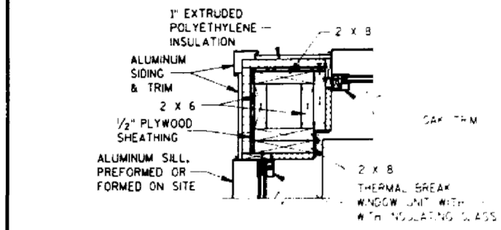
A A-4 SECTION AT FRONT WINDOW



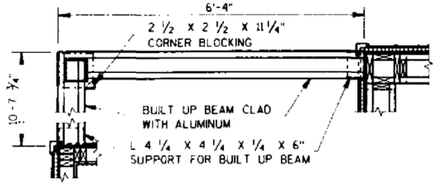
B A-4 SECTION AT WINDOW AND PORCH



C A-4 SECTION AT WINDOW AND DOOR

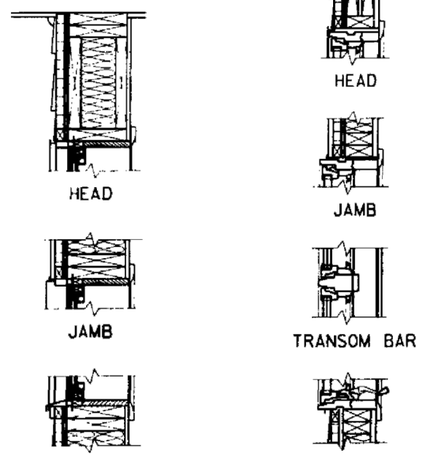


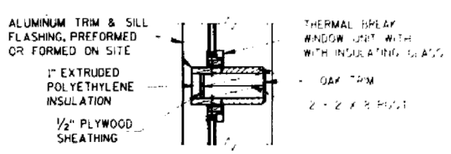
1 A-4 JAMB AT CORNER POST



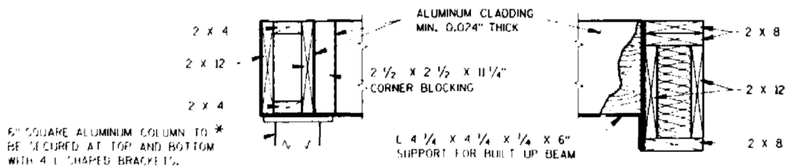
D A-4 PLAN OF BUILT UP BEAM

* IF NOT READILY AVAILABLE, SUBSTITUTE 6" SQUARE WOOD POST CLAD THE SAME AS BUILT UP BEAM.





2 A-4 JAMB AT INTERMEDIATE POST



3 A-4 BUILT UP BEAM AT POST

4 A-4 BUILT UP BEAM AT WALL

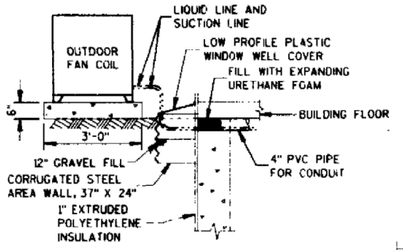
LEVELS ON 16.17, 12.13,

FILE NAME: HDGN:DE_SCALE31_34:DPWTA4.DG

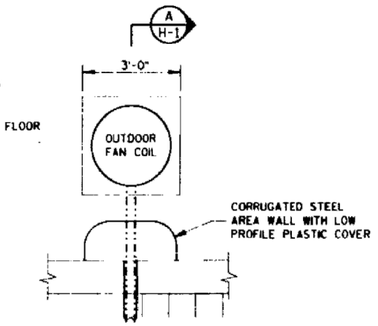
WISDOT/CADDS SHEET 42

12

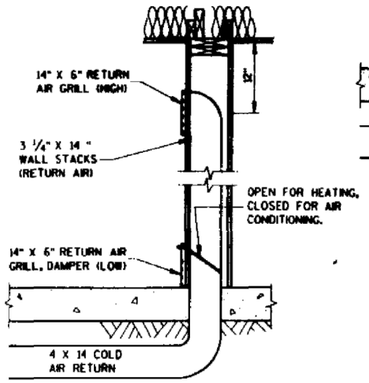
STATE PROJECT NUMBER	SHEET NO.
1131-07-71	2.0
DEPERE-WRIGHTSTOWN SCALE NOS. 31, 34 HEATING	
BROWN-OUTAGAMIE CO.	DRAWING H-1



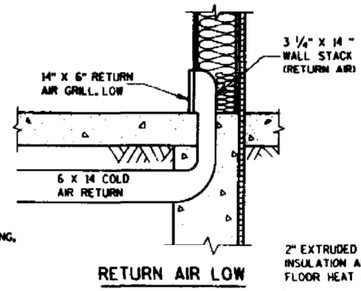
A H-1 SECTION AT AREA WALL



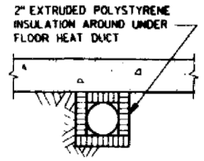
1 H-1 PLAN AT AREA WALL



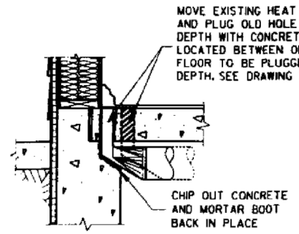
RETURN AIR HIGH & LOW



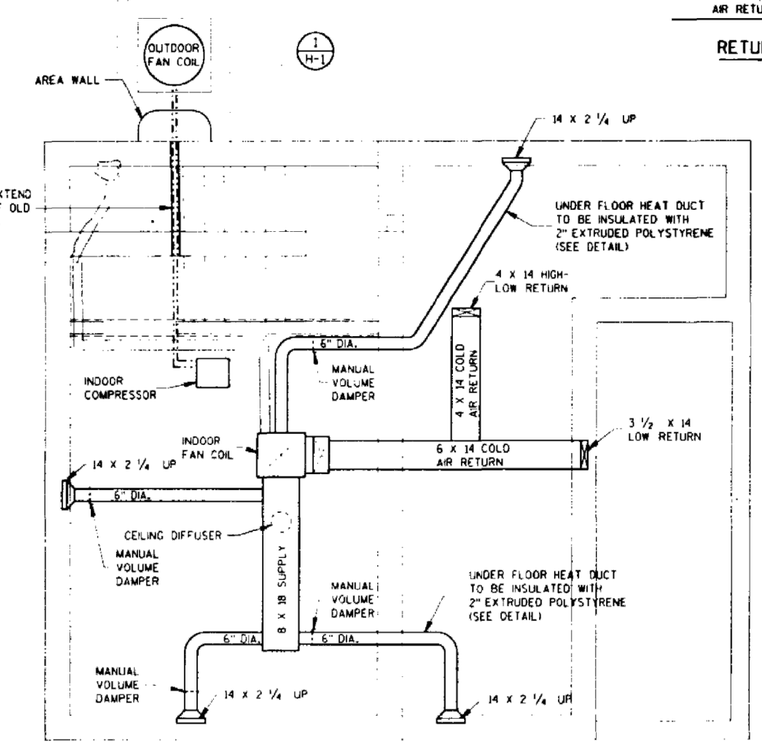
RETURN AIR LOW



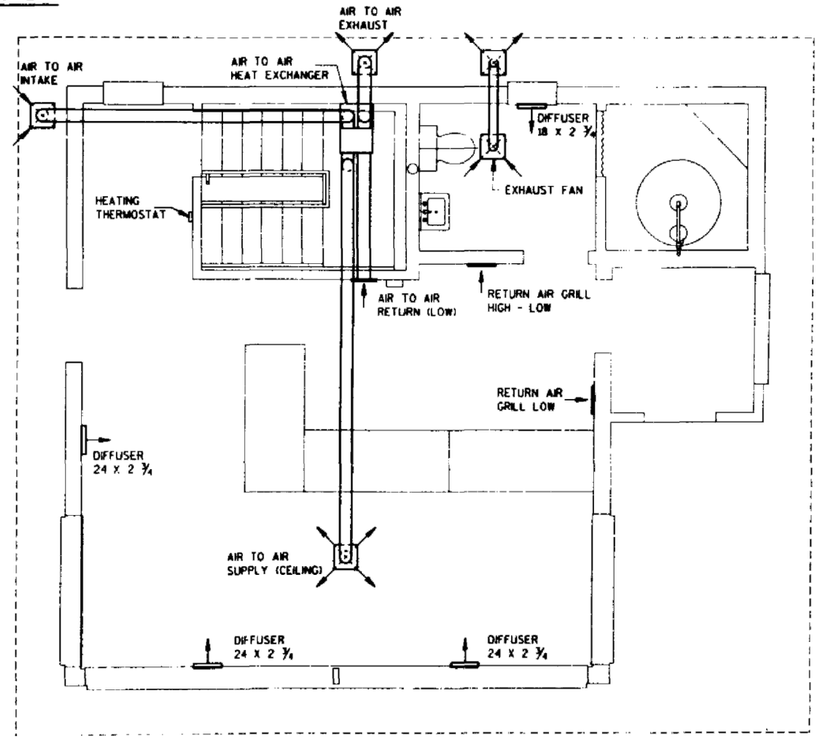
UNDER FLOOR HEAT DUCT



HEAT REGISTER MODIFICATION



BASEMENT HEAT PLAN



FIRST FLOOR AIR & HEAT

FILE NAME: MDGN:DE_SCALE31_34:DPWTH1.DG

WISDOT/CADDS SHEET 42

13

BACK FLOW VALVES PLACED ON HAND-HELD DRENCH HOSE IN SHOWER

STATE PROJECT NUMBER	SHEET	NO.
1131-07-71		

DEPERE-WRIGHTSTOWN SCALE NOS. 31, 34
PLUMBING
BROWN-OUTAGAMIE CO. DRAWING P-1

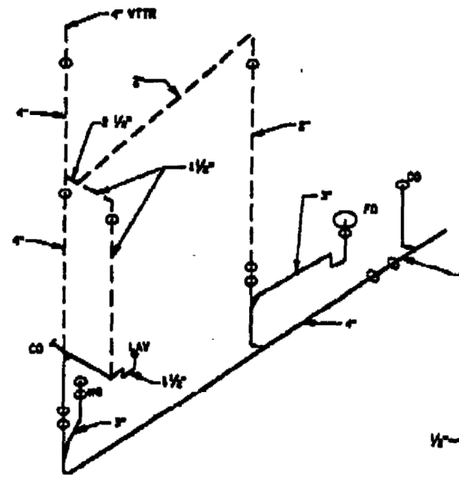
REVISED 6-25-91

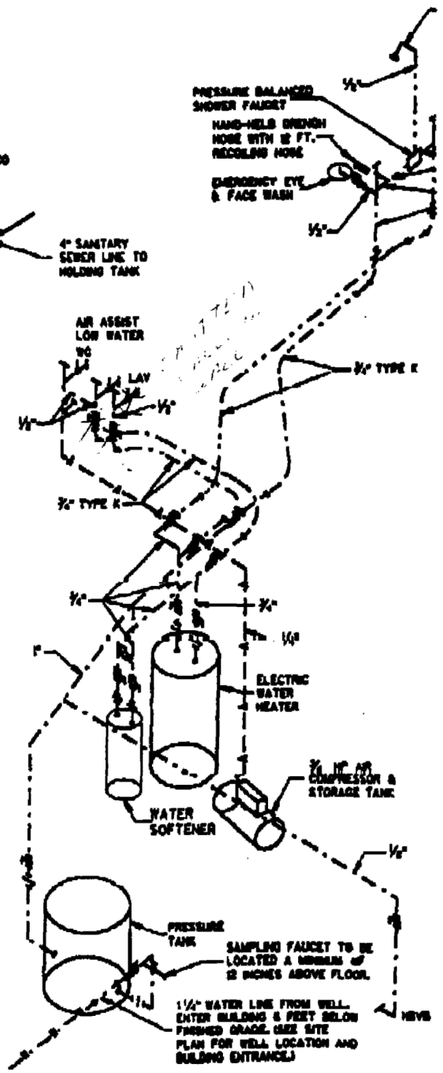
SYMBOLS

WASTE LINE		VENT TERMINAL THROUGH ROOF	VTTR
VENT LINE		HOSE BIB WITH VACUUM BREAKER	HBVB
WATER LINE FROM WELL		CLEAN OUT	CO
COLD WATER LINE		WATER CLOSET	WC
HOT WATER LINE		LAVATORY	LAV
UNION		FLOOR DRAIN	FD
DIELECTRIC UNION		SAMPLING FAUCET	
STOP VALVE		CHECK VALVE	
GATE VALVE		AIR CHAMBER OR SHOCK ABSORBER	
BALL VALVE		PIPE PASSING THRU OBJECT	
FLUSH VALVE			

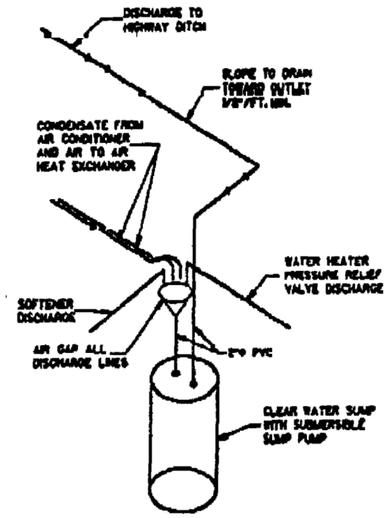
WISCONSIN
PAUL J. CHRISTIANSON
E-10207
Madison
PROFESSIONAL ENGINEER

ISOMETRIC OF VENT & WASTE LINES

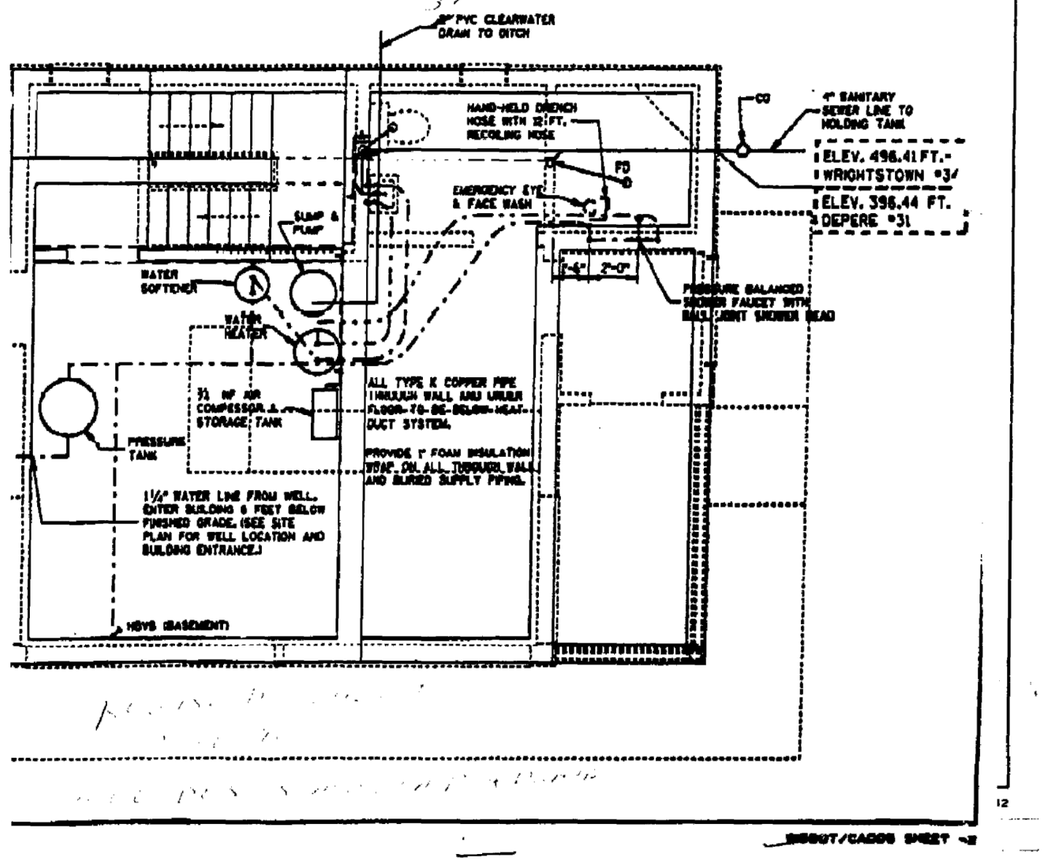




ISOMETRIC OF SUMP



ISOMETRIC OF SUPPLY LINES



WISDOT/CADDS SHEET 12

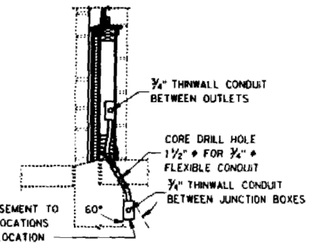
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	REMOVAL PLAN: EXISTING BUILDING	SHEET 31	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\021200-REMBLD.DWG
LAYOUT NAME - 09
PLOT DATE : 4/25/2024 4:07 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1"=50'

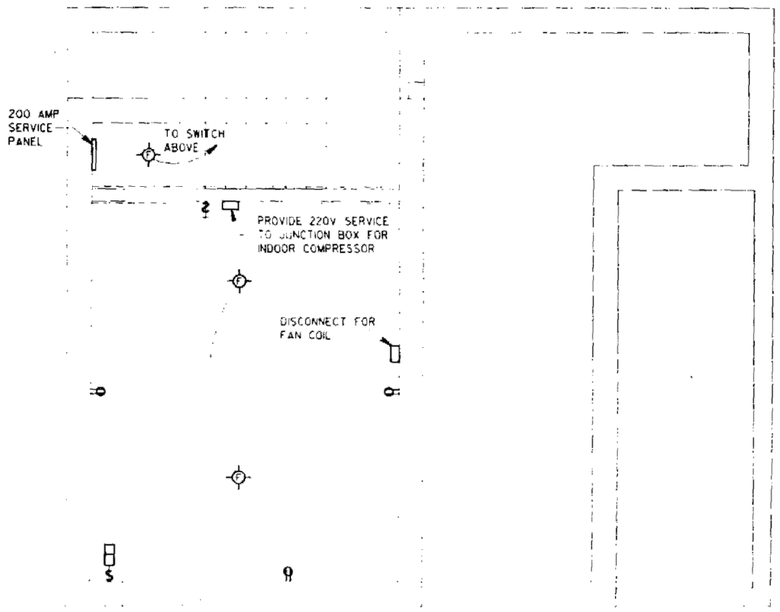
STATE PROJECT NUMBER	SHEET NO.
1131-07-71	2.9
DEPERE-WRIGHTSTOWN SCALE NOS. 31 34 ELECTRICAL	
BROWN-OUTAGAMIE CO. LINE	DRAWING E-1

SYMBOLS

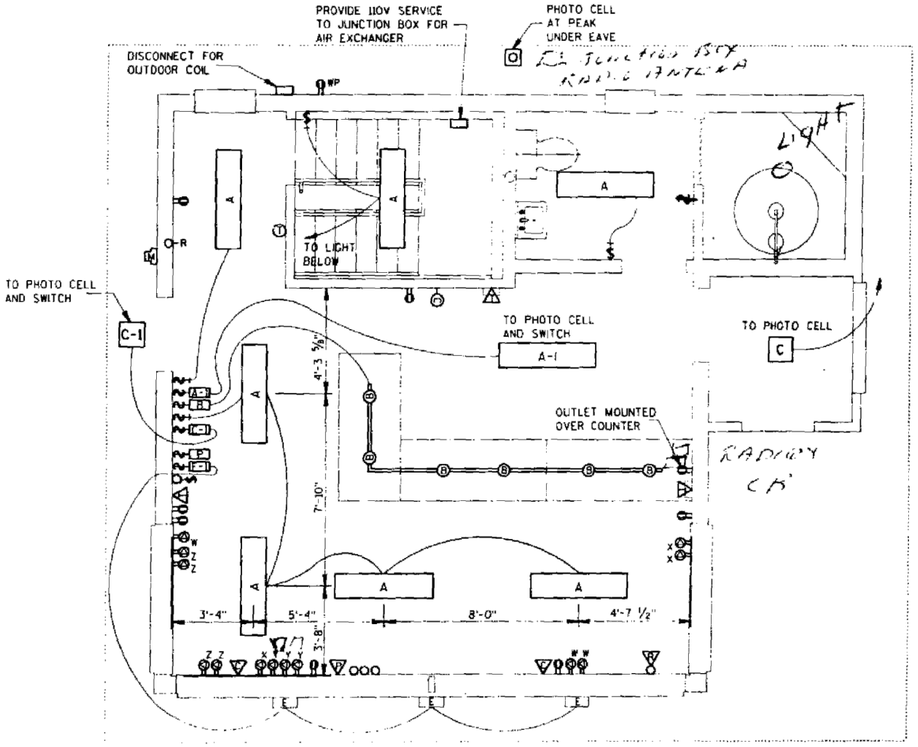
A-1	FLUORESCENT FIXTURES, 12 X 48 (LETTER DESIGNATES CIRCUIT)
(B)—(B)	TRACK LIGHTING (WITH ELECTRONIC DIMMER FOR TRACK LIGHTING AND INDIVIDUAL SWITCHES FOR EACH LIGHT)
(F)	CEILING INCANDESCENT
S1	SWITCH
S1-O	SWITCH BOX AND CONDUIT RACEWAY TO BASEMENT FOR SCALE SIGNS, SURFACE MOUNT
S3-A-2	THREE POSITION SINGLE-POLE, DOUBLE THROW W/CENTER OFF SPECIFICATION GRADE SWITCH (LETTER DESIGNATES CIRCUIT)
S-P	PARKING LOT & OUTSIDE AREA LIGHTS
S-T	TUNNEL AND SCALE PIT LIGHTS
	DUPLEX RECEPTACLE
	DUPLEX OUTLET, 3-WIRE DEDICATED CIRCUITS, WITH ISOLATED GROUND
W	- OTHER ELECTRONIC EQUIPMENT
X	- COMPUTER CIRCUITS (MAIN FRAME)
Y	- STATIC SCALE ELECTRONICS
Z	- W.I.M. SCALE & COMPUTERS
WP	WEATHER PROOF BOX WITH DUPLEX OUTLET
C	CLOCK OUTLET
R-O	1" CONDUIT RACEWAY FOR RADIO ANTENNA
O	1" NON-METALLIC CONDUIT SLEEVES THROUGH FLOOR FOR SCALE.
T-O	1" CONDUIT RACEWAY AND TELEPHONE OUTLET BOX WITH COVER FOR RADIO ANTENNA
T	TELEPHONE OUTLET BOX FOR PUBLIC ADDRESS SYSTEM
T	TELEPHONE OUTLET BOX FOR COMPUTER SYSTEM
T	TELEPHONE OUTLET BOX
	PHOTO CELL
M	ELECTRIC METER
T	HEATING THERMOSTAT



OUTLET INSTALLATION



BASEMENT ELECTRICAL PLAN



FIRST FLOOR ELECTRICAL PLAN

WISDOT/CADDS SHEET 42

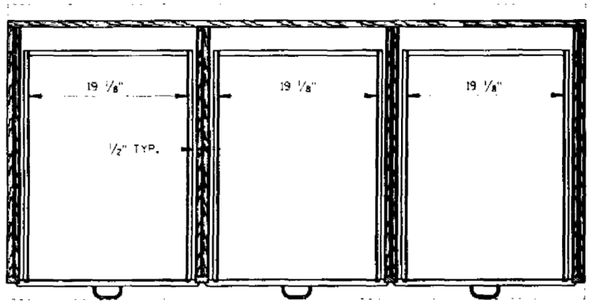
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	REMOVAL PLAN: EXISTING BUILDING	SHEET 32	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\021200-REMBLD.DWG
LAYOUT NAME - 10
PLOT DATE : 4/25/2024 4:07 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1"=50'

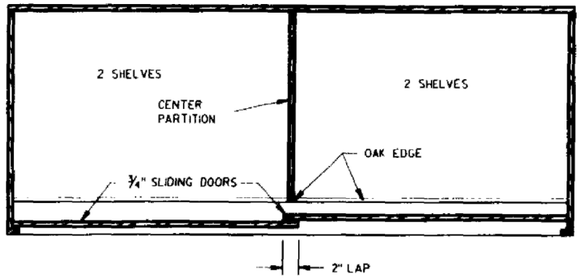
WISDOT/CADDS SHEET 44

STATE PROJECT NUMBER	SHEET NO.
1131-07-71	2.12

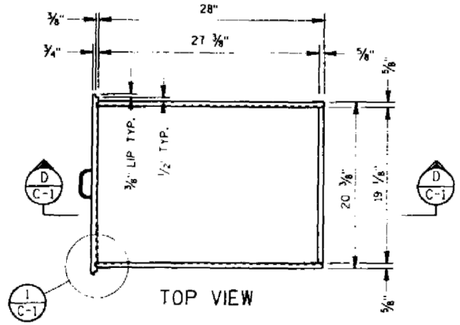
DEPERE-WRIGHTSTOWN SCALE NOS. 31, 34
WORK COUNTER DETAILS
BROWN-OUTAGAMIE CO DRAWING C-1

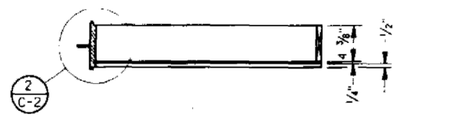


A C-1 SECTION A - A D C-1



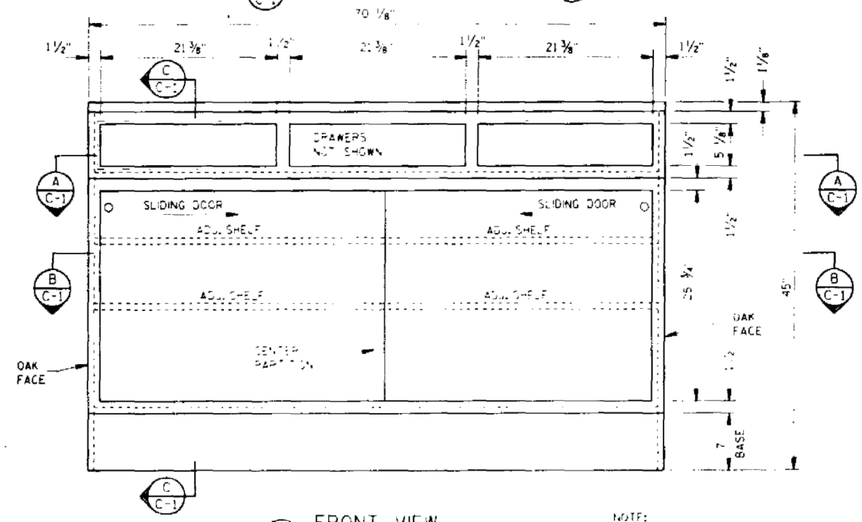
B C-1 SECTION B - B





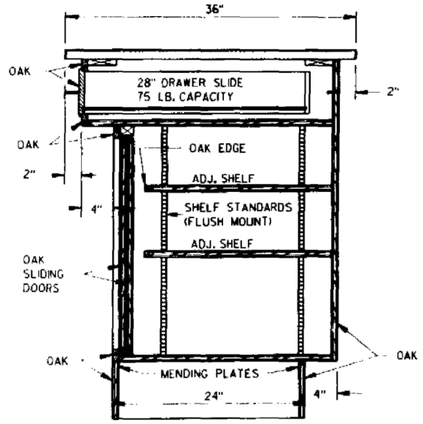
D C-1 SECTION D - D

DRAWER DETAILS

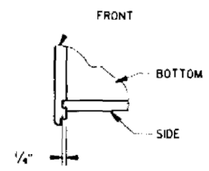


D C-1 FRONT VIEW

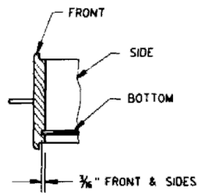
NOTE:
CABINETS & BASE TO BE SEPARATE TO ALLOW FOR ADJUSTING HEIGHT. ATTACH WITH MENDING PLATES & SCREWS INSIDE.



C C-1 SECTION C - C



1 C-1 FRONT CONNECTION

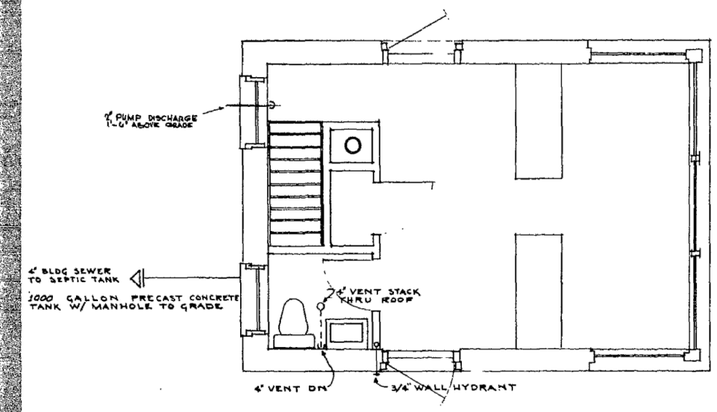


2 C-2 BOTTOM CONNECTION

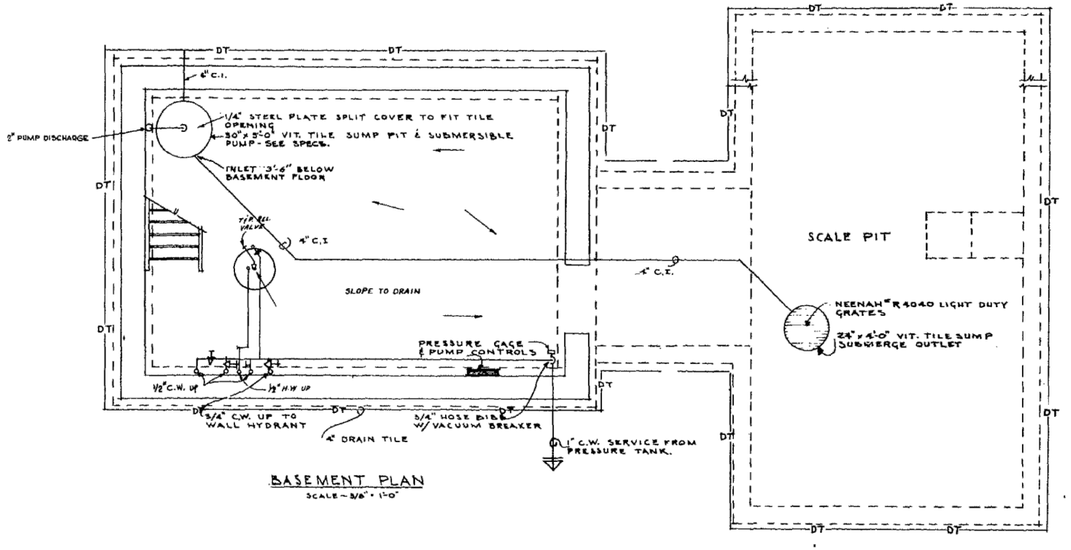
FILE NAME: DE SCALE31 34DPW1C1.DGN WISDOT/CADDS SHEET 42

PLOT SCALE: 0.6667 REV. DATE: 1-7-91 Title : WORK COUNTER DETAILS 17

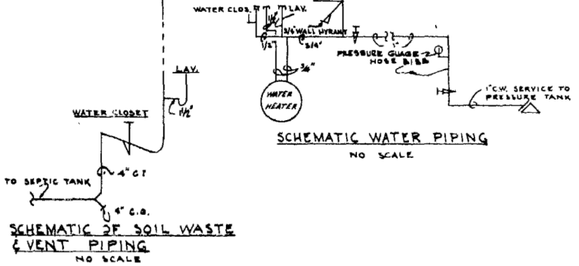
WRIGHTSTOWN



FIRST FLOOR PLAN
SCALE - 3/8" = 1'-0"

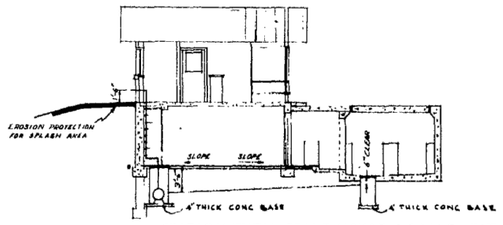


BASEMENT PLAN
SCALE - 3/8" = 1'-0"

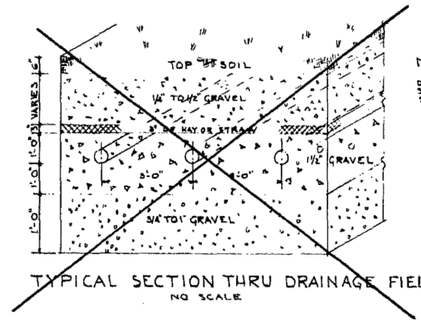


SCHEMATIC WATER PIPING
NO SCALE

SCHEMATIC OF SOIL WASTE & VENT PIPING
NO SCALE



SECTION THRU SCALE HOUSE & SCALE PIT
SCALE - 1/8" = 1'-0"



TYPICAL SECTION THRU DRAINAGE FIELD
NO SCALE

NOTE

DRAINAGE FIELD TO BE SIZED AT EACH SITE.

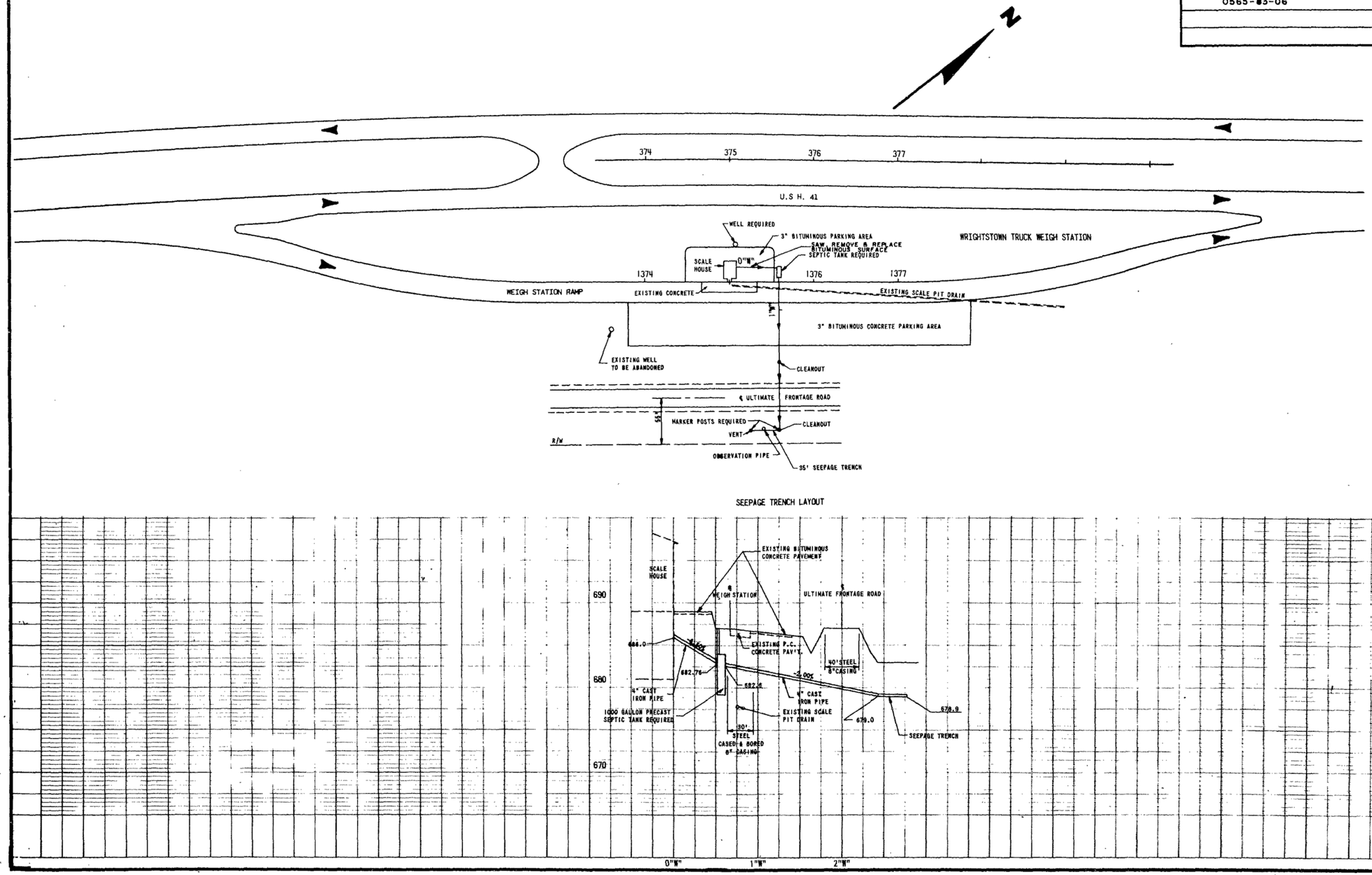
WISCONSIN JAMES E. MALONEY PROFESSIONAL ENGINEER

KB
EHM
6804-12

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	REMOVAL PLAN: EXISTING STATIC SCALE PLANS	SHEET 34 E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\021200-REMBLD.DWG
LAYOUT NAME - 12
PLOT DATE : 4/25/2024 4:07 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1"=50'

STATE PROJECT NUMBER	SHEET NO.
0565-83-06	5



PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	REMOVAL PLAN: EXISTING SEPTIC SYSTEM	SHEET 35	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\021200-REMBLD.DWG
LAYOUT NAME - 13

PLOT DATE : 4/25/2024 4:08 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1"=50'

WISDOT/CADDS SHEET 44

2

AUXILIARY COMMUNICATIONS TOWER

SW

2+00 'B'

3+00 'B'

1+00 'B'

4+00 'B'

5+00 'B'

6+00 'B'

7+00 'B'

'B' R/L

'BX' R/L

'D' R/L

'EL' R/L

'EM' R/L

'E' R/L

'ER' R/L

'T' R/L

DWY

CG-24A

REJECT

CG-24D

REJECT

692.82

692.90

692.95

693.03

693.08

693.31

692.17

691.87

691.50

691.57

692.47

692.60

692.72

692.78

2+00 'E'

1+00 'EL'

3+00 'EL'

51+00 'EM'

EP: 51+46.51 'EM'

PI: 50+95.26 'EM'

EP: 51+78.71 'E'

BP: 20+00.00 'A'

CONCRETE WHEEL STOPS (SEE SIGNING AND MARKING PLAN)

DUMPSTER ENCLOSURE

STORMSEWER REQUIRED SEE STORMSEWER PLAN

CONCRETE STOOP/APRON SEE BUILDING PLANS BOLLARDS IN STOOP/APRON INCIDENTAL TO BUILDING

SWEF/POST BUILDING

HMA-4

BP: 50+00.00 'EM'

PIPE BOLLARD, SEE CONSTRUCTION DETAIL IN BUILDING PLANS PAID SEPARATELY

SWEF/POST BUILDING GENERATOR

9'

15'

20'

SEE PLANTING PLAN GRAY GRANITE CHIPS

UNDERDRAIN REQUIRED SEE STORMSEWER PLAN

TRANSFORMER LOCATION SEE BUILDING STRUCTURAL PLANS FOR TRANSFORMER PAD

MATCHLINE 49+00 'E'

49+00 'E'

50+00 'E'

691.39
691.41
691.44
691.62
691.98
691.66
691.77

690.92
691.15

STORMSEWER REQUIRED SEE STORMSEWER PLAN

STA 20+61.31, -9.00' LT
END TAPER

EP: 51+61.11 'T'

690.75
690.81
690.83
690.74
690.71
690.23
690.52
690.49
690.69
689.31
688.11
686.89
686.06

CG-24D
REJECT

GEOTHERMAL FIELD

'A' R/L

DWY
SEE DETAIL

CONCRETE SURFACE DRAIN

51+00 'E'

51+00 'T'

21+00 'A'

18'

2'

HMA-4

BAD

SW

01

02

03

04

PIPE BOLLARD SEE CONSTRUCTION DETAIL IN BUILDING PLANS PAID SEPARATELY

SEE MAIN COMMUNICATIONS TOWER PLANS FOR TOWER SITE LAYOUT

MATCHLINE 22+82.64 'A' (PT)

BP: 50+00.00 'T'

SEE SIDEWALK LAYOUT, PLANTING PLAN, AND MAIN COMMUNICATIONS TOWER PLAN FOR ADDITIONAL LAYOUT INFORMATION

LEGEND

▬	CURB RAMP DETECTABLE WARNING FIELD YELLOW
BAD	BASE AGGREGATE DENSE 3/4-INCH
SW	CONCRETE SIDEWALK 4-INCH
CG-24A	CONCRETE CURB & GUTTER 24-INCH TYPE A
CG-24D	CONCRETE CURB & GUTTER 24-INCH TYPE D
HMA-#	HMA PAVEMENT (# - THICKNESS IN INCHES)
DWY	CONCRETE DRIVEWAY 6-INCH
XXXX.XX	PROPOSED ELEVATION (25' INTERVALS or MIDPOINT)
□/○	PROPOSED INLET
▭	PROPOSED ENDWALL

TOWER GRADING

POINT NUMBER	STATION	OFFSET	NORTHING	EASTING	DESCRIPTION
01	51+34.69'T'	15.00' LT	591161.91	881497.84	TOWER FENCE
02	50+44.69'T'	15.00' LT	591084.90	881544.41	TOWER FENCE
03	51+34.88'T'	65.00' RT	591203.47	881566.20	TOWER FENCE
04	50+44.88'T'	65.00' RT	591126.46	881612.77	TOWER FENCE

2

LEGEND

▬	CURB RAMP DETECTABLE WARNING FIELD YELLOW
BAD	BASE AGGREGATE DENSE 3/4-INCH
SW	CONCRETE SIDEWALK 4-INCH
CG-24A	CONCRETE CURB & GUTTER 24-INCH TYPE A
CG-24D	CONCRETE CURB & GUTTER 24-INCH TYPE D
HMA-#	HMA PAVEMENT (# - THICKNESS IN INCHES)
DWY	CONCRETE DRIVEWAY 6-INCH
XXXX.XX	PROPOSED ELEVATION (25' INTERVALS or MIDPOINT)
□/○	PROPOSED INLET
⊏	PROPOSED ENDWALL

N

MATCHLINE 49+00 'E'

EXISTING ACCESS ROAD

BP: 48+89.28 'E'

49+00

ESTIMATED UTILITY TRENCH

SLOPE INTERCEPT (TYP.)

BP: 50+00.00 'F'

51+00 'F'

52+00 'F'

53+00 'F'

54+00 'F'

E. FRONTAGE ROAD

55+00 'F'

HMA-4

6"

11'

BAD

+29

+04

+12

+16

+63

CG-24D
DWY

R41'

REPLACE IN KIND AREA DISTURBED FOR SANITARY AND WATER MAIN CONSTRUCTION. SEE TYPICAL SECTION FOR PAVEMENT SECTION ACTUAL AREA REQUIRED TO BE DETERMINED BY CONTRACTOR OPERATIONS

STA 53+06.28'F', 59.0' RT

KERRIGAN DRIVE

2

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN DETAILS: KERRIGAN ROAD, SANITARY AND WATER MAIN CONSTRUCTION	SHEET 37	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 02
PLOT DATE : 4/25/2024 4:09 PM
PLOT BY : JON BLOMQUIST
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2

2

SLOPE INTERCEPT (TYP.)

'PB' R/L

66+00 'PB'

67+00 'PB'

65+00 'PB'

64+00 'PB'

EP: 53+47.03 'P'

OUTLET STRUCTURE REQUIRED
SEE CONSTRUCTION DETAIL

68+00 'PB'

STORMSEWER REQUIRED
SEE STORMSEWER PLAN

STORMWATER DETENTION BASIN

53+00 'P'

STA 63+78.88'F', -48.6' LT
FENCE

'P' R/L

STA 63+65.12'F', -31.6' LT
FENCE

52+00 'P'

64+00 'F'

DWY

FENCE CHAIN LINK 6-FT

51+00 'P'

STA 61+25.72'F', -29.6' LT
FENCE

61+00 'PB'

63+00 'F'

PC: 63+37.51 'F'

50+00 'P'

62+00 'PB'

62+00 'F'

E. FRONTAGE ROAD

'F' R/L

+62

2'

11'

61+00 'F'

PT: 61+54.54 'F'

MATCHLINE 22+82.64 'A' (PT)

PC: 21+60.63 'A'

9' LT BEGIN TAPER

HMA-4

9'

22+00 'A'

ACCESS ROAD

BAD

BAD

12'

+77

2'

PT: 22+98.00 'A'

BP: 49+86.62 'P'

23+00 'A'

'A' R/L

2'

9'

+98

BEGIN TAPER

CULVERT REQUIRED
SEE STORMSEWER PLAN

SEE NEXT SHEET

2'

+57

11'

+79

11'

59+00 'F'

LEGEND

▬	CURB RAMP DETECTABLE WARNING FIELD YELLOW
BAD	BASE AGGREGATE DENSE 3/4-INCH
SW	CONCRETE SIDEWALK 4-INCH
CG-24A	CONCRETE CURB & GUTTER 24-INCH TYPE A
CG-24D	CONCRETE CURB & GUTTER 24-INCH TYPE D
HMA-#	HMA PAVEMENT (# - THICKNESS IN INCHES)
DWY	CONCRETE DRIVEWAY 6-INCH
XXXX.XX	PROPOSED ELEVATION (25' INTERVALS or MIDPOINT)
	PROPOSED INLET
	PROPOSED ENDWALL

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN DETAILS: STORMWATER DETENTION POND & ACCESS RD	SHEET 38	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 03

PLOT DATE : 4/25/2024 4:09 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

N

FENCE CHAIN LINK 6-FT

CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE D

R40'

10'

2'

+62
678.28

678.55

STA 23+94.56'A', -17.8' LT
END TAPER

+14

678.99

BAD

46

47

+83

679.76

2'

HMA - 4

14'

E. FRONTAGE ROAD

SECURE SLIDE TYPE
CLASS IV 18-FT GATE
STA 23+82 'A'

CG-24D
REJECT

SW

679.40

41

'A' R/L

679.84

CONCRETE MEDIAN
BLUNT NOSE
SEE CONST. DETAIL

681.03

680.46

4'

44

43

42

24+00 'A'

ACCESS ROAD

11'

EP: 24+55.18 'A'

R4'

681.19

680.62

680.00

679.56

SW

CG-24D
REJECT

CONCRETE MEDIAN
BLUNT NOSE
SEE CONST. DETAIL

13'

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D

STA 23+86.88'A', 16.5' RT
END TAPER

+83

680.54

2'

BAD

+79

679.62

60+00 'F'

'F' R/L

R25'

40

48

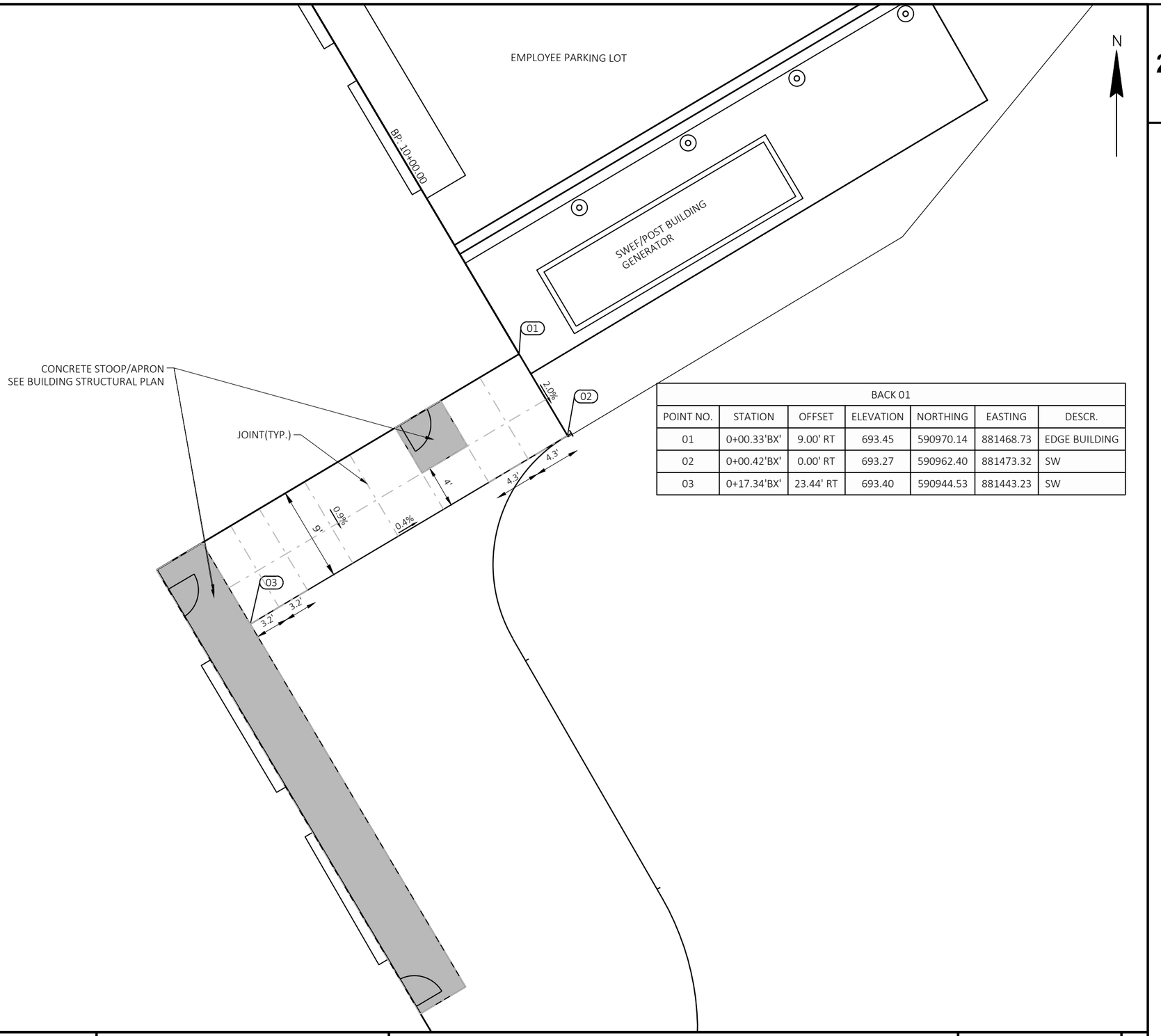
2'

ACCESS RADII					
POINT NUMBER	STATION	OFFSET	NORTHING	EASTING	DESCRIPTION
40	23+84.81'A'	41.37' RT	591287.85	881807.79	25' RAD.
41	24+00.54'A'	0.00' LT	591331.96	881811.52	4' RAD.
42	23+88.54'A'	0.00'	591328.65	881799.98	4' RAD.
43	23+75.35'A'	0.00' LT	591325.02	881787.30	4' RAD.
44	23+63.35'A'	0.00'	591321.72	881775.76	4' RAD.
45	24+13.68'A'	57.90' LT	591391.23	881808.21	40' RAD.
46	23+84.10'A'	18.73' LT	591345.43	881790.56	FENCE
47	23+86.52'A'	38.58' LT	591365.18	881787.42	FENCE
48	23+75.02'A'	44.16' RT	591282.48	881799.14	FENCE

LEGEND

	CURB RAMP DETECTABLE WARNING FIELD YELLOW
BAD	BASE AGGREGATE DENSE 3/4-INCH
SW	CONCRETE SIDEWALK 4-INCH
CG-24A	CONCRETE CURB & GUTTER 24-INCH TYPE A
CG-24D	CONCRETE CURB & GUTTER 24-INCH TYPE D
HMA-#	HMA PAVEMENT (# - THICKNESS IN INCHES)
DWY	CONCRETE DRIVEWAY 6-INCH
XXXX.XX	PROPOSED ELEVATION (25' INTERVALS or MIDPOINT)
	PROPOSED INLET
	PROPOSED ENDWALL

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN DETAILS: ACCESS ROAD: SECURE ACCESS AREA	SHEET 39	E

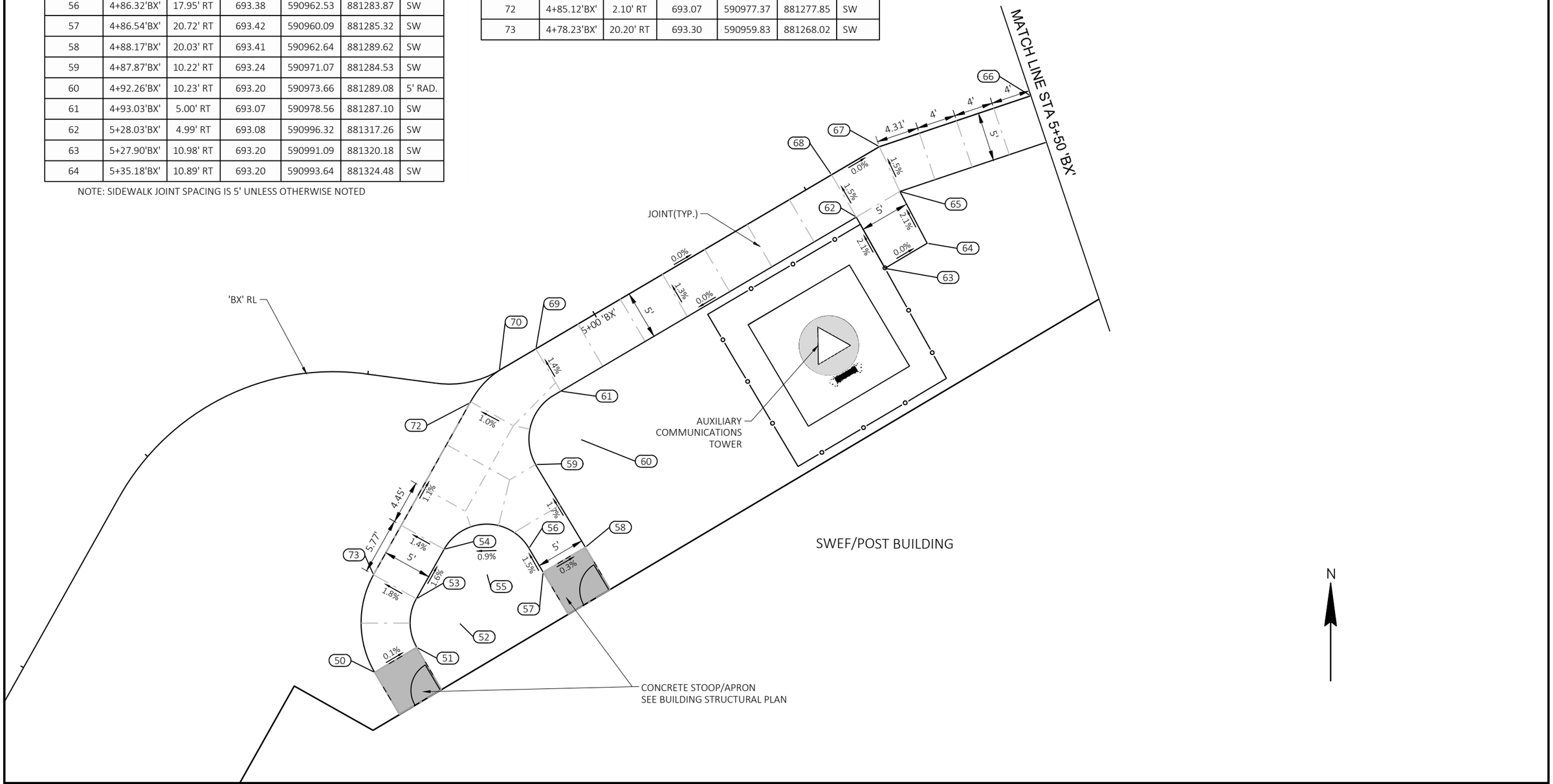


BACK 01						
POINT NO.	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCR.
01	0+00.33'BX'	9.00' RT	693.45	590970.14	881468.73	EDGE BUILDING
02	0+00.42'BX'	0.00' RT	693.27	590962.40	881473.32	SW
03	0+17.34'BX'	23.44' RT	693.40	590944.53	881443.23	SW

FRONT WEST 02 (BX RL)						
POINT NO.	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCR.
50	4+79.62'BX'	30.06' RT	693.43	590949.88	881268.12	SW
51	4+82.47'BX'	27.00' RT	693.42	590952.43	881272.42	SW
52	4+83.66'BX'	24.35' RT	693.44	590954.94	881276.75	5' RAD.
53	4+82.32'BX'	22.07' RT	693.39	590957.39	881272.38	SW
54	4+83.17'BX'	16.86' RT	693.30	590962.43	881275.21	SW
55	4+84.67'BX'	19.55' RT	693.39	590959.98	881279.57	5' RAD.
56	4+86.32'BX'	17.95' RT	693.38	590962.53	881283.87	SW
57	4+86.54'BX'	20.72' RT	693.42	590960.09	881285.32	SW
58	4+88.17'BX'	20.03' RT	693.41	590962.64	881289.62	SW
59	4+87.87'BX'	10.22' RT	693.24	590971.07	881284.53	SW
60	4+92.26'BX'	10.23' RT	693.20	590973.66	881289.08	5' RAD.
61	4+93.03'BX'	5.00' RT	693.07	590978.56	881287.10	SW
62	5+28.03'BX'	4.99' RT	693.08	590996.32	881317.26	SW
63	5+27.90'BX'	10.98' RT	693.20	590991.09	881320.18	SW
64	5+35.18'BX'	10.89' RT	693.20	590993.64	881324.48	SW

NOTE: SIDEWALK JOINT SPACING IS 5' UNLESS OTHERWISE NOTED

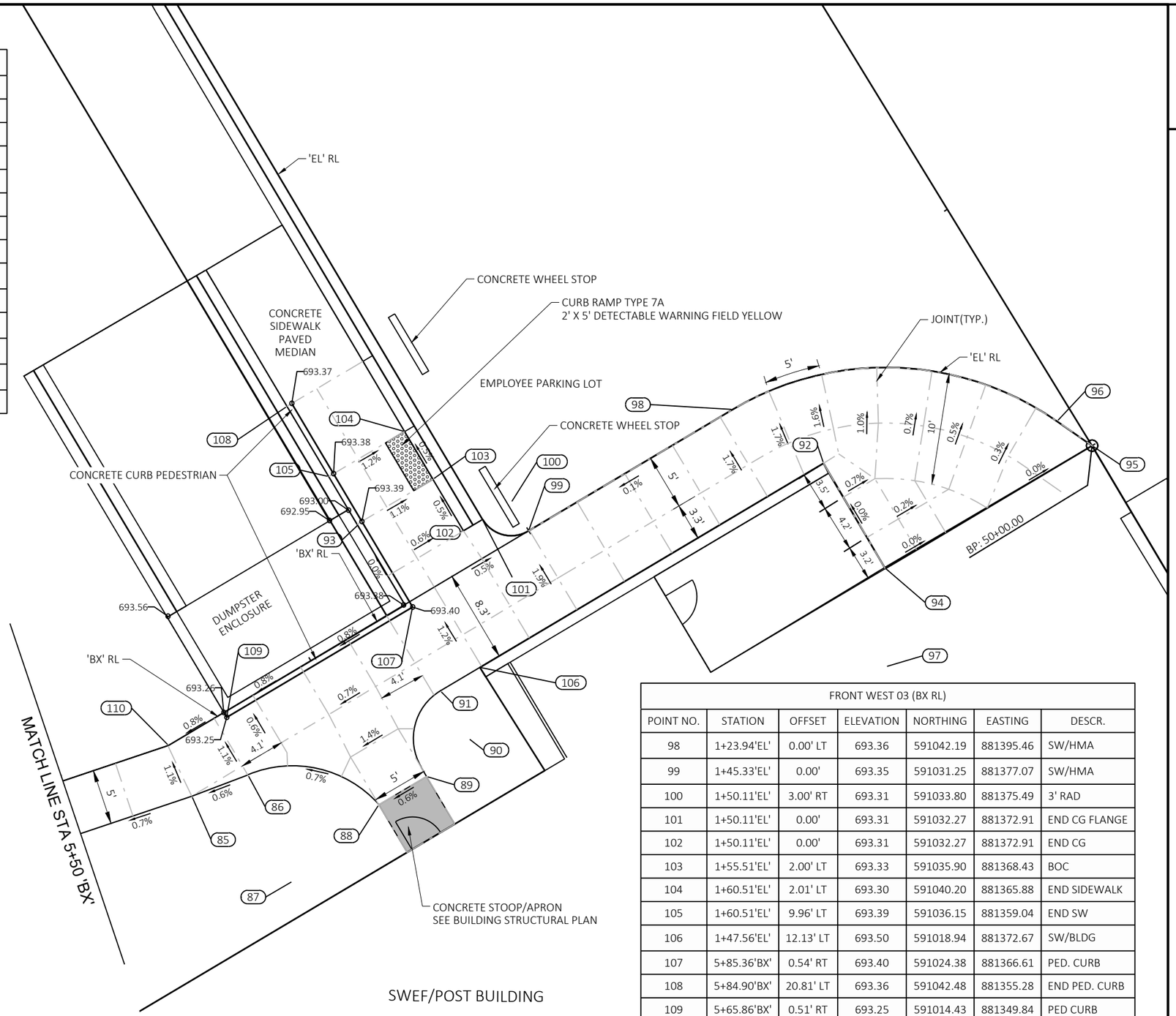
FRONT WEST 02 (BX RL)						
POINT NO.	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCR.
65	5+34.22'BX'	5.00' RT	693.08	590998.92	881321.69	SW
66	5+50.00'BX'	0.02' RT	693.13	591008.66	881335.07	SW
67	5+33.69'BX'	0.00'	693.00	591003.49	881319.60	SW
68	5+28.04'BX'	0.01' LT	693.00	591000.63	881314.73	SW
69	4+93.04'BX'	0.00'	693.01	590982.87	881284.57	SW
70	4+88.72'BX'	0.00'	693.03	590980.68	881280.84	SW
72	4+85.12'BX'	2.10' RT	693.07	590977.37	881277.85	SW
73	4+78.23'BX'	20.20' RT	693.30	590959.83	881268.02	SW



PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	SIDEWALK DETAILS	SHEET 41	E

N

FRONT WEST 03 (BX RL)						
POINT NO.	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCR.
85	5+60.05'BX'	5.03' RT	693.27	591007.32	881346.69	SW
86	5+64.84'BX'	5.95' RT	693.30	591009.23	881351.75	SW
87	5+63.40'BX'	16.25' RT	693.45	590999.64	881355.78	10.4' RAD
88	5+73.62'BX'	14.30' RT	693.38	591006.55	881363.56	SW
89	5+78.62'BX'	14.31' RT	693.41	591009.10	881367.86	SW
90	5+83.62'BX'	13.32' RT	693.50	591012.52	881371.65	5' RAD.
91	5+83.63'BX'	8.32' RT	693.50	591016.81	881369.10	SW
92	1+17.45'EL'	7.81' LT	693.50	591037.34	881403.66	SW/BLDG
93	1+55.44'EL'	9.80' LT	693.41	591031.86	881361.77	END RAMP
94	1+09.74'EL'	18.05' LT	693.50	591027.94	881409.17	SW/BLDG
95	0+89.14'EL'	0.00'	693.50	591038.93	881427.88	SW/HMA/BLDG
96	0+92.99'EL'	0.00'	693.48	591041.13	881424.72	SW/HMA
97	0+81.50'EL'	26.18' LT	693.50	591018.99	881409.27	27' RAD.



SWEF/POST BUILDING

FRONT WEST 03 (BX RL)						
POINT NO.	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCR.
98	1+23.94'EL'	0.00' LT	693.36	591042.19	881395.46	SW/HMA
99	1+45.33'EL'	0.00'	693.35	591031.25	881377.07	SW/HMA
100	1+50.11'EL'	3.00' RT	693.31	591033.80	881375.49	3' RAD
101	1+50.11'EL'	0.00'	693.31	591032.27	881372.91	END CG FLANGE
102	1+50.11'EL'	0.00'	693.31	591032.27	881372.91	END CG
103	1+55.51'EL'	2.00' LT	693.33	591035.90	881368.43	BOC
104	1+60.51'EL'	2.01' LT	693.30	591040.20	881365.88	END SIDEWALK
105	1+60.51'EL'	9.96' LT	693.39	591036.15	881359.04	END SW
106	1+47.56'EL'	12.13' LT	693.50	591018.94	881372.67	SW/BLDG
107	5+85.36'BX'	0.54' RT	693.40	591024.38	881366.61	PED. CURB
108	5+84.90'BX'	20.81' LT	693.36	591042.48	881355.28	END PED. CURB
109	5+65.86'BX'	0.51' RT	693.25	591014.43	881349.84	PED CURB
110	5+60.05'BX'	0.00'	693.21	591011.89	881344.59	SW

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	SIDEWALK DETAILS	SHEET 42	E

2

TEMPORARY DITCH CHECK (SEE SDD) (TYP.)

KAUKAUNA UTILITIES (ELEC.)

SLOPE INTERCEPT (TYP.)

WISDOT

NO TOPSOIL TO BE PLACED HERE
SEEDING TEMPORARY, FERTILIZER TYPE B, MULCH AND SOIL STABILIZER TYPE B

SILT FENCE (SEE SDD) (TYP.)

WISDOT

AUXILIARY COMMUNICATIONS TOWER

'D' R/L

2+00 'B'

TOPSOIL STRIPPING STOCKPILE

2+00 'E'

3+00 'EL'

51+00 'EM'

'EL' R/L

'EM' R/L

STORMSEWER REQUIRED SEE STORMSEWER PLAN

SEE PLANTING PLAN AND CONSTRUCTION DETAIL FOR AREAS ADJACENT TO THE BUILDING

3+00 'B'

1+00 'B'

EMPLOYEE PARKING LOT

EROSION MAT URBAN CLASS I, TYPE B IN DITCH (SEE CONSTRUCTION DETAIL)

STORMSEWER REQUIRED SEE STORMSEWER PLAN

DUMPSTER ENCLOSURE

1+00 'EL'

7+00 'B'

EROSION MAT URBAN CLASS I, TYPE B AT CULVERT END (SEE CONSTRUCTION DETAIL)

SWEF/POST BUILDING

INLET PROTECTION TYPE A (SEE SDD) (TYP.)

'A' R/L

21'A'

MATCHLINE 22+82.64 'A' (PT)

'B' R/L

GRAY GRANITE CHIPS AND WEED BARRIER FABRIC SEE PLANTING PLAN

51+00 'E'

SWEF/POST BUILDING GENERATOR

'E' R/L

51+00 'T'

4+00 'B'

UNDERDRAIN REQUIRED SEE STORMSEWER PLAN

'T' R/L

'A' RL FORESLOPE
SALVAGED TOPSOIL, SEEDING NO. 30, FERTILIZER TYPE B AND MULCH

6+00 'B'

SEE MAIN COMMUNICATIONS TOWER PLANS FOR TOWER SITE
WASHED STONE 3/4-INCH

BEHIND CURB ON 'A' RL
SALVAGED TOPSOIL, SEEDING NO. 40, FERTILIZER TYPE B AND MULCH

BUILDING FOUNDATION SLOPES ('BX' CROSS SECTIONS)
NO TOPSOIL TO BE PLACED IN THIS AREA
SEEDING TEMPORARY, FERTILIZER TYPE B, MULCH AND SOIL STABILIZER TYPE B REQUIRED

5+00 'B'

50+00 'E'

FILL SLOPE: SEEDING TEMPORARY, FERTILIZER TYPE B, MULCH AND SOIL STABILIZER TYPE B REQUIRED

LEGEND

- TOPSOIL STRIPPING STOCKPILE
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- RIPRAP LIGHT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A

DISTURBED AREAS NOT COVERED WITH EROSION MAT, RIPRAP, PAVEMENT, OR GRAVEL ARE TO BE COVERED WITH MULCH

EROSION MAT URBAN CLASS I, TYPE B AT CULVERT END (SEE CONSTRUCTION DETAIL)

'ER' CROSS SECTIONS
TERRACE: SALVAGED TOPSOIL, SEEDING NO. 40, FERTILIZER TYPE B AND MULCH
FILL SLOPE: SEEDING TEMPORARY, FERTILIZER TYPE B, MULCH AND SOIL STABILIZER TYPE B

MATCHLINE 49+00 'E'

49+00 'E'

TOPSOIL STRIPPING STOCKPILE

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	EROSION CONTROL	SHEET 43	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 00
PLOT DATE : 4/25/2024 4:10 PM
PLOT BY : JON BLOMQUIST
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2

2

SLOPE INTERCEPT (TYP.)

ACCESS ROAD BACKSLOPE
NO TOPSOIL, SEEDING TEMPORARY, SOIL STABILIZER TYPE B, MULCH

TEMPORARY DITCH CHECK (SEE SDD) (TYP.)

EROSION MAT CLASS I, TYPE B IN DITCH (SEE CONSTRUCTION DETAIL)

ACCESS ROAD FORESLOPE
SALV. TOPSOIL, SEEDING NO 30, SOIL STABILIZER TYPE B, MULCH

'P' RL & 'PB' RL
SALVAGED TOPSOIL, SEED NO 10, FERTILIZER TYPE B.
'P' RL TO RECEIVE E-MAT URBAN CLASS I TYPE A
'PB' RL TO RECEIVE SOIL STABILIZER TYPE B & MULCH

'PB' R/L

'P' R/L

'A' R/L

'F' R/L

67'PB'
66'PB'
65'PB'
64'PB'
63'PB'
62'PB'
68'PB'

53'P'
52'P'
51'P'
50'P'

EP: 53+47.03 'P'

CULVERT REQUIRED
SEE OUTLET STRUCTURE DETAIL

CULVERT PIPE CHECK (SEE SDD)

RIPRAP LIGHT (6'X20')
OVERFLOW, ELEV. 677.00

INLET PROTECTION TYPE A
(SEE SDD) (TYP.)

BP: 49+89.62 'P'

MATCHLINE 22+82.64 'A' (PT)

22'A'
23'A'
24'A'

ACCESS ROAD

TOPSOIL STRIPPING STOCKPILE
(SEE CONSTRUCTION DETAIL)

RIPRAP LIGHT (6'X20')

CULVERT REQUIRED
SEE STORMSEWER PLAN

CULVERT PIPE CHECK
(SEE SDD)

64'F'
63'F'
62'F'
61'F'
60'F'
59'F'

PC: 63+37.51 'F'

PT: 61+54.54 'F'

E. FRONTAGE ROAD

ASPHALT FLUME

E. FRONTAGE ROAD FORESLOPE
SALV. TOPSOIL, SEEDING NO 30, SOIL STABILIZER TYPE B, MULCH

LEGEND

- TOPSOIL STRIPPING STOCKPILE
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- RIPRAP LIGHT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A

DISTURBED AREAS NOT COVERED WITH EROSION MAT, RIPRAP, PAVEMENT, OR GRAVEL ARE TO BE COVERED WITH MULCH

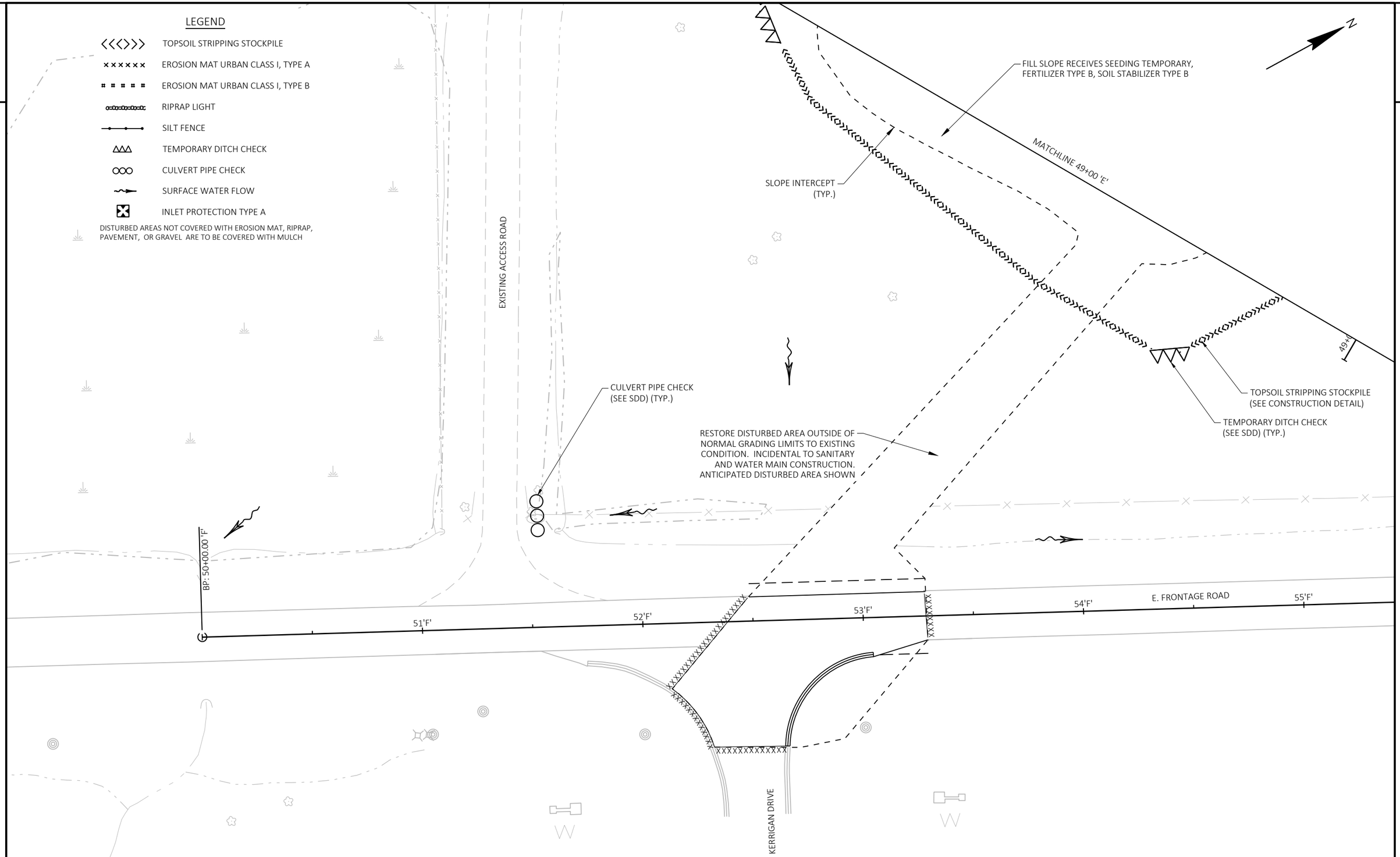
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	EROSION CONTROL	SHEET 44	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 01
PLOT DATE : 6/28/2024 12:01 PM
PLOT BY : JON BLOMQUIST
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

LEGEND

- TOPSOIL STRIPPING STOCKPILE
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- RIPRAP LIGHT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A

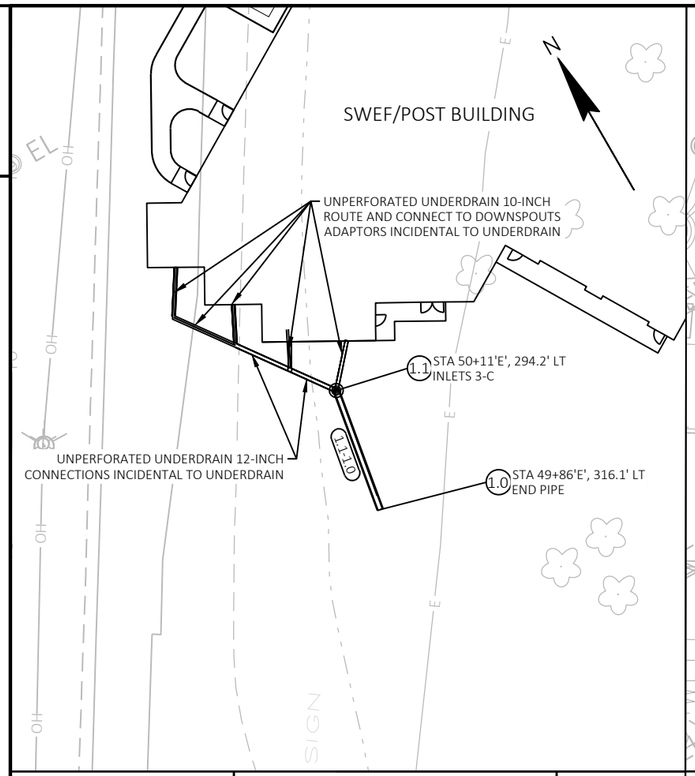
DISTURBED AREAS NOT COVERED WITH EROSION MAT, RIPRAP, PAVEMENT, OR GRAVEL ARE TO BE COVERED WITH MULCH

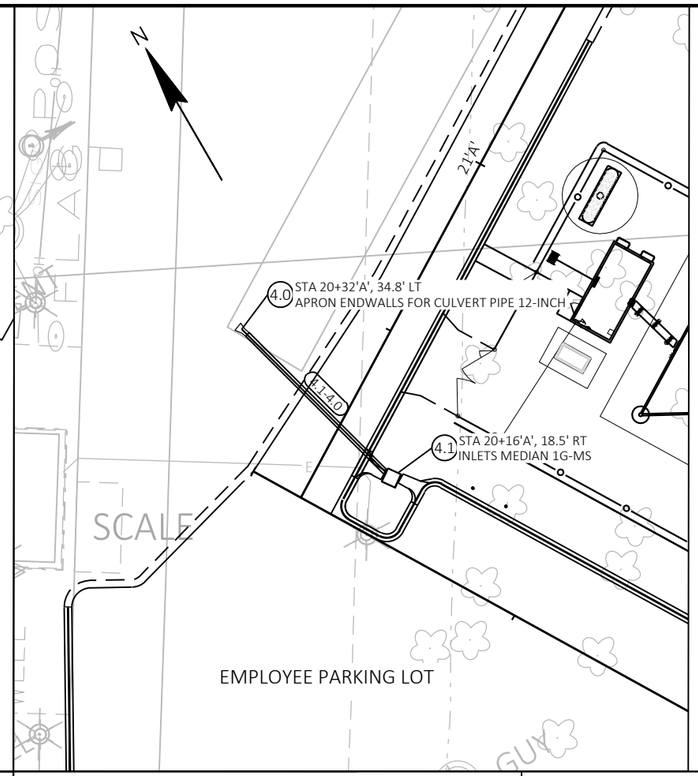


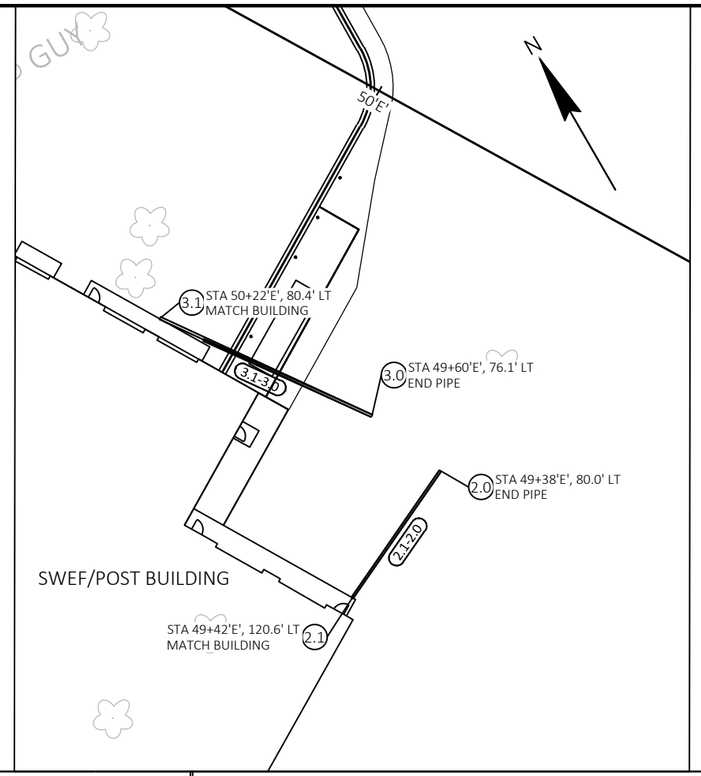
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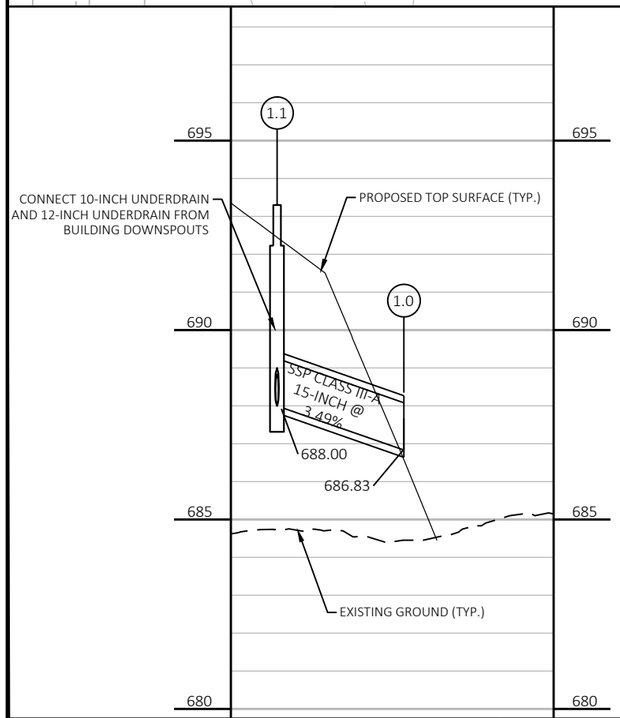
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	EROSION CONTROL	SHEET 45	E

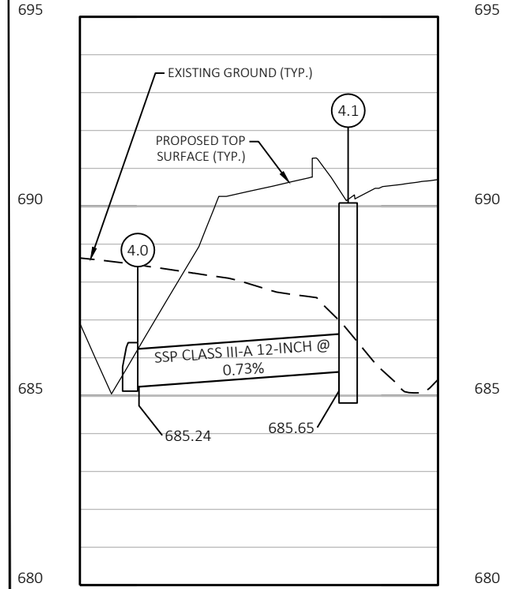
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 02
PLOT DATE : 4/25/2024 4:11 PM
PLOT BY : JON BLOMQUIST
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

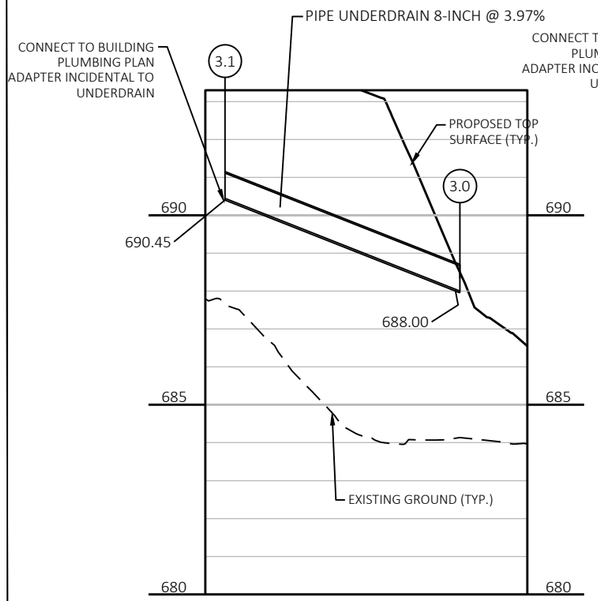


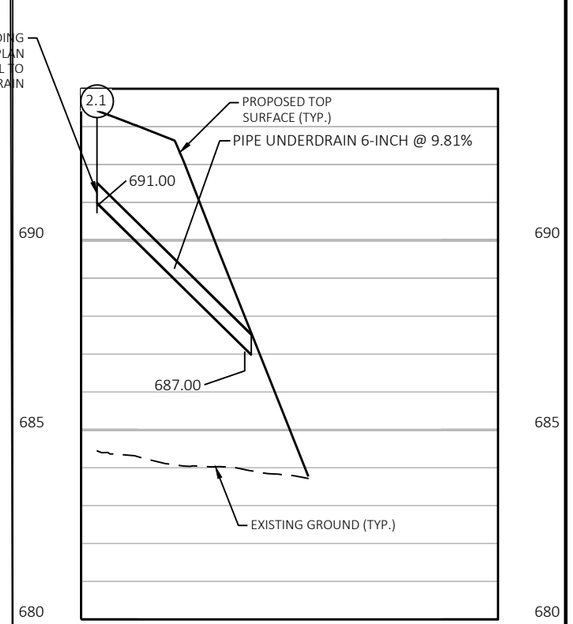








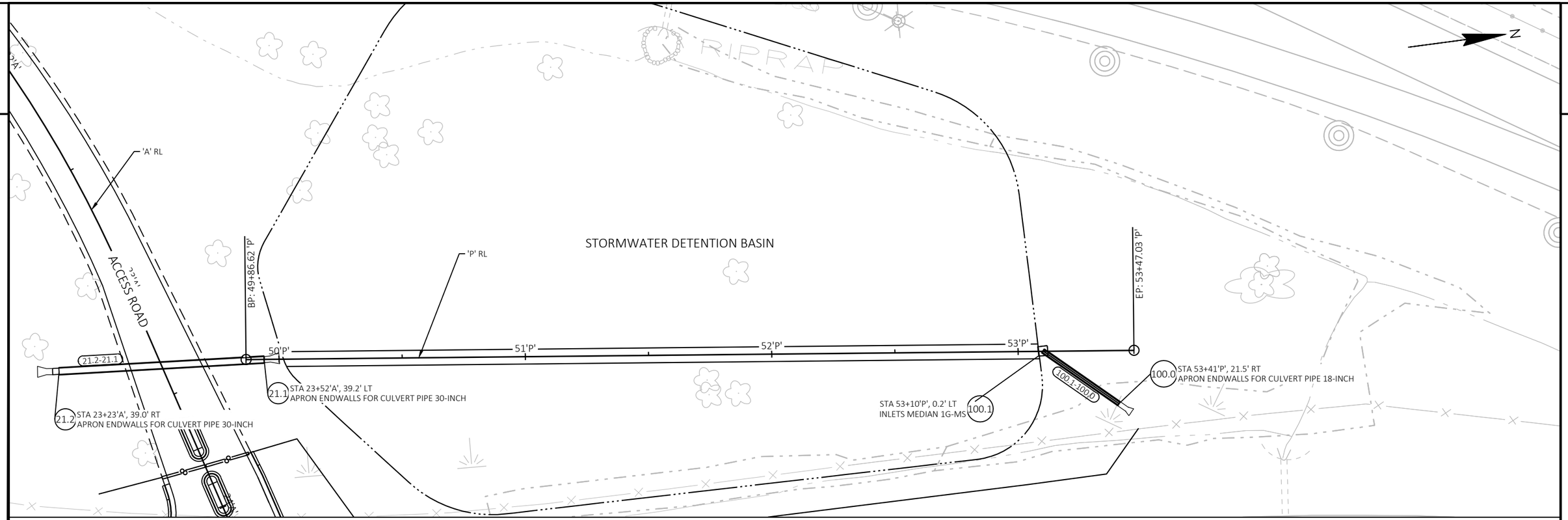


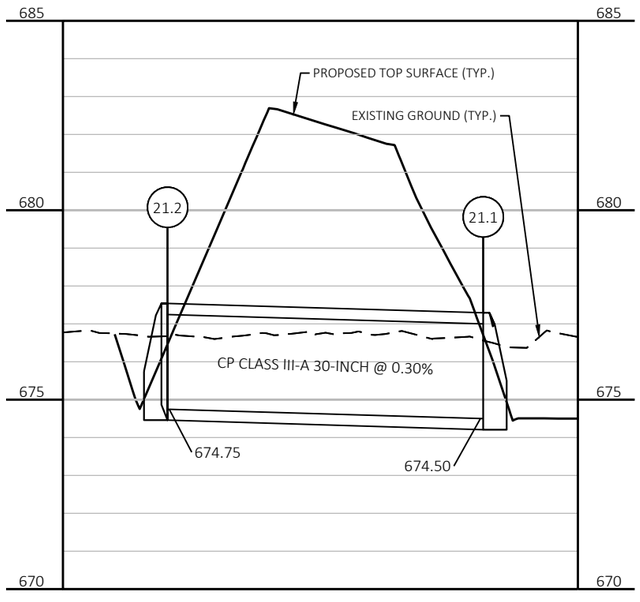


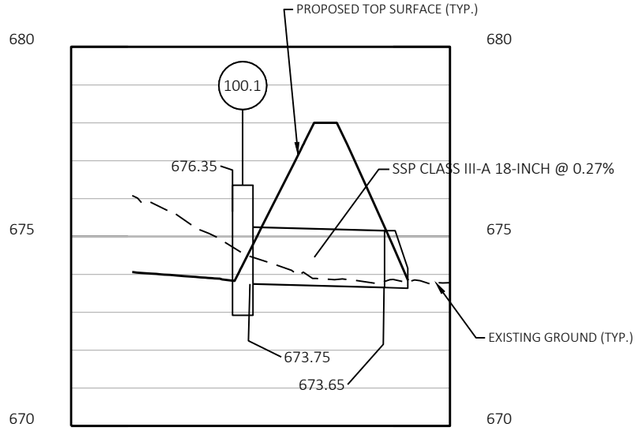
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	STORMSEWER PLAN	SHEET 46	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3 BLD\SHEETSPLAN\022501-SS.DWG PLOT DATE : 4/30/2024 11:40 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1"=40'

2







PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	STORMSEWER PLAN	SHEET 47	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3 BLD\SHEETSPLAN\022501-SS.DWG PLOT DATE : 4/25/2024 4:13 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : ##########

2

STA 51+17'E', 166.7' LT
COMMUNICATION VAULT TYPE 1 V01

45 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
145 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT (12-CT)
(FROM EXISTING CABLE IN VAULT EX)

EX STA 1374+91'NB', 107.6' RT
EXISTING VAULT

185 LF CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
285 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT (12-CT)
(FROM EXISTING CABLE IN VAULT EX)

N

SEE STORMSEWER PLAN

SEE STORMSEWER PLAN

LIGHTED BOLLARD (TYP.)

BUILDING TO TOWER SHELTER
3 X 190 LF CONDUIT RIGID NONMETALLIC SCHEDULE 40 4-INCH

GEOTHERMAL FIELD

APPROXIMATE
GEOTHERMAL PIPING
LOCATION

STA 50+72, 164.6' LT
COMMUNICATION VAULT TYPE 1 V00

EP: 51+78.71 'E'

COORDINATE "MAIN
COMMUNICATIONS TOWER
ELECTRICAL SERVICE"
ACTUAL LOCATION TO BE
DETERMINED BY UTILITY

V02 STA 51+07'E', 41.9' RT
COMMUNICATION VAULT TYPE 1

SWEF /POST BUILDING

51+00 'E'

135 LF - CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
370 LF "12 CT FIBER OPTIC CABLE"
FROM TELECOM ROOM TO TOWER VIA V02 IN 2-INCH CONDUIT
2 FIBER OPTIC PATCH PANELS IN SWEF/POST COMMUNICATIONS ROOM

EMPLOYEE PARKING

TWR
TOWER SHELTER

ACCESS ROAD

'E' R/L

BLDG
TELCOM ROOM

SWEF/POST
BUILDING
GENERATOR

MAIN
COMMUNICATIONS
TOWER

V02 TO TOWER SHELTER (TWR)
INSTALL 60 LF CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
1 FIBER OPTIC PATCH PANEL IN MAIN COMMUNICATIONS TOWER SHELTER

COORDINATE "NATURAL GAS SERVICE WRIGHTSTOWN SWEF\POST"
ACTUAL LOCATION TO BE DETERMINED BY UTILITY

SEE STORMSEWER PLAN

50+00 'E'

LIGHT POLE (TYP.)

APPROXIMATE ELECTRIC TRANSFORMER LOCATIONS

LIGHTING CONTROL CABINET, SEE LIGHTING PLANS

NOTES:
SEE BUILDING PLANS FOR CONDUIT TO GATES AND
LIGHTING PLANS FOR LIGHTING CONDUIT

SEE SANITARY
AND WATER PLANS

BP: 48+89.28 'E'

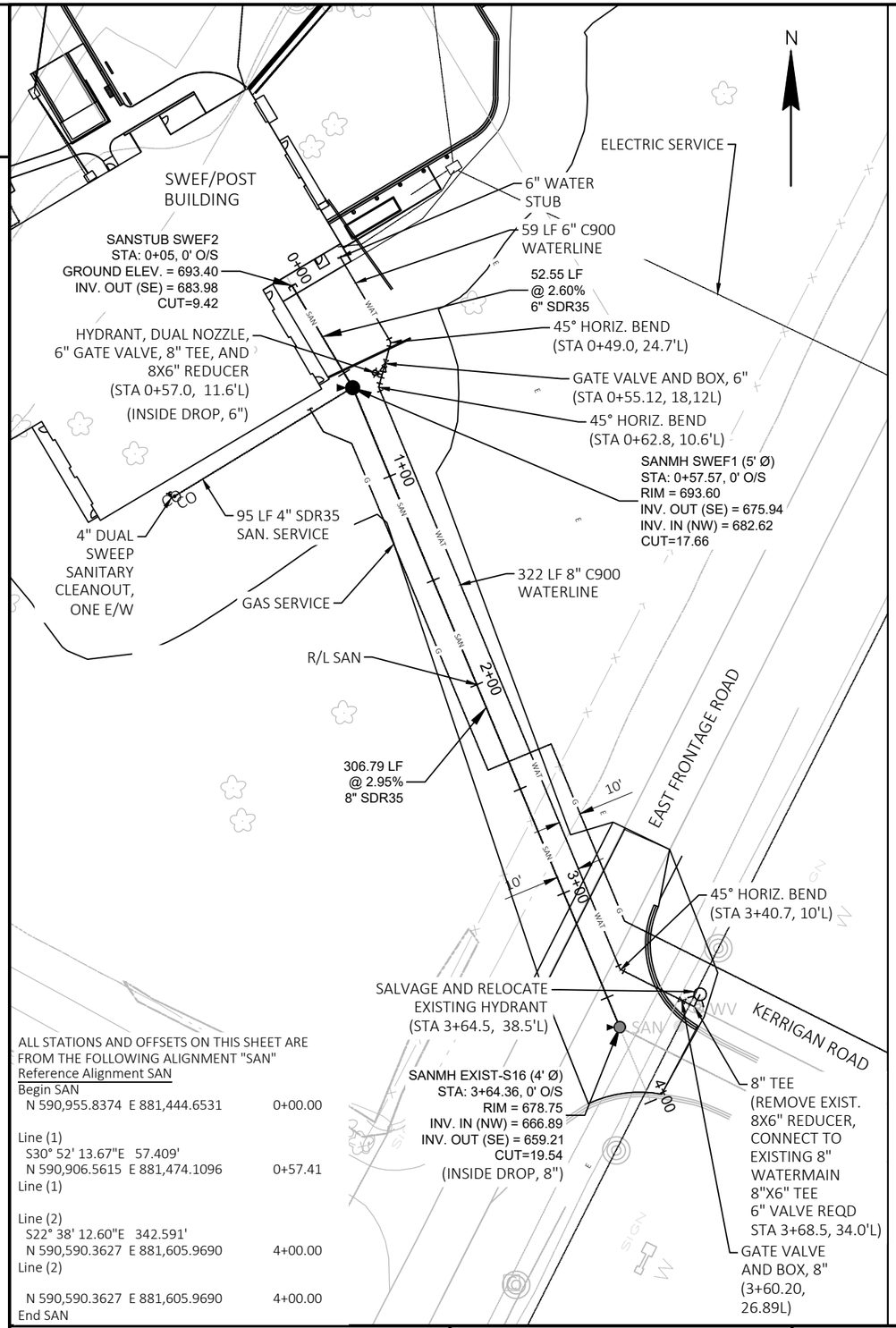
49+00 'E'

COORDINATE "ELECTRICAL SERVICE WRIGHTSTOWN SWEF\POST"
ACTUAL LOCATION TO BE DETERMINED BY UTILITY

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	UTILITY PLAN	SHEET 48	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\023000-UP_FO.DWG
LAYOUT NAME - 01

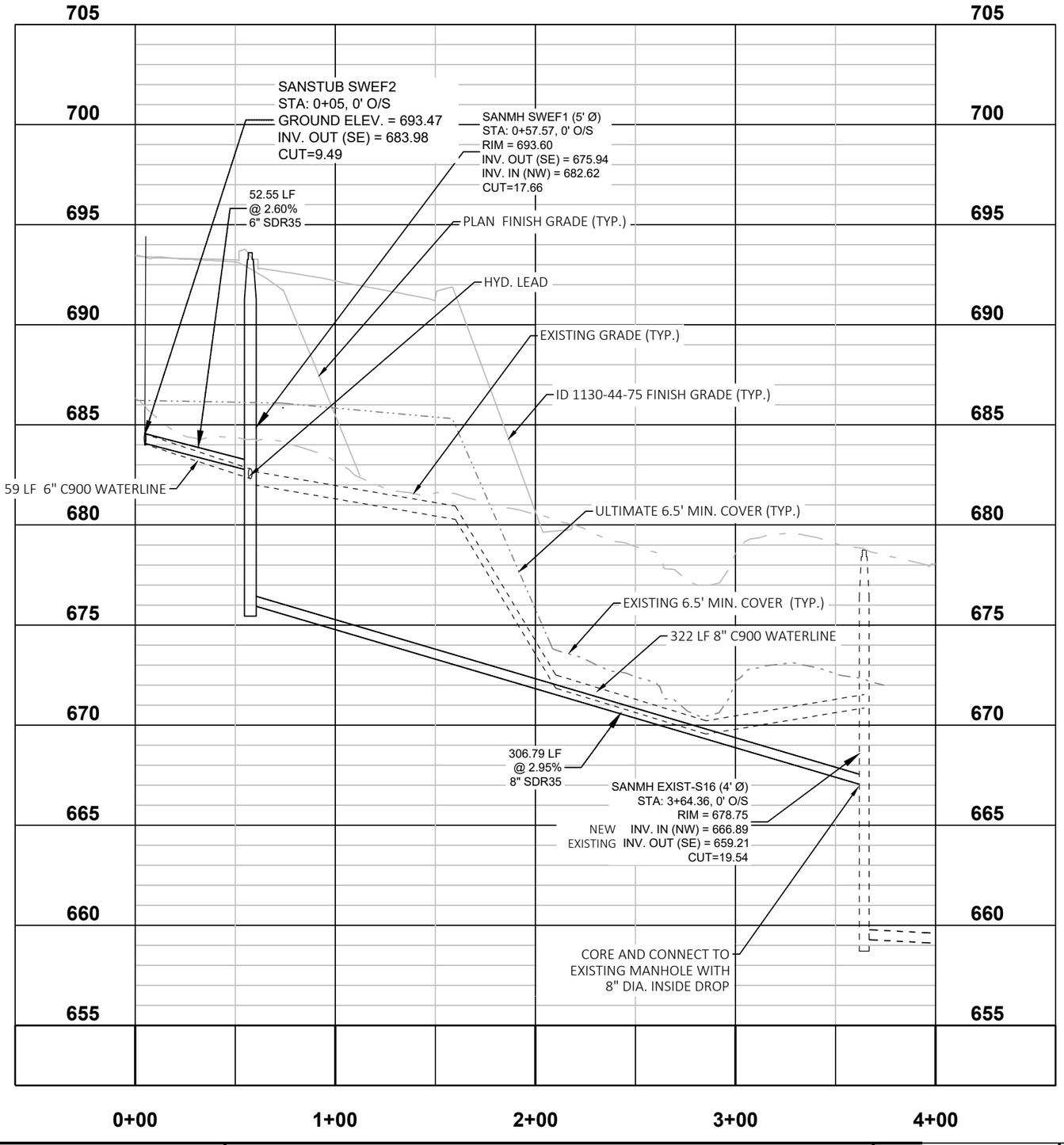
PLOT DATE : 4/30/2024 11:45 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:50 FT



ALL STATIONS AND OFFSETS ON THIS SHEET ARE FROM THE FOLLOWING ALIGNMENT "SAN"

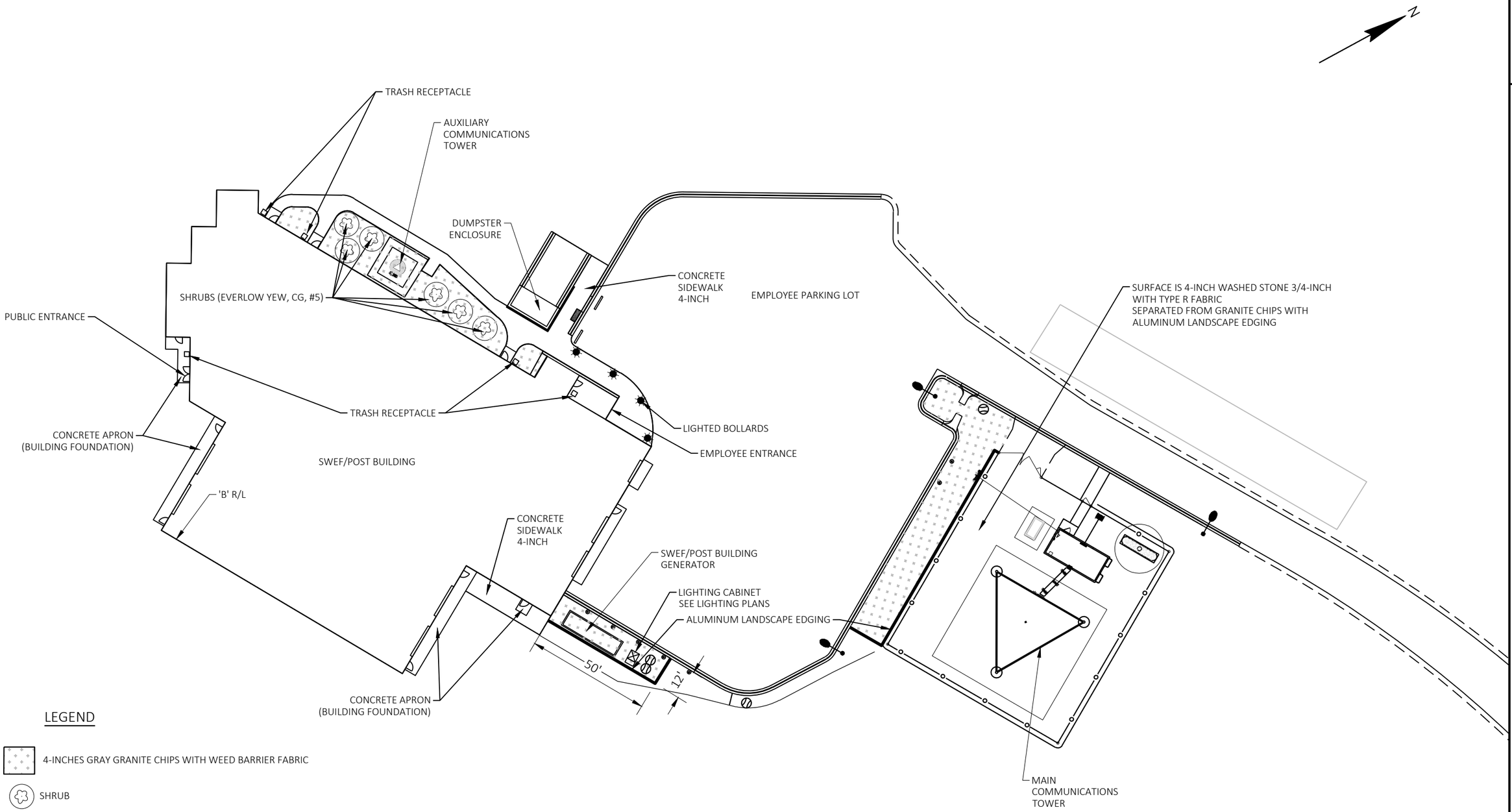
Reference Alignment SAN

Begin SAN		
N 590,955.8374	E 881,444.6531	0+00.00
Line (1)		
S30° 52' 13.67"E	57.409'	
N 590,906.5615	E 881,474.1096	0+57.41
Line (1)		
Line (2)		
S22° 38' 12.60"E	342.591'	
N 590,590.3627	E 881,605.9690	4+00.00
Line (2)		
N 590,590.3627	E 881,605.9690	4+00.00
End SAN		



PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	SANITARY SEWER AND WATER PLAN AND PROFILE	SHEET 49 E

2



LEGEND

4-INCHES GRAY GRANITE CHIPS WITH WEED BARRIER FABRIC

SHRUB

NOTE: SEE CONSTRUCTION DETAIL FOR PLANTING BED DETAIL AND SIDEWALK DETAIL FOR SIDEWALK LAYOUT

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLANTING PLAN	SHEET 50	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\023101-PL.DWG
LAYOUT NAME - 01

PLOT DATE : 4/30/2024 12:02 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

AUXILIARY COMMUNICATIONS TOWER

DUMPSTER ENCLOSURE

CONCRETE WHEEL STOP

RESERVED PARKING
VIOLATORS WILL BE FINED
THIS SPACE

R7-8A
12"X18"
1-1

SWEF/POST BUILDING

6" DIAGONALS WHITE, 3' CENTER TO CENTER SPACING AT 45° (TYP.)

'EL' R/L

3+00 'EL'

2+00 'EL'

1+00 'EL'

EP: 51+78.71 'E'

BP: 20+00.00 'A'

1 DOUBLE

ACCESS ROAD 21+00 'A'

'A' R/L

MATCHLINE 22+82.64 'A' (PT)

51+00 'E'

12+00 'ER'

EMPLOYEE PARKING LOT

'E' R/L

'ER' R/L

50+00 'E'

11+00 'ER'

SEE MAIN COMMUNICATIONS TOWER PLANS FOR TOWER SITE

MATCHLINE 49+00 'E'

49+00 'E'

PERMANENT SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- X-X — DENOTES SIGN NUMBER
- XR-X — DENOTES SIGN NUMBER TO BE REMOVED
- XM-X — DENOTES SIGN NUMBER TO BE MOVED
- ESTR — EXISTING SIGN TO REMAIN
- XX" x XX" — INDICATES SIGN SIZE

PAVEMENT MARKING LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING DIAGONAL EPOXY 6-INCH (WHITE)
5. MARKING PARKING STALL EPOXY (WHITE)
6. MARKING SYMBOL EPOXY (WHITE)

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 51	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\023201-PSM.DWG
LAYOUT NAME - 01
PLOT DATE : 6/5/2024 8:50 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

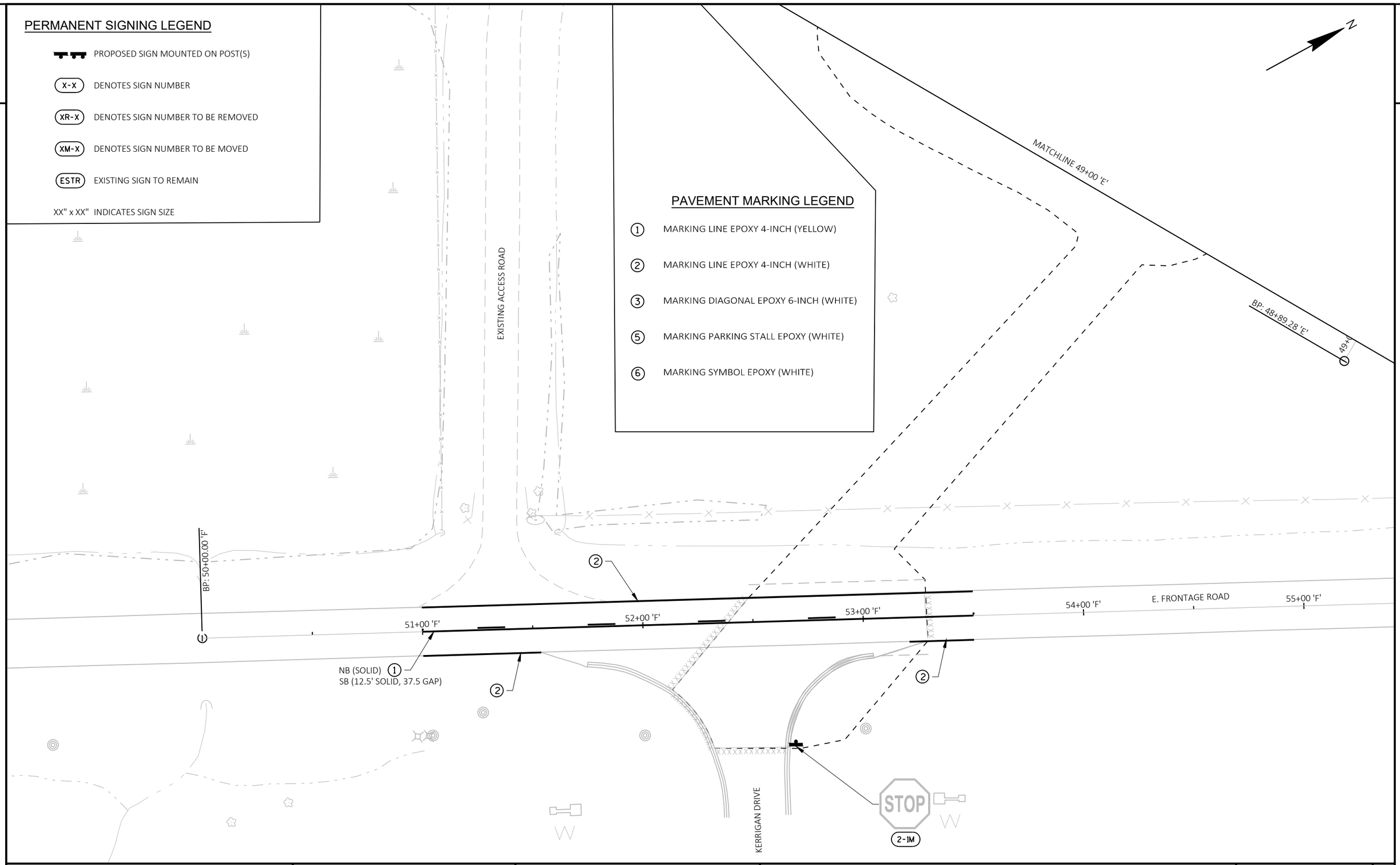
2

PERMANENT SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- X-X — DENOTES SIGN NUMBER
- XR-X — DENOTES SIGN NUMBER TO BE REMOVED
- XM-X — DENOTES SIGN NUMBER TO BE MOVED
- ESTR — EXISTING SIGN TO REMAIN
- XX" x XX" — INDICATES SIGN SIZE

PAVEMENT MARKING LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING DIAGONAL EPOXY 6-INCH (WHITE)
5. MARKING PARKING STALL EPOXY (WHITE)
6. MARKING SYMBOL EPOXY (WHITE)



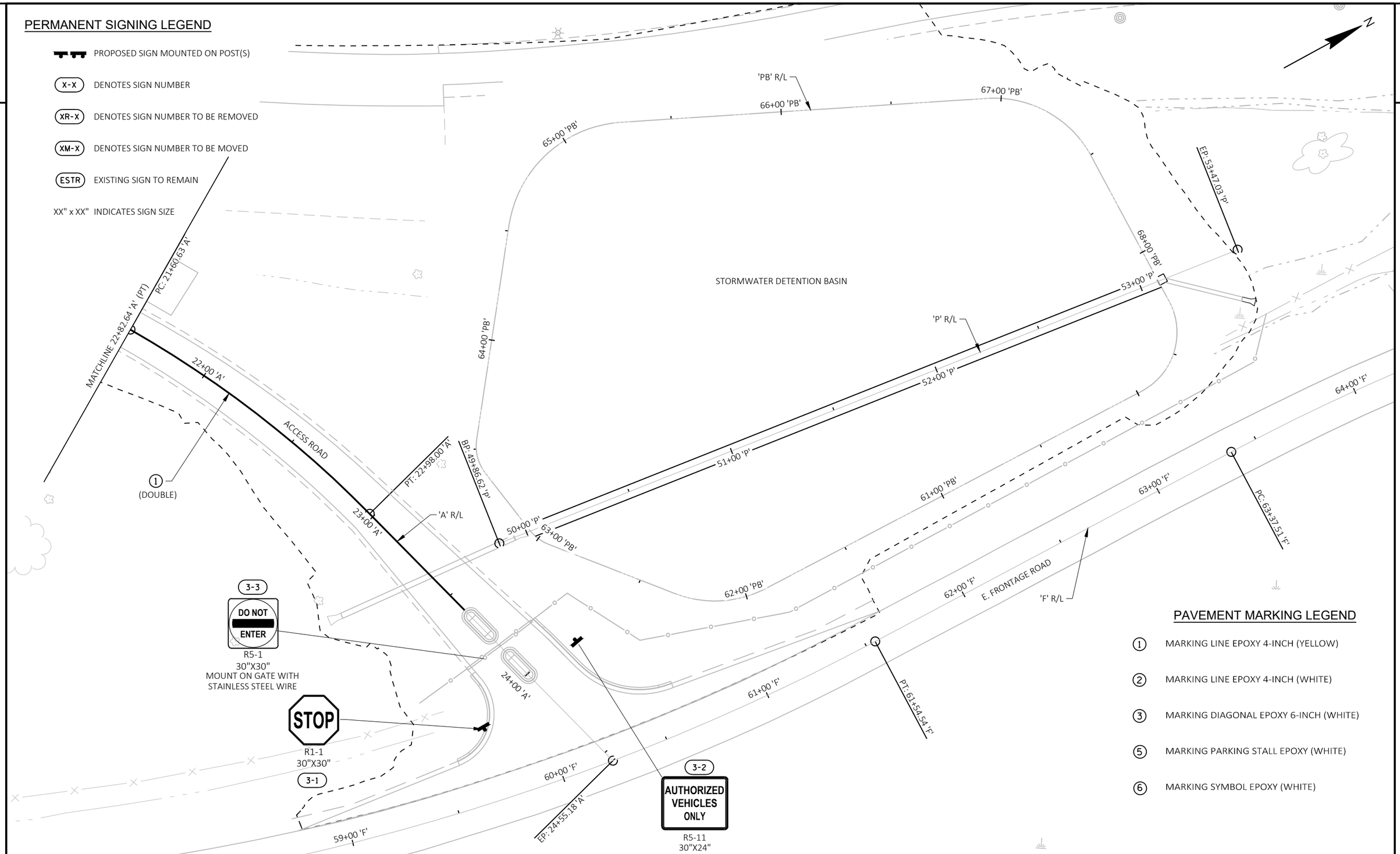
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 52	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\023201-PSM.DWG
LAYOUT NAME - 02

PLOT DATE : 6/5/2024 8:51 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:50 FT

PERMANENT SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- X-X — DENOTES SIGN NUMBER
- XR-X — DENOTES SIGN NUMBER TO BE REMOVED
- XM-X — DENOTES SIGN NUMBER TO BE MOVED
- ESTR — EXISTING SIGN TO REMAIN
- XX" x XX" — INDICATES SIGN SIZE



PAVEMENT MARKING LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING DIAGONAL EPOXY 6-INCH (WHITE)
5. MARKING PARKING STALL EPOXY (WHITE)
6. MARKING SYMBOL EPOXY (WHITE)

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 53	E

LEGEND

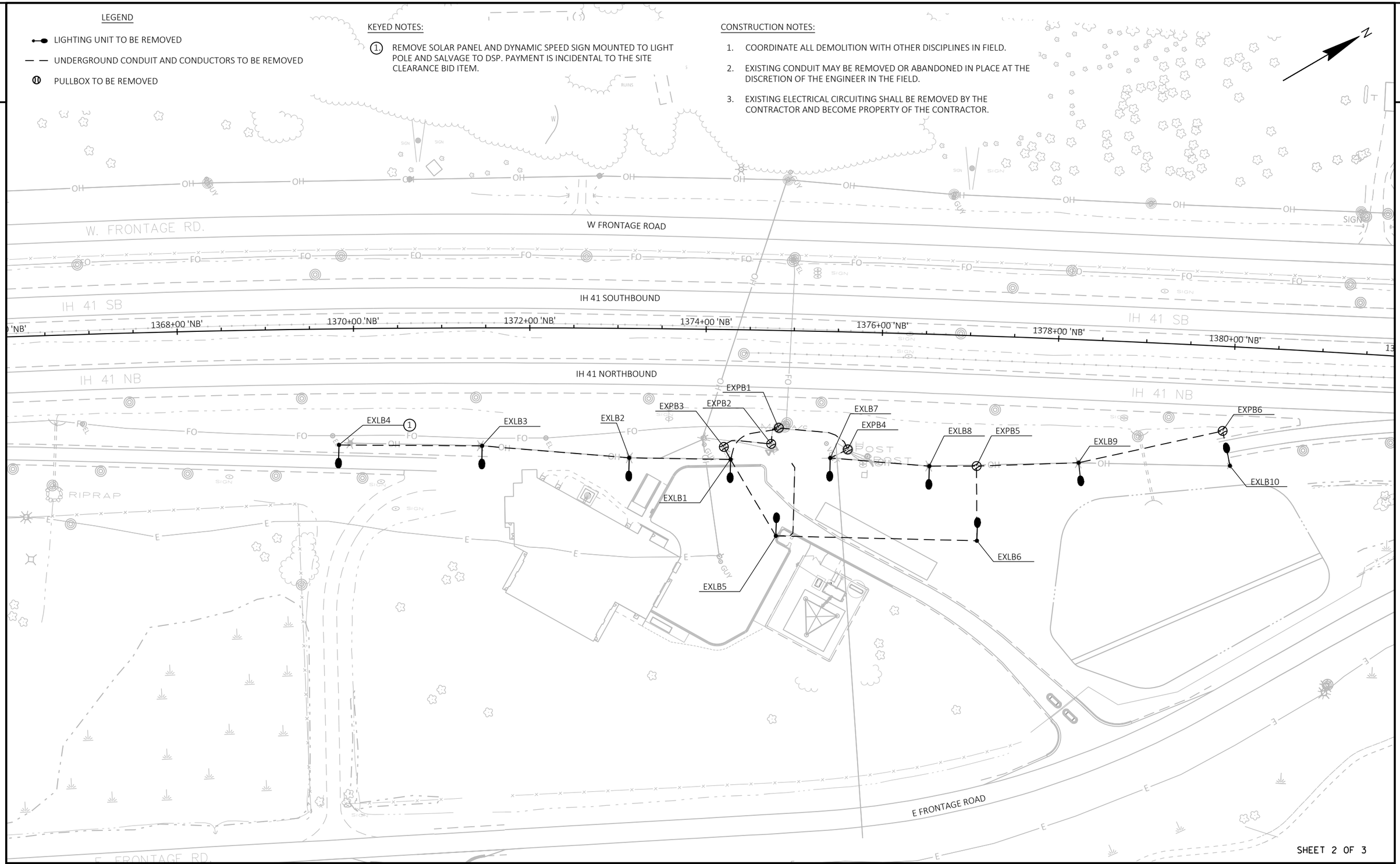
- LIGHTING UNIT TO BE REMOVED
- UNDERGROUND CONDUIT AND CONDUCTORS TO BE REMOVED
- PULLBOX TO BE REMOVED

KEYED NOTES:

1. REMOVE SOLAR PANEL AND DYNAMIC SPEED SIGN MOUNTED TO LIGHT POLE AND SALVAGE TO DSP. PAYMENT IS INCIDENTAL TO THE SITE CLEARANCE BID ITEM.

CONSTRUCTION NOTES:

1. COORDINATE ALL DEMOLITION WITH OTHER DISCIPLINES IN FIELD.
2. EXISTING CONDUIT MAY BE REMOVED OR ABANDONED IN PLACE AT THE DISCRETION OF THE ENGINEER IN THE FIELD.
3. EXISTING ELECTRICAL CIRCUITING SHALL BE REMOVED BY THE CONTRACTOR AND BECOME PROPERTY OF THE CONTRACTOR.



SHEET 2 OF 3

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	LIGHTING REMOVALS	SHEET 54	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\023401-LR.DWG
LAYOUT NAME - 02

PLOT DATE : 4/25/2024 4:18 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

GENERAL STREET LIGHTING NOTES:

1) THE ENGINEER SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION.

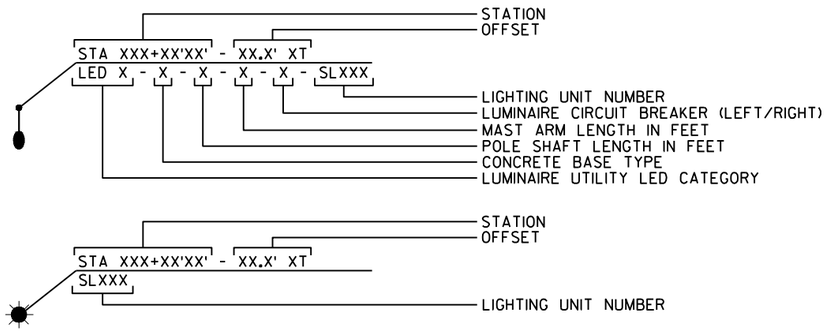
2) THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

3) NO SPLICES ALLOWED IN PULLBOXES.

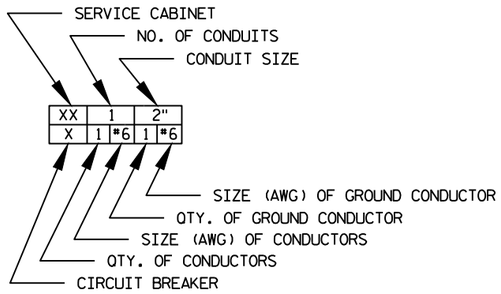
4) PHOTOCONTROL ON LIGHTING CABINET.

LEGEND:

- SINGLE ARM LIGHTING UNIT
- TWIN ARM LIGHTING UNIT
- BOLLARDS
- LIGHTING UNIT WALKWAY
- CONCRETE CONTROL CABINET BASE/ELECTRICAL SERVICE
- PULL BOX NON-CONDUCTIVE (24"X42")
- LIGHTING CONDUIT SCHEDULE 40 RIGID NONMETALLIC
- LIGHTING CONDUIT SCHEDULE 80 RIGID NONMETALLIC



CONDUIT/CONDUCTOR LEGEND



PWO = PULL/TRACER WIRE ONLY

NEU = NEUTRAL

CONDUCTOR COLOR LEGEND

CB1800

STREET LIGHTING CONDUCTORS
A - BLACK B - RED
240V PHASE TO PHASE

SHEET 1 OF 3

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	LIGHTING PLAN	SHEET 55	E

GENERAL NOTES (APPLIES TO THIS CONSTRUCTION DETAIL)

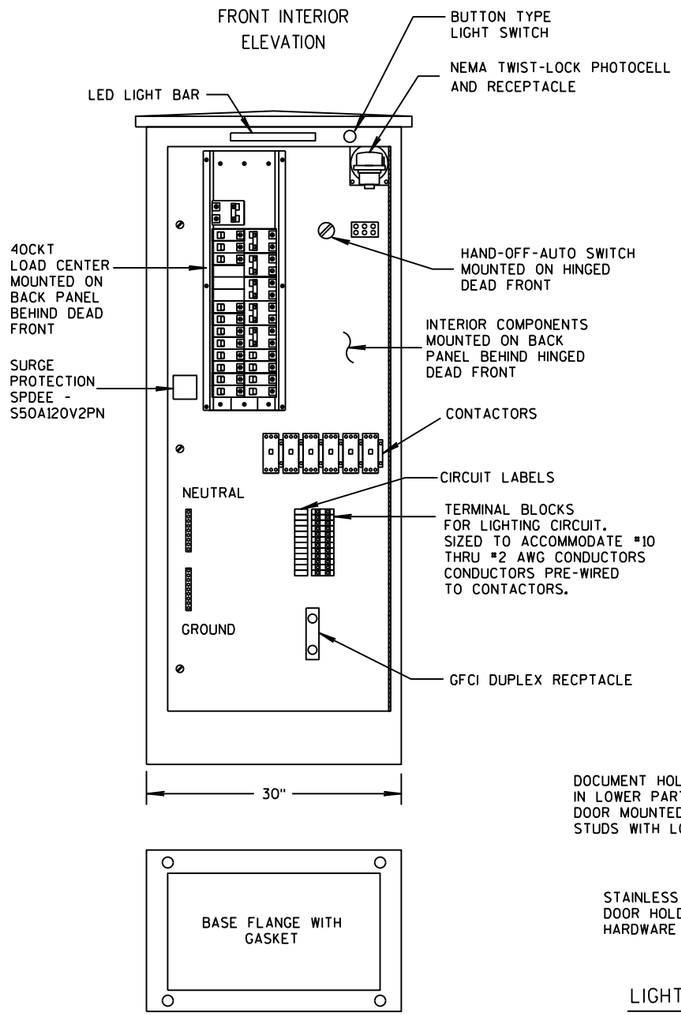
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

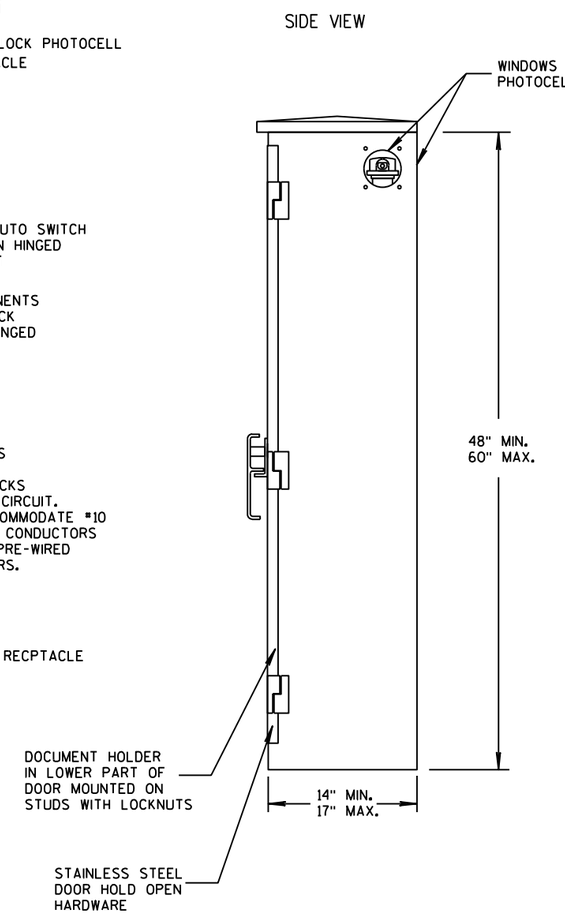
ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

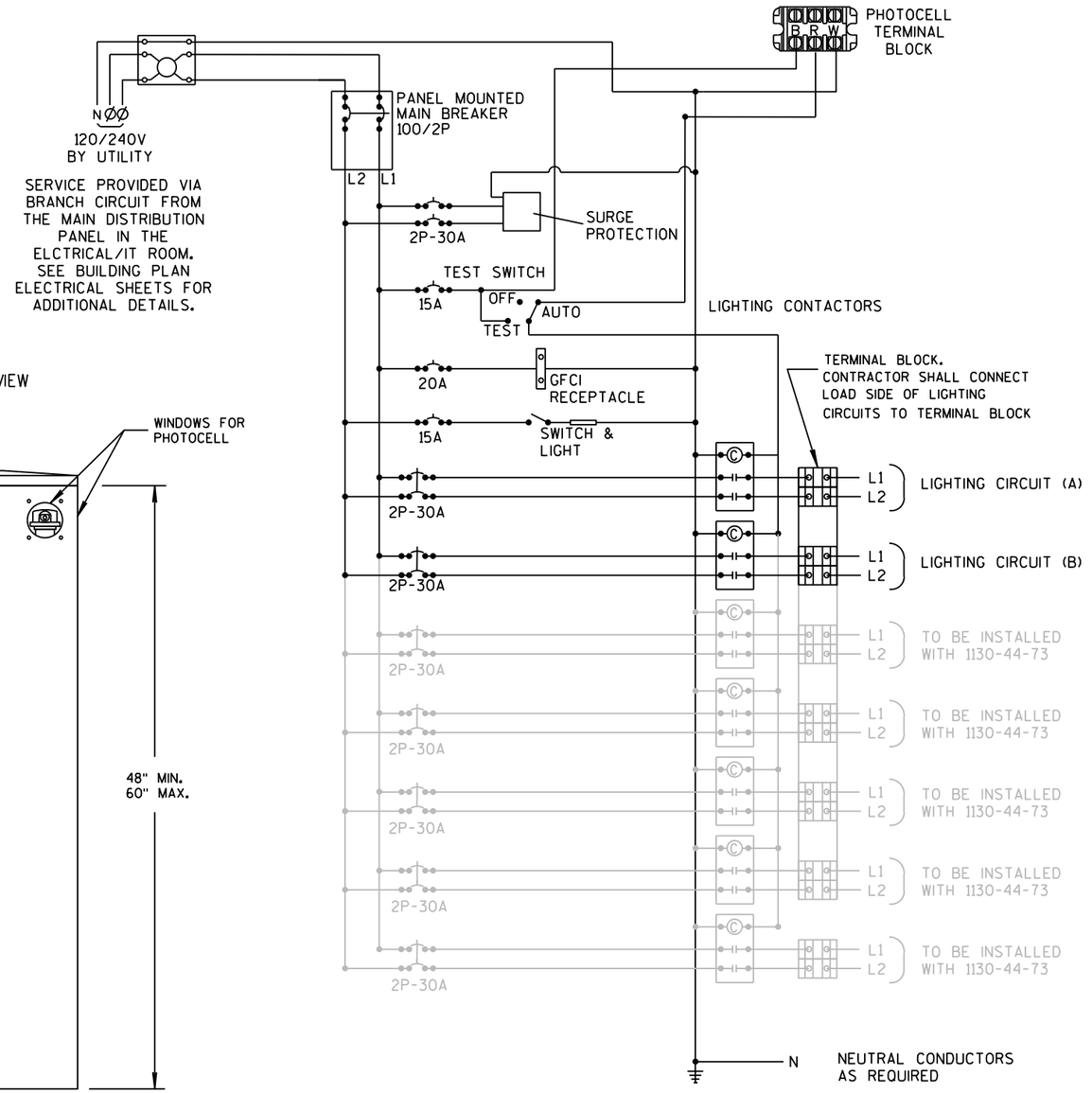
ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.







LIGHTING CONTROL CABINET - SCHEMATICS

CBI800 659.2130

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	LIGHTING PLAN	SHEET 56	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\023601-LP.DWG
LAYOUT NAME - CABINET SCHEMATIC
PLOT DATE : 4/25/2024 4:20 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1"=50'
WISDOT/CADDS SHEET 44

2

CONSTRUCTION NOTES:

1. FIELD LOCATE/VERIFY CABINET AND PULLBOXES PRIOR TO CONSTRUCTION. ADJUST LOCATIONS IF DIRECTED BY THE ENGINEER.
2. BOLLARDS INSTALLED NEAR THE BUILDING WILL NOT RECEIVE POWER UNTIL ADDITIONAL INFRASTRUCTURE IS INSTALLED WITH PROJECT 1130-44-75.

KEYED NOTES:

(1) STUB AND CAP CONDUIT FOR CONNECTION WITH PROJECT 1130-44-75.

CB1800			1	3"
A	4	#8	2	#8
A	4	#8	-	-

PWO 1-2"
STA 50+87'E' - 130.3' LT
BLD1800
STA 50+87'E' - 112.8' LT
BLD1801
STA 50+84'E' - 97.7' LT
BLD1802
STA 50+72'E' - 87.5' LT
BLD1803
PWO 1-2"
PWO 1-2"
PWO 1-2"
STA. 51+45'E' - 4.9' RT
LED B - 5 - 30 - 15 - B - SL1801
PWO 2-2"
STA 20+24'A' - 14.0' RT
PB1803
21+00 'A'
22+00 'A'
51+00 'E'
50+00 'E'
STA. 21+27'A' - 13.7' RT
LED B - 5 - 30 - 15 - A - SL1802
PWO 1-2"
PWO 1-2"
STA. 50+36'E' - 25.0' RT
LED B - 5 - 30 - 15 - A - SL1800
STA 49+99'E' - 1.4' RT
PB1802
STA 22+90'A' - 17.2' RT
PB1804
PWO 1-2"
23+00 'A'
STA. 49+92'E' - 48.0' LT
CB1800
PWO 2-3"
PWO 3-3"
STA 49+94'E' - 41.1' LT
PB1801
STA 49+90'E' - 41.0' LT
PB1800
49+00 'E'
STA. 23+95'A' - 0.0' RT
(2) LED B - 5 - 30 - (2) 15 - B/A - SL1803
STA 23+94'A' - 24.7' RT
PB1805
24+00 'A'
60'F'
58'F'
56'F'
KERRIGAN DRIVE
SAN
SCALE

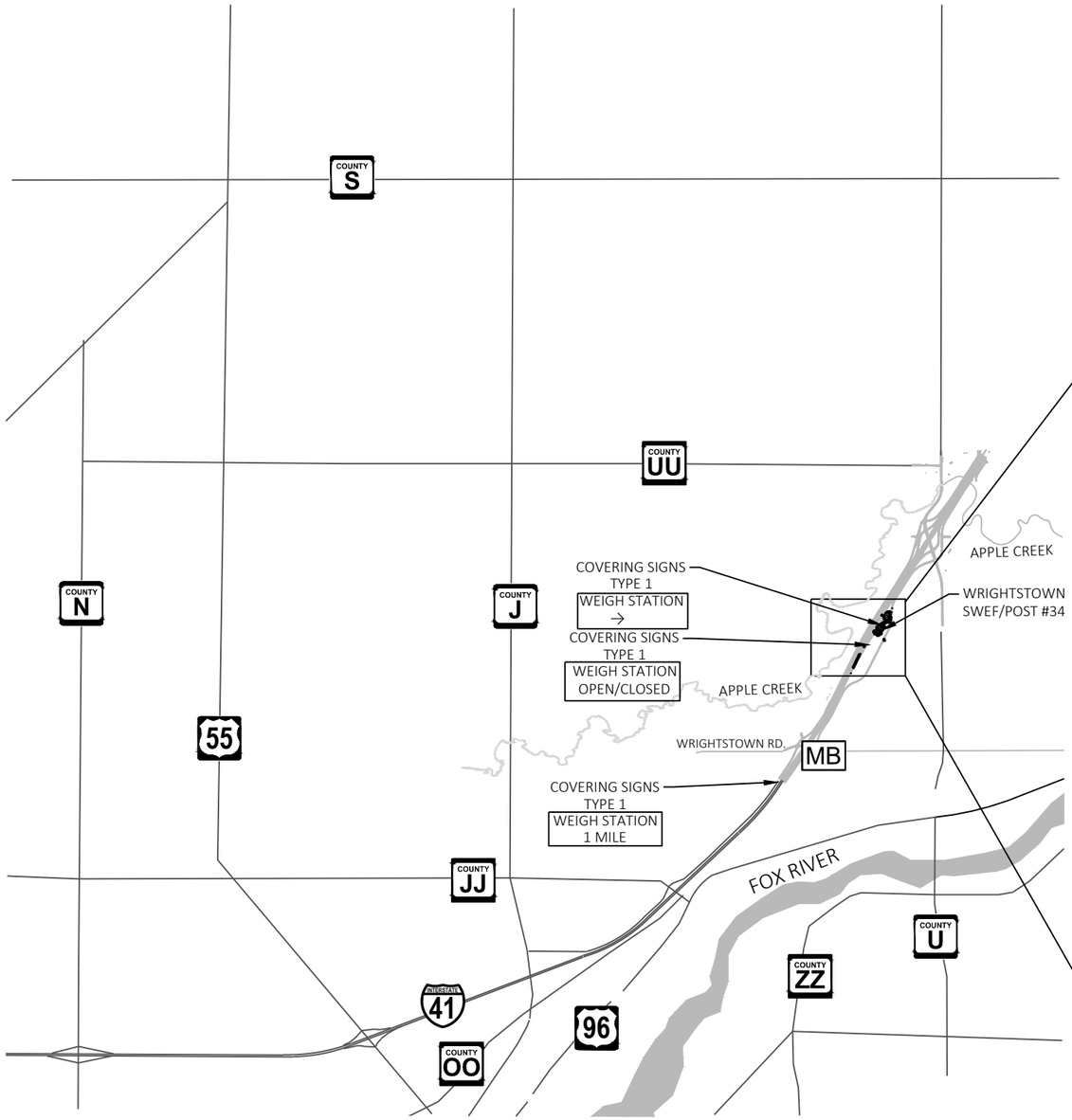
1 =	CB1800		1	2"
	A	2	#8	1	#8
	B	2	#8	-	-

2 =	CB1800		1	3"
	A	2	#8	1	#8
	B	2	#8	-	-

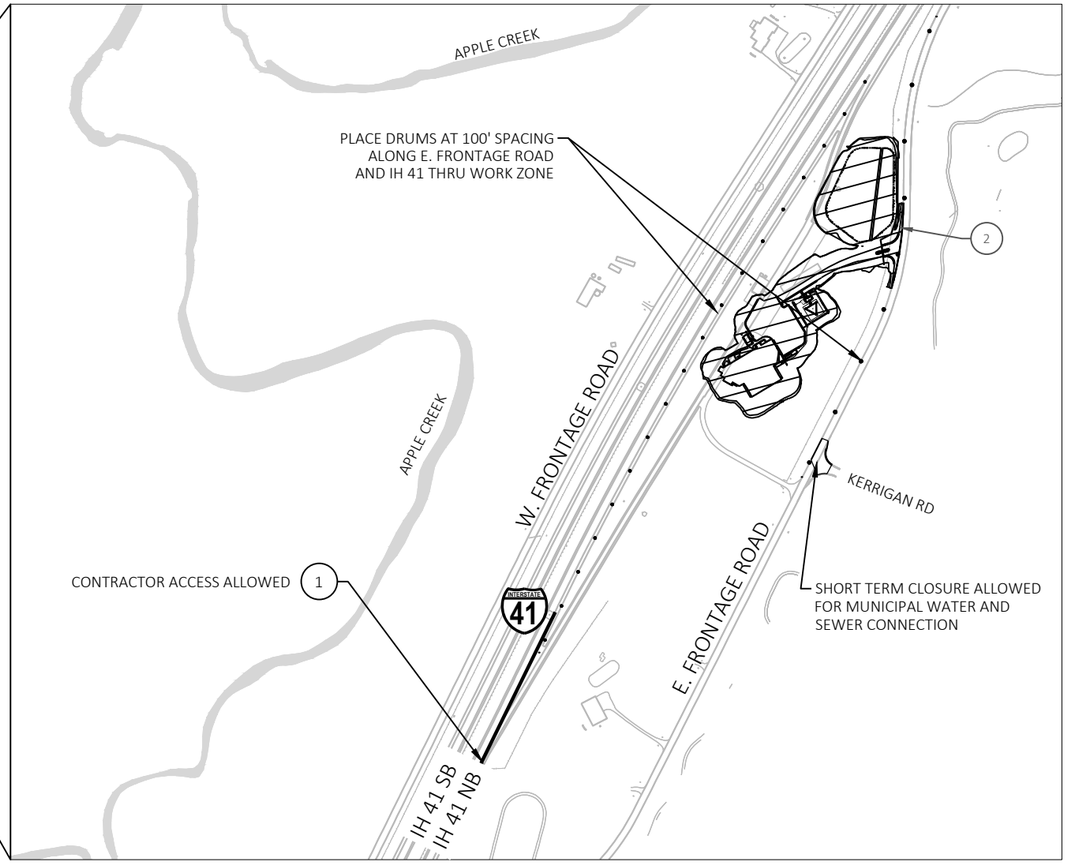
IH 41 CORRIDOR
WRIGHTSTOWN SWEF - 240V
VILLAGE OF WRIGHTSTOWN, OUTAGAMIE COUNTY
LIGHTING NO. WS-34
DESIGNER: KL ENGINEERING, INC.
DATE: 04-22-2024 | SHEET 1 OF 1

SHEET 2 OF 3

2



WRIGHTSTOWN SWEF/POST #34 DETAIL



TRAFFIC CONTROL GENERAL NOTES

REMOVE OR COVER ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICTS WITH THE TRAFFIC CONTROL "IN USE", AS NEEDED AND APPROVED BY THE ENGINEER.

LOCATION OF PCMS TO BE APPROVED BY ENGINEER.

ADD PCMS AT EACH END OF EAST FRONTAGE ROAD, ONE WEEK PRIOR TO CLOSURE

PCMS MESSAGE PLAN

SCREEN 1	SCREEN 2
ROAD WORK BEGINS	DAY DATE TIME

DISPLAY 7 DAYS PRIOR TO BEGIN WORK

LEGEND

MB	PORTABLE CHANGEABLE MESSAGE BOARD
	WORK ZONE
1	SEE S.D.D "TRAFFIC CONTROL, EXIT RAMP CLOSURE"
2	SEE S.D.D. "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED HIGHWAY"

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	TRAFFIC CONTROL OVERVIEW	SHEET 58	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\025100_TC.DWG
LAYOUT NAME - 0V

PLOT DATE : 4/25/2024 4:22 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:1 MI

2

N

1370
1372
1374
1376
1378
1380
1382
138

STA 5+82.95 'BX'
STA 10+00.00 'D'

'D' R/L
SEE SHEET 2

'EL' R/L
SEE SHEET 4

STA 51+46.51 'EM'
STA 3+26.82 'EL'

STA 51+78.71 'E'
STA 3+69.19 'EL'

4'BX'
2'B'
10+50 'D'
51'EM'

SWEF/POST BUILDING

'EM' R/L
SEE SHEET 4

STA 5+97.87 'BX'
STA 1+45.33 'EL'

STA 50+00.00 'EM'
STA 0+89.14 'EL'
STA 6+81.69 'B'

STA 20+00.00 'A'
STA 51+64.35 'E'

STA 20+54.00 'A'
STA 51+61.11 'T'

4'B'
28'X'
'B' R/L
SEE SHEET 2

STA 10+85.61 'ER'
STA 50+03.82 'E'

12'ER'
51'T'

'A' R/L
SEE SHEET 1

'BX' R/L
SEE SHEET 3

STA 0+00.42 'BX'
STA 0+00.14 'EL'

50'EM'

'T' R/L
SEE SHEET 1

22'A'

STA 0+09.14 'EL'
STA 6+01.68 'B'

STA 10+00.00 'ER'
STA 0+21.16 'EL'
STA 6+13.70 'B'

STA 10+85.61 'ER'
STA 50+03.82 'E'

'ER' R/L
SEE SHEET 5

'E' R/L
SEE SHEET 5

STA 10+85.61 'ER'
STA 50+03.82 'E'

'PB' R/L
SEE SHEET 6

STA 68+15.09 'PB'
STA 53+08.39 'P'

66'PB'

STORMWATER
DETENTION
BASIN

64'PB'

'P' R/L
SEE SHEET 6

68'PB'

52'P'

50'P'

STA 63+04.92 'PB'
STA 50+01.83 'P'

62'PB'

ACCESS ROAD

24'A'

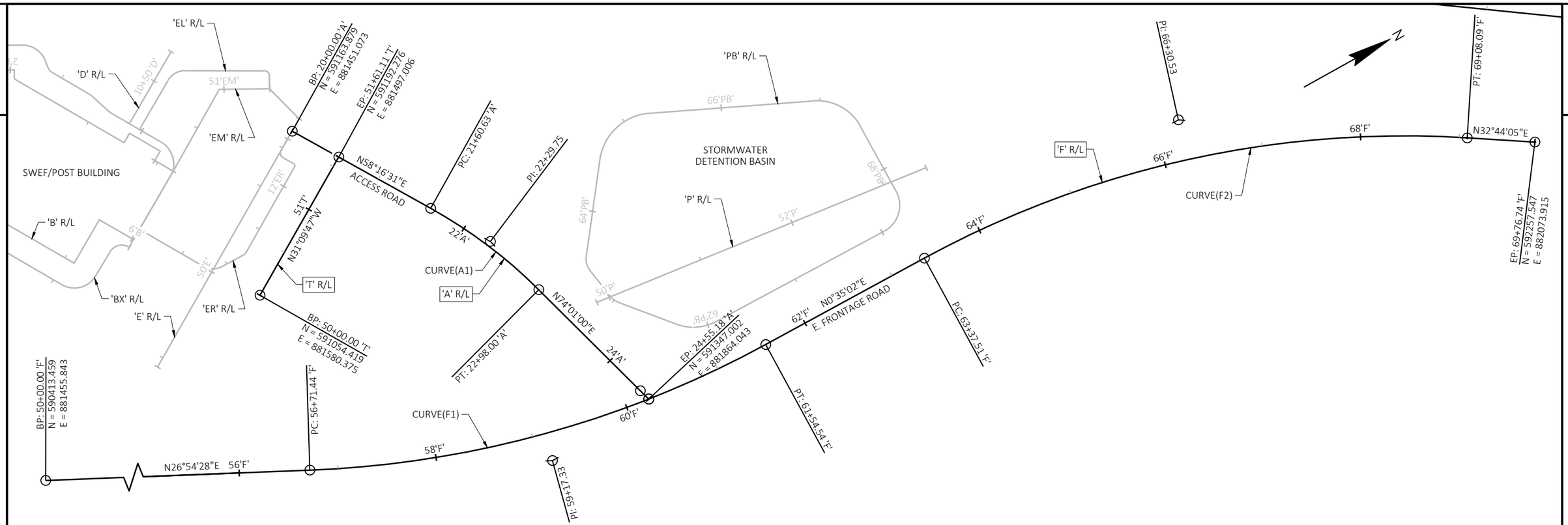
52'F'
54'F'
56'F'
58'F'
60'F'
62'F'
64'F'
66'F'

'F' R/L
SEE SHEET 1

E. FRONTAGE ROAD

STA 60+23.76 'F' =
STA 24+55.18 'A'

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	ALIGNMENT DIAGRAM: OVERVIEW SHEET	SHEET 59	E



'F' R/L

ALIGNMENT: Ali-F
DESCRIPTION: 'F'
LENGTH: 1976.74

BEGIN ALIGNMENT 'F' PI STATION 50+00.00
TANGENT N 590413.459 E 881455.843 STATION 50+00.00
DISTANCE 671.44 BEARING N26° 54' 28"E

CURVE (F1)
ARC PC N 591012.207 E 881759.709 STATION 56+71.44
CC N 591488.069 E 880822.052
PI N 591231.478 E 881870.989 STATION 59+17.33
TAN 245.89
DB N26° 54' 28"E
DA N00° 35' 02"E
LCHORD DIST 478.86 BEARING N13° 44' 45"E
EXTERNAL DIST 28.37
MID ORD 27.62
RADIUS 1051.50
DEG 05° 26' 56"
DELTA 26° 19' 27"
LENGTH 483.10
PT N 591477.356 E 881873.494 STATION 61+54.54

PI STATION 61+54.54
TANGENT N 591477.356 E 881873.494 STATION 61+54.54
DISTANCE 182.97 BEARING N00° 35' 02"E

CURVE (F2)
ARC PC N 591660.314 E 881875.358 STATION 63+37.51
CC N 591649.954 E 882892.127
PI N 591953.318 E 881878.343 STATION 66+30.53
TAN 293.02
DB N00° 35' 02"E
DA N32° 44' 05"E
LCHORD DIST 563.12 BEARING N16° 39' 33"E
EXTERNAL DIST 41.38
MID ORD 39.76
RADIUS 1016.82
DEG 05° 38' 05"
DELTA 32° 09' 03"
LENGTH 570.58
PT N 592199.801 E 882036.793 STATION 69+08.09

PI STATION 69+08.09
TANGENT N 592199.801 E 882036.793 STATION 69+08.09
DISTANCE 68.65 BEARING N32° 44' 05"E

END ALIGNMENT 'F' PI STATION 69+76.74
END N 592257.547 E 882073.915 STATION 69+76.74

'T' R/L

ALIGNMENT: Ali-T
DESCRIPTION: 'T'
LENGTH: 161.11

BEGIN ALIGNMENT 'T' PI STATION 50+00.00
TANGENT N 591054.419 E 881580.375 STATION 50+00.00
DISTANCE 161.11 BEARING N31° 09' 47"W

END ALIGNMENT 'T' PI STATION 51+61.11
END N 591192.276 E 881497.006 STATION 51+61.11

'A' R/L

ALIGNMENT: Ali-A
DESCRIPTION: 'A'
LENGTH: 443.27

BEGIN ALIGNMENT 'A' PI STATION 20+00.00
N 591163.879 E 881451.073 STATION 20+00.00
DISTANCE 160.63 BEARING N58° 16' 31"E

CURVE (A1)
ARC PC N 591248.343 E 881587.700 STATION 21+60.63
CC N 590823.051 E 881850.619
PI N 591284.689 E 881646.493 STATION 22+29.75
TAN 69.12
DB N58° 16' 31"E
DA N74° 01' 00"E
LCHORD DIST 136.94 BEARING N66° 08' 46"E
EXTERNAL DIST 4.75
MID ORD 4.71
RADIUS 500.00
DEG 11° 27' 33"
DELTA 15° 44' 29"
LENGTH 137.37
PT N 591303.722 E 881712.941 STATION 22+98.00

PI STATION 22+98.00
TANGENT N 591303.722 E 881712.941 STATION 22+98.00
DISTANCE 145.27 BEARING N74° 01' 00"E

END ALIGNMENT 'A' PI STATION 24+55.18
END N 591347.002 E 881864.043 STATION 24+55.18

'B' R/L

ALIGNMENT: Ali-B
DESCRIPTION: 'B'
LENGTH: 703.38

BEGIN ALIGNMENT 'B' PI STATION 0+00.00
N 591027.848 E 881409.225 STATION 0+00.00
DISTANCE 11.00 BEARING N30° 22' 17"W

PI STATION 0+11.00
N 591037.338 E 881403.663 STATION 0+11.00
DISTANCE 36.04 BEARING S59° 17' 55"W

PI STATION 22+98.00
N 591018.936 E 881372.672 STATION 0+47.04
DISTANCE 11.00 BEARING S32° 10' 06"E

PI STATION 0+58.05
N 591009.622 E 881378.530 STATION 0+58.05
DISTANCE 42.44 BEARING S59° 17' 55"W

PI STATION 1+00.49
N 590987.953 E 881342.038 STATION 1+00.49
DISTANCE 86.15 BEARING S59° 17' 55"W

PI STATION 1+86.64
N 590943.969 E 881267.964 STATION 1+86.64
DISTANCE 9.21 BEARING N60° 42' 05"W

PI STATION 1+95.85
N 590948.477 E 881259.930 STATION 1+95.85
DISTANCE 17.00 BEARING S29° 17' 55"W

PI STATION 2+12.85
N 590933.652 E 881251.611 STATION 2+12.85
DISTANCE 15.00 BEARING S60° 42' 05"E

PI STATION 2+27.85
N 590926.312 E 881264.692 STATION 2+27.85
DISTANCE 10.00 BEARING S29° 17' 55"W

PI STATION 2+37.85
N 590917.592 E 881259.799 STATION 2+37.85
DISTANCE 15.00 BEARING S60° 42' 05"E

PI STATION 2+52.85
N 590910.252 E 881272.878 STATION 2+52.85
DISTANCE 10.00 BEARING S29° 17' 55"W

PI STATION 2+62.85
N 590901.531 E 881267.985 STATION 2+62.85
DISTANCE 30.00 BEARING S60° 42' 05"E

PI STATION 2+92.85
N 590886.849 E 881294.149 STATION 2+92.85
DISTANCE 9.97 BEARING N29° 33' 10"E

PI STATION 3+02.82
N 590895.525 E 881299.068 STATION 3+02.82
DISTANCE 25.95 BEARING S60° 45' 39"E

PI STATION 3+28.77
N 590882.848 E 881321.714 STATION 3+28.77
DISTANCE 16.97 BEARING N59° 18' 30"E

PI STATION 3+45.75
N 590891.512 E 881336.311 STATION 3+45.75
DISTANCE 51.00 BEARING S30° 42' 05"E

PI STATION 3+96.74
N 590847.665 E 881362.347 STATION 3+96.74
DISTANCE 114.01 BEARING N59° 17' 55"E

PI STATION 5+10.76
N 590905.875 E 881460.380 STATION 5+10.76
DISTANCE 50.95 BEARING N30° 41' 11"W

PI STATION 5+61.71
N 590949.694 E 881434.376 STATION 5+61.71
DISTANCE 39.97 BEARING N59° 14' 20"E

PI STATION 6+01.68
N 590970.139 E 881468.726 STATION 6+01.68
DISTANCE 80.00 BEARING N30° 42' 07"W

PI STATION 6+81.68
N 591038.926 E 881427.881 STATION 6+81.68
DISTANCE 16.78 BEARING S59° 15' 36"W

PI STATION 6+98.46
N 591030.350 E 881413.462 STATION 6+98.46
DISTANCE 4.92 BEARING S59° 25' 51"W

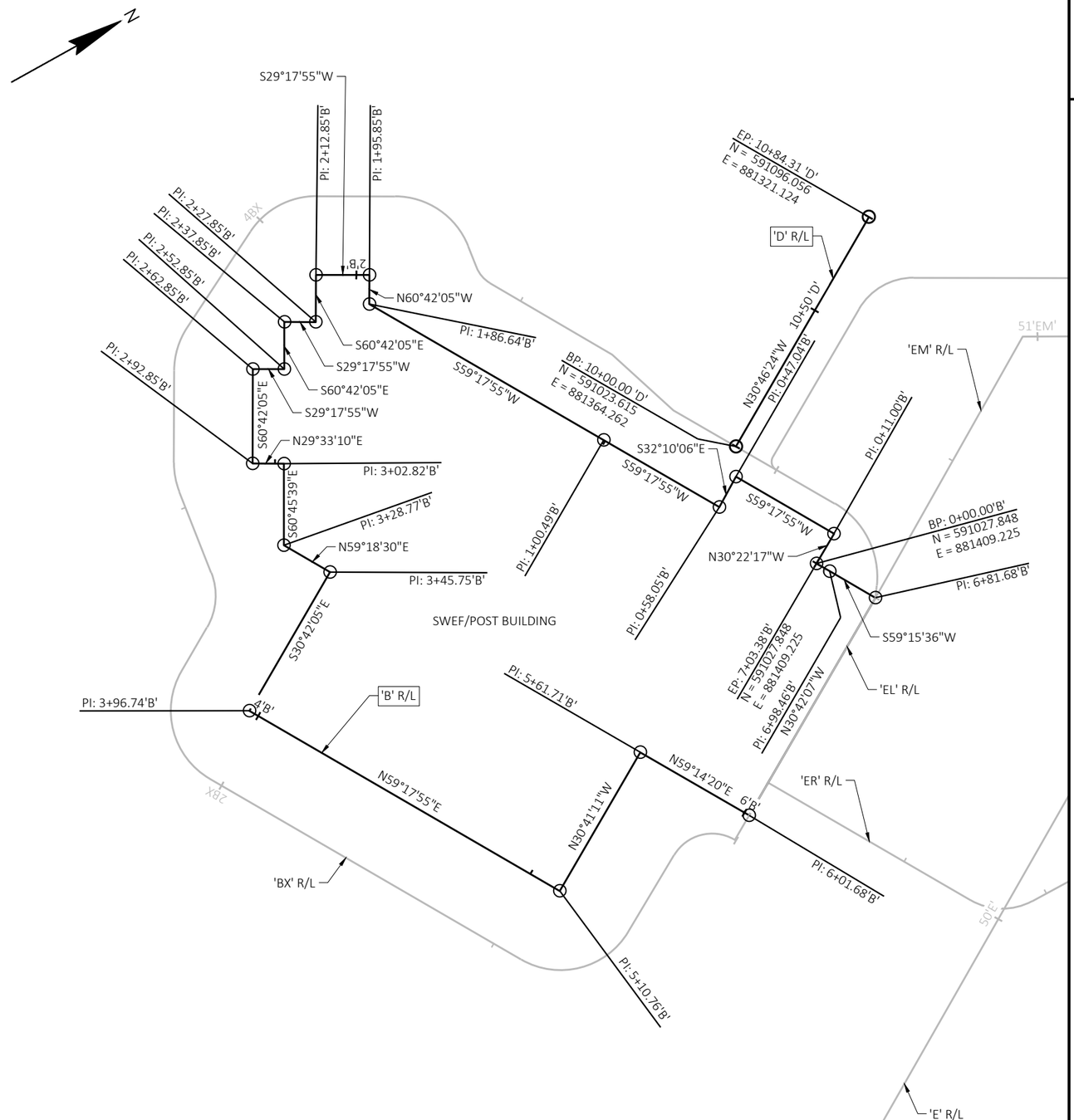
END ALIGNMENT 'B' PI STATION 7+03.38
END N 591027.848 E 881409.225 STATION 7+03.38

'D' R/L

ALIGNMENT: Ali-D
DESCRIPTION: 'D'
LENGTH: 84.31

BEGIN ALIGNMENT 'D' PI STATION 10+00.00
TANGENT N 591023.615 E 881364.262 STATION 10+00.00
DISTANCE 84.31 BEARING N30° 46' 24"W

END ALIGNMENT 'D' PI STATION 10+84.31
END N 591096.056 E 881321.124 STATION 10+84.31



PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	ALIGNMENT DIAGRAM: SHEET 2	SHEET 61	E

ALIGNMENT: Ali-BX
DESCRIPTION: 'BX'
LENGTH: 597.87

BEGIN ALIGNMENT 'BX' PI STATION 0+00.00

TANGENT N 590962.618 E 881473.680 STATION 0+00.00

DISTANCE 0.79 BEARING S58° 44' 07"W

CURVE (BX1)

ARC PC N 590962.205 E 881473.001 STATION 0+00.79

CC N 590950.184 E 881480.301

PI N 590955.072 E 881461.253 STATION 0+14.54
TAN 13.74
DB S58° 44' 07"W
DA S29° 56' 43"E
LCHORD DIST 19.66 BEARING S14° 23' 42"W
EXTERNAL DIST 5.6
MID ORD 4.01
RADIUS 14.06
DEG 407° 23' 02"
DELTA 88° 40' 50"
LENGTH 21.77

PT N 590943.163 E 881468.114 STATION 0+22.56

PI STATION 0+22.56

TANGENT N 590943.163 E 881468.114 STATION 0+22.56

DISTANCE 28.45 BEARING S29° 56' 43"E

CURVE (BX2)

ARC PC N 590918.511 E 881482.315 STATION 0+51.01

CC N 590906.032 E 881460.653

PI N 590897.133 E 881494.631 STATION 0+75.68
TAN 24.67
DB S29° 56' 43"E
DA S59° 17' 55"W
LCHORD DIST 35.12 BEARING S14° 40' 36"W
EXTERNAL DIST 10.12
MID ORD 7.21
RADIUS 25.00
DEG 229° 10' 59"
DELTA 89° 14' 38"
LENGTH 38.94

PT N 590884.536 E 881473.417 STATION 0+89.95

PI STATION 0+89.95

TANGENT N 590884.536 E 881473.417 STATION 0+89.95

DISTANCE 114.33 BEARING S59° 17' 55"W

CURVE (BX3)

ARC PC N 590826.165 E 881375.114 STATION 2+04.28

CC N 590847.661 E 881362.349

PI N 590813.401 E 881353.617 STATION 2+29.28
TAN 25.00
DB S59° 17' 55"W
DA N30° 42' 05"W
LCHORD DIST 35.36 BEARING N75° 42' 05"W
EXTERNAL DIST 10.36
MID ORD 7.32
RADIUS 25.00
DEG 229° 10' 59"
DELTA 89° 59' 60"
LENGTH 39.27

PT N 590834.897 E 881340.853 STATION 2+43.55

PI STATION 2+43.55

TANGENT N 590834.897 E 881340.853 STATION 2+43.55

DISTANCE 16.18 BEARING N30° 42' 05"W

CURVE (BX4)

ARC PC N 590848.807 E 881332.594 STATION 2+59.73

CC N 590838.596 E 881315.397

PI N 590857.114 E 881327.661 STATION 2+69.39
TAN 9.66
DB N30° 42' 05"W
DA N82° 16' 06"W
LCHORD DIST 17.40 BEARING N56° 29' 05"W
EXTERNAL DIST 2.21
MID ORD 1.99
RADIUS 20.00
DEG 286° 28' 44"
DELTA 51° 34' 01"
LENGTH 18.00

PT N 590858.414 E 881318.087 STATION 2+77.73

PI STATION 2+77.73

TANGENT N 590858.414 E 881318.087 STATION 2+77.73

DISTANCE 27.66 BEARING N82° 16' 06"W

CURVE (BX5)

ARC PC N 590862.135 E 881290.681 STATION 3+05.39

CC N 590886.908 E 881294.044

PI N 590862.776 E 881285.963 STATION 3+10.15
TAN 4.76
DB N82° 16' 06"W
DA N60° 42' 05"W
LCHORD DIST 9.35 BEARING N71° 29' 05"W
EXTERNAL DIST 0.45
MID ORD 0.44
RADIUS 25.00
DEG 229° 10' 59"
DELTA 21° 34' 01"
LENGTH 9.41

PT N 590865.106 E 881281.810 STATION 3+14.80

PI STATION 3+14.80

TANGENT N 590865.106 E 881281.810 STATION 3+14.80

DISTANCE 29.31 BEARING N60° 42' 05"W

CURVE (BX6)

ARC PC N 590879.447 E 881256.252 STATION 3+44.10

CC N 590901.249 E 881268.486

PI N 590883.109 E 881249.726 STATION 3+51.59
TAN 7.48
DB N60° 42' 05"W
DA N27° 22' 31"W
LCHORD DIST 14.34 BEARING N44° 02' 18"W
EXTERNAL DIST 1.1
MID ORD 1.05
RADIUS 25.00
DEG 229° 10' 59"
DELTA 33° 19' 34"
LENGTH 14.54

PT N 590889.754 E 881246.286 STATION 3+58.64

PI STATION 3+58.64

TANGENT N 590889.754 E 881246.286 STATION 3+58.64

DISTANCE 36.59 BEARING N27° 22' 31"W

CURVE (BX7)

ARC PC N 590922.246 E 881229.461 STATION 3+95.23

CC N 590933.742 E 881251.661

PI N 590934.219 E 881223.262 STATION 4+08.72
TAN 13.48
DB N27° 22' 31"W
DA N29° 17' 55"E
LCHORD DIST 23.73 BEARING N00° 57' 42"E
EXTERNAL DIST 3.4
MID ORD 3.00
RADIUS 25.00
DEG 229° 10' 59"
DELTA 56° 40' 26"
LENGTH 24.73

PT N 590945.976 E 881229.859 STATION 4+19.96

PI STATION 4+19.96

TANGENT N 590945.976 E 881229.859 STATION 4+19.96

DISTANCE 24.99 BEARING N29° 17' 55"E

CURVE (BX8)

ARC PC N 590967.767 E 881242.087 STATION 4+44.95

CC N 590955.533 E 881263.889

PI N 590982.514 E 881250.362 STATION 4+61.86
TAN 16.91
DB N29° 17' 55"E
DA S82° 33' 15"E
LCHORD DIST 28.01 BEARING N63° 22' 20"E
EXTERNAL DIST 5.18
MID ORD 4.29
RADIUS 25.00
DEG 229° 10' 59"
DELTA 68° 08' 50"
LENGTH 29.73

PT N 590980.323 E 881267.129 STATION 4+74.69

PI STATION 4+74.69

TANGENT N 590980.323 E 881267.129 STATION 4+74.69

DISTANCE 7.39 BEARING S82° 33' 15"E

CURVE (BX9)

ARC PC N 590979.365 E 881274.453 STATION 4+82.07

CC N 590989.281 E 881275.748

PI N 590978.920 E 881277.860 STATION 4+85.51
TAN 3.44
DB S82° 33' 15"E
DA N59° 31' 07"E
LCHORD DIST 6.50 BEARING N78° 28' 56"E
EXTERNAL DIST 0.57
MID ORD 0.54
RADIUS 10.00
DEG 572° 57' 28"
DELTA 37° 55' 39"
LENGTH 6.62

PT N 590980.663 E 881280.821 STATION 4+88.69

PI STATION 4+88.69

TANGENT N 590980.663 E 881280.821 STATION 4+88.69

DISTANCE 45.00 BEARING N59° 31' 07"E

PI STATION 5+33.69

TANGENT N 591003.492 E 881319.605 STATION 5+33.69

DISTANCE 26.36 BEARING N71° 25' 16"E

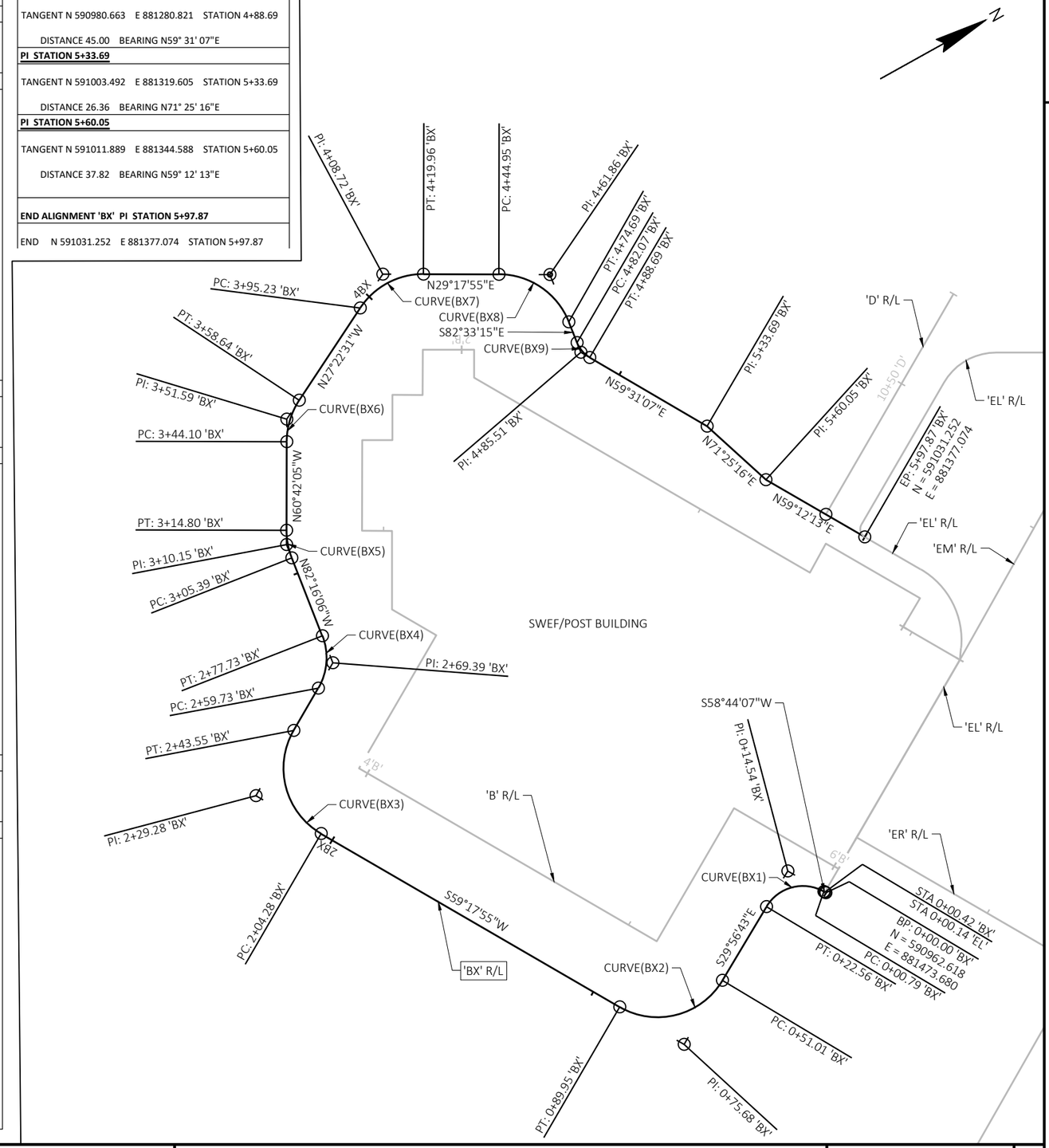
PI STATION 5+60.05

TANGENT N 591011.889 E 881344.588 STATION 5+60.05

DISTANCE 37.82 BEARING N59° 12' 13"E

END ALIGNMENT 'BX' PI STATION 5+97.87

END N 591031.252 E 881377.074 STATION 5+97.87

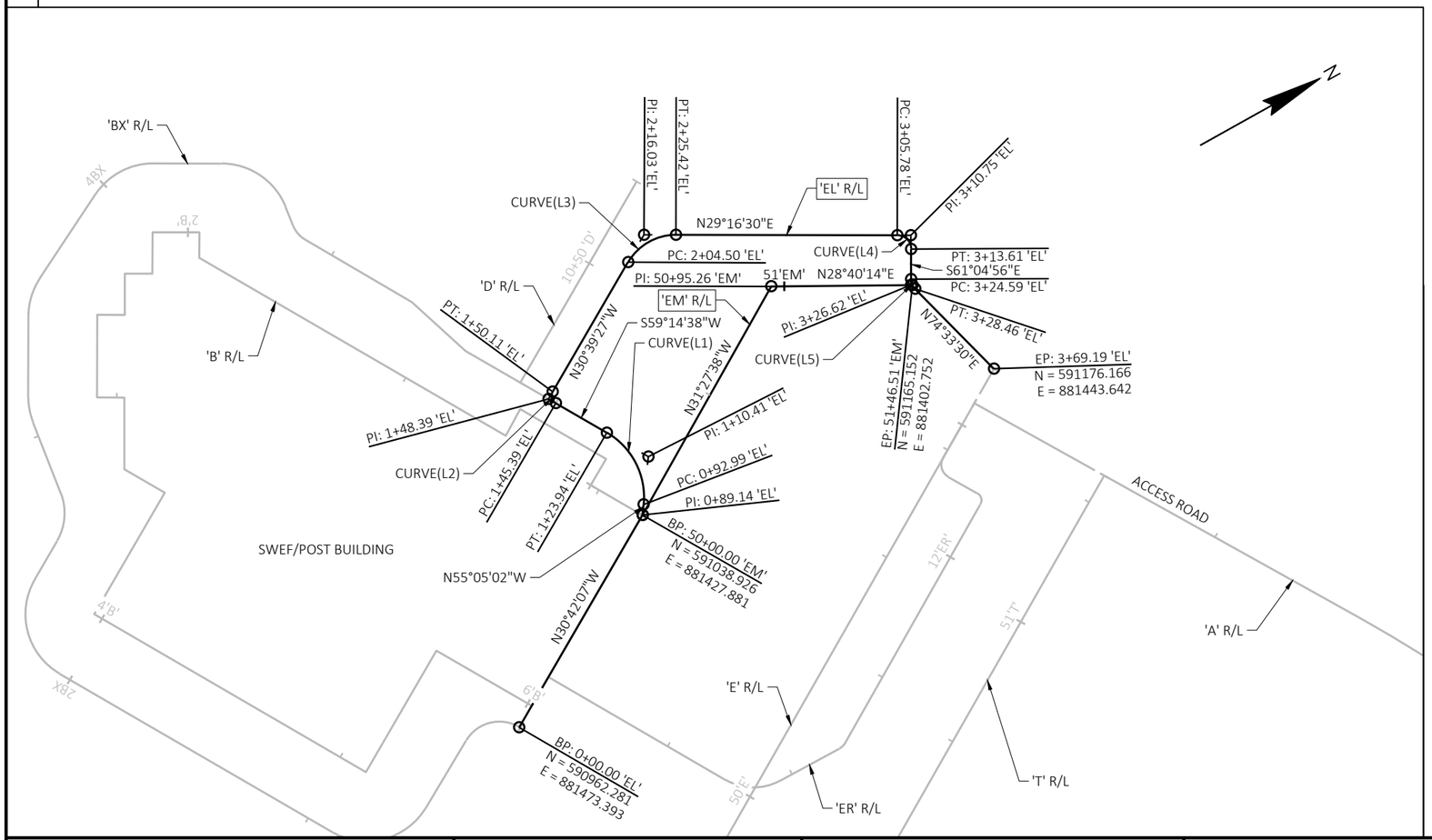


PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	ALIGNMENT DIAGRAM: SHEET 3	SHEET 62	E

'EL' R/L

ALIGNMENT: Ali-EL
DESCRIPTION: 'EL'
LENGTH: 369.19

BEGIN ALIGNMENT 'EL' PI STATION 0+00.00
TANGENT N 590962.281 E 881473.393 STATION 0+00.00
DISTANCE 89.14 BEARING N30° 42' 07"W
PI STATION 0+89.14
TANGENT N 591038.926 E 881427.881 STATION 0+89.14
DISTANCE 3.85 BEARING N55° 05' 02"W
CURVE (L1)
ARC PC N 591041.130 E 881424.723 STATION 0+92.99
CC N 591018.990 E 881409.269
PI N 591051.103 E 881410.435 STATION 1+10.41
TAN 17.42
DB N55° 05' 02"W
DA S59° 14' 38"W
LCHORD DIST 29.28 BEARING N87° 55' 12"W
EXTERNAL DIST 5.13
MID ORD 4.31
RADIUS 27.00
DEG 212° 12' 24"
DELTA 65° 40' 20"
LENGTH 30.95
PT N 591042.193 E 881395.462 STATION 1+23.94
PI STATION 1+23.94
TANGENT N 591042.193 E 881395.462 STATION 1+23.94
DISTANCE 21.45 BEARING S59° 14' 38"W
CURVE (L2)
ARC PC N 591031.223 E 881377.028 STATION 1+45.39
CC N 591033.801 E 881375.494
PI N 591029.686 E 881374.445 STATION 1+48.39
TAN 3.01
DB S59° 14' 38"W
DA N30° 39' 27"W
LCHORD DIST 4.25 BEARING N75° 42' 25"W
EXTERNAL DIST 1.25
MID ORD 0.88
RADIUS 3.00
DEG 1909° 51' 34"
DELTA 90° 05' 55"
LENGTH 4.72
PT N 591032.271 E 881372.913 STATION 1+50.11
PI STATION 1+50.11
TANGENT N 591032.271 E 881372.913 STATION 1+50.11
DISTANCE 54.39 BEARING N30° 39' 27"W
CURVE (L3)
ARC PC N 591079.061 E 881345.178 STATION 2+04.50
CC N 591089.259 E 881362.383
PI N 591088.981 E 881339.298 STATION 2+16.03
TAN 11.53
DB N30° 39' 27"W
DA N29° 16' 30"E
LCHORD DIST 19.98 BEARING N00° 41' 28"W
EXTERNAL DIST 3.09
MID ORD 2.67
RADIUS 20.00
DEG 286° 28' 44"
DELTA 59° 55' 57"
LENGTH 20.92
PT N 591099.039 E 881344.937 STATION 2+25.42
PI STATION 2+25.42
TANGENT N 591099.039 E 881344.937 STATION 2+25.42
DISTANCE 80.37 BEARING N29° 16' 30"E
CURVE (L4)
ARC PC N 591169.141 E 881384.236 STATION 3+05.78
CC N 591166.696 E 881388.598
PI N 591173.475 E 881386.666 STATION 3+10.75
TAN 4.97
DB N29° 16' 30"E
DA S61° 04' 56"E
LCHORD DIST 7.05 BEARING N74° 05' 47"E
EXTERNAL DIST 2.05
MID ORD 1.45
RADIUS 5.00
DEG 1145° 54' 56"
DELTA 89° 38' 34"
LENGTH 7.82
PT N 591171.072 E 881391.015 STATION 3+13.61
PI STATION 3+13.61
TANGENT N 591171.072 E 881391.015 STATION 3+13.61
DISTANCE 10.98 BEARING S61° 04' 56"E
CURVE (L5)
ARC PC N 591165.763 E 881400.626 STATION 3+24.59
CC N 591170.139 E 881403.044
PI N 591164.777 E 881402.410 STATION 3+26.62
TAN 2.04
DB S61° 04' 56"E
DA N74° 33' 30"E
LCHORD DIST 3.78 BEARING S83° 15' 43"E
EXTERNAL DIST 0.4
MID ORD 0.37
RADIUS 5.00
DEG 1145° 54' 56"
DELTA 44° 21' 34"
LENGTH 3.87
PT N 591165.320 E 881404.375 STATION 3+28.46
PI STATION 3+28.46
TANGENT N 591165.320 E 881404.375 STATION 3+28.46
DISTANCE 40.74 BEARING N74° 33' 30"E
END ALIGNMENT 'EL' PI STATION 3+69.19
END N 591176.166 E 881443.642 STATION 3+69.19



'EM' R/L

ALIGNMENT: Ali-EM
DESCRIPTION: 'EM'
LENGTH: 146.51

BEGIN ALIGNMENT 'EM' PI STATION 50+00.00
TANGENT N 591038.926 E 881427.881 STATION 50+00.00
DISTANCE 95.26 BEARING N31° 27' 38"W
PI STATION 50+95.26
TANGENT N 591120.184 E 881378.163 STATION 50+95.26
DISTANCE 51.25 BEARING N28° 40' 14"E
END ALIGNMENT 'EM' PI STATION 51+46.51
END N 591165.152 E 881402.752 STATION 51+46.51

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	ALIGNMENT DIAGRAM: SHEET 4	SHEET 63	E

'ER' R/L

ALIGNMENT: Ali-ER
DESCRIPTION: 'ER'
LENGTH: 260.49

BEGIN ALIGNMENT 'ER' PI STATION 10+00.00
TANGENT N 590980.475 E 881462.589 STATION 10+00.00
DISTANCE 74.41 BEARING N59° 17' 55"E

CURVE (R1)
ARC PC N 591018.465 E 881526.569 STATION 10+74.41
CC N 591035.662 E 881516.358
PI N 591024.179 E 881536.192 STATION 10+85.60
TAN 11.19
DB N59° 17' 55"E
DA N00° 50' 13"E
LCHORD DIST 19.53 BEARING N30° 04' 04"E
EXTERNAL DIST 2.92
MID ORD 2.55
RADIUS 20.00
DEG 286° 28' 44"
DELTA 58° 27' 42"
LENGTH 20.41
PT N 591035.370 E 881536.356 STATION 10+94.82

PI STATION 10+94.82
TANGENT N 591035.370 E 881536.356 STATION 10+94.82
DISTANCE 24.72 BEARING N00° 50' 13"E

CURVE (R2)
ARC PC N 591060.085 E 881536.717 STATION 11+19.53
CC N 591060.158 E 881531.717
PI N 591061.524 E 881536.738 STATION 11+20.97
TAN 1.44
DB N00° 50' 13"E
DA N31° 17' 45"W
LCHORD DIST 2.77 BEARING N15° 13' 46"W
EXTERNAL DIST 0.2
MID ORD 0.20
RADIUS 5.00
DEG 1145° 54' 56"
DELTA 32° 07' 58"
LENGTH 2.80
PT N 591062.755 E 881535.990 STATION 11+22.34

PI STATION 11+22.34
TANGENT N 591062.755 E 881535.990 STATION 11+22.34
DISTANCE 99.56 BEARING N31° 17' 45"W

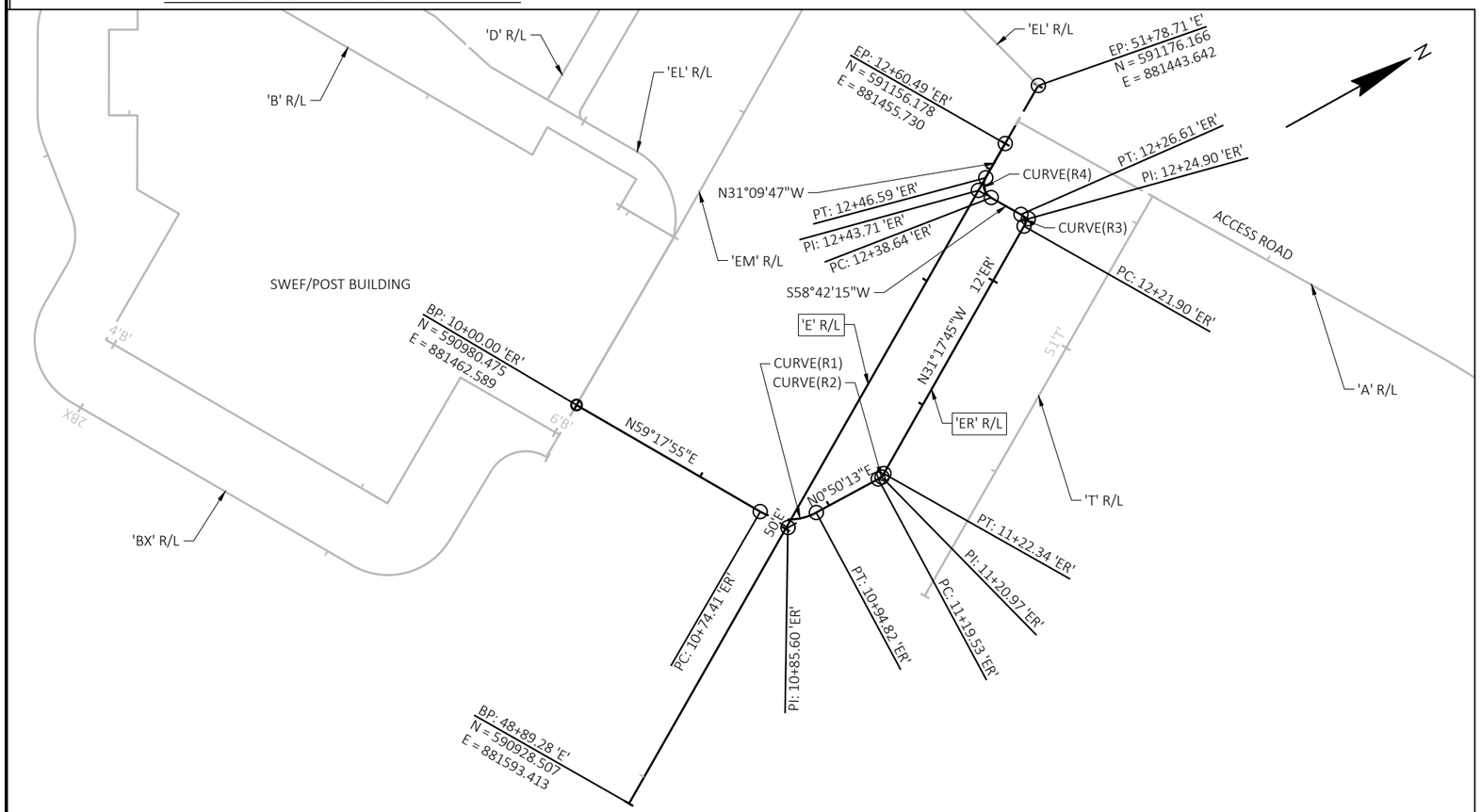
CURVE (R3)
ARC PC N 591147.829 E 881484.273 STATION 12+21.90
CC N 591146.270 E 881481.709
PI N 591150.392 E 881482.714 STATION 12+24.90
TAN 3.00
DB N31° 17' 45"W
DA S58° 42' 15"W
LCHORD DIST 4.24 BEARING N76° 17' 45"W
EXTERNAL DIST 1.24
MID ORD 0.88
RADIUS 3.00
DEG 1909° 51' 34"
DELTA 89° 59' 60"
LENGTH 4.71
PT N 591148.834 E 881480.151 STATION 12+26.61

PI STATION 12+26.61
TANGENT N 591148.834 E 881480.151 STATION 12+26.61
DISTANCE 12.03 BEARING S58° 42' 15"W

CURVE (R4)
ARC PC N 591142.583 E 881469.868 STATION 12+38.64
CC N 591146.900 E 881467.244
PI N 591139.953 E 881465.542 STATION 12+43.71
TAN 5.06
DB S58° 42' 15"W
DA N31° 09' 47"W
LCHORD DIST 7.15 BEARING N76° 13' 46"W
EXTERNAL DIST 2.1
MID ORD 1.48
RADIUS 5.05
DEG 1134° 13' 52"
DELTA 90° 07' 57"
LENGTH 7.95
PT N 591144.285 E 881462.922 STATION 12+46.59

PI STATION 12+46.59
TANGENT N 591144.285 E 881462.922 STATION 12+46.59
DISTANCE 13.90 BEARING N31° 09' 47"W

END ALIGNMENT 'ER' PI STATION 12+60.49
END N 591156.178 E 881455.730 STATION 12+60.49



'E' R/L

ALIGNMENT: Ali-E
DESCRIPTION: 'E'
LENGTH: 289.42

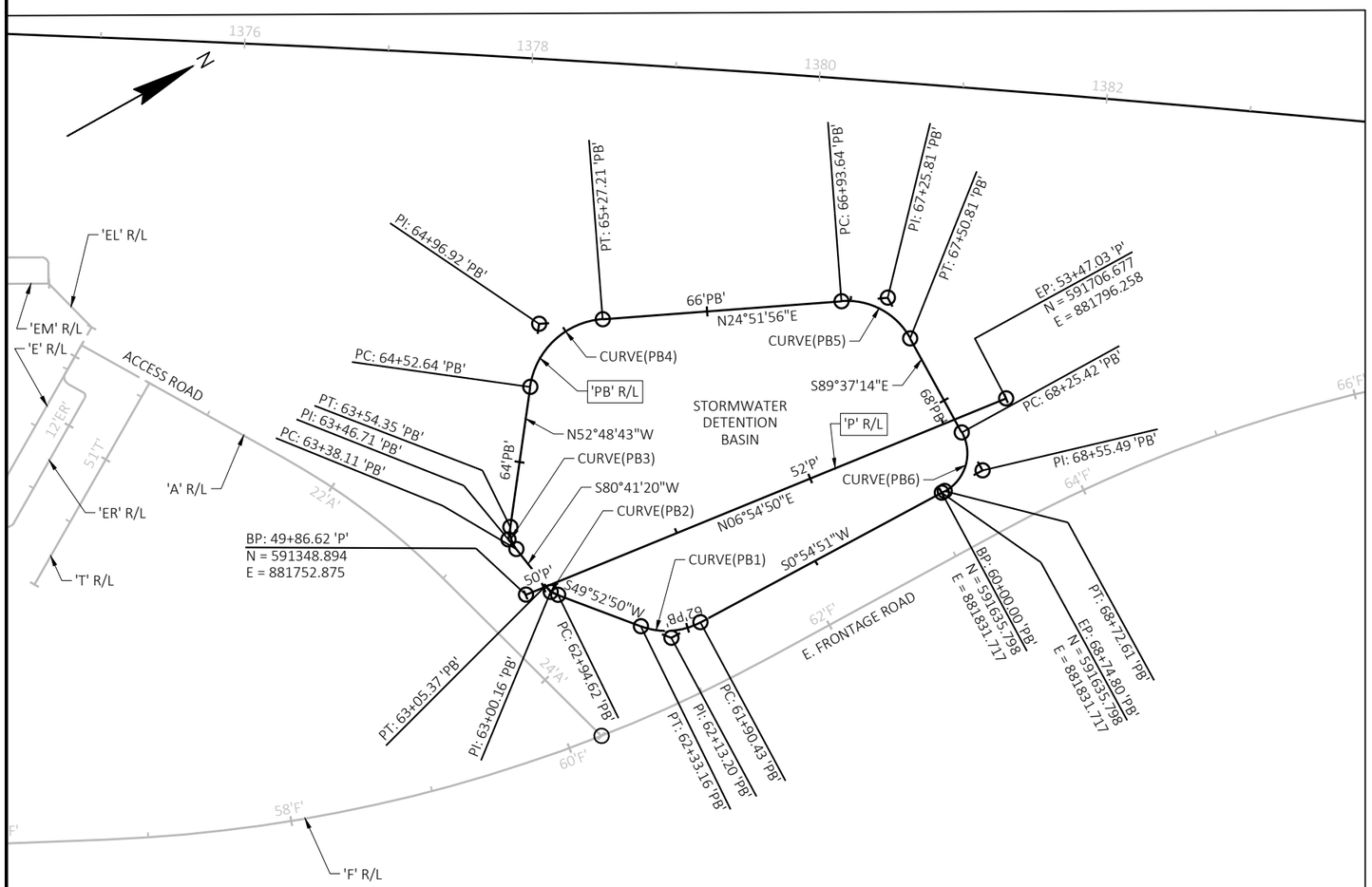
BEGIN ALIGNMENT 'E' PI STATION 48+89.28
TANGENT N 590928.507 E 881593.413 STATION 48+89.28
DISTANCE 289.42 BEARING N31° 09' 47"W

END ALIGNMENT 'E' PI STATION 51+78.71
END N 591176.166 E 881443.642 STATION 51+78.71

'P' R/L

ALIGNMENT: Ali-P
DESCRIPTION: 'P'
LENGTH: 360.40

BEGIN ALIGNMENT 'P' PI STATION 49+86.62
TANGENT N 591348.894 E 881752.875 STATION 49+86.62
DISTANCE 360.40 BEARING N06° 54' 50"E
END ALIGNMENT 'P' PI STATION 53+47.03
END N 591706.677 E 881796.258 STATION 53+47.03

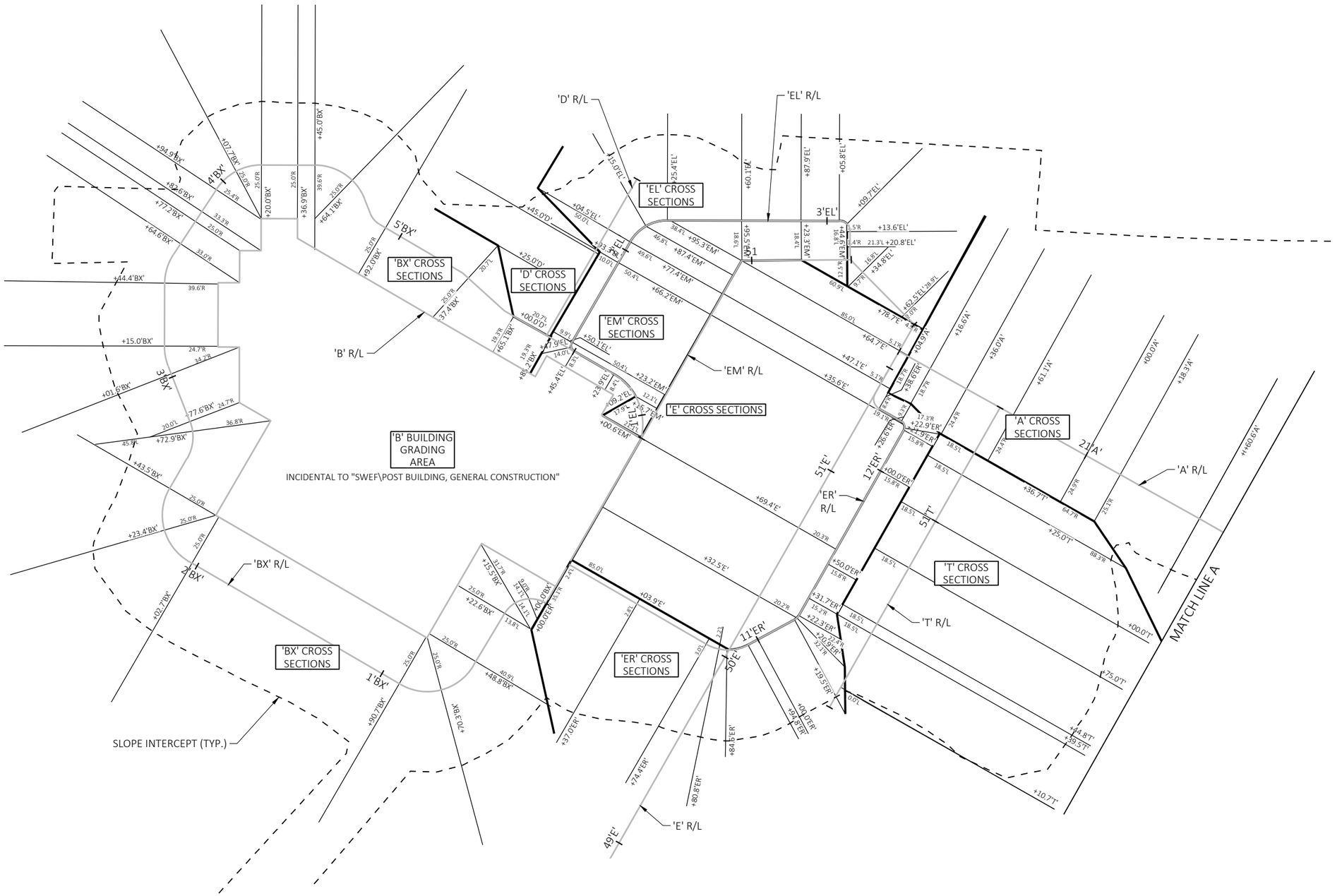


'PB' R/L

ALIGNMENT: Ali-PB
DESCRIPTION: 'PB'
LENGTH: 874.80

BEGIN ALIGNMENT 'PB' PI STATION 60+00.00
TANGENT N 591635.798 E 881831.717 STATION 60+00.00
DISTANCE 190.43 BEARING S00° 54' 51"W
CURVE (PB1)
ARC PC N 591445.392 E 881828.679 STATION 61+90.43
CC N 591446.190 E 881778.685
PI N 591422.626 E 881828.315 STATION 62+13.20
TAN 22.77
DB S00° 54' 51"W
DA S49° 52' 50"W
LCHORD DIST 41.44 BEARING S25° 23' 50"W
EXTERNAL DIST 4.94
MID ORD 4.50
RADIUS 50.00
DEG 114° 35' 30"
DELTA 48° 57' 59"
LENGTH 42.73
PT N 591407.955 E 881810.904 STATION 62+33.16
PI STATION 62+33.16
TANGENT N 591407.955 E 881810.904 STATION 62+33.16
DISTANCE 61.46 BEARING S49° 52' 50"W
CURVE (PB2)
ARC PC N 591368.352 E 881763.907 STATION 62+94.62
CC N 591383.646 E 881751.019
PI N 591364.801 E 881759.693 STATION 63+00.13
TAN 5.51
DB S49° 52' 50"W
DA S80° 41' 20"W
LCHORD DIST 10.63 BEARING S65° 17' 05"W
EXTERNAL DIST 0.75
MID ORD 0.72
RADIUS 20.00
DEG 286° 28' 44"
DELTA 30° 48' 31"
LENGTH 10.75
PT N 591363.910 E 881754.255 STATION 63+05.37
PI STATION 63+05.37
TANGENT N 591363.910 E 881754.255 STATION 63+05.37
DISTANCE 32.74 BEARING S80° 41' 20"W
CURVE (PB3)
ARC PC N 591358.612 E 881721.945 STATION 63+38.11
CC N 591378.349 E 881718.709
PI N 591357.222 E 881713.466 STATION 63+46.71
TAN 8.59
DB S80° 41' 20"W
DA N52° 48' 43"W
LCHORD DIST 15.79 BEARING N76° 03' 41"W
EXTERNAL DIST 1.77
MID ORD 1.62
RADIUS 20.00
DEG 286° 28' 44"
DELTA 46° 29' 56"
LENGTH 16.23
PT N 591362.416 E 881706.621 STATION 63+54.35
PI STATION 63+54.35
TANGENT N 591362.416 E 881706.621 STATION 63+54.35
DISTANCE 98.30 BEARING N52° 48' 43"W
CURVE (PB4)
ARC PC N 591421.829 E 881628.313 STATION 64+52.64
CC N 591465.645 E 881661.557
PI N 591448.594 E 881593.035 STATION 64+96.92
TAN 44.28
DB N52° 48' 43"W
DA N24° 51' 56"E
LCHORD DIST 68.98 BEARING N13° 58' 24"W
EXTERNAL DIST 15.61
MID ORD 12.16
RADIUS 55.00
DEG 104° 10' 27"
DELTA 77° 40' 39"
LENGTH 74.57
PT N 591488.772 E 881611.655 STATION 65+27.21
PI STATION 65+27.21
TANGENT N 591488.772 E 881611.655 STATION 65+27.21
DISTANCE 166.43 BEARING N24° 51' 56"E
CURVE (PB5)
ARC PC N 591639.777 E 881681.639 STATION 66+93.64
CC N 591618.753 E 881727.004
PI N 591668.964 E 881695.166 STATION 67+25.81
TAN 32.17
DB N24° 51' 56"E
DA S89° 37' 14"E
LCHORD DIST 54.11 BEARING N57° 37' 21"E
EXTERNAL DIST 9.45
MID ORD 7.95
RADIUS 50.00
DEG 114° 35' 30"
DELTA 65° 30' 50"
LENGTH 57.17
PT N 591668.751 E 881727.335 STATION 67+50.81
PI STATION 67+50.81
TANGENT N 591668.751 E 881727.335 STATION 67+50.81
DISTANCE 74.60 BEARING S89° 37' 14"E
CURVE (PB6)
ARC PC N 591668.257 E 881801.937 STATION 68+25.42
CC N 591638.258 E 881801.738
PI N 591668.058 E 881832.010 STATION 68+55.49
TAN 30.07
DB S89° 37' 14"E
DA S00° 31' 10"W
LCHORD DIST 42.48 BEARING S44° 33' 02"E
EXTERNAL DIST 12.48
MID ORD 8.81
RADIUS 30.00
DEG 190° 59' 09"
DELTA 90° 08' 24"
LENGTH 47.20
PT N 591637.986 E 881831.737 STATION 68+72.61
PI STATION 68+72.61
TANGENT N 591637.986 E 881831.737 STATION 68+72.61
DISTANCE 2.19 BEARING S00° 31' 10"W
END ALIGNMENT 'PB' PI STATION 68+74.80

2



PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	EARTHWORK MATCHLINE	SHEET 66	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\027202_XM.DWG
LAYOUT NAME - 01

PLOT DATE : 4/25/2024 4:24 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

SLOPE INTERCEPT (TYP.)

'PB' CROSS SECTIONS

'P' CROSS SECTIONS

'A' CROSS SECTIONS

'PB' CROSS SECTIONS

'F' CROSS SECTIONS

'A' R/L

'P' R/L

'PB' R/L

'F' R/L

MATCH LINE A

65'PB'

66'PB'

67'PB'

68'PB'

53'P'

52'P'

51'P'

50'P'

63'PB'

62'PB'

61'PB'

22'A'

24'A'

25'A'

20'A'

64'F'

65'F'

63'F'

62'F'

61'F'

60'F'

59'F'

58'F'

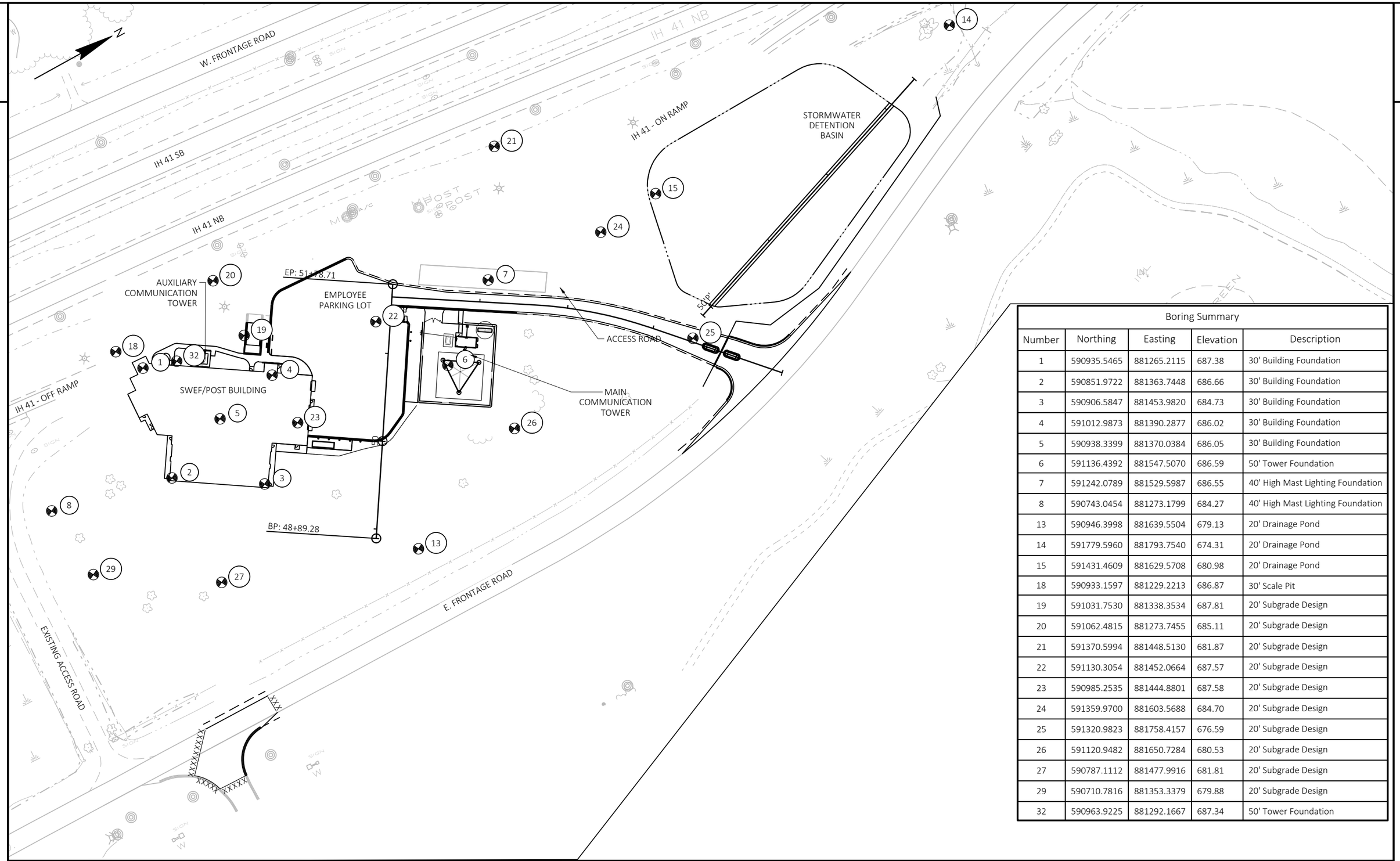
57'F'

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	EARTHWORK MATCHLINES	SHEET 67 E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\027202_XM.DWG
LAYOUT NAME - 02

PLOT DATE : 4/25/2024 4:24 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42



Boring Summary				
Number	Northing	Easting	Elevation	Description
1	590935.5465	881265.2115	687.38	30' Building Foundation
2	590851.9722	881363.7448	686.66	30' Building Foundation
3	590906.5847	881453.9820	684.73	30' Building Foundation
4	591012.9873	881390.2877	686.02	30' Building Foundation
5	590938.3399	881370.0384	686.05	30' Building Foundation
6	591136.4392	881547.5070	686.59	50' Tower Foundation
7	591242.0789	881529.5987	686.55	40' High Mast Lighting Foundation
8	590743.0454	881273.1799	684.27	40' High Mast Lighting Foundation
13	590946.3998	881639.5504	679.13	20' Drainage Pond
14	591779.5960	881793.7540	674.31	20' Drainage Pond
15	591431.4609	881629.5708	680.98	20' Drainage Pond
18	590933.1597	881229.2213	686.87	30' Scale Pit
19	591031.7530	881338.3534	687.81	20' Subgrade Design
20	591062.4815	881273.7455	685.11	20' Subgrade Design
21	591370.5994	881448.5130	681.87	20' Subgrade Design
22	591130.3054	881452.0664	687.57	20' Subgrade Design
23	590985.2535	881444.8801	687.58	20' Subgrade Design
24	591359.9700	881603.5688	684.70	20' Subgrade Design
25	591320.9823	881758.4157	676.59	20' Subgrade Design
26	591120.9482	881650.7284	680.53	20' Subgrade Design
27	590787.1112	881477.9916	681.81	20' Subgrade Design
29	590710.7816	881353.3379	679.88	20' Subgrade Design
32	590963.9225	881292.1667	687.34	50' Tower Foundation

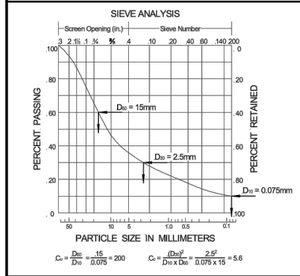
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN: SOIL BORINGS	SHEET 68	E

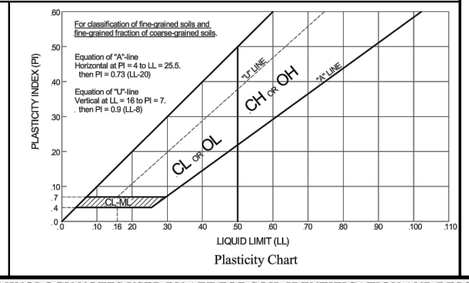
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\027301-BOR.DWG
LAYOUT NAME - 00
PLOT DATE : 4/25/2024 4:25 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : ##########

UNIFIED SOIL CLASSIFICATION SYSTEM
ASTM Designations: D 2487, D2488

AMERICAN ENGINEERING TESTING, INC.

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests[A]				Soil Classification: Group Symbol	Soil Classification: Group Name[B]
Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels More than 50% coarse fraction retained on No. 4 sieve	Clean Gravels Less than 5% fines[C]	Cu≥4 and 1≤Cc≤3[E]	GW	Well graded gravel[F]
			Cu<4 and/or 1>Cc>3[E]	GP	Poorly graded gravel[F]
		Gravels with Fines more than 12% fines[C]	Fines classify as ML or MH	GM	Silty gravel[F,G,H]
			Fines classify as CL or CH	GC	Clayey gravel[F,G,H]
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands Less than 5% fines[D]	Cu≥6 and 1≤Cc≤3[E]	SW	Well-graded sand[I]
			Cu<6 and 1>Cc>3[E]	SP	Poorly-graded sand[I]
		Sands with Fines more than 12% fines[D]	Fines classify as ML or MH	SM	Silty sand[G,H,I]
			Fines classify as CL or CH	SC	Clayey sand[G,H,I]
Fine-Grained Soils 50% or more passes the No. 200 sieve (see Plasticity Chart below)	Silts and Clays Liquid limit less than 50	inorganic	PI>7 and plots on or above "A" line[J]	CL	Lean clay[K,L,M]
			PI<4 or plots below "A" line[J]	ML	Silt[K,L,M]
		organic	Liquid limit–oven dried / Liquid limit – not dried <0.75	OL	Organic clay[K,L,M,N] / Organic silt[K,L,M,O]
	Silts and Clays Liquid limit 50 or more	inorganic	PI plots on or above "A" line	CH	Fat clay[K,L,M]
			PI plots below "A" line	MH	Elastic silt[K,L,M]
		organic	Liquid limit–oven dried / Liquid limit – not dried <0.75	OH	Organic clay[K,L,M,P] / Organic silt[K,L,M,Q]
Highly organic soil			Primarily organic matter, dark in color, and organic in odor	PT	Peat[R]





Plasticity Chart

Notes

[A]Based on the material passing the 3-in (75-mm) sieve.
[B]If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
[C]Gravels with 5 to 12% fines require dual symbols:
GW-GM well-graded gravel with silt
GW-GC well-graded gravel with clay
GP-GM poorly graded gravel with silt
GP-GC poorly graded gravel with clay
[D]Sands with 5 to 12% fines require dual symbols:
SW-SM well-graded sand with silt
SW-SC well-graded sand with clay
SP-SM poorly graded sand with silt
SP-SC poorly graded sand with clay

[E]$Cu = D_{60} / D_{10}$, $Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$

[F]If soil contains ≥15% sand, add "with sand" to group name.
[G]If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.
[H]If fines are organic, add "with organic fines" to group name.
[I]If soil contains ≥15% gravel, add "with gravel" to group name.
[J]If Atterberg limits plot is hatched area, soils is a CL-ML silty clay.
[K]If soil contains 15 to 29% plus No. 200 add "with sand" or "with gravel", whichever is predominant.
[L]If soil contains ≥30% plus No. 200, predominantly sand, add "sandy" to group name.
[M]If soil contains ≥30% plus No. 200, predominantly gravel, add "gravelly" to group name.
[N]PI≥4 and plots on or above "A" line.
[O]PI<4 or plots below "A" line.
[P]PI plots on or above "A" line.
[Q]PI plots below "A" line.
[R]Fiber Content description shown below.

ADDITIONAL TERMINOLOGY NOTES USED BY AET FOR SOIL IDENTIFICATION AND DESCRIPTION

Grain Size

Term	Particle Size
Boulders	Over 12"
Cobbles	3" to 12"
Gravel	#4 sieve to 3"
Sand	#200 to #4 sieve
Fines (silt & clay)	Pass #200 sieve

Gravel Percentages

Term	Percent
A Little Gravel	3% - 14%
With Gravel	15% - 29%
Gravelly	30% - 50%

Consistency of Plastic Soils

Term	N-Value, BPF
Very Soft	less than 2
Soft	2 - 4
Firm	5 - 8
Stiff	9 - 15
Very Stiff	16 - 30
Hard	Greater than 30

Relative Density of Non-Plastic Soils

Term	N-Value, BPF
Very Loose	0 - 4
Loose	5 - 10
Medium Dense	11 - 30
Dense	31 - 50
Very Dense	Greater than 50

Moisture/Frost Condition (MC Column)

D (Dry):	Absense of moisture, dusty, dry to touch.
M (Moist):	Damp, although free water not visible. Soil may still have a high water content (over "optimum").
W (Wet/ Waterbearing):	Free water visible intended to describe non-plastic soils. Waterbearing usually relates to sands and sand with silt.
F (Frozen):	Soil frozen

Layering Notes

Laminations:	Layers less than ½" thick of differing material or color.
Lenses:	Pockets or layers greater than ½" thick of differing material or color.

Peat Description

Term	Fiber Content (Visual Estimate)
Fibric Peat:	Greater than 67%
Hemic Peat:	33 – 67%
Sapric Peat:	Less than 33%

Organic Description (if no lab tests)

Soils are described as ***organic***, if soil is not peat and is judged to have sufficient organic fines content to influence the Liquid Limit properties. ***Slightly organic*** used for borderline cases.

Root Inclusions

With roots:	Judged to have sufficient quantity of roots to influence the soil properties.
Trace roots:	Small roots present, but not judged to be in sufficient quantity to significantly affect soil properties.

01CLS021 (01/08) **AMERICAN ENGINEERING TESTING, INC.**

SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-01 (p. 1 of 2)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	Surface Elevation **687.4** MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
	687.1	4.25 inches of bituminous pavement	PAVEMENT									
1		FILL, silty gravel with sand, gray, moist (GM)	FILL		M	DS						
2	685.2											
3		SILTY SAND, fine grained, brown, moist, medium dense (SM)	GLACIO-LACUSTRINE DEPOSITS	19	M	SS	14					
4	682.9											
5		LEAN CLAY, reddish brown, firm (CL)	TILL									
6				6	M	SS	17	35	1.25			
7	680.4											
8		SILTY SAND, fine grained, brown, moist, medium dense (SM)	GLACIO-LACUSTRINE DEPOSITS	16	M	SS	22					
9	677.9											
10		SAND WITH SILT, fine grained, brown, moist, medium dense (SP-SM)		17	M	SS	24					
11	675.4											
12		SAND, fine to medium grained, brown, moist to waterbearing, loose (SP)		6	M/W	SS	20					
13												
14	672.9											
15		SAND, fine grained, brown, waterbearing, very loose (SP)		3	W	SS	24					
16												
17												
18												
19												
20				3	W	SS	24					
21												
22												
23												

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-19.5' 3.25" HSA							
19.5-29.5' w/ DM	**9/12/22**	**0900**	**16.5**	**14.5**	**14.0**	**None**	**13.7**
	9/12/22	**0910**	**16.5**	**14.5**	**13.6**	**None**	**13.2**
BORING COMPLETED: **9/12/22**							
DR: **MD** LG: **KS** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

03/2011 01-DHR-060

SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-01 (p. 2 of 2)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
25		SAND, fine grained, brown, waterbearing, very loose (SP) *(continued)*		3	W	SS	24					
26												
27												
28	659.4											
29		Sandy LEAN CLAY, brown, hard, with lenses of sand (CL)	TILL									
30												
31	655.9			31	W	SS	20		>4.5			
		End of boring at 31.5 feet										

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

03/2011 01-DHR-060

SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-02 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

Surface Elevation **686.7**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
0	686.4	SILTY SAND with organics, fine grained, brown, moist (SM)	TOPSOIL									
1		SAND, fine grained, brown, moist, very loose (SP)	GLACIO-LACUSTRINE DEPOSITS	2	M	SS	17					
2	684.7											
3		SILTY SAND, fine grained, brown, moist, medium dense (SM)		14	M	SS	17					
4	682.2											
5		SAND WITH SILT, fine grained, brown, medium dense (SP-SM)		14	M	SS	26					
6												
7	679.7											
8		SILTY SAND, fine grained, brown, moist, loose (SM)		9	M	SS	24					
9	677.2											
10		SAND WITH SILT, fine grained, brown, moist to waterbearing, loose (SP-SM)		8	M	SS	21					
11												
12												
13				9	MW	SS	18					
14	672.2											
15		SAND, fine grained, brown, waterbearing, loose to medium dense (SP)		11	W	SS	18					
16												
17												
18												
19												
20				9	W	SS	17					
21	665.2											
		End of boring at 21.5 feet										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
0-19.5' 3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
	9/7/22	**1100**	**16.5**	**14.5**	**13.9**	**None**	**13.3**
	9/7/22	**1110**	**16.5**	**14.5**	**13.6**	**None**	**13.0**
BORING COMPLETED: **9/7/22**							
DR: **MD** LG: **KS** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-03 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

Surface Elevation **684.7**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
0	684.1	FILL, silty sand with organics, fine grained, brown, moist (SM)	FILL/ TOPSOIL									
1		FILL, sand with silt, fine grained, yellowish brown, moist (SP-SM)	FILL	4	M	SS	18					
2	682.7											
3		SILTY SAND, fine grained, brown, moist, loose, with trace organics (SM)	GLACIO-LACUSTRINE DEPOSITS	7	M	SS	17					
4	680.2											
5		SAND, fine grained, brown, moist to waterbearing, loose to medium dense (SP)		8	M	SS	19					
6												
7												
8				11	M	SS	20					
9												
10				24	MW	SS	17					
11												
12												
13				13	W	SS	16					
14	670.2											
15		SILTY SAND, fine grained, brown, waterbearing, loose (SM)		9	W	SS	16					
16												
17												
18												
19												
20				6	W	SS	15					
21	663.2											
		End of boring at 21.5 feet										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
0-19.5' 3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
	9/7/22	**1300**	**14.0**	**12.0**	**11.6**	**None**	**11.5**
	9/7/22	**1310**	**14.0**	**12.0**	**11.5**	**None**	**10.9**
BORING COMPLETED: **9/7/22**							
DR: **MD** LG: **KS** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-04 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION (Surface Elevation 686.0)	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1	685.4	SILTY SAND with organics, fine grained, a little gravel, brown, moist (SM)	TOPSOIL									
		SAND, fine grained, brown, moist, loose (SP)	GLACIO-LACUSTRINE DEPOSITS	6	M	SS	16					
3				8	M	SS	19					
6				9	M	SS	20					
7	679.0	SILTY SAND, fine grained, brown, moist to waterbearing, loose to medium dense (SM)										
8				11	M	SS	21					
10				9	M	SS	16					
13				6	M/W	SS	21					
16				6	W	SS	19					
18	668.0	SAND, fine grained, brown, waterbearing, loose (SP)										
21	664.5			5	W	SS	14					
		End of boring at 21.5 feet										

DEPTH: DRILLING METHOD	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-19.5' 3.25" HSA	**9/7/22**	**1400**	**16.5**	**14.5**	**14.0**	**None**	**13.6**
	9/7/22	**1410**	**16.5**	**14.5**	**13.2**	**None**	**12.4**
BORING COMPLETED: **9/7/22**							
DR: **MD** LG: **KS** Rig: **57**							

WATER LEVEL MEASUREMENTS

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-05 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION (Surface Elevation 686.1)	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1	685.5	SILTY SAND with organics, fine grained, brown, moist (SM)	TOPSOIL									
		SILTY SAND, fine grained, brown, moist to waterbearing, very loose to loose (SM)	GLACIO-LACUSTRINE DEPOSITS	4	M	SS	19					
3				7	M	SS	17					12
6				5	M	SS	17					
8				4	M	SS	17					
10				4	M	SS	16					
13				8	M	SS	19					
16				6	M/W	SS	19					
18	668.1	SAND, fine grained, brown, waterbearing, very loose (SP)										
21	664.6			2	W	SS	20					
		End of boring at 21.5 feet										

DEPTH: DRILLING METHOD	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-19.5' 3.25" HSA	**9/7/22**	**1200**	**14.0**	**12.0**	**12.0**	**None**	**None**
	9/7/22	**1210**	**14.0**	**12.0**	**12.0**	**None**	**None**
BORING COMPLETED: **9/7/22**	**9/7/22**	**1220**	**21.5**	**19.5**	**18.3**	**None**	**17.9**
DR: **MD** LG: **KS** Rig: **57**	**9/7/22**	**1230**	**21.5**	**19.5**	**16.5**	**None**	**15.1**

WATER LEVEL MEASUREMENTS

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-06 (p. 1 of 2)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION (Surface Elevation **686.6**)	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
0	686.1	SILTY SAND with organics, fine grained, dark brown, moist (SM)	TOPSOIL									
1			GLACIO-LACUSTRINE DEPOSITS	5	M	SS	14					
2	684.6	SILTY SAND, fine to medium grained, brown, moist, loose, with trace organics (SM)										
3		SAND WITH SILT, fine grained, brown, moist, medium dense (SP-SM)		21	M	SS	20					
4												
5				17	M	SS	22					
6												
7	679.6	SILTY SAND, fine grained, brown, moist to waterbearing, loose (SM)		7	M	SS	20					
8												
9				5	M	SS	24					
10												
11				7	MW	SS	17					
12												
13	672.1	SAND, fine grained, brown, waterbearing, loose (SP)		8	W	SS	14					
14												
15				5	W	SS	17					
16												
17												
18												
19												
20	663.6	SAND, fine to medium grained, brown, waterbearing, loose (SP)										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-48.0' 3.25" HSA	**9/7/22**	**1500**	**16.5**	**14.5**	**14.2**	**None**	**13.4**
	9/7/22	**1510**	**16.5**	**14.5**	**13.8**	**None**	**13.0**
BORING COMPLETED: **9/7/22**							
DR: **MD** LG: **KS** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/8/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-06 (p. 2 of 2)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
25		SAND, fine to medium grained, brown, waterbearing, loose (SP) *(continued)*		6	W	SS	16					
26												
27												
28												
29												
30				7	W	SS	21					
31												
32												
33	653.6	Sandy LEAN CLAY, a little gravel, brown, hard (CL)	TILL									
34												
35												
36	650.7	SAND, fine grained, brown, waterbearing, dense (SP)	GLACIO-LACUSTRINE DEPOSITS	34	W	SS	20	10	>4.5			
37												
38	648.6	Sandy LEAN CLAY, a little gravel, brown, hard, with lenses of sand (CL)	TILL									
39												
40	646.1	SAND WITH SILT, fine grained, brown, waterbearing, dense (SP-SM)	GLACIO-LACUSTRINE DEPOSITS	47	W	SS	20	13	>4.5			
41												
42												
43	643.6	LEAN CLAY with sand, a little gravel, brown, hard (CL)	TILL									
44												
45												
46				38	W	SS	34	13	3.75			
47												
48												
49				31	W	SS	24	18	3.75			
50	636.6	*End of boring at 50.0 feet*										

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/8/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-07 (p. 1 of 2)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION (Surface Elevation **686.6**)	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1	685.8	SILTY SAND with organics, fine grained, a little gravel, dark brown, moist (SM)	TOPSOIL									
		SILTY SAND, fine grained, brown, moist, very loose to loose (SM)	GLACIO-LACUSTRINE DEPOSITS	4	M	SS	15					
3				7	M	SS	18					
4	682.1											
5		SAND WITH SILT, fine grained, brown, moist, loose (SP-SM)		6	M	SS	20					
7	679.6											
8		SILTY SAND, fine grained, brown, moist to waterbearing, loose to medium dense (SM)		10	M	SS	20					
11				13	M	SS	19					
12					▼							
13				10	M/W	SS	19					
14	672.1											
15		SAND, fine grained, brown, waterbearing, loose (SP)		9	W	SS	17					
16	670.5											
17		LEAN CLAY with sand, reddish brown, stiff (CL)	TILL					14	2.0			
18	668.6											
19		SAND, fine grained, brown, waterbearing, medium dense (SP)	GLACIO-LACUSTRINE DEPOSITS									
20	665.8			13	W	SS	18					
21		SILTY CLAYEY SAND, fine grained, brown, waterbearing, medium dense (SC-SM)	TILL									
23	663.6	LEAN CLAY with sand, brown, very stiff, with lenses of sand (CL)										

DEPTH: DRILLING METHOD	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-14.5' 3.25" HSA							
14.5-39.5' w/ DM	**9/8/22**	**1420**	**16.5**	**14.5**	**14.1**	**None**	**13.1**
	9/8/22	**1430**	**16.5**	**14.5**	**13.4**	**None**	**12.4**
BORING COMPLETED: **9/8/22**							
DR: **MD** LG: **KS** Rig: **57**							

WATER LEVEL MEASUREMENTS

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-07 (p. 2 of 2)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
25		LEAN CLAY with sand, brown, very stiff, with lenses of sand (CL) *(continued)*		30	W	SS	24	15	>4.5			
28	658.6											
29		LEAN CLAY with sand, a little gravel, brown, very stiff, with lenses of sand (CL)		29	W	SS	24	22	>4.5			
35				24	W	SS	24	15	2.75			
38	648.6											
39		SAND WITH SILT, fine grained, brown, waterbearing, dense (SP-SM)	GLACIO-LACUSTRINE DEPOSITS									
40	645.8			39	W	SS	24					
41	645.1	LEAN CLAY with sand, a little gravel, brown, hard (CL)	TILL					17	4.0			
		End of boring at 41.5 feet										

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-08 (p. 1 of 2)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	Surface Elevation **684.3** MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1	683.8	FILL, silty sand with organics, fine grained, dark brown, moist (SM)	FILL/ TOPSOIL	4	M	SS	18					
2		FILL, silty sand, fine grained, brown, moist, with trace organics, with lenses of lean clay (SM)	FILL									
3	681.3			12	M	SS	14					
4	680.8	FILL, silty sand, fine to medium grained, a little gravel, dark brown and brown, moist (SM)	GLACIO-LACUSTRINE DEPOSITS									
5	679.1	SILTY SAND, fine grained, brown, moist, medium dense (SM)		11	M	SS	23	19				
6	678.3	LEAN CLAY with sand, brown, firm (CL)	TILL					21	1.25			
7	677.3	Sandy LEAN CLAY, brown, stiff (CL)										
8		SILTY SAND, fine grained, brown, moist, loose (SM)	GLACIO-LACUSTRINE DEPOSITS	8	M	SS	24	18				
9	674.8											
10		SILT, brown, moist, loose (ML)		7	M	SS	24	23				
11												
12	672.3											
13		SILTY SAND, fine grained, brown, moist to waterbearing, very loose to loose (SM)		7	M/W	SS	21					
14												
15				4	W	SS	20					
16												
17												
18	666.3											
19		SAND WITH SILT, fine grained, brown, waterbearing, very loose (SP-SM)										
20				4	W	SS	20					
21												
22												
23	661.3											
		SILTY SAND, fine grained, brown, waterbearing, loose (SM)										

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS						
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-14.5'	**3.25" HSA**							
14.5-39.5'	**w/ DM**	**9/7/22**	**0910**	**16.5**	**14.5**	**14.2**	**None**	**13.4**
		9/7/22	**0920**	**16.5**	**14.5**	**13.1**	**None**	**12.8**
BORING COMPLETED:	**9/7/22**							
DR: **MD**	LG: **KS** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/8/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-08 (p. 2 of 2)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
25		SILTY SAND, fine grained, brown, waterbearing, loose (SM) *(continued)*		5	W	SS	19					
26												
27												
28	656.3											
29		SAND, fine to medium grained, gray, waterbearing, loose, with lenses of lean clay (SP)										
30				5	W	SS	18					
31												
32												
33	651.3											
34		CLAYEY SAND, fine to medium grained, a little gravel, brown, waterbearing, medium dense, with lenses of lean clay (SC)	TILL									
35												
36				24	W	SS	19					
37												
38	646.3											
39		LEAN CLAY with sand, a little gravel, brown, very stiff (CL)										
40												
41				30	W	SS	24	15	4.0			
	642.8	*End of boring at 41.5 feet*										

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/8/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-13 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	Surface Elevation **679.1** MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1	678.1	FILL, silty sand with organics, fine grained, brown, moist (SM)	FILL/ TOPSOIL	7	M	SS	16					
2	677.1	FILL, sand with silt, fine to medium grained, yellowish brown, moist (SP-SM)	FILL									
3		SAND, fine grained, brown, moist to waterbearing, very loose to loose (SP)	GLACIO-LACUSTRINE DEPOSITS	7	M	SS	18					
4												
5				8	M	SS	20					
6												
7				4	M/W	SS	18					
8												
9				6	W	SS	14					4
10												
11				5	W	SS	19					
12												
13				5	W	SS	16					
14												
15				7	W	SS	20					
16												
17				9	W	SS	14					
18												
19				6	W	SS	16					
20	659.1	*End of boring at 20.0 feet*										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-18.0' 3.25" HSA	**9/6/22**	**1300**	**12.0**	**10.0**	**9.7**	**None**	**8.1**
	9/6/22	**1310**	**12.0**	**10.0**	**8.8**	**None**	**7.3**
BORING COMPLETED: **9/6/22**							
DR: **KS** LG: **JB** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-14 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	Surface Elevation **674.3** MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1	672.8	FILL, sandy silt with organics, dark brown, moist (OL)	FILL/ TOPSOIL	5	M	SS	18					
2	672.3	FILL, silty sand, fine grained, brown, moist (SM)	FILL									
3	670.3	Sandy LEAN CLAY, reddish brown, firm (CL)	TILL	7	M	SS	10	18	0.75			
4		LEAN CLAY with sand, reddish brown, stiff to very stiff (CL)										
5				10	M	SS	20	13	2.5			
6												
7	666.3			16	M	SS	24	15	3.25			
8		LEAN CLAY, mottled reddish brown and gray, very stiff (CL)										
9	664.3			16	M	SS	20	16	2.0			
10		LEAN CLAY with sand, a little gravel, brown, stiff (CL)										
11	662.3			12	M/W	SS	20	19	2.0			
12		LEAN CLAY, brown, firm (CL)										
13	660.3			5	W	SS	20	20	1.0			
14	659.8	SILTY SAND, fine grained, brown, waterbearing (SM)	GLACIO-LACUSTRINE DEPOSITS									
15		Sandy LEAN CLAY, a little gravel, brown, stiff (CL)	TILL	15	W	SS	16	14	2.75			
16	658.3	SILTY SAND, fine grained, brown, waterbearing, medium dense (SM)	GLACIO-LACUSTRINE DEPOSITS									
17				14	W	SS	18					
18												
19				12	W	SS	18					
20	654.3	*End of boring at 20.0 feet*										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-18.0' 3.25" HSA	**9/6/22**	**1200**	**20.0**	**18.0**	**16.5**	**None**	**15.1**
	9/6/22	**1210**	**20.0**	**18.0**	**15.1**	**None**	**10.6**
BORING COMPLETED: **9/6/22**	**9/6/22**	**1220**	**20.0**	**18.0**	**15.1**	**None**	**10.1**
DR: **KS** LG: **JB** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-15 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

Surface Elevation **681.0**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
	680.6	Sandy SILT with organics, dark brown, moist (OL)	TOPSOIL									
1		SILTY SAND, fine grained, dark brown, moist, loose, with trace organics (SM)	GLACIO-LACUSTRINE DEPOSITS	6	M	SS	12					
2	679.0	LEAN CLAY with sand, reddish brown, firm (CL)	TILL									
3				7	M	SS	20	21	1.5			
4	677.0	SILTY SAND, fine grained, brown, moist to waterbearing, loose to medium dense (SM)	GLACIO-LACUSTRINE DEPOSITS									
5				5	M	SS	15					
6												
7				15	M/W	SS	15					26
8	673.0	SAND, fine grained, brown, waterbearing, medium dense (SP)										
9				20	W	SS	16					
10	671.0	SAND WITH SILT, fine grained, brown, waterbearing, medium dense (SP-SM)										
11				18	W	SS	12					
12	669.0	SAND, fine grained, brown, waterbearing (SP)										
	668.5	LEAN CLAY with sand, a little gravel, brown, very stiff to hard (CL)	TILL									
13				27	W	SS	24	14	4.0			
14												
15				29	W	SS	24	13	>4.5			
16												
17				30	W	SS	24	10	4.0			
18												
19				35	W	SS	24	12	3.75			
20	661.0	*End of boring at 20.0 feet*										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-18.0' 3.25" HSA	**9/6/22**	**1120**	**10.0**	**8.0**	**9.3**	**None**	**7.9**
	9/6/22	**1130**	**10.0**	**8.0**	**2.8**	**None**	**6.9**
BORING COMPLETED: **9/6/22**							
DR: **KS** LG: **JB** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

03/2011 01-DHR-060

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN: SOIL BORINGS	SHEET 77 E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\027301-BOR.DWG
LAYOUT NAME - 09

PLOT DATE : 4/25/2024 4:25 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-18 (p. 1 of 2)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	Surface Elevation **686.9** MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
	686.5	4.75 inches of bituminous pavement	PAVEMENT									
1		FILL, silty gravel with sand, grayish brown, moist (GM)	FILL		M	DS						
2	684.5											
3		SAND WITH SILT, fine grained, brown, moist, medium dense (SP-SM)	GLACIO-LACUSTRINE DEPOSITS	23	M	SS	17					
4	682.4											
5		SILTY SAND, fine grained, reddish brown, moist, medium dense (SM)		15	M	SS	19					
6	681.0											
7	679.9	SAND WITH SILT, fine grained, brown, moist, medium dense (SP-SM)										
8		SAND, fine grained, brown, moist, very loose to loose (SP)		10	M	SS	17					
9												
10				4	M	SS	17					
11												
12	674.9	SILTY SAND, fine grained, brown, moist to waterbearing, very loose (SM)										
13				3	MW	SS	20					
14												
15				3	W	SS	8					
16												
17												
18	668.9	SAND, fine grained, brown, waterbearing, very loose (SP)										
19												
20				3	W	SS	24					
21												
22												
23	663.9	LEAN CLAY with sand, a little gravel, brown, stiff, with lenses of sand (CL)	TILL									

DEPTH: DRILLING METHOD	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-14.5' 3.25" HSA							
14.5-29.5' w/ DM	**9/9/22**	**1100**	**16.5**	**14.5**	**14.3**	**None**	**14.2**
	9/9/22	**1110**	**16.5**	**14.5**	**14.0**	**None**	**13.6**
BORING COMPLETED: **9/9/22**							
DR: **MD** LG: **KS** Rig: **57**							

WATER LEVEL MEASUREMENTS

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

03/2011 01-DHR-060

SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-18 (p. 2 of 2)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
25		LEAN CLAY with sand, a little gravel, brown, stiff, with lenses of sand (CL) *(continued)*	TILL *(continued)*	10	W	SS	22	13	2.25			
26												
27												
28	658.9	Sandy LEAN CLAY, a little gravel, brown, very stiff, with lenses of sand (CL)										
29												
30				21	W	SS	18	21	2.75			
31	655.4	*End of boring at 31.5 feet*										

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

03/2011 01-DHR-060

SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-19 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	Surface Elevation **687.8** MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1		FILL, gravelly silty sand, fine to coarse grained, grayish brown, moist (SM)	FILL	24	M	SS	16					
2	685.3											
3		SILTY SAND, fine grained, brown, moist, medium dense (SM)	GLACIO-LACUSTRINE DEPOSITS	17	M	SS	16					
4												
5				20	M	SS	24					
6												
7												
8				20	M	SS	24					
9	678.3											
10		SAND WITH SILT, fine grained, brown, moist, medium dense (SP-SM)		16	M	SS	19					
11												
12												
13				12	M	SS	18					
14	673.3											
15		LEAN CLAY with sand, a little gravel, brown, very stiff (CL)	TILL	19	M	SS	24	13	3.0			
16	671.3											
		End of boring at 16.5 feet										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
0-14.5' 3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
	9/12/22	**1100**	**16.5**	**14.5**	**14.5**	**None**	**None**	
BORING COMPLETED: **9/12/22**								
DR: **MD** LG: **KS** Rig: **57**								

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-20 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	Surface Elevation **685.1** MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1	684.7	SILTY SAND with organics, fine grained, a little gravel, dark brown, moist (SM)	TOPSOIL	6	M	SS	16					
2		SAND, fine grained, brown, moist, loose (SP)	GLACIO-LACUSTRINE DEPOSITS									
3				9	M	SS	19					
4												
5												
6				10	M	SS	19					
7												
8				8	M	SS	21					
9	675.6				▼							
10		SILTY SAND, fine grained, brown, waterbearing, very loose (SM)		3	W	SS	19					
11												
12												
13				4	W	SS	21					
14												
15				4	W	SS	23					
16	668.6											
		End of boring at 16.5 feet										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
0-14.5' 3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
	9/9/22	**1200**	**11.5**	**9.5**	**9.4**	**None**	**9.4**	
	9/9/22	**1210**	**11.5**	**9.5**	**9.4**	**None**	**9.4**	
BORING COMPLETED: **9/9/22**								
DR: **MD** LG: **KS** Rig: **57**								

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-21 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION (Surface Elevation 681.9)	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
	681.5	SILTY SAND with organics, fine to medium grained, dark brown, moist (SM)	TOPSOIL									
1			GLACIO-LACUSTRINE DEPOSITS	3	M	SS	16					
2	679.9	SAND WITH SILT, fine grained, brown, moist, very loose (SP-SM)										
3		SILTY SAND, fine grained, brown, moist, loose (SM)		5	M	SS	18					
4	678.4	Sandy SILT, brown, moist, loose (ML)						25				
5	677.4	SILTY SAND, fine grained, brown, waterbearing, very loose to medium dense (SM)		4	M	SS	18					
6												
7												
8				11	M	SS	19					
9												
10					▼							
11				15	M/W	SS	21					
12												
13	668.7	CLAYEY SAND, fine grained, brown, waterbearing, loose (SC)	TILL	10	W	SS	24					
14	667.4	SILTY SAND, fine grained, brown, waterbearing, medium dense (SM)	GLACIO-LACUSTRINE DEPOSITS	11	W	SS	19					
15												
16	665.4	*End of boring at 16.5 feet*										

DEPTH: DRILLING METHOD	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-14.5' 3.25" HSA	**9/9/22**	**1300**	**16.5**	**14.5**	**14.0**	**None**	**11.2**
	9/9/22	**1310**	**16.5**	**14.5**	**14.0**	**None**	**10.1**
BORING COMPLETED: **9/9/22**							
DR: **MD** LG: **KS** Rig: **57**							

WATER LEVEL MEASUREMENTS

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-22 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION (Surface Elevation 687.6)	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
	687.4	SILTY SAND with organics, fine grained, a little gravel, dark brown, moist (SM)	TOPSOIL									
1			GLACIO-LACUSTRINE DEPOSITS	4	M	SS	15					
2	685.6	SAND WITH SILT, fine grained, brown, moist, very loose (SP-SM)										
3		SILTY SAND, fine grained, brown, moist, loose (SM)		10	M	SS	20					
4	683.1											
5		SAND WITH SILT, fine grained, brown, wet, very loose (SP-SM)		4	W	SS	19					
6												
7	680.6											
8		SILTY SAND, fine grained, brown, moist to waterbearing, loose (SM)		9	M	SS	24					
9												
10				9	M	SS	22					
11												
12					▼							
13				8	M/W	SS	18					
14	673.1											
15		SAND WITH SILT, fine to medium grained, yellowish brown, waterbearing, loose (SP-SM)		8	W	SS	18					
16												
17												
18	669.6											
19		SILTY SAND, fine grained, brown, waterbearing, medium dense (SM)										
20												
21	666.1			22	W	SS	18					
		End of boring at 21.5 feet										

DEPTH: DRILLING METHOD	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-19.5' 3.25" HSA	**9/8/22**	**1400**	**16.5**	**14.5**	**13.9**	**None**	**13.1**
	9/8/22	**1410**	**16.5**	**14.5**	**13.6**	**None**	**12.6**
BORING COMPLETED: **9/8/22**							
DR: **MD** LG: **KS** Rig: **57**							

WATER LEVEL MEASUREMENTS

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-23 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	Surface Elevation **687.6** MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
	687.3	SILTY SAND with organics, fine grained, dark brown, moist (SM)	TOPSOIL									
1		SAND WITH SILT, fine grained, brown, moist to waterbearing, loose to medium dense (SP-SM)	GLACIO-LACUSTRINE DEPOSITS	5	M	SS	16					
2												
3				12	M	SS	17					
4												
5				12	M	SS	19					10
6												
7												
8				13	M	SS	19					
9												
10				10	M	SS	21					
11												
12												
13				13	M/W	SS	18					
14												
15				8	W	SS	17					
16												
17												
18	669.6	SILTY SAND, fine grained, brown, waterbearing, loose (SM)										
19												
20												
21	666.1			8	W	SS	17					
		End of boring at 21.5 feet										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-19.5' 3.25" HSA	**9/8/22**	**1300**	**16.5**	**14.5**	**14.1**	**None**	**13.7**
	9/8/22	**1310**	**16.5**	**14.5**	**14.0**	**None**	**13.5**
BORING COMPLETED: **9/8/22**							
DR: **MD** LG: **KS** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

03/2011 01-DHR-060

SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-24 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	Surface Elevation **684.7** MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
	684.2	SILTY SAND with organics, fine grained, a little gravel, dark brown, moist (SM)	TOPSOIL									
1		SILTY SAND, fine grained, brown, moist, loose (SM)	GLACIO-LACUSTRINE DEPOSITS	5	M	SS	14					
2												
3	681.0			5	M	SS	18					
4	680.2	LEAN CLAY with sand, reddish brown (CL)	TILL					21	2.0			
5	679.9	CLAYEY SAND, fine grained, brown, moist (SC)	GLACIO-LACUSTRINE DEPOSITS	18	M	SS	17					
6		SAND WITH SILT, fine grained, brown, moist, medium dense (SP-SM)										
7	677.7	SILTY SAND, fine grained, brown, moist, medium dense (SM)										
8				16	M	SS	20					
9												
10	673.8			14	M	SS	17					
11	672.7	LEAN CLAY with sand, reddish brown, (CL)	TILL					12	4.0			
12		SILTY SAND, fine grained, brown, waterbearing, medium dense (SM)	GLACIO-LACUSTRINE DEPOSITS	19	W	SS	22					
13												
14	670.2											
15		SAND, fine to medium grained, brown, waterbearing, medium dense (SP)		14	W	SS	20					
16	668.6											
17		CLAYEY SAND, fine grained, brown, waterbearing, medium dense (SC)	TILL									
18	666.7											
19		CLAYEY SAND, fine to medium grained, a little gravel, brown, waterbearing, medium dense, with lenses of lean clay (SC)										
20				20	W	SS	24					
21	663.2											
		End of boring at 21.5 feet										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-19.5' 3.25" HSA	**9/9/22**	**0710**	**16.5**	**14.5**	**13.3**	**None**	**12.3**
	9/9/22	**0720**	**16.5**	**14.5**	**12.4**	**None**	**11.7**
BORING COMPLETED: **9/9/22**							
DR: **MD** LG: **KS** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

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SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-25 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION (Surface Elevation 676.6)	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1	676.1	SILTY SAND with organics, fine grained, dark brown, moist (SM)	TOPSOIL									
2	675.1	SILTY SAND, fine grained, brown, moist, loose (SM)	GLACIO-LACUSTRINE DEPOSITS	6	M	SS	16	14	1.75			
3	674.6	Sandy LEAN CLAY, reddish brown with gray mottling (CL)	TILL	5	M	SS	18					
4	672.1	CLAYEY SAND, fine to medium grained, reddish brown, moist, loose (SC)										
5	670.8	CLAYEY SAND, fine grained, brown, moist to waterbearing, medium dense (SC)		12	M/W	SS	24					
6		SAND, fine grained, brown, waterbearing, loose to medium dense (SP)	GLACIO-LACUSTRINE DEPOSITS									
7												
8				7	W	SS	16					
9	667.1											
10		SAND WITH SILT, fine grained, brown, waterbearing, loose to medium dense (SP-SM)										
11				12	W	SS	15					
12												
13				10	W	SS	24					
14	662.1											
15		SAND, fine grained, brown, waterbearing, very loose (SP)		3	W	SS	16					
16												
17												
18												
19												
20				3	W	SS	15					
21	655.1											
		End of boring at 21.5 feet										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-19.5' 3.25" HSA	**9/8/22**	**0740**	**11.5**	**9.5**	**8.2**	**None**	**6.3**
	9/8/22	**0750**	**11.5**	**9.5**	**7.0**	**None**	**5.7**
BORING COMPLETED: **9/8/22**							
DR: **MD** LG: **KS** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

03/2011 01-DHR-060

SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-26 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION (Surface Elevation 680.5)	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1	679.6	SILTY SAND with organics, fine grained, dark brown, moist (SM)	TOPSOIL									
2	678.5	SILTY SAND, fine grained, brown, moist, loose (SM)	GLACIO-LACUSTRINE DEPOSITS	5	M	SS	19					
3		SAND WITH SILT, fine grained, brown, moist, very loose (SP-SM)		4	M	SS	17					
4	676.0											
5		SAND, fine grained, brown, moist to waterbearing, loose to medium dense (SP)		7	M	SS	17					
6												
7												
8				13	M/W	SS	17					
9												
10				9	W	SS	16					
11												
12	668.5											
13		SAND WITH SILT, fine grained, brown, waterbearing, loose (SP-SM)		9	W	SS	18					
14	666.0											
15		SILTY SAND, fine grained, brown, waterbearing, very loose (SM)		4	W	SS	18					
16												
17												
18												
19												
20				4	W	SS	19					
21	659.0											
		End of boring at 21.5 feet										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
0-19.5' 3.25" HSA	**9/8/22**	**0700**	**11.5**	**9.5**	**9.1**	**None**	**8.2**
	9/8/22	**0710**	**11.5**	**9.5**	**8.7**	**None**	**7.6**
BORING COMPLETED: **9/8/22**							
DR: **MD** LG: **KS** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

03/2011 01-DHR-060

2

SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-27 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

Surface Elevation **681.8**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1	680.9	Sandy SILT with organics, dark brown, moist (OL)	TOPSOIL									
2		SAND WITH SILT, fine grained, brown, moist, loose (SP-SM)	GLACIO-LACUSTRINE DEPOSITS	5	M	SS	17					
3				5	M	SS	17					
4	677.3											
5		SILTY SAND, fine grained, brown, moist, loose (SM)		5	M	SS	19					
6												
7	674.8											
8		SAND, fine to medium grained, brown, moist to waterbearing, loose to medium dense (SP)		10	M/W	SS	17					
9												
10				25	W	SS	17					
11												
12	669.8											
13		SAND, fine grained, brown, waterbearing, very loose to loose (SP)		6	W	SS	18					
14												
15				5	W	SS	19					
16												
17												
18												
19												
20												
21				3	W	SS	18					
	660.3	*End of boring at 21.5 feet*										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
0-19.5' 3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
	9/8/22	**0830**	**11.5**	**9.5**	**9.2**	**None**	**8.8**
	9/8/22	**0840**	**11.5**	**9.5**	**8.9**	**None**	**8.4**
BORING COMPLETED: **9/8/22**							
DR: **MD** LG: **KS** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

03/2011 01-DHR-060

SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-29 (p. 1 of 1)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

Surface Elevation **679.9**

DEPTH IN FEET	ELEV. FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1	679.3	Sandy SILT with organics, dark brown, moist (OL)	TOPSOIL									
		LEAN CLAY, brown, firm (CL)	TILL	5	M	SS	16					
2	677.9											
3		LEAN CLAY, mottled brown and gray, firm (CL)		7	M	SS	22	31	2.0			
4	675.4											
5		SILTY SAND, fine grained, brown, moist, loose (SM)	GLACIO-LACUSTRINE DEPOSITS	10	M	SS	21					
6												
7	672.9											
8		SAND WITH SILT, fine grained, brown, moist to waterbearing, loose (SP-SM)		7	M/W	SS	20					
9												
10				6	W	SS	20					
11												
12	667.9											
13		SAND, fine grained, brown, waterbearing, loose (SP)		8	W	SS	17					
14	665.4											
15		SILTY SAND, fine grained, brown, waterbearing, loose (SM)		7	W	SS	17					
16												
17												
18												
19												
20												
21				8	W	SS	17					
	658.4	*End of boring at 21.5 feet*										

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS						
0-19.5' 3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL
	9/8/22	**0910**	**11.5**	**9.5**	**9.1**	**None**	**8.7**
	9/8/22	**0920**	**11.5**	**9.5**	**8.0**	**None**	**7.6**
BORING COMPLETED: **9/8/22**							
DR: **MD** LG: **KS** Rig: **57**							

NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

03/2011 01-DHR-060

SUBSURFACE BORING LOG

AET No: **P-0016383** Log of Boring No. **B-32 (p. 1 of 2)**

Project: **Project ID 1130-44-73; Wrightstown SWEF/Post; IH 41; Outagamie County**

DEPTH IN FEET	ELEV. FEET	Surface Elevation **687.3** MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS WC	qp	LL	PL	%-#200
1		FILL, gravelly silty sand, fine to coarse grained, grayish brown, moist (SM)	FILL	24	M	SS	17					
2	685.0											
3	684.4	FILL, clayey sand, fine grained, brown, moist (SC)		14	M	SS	22					
4		SILTY SAND, fine grained, brown, moist, very loose to medium dense (SM)	GLACIO-LACUSTRINE DEPOSITS									
5												
6				6	M	SS	20					
7												
8				4	M	SS	20					
9												
10												
11				8	M	SS	17					
12	675.3											
13		SAND WITH SILT, fine grained, brown, moist to waterbearing, loose (SP-SM)		8	MW	SS	18					
14	672.8											
15		SILTY SAND, fine grained, brown, waterbearing, loose (SM)		6	W	SS	17					
16												
17												
18	669.3											
19		SAND, fine grained, brown, waterbearing, very loose to medium dense (SP)										
20												
21				3	W	SS	20					
22												
23												

DEPTH: DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-14.5' 3.25" HSA								
14.5-39.5' w/ DM	**9/12/22**	**0930**	**16.5**	**14.5**	**14.4**	**None**	**14.0**	
	9/12/22	**0940**	**16.5**	**14.5**	**14.0**	**None**	**13.6**	
BORING COMPLETED: **9/12/22**								
DR: **MD** LG: **KS** Rig: **57**								

AET_CORP W-ELEV P-0016383.GPJ AET+CPT+WELL.GDT 12/6/22

03/2011 01-DHR-060

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN: SOIL BORINGS	SHEET 84	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\027301-BOR.DWG LAYOUT NAME - 16 PLOT DATE : 4/25/2024 4:26 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : ########## WISDOT/CADDS SHEET 44

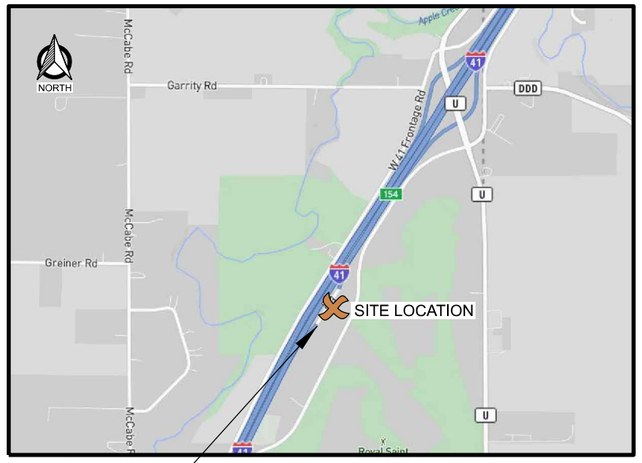
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT

WRIGHTSTOWN SAFETY & WEIGHT FACILITY
NO. 34
OUTAGAMIE COUNTY

STATE PROJECT NUMBER
1130-44-74

SHEET INDEX

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C-102	MAIN TOWER COMPOUND PLAN
C-103	AUXILIARY TOWER COMPOUND PLAN
C-104	MAIN TOWER GRADING PLAN
C-105	AUXILIARY TOWER GRADING PLAN
C-501	SITE DETAILS
C-502	FENCE DETAILS
C-503	SHELTER FOUNDATION DETAILS
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C-505	UTILITY ICE SHIELD DETAILS
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T-503	ICE BRIDGE DETAILS
T-504	ANTENNA INSTALLATION DETAILS
E-101	MAIN TOWER GROUNDING PLAN
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E-105	SHELTER ELECTRICAL PLAN
E-501	GROUNDING DETAILS
E-502	GROUNDING DETAILS
E-503	GROUNDING DETAILS
E-504	UTILITY DETAILS
E-505	UTILITY RACK DETAILS



SITE LOCATION



ENGINEER:
EDGE CONSULTING ENGINEERS, INC.
624 WATER STREET
PRAIRIE DU SAC, WI 53578
CONTACT: ARLEN OSTRENG, PE
PHONE: (608) 644-1449

400' MAIN TOWER:
COORDINATES (1A CERTIFICATE):
LAT (NAD83/2011): 44°-20'-26.64" N (44.340733)
LONG (NAD83/2011): 88°-11'-59.02" W (-88.199728)
GROUND ELEVATION (NAVD 88): 684.8'
ASR NUMBER: 1327124

70' AUXILIARY TOWER:
COORDINATES (1A CERTIFICATE):
LAT (NAD83/2011): 44°-20'-25.12" N (44.340311)
LONG (NAD83/2011): 88°-12'-02.45" W (-88.200681)
GROUND ELEVATION (NAVD 88): 687.2'
ASR NUMBER: TBD

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

Issued / Revised

ISSUED FOR: PS&E

Drawing Title:

TITLE SHEET

Plans prepared by:
Edge Consulting
Engineers, Inc.

Sheet No.
G-001

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE: NOT TO SCALE	SHEET 85	E

FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\G-001.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.

KEYNOTES: (THIS SHEET)

A. 400' MAIN TOWER

B. WDOT EQUIPMENT SHELTER

C. FENCED TOWER COMPOUND

D. VEHICLE ACCESS GATE W/ SNOW GATE

E. V02
COMMUNICATIONS VAULT TYPE 1 (673.01105)

F. (4) CONDUITS RIGID NON-METALLIC (TOTAL):
FROM SWEF BLDG TO TOWER SITE
(1) 2" (FIBER OPTIC)
(3) 4" (FUTURE USE)

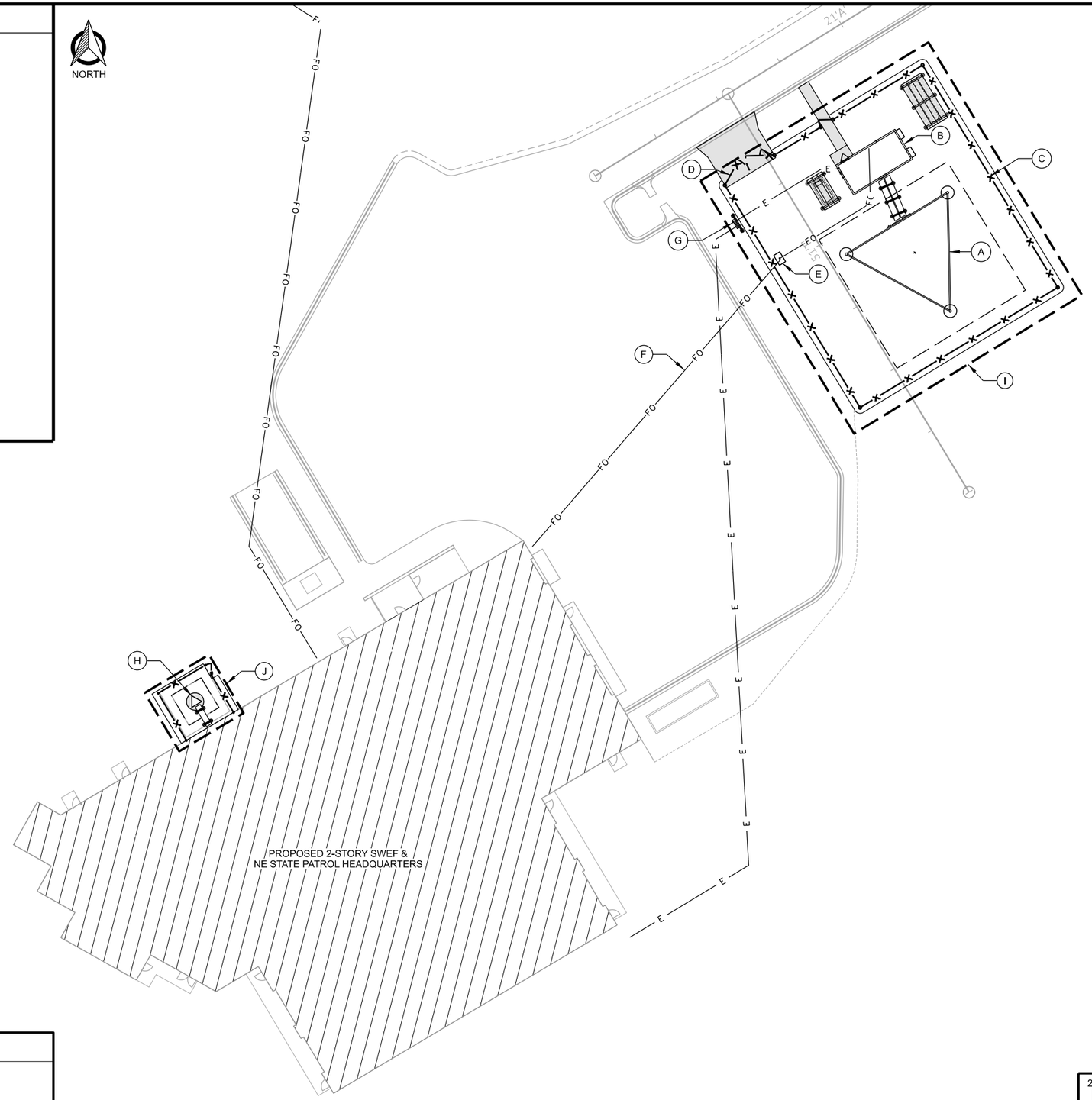
G. ELECTRIC UTILITY SERVICE METER
(SPV.0060.203)

H. 70' AUXILIARY TOWER

I. WORK LIMITS FOR:
BID ITEMS SPV.0060.200 & SPV.0030.202

J. WORK LIMITS FOR:
BID ITEM SPV. 0060.201

NORTH



GENERAL NOTES: (THIS SHEET)

1. NORTH ARROW SHOWN AS APPROXIMATE.
2. LINEWORK FOR PROPOSED SWEF PROVIDED BY KL ENGINEERING ON 05/11/2023.

20' 0 20' 40'
SCALE: 11" x 17" - 1" = 40'
22" x 34" - 1" = 20'

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

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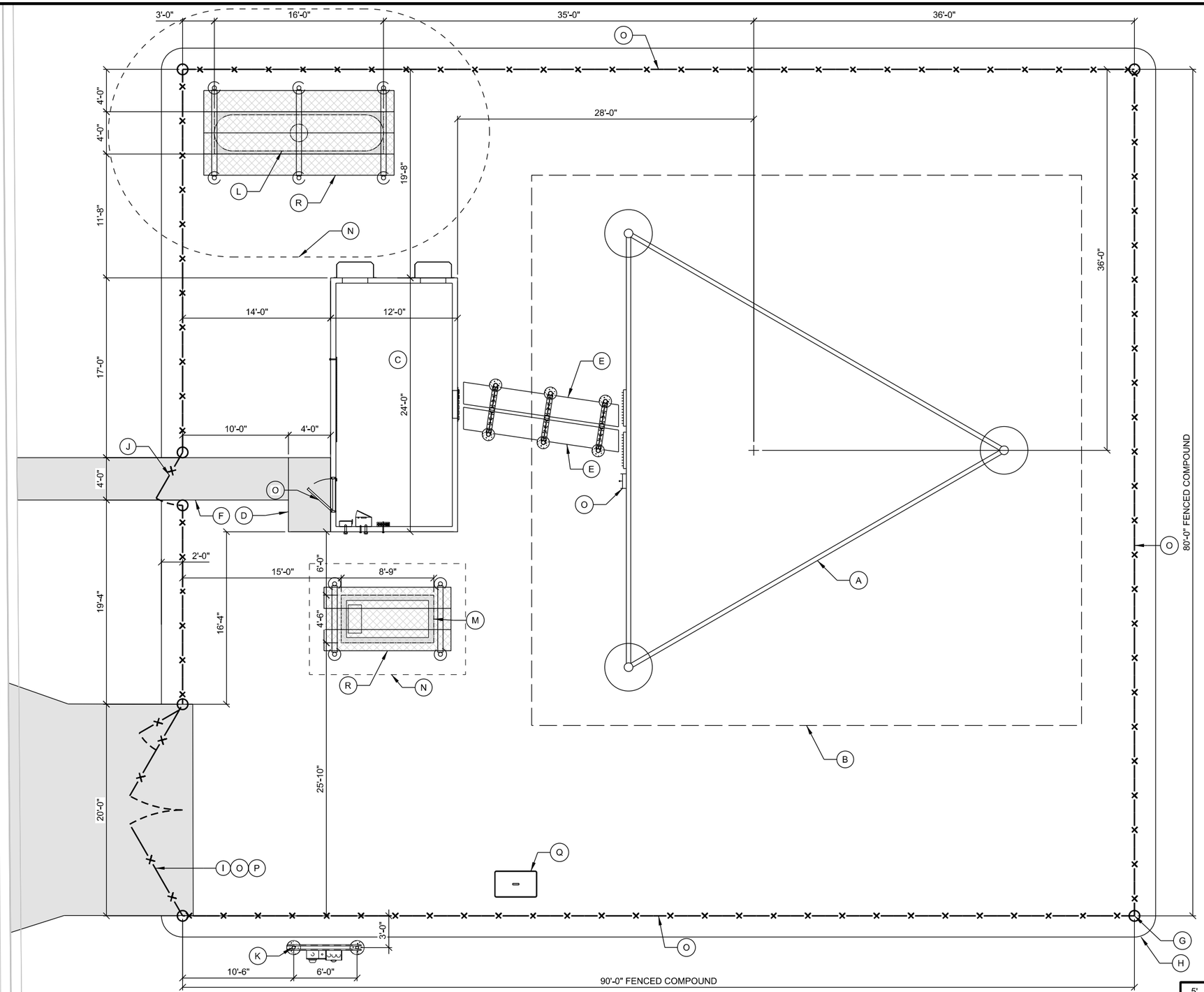
Drawing Title:
OVERALL SITE PLAN

Plans prepared by:
Edge Consulting
Engineers, Inc.

Sheet No.
C-101

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 86	E

FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\C-101.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.



KEYNOTES: (THIS SHEET)

A. 400' SELF-SUPPORT TOWER (41'-0" FACE WIDTH SHOWN);
VERIFY WITH TOWER MFG TOWER AND FOUNDATION PLANS
SEE T-201 FOR DETAILS

B. TOWER FOUNDATION (52'-0" x 52'-0" PAD SHOWN);
VERIFY WITH TOWER MFG TOWER AND FOUNDATION PLANS

C. 12' x 24' WDOT EQUIPMENT SHELTER; SEE A-101 FOR DETAILS

D. 4' x 7' CONCRETE STOOP; SEE C-503 FOR DETAILS

E. 24" WIDE ICE BRIDGE; SEE T-502 FOR DETAILS

F. CONCRETE SIDEWALK 4-INCH (602.0405)

G. 80' x 90' FENCED COMPOUND;
8' TALL (7' FABRIC W/ 1' BARB WIRE);
SEE C-502 FOR DETAILS

H. GRAVEL COMPOUND;
EDGE TO EXTEND 2' BEYOND FENCE PERIMETER;
SEE B/C-501 FOR DETAILS

I. 20' WIDE VEHICLE ACCESS GATE W/ SNOW GATE AND
(1) MULTI-USER LOCK SYSTEM (TAYHOPE 5 USER);
(2) PADLOCKS REQUIRED (BY CONTRACTOR)

J. 4' WIDE MAN GATE AND
(1) MULTI-USER LOCK SYSTEM (TAYHOPE 5 USER)
(1) PADLOCK REQUIRED (BY CONTRACTOR)

K. UTILITY RACK (SPV.0060.203); SEE UTILITY PLAN

L. 1000 GAL. LP FUEL TANK ON CONCRETE SLAB (SPV.0060.202);
SEE C-504 & UTILITY PLAN FOR DETAILS

M. GENERATOR ON CONCRETE SLAB (SPV.0060.202);
SEE C-504 & UTILTY PLAN FOR DETAILS
VERIFY SLAB DIMENSIONS WITH GENERATOR SUPPLIER PRIOR TO INSTALLATION

N. CLEARANCE ZONE/SETBACKS
- 10' AROUND LP TANK
- 3' AROUND GENERATOR

O. SIGNAGE: (9"x12" TYP.)
- (4) RF NOTICE SIGNS;
  INSTALL ON EACH SIDE OF FENCE
- (2) RF CAUTION SIGNS;
  INSTALL NEAR TOWER CLIMB AND ON SHELTER DOOR
- (9) NOTICE AUTHORIZED PERSONNEL ONLY SIGNS;
  INSTALL (2) ON EACH SIDE FENCE AND (1) ON SHELTER DOOR
- (1) NO SMOKING SIGN;
  INSTALL ON SHELTER DOOR

P. ASR SIGN;
(1) INSTALLED ON VEHICLE GATE;
SEE B/C-502 FOR DETAILS

Q. COMMUNICATION VAULT TYPE 1 (673.0105);
SEE UTILITY PLAN

R. UTILITY ICE SHEILD OVER LP TANK AND GENERATOR;
SEE C-505 FOR DETAILS

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

Issued / Revised

ISSUED FOR: PS&E

Drawing Title:

MAIN TOWER COMPOUND PLAN

5' 0 5' 10'
SCALE: 11" x 17" - 1" = 10'
22" x 34" - 1" = 5'

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.
C-102

2

(#) KEYNOTES: (THIS SHEET)

A. 70' NON-TAPERED TOWER (4' FACE WIDTH SHOWN);
CONFIRM SIZE WITH TOWER MANUFACTURER DESIGN

B. TOWER FOUNDATION (12' x 12' PAD SHOWN);
CONFIRM SIZE WITH TOWER MANUFACTURER DESIGN

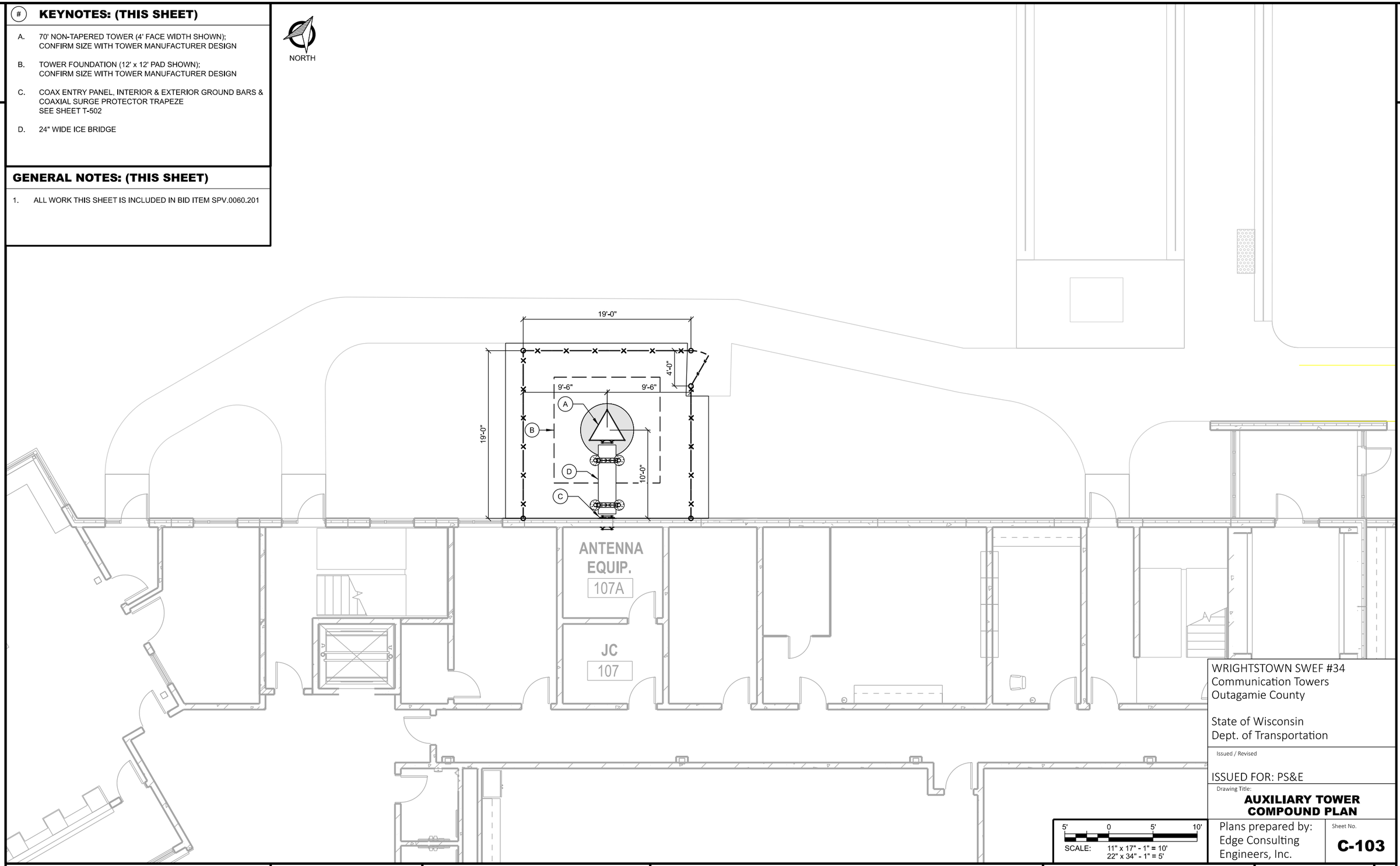
C. COAX ENTRY PANEL, INTERIOR & EXTERIOR GROUND BARS &
COAXIAL SURGE PROTECTOR TRAPEZE
SEE SHEET T-502

D. 24" WIDE ICE BRIDGE

GENERAL NOTES: (THIS SHEET)

1. ALL WORK THIS SHEET IS INCLUDED IN BID ITEM SPV.0060.201

NORTH



2

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

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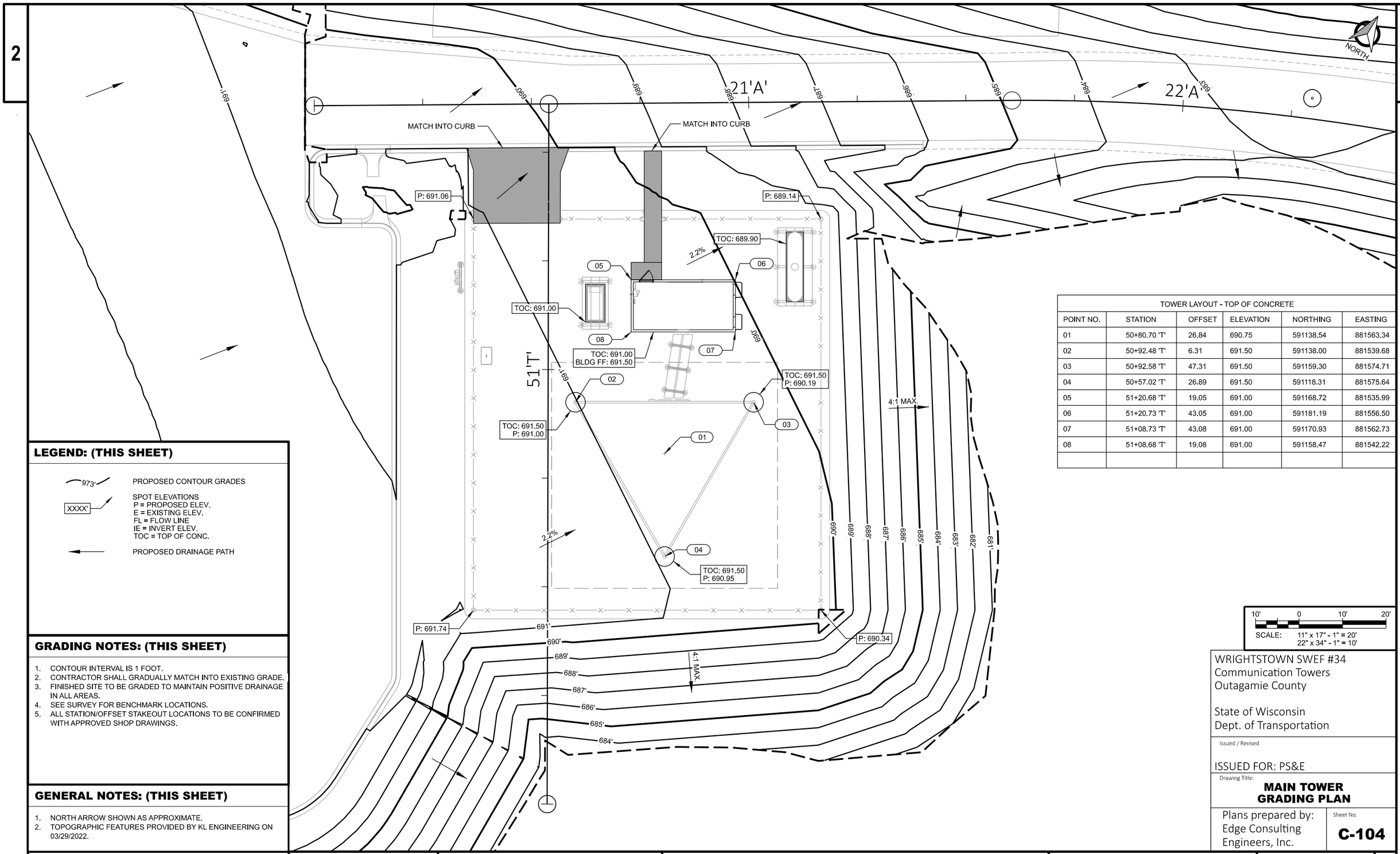
ISSUED FOR: PS&E

Drawing Title:
AUXILIARY TOWER COMPOUND PLAN

5' 0 5' 10'
SCALE: 11" x 17" - 1" = 10'
22" x 34" - 1" = 5'

Plans prepared by:
Edge Consulting
Engineers, Inc.

Sheet No.
C-103



TOWER LAYOUT - TOP OF CONCRETE					
POINT NO.	STATION	OFFSET	ELEVATION	NORTHING	EASTING
01	50+80.70 'T'	26.84	690.75	591138.54	881563.34
02	50+92.48 'T'	6.31	691.50	591138.00	881539.68
03	50+92.58 'T'	47.31	691.50	591159.30	881574.71
04	50+57.02 'T'	26.89	691.50	591118.31	881575.64
05	51+20.68 'T'	19.05	691.00	591168.72	881535.99
06	51+20.73 'T'	43.05	691.00	591181.19	881556.50
07	51+08.73 'T'	43.08	691.00	591170.93	881562.73
08	51+08.68 'T'	19.08	691.00	591158.47	881542.22

LEGEND: (THIS SHEET)

- 973' — PROPOSED CONTOUR GRADES
- XXXX' — SPOT ELEVATIONS
  - P = PROPOSED ELEV.
  - E = EXISTING ELEV.
  - FL = FLOW LINE
  - IE = INVERT ELEV.
  - TOC = TOP OF CONC.
- PROPOSED DRAINAGE PATH

GRADING NOTES: (THIS SHEET)

1. CONTOUR INTERVAL IS 1 FOOT.
2. CONTRACTOR SHALL GRADUALLY MATCH INTO EXISTING GRADE.
3. FINISHED SITE TO BE GRADED TO MAINTAIN POSITIVE DRAINAGE IN ALL AREAS.
4. SEE SURVEY FOR BENCHMARK LOCATIONS.
5. ALL STATION/OFFSET STAKEOUT LOCATIONS TO BE CONFIRMED WITH APPROVED SHOP DRAWINGS.

GENERAL NOTES: (THIS SHEET)

1. NORTH ARROW SHOWN AS APPROXIMATE.
2. TOPOGRAPHIC FEATURES PROVIDED BY KL ENGINEERING ON 03/29/2022.

10' 0 10' 20'

SCALE: 11" x 17" - 1" = 20'
22" x 34" - 1" = 10'

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

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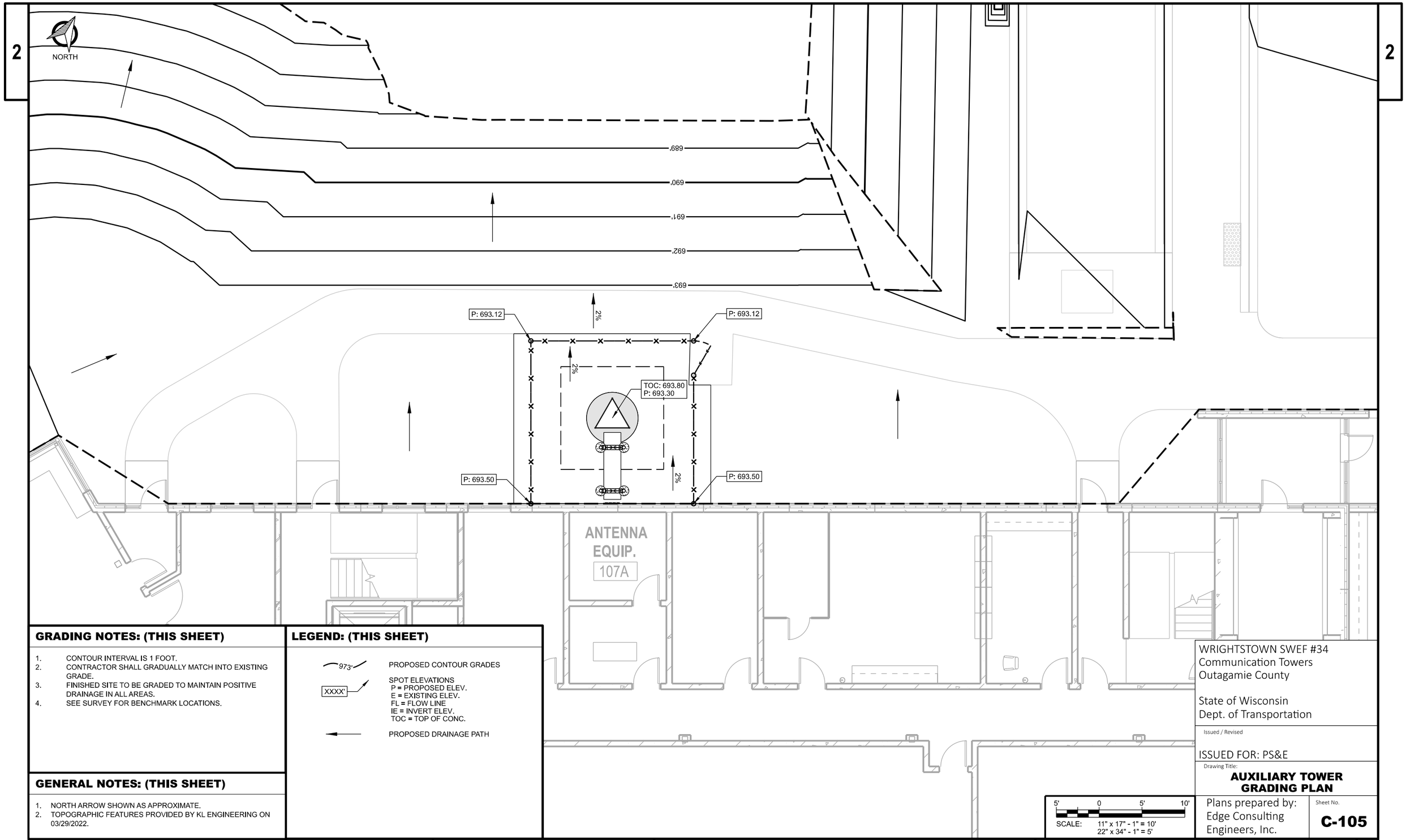
Drawing Title:
MAIN TOWER GRADING PLAN

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.
C-104

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 89	E

FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\C-104.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.



GRADING NOTES: (THIS SHEET)

1. CONTOUR INTERVAL IS 1 FOOT.
2. CONTRACTOR SHALL GRADUALLY MATCH INTO EXISTING GRADE.
3. FINISHED SITE TO BE GRADED TO MAINTAIN POSITIVE DRAINAGE IN ALL AREAS.
4. SEE SURVEY FOR BENCHMARK LOCATIONS.

GENERAL NOTES: (THIS SHEET)

1. NORTH ARROW SHOWN AS APPROXIMATE.
2. TOPOGRAPHIC FEATURES PROVIDED BY KL ENGINEERING ON 03/29/2022.

LEGEND: (THIS SHEET)

973' — PROPOSED CONTOUR GRADES

XXXX' — SPOT ELEVATIONS
P = PROPOSED ELEV.
E = EXISTING ELEV.
FL = FLOW LINE
IE = INVERT ELEV.
TOC = TOP OF CONC.

PROPOSED DRAINAGE PATH

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

Issued / Revised

ISSUED FOR: PS&E

Drawing Title:

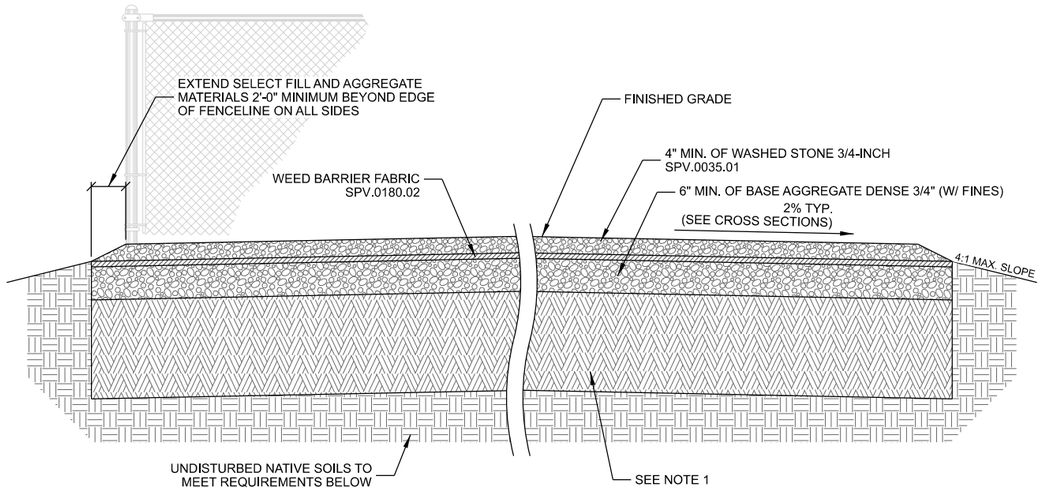
AUXILIARY TOWER GRADING PLAN

5' 0 5' 10'
SCALE: 11" x 17" - 1" = 10'
22" x 34" - 1" = 5'

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.
C-105

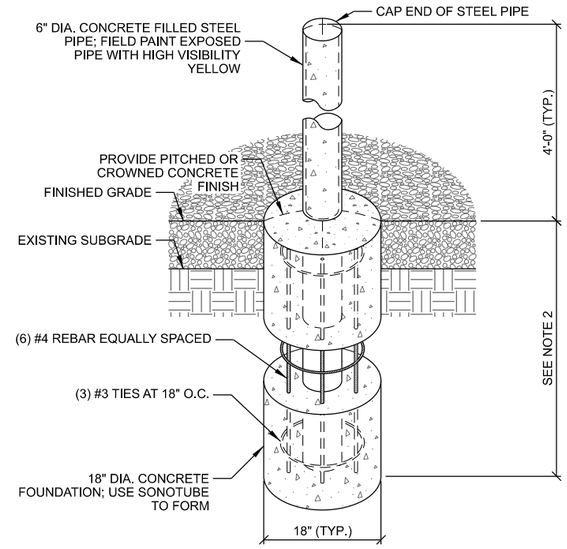
PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET	E



NOTES:

1. REMOVE ALL TOPSOIL, ORGANIC MATERIAL AND WET OR POOR SOILS WITHIN COMPOUND AREA. CONTRACTOR TO REVIEW SITE CONDITIONS AND CONSULT GEOTECHNICAL REPORT FOR ANTICIPATED DEPTH OF SOILS THAT WILL REQUIRE REMOVAL. IF POOR SOILS ARE ENCOUNTERED CONTACT CONSTRUCTION MANAGER FOR GUIDANCE.
2. FINAL TOWER FOUNDATION DESIGN RECOMMENDATIONS TO SUPERCEDE GRADING PLAN OR SITE PLAN ELEVATIONS.

A **COMPOUND CROSS SECTION**



NOTES:

1. MAINTAIN 3" MINIMUM REBAR COVER IN ALL DIRECTION
2. PIER FOUNDATION DEPTH TO BE A MINIMUM OF 48"; DEPTH TO EXCEED LOCAL FROST DEPTH
3. CONCRETE TO BE A MINIMUM OF 4,000 PSI AT 28 DAYS

B **PIPE BOLLARD**

2

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Communication Towers
Outagamie County

State of Wisconsin
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Drawing Title:

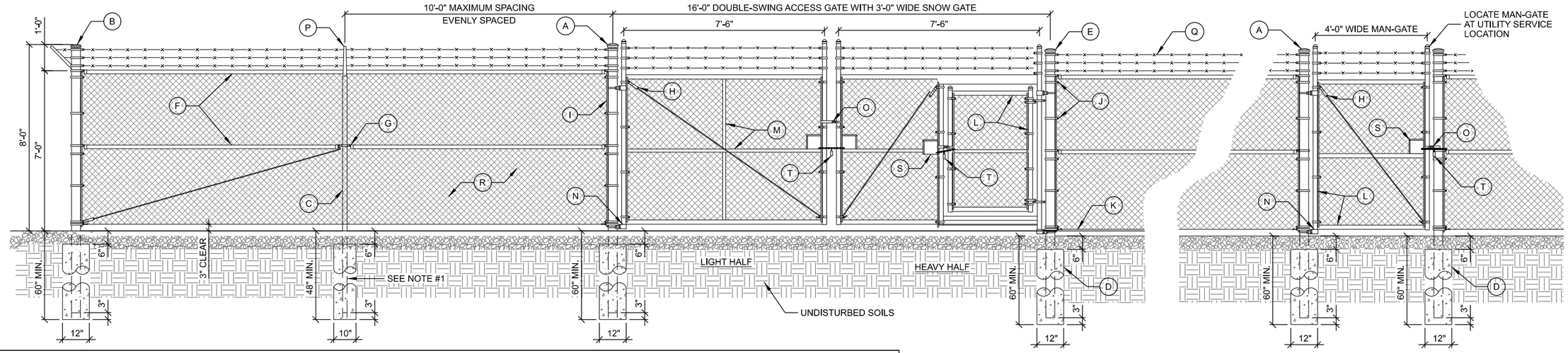
SITE DETAILS

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.

C-501

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE: NOT TO SCALE	SHEET 91	E



(#) KEY NOTES: (THIS DETAIL)

A. 3-1/2" (4" O.D.) SCH. 40 GALV. STEEL GATE POST

B. 2-1/2" (2-7/8" O.D.) SCH. 40 GALV. STEEL CORNER POST

C. 2" (2-3/8" O.D.) SCH. 40 GALV. STEEL LINE POSTS; LINE POSTS SHALL BE EQUALLY SPACED AT MAXIMUM 10'-0" O.C; SEE NOTE #1

D. CONCRETE POST FOUNDATION; 12" DIA. AT GATE & CORNER POSTS, 10" DIA. AT LINE POSTS SEE DETAIL BELOW

E. FENCE POST CAP (SIZE VARIES)

F. 1-1/4" (1.66" O.D.) TOP RAIL & MID BRACE RAIL PIPE

G. OFFSET BRACE RAIL ENDS FOR MID BRACE RAIL

H. 5/16" O.D. TRUSS ROD WITH TRUSS TIGHTENER ASSEMBLY

I. 3/16" x 3/4" STRETCHER BAR; TO EXTEND FULL HEIGHT OF FENCE FABRIC

J. 3/4" TENSION BAND (TYP.).

K. TENSION WIRE (7 GAUGE)

L. 1-1/2" (1.9" O.D.) SCH. 40 GALV. STEEL FENCE GATE FRAME

M. 1-1/4" (1.66" O.D.) SCH. 40 GALV. STEEL HORIZONTAL AND VERTICAL GATE BRACES

N. MALLEABLE BUTT HINGES (TYP.)

O. GATE LATCH; VERIFY REQUIREMENTS WITH FENCE MANUFACTURER

P. 45° BARB ARM FENCE POST CAP

Q. (3) STRANDS OF 4 PT. GALV. BARB WIRE

R. FENCE FABRIC; #9 GAUGE GALV. COATED, 2" DIAMOND PATTERN CHAIN LINK; TWISTED TOP SELVAGE AND KNUCKELD BOTTOM SELVAGE

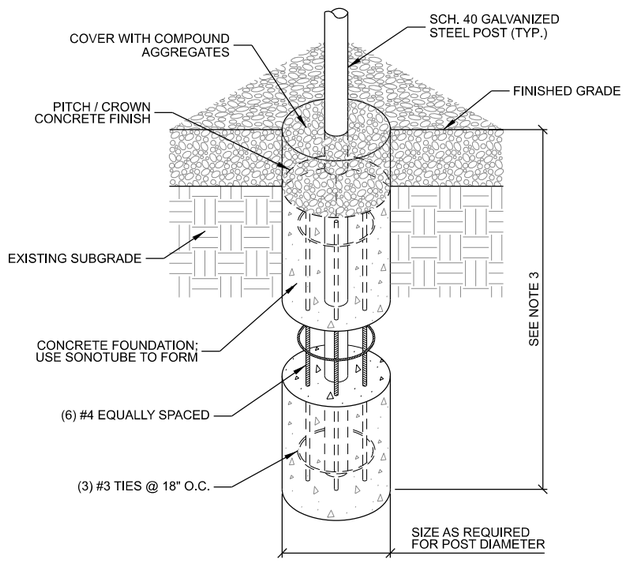
S. 6" x 6" HANDHOLE FOR CHAIN LOCK

T. GATE LOCK

NOTES:

1. ALL LINE POSTS MAY BE EITHER DRIVEN OR SET IN CONCRETE AT CONTRACTORS OPTION. SEE DETAIL FOR DEPTH AND FOOTING REQUIREMENTS. IF DRIVEN, DRIVE LINE POSTS TO 60" DEPTH MINIMUM.
2. ALL FENCE POSTS AND FRAMING TO BE SCH. 40 GALVANIZED STEEL. SEE DETAIL FOR SIZES.

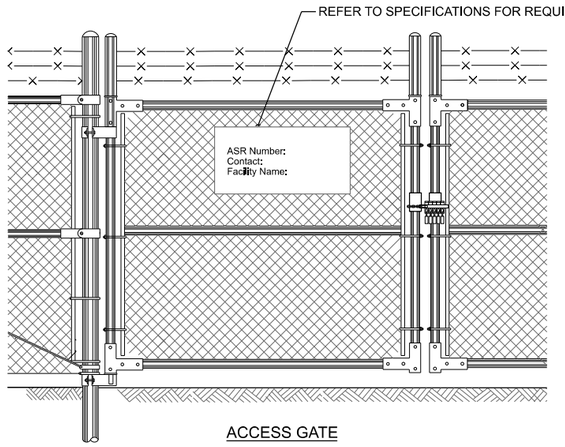
A COMPOUND FENCE



NOTES:

1. MAINTAIN 3" MINIMUM REBAR COVER WITH CONCRETE IN ALL DIRECTIONS.
2. CONCRETE MIX TO BE 4,000 PSI @ 28 DAYS.
3. FOUNDATION DEPTH TO EXCEED LOCAL FROST DEPTH, OR 48" MINIMUM.

B FENCE POST PIER FOUNDATION



ACCESS GATE

GENERAL NOTES:

1. THE ANTENNA STRUCTURE REGISTRATION NUMBER SHALL BE DISPLAYED PER 47 CFR 17.4 (g).
2. THE ASR NUMBER SHALL BE POSTED ON THE PERIMETER FENCE OR ACCESS GATE SO THAT IT IS CONSPICUOUSLY VISIBLE AND LEGIBLE FROM THE PUBLICLY ACCESSIBLE AREA NEAREST THE BASE OF THE ANTENNA STRUCTURE ALONG A PUBLICLY ACCESSIBLE ROADWAY OR PATH.
3. MATERIALS USED TO DISPLAY THE ANTENNA STRUCTURE REGISTRATION NUMBER MUST BE WEATHER-RESISTANT AND OF SUFFICIENT SIZE TO BE EASILY SEEN WHERE POSTED.

C ANTENNA STRUCTURE REGISTRATION (ASR) SIGNAGE

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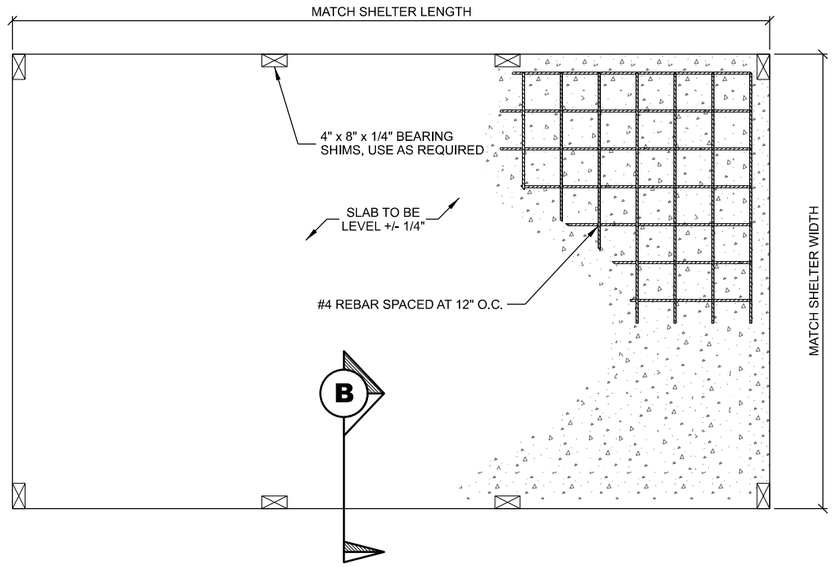
Drawing Title:

FENCE DETAILS

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.

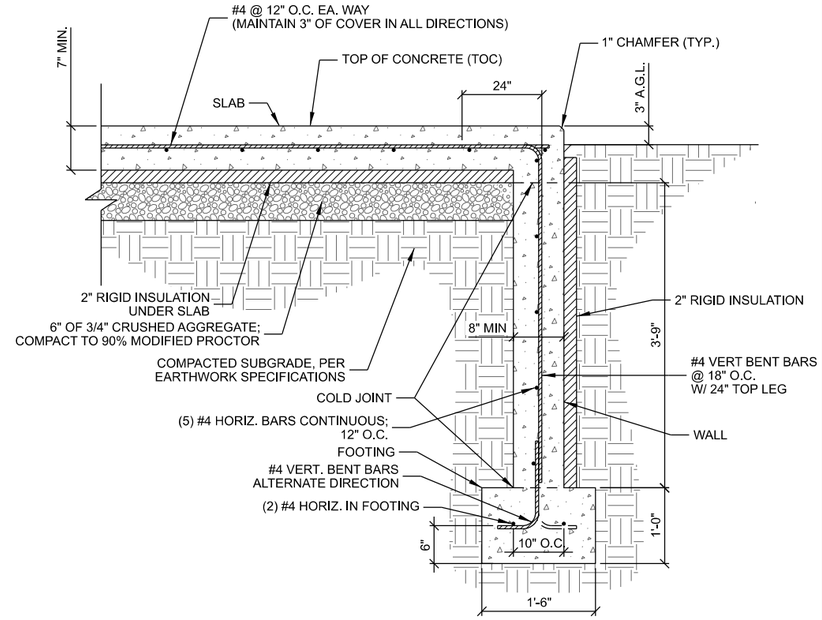
C-502



NOTES:
1. BEARING SHIM: GALVANIZED STEEL, 4 EACH SIDE USE SHIMS AS REQUIRED TO ASSURE SHELTER IS BEARING AT PERIMETER.

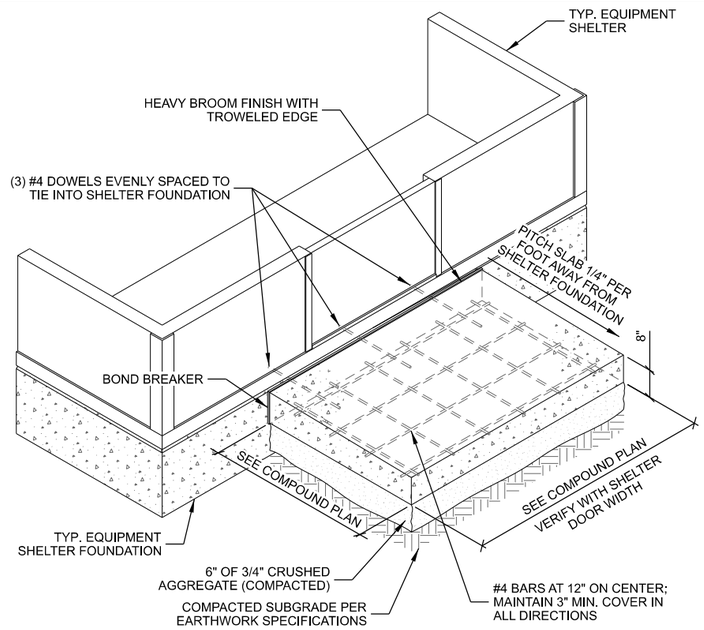
A SHELTER FOUNDATION PLAN

SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"

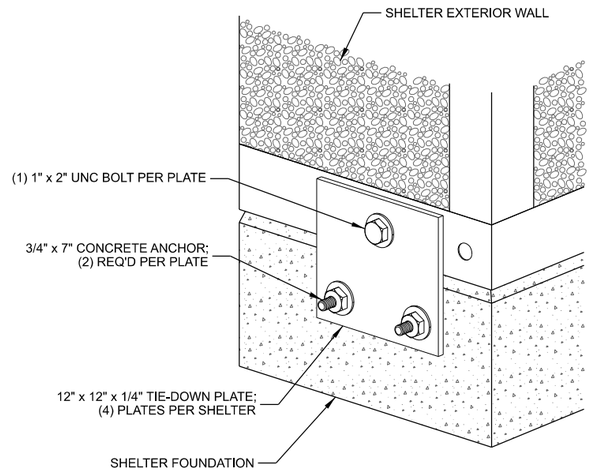


B SHELTER FOUNDATION

SCALE: 11" x 17" - 1/2" = 1'-0"
22" x 34" - 1" = 1'-0"



C SHELTER STOOP



D TIE DOWN PLATE

CONCRETE AND REINFORCING NOTES:

1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS AND MOST CURRENT VERSION OF ACI STANDARDS.
2. ALL CONCRETE UNLESS SPECIFICALLY NOTED SHALL BE NORMAL WEIGHT(145 PCF) AND SHALL ACHIEVE A 28-DAY COMPRESSIVE STRENGTH (f'c) OF 4,000 PSI. EXPOSED EXTERIOR CONCRETE TO BE AIR ENTRAINED WITH 6% +/- 1% AIR CONTENT. CONTRACTOR TO PERFORM CONCRETE SLUMP TEST (4" MAX SLUMP). NO WATER TO BE ADDED AFTER SLUMP HAS BEEN MEASURED.
3. ALL CONCRETE REINFORCING SHALL BE ASTM A615 GRADE 60 AND PLACED IN ACCORDANCE WITH ACI STANDARDS
4. REMOVE ALL ORGANIC MATERIAL, SOFT AND/OR UNSUITABLE SOILS WITHIN FOUNDATION FOOTPRINT. DO NOT UTILIZE THESE SOILS FOR BACKFILL.
5. CONSULT GEOTECHNICAL INVESTIGATION REPORT FOR ANTICIPATED SOIL CONDITIONS AND CONSTRUCTION CONSIDERATIONS.
6. FOUNDATION DESIGN BASED ON A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF AND MAX. PLASTICITY INDEX OF 20, CONTRACTOR TO CONFIRM BEARING SOILS MEET THESE CONDITIONS BEFORE INSTALLATION.
7. SOILS NOT MEETING THE DESIGN BEARING STRENGTH SHALL BE UNDERCUT AND REPLACED WITH SELECT CRUSHED MATERIAL. UNDERCUT ONE FOOT ON EACH SIDE OF THE FOOTING FOR EVERY FOOT IN DEPTH. CONSULT WITH ENGINEER FOR REQUIRED UNDERCUT DEPTH.
8. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM ALL FOUNDATIONS.
9. FOUNDATION DESIGN BASED ON INFORMATION PROVIDED BY SHELTER MFG. (WEIGHT, LIVE LOAD, ETC.). CONTRACTOR TO VERIFY EXACT SHELTER SIZE AND TYPE.

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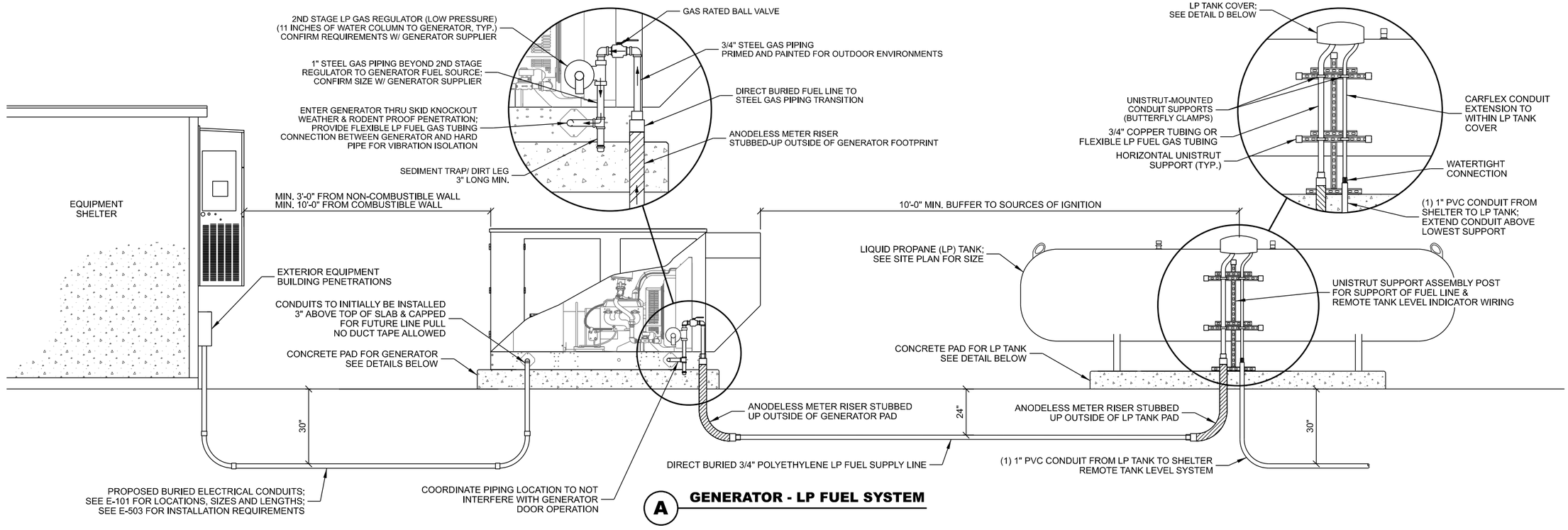
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SHELTER FOUNDATION DETAILS

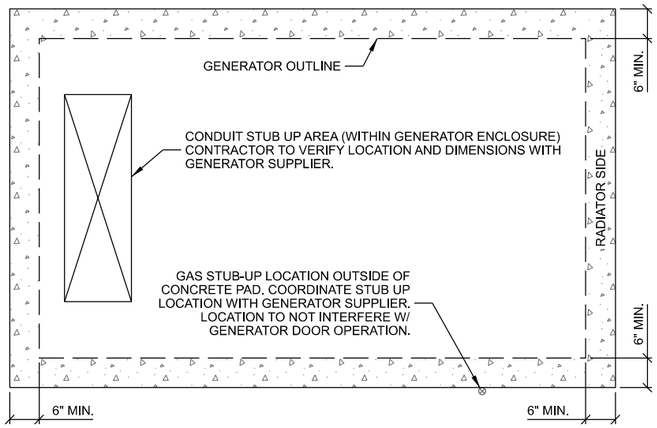
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Edge Consulting Engineers, Inc.

Sheet No.
C-503

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE: NOT TO SCALE	SHEET 93	E

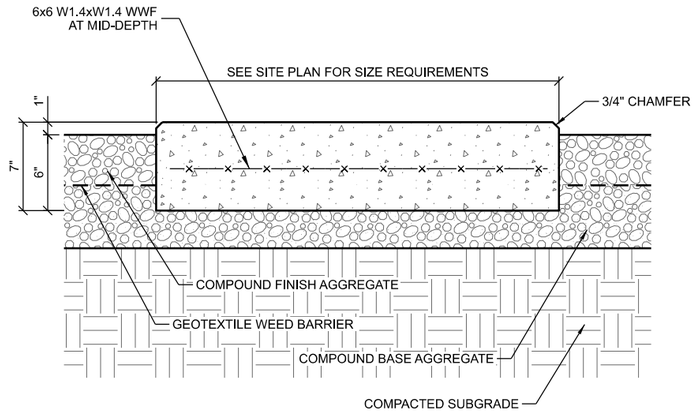


A **GENERATOR - LP FUEL SYSTEM**



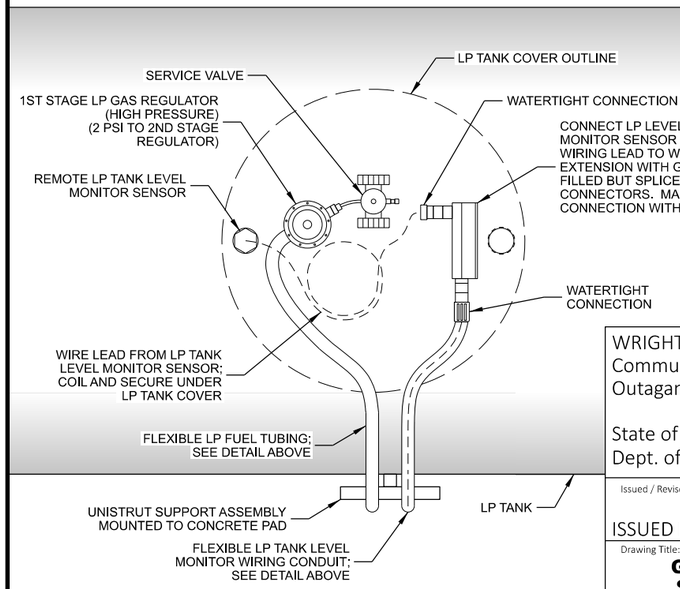
NOTES:
1. CONTRACTOR TO VERIFY SLAB DIMENSIONS AND PIPING STUB UP LOCATIONS WITH GENERATOR SUPPLIER PRIOR TO INSTALLATION.
2. ORIENT RADIATOR SIDE TOWARDS TOWER
3. SEE DETAIL TO RIGHT FOR CONCRETE PAD REQUIREMENTS.

B **TYP. GENERATOR FOUNDATION PLAN**



NOTES:
1. CONCRETE MIX TO BE 4,000 PSI @ 28 DAYS.
2. FINISH: MEDIUM BROOM.

C **CONCRETE PAD**



D **TYP. LP TANK CONNECTIONS (PLAN VIEW)**

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Communication Towers
Outagamie County

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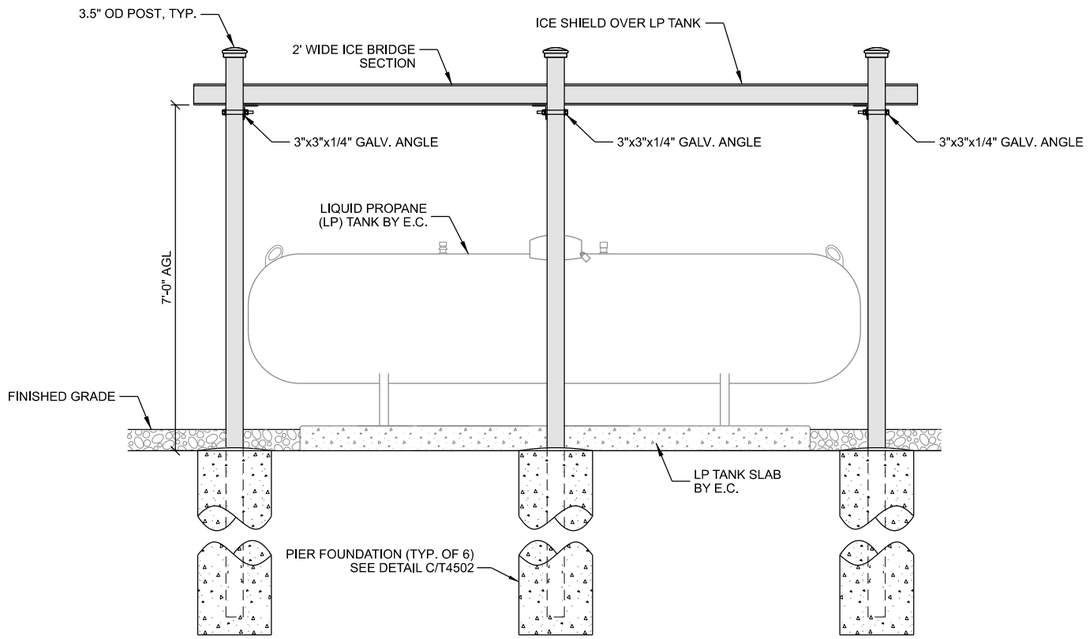
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GENERATOR FUEL SYSTEM DETAILS

Plans prepared by:
Edge Consulting Engineers, Inc.

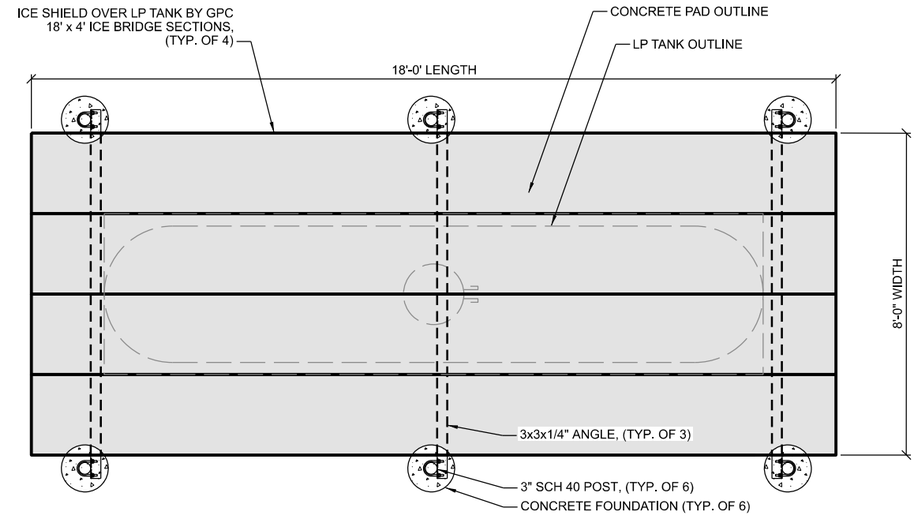
Sheet No.
C-504

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE: NOT TO SCALE	SHEET 94	E

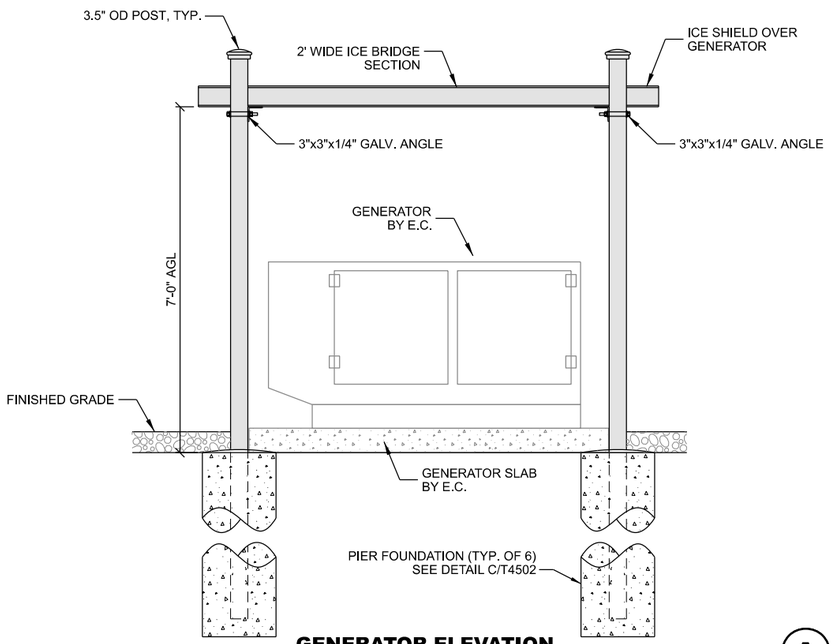
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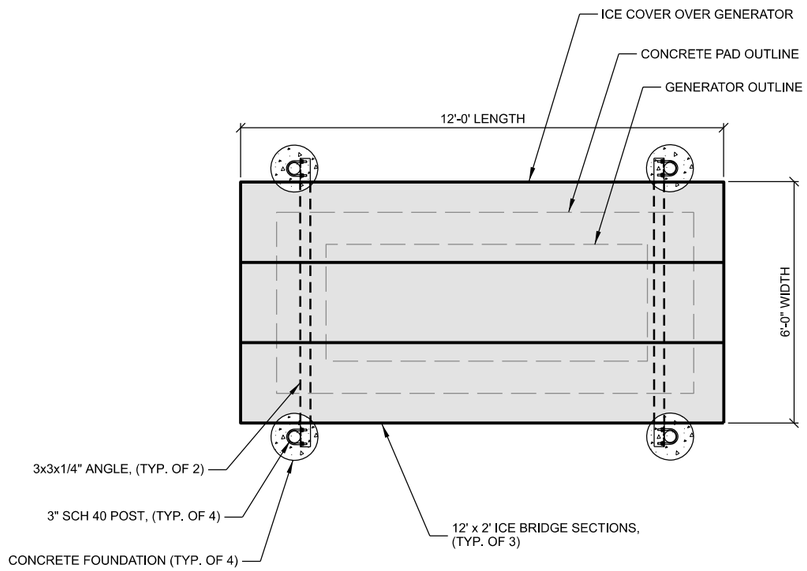
LP TANK ELEVATION



LP TANK PLAN VIEW



GENERATOR ELEVATION



GENERATOR PLAN VIEW

A **UTILITY ICE SHIELD DETAIL**

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Communication Towers
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Drawing Title:
UTILITY ICE SHIELD DETAILS

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.
C-505

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 95	E

(#) KEYNOTES: (THIS SHEET)

A. RADIO EQUIPMENT RACK
(PROVIDED AND INSTALLED BY OTHERS)

B. ENTRY DOOR

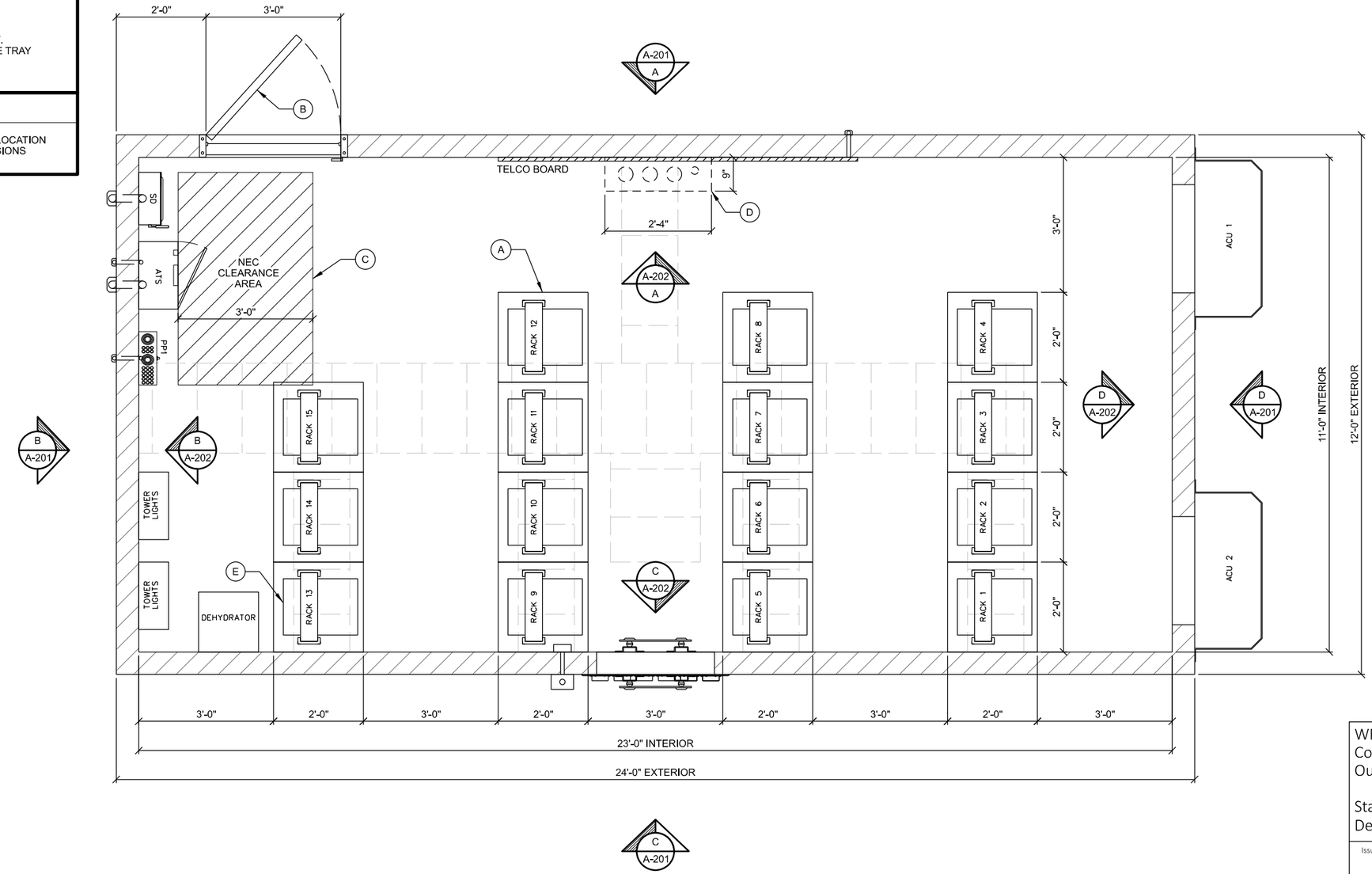
C. NEC CLEARANCE AREA
36-INCHES IN FRONT OF ELECTRIC PANELS

D. CONDUIT STUB-UP AREA IN SHELTER FLOOR:
(4) TOTAL: (3) 4-INCH & (1) 2-INCH
PATCH FLOOR & SEAL AROUND CONDUIT PENETRATIONS

E. RACK MOUNTED FIBER OPTIC PATCH PANEL
INSTALLED IN RACK 13.
SC-TO-SC (FEMALE/FEMALE) CONNECTORS;
ROUTE FIBER OPTIC CABLE ALONG CABLE TRAY.
PROVIDE 20 FOOT SERVICE LOOP LAID IN CABLE TRAY
ABOVE RACK 13.

GENERAL NOTES: (THIS SHEET)

1. CONTRACTOR TO FIELD VERIFY PENETRATION LOCATION DIMENSIONS WITH SUPPLIED BUILDING. DIMENSIONS SHOWN ARE APPROXIMATE.



A SHELTER FLOOR PLAN

SCALE: 11" x 17" - 3/8" = 1'-0"
22" x 34" - 3/4" = 1'-0"

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Drawing Title:

SHELTER FLOOR PLAN

Plans prepared by:
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Sheet No.

A-101

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 96	E

FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\A-101.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.

2

(#) KEYNOTES: (THIS SHEET)

A. 48" 2-BULB LIGHT FIXTURE

B. SMOKE DETECTOR

C. COAXIAL SURGE PROTECTOR TRAPEZE (POLYPHASER)

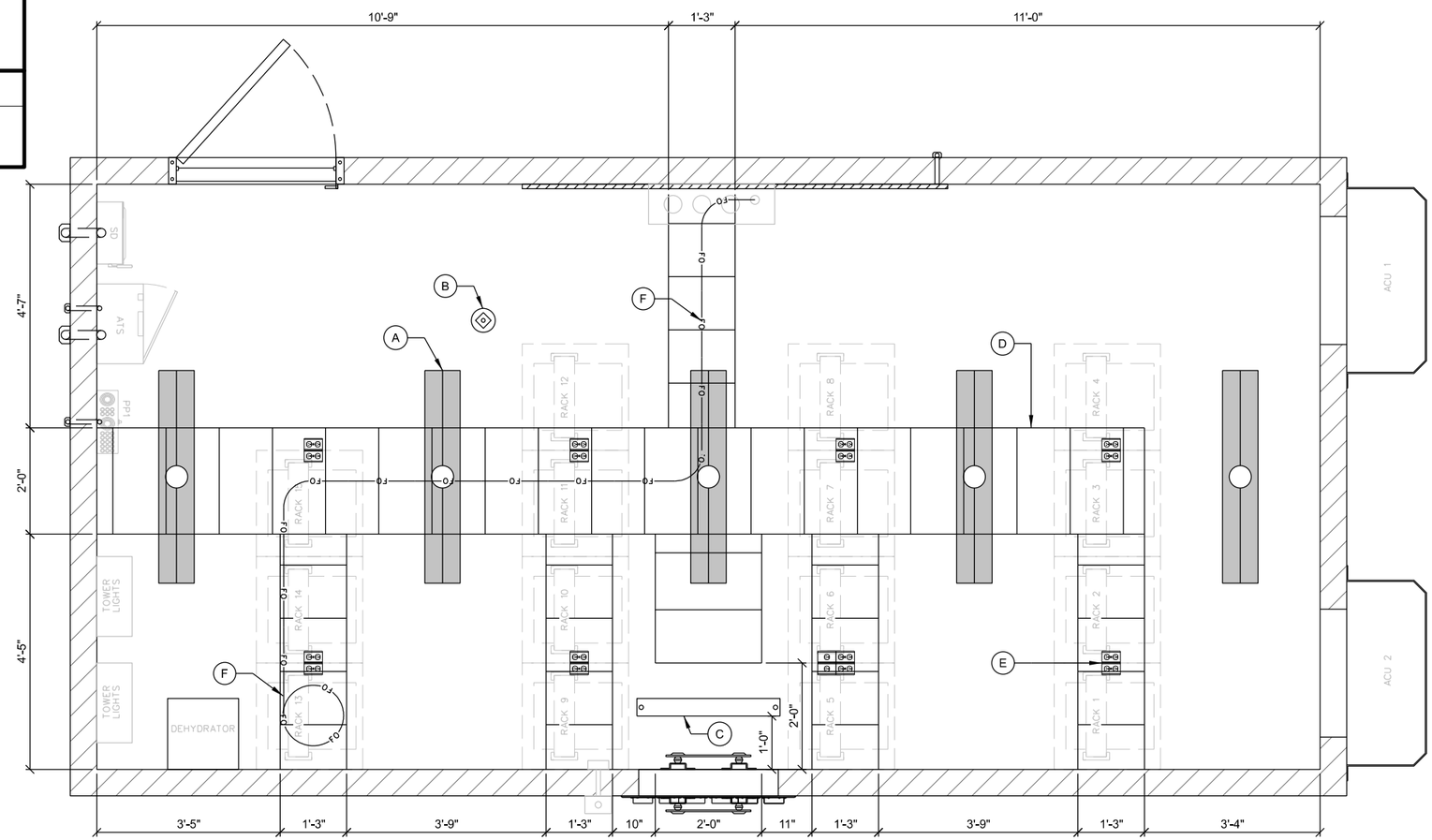
D. CABLE TRAY

E. ELECTRIC RECEPTACLES, SEE SHEET E-104

F. ROUTE FIBER OPTIC CABLE ALONG CABLE TRAY PROVIDE 20 FOOT SERVICE LOOP LAID IN CABLE TRAY ABOVE RACK 13

GENERAL NOTES: (THIS SHEET)

1. CONTRACTOR TO FIELD VERIFY PENETRATION LOCATION DIMENSIONS WITH SUPPLIED BUILDING. DIMENSIONS SHOWN ARE APPROXIMATE.



A SHELTER CEILING PLAN
SCALE: 11" x 17" - 3/8" = 1'-0"
22" x 34" - 3/4" = 1'-0"

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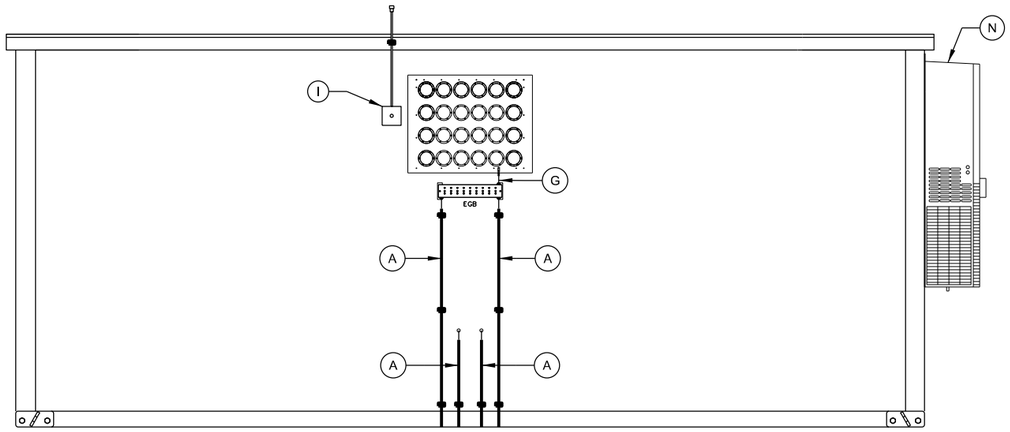
SHELTER CEILING PLAN

Plans prepared by:
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Sheet No.
A-102

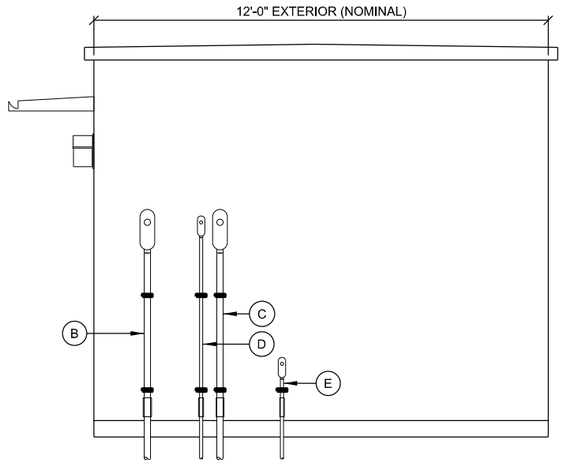
PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 97	E

FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\A-102.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.



A EXTERIOR ELEVATION

SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"



B EXTERIOR ELEVATION

SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"

KEYNOTES: (THIS SHEET)

A. #2 SOLID TINNED GROUND LEAD TO SITE GROUND SYSTEM. LEAD TO BE INSTALLED WITHIN CARFLEX CONDUIT. PROVIDE CONDUIT SUPPORT EVERY 30-INCHES. SECURE FASTENERS TO SHELTER WALL.

B. 2" CONDUIT TO UTILITY RACK (AC POWER)

C. 2" CONDUIT TO GENERATOR (AC POWER)

D. 1" CONDUIT TO GENERATOR (CONTROL & ALARM)

E. 1" CONDUIT TO GENERATOR (GENERATOR LOAD CENTER)

F. 1" CONDUIT TO LP TANK (REMOTE LEVEL MONITOR)

G. #6 STRANDED INSULATED BONDING JUMPER TO ENTRY PORT PLATE

H. EXTERIOR GFCI RECEPTACLE

I. TOWER LIGHTING JUNCTION BOX & PHOTO CELL; SEE D/E-504 FOR DETAIL

J. EXTERIOR LIGHT

K. DOOR HARDWARE

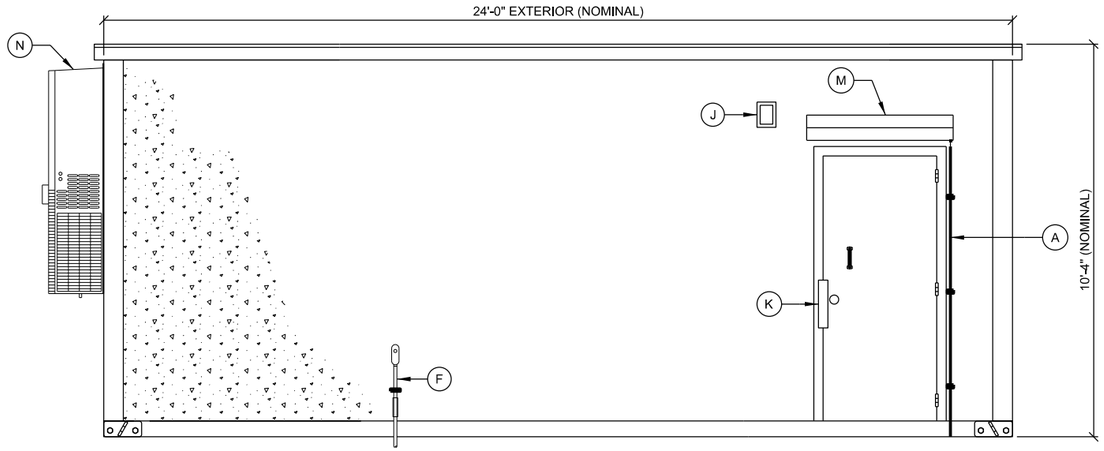
L. ENTRY PORT

M. CANOPY

N. HVAC UNIT

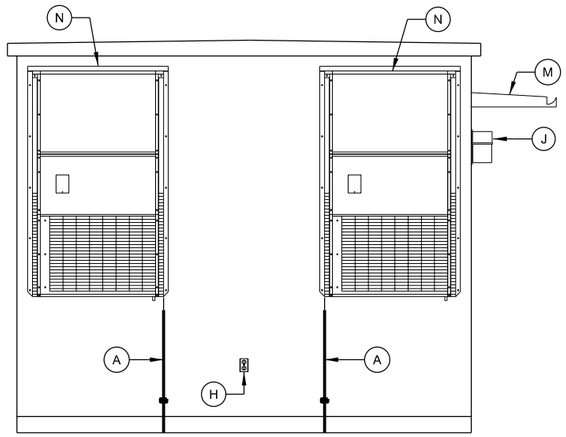
GENERAL NOTES: (THIS SHEET)

1. ALL PVC CONDUITS TO BUILDING TO INCLUDE SLIP JOINTS WHEN EXITING GRADE.
2. ALL CONDUITS ALONG SHELTER WALL TO BE PROVIDED WITH CONDUIT SUPPORTS AT +/- 30-INCH INTERVALS.
3. ALL MECHANICAL GROUND CONNECTIONS TO UTILIZE 2-HOLE LUGS AND STAINLESS-STEEL HARDWARE. PROVIDE ANTI-OXIDANT COMPOUND BETWEEN LUG & CONNECTION POINT. USE COPPER ANTI-OXIDANT FOR COPPER-TO-COPPER CONNECTION.
4. SELF TAPPING SCREW GROUND CONNECTIONS ARE NOT ALLOWED.
5. ALL EXTERIOR METALLIC CONDUITS AND BOXES TO BE PROVIDED WITH GROUND BOND CONNECTION VIA THROUGH WALL HUB CONNECTION TO EXTERIOR GROUNDED DEVICE OR OTHER DIRECT CONNECTION TO GROUND SYSTEM.



C EXTERIOR ELEVATION

SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"



D EXTERIOR ELEVATION

SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

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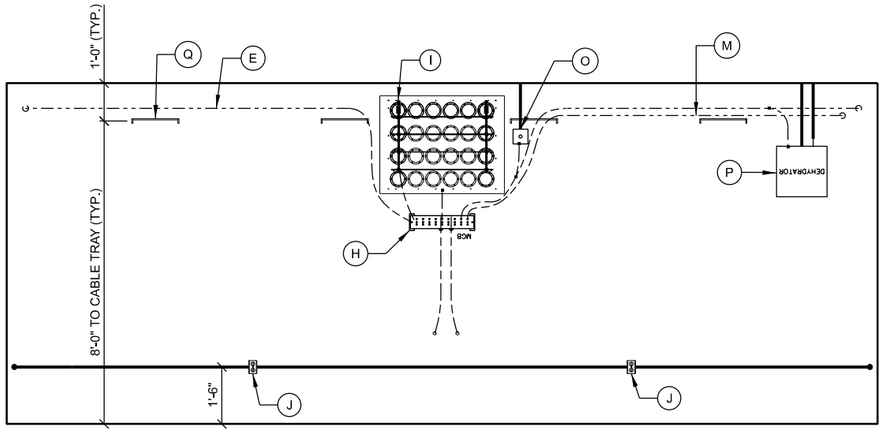
ISSUED FOR: PS&E

Drawing Title:
SHELTER ELEVATIONS: EXTERIOR

Plans prepared by:
Edge Consulting Engineers, Inc.

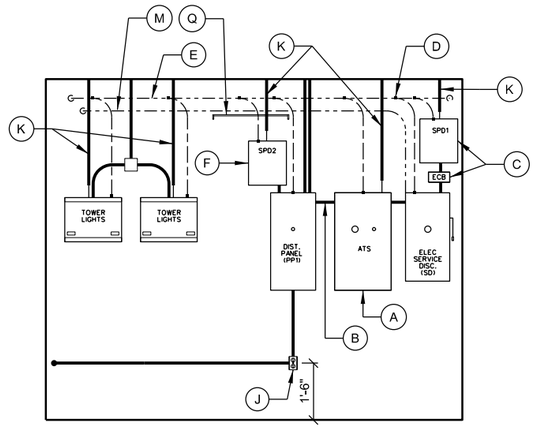
Sheet No.
A-201

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 98	E



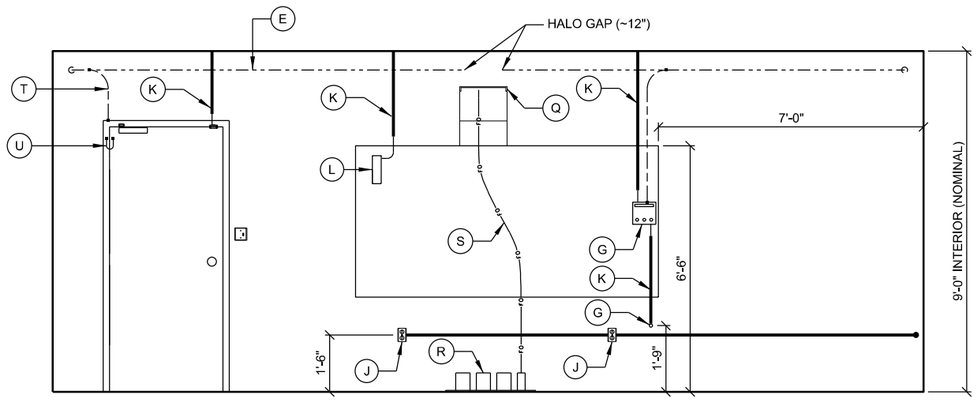
A INTERIOR ELEVATION

SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"



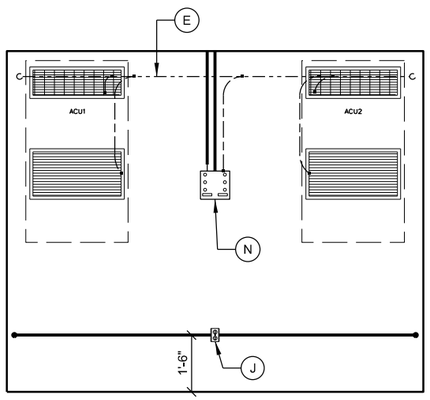
B INTERIOR ELEVATION

SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"



C INTERIOR ELEVATION

SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"



D INTERIOR ELEVATION

SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"

KEYNOTES: (THIS SHEET)

A. AUTOMATIC TRANSFER SWITCH (ATS) INSTALL AT 6'-0" ABOVE FINISH FLOOR (BID ITEM SPV.0060.106)

B. RIGID METALLIC CONDUIT / RACEWAY BETWEEN ELECTRICAL DEVICES (TYP.)

C. 60A CIRCUIT BREAKER & SPD1 ON ELEC. SERVICE DISCONNECT

D. BOND ALL DEVICE BOXES (ATS, TOWER LIGHTS, SPD1 & SPD2) TO HALO (#6 STRANDED INSULATED)

E. GROUNDING HALO (#2 STRANDED INSULATED)

F. SPD2 ON DIST. PANEL (PP1)

G. LP TANK REMOTE LEVEL MONITOR (BID ITEM SPV.0060.106) & 1" PENETRATION

H. MASTER GROUND BAR. FOLLOW PANI SYSTEM FOR ORGANIZATION OF CONNECTIONS TO BAR; SEE E-503 FOR DETAILS

I. COAXIAL SURGE PROTECTOR TRAPEZE GROUND SYSTEM

J. DUPLEX RECEPTACLE

K. ALARM CONDUITS AND WIRING FROM MONITORED DEVICES, SEE SPECIFICATIONS FOR REQUIREMENTS

L. R66 ALARM BLOCK (INSTALLED BY OWNER)

M. NEUTRAL-GROUND BOND CONNECTION TIE TO MGB (#2 STRANDED INSULATED). ROUTE ALONG PERIMETER WALL BELOW HALO OR ALONG CABLE TRAY

N. HVAC LEAD LAG CONTROLLER

O. TOWER LIGHTING JUNCTION BOX AND WALL PENETRATION; SEE D/E-504 FOR DETAILS

P. DEHYDRATOR; INSTALLED BY OWNER

Q. CABLE TRAY

R. CONDUIT STUBS THROUGH SHELTER FLOOR; PROVIDE BOOT CAPS

S. (2) 12-CT SMFO CABLES ROUTED ALONG CABLE TRAY TO RACK 9

T. DOOR FRAME GROUND

U. DOOR PANEL GROUND (HINGE SIDE)

GENERAL NOTES: (THIS SHEET)

1. ALL INTERIOR CONDUITS TO BE RGS OR EMT. UTILIZE COMPRESSION FITTINGS FOR EMT INSTALLATIONS. SET SCREW FITTINGS AR NOT ALLOWED.
2. ALL MECHANICAL GROUND CONNECTIONS TO UTILIZE 2-HOLE LUGS AND STAINLESS-STEEL HARDWARE. PROVIDE ANTI-OXIDANT COMPOUND BETWEEN LUG & CONNECTION POINT. USE COPPER ANTI-OXIDANT FOR COPPER-TO-COPPER CONNECTIONS.
3. PROVIDE EMT CONDUIT FOR ALL ALARM AND LOW VOLTAGE WIRING FROM DEVICES WITH DRY CONTACTS TO ALARM BOCK. CONDUITS NEED NOT BE FULL LENGTH AND MAY UTILIZE CABLE TRAY FOR HORIZONTAL RUNS. CONDUITS SHALL EXTEND ABOVE AND OVER TO CABLE TRAY AND PROVIDE BUSHINGS ON ENDS.
4. ALL METALLIC CONDUITS AND BOXES TO BE GROUND BONDED TO HALO.

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

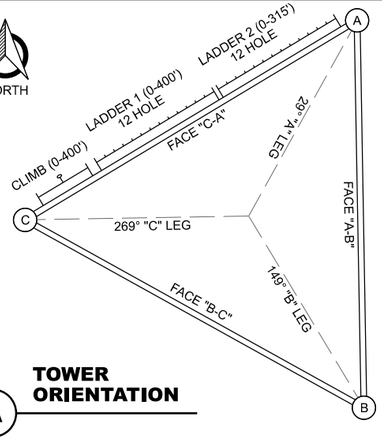
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ISSUED FOR: PS&E

Drawing Title:
SHELTER ELEVATIONS: INTERIOR

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.
A-202



A **TOWER ORIENTATION**

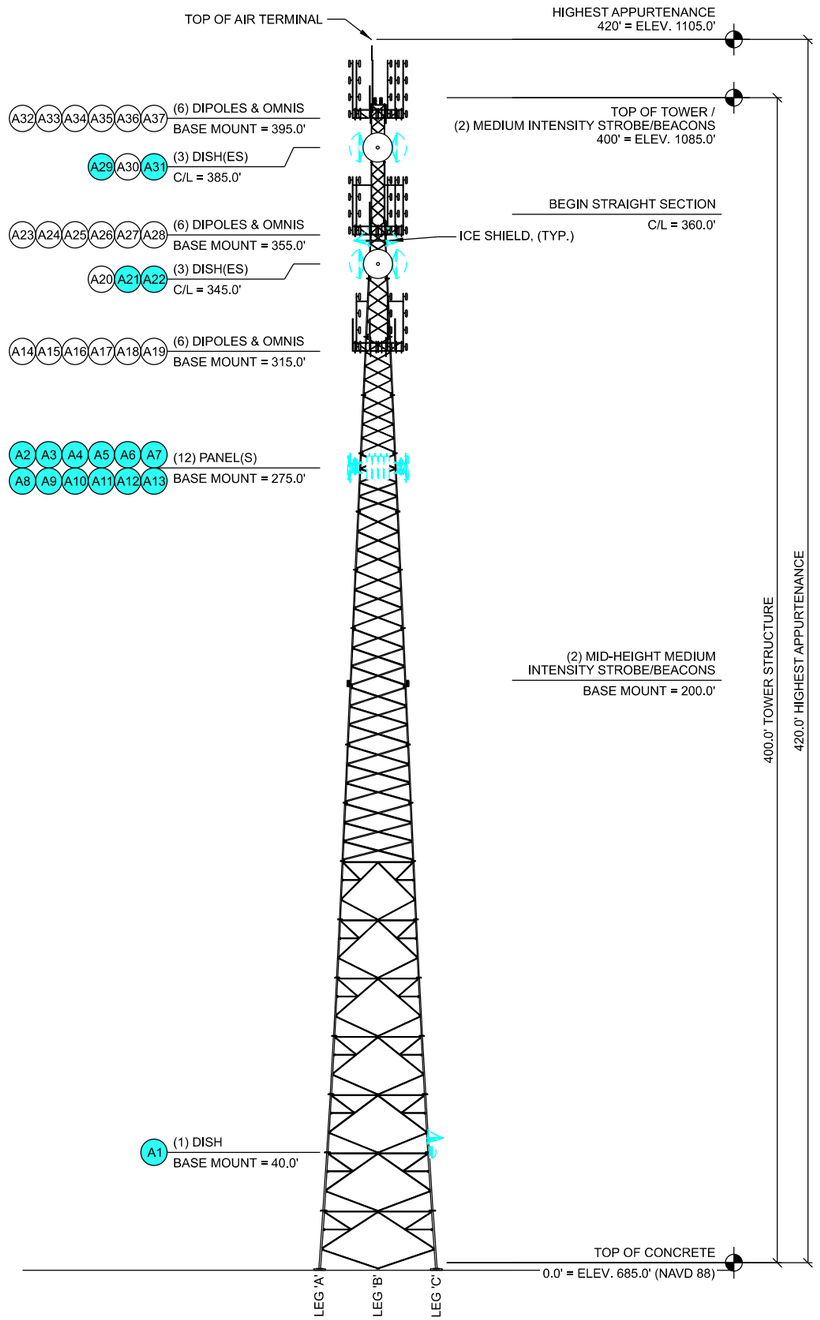
NOTES:

1. TOWER TO BE ANALYZED FOR FULL CAPACITY LOADING (PROPOSED AND FUTURE).
2. REFER TO ANTENNA MOUNTING DETAILS FOR ADDITIONAL INFO ON MOUNT DESIGN AND MOUNTING REQUIREMENTS.
3. ALL OMNI & DIPOLE ANTENNAS BELOW TOP LAYER TO INCLUDE TOP BRACING WHEN RECOMMENDED BY THE MANUFACTURER.
4. TOWER ANCHOR BOLTS SHALL BE DESIGNED SUCH THAT GROUT IS NOT REQUIRED BELOW TOWER BASE PLATES AND AROUND ANCHOR BOLTS.
5. TOWER TO BE DESIGNED AS STRUCTURE CLASS III. REFER TO SPECS FOR OTHER REQUIREMENTS.
6. TOWER & TOWER FOUNDATION - CONTRACTOR IS RESPONSIBLE FOR STRUCTURAL DESIGN OF BOTH ITEMS.
7. ALL PROPOSED ANTENNAS, COAX AND WAVEGUIDES WILL BE PROVIDED BY OWNER. CONTRACTOR TO INSTALL ALL ITEMS. FUTURE ANTENNAS, COAX AND WAVEGUIDES WILL NOT BE INSTALLED AS PART OF THIS PROJECT.
8. ALL ANTENNA AND DISH MOUNTS AND ICE SHIELDS (PROPOSED AND FUTURE) SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. INSTALLATION AND ALIGNMENT OF REMOTE DISH REQUIRED. SEE SPECIFICATIONS SECTION 33 83 00 FOR REQUIREMENTS.

TOWER LOADING

ANTENNA ID	ANTENNA TYPE	(QTY.) ANTENNA MODEL SIZE & WEIGHT		TOWER LEG	ANTENNA MOUNT SIZE & WEIGHT		MOUNT HEIGHT (T.O.C.)	C/L HEIGHT (T.O.C.)	C/L ELEV. (NAVD 88)	ANTENNA AZIMUTH	TILT (+/-)	Tx LINE (QTY.) SIZE	FREQUENCY (MHz)	OWNER USE	NOTES
A1	Dish	(1) VHLPX4-11W_A		C	Leg Mount (PM-SU4-63)		40.0'	40.0'	725.0'	305°		(2) EW63	6 GHz	WDOT	To Auxiliary Tower Ice Shield
		4' Dia.	71 lbs.		4.5" OD x 63" Mast Pipe	138 lbs.									
A2-A13	PANEL	(12) Panel Antenna(s)		A,B,C	(3) Sector V-Frames		275.0'	275.0'	960.0'			(12) 1-5/8"	TBD		FUTURE
		96"tall x 20"wide x 8"deep	276 sq ft		12-6" face, 2-3/8" pipes	465 lbs./ea									
A14	Dipole	(1) Comprod 874F-70TM		A	V-Arm Truss Frame		315.0'	325.3'	1010.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs		w/ (2) Mast Pipes	450 lbs.									
A15	Colliner Omni	(1) SC469-HF1LDF (D00-NUFP)		A	Utilize A14 Mount		315.0'	320.6'	1005.6'		0°	(1) 1-5/8"		WDOT	
		135" Long	25 lbs.												
A16	Dipole	(1) Comprod 874F-70TM		B	V-Arm Truss Frame		315.0'	325.3'	1010.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs		w/ (2) Mast Pipes	450 lbs.									
A17	Colliner Omni	(1) SC469-HF1LDF (D00-NUFP)		B	Utilize A16 Mount		315.0'	320.6'	1005.6'		0°	(1) 1-5/8"		WDOT	
		135" Long	25 lbs.												
A18	Dipole	(1) Comprod 874F-70TM		C	V-Arm Truss Frame		315.0'	325.3'	1010.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs		w/ (2) Mast Pipes	450 lbs.									
A19	Colliner Omni	(1) SC469-HF1LDF (D00-NUFP)		C	Utilize A18 Mount		315.0'	320.6'	1005.6'		0°	(1) 1-5/8"		WDOT	
		135" Long	25 lbs.												
A20	Dish	(1) HX10-6W		A	Leg Mount (PM-SU4-63)		345.0'	345.0'	1030.0'	87.8°		(2) EW63	6 GHz	WDOT Path to DePere	Ice Shield Above NOTE #9
		10' Dia.	580 lbs.		4.5" OD x 63" Mast Pipe	138 lbs.									
A21	Dish	(1) HX10-6W		B	Leg Mount (PM-SU4-63)		345.0'	345.0'	1030.0'	?		(2) EW63	6 GHz	WDOT Path to ???	Ice Shield Above FUTURE
		10' Dia.	580 lbs.		4.5" OD x 63" Mast Pipe	138 lbs.									
A22	Dish	(1) HX10-6W		C	Leg Mount (PM-SU4-63)		345.0'	345.0'	1030.0'			(2) EW63	6 GHz	WDOT Path to ???	Ice Shield Above FUTURE
		10' Dia.	580 lbs.		4.5" OD x 63" Mast Pipe	138 lbs.									
A23	Dipole	(1) Comprod 874F-70TM		A	V-Arm Truss Frame		355.0'	365.3'	1050.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs		w/ (2) Mast Pipes	450 lbs.									
A24	Dipole	(1) Comprod 874F-70TM		A	Utilize A23 Mount		355.0'	365.3'	1050.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs												
A25	Dipole	(1) Comprod 874F-70TM		B	V-Arm Truss Frame		355.0'	365.3'	1050.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs		w/ (2) Mast Pipes	450 lbs.									
A26	Colliner Omni	(1) SC469-HF1LDF (D00-NUFP)		B	Utilize A25 Mount		355.0'	360.6'	1045.6'		0°	(1) 1-5/8"		WDOT	
		135" Long	25 lbs.												
A27	Dipole	(1) Comprod 874F-70TM		C	V-Arm Truss Frame		355.0'	365.3'	1050.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs		w/ (2) Mast Pipes	450 lbs.									
A28	Dipole	(1) Comprod 874F-70TM		C	Utilize A27 Mount		355.0'	365.3'	1050.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs												
A29	Dish	(1) HX10-6W		A	Leg Mount (PM-SU4-63)		385.0'	385.0'	1070.0'	?		(2) EW63	6 GHz	WDOT Path to ???	FUTURE
		10' Dia.	580 lbs.		4.5" OD x 63" Mast Pipe	138 lbs.									
A30	Dish	(1) HX10-6W		B	Leg Mount (PM-SU4-63)		385.0'	385.0'	1070.0'	191.3°		(2) EW63	6 GHz	WDOT Path to Chilton	
		10' Dia.	580 lbs.		4.5" OD x 63" Mast Pipe	138 lbs.									
A31	Dish	(1) HX10-6W		C	Leg Mount (PM-SU4-63)		385.0'	385.0'	1070.0'	?		(2) EW63	6 GHz	WDOT Path to ???	FUTURE
		10' Dia.	580 lbs.		4.5" OD x 63" Mast Pipe	138 lbs.									
A32	Dipole	(1) Comprod 874F-70TM		A	V-Arm Truss Frame		395.0'	405.3'	1090.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs		w/ (2) Mast Pipes	450 lbs.									
A33	Dipole	(1) Comprod 874F-70 (UHF)		A	Utilize A32 Mount		395.0'	405.3'	1090.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs												
A34	Dipole	(1) Comprod 874F-70TM		B	V-Arm Truss Frame		395.0'	405.3'	1090.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs		w/ (2) Mast Pipes	450 lbs.									
A35	Colliner Omni	(1) SC469-HF1LDF (D00-NUFP)		B	Utilize A34 Mount		395.0'	400.6'	1085.6'		0°	(1) 1-5/8"		WDOT	
		135" Long	25 lbs.												
A36	Dipole	(1) Comprod 874F-70TM		C	V-Arm Truss Frame		395.0'	405.3'	1090.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs		w/ (2) Mast Pipes	450 lbs.									
A37	Dipole	(1) Comprod 874F-70TM		C	Utilize A36 Mount		395.0'	405.3'	1090.3'			(1) 1-5/8"		WDOT	
		246" Long	67 lbs												

B **TOWER LOADING SUMMARY**



C **TOWER PROFILE (ELEVATION)**

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

Issued / Revised

ISSUED FOR: PS&E

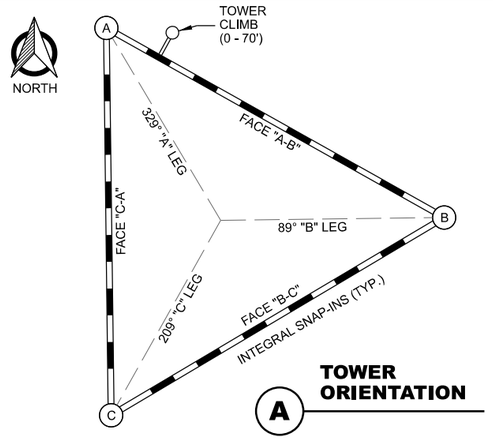
Drawing Title:
MAIN TOWER LOADING/ELEVATION

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.
T-201

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE: NOT TO SCALE	SHEET 100	E

FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\T-201.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.



A **TOWER ORIENTATION**

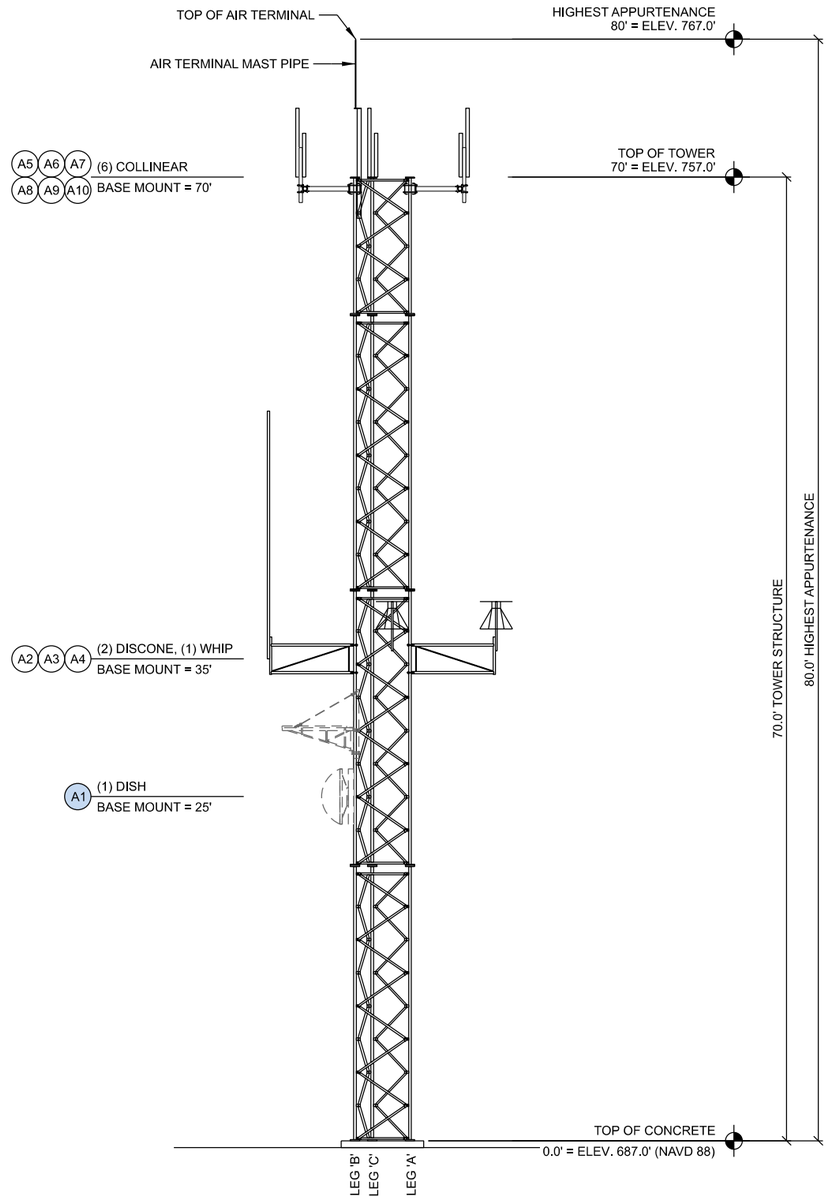
NOTES:

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5. TOWER TO BE DESIGNED AS STRUCTURE CLASS III. REFER TO SPECS FOR OTHER REQUIREMENTS.
6. TOWER & TOWER FOUNDATION - CONTRACTOR IS RESPONSIBLE FOR STRUCTURAL DESIGN OF BOTH ITEMS.
7. ALL PROPOSED ANTENNAS, COAX AND WAVEGUIDES WILL BE PROVIDED BY OWNER. CONTRACTOR TO INSTALL ALL ITEMS. FUTURE ANTENNAS, COAX AND WAVEGUIDES WILL NOT BE INSTALLED AS PART OF THIS PROJECT.
8. ALL ANTENNA AND DISH MOUNTS AND ICE SHIELDS (PROPOSED AND FUTURE) SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. INSTALLATION AND ALIGNMENT OF REMOTE DISH REQUIRED. SEE SPECIFICATIONS SECTION 33 83 00 FOR REQUIREMENTS.

TOWER LOADING

ANTENNA ID	ANTENNA TYPE	(QTY.) ANTENNA MODEL SIZE & WEIGHT		TOWER LEG	ANTENNA MOUNT SIZE & WEIGHT		MOUNT HEIGHT (T.O.C.)	C/L HEIGHT (T.O.C.)	C/L ELEV. (NAVD 88)	ANTENNA AZIMUTH	TILT (+/-)	Tx LINE (QTY.) SIZE	FREQUENCY (MHz)	OWNER USE	NOTES
A1	Dish	(1) SB4-W100		B	Leg Mount (PM-SU4-63)		25.0'	25.0'	712.0'	55°		(1) EW63	6 GHz	WDOT	To Main Tower Ice Shield
		4' Dia	77 lbs.		4.5" OD x 63" Mast Pipe	138 lbs									
A2	Discone	(1) Telwave ANT280S		A	6' Stand-Off (S600)		35.0'	35.0'	722.0'			(1) 7/8"		WDOT	
		43"W x 28.5"Dia	11 lbs.		32" x 2" OD Mast	61 lbs									
A3	Whip	(1) Solorcon A-99		B	6' Stand-Off (S600)		35.0'	35.0'	722.0'			(1) 7/8"		WDOT	
		18'L x 2"Dia	6 lbs.		32" x 2" OD Mast	61 lbs									
A4	Discone	(1) Telwave ANT280S		C	6' Stand-Off (S600)		35.0'	35.0'	722.0'			(1) 7/8"		WDOT	
		43"W x 28.5"Dia	11 lbs.		32" x 2" OD Mast	61 lbs									
A5	Collinear	(1) Telwave ANT150F2		A	T-Arm (SF-HPM3) 20" Standoff		70.0'	70.0'	757.0'			(1) 7/8"		WDOT	
		60"L x 2.75"Dia	12 lbs		(2) 3" OD x 48" Masts	304 lbs.									
A6	Collinear	(1) Telwave ANT790F2		A	Utilize A5 Mount		70.0'	70.0'	757.0'			(1) 7/8"		WDOT	FUTURE
		38"L x 2.75"Dia	8 lbs												
A7	Collinear	(1) Telwave ANT150F2		B	T-Arm (SF-HPM3) 20" Standoff		70.0'	70.0'	757.0'			(1) 7/8"		WDOT	
		60"L x 2.75"Dia	12 lbs		(2) 3" OD x 48" Masts	304 lbs.									
A8	Collinear	(1) Telwave ANT790F2		B	Utilize A7 Mount		70.0'	70.0'	757.0'			(1) 7/8"		WDOT	FUTURE
		38"L x 2.75"Dia	8 lbs												
A9	Collinear	(1) Telwave ANT150F2		C	T-Arm (SF-HPM3) 20" Standoff		70.0'	70.0'	757.0'			(1) 7/8"		WDOT	
		60"L x 2.75"Dia	12 lbs		(2) 3" OD x 48" Masts	304 lbs.									
A10	Collinear	(1) Telwave ANT790F2		C	Utilize A9 Mount		70.0'	70.0'	757.0'			(1) 7/8"		WDOT	FUTURE
		38"L x 2.75"Dia	8 lbs												

B **TOWER LOADING SUMMARY**



C **TOWER PROFILE (ELEVATION)**

2

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

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ISSUED FOR: PS&E

Drawing Title:
AUXILIARY TOWER LOADING/ELEVATION

Plans prepared by:
Edge Consulting Engineers, Inc.

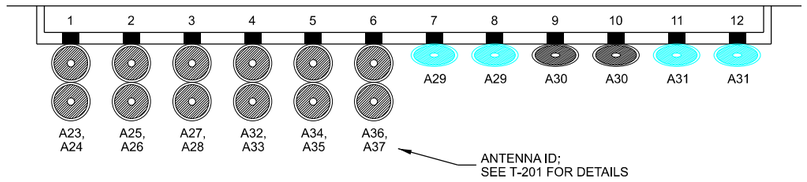
Sheet No.
T-202

2

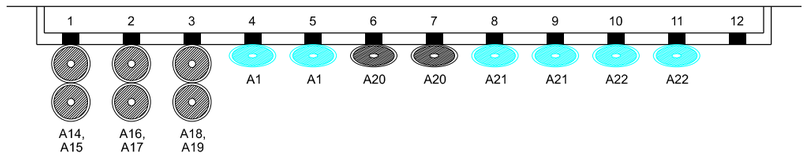
LEGEND: (THIS SHEET)

SIZE	SYMBOL	O.D.	MIN. BEND RAD.
1-5/8"		1.98"	20"
1-1/4"		1.55"	15"
7/8"		1.09"	10"
1/2"		0.63"	5"
CAT5		0.35"	3"
EW63		2"x1.16"	20"
EWP90-107		1.3"x0.8"	13"
LMR-400		0.4"	1"

LADDER #1 (WDOT) 0' - 400'



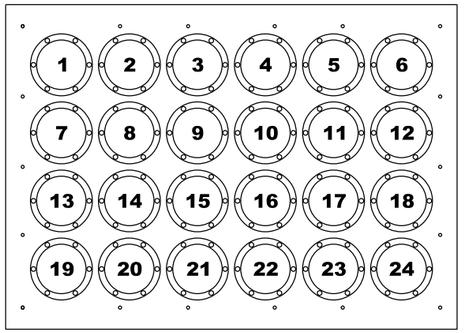
LADDER #1 (WDOT) 0' - 315'



NOTES:

1. REFER TO SHEET T-201 FOR ANTENNA ID REFERENCE AND LADDER INSTALLATION LOCATION.
2. DOUBLE STACKING OF 1-5/8" AND TRIPLE STAKING OF 7/8" COAX IS ALLOWED.
3. DOUBLE STACKING OF WAVEGUIDE IS ALLOWED WHEN USING CUSHION TYPE SNAP IN HANGERS.
4. GROUP LINES WITHIN LADDERS FOR SIMILAR TERMINATION LEVEL. SEPARATE WAVEGUIDE FROM COAX.
5. PROVIDE & INSTALL PROPERLY SIZED SNAP-INS FOR EACH COAX.
6. TOWER LOADING DESIGN SHALL ASSUME (3) COAX LADDERS INSTALLED

A TRANSMISSION LINE LADDER ROUTING



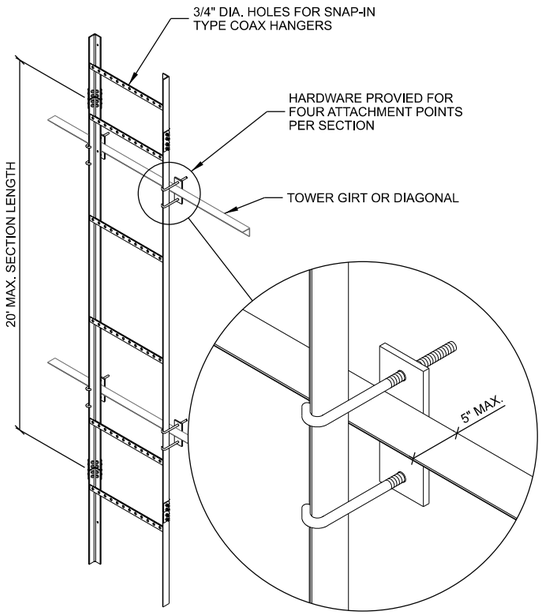
ENTRY PANEL 1
(AS VIEWED FROM INSIDE SHELTER)

ENTRY PANEL PORT ASSIGNMENT			
PORT #	ANTENNA ID	ANTENNA SYSTEM	(QTY.) CABLE SIZE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10	**TO BE DETERMINED**		
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			

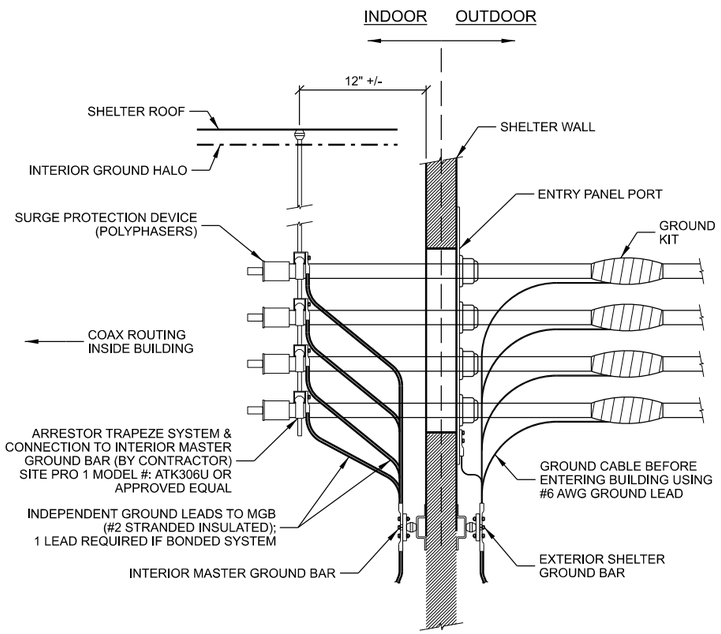
NOTES:

1. REFER TO SHEET T-201 FOR ANTENNA ID REFERENCE
2. PORT OPENINGS ARE 4" DIA UNLESS OTHERWISE NOTED.
3. PROVIDE AND INSTALL PROPERLY SIZED BOOTS, CUSHIONS AND PLUGS FOR EACH PORT OPENING INSIDE AND OUTSIDE OF SHELTER.
4. ALL UNUSED PORTS ON ALL ENTRY PANELS TO BE CAPPED & SECURED IN PLACE W/ BLACK CABLE TIE.

B ENTRY PANEL ROUTING



C VERTICAL TRANSMISSION LINE LADDER



D CABLE ENTRY

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WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

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ISSUED FOR: PS&E

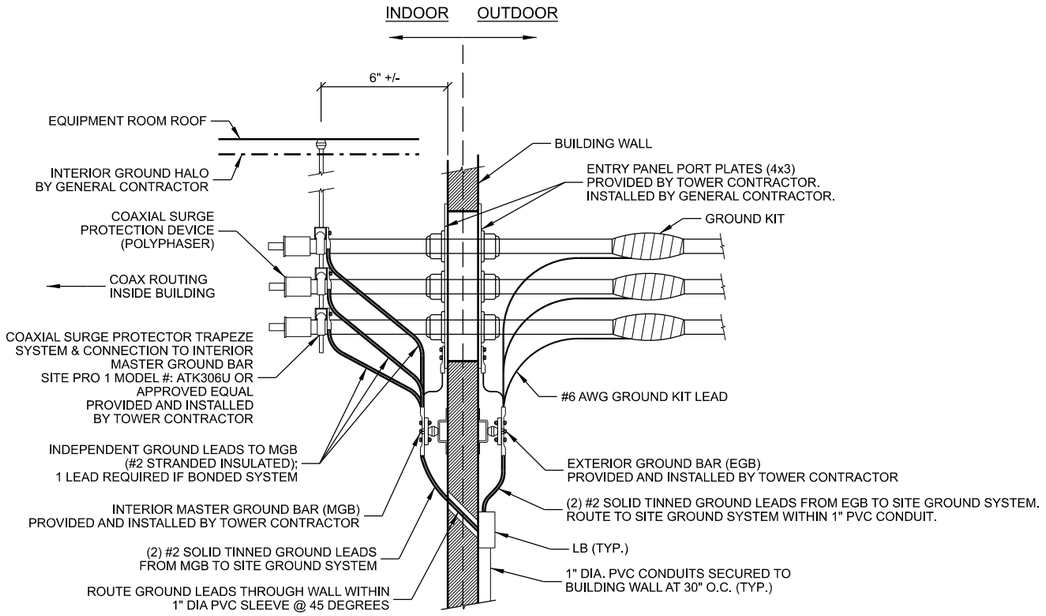
Drawing Title:
MAIN TOWER TRANSMISSION LINE INSTALLATION DETAILS

Plans prepared by:
Edge Consulting Engineers, Inc.

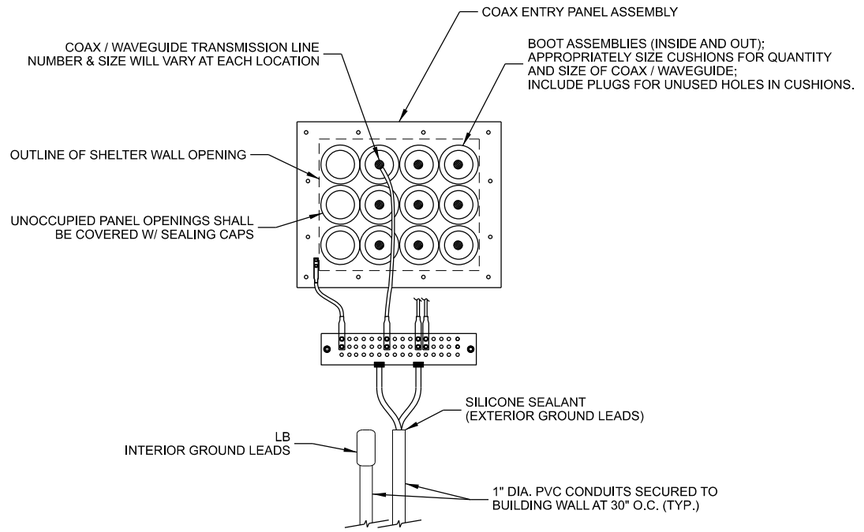
Sheet No.
T-501

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE: NOT TO SCALE	SHEET 102	E

FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\T-501.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.



SECTION VIEW

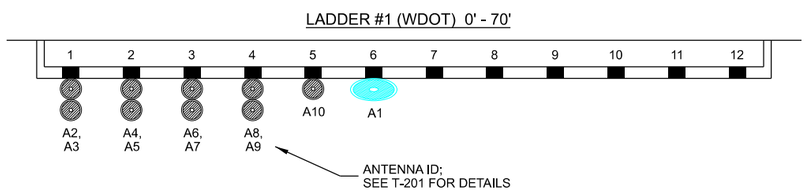


PROFILE VIEW

A SWEF BUILDING CABLE ENTRY

LEGEND: (THIS SHEET)

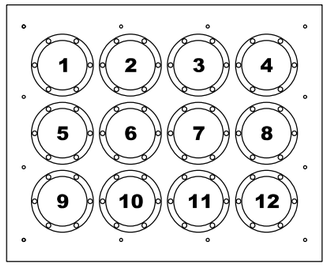
SIZE	SYMBOL	O.D.	MIN. BEND RAD.
1-5/8"		1.98"	20"
1-1/4"		1.55"	15"
7/8"		1.09"	10"
1/2"		0.63"	5"
CAT5		0.35"	3"
EW63		2"x1.16"	20"
EWP90-107		1.3"x0.8"	13"
LMR-400		0.4"	1"



NOTES:

1. REFER TO SHEET T-201 FOR ANTENNA ID REFERENCE AND LADDER INSTALLATION LOCATION.
2. DOUBLE STACKING OF 1-5/8" AND TRIPLE STAKING OF 7/8" COAX IS ALLOWED.
3. DOUBLE STACKING OF WAVEGUIDE IS ALLOWED WHEN USING CUSHION TYPE SNAP IN HANGERS.
4. GROUP LINES WITHIN LADDERS FOR SIMILAR TERMINATION LEVEL. SEPARATE WAVEGUIDE FROM COAX.
5. PROVIDE & INSTALL PROPERLY SIZED SNAP-INS FOR EACH COAX.
6. TOWER LOADING DESIGN SHALL ASSUME (3) COAX LADDERS INSTALLED

B SWEF BUILDING TRANSMISSION LINE LADDER ROUTING



ENTRY PANEL 1
(AS VIEWED FROM INSIDE SHELTER)

ENTRY PANEL PORT ASSIGNMENT			
PORT #	ANTENNA ID	ANTENNA SYSTEM	(QTY.) CABLE SIZE
1			
2			
3			
4			
5			
6			
7	**TO BE DETERMINED**		
8			
9			
10			
11			
12			

NOTES:

1. REFER TO SHEET T-201 FOR ANTENNA ID REFERENCE
2. PORT OPENINGS ARE 4" DIA UNLESS OTHERWISE NOTED.
3. PROVIDE AND INSTALL PROPERLY SIZED BOOTS, CUSHIONS AND PLUGS FOR EACH PORT OPENING INSIDE AND OUTSIDE OF SHELTER.
4. ALL UNUSED PORTS ON ALL ENTRY PANELS TO BE CAPPED & SECURED IN PLACE W/ BLACK CABLE TIE.

C SWEF BUILDING ENTRY PANEL ROUTING

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

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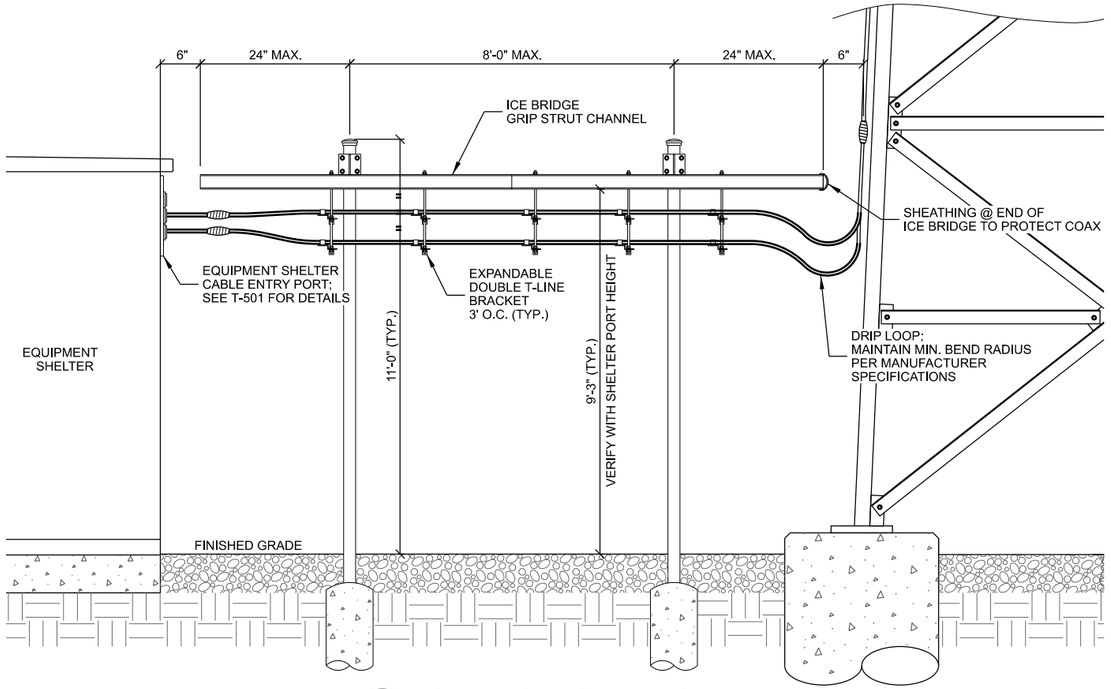
ISSUED FOR: PS&E

Drawing Title:
AUX. TOWER TRANSMISSION LINE INSTALLATION DETAILS

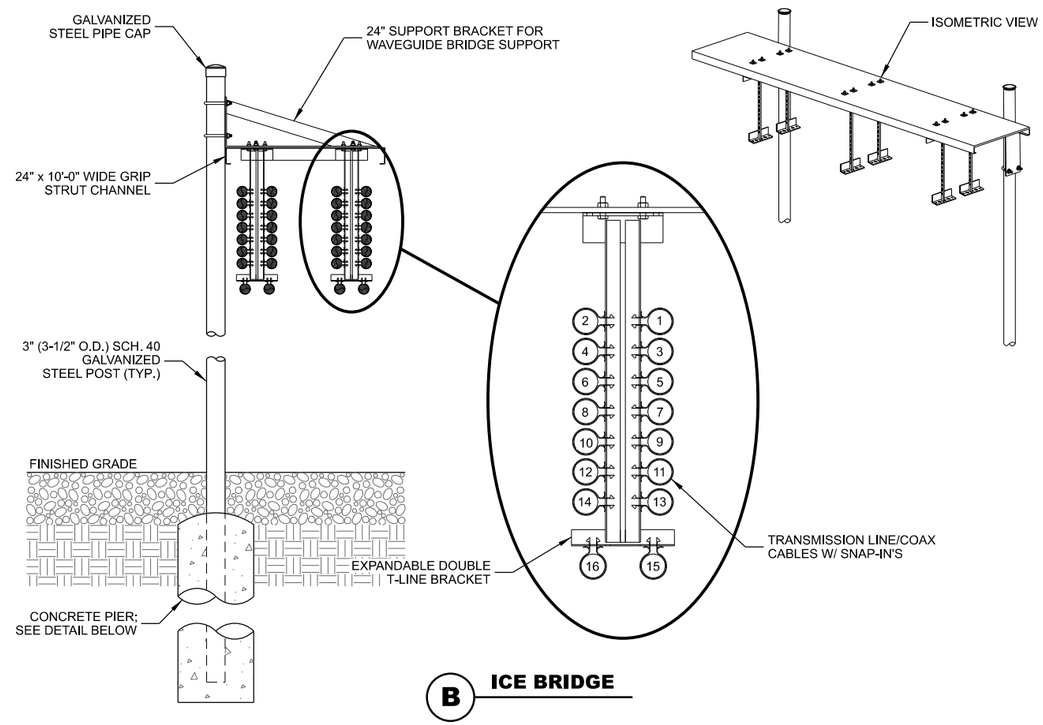
Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.
T-502

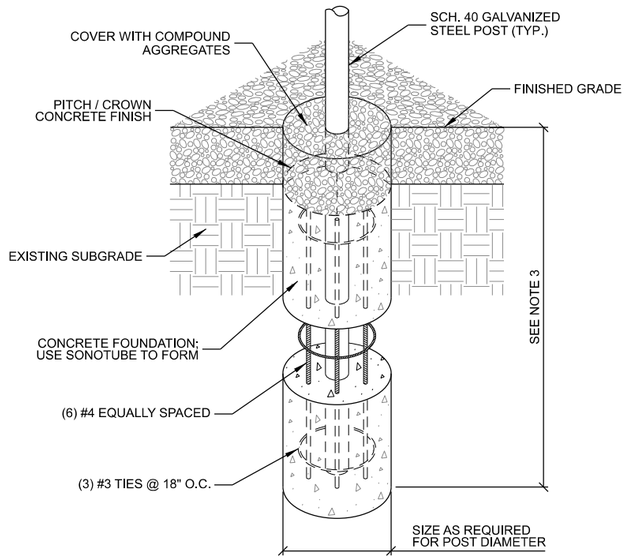
PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE: NOT TO SCALE	SHEET 103	E



A **ICE BRIDGE INSTALLATION**



B **ICE BRIDGE**



C **ICE BRIDGE POST FOUNDATION**

NOTES:

1. MAINTAIN 3" MINIMUM REBAR COVER WITH CONCRETE IN ALL DIRECTIONS.
2. CONCRETE MIX TO BE 4,000 PSI @ 28 DAYS.
3. FOUNDATION DEPTH TO EXCEED LOCAL FROST DEPTH, OR 48" MINIMUM.

ICE BRIDGE NOTES : (THIS SHEET)

1. FOR COMPONENTS AS SHOWN IN STANDARD DETAILS, MAXIMUM ALLOWABLE SPAN BETWEEN SUPPORTS ON A CONTINUOUS SINGLE SECTION OF BRIDGE CHANNEL SHALL BE 8' FOR A 10' SECTION.
2. SPLICES IN SECTIONS OF BRIDGE CHANNEL SHALL BE INSTALLED AT SUPPORTS, WHERE POSSIBLE, OR AT MOST 2' FROM A SUPPORT.
3. FREE ENDS OF ICE BRIDGE CHANNELS SHALL NOT EXCEED A CANTILEVER DISTANCE OF 2' FROM A SUPPORT.
4. CUT BRIDGE CHANNEL SECTIONS SHALL HAVE RAW EDGES TREATED WITH COLD GALVANIZING SPRAY.
5. DEVIATIONS FROM STANDARDS FOR COMPONENT INSTALLATIONS ARE PERMITTED WITH MANUFACTURER'S AND ENGINEER'S APPROVAL.
6. DEVIATIONS FROM ICE BRIDGE FOUNDATIONS SHOWN ON SITE SPECIFIC DRAWINGS OR STANDARD DETAILS REQUIRE ENGINEERING APPROVAL.
7. INSTALL PROTECTIVE SHEATHING AT TOWER END OF ICE BRIDGE TO PROTECT CABLING.

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

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Drawing Title:

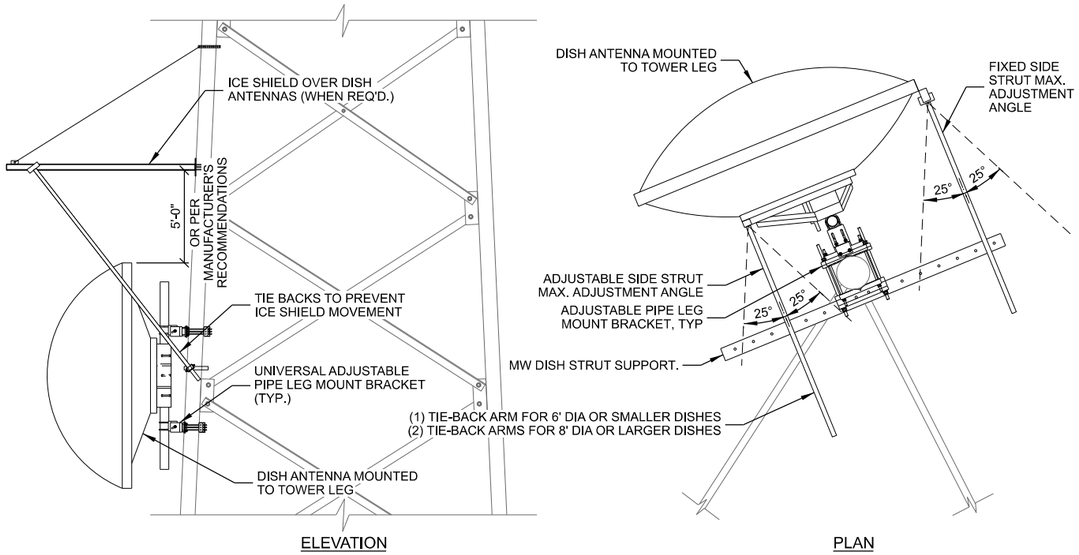
ICE BRIDGE DETAILS

Plans prepared by:
Edge Consulting
Engineers, Inc.

Sheet No.

T-503

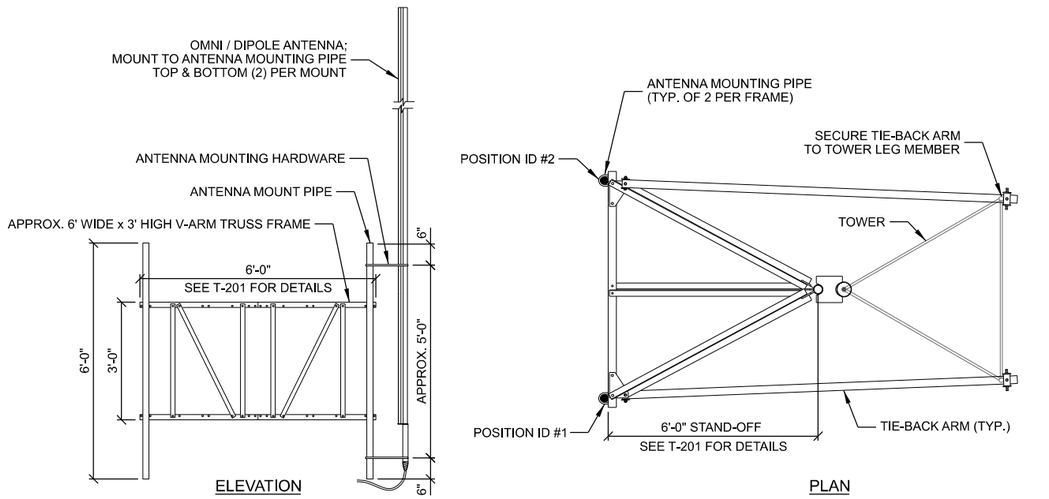
PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE: NOT TO SCALE	SHEET 104	E



NOTES:

1. 4' DIA. OR GREATER DISH ANTENNAS TO BE MOUNTED ON 4.5" O.D. PIPE MASTS.
2. INSTALL TIE-BACK SUPPORT(S) FOR EACH DISH PER DETAIL OR DISH MANUFACTURERS INSTRUCTIONS.
3. ANTENNA MOUNTS SHOWN ARE SCHEMATIC ONLY. MOUNT MANUFACTURER IS RESPONSIBLE TO DESIGN MOUNTS TO MEET THE ANTENNA LOADS AND MAXIMUM WIND DESIGN PARAMETERS AS OUTLINED IN THE SPECS.
4. ICE SHIELD WIDTH TO BE 2' WIDER THAN DISH DIAMETER MIN.
5. ICE SHIELDS TO INCLUDE TIE BACK WIRES TO PREVENT MOVEMENT & TWIST IN HIGH WIND CONDITIONS.

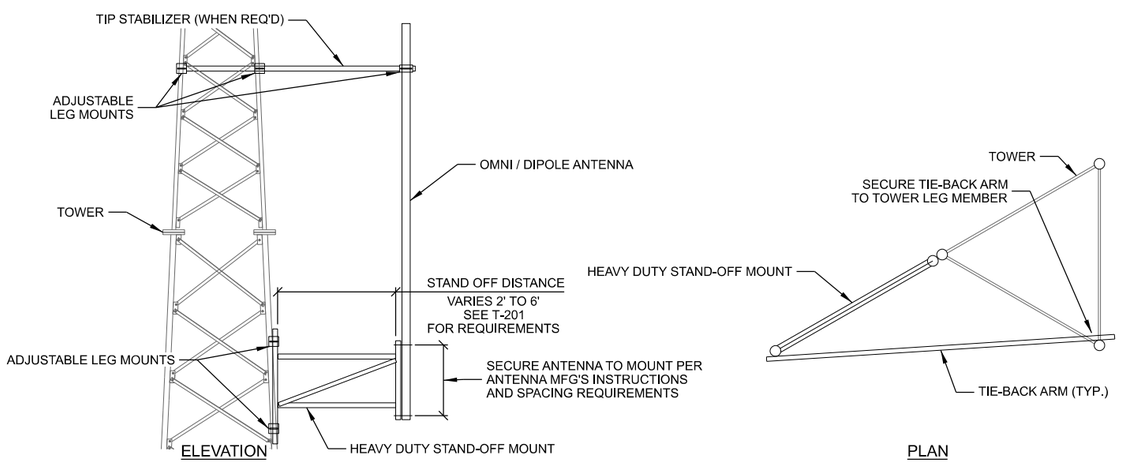
A DISH MOUNTING



NOTES:

1. ALL MOUNTS, MOUNTING HARDWARE AND ACCESSORIES (INCLUDING FUTURE) TO BE PROVIDED & INSTALLED BY CONTRACTOR AS PART OF CONTRACT.
2. ANTENNA MOUNTS SHOWN ARE SCHEMATIC ONLY. TOWER MANUFACTURER IS RESPONSIBLE TO DESIGN MOUNTS TO MEET THE ANTENNA LOADS AND MAXIMUM WIND DESIGN PARAMETERS AS OUTLINED IN THE SPECS.
3. ALL MOUNTS, MOUNTING HARDWARE AND ACCESSORIES TO BE HOT DIPPED GALVANIZED.
4. ANTENNA POSITIONS ARE NUMBERED LEFT TO RIGHT (CLOCKWISE) AS LOOKING DOWN AT MOUNT FROM ABOVE.

B V-ARM TRUSS FRAME MOUNT



NOTES:

1. ANTENNA MOUNTS SHOWN ARE SCHEMATIC ONLY. TOWER MANUFACTURER IS RESPONSIBLE TO DESIGN MOUNTS TO MEET THE ANTENNA LOADS AND MAXIMUM WIND DESIGN PARAMETERS AS OUTLINED IN THE SPECS.
2. POSITION LOCATIONS ARE REFERENCED INCREASING IN A CLOCKWISE DIRECTION (INCREASING AZIMUTH).
3. ALL MOUNTS, MOUNTING HARDWARE AND ACCESSORIES TO BE HOT DIPPED GALVANIZED.

C OMNI / DIPOLE STANDOFF MOUNTING

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WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

Issued / Revised

ISSUED FOR: PS&E

Drawing Title:
ANTENNA INSTALLATION DETAILS

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.
T-504

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE: NOT TO SCALE	SHEET 105	E

KEYNOTES: (THIS SHEET)

A. TOWER GROUND RING, MAINTAIN 2' SEPARATION FROM TOWER FOUNDATION

B. SHELTER GROUND RING, MAINTAIN 2' SEPARATION FROM SHELTER FOUNDATION

C. TOWER GROUND BAR, (2) LEADS TO TOWER GROUND RING & (1) TO TOWER STEEL; SEE DETAIL D/E-501

D. EXTERIOR SHELTER GROUND BAR, (2) LEADS TO SHELTER GROUND RING; SEE DETAIL F/E-502

E. INTERIOR SHELTER GROUND BAR (MGB), (2) LEADS TO SHELTER GROUND RING; SEE DETAIL F/E-502

F. TOWER STEEL GROUND, (1) PER LEG REQ'D, EXOTHERMIC WELD TO LEG GROUND TAB; SEE E-501 FOR DETAILS

G. TOWER FOUNDATION GROUND; SEE E-502 FOR DETAILS

H. FENCE CORNER POST GROUND; SEE E-502 FOR DETAILS

I. FENCE GATE GROUND; SEE E-502 FOR DETAILS

J. SHELTER EXTERIOR AC UNIT GROUND; SEE A-201 FOR DETAILS

K. ICE BRIDGE/UTILITY POST GROUND; SEE E-501 FOR DETAILS

L. SHELTER FOUNDATION GROUND; SEE E-502 FOR DETAILS

M. A/C METER BOX GROUND

N. FENCE FABRIC & DETERRENT WIRING BONDING; SEE E-502 FOR DETAILS

O. GENERATOR ENCLOSURE GROUND, (1) LEAD

P. LP TANK LEG GROUND (EACH LEG), 2-HOLE LUG

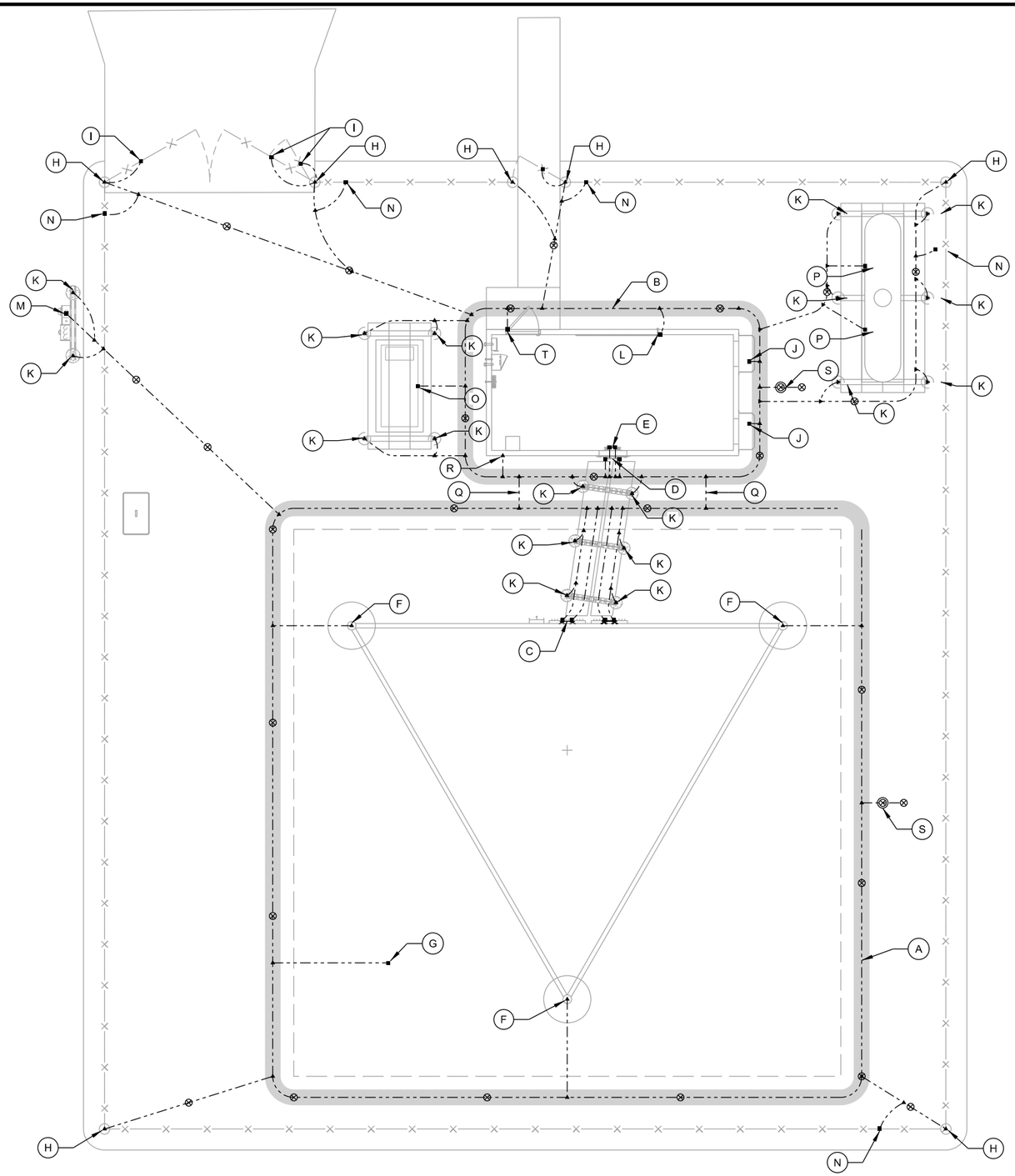
Q. SHELTER GROUND RING TO TOWER GROUND RING, (2) LEADS

R. SHELTER ANCHOR TAB GROUND. CLOSEST TAB TO RF ENTRY PORT (1 REQ'D)

S. GROUND TEST WELL; SEE DETAIL C/E-502 FOR DETAILS

T. SHELTER AWNING GROUND. TIE TO SHELTER GROUND RING.

NORTH



GROUNDING LEGEND: (THIS SHEET)

- GROUND TEST WELL, SEE E-502 FOR DETAILS
- COPPER CLAD GROUND ROD, (5/8" DIA. x 10' LONG) SPACE @ 2X GOUND ROD LENGTH (20' O.C. MAX., 6' MIN.)
- COPPER PLATE, (18" x 18" x 0.032" THK) SPACE @ 2X GOUND ROD LENGTH (20' O.C. MAX., 6' MIN.)
- EXOTHERMIC OR UL RATED IRREVERSIBLE CONNECTION (CADWELD OR HYGROUND)
- MECHANICAL CONNECTION (BURNDY 2-HOLE LUG OR APPROVED EQUAL)
- #2 AWG BARE SOLID TINNED COPPER CONDUCTOR IN STANDARD GROUND TRENCH, SEE E-502 FOR DETAILS
- #2 AWG BARE SOLID TINNED COPPER CONDUCTOR IN ENHANCED GROUND TRENCH, SEE E-502 FOR DETAILS

GENERAL NOTES: (THIS SHEET)

1. GROUNDING SYSTEM & CONDUCTORS SHALL BE TESTED BY CONTRACTOR AND RESULTS PROVIDED TO ENGINEER PRIOR TO BACKFILLING. SYSTEM SHALL PROVIDE 3 OHM OR LESS RESISTANCE UPON COMPLETION.
2. ALL NON-INSULATED GROUND LEADS EXTENDING ABOVE GROUND LEVEL SHALL BE ENCASED IN 1/2" PVC & SEALED WITH SILICONE.
3. GROUND RINGS & TOP OF RODS SHALL BE INSTALLED AT 30" BELOW FINISHED GRADE. (SEE DETAIL A/E-501)
4. INSTALL 18"X18" COPPER PLATES IN LIEU OF GROUND RODS WHEN INSTALLING OVER TOWER FOUNDATION OR WHERE DRIVING GROUND RODS IS NOT FEASIBLE. REFER TO GEOTECH REPORT FOR SOIL CONDITIONS.
5. ALL MECHANICAL GROUND CONNECTIONS TO UTILIZE 2-HOLE LUGS AND STAINLESS-STEEL HARDWARE. PROVIDE ANTI-OXIDANT COMPOUND BETWEEN LUG & CONNECTION POINT. USE COPPER ANTI-OXIDANT FOR COPPER-TO-COPPER CONNECTIONS. SELF-TAPPING SCREWS ARE NOT ALLOWED.
6. ALL ABOVE GRADE CADWELD CONNECTIONS (TO GALVANIZED ITEMS) SHALL BE SPRAYED WITH COLD GALVANIZING COMPOUND TO PREVENT CORROSION.

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

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ISSUED FOR: PS&E

Drawing Title: **MAIN TOWER GROUNDING PLAN**

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No. **E-101**

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE: NOT TO SCALE	SHEET 106	E

FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\E-101.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.

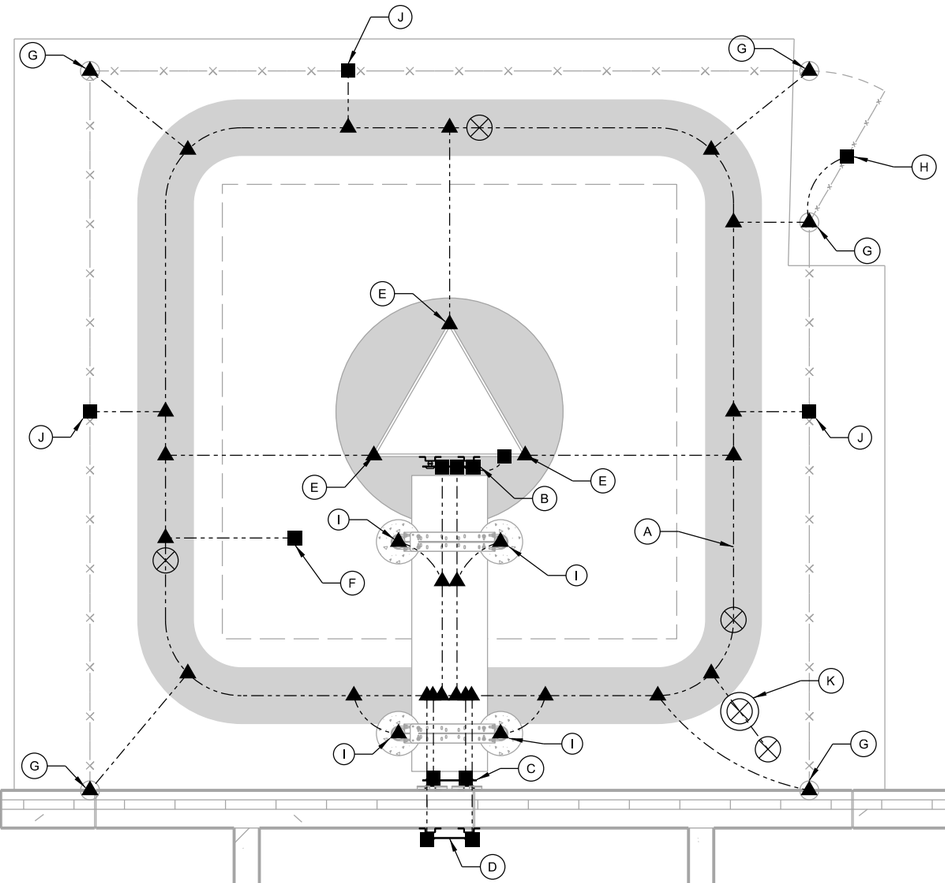
KEYNOTES: (THIS SHEET)

A.	TOWER GROUND RING, MAINTAIN 2' SEPARATION FROM TOWER FOUNDATION
B.	TOWER GROUND BAR, (2) LEADS TO TOWER GROUND RING & (1) TO TOWER STEEL; SEE DETAIL D/E-501
C.	EXTERIOR BUILDING GROUND BAR, (2) LEADS TO TOWER GROUND RING; SEE DETAIL F/E-502
D.	INTERIOR BUILDING GROUND BAR (MGB), (2) LEADS TO TOWER GROUND RING; SEE DETAIL F/E-502
E.	TOWER STEEL GROUND, (1) PER LEG REQ'D. EXOTHERMIC WELD TO LEG GROUND TAB; SEE E-501 FOR DETAILS
F.	TOWER FOUNDATION GROUND; SEE E-502 FOR DETAILS
G.	FENCE CORNER POST GROUND; SEE E-502 FOR DETAILS
H.	FENCE GATE GROUND; SEE E-502 FOR DETAILS
I.	ICE BRIDGE/UTILITY POST GROUND; SEE E-501 FOR DETAILS
J.	FENCE FABRIC & DETERRENT WIRING BONDING; SEE E-502 FOR DETAILS
K.	GROUND TEST WELL; SEE DETAIL C/E-502 FOR DETAILS

NORTH

GROUNDING LEGEND: (THIS SHEET)

- GROUND TEST WELL, SEE E-502 FOR DETAILS
- COPPER CLAD GROUND ROD, (5/8" DIA. x 10' LONG) SPACE @ 2X GOUND ROD LENGTH (20' O.C. MAX., 6' MIN.)
- COPPER PLATE, (18" x 18" x 0.032" THK) SPACE @ 2X GOUND ROD LENGTH (20' O.C. MAX., 6' MIN.)
- EXOTHERMIC OR UL RATED IRREVERSIBLE CONNECTION (CADWELD OR HYGROUND)
- MECHANICAL CONNECTION (BURNDY 2-HOLE LUG OR APPROVED EQUAL)
- #2 AWG BARE SOLID TINNED COPPER CONDUCTOR IN STANDARD GROUND TRENCH, SEE E-502 FOR DETAILS
- #2 AWG BARE SOLID TINNED COPPER CONDUCTOR IN ENHANCED GROUND TRENCH, SEE E-502 FOR DETAILS



GENERAL NOTES: (THIS SHEET)

1. GROUNDING SYSTEM & CONDUCTORS SHALL BE TESTED BY CONTRACTOR AND RESULTS PROVIDED TO ENGINEER PRIOR TO BACKFILLING. SYSTEM SHALL PROVIDE 3 OHM OR LESS RESISTANCE UPON COMPLETION.
2. ALL NON-INSULATED GROUND LEADS EXTENDING ABOVE GROUND LEVEL SHALL BE ENCASED IN 1/2" PVC & SEALED WITH SILICONE.
3. GROUND RINGS & TOP OF RODS SHALL BE INSTALLED AT 30" BELOW FINISHED GRADE. (SEE DETAIL A/E-501)
4. INSTALL 18"X18" COPPER PLATES IN LIEU OF GROUND RODS WHEN INSTALLING OVER TOWER FOUNDATION OR WHERE DRIVING GROUND RODS IS NOT FEASIBLE. REFER TO GEOTECH REPORT FOR SOIL CONDITIONS.
5. ALL MECHANICAL GROUND CONNECTIONS TO UTILIZE 2-HOLE LUGS AND STAINLESS-STEEL HARDWARE. PROVIDE ANTI-OXIDANT COMPOUND BETWEEN LUG & CONNECTION POINT. USE COPPER ANTI-OXIDANT FOR COPPER-TO-COPPER CONNECTIONS. SELF-TAPPING SCREWS ARE NOT ALLOWED.
6. ALL ABOVE GRADE CADWELD CONNECTIONS (TO GALVANIZED ITEMS) SHALL BE SPRAYED WITH COLD GALVANIZING COMPOUND TO PREVENT CORROSION.

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

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ISSUED FOR: PS&E

Drawing Title:
AUXILIARY TOWER GROUNDING PLAN

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.
E-102

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE: NOT TO SCALE	SHEET 107	E

FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\E-102.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.

2

(#) KEYNOTES: (THIS SHEET)

A. EQUIPMENT SHELTER

B. 400A 120/240V 1P SECONDARY ELECTRIC SERVICE TO UTILITY RACK. (2) CONDUIT RIGID NON-METALLIC 4-INCH INSTALLED BY CONTRACTOR; COORDINATE INSTALLATION REQUIREMENTS WITH UTILITY PROVIDER (SPV.0060.203)

C. MULTI-ELECTRIC METER UTILITY RACK INSTALLED BY CONTRACTOR; SEE E-505 FOR DETAILS (SPV.0060.203)

D. 200A 120/240V 1P ELECTRIC SERVICE TO EQUIPMENT BUILDING; (1) CONDUIT RIGID NON-METALLIC 2-INCH SCH40 (SPV.0060.203)

E. 50kW GENERATOR ON CONCRETE SUPPORT SLAB; SEE E-105 & C-504 FOR DETAILS (SPV.0060.202)

F. GENERATOR AC ELECTRIC; (1) CONDUIT RIGID NON-METALLIC 2-INCH (SPV.0060.202)

G. GENERATOR CONTROL & ALARM; (1) CONDUIT RIGID NON-METALLIC 1-INCH (SPV.0060.202)

H. GENERATOR LOAD CENTER; (1) CONDUIT RIGID NON-METALLIC 1-INCH (SPV.0060.202)

I. 1,000 GAL. LP TANK, SEE C-504 FOR DETAILS (SPV.0060.202)

J. LP FUEL LINE, SEE E-505 FOR DETAILS (SPV.0060.202)

K. REMOTE LP FUEL TANK LEVEL MONITOR CONDUIT; (1) CONDUIT RIGID NON-METALLIC 1-INCH (SPV.0060.202)

L. STUB ALL CONDUITS ON OUTSIDE OF CONCRETE FOUNDATION. ALL OUTSIDE BUILDING PENETRATIONS TO BE WEATHERPROOF LB, SEE E-503 FOR DETAILS

M. UTILITY SETBACK / CLEARANCES.
3' AROUND GENERATOR.
10' LP TANK TO BLDG

N. V02
COMMUNICATION VAULT TYPE 1 (673.0105)

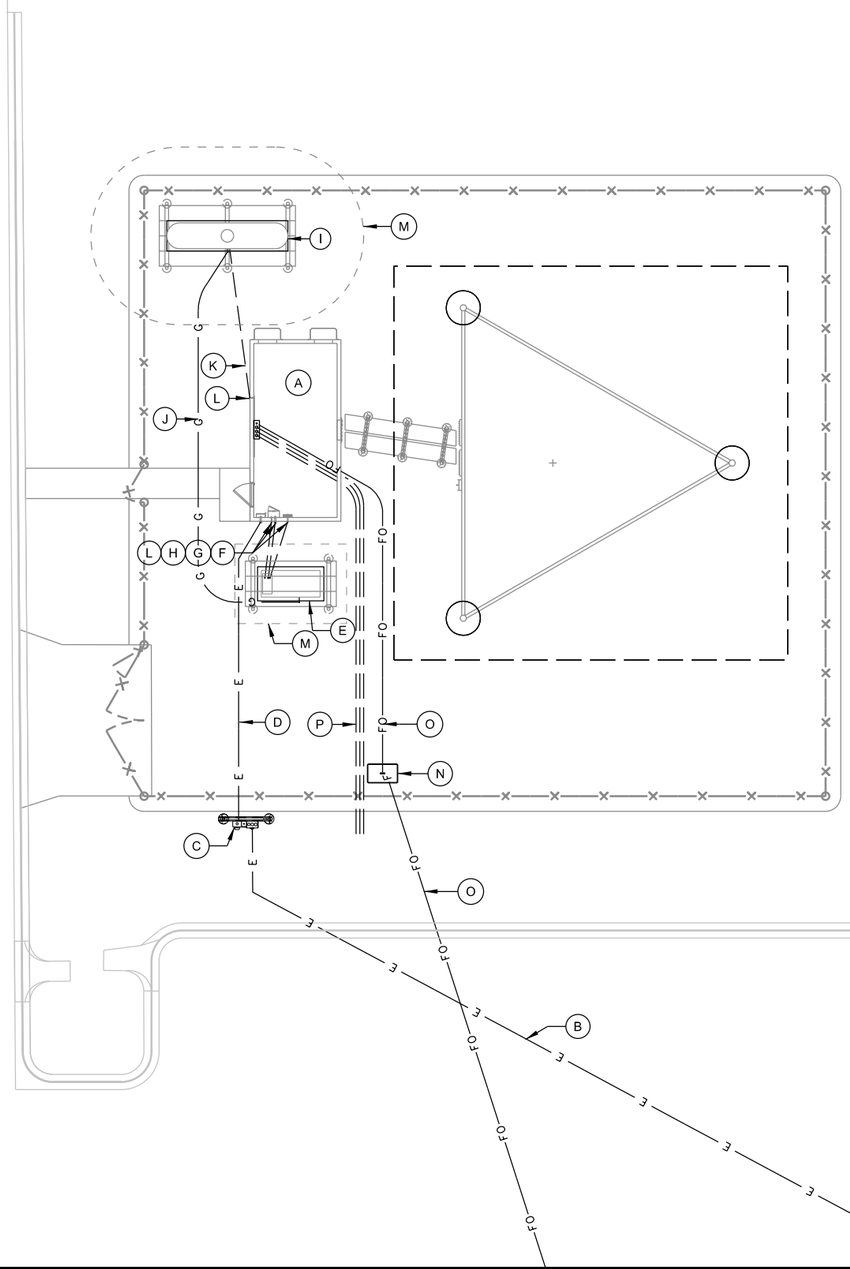
O. (1) CONDUIT RIGID NON-METALLIC SCH 40 2-INCH (652.0225); (1) FIBER OPTIC CABLE (SPV.0090.03) TO V02 THEN TO SWEF BUILDING

P. (3) CONDUITS RIGID NON-METALLIC SCH 40 4-INCH (652.0240) TO SWEF BUILDING

GENERAL NOTES: (THIS SHEET)

1. CONTRACTOR SHALL FIELD VERIFY DEPTHS, LOCATIONS, & SIZES OF ALL EXISTING UTILITIES.
2. ALL UTILITIES SHALL BE INSTALLED ACCORDING TO STATE AND LOCAL REQUIREMENTS.
3. ALL ELECTRICAL WORK SHALL CONFORM TO NATIONAL, STATE, AND LOCAL CODES.
4. ALL UNDERGROUND TRENCHING, PIPE AND CONDUIT INSTALLATION TO BE COMPLETED PRIOR TO FINAL SUBGRADE COMPACTION AND AGGREGATE INSTALLATION.
5. ALL CONDUCTORS TO BE COPPER.
6. ALL UNDERGROUND ELECTRICAL & TELCO CONDUITS TO BE SCH. 80 PVC UNLESS OTHERWISE REQUIRED BY THE UTILITY PROVIDER.
7. ALL OUTDOOR ABOVE GRADE EXPOSED ELECTRICAL CONDUIT RUNS TO BE RIGID GALVANIZED STEEL (RGS). ALL BELOW GRADE CONDUIT STUB UPS TO BE SCH 80 PVC WITH SLIP JOINT.
8. REFERENCE MANUFACTURER AND CATALOG NUMBERS ARE USED FOR QUALITY AND PERFORMANCE ONLY. EQUIPMENT MFR. BY OTHERS ARE EQUALLY ACCEPTABLE PROVIDED THEY MEET OR EXCEED THE SPEC.
9. PROVIDE AND INSTALL ALL NECESSARY WIRING AND CONDUITS FROM EXTERIOR ELECTRICAL ITEMS TO DISTRIBUTION PANEL WITHIN EQUIPMENT BUILDING.
10. ALL CONDUIT STUBS IN BUILDINGS & PULL BOXES TO BE IDENTIFIED AND LABELED.
11. PROVIDE PULL STRINGS IN ALL CONDUITS.
12. ALL INDOOR EXPOSED CONDUIT TO BE METALLIC (EMT OR RGS). COMPRESSION FITTINGS ARE REQUIRED FOR EMT CONDUITS.
13. SEE E-503 FOR CONDUIT INSTALLATION REQUIREMENTS.

NORTH



10' 0 10' 20'
SCALE: 11" x 17" - 1" = 20'
22" x 34" - 1" = 10'

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

Issued / Revised
ISSUED FOR: PS&E

Drawing Title:
MAIN TOWER UTILITY PLAN

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.
E-103

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 108	E

2

(#) KEYNOTES: (THIS SHEET)

A. MASTER GROUND BAR

B. EXTERIOR GROUND BAR

C. COAXIAL SURGE ARRESTOR TRAPEZE

D. #2 STRANDED INSULATED HALO MOUNTED ON NON-CONDUCTIVE STAND-OFFS 3-INCHES FROM WALL AND 6-INCHES BELOW CEILING

E. SERVICE ENTRANCE GROUNDING ELECTRODE CONDUCTOR TO MGB (SEE DETAIL D/E503)

F. #2 STRANDED INSULATED RACK GROUNDS (1) INDEPENDENT LEAD PER RACK BACK TO MGB

G. #2 STRANDED INSULATED CABLE TRAY SYSTEM GROUND; (1) REQUIRED

H. #6 STRANDED INSULATED CABLE TRAY SECTION GROUNDS

I. #6 STRANDED INSULATED METAL DEVICE/ BOX BONDS

J. #2 STRANDED INSULATED COAXIAL SURGE ARRESTOR TRAPEZE GROUND

K. #6 OR LARGER STRANDED INSULATED DOOR FRAME GROUND

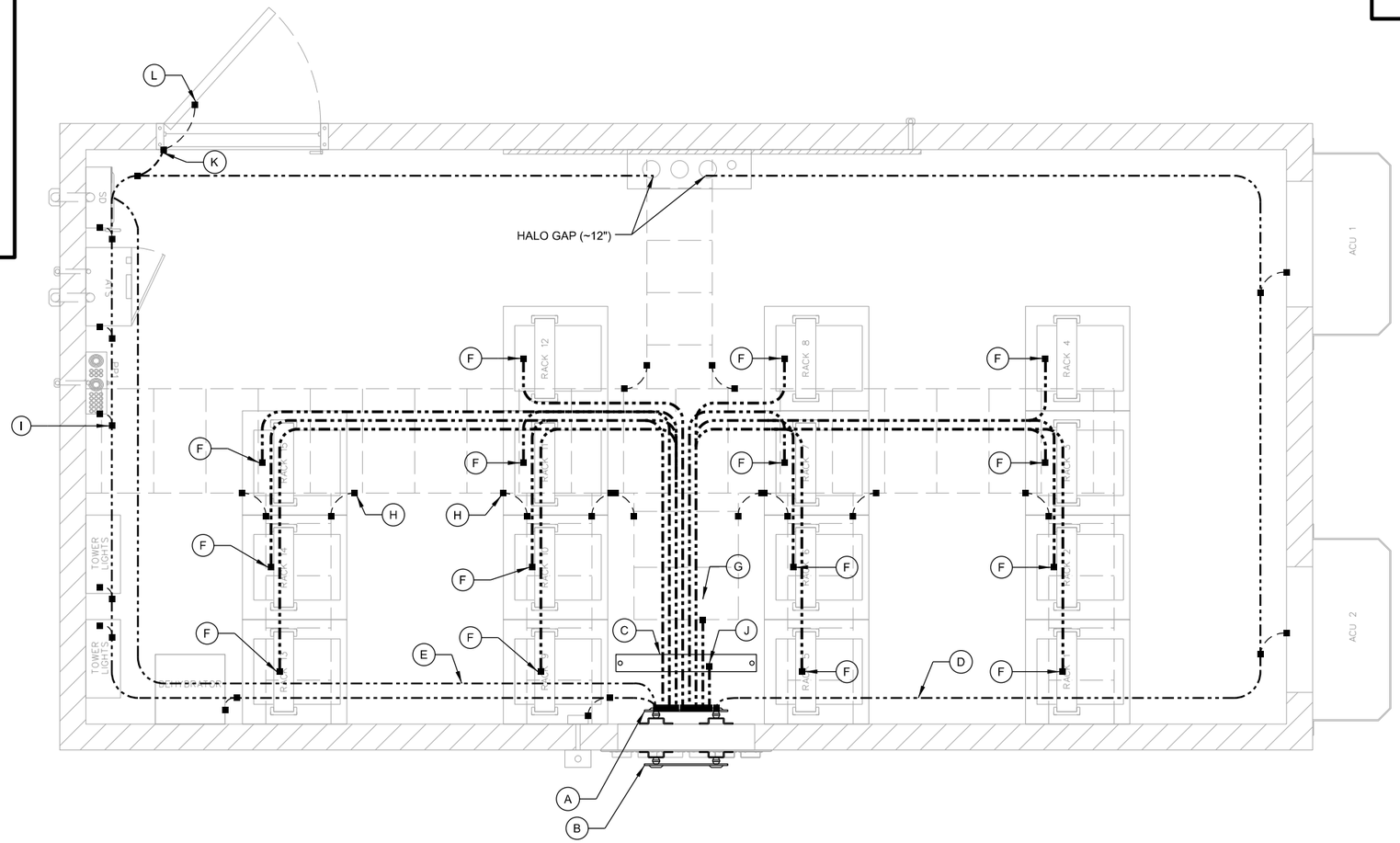
L. #6 OR LARGER STRANDED OR SHORT BRAIDED INSULATED DOOR PANEL GROUND (HINGE SIDE)

GENERAL NOTES: (THIS SHEET)

1. ALL MECHANICAL GROUND CONNECTIONS TO UTILIZE 2-HOLE LUGS AND STAINLESS-STEEL HARDWARE. SCRAPE PAINT FROM BOXES AND DEVICES BEING CONNECTED TO AS TO MAINTAIN GOOD ELECTRICAL CONDUCTIVITY. PROVIDE ANTI-OXIDANT COMPOUND BETWEEN LUG & CONNECTION POINT. USE COPPER ANTI-OXIDANT FOR COPPER-TO-COPPER CONNECTIONS. SELF-TAPPING SCREWS ARE NOT ALLOWED.
2. ALL METALLIC CONDUITS AND BOXES TO BE GROUND BONDED TO HALO.

GROUNDING LEGEND: (THIS SHEET)

- ▲ EXOTHERMIC OR UL RATED IRREVERSIBLE CONNECTION (CADWELD OR HYGROUND)
- ■ MECHANICAL CONNECTION (BURNDY 2-HOLE LUG OR APPROVED EQUAL)
- #2 AWG STRANDED INSULATED COPPER CONDUCTOR
- #6 AWG STRANDED INSULATED COPPER CONDUCTOR



A SHELTER GROUNDING PLAN
SCALE: 11" x 17" - 3/8" = 1'-0"
22" x 34" - 3/4" = 1'-0"

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

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ISSUED FOR: PS&E

Drawing Title:

SHELTER GROUNDING PLAN

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.
E-104

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 109	E

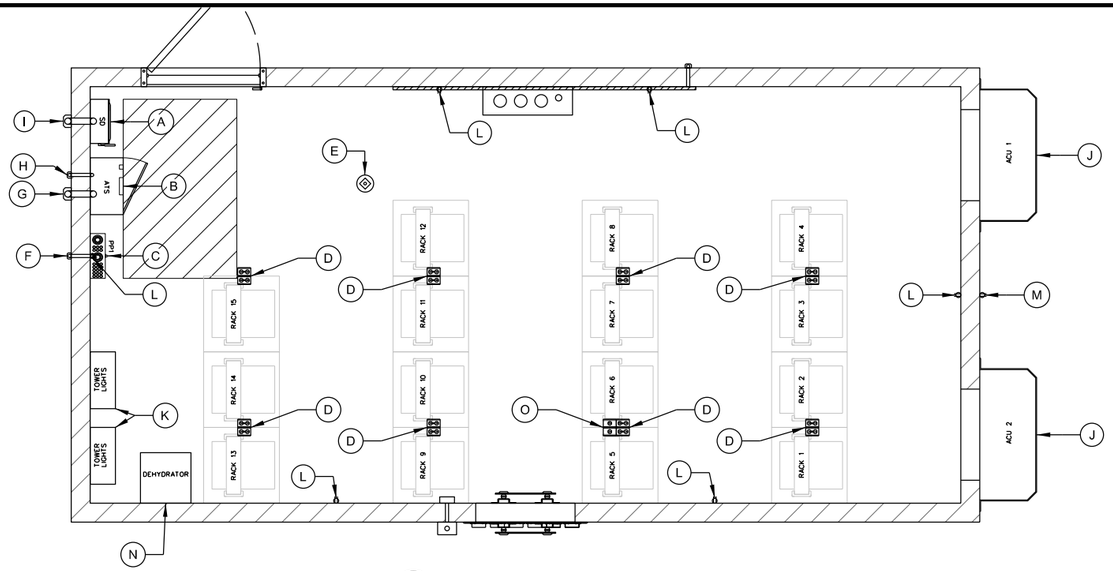
FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\E-104.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.

(#) KEYNOTES: (THIS SHEET)

- A. SERVICE DISCONNECT
- B. AUTOMATIC TRANSFER SWITCH (ATS) (200A)
- C. DISTRIBUTION PANEL (PP1)
- D. RACK RECEPTACLES. CEILING MOUNTED BETWEEN RACKS (2) 20A DUPLEX RECEPTACLESIN QUAD BOX; SEPARATE CIRCUIT PER QUAD BOX
- E. SMOKE ALARM
- F. GENERATOR CONVENIENCE OUTLET
- G. GENERATOR A/C POWER FEED
- H. GENERATOR CONTROL WIRING FEED
- I. ELECTRIC UTILITY SERVICE FEED
- J. HVAC UNIT
- K. TOWER LIGHTS
- L. INTERIOR CONVENIENCE OUTLET
- M. EXTERIOR CONVENIENCE OUTLET
- N. DEHYDRATOR
- O. CHARGER RECEPTACLES (2 REQUIRED); CEILING MOUNTED BETWEEN RACKS 5 & 6; (2) 20A-120V SINGLE RECEPTACLES IN 1 GANG BOX

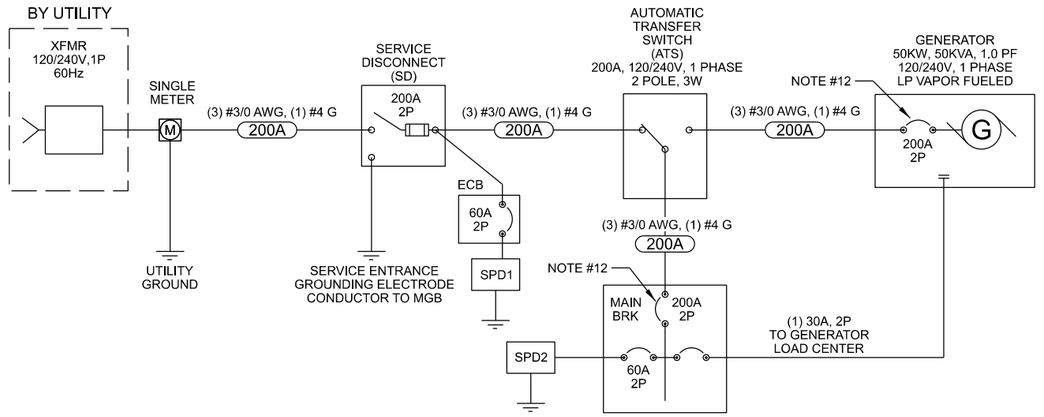
GENERAL NOTES: (THIS SHEET)

1. ALL ELECTRICAL WORK SHALL CONFORM TO CURRENT NATIONAL, STATE AND LOCAL CODES.
2. ALL WIRE AND CONDUIT SIZES SPECIFIED ARE MINIMUMS. LARGER SIZES MAY BE REQUIRED BY CODE. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND CODE REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
3. ALL CONDUCTORS SHALL BE COPPER.
4. ALL INDOOR RACEWAY TO BE EMT OR RGS. EMT INSTALLATIONS SHALL UTILIZE COMPRESSION FITTINGS.
5. CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY WIRING AND CONDUITS FROM ELECTRICAL DEVICES REQUIRED ON PROJECT TO THE DISTRIBUTION PANELS.
6. ALL ELECTRICAL WORK SHALL BE COMPLETED UNDER THE DIRECT SUPERVISION OF A LICENSED MASTER ELECTRICIAN.
7. CONTRACTOR SHALL PERFORM AN INSPECTION OF THE EXISTING ELECTRICAL EQUIPMENT AND INSTALLATION WITHIN THE PRE-MANUFACTURED BUILDING PROVIDED BY THE OWNER FOR CONFORMANCE WITH STATE AND LOCAL ELECTRICAL CODE. ELECTRICAL CONTRACTOR SHALL NOTIFY ENGINEER OF ANY NON-CONFORMING ITEMS.
8. E.C. TO COORDINATE THE SERVICE INSTALLATION, SCHEDULING, METER BASE INSTALLATION, INSPECTION, ETC. WITH THE UTILITY PROVIDER.
9. ALL ELECTRICAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND ALL OTHER DRAWINGS RELATED TO THE PERFORMANCE OF THE WORK.
10. THE CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THIS WORK SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT SPECIFICATIONS BEFORE COMMENCING ANY WORK. THE PROJECT SPECIFICATIONS AND DRAWINGS FORM THE BASIS OF THE CONTRACT REQUIREMENTS AND INCLUDE THE TYPE AND GRADE OF MATERIALS TO BE INSTALLED, EQUIPMENT TO BE FURNISHED, THE MANNER BY WHICH TO BE INSTALLED AND WHERE TO BE LOCATED. IN THE EVENT OF A CONFLICT BETWEEN THE PROJECT SPECIFICATIONS AND DRAWINGS, SPECIFICATIONS GOVERN UNLESS THE ARCHITECT/ENGINEER DIRECTS OTHERWISE.
11. EQUIPMENT LABELS AND INSTRUCTIONS REGARDING THE APPLICATION AND INSTALLATION OF THE LISTED EQUIPMENT SHALL BE FOLLOWED TO INSURE THAT THE EQUIPMENT IS BEING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LISTING INSTRUCTIONS. THE TEMPERATURE RATING OF THE EQUIPMENT TERMINATIONS MUST BE CAREFULLY CORRELATED WITH THE CONDUCTOR AMPACITY TO PREVENT OVERHEATING AND PREMATURE FAILURE.
12. CONTRACTOR TO SELECTIVELY COORDINATE OVER-CURRENT PROTECTION OF MAIN BREAKERS IN PANELS, DISCONNECTS AND GENERATORS WITH BRANCH PANEL CIRCUIT BREAKERS.
13. CONDUIT RUNS SHOWN ON DRAWINGS ARE DIAGRAMMATIC.
14. FURNISH AND INSTALL EQUIPMENT DISCONNECT SWITCHES IN STRICT COMPLIANCE WITH CODE REQUIREMENTS.

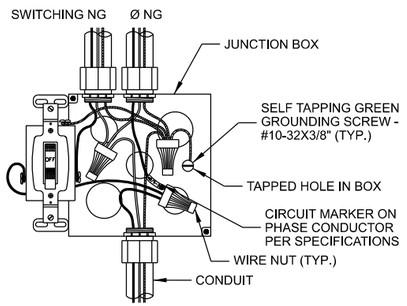


A SHELTER ELECTRICAL PLAN

SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"

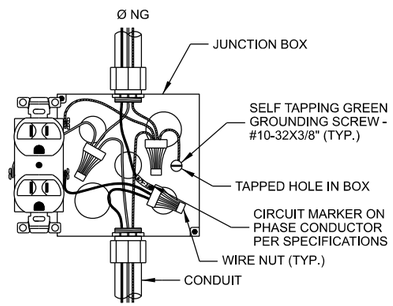


B ELECTRICAL ONE LINE DIAGRAM



NOTES:

1. PROVIDE A SEPARATE NEUTRAL FOR EACH CIRCUIT.
2. WIRING DEVICES SHALL NOT BE USED FOR SPLICING. USE A PIGTAIL TO CONNECT EACH DEVICE AS SHOWN.
3. GREEN GROUND CONDUCTOR SHALL BE CONTINUOUS SO THAT REMOVAL OF DEVICE WILL NOT INTERFERE WITH GROUND CONTINUITY.



C TYPICAL SWITCH - RECEPTACLE WIRING DETAIL

PANELBOARD SCHEDULE

PANEL ID: PP1	VOLTAGE: 240/120	AIC RATING: 10kA	BUS AMPS: 200A
PHASE/WIRE: 1P, 3W	TYPE:	MOUNT: SURFACE	MAIN CB AMPS: 200A
REMARKS:			

DESCRIPTION	WIRE	POLE	TRIP	CKT#	LOAD A Ø VA	LOAD B Ø VA	CKT#	TRIP	POLE	WIRE	DESCRIPTION
SPD2 * NOTE 1	4	2	60	1	10						
							2	-	-	-	SPARE
	-	-	-	3	10						
							4	-	-	-	SPARE
ACU 1	8	2	30	5	2,760						
						2,760	6	30	2	8	ACU 2
	-	-	-	7	2,760						
						2,760	8	-	-	-	
SMOKE DETECTOR	12	1	20	9	120						
						1,080	10	20	1	12	RECEPT. - INTERIOR
GENERATOR LOAD CENTER	10	2	30	11	500						
						180	12	20	1	12	RECEPT. - EXTERIOR
				13	500						
						280	14	20	1	12	LIGHTS - INT/EMER/DOOR
TOWER LIGHTS	12	1	20	15	150						
						520	16	20	1	12	DEHYDRATOR
RACK RECEPT. (1&2)	12	1	20	17	2,000						
						2,000	18	20	1	12	RACK RECEPT. (3&4)
RACK RECEPT. (5&6)	12	1	20	19	2,000						
						2,000	20	20	1	12	RACK RECEPT. (7&8)
RACK RECEPT. (9&10)	12	1	20	21	2,000						
						2,000	22	20	1	12	RACK RECEPT. (11&12)
RACK RECEPT. (13&14)	12	1	20	23	2,000						
						2,000	24	20	1	12	RACK RECEPT. (15&16)
CHARGER RECEPT.	12	1	20	25	1,000						
						1,000	26	20	1	12	CHARGER RECEPT.
SPARE	-	-	-	27							
							28	-	-	-	SPARE
SPARE	-	-	-	29							
							30	-	-	-	SPARE
SPARE	-	-	-	31							
							32	-	-	-	SPARE
SPARE	-	-	-	33							
							34	-	-	-	SPARE
SPARE	-	-	-	35							
							36	-	-	-	SPARE
SPARE	-	-	-	37							
							38	-	-	-	SPARE
SPARE	-	-	-	39							
							40	-	-	-	SPARE
SPARE	-	-	-	41							
							42	-	-	-	SPARE
					TOTALS						
					15,810	16,580					
					AMPS PER PHASE						
					132	138					
					TOTAL CONNECT, KVA						
					32.39						

*NOTE 1
COORDINATE CB SIZE W/ SPD MANUFACTURER RECOMMENDATION

WRIGHTSTOWN SWEF #34
Communication Towers
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State of Wisconsin
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SHELTER ELECTRICAL PLAN

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.

E-105

(#) KEYNOTES: (THIS SHEET)

A. AIR TERMINAL;
EXTEND 2' ABOVE HIGHEST ANTENNA MIN. ON MAST PIPE
MECHANICALLY FASTEN AIR TERMINAL TO MAST PIPE MAST
PIPE TO BE MECHANICALLY CONNECTED TO TOWER STEEL

B. COAX / WAVEGUIDE TRANSMISSION LINE GROUND KIT;
SEE DETAIL THIS SHEET

C. GROUND KIT JUMPER;
CONNECT TO GROUND BAR WITH 2 HOLE LONG BARREL LUG

D. ANTENNA GROUND BAR (TINNED);
FOR CONNECTION OF MULTIPLE GROUND KITS AT ONE
LEVEL MOUNT TO TOWER STEEL;
INSTALL #2 STRANDED LEAD FROM GROUND BAR TO TOWER
STEEL

E. FOR SINGLE ANTENNAS AT ONE LEVEL OMIT ANTENNA
GROUND BAR CONNECT GROUND KIT JUMPER DIRECTLY TO
TOWER STEEL WITH UL LISTED BONDING CLAMP

F. UL LISTED BONDING CLAMP;
- HARGER BGC41.25-2 PIPE CLAMPS FOR
1-1/4" TO 2" DIA. ROUND MEMBERS
OR
- HARGER #223T HEAVY DUTY TINNED FLANGE
BONDING PLATE
- USE EXTERNAL ANTI-OXIDATION COMPOUND.
- PAINT WITH COLD GALV. COMPOUND AFTER BONDING.

G. TOWER GROUND BAR (TGB) (TINNED);
4" x 18" x¼" - SIZED FOR (30) 2 HOLE GROUND LUGS MOUNT
DIAGONALLY FOR EASIER HOOK-UP OF GROUNDING KIT
LEADS INSTALL ON TOWER WITH INSULATORS AT 12" (ABOVE
ICE BRIDGE)

H. TGB GROUNDS;
#2 BARE SOLID TINNED ENCASED IN CARFLEX CONDUIT
FROM TGB TO TOWER GROUND RING (2) REQ'D AND FROM
TGB TO TOWER STEEL (1) REQ'D;
CONDUIT TO BE SUPPORTED EVERY +/- 30-INCHES TO
GRADE. SUPPORT ALONG TRANSMISSION LADDER WITH
COAX SNAP-IN HANGERS OR ANGLE ADAPTERS CONNECTED
TO TOWER STEEL.

I. TOWER STEEL GROUNDS;
#2 BARE SOLID TINNED ENCASED IN CARFLEX CONDUIT
FROM TOWER STEEL TO TOWER GROUND RING (3) REQ'D.

J. TOWER FOUNDATION GROUND, (1 REQ'D);
SEE E-502 FOR DETAILS

K. SHELTER EXTERIOR GROUND BAR (EGB) (TINNED);
SEE DETAIL THIS SHEET

L. EGB GROUNDS;
#2 BARE SOLID TINNED
SEE DETAIL THIS SHEET & F/E-502.
ENCASE IN CARFLEX CONDUIT FROM EGB TO SHELTER
GROUND RING (2) REQ'D.
CONDUIT TO BE SUPPORTED EVERY +/- 30-INCHES TO
GRADE.

M. SURGE ARRESTOR/POLY PHASER

N. INTERIOR SHELTER GROUND BAR / MASTER GROUND BAR
(MGB);
SEE DETAIL THIS SHEET & F/E-502.

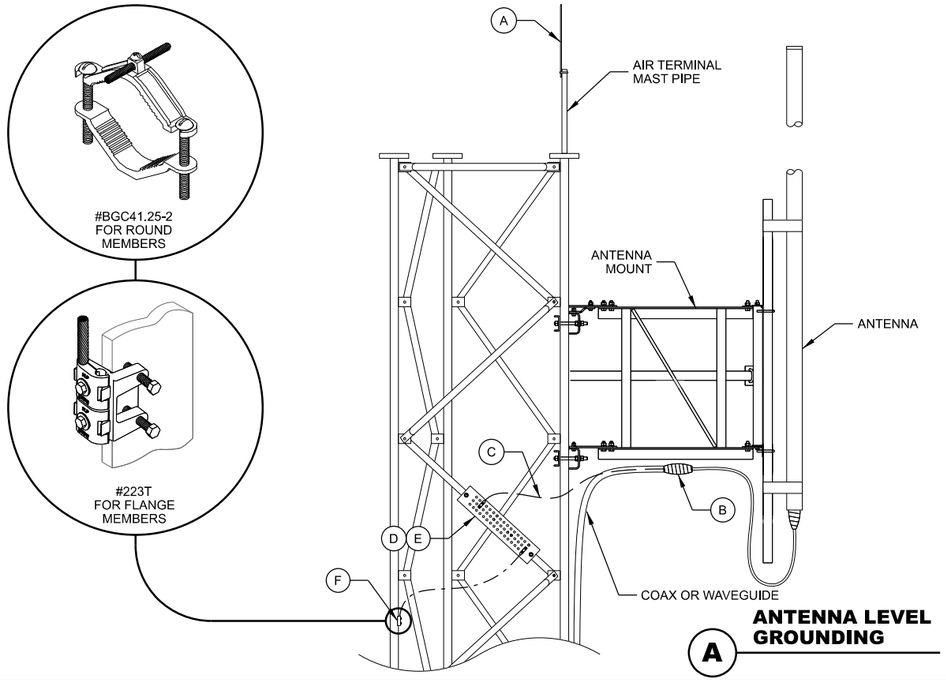
O. #2 BARE SOLID TINNED, ENCASE IN CARFLEX CONDUIT
FROM MGB TO SHELTER GROUND RING (2) REQ'D.;
SEE DETAIL THIS SHEET

P. ICE BRIDGE POST GROUNDS;
#2 BARE SOLID TINNED ENCASE IN CARFLEX CONDUIT TO 24"
BELOW GRADE;
SEE E-502 FOR DETAILS

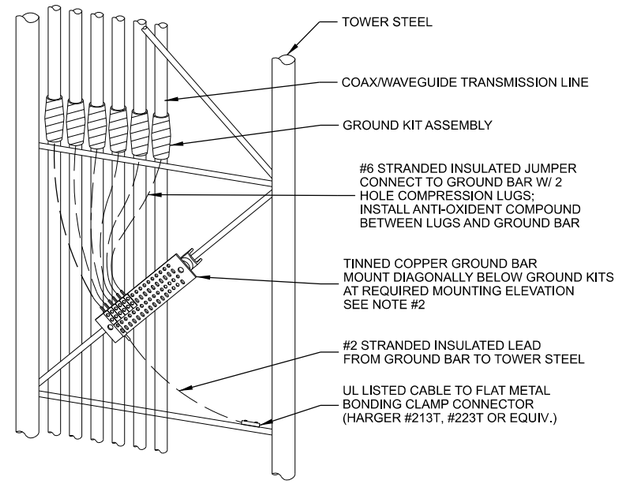
Q. ICE BRIDGE SECTION GROUNDS;
#6 STRANDED INSULATED
2 HOLE LONG BARREL ON EACH END (TYP.)

R. ICE BRIDGE SECTION TO POST GROUNDS;
#6 STRANDED INSULATED
2 HOLE LONG BARREL ON SECTION & CADWELD TO POST
ORIENT LEAD WITH HIGH SIDE TOWARDS TOWER

S. ENTRY PANEL GROUND;
#6 STRANDED INSULTATED
2 HOLE LONG BARREL ON EACH END (TYP.)



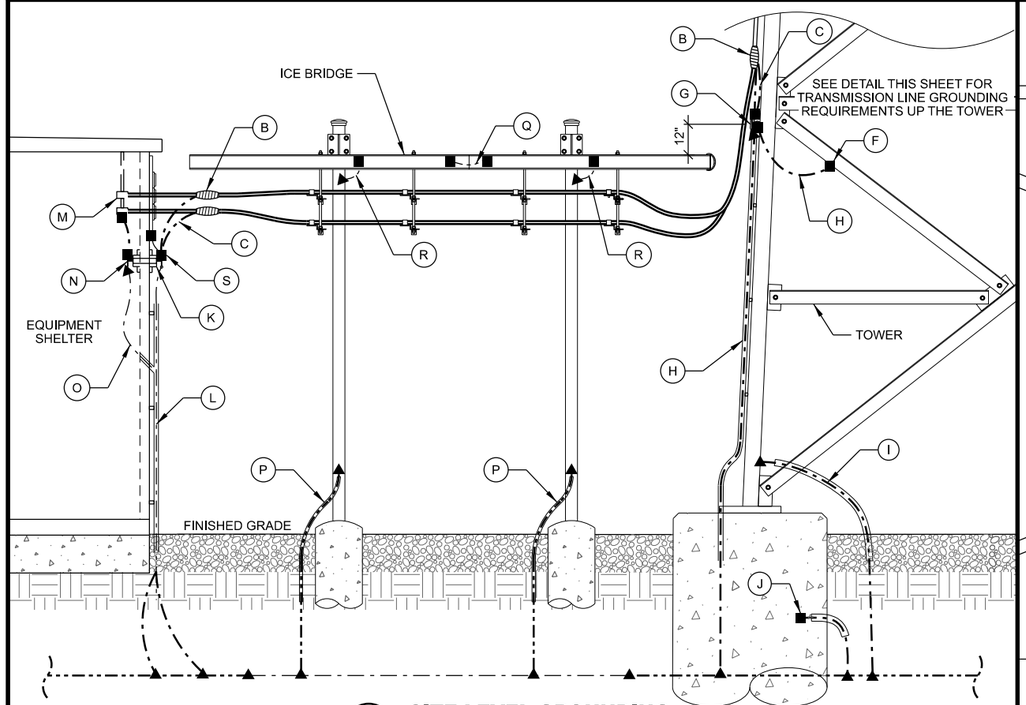
A ANTENNA LEVEL GROUNDING



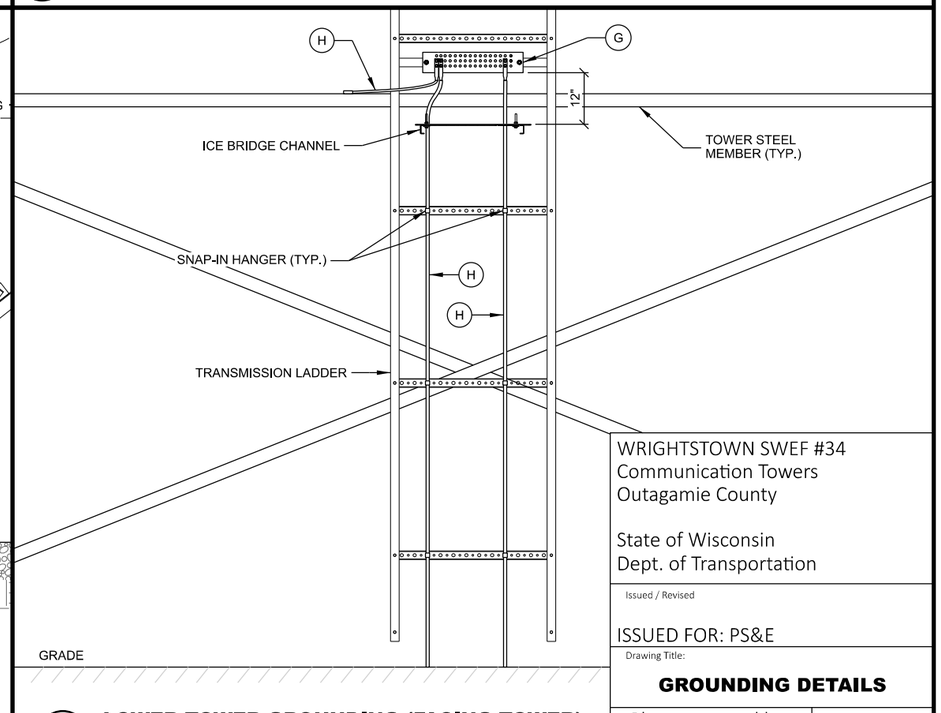
C TRANSMISSION LINE GROUNDING

NOTES:

1. INSTALL GROUND KITS ON EACH TRANSMISSION LINE IN THE FOLLOWING LOCATIONS:
   A. ANTENNA / DISH LEVEL
   B. AT 75 FOOT MAX INTERVALS FROM ANTENNA LEVEL TO BASE OF TOWER
   C. TOWER BASE
   D. EQUIPMENT BUILDING ENTRY
2. INSTALL ANTENNA GROUND BARS AT EACH ANTENNA TIER LEVEL FOR CONNECTION OF MULTIPLE ANTENNAS AT EACH LEVEL. WHEN ONLY ONE ANTENNA IS INSTALLED AT A LEVEL, CONNECT GROUND KIT DIRECTLY TO TOWER STEEL WITH UL LISTED BONDING CLAMP.



B SITE LEVEL GROUNDING



D LOWER TOWER GROUNDING (FACING TOWER)

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

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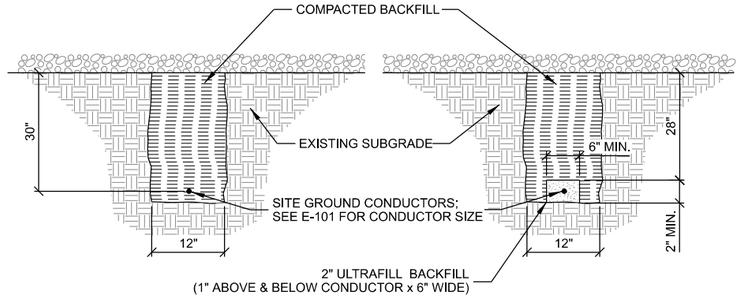
GROUNDING DETAILS

Plans prepared by:
Edge Consulting
Engineers, Inc.

Sheet No.
E-501

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 111	E

FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\E-501.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.

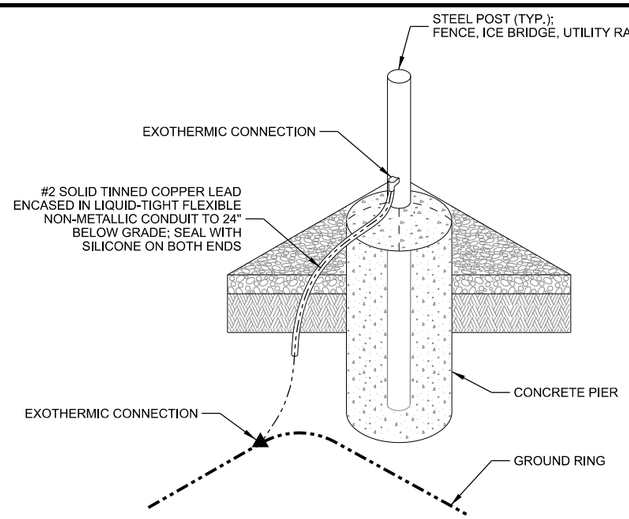


STANDARD GROUND TRENCH ENHANCED GROUND TRENCH

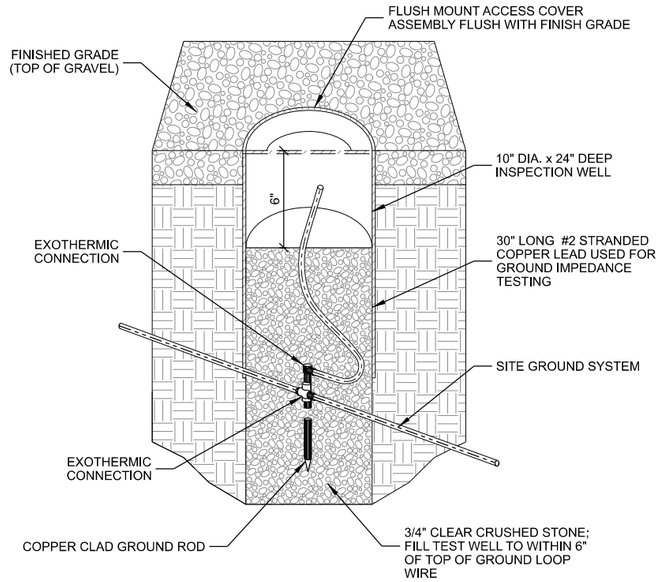
NOTES:

1. GROUNDING TRENCHES TO BE BACK FILLED WITH NATIVE SOIL.
2. COMPACT BACK FILL TO 95% MODIFIED PROCTOR.

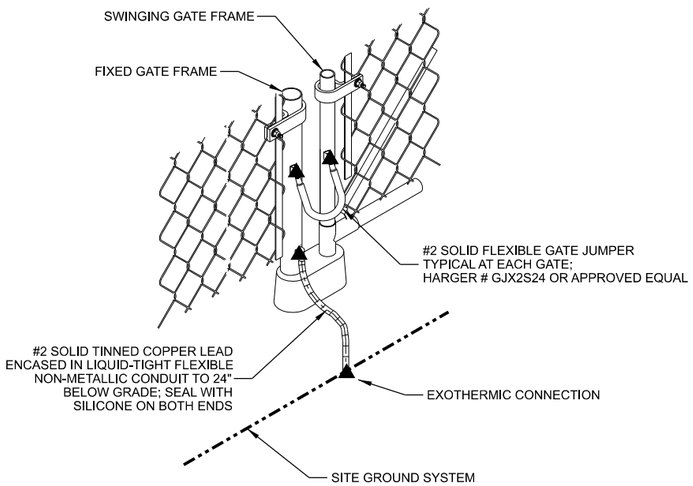
A GROUNDING TRENCH



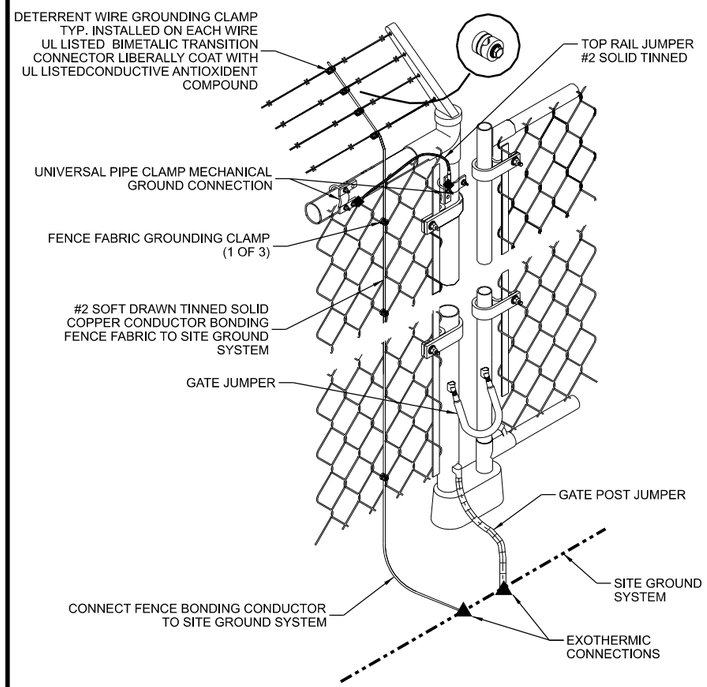
B STEEL POST GROUNDING



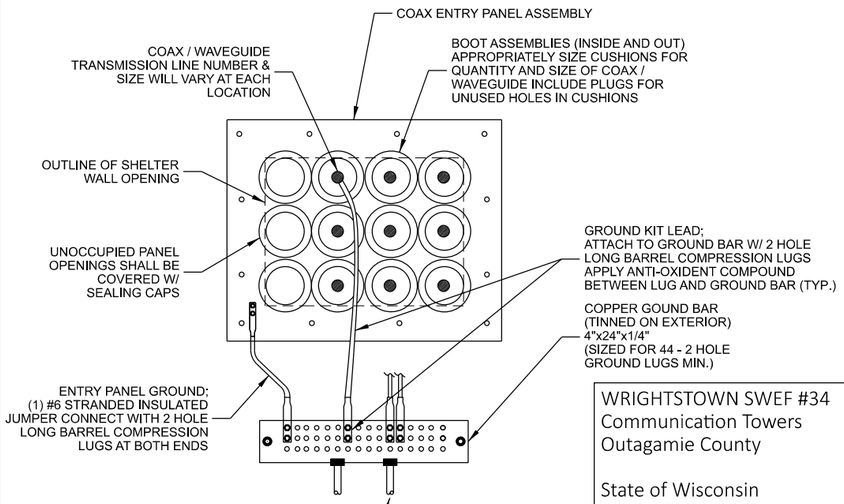
C GROUND TEST WELL



D FENCE GATE GROUNDING



E FENCE FABRIC AND DETERRENT WIRING BONDING



F INTERIOR / EXTERIOR SHELTER GROUND BARS

WRIGHTSTOWN SWEF #34
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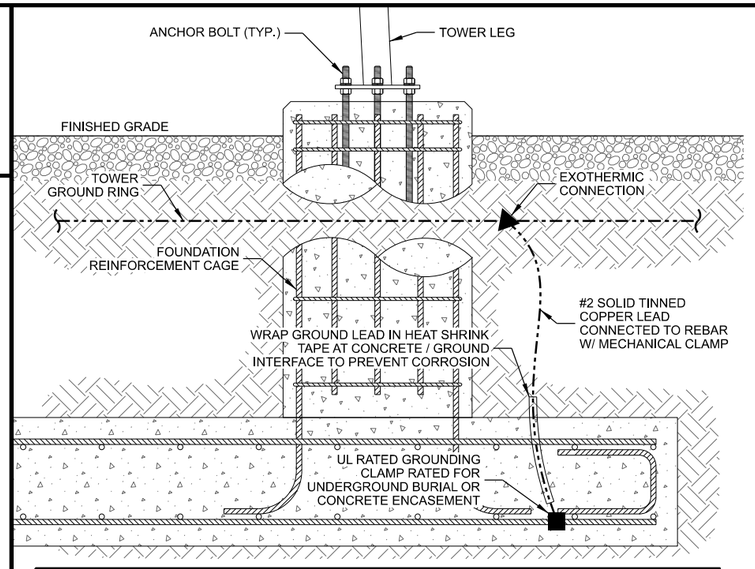
GROUNDING DETAILS

Plans prepared by:
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Sheet No.

E-502

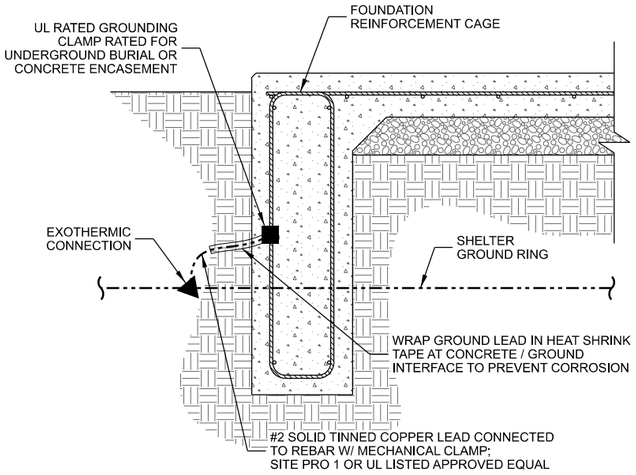
PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 112	E



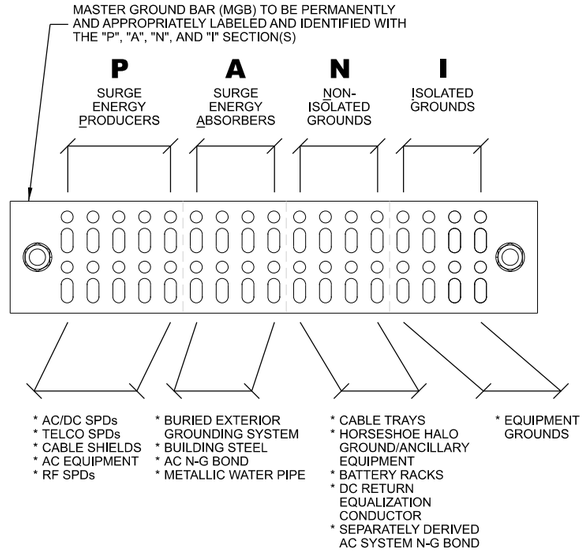
NOTES:

1. FOUNDATION SHOWN IS TYPICAL. SEE TOWER FOUNDATION PLANS FOR REINFORCEMENT DETAILS.
2. FOUNDATION GROUNDING PER NEC 250.52(3)(A). GROUNDING CONNECTIONS TO BE COVERED BY A MINIMUM OF 3" CONCRETE AND BE MADE TO A MIN. 20' CONTINUOUS REBAR.

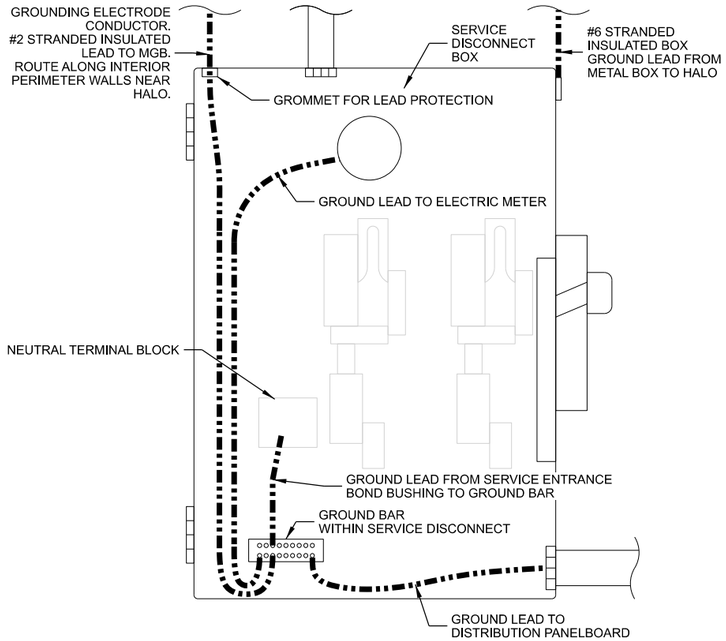
A **TOWER FOUNDATION GROUNDING**



B **SHELTER FOUNDATION GROUNDING**



C **P.A.N.I. SYSTEM ORGANIZATION**



D **SERVICE ENTRANCE GROUNDING ELECTRODE CONDUCTOR**

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WRIGHTSTOWN SWEF #34
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GROUNDING DETAILS

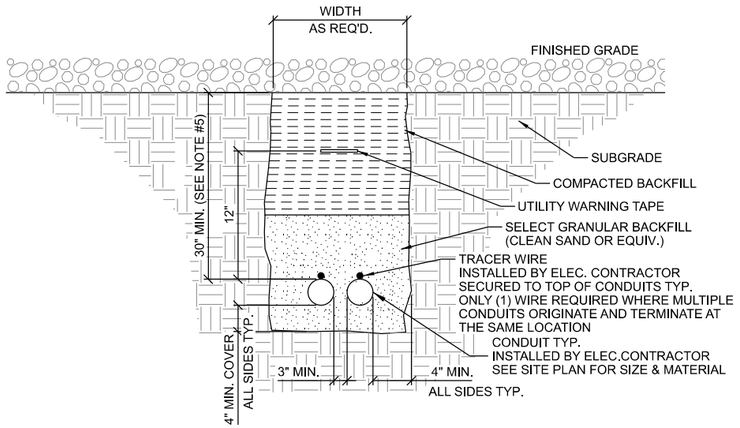
Plans prepared by:
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Sheet No.
E-503

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 113	E

FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\E-503.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.

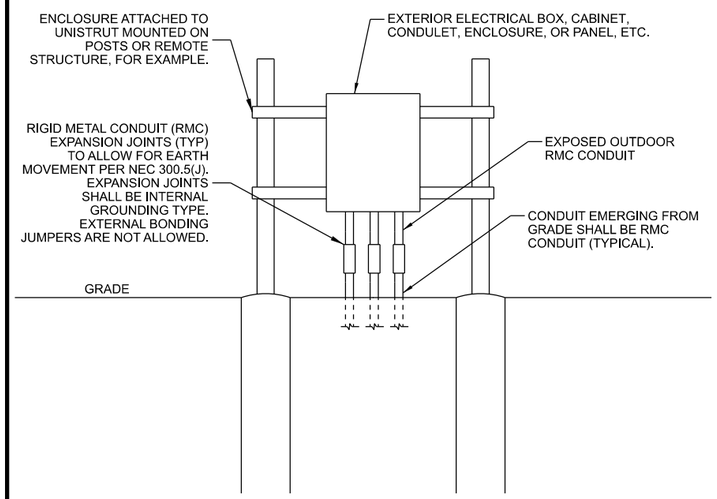
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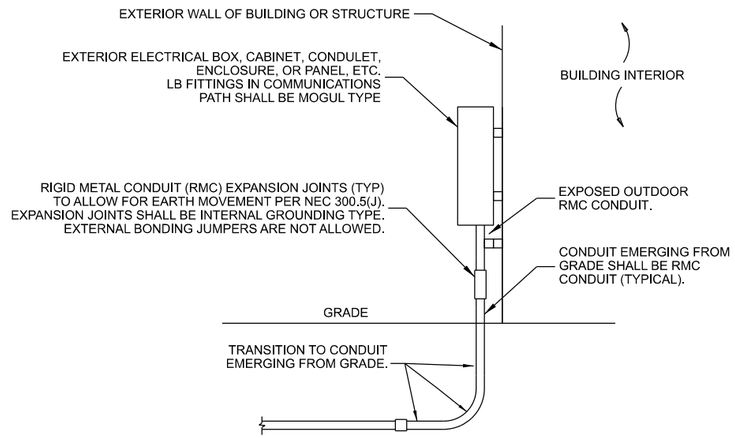
NOTES:

1. ALL CONDUITS TO BE EQUIPPED W/ PULL CORDS & CAPPED FOR FUTURE LINE PULLS. NO DUCT TAPE CAPS ALLOWED
2. WARNING TAPE TO RUN CONTINUOUSLY ALONG THE ENTIRE CONDUIT LENGTH. INSTALL TAPE 12" ABOVE THE TOP OF THE CONDUITS.
3. TRACER WIRE TO BE 14 GA. SOLID COPPER WIRE WITH CORROSION PROTECTIVE COATING. SECURE TO TOP OF CONDUIT AND RUN CONTINUOUSLY ALONG THE ENTIRE LENGTH. EXTEND TO GRADE AT BOTH ENDS AND TERMINATE IN A FLUSH W/ GRADE LOCATABLE TRACER BOX. TRACER BOX SHALL BE "SNAKE PIT" AS MANUFACTURED BY COPPERHEAD INDUSTRIES OR EQUIVALENT.
4. CONTRACTOR TO CHECK CONTINUITY OF TRACER WIRE BEFORE AND AFTER BURIAL.

A **UTILITY TRENCH**

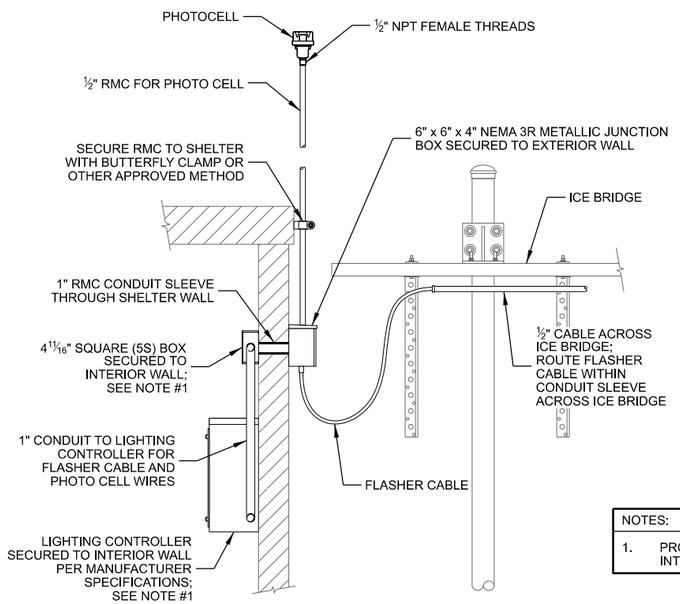


B **CONDUIT STUB-UP**



WALL-MOUNTED ENCLOSURE EXAMPLE

C **CONDUIT STUB-UP AT SHELTER**



NOTES:

1. PROVIDE GROUND BOND FROM LIGHTING CONTROLLER BOX AND INTERIOR JUNCTION BOX TO INTERIOR GROUND HALO SYSTEM.

D **TOWER LIGHTING INSTALLATION**

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WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

Issued / Revised

ISSUED FOR: PS&E

Drawing Title:

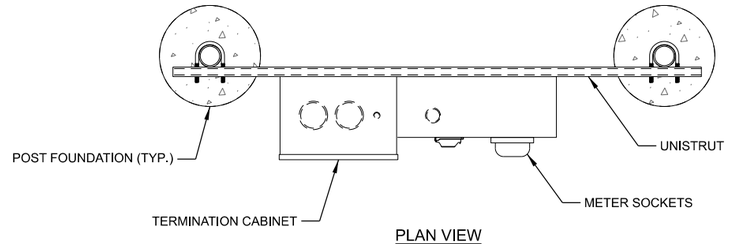
UTILITY DETAILS

Plans prepared by:
Edge Consulting
Engineers, Inc.

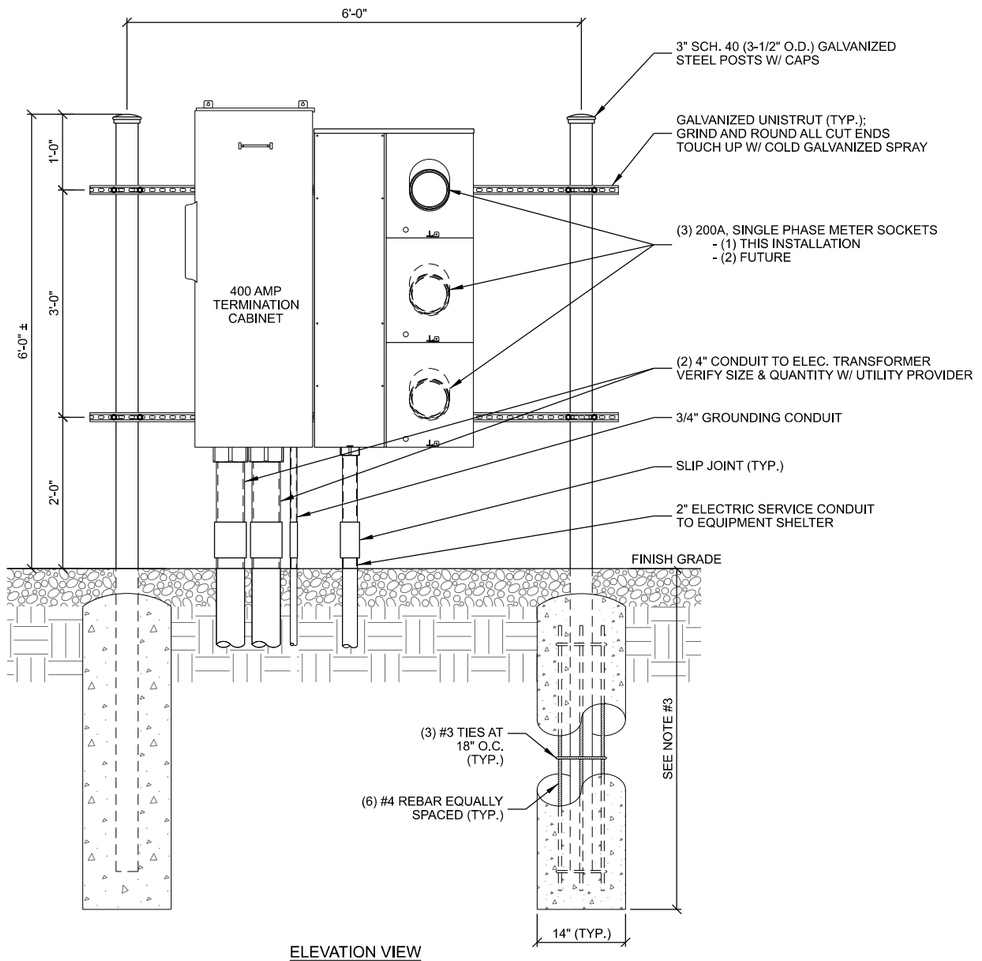
Sheet No.

E-504

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 114	E



PLAN VIEW



ELEVATION VIEW

NOTES:

1. CONCRETE FOR PIER TO BE A MINIMUM OF 4,000 PSI AT 28 DAYS.
2. MAINTAIN 3" MINIMUM REBAR COVER IN ALL DIRECTIONS.
3. PIER FOUNDATION DEPTH TO BE A MINIMUM OF 48"; DEPTH TO EXCEED LOCAL FROST DEPTH.
4. CONFIRM MATERIAL AND INSTALLATION REQUIREMENTS WITH UTILITY PROVIDER PRIOR TO ORDERING MATERIALS AND/OR INSTALLATION.
5. ALL CONDUITS SHALL BE SCH 40 PVC UNLESS OTHERWISE NOTED OR REQUIRED BY UTILITY PROVIDER.
6. CONTRACTOR TO PROVIDE AND INSTALL H-FRAME, TERMINATION CABINET, METERING SOCKETS, CONDUITS AND CONDUCTORS UNLESS OTHERWISE NOTED.

A MULTI-METER UTILITY RACK

SCALE: 11" x 17" - 1/2" = 1'-0"
22" x 34" - 1" = 1'-0"

WRIGHTSTOWN SWEF #34
Communication Towers
Outagamie County

State of Wisconsin
Dept. of Transportation

Issued / Revised

ISSUED FOR: PS&E

Drawing Title:

UTILITY RACK DETAILS

Plans prepared by:
Edge Consulting Engineers, Inc.

Sheet No.

E-505

PROJECT NO: 1130-44-74	HWY: IH-41	COUNTY: OUTAGAMIE	COMMUNICATION TOWERS	SCALE:	SHEET 115	E

FILE NAME : I:\30900\30914\Design\CAD\BD\Plot\E-505.dgn PLOT DATE : 4/29/2024 PLOT BY : EDGE CONSULTING ENGINEERS, INC.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY

WRIGHTSTOWN, WI • STATE PROJECT NUMBER 1130-44-74

PROJECT RENDERING (FOR REFERENCE PURPOSES ONLY)



PERPECTIVE VIEW FROM THE SOUTHWEST

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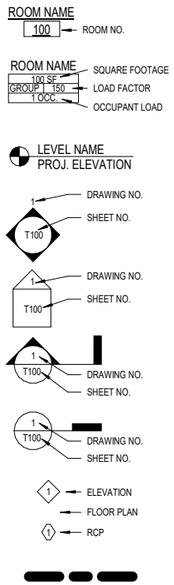
PHOTOVOLTIAC

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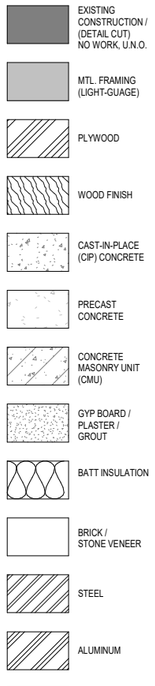
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. T100	

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SYMBOL LEGEND



MATERIAL KEY LEGEND



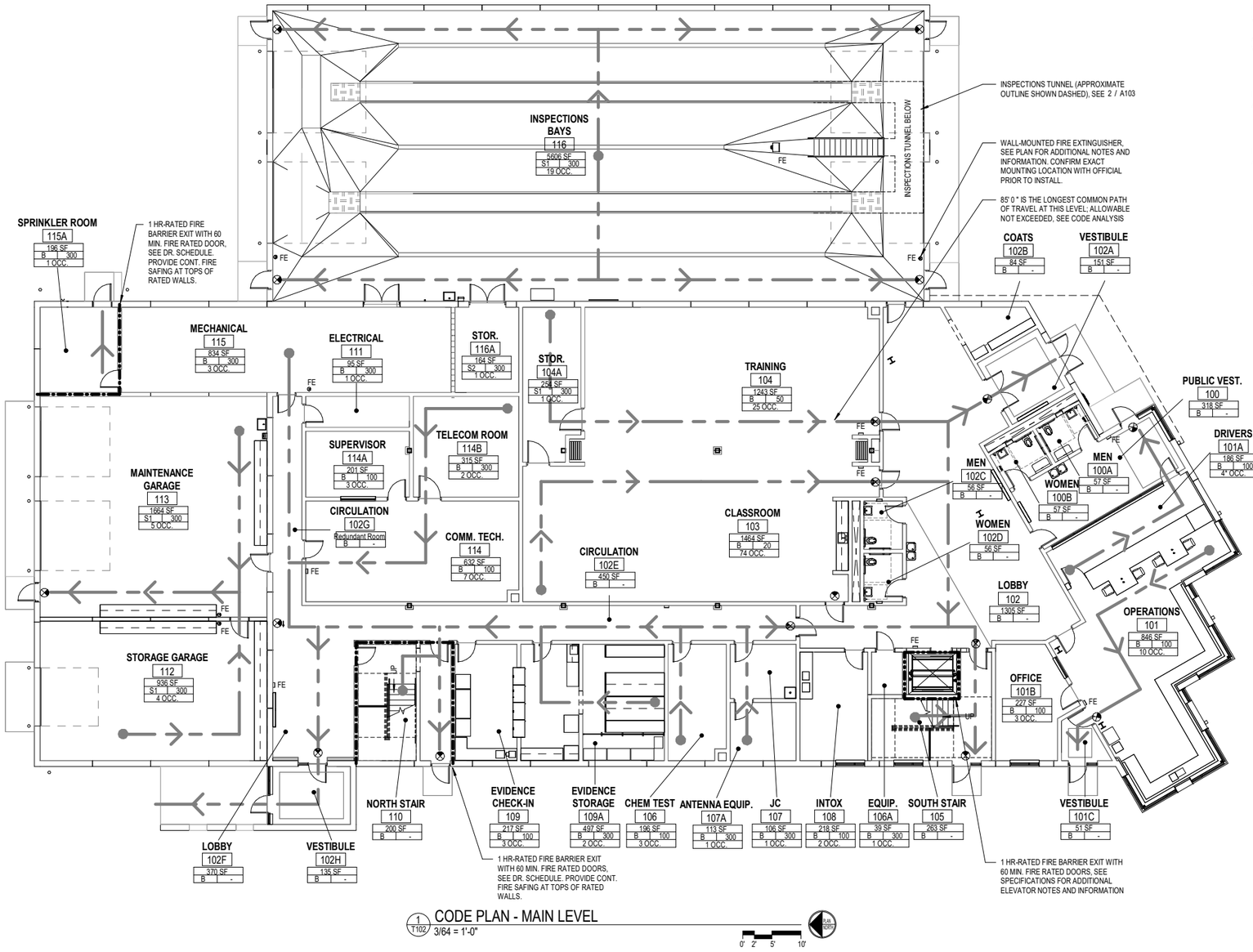
ABBREVIATIONS

ACT	ACOUSTIC CEILING TILE	MAX	MAXIMUM
ADJ	ADJACENT	MECH	MECHANICAL
AFF	ABOVE FINISHED FLOOR	MEP	MECHANICAL, ELECTRICAL, PLUMBING & PROCESS
AHU	AIR HANDLING UNIT		
ALT	ALTERNATE	MPC	METAL PANEL CEILING
ALUM	ALUMINUM	MTL	METAL
AP	ACCESS PANEL	MEZZ	MEZZANINE
APPROX	APPROXIMATE	MFR	MANUFACTURER
ARCH	ARCHITECTURAL	MIN	MINIMUM
		MISC	MISCELLANEOUS
BCMU	BURNISHED CONCRETE MASONRY UNIT	MO	MASONRY OPENING
BD	BOARD	NA	NOT APPLICABLE
BLDG	BUILDING	N.I.C.	NOT IN CONTRACT
BLK	BLOCK	N.T.S.	NOT TO SCALE
BLKG	BLOCKING		
B.O.	BOTTOM OF	OD	OUTSIDE DIAMETER
BRG	BEARING	OFF	OFFICE
		OPNG	OPENING
CAB	CABINET	OH	OVERHEAD
CJ	CONTROL JOINT		
CL	CENTERLINE	P	PAINT
CLG	CEILING	PC	PRECAST
CMU	CONCRETE MASONRY UNIT	PCT	PORCELAIN TILE
CONC	CONCRETE	PDFs	PREDETERMINED FASTENER(S)
CONT	CONTINUOUS	PERF	PERFORATED
CP	CARPET	PLAM	PLASTIC LAMINATE
CPT	CARPET TILE	PLYWD	PLYWOOD
CT	CERAMIC TILE	PREFIN	PREFINISHED
CUH	CABINET UNIT HEATER	PT	PAINT
		PTD	PAPER TOWER DISPENSER
DEMO	DEMOLITION		
DET	DETAIL	QT	QUARRY TILE
DF	DRINKING FOUNTAIN		
DIA	DIAMETER	RAD	RADIUS
DIM	DIMENSION	RAF	RAISED ACCESS FLOOR
DN	DOWN	RB	RESILIENT BASE
DR	DOOR	RCP	REFLECTED CEILING PLAN
DS	DOWN SPOUT	RD	ROOF DRAIN
DW	DISHWASHER	REC	RECESSED
		REF	REFRIGERATOR
EA	EACH	REINF	REINFORCED
EFIS	EXTERIOR FINISH INSULATION SYSTEM	REQD	REQUIRED
		REV	REVERSED
EJ	EXPANSION JOINT	RFS	ROOM FINISH SCHEDULE
ELEC	ELECTRICAL	RM	ROOM
ELEV	ELEVATION	RO	ROUGH OPENING
ENCL	ENCLOSURE	RWOM	RECESSED WALK-OFF MAT
EP	EPOXY PAINT		
EQ	EQUAL	S	SEALED
EX	EXISTING	SCHED	SCHEDULE
EXP	EXPOSED	SD	SOAP DISPENSER
EXIST	EXISTING	SHTHG	SHEATHING
		SIM	SIMILAR
FD	FLOOR DRAIN	SPEC	SPECIFICATION
FE	FIRE EXTINGUISHER	SF	SQUARE FOOT
FIN	FINISH	SS	STAINLESS STEEL
FLR	FLOOR	SS COUNTER	SOLID SURFACE COUNTER
FP	FIRE PROOFING	STL	STEEL
FRP	FIBERGLASS REINFORCED PANEL	STOR	STORAGE
		STRUCT	STRUCTURAL
FT	FOOT	SUSP	SUSPENDED
FWC	FABRIC WALL COVERING		
		TEMP	TEMPORARY
GA	GAUGE	T&G	TONGUE AND GROOVE
GALV	GALVANIZED	T.O.	TOP OF
GB	GYPSUM BOARD	TPD	TOILET PAPER DISPENSER
GFCMU	GROUND FACE CONCRETE MASONRY UNIT	TYP	TYPICAL
GL	GLASS	UNO	UNLESS NOTED OTHERWISE
GLU LAM	GLUE LAMINATED WOOD		
GYP	GYPSUM	VCT	VINYL COMPOSITION TILE
		VER	VERIFY
HRDWR	HARDWARE	VERT	VERTICAL
HM	HOLLOW METAL	VIF	VERIFY IN FIELD
HORZ	HORIZONTAL		
HT	HEIGHT	W/	WITH
		WC	WATER CLOSET
ID	INSIDE DIAMETER	WD	WOOD
INSUL	INSULATION	WDW	WINDOW
		WH	WATER HEATER
JC	JANITOR'S CLOSET	WPC	WOOD PANEL CEILING
		WRB	WEATHER BARRIER
LAV	LAVATORY		
LF	LINEAR FEET		
LVT	LUXURY VINYL TILE		

GENERAL NOTES

1. ALL CONSTRUCTION MUST MEET ALL STATE AND LOCAL CODES.
2. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR VERIFYING CONDITIONS AND LOCATIONS OF ANY EXISTING UTILITIES. CONTACT DIGGERS HOTLINE FOR UTILITY LOCATES PRIOR TO COMMENCING CONSTRUCTION. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
3. DEBRIS, TRASH, AND REFUSE SHALL BE TRANSPORTED BY TRUCKS OR OTHER SUITABLE VEHICLES. DISPOSE OF MATERIAL IN A LAWFUL MANNER AT APPROPRIATE SITES, BURNING OF MATERIALS OR DEBRIS ON SITE WILL NOT BE ALLOWED.
4. ALL CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE CONSTRUCTION DOCUMENTS AND IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
5. EACH SUB CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, CONDITIONS, AND EXTENT OF THE WORK TO BE ACCOMPLISHED UNDER THIS CONTRACT.
6. EACH SUB CONTRACTOR SHALL EXAMINE ALL DRAWINGS & SPECIFICATIONS FOR ANY WORK MARKED FOR EACH RESPECTIVE TRADE (i.e. BY G.C. BY M.C., ETC.) AND INCLUDE SUCH WORK IN HIS BID.
7. ALL DIMENSIONS INDICATED ON THE DRAWINGS SHALL BE ADHERED TO IN PREFERENCE TO SCALING DRAWINGS.
8. ALL TYPICAL NOTES APPLY TO ALL SHEETS AND WHERE SAME CONDITION IS SHOWN OR APPLIES.
9. CONFIRM AND COORDINATION LOCATIONS OF REBAR WITH GROUND PENETRATING RADAR (GPR) WHERE OCCURS. CUTTING AND PATCHING SHALL BE AS FOLLOWS:
   - 9.1. PRECAST CONTRACTOR SHALL PROVIDE ALL OPENINGS (AND COORDINATE WITH ALL OTHER PRIME CONTRACTORS FOR SIZES AND LOCATIONS) FOR PENETRATIONS IN ALL PRECAST CONCRETE. EACH PRIME CONTRACTOR SHALL FIRE SAFE PER GENERAL NOTE 26.
   - 9.2 EACH PRIME CONTRACTOR SHALL PROVIDE OPENINGS, AND PATCH AND MATCH FOR PENETRATIONS 6" x 6" OR SMALLER (UNO) EXCEPT IN PRECAST CONCRETE - SEE NOTE 9.1. EACH PRIME CONTRACTOR SHALL FIRE SAFE PER GENERAL NOTE 26
   - 9.3 THE GENERAL CONTRACTOR SHALL PROVIDE OPENINGS, AND PATCH AND MATCH FOR ALL PENETRATIONS REQUIRED UNDER ALL PRIME CONTRACTS WHICH ARE LARGER THAN 6" x 6" (UNO) EXCEPT IN PRECAST CONCRETE - SEE NOTE 9.1. EACH PRIME CONTRACTOR SHALL FIRE SAFE PER GENERAL NOTE 26.
10. THE GENERAL CONTRACTOR SHALL PATCH AND MATCH ALL SURFACES (NEW AND EXISTING) AFFECTED BY THE WORK TO BE DONE UNDER ALL CONTRACTS. UNLESS NOTED OTHERWISE.
11. NO FIELD REVISIONS TO ANY STRUCTURAL COMPONENTS SHALL BE MADE WITHOUT PRIOR APPROVAL OF ARCHITECT. THIS INCLUDES BUT IS NOT LIMITED TO REVISIONS DUE TO MIS-LOCATION, MISFIT, OR ANY OTHER CONSTRUCTION ERRORS.
12. NO OPENING SHALL BE PLACED IN ANY STRUCTURAL MEMBER (OTHER THAN AS INDICATED ON APPROVED SHOP DRAWINGS) UNTIL THE LOCATION HAS BEEN APPROVED BY THE ARCHITECT.
13. ALL COLORS TO BE SELECTED BY THE A/E AND OWNER FROM THE MANUFACTURERS FULL RANGE OF COLOR SELECTIONS.
14. ERECT CONSTRUCTION FENCING TO PREVENT PUBLIC ACCESS AND ENSURE PUBLIC SAFETY. COORDINATE LOCATIONS WITH OWNER.
15. CROSS-REFERENCE ARCHITECTURAL DRAWINGS WITH ALL OTHER DISCIPLINES TO ASSURE COORDINATION OF LOCATIONS, SIZE, AND MATERIALS. NOTIFY ARCHITECT OF ANY DISCREPANCIES OR CONFLICTS IMMEDIATELY.
16. SCHEDULES & TABLES NOT LOCATED ON DRAWINGS MAY BE LOCATED IN PROJECT MANUAL.
17. ALL WOOD FRAMING AND BLOCKING CONCEALED IN CEILINGS AND PARTITIONS SHALL BE FIRE RETARDANT TREATED (U.N.O). WOOD USED AT ROOF AREAS AND EDGES SHALL BE CONSTRUCTION GRADE OR BETTER. (U.N.O).
18. ALL COPINGS AND GRAVEL STOPS ARE TO BE CONTINUOUSLY CAULKED AT DRIP EDGE ON BOTH SIDES BY GENERAL CONTRACTOR.
19. EACH SUB CONTRACTOR SHALL FIRE SAFE / FIRE SEAL ALL OF THEIR RESPECTIVE FLOOR, WALL AND CEILING PENETRATIONS.
   - 26.1. FILL ALL VOIDS AND GAPS SOLID AT PIPE, DUCT, CONDUIT ETC., PENETRATIONS IN NON-RATED WALLS/PARTITIONS WITH MORTAR AT MASONRY PARTITIONS AND "DURABOND" COMPOUND AT GYPSUM BOARD PARTITIONS TO PREVENT THE PASSAGE OF SOUND AND SMOKE.
   - 26.2. FILL ALL VOIDS AND GAPS SOLID AT PIPE, DUCT, CONDUIT ETC., PENETRATIONS IN FIRE RATED WALLS/PARTITIONS WITH FIRE SAFING, FIRE STOP SEALANT, FIRE STOP FOAM, OR INTUMESCENT WRAP STRIP AS REQUIRED FOR U.L. RATING/CLASSIFICATION. THE U.L. RATING CLASSIFICATION SHALL MEET OR EXCEED THE RATING OF THE ASSEMBLY THE PENETRATION IS LOCATED WITHIN.
   - 26.3. FILL ALL VOIDS AND GAPS SOLID AT PIPE, DUCT, CONDUIT ETC., PENETRATIONS IN FLOORS WITH FIRE SAFING, FIRE STOP SEALANT, FIRE STOP FOAM, OR INTUMESCENT WRAP STRIP AS REQUIRED FOR U.L. RATING/CLASSIFICATION. THE U.L. RATING CLASSIFICATION SHALL MEET OR EXCEED THE RATING OF THE ASSEMBLY THE PENETRATION IS LOCATED WITHIN.
20. ALL CONSTRUCTION TESTING TO BE PERFORMED BY THE GENERAL CONTRACTOR.
21. ARCHITECTURAL ELEVATION 100'-0" = 693.5' MSL (SEE CIVIL)
22. THE GENERAL CONTRACTOR SHALL PROVIDE BLOCKING IN GYPSUM BOARD PARTITIONS AS REQUIRED. TO SUPPORT WALL MOUNTED ITEMS SHOWN ON THE PLANS OR FUTURE ITEMS TO BE MOUNTED ON THE WALL.

2



1 / T102 CODE PLAN - MAIN LEVEL
3/64 = 1'-0"

0' 2' 5' 10'

CODE SUMMARY ANALYSIS

PROJECT SCOPE:
THIS PROJECT IS A 34,396 SF STATE PATROL SAFETY AND WEIGHT ENFORCEMENT FACILITY. THIS FACILITY INCLUDES BOTH SWEF AND REGIONAL STATE PATROL POST FUNCTIONS INCLUDING, BUT NOT LIMITED TO: VEHICLE INSPECTIONS, INSPECTION OPERATIONS, VEHICLE MAINTENANCE GARAGE, TELECOM OPERATIONS, DISPATCH, LAW ENFORCEMENT ADMINISTRATIVE OFFICES, TRAINING CLASSROOMS, CONFERENCE ROOMS, EVIDENCE STORAGE, LOCKEROOMS AND OTHER VARIOUS SUPPORT SPACES AS INDICATED ON THE DRAWINGS.

THE GENERAL PUBLIC HAS 24-HOUR ACCESS TO THE SOUTH VESTIBULE AND ASSOCIATED TOILET ROOMS. UNCHAPERONED VISITORS BEYOND THIS POINT ARE RESTRICTED. THE NORTH STAFF ENTRANCE IS ACCESSIBLE FROM A SECURED PARKING LOT TO THE NORTH.

PROJECT ADDRESS:
WRIGHTSTOWN, WISCONSIN

APPLICABLE CODES:
WISCONSIN STATE BUILDING CODE:
2015 INTERNATIONAL BUILDING CODE (IBC) W/ STATE AMENDMENTS
2015 INTERNATIONAL ENERGY CODE (IECC) W/ STATE AMENDMENTS
2015 INTERNATIONAL FIRE CODE (IFC) W/ STATE AMENDMENTS

INTERNATIONAL ENERGY CONSERVATION CODE (IECC):

A. COMMERCIAL ENERGY EFFICIENCY (IECC CHAPTER 4):
I. LOCATION: ZONE 6
II. COMPLIANCE PATH: IECC C402-C406 (IECC 401.2).
III. COMCHECK WORKSHEET, FEDERAL DEPARTMENT OF ENERGY (DOE)

INTERNATIONAL BUILDING CODE (IBC):

A. USE AND OCCUPANCY CLASSIFICATION (IBC CHAPTER 3)
I. MIXED OCCUPANCIES MULTI-STORY BUILDING (IBC 506.2.4):
BUSINESS-B ; CIVIC ADMINISTRATION (IBC 304)
STORAGE-S1; VEHICLE STORAGE (IBC 311.2)
II. ACCESSORY OCCUPANCIES (IBC 508.2.)
STORAGE-S2; NONCOMBUSTIBLE, LOW HAZARD STORAGE (IBC 311.3)

B. SPECIAL REQUIREMENTS (IBC CHAPTER 4)
I. SECTION 406 - MOTOR VEHICLE-RELATED OCCUPANCIES
AUTOMATIC GARAGE DOOR OPENERS, IF PROVIDED, SHALL BE LISTED IN ACCORDANCE WITH UL 325. IBC (406.3.6)

C. GENERAL BUILDING HEIGHTS AND AREAS (IBC CHAPTER 5)
I. PROPOSED BUILDING HEIGHT AND AREA

	PROPOSED
STORIES ABOVE GRADE	2 STORIES
HEIGHT	36' - 0"
AREA (FOOTPRINT)	21,696 SF

II. **ALLOWABLE BUILDING HEIGHT ABOVE GRADE PLANE (TABLE 504.3)**
GROUP B/S; TYPE IIB SPRINKLED- 75'-0" MAX., NOT EXCEEDED

III. **ALLOWABLE STORIES ABOVE GRADE PLANE (TABLE 504.4)**
GROUP S1; TYPE IIB SPRINKLED- 3 STORIES, NOT EXCEEDED

IV. **ALLOWABLE AREA FACTOR (TABLE 506.2)**
ACTUAL BUILDING AREA BY FLOOR-

INSPECTIONS TUNNEL:	186 SF
MAIN LEVEL:	21,696 SF
UPPER LEVEL:	12,514 SF
TOTAL BLDG AREA:	**34,396 SF**

MAIN LEVEL ALLOWABLE AREA -

GROUP	ACTUAL SF	% OF TOTAL	ALLOW. AREA BY GROUP	ALLOW. AREA (WEIGHTED AVG)
B	13,052	60%	69,000	41,400 SF
S-1	8,644	40%	78,000	31,200
TOTAL	***21,696 SF**	**100%**	**-**	**72,600 SF**

UPPER LEVEL ALLOWABLE-

GROUP	ACTUAL SF	% OF TOTAL	ALLOW. AREA BY GROUP	ALLOW. AREA (WEIGHTED AVG)
B	12,514	100%	69,000	69,000 SF
TOTAL	***12,514 SF**	**100%**	**-**	**69,000 SF**

*AREA LIMIT NOT EXCEEDED (IBC 506.2.4).

V. ACCESSORY OCCUPANCIES ARE LESS THAN 10% OF THE FLOOR AREA IN WHICH THEY ARE LOCATED. NOT EXCEEDED (IBC 508.2.3)
• S-2 OCCUPANCY (LEVEL 2) = 1,136 SF OR 9% OF TOTAL AREA (12,514 SF).

VI. NONSEPARATED OCCUPANCIES (IBC 508.3)

VII. NO WORK AT INCIDENTAL USE AREAS (IBC TABLE 509) ***TO BE CONFIRMED***

D. CONSTRUCTION TYPE (IBC CHAPTER 6)
I. PROPOSED CONSTRUCTION: TYPE IIB (IBC TABLE 601)

PRIMARY STRUCT. FRAME-	0 HR
BEARING WALLS:	
EXTERIOR-	0 HR
INTERIOR-	0 HR
NON BEARING WALLS*	
EXTERIOR-	-
INTERIOR-	0 HR
FLOOR CONSTRUCTION	0 HR
ROOF CONSTRUCTION	0 HR

II. FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE (IBC TABLE 602)

X > 30; 0 HOURS OF FIRE RESISTANCE REQUIRED.

E. INTERIOR FINISHES (IBC CHAPTER 8)
I. INTERIOR FINISHES TO MEET REQUIREMENTS (IBC TABLE 803.11)

GROUP	EXIT ENCLOSURES	CORRIDORS	ROOMS
B (SPRINKLERED)	B	C	C
S1 (SPRINKLERED)	C	C	C

F. FIRE PROTECTION SYSTEMS (CHAPTER 9)
I. THE BUILDING IS CURRENTLY SPRINKLED AND ANY MODIFICATIONS WILL BE IN ACCORDANCE WITH IBC CHAPTER 9, THE INTERNATIONAL FIRE CODE, AND STATE REQUIREMENTS.

G. MEANS OF EGRESS (CHAPTER 10)
I. OCCUPANT LOAD:

OCCUPANT LOAD	GROUP B	GROUP S1	TOTAL
INSPECTIONS TUNNEL	-	-	-
MAIN LEVEL	139	29	168
UPPER LEVEL	127	-	127
TOTAL	**266**	**29**	**295**

II. MEANS OF EGRESS SIZING (IBC 1005):
MAIN LEVEL (168 OCC.); FULLY SPRINKLED:
• STAIRWAYS- NOT APPLICABLE
• OTHER- 168 OCC. x 0.15 = 26" REQUIRED / 468" PROVIDED
UPPER LEVEL (127 OCC.); FULLY SPRINKLED:
• STAIRWAYS- 127 OCC. x 0.20 = 26" REQUIRED / 106" PROVIDED
• OTHER- 127 OCC. x 0.15 = 20" REQUIRED / 72" PROVIDED

III. NEW DOORS SHALL BE CODE COMPLIANT (IBC 1010), SEE DOOR SCHEDULE.
IV. NEW STAIRS SHALL BE CODE COMPLIANT (IBC 111), SEE STAIR DETAILS.
V. COMMON PATH OF TRAVEL: 100' MAXIMUM. NOT EXCEEDED (TABLE 1006.2.1)
VI. EXITS REQUIRED: 2 EXITS REQUIRED; 10 PROVIDED (IBC TABLE 1006.3.1)
VII. TRAVEL DISTANCE: MAXIMUM TRAVEL DISTANCE OF 300' AT GROUP B OCCUPANCY WITH A SPRINKLER SYSTEM. NOT EXCEEDED. (IBC TABLE 1017.2)
VIII. DEAD ENDS: 50' MAX. AT GROUP B, 20' MAX. AT GROUP S. NOT EXCEEDED. (IBC 1020.4)

H. ACCESSIBILITY (CHAPTER 11)
PROJECT SCOPE SHALL BE ACCESSIBLE IN ACCORDANCE WITH IBC CHAPTER 11 AND STATE ACCESSIBILITY CODE REQUIREMENTS.

I. PLUMBING (CHAPTER 29)
I. MALE/FEMALE TOTAL OCCUPANTS = **295 OCCUPANTS**
III. MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES PER TABLE 2902.1

GROUP B-

MALE / FEMALE (266 OCCUPANTS):

TOILETS/URINALS-	1 PER 25 FOR FIRST 50 AND 1 PER 50 FOR REMAINDER 7 REQUIRED*
LAVATORY-	1 PER 40 FOR FIRST 80 AND 1 PER 80 FOR REMAINDER 4 REQUIRED*

GROUP S-

MALE / FEMALE (29 OCCUPANTS):

TOILETS/URINALS-	1 PER 100 1 REQUIRED*
LAVATORY-	1 PER 100 1 REQUIRED*

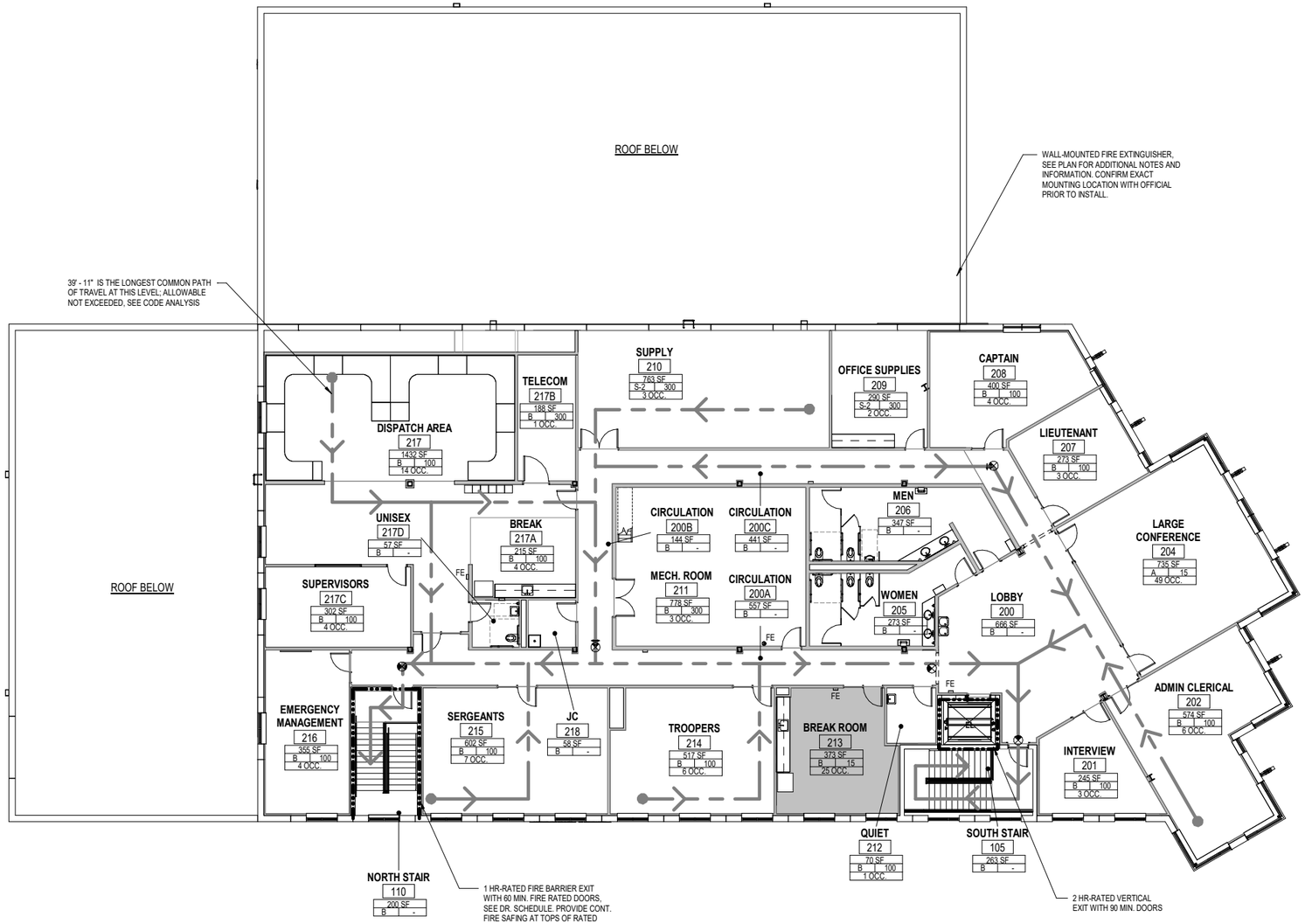
***COMBINED-**

TOILETS/URINALS-	8 TOTAL TOILETS REQUIRED; 11 PROVIDED
LAVATORY-	5 TOTAL LAVATORIES REQUIRED; 9 PROVIDED
DRINKING FOUNTAIN-	1 PER 1,000 FOR FIRST 1 TOTAL REQUIRED; 4 PROVIDED; (2) HIGH/LOW
SERVICE SINK-	1 REQUIRED 3 PROVIDED

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI		MAIN LEVEL CODE PLAN AND SUMMARY	ISSUE DATE: 5/1/24 / ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41 / COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. T102

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1 T103 CODE PLAN - UPPER LEVEL
3/64 = 1'-0"

0' 2' 5' 10'

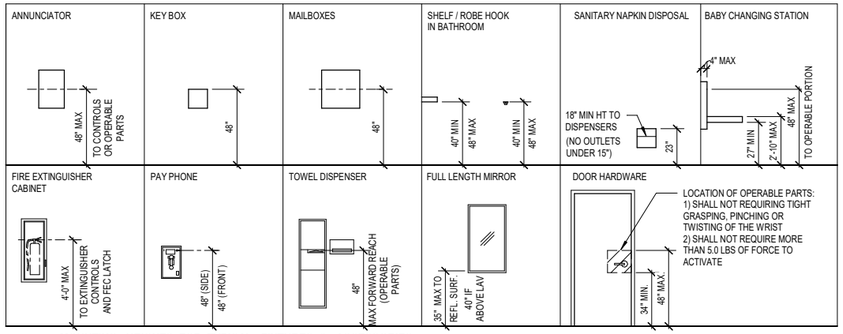
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. T103	119

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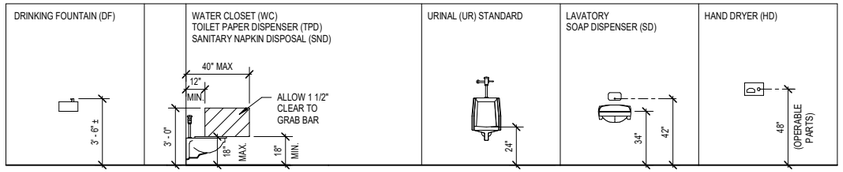
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STANDARD MOUNTING HEIGHTS

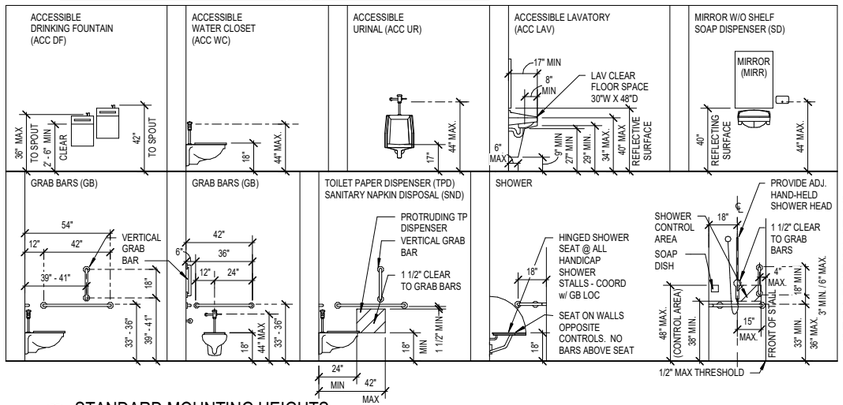
MOUNTING HEIGHTS FOR EQUIPMENT



MOUNTING HEIGHTS FOR TYPICAL FIXTURES & ACCESSORIES

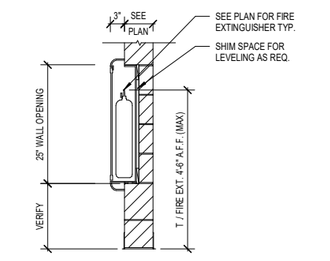


MOUNTING HEIGHTS FOR ACCESSIBLE (ACC) FIXTURES AND ACCESSORIES



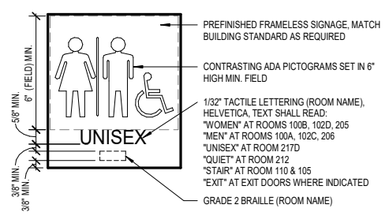
SHOWER NOTES :
1) SHOWERS SHALL DELIVER WATER THAT IS 120° F MAX.
2) HAND SHOWER HOSE SHALL BE 59" MIN. IN LENGTH.
3) THRESHOLDS SHALL BE 1/2" MAX. IN HEIGHT AND BEVELED, ROUNDED OR VERTICAL IN TRANSFER TYPE SHOWER.

3 / T104 STANDARD MOUNTING HEIGHTS
1/8" = 1'-0"



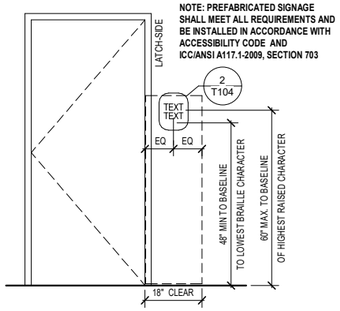
4 / T104 SEMI-RECESSED CABINET SECTIONS
3/8" = 1' - 0"

NOTE: PREFABRICATED SIGNAGE SHALL MEET ALL REQUIREMENTS AND BE INSTALLED IN ACCORDANCE WITH ACCESSIBILITY CODE AND ICC/ANSI A117.1-2009, SECTION 703



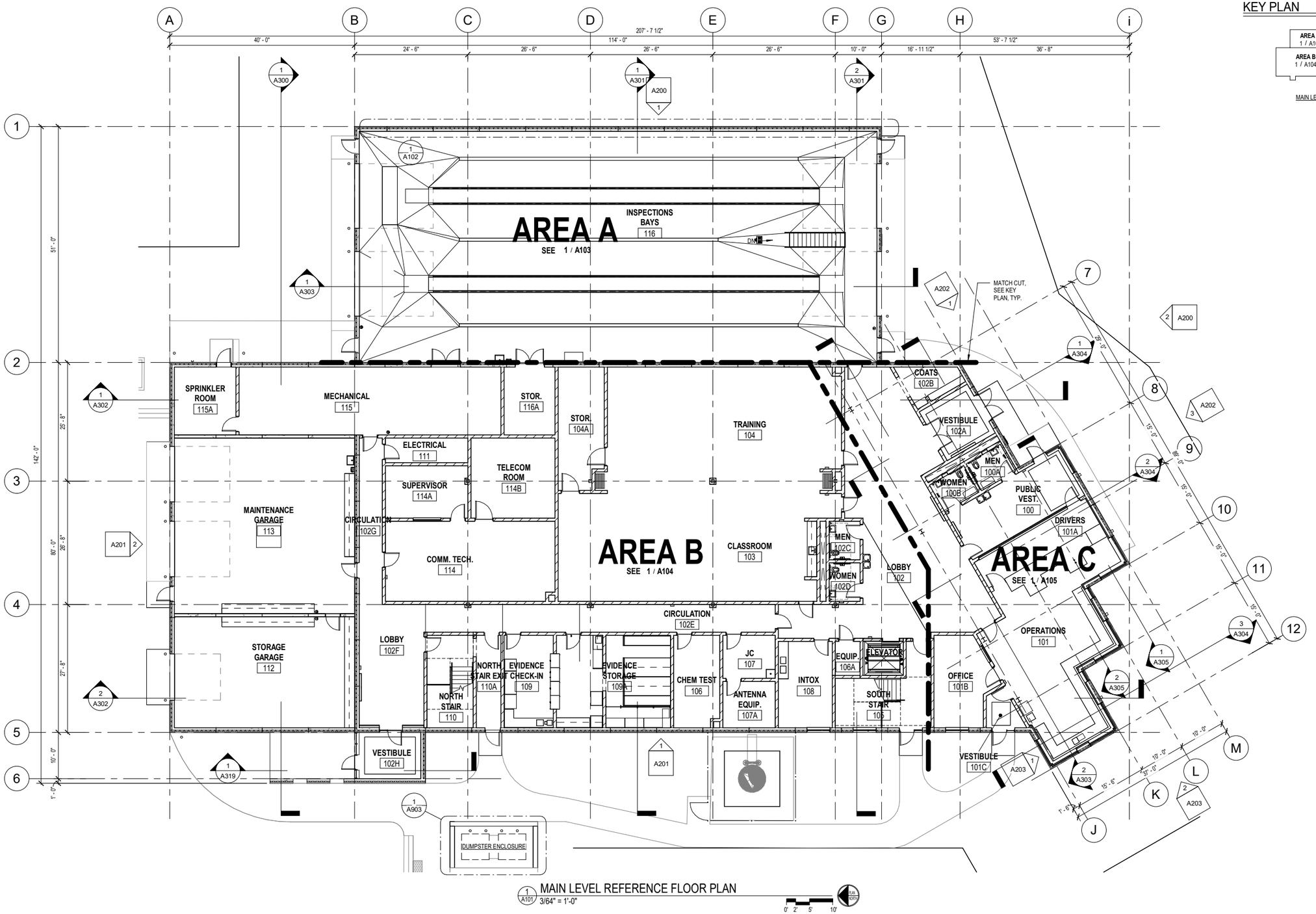
2 / T104 SIGNAGE DETAIL
1 1/2" = 1'-0"

NOTE: PREFABRICATED SIGNAGE SHALL MEET ALL REQUIREMENTS AND BE INSTALLED IN ACCORDANCE WITH ACCESSIBILITY CODE AND ICC/ANSI A117.1-2009, SECTION 703



1 / T104 ROOM SIGNAGE ELEVATION
1/4" = 1'-0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STANDARD MOUNTING HEIGHTS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. T104	120



KEY PLAN

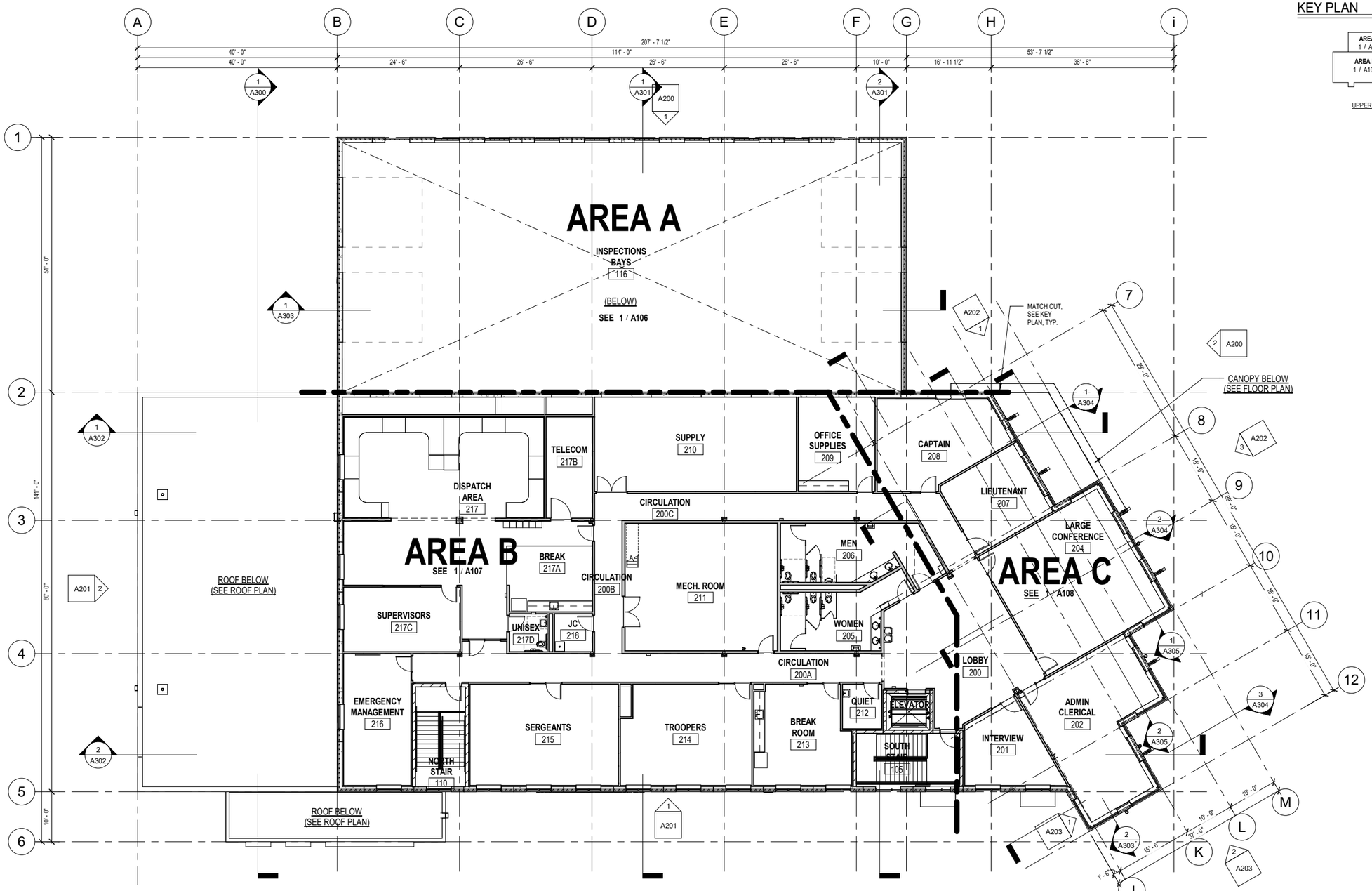


1 A101 MAIN LEVEL REFERENCE FLOOR PLAN
3/64" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MAIN LEVEL REFERENCE FLOOR PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A101	121

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KEY PLAN



UPPER LEVEL

1 A102 UPPER LEVEL REFERENCE FLOOR PLAN
3/64" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			UPPER LEVEL REFERENCE FLOOR PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A102	

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GENERAL PLAN NOTES

1.SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.

2. FLOOR PLAN KEYNOTES IN THE LEGEND ABOVE MAY NOT APPLY TO ALL FLOOR PLAN DRAWINGS.

3. ALL DIMENSIONS ON FLOOR PLANS ARE TO THE CENTER OF STUD, FACE OF MASONRY, UNLESS NOTED OTHERWISE.

4. ALL NON-FURRING PARTITIONS EXTEND TO THE UNDERSIDE OF STRUCTURE, U.N.O., FURRING WALLS EXTEND MIN. 6" ABOVE FINISH CEILINGS. SEE DETAILS

5. FIRE DAMPERS SHALL BE PROVIDED WHERE DUCTS PENETRATE FIRE-RATED ASSEMBLIES, SEE CODE PLAN FOR ADDITIONAL NOTES AND INFORMATION.

6. GC SHALL SUBMIT INDICATED FIRE-RESISTANT SEALING PROPOSALS TO BUILDING DEPARTMENT FOR REVIEW PRIOR TO PROCEEDING WITH WORK.

7. FOR TYPICAL CMU COURSING CONFIGURATIONS AND BURNISH FINISHES, SEE 2 / A522

8. SEE STRUCTURAL FOR ADDITION REQUIREMENTS FOR PRECAST ELEMENTS.

9. WALL-MOUNTED MONITOR, MOUNTS AND MONITORS BY OWNER. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING AS REQUIRED AT FRAMED WALLS CAPABLE OF SUPPORTING 125 LBS MINIMUM. COORDINATE WITH POWER AND I.T. REQUIREMENTS, SEE E-SERIES SHEETS.

10. AT ALL WALL TILE LOCATIONS, CONTRACTOR SHALL PROVIDE CEMENTITIOUS BACKERBOARD SUBSTRATE IN LIEU OF GYPSUM BOARD AND INSTALL PER TCNA HANDBOOK METHOD W244.

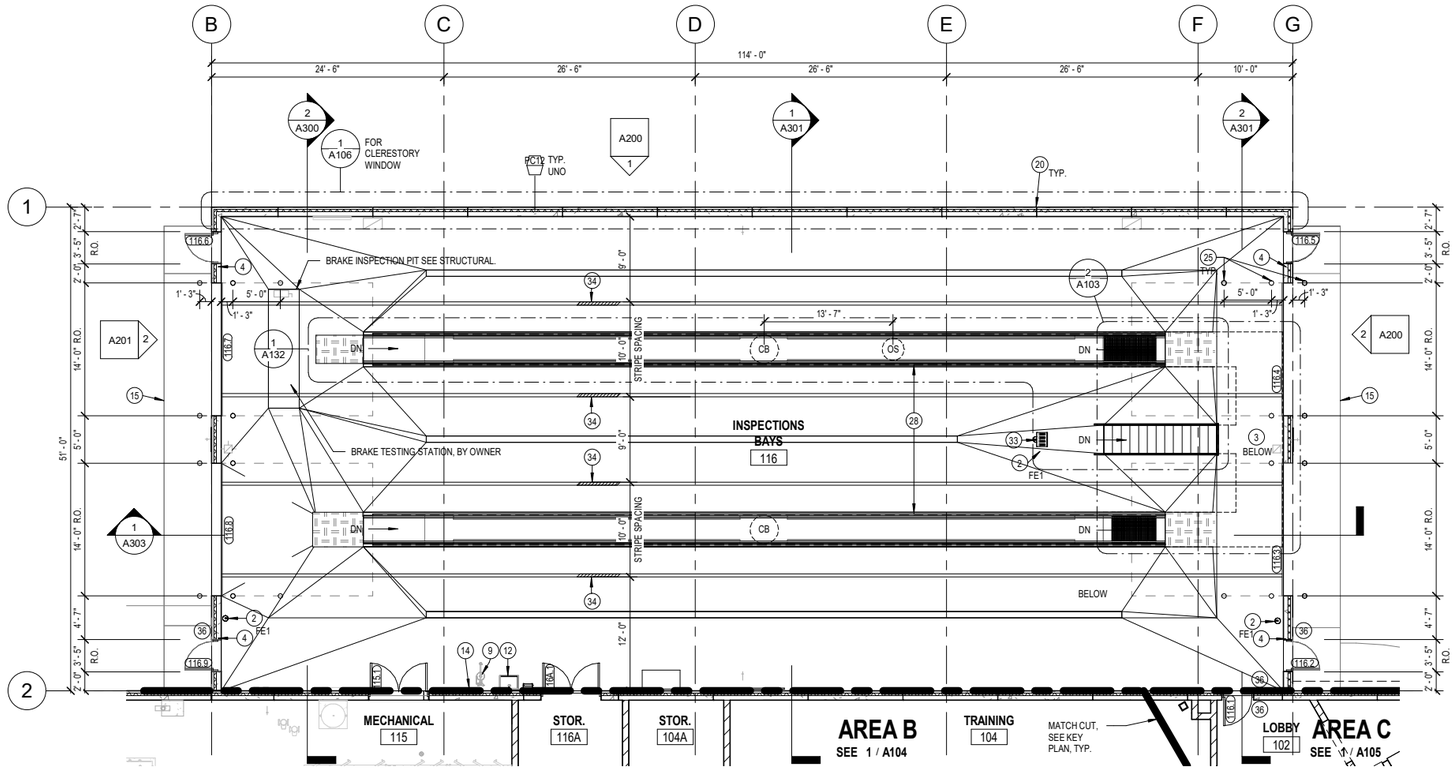
KEY PLAN

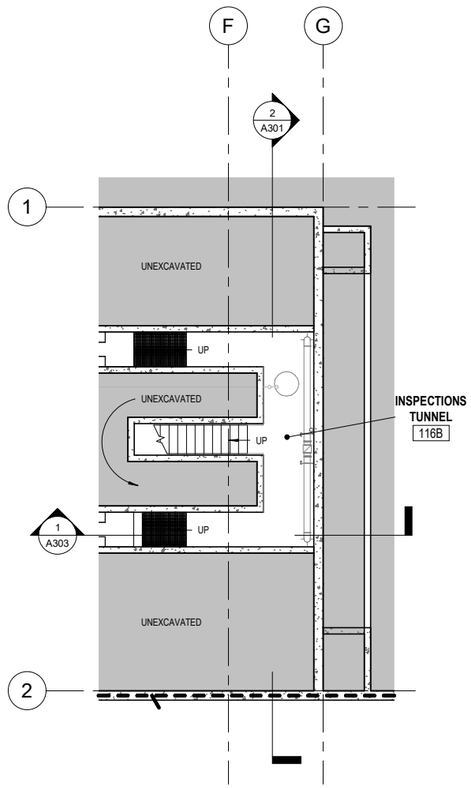


MAIN LEVEL

FLOOR PLAN KEYNOTES

1. CASEWORK, SEE ELEVATION
2. WALL-MOUNTED FIRE EXTINGUISHER, SEE PLAN FOR TYPE (PROVIDE SEMI-RECESSED PREFINISHED MTL. CABINETS AT FRAMED WALLS) CONFIRM EXACT MOUNTING LOCATION WITH OFFICIAL PRIOR TO INSTALL. SEE STANDARD MOUNTING HEIGHTS.
3. INSPECTIONS TUNNEL, SEE STRUCT. FOR ADDITIONAL NOTES AND INFORMATION
4. ACCESSIBLE SIGNAGE, SEE 1 / T104
5. DIGITAL DISPLAY, SEE ELEC. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING FOR INSTALL AT 54" AFF.
6. STL. STAIR / SHIP'S LADDER ASSEMBLY, SEE 1 / A554
7. PROVIDE 20' - 0" LF OF FIRE-RATED 3/4" SHEATHING BACKER FROM 6" TO 102" AFF. COORDINATE EXACT LOCATION WITH I.T. REQUIREMENTS.
8. STL. ANTENNA STORAGE (HIGH), SEE PC PANELS FOR STL EMBED LOCATIONS. PROVIDE GALV. STL. ANGLE SUPPORT ASSEMBLY AT EA. PANEL. 24" HORZ. LEG AND 16" VERT LEG, CAPABLE OF SUPPORTING 200 LBS
9. EMERGENCY EYE WASH STATION, SEE PLUMB.
10. CONC. EQUIPMENT PAD, SEE STRUCT.
11. FLOOR SINK, SEE MECH. PROVIDE 4' FRP PANELING ON BOTH SIDE WALLS (MEASURED FROM THE CORNER) EXTENDING FROM FLOOR TO 5' AFF.
12. UTILITY SINK, SEE PLUMB.
13. FIRE DEPARTMENT CONNECTION, SEE PLUMB. COORDINATE EXACT EXTERIOR MOUNTING LOCATION OF CORRESPONDING FIRE DEPARTMENT ACCESS BOX WITH AHJ.
14. WALL SPIGOT, SEE PLUMB.
15. CONC. STOOP/APRON, SEE STRUCT.
16. PREFABRICATED DISPLAY CASE, SEE 3 / A504
17. HI/LO DRINKING FOUNTAIN WITH BOTTLE FILLER, SEE PLUMB AND STANDARD MOUNTING HEIGHTS FOR ADDITIONAL NOTES AND INFORMATION
18. ELEVATOR ASSEMBLY AND HOIST WAY, SEE ENLARGED ELEVATOR PLANS
19. LOCKER ASSEMBLY, SEE ELEVATION 6 / A507
20. PRECAST WALL PANEL, SEE STRUCT. SEALANT AT ALL PRECAST WALL PANEL JOINTS (BOTH SIDES), TYP.
21. FIRE ANNUNCIATION PANEL, SEE ELEC., SEE FIRE PROTECTION
22. REFRIGERATOR, PROVIDED BY OWNER. (NIC)
23. FUME HOOD, PROVIDED BY OWNER (NIC)
24. MEP CHASE, SEE MECH., ELEC. & PLUMB. FOR ADDITIONAL NOTES AND INFORMATION.
25. STL. BOLLARD (CONCRETE FILLED) WITH FINISH SLEEVE, SEE STRUCT.
26. EVIDENCE DRY CABINET, PROVIDED BY OWNER (NIC)
27. STL. CANOPY ASSEMBLY, SEE ROOF PLAN AND STRUCT. FOR ADDITIONAL NOTES AND INFORMATION
28. PIT WITH GRATE, SEE STRUCT. AND MECH.
29. RECESSED FLOOR MAT AND FRAME, SEE FLOOR PLAN AND PROJECT SPECIFICATIONS FOR ADDITIONAL NOTES AND INFORMATION
30. KEY STORAGE CABINET. GC TO CONFIRM MOUNTING LOCATION WITH OWNER PRIOR TO INSTALL
31. APPROXIMATE LOCATION OF MEP EQUIPMENT SHOWN FOR REFERENCE PURPOSES ONLY, SEE MEP.
32. RAISED ACCESS FLOOR ASSEMBLY
33. OVERHEAD DOOR CONTROL CONSOLE. SEE 4 / A125
34. PAINTED 4" WIDE TRAFFIC STRIPE REFER TO SPEC. SECTION 09 91 00
35. CUSTOM WORKSPACE COUNTER TOP. SEE 1 / A503
36. CARD READER, SEE ELECTRICAL AND DOOR SCHEDULE
37. MOVABLE WALL PARTITION, SEE DETAILS
38. APPROXIMATE LOCATION OF KEY LOCK BOX. COORDINATE EXACT PLACEMENT WITH ONWER AND AHJ PRIOR TO INSTALL.
39. FURRING WALL TO EXTEND BENEATH SILL, SEE DETAIL
40. COORDINATE INSTALL OF DOWNSPOUT WITH UNDERDRAIN, SEE CIVIL. MATCH DOWNSPOUT FINISH AT PREFINFINISHED MTL. TRANSITION TO UNDERDRAIN. PROVIDE HEAT TAPE TO EXTEND FROM TOP OF DOWNSPOUT TO 16" BEYOND TOP OF UNDERDRAIN. FOR ADDITIONAL NOTES AND INFORMATION SEE 7 / A401
41. SOLID SURFACE WINDOW SILL, SEE ALUMINUM STORE FRONT TYPES AND/OR HM WINDOW TYPES FOR MORE INFORMATION
42. UTILITY SHELF W/ MOP CLIPS, SEE SPEC





1 A103 MAIN LEVEL FLOOR PLAN (AREA A)
1/16" = 1'-0"

2 A103 TUNNEL LEVEL FLOOR PLAN (AREA A)
1/16" = 1'-0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MAIN LEVEL FLOOR PLAN (AREA A)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A103	123

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GENERAL PLAN NOTES

1.SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.

2. FLOOR PLAN KEYNOTES IN THE LEGEND ABOVE MAY NOT APPLY TO ALL FLOOR PLAN DRAWINGS.

3. ALL DIMENSIONS ON FLOOR PLANS ARE TO THE CENTER OF STUD, FACE OF MASONRY, UNLESS NOTED OTHERWISE.

4. ALL NON-FURRING PARTITIONS EXTEND TO THE UNDERSIDE OF STRUCTURE, U.N.O., FURRING WALLS EXTEND MIN. 6" ABOVE FINISH CEILINGS. SEE DETAILS

5. FIRE DAMPERS SHALL BE PROVIDED WHERE DUCTS PENETRATE FIRE-RATED ASSEMBLIES, SEE CODE PLAN FOR ADDITIONAL NOTES AND INFORMATION.

6. GC SHALL SUBMIT INDICATED FIRE-RESISTANT SEALING PROPOSALS TO BUILDING DEPARTMENT FOR REVIEW PRIOR TO PROCEEDING WITH WORK.

7. FOR TYPICAL CMU COURSING CONFIGURATIONS AND BURNISH FINISHES, SEE 2 / A522

8. SEE STRUCTURAL FOR ADDITION REQUIREMENTS FOR PRECAST ELEMENTS.

9. WALL-MOUNTED MONITOR, MOUNTS AND MONITORS BY OWNER. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING AS REQUIRED AT FRAMED WALLS CAPABLE OF SUPPORTING 125 LBS MINIMUM. COORDINATE WITH POWER AND I.T. REQUIREMENTS, SEE E-SERIES SHEETS.

10. AT ALL WALL TILE LOCATIONS, CONTRACTOR SHALL PROVIDE CEMENTITIOUS BACKERBOARD SUBSTRATE IN LIEU OF GYPSUM BOARD AND INSTALL PER TCNA HANDBOOK METHOD W244.

KEY PLAN



MAIN LEVEL

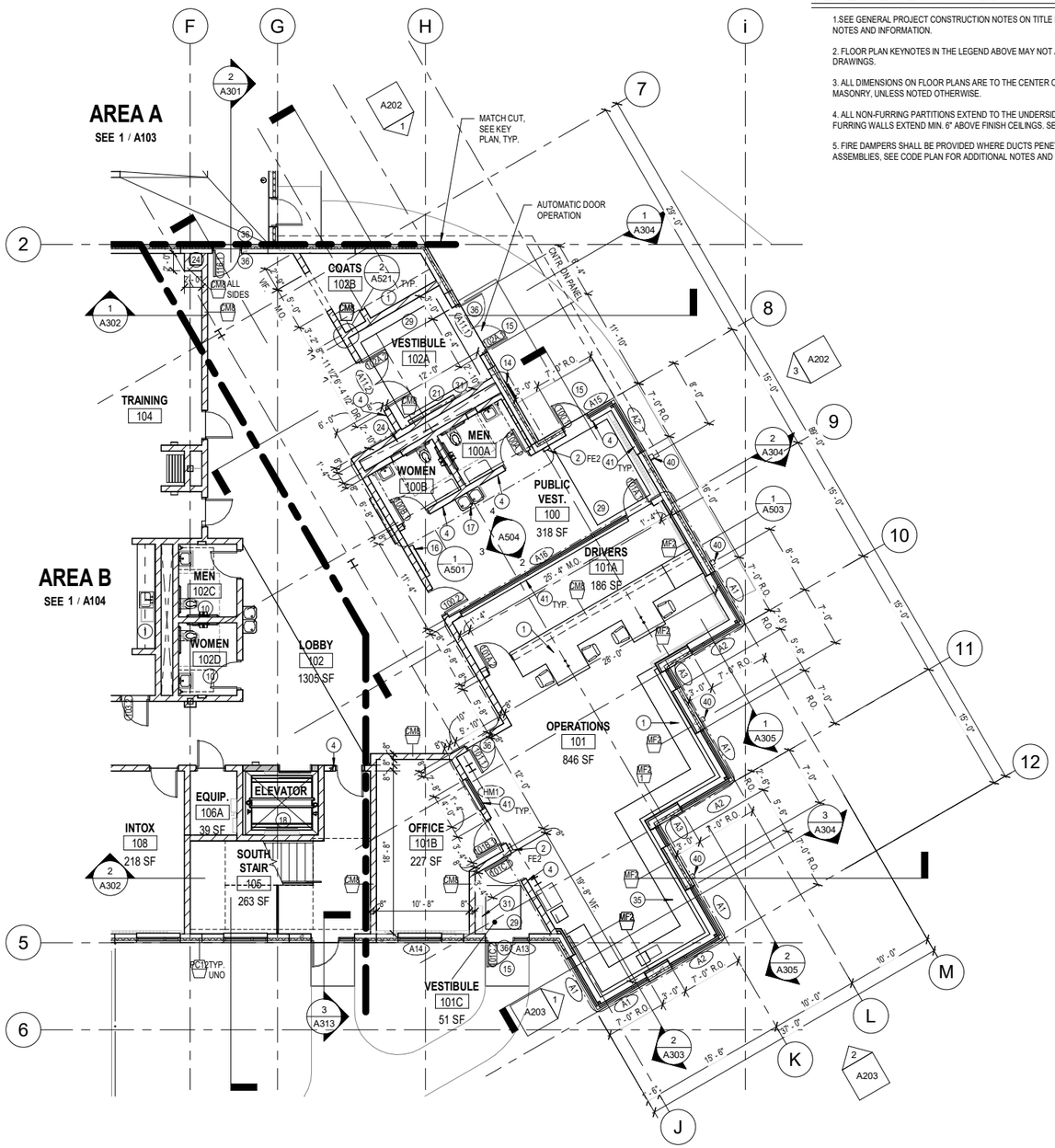
FLOOR PLAN KEYNOTES

1. CASEWORK, SEE ELEVATION
2. WALL-MOUNTED FIRE EXTINGUISHER, SEE PLAN FOR TYPE (PROVIDE SEMI-RECESSED PREFINISHED MTL. CABINETS AT FRAMED WALLS) CONFIRM EXACT MOUNTING LOCATION WITH OFFICIAL PRIOR TO INSTALL. SEE STANDARD MOUNTING HEIGHTS.
3. INSPECTIONS TUNNEL, SEE STRUCT. FOR ADDITIONAL NOTES AND INFORMATION
4. ACCESSIBLE SIGNAGE, SEE 1 / T104
5. DIGITAL DISPLAY, SEE ELEC. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING FOR INSTALL AT 54" AFF.
6. STL. STAIR / SHIP'S LADDER ASSEMBLY, SEE 1 / A554
7. PROVIDE 20' - 0" LF OF FIRE-RATED 3/4" SHEATHING BACKER FROM 6" TO 102" AFF. COORDINATE EXACT LOCATION WITH I.T. REQUIREMENTS.
8. STL. ANTENNA STORAGE (HIGH), SEE PC PANELS FOR STL EMBED LOCATIONS. PROVIDE GALV. STL. ANGLE SUPPORT ASSEMBLY AT EA. PANEL. 24" HORZ. LEG AND 16" VERT LEG, CAPABLE OF SUPPORTING 200 LBS
9. EMERGENCY EYE WASH STATION, SEE PLUMB.
10. CONC. EQUIPMENT PAD, SEE STRUCT.
11. FLOOR SINK, SEE MECH. PROVIDE 4' FRP PANELING ON BOTH SIDE WALLS (MEASURED FROM THE CORNER) EXTENDING FROM FLOOR TO 5' AFF.
12. UTILITY SINK, SEE PLUMB.
13. FIRE DEPARTMENT CONNECTION, SEE PLUMB. COORDINATE EXACT EXTERIOR MOUNTING LOCATION OF CORRESPONDING FIRE DEPARTMENT ACCESS BOX WITH AHJ.
14. WALL SPIGOT, SEE PLUMB.
15. CONC. STOOP/APRON, SEE STRUCT.
16. PREFABRICATED DISPLAY CASE, SEE 3 / A504
17. HI/LO DRINKING FOUNTAIN WITH BOTTLE FILLER, SEE PLUMB AND STANDARD MOUNTING HEIGHTS FOR ADDITIONAL NOTES AND INFORMATION
18. ELEVATOR ASSEMBLY AND HOIST WAY, SEE ENLARGED ELEVATOR PLANS
19. LOCKER ASSEMBLY, SEE ELEVATION 6 / A507
20. PRECAST WALL PANEL, SEE STRUCT. SEALANT AT ALL PRECAST WALL PANEL JOINTS (BOTH SIDES), TYP.
21. FIRE ANNUNCIATION PANEL, SEE ELEC., SEE FIRE PROTECTION
22. REFRIGERATOR, PROVIDED BY OWNER. (NIC)
23. FUME HOOD, PROVIDED BY OWNER (NIC)
24. MEP CHASE, SEE MECH., ELEC. & PLUMB. FOR ADDITIONAL NOTES AND INFORMATION.
25. STL. BOLLARD (CONCRETE FILLED) WITH FINISH SLEEVE, SEE STRUCT.
26. EVIDENCE DRY CABINET, PROVIDED BY OWNER (NIC)
27. STL. CANOPY ASSEMBLY, SEE ROOF PLAN AND STRUCT. FOR ADDITIONAL NOTES AND INFORMATION
28. PIT WITH GRATE, SEE STRUCT. AND MECH.
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30. KEY STORAGE CABINET. GC TO CONFIRM MOUNTING LOCATION WITH OWNER PRIOR TO INSTALL
31. APPROXIMATE LOCATION OF MEP EQUIPMENT SHOWN FOR REFERENCE PURPOSES ONLY, SEE MEP.
32. RAISED ACCESS FLOOR ASSEMBLY
33. OVERHEAD DOOR CONTROL CONSOLE. SEE 4 / A125
34. PAINTED 4" WIDE TRAFFIC STRIPE REFER TO SPEC. SECTION 09 91 00
35. CUSTOM WORKSPACE COUNTER TOP. SEE 1 / A503
36. CARD READER, SEE ELECTRICAL AND DOOR SCHEDULE
37. MOVABLE WALL PARTITION, SEE DETAILS
38. APPROXIMATE LOCATION OF KEY LOCK BOX. COORDINATE EXACT PLACEMENT WITH ONWER AND AHJ PRIOR TO INSTALL.
39. FURRING WALL TO EXTEND BENEATH SILL, SEE DETAIL
40. COORDINATE INSTALL OF DOWNSPOUT WITH UNDERDRAIN. SEE CIVIL. MATCH DOWNSPOUT FINISH AT PREFINFINISHED MTL. TRANSITION TO UNDERDRAIN. PROVIDE HEAT TAPE TO EXTEND FROM TOP OF DOWNSPOUT TO 16" BEYOND TOP OF UNDERDRAIN. FOR ADDITIONAL NOTES AND INFORMATION SEE 7 / A401
41. SOLID SURFACE WINDOW SILL, SEE ALUMINUM STORE FRONT TYPES AND/OR HM WINDOW TYPES FOR MORE INFORMATION
42. UTILITY SHELF W/ MOP CLIPS, SEE SPEC

1 A104 MAIN LEVEL FLOOR PLAN (AREA B)
1/16" = 1'-0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MAIN LEVEL FLOOR PLAN (AREA B)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A104	124

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1 A105 MAIN LEVEL FLOOR PLAN (AREA C)
1/16" = 1'-0"

0' 2' 5' 10'

GENERAL PLAN NOTES

1. SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.
2. FLOOR PLAN KEYNOTES IN THE LEGEND ABOVE MAY NOT APPLY TO ALL FLOOR PLAN DRAWINGS.
3. ALL DIMENSIONS ON FLOOR PLANS ARE TO THE CENTER OF STUD, FACE OF MASONRY, UNLESS NOTED OTHERWISE.
4. ALL NON-FURRING PARTITIONS EXTEND TO THE UNDERSIDE OF STRUCTURE, U.N.O., FURRING WALLS EXTEND MIN. 6" ABOVE FINISH CEILINGS. SEE DETAILS
5. FIRE DAMPERS SHALL BE PROVIDED WHERE DUCTS PENETRATE FIRE-RATED ASSEMBLIES, SEE CODE PLAN FOR ADDITIONAL NOTES AND INFORMATION.
6. GC SHALL SUBMIT INDICATED FIRE-RESISTANT SEALING PROPOSALS TO BUILDING DEPARTMENT FOR REVIEW PRIOR TO PROCEEDING WITH WORK.
7. FOR TYPICAL CMU COURSING CONFIGURATIONS AND BURNISH FINISHES, SEE 2 / A522
8. SEE STRUCTURAL FOR ADDITION REQUIREMENTS FOR PRECAST ELEMENTS.
9. WALL-MOUNTED MONITOR, MOUNTS AND MONITORS BY OWNER. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING AS REQUIRED AT FRAMED WALLS CAPABLE OF SUPPORTING 125 LBS MINIMUM. COORDINATE WITH POWER AND I.T. REQUIREMENTS, SEE E-SERIES SHEETS.
10. AT ALL WALL TILE LOCATIONS, CONTRACTOR SHALL PROVIDE CEMENTITIOUS BACKERBOARD SUBSTRATE IN LIEU OF GYPSUM BOARD AND INSTALL PER TCNA HANDBOOK METHOD W244.

KEY PLAN



MAIN LEVEL

FLOOR PLAN KEYNOTES

1. CASEWORK, SEE ELEVATION
2. WALL-MOUNTED FIRE EXTINGUISHER, SEE PLAN FOR TYPE (PROVIDE SEMI-RECESSED PREFINISHED MTL. CABINETS AT FRAMED WALLS) CONFIRM EXACT MOUNTING LOCATION WITH OFFICIAL PRIOR TO INSTALL. SEE STANDARD MOUNTING HEIGHTS.
3. INSPECTIONS TUNNEL, SEE STRUCT. FOR ADDITIONAL NOTES AND INFORMATION
4. ACCESSIBLE SIGNAGE, SEE 1 / T104
5. DIGITAL DISPLAY, SEE ELEC. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING FOR INSTALL AT 54" AFF.
6. STL. STAIR / SHIP'S LADDER ASSEMBLY, SEE 1 / A554
7. PROVIDE 20' - 0" LF OF FIRE-RATED 3/4" SHEATHING BACKER FROM 6" TO 102" AFF. COORDINATE EXACT LOCATION WITH I.T. REQUIREMENTS.
8. STL. ANTENNA STORAGE (HIGH), SEE PC PANELS FOR STL EMBED LOCATIONS. PROVIDE GALV. STL. ANGLE SUPPORT ASSEMBLY AT EA. PANEL. 24" HORZ. LEG AND 16" VERT LEG, CAPABLE OF SUPPORTING 200 LBS
9. EMERGENCY EYE WASH STATION, SEE PLUMB.
10. CONC. EQUIPMENT PAD, SEE STRUCT.
11. FLOOR SINK, SEE MECH. PROVIDE 4' FRP PANELING ON BOTH SIDE WALLS (MEASURED FROM THE CORNER) EXTENDING FROM FLOOR TO 5' AFF.
12. UTILITY SINK, SEE PLUMB.
13. FIRE DEPARTMENT CONNECTION, SEE PLUMB. COORDINATE EXACT EXTERIOR MOUNTING LOCATION OF CORRESPONDING FIRE DEPARTMENT ACCESS BOX WITH AHJ.
14. WALL SPIGOT, SEE PLUMB.
15. CONC. STOOP/APRON, SEE STRUCT.
16. PREFABRICATED DISPLAY CASE, SEE 3 / A504
17. HI/LO DRINKING FOUNTAIN WITH BOTTLE FILLER, SEE PLUMB AND STANDARD MOUNTING HEIGHTS FOR ADDITIONAL NOTES AND INFORMATION
18. ELEVATOR ASSEMBLY AND HOIST WAY, SEE ENLARGED ELEVATOR PLANS
19. LOCKER ASSEMBLY, SEE ELEVATION 6 / A507
20. PRECAST WALL PANEL, SEE STRUCT. SEALANT AT ALL PRECAST WALL PANEL JOINTS (BOTH SIDES), TYP.
21. FIRE ANNUNCIATION PANEL, SEE ELEC., SEE FIRE PROTECTION
22. REFRIGERATOR, PROVIDED BY OWNER. (NIC)
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24. MEP CHASE, SEE MECH., ELEC. & PLUMB. FOR ADDITIONAL NOTES AND INFORMATION.
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26. EVIDENCE DRY CABINET, PROVIDED BY OWNER (NIC)
27. STL. CANOPY ASSEMBLY, SEE ROOF PLAN AND STRUCT. FOR ADDITIONAL NOTES AND INFORMATION
28. PIT WITH GRATE, SEE STRUCT. AND MECH.
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30. KEY STORAGE CABINET. GC TO CONFIRM MOUNTING LOCATION WITH OWNER PRIOR TO INSTALL
31. APPROXIMATE LOCATION OF MEP EQUIPMENT SHOWN FOR REFERENCE PURPOSES ONLY, SEE MEP.
32. RAISED ACCESS FLOOR ASSEMBLY
33. OVERHEAD DOOR CONTROL CONSOLE. SEE 4 / A125
34. PAINTED 4" WIDE TRAFFIC STRIPE REFER TO SPEC. SECTION 09 91 00
35. CUSTOM WORKSPACE COUNTER TOP. SEE 1 / A503
36. CARD READER, SEE ELECTRICAL AND DOOR SCHEDULE
37. MOVABLE WALL PARTITION, SEE DETAILS
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41. SOLID SURFACE WINDOW SILL, SEE ALUMINUM STORE FRONT TYPES AND/OR HM WINDOW TYPES FOR MORE INFORMATION
42. UTILITY SHELF W/ MOP CLIPS, SEE SPEC

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MAIN LEVEL FLOOR PLAN (AREA C)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A105	125

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GENERAL PLAN NOTES

1.SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.

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3. ALL DIMENSIONS ON FLOOR PLANS ARE TO THE CENTER OF STUD, FACE OF MASONRY, UNLESS NOTED OTHERWISE.

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6. GC SHALL SUBMIT INDICATED FIRE-RESISTANT SEALING PROPOSALS TO BUILDING DEPARTMENT FOR REVIEW PRIOR TO PROCEEDING WITH WORK.

7. FOR TYPICAL CMU COURSING CONFIGURATIONS AND BURNISH FINISHES, SEE 2 / A522

8. SEE STRUCTURAL FOR ADDITION REQUIREMENTS FOR PRECAST ELEMENTS.

9. WALL-MOUNTED MONITOR, MOUNTS AND MONITORS BY OWNER. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING AS REQUIRED AT FRAMED WALLS CAPABLE OF SUPPORTING 125 LBS MINIMUM. COORDINATE WITH POWER AND I.T. REQUIREMENTS, SEE E-SERIES SHEETS.

10. AT ALL WALL TILE LOCATIONS, CONTRACTOR SHALL PROVIDE CEMENTITIOUS BACKERBOARD SUBSTRATE IN LIEU OF GYPSUM BOARD AND INSTALL PER TCNA HANDBOOK METHOD W244.

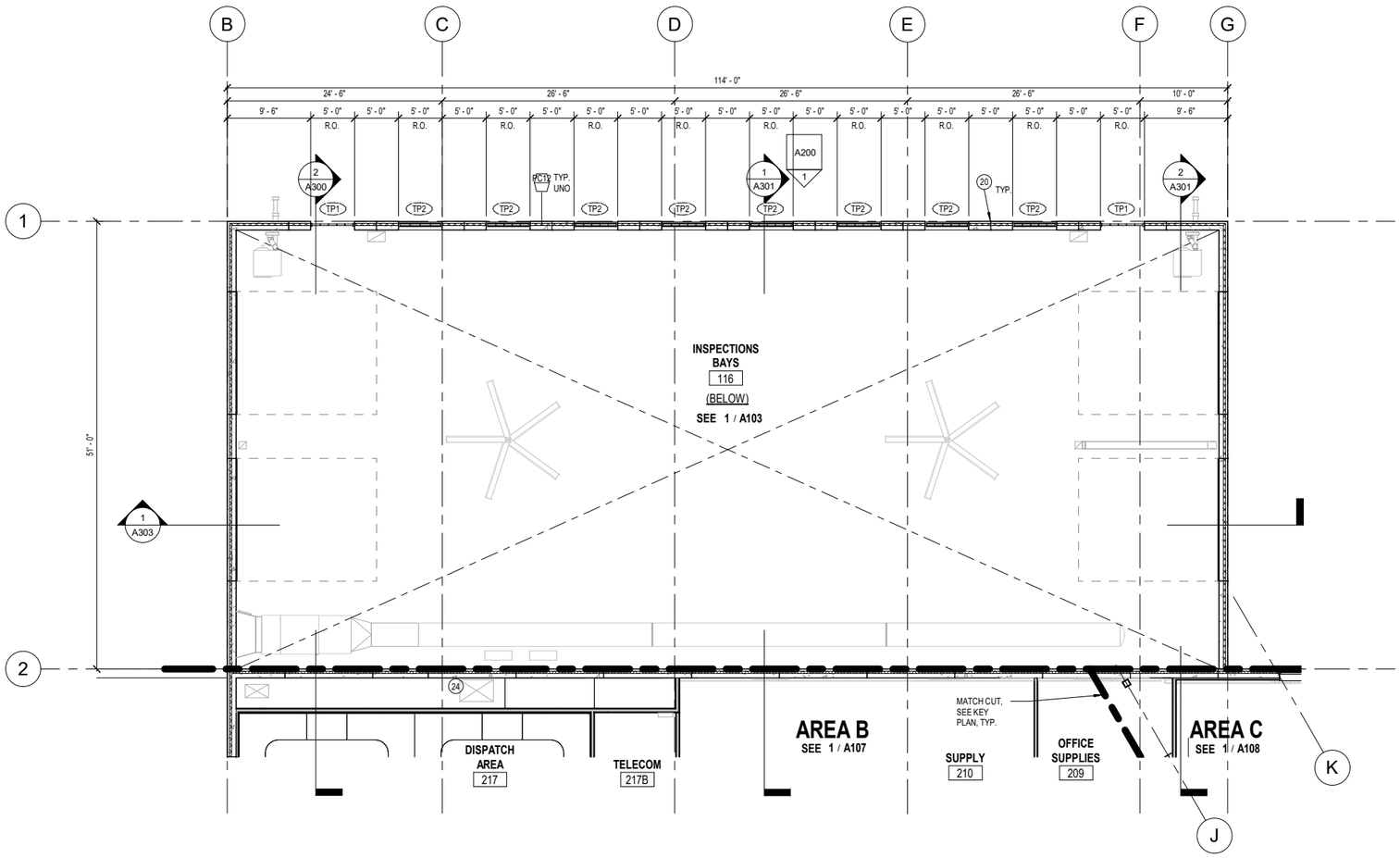
KEY PLAN



UPPER LEVEL

FLOOR PLAN KEYNOTES

1. CASEWORK, SEE ELEVATION
2. WALL-MOUNTED FIRE EXTINGUISHER, SEE PLAN FOR TYPE (PROVIDE SEMI-RECESSED PREFINISHED MTL. CABINETS AT FRAMED WALLS) CONFIRM EXACT MOUNTING LOCATION WITH OFFICIAL PRIOR TO INSTALL. SEE STANDARD MOUNTING HEIGHTS.
3. INSPECTIONS TUNNEL, SEE STRUCT. FOR ADDITIONAL NOTES AND INFORMATION
4. ACCESSIBLE SIGNAGE, SEE 1 / T104
5. DIGITAL DISPLAY, SEE ELEC. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING FOR INSTALL AT 54" AFF.
6. STL. STAIR / SHIP'S LADDER ASSEMBLY, SEE 1 / A554
7. PROVIDE 20' - 0" LF OF FIRE-RATED 3/4" SHEATHING BACKER FROM 6" TO 102" AFF. COORDINATE EXACT LOCATION WITH I.T. REQUIREMENTS.
8. STL. ANTENNA STORAGE (HIGH), SEE PC PANELS FOR STL EMBED LOCATIONS. PROVIDE GALV. STL. ANGLE SUPPORT ASSEMBLY AT EA. PANEL. 24" HORZ. LEG AND 16" VERT LEG, CAPABLE OF SUPPORTING 200 LBS
9. EMERGENCY EYE WASH STATION, SEE PLUMB.
10. CONC. EQUIPMENT PAD, SEE STRUCT.
11. FLOOR SINK, SEE MECH. PROVIDE 4' FRP PANELING ON BOTH SIDE WALLS (MEASURED FROM THE CORNER) EXTENDING FROM FLOOR TO 5' AFF.
12. UTILITY SINK, SEE PLUMB.
13. FIRE DEPARTMENT CONNECTION, SEE PLUMB. COORDINATE EXACT EXTERIOR MOUNTING LOCATION OF CORRESPONDING FIRE DEPARTMENT ACCESS BOX WITH AHJ.
14. WALL SPIGOT, SEE PLUMB.
15. CONC. STOOP/APRON, SEE STRUCT.
16. PREFABRICATED DISPLAY CASE, SEE 3 / A504
17. HI/LO DRINKING FOUNTAIN WITH BOTTLE FILLER, SEE PLUMB AND STANDARD MOUNTING HEIGHTS FOR ADDITIONAL NOTES AND INFORMATION
18. ELEVATOR ASSEMBLY AND HOIST WAY, SEE ENLARGED ELEVATOR PLANS
19. LOCKER ASSEMBLY, SEE ELEVATION 6 / A507
20. PRECAST WALL PANEL, SEE STRUCT. SEALANT AT ALL PRECAST WALL PANEL JOINTS (BOTH SIDES), TYP.
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22. REFRIGERATOR, PROVIDED BY OWNER. (NIC)
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41. SOLID SURFACE WINDOW SILL, SEE ALUMINUM STORE FRONT TYPES AND/OR HM WINDOW TYPES FOR MORE INFORMATION
42. UTILITY SHELF W/ MOP CLIPS, SEE SPEC



1 A106 UPPER LEVEL REFERENCE FLOOR PLAN
1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			UPPER LEVEL FLOOR PLAN (AREA A)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A106	126

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GENERAL PLAN NOTES

1.SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.

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5. FIRE DAMPERS SHALL BE PROVIDED WHERE DUCTS PENETRATE FIRE-RATED ASSEMBLIES, SEE CODE PLAN FOR ADDITIONAL NOTES AND INFORMATION.

6. GC SHALL SUBMIT INDICATED FIRE-RESISTANT SEALING PROPOSALS TO BUILDING DEPARTMENT FOR REVIEW PRIOR TO PROCEEDING WITH WORK.

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8. SEE STRUCTURAL FOR ADDITION REQUIREMENTS FOR PRECAST ELEMENTS.

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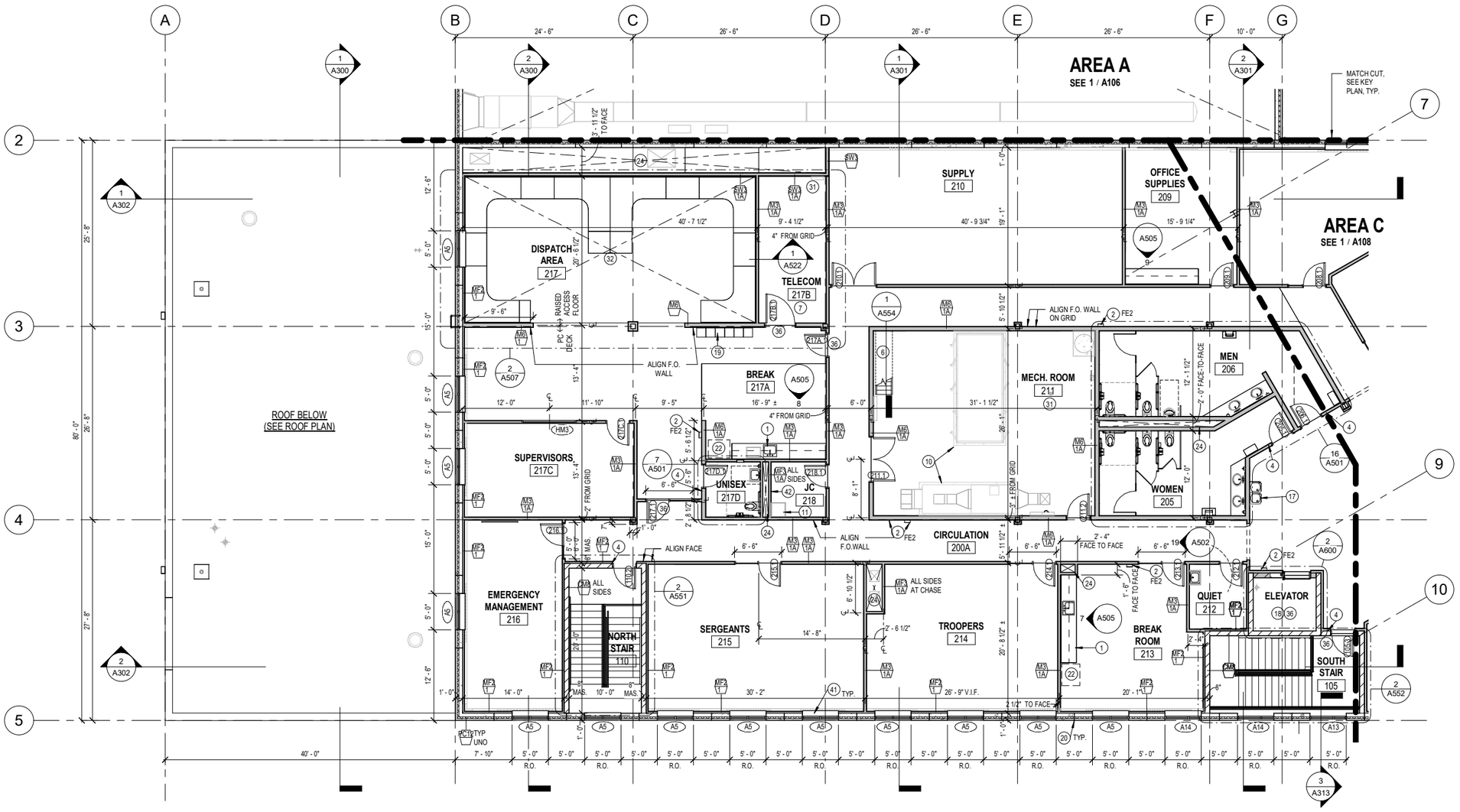
KEY PLAN



UPPER LEVEL

FLOOR PLAN KEYNOTES

1. CASEWORK, SEE ELEVATION
2. WALL-MOUNTED FIRE EXTINGUISHER, SEE PLAN FOR TYPE (PROVIDE SEMI-RECESSED PREFINISHED MTL. CABINETS AT FRAMED WALLS) CONFIRM EXACT MOUNTING LOCATION WITH OFFICIAL PRIOR TO INSTALL. SEE STANDARD MOUNTING HEIGHTS.
3. INSPECTIONS TUNNEL, SEE STRUCT. FOR ADDITIONAL NOTES AND INFORMATION
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5. DIGITAL DISPLAY, SEE ELEC. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING FOR INSTALL AT 54" AFF.
6. STL. STAIR / SHIP'S LADDER ASSEMBLY, SEE 1 / A554
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16. PREFABRICATED DISPLAY CASE, SEE 3 / A504
17. HI/LO DRINKING FOUNTAIN WITH BOTTLE FILLER, SEE PLUMB AND STANDARD MOUNTING HEIGHTS FOR ADDITIONAL NOTES AND INFORMATION
18. ELEVATOR ASSEMBLY AND HOIST WAY, SEE ENLARGED ELEVATOR PLANS
19. LOCKER ASSEMBLY, SEE ELEVATION 6 / A507
20. PRECAST WALL PANEL, SEE STRUCT. SEALANT AT ALL PRECAST WALL PANEL JOINTS (BOTH SIDES), TYP.
21. FIRE ANNUNCIATION PANEL, SEE ELEC., SEE FIRE PROTECTION
22. REFRIGERATOR, PROVIDED BY OWNER. (NIC)
23. FUME HOOD, PROVIDED BY OWNER (NIC)
24. MEP CHASE, SEE MECH., ELEC. & PLUMB. FOR ADDITIONAL NOTES AND INFORMATION.
25. STL. BOLLARD (CONCRETE FILLED) WITH FINISH SLEEVE, SEE STRUCT.
26. EVIDENCE DRY CABINET, PROVIDED BY OWNER (NIC)
27. STL. CANOPY ASSEMBLY, SEE ROOF PLAN AND STRUCT. FOR ADDITIONAL NOTES AND INFORMATION
28. PIT WITH GRATE, SEE STRUCT. AND MECH.
29. RECESSED FLOOR MAT AND FRAME, SEE FLOOR PLAN AND PROJECT SPECIFICATIONS FOR ADDITIONAL NOTES AND INFORMATION
30. KEY STORAGE CABINET. GC TO CONFIRM MOUNTING LOCATION WITH OWNER PRIOR TO INSTALL
31. APPROXIMATE LOCATION OF MEP EQUIPMENT SHOWN FOR REFERENCE PURPOSES ONLY, SEE MEP.
32. RAISED ACCESS FLOOR ASSEMBLY
33. OVERHEAD DOOR CONTROL CONSOLE. SEE 4 / A125
34. PAINTED 4" WIDE TRAFFIC STRIPE REFER TO SPEC. SECTION 09 91 00
35. CUSTOM WORKSPACE COUNTER TOP. SEE 1 / A503
36. CARD READER, SEE ELECTRICAL AND DOOR SCHEDULE
37. MOVABLE WALL PARTITION, SEE DETAILS
38. APPROXIMATE LOCATION OF KEY LOCK BOX. COORDINATE EXACT PLACEMENT WITH ONWER AND AHJ PRIOR TO INSTALL.
39. FURRING WALL TO EXTEND BENEATH SILL, SEE DETAIL
40. COORDINATE INSTALL OF DOWNSPOUT WITH UNDERDRAIN, SEE CIVIL. MATCH DOWNSPOUT FINISH AT PREFINFINISHED MTL. TRANSITION TO UNDERDRAIN. PROVIDE HEAT TAPE TO EXTEND FROM TOP OF DOWNSPOUT TO 16" BEYOND TOP OF UNDERDRAIN. FOR ADDITIONAL NOTES AND INFORMATION SEE 7 / A401
41. SOLID SURFACE WINDOW SILL, SEE ALUMINUM STORE FRONT TYPES AND/OR HM WINDOW TYPES FOR MORE INFORMATION
42. UTILITY SHELF W/ MOP CLIPS, SEE SPEC



1 / A107 UPPER LEVEL FLOOR PLAN (AREA B)
1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			UPPER LEVEL FLOOR PLAN (AREA B)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A107	

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GENERAL PLAN NOTES

1.SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.

2. FLOOR PLAN KEYNOTES IN THE LEGEND ABOVE MAY NOT APPLY TO ALL FLOOR PLAN DRAWINGS.

3. ALL DIMENSIONS ON FLOOR PLANS ARE TO THE CENTER OF STUD, FACE OF MASONRY, UNLESS NOTED OTHERWISE.

4. ALL NON-FURRING PARTITIONS EXTEND TO THE UNDERSIDE OF STRUCTURE, U.N.O., FURRING WALLS EXTEND MIN. 6" ABOVE FINISH CEILINGS. SEE DETAILS

5. FIRE DAMPERS SHALL BE PROVIDED WHERE DUCTS PENETRATE FIRE-RATED ASSEMBLIES, SEE CODE PLAN FOR ADDITIONAL NOTES AND INFORMATION.

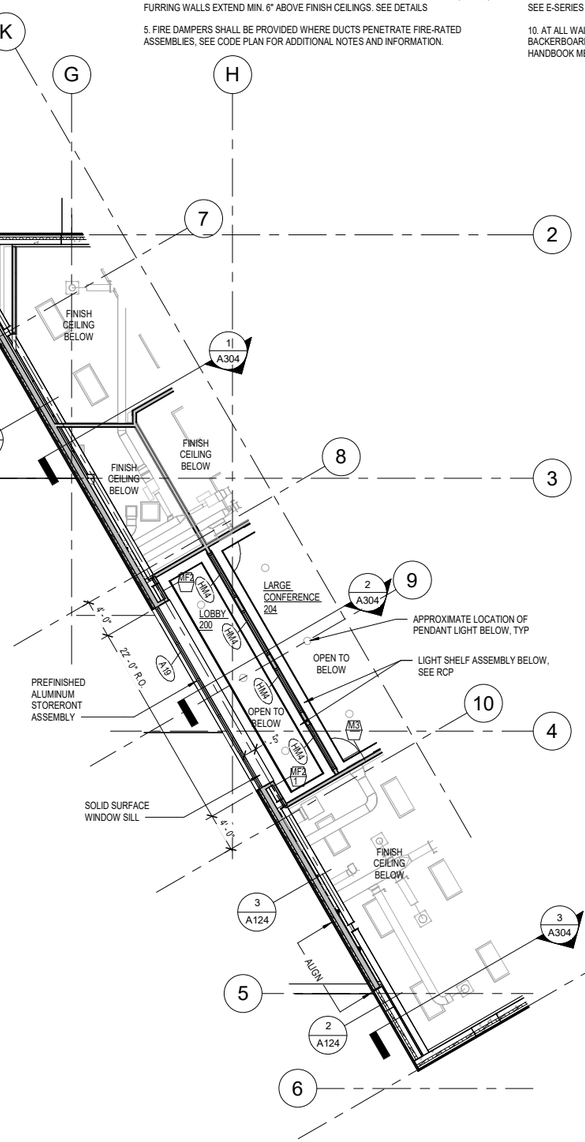
6. GC SHALL SUBMIT INDICATED FIRE-RESISTANT SEALING PROPOSALS TO BUILDING DEPARTMENT FOR REVIEW PRIOR TO PROCEEDING WITH WORK.

7. FOR TYPICAL CMU COURSING CONFIGURATIONS AND BURNISH FINISHES, SEE 2 / A522

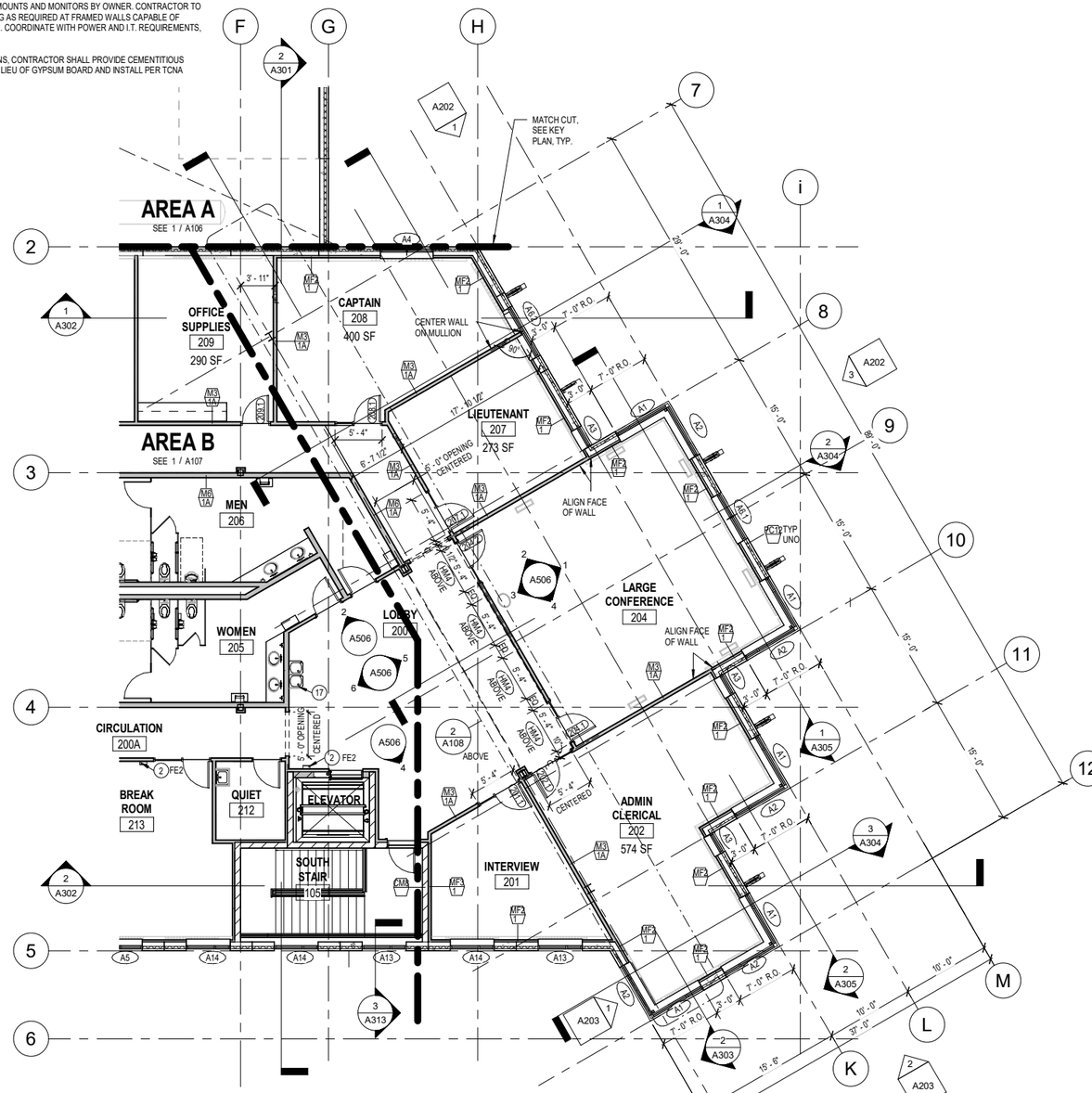
8. SEE STRUCTURAL FOR ADDITION REQUIREMENTS FOR PRECAST ELEMENTS.

9. WALL-MOUNTED MONITOR, MOUNTS AND MONITORS BY OWNER. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING AS REQUIRED AT FRAMED WALLS CAPABLE OF SUPPORTING 125 LBS MINIMUM. COORDINATE WITH POWER AND I.T. REQUIREMENTS, SEE E-SERIES SHEETS.

10. AT ALL WALL TILE LOCATIONS, CONTRACTOR SHALL PROVIDE CEMENTITIOUS BACKERBOARD SUBSTRATE IN LIEU OF GYPSUM BOARD AND INSTALL PER TCNA HANDBOOK METHOD W244.



2 CLERESTORY PLAN (AREA C) — A108
1/16" = 1'-0"



1 UPPER LEVEL FLOOR PLAN (AREA C) — A108
1/16" = 1'-0"

KEY PLAN

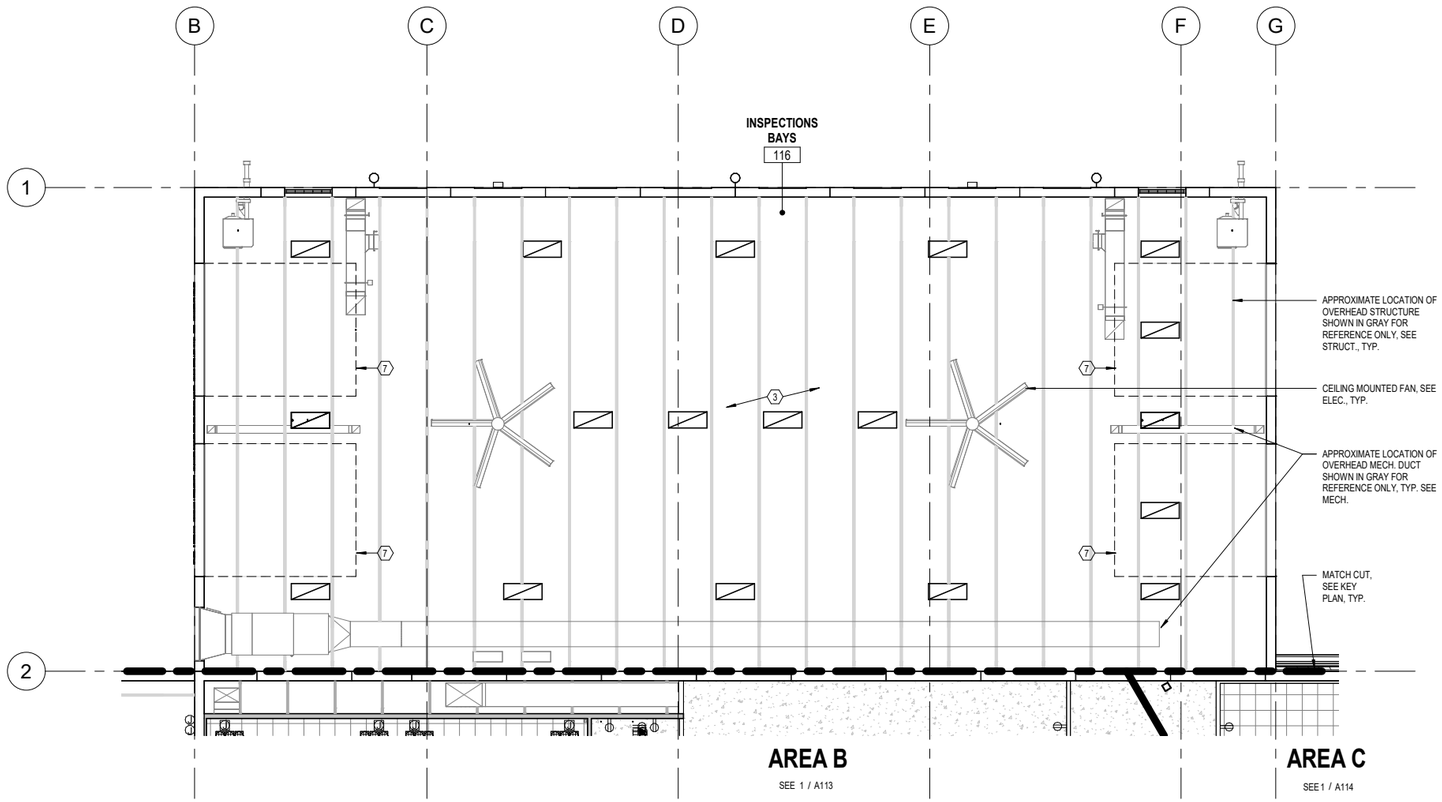


UPPER LEVEL

FLOOR PLAN KEYNOTES

1. CASEWORK, SEE ELEVATION
2. WALL-MOUNTED FIRE EXTINGUISHER, SEE PLAN FOR TYPE (PROVIDE SEMI-RECESSED PREFINISHED MTL. CABINETS AT FRAMED WALLS) CONFIRM EXACT MOUNTING LOCATION WITH OFFICIAL PRIOR TO INSTALL. SEE STANDARD MOUNTING HEIGHTS.
3. INSPECTIONS TUNNEL, SEE STRUCT. FOR ADDITIONAL NOTES AND INFORMATION
4. ACCESSIBLE SIGNAGE, SEE 1 / T104
5. DIGITAL DISPLAY, SEE ELEC. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING FOR INSTALL AT 54" AFF.
6. STL. STAIR / SHIP'S LADDER ASSEMBLY, SEE 1 / A554
7. PROVIDE 20' - 0" LF OF FIRE-RATED 3/4" SHEATHING BACKER FROM 6" TO 102" AFF. COORDINATE EXACT LOCATION WITH I.T. REQUIREMENTS.
8. STL. ANTENNA STORAGE (HIGH), SEE PC PANELS FOR STL EMBED LOCATIONS. PROVIDE GALV. STL. ANGLE SUPPORT ASSEMBLY AT EA. PANEL. 24" HORZ. LEG AND 16" VERT LEG, CAPABLE OF SUPPORTING 200 LBS
9. EMERGENCY EYE WASH STATION, SEE PLUMB.
10. CONC. EQUIPMENT PAD, SEE STRUCT.
11. FLOOR SINK, SEE MECH. PROVIDE 4' FRP PANELING ON BOTH SIDE WALLS (MEASURED FROM THE CORNER) EXTENDING FROM FLOOR TO 5' AFF.
12. UTILITY SINK, SEE PLUMB.
13. FIRE DEPARTMENT CONNECTION, SEE PLUMB. COORDINATE EXACT EXTERIOR MOUNTING LOCATION OF CORRESPONDING FIRE DEPARTMENT ACCESS BOX WITH AHJ.
14. WALL SPIGOT, SEE PLUMB.
15. CONC. STOOP/APRON, SEE STRUCT.
16. PREFABRICATED DISPLAY CASE, SEE 3 / A504
17. HI/LO DRINKING FOUNTAIN WITH BOTTLE FILLER, SEE PLUMB AND STANDARD MOUNTING HEIGHTS FOR ADDITIONAL NOTES AND INFORMATION
18. ELEVATOR ASSEMBLY AND HOIST WAY, SEE ENLARGED ELEVATOR PLANS
19. LOCKER ASSEMBLY, SEE ELEVATION 6 / A507
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PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			UPPER LEVEL FLOOR PLAN (AREA C)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A108	128



1 / A112 MAIN LEVEL RCP - AREA A
1/16" - 1' - 0"

0' 2' 5' 10'

KEY PLAN



MAIN LEVEL

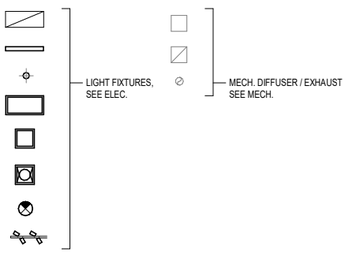
REFLECTED CEILING PLAN KEYNOTES

1. PREFINISHED MTL. SOFFIT PANEL. SEE SECTIONS FOR ADDITIONAL NOTES AND INFORMATION
2. MECHANICAL CHASE, SEE FLOOR PLAN
3. EXPOSED STRUCTURE, PAINT. SEE ARCHITECTURAL BUILDING SECTIONS AND STRUCT. FOR ADDITIONAL NOTES AND INFORMATION.
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5. 2x2 ACT CEILING ASSEMBLY. CENTER ON ROOM, U.N.O. SEE ROOM FINISH SCHED.
6. ACCESS PANEL, PAINT. COORDINATE EXACT LOCATION WITH MECH. REQUIREMENTS AND LIGHTING
7. APPROXIMATE LOCATION OF OVERHEAD DOOR TRACK ASSEMBLY, COORDINATE WITH LIGHTING AS REQUIRED.
8. ROOF HATCH, SEE ROOF PLAN FOR ADDITIONAL NOTES AND INFORMATION
9. LINEAR VENEERED WOOD CEILING PANELS
10. FINISHED CEILING HT. VARIES. SEE INTERIOR SECTIONS & ELEVATIONS FOR ADDITIONAL NOTES & INFORMATION
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14. LINEAR VENEERED WOOD CEILING LOWER MOUNTING DETAIL SEE 3 / A522
15. LINEAR VENEERED WOOD CEILING UPPER MOUNTING DETAIL SEE 6 / A522
16. LINEAR VENEERED WOOD CEILING PENDENT LIGHT MOUNTING DETAIL SEE 4 / A522, 5 / A522

GENERAL REFLECTED CEILING PLAN NOTES

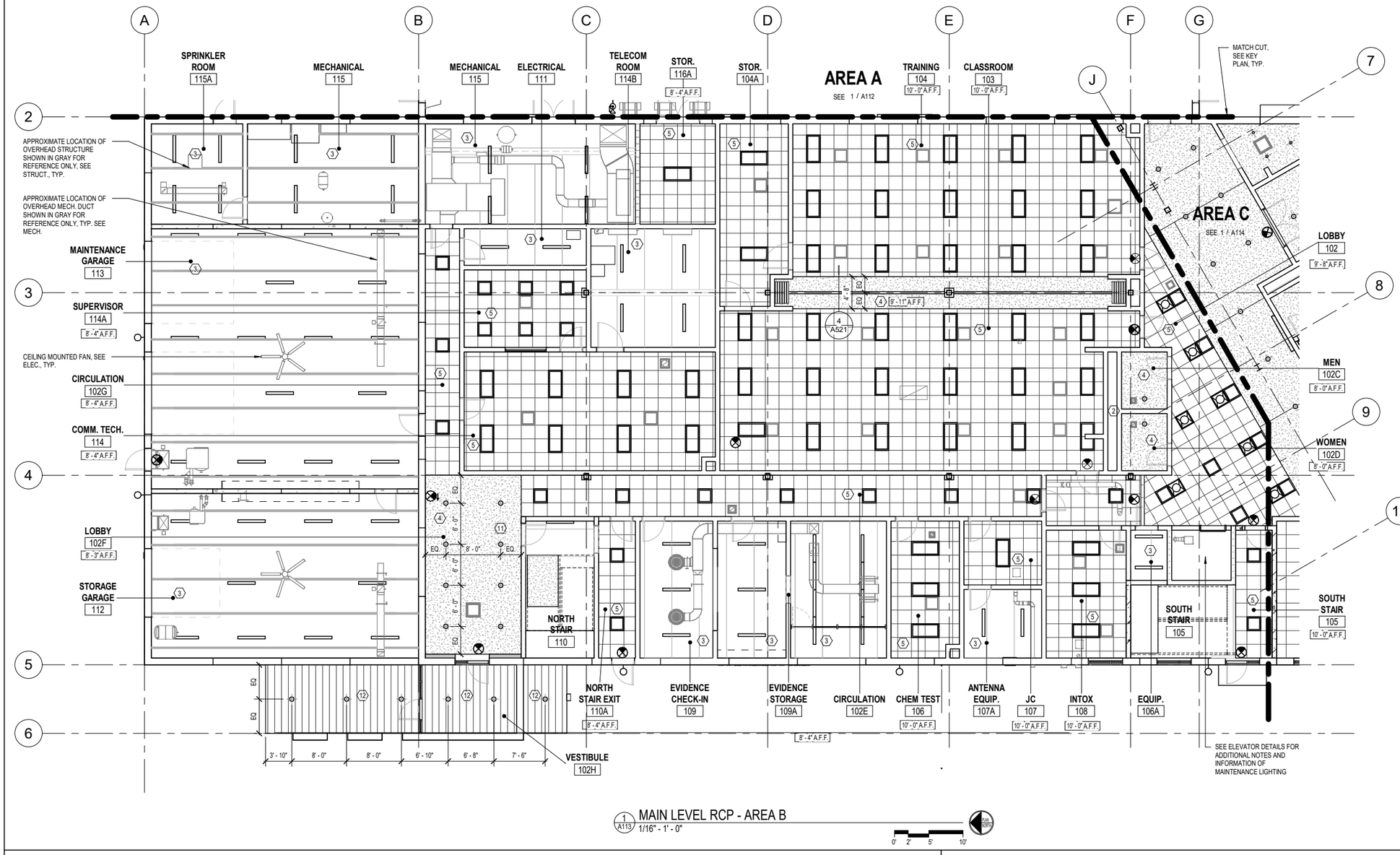
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2. SEE ROOM FINISH SCHEDULE FOR ADDITIONAL NOTES AND INFORMATION
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4. CONTRACTOR TO COORDINATE EXACT QUANTITY AND LOCATION OF ACCESS PANELS WHERE NOT SHOWN. PROVIDE ACCESS PANELS AT ALL MEP EQUIPMENT MAINTENANCE LOCATIONS WHERE POSITIONED ABOVE FIXED FINISH CEILING.

REFLECTED CEILING PLAN LEGEND



PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MAIN LEVEL REFLECTED CEILING PLAN (AREA A)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A112	129

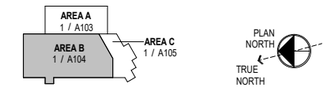
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1 / A113 MAIN LEVEL RCP - AREA B
1/16" - 1' - 0"

0' 2' 5' 10'

KEY PLAN



MAIN LEVEL

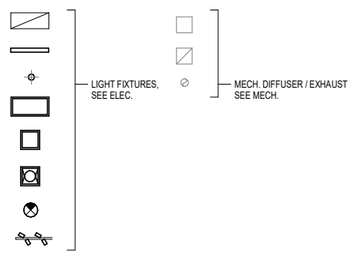
REFLECTED CEILING PLAN KEYNOTES

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15. LINEAR VENEERED WOOD CEILING UPPER MOUNTING DETAIL SEE 6 / A522
16. LINEAR VENEERED WOOD CEILING PENDENT LIGHT MOUNTING DETAIL SEE 4 / A522 5 / A522

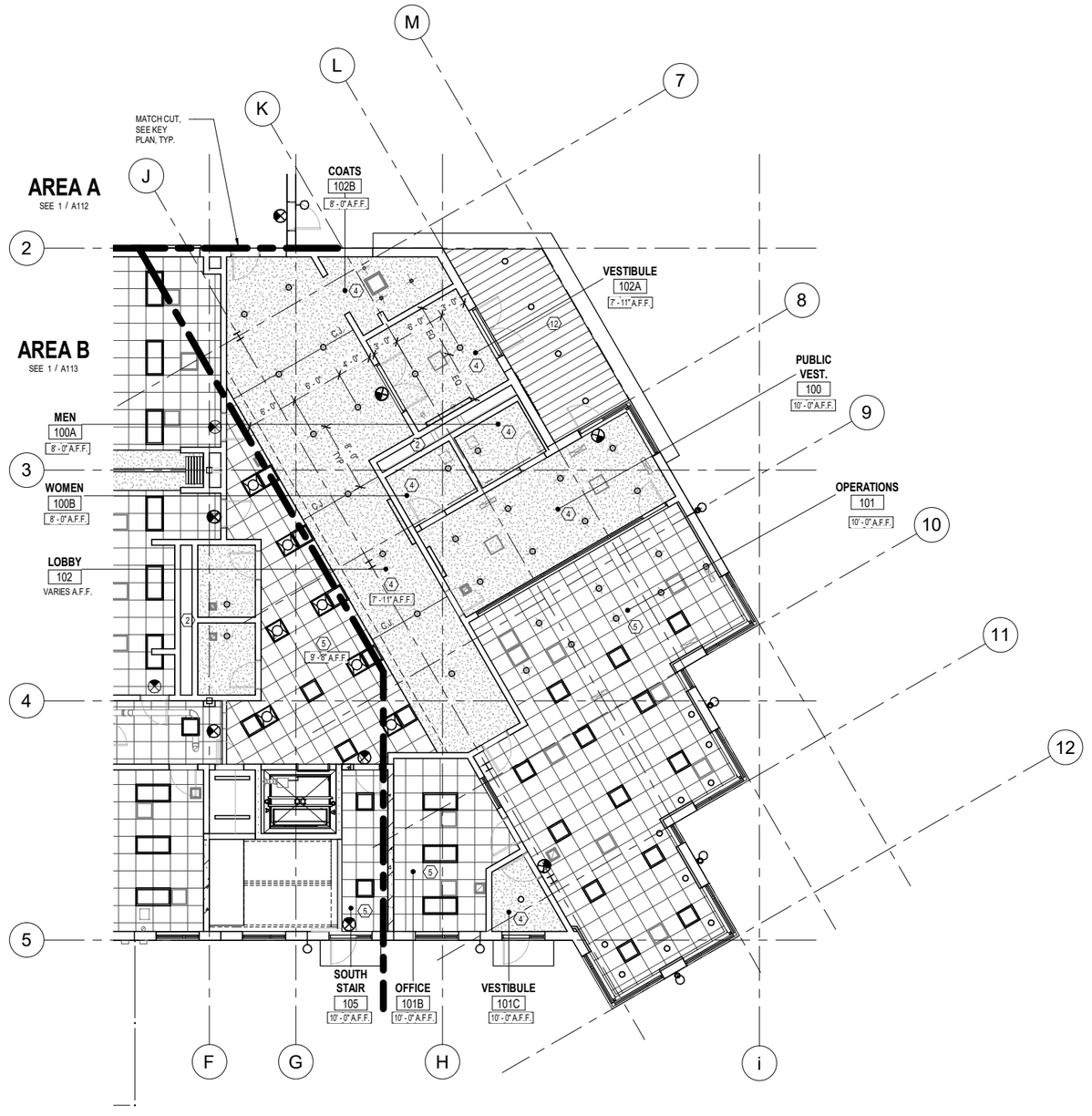
GENERAL REFLECTED CEILING PLAN NOTES

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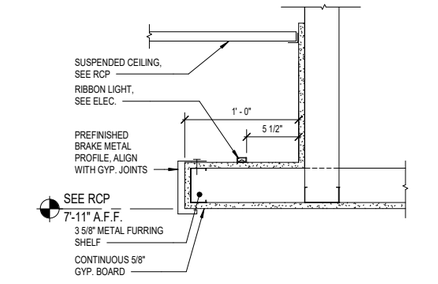
REFLECTED CEILING PLAN LEGEND



PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MAIN LEVEL REFLECTED CEILING PLAN (AREA B)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A113	130



1 / A114 MAIN LEVEL RCP - AREA C
1/16" = 1' - 0"



2 / A114 INTERIOR WALL SHELF
3/4" = 1'-0"

KEY PLAN



MAIN LEVEL

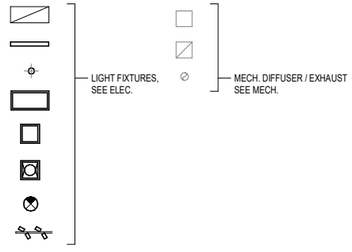
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16. LINEAR VENEERED WOOD CEILING PENDENT LIGHT MOUNTING DETAIL SEE 4 / A522 5 / A522

GENERAL REFLECTED CEILING PLAN NOTES

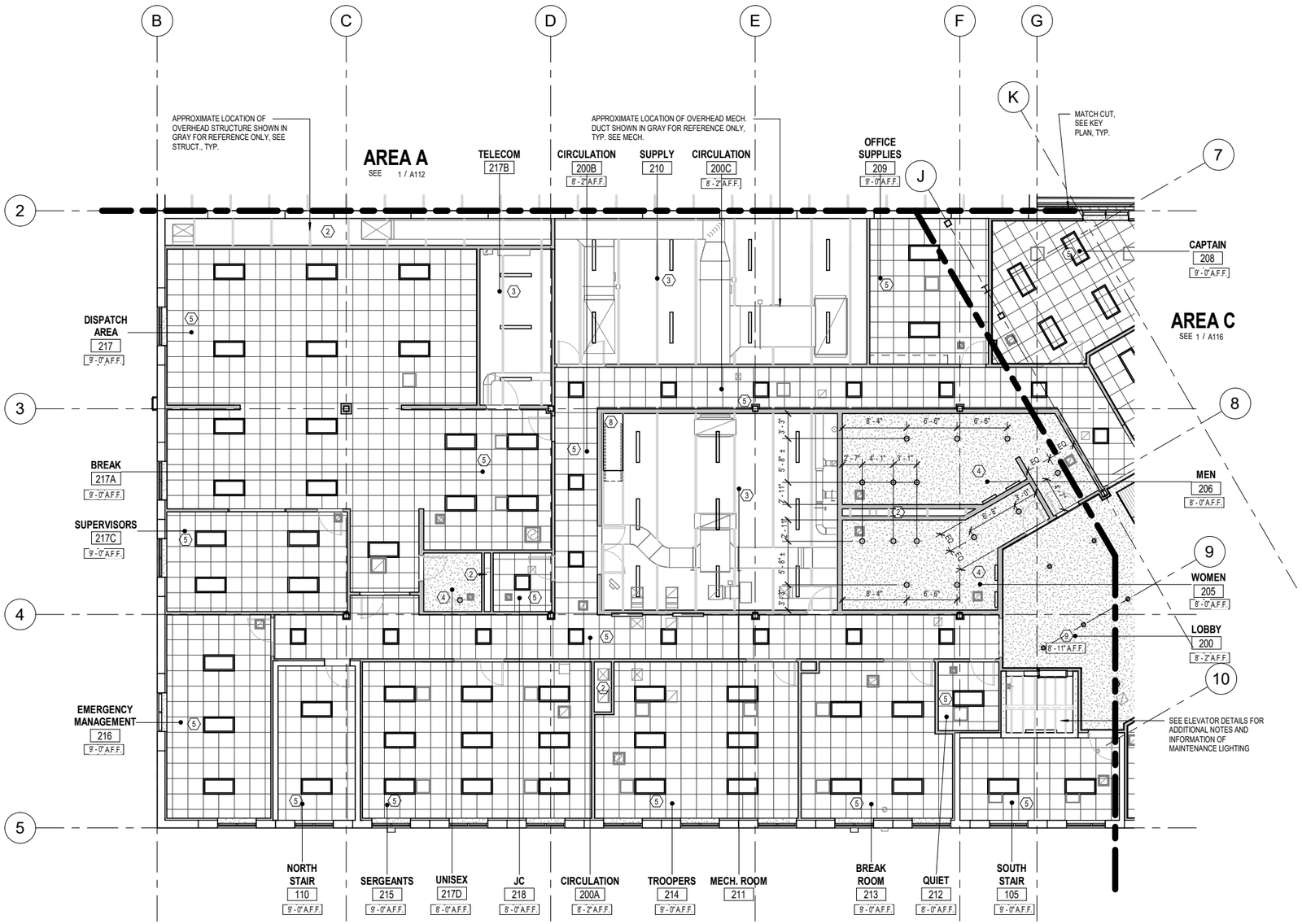
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REFLECTED CEILING PLAN LEGEND



PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MAIN LEVEL REFLECTED CEILING PLAN (AREA C)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A114	

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 10:57:44 AM



1 A115 UPPER LEVEL RCP - AREA B
1/16" - 1' - 0"

0' 2' 5' 10'

KEY PLAN



UPPER LEVEL

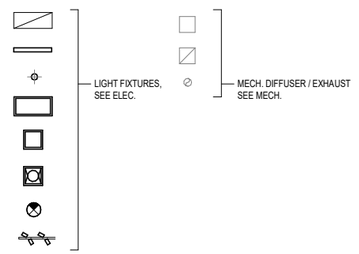
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15. LINEAR VENEERED WOOD CEILING UPPER MOUNTING DETAIL SEE 6 / A522
16. LINEAR VENEERED WOOD CEILING PENDENT LIGHT MOUNTING DETAIL SEE 4 / A522 5 / A522

GENERAL REFLECTED CEILING PLAN NOTES

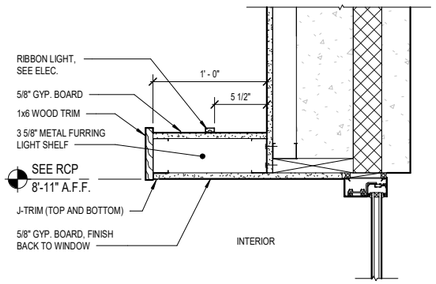
1. SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.
2. SEE ROOM FINISH SCHEDULE FOR ADDITIONAL NOTES AND INFORMATION
3. MEP EQUIPMENT SHOWN FOR REFERENCE ONLY. SEE MEP + FIRE PROTECTION FOR ADDITIONAL NOTES AND INFORMATION.
4. CONTRACTOR TO COORDINATE EXACT QUANTITY AND LOCATION OF ACCESS PANELS WHERE NOT SHOWN. PROVIDE ACCESS PANELS AT ALL MEP EQUIPMENT MAINTENANCE LOCATIONS WHERE POSITIONED ABOVE FIXED FINISH CEILING.

REFLECTED CEILING PLAN LEGEND

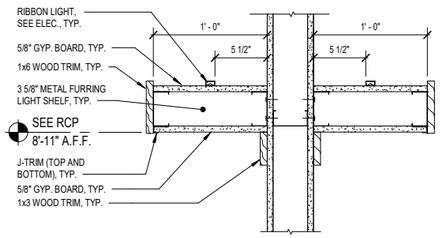


PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			UPPER LEVEL REFLECTED CEILING PLAN (AREA B)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A115	132

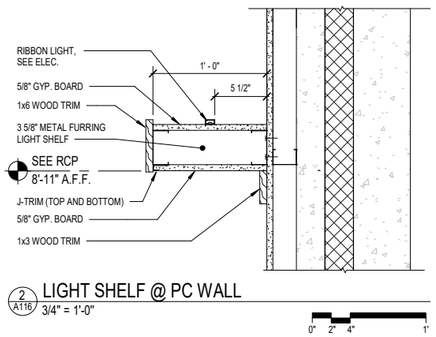
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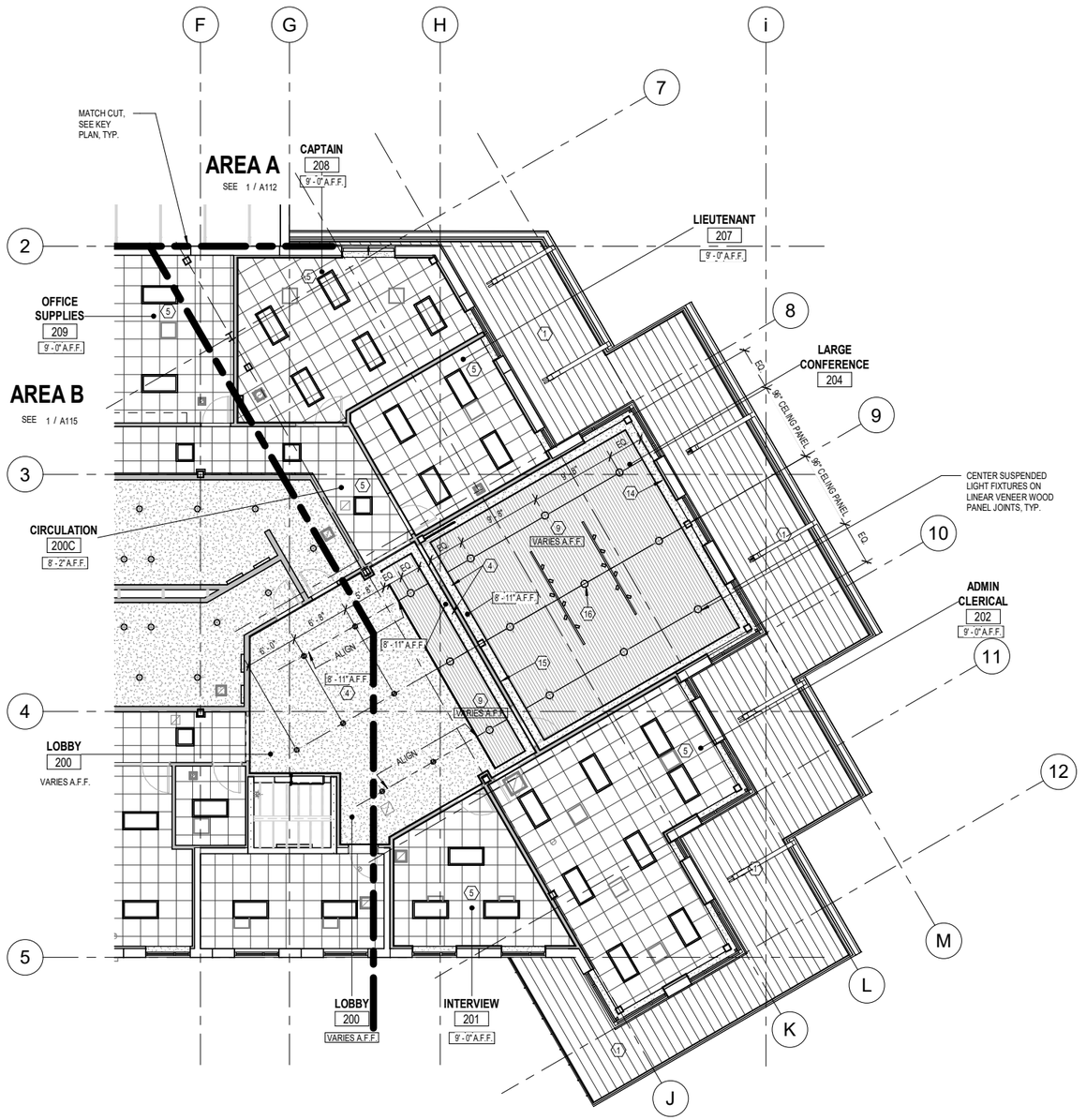
4 / A116 LIGHT SHELF - OVER WINDOW DETAIL
3/4" = 1'-0"
0" 2" 4" 1'



3 / A116 LIGHT SHELF @ INTERIOR WALL
3/4" = 1'-0"
0" 2" 4" 1'



2 / A116 LIGHT SHELF @ PC WALL
3/4" = 1'-0"
0" 2" 4" 1'



1 / A116 UPPER LEVEL RCP - AREA C
1/16" - 1' - 0"
0' 2' 5' 10'

KEY PLAN



UPPER LEVEL

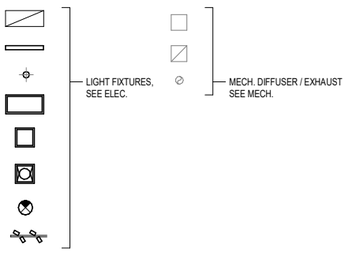
REFLECTED CEILING PLAN KEYNOTES

1. PREFINISHED MTL. SOFFIT PANEL. SEE SECTIONS FOR ADDITIONAL NOTES AND INFORMATION
2. MECHANICAL CHASE, SEE FLOOR PLAN
3. EXPOSED STRUCTURE, PAINT. SEE ARCHITECTURAL BUILDING SECTIONS AND STRUCT. FOR ADDITIONAL NOTES AND INFORMATION.
4. 5/8" GYPSUM CEILING/SOFFIT FINISH ON 3 5/8" LIGHT-GUAGE METAL FRAMING AT 16" O.C.. COORDINATE EXACT HEIGHT AFF. TO ALIGN WITH GYP FINISH AT WINDOW HEAD WHERE OCCURS, SEE ALUMINUM FRAME TYPES FOR ADDITIONAL NOTES AND INFORMATION.
5. 2x2 ACT CEILING ASSEMBLY. CENTER ON ROOM, U.N.O. SEE ROOM FINISH SCHED.
6. ACCESS PANEL, PAINT. COORDINATE EXACT LOCATION WITH MECH. REQUIREMENTS AND LIGHTING
7. APPROXIMATE LOCATION OF OVERHEAD DOOR TRACK ASSEMBLY, COORDINATE WITH LIGHTING AS REQUIRED.
8. ROOF HATCH, SEE ROOF PLAN FOR ADDITIONAL NOTES AND INFORMATION
9. LINEAR VENEERED WOOD CEILING PANELS
10. FINISHED CEILING HT. VARIES. SEE INTERIOR SECTIONS & ELEVATIONS FOR ADDITIONAL NOTES & INFORMATION
11. 18"x18" ACCESS PANEL. GC TO COORDINATE EXACT LOCATION WITH REQUIRED MEP ACCESS, SEE MECH.
12. PREFINISHED METAL SOFIT PANEL
13. 2-HR FIRE RATED CEILING ASSEMBLY. 6" LIGHT-GUAGE METAL FRAMING AT 16" O.C. WITH (2) LAYERS OF 5/8" TYPE-X GYPSUM FINISH BOTH AT TOP AND BOTTOM. PROVIDE CONT. FIRE-RATED SEALANT AT PERIMETER
14. LINEAR VENEERED WOOD CEILING LOWER MOUNTING DETAIL SEE 3 / A522
15. LINEAR VENEERED WOOD CEILING UPPER MOUNTING DETAIL SEE 6 / A522
16. LINEAR VENEERED WOOD CEILING PENDENT LIGHT MOUNTING DETAIL SEE 4 / A522, 5 / A522

GENERAL REFLECTED CEILING PLAN NOTES

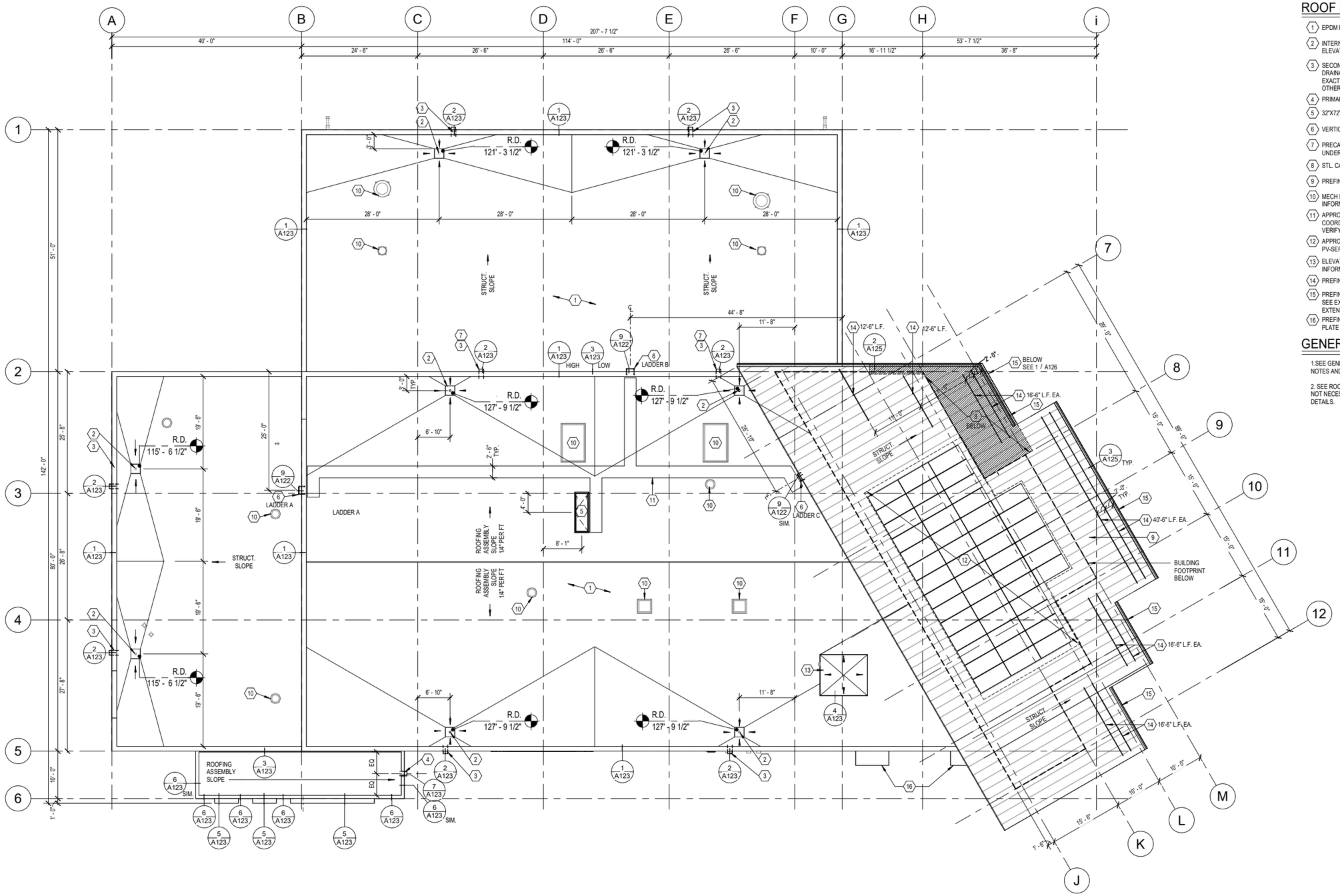
1. SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.
2. SEE ROOM FINISH SCHEDULE FOR ADDITIONAL NOTES AND INFORMATION
3. MEP EQUIPMENT SHOWN FOR REFERENCE ONLY. SEE MEP + FIRE PROTECTION FOR ADDITIONAL NOTES AND INFORMATION.
4. CONTRACTOR TO COORDINATE EXACT QUANTITY AND LOCATION OF ACCESS PANELS WHERE NOT SHOWN. PROVIDE ACCESS PANELS AT ALL MEP EQUIPMENT MAINTENANCE LOCATIONS WHERE POSITIONED ABOVE FIXED FINISH CEILING.

REFLECTED CEILING PLAN LEGEND



PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			UPPER LEVEL REFLECTED CEILING PLAN (AREA C)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A116	133

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1 A121 ROOF PLAN
3/64" = 1'-0"

0' 2' 5' 10'

ROOF PLAN KEYNOTES

1. EPDM ROOF ASSEMBLY, FOR TYPICAL DETAIL SEE 1 / A122
2. INTERNAL PRIMARY ROOF DRAIN. PIPE TO OUTSPOUT, SEE EXTERIOR ELEVATIONS AND MECH. FOR ADDITIONAL NOTES AND INFORMAITON.
3. SECONDARY THROUGH-WALL OVERFLOW SCUPPER, SET 2" ABOVE PRIMARY DRAINAGE. SEE EXTERIOR ELEVATIONS AND PC PANEL ELEVATIONS FOR EXACT PLACEMENT- CENTERED ON PRESCAST WALL PANEL UNLESS NOTED OTHERWISE. SEE SEE DETAIL 2 / A123
4. PRIMARY THROUGH-WALL SCUPPER
5. 32"X72" ROOF HATCH, SEE DETAIL 7 / A122
6. VERTICAL MTL. ROOF LADDER, SEE DETAIL 9 / A122
7. PRECAST CONC. SPLASH BLOCK AT ROOF BELOW, PROVIDE WEAR PAD AT UNDERSIDE
8. STL. CANOPY ASSEMBLY, SEE 1 / A126
9. PREFINISHED STANDING SEAM MTL. ROOF PANEL ASSEMBLY
10. MECH EQUIPMENT, SEE MEP DRAWINGS FOR ADDITIONAL NOTES AND INFORMATION.
11. APPROXIMATE LOCATION OF WALK PAD BY ROOF MANUFACTURER/SUPPLIER. COORDINATE WITH PLACEMENT OF MEP EQUIPMENT AS REQUIRED, FIELD VERIFY
12. APPROXIMATE LOCATION OF ROOF-MOUNTED PHOTOVOLTAIC ARRAY, SEE PV-SERIES SHEETS
13. ELEVATOR SHAFT LID ASSEMBLY, SEE STRUCT. FOR ADDITIONAL NOTES AND INFORMATION
14. PREFINISHED MTL ICE GUARD
15. PREFINISHED MTL. GUTTER WITH DOWNSPOUT(S), SHOWN GRAY FOR CLARITY, SEE EXTERIOR ELEVATIONS. PROVIDE CONTINUOUS HEAT TRACE TO FULL EXTENTS, SEE ELEC.
16. PREFINISHED ALUMINUM SOLAR SUN CANOPY, COORDINATE WITH STL. EMBED PLATE LOCATIONS (BY PRECASTER), SEE PC PANEL ELEVATIONS 5 / A401

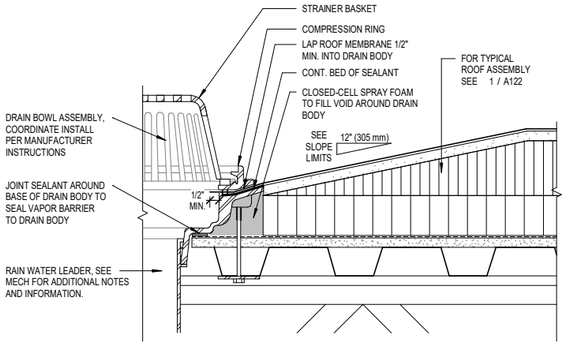
GENERAL ROOF PLAN NOTES

1. SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.
2. SEE ROOF DETAILS DRAWING SHEET(S) FOR TYPICAL ROOF DETAIL INCLUDING, BUT NOT NECESSARILY LIMITED TO, PENETRATIONS, SUPPORTS, FLASHING AND CURB DETAILS.

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ROOF PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A121	

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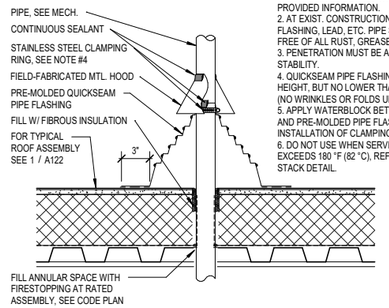


NOTES:
1. SEE ROOF PLAN FOR ADDITIONAL NOTES AND INFORMATION ON ROOF DRAIN INSTALL ELEVATIONS.
2. HOLE IN MEMBRANE SHOULD EXTEND A MINIMUM OF 1/2" (13 mm) BEYOND CLAMPING RING AND BE LARGER THAN THE DIAMETER OF THE LEADER PIPE.
3. INSULATION ADJACENT TO DRAIN TO BE APPROPRIATE INSULATION WITH APPROPRIATE BONDING SURFACE.
4. WATERBLOCK MINIMUM 1/2 OF 10 OZ (295 ml) TUBE PER 4" (102 mm) DRAIN. USE ADDITIONAL WATERBLOCK FOR LARGER DRAINS.
5. IN RE-ROOF APPLICATIONS:
-REMOVE EXISTING FLASHING DOWN TO METAL BOWL.
-REPAIR OR REPLACE BROKEN DRAIN COMPONENTS.
-DRILL AND TAP BROKEN DRAIN BOLTS AND REPLACE IF NECESSARY.

SUMP AREA FIELD REQUIREMENTS:
1) IF SEAM EDGE IS WITHIN 9" (229 mm) OF DRAIN COMPRESSION RING, EPDM TARGET PATCH REQUIRED.
2) IF SEAM EDGE IS WITHIN 9" (229 mm) TO 18" (457 mm) OF DRAIN COMPRESSION RING, INSTALL A LAYER OF 5" 127 mm) QUICKSEAM FLASHING CENTERED OVER SEAM EDGE. EXTEND 5" (127 mm) QUICKSEAM FLASHING 3" (76 mm) MIN. BEYOND EDGE OF SUMP.

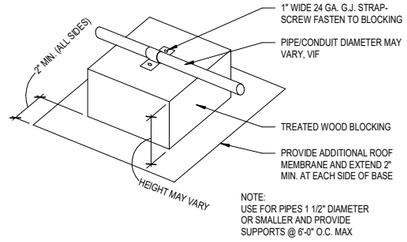
MEMBRANE SLOPE LIMITS:
1) MAXIMUM SLOPE FOR REINFORCED MEMBRANE SHALL BE 2" (51 mm) TO 12" (305 mm).
2) MAX. SLOPE FOR STANDARD MEMBRANE SHALL BE 6" (152 mm) / 12" (305 mm).

10 A122 TYPICAL ROOF DRAIN DETAIL
1/2" = 1' - 0"



NOTES:
1. CONFIRM ALL DETAILS WITH MANUFACTURER PROVIDED INFORMATION.
2. AT EXIST. CONSTRUCTION,REMOVE ALL EXISTING FLASHING, LEAD, ETC. PIPE SURFACE MUST BE FREE OF ALL RUST, GREASE, INSULATION, ETC.
3. PENETRATION MUST BE ANCHORED TO ENSURE STABILITY.
4. QUICKSEAM PIPE FLASHING MAY BE CUT TO HEIGHT, BUT NO LOWER THAN REINFORCING RING (NO WRINKLES OR FOLDS UNDER CLAMPING RING).
5. APPLY WATERBLOCK BETWEEN PENETRATION AND PRE-MOLDED PIPE FLASHING PRIOR TO INSTALLATION OF CLAMPING RING.
6. DO NOT USE WHEN SERVICE LINE TEMP. EXCEEDS 180 °F (82 °C), REFER TO HOT VENT STACK DETAIL.

6 A122 PIPE PENETRATION DETAIL
3/4" = 1' - 0"

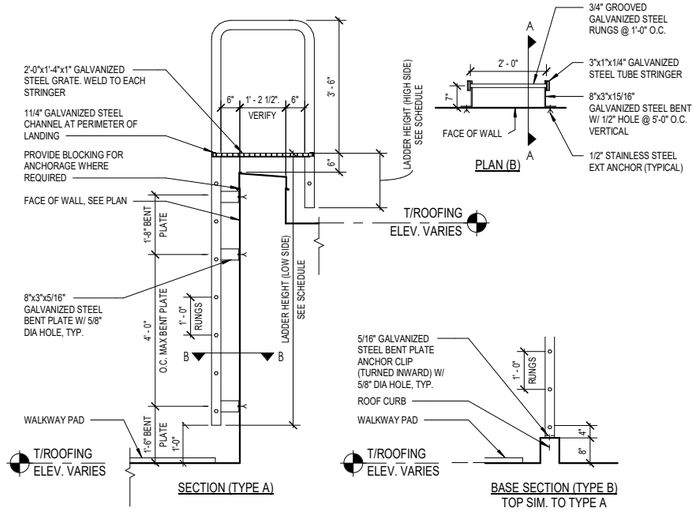


NOTE:
USE FOR PIPES 1 1/2" DIAMETER OR SMALLER AND PROVIDE SUPPORTS @ 6'-0" O.C. MAX

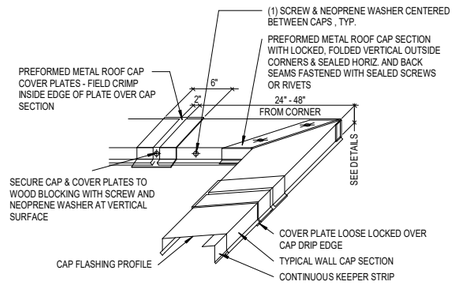
3 A122 ROOF PIPE SUPPORT DETAIL
N.T.S.

ROOF ACCESS LADDER SCHEDULE, SEE ROOF PLAN FOR LADDER TYPE.						
LADDER IDENTIFICATION (SEE PLAN)	LADDER TYPE	APPROXIMATE LADDER HEIGHT		WALL / PARAPET CONSTRUCTION VIF	APPROX. PARAPET THICKNESS VIF	COMMENTS
		HIGH SIDE	LOW SIDE			
LADDER A	1	12' - 6"	-	PC WALL PANEL	1' - 3"±	NOTE #1 & #2
LADDER B	1	6' - 4"	1' - 0"	PC WALL PANEL	1' - 3"±	NOTE #1 & #2
LADDER C	2	7' - 6"	-	STRUCT. STL ASSEMBLY	-	NOTE #1 & #2 & #3

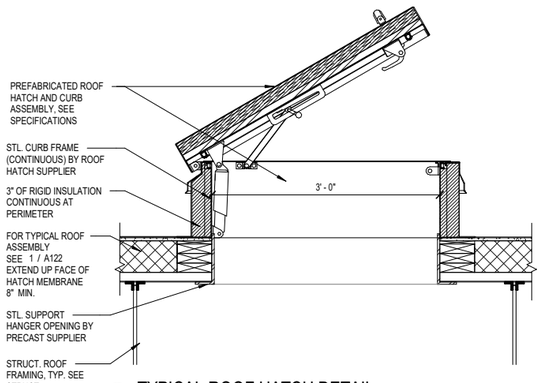
LADDER SCHEDULE NOTES:
1) ATTACHEMENT OF LADDERS DIRECTLY TO ROOFING ASSMBLY IS PROHIBITED, U.N.O.
2) CONTRACTOR TO FIELD VERIFY ALL CONDITIONS AND COORDINATE WITH ROOFING ASSEMBLY AS REQUIRED.
3) TYPE 2 LADDERS SHALL BE SECURED TO TOP OF ROOF CURB AT BOTTOM AND STRUCT STL. ROOFING ASSEMBLY AT TOP.



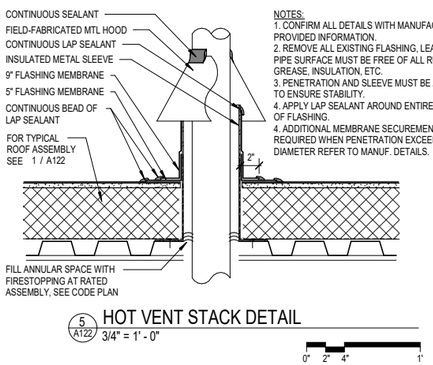
9 A122 TYPICAL LADDER DETAILS
1/4" = 1' - 0"



8 A122 ISOMETRIC COPING DETAIL
N.T.S.

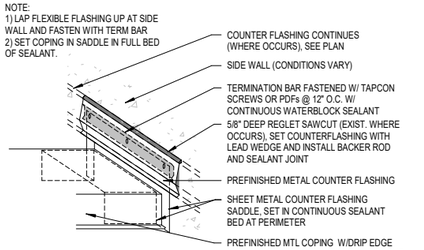


7 A122 TYPICAL ROOF HATCH DETAIL
1/2" = 1'-0"

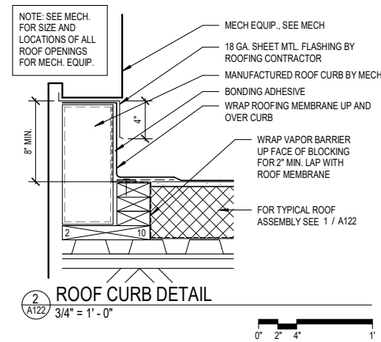


NOTES:
1. CONFIRM ALL DETAILS WITH MANUFACTURER PROVIDED INFORMATION.
2. REMOVE ALL EXISTING FLASHING, LEAD, ETC. PIPE SURFACE MUST BE FREE OF ALL RUST, GREASE, INSULATION, ETC.
3. PENETRATION AND SLEEVE MUST BE ANCHORED TO ENSURE STABILITY.
4. APPLY LAP SEALANT AROUND ENTIRE PERIMETER OF FLASHING.
4. ADDITIONAL MEMBRANE SECUREMENT REQUIRED WHEN PENETRATION EXCEEDS 12" DIAMETER REFER TO MANUF. DETAILS.

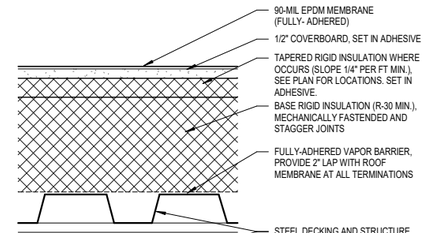
5 A122 HOT VENT STACK DETAIL
3/4" = 1' - 0"



4 A122 COPING SADDLE DIAGRAM
N.T.S.



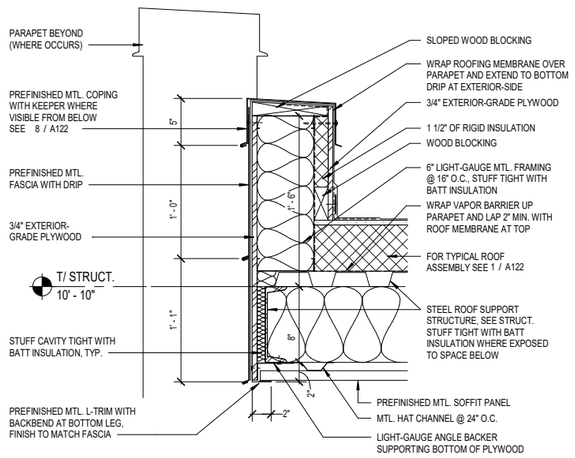
2 A122 ROOF CURB DETAIL
3/4" = 1' - 0"



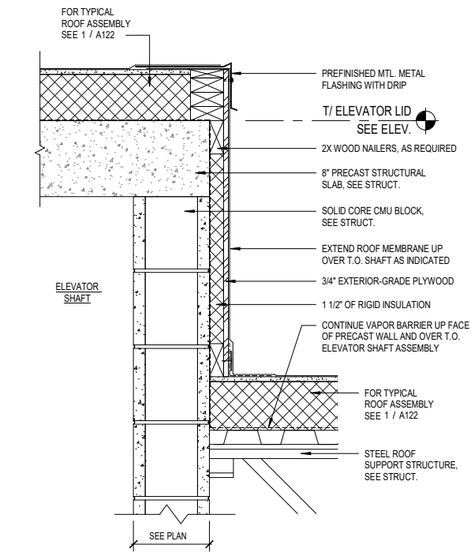
1 A122 TYPICAL ROOFING ASSEMBLY DETAIL
1 1/2" = 1' - 0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ROOF DETAILS	ISSUE DATE: 5/1/24 / ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A122

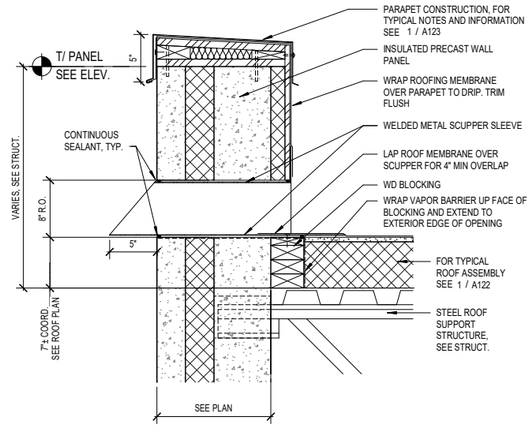
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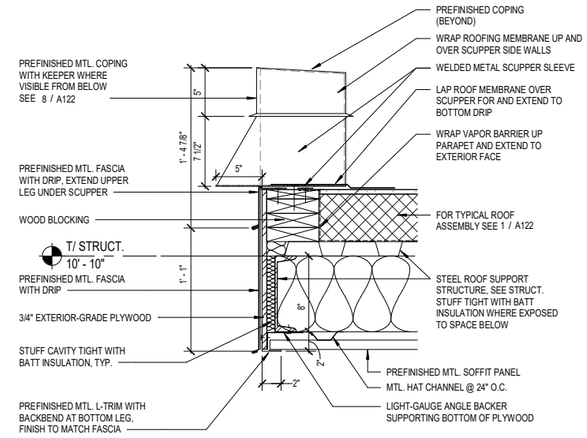
6 A123 ROOF DETAIL - NORTH CANOPY
3/4" = 1' - 0"



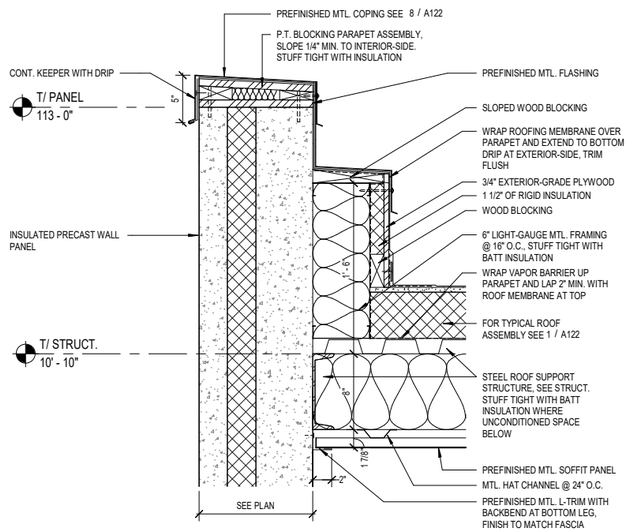
4 A123 ELEVATOR PARAPET DETAIL
3/4" = 1' - 0"



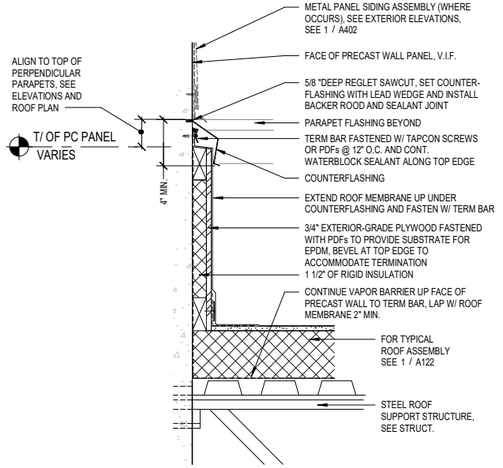
2 A123 SCUPPER DETAIL
3/4" = 1' - 0"



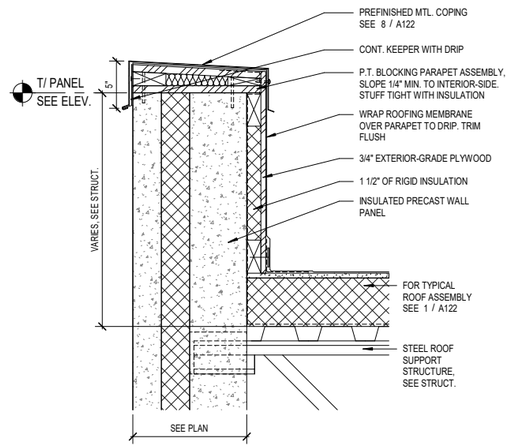
7 A123 SCUPPER DETAIL - NORTH CANOPY
3/4" = 1' - 0"



5 A123 PARAPET DETAIL - NORTH CANOPY
3/4" = 1' - 0"

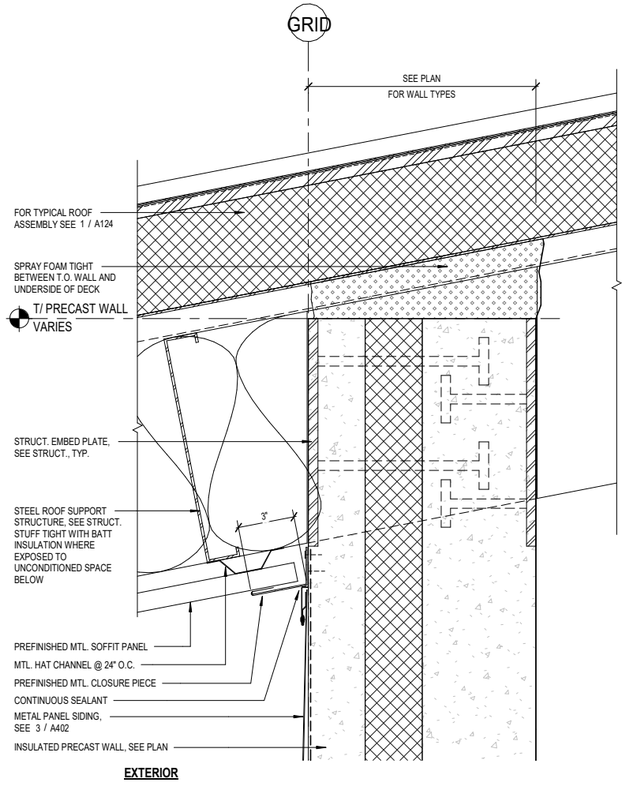


3 A123 PARAPET DETAIL
3/4" = 1' - 0"

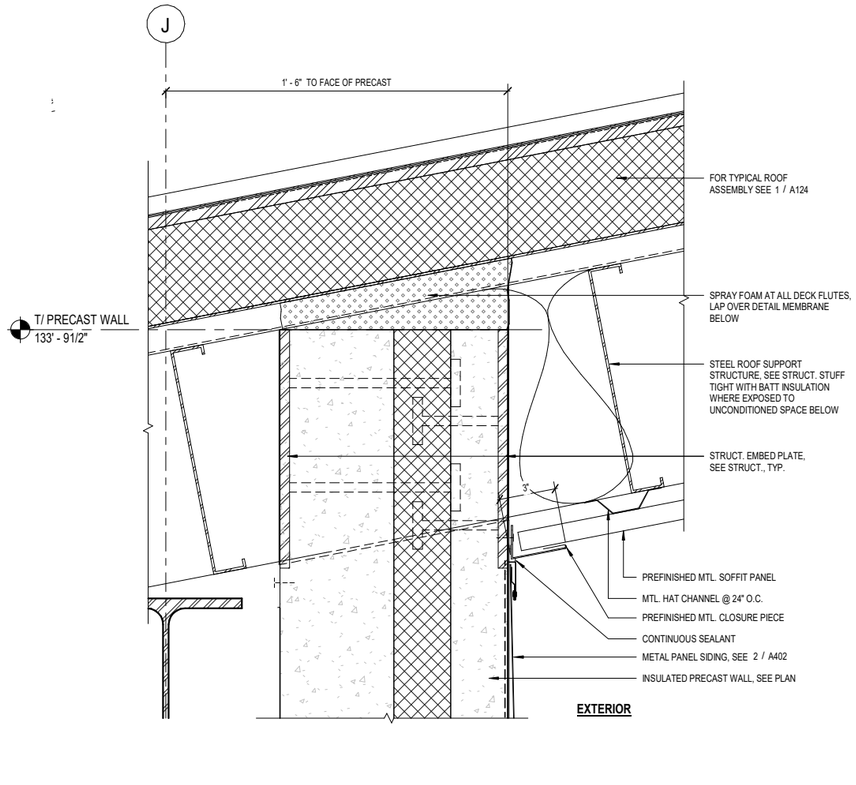


1 A123 PARAPET DETAIL
3/4" = 1' - 0"

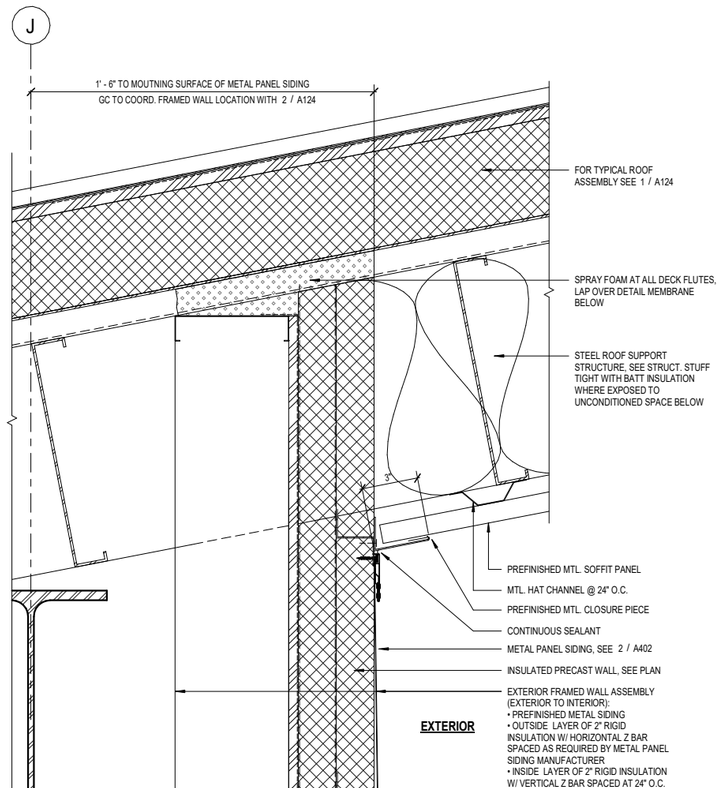
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ROOF DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A123	136



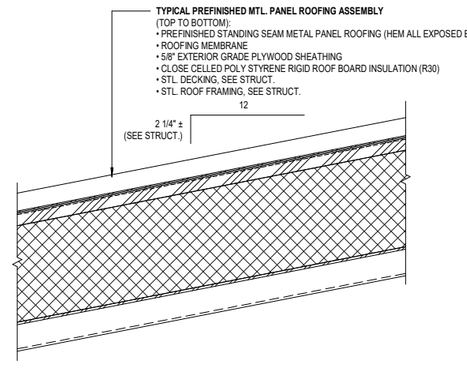
4 A124 ROOF DETAIL - SLOPED ROOF
1 1/2" =1' - 0"
0" 1" 2" 6"



2 A124 ROOF DETAIL - SLOPED ROOF
1 1/2" =1' - 0"
0" 1" 2" 6"



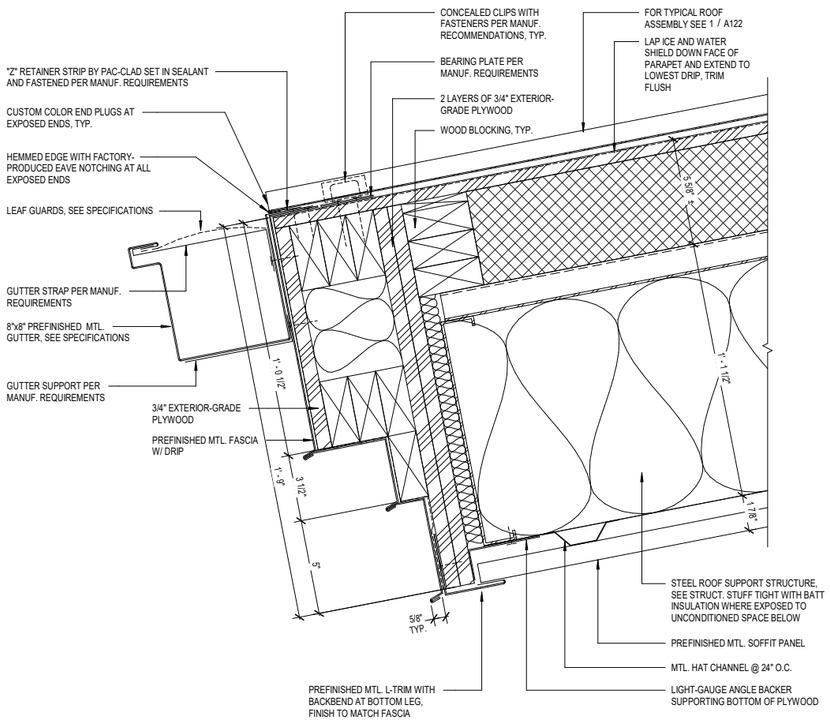
3 A124 ROOF DETAIL - SLOPED ROOF
1 1/2" =1' - 0"
0" 1" 2" 6"



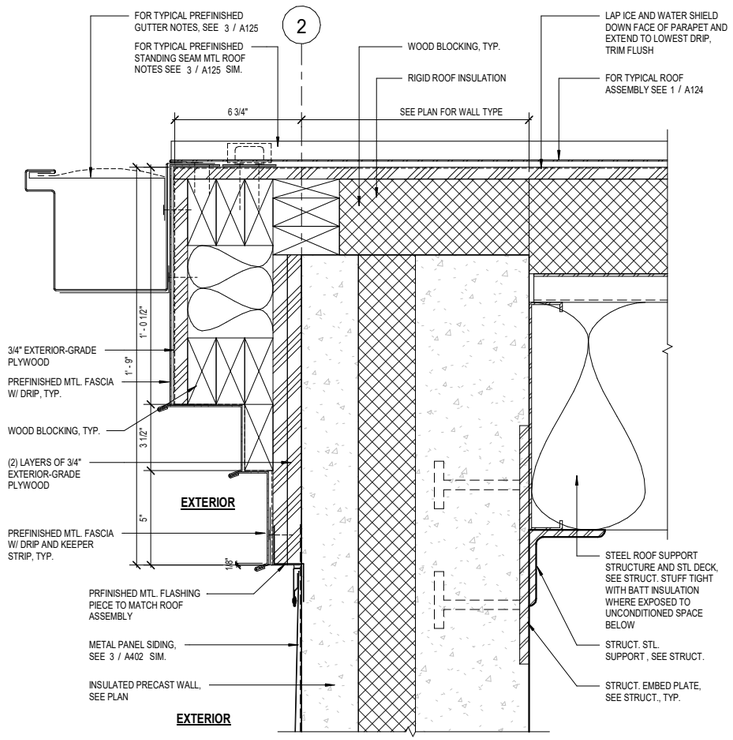
1 A124 TYPICAL ROOF ASSEMBLY - SLOPED ROOF
1 1/2" =1' - 0"
0" 1" 2" 6"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ROOF DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A124	137

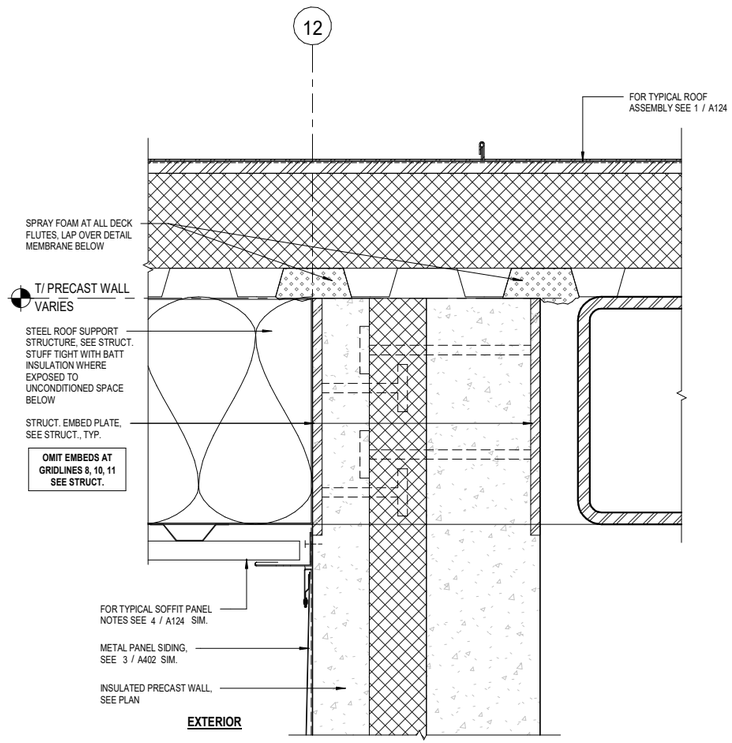
2



3 / A125 ROOF DETAIL - SLOPED ROOF
1 1/2" =1' - 0"
0" 1" 2" 6"

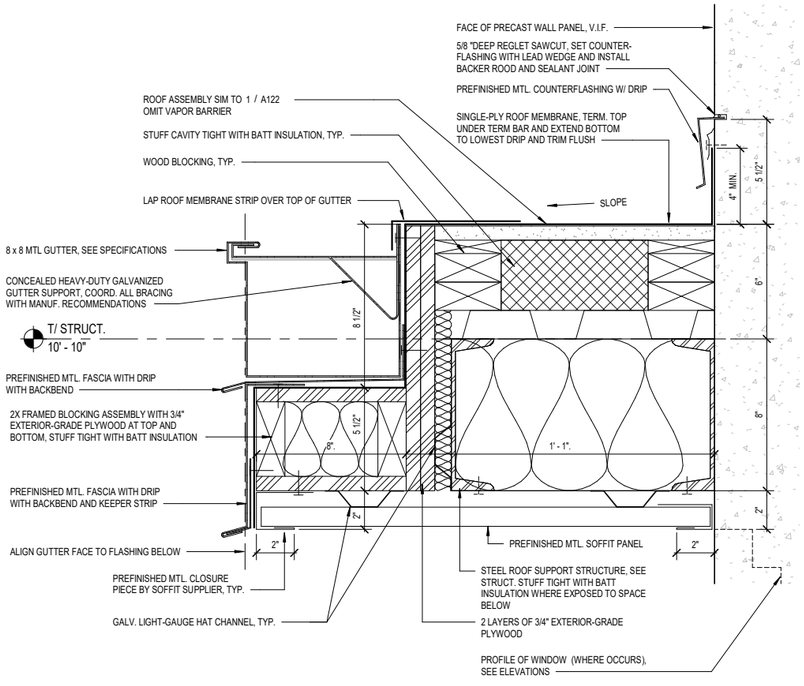


2 / A125 TYPICAL METAL ROOFING ASSEMBLY DETAIL
1 1/2" =1' - 0"
0" 1" 2" 6"

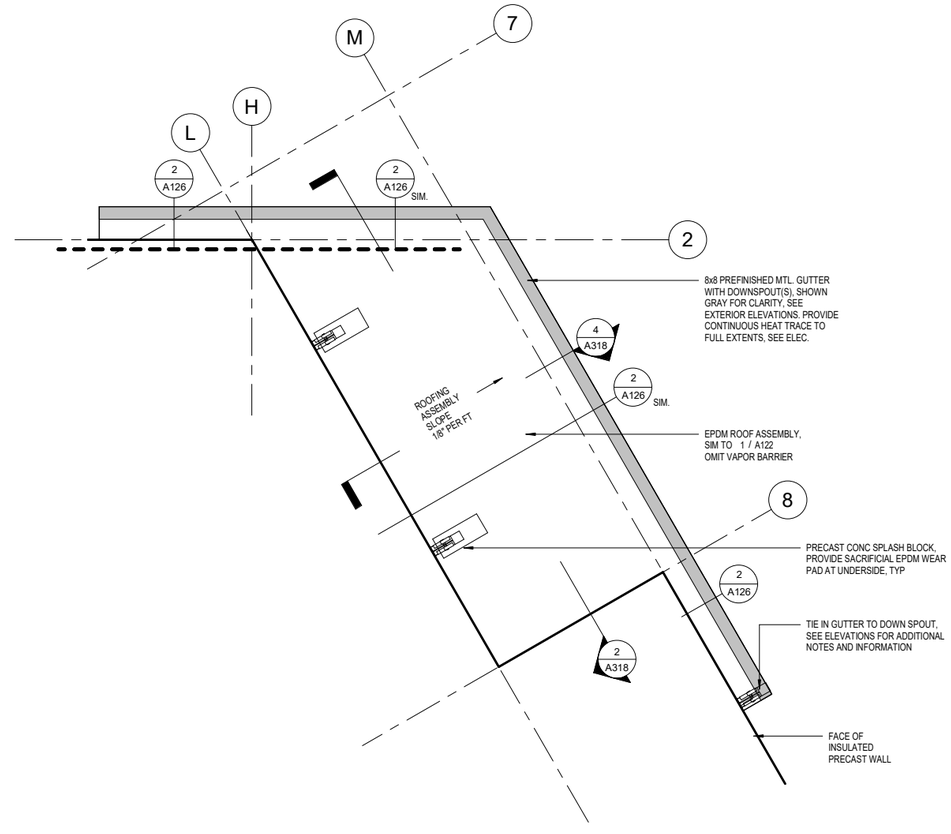


1 / A125 ROOF DETAIL - SLOPED ROOF
1 1/2" =1' - 0"
0" 1" 2" 6"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ROOF DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A125	138



2 A126 ROOF DETAIL - SOUTH CANOPY
1 1/2" = 1' -0"

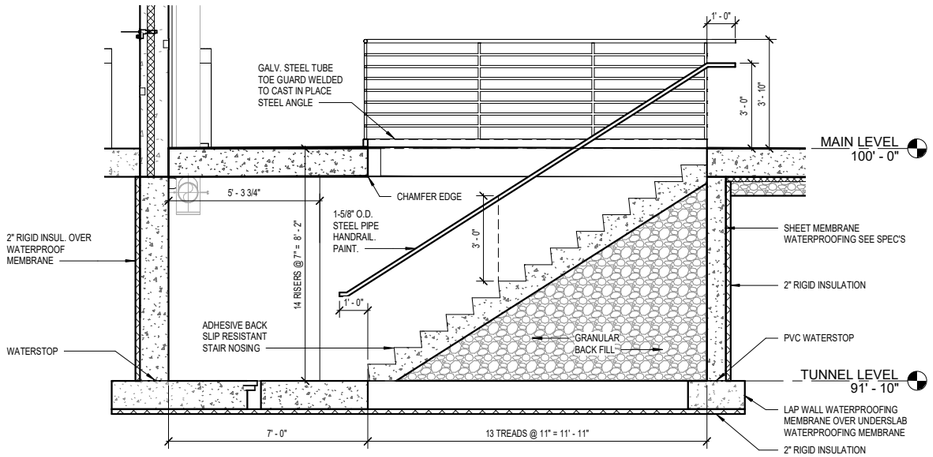


1 A126 ENLARGED PLAN AT SOUTH CANOPY
1/8" = 1' - 0"

2

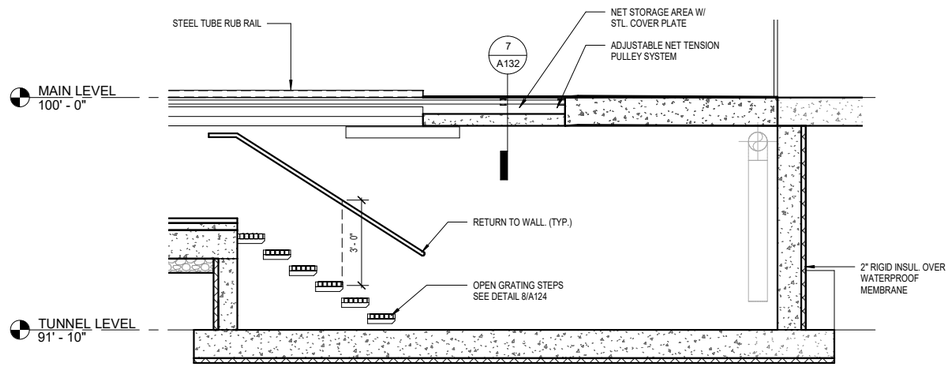
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			SOUTH CANOPY DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A126	139

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 10:57:56 AM



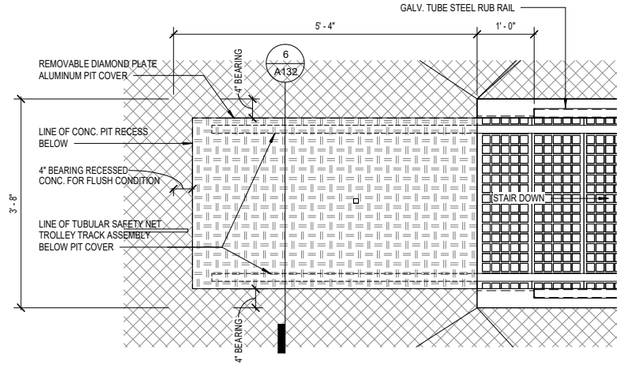
1 A131 TUNNEL ACCESS SECTION
3/16" = 1' - 0"

0' 1" 2' 4'



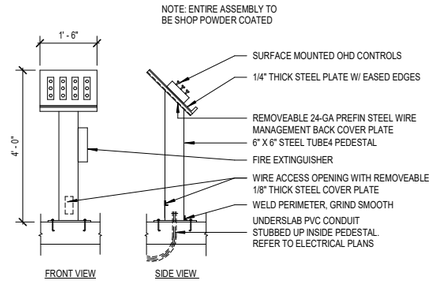
2 A131 PIT ACCESS STAIR SECTION
3/16" = 1' - 0"

0' 1" 2' 4'



3 A131 PIT COVER PLATE DETAIL
3/8" = 1' - 0"

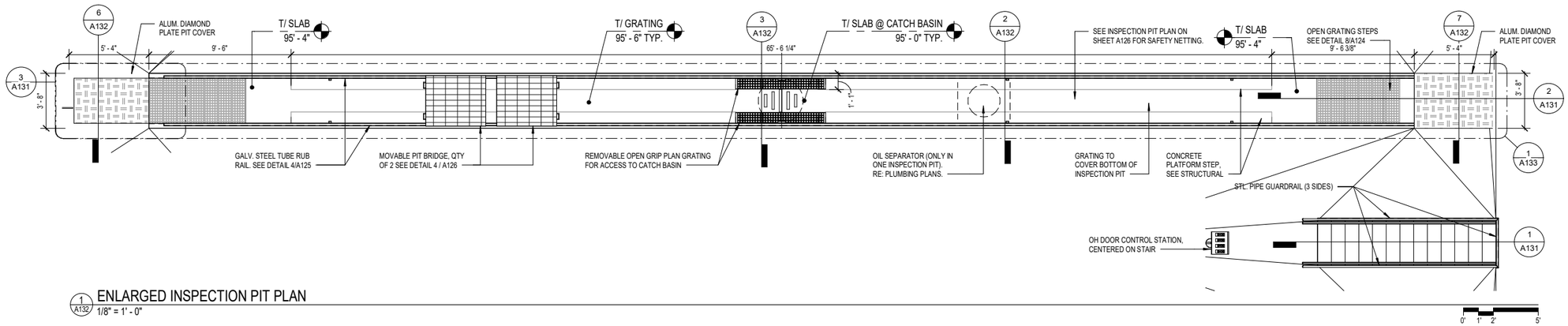
0" 4" 8" 2'



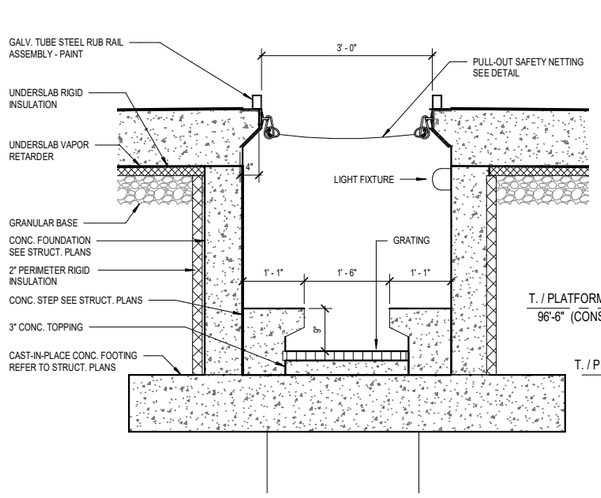
4 A131 OVERHEAD DOOR CONTROL STATION
1/4" = 1' - 0"

0" 6" 1' 3'

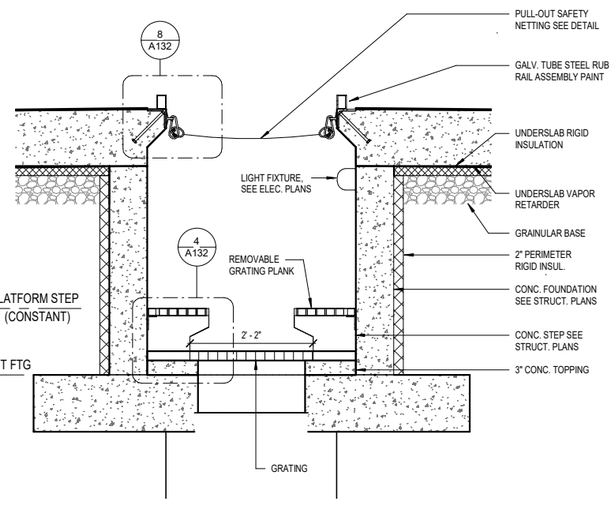
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			INSPECTION PIT SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A131	140



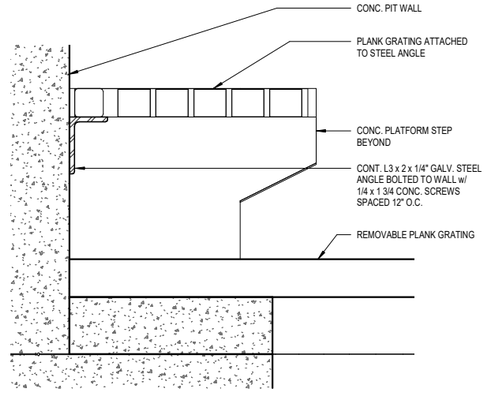
1 A132 ENLARGED INSPECTION PIT PLAN
1/8" = 1' - 0"



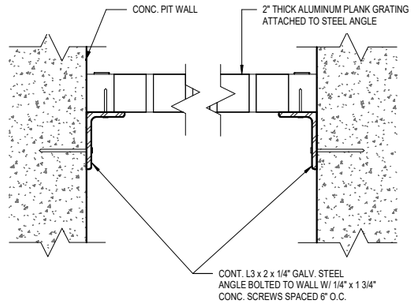
2 A132 INSPECTION PIT SECTION
3/8" = 1' - 0"
0" 4" 8" 2'



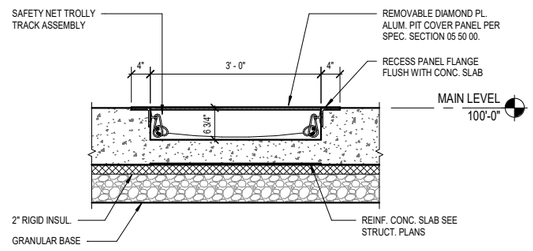
3 A132 INSPECTION PIT SECTION @ CATCH BASIN
3/8" = 1' - 0"
0" 4" 8" 2'



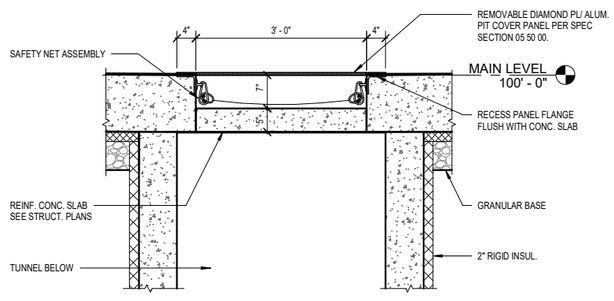
4 A132 REMOVABLE PLANKS AT CATCH BASIN
1 1/2" = 1' - 0"
0" 1" 2" 6"



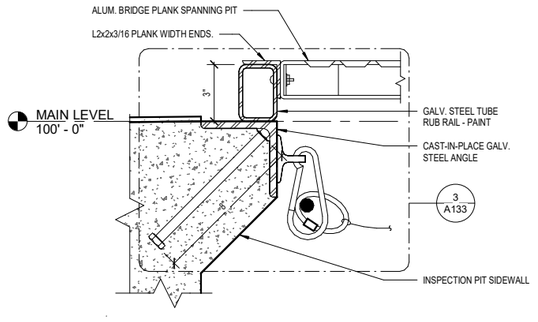
5 A132 GRATING PLANK AT STAIRS
1 1/2" = 1' - 0"
0" 1" 2" 6"



6 A132 SECTION THRU PIT COVER/NET STACKING
3/8" = 1' - 0"
0" 4" 8" 2'



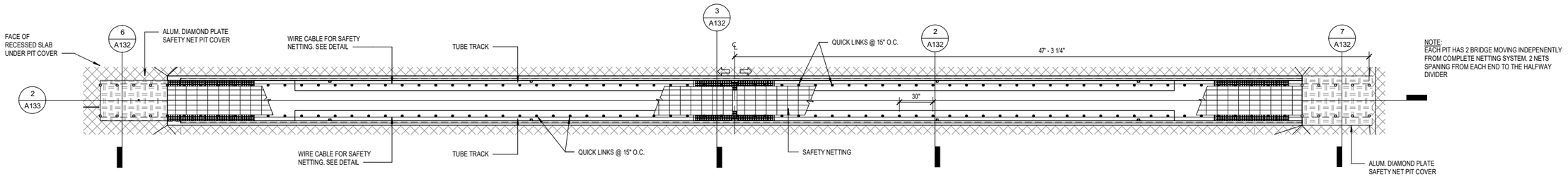
7 A132 SAFETY NETTING COLLECTION POCKET
3/8" = 1' - 0"
0" 4" 8" 2'



8 A132 MOVABLE PLANK DETAIL
1 1/2" = 1' - 0"
0" 1" 2" 6"

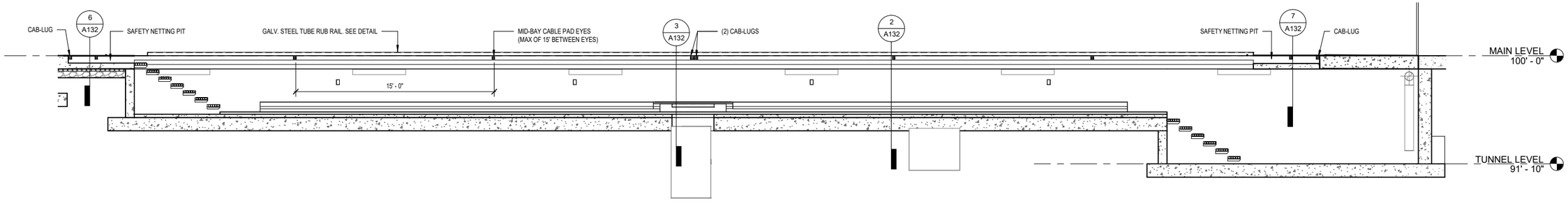
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			INSPECTION PIT PLAN & DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A132	

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 10:58:00 AM



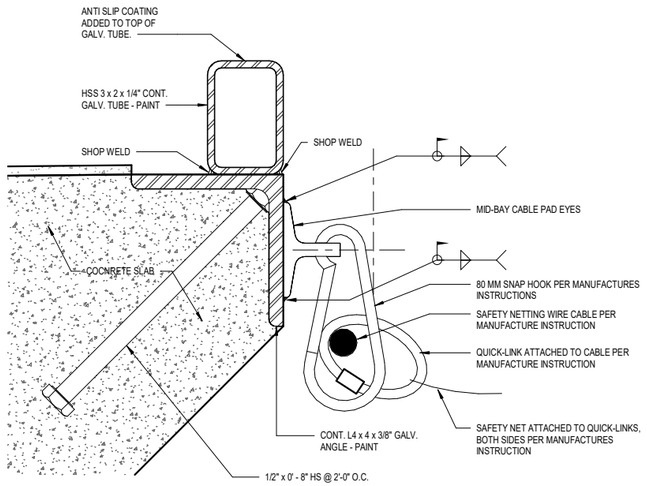
1 A133 INSPECTION PIT SAFETY NET PLAN (TYP @ BOTH PITS)
1/8" = 1' - 0"

0' 1' 2' 5'



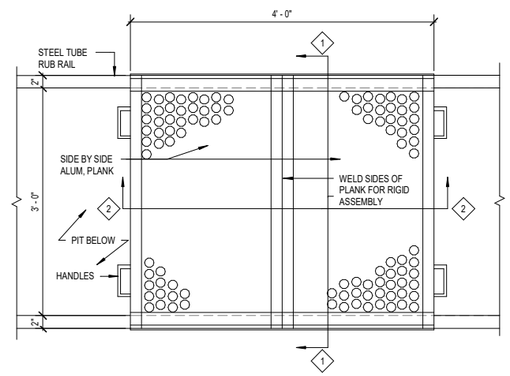
2 A133 INSPECTION PIT - CROSS SECTION (TYP @ BOTH PITS)
1/8" = 1' - 0"

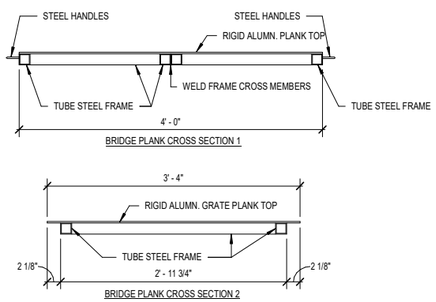
0' 1' 2' 5'



3 A133 PIT SAFETY NETTING ASSEMBLY
3" = 1' - 0"

0" 1" 2" 3"





4 A133 TYP. MOVABLE PIT BRIDGE PLANK (2 PER PIT)
1/2" = 1'-0"

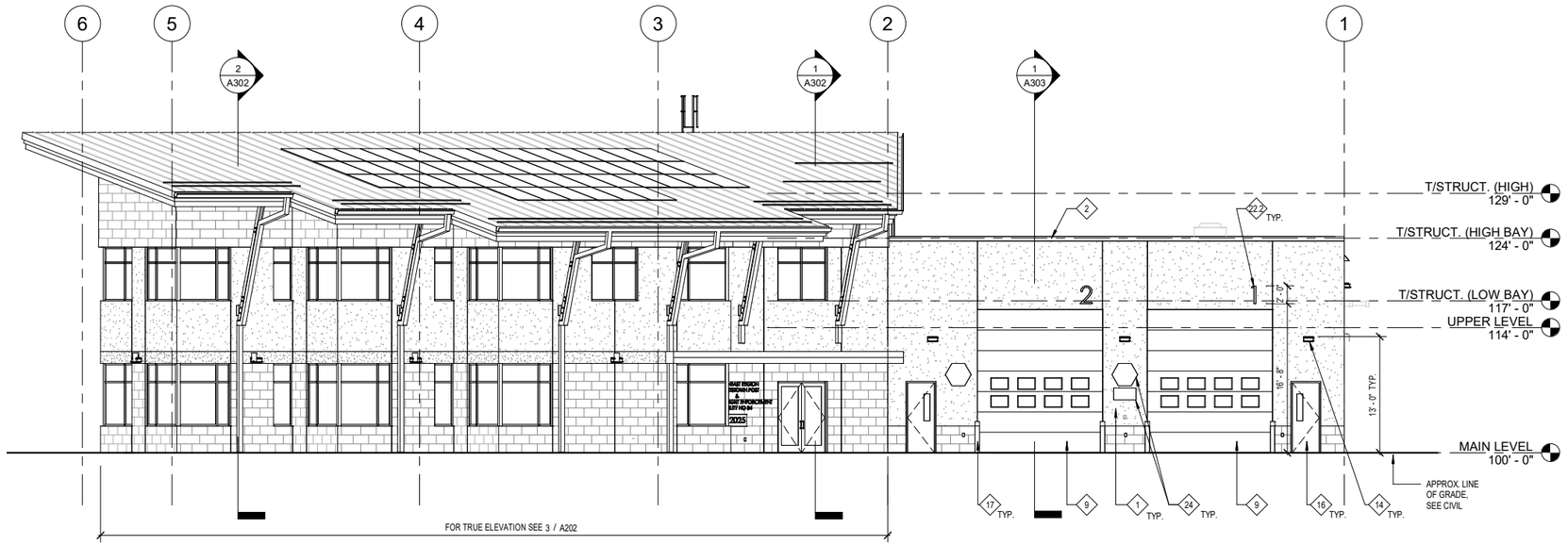
0" 3" 6" 1' - 6"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			INSPECTION PIT SAFETY NETTING	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A133	

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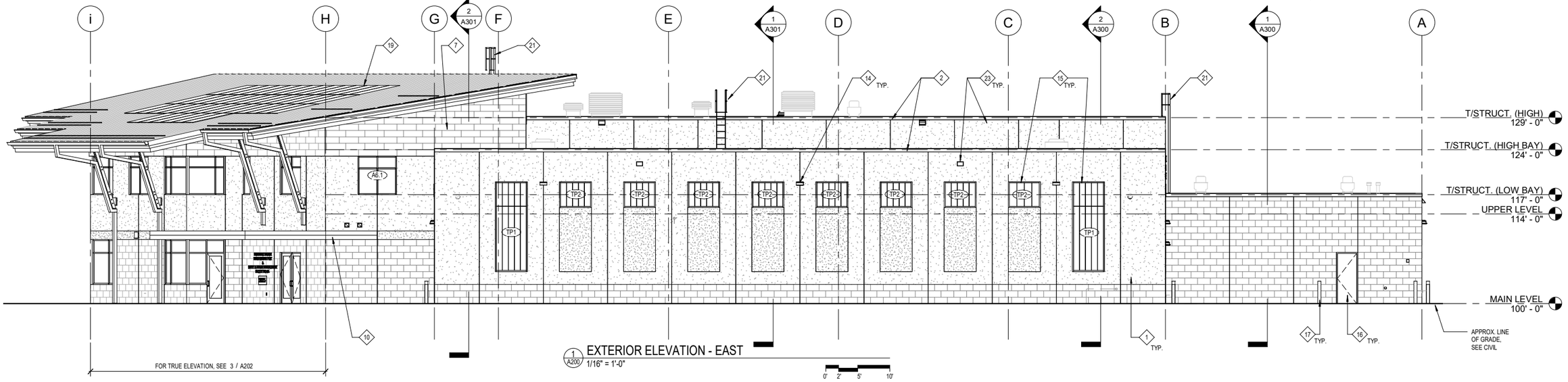
GENERAL PLAN NOTES

1. SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.
2. SEE PRECAST WALL PANEL ELEVATIONS FOR ADDITIONAL NOTES AND INFORMATION.



2 A200 EXTERIOR ELEVATION - SOUTH
1/16" = 1'-0"

0' 2' 5' 10'



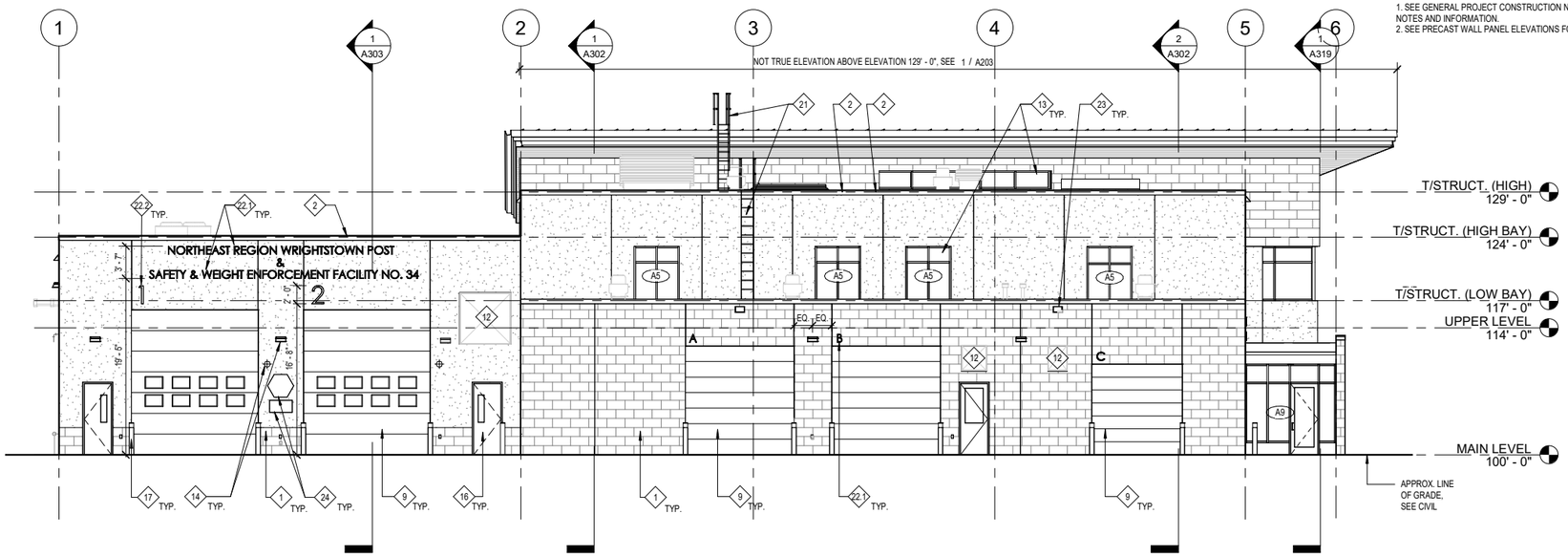
1 A200 EXTERIOR ELEVATION - EAST
1/16" = 1'-0"

0' 2' 5' 10'

ELEVATION KEYNOTES

1. PRECAST INSULATED WALL PANEL. SEE PRECAST WALL PANEL ELEVATIONS FOR ADDITIONAL NOTES AND INFORMATION
2. PREFINISHED METAL COPING ASSEMBLY
3. PREFINISHED OPEN MTL. DOWNSPOUT WITH ELBOW (WHERE SHOWN).
4. PREFINISHED STANDING SEAM METAL ROOF ASSEMBLY, SEE 1 / A124
5. PREFINISHED MTL. GUTTER ASSEMBLY, SEE ROOF PLAN
6. PREFINISHED METAL FASCIA
7. PREFINISHED METAL SIDING, SEE PLAN A402 FOR TYP METAL PANEL SIDING DETAILS
8. PREFINISHED SOFFIT PANEL
9. OVERHEAD SECTIONAL DOOR, SEE DOOR SCHEDULE
10. CANOPY ASSEMBLY, SEE ROOF PLAN
11. APPOXIMATE LOCATION OF HOSE BIB, SEE PLUMB.
12. MEP R.O. AT PRECAST PANEL, SEE PRECAST WALL PANEL ELEVATIONS.
13. ALUMINUM STOREFRONT / WINDOW WALL ASSEMBLY, SEE TYPE.
14. EXTERIOR LIGHT FIXTURE, SEE ELEC AND PC PANEL ELEVATION.
15. INSULATED TRANSLUCENT FIBERGLASS SANDWICH PANEL UNIT
16. HINGED DOOR, SEE DOOR SCHEDULE.
17. STL. BOLLARD, PAINT. TYP. SEE STRUCT.
18. STL. ROOF SUPPORT, SEE 7 / A401
19. ROOF-MOUNTED PHOTOVOLTAIC (PV) ARRAY, SEE ELEC.
20. PREFINISHED MTL OPEN-FACED DOWNSPOUT TO CATCHBASIN AT GRADE, SEE CIVIL. PROVIDE CONTINUOUS HEAT TRACE FROM GUTTER TO 12" BELOW GRADE AT CATCH BASIN, SEE ELEC.
20.1. COORDINATE INSTALL OF DOWNSPOUT WITH UNDERDRAIN, SEE CIVIL. MATCH DOWNSPOUT FINISH AT PREFINFINISHED MTL. TRANSITION TO UNDERDRAIN.
21. STL. ROOF LADDER ASSEMBLY, SEE ROOF PLAN
22. 12" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
22.1. 11" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
22.2. 24" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
22.3. 5" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
22.4. 30"x24x1/4" CUT ALUMINUM PLATE WITH 8" NEGATIVE LETTERS TEXT, SEE SPEC FOR FINISH.
23. OVERFLOW SCUPPER, SEE ROOF PLAN AND PRECAST WALL PANEL ELEVATIONS
24. METAL PANEL SIGNAGE (BY OTHERS). SHOWN FOR REFERENCE PURPOSES ONLY.
25. PREFABRICATED EXTERIOR SOLAR SUN SHADE ASSEMBLY, SEE ROOF PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			EXTERIOR ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
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2 A201 EXTERIOR ELEVATION - NORTH
1/16" = 1'-0"

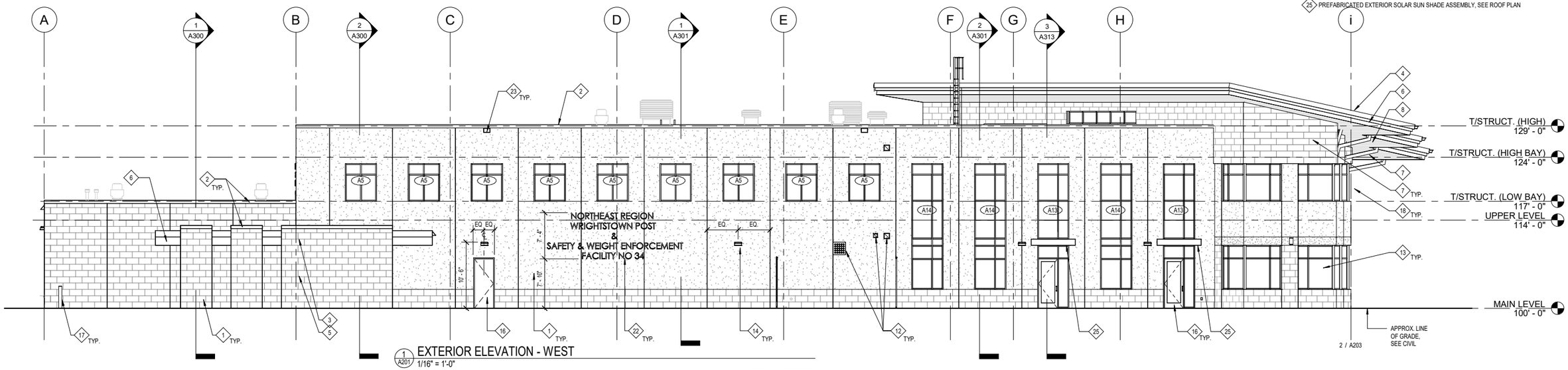
0' 2' 5' 10'

GENERAL PLAN NOTES

1. SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.
2. SEE PRECAST WALL PANEL ELEVATIONS FOR ADDITIONAL NOTES AND INFORMATION.

ELEVATION KEYNOTES

1. PRECAST INSULATED WALL PANEL. SEE PRECAST WALL PANEL ELEVATIONS FOR ADDITIONAL NOTES AND INFORMATION
2. PREFINISHED METAL COPING ASSEMBLY
3. PREFINISHED OPEN MTL. DOWNSPOUT WITH ELBOW (WHERE SHOWN).
4. PREFINISHED STANDING SEAM METAL ROOF ASSEMBLY, SEE 1 / A124
5. PREFINISHED MTL. GUTTER ASSEMBLY, SEE ROOF PLAN
6. PREFINISHED METAL FASCIA
7. PREFINISHED METAL SIDING, SEE PLAN A402 FOR TYP METAL PANEL SIDING DETAILS
8. PREFINISHED SOFFIT PANEL
9. OVERHEAD SECTIONAL DOOR, SEE DOOR SCHEDULE
10. CANOPY ASSEMBLY, SEE ROOF PLAN
11. APPOXIMATE LOCATION OF HOSE BIB, SEE PLUMB.
12. MEP R.O. AT PRECAST PANEL, SEE PRECAST WALL PANEL ELEVATIONS.
13. ALUMINUM STOREFRONT / WINDOW WALL ASSEMBLY, SEE TYPE.
14. EXTERIOR LIGHT FIXTURE, SEE ELEC AND PC PANEL ELEVATION.
15. INSULATED TRANSLUCENT FIBERGLASS SANDWICH PANEL UNIT
16. HINGED DOOR, SEE DOOR SCHEDULE.
17. STL. BOLLARD, PAINT. TYP. SEE STRUCT.
18. STL. ROOF SUPPORT, SEE 7 / A401
19. ROOF-MOUNTED PHOTOVOLTAIC (PV) ARRAY, SEE ELEC.
20. PREFINISHED MTL OPEN-FACED DOWNSPOUT TO CATCHBASIN AT GRADE, SEE CIVIL. PROVIDE CONTINUOUS HEAT TRACE FROM GUTTER TO 12" BELOW GRADE AT CATCH BASIN, SEE ELEC.
20.1 COORDINATE INSTALL OF DOWNSPOUT WITH UNDERDRAIN, SEE CIVIL. MATCH DOWNSPOUT FINISH AT PREFINFINISHED MTL. TRANSITION TO UNDERDRAIN.
21. STL. ROOF LADDER ASSEMBLY, SEE ROOF PLAN
22. 12" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
22.1 11" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
22.2 24" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
22.3 5" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
22.4 30"x24x1/4" CUT ALUMINUM PLATE WITH 8" NEGATIVE LETTERS TEXT, SEE SPEC FOR FINISH.
23. OVERFLOW SCUPPER, SEE ROOF PLAN AND PRECAST WALL PANEL ELEVATIONS
24. METAL PANEL SIGNAGE (BY OTHERS). SHOWN FOR REFERENCE PURPOSES ONLY.
25. PREFABRICATED EXTERIOR SOLAR SUN SHADE ASSEMBLY, SEE ROOF PLAN



1 A201 EXTERIOR ELEVATION - WEST
1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			EXTERIOR ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A201	144



3 A202 PARTIAL EXTERIOR ELEV. - SOUTHEAST
1/16" = 1'-0"

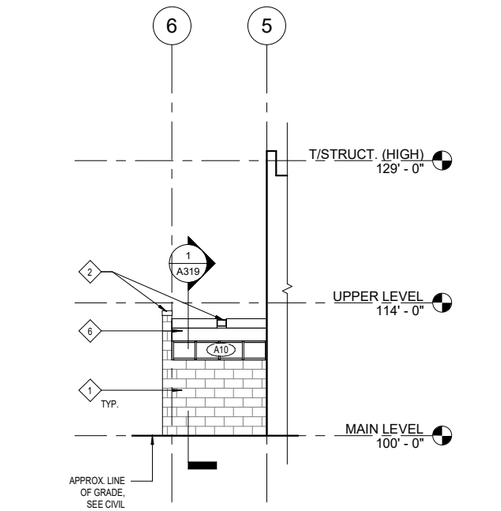
0' 2' 5' 10'

GENERAL PLAN NOTES

1. SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.
2. SEE PRECAST WALL PANEL ELEVATIONS FOR ADDITIONAL NOTES AND INFORMATION.

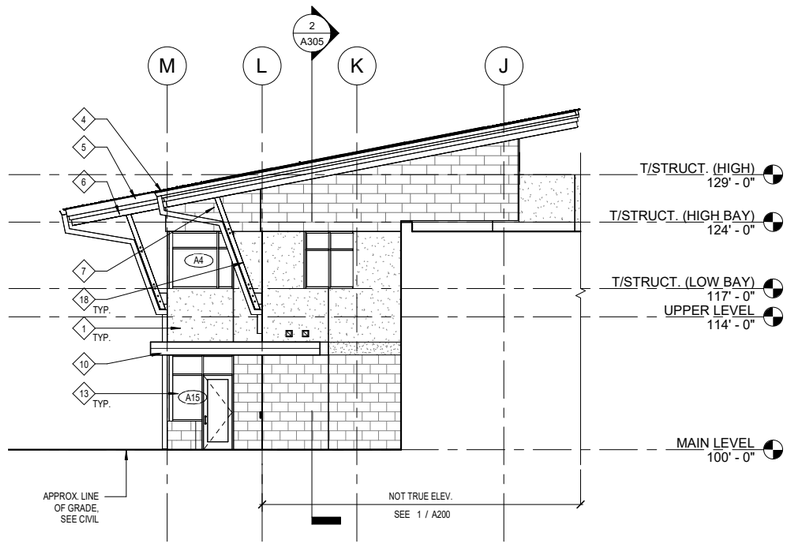
ELEVATION KEYNOTES

1. PRECAST INSULATED WALL PANEL. SEE PRECAST WALL PANEL ELEVATIONS FOR ADDITIONAL NOTES AND INFORMATION
2. PREFINISHED METAL COPING ASSEMBLY
3. PREFINISHED OPEN MTL. DOWNSPOUT WITH ELBOW (WHERE SHOWN).
4. PREFINISHED STANDING SEAM METAL ROOF ASSEMBLY, SEE 1 / A124
5. PREFINISHED MTL. GUTTER ASSEMBLY, SEE ROOF PLAN
6. PREFINISHED METAL FASCIA
7. PREFINISHED METAL SIDING, SEE PLAN A402 FOR TYP METAL PANEL SIDING DETAILS
8. PREFINISHED SOFFIT PANEL
9. OVERHEAD SECTIONAL DOOR, SEE DOOR SCHEDULE
10. CANOPY ASSEMBLY, SEE ROOF PLAN
11. APPOXIMATE LOCATION OF HOSE BIB, SEE PLUMB.
12. MEP R.O. AT PRECAST PANEL, SEE PRECAST WALL PANEL ELEVATIONS.
13. ALUMINUM STOREFRONT / WINDOW WALL ASSEMBLY, SEE TYPE.
14. EXTERIOR LIGHT FIXTURE, SEE ELEC AND PC PANEL ELEVATION.
15. INSULATED TRANSLUCENT FIBERGLASS SANDWICH PANEL UNIT
16. HINGED DOOR, SEE DOOR SCHEDULE.
17. STL. BOLLARD, PAINT. TYP. SEE STRUCT.
18. STL. ROOF SUPPORT, SEE 7 / A401
19. ROOF-MOUNTED PHOTOVOLTAIC (PV) ARRAY, SEE ELEC.
20. PREFINISHED MTL OPEN-FACED DOWNSPOUT TO CATCHBASIN AT GRADE, SEE CIVIL. PROVIDE CONTINUOUS HEAT TRACE FROM GUTTER TO 12" BELOW GRADE AT CATCH BASIN, SEE ELEC.
- 20.1 COORDINATE INSTALL OF DOWNSPOUT WITH UNDERDRAIN, SEE CIVIL. MATCH DOWNSPOUT FINISH AT PREFINFINISHED MTL. TRANSITION TO UNDERDRAIN.
21. STL. ROOF LADDER ASSEMBLY, SEE ROOF PLAN
22. 12" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
- 22.1 11" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
- 22.2 24" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
- 22.3 5" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
- 22.4 30"x24x1/4" CUT ALUMINUM PLATE WITH 8" NEGATIVE LETTERS TEXT, SEE SPEC FOR FINISH.
23. OVERFLOW SCUPPER, SEE ROOF PLAN AND PRECAST WALL PANEL ELEVATIONS
24. METAL PANEL SIGNAGE (BY OTHERS). SHOWN FOR REFERENCE PURPOSES ONLY.
25. PREFABRICATED EXTERIOR SOLAR SUN SHADE ASSEMBLY, SEE ROOF PLAN



2 A202 PARTIAL EXTERIOR ELEV. - SOUTH
1/16" = 1'-0"

0' 2' 5' 10'

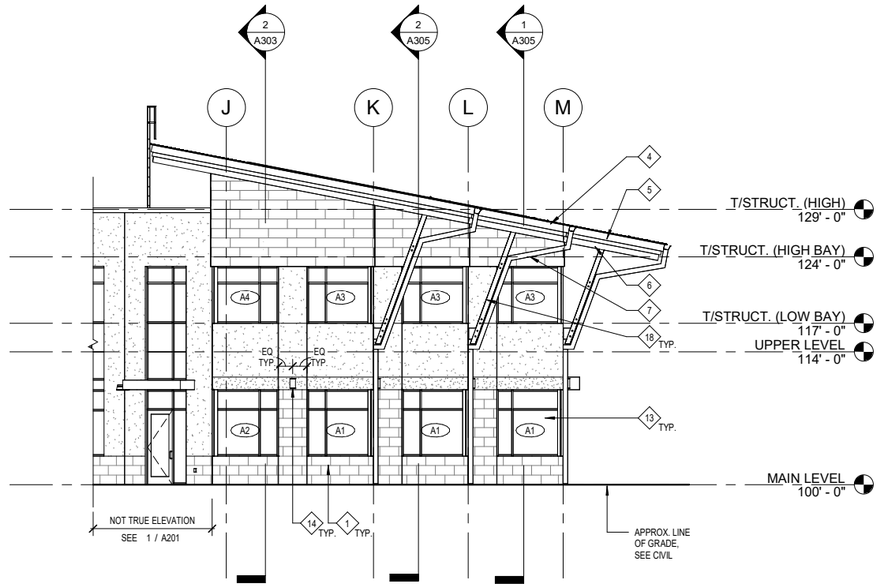


1 A202 PARTIAL EXTERIOR ELEV. - NORTHEAST
1/16" = 1'-0"

0' 2' 5' 10'

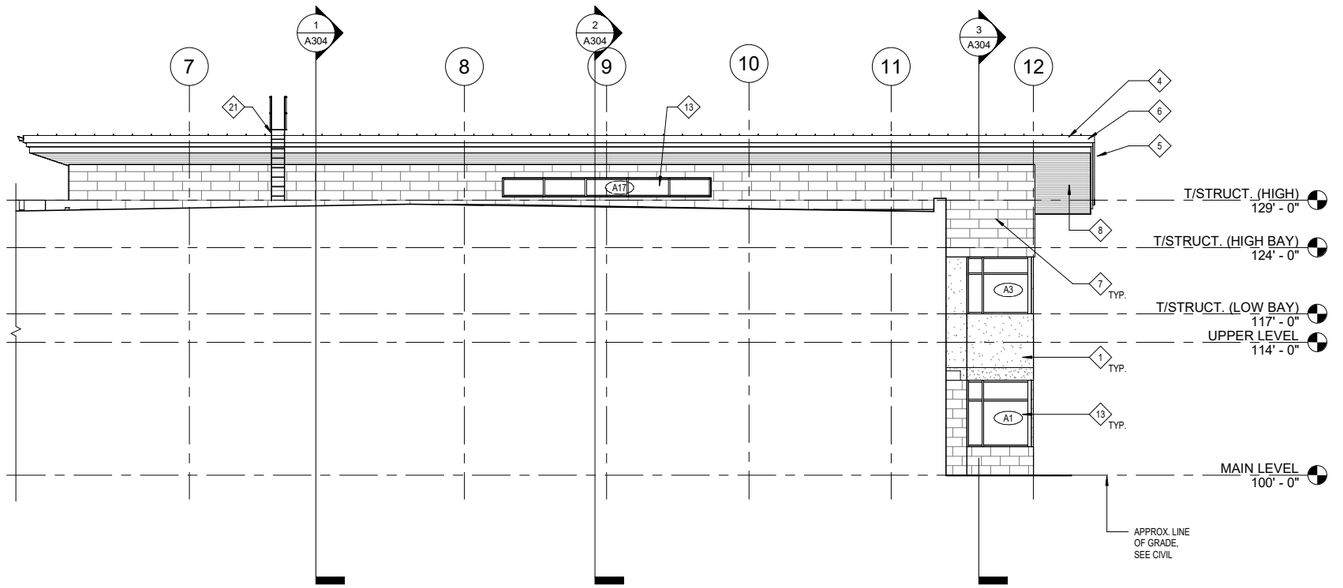
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			EXTERIOR ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A202	

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2 A203 PARTIAL EXTERIOR ELEV. - SOUTHWEST
1/16" = 1'-0"

0' 2' 5' 10'



1 A203 PARTIAL EXTERIOR ELEV. - NORTHWEST
1/16" = 1'-0"

0' 2' 5' 10'

GENERAL PLAN NOTES

1. SEE GENERAL PROJECT CONSTRUCTION NOTES ON TITLE PAGE FOR ADDITIONAL NOTES AND INFORMATION.
2. SEE PRECAST WALL PANEL ELEVATIONS FOR ADDITIONAL NOTES AND INFORMATION.

ELEVATION KEYNOTES

1. PRECAST INSULATED WALL PANEL. SEE PRECAST WALL PANEL ELEVATIONS FOR ADDITIONAL NOTES AND INFORMATION
2. PREFINISHED METAL COPING ASSEMBLY
3. PREFINISHED OPEN MTL. DOWNSPOUT WITH ELBOW (WHERE SHOWN).
4. PREFINISHED STANDING SEAM METAL ROOF ASSEMBLY, SEE 1 / A124
5. PREFINISHED MTL. GUTTER ASSEMBLY, SEE ROOF PLAN
6. PREFINISHED METAL FASCIA
7. PREFINISHED METAL SIDING, SEE PLAN A402 FOR TYP METAL PANEL SIDING DETAILS
8. PREFINISHED SOFFIT PANEL
9. OVERHEAD SECTIONAL DOOR, SEE DOOR SCHEDULE
10. CANOPY ASSEMBLY, SEE ROOF PLAN
11. APPOXIMATE LOCATION OF HOSE BIB, SEE PLUMB.
12. MEP R.O. AT PRECAST PANEL, SEE PRECAST WALL PANEL ELEVATIONS.
13. ALUMINUM STOREFRONT / WINDOW WALL ASSEMBLY, SEE TYPE.
14. EXTERIOR LIGHT FIXTURE, SEE ELEC AND PC PANEL ELEVATION.
15. INSULATED TRANSLUCENT FIBERGLASS SANDWICH PANEL UNIT
16. HINGED DOOR, SEE DOOR SCHEDULE.
17. STL. BOLLARD, PAINT. TYP. SEE STRUCT.
18. STL. ROOF SUPPORT, SEE 7 / A401
19. ROOF-MOUNTED PHOTOVOLTAIC (PV) ARRAY, SEE ELEC.
20. PREFINISHED MTL OPEN-FACED DOWNSPOUT TO CATCHBASIN AT GRADE, SEE CIVIL. PROVIDE CONTINUOUS HEAT TRACE FROM GUTTER TO 12" BELOW GRADE AT CATCH BASIN, SEE ELEC.
20.1. COORDINATE INSTALL OF DOWNSPOUT WITH UNDERDRAIN, SEE CIVIL. MATCH DOWNSPOUT FINISH AT PREFINFINISHED MTL. TRANSITION TO UNDERDRAIN.
21. STL. ROOF LADDER ASSEMBLY, SEE ROOF PLAN
22. 12" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
22.1. 11" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
22.2. 24" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
22.3. 5" CAST ALUMINUM LETTER TEXT, SEE SPEC FOR FINISH.
22.4. 30"x24x1/4" CUT ALUMINUM PLATE WITH 8" NEGATIVE LETTERS TEXT, SEE SPEC FOR FINISH.
23. OVERFLOW SCUPPER, SEE ROOF PLAN AND PRECAST WALL PANEL ELEVATIONS
24. METAL PANEL SIGNAGE (BY OTHERS). SHOWN FOR REFERENCE PURPOSES ONLY.
25. PREFABRICATED EXTERIOR SOLAR SUN SHADE ASSEMBLY, SEE ROOF PLAN

2

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			EXTERIOR ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A203	146

PC WALL PANEL FINISHES

FINISH 1: MASONRY STAMP:
CONTROL SAMPLE- SAND: EVENSON, STONE: 3/8" EVENSON, CEMENT: WHITE, PIGMENT: 51 BUFF, FINISH: FORMLINER- 12x24 SPLIT LIMESTONE RUNNING BOND

FINISH 2: LIGHT CHARCOAL:
CONTROL SAMPLE- SAND: BAKER BLACK, STONE: 1/2" BAKER BLACK, CEMENT: GREY, PIGMENT: 620 CHARCOAL, FINISH: LIGHT SANDBLAST

FINISH 3: DARK CHARCOAL:
CONTROL SAMPLE- SAND: BAKER BLACK, STONE: 1/2" BAKER BLACK, CEMENT: GREY, PIGMENT: 620 CHARCOAL, FINISH: MEDIUM SANDBLAST

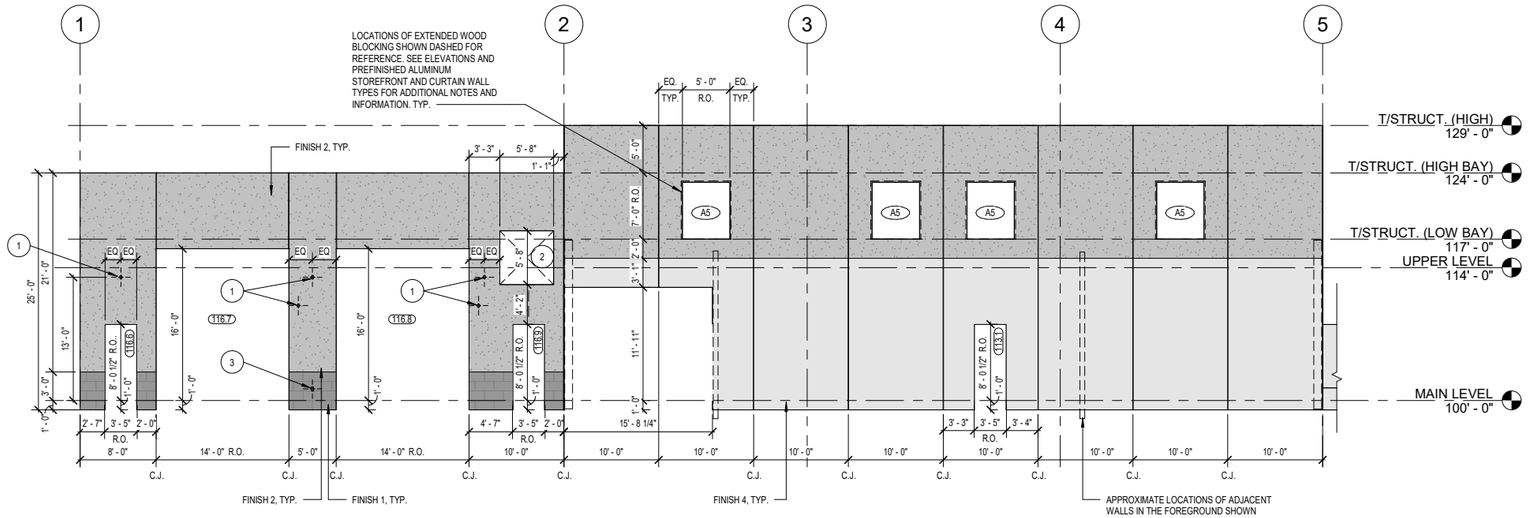
FINISH 4: TYP. INTERIOR FINISH:
CONTROL SAMPLE- CEMENT: NATURAL GREY, FINISH: STEEL SMOOTH FORM FINISH

GENERAL PC WALL PANEL NOTES

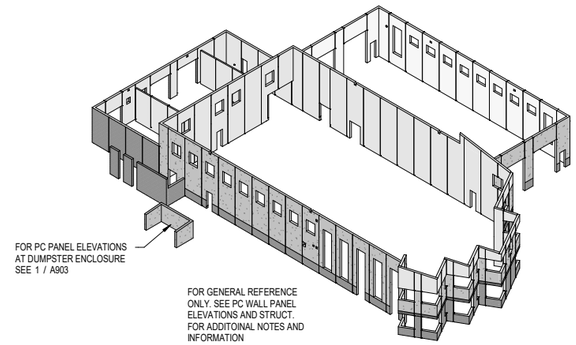
1. SEE PC WALL PANEL ELEVATIONS FOR DESIGN INTENT OF FORMLINER CONFIGURATION. FORMLINER PATTERN MAY NOT ALIGN ACROSS ENTIRE PANEL WHERE DIVIDED BY AN OPENING.
2. SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR ADDITIONAL NOTES AND INFORMATION.
3. ALL OUTSIDE CORNERS SHALL BE CONSTRUCTED OF 45 DEG. MITERED PANELS.
4. ROUGH OPENING SIZES ARE FOR REFERENCE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM OPENING REQUIREMENTS WITH ENTIRE PROJECT DOCUMENT SET.
5. ALL MOUNTING EMBED LOCATIONS AND SIZES SHOWN FOR REFERENCE PURPOSES ONLY. COORDINATE AS REQUIRED WITH ASSOCIATED DETAILS.
6. FOR PC PANEL ELEVATIONS AT DUMPSTER ENCLOSURE SEE 1 / A903

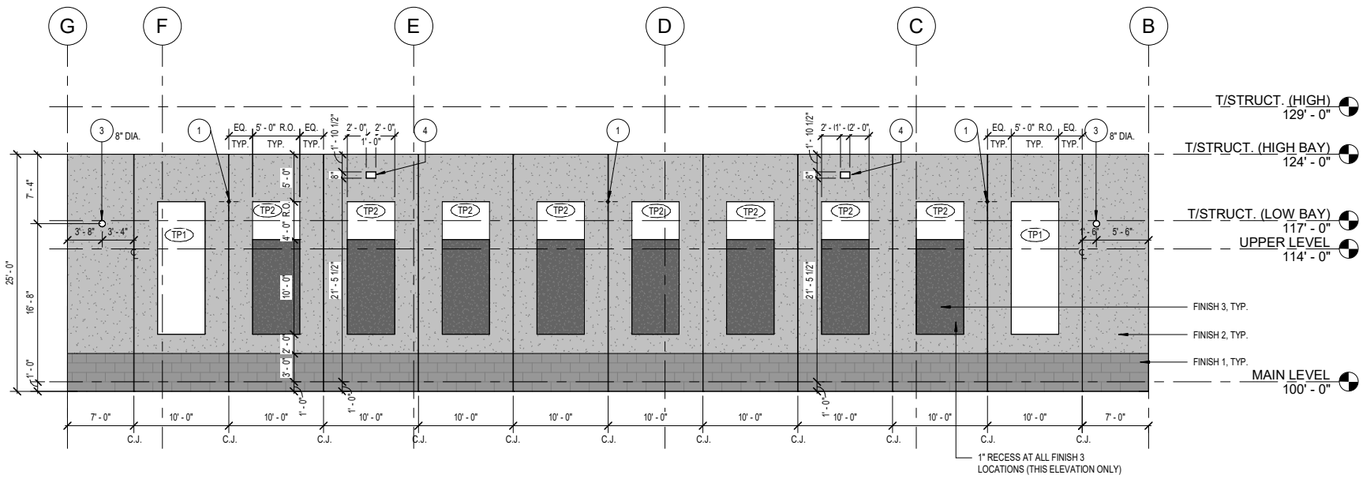
PC WALL PANEL KEYNOTES

1. WALL-MOUNTED ELEC. LIGHT FIXTURE, SEE ELEC.
2. MECHANICAL ROUGH OPENING, SEE MECH.
3. WALL HYDRANT, SEE PLUMB.
4. THROUGH-WALL SCUPPER, SEE ROOF PLAN FOR ADDITIONAL NOTES AND INFORMATION
5. STL. EMBED (MOUNTING) PLATE BY PRECAST MANUFACTURER



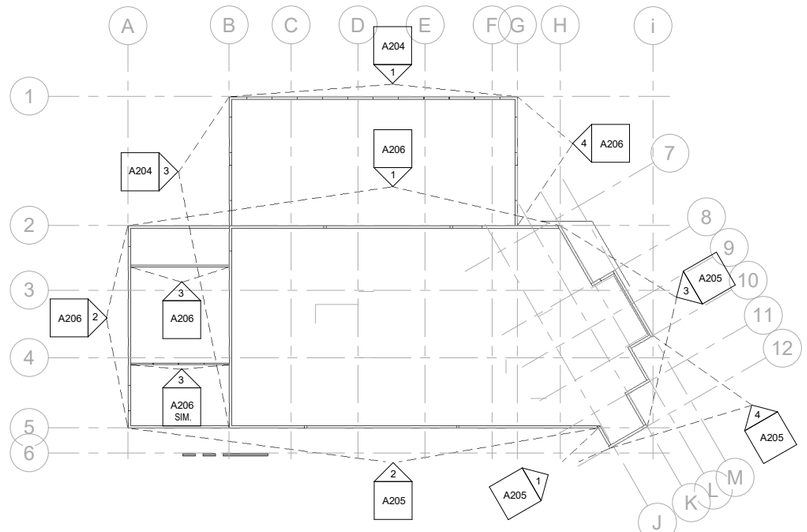
3 A204 PANEL ELEVATION - NORTH1
1/16" = 1'-0"





1 A204 PRECAST PANEL ELEVATION - EAST
1/16" = 1'-0"

4 A204 PC WALL PANEL AXON



5 A204 PRECAST PANEL PLAN
NOT TO SCALE

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PC PANEL ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A204	

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 10:58:19 AM

PC WALL PANEL FINISHES

FINISH 1: MASONRY STAMP:
CONTROL SAMPLE- SAND: EVENSON, STONE: 3/8" EVENSON, CEMENT: WHITE, PIGMENT: 51 BUFF, FINISH: FORMLINER-12x24 SPLIT LIMESTONE RUNNING BOND

FINISH 2: LIGHT CHARCOAL:
CONTROL SAMPLE- SAND: BAKER BLACK, STONE: 1/2" BAKER BLACK, CEMENT: GREY, PIGMENT: 620 CHARCOAL, FINISH: LIGHT SANDBLAST

FINISH 3: DARK CHARCOAL:
CONTROL SAMPLE- SAND: BAKER BLACK, STONE: 1/2" BAKER BLACK, CEMENT: GREY, PIGMENT: 620 CHARCOAL, FINISH: MEDIUM SANDBLAST

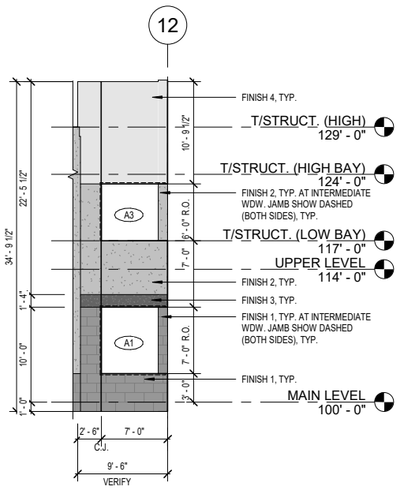
FINISH 4: TYP. INTERIOR FINISH:
CONTROL SAMPLE- CEMENT: NATURAL GREY, FINISH: STEEL SMOOTH FORM FINISH

GENERAL PC WALL PANEL NOTES

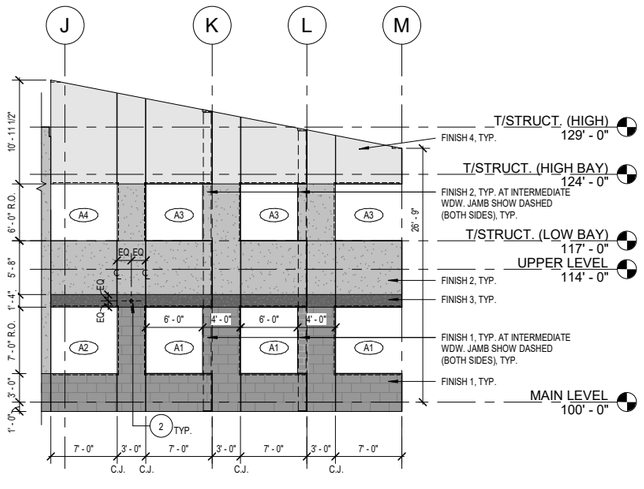
1. SEE PC WALL PANEL ELEVATIONS FOR DESIGN INTENT OF FORMLINER CONFIGURATION. FORMLINER PATTERN MAY NOT ALIGN ACROSS ENTIRE PANEL WHERE DIVIDED BY AN OPENING.
2. SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR ADDITIONAL NOTES AND INFORMATION.
3. ALL OUTSIDE CORNERS SHALL BE CONSTRUCTED OF 45 DEG. MITERED PANELS.
4. ROUGH OPENING SIZES ARE FOR REFERENCE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM OPENING REQUIREMENTS WITH ENTIRE PROJECT DOCUMENT SET.
5. ALL MOUNTING EMBED LOCATIONS AND SIZES SHOWN FOR REFERENCE PURPOSES ONLY. COORDINATE AS REQUIRED WITH ASSOCIATED DETAILS.
6. FOR PC PANEL ELEVATIONS AT DUMPSTER ENCLOSURE SEE 1 / A903

PC WALL PANEL KEYNOTES

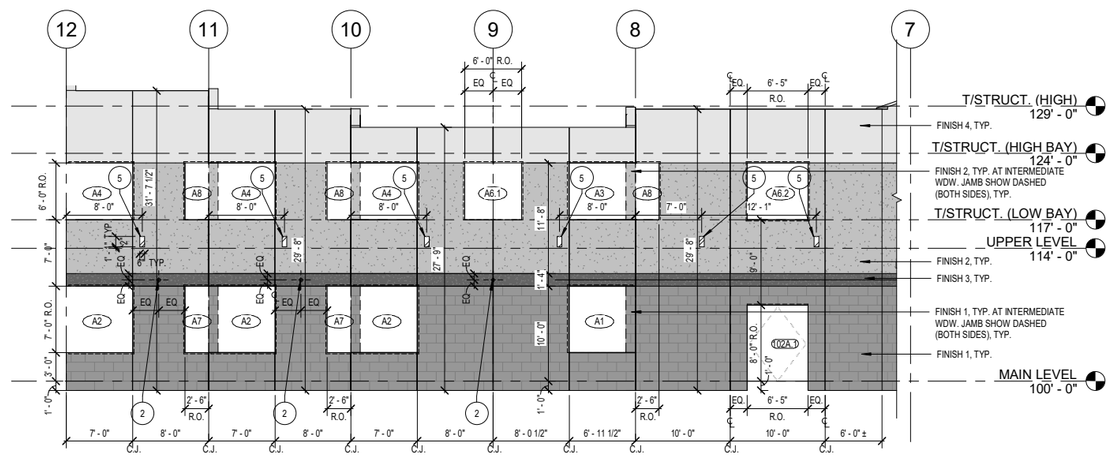
1. WALL-MOUNTED ELEC. LIGHT FIXTURE, SEE ELEC.
2. MECHANICAL ROUGH OPENING, SEE MECH.
3. WALL HYDRANT, SEE PLUMB.
4. THROUGH-WALL SCUPPER, SEE ROOF PLAN FOR ADDITIONAL NOTES AND INFORMATION
5. STL. EMBED (MOUNTING) PLATE BY PRECAST MANUFACTURER



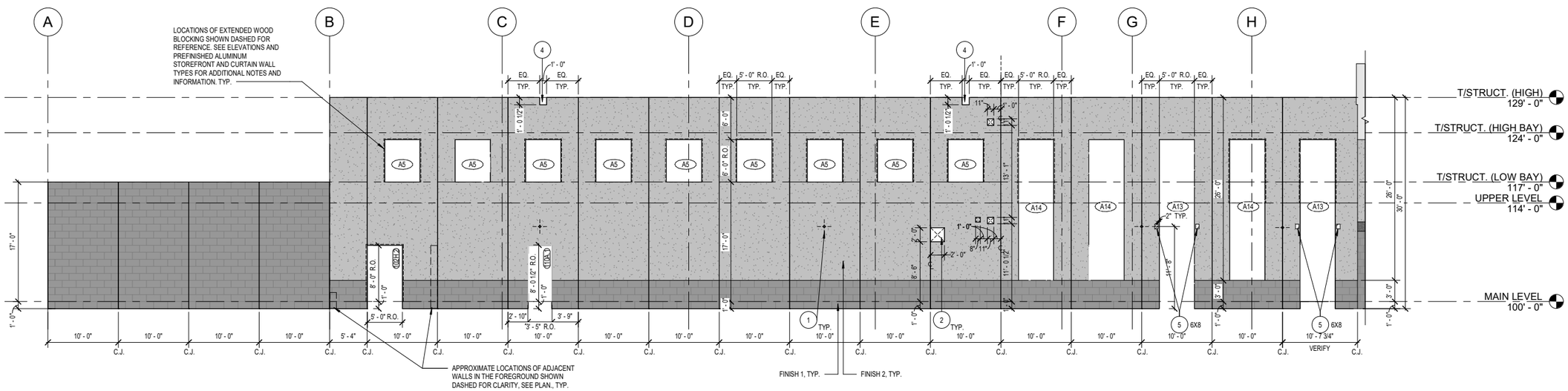
1 / A205 PANEL ELEVATION - WEST2
1/16"=1'-0"



4 / A205 PRECAST PANEL ELEVATION - SOUTHWEST
1/16" = 1'-0"



3 / A205 PRECAST PANEL ELEVATION - SOUTHEAST
1/16" = 1'-0"



2 / A205 PRECAST PANEL ELEVATION - WEST
1/16"=1'-0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PC PANEL ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A205	

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 10:58:21 AM

PC WALL PANEL FINISHES

FINISH 1: MASONRY STAMP:
CONTROL SAMPLE- SAND: EVENSON, STONE: 3/8" EVENSON, CEMENT: WHITE, PIGMENT: 51 BUFF, FINISH: FORMLINER- 12x24 SPLIT LIMESTONE RUNNING BOND

FINISH 2: LIGHT CHARCOAL:
CONTROL SAMPLE- SAND: BAKER BLACK, STONE: 1/2" BAKER BLACK, CEMENT: GREY, PIGMENT: 620 CHARCOAL, FINISH: LIGHT SANDBLAST

FINISH 3: DARK CHARCOAL:
CONTROL SAMPLE- SAND: BAKER BLACK, STONE: 1/2" BAKER BLACK, CEMENT: GREY, PIGMENT: 620 CHARCOAL, FINISH: MEDIUM SANDBLAST

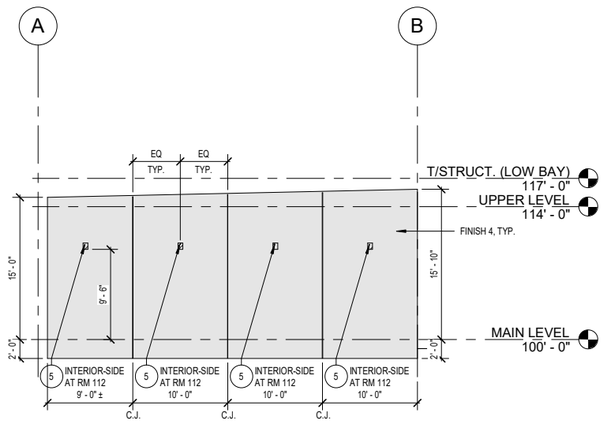
FINISH 4: TYP. INTERIOR FINISH:
CONTROL SAMPLE- CEMENT: NATURAL GREY, FINISH: STEEL SMOOTH FORM FINISH

GENERAL PC WALL PANEL NOTES

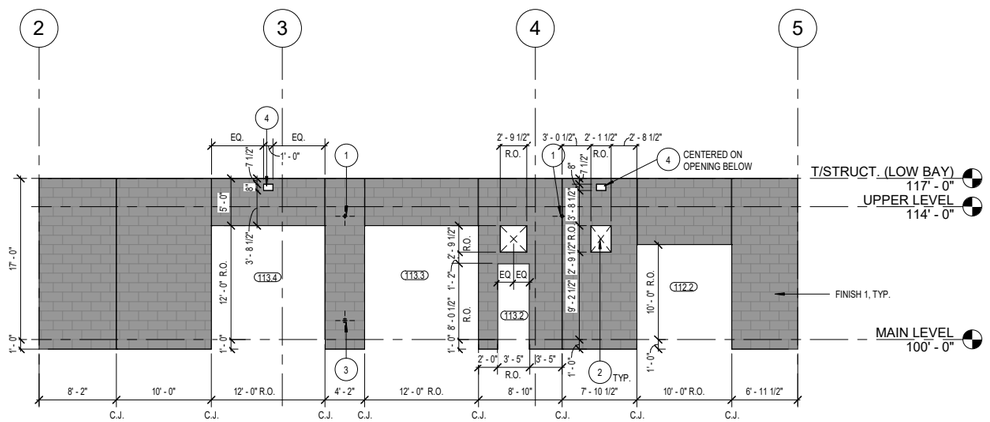
1. SEE PC WALL PANEL ELEVATIONS FOR DESIGN INTENT OF FORMLINER CONFIGURATION. FORMLINER PATTERN MAY NOT ALIGN ACROSS ENTIRE PANEL WHERE DIVIDED BY AN OPENING.
2. SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR ADDITIONAL NOTES AND INFORMATION.
3. ALL OUTSIDE CORNERS SHALL BE CONSTRUCTED OF 45 DEG. MITERED PANELS.
4. ROUGH OPENING SIZES ARE FOR REFERENCE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM OPENING REQUIREMENTS WITH ENTIRE PROJECT DOCUMENT SET.
5. ALL MOUNTING EMBED LOCATIONS AND SIZES SHOWN FOR REFERENCE PURPOSES ONLY. COORDINATE AS REQUIRED WITH ASSOCIATED DETAILS.
6. FOR PC PANEL ELEVATIONS AT DUMPSTER ENCLOSURE SEE 1 / A903

PC WALL PANEL KEYNOTES

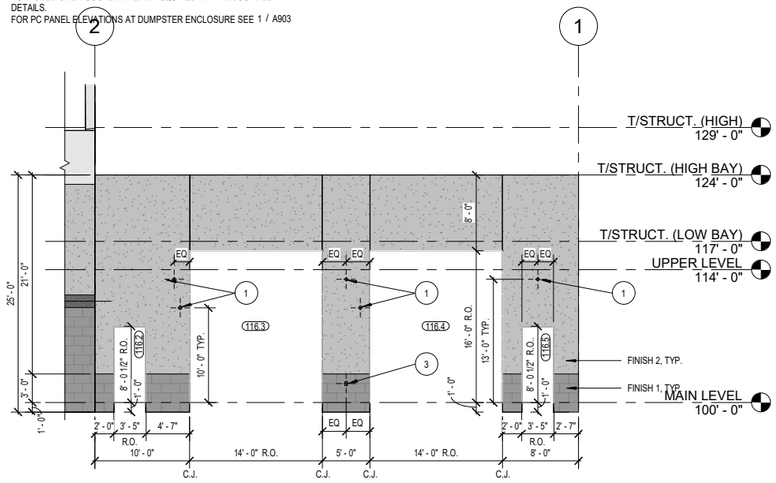
1. WALL-MOUNTED ELEC. LIGHT FIXTURE, SEE ELEC.
2. MECHANICAL ROUGH OPENING, SEE MECH.
3. WALL HYDRANT, SEE PLUMB.
4. THROUGH-WALL SCUPPER, SEE ROOF PLAN FOR ADDITIONAL NOTES AND INFORMATION
5. STL. EMBED (MOUNTING) PLATE BY PRECAST MANUFACTURER



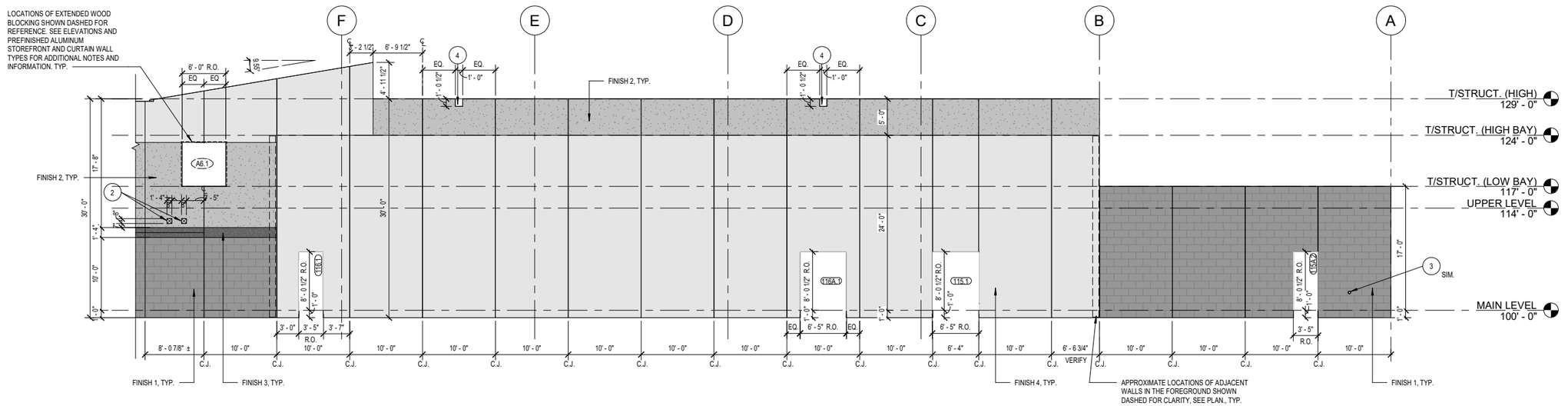
3 A206 PRECAST PANEL ELEVATION - WEST 2
1/16" = 1'-0"



2 A206 PANEL ELEVATION - NORTH
1/16" = 1'-0"



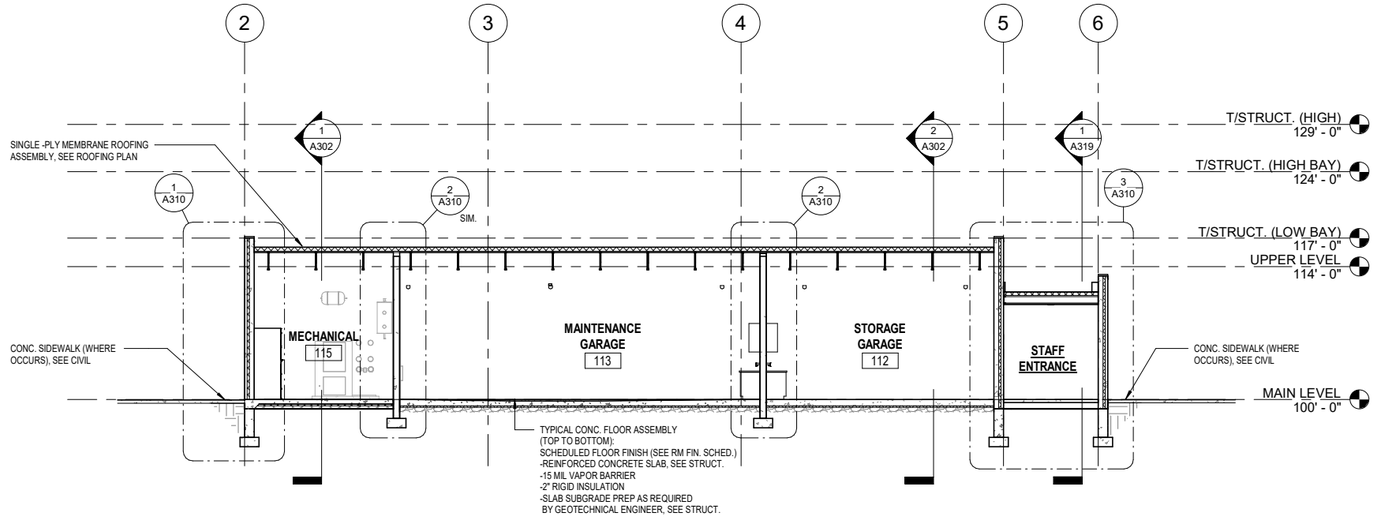
4 A206 PRECAST PANEL ELEVATION - SOUTH
1/16" = 1'-0"



1 A206 PRECAST PANEL ELEVATION - BACK WALL EAST
1/16" = 1'-0"

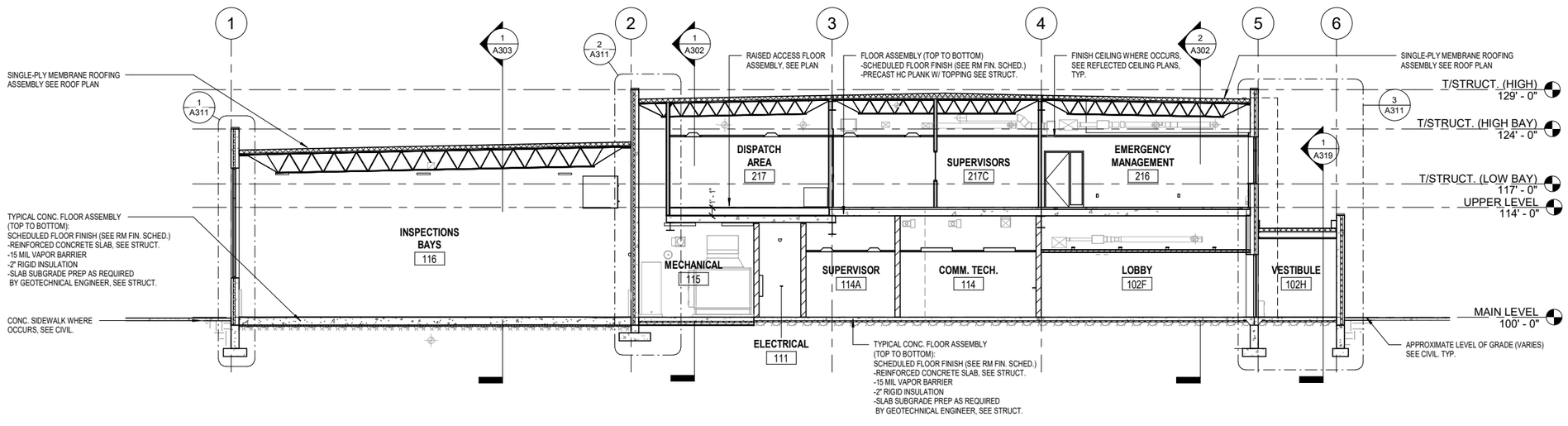
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PC PANEL ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A206	

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1 A300 BUILDING SECTION
1/16"=1'-0"

0' 2' 5' 10'

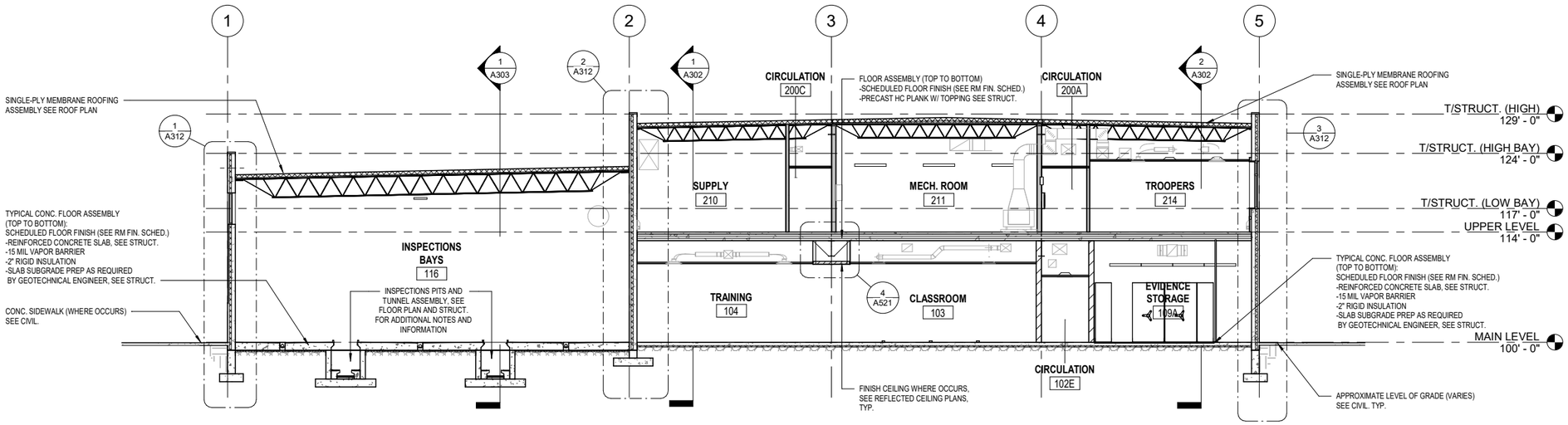


2 A300 BUILDING SECTION
1/16"=1'-0"

0' 2' 5' 10'

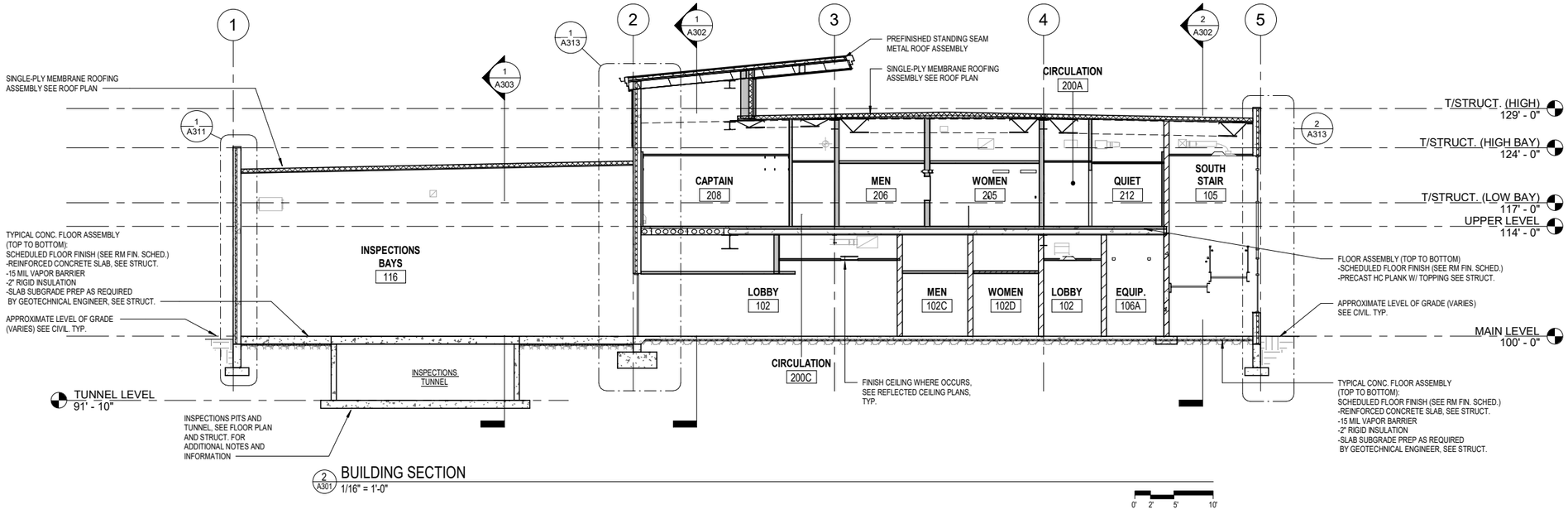
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			BUILDING SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A300	150

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1 A301 BUILDING SECTION
1/16"=1'-0"

0' 2' 5' 10'

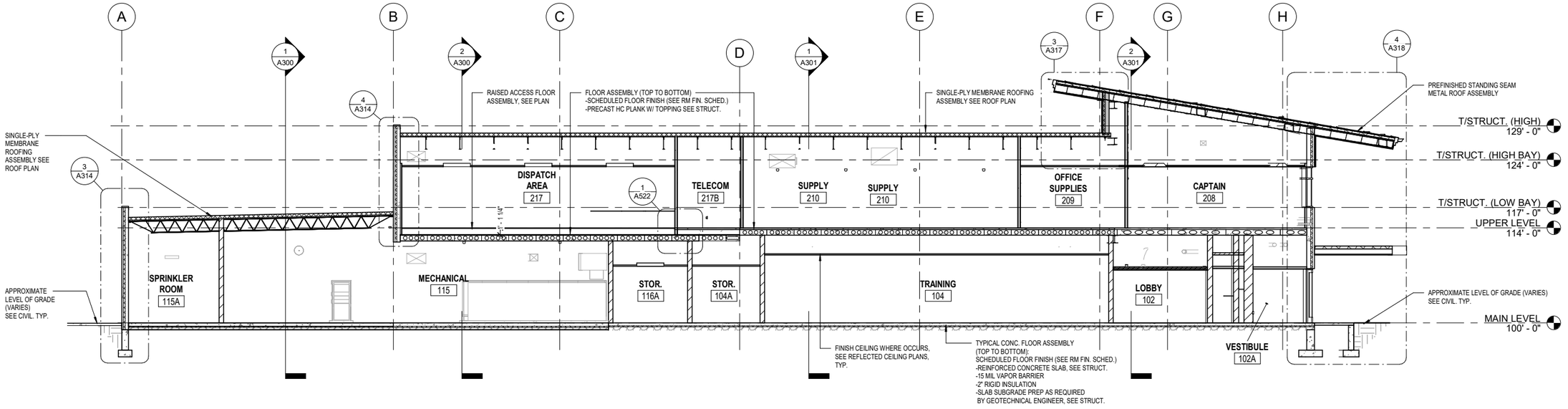


2 A301 BUILDING SECTION
1/16" = 1'-0"

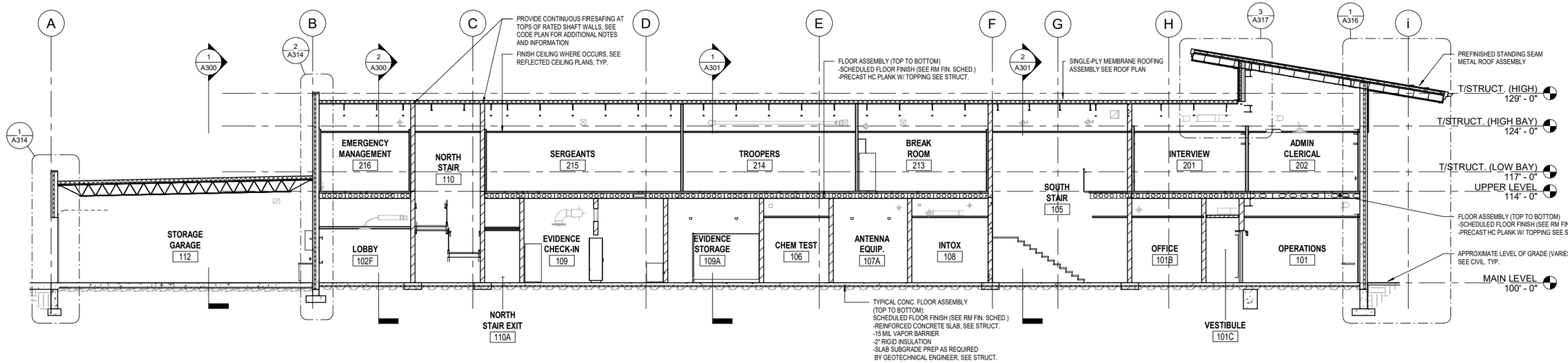
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			BUILDING SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A301	151

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 10:58:25 AM



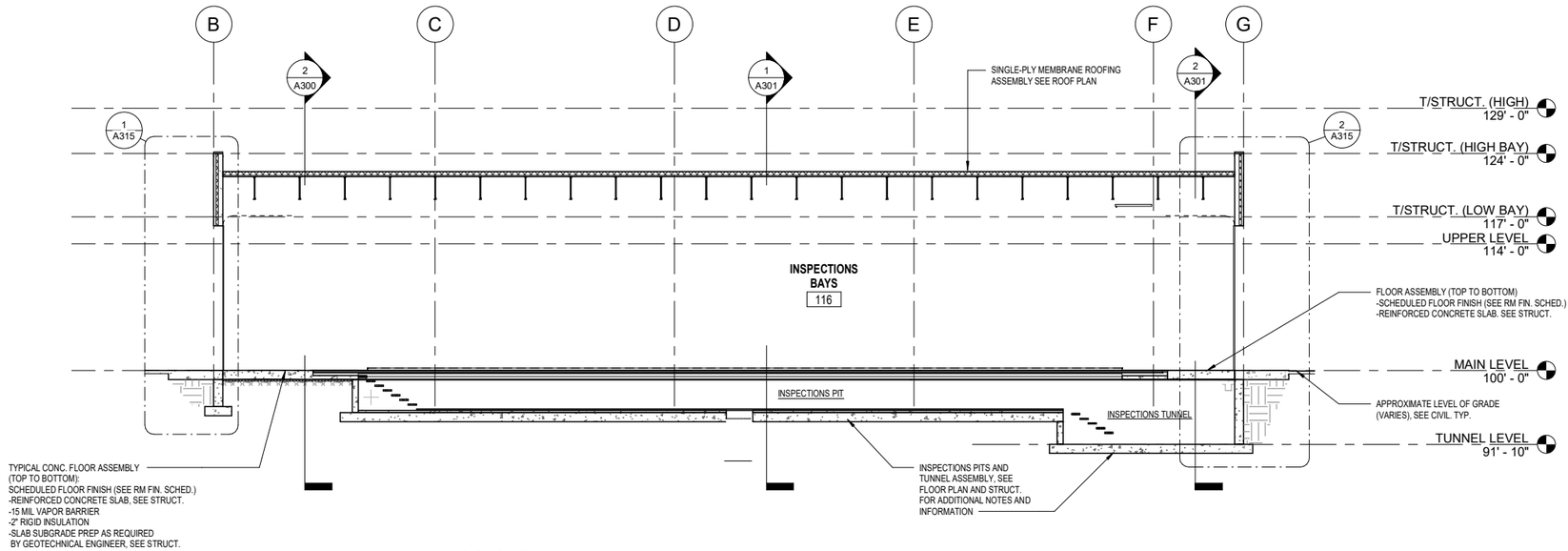
1 A302 BUILDING SECTION
1/16" = 1'-0"



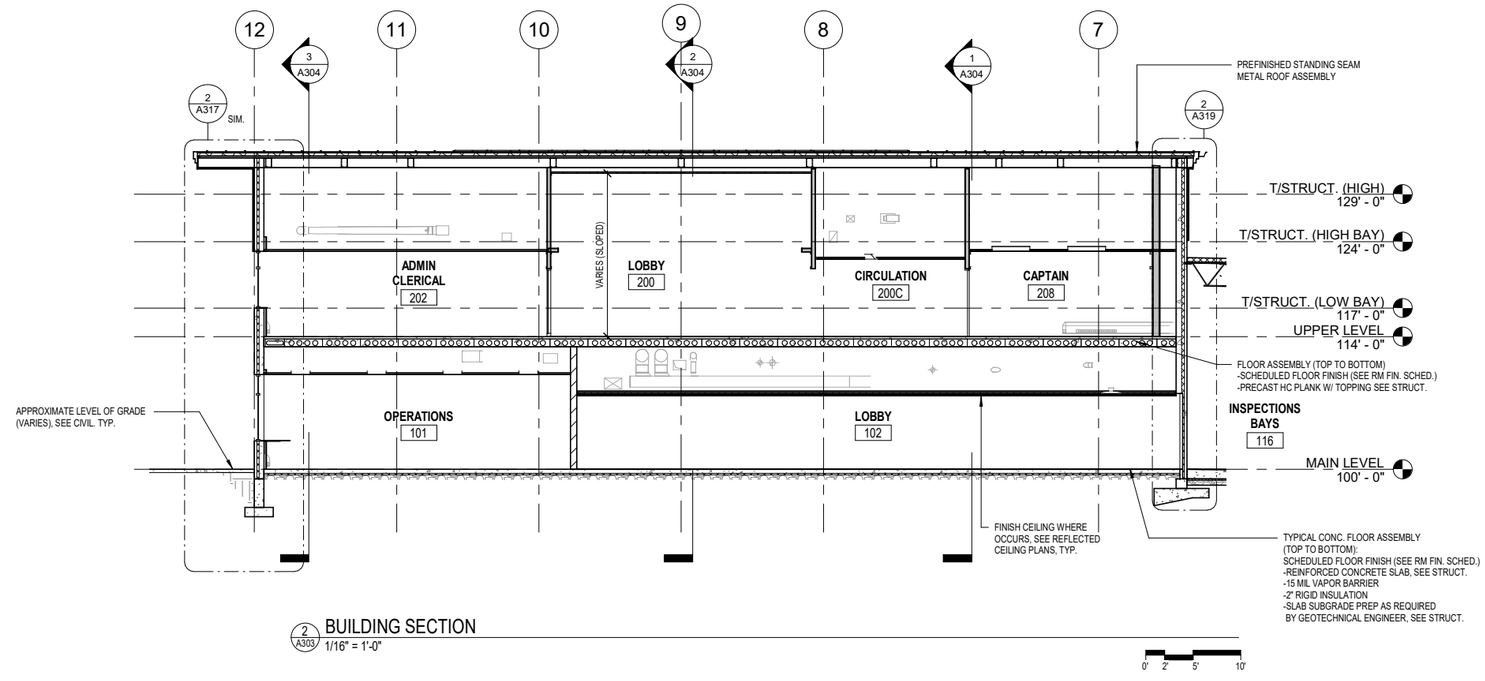
2 A302 BUILDING SECTION
1/16" = 1'-0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			BUILDING SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A302	152

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 10:58:27 AM



1 A303 BUILDING SECTION
1/16" = 1'-0"

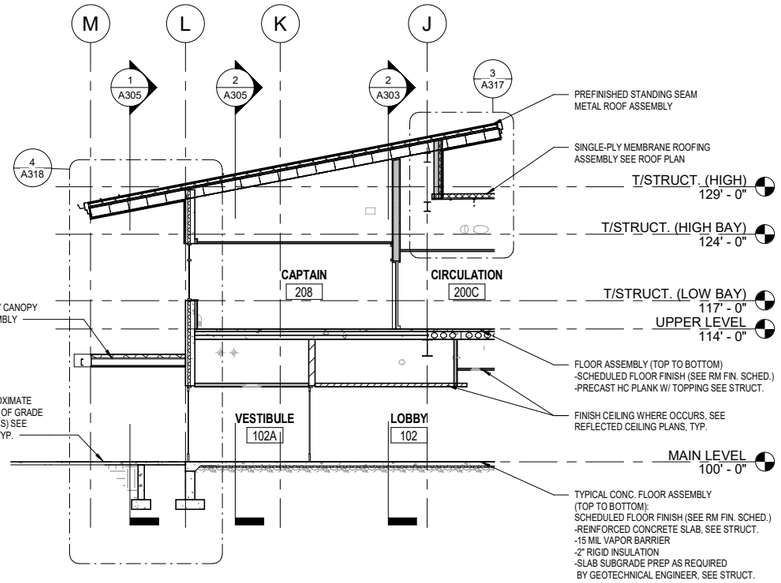


2 A303 BUILDING SECTION
1/16" = 1'-0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			BUILDING SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A303	153

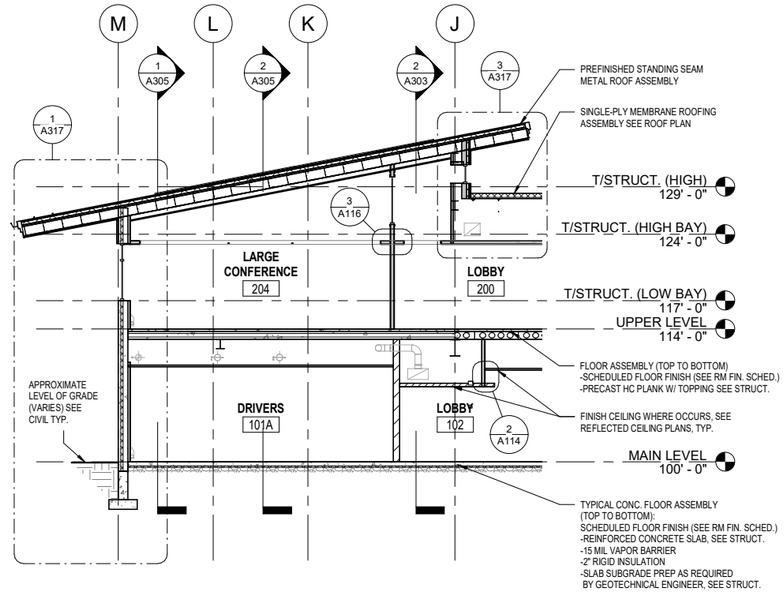
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2



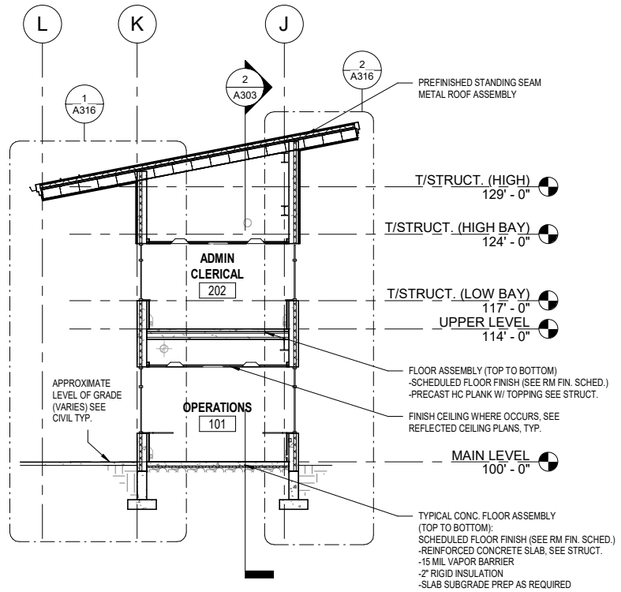
1 A304 BUILDING SECTION
1/16" = 1'-0"

0' 2' 5' 10'



2 A304 BUILDING SECTION
1/16" = 1'-0"

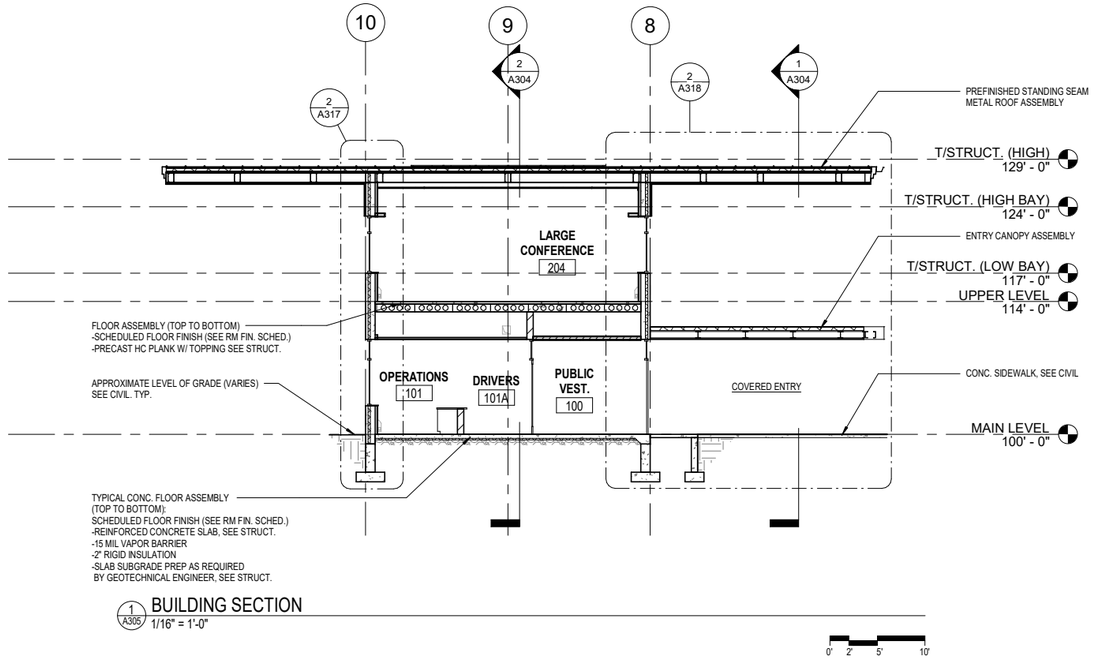
0' 2' 5' 10'



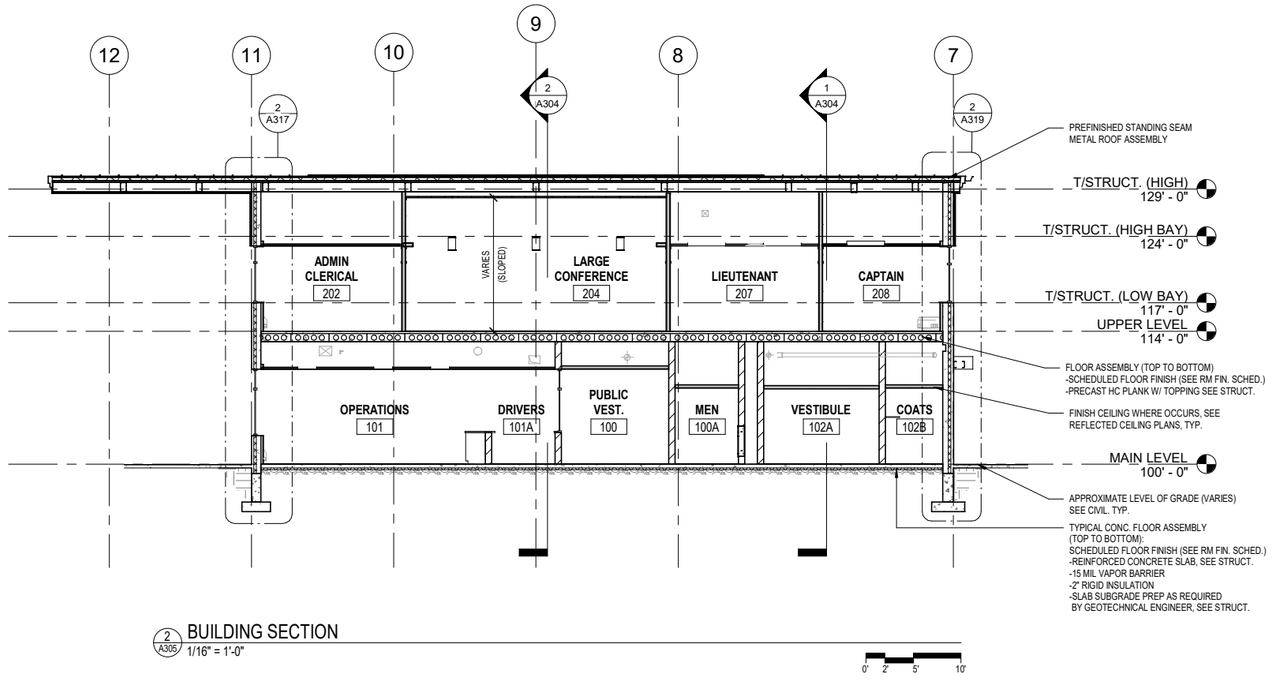
3 A304 BUILDING SECTION
1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			BUILDING SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A304	154



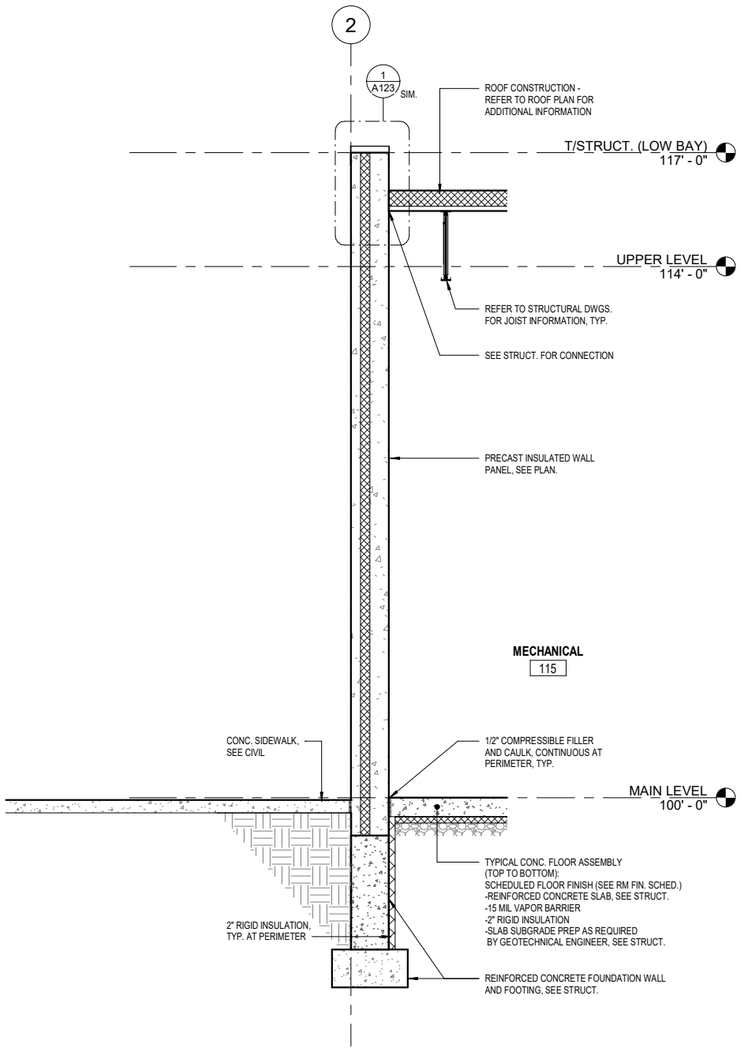
1 A305 BUILDING SECTION
1/16" = 1'-0"



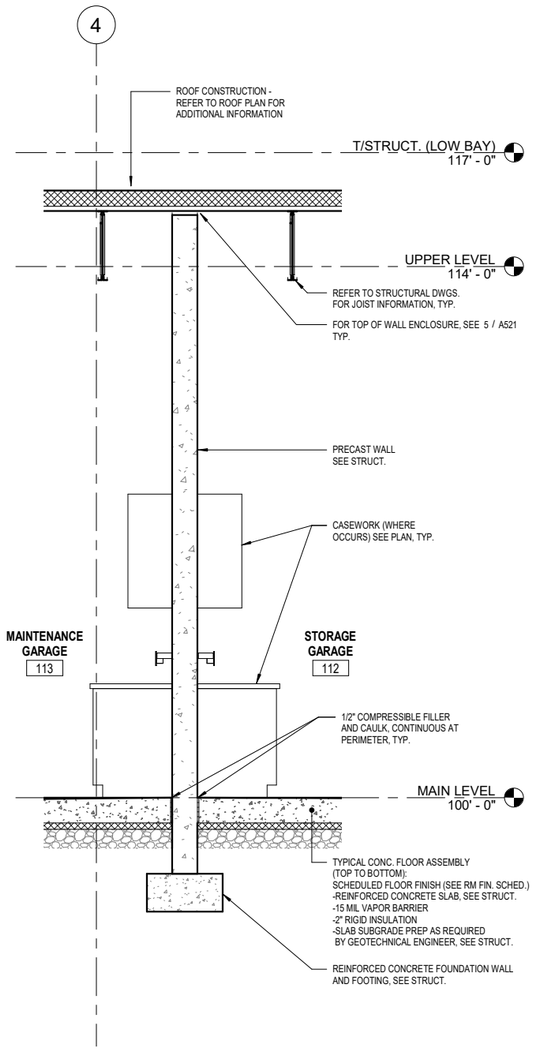
2 A305 BUILDING SECTION
1/16" = 1'-0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			BUILDING SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A305	

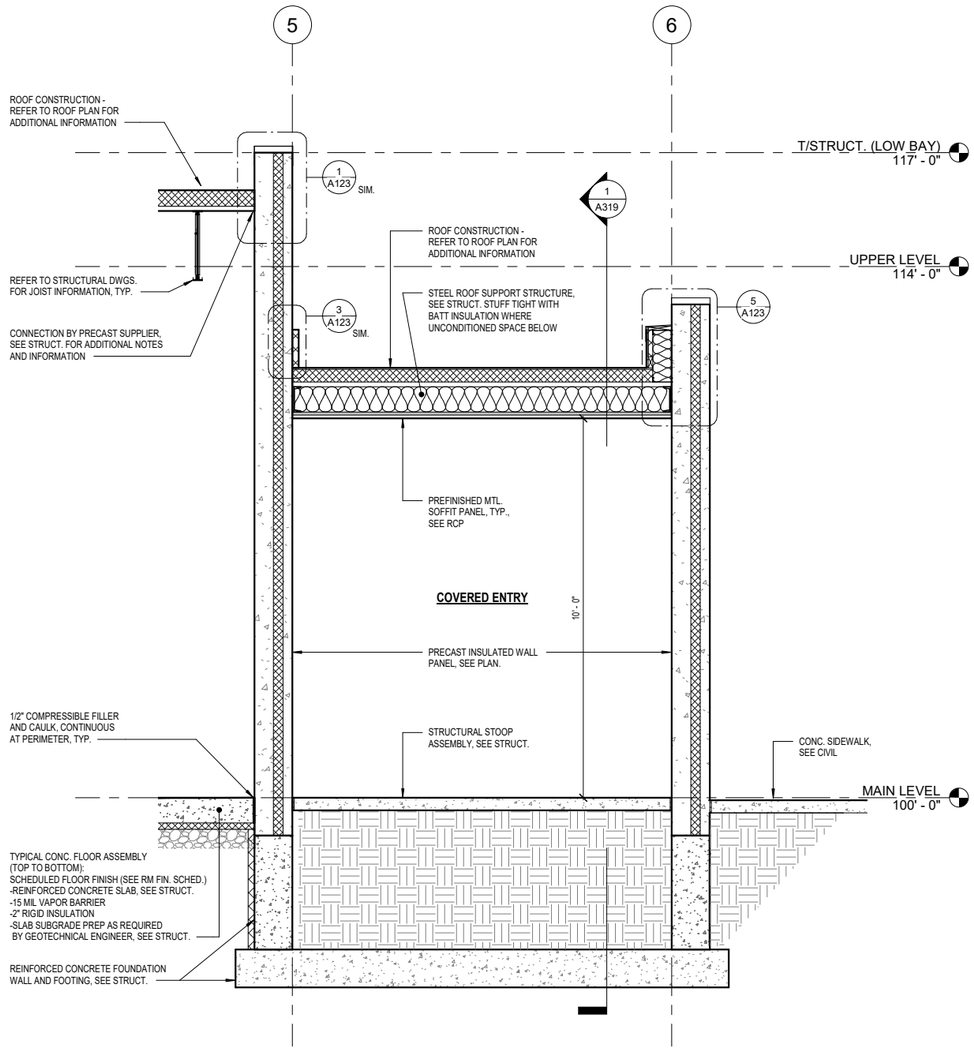
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1 A310 WALL SECTION
1/4" = 1' - 0"

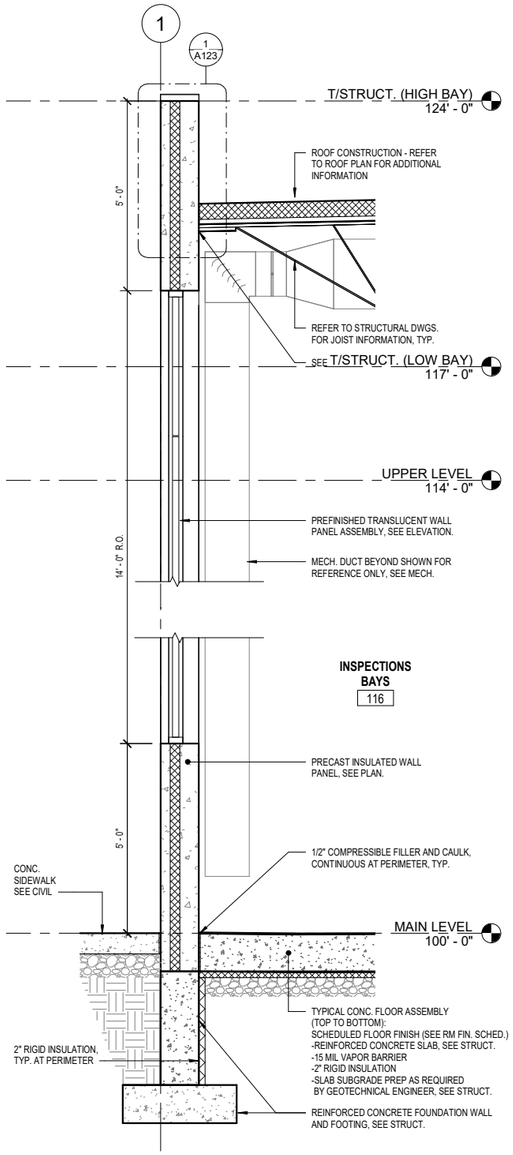


2 A310 WALL SECTION
1/4" = 1' - 0"



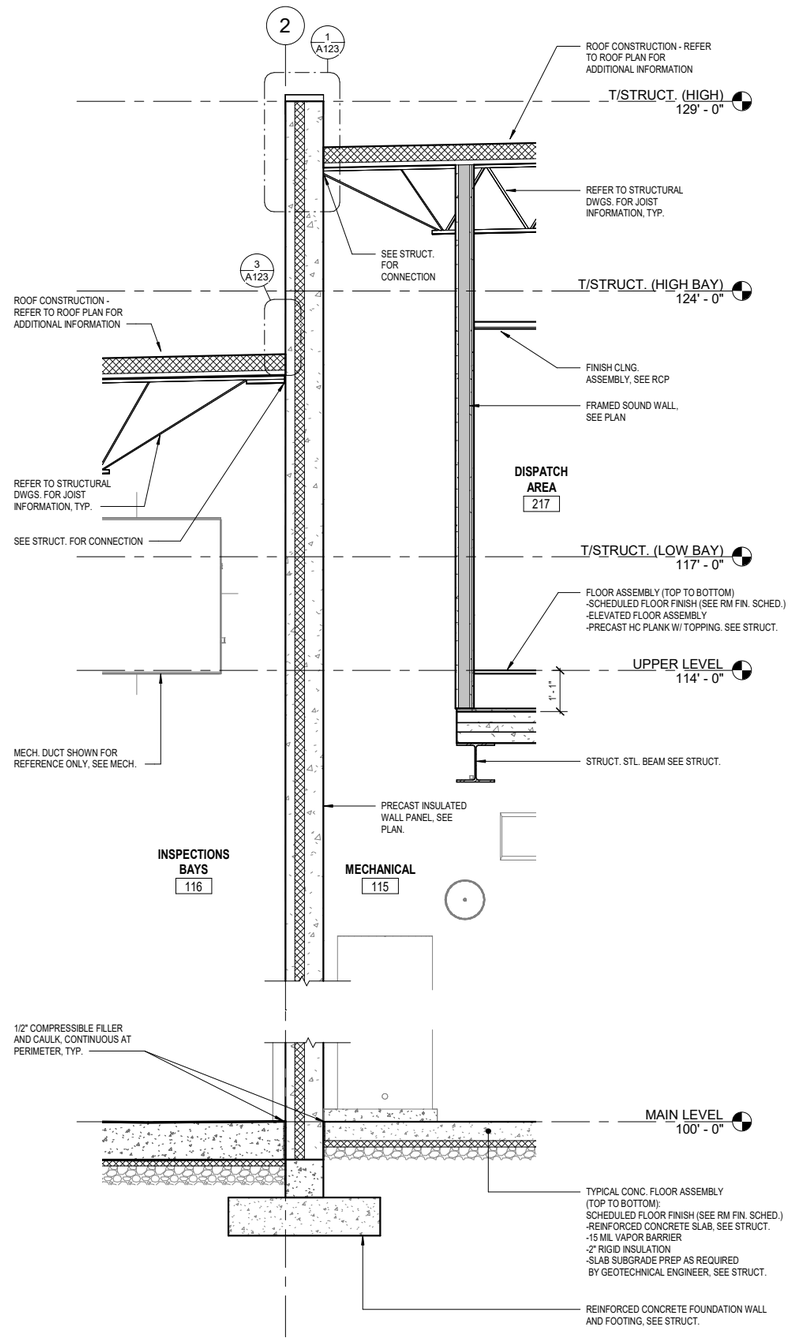
3 A310 WALL SECTION
1/4" = 1' - 0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WALL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A310	156



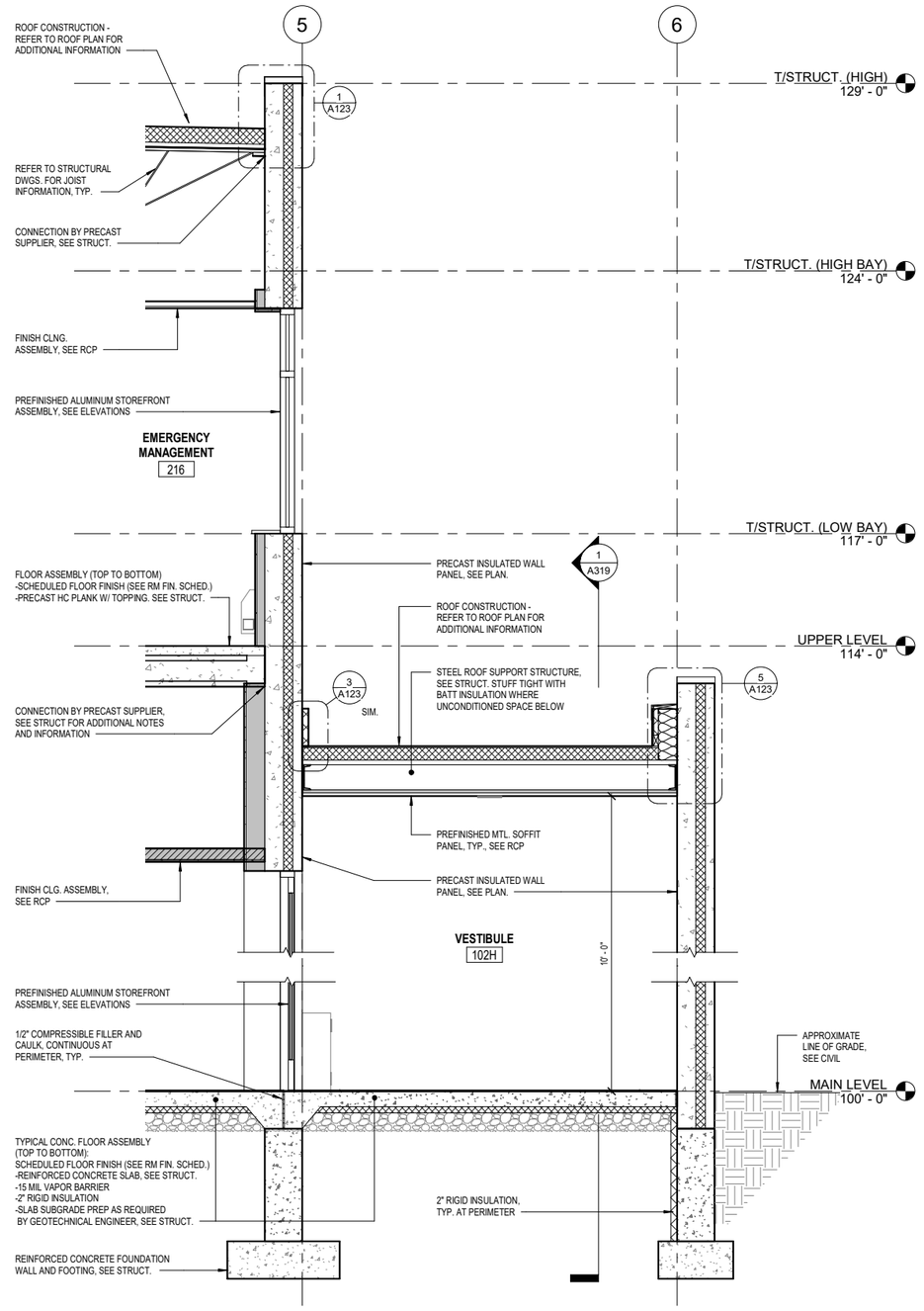
1 A311 WALL SECTION
1/4" = 1' - 0"

0" 6" 1' 3'



2 A311 WALL SECTION
1/4" = 1' - 0"

0" 6" 1' 3'

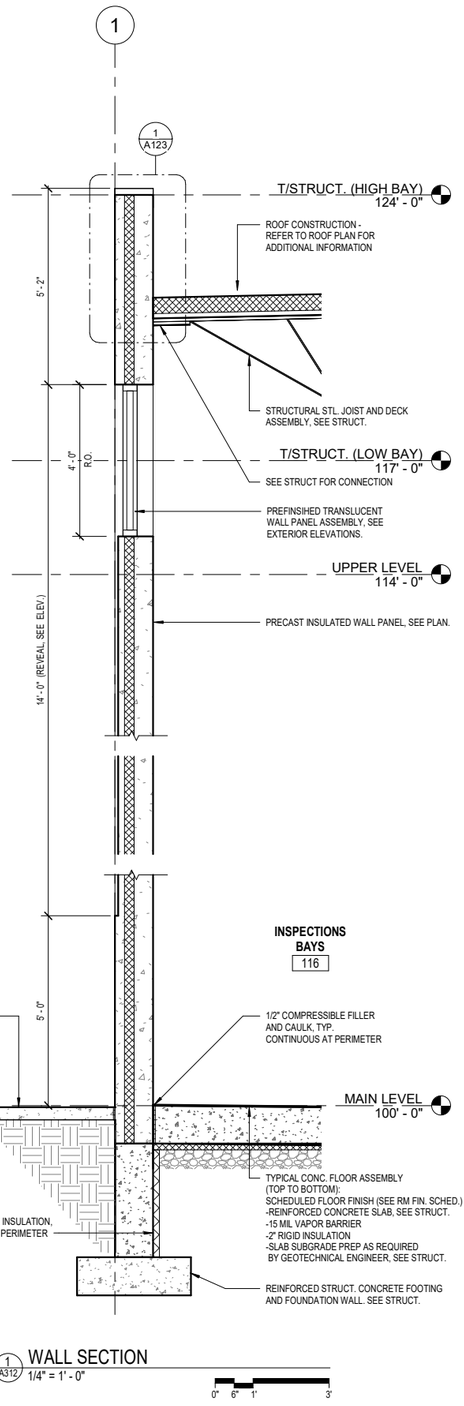


3 A311 WALL SECTION
1/4" = 1' - 0"

0" 6" 1' 3'

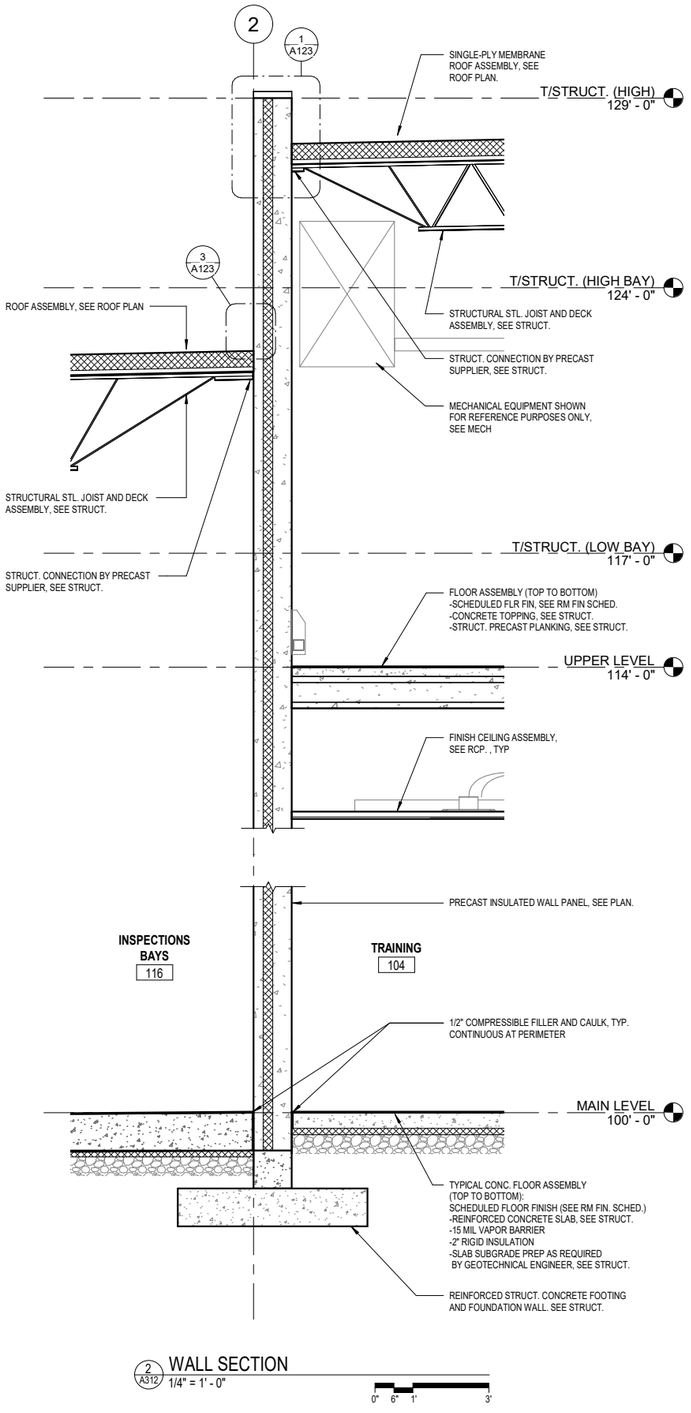
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WALL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A311	

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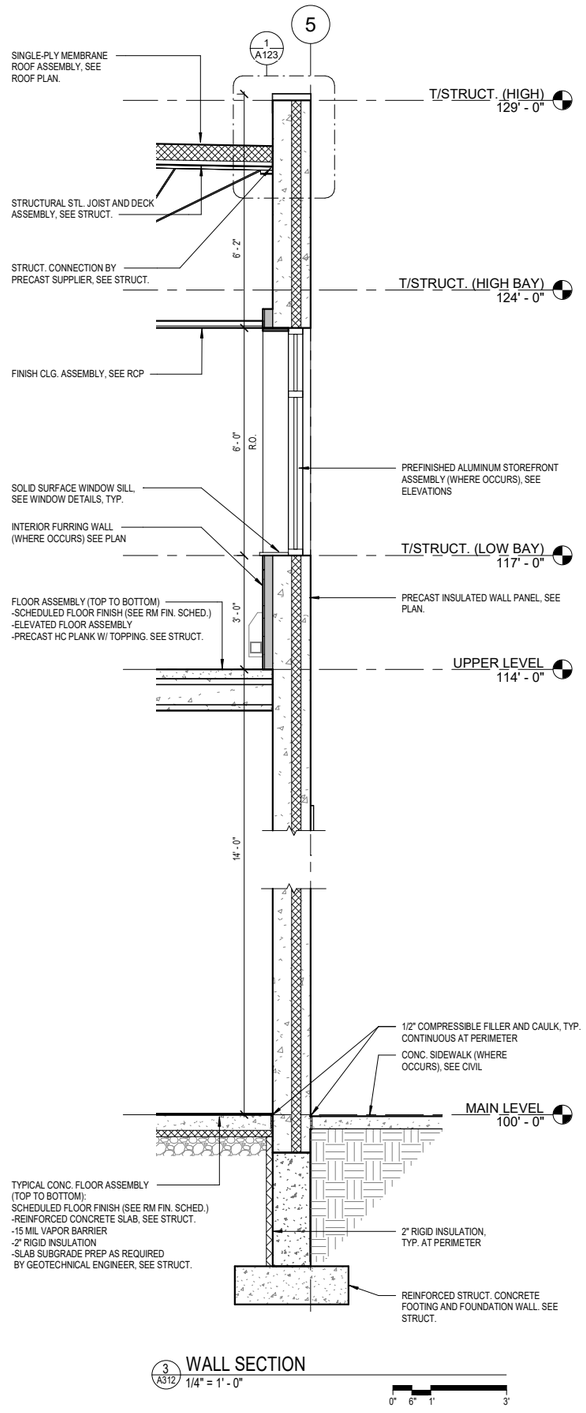
1 A312 WALL SECTION
1/4" = 1' - 0"

0" 6" 1' 3'



2 A312 WALL SECTION
1/4" = 1' - 0"

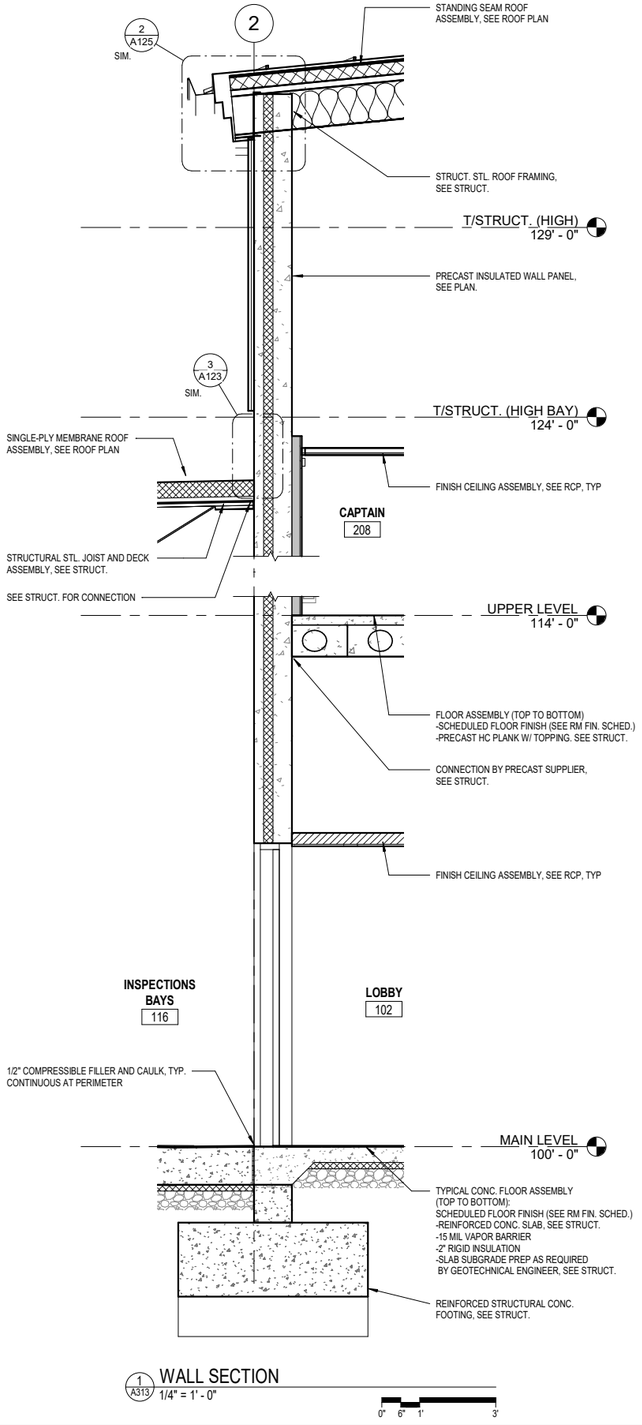
0" 6" 1' 3'



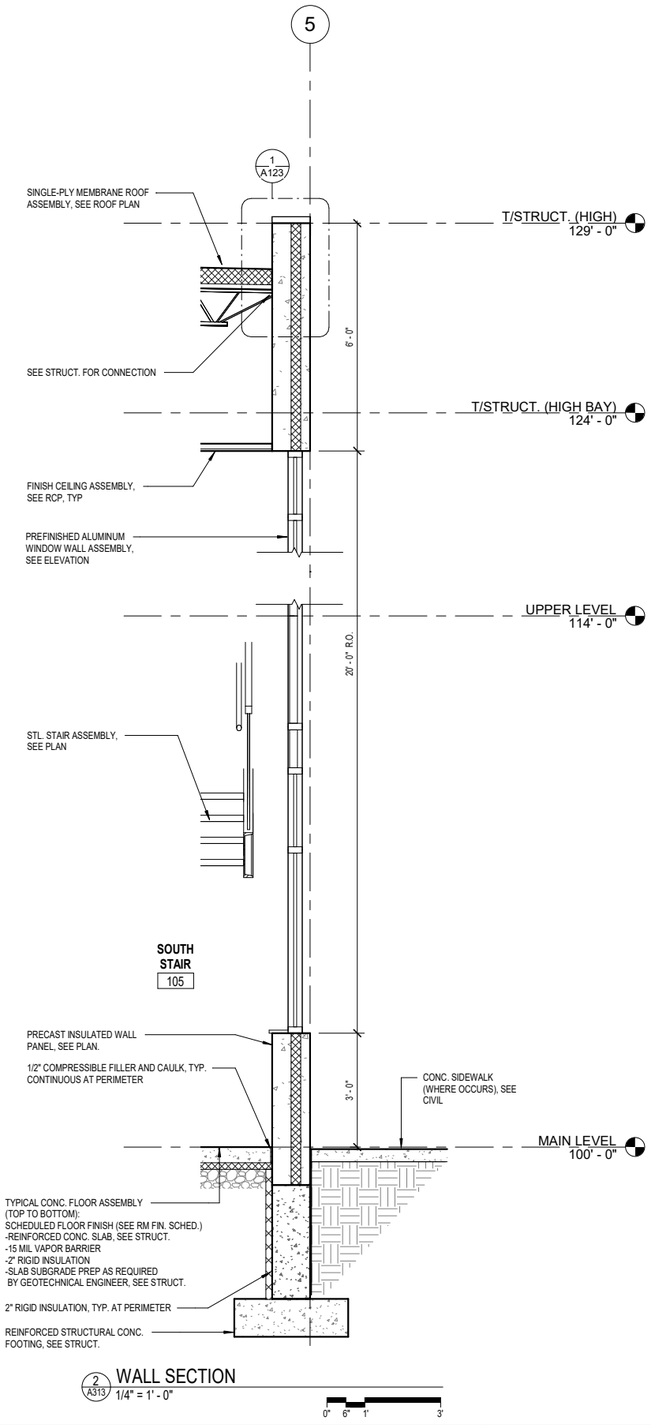
3 A312 WALL SECTION
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0" 6" 1' 3'

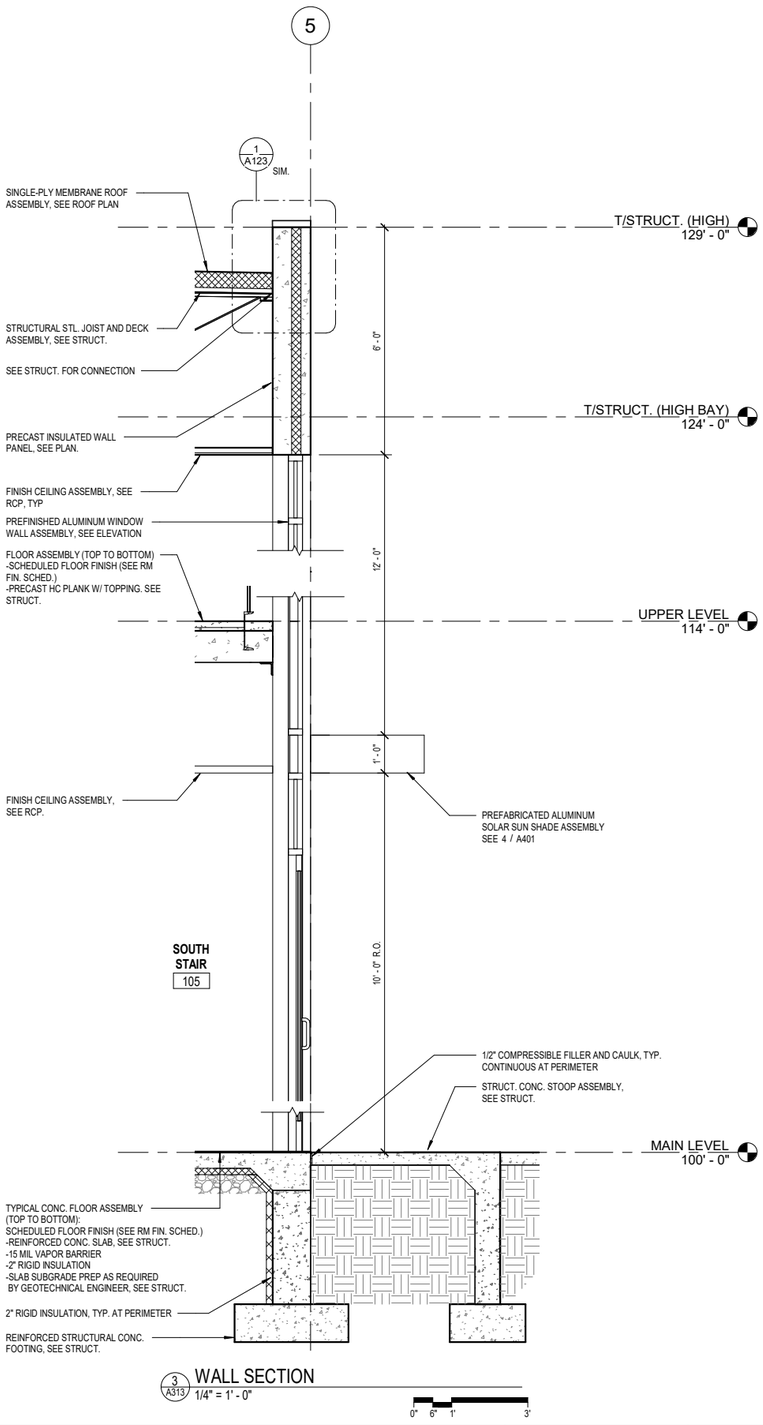
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WALL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A312	158



1 A313 WALL SECTION
1/4" = 1' - 0"
0" 6" 1' 3'

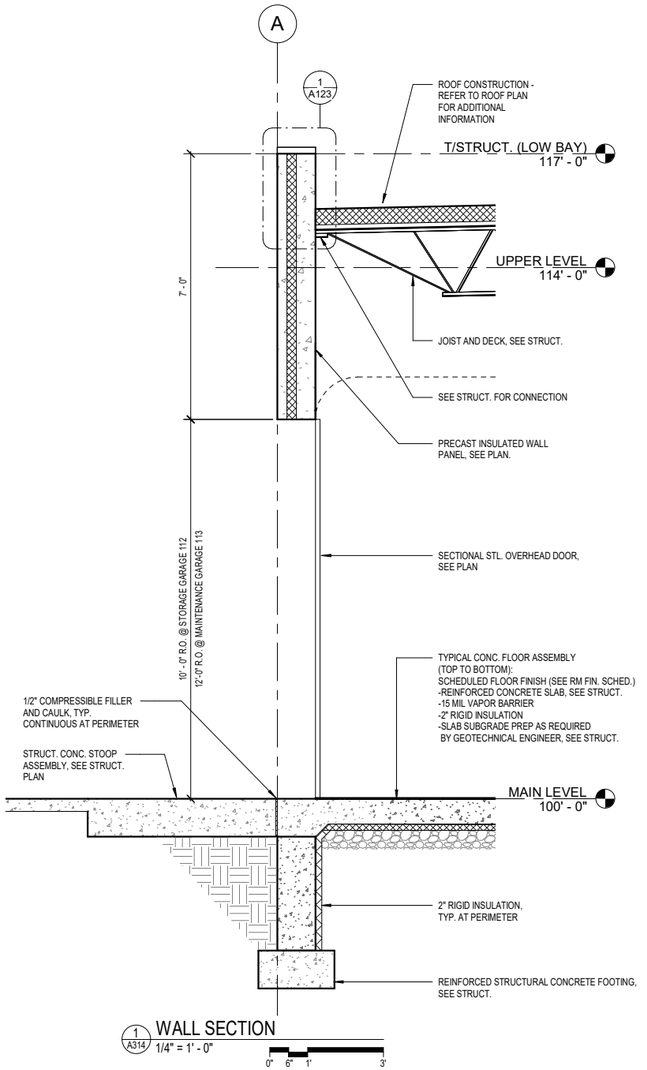


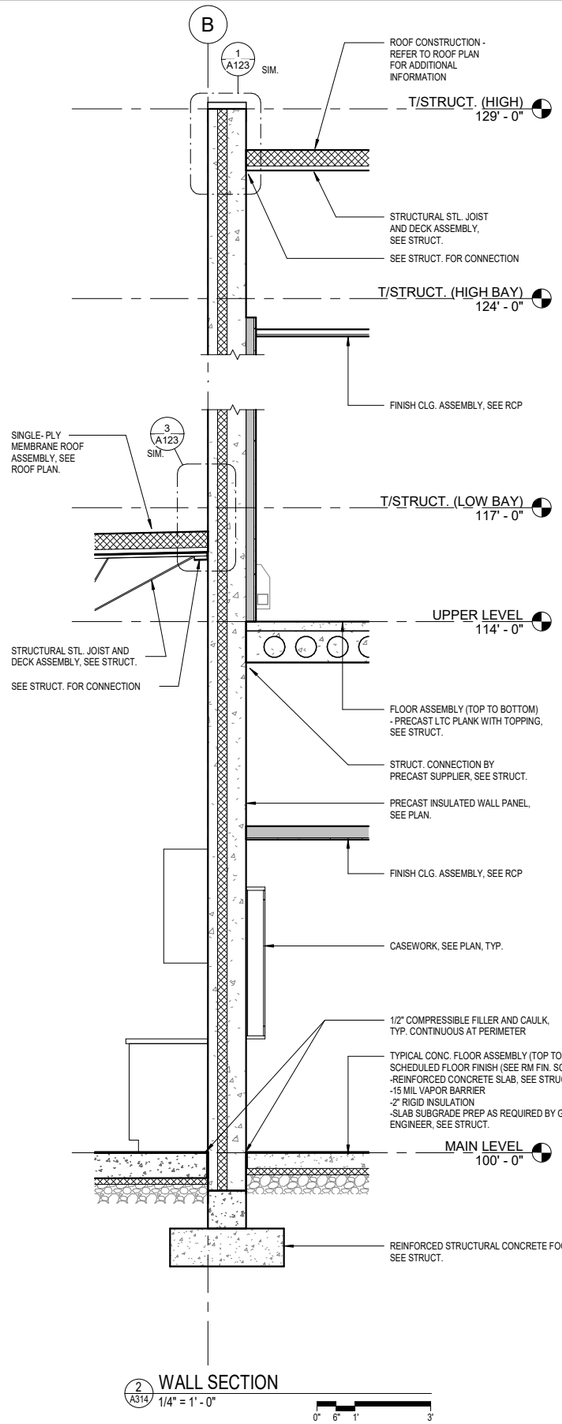
2 A313 WALL SECTION
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0" 6" 1' 3'

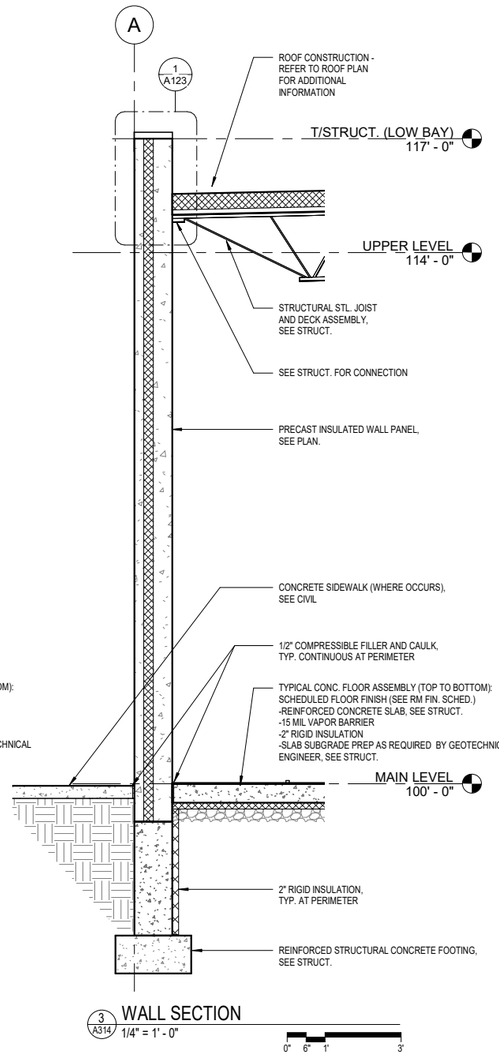


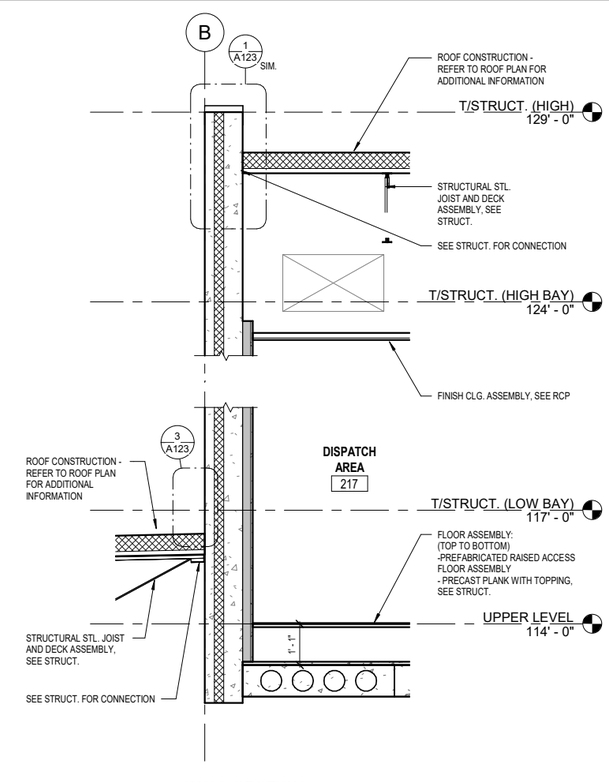
3 A313 WALL SECTION
1/4" = 1' - 0"
0" 6" 1' 3'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WALL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A313	159



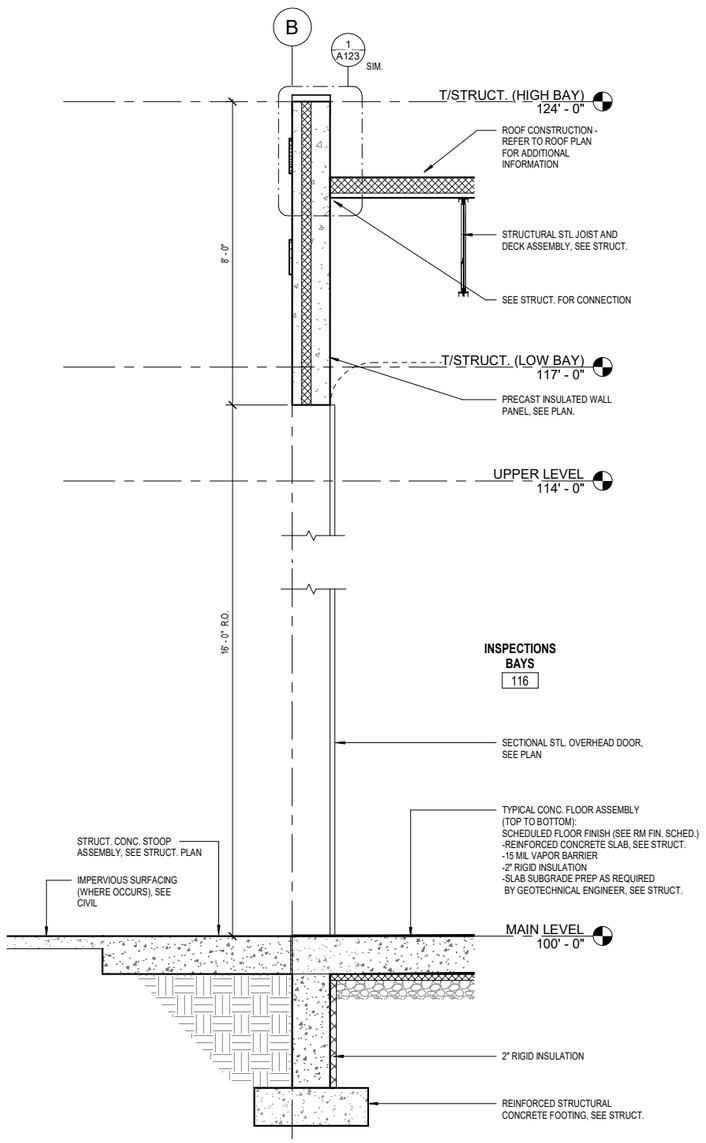




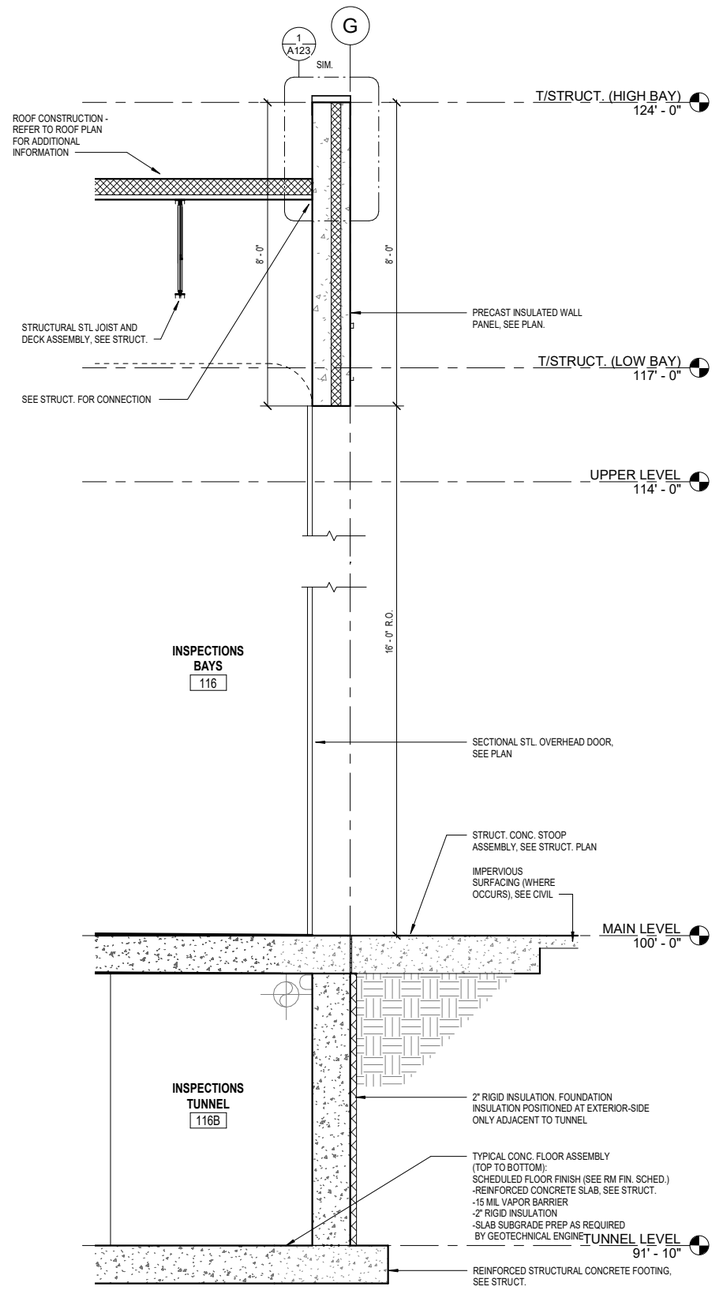


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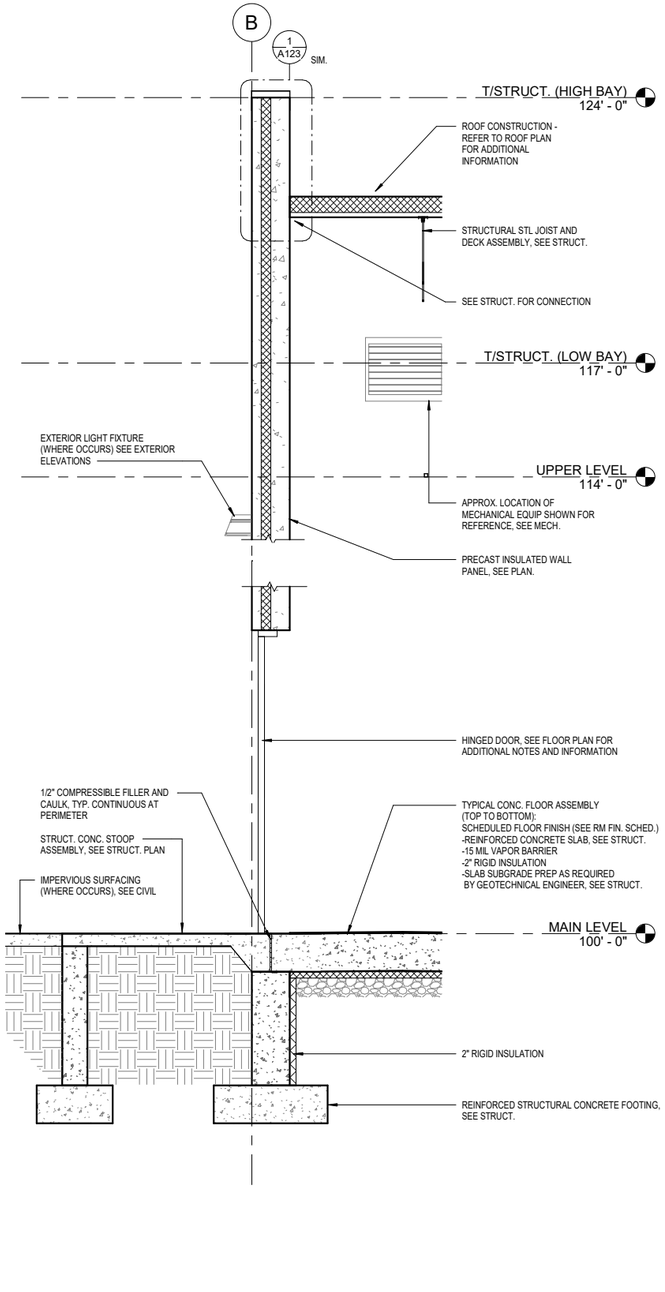
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WALL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A314	160



1 A315 WALL SECTION
1/4" = 1' - 0"
0" 6" 1' 3'



2 A315 WALL SECTION
1/4" = 1' - 0"
0" 6" 1' 3'

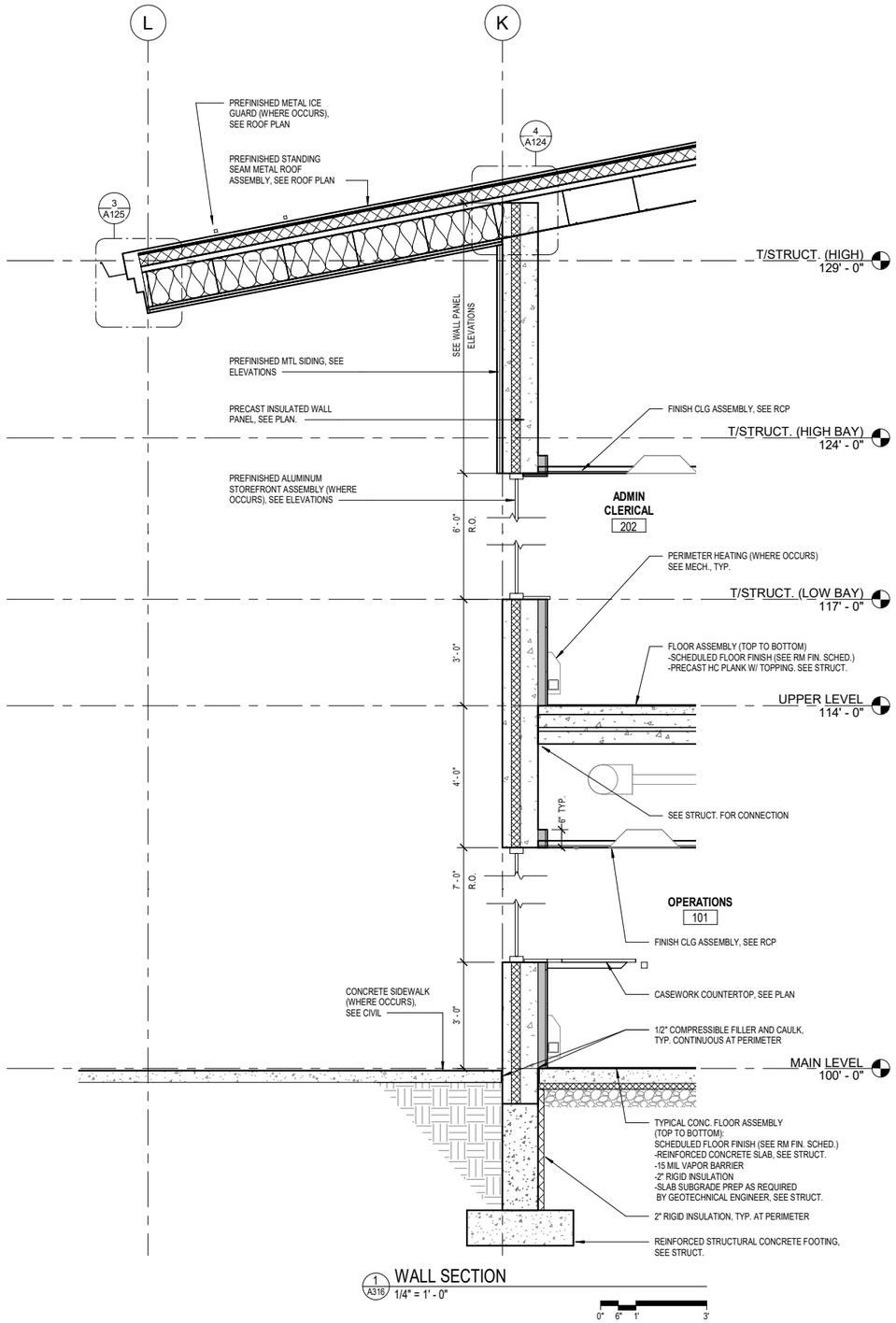


3 A315 WALL SECTION
1/4" = 1' - 0"
0" 6" 1' 3'

2

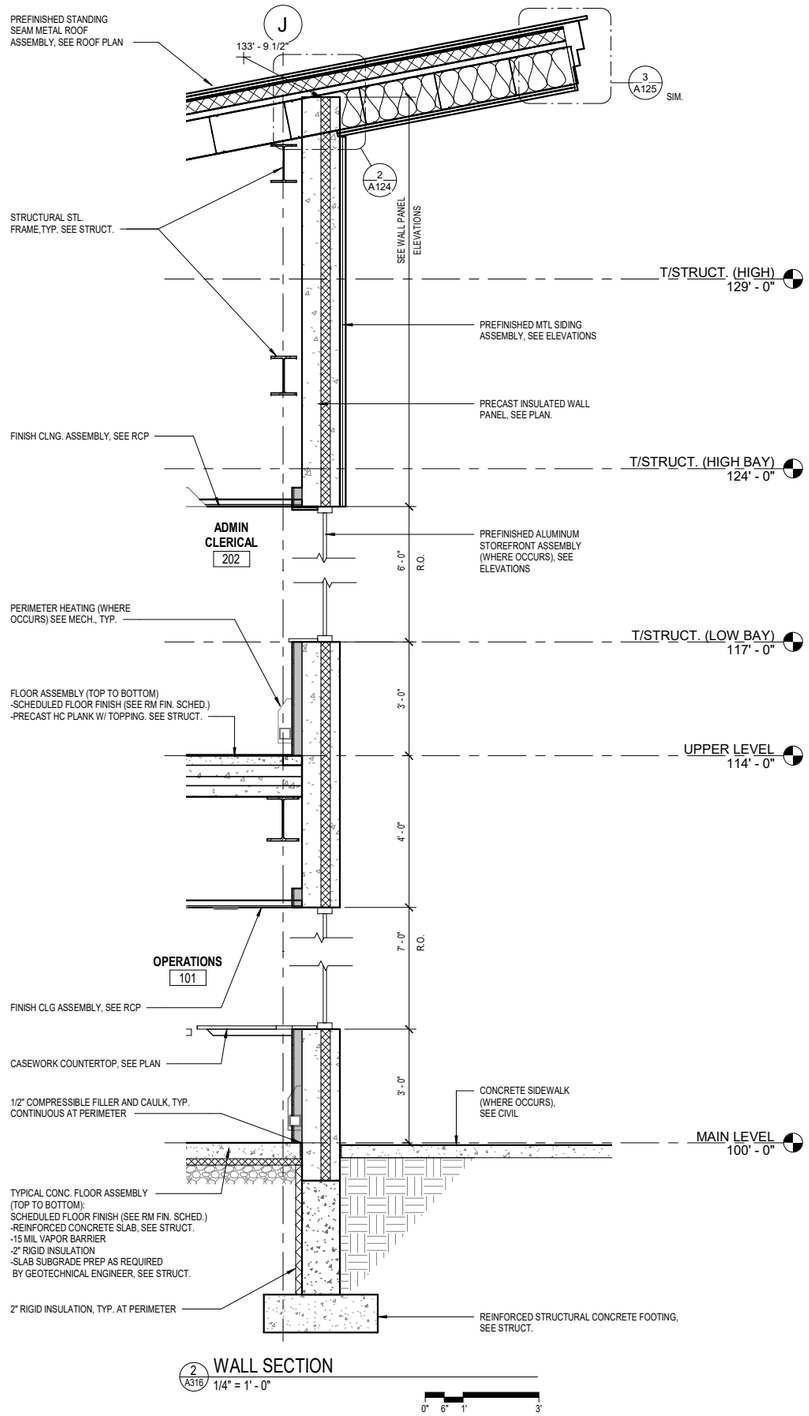
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WALL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A315	

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1 A316 WALL SECTION
1/4" = 1' - 0"

0" 6" 1' 3'



2 A316 WALL SECTION
1/4" = 1' - 0"

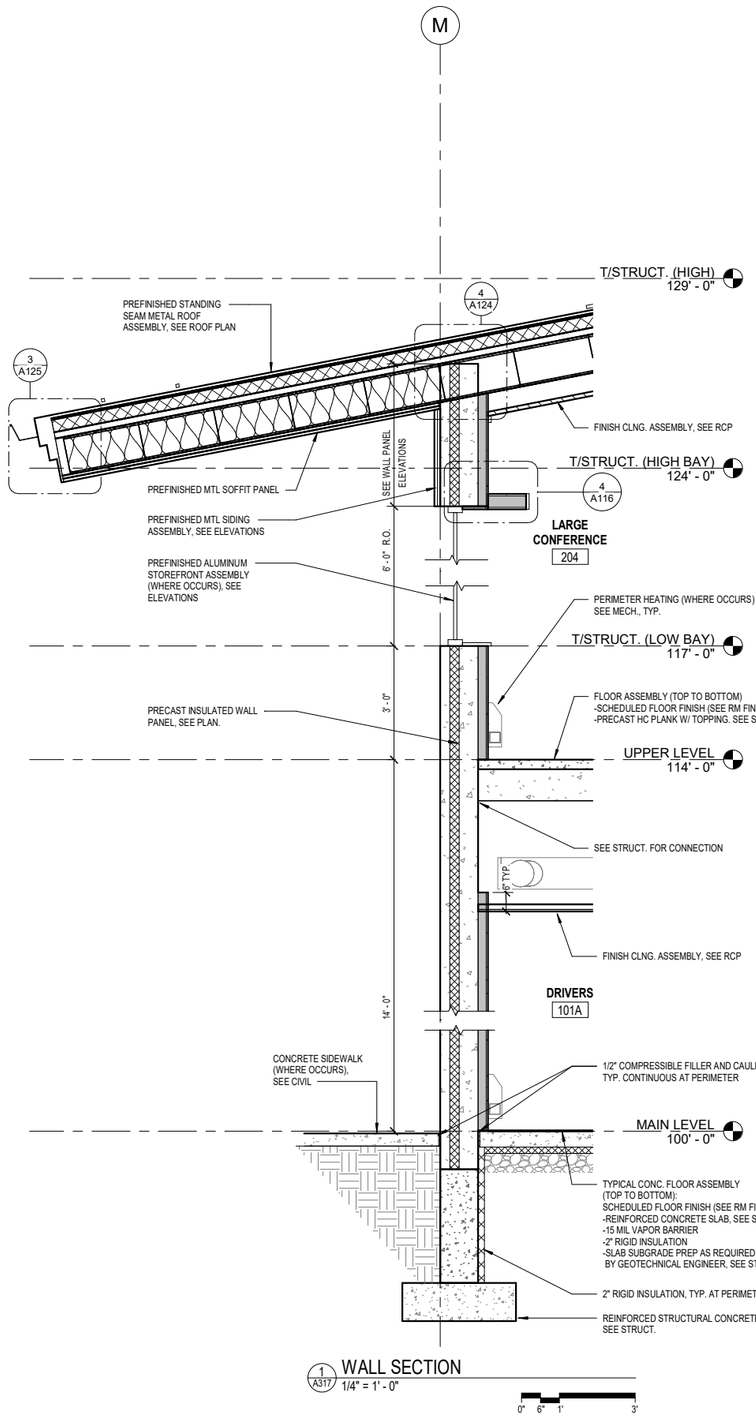
0" 6" 1' 3'

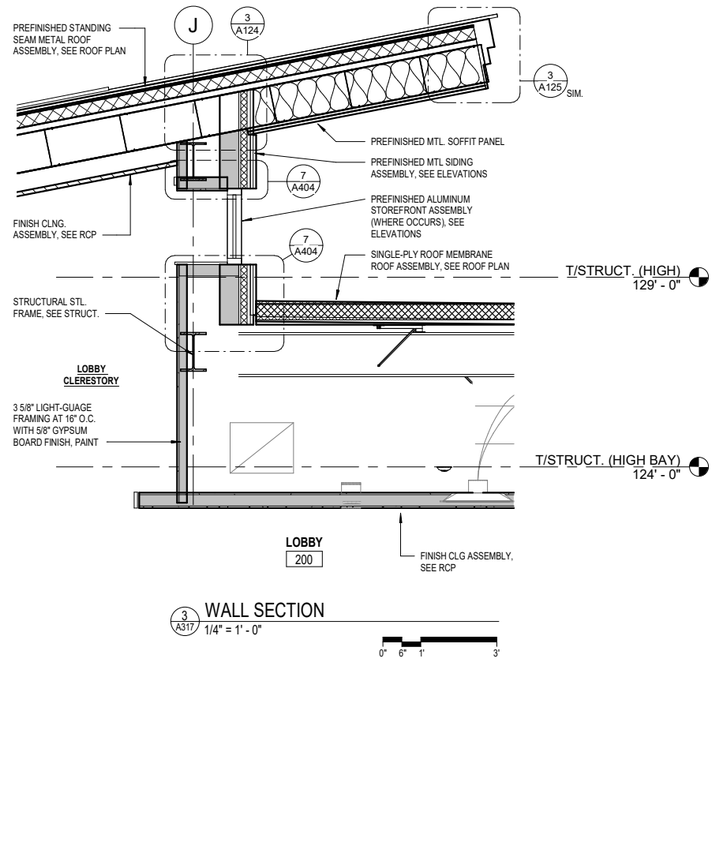
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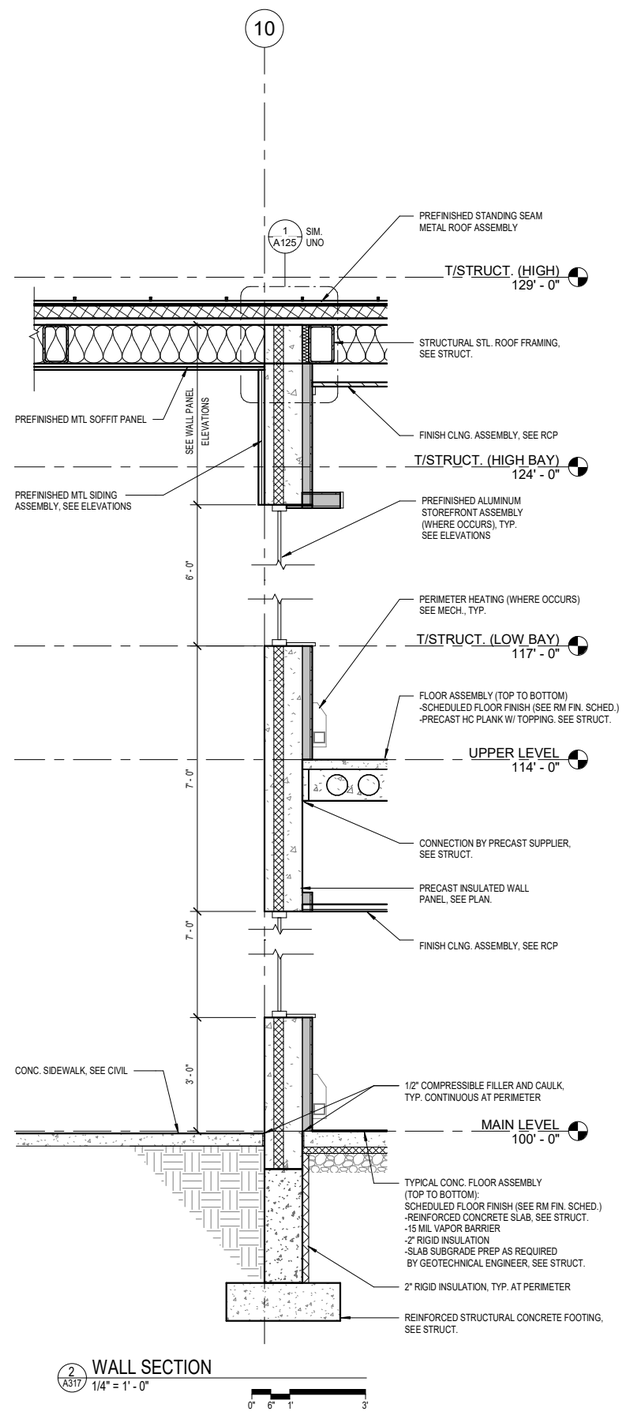
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WALL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A316	162

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PLOT DATE: 4/29/2024 10:58:38 AM

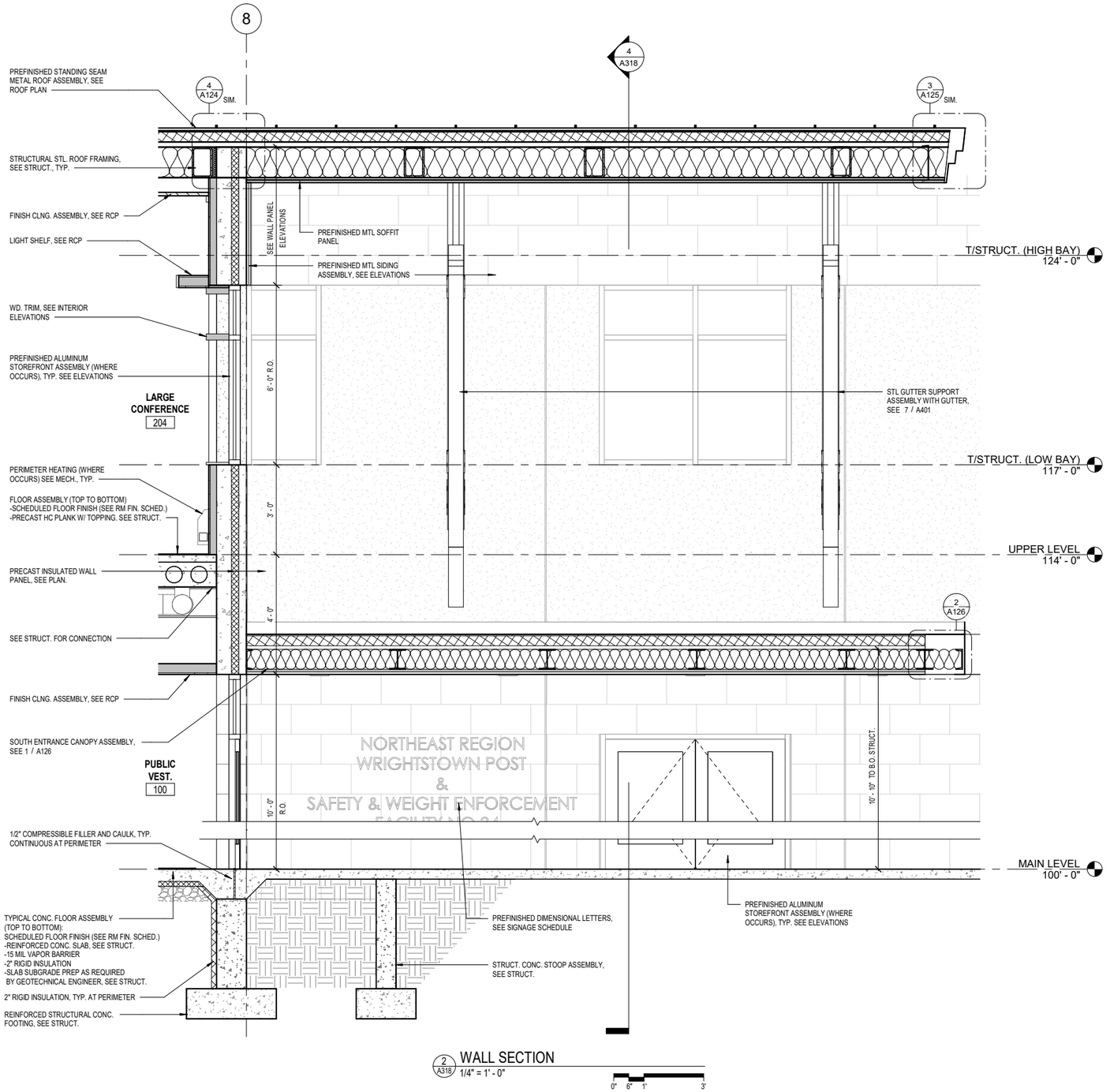




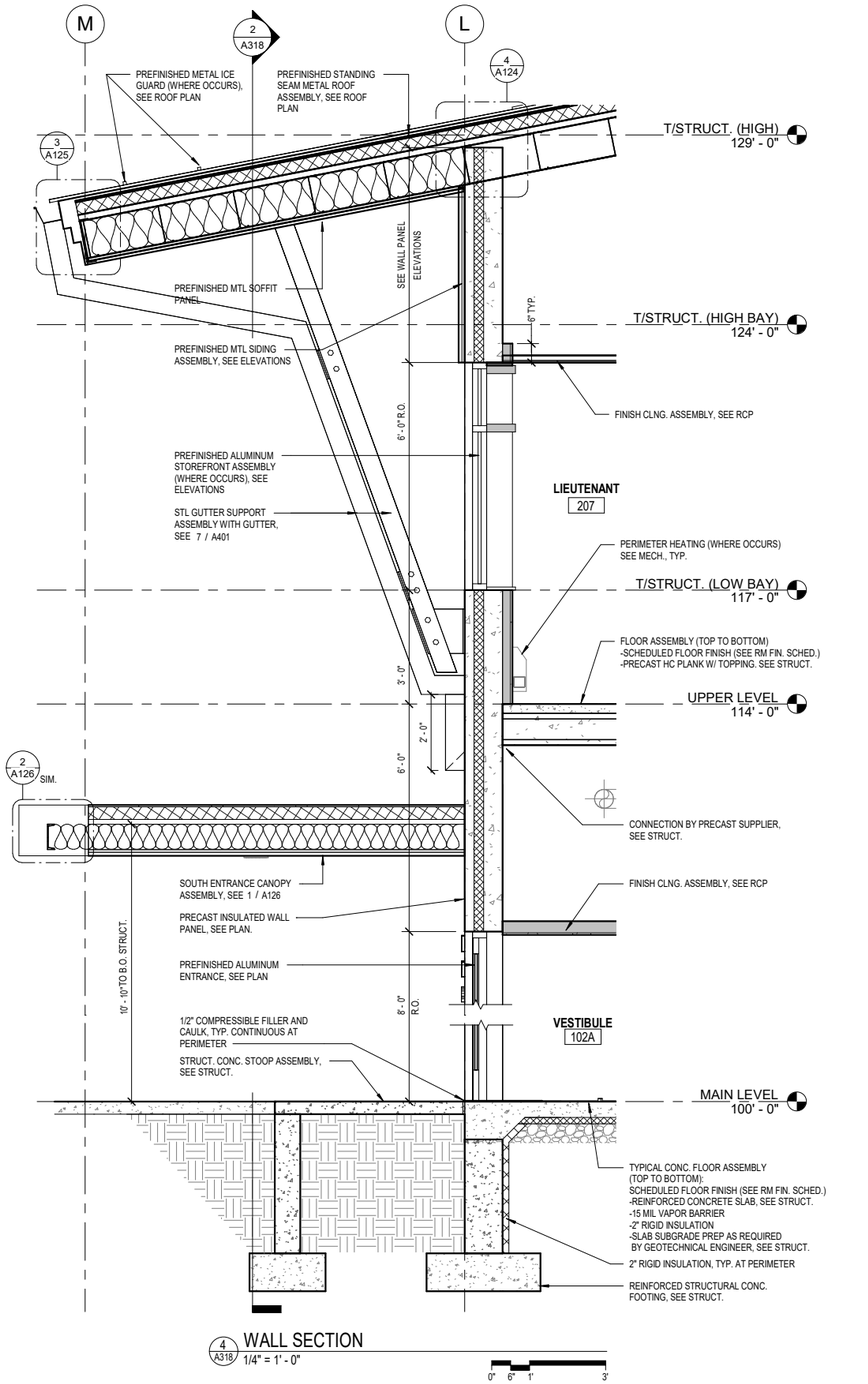


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PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WALL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A317	163

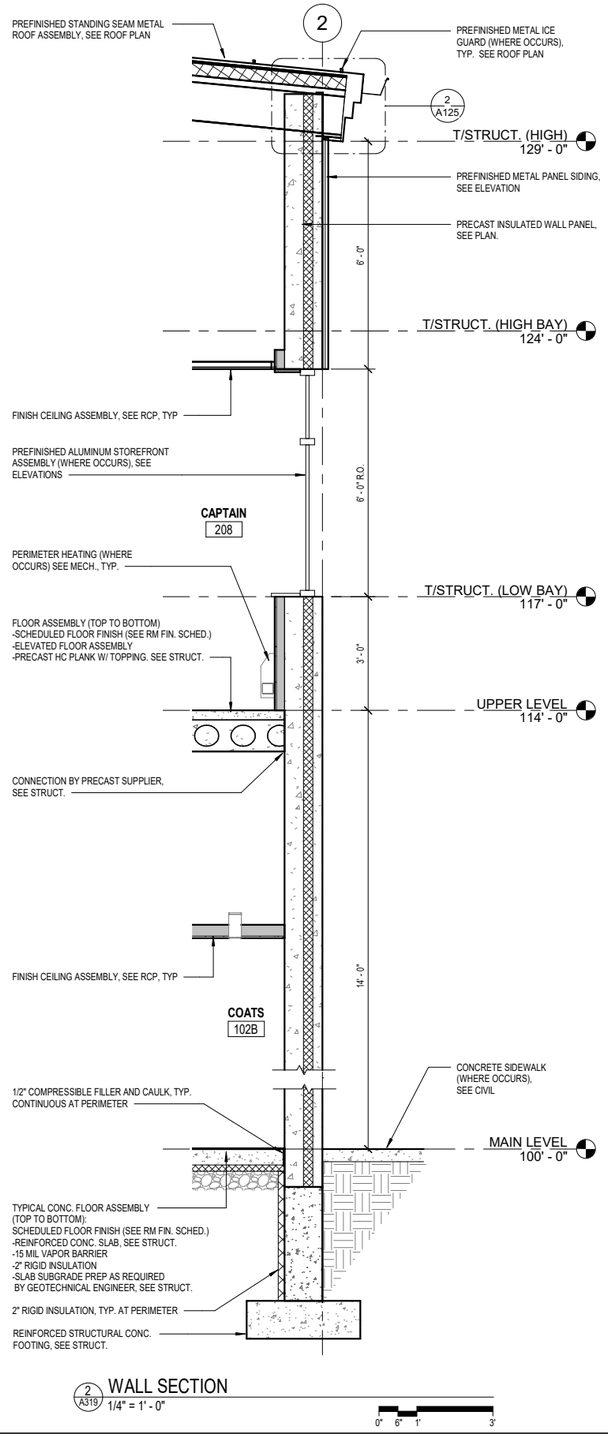


2 A318 WALL SECTION
1/4" = 1' - 0"
0" 6" 1' 3'

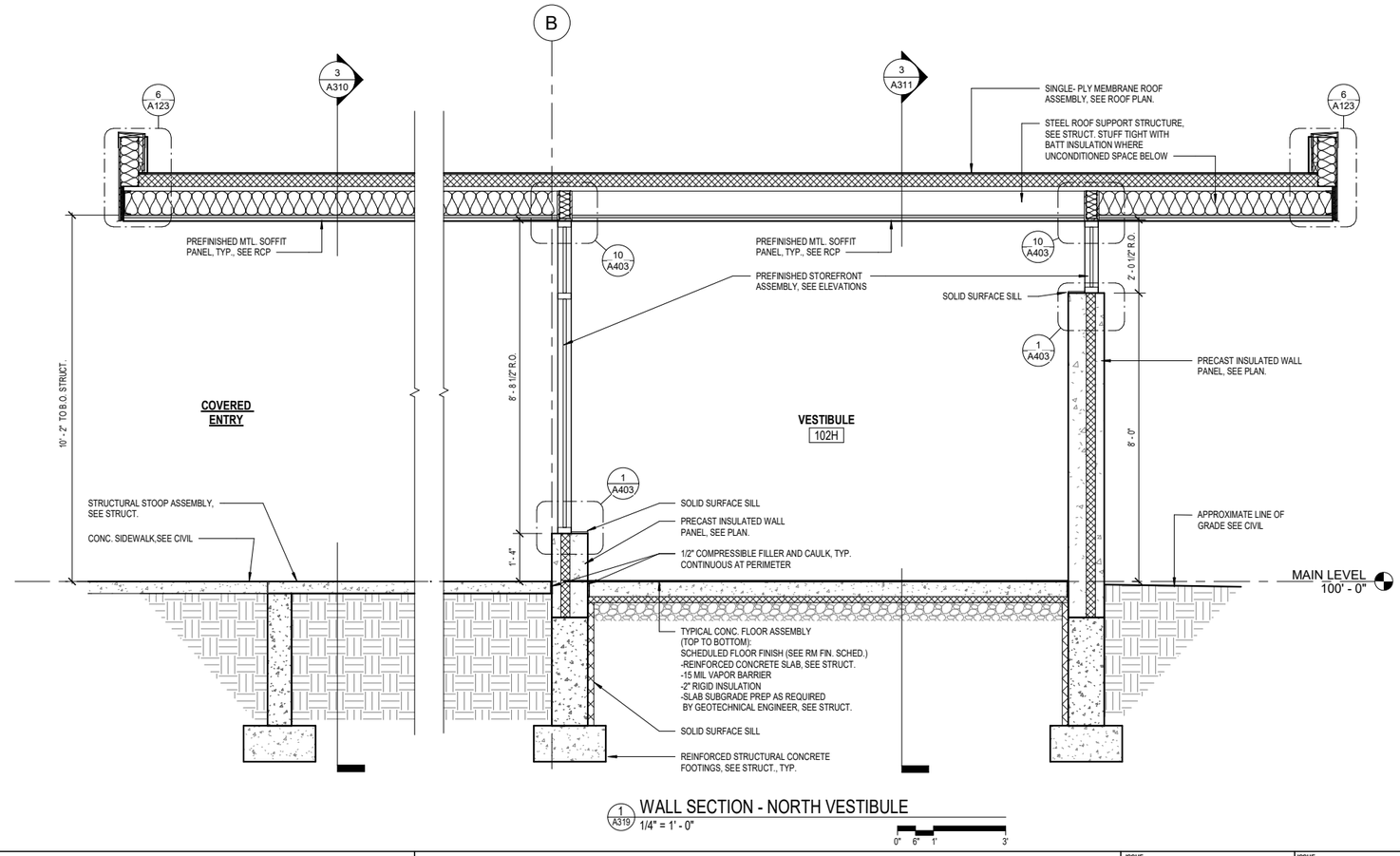


4 A318 WALL SECTION
1/4" = 1' - 0"
0" 6" 1' 3'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WALL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A318	164



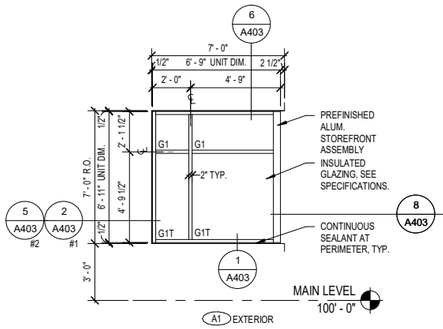
2 A319 WALL SECTION
1/4" = 1' - 0"



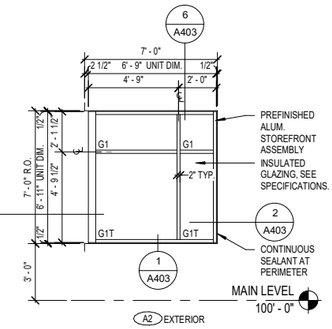
1 A319 WALL SECTION - NORTH VESTIBULE
1/4" = 1' - 0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WALL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A319	

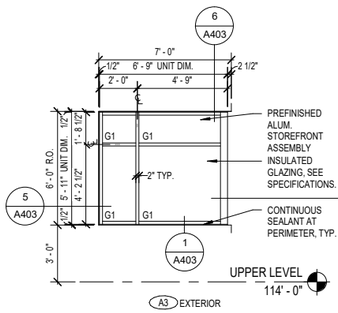
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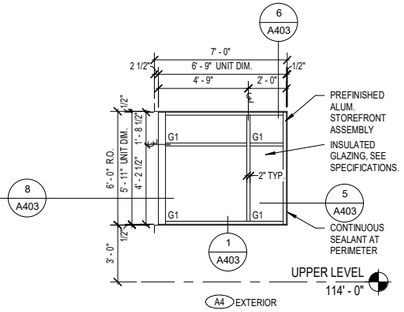
A1 EXTERIOR



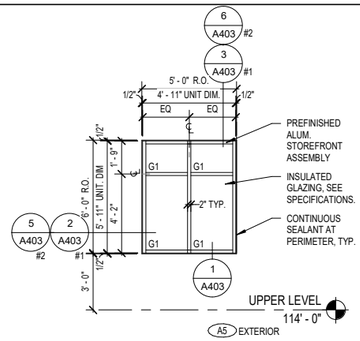
A2 EXTERIOR



A3 EXTERIOR



A4 EXTERIOR

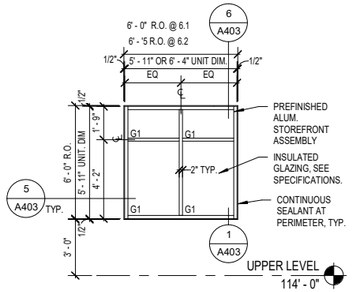


A5 EXTERIOR

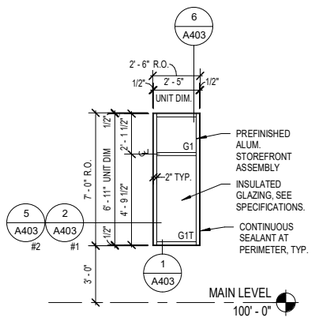
ALUMINUN STOREFRONT AND CURTAIN WALL GENERAL NOTES:

NOTE #1: OMIT EXTENDED WINDOW BLOCKING WHERE PC SURROUND IS EXPOSED. SEE PC PANEL ELEVATIONS AND WINDOW DETAILS FOR ADDITIONAL NOTES AND INFORMATION

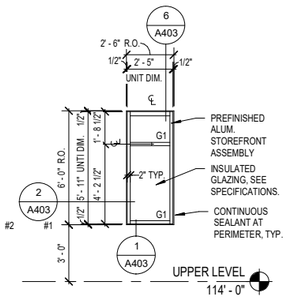
NOTE #2: EXTENDED WINDOW BLOCKING AT FURRING WALL LOCATOINS SEE PC PANEL ELEVATIONS AND WINDOW DETAILS FOR ADDITIONAL NOTES AND INFORMATION



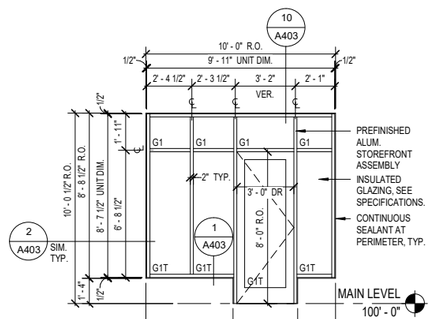
A6.1 EXTERIOR
A6.2 EXTERIOR



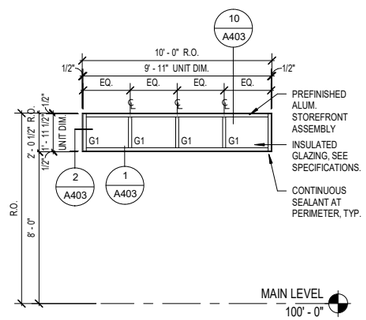
A7 EXTERIOR



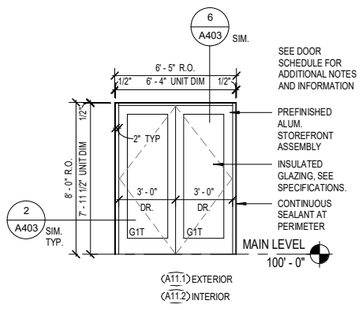
A8 EXTERIOR



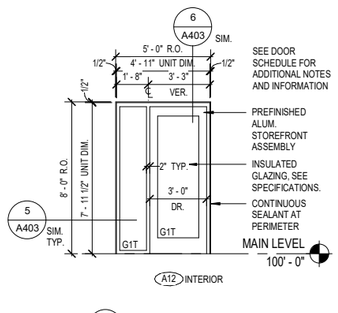
A9 EXTERIOR



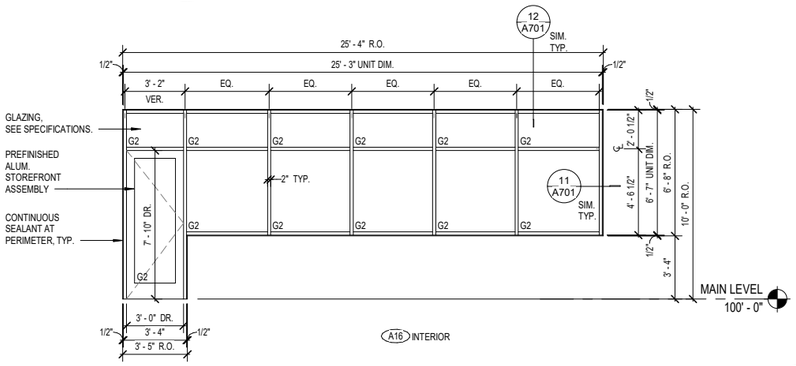
A10 EXTERIOR



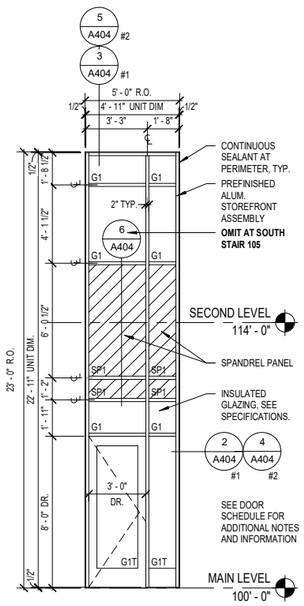
A11.1 EXTERIOR
A11.2 INTERIOR



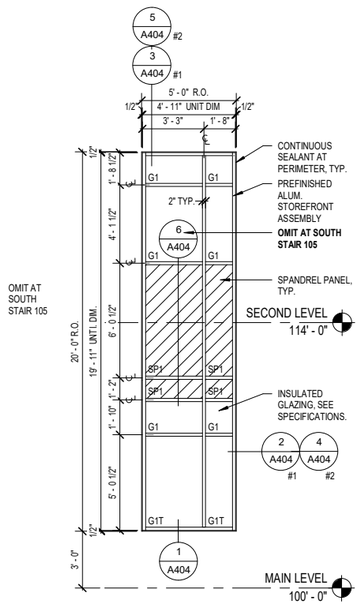
A12 INTERIOR



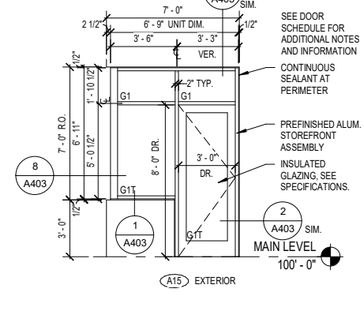
A16 INTERIOR



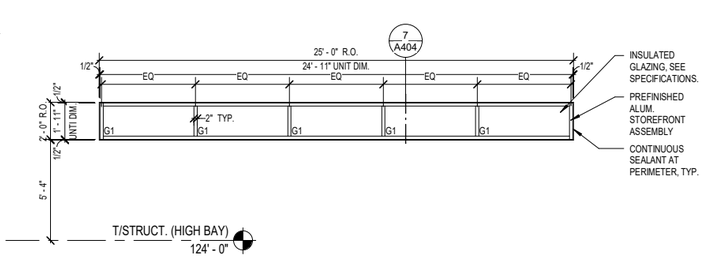
A13 EXTERIOR



A14 EXTERIOR



A15 EXTERIOR



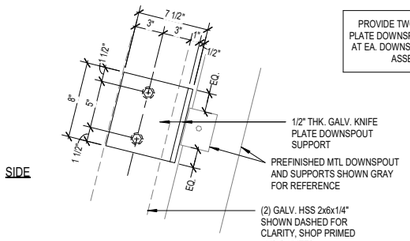
A17 EXTERIOR

ALUMINUM STOREFRONT TYPES

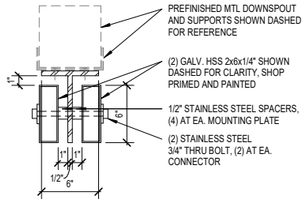
1/8" = 1' - 0"

0' 1' 2' 5'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ALUMINUM STOREFRONT TYPES	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A400	166

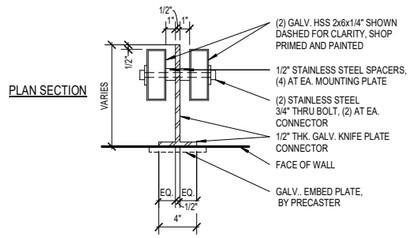


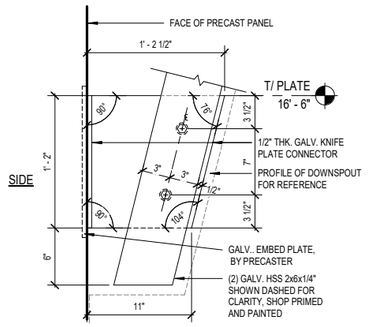
PROVIDE TWO GALV. KNIFE PLATE DOWNSPOUT SUPPORTS AT EA. DOWNSPOUT SUPPORT ASSEMBLY

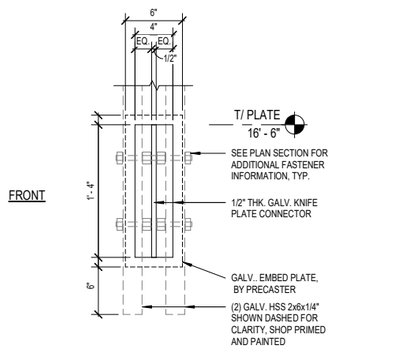


9 A401 GUTTER SUPPORT ASSEMBLY AT DOWNSPOUT SUPPORT
3/4" = 1' - 0"

0" 2" 4" 1'

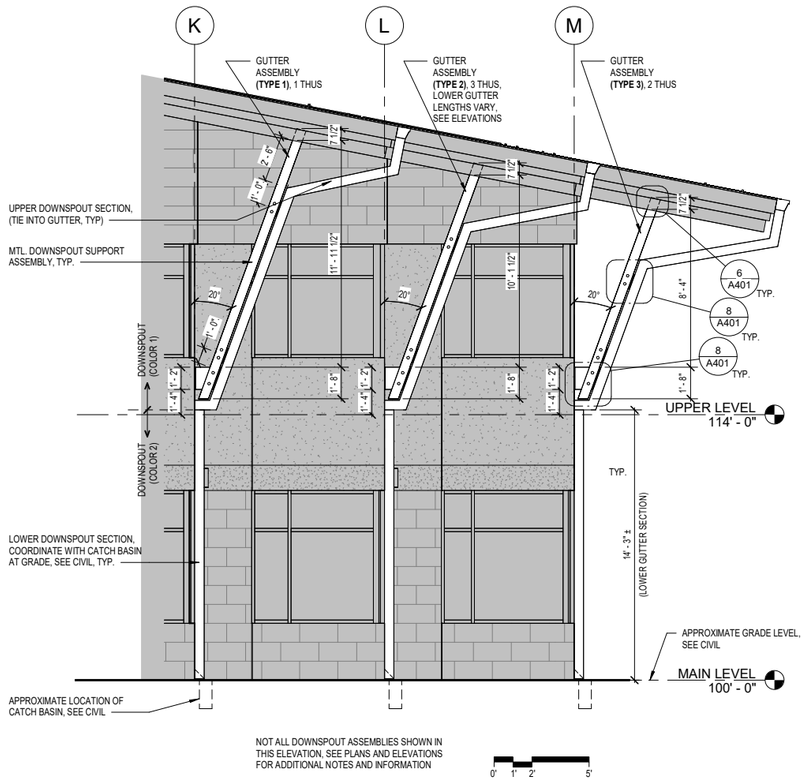






8 A401 GUTTER SUPPORT ASSEMBLY AT BASE
3/4" = 1' - 0"

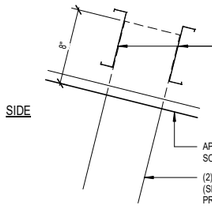
0" 2" 4" 1'



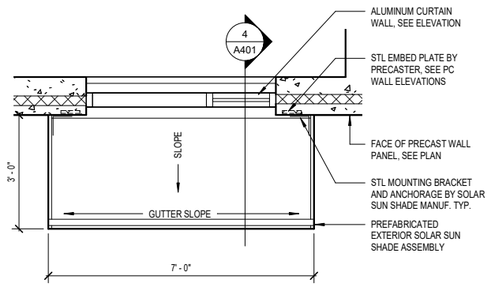
NOT ALL DOWNSPOUT ASSEMBLIES SHOWN IN THIS ELEVATION, SEE PLANS AND ELEVATIONS FOR ADDITIONAL NOTES AND INFORMATION

7 A401 DOWNSPOUT SUPPORT ASSEMBLY ELEVATION
1/4" = 1'-0"

0' 1' 2' 5'

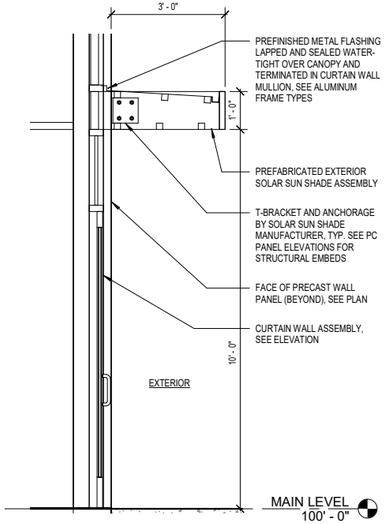


6 A401 GUTTER SUPPORT ASSEMBLY AT TOP
3/4" = 1' - 0"



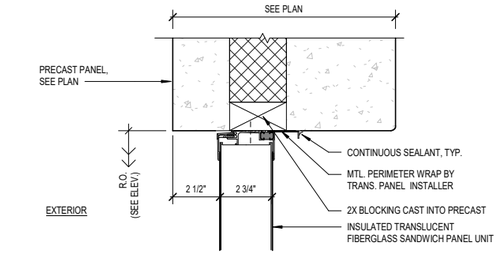
5 A401 SOLAR SUN SHADE PLAN DETAIL
1" = 1' - 0"

0" 6" 1' 3'



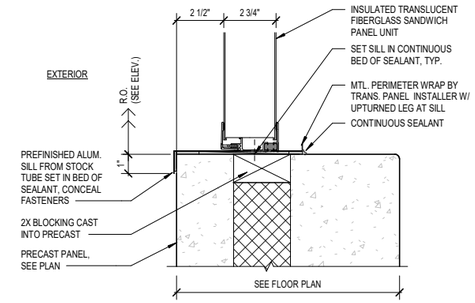
4 A401 SOLAR SUN SHADE DETAIL
1" = 1'-0"

0" 6" 1' 3'



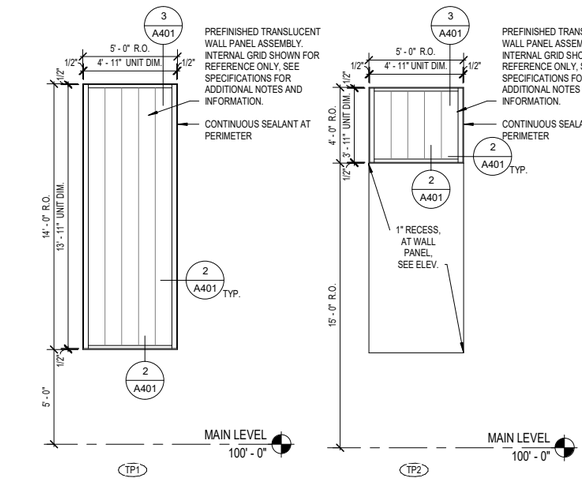
3 A401 WINDOW HEAD DETAIL (JAMB SIM.)
1 1/2" = 1' - 0"

0" 1" 2" 6"



2 A401 TRANS. PANEL DETAIL_SILL
1 1/2" = 1' - 0"

0" 1" 2" 6"



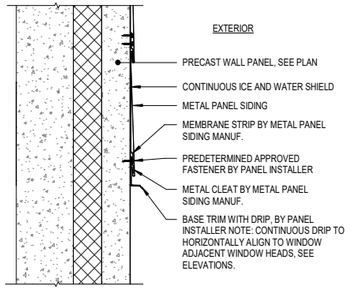
1 A401 TRANSLUCENT WALL PANEL TYPES
1/8" = 1' - 0"

0' 1' 2' 5'

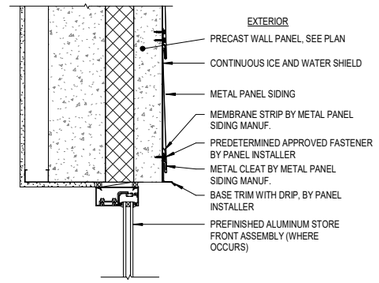
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI		TRANS. PANEL TYPES AND EXTERIOR DETAILS	ISSUE DATE: 5/1/24 / ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41 / COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A401

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 10:58:46 AM

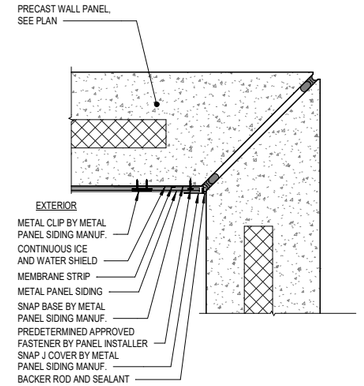
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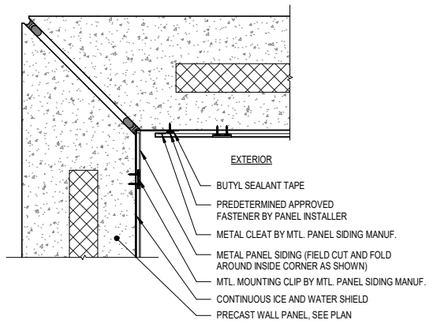
8 A402 METAL SIDING PANEL - CONTINUOUS DRIP CAP - NO WINDOW
3/4" = 1'-0"



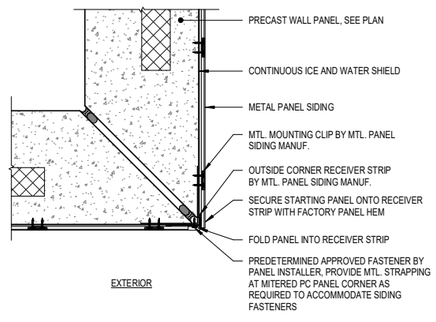
7 A402 METAL SIDING PANEL - CONTINUOUS DRIP CAP - OVER WINDOW
3/4" = 1'-0"



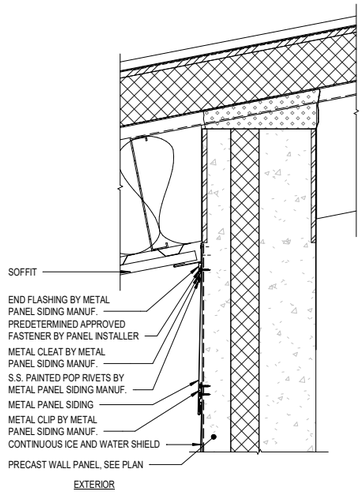
6 A402 METAL SIDING PANEL - INSIDE CORNER - DEAD END
3/4" = 1'-0"



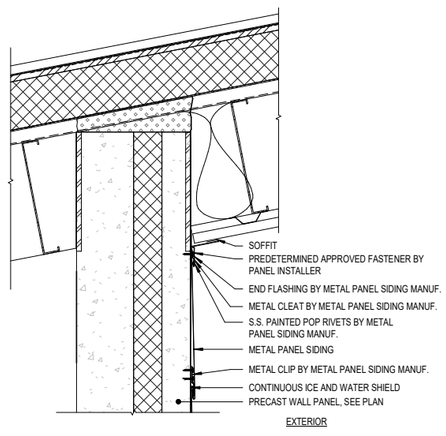
5 A402 METAL SIDING PANEL - INSIDE CORNER
3/4" = 1'-0"



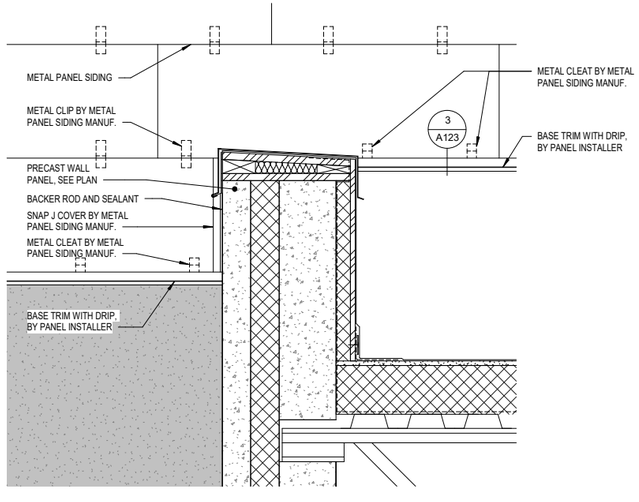
4 A402 METAL SIDING PANEL - OUTSIDE CORNER
3/4" = 1'-0"



3 A402 METAL SIDING PANEL - LOWER SOFFIT DETAIL
3/4" = 1'-0"



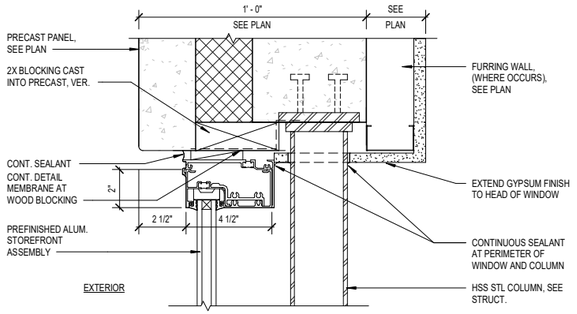
2 A402 METAL SIDING PANEL - UPPER SOFFIT DETAIL
3/4" = 1'-0"



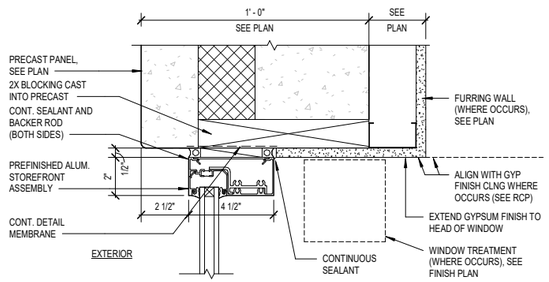
1 A402 METAL SIDING PANEL - OVER PARAPET WALL DETAIL
3/4" = 1'-0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			METAL PANEL DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A402	168

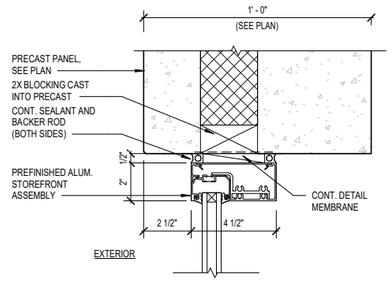
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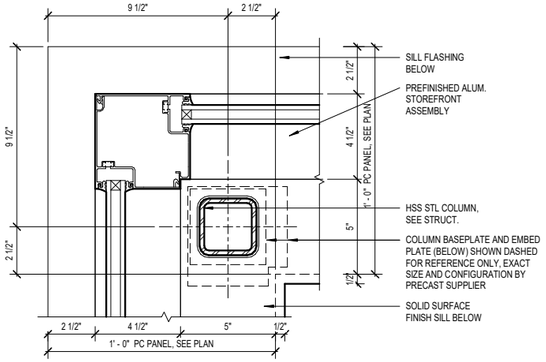
9 A403 STOREFRONT HEAD DETAIL AT COLUMN
1 1/2" = 1' - 0"
0" 1" 2" 6"



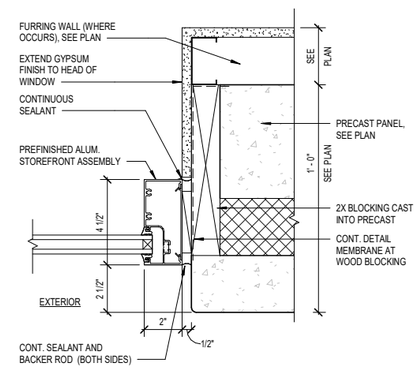
6 A403 STOREFRONT HEAD DETAIL (EXTENDED BLOCKING)
1 1/2" = 1' - 0"
0" 1" 2" 6"



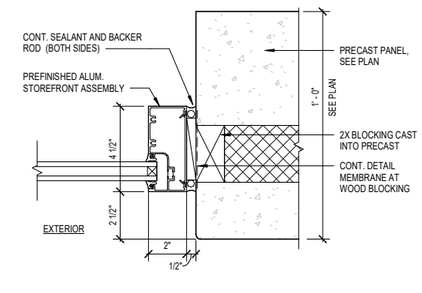
3 A403 STOREFRONT HEAD DETAIL
1 1/2" = 1' - 0"
0" 1" 2" 6"



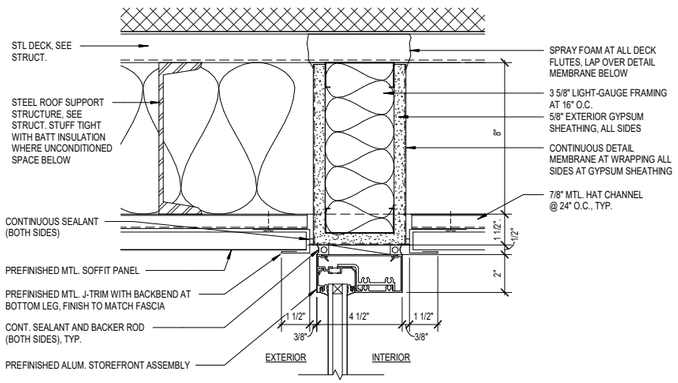
8 A403 STOREFRONT CORNER DETAIL
1 1/2" = 1' - 0"
0" 1" 2" 6"



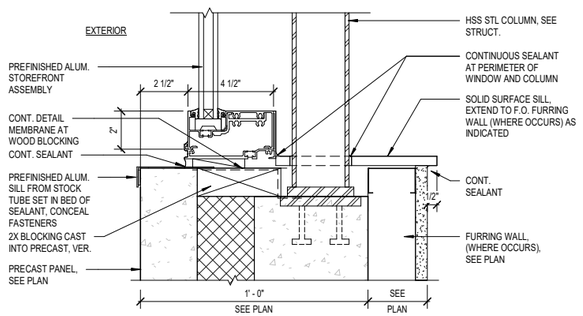
5 A403 STOREFRONT JAMB DETAIL (EXTENDED BLOCKING)
1 1/2" = 1' - 0"
0" 1" 2" 6"



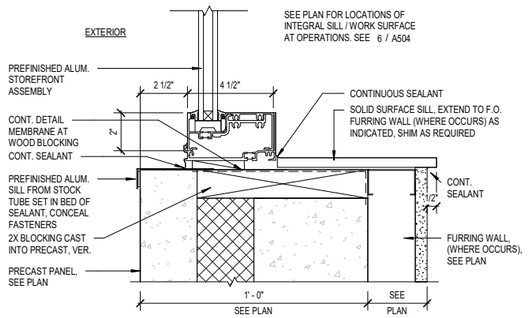
2 A403 STOREFRONT JAMB DETAIL
1 1/2" = 1' - 0"
0" 1" 2" 6"



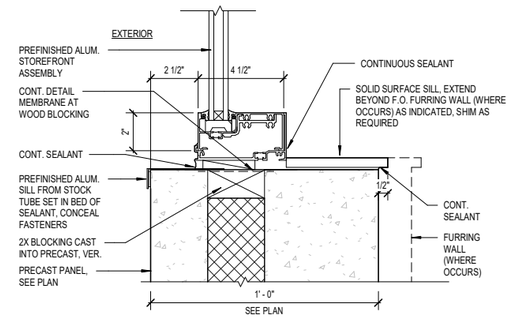
10 A403 STOREFRONT HEAD DETAIL AT VESTIBULE 102H
1 1/2" = 1' - 0"
0" 1" 2" 6"



7 A403 STOREFRONT SILL DETAIL AT COLUMN
1 1/2" = 1' - 0"
0" 1" 2" 6"

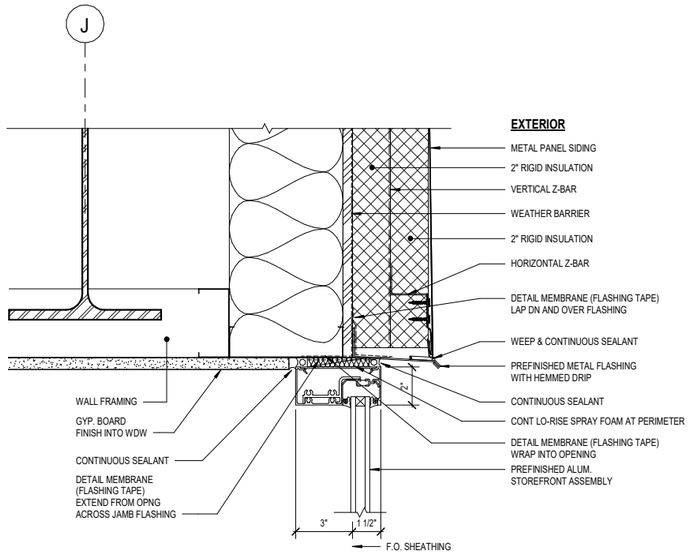


4 A403 STOREFRONT SILL DETAIL (EXTEND BLOCKING)
1 1/2" = 1' - 0"
0" 1" 2" 6"

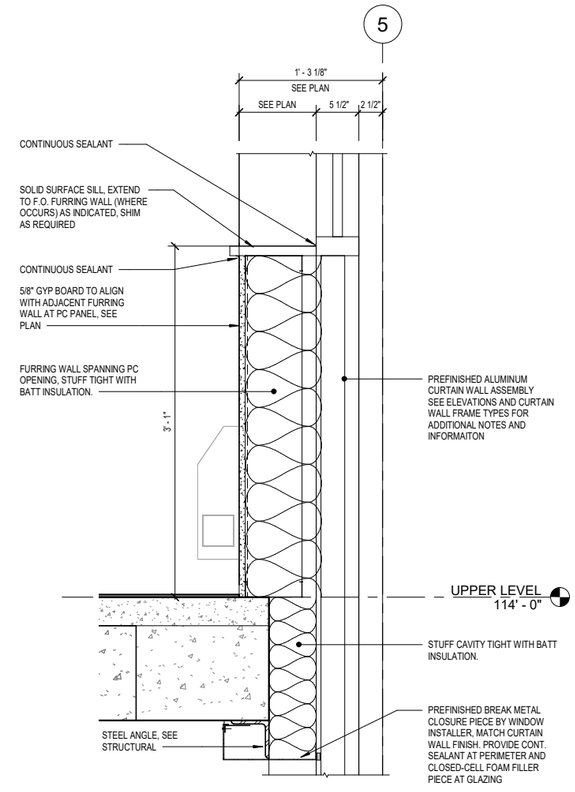


1 A403 STOREFRONT SILL DETAIL
1 1/2" = 1' - 0"
0" 1" 2" 6"

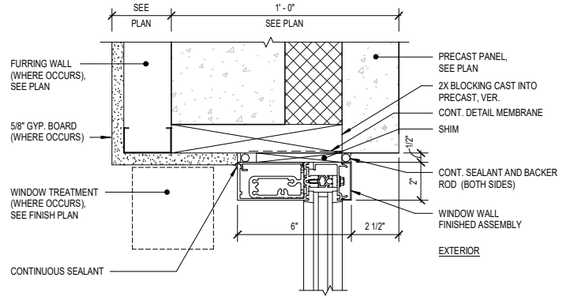
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WINDOW DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A403	169



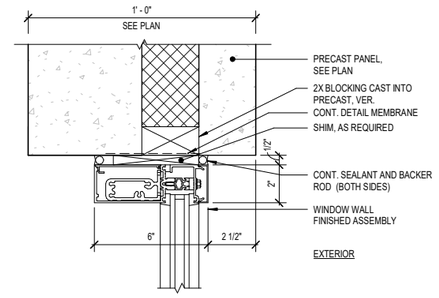
7 A404 HEAD AND SILL DETAIL @ RIBBON WINDOW
1 1/2" =1' - 0"



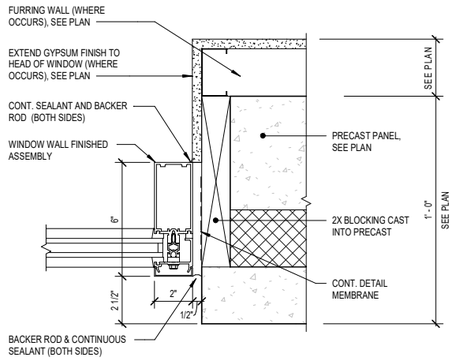
6 A404 CURTAIN WALL DETAIL AT FLOOR PLATE
1 1/2" = 1'-0"



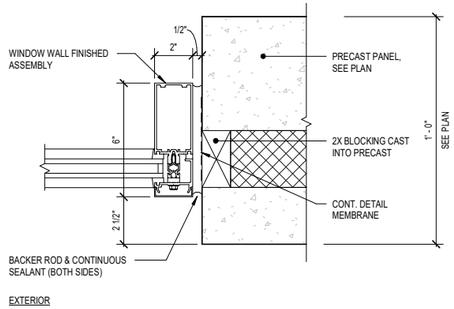
5 A404 CURTAIN WALL HEAD DETAIL (EXTENDED BLOCKING)
1 1/2" = 1' - 0"



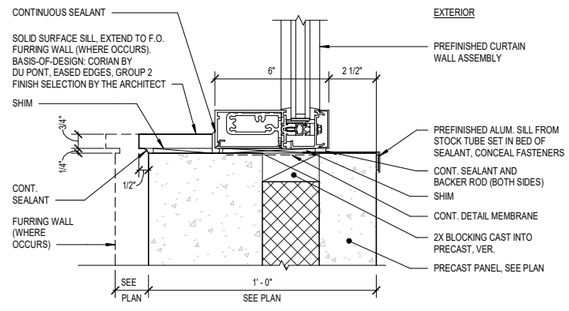
3 A404 CURTAIN WALL HEAD DETAIL
1 1/2" = 1' - 0"



4 A404 CURTAIN WALL JAMB DETAIL (EXTENDED BLOCKING)
1 1/2" = 1' - 0"



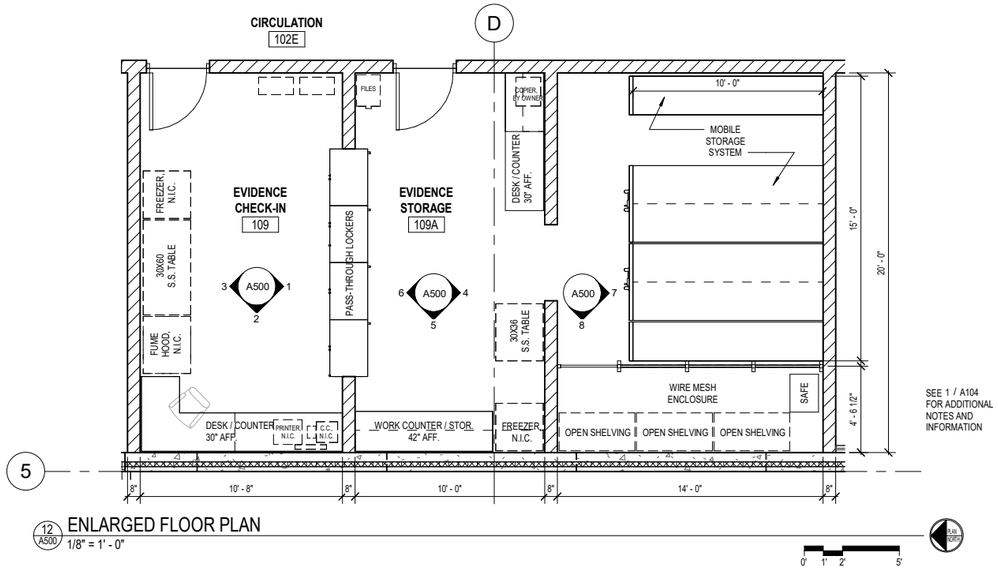
2 A404 CURTAIN WALL JAMB DETAIL
1 1/2" = 1' - 0"



1 A404 CURTAIN WALL SILL DETAIL
1 1/2" = 1' - 0"

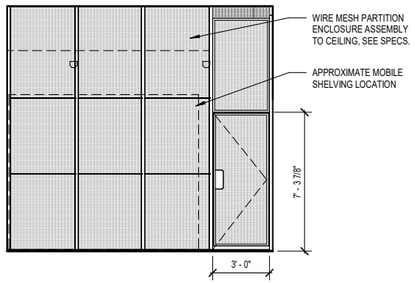
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WINDOW DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A404	

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 10:58:49 AM

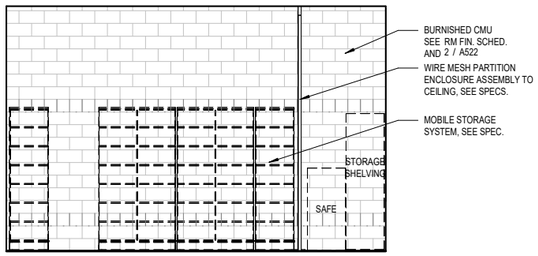


SEE 1 / A104 FOR ADDITIONAL NOTES AND INFORMATION

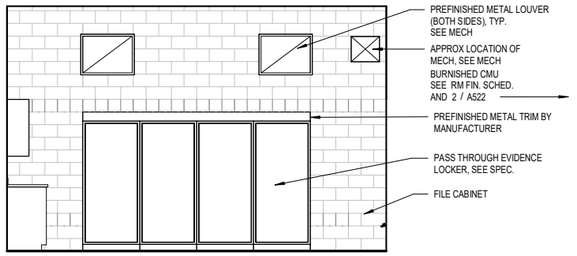
12 A500 ENLARGED FLOOR PLAN
1/8" = 1' - 0"



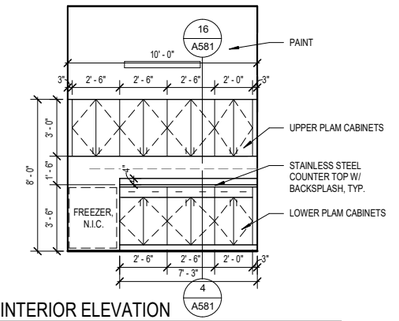
8 A500 INTERIOR ELEVATION
1/8" = 1' - 0"



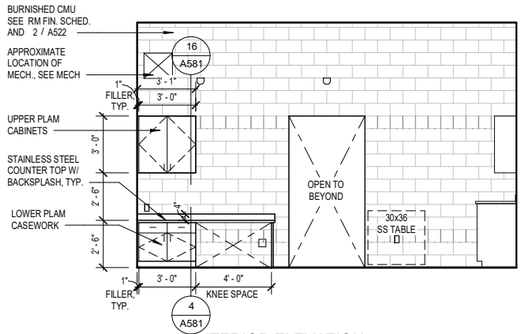
7 A500 INTERIOR ELEVATION
1/8" = 1' - 0"



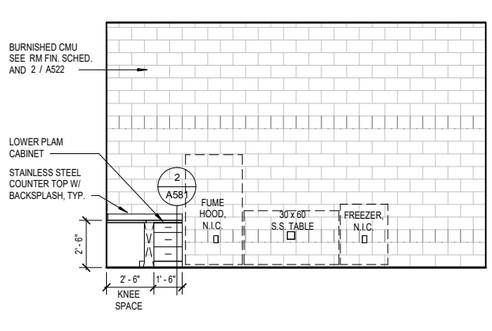
6 A500 INTERIOR ELEVATION
1/8" = 1' - 0"



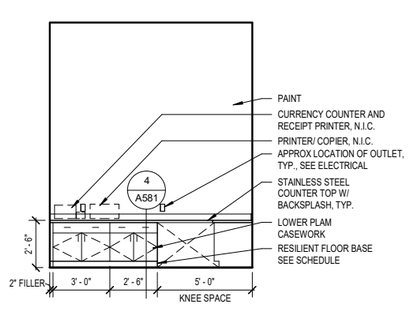
5 A500 INTERIOR ELEVATION
1/8" = 1' - 0"



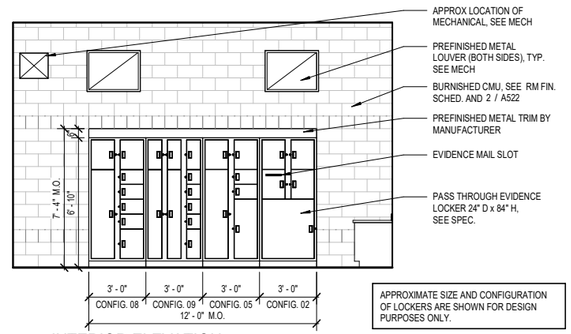
4 A500 INTERIOR ELEVATION
1/8" = 1' - 0"



3 A500 INTERIOR ELEVATION
1/8" = 1' - 0"



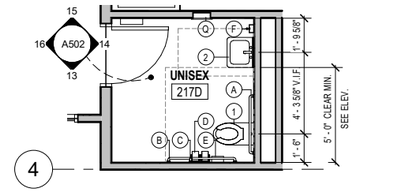
2 A500 INTERIOR ELEVATION
1/8" = 1' - 0"



APPROXIMATE SIZE AND CONFIGURATION OF LOCKERS ARE SHOWN FOR DESIGN PURPOSES ONLY.

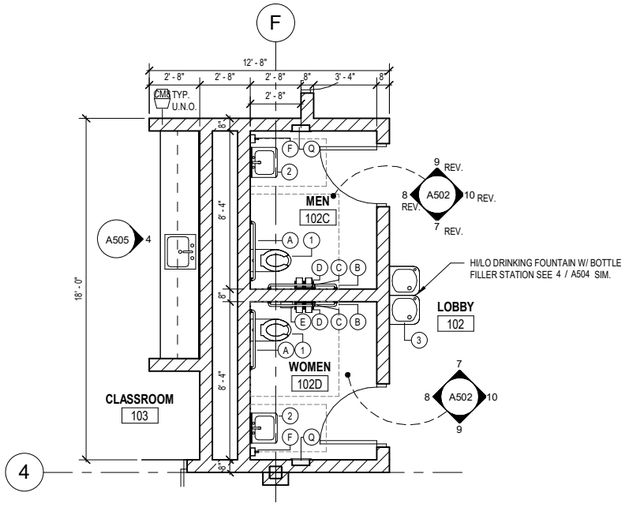
1 A500 INTERIOR ELEVATION
1/8" = 1' - 0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			INTERIOR ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A500	171

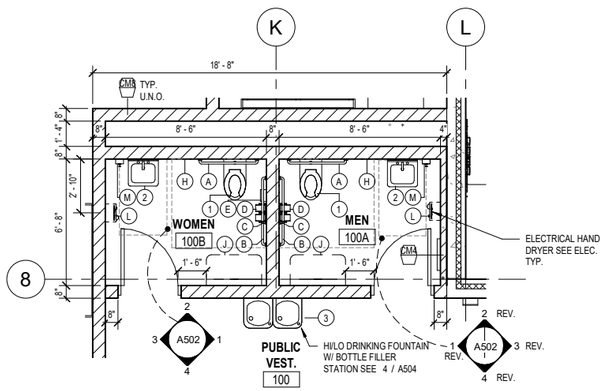


4

7 A501 ENLARGED FLOOR PLAN - UPPER LEVEL
1/8" = 1' - 0"
0' 1' 2' 5'



2 A501 ENLARGED FLOOR PLAN - MAIN LEVEL
1/8" = 1' - 0"
0' 1' 2' 5'



1 A501 ENLARGED FLOOR PLAN - MAIN LEVEL
1/8" = 1' - 0"
0' 1' 2' 5'

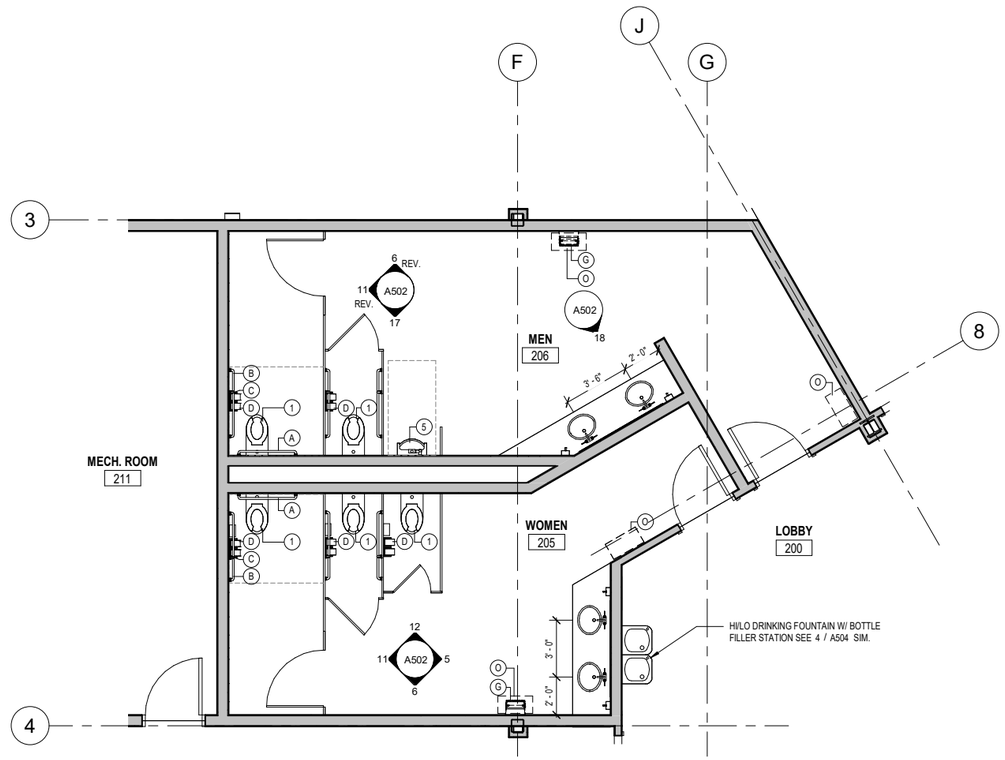
TOILET FIXTURE SCHEDULE

ALL FIXTURES ONT HIS SCHEDULE ARE BY PLUMBING CONTRACTOR UNLESS NOTED OTHERWISE REFER TO THE PLUMBING DRAWINGS AND SPECIFICATIONS FOR FURTHER INFORMATION.

MARK	DESCRIPTION	REMARKS
1	WATER CLOSET - ACCESSIBLE	-
2	WALL HUNG LAVATORY - ACCESSIBLE	-
3	ELECTRIC WATER COOLER	-
4	NOT USED	-
5	URINAL - ACCESSIBLE	-

TOILET ACCESSORY SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL NO.	REMARKS
A	GRAB BAR	BOBRICK	B-6806 x 36	-
B	GRAB BAR	BOBRICK	B-6806 x 42	-
C	GRAB BAR	BOBRICK	B-6806 x 18	VERTICAL
D	TOILET PAPER DISPENSER (N.I.C.)			-
E	SANITARY NAPKIN DISPENSER	BOBRICK	B-270	-
F	SOAP DISPENSER (N.I.C.)			STANDARD, SURFACE MOUNTED
G	PAPER TOWEL DISPENSER (N.I.C.)	BOBRICK	B-72860	-
H	GARBAGE RECEPTILCAL - 12 GAL.	BOBRICK	B-35643	RECESSED
J	BABY CHANGING STATION	KOALA KARE	KB300-SS	-
K	MIRROR - 18" x 36"	BRADLEY CORP.	781-1836	-
L	ELECTRIC HAND DRYER			SEE ELECTRICAL
M	SOAP DISPENSER (N.I.C.)			HEAVY DUTY, SURFACE MOUNTED
N	MIRROR - 60" x 36"	BRADLEY CORP.	781-5436	-
O	GARBAGE RECEPTICAL			-
P	COAT HOOK	BRADLEY CORP.	915-00	-
Q	PAPER TOWEL / WASTE UNIT COMBO	BOBRICK	B-38034	RECESSED



16 A501 ENLARGED FLOOR PLAN - UPPER LEVEL
1/8" = 1' - 0"
0' 1' 2' 5'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			INTERIOR ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A501	172

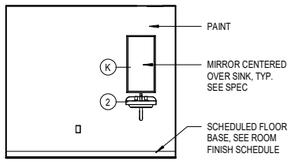
TOILET FIXTURE SCHEDULE

ALL FIXTURES ONT HIS SCHEDULE ARE BY PLUMBING CONTRACTOR UNLESS NOTED OTHERWISE REFER TO THE PLUMBING DRAWINGS AND SPECIFICATIONS FOR FURTHER INFORMATION.

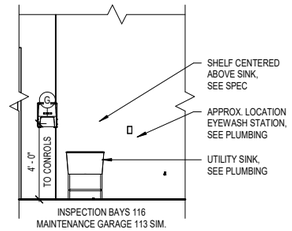
MARK	DESCRIPTION	REMARKS
1	WATER CLOSET - ACCESSIBLE	-
2	WALL HUNG LAVATORY - ACCESSIBLE	-
3	ELECTRIC WATER COOLER	-
4	NOT USED	-
5	URINAL - ACCESSIBLE	-

TOILET ACCESSORY SCHEDULE

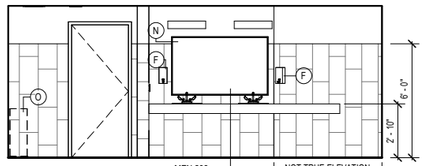
MARK	DESCRIPTION	MANUFACTURER	MODEL NO.	REMARKS
A	GRAB BAR	BOBRICK	B-6806 x 36	-
B	GRAB BAR	BOBRICK	B-6806 x 42	-
C	GRAB BAR	BOBRICK	B-6806 x 18	VERTICAL
D	TOILET PAPER DISPENSER (N.I.C.)			-
E	SANITARY NAPKIN DISPENSER	BOBRICK	B-270	-
F	SOAP DISPENSER (N.I.C.)			STANDARD, SURFACE MOUNTED
G	PAPER TOWEL DISPENSER (N.I.C.)	BOBRICK	B-72860	-
H	GARBAGE RECEPTILCAL - 12 GAL.	BOBRICK	B-35643	RECESSED
J	BABY CHANGING STATION	KOALA KARE	KB300-SS	-
K	MIRROR - 18" x 36"	BRADLEY CORP.	781-1836	-
L	ELECTRIC HAND DRYER			SEE ELECTRICAL
M	SOAP DISPENSER (N.I.C.)			HEAVY DUTY, SURFACE MOUNTED
N	MIRROR - 60" x 36"	BRADLEY CORP.	781-5436	-
O	GARBAGE RECEPTICAL			-
P	COAT HOOK	BRADLEY CORP.	915-00	-
Q	PAPER TOWEL / WASTE UNIT COMBO	BOBRICK	B-38034	RECESSED



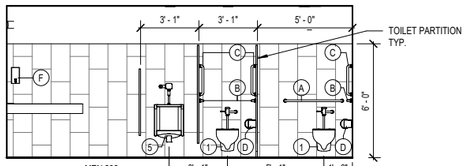
19 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



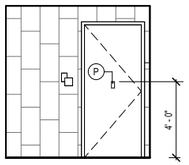
20 A502 INTERIOR ELEVATION - UTILITY SINK, TYP.
1/8" = 1' - 0"



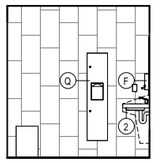
18 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



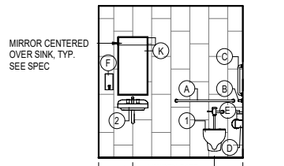
17 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



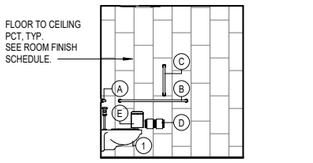
16 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



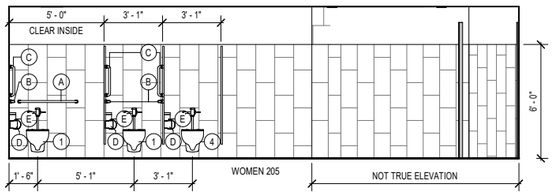
15 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



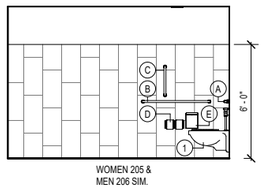
14 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



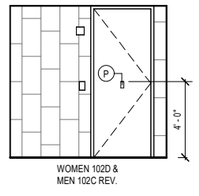
13 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



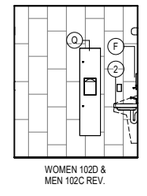
12 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



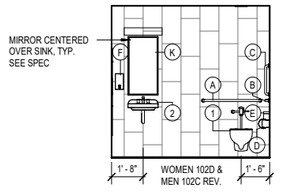
11 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



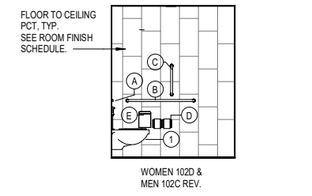
10 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



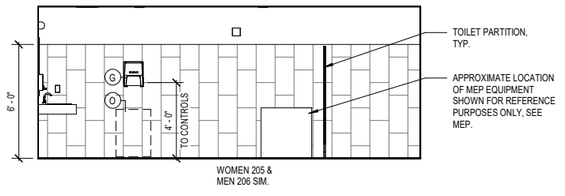
9 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



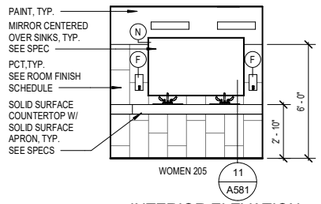
8 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



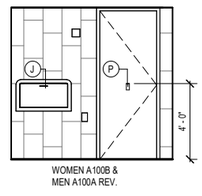
7 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



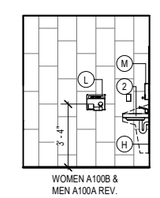
6 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



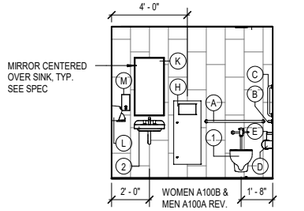
5 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



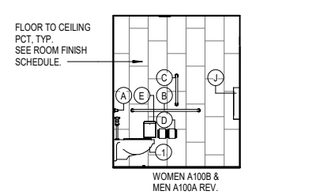
4 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



3 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



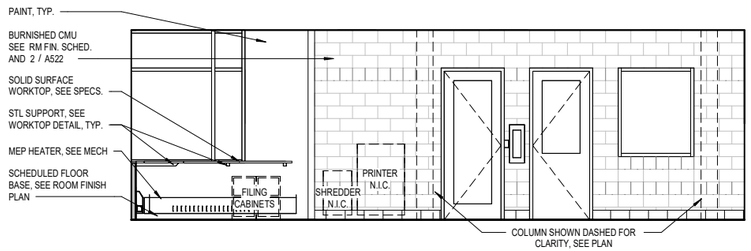
2 A502 INTERIOR ELEVATION
1/8" = 1' - 0"



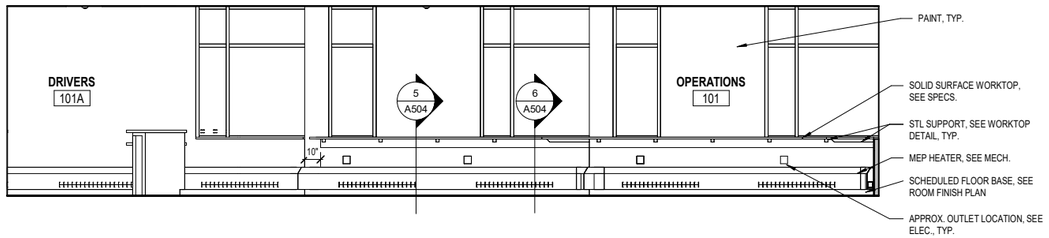
1 A502 INTERIOR ELEVATION
1/8" = 1' - 0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI		INTERIOR ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A502

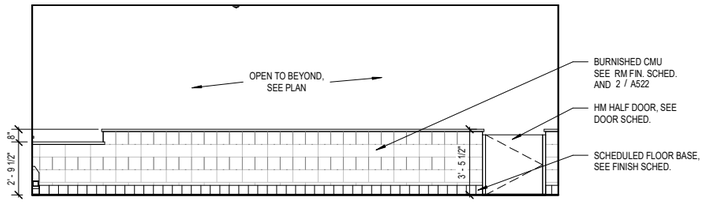
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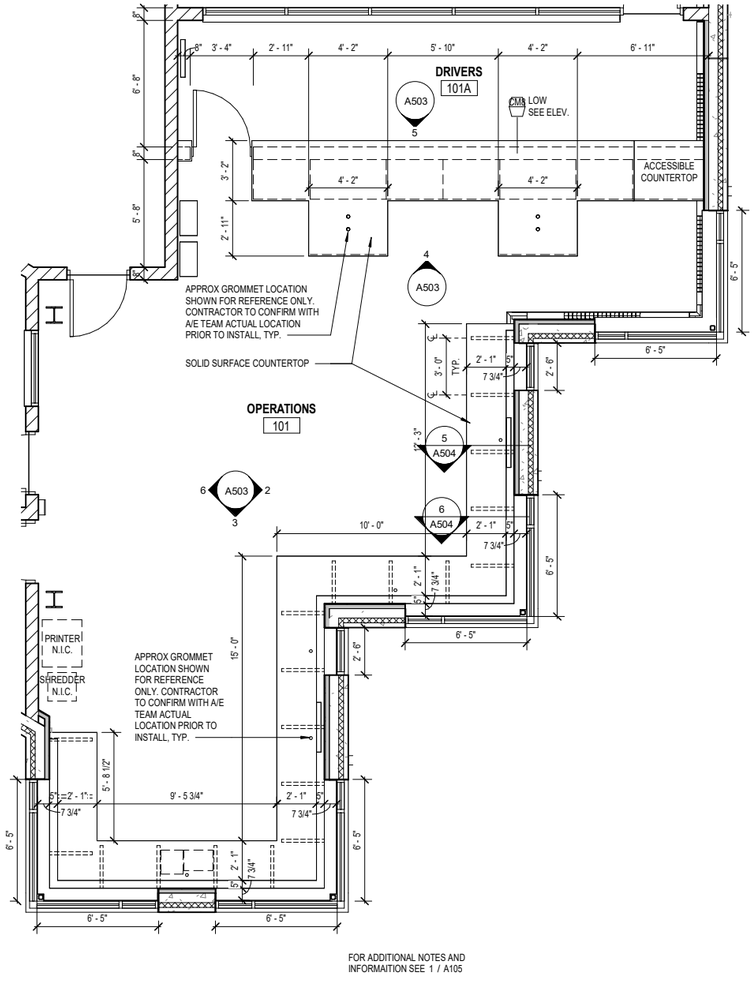
6 A503 INTERIOR ELEVATION - OPERATIONS
1/8" = 1' - 0"



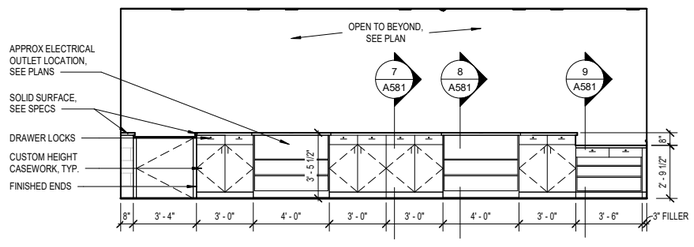
2 A503 INTERIOR ELEVATION - OPERATIONS
1/8" = 1' - 0"



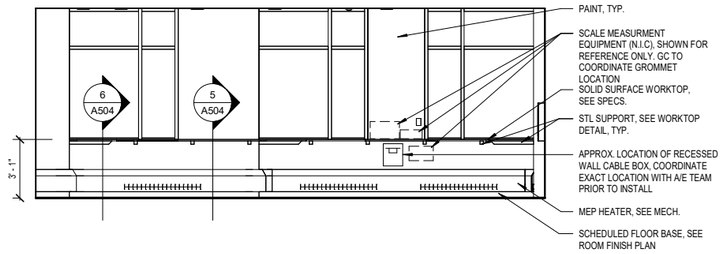
5 A503 INTERIOR ELEVATION - DRIVERS
1/8" = 1' - 0"



1 A503 ENLARGED CASEWORK PLAN - OPERATIONS
1/8" = 1' - 0"



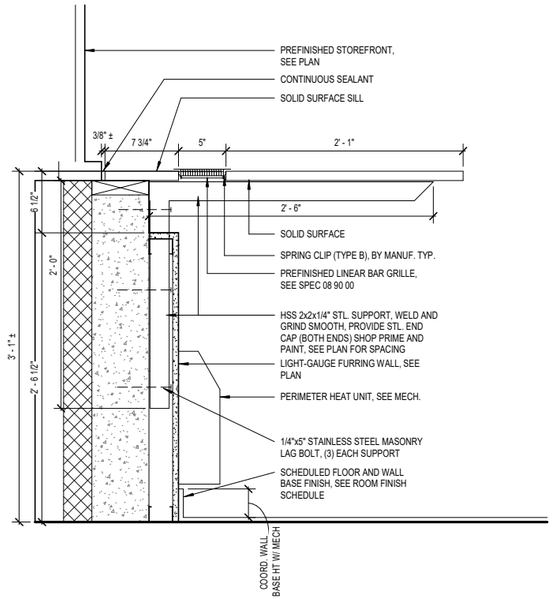
4 A503 INTERIOR ELEVATION - OPERATIONS
1/8" = 1' - 0"



3 A503 INTERIOR ELEVATION - OPERATIONS
1/8" = 1' - 0"

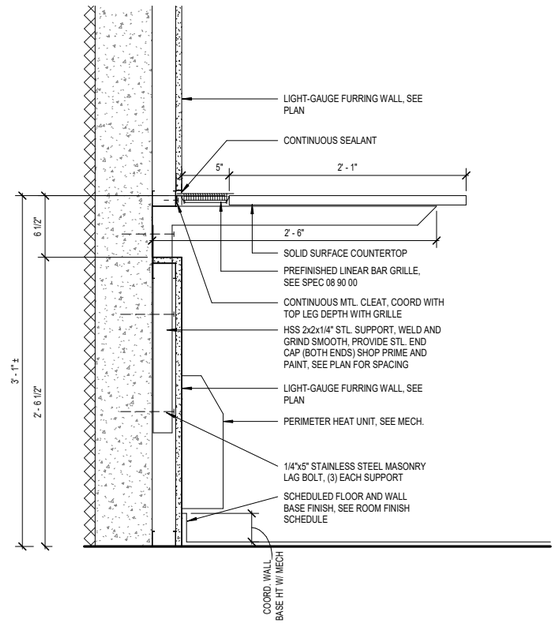
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			INTERIOR ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A503	

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 10:59:08 AM



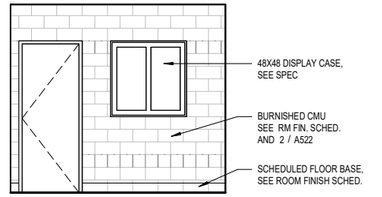
6 A504 COUNTERTOP DETAIL AT WINDOW
3/4" = 1' - 0"

0" 2" 4" 1'



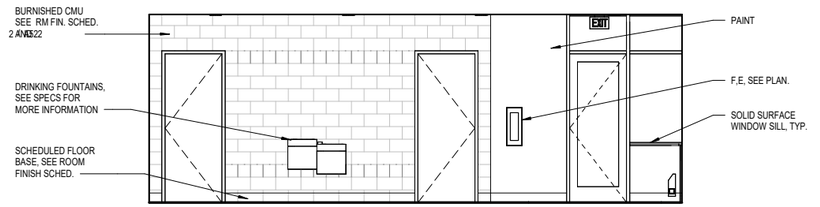
5 A504 COUNTERTOP DETAIL AT WALL
3/4" = 1' - 0"

0" 2" 4" 1'



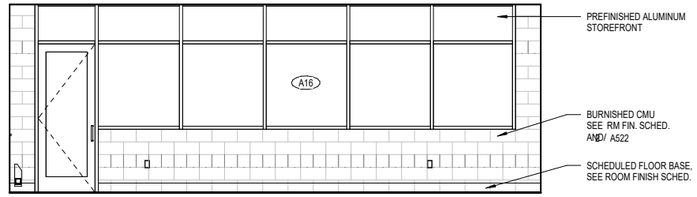
3 A504 INTERIOR ELEVATION - VESTIBULE
1/8" = 1' - 0"

0' 1' 2' 5'



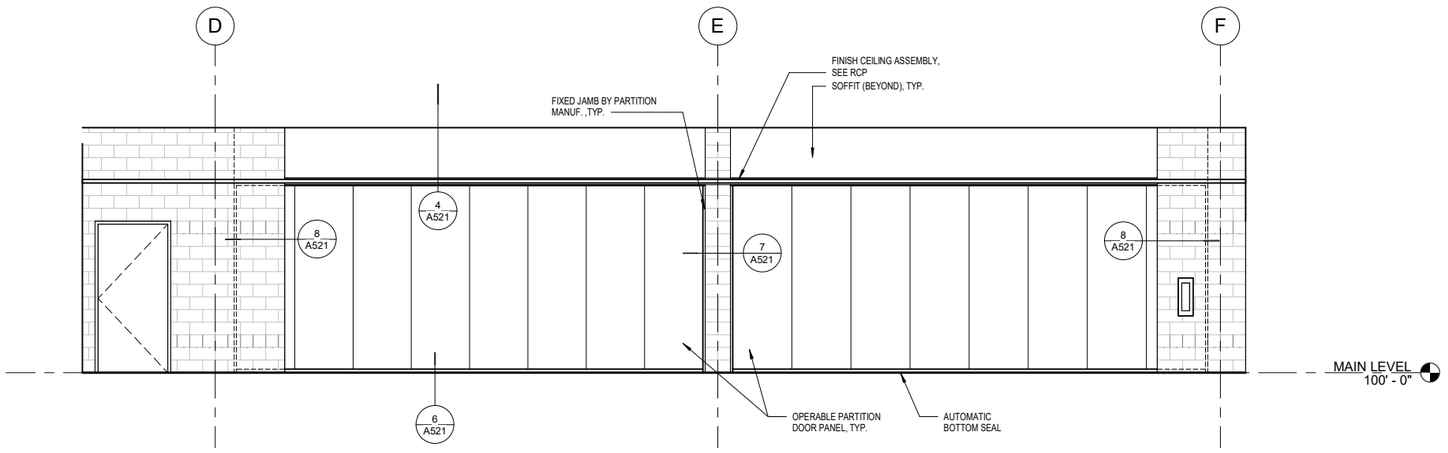
4 A504 INTERIOR ELEVATION - VESTIBULE
1/8" = 1' - 0"

0' 1' 2' 5'



2 A504 INTERIOR ELEVATION - VESTIBULE
1/8" = 1' - 0"

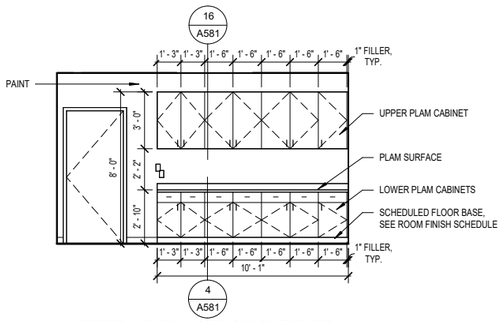
0' 1' 2' 5'



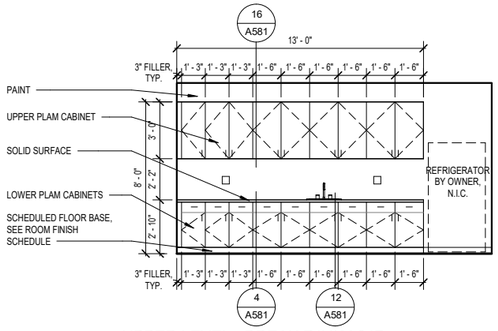
1 A504 INTERIOR ELEVATION - PARTITION WALL
1/8" = 1'-0"

0' 1' 2' 5'

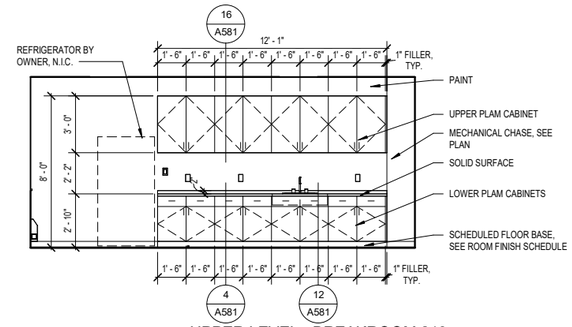
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			INTERIOR ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A504	175



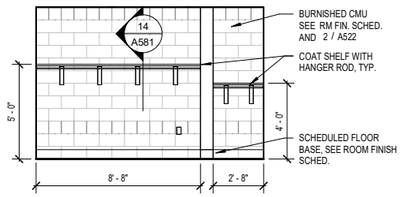
9 A505 UPPER LEVEL - OFFICE SUPPLIES
1/4" = 1'-0"



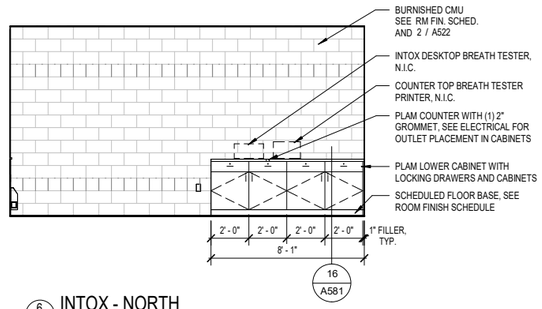
8 A505 UPPER LEVEL - BREAK ROOM 217
1/8" = 1' - 0"



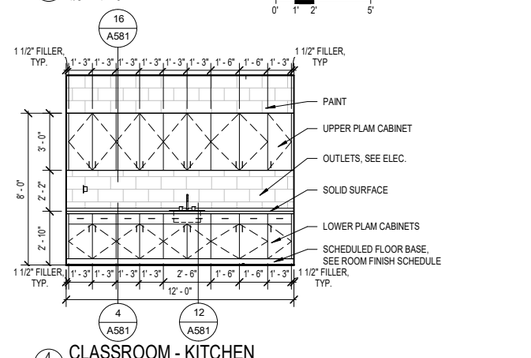
7 A505 UPPER LEVEL - BREAKROOM 213
1/8" = 1' - 0"



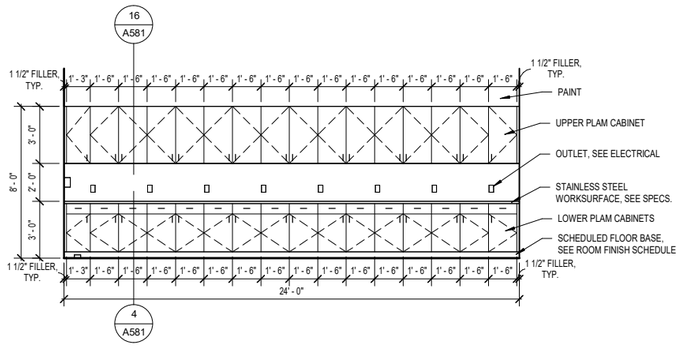
5 A505 COAT ROOM
1/8" = 1' - 0"

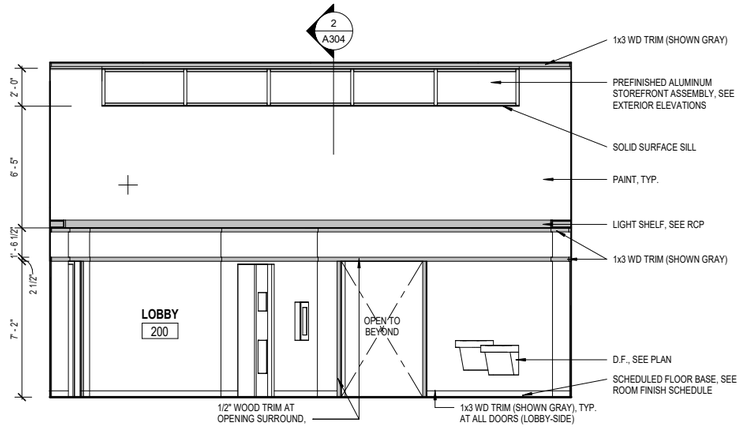


6 A505 INTOX - NORTH
1/8" = 1' - 0"

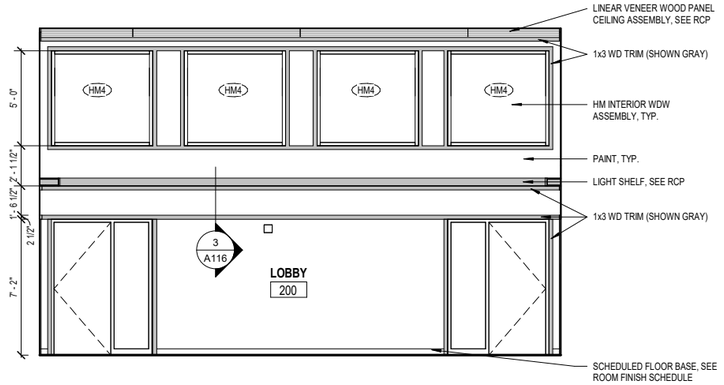


4 A505 CLASSROOM - KITCHEN
1/8" = 1' - 0"

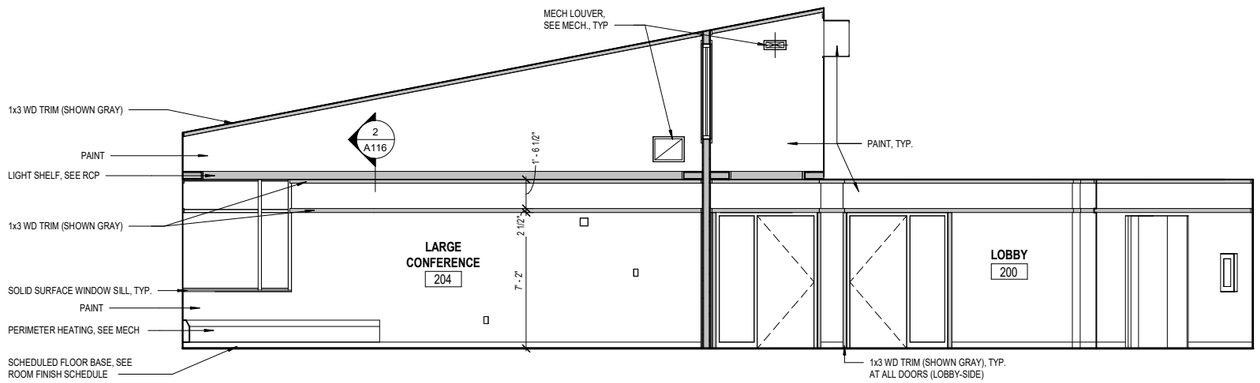

16
A581
1 1/2" FILLER, TYP.
1' - 3" 1' - 6" 1' - 6" 1' - 6" 1' - 6" 1' - 6" 1' - 6" 1' - 6" 1' - 6



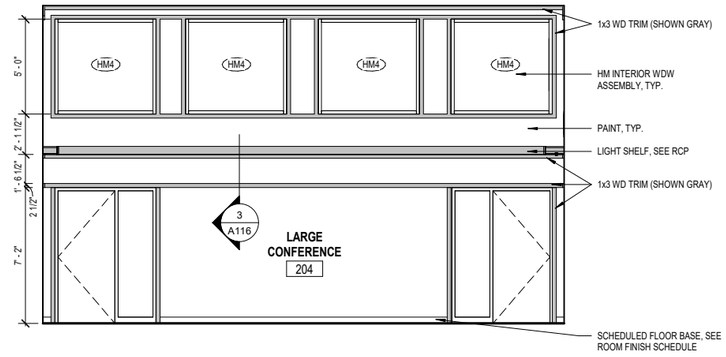
6 A506 INTERIOR ELEVATION - LG CONFERENCE
1/8"" = 1'-0"
0' 1' 2' 5'



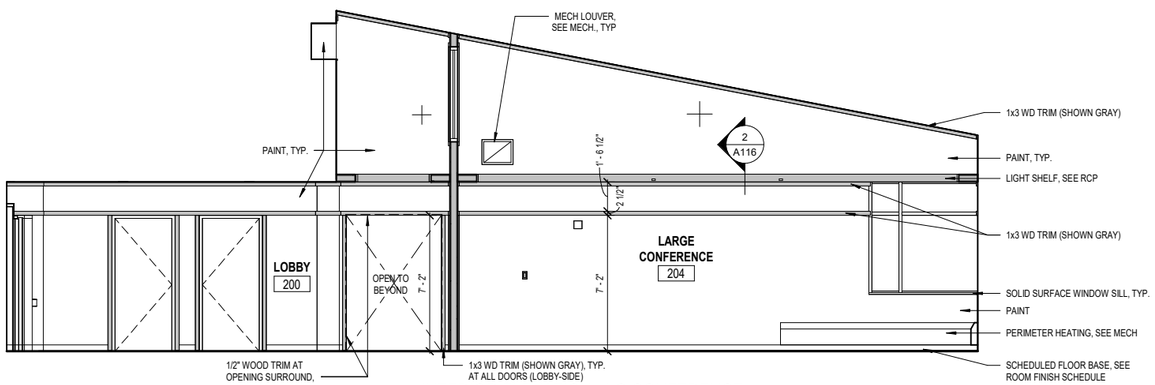
5 A506 INTERIOR ELEVATION - LG CONFERENCE
1/8"" = 1'-0"
0' 1' 2' 5'



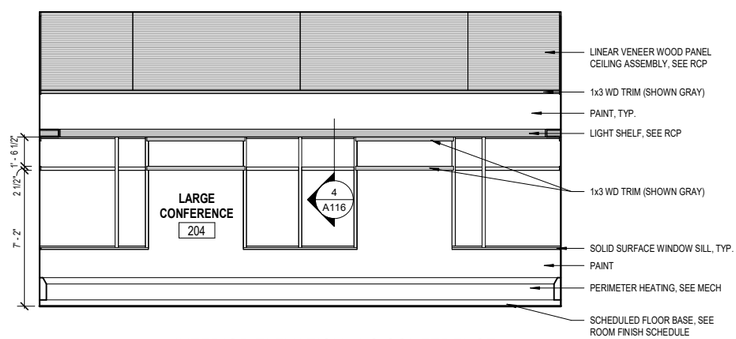
4 A506 INTERIOR ELEVATION - LG CONFERENCE
1/8" = 1' - 0"
0' 1' 2' 5'



3 A506 INTERIOR ELEVATION - LG
1/8" = 1' - 0"
0' 1' 2' 5'



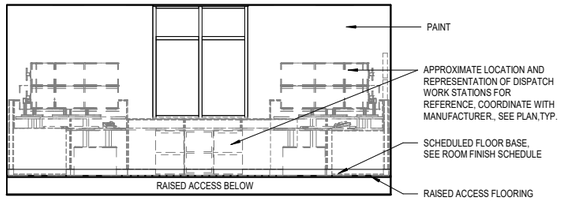
2 A506 INTERIOR ELEVATION - LG CONFERENCE
1/8" = 1' - 0"
0' 1' 2' 5'



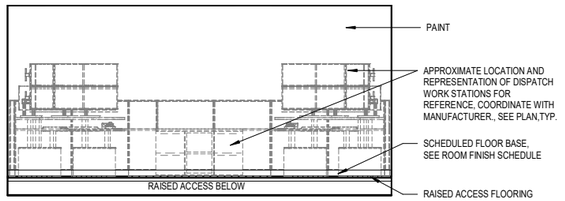
1 A506 INTERIOR ELEVATION - LG CONFERENCE
1/8" = 1' - 0"
0' 1' 2' 5'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			INTERIOR ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A506	177

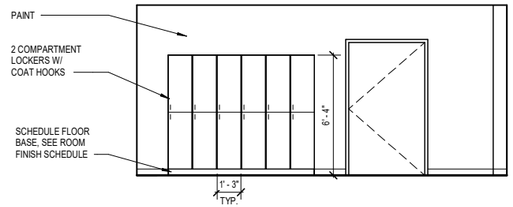
Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 10:59:18 AM



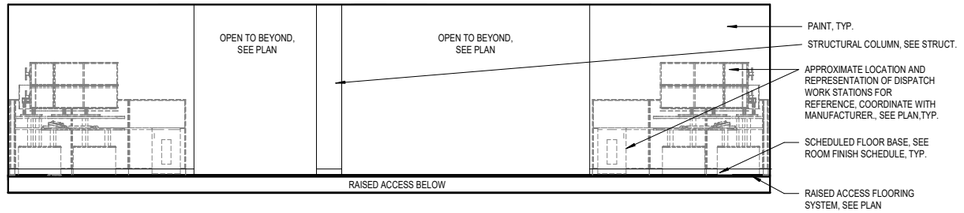
5 A507 UPPER LEVEL - DISPATCH - NORTH
1/8" = 1' - 0"
0' 1' 2' 5'



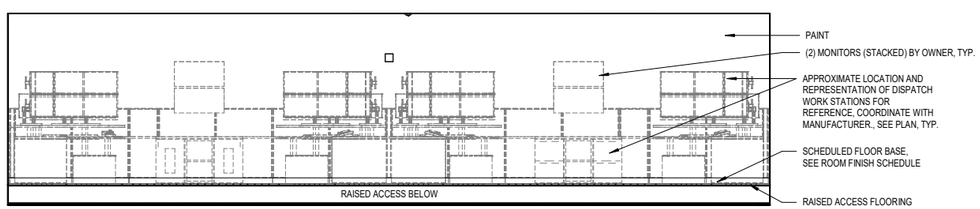
4 A507 UPPER LEVEL - DISPATCH - SOUTH
1/8" = 1' - 0"
0' 1' 2' 5'



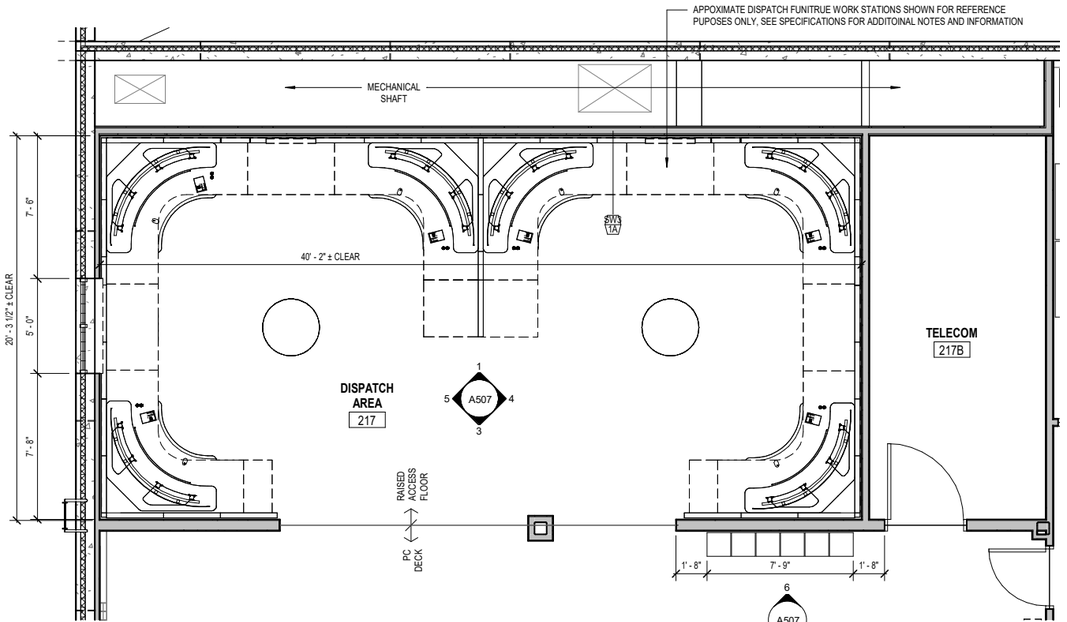
6 A507 UPPER LEVEL - LOCKERS
1/8" = 1' - 0"
0' 1' 2' 5'



3 A507 UPPER LEVEL - DISPATCH - WEST
1/8" = 1' - 0"
0' 1' 2' 5'



1 A507 UPPER LEVEL - DISPACTCH - EAST
1/8" = 1' - 0"
0' 1' 2' 5'

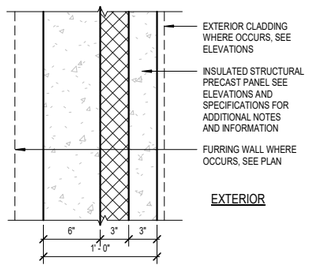


2 A507 ENLARGED DISPACTCH FLOOR PLAN
1/8" = 1' - 0"
0' 1' 2' 5'

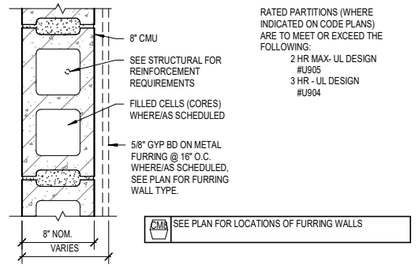
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			INTERIOR ELEVATIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A507	178

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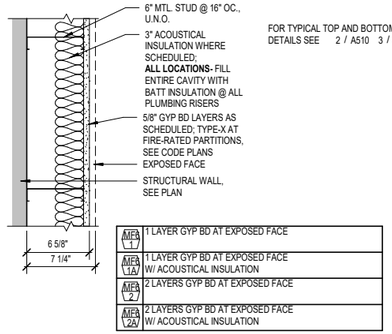
2



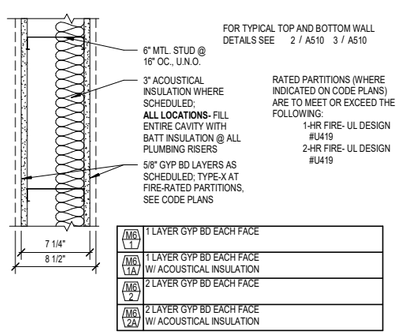
WALL TYPE PC12



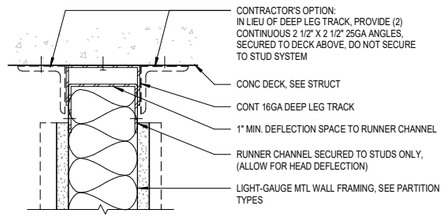
WALL TYPE CM8



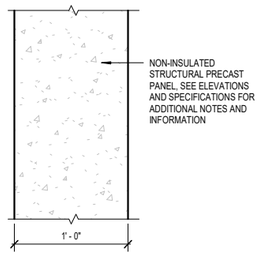
WALL TYPE MF6



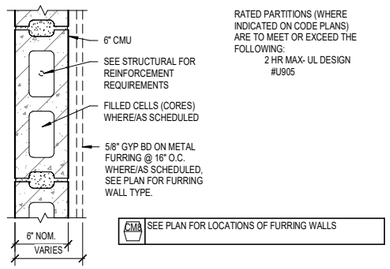
WALL TYPE M6



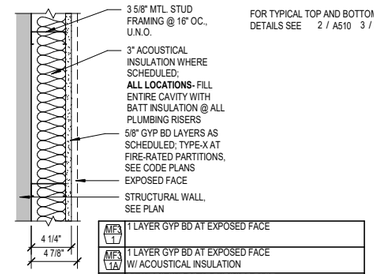
3 / A510 TOP OF PARTITION AT DECK (DEFLECTION)
1 1/2" = 1' - 0"



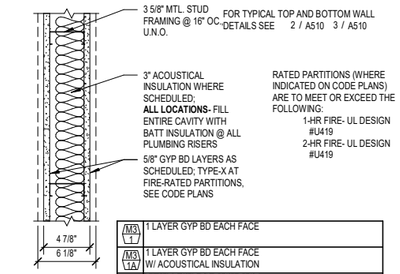
WALL TYPE PC12S



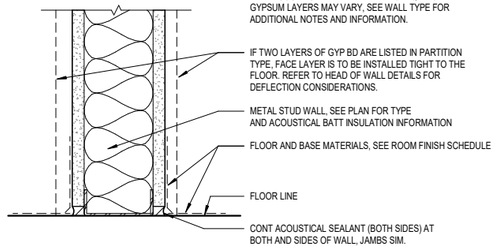
WALL TYPE CM6



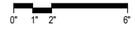
WALL TYPE MF3

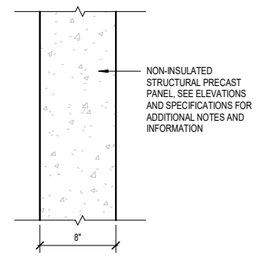


WALL TYPE M3

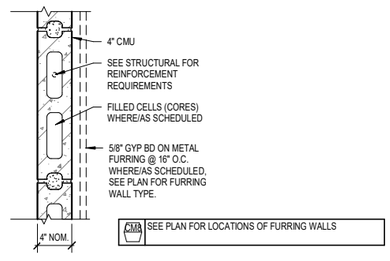


2 / A510 ACOUSTICAL PARTITION BASE DETAIL
1 1/2" = 1' - 0"

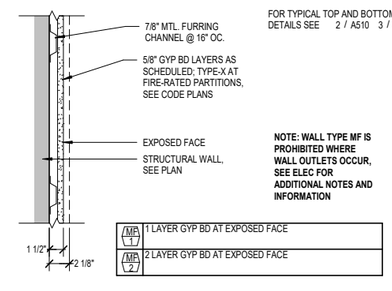




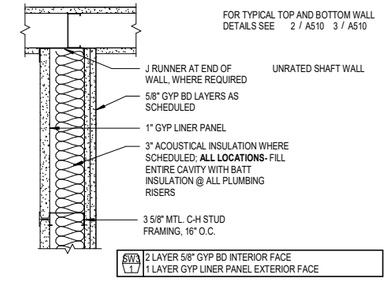
WALL TYPE PC8S



WALL TYPE CM4

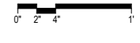


WALL TYPE MF1



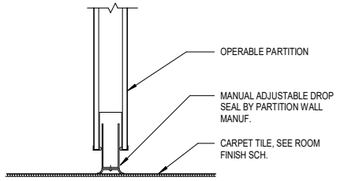
WALL TYPE SW3

1 / A510 WALL AND PARTITION TYPES
3/4" = 1' - 0"

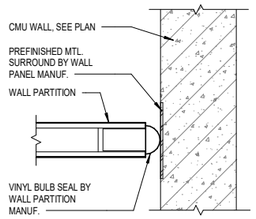


PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			WALL TYPES AND DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A510	

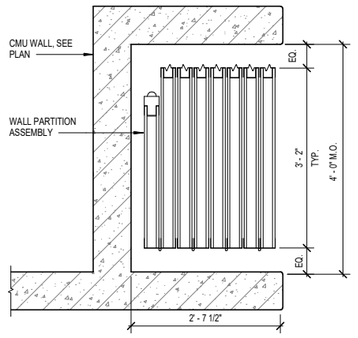
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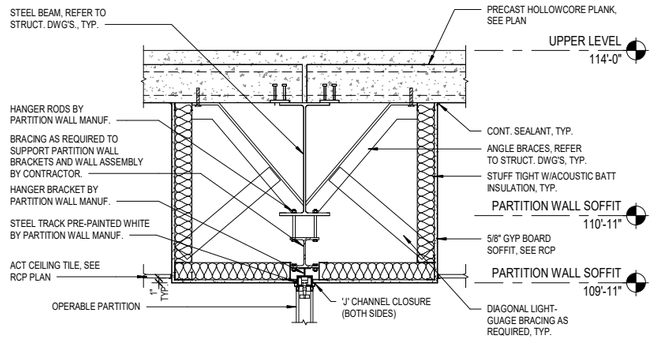
6 A521 PARTITION WALL - TYP. SILL DETAIL
3/4" = 1' - 0"



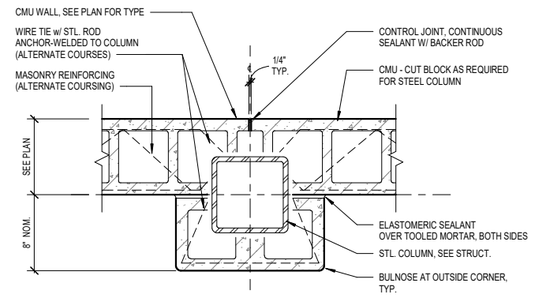
7 A521 PARTITION WALL - TYP. JAMB DETAIL
3/4" = 1' - 0"



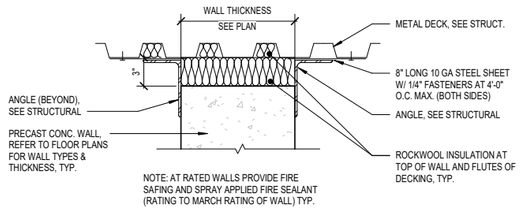
8 A521 PARTITION WALL - TYP. POCKET DETAIL
3/8" = 1' - 0"



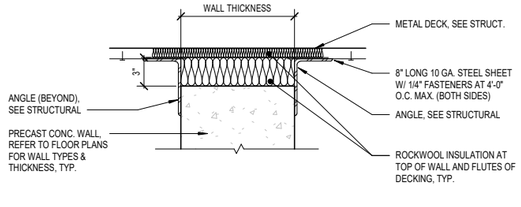
4 A521 PARTITION WALL BULK HEAD DETAIL
3/8" = 1' - 0"



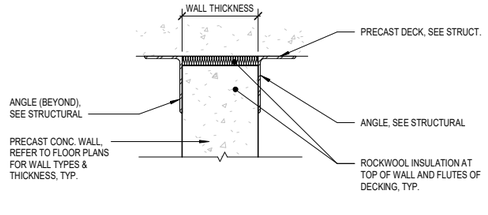
3 A521 TYPICAL CMU DETAIL AT STL. COLUMN
3/4" = 1' - 0"



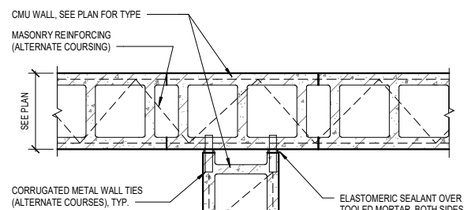
PERPENDICULAR TO METAL DECK



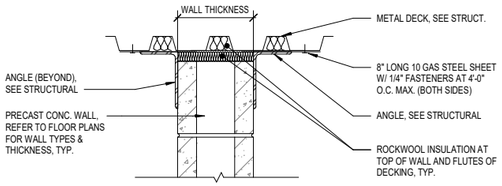
PARALLEL TO METAL DECK



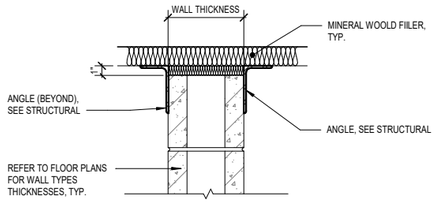
AT CONCRETE DECK



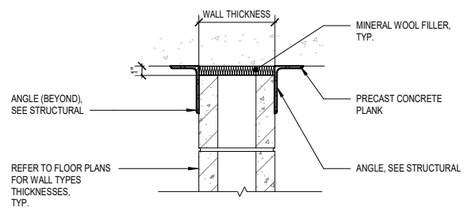
2 A521 TYPICAL CMU WALL INTERSECTION
3/4" = 1' - 0"



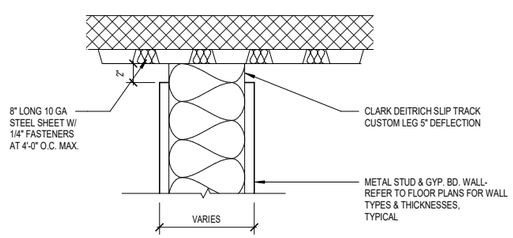
PERPENDICULAR TO METAL DECK



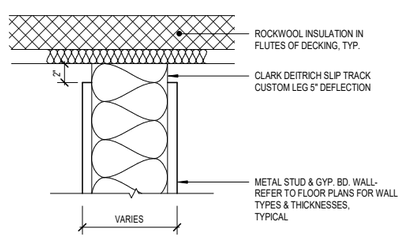
PARALLEL TO METAL DECK



AT CONCRETE DECK

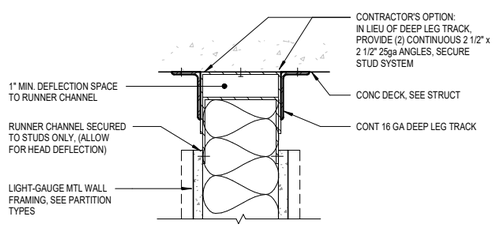


PARALLEL TO METAL DECK

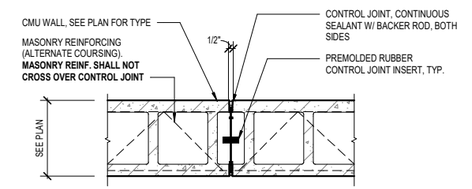


PERPENDICULAR TO METAL DECK

5 A521 TYPICAL TOP OF WALL DETAILS
3/4" = 1' - 0"

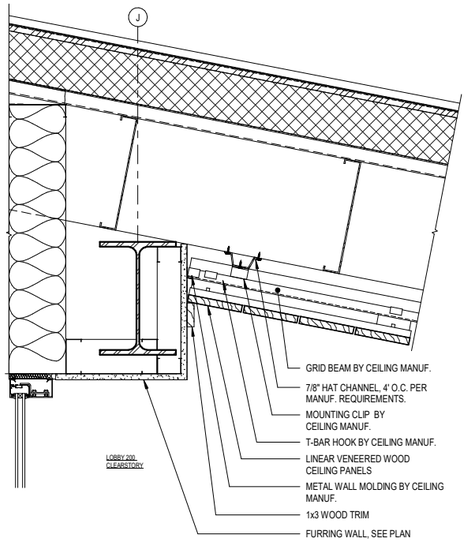


NON-RATED PARTITION HEAD DETAIL @ CONC DECK

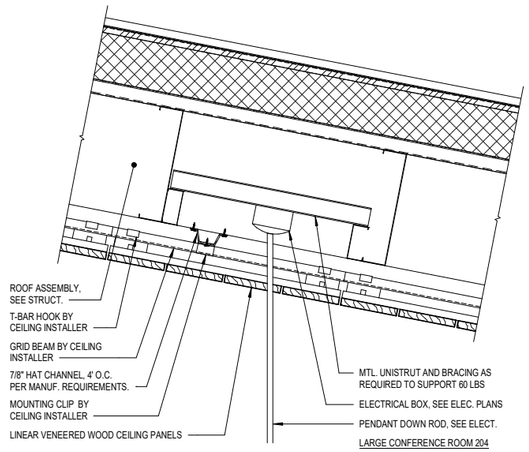


1 A521 TYPICAL CMU CONTROL JOINT
3/4" = 1'-0"

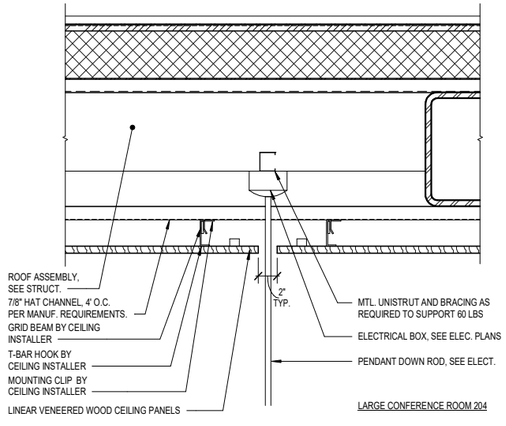
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			INTERIOR DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A521	180



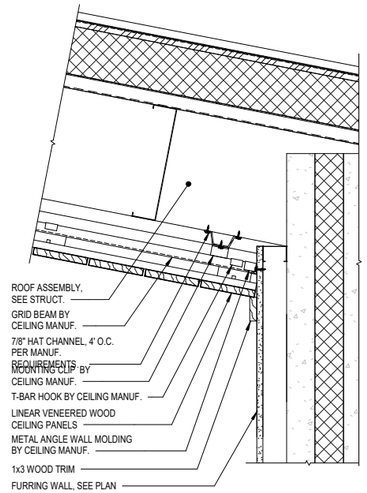
6 A522 WOOD CEILING - UPPER INSTALLATION DETAIL
3/4" = 1'-0"



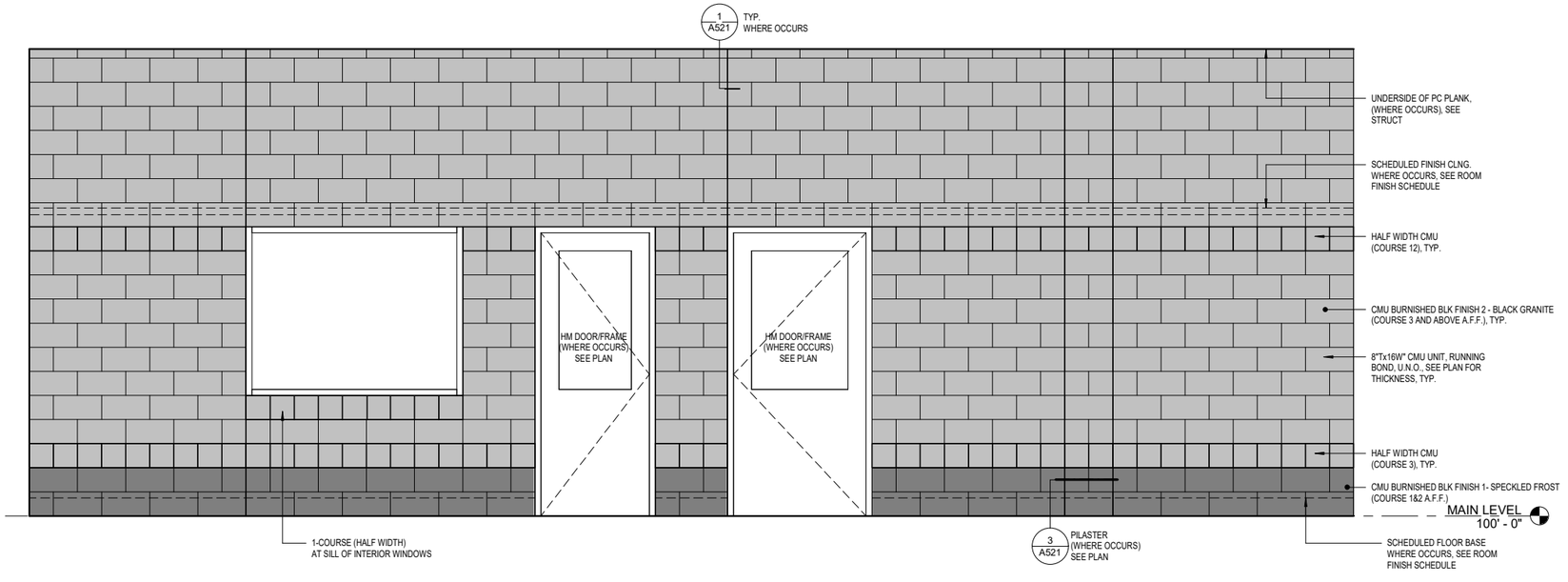
5 A522 WOOD CEILING - PENDANT LIGHT INSTALL DETAIL
3/4" = 1'-0"



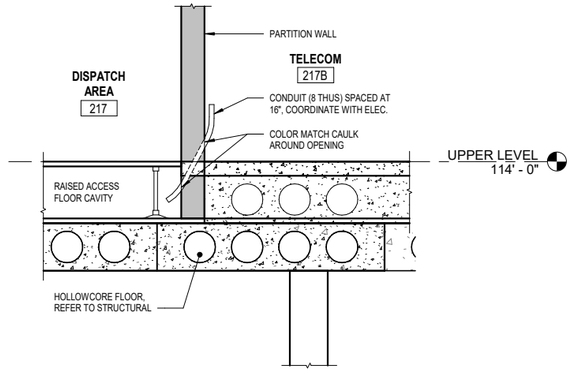
4 A522 WOOD CEILING - PENDANT LIGHT INSTALL DETAIL 2
3/4" = 1'-0"



3 A522 WOOD CEILING - LOWER INSTALLATION DETAIL
3/4" = 1'-0"



2 A522 TYPICAL CMU COURSING AT MAIN LEVEL
1/4" = 1' - 0"



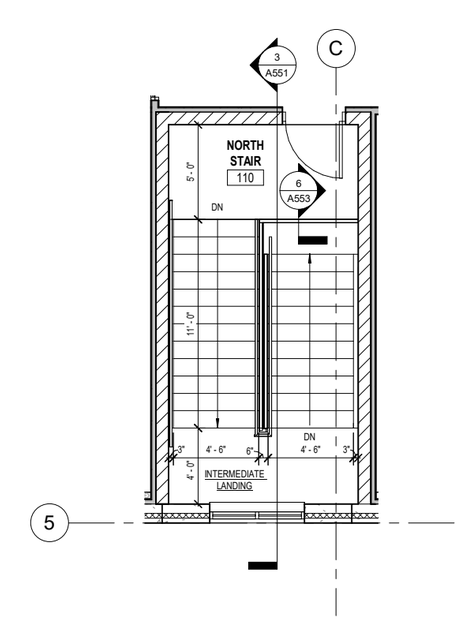
1 A522 LOW VOLTAGE CONDUIT CHASE DETAIL
3/8" = 1' - 0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			INTERIOR DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A522	

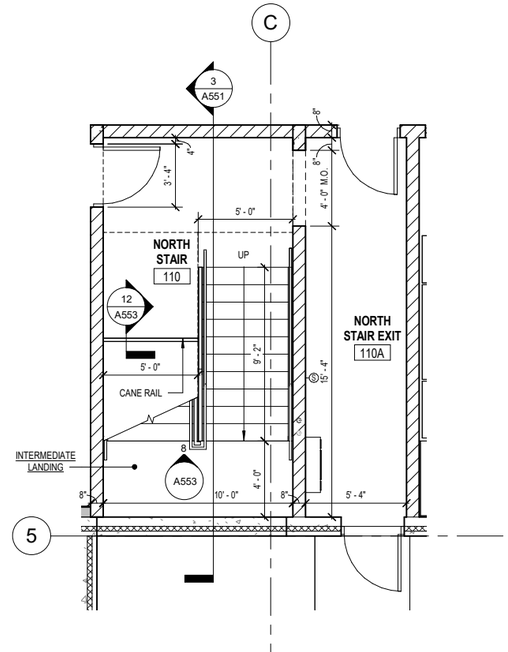
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NOTE: ALL MEMBERS, WELDS AND CONNECTIONS TO MEET AESS CATEGORY 3

3 A551 NORTH STAIR SECTION 1
1/8" = 1' - 0"



2 A551 UPPER LEVEL FLOOR PLAN
1/8" = 1' - 0"

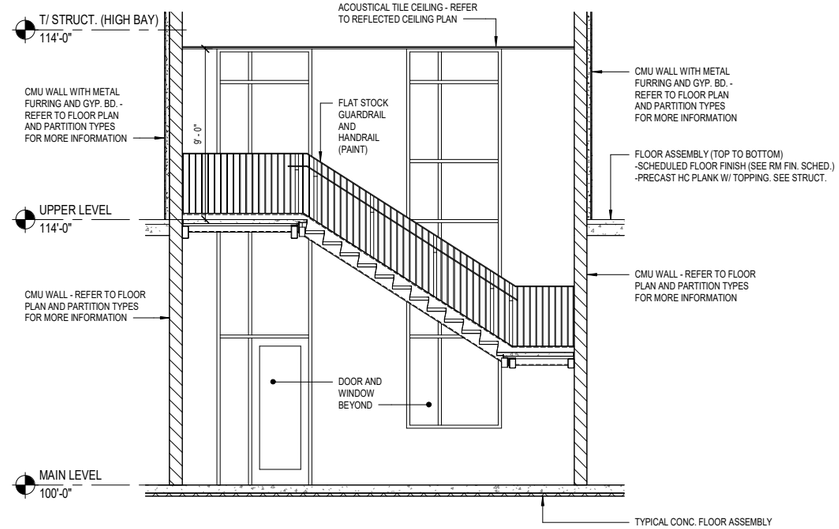


1 A551 MAIN LEVEL FLOOR PLAN
1/8" = 1' - 0"

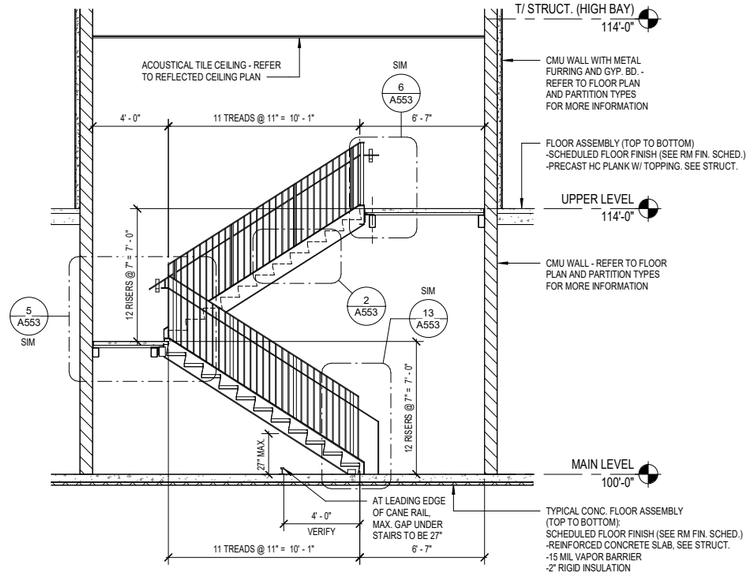
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			NORTH STAIR DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A551	182

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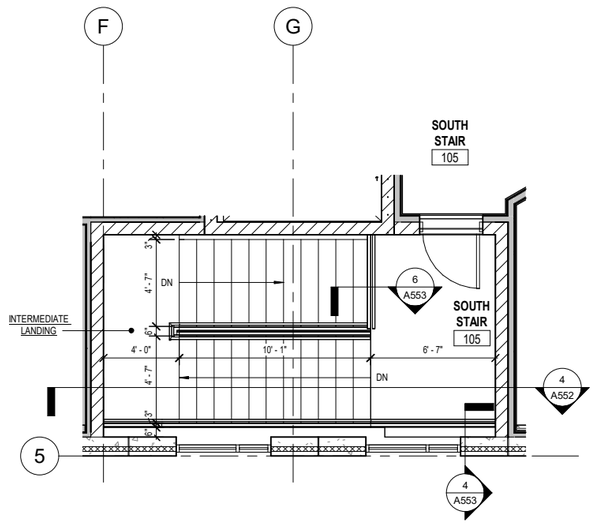
NOTE: ALL MEMBERS, WELDS AND CONNECTIONS TO MEET AESS CATEGORY 3



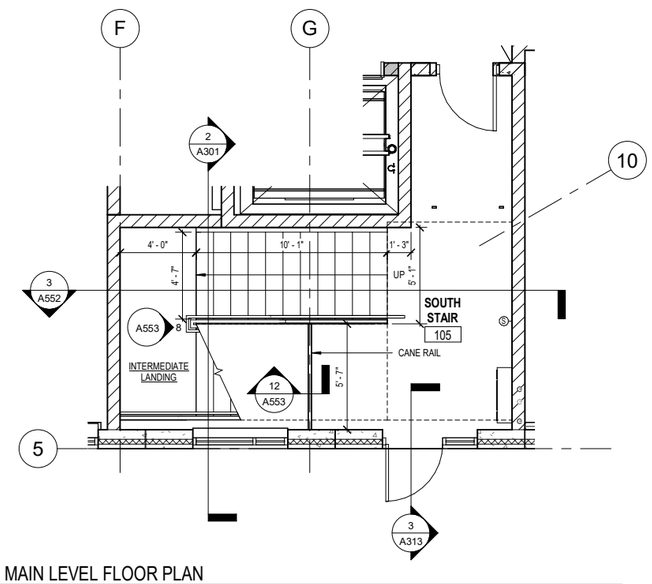
4 A552 SOUTH STAIR SECTION 2
1/8" = 1' - 0"



3 A552 SOUTH STAIR SECTION 1
1/8" = 1' - 0"
0' 1' 2' 5'



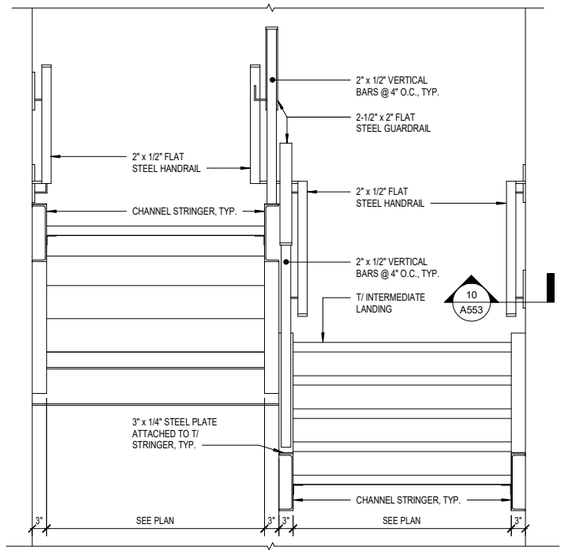
2 A552 UPPER LEVEL FLOOR PLAN
1/8" = 1' - 0"
0' 1' 2' 5'



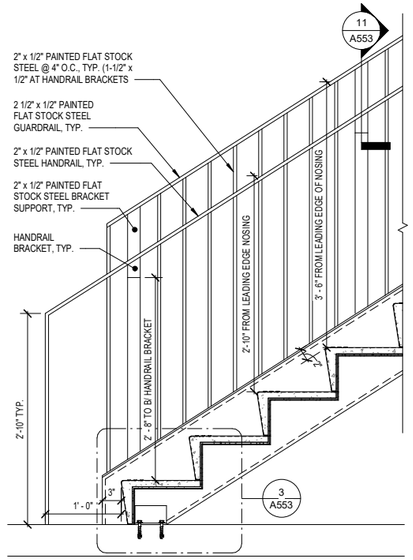
1 A552 MAIN LEVEL FLOOR PLAN
1/8" = 1' - 0"
0' 1' 2' 5'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			SOUTH STAIR DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A552	

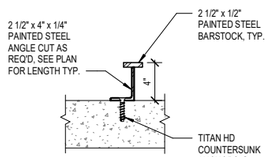
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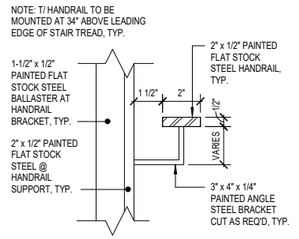
14 A553 SWITCHBACK SECTION
3/8" = 1' - 0"



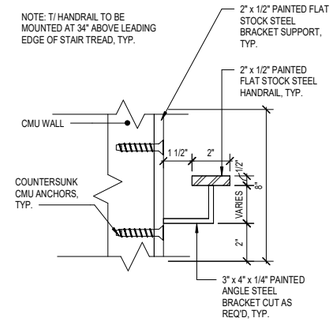
13 A553 BOTTOM OF STAIR TERRAZZO DETAIL
1/2" = 1' - 0"



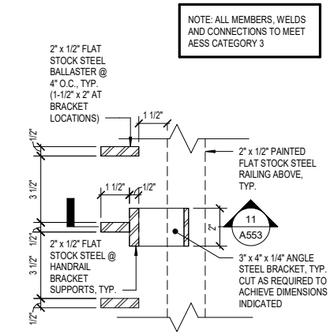
12 A553 CANE RAIL DETAIL
3/4" = 1' - 0"



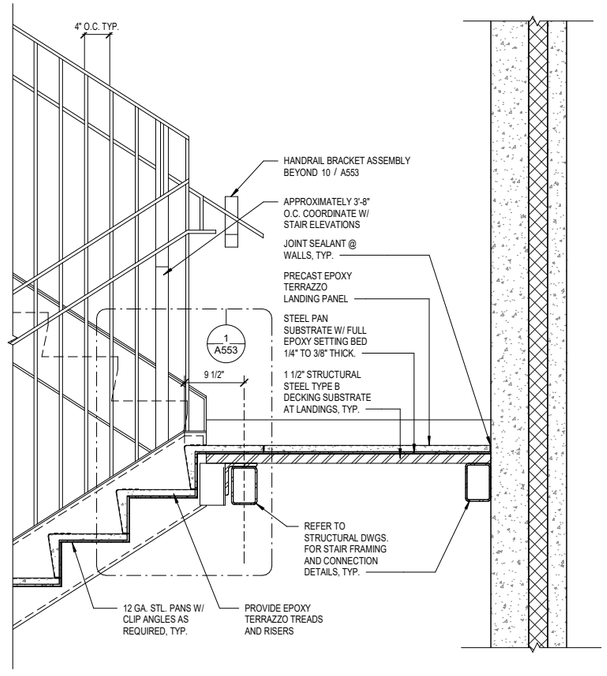
11 A553 HANDRAIL BRACKET @ BALLASTER
1 1/2" = 1' - 0"



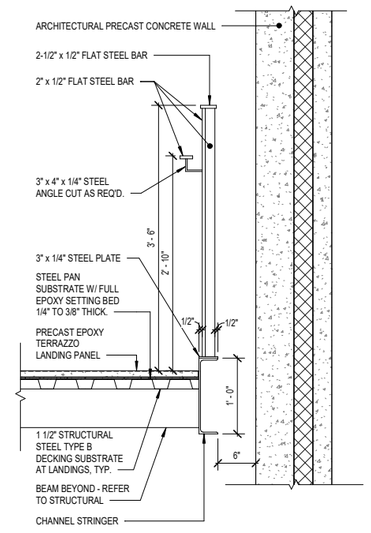
10 A553 HANDRAIL BRACKET @ WALL
1 1/2" = 1' - 0"



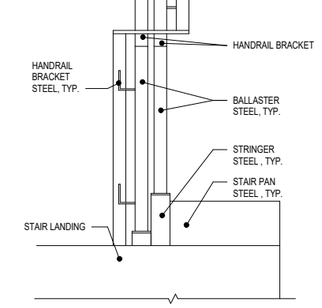
9 A553 HANDRAIL BRACKET OVERVIEW
1 1/2" = 1' - 0"



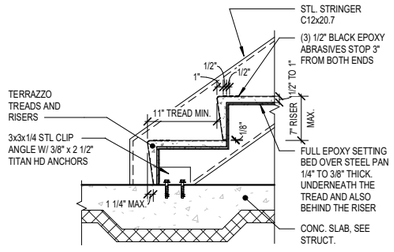
5 A553 TOP OF STAIR INTERMEDIATE LANDING TERRAZZO DETAIL
1/2" = 1' - 0"



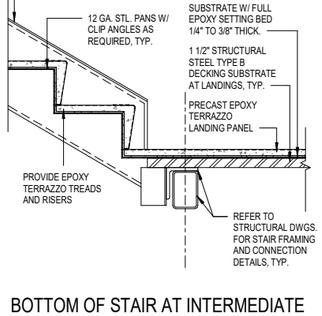
4 A553 GUARDRAIL AT EXPOSED STRINGER TERRAZZO DETAIL
1/2" = 1' - 0"



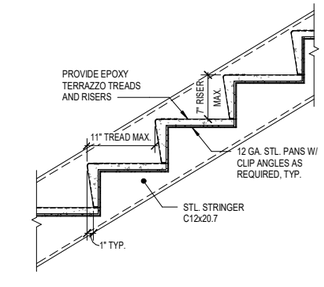
8 A553 SWITCHBACK RAILING DETAIL
1/2" = 1' - 0"



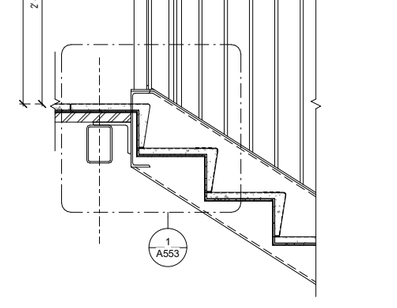
3 A553 TERRAZZO STAIR DETAIL
1/2" = 1' - 0"



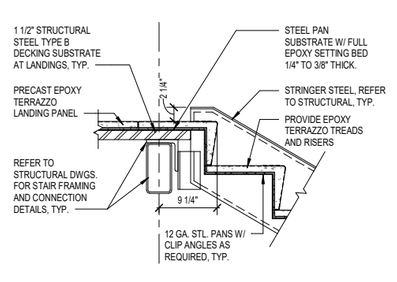
BOTTOM OF STAIR AT INTERMEDIATE LANDING DETAIL
7 A553 1/2" = 1' - 0"



2 A553 STEEL PAN TERRAZZO DETAIL
1/2" = 1' - 0"



6 A553 GUARDRAIL AT TOP LANDING TERRAZZO DETAIL
1/2" = 1' - 0"

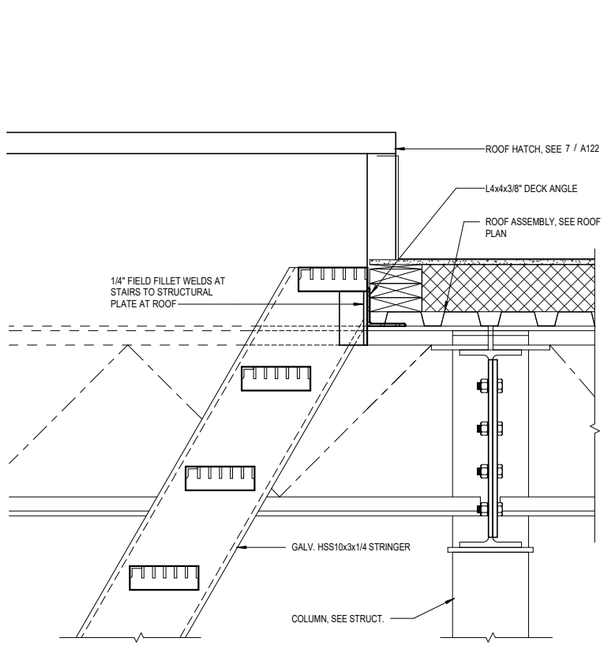


1 A553 TOP LANDING TERRAZZO DETAIL
1/2" = 1' - 0"

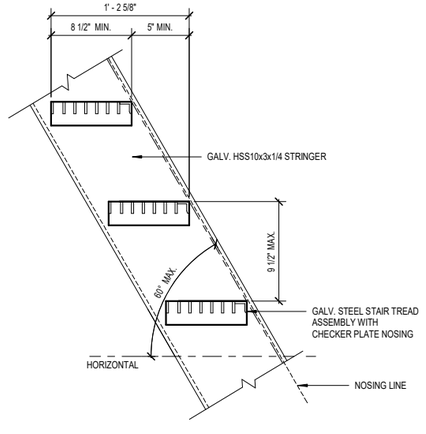
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STAIR DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A553	

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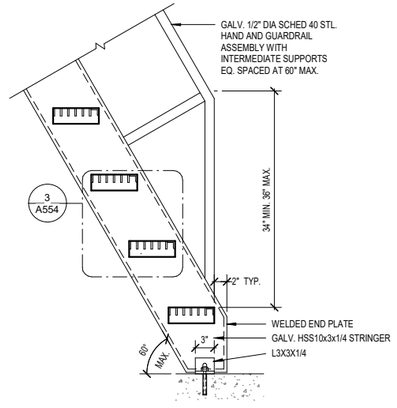
NOTE: ALL MEMBERS, WELDS AND CONNECTIONS TO MEET AESS CATEGORY 3



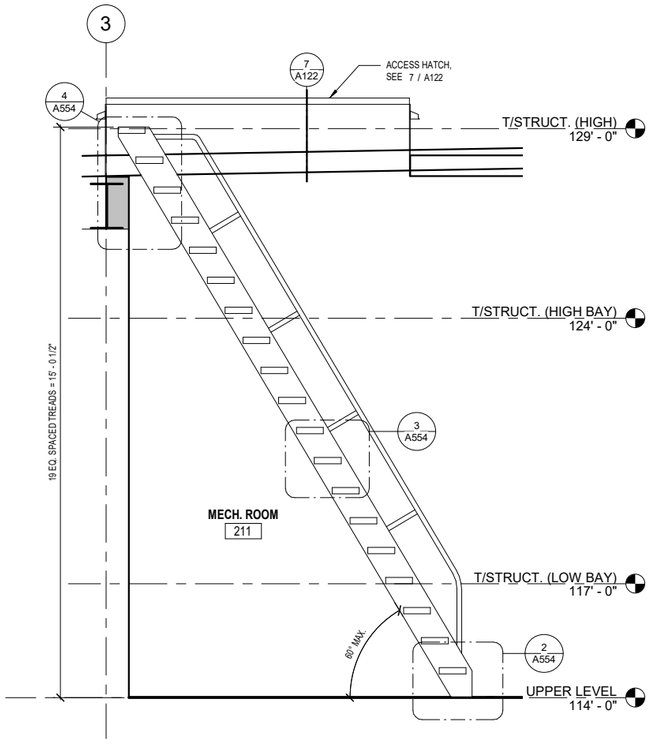
4 A554 SHIPS LADDER DETAIL (HIGH)
3/4" = 1'-0"



3 A554 SHIPS LADDER DETAIL (TYP.)
3/4" = 1'-0"



2 A554 SHIPS LADDER DETAIL (LOW)
1/2" = 1'-0"

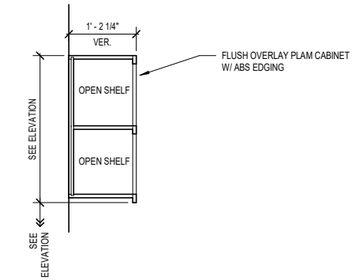


1 A554 SHIPS LADDER SECTION
1/4" = 1'-0"

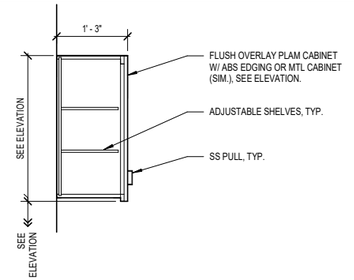
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			SHIPS LADDER DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A554	

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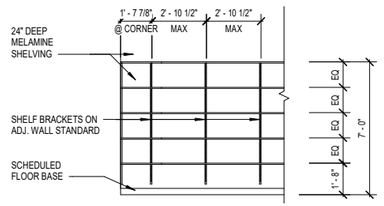
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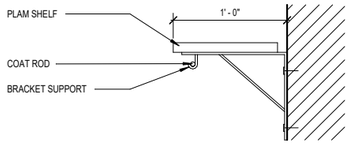
17 A581 UPPER CABINET SECTION
3/8" = 1'-0"



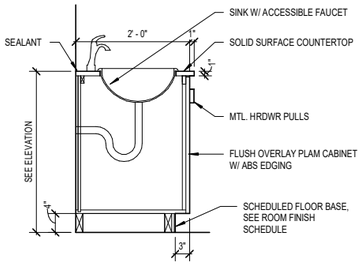
16 A581 UPPER CABINET SECTION
3/8" = 1'-0"



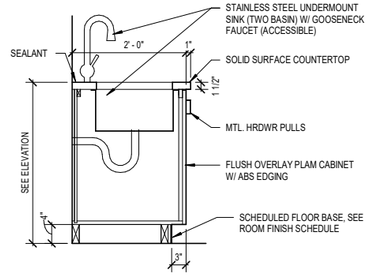
15 A581 ADJUSTIBLE LAMINATE SHEVING
1/8" = 1'-0"



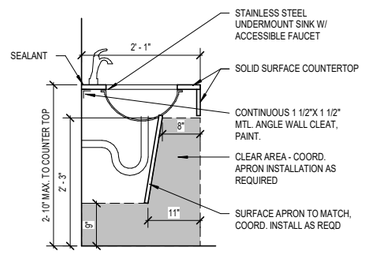
14 A581 COAT RACK
3/4" = 1'-0"



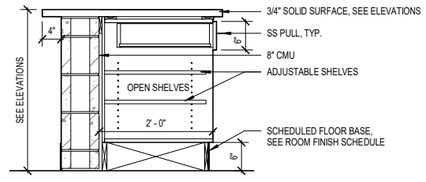
13 A581 SINK SECTION
3/8" = 1'-0"



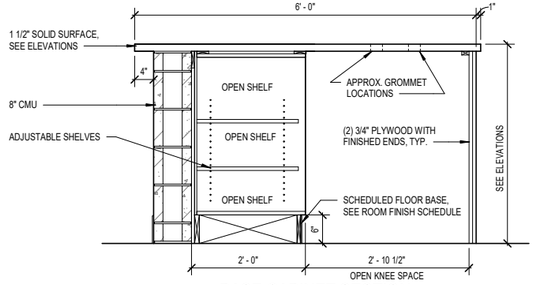
12 A581 SINK SECTION
3/8" = 1'-0"



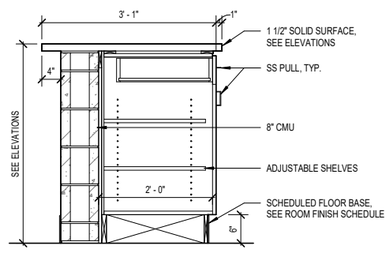
11 A581 SINK SECTION - ACCESSIBLE
3/8" = 1'-0"



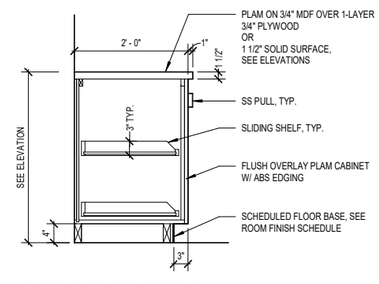
9 A581 ADA - BASE CABINET SECTION
3/8" = 1'-0"



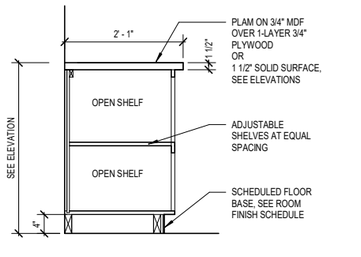
8 A581 BASE CABINET SECTION
3/8" = 1'-0"



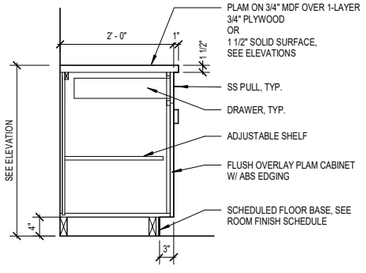
7 A581 BASE CABINET SECTION
3/8" = 1'-0"



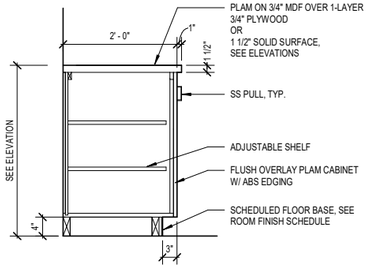
6 A581 BASE CABINET SECTION
3/8" = 1'-0"



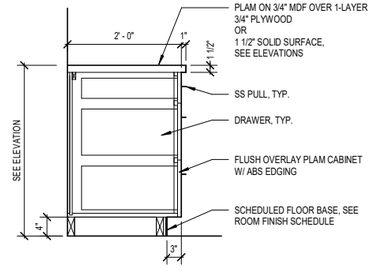
5 A581 BASE CABINET SECTION
3/8" = 1'-0"



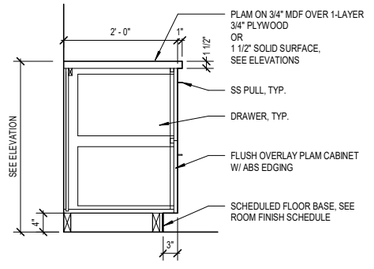
4 A581 BASE CABINET SECTION
3/8" = 1'-0"



3 A581 BASE CABINET SECTION
3/8" = 1'-0"



2 A581 BASE CABINET SECTION
3/8" = 1'-0"

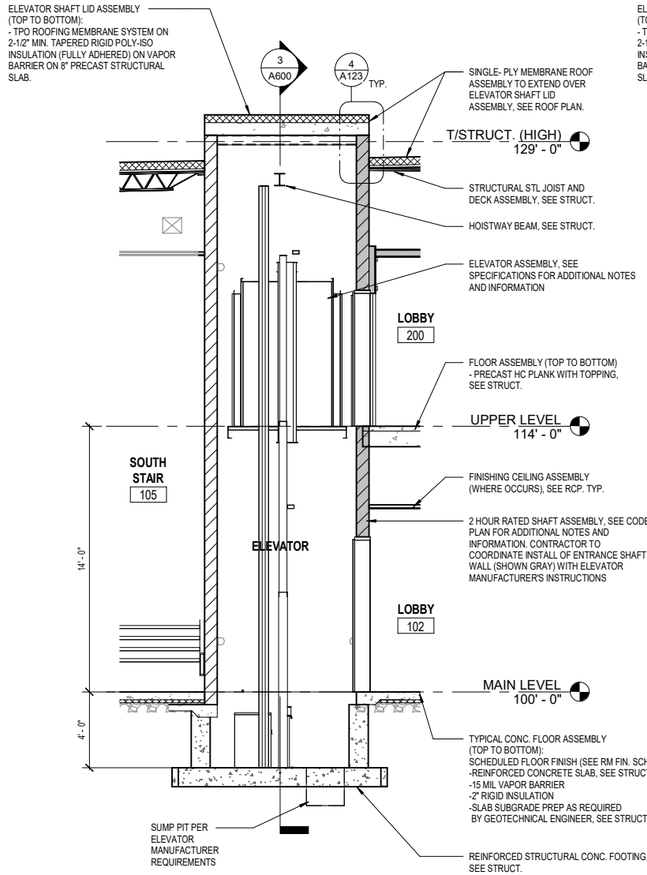


1 A581 BASE CABINET SECTION
3/8" = 1'-0"

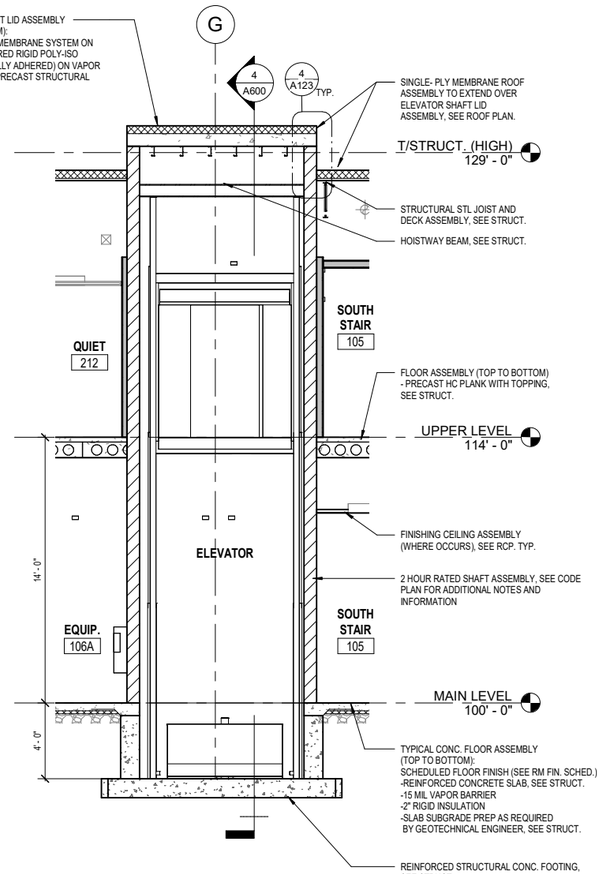
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			CASEWORK DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A581	186

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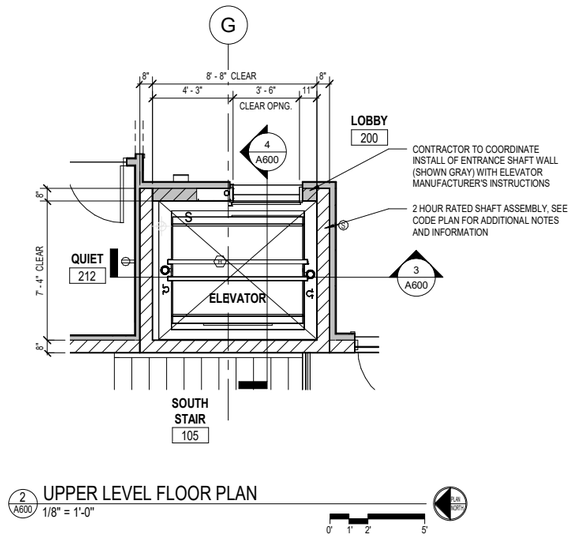
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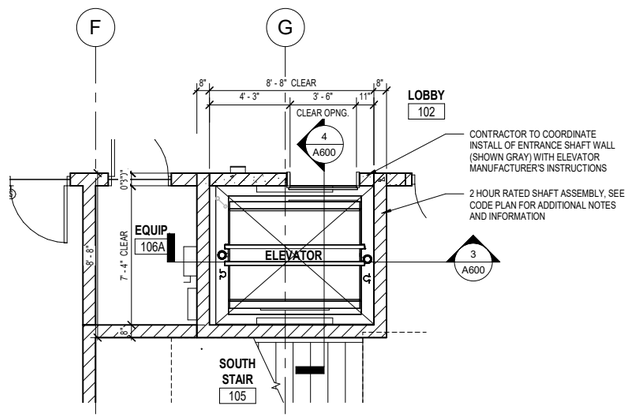
4 A600 ELEVATOR SECTION 1
1/8" = 1'-0"
0' 1' 2' 5'



3 A600 ELEVATOR SECTION 2
1/8" = 1'-0"
0' 1' 2' 5'



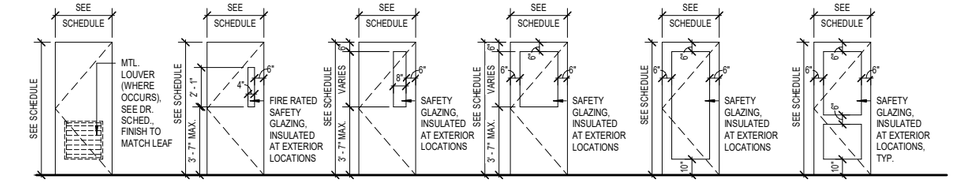
2 A600 UPPER LEVEL FLOOR PLAN
1/8" = 1'-0"
0' 1' 2' 5'

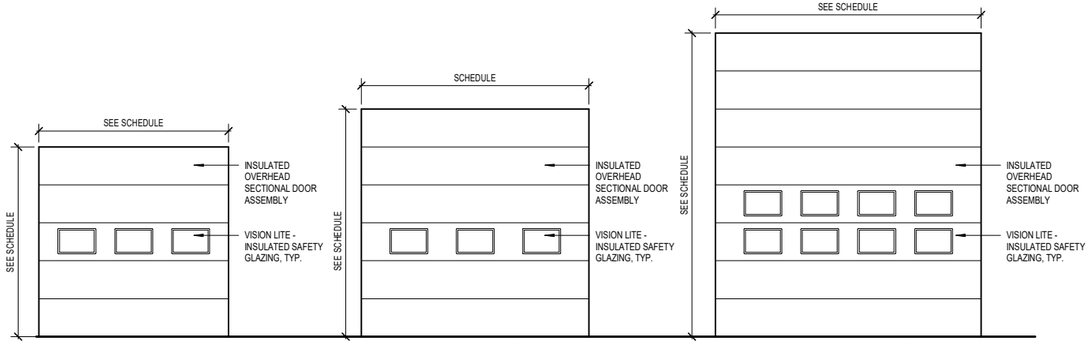


1 A600 MAIN LEVEL FLOOR PLAN
1/8" = 1'-0"
0' 1' 2' 5'

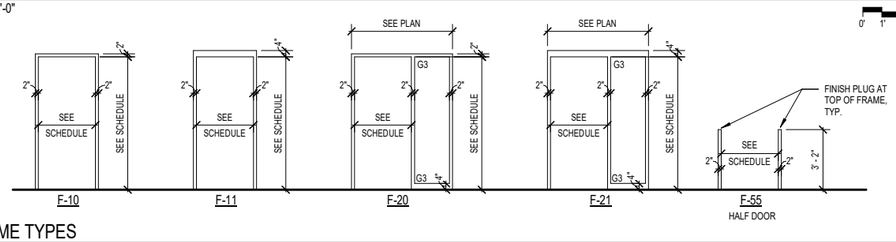
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ELEVATOR DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A600	

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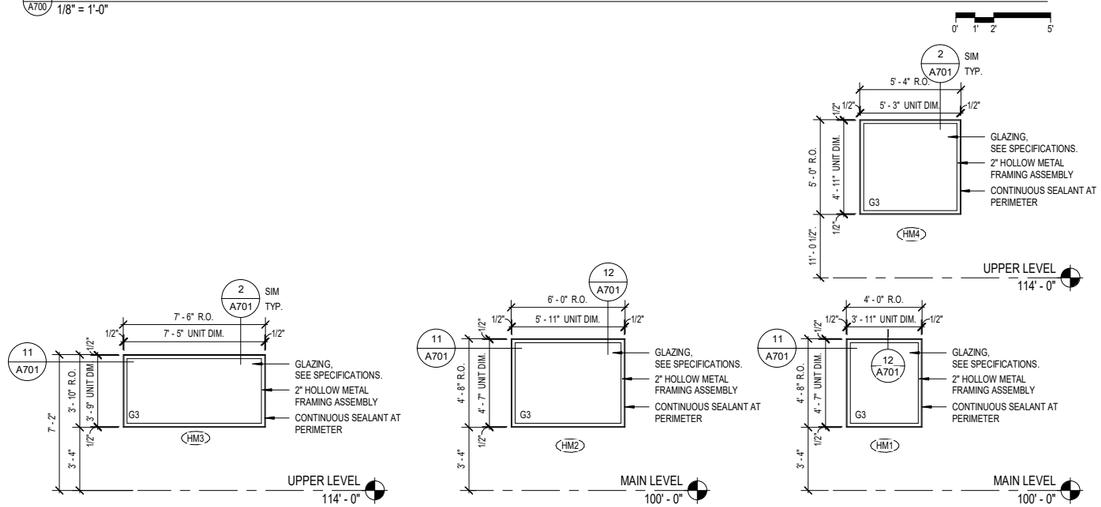




1 A700 DOOR TYPES
1/8" = 1'-0"



2 A700 FRAME TYPES
1/8" = 1'-0"



3 A700 HOLLOW METAL WINDOW TYPES
1/8" = 1'-0"

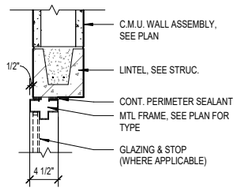
DOOR SCHEDULE

MARK	DOOR					FRAME		DETAIL			HRDWR GROUP	FIRE RATING	CARD READER (PLACEMENT-SIDE)	COMMENTS
	LEAF QTY	WIDTH	HEIGHT	TYPE	MATERIAL	TYPE	MATERIAL	HEAD	JAMB	SILL				
100.1	1	3' - 0"	7' - 10"	D50	ALUM	-	ALUM	-	-	-	33	-	-	SEE PLAN FOR ALUMINUM STOREFRONT TYPE
100.2	1	3' - 0"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	-	16	-	-	
100A.1	1	3' - 0"	7' - 10"	D10	WD	F10	HM	4/A701	3/A701	-	23	-	-	
100B.1	1	3' - 0"	7' - 10"	D10	WD	F10	HM	4/A701	3/A701	-	23	-	-	
101.1	1	3' - 0"	7' - 10"	D40	HM	F10	HM	4/A701	3/A701	-	24	-	CR - LOBBY 102	
101A.1	1	3' - 0"	7' - 10"	D50	ALUM	-	ALUM	-	-	-	13	-	-	SEE PLAN FOR ALUMINUM STOREFRONT TYPE, REMOTE BUZZ-IN (POWERED) FROM OPERATIONS 101
101A.2	1	3' - 0"	3' - 2"	D10	HM	F55	HM	-	3/A701	-	35A	-	-	HALF HEIGHT COUNTER DOOR
101B.1	1	3' - 0"	7' - 10"	D40	HM	F10	HM	4/A701	3/A701	1/A701	02	-	-	
101C.1	1	3' - 0"	7' - 10"	D50	HM	F10	HM	4/A701	3/A701	-	35	-	-	
101C.2	1	3' - 0"	7' - 10"	D50	ALUM	-	ALUM	-	-	-	31	-	CR - EXTERIOR	SEE PLAN FOR ALUMINUM STOREFRONT TYPE
102.1	1	3' - 0"	7' - 10"	D40	HM	F10	HM	4/A701	3/A701	-	25A	-	CR - LOBBY 102	
102A.1	2	6' - 0"	7' - 10"	D50	ALUM	-	ALUM	-	-	-	32B	-	CR - EXTERIOR	SEE PLAN FOR ALUMINUM STOREFRONT TYPE
102A.2	2	6' - 0"	7' - 10"	D50	ALUM	-	ALUM	-	-	-	32A	-	CR - EXTERIOR	SEE PLAN FOR ALUMINUM STOREFRONT TYPE
102C.1	1	3' - 0"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	-	23	-	-	
102D.1	1	3' - 0"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	-	23	-	-	
102H.1	1	3' - 0"	7' - 10"	D50	ALUM	-	ALUM	-	-	-	31	-	CR - EXTERIOR	SEE PLAN FOR ALUMINUM STOREFRONT TYPE
102H.2	1	3' - 0"	7' - 10"	D50	ALUM	-	ALUM	-	-	-	29	-	-	SEE PLAN FOR ALUMINUM STOREFRONT TYPE
103.1	1	3' - 0"	7' - 10"	D40	HM	F10	HM	4/A701	3/A701	1/A701	15	-	-	
103.2	1	3' - 0"	7' - 10"	D40	HM	F10	HM	4/A701	3/A701	1/A701	17A	-	-	
104.1	1	3' - 0"	7' - 10"	D40	HM	F10	HM	4/A701	3/A701	1/A701	21	-	-	
104.2	1	3' - 8"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	1/A701	18	-	-	
104A.1	1	3' - 8"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	1/A701	15	-	-	
105.1	1	3' - 0"	7' - 10"	D50	ALUM	-	ALUM	-	-	-	31	-	CR - EXTERIOR	SEE PLAN FOR ALUMINUM STOREFRONT TYPE
105.2	1	3' - 0"	7' - 10"	D30	HM	F10	HM	4/A701	3/A701	-	11	-	-	
105.3	1	3' - 0"	7' - 0"	D30	HM	F10	HM	2/A701	2/A701 SIM	1/A701	25	-	CR - SOUTH STAIR 105.3	
106.1	1	3' - 0"	7' - 10"	D40	HM	F10	HM	4/A701	3/A701	1/A701	11	-	-	
106A.1	1	3' - 0"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	1/A701	15	-	-	
107.1	1	3' - 0"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	1/A701	08	-	-	
107A.1	1	3' - 0"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	-	15	-	-	
108.1	1	3' - 0"	7' - 10"	D40	HM	F10	HM	4/A701	3/A701	1/A701	02	-	-	
109.1	1	3' - 0"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	1/A701	12	-	-	
109A.1	1	3' - 0"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	1/A701	25	-	CR - CIRCULATION 102E	
110.1	1	3' - 0"	7' - 10"	D20	HM	F10	HM	4/A701	3/A701	1/A701	28	60 MIN.	-	
110.2	1	3' - 0"	7' - 0"	D20	HM	F10	HM	2/A701	2/A701 SIM	1/A701	11	60 MIN.	-	
110A.1	1	3' - 0"	7' - 10"	D10	FRP	F10	FRP	6/A701	5/A701	-	27	-	-	
110A.2	1	3' - 0"	7' - 10"	D20	HM	F10	HM	4/A701	2/A701	1/A701	28	60 MIN.	-	
111.1	1	3' - 0"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	1/A701	15	-	-	
112.1	1	3' - 0"	7' - 10"	D40	HM	F10	HM	6/A701 SIM	5/A701 SIM	-	14	-	-	
112.2	-	10' - 0"	10' - 0"	D100	INSUL. MTL.	-	MTL.	8/A701	7/A701	TBD	34	-	-	OVERHEAD SECTIONAL DOOR, STANDARD TRACK
113.1	1	3' - 0"	7' - 10"	D40	HM	F10	HM	6/A701	5/A701	1/A701	24A	-	CR - BOTH SIDES	
113.2	1	3' - 0"	7' - 10"	D40	FRP	F10	FRP	6/A701	5/A701 SIM	1/A701	26	-	CR - EXTERIOR	
113.3	-	12' - 0"	12' - 0"	D200	INSUL. MTL.	-	MTL.	8/A701	7/A701	TBD	34		-	OVERHEAD SECTIONAL DOOR, LOW HEADROOM
113.4	-	12' - 0"	12' - 0"	D200	INSUL. MTL.	-	MTL.	8/A701	7/A701	TBD	34		-	OVERHEAD SECTIONAL DOOR, LOW HEADROOM
114.1	1	3' - 0"	7' - 10"	D40	HM	F10	HM	4/A701	3/A701	1/A701	24	-	CR - CIRCULATION 102G	
114A.1	1	3' - 0"	7' - 10"	D40	HM	F10	HM	4/A701	3/A701	-	02	-	-	
114B.1	1	3' - 8"	7' - 10"	D40	HM	F10	HM	4/A701	3/A701	1/A701	15	-	-	
115.1	2	6' - 0"	7' - 10"	D10	HM	F10	HM	6/A701	5/A701	-	10A	-	-	
115.2	1	3' - 0"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	1/A701	18A	-	-	
115A.1	1	3' - 0"	7' - 10"	D10	HM	F10	HM	4/A701	3/A701	-	11	60 MIN.	-	24"x24" MTL. FUSIBLE LINK LOUVER (90 MIN)
115A.2	1	3' - 0"	7' - 10"	D10	FRP	F10	FRP	6/A701	5/A701	1/A701	19	-	-	
116.1	1	3' - 0"	7' - 10"	D10	HM	F10	HM	6/A701	5/A701	1/A701	24B	-	CR - BOTH SIDES	
116.2	1	3' - 0"	7' - 10"	D30	FRP	F10	FRP	6/A701	5/A701	1/A701	26	-	CR - EXTERIOR	
116.3	-	14' - 0"	16' - 0"	D300	INSUL. MTL.	-	MTL.	8/A701	7/A701	TBD	34	-	-	OVERHEAD SECTIONAL DOOR, STANDARD TRACK
116.4	-	14' - 0"	16' - 0"	D300	INSUL. MTL.	-	MTL.	8/A701	7/A701	TBD	34	-	-	OVERHEAD SECTIONAL DOOR, STANDARD TRACK
116.5	1	3' - 0"	7' - 10"	D30	FRP	F10	FRP	6/A701	5/A701	1/A701	26	-	-	
116.6	1	3' - 0"	7' - 10"	D30	FRP	F10	FRP	6/A701	5/A701	1/A701	26	-	-	
116.7	-	14' - 0"	16' - 0"	D300	INSUL. MTL.	-	MTL.	8/A701	7/A701	TBD	34	-	-	OVERHEAD SECTIONAL DOOR, STANDARD TRACK
116.8	-	14' - 0"	16' - 0"	D300	INSUL. MTL.	-	MTL.	8/A701	7/A701	TBD	34	-	-	OVERHEAD SECTIONAL DOOR, STANDARD TRACK
116.9	1	3' - 0"	7' - 10"	D30	FRP	F10	FRP	6/A701	5/A701	1/A701	26	-	CR - EXTERIOR	
116A.1	2	6' - 0"	7' - 10"	D10	HM	F10	HM	6/A701	5/A701	-	09	-	-	
201.1	1	3' - 0"	7' - 0"	D10	WD	F20	HM	2/A701	2/A701 SIM	-	01	-	-	
202.1	1	3' - 0"	7' - 0"	D10	WD	F20	HM	2/A701	2/A701 SIM	-	06	-	-	
204.1	1	3' - 0"	7' - 0"	D10	WD	F20	HM	2/A701	2/A701 SIM	-	01	-	-	
204.2	1	3' - 0"	7' - 0"	D10	WD	F20	HM	2/A701	2/A701 SIM	-	01	-	-	
205.1	1	3' - 0"	7' - 0"	D10	WD	F10	HM	2/A701	2/A701 SIM	1/A701	35	-	-	
206.1	1	3' - 0"	7' - 0"	D10	WD	F10	HM	2/A701	2/A701 SIM	1/A701	35	-	-	
207.1	1	3' - 0"	7' - 0"	D10	WD	F20	HM	2/A701	2/A701	-	02	-	-	
208.1	1	3' - 0"	7' - 0"	D10	WD	F20	HM	2/A701	2/A701	-	03	-	-	
209.1	1	3' - 0"	7' - 0"	D10	WD	F10	HM	2/A701	2/A701 SIM	-	01	-	-	
210.1	2	6' - 0"	7' - 0"	D10	HM	F10	HM	2/A701	2/A701 SIM	1/A701	04	-	-	
211.1	2	6' - 0"	8' - 0"	D10	HM	F10	HM	2/A701	2/A701 SIM	1/A701	05	-	-	
211.2	1	3' - 0"	7' - 0"	D10	HM	F10	HM	2/A701	2/A701 SIM	1/A701	15	-	-	
212.1	1	3' - 0"	7' - 0"	D10	WD	F10	HM	2/A701	2/A701 SIM	1/A701	23	-	-	
213.1	1	3' - 0"	7' - 0"	D10	WD	F20	HM	2/A701	2/A701 SIM	1/A701	11	-	-	
214.1	1	3' - 0"	7' - 0"	D10	WD	F20	HM	2/A701	2/A701 SIM	-	06	-	-	
215.1	1	3' - 0"	7' - 0"	D10	WD	F20	HM	2/A701	2/A701 SIM	-	07	-	-	
216.1	1	3' - 0"	7' - 0"	D10	WD	F20	HM	2/A701	2/A701 SIM	-	06	-	-	
217.1	1	3' - 0"	7' - 0"	D10	WD	F20	HM	2/A701	2/A701 SIM	-	25	-	CR - CIRCULATION 200A	
217A.1	1	3' - 0"	7' - 0"	D10	WD	F10	HM	2/A701	2/A701 SIM	-	25	-	CR - CIRCULATION 200A	
217B.1	1	4' - 0"	7' - 0"	D10	HM	F10	HM	2/A701	2/A701 SIM	1/A701	24	-	CR - BREAK 217A	
217C.1	1	3' - 0"	7' - 0"	D10	WD	F10	HM	2/A701	2/A701 SIM	-	02	-	-	
217D.1	1	3' - 0"	7' - 0"	D10	WD	F10	HM	2/A701	2/A701 SIM	1/A701	23	-	-	
218.1	1	3' - 0"	7' - 0"	D10	WD	F10	HM	2/A701	2/A701 SIM	1/A701	08	-	-	

DOOR SCHEDULE NOTES

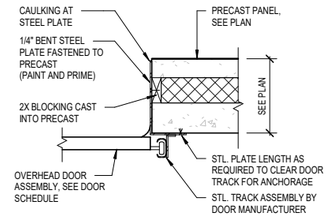
1. SEE ELEC. & I.T. FOR ADDITONAL EXTERIOR CARD READER LOCATIONS

2



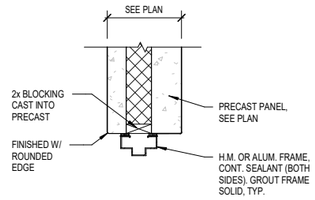
12 A701 HEAD DETAIL AT CMU WALL
1/2" = 1'-0"

0" 3" 6" 1' - 6"



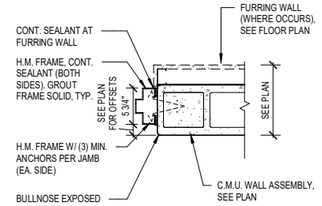
9 A701 OVERHEAD DOOR JAMB DETAIL
1/2" = 1'-0"

0" 3" 6" 1' - 6"



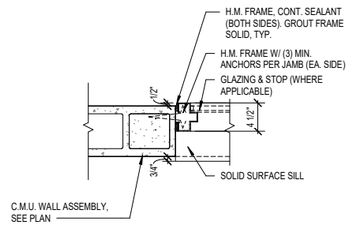
6 A701 DOOR HEAD DETAIL AT PRECAST WALL
1/2" = 1'-0"

0" 3" 6" 1' - 6"



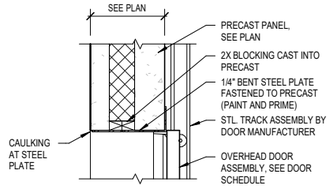
3 A701 DOOR JAMB DETAIL AT CMU WALL
1/2" = 1'-0"

0" 3" 6" 1' - 6"



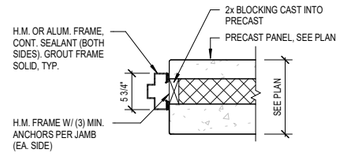
11 A701 JAMB DETAIL AT CMU WALL W/SILL
1/2" = 1'-0"

0" 3" 6" 1' - 6"



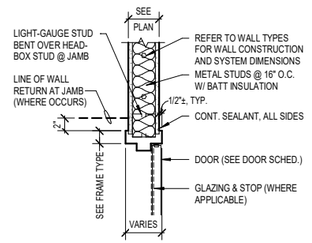
8 A701 OVERHEAD DOOR HEAD DETAIL
1/2" = 1'-0"

0" 3" 6" 1' - 6"



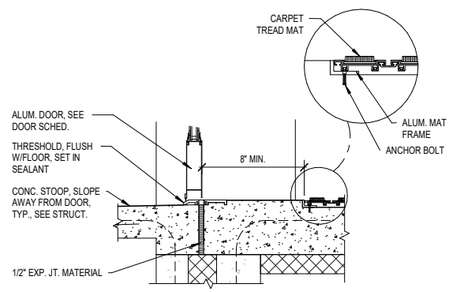
5 A701 DOOR JAMB DETAIL AT PRECAST WALL
1/2" = 1'-0"

0" 3" 6" 1' - 6"



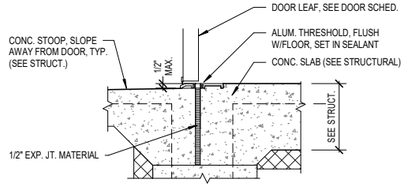
2 A701 DOOR HEAD DETAIL AT FRAMED WALL (JAMB SIM.)
1/2" = 1'-0"

0" 3" 6" 1' - 6"



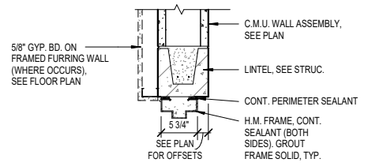
10 A701 DOOR SILL DETAIL
3/4" = 1'-0"

0" 2" 4" 1'



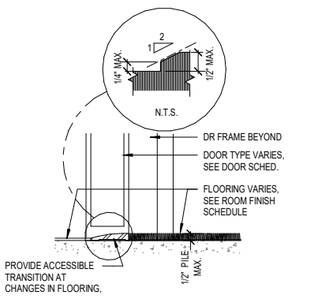
7 A701 DOOR SILL DETAIL
3/4" = 1'-0"

0" 2" 4" 1'



4 A701 DOOR HEAD DETAIL AT CMU WALL
1/2" = 1'-0"

0" 3" 6" 1' - 6"



1 A701 TYP. THRESHOLD DETAIL @ DOOR
1 1/2" = 1'-0"

0" 1" 2" 6"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			DOOR/FRAME DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A701	189

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR		BASE		WALLS								CEILING		NOTES AND COMMENTS
						NORTH		EAST		SOUTH		WEST				
		MATERIAL	FIN.	MATERIAL	FIN.	MATERIAL	FIN.	MATERIAL	FIN.	MATERIAL	FIN.	MATERIAL WEST	FIN.	MATERIAL	FIN.	
100	PUBLIC VEST.	CONC	PCT/RWOM	BCMU/PC	6" PCT	BCMU	S	BCMU	S	PC	S	BCMU	S	GB	P	SEE INTERIOR ELEVATIONS
100A	MEN	CONC	PCT	BCMU	PCT	BCMU	PCT	BCMU	PCT	BCMU	PCT	BCMU	PCT	GB	EP	SEE INTERIOR ELEVATIONS
100B	WOMEN	CONC	PCT	BCMU	PCT	BCMU	PCT	BCMU	PCT	BCMU	PCT	BCMU	PCT	GB	EP	SEE INTERIOR ELEVATIONS
101	OPERATIONS	CONC	PCT	BCMU/PC	6" PCT	BCMU	S	BCMU	S	PC	S	PC	P	ACT - 01	-	SEE INTERIOR ELEVATIONS
101A	DRIVERS	CONC	PCT	BCMU/PC	6" PCT	BCMU	S	BCMU	S	PC	S	BCMU	S	ACT - 01	-	SEE INTERIOR ELEVATIONS
101B	OFFICE	CONC	CPT	BCMU/PC	4" RB	BCMU	S	BCMU	S	BCMU	S	PC	P	ACT - 01	-	
101C	VESTIBULE	CONC	PCT/RWOM	BCMU/PC	6" PCT	BCMU	S	BCMU	S	BCMU	S	PC	P	GB	P	
102	LOBBY	CONC	PCT	BCMU/PC	6" PCT	BCMU	S	BCMU/PC	S/P	BCMU	S	BCMU	S	GB/ACT - 01	P/-	SEE INTERIOR ELEVATIONS
102A	VESTIBULE	CONC	PCT	BCMU/PC	6" PCT	BCMU	S	BCMU	S	PC	P	BCMU	S	GB	P	
102B	COATS	CONC	PCT	BCMU/PC	6" PCT	BCMU	S	PC	P	PC	P	BCMU	S	GB	P	
102C	MEN	CONC	PCT	BCMU	PCT	BCMU	PCT	BCMU	PCT	BCMU	PCT	BCMU	PCT	GB	EP	SEE INTERIOR ELEVATIONS
102D	WOMEN	CONC	PCT	BCMU	PCT	BCMU	PCT	BCMU	PCT	BCMU	PCT	BCMU	PCT	GB	EP	SEE INTERIOR ELEVATIONS
102E	CIRCULATION	CONC	PCT	BCMU	6" PCT	BCMU	S	BCMU	S	BCMU	S	-	S	ACT - 01	-	
102F	LOBBY	CONC	PCT	BCMU/PC	6" PCT	PC/GB	P	BCMU	S	BCMU	S	PC/GB	P	GB	P	SEE INTERIOR ELEVATIONS
102G	CIRCULATION	CONC	PCT	BCMU/PC	6" PCT	PC	P	BCMU	S	BCMU	S	-	-	ACT - 01	-	
102H	VESTIBULE	CONC	PCT/RWOM	PC	6" PCT	PC	P	PC	P	PC	P	PC	P	MPS	-	
103	CLASSROOM	CONC	CPT	BCMU	4" RB	BCMU	S	BCMU	S	BCMU	P	BCMU	S	ACT - 01	-	
104	TRAINING	CONC	CPT	BCMU/PC	4" RB	BCMU	S	PC	P	BCMU	P	BCMU	S	ACT - 01	-	
104A	STOR.	CONC	LVT	BCMU/PC	4" RB	BCMU	S	PC	P	BCMU	P	BCMU	S	ACT - 01	-	
105	SOUTH STAIR	CONC	PCT/TRZ	BCMU/PC	6" PCT	BCMU	S	BCMU	S	BCMU	S	PC	P	ACT - 01	-	ET FINISH AT TREADS, SEE STAIR DETAILS
106	CHEM TEST	CONC	CPT	BCMU/PC	4" RB	BCMU	S	BCMU	S	BCMU	S	PC	P	ACT - 01	-	
106A	EQUIP.	CONC	S	BCMU	-	BCMU	S	BCMU	S	BCMU	S	BCMU	S	EXP	P	
107	JC	CONC	S	BCMU	-	BCMU	S	BCMU	S	BCMU	S	BCMU	S	ACT - 01	-	
107A	ANTENNA EQUIP.	CONC	S	BCMU/PC	-	BCMU	S	BCMU	S	BCMU	P	PC	P	EXP	P	
108	INTOX	CONC	S	BCMU/PC	-	BCMU	S	BCMU	S	BCMU	S	PC	P	ACT - 02	-	
109	EVIDENCE CHECK-IN	CONC	S	BCMU/PC	-	BCMU	S	BCMU	S	BCMU	S	PC	P	EXP	P	SEE INTERIOR ELEVATIONS
109A	EVIDENCE STORAGE	CONC	S	BCMU/PC	-	BCMU	S	BCMU	S	BCMU	S	PC	P	EXP	P	SEE INTERIOR ELEVATIONS
110	NORTH STAIR	CONC	PCT/TRZ	BCMU/PC	6" PCT	BCMU	S	BCMU	S	BCMU	S	PC	P	GB	P	ET FINISH AT TREADS, SEE STAIR DETAILS
110A	NORTH STAIR EXIT	CONC	PCT	BCMU/PC	6" PCT	BCMU	S	BCMU	S	BCMU	S	PC	P	ACT - 01	-	
111	ELECTRICAL	CONC	S	BCMU	-	BCMU	S	BCMU	S	BCMU	S	BCMU	P	EXP	P	
112	STORAGE GARAGE	CONC	EP	PC	-	PC	EP	BCMU	EP	BCMU	EP	BCMU	EP	EXP	EP	
113	MAINTENANCE GARAGE	CONC	EP	PC	-	PC	EP	BCMU	EP	BCMU	EP	BCMU	EP	EXP	EP	
114	COMM. TECH.	CONC	CPT	BCMU	4" RB	BCMU	S	BCMU	S	BCMU	S	BCMU	S	ACT - 01	-	
114A	SUPERVISOR	CONC	CPT	BCMU	4" RB	BCMU	S	BCMU	S	BCMU	S	BCMU	S	ACT - 01	-	
114B	TELECOM ROOM	CONC	S	BCMU	-	BCMU	S	BCMU	S	BCMU	S	BCMU	S	ACT - 01	-	
115	MECHANICAL	CONC	S	BCMU/PC	-	BCMU	S	PC	P	BCMU	S	BCMU/PC	S/P	EXP	P	
115A	SPRINKLER ROOM	CONC	S	PC	-	PC	P	PC	P	BCMU	S	PC	S	EXP	P	
116	INSPECTIONS BAYS	CONC	FAF	PC	8" FAF	PC	EP	PC	EP	PC	EP	PC	EP	EXP	EP	SMOOTH RUBBED FINISH AT ALL EXPOSED CIP WALLS, SEE SPECIFICATIONS.
116A	STOR.	CONC	FAF	BCMU/PC	8" FAF	BCMU	EP	PC	EP	BCMU	EP	BCMU	EP	ACT - 01	-	
116B	INSPECTIONS TUNNEL	CONC	FAF	CONC	8" FAF	CONC	EP	CONC	EP	CONC	EP	CONC	EP	CONC	EP	SMOOTH RUBBED FINISH AT ALL EXPOSED CIP WALLS, SEE SPECIFICATIONS.
200	LOBBY	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	WPC/GB	-/-	SEE INTERIOR ELEVATIONS
200A	CIRCULATION	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
200B	CIRCULATION	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
200C	CIRCULATION	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
201	INTERVIEW	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
202	ADMIN CLERICAL	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
204	LARGE CONFERENCE	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	SEE INTERIOR ELEVATIONS
205	WOMEN	CONC	PCT	GB	PCT	GB	PCT/P	GB	PCT/P	GB	PCT/P	GB	PCT/P	GB	P	SEE INTERIOR ELEVATIONS
206	MEN	CONC	PCT	GB	PCT	GB	PCT/P	GB	PCT/P	GB	PCT/P	GB	PCT/P	GB	P	SEE INTERIOR ELEVATIONS
207	LIEUTENANT	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01		
208	CAPTAIN	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
209	OFFICE SUPPLIES	CONC	S	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
210	SUPPLY	CONC	S	GB/PC	4" RB	GB	P	GB	P	GB	P	GB	P	EXP	P	
211	MECH. ROOM	CONC	S	GB	4" RB	GB	P	GB	P	GB	P	GB	P	GB	P	
212	QUIET	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
213	BREAK ROOM	CONC	LVT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
214	TROOPERS	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
215	SERGEANTS	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
216	EMERGENCY MANAGEMENT	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
217	DISPATCH AREA	CONC	CPT/RAF	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
217A	BREAK	CONC	LVT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
217B	TELECOM	CONC	S	GB	4" RB	GB	P	GB	P	GB	P	GB	P	TBD	TBD	
217C	SUPERVISORS	CONC	CPT	GB	4" RB	GB	P	GB	P	GB	P	GB	P	ACT - 01	-	
217D	UNISEX	CONC	PCT	GB	4" RB	GB	PCT/P	GB	PCT/P	GB	PCT/P	GB	PCT/P	ACT - 01	-	SEE INTERIOR ELEVATIONS
218	JC	CONC	S	GB	4" RB	GB	FRP/P	GB	P	GB	P	GB	FRP/P	ACT - 01	-	

ROOM FINISH SCHEDULE NOTES

1. PROVIDE TRANSITION STRIP / THRESHOLD AT FLOORING TRANSITION
2. OMIT FLOOR BASE AT EXPOSED MASONRY / PRECAST FINISHES UNLESS NOTED OTHERWISE.
3. EPOXY COATING AT INSPECTION BAY PITS AND INSPECTION TUNNEL

ROOM FINISH SCHEDULE ABBREVIATIONS

ACT = ACOUSTIC CEILING TILE
BCMU = BURNISHED CONCRETE MASONRY UNIT
CONC = CONCRETE
CP = CARPET
CIP = CAST-IN-PLACE
CPT = CARPET TILE
CT = CERAMIC TILE
EP = EPOXY PAINT
EXP = EXPOSED
FRP = FIBERGLASS REINFORCED PANEL
FAF = FLUID APPLIED FLOOR - SEE SPEC 09 67 00
GB = GYPSUM BOARD
LVT = LUXURY VINYL TILE
MPC = METAL PANEL CEILING
P = PAINT
PC = PRECAST
PCT = PORCELAIN TILE
RAF = RAISED ACCESS FLOOR
RB = RESILIENT BASE
RWOM = RECESSED WALK-OFF MAT
S = SEALED
TRZ = PRECAST EPOXY TERRAZZO
WPC = WOOD PANEL CEILING

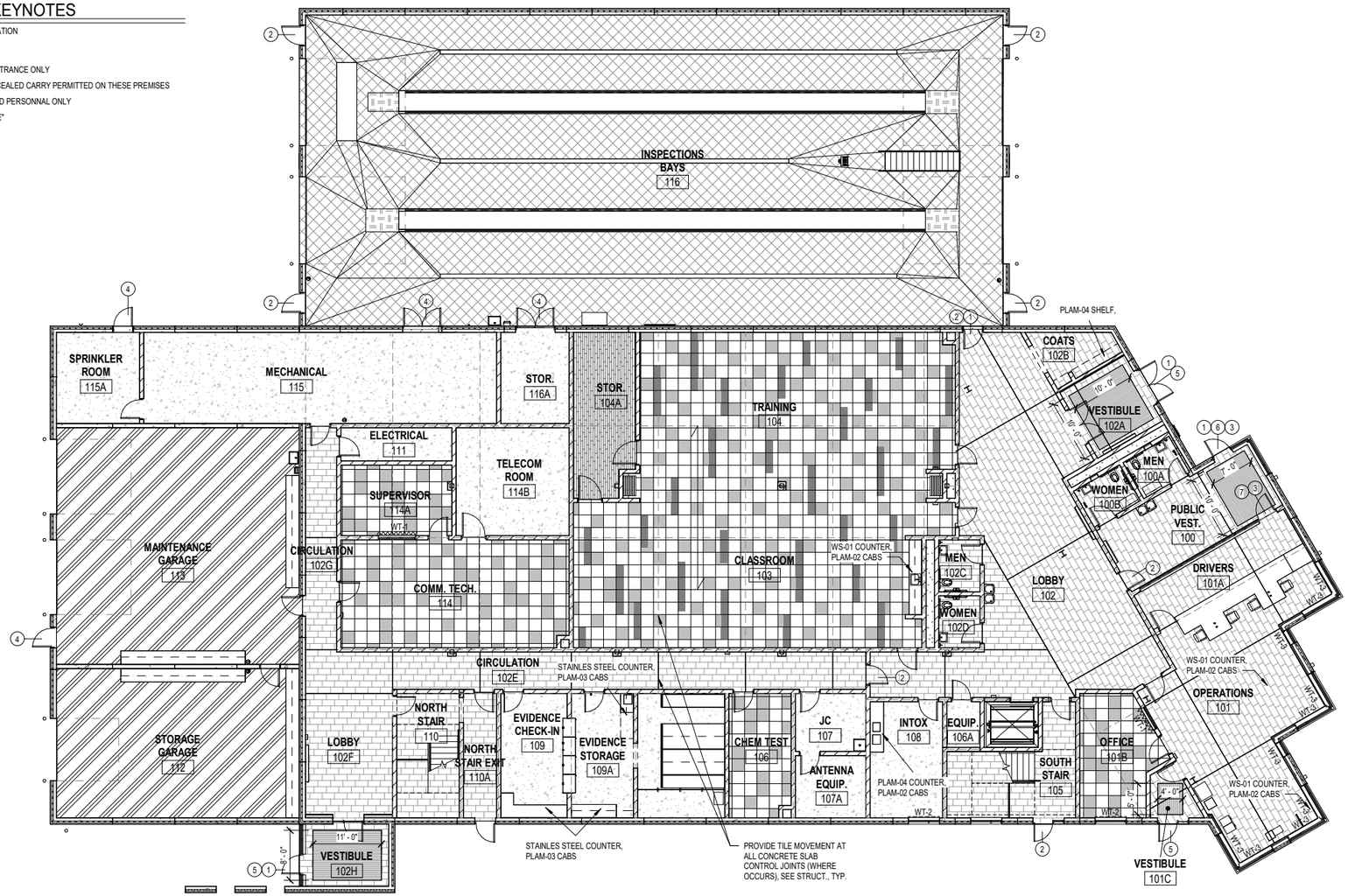
WINDOW TREATMENT SYMBOLS LEGEND

WT-1	ROLLING TINTED FILM SOLAR SHADE
WT-2	ROLLING FABRIC SOLAR SHADE
WT-3	ROLLING TINTED FILM SOLAR SHADE

FINISH MATERIAL KEYNOTES

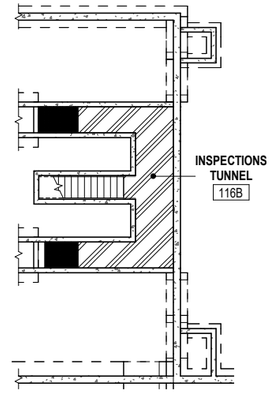
SEE SPECIFICATIONS FOR MORE INFORMATION

1. SIGN TYPE A, NO SMOKING
2. SIGN TYPE B, NOTICE EMPLOYEE ENTRANCE ONLY
3. SIGN TYPE C, NOTICE LAWFUL CONCEALED CARRY PERMITTED ON THESE PREMISES
4. SIGN TYPE D, KEEP OUT AUTHORIZED PERSONNAL ONLY
5. WHITE VINYL "EMPLOYEE ENTRANCE"
6. WHITE VINYL "PUBLIC ENTRANCE"
7. WHITE VINYL "DRIVERS ENTRANCE"



1 A801 MAIN LEVEL FINISH FLOOR PLAN
3/64" = 1' - 0"

0' 2' 5' 10'



2 A801 TUNNEL LEVEL FINISH FLOOR PLAN
3/64" = 1' - 0"

0' 2' 5' 10'

FINISH MATERIAL KEY

PCT - 01	LVT - 01
PCT - 02	LVT - 02
CTP - 01.A	TZR-01
CPT - 01.B	SEALED
CPT - 02.A	RWM = RECESSED WALK-OFF MAT
CPT - 02.B	FAF-01
CPT - 02.C	EPOXY

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MAIN LEVEL FINISH PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A801	191

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FINISH MATERIAL KEY

PCT - 01	LVT - 01
PCT - 02	LVT - 02
CTP - 01.A	TZR-01
CPT - 01.B	SEALED
CPT - 02.A	RWM = RECESSED WALK-OFF MAT
CPT - 02.B	FAF-01
CPT - 02.C	EPOXY

WINDOW TREATMENT SYMBOLS LEGEND

WT-1	ROLLING TINTED FILM SOLAR SHADE
WT-2	ROLLING FABRIC SOLAR SHADE
WT-3	ROLLING TINTED FILM SOLAR SHADE

FINISH MATERIAL KEYNOTES

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4. SIGN TYPE D, KEEP OUT AUTHORIZED PERSONNAL ONLY
5. WHITE VINYL "EMPLOYEE ENTRANCE"
6. WHITE VINYL "PUBLIC ENTRANCE"
7. WHITE VINYL "DRIVERS ENTRANCE"



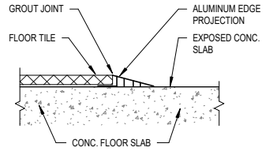
1 A802 UPPER LEVEL FINISH FLOOR PLAN
3/64" = 1'-0"

0' 2' 5' 10'

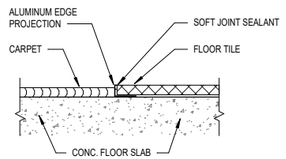
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			UPPER LEVEL FINISH PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A802	

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 10:59:46 AM

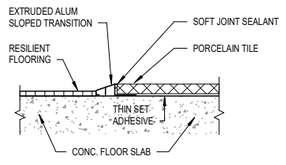
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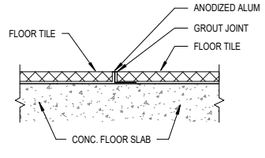
5 A803 TRANSITION - FLOOR TILE TO EXPOSED SLAB
1 1/2" = 1' - 0"



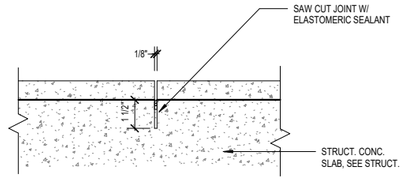
4 A803 TRANSITION - FLOOR TILE TO CARPET
1 1/2" = 1' - 0"



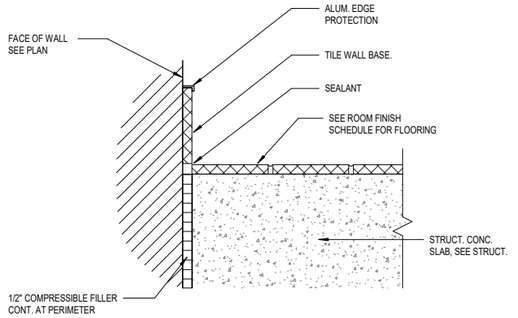
3 A803 TRANSITION - FLOOR TILE TO RESILIENT FLOORING
1 1/2" = 1' - 0"



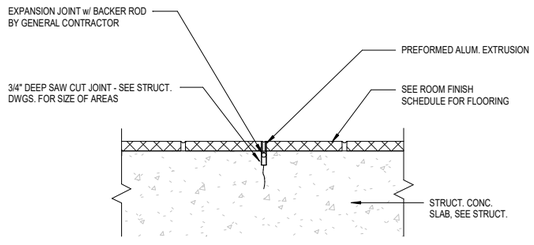
2 A803 FLOOR TILE MOVEMENT JOINT
1 1/2" = 1' - 0"



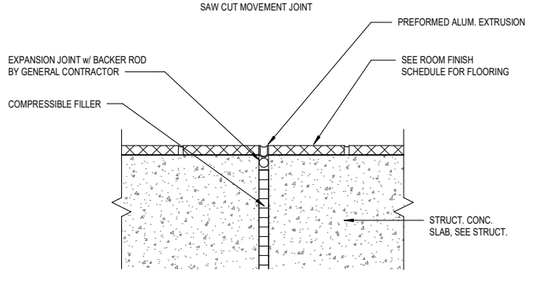
CONTROL JOINT @ CONC. SLAB IN INSPECTION BAY



FLOOR TILE PERIMETER JOINT & BASE

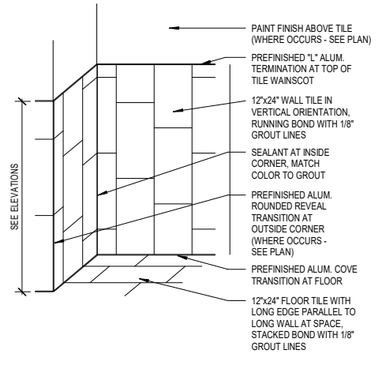


SAW CUT MOVEMENT JOINT



COLD JOINT & FIELD

1 A803 TILE DETAILS
1 1/2" = 1' - 0"



6 A803 TILE DETAIL @ WALL
NTS

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			FLOOR FINISH DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A803	193

EXTERIOR

PRECAST WALLS

SEE A204 FOR ADDITIONAL INFORMATION

EXTERIOR DOORS/ OPENINGS

FRP EXTERIOR DOORS

FPR-01 = FIBERGLASS REINFORCED PANEL DOOR (TYPE 1)
- MANUF: SHERWIN WILLIAMS
- COLOR: GRIZZLE GRAY 7068
- FINISH: SEMI GLOSS
- LOCATION: MAINTENANCE GARAGE, SPRINKLER ROOM
- NOTE: MANUFACTURED PRIMED AND PAINTED

FRP-02
- MANUF: SHERWIN WILLIAMS
- COLOR: PRAIRIE GRASS (SW 7546)
- FINISH: SEMI GLOSS
- LOCATION: INSPECTION BAY
- NOTE: MANUFACTURED PRIMED AND PAINTED

OH DOORS:

OHD-01 = OVERHEAD DOOR
- MANUF: CLOPAY
- COLOR: CHARCOAL
- TEXTURE: STUCCO
- LOCATION: INSPECTION BAYS

OHD-02 = OVER HEAD DOOR
- MANUF: CLOPAY
- COLOR: SANDSTONE
- TEXTURE: STUCCO
- LOCATION: STORAGE GARAGE
  MAINTENANCE GARAGE

ALUMINUM STOREFRONT/ CURTAIN WALL FRAME & WINDOWS (EXTERIOR & INTERIOR)
- MANUF: KAWNEER
- COLLECTION: PERMAFLUOR
- COLOR: CHARCOAL
- GLAZING: CLEAR
- LOCATION: SEE PLANS
- NOTE: COLOR TO MATCH SILL PRECAST BELOW
  SEE WINDOWSILL/ COPING FINISH NOTE

TRANSLUCENT PANELS

TP-01 = TRANSLUCENT PANELS (TYPE 1)
- MANUF: KALWALL
- PRODUCT: KALWALL CORROSION RESISTANT FINISH
- FINISH: 20% LIGHT TRANSMISSION
- EXTERIOR FACE: ICE BLUE
- INTERIOR FACE: CRYSTAL
- GRID PATTERN: VERTI-KAL, 10" SPACING
- LOCATION: SEE PLANS

FRAMES:
- MANUF: KALWALL
- PRODUCT: KALWALL CORROSION RESISTANT FINISH
- COLOR: COLOR TO MATCH ALUMINUM STOREFRONT AND CURTAIN WALL SYSTEM
- SILL: PAC-03
- LOCATION: SEE PLANS
- NOTE: COORDINATE WITH A/E PRIOR TO INSTALL

SILLS AND COPING

PAC-01
- MANUF: PAC-CLAD
- COLOR: ALMOND
- LOCATION: WHERE PC FINISH 1 IS USED BELOW
- NOTE: COORDINATE WITH A/E PRIOR TO INSTALL

PAC-02
- MANUF: PAC-CLAD
- COLOR: SLATE GREY
- LOCATION: WHERE PC FINISH 2 IS USED BELOW
- NOTE: COORDINATE WITH A/E PRIOR TO INSTALL

PAC-03
- MANUF: PAC-CLAD
- COLOR: GRAPHITE
- LOCATION: WHERE PC FINISH 3 IS USED BELOW
- NOTE: COORDINATE WITH A/E PRIOR TO INSTALL

EXTERIOR CONT.

METAL WALL SIDING PANEL
- MANUF: ATAS
- PRODUCT: VERSA-LOK
- COLOR: SLATE GREY
- FINISH: STANDARD
- LOCATION: SEE PLANS

METAL ROOF
- MANUF: PAC CLAD
- PRODUCT: SNAP CLAD
- COLOR: COLONIAL RED
- LOCATION: SEE PLANS

SNOW GUARD
- MANUF: PAC CLAD
- PRODUCT: COLOR GUARD SNOW RETENTION SYSTEM
- COLOR: COLOR TO MATCH STANDING SEAM ROOF
- LOCATION: SEE PLANS

FASCIA & SOFFIT
- MANUF: PAC CLAD
- COLOR: COLOR TO MATCH STANDING SEAM ROOF
- LOCATION: SEE PLANS

GUTTER
- MANUF: PAC CLAD
- PRODUCT: PAC-TITE
- COLOR: COLOR TO MATCH STANDING SEAM ROOF
- LOCATION: SEE PLANS

GUTTER SUPPORTS
- MANUF: SHERWIN WILLIAMS
- COLOR: RUSTIC RED (SW 7593)
- FINISH: SEMI GLOSS
- LOCATION: SEE PLANS

DOWNSPOUT
- MANUF: PAC CLAD
- COLOR 01: COLONIAL RED
- COLOR 02: SLATE GREY
- LOCATION: SEE DRAWINGS
- NOTE: COORDINATE WITH A/E PRIOR TO INSTALL

ALUMINUM SUN CANOPY
- MANUF: INDUSTRIAL LOUVERS
- CATEGORY: VERTA
- COLOR: COSMIC GRAY (399C9126FP)
- FINISH: METALIC
- LOCATION: SEE PLANS

STEEL CANOPY ASSEMBLY
- GUTTER/ FASCIA / SOFFIT:
- MANUF: PAC CLAD
- COLOR: GRAPHITE
- LOCATION: SEE PLANS

DEMINSIONAL LETTERING / SIGN
- MANUF: ASI SIGN SYSTEMS
- COLOR: DARK GREY
- FONT: CENTURY GOTHIC
- LOCATION: SEE PLANS FOR SIZING AND PLACEMENT

BOLLARDS
- REFER TO SPEC
- COLOR: SAFETY YELLOW
- FINISH: PLASTIC SLEEVE
- LOCATION: SEE PLAN

DUMPSTER ENCLOSURE

SEE A903 FOR PC FINISH AND ADDITIONAL INFORMATION
- BOLLARDS: GALVANIZED MTL.

DUMPSTER ENCLOSURE GATE CLADDING
- MANUF: AZEK
- DIVISION: TIMBERTECH
- COLLECTION: LANDMARK
- PRODUCT: COMPOSIT WOOD
- FINISH: CASTLE GATE
- INSTALLATION: SEE PLANS

INTERIOR

FLOORING

PORCELAIN CERAMIC TILE

PCT-01 = PORCELAIN CERAMIC TILE (TYPE 1)
- MANUF: DALTILE
- COLLECTION: VOLUME 1.0
- COLOR: AMPLIFY BLACK VL70
- TYPE: 12"x24" FLOOR & WALL TILE
- INSTALLATION: RUNNING BOND
- GROUT: ARDEX; CAST IRON 22
- LOCATION: RESTROOMS
- SCHLUTER – BRUSHED GRAPHITE ALUMINUM (AGRB)

PCT-02 = CERAMIC TILE (TYPE 2)
- MANUF: DALTILE
- COLLECTION: VOLUME 1.0
- COLOR: DEGREES SILVER VL71
- TYPE: 12"x24" FLOOR TILE
- INSTALLATION: RUNNING BOND
- GROUT: ARDEX; IRISH CREME 10
- LOCATION: UPPER LEVEL RESTROOMS
- BASE: TILE WALL BASE
- SCHLUTER – BRUSHED NICKEL ALUMINUM (ATGB)

CARPET TILE

CPT-01.A = CARPET TILE (TYPE 1.A)
- MANUF: INTERFACE
- COLLECTION: ICE BREAKER
- COLOR: MAGMA
- SIZE: 19.69" X 19.69"
- LAYOUT: 80% COVERAGE
- INSTALLATION: NON-DIRECTIONAL
- LOCATION: UPPER LEVEL, SEE FINISH PLAN

CPT-01.B = CARPET TILE (TYPE 1.B)
- MANUF: INTERFACE
- COLLECTION: ICE BREAKER
- COLOR: AGATE
- SIZE: 19.69" X 19.69"
- LAYOUT: 20% COVERAGE
- INSTALLATION: NON-DIRECTIONAL
- LOCATION: UPPER LEVEL, SEE FINISH PLAN

CPT-02.A = CARPET TILE (TYPE 2.A)
- MANUF: INTERFACE
- COLLECTION: OPEN AIR 423
- COLOR: LINEN (107092)
- SIZE: 19.69" X 19.69"
- LAYOUT: 50% COVERAGE
- INSTALLATION: BRICK
- LOCATION: MAIN LEVEL, SEE FINISH PLAN

CPT-02.B = CARPET TILE (TYPE 2.B)
- MANUF: INTERFACE
- COLLECTION: OPEN AIR 423
- COLOR: NATURAL (107088)
- SIZE: 19.69" X 19.69"
- LAYOUT: 40% COVERAGE
- INSTALLATION: BRICK
- LOCATION: MAIN LEVEL, SEE FINISH PLAN

CPT-02.C = CARPET TILE (TYPE 2.C)
- MANUF: INTERFACE
- COLLECTION: OPEN AIR 423
- COLOR: NAVY (107831)
- SIZE: 19.69" X 19.69"
- LAYOUT: 10% COVERAGE
- INSTALLATION: BRICK
- LOCATION: CLASSROOM (10%) SEE PLAN

LUXURY VINYL TILE

LVT-01 = LUXURY VINYL TILE (TYPE 1)
- MANUF: ARMSTRONG
- COLLECTION: COALESCE
- COLOR: OXIDIZE TIN ST881
- TYPE: 18x36
- INSTALLATION: RUNNING BOND
- LOCATION: SEE FINISH PLAN

LVT-02 = LUXURY VINYL TILE (TYPE 2)
- MANUF: ARMSTRONG
- COLLECTION: COALESCE
- COLOR: OXIDIZE RHODIUM ST884
- TYPE: 18x36
- INSTALLATION: RUNNING BOND
- LOCATION: SEE FINISH PLAN

FLUID APPLIED FLOOR

FAF-01 = FLUID APPLIED FLOOR
- MANUF: KEY RESIN COMPANY
- COLOR: WARM GREY
- LOCATION: INSPECTION BAY, INSPECTION PIT, & INSPECTION TUNNEL

FLOORING CONT.

PRECAST EPOXY TERRAZZO

TRZ-01= PRECAST EPOXY TERRAZZO
- MANUF: WAUSAU TILE
- SERIES: PRAIRIE - POLISHED
- COLOR: TZG76 CONE FLOWER
- INSTALLATION/ PATTERN: 1/2 RUNNING BOND
- TERRAZZO TILE TREADS: YES
- LOCATION: STAIRS
- NOTE: COORDINATE WITH A/E PRIOR INSTALLATION

RECESSED WALK-OFF MAT

RWM = RECESSED WALK-OFF MAT
- MANUF: BABCOCK DAVIS
- PRODUCT: QUIET FLEX ROLL UP (LDPE-HINGED MATS)
- DIMENSIONS: SEE PLANS
- INSTALLATION: RECESSED (AT TILE)
- LOCATION: SEE PLANS

WALLS

CMU

SEE A522 FOR ADDITIONAL INFORMATION

PAINT

PT-01 = WALL PAINT (TYPE #1)
- MANUF: SHERWIN WILLIAMS
- PRODUCT: HARMONY
- COLOR: GREEK VILLA (SW7551)
- FINISH: EGG-SHELL
- LOCATION: FIELD WHITE: WALL

PT-02 = WALL PAINT (TYPE #2)
- MANUF: SHERWIN WILLIAMS
- PRODUCT: HARMONY
- COLOR: CEILING BRIGHT WHITE
- FINISH: EGG-SHELL
- LOCATION: FIELD WHITE: CEILING

WALL TILE

SEE FLOOR TILE

PARTITION WALL

PW-01 = PARTITION WALL
- MANUF: MODERNFOLD
- PRODUCT: STANDARD LEN-TEX
- CATEGORY: LENNON GRASS
- COLOR: PRAIRIE
- TRIM & HINGES COLOR: NATURAL CHOICE
- LOCATION: SEE PLANS

EPOXY PAINT
- MANUF: SHERWIN WILLIAMS
- COLLECTION: HIGH PERFORMANCE EPOXY
- COLOR: HIGH REFLECTIVE WHITE (SW 7757)
- FINISH: GLOSS
- LOCATION: WALLS: WHERE OCCURS

WOOD TRIM
- SPECIES: CLEAR MAPLE
- STAIN: CLEAR
- LOCATION: WHERE OCCURS
- NOTE: TRIM TO MATCH DOORS

WALL BASE

RB-1 = RUBBER BASE (TYPE 1)
- MANUF: TARKETT
- COLLECTION: TRADITIONAL WALL BASE (4")
- COLOR: CHARCOAL WG

PCT = PORCELAIN CERAMIC TILE
- TILE BASE TO MATCH FLOOR TILE WHERE OCCURS
- UNLESS NOTED OTHERWISE ON THE ROOM FINISH SCHEDULE

INTERIOR DOORS

HM DOORS / HM FRAMES / HM WINDOW FRAMES
- MANUF: SHERWIN WILLIAMS
- PRODUCT: HARMONY
- COLOR: GRIZZLE GRAY (SW7068)
- FINISH: SEMI-GLOSS
- LOCATION: SEE SPECS
- NOTE: APPLIES TO ALL OTHER EXPOSED METALS

WOOD LEAFS (SEE DR SCHEDULE)
- MANUF: VT INDUSTRIES
- COLLECTION: ENVIROCLAD
- SPECIES: SELECT WHITE BIRCH
- CUT: PLAIN SLICED
- FINISH STAIN COLOR: CLEAR, CL18

WINDOWSILL

WS#01 = SOLID SURFACE WINDOW SILL
- MANUF: CAMBRIA
- COLLECTION: DESERT
- COLOR: MINNESOTA SNOW MATTE
- LOCATION: SEE SPECS

PLAM

PLAM-01:
- MANUF: FORMICA
- COLOR: ESPRESSO PEAR (5489)
- TEXTURE: MATTE
- DIRECTION: VERTICAL GRAIN RUN
- LOCATION: SEE FINISH PLANS

PLAM-02:
- MANUF: FORMICA
- COLOR: SILVER RIFTWOOD (6413)
- TEXTURE: MATTE
- DIRECTION: VERTICAL GRAIN RUN
- LOCATION: SEE FINISH PLANS

PLAM-03:
- MANUF: FORMICA
- COLOR: STORM (912)
- TEXTURE: MATTE
- DIRECTION: SOLID
- LOCATION: SEE FINISH PLANS

PLAM-04:
- MANUF: FORMICA
- COLOR: PALOMA POLAR (6698)
- TEXTURE: MATTE
- DIRECTION: NON-DIRECTIONAL
- LOCATION: SEE FINISH PLANS

INTERIOR SOLID SURFACE

WS-01 = SOLID SURFACE COUNTERTOP (TYPE 1)
- MANUF: CAMBRIA
- COLLECTION: DESERT
- COLOR: MINNESOTA SNOW MATTE
- LOCATION: SEE PLANS AND SPECS

WS-02 = SOLID SURFACE COUNTERTOP (TYPE 2)
- MANUF: CAMBRIA
- COLLECTION: DESERT
- COLOR: FIELDSTONE
- LOCATION: SEE PLANS AND SPECS

TOILET PARTITIONS
- MANUF: SCRANTON
- COLLECTION: ECLIPSE
- COLOR: SANDCASTLE
- INSTALLATION: FLOOR-MOUNTED / OVRHD BRACED
- FINISH: (ORANGE PEEL)
- LOCATION: MEN 206, WOMEN 205

SILL GRILL
- MANUF: PRICE INDUSTRIES
- PRODUCT LBP – LINEAR BAR GRILLE
- COLOR: WHITE
- LOCATION: IN SOLID SURFACE AT OPERATIONS

CEILING

ACT-01 = LAY-IN CEILING (TYPE 1)
- MANUF: ARMSTRONG
- COLLECTION: ULTIMA
- COLOR: WHITE
- TYPE: 24x24
- INSTALLATION: TEGULAR IN MTL. GRID
- GRID COLOR: COLOR TO MATCH
- LOCATION: ALL LOCATIONS UNLESS NOTED OTHERWISE

ACT-02 = LAY-IN CEILING (TYPE 2)
- MANUF: ARMSTRONG
- COLLECTION: CERAMAGUARD
- COLOR: WHITE
- TYPE: 24x24
- INSTALLATION: TEGULAR IN MTL. GRID
- GRID COLOR: COLOR TO MATCH
- LOCATION: INTOX

WPC-1 = LINEAR VENEERED WOOD CEILING PANELS (TYPE 1)
- MANUF: ARMSTRONG
- COLLECTION: WOODWORKS
- COLOR: PLAIN SLICE WHITE MAPLE (NWM)
- PLANK: 6" WIDE W/ 1/4" REVEAL
- PANEL SIZE: 24X96
- INSTALLATION:
- GRID COLOR: BLACK
- LOCATION: SEE PLAN

VERIFY ALL FINISHES WITH A/E PRIOR TO INSTALL

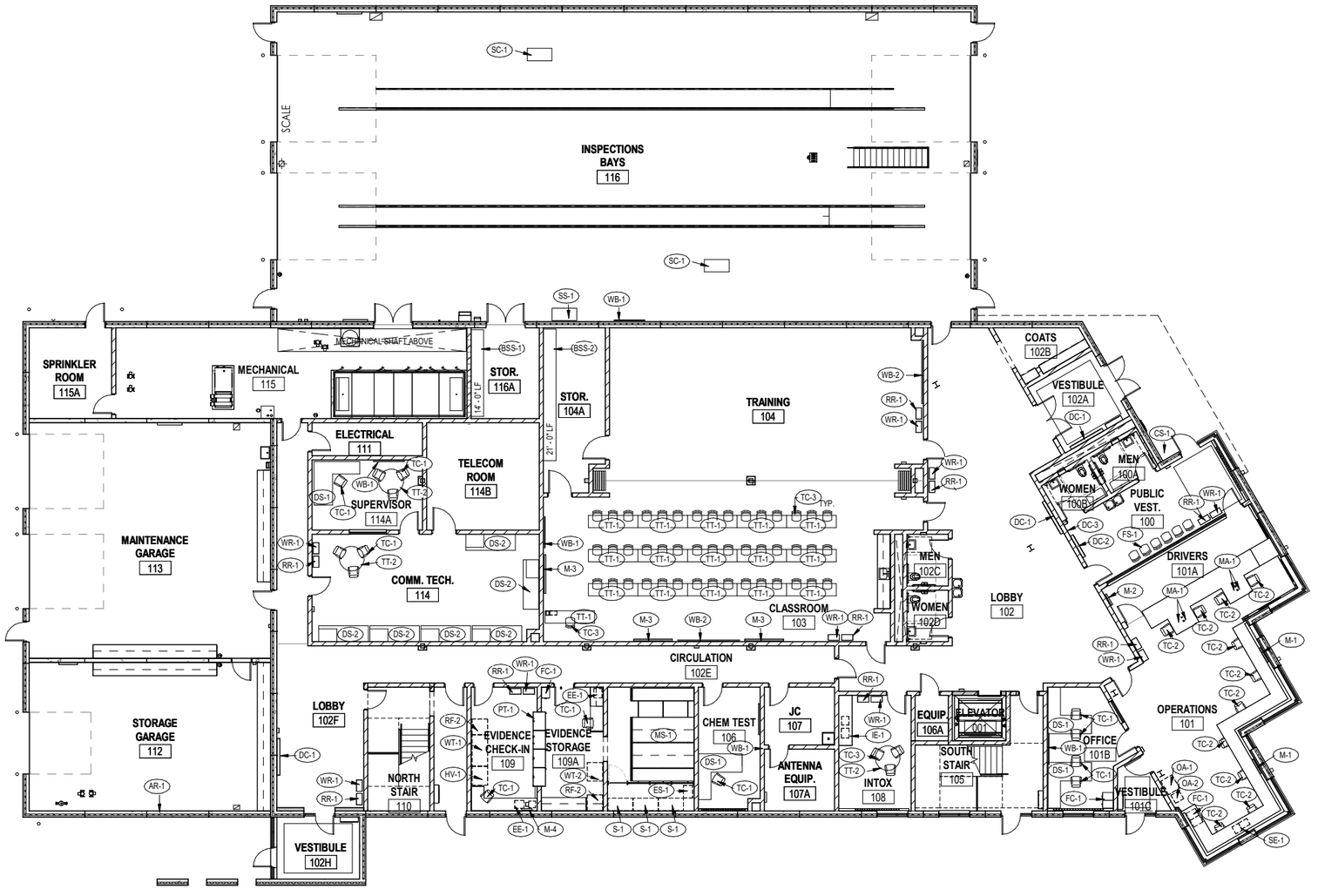
1 / A804 FINISH MATERIALS
N.T.S.

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			FINISH MATERIALS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A804	194

FURNITURE SCHEDULE - MAIN LEVEL					
ROOM LOCATION	LABEL	QTY	DESCRIPTION	PROVIDED BY	COMMENT
000 OUTSIDE	CS-1	1	CIGATETTE RECEPTACLE SNUFFER	CONTRACTOR	
100 PUBLIC VESTIBULE	DC-2	1	DISPLAY CASE 48" x 48"	CONTRACTOR	
100 PUBLIC VESTIBULE	DC-3	1	BROCHURE DISPLAY 22 3/4" x 20"	CONTRACTOR	
100 PUBLIC VESTIBULE	FS-1	6	FIXED SEATING	BCE	
100 PUBLIC VESTIBULE	RR-1	1	RECYCLING RECEPTACAL	OWNER	
100 PUBLIC VESTIBULE	WR-1	1	WASTE RECEPTICAL	OWNER	
101 OPERATIONS	FC-1	2	FILE CABINET	BCE	
101 OPERATIONS	M-1	2	34" MONITOR - TRAFFIC / SECURITY	OWNER	SEE NOTE 2
101 OPERATIONS	MA-1	4	MONITOR ARMS FOR DUAL MONITORS	OWNER	
101 OPERATIONS	OA-1	1	PRINTER/COPIER	OWNER	
101 OPERATIONS	OA-2	1	PAPER SHREDDER	OWNER	
101 OPERATIONS	RR-1	1	RECYCLING RECEPTACAL	OWNER	
101 OPERATIONS	SE-1	2	SCALE EQUIPMENT	OWNER	
101 OPERATIONS	TC-2	11	TASK CHAIR - HIGH COUNTER HEIGHT	BCE	
101 OPERATIONS	WR-1	1	WASTE RECEPTICAL	OWNER	
101A DRIVERS	M-2	1	27" MONITOR - WEATHER	OWNER	SEE NOTE 2
101B OFFICE	DS-1	2	OFFICE DESK	BCE	
101B OFFICE	FC-1	2	FILE CABINET	BCE	
101B OFFICE	TC-1	4	TASK CHAIR - STANDARD HEIGHT	BCE	
101B OFFICE	WB-1	1	WHITE BOARD 5'X4'	CONTRACTOR	SEE NOTE 1
102 LOBBY	DC-1	1	DISPLAY CASE 72" x 48"	CONTRACTOR	
102 LOBBY	RR-1	1	RECYCLING RECEPTICAL	OWNER	
102 LOBBY	WR-1	1	WASTE RECEPTICAL	OWNER	
102A VESTIBULE	DC-1	1	DISPLAY CASE 72" x 48"	OWNER	
102F LOBBY	DC-1	1	DISPLAY CASE 72" x 48"	CONTRACTOR	
102F LOBBY	RR-1	1	RECYCLING RECEPTICAL	OWNER	
102F LOBBY	WR-1	1	WASTE RECEPTICAL	OWNER	
103 CLASSROOM	M-3	3	85" FLAT SCREEN TV	OWNER	SEE NOTE 2
103 CLASSROOM	RR-1	1	RECYCLING RECEPTICAL	OWNER	
103 CLASSROOM	TC-3	46	GUEST TASK CHAIR - STANDARD HEIGHT	BCE	
103 CLASSROOM	TT-1	16	TRAINING TABLE 6' x 2'	BCE	
103 CLASSROOM	WB-1	1	WHITE BOARD 5' X 4'	CONTRACTOR	SEE NOTE 1
103 CLASSROOM	WB-2	1	WHITE BOARD 10' x 4'	CONTRACTOR	SEE NOTE 1
103 CLASSROOM	WR-1	1	WASTE RECEPTICAL	OWNER	
104 TRAINING	RR-1	1	RECYCLING RECEPTICAL	OWNER	
104 TRAINING	WB-2	1	WHITE BOARD 10' x 4'	CONTRACTOR	SEE NOTE 1
104 TRAINING	WR-1	1	WASTE RECEPTICAL	OWNER	
106 CHEM TEST	DS-1	1	OFFICE DESK	BCE	
106 CHEM TEST	TC-1	1	TASK CHAIR - STANDARD HEIGHT	BCE	
106 CHEM TEST	WB-1	1	WHITE BOARD 5'X4'	CONTRACTOR	SEE NOTE 1
108 INTOX	IE-1	2	INTOX EQUIPMENT	OWNER	
108 INTOX	RR-1	1	RECYCLING RECEPTACAL	OWNER	
108 INTOX	TC-3	1	GUEST TASK CHAIR - STANDARD HEIGHT	BCE	
108 INTOX	TT-2	1	TRAINING TABLE - 4' DIA. ROUND	BCE	
108 INTOX	WR-1	1	WASTE RECEPTICAL	OWNER	
109 EVIDENCE CHECK-IN	EE-1	4	EVIDENCE EQUIPMENT	OWNER	
109 EVIDENCE CHECK-IN	HV-1	1	HOOD VENT	OWNER	
109 EVIDENCE CHECK-IN	M-4	1	24" MONITOR - CASH COUNTER	OWNER	
109 EVIDENCE CHECK-IN	RF-2	1	CHEST FREEZER - MED	OWNER	
109 EVIDENCE CHECK-IN	RR-1	1	RECYCLING RECEPTACAL	OWNER	
109 EVIDENCE CHECK-IN	TC-1	1	TASK CHAIR - STANDARD HEIGHT	BCE	
109 EVIDENCE CHECK-IN	WR-1	1	WASTE RECEPTICAL	OWNER	
109 EVIDENCE CHECK-IN	WT-1	1	SS WORK TABLE - 5' x 2'6"	CONTRACTOR	
109A EVIDENCE STORAGE	ES-1	1	EVIDENCE SAFE	OWNER	
109A EVIDENCE STORAGE	FC-1	1	FILE CABINET	BCE	
109A EVIDENCE STORAGE	MS-1	1	MOBILE STORAGE	CONTRACTOR	
109A EVIDENCE STORAGE	PT-1	1	PASS THROUGH LOCKERS	CONTRACTOR	
109A EVIDENCE STORAGE	RF-2	1	CHEST FREEZER - MED	OWNER	
109A EVIDENCE STORAGE	S-1	3	FIXED SHELVING	CONTRACTOR	
109A EVIDENCE STORAGE	TC-1	1	TASK CHAIR - STANDARD HEIGHT	BCE	
109A EVIDENCE STORAGE	WT-2	1	SS WORK TABLE - 3' x 2'6"	CONTRACTOR	
112 STORAGE GARAGE	AR-1	1	ANTENNEA RACK	CONTRACTOR	
114 COMM. TECH	DS-2	6	COMM TECH STATION	BCE	
114 COMM. TECH	RR-1	1	RECYCLING RECEPTICAL	OWNER	
114 COMM. TECH	TC-1	3	TASK CHAIR - STANDARD HEIGHT	BCE	
114 COMM. TECH	TT-2	1	TRAINING TABLE - 4' DIA. ROUND	BCE	
114 COMM. TECH	WR-1	1	WASTE RECEPTICAL	OWNER	
114A SUPERVISOR	DS-1	1	OFFICE DESK	BCE	
114A SUPERVISOR	TC-1	4	TASK CHAIR - STANDARD HEIGHT	BCE	
114A SUPERVISOR	TT-2	1	TRAINING TABLE - 4' DIA. ROUND	BCE	
114A SUPERVISOR	WB-1	1	WHITE BOARD 5'X4'	CONTRACTOR	SEE NOTE 1
116 INSPECTIONS BAY	SC-1	2	STEEL WORKERS CART	CONTRACTOR	
116 INSPECTIONS BAY	SS-1	1	STORAGE SHED CABINET	OWNER	
116 INSPECTIONS BAY	WB-1	1	WHITE BOARD 5'X4'	CONTRACTOR	SEE NOTE 1
116 INSPECTIONS BAY	WC-1	2	STEEL WORKERS CART	CONTRACTOR	
116A STOR.	BSS-1	1	ADJUSTABLE PLASTIC LAMINATE SHELVING	CONTRACTOR	
116A STOR.	BSS-2	1	ADJUSTABLE PLASTIC LAMINATE SHELVING	OWNER	

GENERAL PLAN NOTES

1. ALL WHITEBOARD SILLS TO BE MOUNTED AT 2'-10" A.F.F.
2. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING AS REQUIRED AT AT FRAMED WALLS CAPABLE OF SUPPORTING 125 LBS MINIMUM. COORDINATE WITH POWER AND I.T. REQUIREMENTS. SEE E-SERIES SHEETS.
3. (2) MONITORS STACKED AT EACH LOCATION.
4. FOR ADJUSTABLE LAMINATE SHELVING (W/ BRACKETS AND STANDARDS) SEE 15 / A581



2 A901 MAIN LEVEL REFERENCE FURNISHING PLAN
3/64" = 1'-0"
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MAIN LEVEL FURNITURE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A901	195

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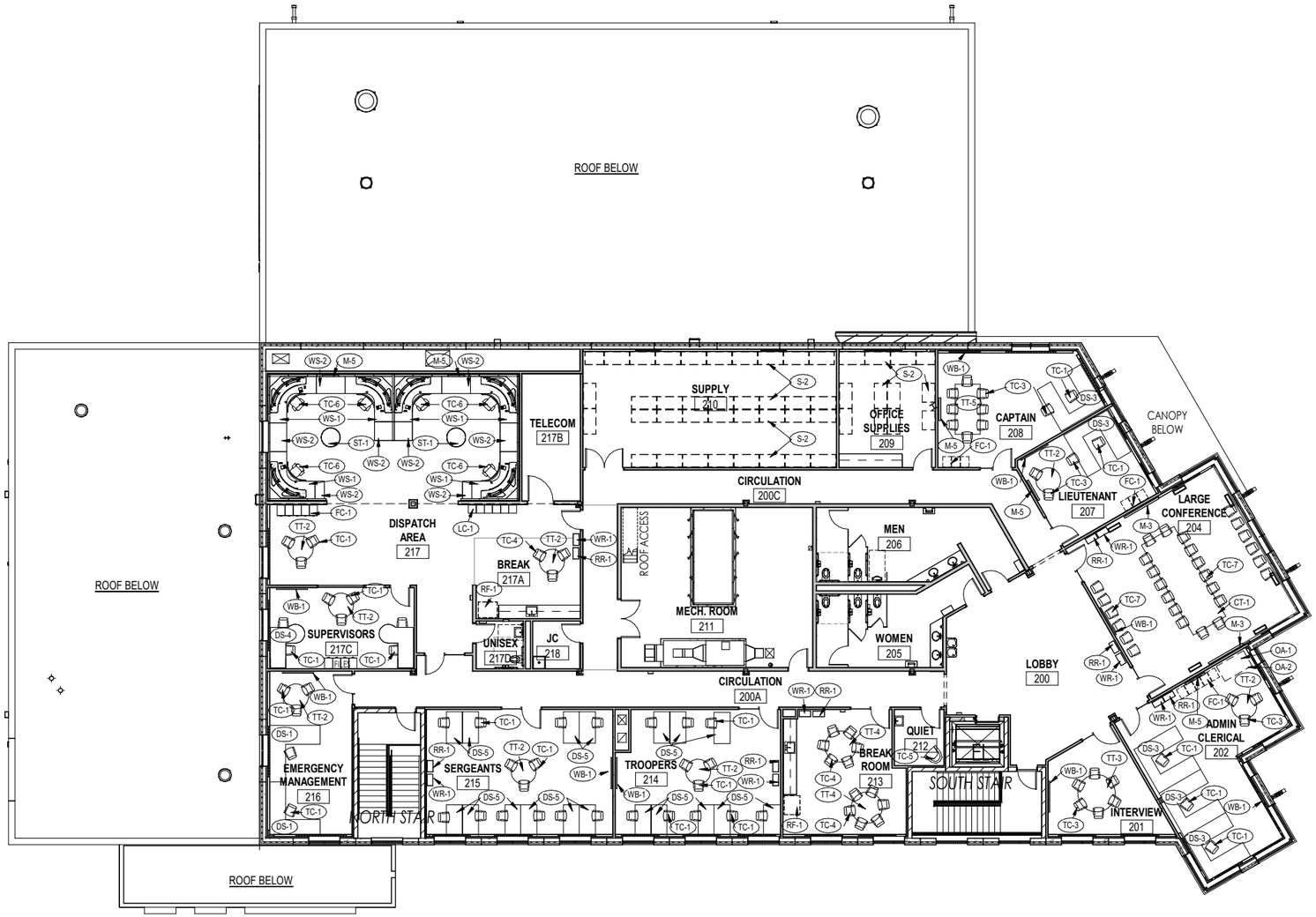
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FURNITURE SCHEDULE - UPPER LEVEL

ROOM LOCATION	LABEL	QTY	DESCRIPTION	PROVIDED BY	COMMENT
200 LOBBY	RR-1	1	RECYCLING RECEPTICAL	OWNER	
200 LOBBY	WR-1	1	WASTE RECEPTICAL	OWNER	
201 INTERVIEW	RR-1	1	RECYCLING RECEPTICAL	OWNER	
201 INTERVIEW	TC-3	1	GUEST TASK CHAIR - STANDARD HEIGHT	BCE	
201 INTERVIEW	TT-3	1	TRAINING TABLE - 6' DIA. ROUND	BCE	
201 INTERVIEW	WB-1	1	WHITE BOARD 5'X4'	CONTRACTOR	SEE NOTE 1
201 INTERVIEW	WR-1	1	WASTE RECEPTICAL	OWNER	
202 ADMIN CLERICAL	DS-3	3	OFFICE DESK - U SHAPED	BCE	
202 ADMIN CLERICAL	FC-1	5	FILE CABINET	BCE	
202 ADMIN CLERICAL	M-5	1	50" FLAT SCREEN TV	OWNER	SEE NOTE 2
202 ADMIN CLERICAL	OA-1	1	PRINTER/COPIER	OWNER	
202 ADMIN CLERICAL	OA-2	1	PAPER SHREDDER	OWNER	
202 ADMIN CLERICAL	RR-1	1	RECYCLING RECEPTICAL	OWNER	
202 ADMIN CLERICAL	TC-1	3	TASK CHAIR - STANDARD HEIGHT	BCE	
202 ADMIN CLERICAL	TC-3	3	GUEST TASK CHAIR - STANDARD HEIGHT	BCE	
202 ADMIN CLERICAL	TT-2	1	TRAINING TABLE - 4' DIA. ROUND	BCE	
202 ADMIN CLERICAL	WB-1	1	WHITE BOARD 5'X4'	CONTRACTOR	SEE NOTE 1
202 ADMIN CLERICAL	WR-1	1	WASTE RECEPTICAL	OWNER	
204 LARGE CONFERENCE	CT-1	1	LARGE CONFRENCE TABLE	BCE	
204 LARGE CONFERENCE	M-3	2	85" FLAT SCREEN TV	OWNER	SEE NOTE 2
204 LARGE CONFERENCE	RR-1	1	RECYCLING RECEPTICAL	OWNER	
204 LARGE CONFERENCE	TC-1	28	TASK CHAIR - STANDARD HEIGHT	BCE	
204 LARGE CONFERENCE	TC-7	28	CONFRENCE CHAIR - STANDARD HEIGHT	BCE	
204 LARGE CONFERENCE	WR-1	1	WASTE RECEPTICAL	OWNER	
207 LIEUTENANT	DS-3	3	OFFICE DESK - U SHAPED	BCE	
207 LIEUTENANT	FC-1	3	FILE CABINET	BCE	
207 LIEUTENANT	M-5	1	50" FLAT SCREEN TV	OWNER	SEE NOTE 2
207 LIEUTENANT	TC-1	4	TASK CHAIR - STANDARD HEIGHT	BCE	
207 LIEUTENANT	TC-3	3	GUEST TASK CHAIR - STANDARD HEIGHT	BCE	
207 LIEUTENANT	TT-2	1	TRAINING TABLE - 4' DIA. ROUND	BCE	
208 CAPTAIN	DS-3	3	OFFICE DESK - U SHAPED	BCE	
208 CAPTAIN	FC-1	3	FILE CABINET	BCE	
208 CAPTAIN	M-5	1	50" FLAT SCREEN TV	OWNER	SEE NOTE 2
208 CAPTAIN	TC-1	10	TASK CHAIR - STANDARD HEIGHT	BCE	
208 CAPTAIN	TT-5	1	TRAINING TABLE - 4' X 8'	BCE	
209 OFFICE SUPPLIES	S-2	12	BOLTLESS SHELVING	CONTRACTOR	
210 SUPPLY	S-2	36	BOLTLESS SHELVING	CONTRACTOR	
212 QUIET	TC-5	1	ARM CHAIR	BCE	
213 BREAK ROOM	RF-1	1	REFRIGERATOR	OWNER	
213 BREAK ROOM	RR-1	1	RECYCLING RECEPTICAL	OWNER	
213 BREAK ROOM	TC-4	12	PLASTIC CHAIR - STANDARD HEIGHT	BCE	
213 BREAK ROOM	TT-4	2	TRAINING TABLE - 5' DIA. ROUND	BCE	
213 BREAK ROOM	WR-1	1	WASTE RECEPTICAL	OWNER	
214 TROOPERS	RR-1	1	RECYCLING RECEPTICAL	OWNER	
214 TROOPERS	TC-1	11	TASK CHAIR - STANDARD HEIGHT	BCE	
214 TROOPERS	WR-1	1	WASTE RECEPTICAL	OWNER	
215 SERGEANTS	DS-5	10	OFFICE DESK	BCE	
215 SERGEANTS	RR-1	1	RECYCLING RECEPTICAL	OWNER	
215 SERGEANTS	TC-1	13	TASK CHAIR - STANDARD HEIGHT	BCE	
215 SERGEANTS	WR-1	1	WASTE RECEPTICAL	OWNER	
216 EMERGENCY MANAGEMENT	DS-1	2	OFFICE DESK	BCE	
216 EMERGENCY MANAGEMENT	TC-1	5	TASK CHAIR - STANDARD HEIGHT	BCE	
216 EMERGENCY MANAGEMENT	TT-2	1	TRAINING TABLE - 4' DIA. ROUND	BCE	
217 DISPATCH AREA	FC-1	5	FILE CABINET	BCE	
217 DISPATCH AREA	LC-1	6	2 COMPARTMENT LOCKER W/ COAT HOOK	CONTRACTOR	
217 DISPATCH AREA	M-5	4	34" MONITOR - STACKED	OWNER	SEE NOTE 2 & NOTE 3
217 DISPATCH AREA	ST-1	2	LAZY SUSAN STORAGE TABLE	CONTRACTOR	
217 DISPATCH AREA	TC-1	3	TASK CHAIR - STANDARD HEIGHT	BCE	
217 DISPATCH AREA	TC-6	6	DISPATCH TASK CHAIR - STANDARD HEIGHT	CONTRACTOR	
217 DISPATCH AREA	TT-2	1	TRAINING TABLE - 4' DIA. ROUND	BCE	
217 DISPATCH AREA	WS-1	6	DISPATCH WORKSTATION	CONTRACTOR	SEE SPECS
217 DISPATCH AREA	WS-2	8	DISPATCH WORKSTATION - CABINET	CONTRACTOR	SEE SPECS
217A BREAK ROOM	RF-1	1	REFRIGERATOR	OWNER	
217A BREAK ROOM	RR-1	1	RECYCLING RECEPTICAL	OWNER	
217A BREAK ROOM	TC-4	3	PLASTIC CHAIR - STANDARD HEIGHT	BCE	
217A BREAK ROOM	TT-2	1	TRAINING TABLE - 4' DIA. ROUND	BCE	
217A BREAK ROOM	WR-1	1	WASTE RECEPTICAL	OWNER	
217C SUPERVISORS	DS-4	2	OFFICE DESK	BCE	
217C SUPERVISORS	TC-1	7	TASK CHAIR - STANDARD HEIGHT	BCE	
217C SUPERVISORS	TT-2	1	TRAINING TABLE - 4' DIA. ROUND	BCE	

GENERAL PLAN NOTES

1. ALL WHITEBOARD SILLS TO BE MOUNTED AT 2'-10" A.F.F.
2. CONTRACTOR TO PROVIDE BLOCKING/STRAPPING AS REQUIRED AT AT FRAMED WALLS CAPABLE OF SUPPORTING 125 LBS MINIMUM. COORDINATE WITH POWER AND I.T. REQUIREMENTS, SEE E-SERIES SHEETS.
3. (2) MONITORS STACKED AT EACH LOCATION.
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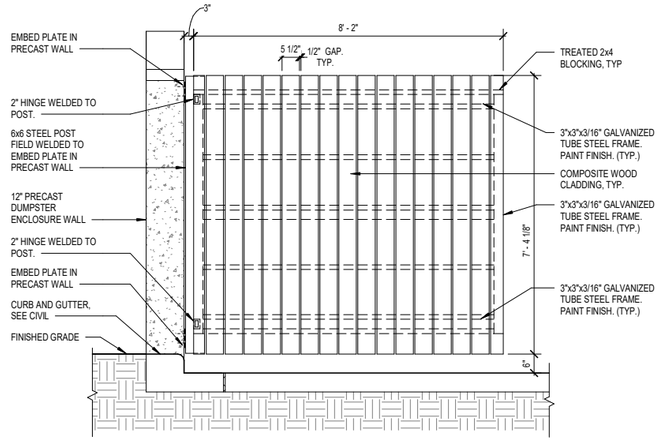


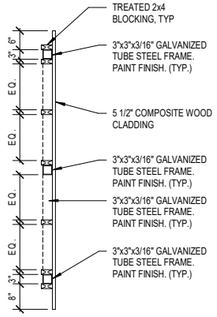
1 A902 UPPER LEVEL REFERENCE FURNISHINGS PLAN
3/ 64" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			UPPER LEVEL FUNITURE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A902	196

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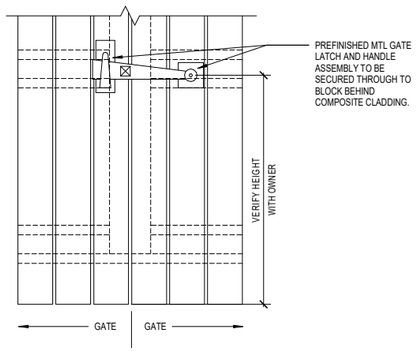




GATE SECTION

8 A903 DUMPSTER ENCLOSURE GATE DETAIL
1/4" = 1'-0"

0" 6" 1' 3'

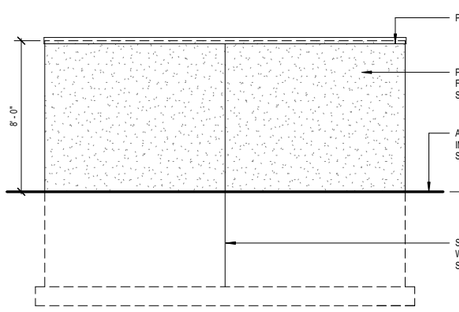


5 A903 DUMPSTER ENCLOSURE GATE LATCH DETAIL
1/2" = 1'-0"

0" 3" 6" 1' - 6"

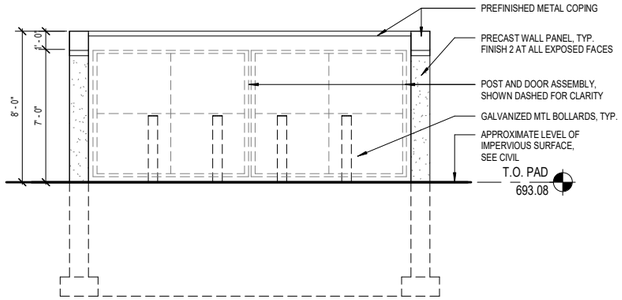
3 A903 DUMPSTER ENCLOSURE ELEVATION
1/8" = 1' - 0"

0' 1' 2' 5'



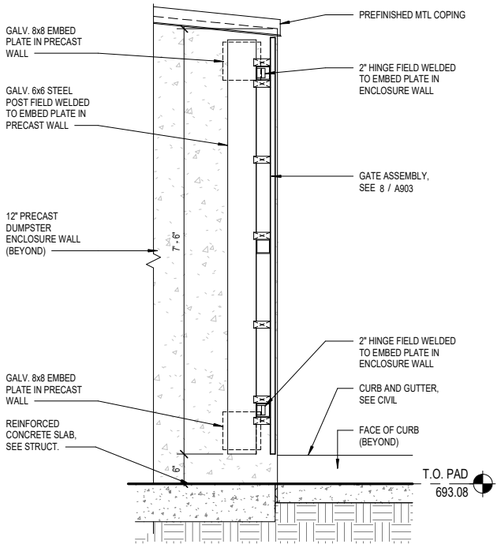
4 A903 DUMPSTER ENCLOSURE ELEVATION
1/8" = 1' - 0"

0' 1' 2' 5'



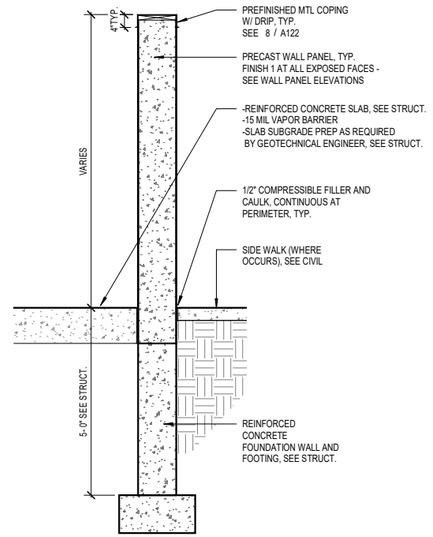
2 A903 DUMPSTER ENCLOSURE ELEVATION
1/8" = 1' - 0"

0' 1' 2' 5'



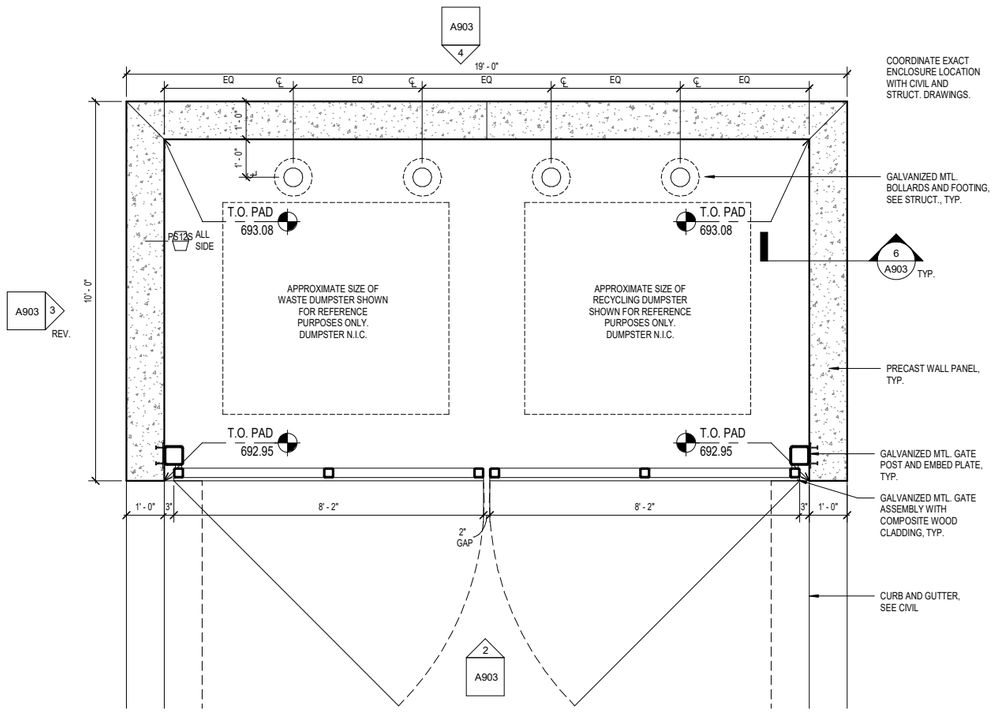
7 A903 DUMPSTER ENCLOSURE GATE END VIEW
3/8" = 1'-0"

0" 4" 8" 2'



6 A903 WALL SECTION - DUMPSTER ENCLOSURE
1/4" = 1' - 0"

0" 6" 1' 3'



1 A903 ENLARGED PLAN - DUMPSTER ENCLOSURE
1/4" = 1' - 0"

0" 6" 1' 3'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			DUMPSTER ENCLOSURE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. A903	

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GENERAL

1. NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER THESE STANDARD STRUCTURAL NOTES. SEE SHEET S-002 FOR ADDITIONAL NOTES AND DESIGN LOAD DATA.

2. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING CODES, SPECIFICATIONS, AND DESIGN MANUAL (LATEST EDITION UNLESS NOTED) AND REFERENCED STANDARDS:
   A. INTERNATIONAL CODE COUNCIL INTERNATIONAL BUILDING CODE (IBC-2018)
   B. AMERICAN SOCIENTY OF CIVIL ENGINEERS MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE/SEI 7-16)
   C. AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, STANDARD (ACI 318-17)
   D. AMERICAN CONCRETE INSTITUTE CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES (ACI 350)
   E. AMERICAN CONCRETE INSTITUTE/THE MASONRY SOCIETY BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530-13/TMS 402-13)
   F. CONCRETE REINFORCING STEEL INSTITUTE (CRSI) MANUAL OF STANDARD PRACTICE
   G. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) STEEL CONSTRUCTION MANUAL, 15TH EDITION
   H. PRESTRESSED/PRECAST CONCRETE INSTITUTE DESIGN HANDBOOK, 8TH EDITION, 2017
   I. STATE AND FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS

3. REFER TO SPECIFICATIONS FOR INFORMATION NOT COVERED BY THESE NOTES OR DRAWINGS.

4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS BEFORE STARTING WORK, AND THE ENGINEER/ARCHITECT SHALL BE IMMEDIATELY NOTIFIED, IN WRITING, OF ANY DISCREPANCIES.

5. IN NO CASE SHALL DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON THE STRUCTURAL DRAWINGS.

6. TYPICAL DETAILS SHALL BE USED WHENEVER APPLICABLE.

7. ALL OMISSIONS AND CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF, AND RESOLVED WITH THE ENGINEER/ARCHITECT BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.

8. THE STRUCTURE IS DESIGNED FOR IN-SERVICE LOADS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION AND ADEQUACY OF THE STRUCTURE TO SUPPORT TEMPORARY CONSTRUCTION LOADS.

9. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF UTILITY SERVICES IN THE AREA TO BE EXCAVATED BEFORE BEGINNING EXCAVATION.

10. NO PIPES, DUCTS, SLEEVES, CHASES, ETC., SHALL BE PLACED IN SLABS OR WALLS, NOR SHALL ANY STRUCTURAL MEMBER BE CUT FOR PIPES, DUCTS, ETC. WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE EOR.

11. RECESSES, DEPRESSIONS, DIMENSIONS, ELEVATIONS, OPENINGS, EQUIPMENT SUPPORTS, AND DETAILS SHALL BE VERIFIED BY REFERENCE TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. OPENINGS, REQUIRED BUT NOT SHOWN, MUST BE PLACED BETWEEN STRUCTURAL MEMBERS.

12. TEMPORARY BRACING:
   A. PROVIDE TEMPORARY LATERAL SUPPORT FOR ALL WALLS WHERE GRADE VARIES ON THE TWO SIDES UNTIL PERMANENT STRUCTURAL SUPPORT SYSTEM IS IN PLACE.
   B. PROVIDE TEMPORARY BRACING FOR ALL BUILDING ELEMENTS AND COMPONENTS UNTIL THE STRUCTURE IS SUFFICIENTLY COMPLETE TO PROVIDE PERMANENT BRACING.

13. ALTERNATE STRUCTURAL SYSTEMS & DETAILS WILL ONLY BE CONSIDERED, PROVIDED THEY ARE SUBMITTED WITH CALCULATIONS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT. THE CALCULATIONS MUST SHOW THE EQUIVALENCY OF THE ALTERNATE. ACCEPTANCE OF THE ALTERNATE BY THE STRUCTURAL ENGINEER OF RECORD MUST BE IN WRITING.

14. ALL NON-STRUCTURAL COMPONENTS SHALL BE DESIGNED BY A REGISTERED ENGINEER IN THE PROJEC TLOCALITY TO MEET THE REQUIREMENTS OF THE LOCAL BUILDING CODE AND AS SET FORTH IN THE PROJECT DRAWINGS AND SPECIFICATIONS. SIGNED AND SEALED CALCULIATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATIONS AND CONSTRUCTION. ITEMS INCLUDE BUT ARE NOT LIMITED TO STAIRS, RAILINGS, WINDWO SYSTEMS, METAL STUDS, STRUCTURAL STEEL CONNECTIONS, PREFABRICATED STRUCTURAL COMPONENTS, SUPPORT OF EXCAVATION SYSTEMS, SCAFFOLDING, ETC.

15. CBS SQUARED REQUIRES A LETTER FROM THE TESTING AGENCY CERTIFYING ALL TESTING AND INSPECTIONS WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE STATEMENT OF SPECIAL INSPECTIONS AND THAT ALL STRUCTURAL NONCONFORMANCE ITEMS HAVE BEEN RESOLVED TO THE SATISFACTION OF THE STRUCTURAL ENGINEER.

16. SPECIAL INSPECTIONS ARE REQUIRED FOR THIS PROJECT. SEE SPECIFICATION SECTION 014000 FOR REQUIRED INSPECTIONS AND ADDITIONAL INFORMATION.

FOOTINGS AND FOUNDATIONS

1. FOUNDATIONS, PIT WALLS, FOUNDATION DRAINAGE, SLABS ON GRADE, & OTHER ITEMS RELATED TO TEH SOILS ARE DESIGNED & SHALL BE CONSTRUCTED IN ACCORDANCW WITH THE RECOMMENDATIONS OF AMERICAN ENGINEERING TESTING (AET) PROJECT NUMBER P-0016383, DATED 12/06/2022.

2. ALL SOIL PROPERTIES, INCLUDING SOIL BEARING PRESSURE, SHALL BE FIELD VERIFIED BY SOILS ENGINEER PRIOR TO PLACING FOOTINGS.

3. ALL SITE SOIL WORK SHALL BE DONE UNDER THE DIRECT OBSERVATION OF A SOILS ENGINEER.

4. WATER LEVELS INDICATED ON BORING LOGS ARE SUBJECT TO SEASONAL AND/OR ANNUAL VARIATIONS. IF NECESSARY A DEWATERING SYSTEM OF SUFFICIENT CAPACITY SHALL BE INSTALLED AND OPERATED TO MAINTAIN THE CONSTRUCTION AREA FREE OF WATER AT ALL TIMES.

5. MINIMUM DEPTH FROM EXTERIOR GRADE TO BOTTOM OF FOOTING NOT ADJACENT TO HEATED SPACE SHALL BE 60 INCHES.

6. PROTECT FOUNDATION EXCAVATIONS FROM FROST; DO NOT PLACE CONCRETE ON FROZEN GROUND.

7. FOUNDATION EXCAVATIONS SHALL BE KEPT FREE OF LOOSE MATERIAL AND STANDING WATER AND SHALL BE CHECKED AND APPROVED BY THE SOILS ENGINEER BEFORE THE PLACEMENT OF ANY CONCRETE.

8. WALL FOOTINGS ARE CONTINUOUS POURED CONCRETE WITH CONTINUOUS REINFORCING PLACED 3" CLEAR OF BOTTOM AND SIDES.

9. PROVIDE 24 DIA. LAP AT SPLICES AND FULL CROSSING LAP AT CORNERS AND INTERSECTIONS.

10. UNLESS OTHERWISE NOTED, WALL FOOTINGS ARE CENTERED UNDER WALLS AND COLUMN FOOTINGS UNDER COLUMNS.

11. FOOTINGS FOR WALLS NOT NOTED SHALL BE 12" THICK WITH A MINIMUM PROJECTION OF 4" EACH SIDE WITH 2-#5 CONTINUOUS.

12. BOTH SIDES OF FOUNDATION WALLS SHALL BE BACKFILLED SIMULTANEOUSLY SO AS TO PREVENT OVERTURNING OR LATERAL MOVEMENT OF WALLS.

REINFORCED CONCRETE

1. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301 (LATEST EDITION) "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", EXCEPT AS MODIFIED BY THESE NOTES.

2. CONCRETE SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH(f'c), MAXIMUM WATER-CEMENT (W/C) RATIO AND MAXIMUM SLUMP AS GIVEN IN THE CONCRETE MIX DESIGN REQUIREMENTS SCHEDULE ON THIS PAGE. "WHERE COMPRESSIVE STREGTH, SLUMP, OR W/C/ ARE NOT GIVEN, PROVIDE A MIX DESIGN COMPLYING WITH ACI REQUIREMENTS FOR THE EXPOSURE CLASS GIVEN."

3. ADD AIR ENTRAINMENT PER ACI DURABILITY REQUIREMENTS FOR EXPOSURE CLASS.

4. CONTRACTOR SHALL SUBMIT MIX DESIGNS FOR APPROVAL 14 DAYS PRIOR TO FABRICATION AND INSTALLATION. ALL CONCRETE MIXES SHALL BE DESIGNED AND CERTIFIED BY A MATERIALS TESTING LABORATORY.

5. ADMIXTURES MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER (CALCIUM CHLORIDE SHALL NOT BE USED).

6. ADMIXTURES SHALL COMPLY WITH ASTM C494 AND BE OF A TYPE THAT INCREASES THE WORKABILITY OF THE CONCRETE, BUT SHALL NOT BE CONSIDERED TO REDUCE THE SPECIFIED MINIMUM CEMENT CONTENT

7. CEMENT SHALL CONFORM TO ASTM C150, TYPE I.

8. READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C94.

9. REFER TO DRAWINGS OF OTHER DISCIPLINES FOR MOLDS, GROOVES, CLIPS, ORNAMENTS, GROUNDS, ETC. REQUIRED TO BE CAST INTO CONCRETE.

10. PROJECTING CORNERS OF SLABS, BEAMS, WALLS, COLUMNS, ETC. SHALL BE FORMED WITH A 3/4" CHAMFER.

11. NO CONDUIT PLACED IN A CONCRETE SLAB SHALL HAVE AN OUTSIDE DIAMETER GREATER THAN1/3 THE THICKNESS OF THE SLAB. NO CONDUIT SHALL BE EMBEDDED IN A SLAB THAT IS LESS THAN 3-1/2" THICK. EXCEPT FOR LOCAL OFFSETS, MINIMUM CLEAR DISTANCE BETWEEN CONDUITS SHALL BE 6".

12. SLEEVES EMBEDDED IN SLABS AND WALLS SHALL BE LOCATED CLEAR BETWEEN REINFORCING BARS AND SHALL MAINTAIN CLEAR SPACING EQUAL TO THE DIAMETER OF THE LARGEST SLEEVE IN ANY DIRECTION. SLEEVE GROUPS THAT DO NOT COMPLY WITH THE ABOVE REQUIREMENTS SHALL BE CONSIDERED AS AN OPENING.

13. EMBEDDED ELECTRICAL CONDUITS AND BOXES SHALL BE PLASTIC OR APPROVED NON-CORRODING MATERIAL

14. EMBEDDED ITEMS SUCH AS PLATES, ANGLES, HEADED STUDS, ANCHOR BOLTS, ETC SHALL BE EPOXY COATED OR GALVANIZED.
   A. GLAVANIZING SHALL CONFORM TO ASTM A123
   B. EPOXY COATING SHALL CONFORM TO ASTM A775 FOR RINFORCING BARS
   C. EPOXY COATING SHALL CONFORM TO ASTM A884 FOR WELDED WIRE FABRIC

15. FLOOR SLABS ARE NON-STRUCTURAL WITH THE EXCEPTION OF HAUNCHED SECTIONS BELOW MASONRY PARTITION WALLS. SLAB REINFORCEMENT SHOWN ON THE PLANS IS THE MINIMUM FOR TEMPERATURE AND SHRINKAGE CONTROL, IS FOR ESTIMATING PURPOSES ONLY, AND WILL NOT ELIMINATE ALL SLAB CRACKING. THE CONTRACTOR IS RESPONSIBLE FOR FINAL REINFORCEMENT AND JOINTING DETAILS NECESSARY TO WARRANTY THE FINISHED SLAB AS REQUIRED BY SPECIFICATIONS.

16. SLAB JOINTS:
   A. SPACING OF CONTROL JOINTS IN SLABS ON GRADE SHALL NOT EXCEED THE FOLLOWING:
      a. EXTERIOR SLABS = 24x SLAB THICKNESS
      b. INTERIOR SLABS = 36x SLAB THICKNESS
   B. RATION OF LONG DIMENSION TO SHORT DIMENSION OF SLAB PANELS CREATEED BY CONTROL JOINTS SHALL NOT EXCEED 1.5

CAST-IN-PLACE CONCRETE WALLS

1. UNLESS OTHERWISE NOTED ON PLANS OR SECTIONS, REINFORCE CAST-IN-PLACE CONCRETE WALLS WITH #4 @ 12" O.C. HORIZONTALLY, AND #4 @ 12" O.C. VERTICALLY EACH FACE.

2. PROVIDE #4x4'-0" (2'-0" EACH LEG) CORNER BARS AT 12" O.C. HORIZONTAL REINFORCING AT OUTSIDE CORNER OF WALL AND EACH FACE AT INTERSECTIONS WITH (3) #4 VERTICAL SUPPORT BARS.

3. ALL OPENINGS IN WALLS LARGER THAN 12" SHALL HAVE (2) #4 AT ALL SIDES (1 EACH FACE) EXTENDED 2'-0" BEYOND EACH EDGE OF OPENING.

4. PROVIDE EXTRA REINFORCING ON EACH FACE AROUND ALL OPENINGS 24" OR LARGER IN ALL SLABS & WALLS EQUAL TO ONE HALF THE INTERRUPTED REINFORCING BARS ON EACH SIDE BUT NOT LESS THAN (2) #4 BARS WITH CLASS B LAP AND NOT LESS THAN 2 FEET BEYOND OF OPENINGS.

5. WALL REINFORCING IS CONTINUOUS THROUGH COLUMNS AND PEDESTALS. PROVIDE CORNER BARS.

6. SPACING OF CONSTRUCTION CONTROL JOINTS IN WALLS EXPOSED TO VIEW SHALL NOT EXCEED 40 FEET.

REINFORCING STEEL

1. REINFORCING PROPERTIES — Fy KSI — ASTM
   A. ALL BARS UNLESS NOTED — 60 — A615
   B. TIES AND STIRRUPS — 60 — A615
   C. WELDED WIRE FABRIC (SMOOTH) — 65 — A185
   D. WELDABLE REBAR — 60 — A706

2. REINFORCING SHALL BE DETAILED, FABRICATED & PLACED IN ACCORDANCE WITH CRSI "MANUAL OF STANDARD PRACTICE", LATEST EDITION.

3. CONTRACTOR SHALL SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR APPROVAL BEFORE FABRICATION AND INSTALLATION.

4. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS, AND INSERTS SHALL BE SECURED IN POSITION WITH WIRE POSITIONERS BEFORE PLACING CONCRETE OR GROUT.

5. FERROUS METAL ACCESSORIES INCLUDING CHAIRS, SLAB BOLSTERS, TIE WIRES, AND SUPPORT BARS SHALL BE PLASTIC OR EPOXY COATED OR GALVANIZED

6. DOWELS BETWEEN FOOTINGS AND WALLS SHALL BE THE SAME GRADE, SIZE, AND SPACING AS VERTICAL WALL REINFORCING.

7. MINIMUM LAP SPLICES OF REINFORCING BARS SHALL BE AS SHOWN IN LAP SPLICE SCHEDULE. ALL LAP SPLICES TO BE CLASS B UNLESS NOTED OTHERWISE.

8. REINFORCING STEEL SHALL BE PROVIDED WITH THE FOLLOWING AMOUNTS OF COVER FOR CAST-IN-PLACE CONCRETE:
   A. CONCRETE PLACED AGAINST EARTH . . . . . .3"
   B. CONCRETE SURFACES IN LIQUID-RETAINING STRUCTURES DENOTED BY Δ.....2"
   C. OTHER CONCRETE SURFACE (FORMED) EXPOSED TO EARTH OR WEATHER:
      #6 THROUGH #18 BARS . . . . . 2"
      #5 BAR AND SMALLER . . . . . 1-1/2"
      STIRRUPS & TIES . . . . . 1-1/2"

PRECAST AND/OR PRESTRESSED CONCRETE

1. USE THE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL DRAWINGS TO OBTAIN THE NECESSARY INFORMATION AND DESIGN REQUIREMENTS FOR THE PRECAST UNITS.

2. THE STRUCTURAL DRAWINGS SHOW THE INTENT OF THE PRECAST CONCRETE FRAMING. REINFORCING AND PRESTRESSING SHOWN IS SCHEMATIC ONLY.

3. PRECAST MANUFACTURER SHALL FURNISH AND DESIGN HEADERS FOR OPENINGS AS REQUIRED OR INDICATED ON THE DRAWINGS. PRECAST MANUFACTURER SHALL PROVIDE WELD PLATES AND OTHER EMBEDDED ITEMS NOTED ON THE DRAWINGS.

4. DESIGN PLANK TO CARRY STAIR STRINGER LOADS.

5. PRECAST SUPPLIER TO DESIGN PRECAST PLANK AS A DIAPHRAGM WITH LOADS AND CONDITIONS PER PLANS, INCLUDING THE ADDITIONAL PRESTRESSING STRANDS FOR DIAPHRAGM TENSION CHORD MEMBERS, IF NECESSARY.

6. PRECAST SUPPLIER TO DESIGN CONNECTIONS BETWEEN PRECAST PLANK AND SHEAR WALLS AND BEAMS.

7. PRECAST SUPPLIER TO DESIGN PRECAST TO PRECAST CONNECTIONS.

8. DESIGN MUST INCLUDE VERIFICATION OF ALL OPENINGS AND MECHANICAL LOADS BY CONTRACT DOCUMENTS. ADDITIONAL OPENINGS OF GREATER THAN 12" DIMENSION SHALL NOT BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE PRECAST MANUFACTURER.

9. VIBRATION CRITERIA SHALL CONFORM TO THE RECOMMENDATIONS FROM THE PRESTRESSED CONCRETE INSTITUTE (PCI) DESIGN MANUAL, LATEST EDITION, OR OTHER APPLICABLE CODES.

10. CAMBER SHALL BE CONTROLLED SO AS TO PROVIDE NO DIFFERENTIAL CAMBER WHEN FINAL INSTALLATION IS COMPLETE.

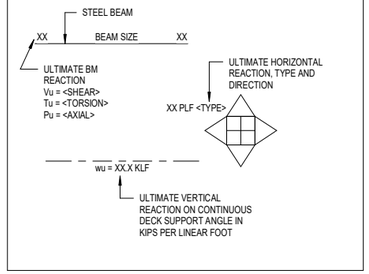
11. ALL PRECAST UNITS TO HAVE 2 HOUR FIRE RATING.

12. PRECAST PLANK UNITS SHALL BE WELDED TO STEEL BEAMS AT ALTERNATE ENDS OF EACH PRECAST UNIT.

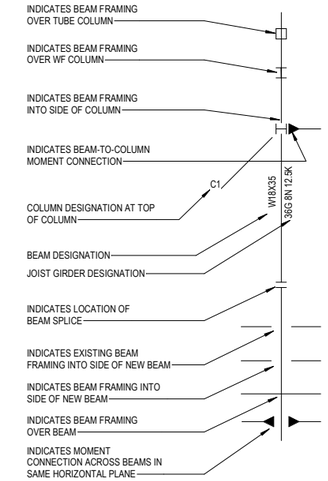
13. FINISH CONCRETE TOPPING ON PRECAST TO A LEVEL SURFACE WITH A MINIMUM THICKNESS AS CALLED FOR ON PLANS.

14. HOT DIP GALVANIZE ALL CONNECTOR ASSEMBLIES WHERE NOTED AS GALVANIZED. CLEAN AND COAT ALL FIELD WELDS WITH TWO COATS OF COLD GALVANIZING COMPOUND.

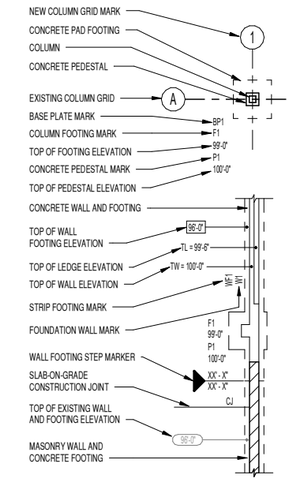
SYMBOLS LEGEND



STRUCTURAL STEEL LEGEND



FOUNDATION LEGEND



CONCRETE MIX DESIGN SCHEDULE

ELEMENT	LOCATION	F'c (PSI)	W/C	DENSITY	DURABILITY EXPOSURE CATAGORIES AND CLASSES (ACI 318 TABLE 19.3.1.1)				
					FREEZING & THAWING (F)	SULFATE (S)	WATER CONTACT (W)	CORROSION PROTECT OF REINF (C)	REMARKS
FOUNDATION AND BUILDING WALLS	I	4000	0.45	NW	F1	S0	W1	C2	SEE NOTE 1, x
	E	4000			F2			C2	
ELEVATED SLABS AND BEAMS (NON PARKING)	I	6000	0.4	NW	F1	S0	W0	C1	SEE NOTE 1, x
	E	6000			F3			C1	
ELEVATED SLABS AND BEAMS (PARKING)	I	6000	0.4	NW	F1	S0	W1	C2	SEE NOTE 1, x
	E	6000			F3			C2	
COLUMNS & PIERS	I	6000	0.4	NW	F0	S0	W0	C0	SEE NOTE 1, x
	E	6000			F1 & F3			C1 & C2	
FOOTINGS AND PILE CAPS	I	5000	0.5	NW	F0	S0	W1	C0	SEE NOTE 1, x
	E	6000			F0			C1	
SLABS ON GRADE (NON-PARKING)	I	4000	0.45	NW	F0	S0	W0	C1	SEE NOTE 1, x
	E	5000			F3			C1	
SLABS ON GRADE (PARKING)	I	5000	0.45	NW	F0	S0	W1	C2	SEE NOTE 1, x
	E	5000			F3			C2	

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			GENERAL STRUCTURAL NOTES	ISSUE DATE: 5/1/24 / ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S001

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LIGHT GUAGE METAL STUD FRAMING

1. LIGHT GAUGE FRAMING SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH IBC CHAPTER 22, SECTION 2210 - COLD FORMED STEEL LIGHT -FRAMED CONSTRUCTION.

2. STUD DESIGNATION & RELATED ACCESSORIES ON DRAWINGS ARE BASED ON SSMA (STEEL STUD MANUFACTURERS ASSOCIATION) STANDARD SHAPES. OTHER MANUFACTURERS SHALL FURNISH ELEMENTS OF EQUAL OR GREATER SECTION PROPERTIES, MATERIAL STRENGTHS, AND STIFFNESS
   Fy = 33,000 psi (STUDS = 43 MIL & THINNER)
   Fy = 50,000 psi (STUDS = 54 MIL & THICKER)
   Fy = 33,000 psi (TRACK)
   Fy = 50,000 psi (STRAPPING)
   A. STEEL THICKNESSES

MIN. (MILS)	REFERENCE GAUGE	MIN DELIVERED (IN.)	DESIGN THICKNESS (IN)	COLOR CODE*
33 MIL	20 GA	0.0329	0.0346	WHITE
43 MIL	18 GA	0.0428	0.0451	YELLOW
54 MIL	16 GA	0.0538	0.0566	GREEN
68 MIL	14 GA	0.0677	0.0713	ORANGE
97 MIL	12 GA	0.0966	0.1017	RED
118 MIL	10 GA	0.1180	0.1242	BLUE

   *COLOR CODE PER ASTM C955
   B. DRAWINGS REFLECT THE SSMA STANDARD MEMBER DESIGNATIONS.
      1. EXAMPLES:
         a. STUDS: 600S162-54 - 6" WEB DEPTH, STUD OR JOIST, 1 5/8" FLANGE WIDTH, 54 MIL THICKNESS
         b. TRACKS: 800T125-43 - 8" WEB DEPTH, TRACK, 1 1/4" FLANGE WIDTH, 43 MIL THICKNESS

3. LOAD BEARING AND NNON-LOAD BEARING CFS FRAMING SHALL BE DESIGNED AND DETAILED FOR APPLIED LOADS AND SERVICEABILITY REQUIREMENTS OF SUPPORTED MATERIALS. COMPONENT FRAMING STABILITY SHALL BE MAINTAINED DURING ERECTION AND IN FINAL CONSTRUCTION CONFIGURATION.

4. SEE ARCHITECURAL DRAWINGS FOR INTERIOR NON-LOAD BEARING PARTITION FRAMING AND CONSTRUCTION.

5. THE INFORMATION SHOWN ON THE STRUCTURAL DRAWINGS IS ONLY CONCEPTUAL AND IS INTENDED TO EXPRESS MINIMUM LIGHT GAUGE METAL SYSTEM MATERIAL, DESIGN, AND CONSTRUCTION PERFORMANCE CRITERIA. THE LIGHT GAUGE METAL SYSTEM SUPPLIER SHALL PROVIDE AND SUBMIT FOR REVIEW THE FINAL STRUCTURAL ENGINEERING DESIGN WHICH INCLUDES DETAILED SHOP DRAWINGS AND CALCULATIONS OF THE MEMBER SIZES, GAUGE THICKNESS, SPACING, AND ALL CONNECTIONS. ALL SUBMITTALS MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT.

6. PROVIDE A MINIMUM OF (1) - 2" FLANGE STUD OR DOUBLE STUDS AT ALL WINDOW JAMBS UNO. STITCH WELD STUDS TOGETHER AT 12" ON CENTER.
   A. SCREW ALL STELL SECTIONS AT WINDOW HEADS & SILLS TO JAMB STUDS WITH A MINIMUM OF ONE SCREW EACH SIDE EACH MEMBER.
   B. ANCHOR EACH STUD TO RUNNERS WITH FOUR #10 SCREWS, TWO TOP AND TWO BOTTOM, WITH ONE SCREW IN EACH FLANGE UNO.
   C. ALIGN RUNNER TRUACK ACCURATELY & SECURE TO BASE & HEAD WITH FASTENER SPACING NOT TO EXCEED 24" ON CENTER.
   D. SELF DRILLING OR SELF-TAPPING MINIMUM #12-14 x 1/2" SCREWS MAY BE USED IN LIEU OF WELDING FOR ASSEMBLING STEEL STUD WALLS.

STEEL DECK

1. ALL STEEL DECKS SHALL BE DESIGNED & CONSTRUCTED IN ACCORDANCE WITH IBC CHAPTER 22, SECTION 2205 – COLD-FORMED STEEL AND THE STEEL DECK INSTITUTE SPECIFICATIONS AND RECOMMENDATIONS LATEST CODE ADOPTED EDITION UNO

2. PRE-APPROVED DECK MANUFACTURERS ARE VULCRAFT, WHEELING AND VERCO. OTHER METAL DECK MANUFACTURERS MAY BE APPROVED PROVIDING THAT THE DECK SPECIFICATIONS MEET OR EXCEED THE SPECIFICATIONS OF THE PRE-APPROVED MANUFACTURERS. METAL DECK SIZE, GAUGE AND TYPE ARE INDICATED ON THE DRAWINGS.

3. ROOF DECK SHALL BE PRIME PAINTED AND LAID OUT CONTINUOUS OVER THREE SPANS MINIMUM. YIELD STRESS SHALL BE 33,000 PSI MINIMUM. DECK SUPPLIER SHALL SUBMIT ICC REPORTS SHOWING ALLOWABLE DIAPHRAGM SHEAR VALUES. ERECT IN ACCORDANCE WITH THE REPORT TO MEET THE REQUIREDSHEAR SPECIFIED ON THE DRAWINGS. CONNECTION TO FRAMING MEMBERS SHALL NOT BE LESS THAN THAT SHOWN ON DRAWINGS.

4. MINIMUM REQUIREMENTS FOR ROOF DECK FASTENING SHALL BE 5/8" Ø PUDDLE WELDS USING THE WELD PATTERN SHOWN ON THE DRAWINGS AND #10 TEK SCREW SIDELAP FASTENERS PER FASTENING DETAILS SHOWN ON THE DRAWINGS OR PRE-APPROVED EQUAL.

5. COMPOSITE METAL FLOOR DECK SHALL BE PHOSPHATIZED/PAINTED AT TOP, PRIME PAINTED AT BOTTOM AND LAID OUT FOR THREE SPANS WHERE POSSIBLE. THE COMPOSITE FLOOR SYSTEM SHALL BE CAPABLE OF SUPPORTING THE SUPERIMPOSED LOADS AS SHOWN ON THE DRAWINGS. THE STEEL DECK SHALL SUPPORT THE WEIGHT OF WET CONCRETE AND OTHER CONSTRUCTION LOADS AS AN UNSHORED FORM DECK. DECK FASTENING SHALL BE PER SDI & MANUFACTURER'S RECOMMENDATIONS BUT NOT LESS THAN THAT SHOWN ON THE DRAWINGS.

6. ALL METAL DECK TO BE SPRAY FIREPROOFED SHALL BE GALVANIZED, CLEANED & DEGREASED PRIOR TO SHIPPING. SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF FIREPROOFING.

7. CONDUITS ARE NOT PERMITTED IN COMPOSITE SLABS WITHOUT AUTHORIZATION FROM THE STRUCTURAL ENGINEER.

STEEL JOISTS

1. ALL STEEL JOISTS SHALL BE DESIGNED & CONSTRUCTED IN ACCORDANCE W/ IBC CHAPTER 22, SECTION 2206 – STEEL JOISTS UNO
2. STEEL JOISTS SUPPLIER SHALL FURNISH ALL BRACING, WALL ANCHORS, HEADERS & BOTTOM CHORD EXTENSIONS, ETC. AS NECESSARY TO PROVIDE A COMPLETE INSTALLATION.
3. THE JOIST SUPPLIER SHALL COORDINATE BRIDGING LOCATIONS WITH THE SPRINKLER CONTRACTOR, SUCH THAT THE BRIDGING IS LOCATED A MINIMUM OF 1'-0" CLEAR HORIZ. FROM THE CENTER LINES OF THE SPRINKLER HEADS OR 2'-0" CLEAR VERTICALLY BELOW THE SPRINKLER DEFLECTOR.
4. THE STEEL ERECTOR IS RESPONSIBLE FOR ADJUSTING HORIZONTAL AND DIAGONAL BRIDGING IF THERE IS A CONFLICT BETWEEN MECHANICAL DUCTS PARALLEL WITH JOISTS AS DIRECTED BY THE STRUCTURAL ENGINEER.
5. PLACEMENT OF MECHANICAL UNITS & HANGERS SUPPORTED BY ROOF OR FLOOR JOISTS IS SUBJECT TO THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
6. SHOP DRAWINGS:
   A. THE JOIST MANUFACTURER SHALL BE RESPONSIBLE FOR AND SHALL SUBMIT SHOP DRAWINGS FOR REVIEW. A CERTIFIED LETTER STATING THAT ALL STANDARD JOISTS CONFORM TO THE LATEST EDITION OF SJI SPECIFICATIONS SHALL BE SUBMITTED.
   B. CALCULATIONS FOR ALL JOIST GIRDERS & SPECIAL JOISTS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT SHALL BE SUBMITTED FOR REVIEW.
7. DESIGN OF STEEL JOIST
   A. ALL JOIST & GIRDER MEMBERS & ELEMENTS SHOWN ON THE DRAWINGS ARE FOR THE IN-PLACE COMPLETED BUILDING. ALL LOADING CRITERIA & VERIFICATION OF DESIGN FOR LOADING SUCH AS HANDLING, TRANSPORTATION & ERECTION ARE THE SOLE RESPONSIBILITY OF THE JOIST MANUFACTURER.
   B. SPECIAL JOISTS & JOIST GIRDERS SHALL BE DESIGNED FOR THE LOADS INDICATED ON THE DRAWINGS.
   C. JOIST MANUFACTURER SHALL DESIGN & PROVIDE SPECIAL JOIST SEATS WHEN THE SUPPORT BEARING WIDTH IS LESS THAN SJI REQUIREMENTS.
   D. ALL JOISTS SHALL BE CAMBERED IN ACCORDANCE WITH SJI CRITERIA, UNO
8. STRUCTURAL STEEL AND JOIST SUPPLIERS SHALL PROVIDE ERECTION BOLTS AND JOIST BOTTOM CHORD EXTENSION AT COLUMNS AND ELSEWHERE PER BY OSHA REQUIREMENTS AND THE METHOD OF STEEL ERECTION.
   A. MAXIMUM BOLT SIZE SHALL BE 1/2" DIA. WITH A 9/16" HOLE FOR "K" SERIES JOISTS AND 3/4" DIA. WITH A 13/16" HOLE FOR LH SERIES JOISTS. STRUCTURAL STEEL AND JOIST SUPPLIERS SHALL COORDINATE OSHA CONNECTION LOCATIONS.

STRUCTURAL STEEL

1. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM WITH THE AISC (AMERICAN INSTITUTE OF STEEL CONSTRUCTION), "MANUAL OF STEEL CONSTRUCTION", LATEST EDITION.

2. ALL STEEL DETAILS AND CONNECTIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AISC "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, ALLOWABLE STRESS DESIGN, AND PLASTIC DESIGN", LATEST EDITION.

3. ALL WELDING SHALL BE BY WELDERS HOLDING CURRENT AND VALID AWS CERTIFICATES IN THE TYPE OF WELD REQUIRED.

4. SHOP CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE BOLTED OR WELDED. FIELD CONNECTIONS SHALL BE BOLTED UNLESS SPECIFICALLY DETAILED OTHERWISE.

5. DESIGN IN ACCORDANCE WITH GUIDE DETAILS AND REACTIONS.

6. USE A325N BOLTS UNLESS NOTED OTHERWISE.

7. OVERSIZED OR SLOTTED HOLES SHALL NOT BE USED FOR ANY CONNECTIONS UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS OR APPROVED IN WRITING BY THE ENGINEER.

8. ALL BEAM COPES MUST BE MADE TO A RADIUS (1" MINIMUM).

9. ALL BUTT AND FULL PENETRATION WELDS SHALL BE MADE USING RUN OFF TABS WHICH SHALL BE TRIMMED FLUSH AND GROUND SMOOTH AFTER WELD IS COMPLETED.

10. ALL WELDS INDICATED SHALL MEET THE MINIMUM WELD SIZE SPECIFIED BY THE CURRENT AISC MANUAL OF STEEL DESIGN. (SINGLE PASS AS REQUIRED).

11. CUTS, HOLES, COPING, ETC. REQUIRED FOR WORK OF OTHER TRADES SHALL BE SHOWN ON THE SHOP DRAWINGS AND MADE IN THE SHOP. CUTS OR BURNING OF HOLES IN STRUCTURAL STEEL MEMBERS IN THE FIELD WILL NOT BE PERMITTED.

12. PROVIDE ANY NECESSARY TEMPORARY BRACING OR GUYS TO PROVIDE LATERAL SUPPORT OF THE BUILDING UNTIL PERMANENT FRAME IS COMPLETELY INSTALLED.

13. INSTALL EXPANSION BOLTS IN ACCORDANCE WITH THE ICBO REPORT RECOMMENDATIONS.

14. ALL ELEVATOR GUIDE BEAMS SHALL BE S8x18.4 UNLESS NOTED OTHERWISE. SLOPE TO MATCH BEAM SLOPE.

15. STRUCTURAL STEEL FRAMING SHALL BE TRUE AND PLUMB BEFORE CONNETIONS ARE FINALLY BOLTED OR WELDED.

MASONRY

1. ALL MASONRY WALLS ARE TO HAVE HORIZONTAL REINFORCEMENT WHICH DOES NOT EXCEED 16 INCHES ON CENTER VERTICALLY. SEE SPECIFICATIONS FOR INFORMATION RELATING TO CONCRETE BLOCK, BRICK, AND WALL REINFORCING.

2. ALL VERTICAL REINFORCING STEEL IN MASONRY WALLS ARE TO COMPLY WITH ASTM A615, GRADE 60. LAPS SHALL BE 48 BAR DIAMETERS (12" MINIMUM).

3. PROVIDE SPLICE BARS FOR ALL BOND BEAM REINFORCING AT ALL CORNERS. SPLICE BAR TO BE THE SAME SIZE AS BARS IN THE BOND BEAM. LAPS SHALL BE 50 BAR DIAMETERS.

4. WHERE MASONRY IS APPLIED ADJACENT TO STEEL MEMBERS (BEAMS AND COLUMNS) PROVIDE ANCHORING DEVICES PER SPECIFICATIONS.

5. REFER TO ARCHITECTURAL PLANS FOR ROUGH OPENING LOCATIONS, SIZES, AND ELEVATIONS.

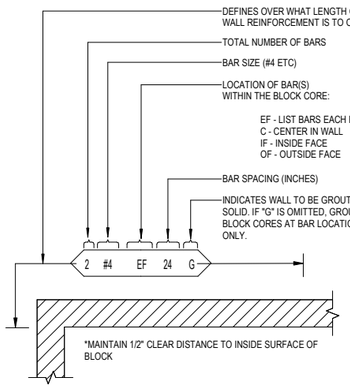
6. USE SIMPSON TITEN HD OR APPROVED EQUAL TYPE ANCHORS IN CMU WALL PARTITIONS.

7. UNLESS OTHERWISE NOTED ON PLANS, ALL NON-STRUCTURAL CMU WALLS SHALL BE REINFORCED WITH A #4 VERTICAL BAR AT 48" O.C. WITH THAT CMU CORE GROUTED SOLID. PROVIDE HORIZONTAL JOINT REINFORCEMENT AT 16" O.C. THE BOTTOM TWO COURSES SHALL BE GROUTED SOLID. PROVIDE CONTINUOUS BOND BEAM AT TOP OF WALL WITH (2) #4 CONTINUOUS. GROUT BOND BEAM SOLID. PROVIDE #4 DOWEL AT 48" O.C. INTO FOUNDATION WALL OR THICKENED SLAB TO MATCH VERTICAL BAR, LAP DOWEL 50 BAR DIAMETERS ONTO VERTICAL WALL REINFORCEMENT. UNLESS OTHERWISE NOTED ON PLANS, PROVIDE LINTEL BLOCK WITH (1) #5 x CONT, AND 8" BEARING EACH END.

8. CONSTRUCTION BRACING FOR MASONRY WALLS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED. MASONRY SUBMITTALS SHALL CONTAIN A LETTER SEALED BY THE ENGINEER AND SHALL BE ISSUED TO THE OWNER AFTER SUBMITTAL REVIEW AND PRIOR TO STARTING MASONRY CONSTRUCTION.

9. THE COMPRESSIVE STRENGTH OF MASONRY (f'_m) SHALL BE 2500 PSI MINIMUM.

MASONRY WALL VERTICAL REINFORCEMENT LEGEND



A

ABV	ABOVE
ADD	ADDENDUM
ADDL	ADDITIONAL
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
APPROX	APPROXIMATE(LY)
ARCH	ARCHITECT(URAL)

B

B/	BOTTOM (OF)
BFE	BOTTOM OF FOOTING ELEVATION
BLK	BLOCK
BLKG	BLOCKING
BLW	BELOW
BM	BEAM(S)
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BRG	BEARING
BTWN	BETWEEN
BW	BOTH WAYS

C

C/C	CENTER TO CENTER
CTR	CENT(ER)(ERED)(TRAL)
CF	CUBIC FEET
CFMF	COLD FORMED METAL FRAMING
CFS	COLD FORMED STEEL
CIP	CAST IN PLACE
CJ	CONTROL JOINT(S)
CJP	COMPLETE JOINT PENETRATION
CL	CENTER LINE
CLR	CLEAR(ANCE)
CMU	CONCRETE MASONRY UNIT
CP-	CONCRETE PIER
COL	COLUMN
CONC	CONCRETE
CONN	CONNECT(ED)(ION)
CONST	CONSTRUCTION
CONST JT	CONSTRUCTION JOINT
CONT	CONTINU(E)(OUS)(ATION)
COORD	COORDINATE
CY	CUBIC YARD

D

DBA	DEFORMED BAR ANCHOR
DBE	DECK BEARING ELEVATION
DEG	DEGREE(S)
DEMO	DEMO(LISH)(LITION)
DTL	DETAIL
DIA (Ø)	DIAMETER
DIAG	DIAGONAL
DIF	DIFFEREN(CE)(TIAL)
DIM	DIMENSION
DIV	DIVI(DE)(DED)(DER)(SION)
DL	DEAD LOAD
DN	DOWN
DWG(S)	DRAWING(S)
DWL	DOWEL(REBAR)

E

EA	EACH
EE	EACH END
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
EMBED	EMBEDMENT
EOS	EDGE OF SLAB
EQ	EQUAL
EQ SP	EQUALLY SPACED
ES	EACH SIDE
EW	EACH WAY
EXIST	EXISTING
EXP	EXPAN(D)(SION)
EXT	EXTERIOR

F

FD	FLOOR DRAIN
FND	FOUNDATION
FP	FIREPROOF(ING)
FR	FRAME
FRMG	FRAMING
FS	FAR SIDE
FOS	FOOTING STEP
FTG	FOOTING
F/	FACE OF

G

GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR

H

HD	HOLD-DOWN
HK	HOOK
HORZ	HORIZONTAL
HSS	HOLLOW STRUCTURAL SECTION (STRUC SHAPE)
HT	HEIGHT

I

IF	INSIDE FACE
INFO	INFORMATION

J

JST	JOIST
JNT	JOINT

K

K	KIP (1000 POUNDS)
KLF	KIPS PER LINEAR FOOT
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH

L

LF	LINEAR FOOT, FEET
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION(S)
LPT	LOW POINT
LTWT	LIGHTWEIGHT
LSL	LAMINATED STRAND LUMBER
LVL	LAMINATED VENEER LUMBER

M

MATL	MATERIAL
MAX	MAXIMUM
MTL	METAL
MEZZ	MEZZANINE
MIN	MINIMUM
MISC	MISCELLANEOUS
MP-	MASONRY PIER

N

NS	NEAR SIDE
NTS	NOT TO SCALE

O

OC	ON CENTER(S)
OD	OUTSIDE DIAMETER / DIMENSION
OF	OUTSIDE FACE
OPNG	OPENING(S)
OPP	OPPOSITE

P

PC	PRECAST
PCF	POUNDS PER CUBIC FOOT
PERIM	PERIMETER
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PREFAB	PREFABRICATE(D)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	POST TENSION(ED)(ING)

Q

QTY	QUANTITY

R

RC	REINFORCED CONCRETE
RD	ROOF DRAIN
REINF	REINFORCE(ED)(ING)(EMENT)
REM	REMAINDER
REQ	REQUIRE(D)
REV	REVIS(E)(ED)(ION)
RO	ROUGH OPENING
RTU	ROOF TOP UNITS

S

SCHED	SCHEDULE
SHT	SHEET
SHTG	SHEATHING
SIDL	SUPER IMPOSED DEAD LOAD
SIM	SIMILAR
SL	SNOW LOAD
SOG	SLAB ON GRADE
SPA	SPACE(S)
SQ	SQUARE
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRUCT	STRUCTUR(E)(AL)

T

TBE	TOP OF BEAM ELEVATION
TPCE	TOP OF PILE CAP (caisson) ELEVATION
TDE	TOP OF DECK ELEVATION
TEMP	TEMPORARY
TFE	TOP OF FOOTING ELEVATION
THRD	THREAD(ED)
TJE	TOP OF JOIST ELEVATION
TLE	TOP OF LEDGE ELEVATION
TME	TOP OF MASONRY ELEVATION
TMPE	TOP OF MASONRY PIER ELEVATION
TOS	TOP OF STEEL ELEVATION
TCPE	TOP OF CONCRETE PIER ELEVATION
TPE	TOP OF PLANK ELEVATION
TPG	TOPPING
TRTD	TREATED
TSE	TOP OF SLAB ELEVATION
TWE	TOP OF WALL ELEVATION
TYP	TYPICAL
T/	TOP OF
T&B	TOP AND BOTTOM

U

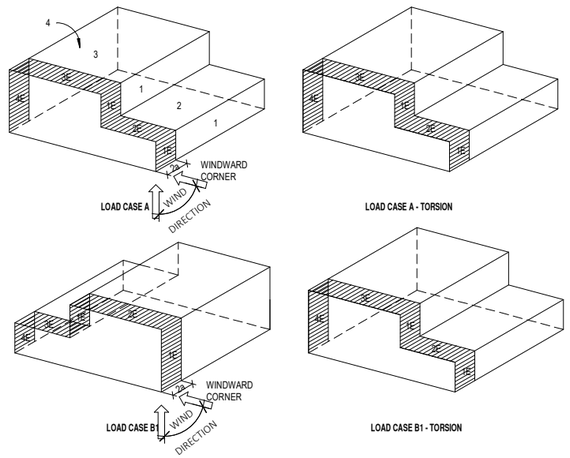
UNO	UNLESS NOTED OTHERWISE

V

VERT	VERTICAL
VIF	VERIFY IN FIELD

W

W/	WITH
W/O	WITHOUT
WF	WIDE FLANGE
WP	WORK(ING) POINT
WT	STRUCTURAL TEE (STRUCT SHAPE)
WWF	WELDED WIRE FABRIC

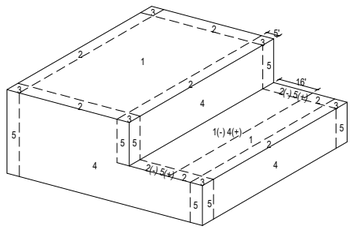


MAIN WIND FORCE RESISTING SYSTEM DIAGRAM

MIRROR LOAD CASES SYMMETRICALLY ABOUT LONG. AND TRANS. AXIS

CALCULATED PRESURES (PSF)				
ZONE	LOAD CASE A		LOAD CASE B	
	+	-	+	-
1	10.1	20.9	-18.9	-8.1
2	-26.1	-15.3	-26.1	-15.3
3	-19.4	-8.6	-16.5	-5.7
4	-17.8	-7.1	-18.9	-8.1
5	-	-	6.6	17.4
6	-	-	-14.1	-3.3
1E	18.0	28.8	-19.8	-9.0
2E	-37.4	-26.7	-37.4	-26.7
3E	-25.6	-14.8	-21.3	-10.5
4E	-23.9	-13.1	-19.8	-9.0
5E	-	-	12.9	23.7
6E	-	-	-18.3	-7.5

MAIN WIND FORCE RESISTING SYSTEM (MWFRS) LOADS - ASCE 7-10 CH28, PART 1



GROSS WIND PRESURES (PSF)									
EFFECTIVE WIND AREA	DIRECTION	ZONE							
		1	2	3	4	5	1OH	2OH	3OH
<= 10 SF	AWAY	-32.4	-56.3	-83.3	-38.3	-47.3	NA	-71.3	-116.2
	TOWARDS	20.4	20.4	20.4	35.3	35.3	NA	NA	NA
< 100 SF	AWAY	-29.4	-41.3	-65.3	-33.1	-36.8	NA	-71.3	-80.3
	TOWARDS	14.4	14.4	14.4	30.1	30.1	NA	NA	NA
>= 500 SF	AWAY	-29.4	-41.3	-65.3	-29.4	-29.4	NA	-71.3	-80.3
	TOWARDS	14.4	14.4	14.4	26.4	26.4	NA	NA	NA

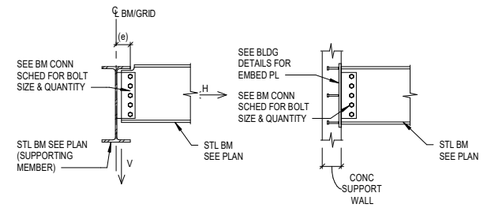
COMPONENTS AND CLADDING WIND LOADS

1. COMPONENTS AND CLADDING SHALL BE DESIGNED FOR THE WIND PRESSURES SHOWN IN THE DIAGRAM AND TABLE.
2. ULTIMATE UPLIFT COMBINATION FOR ROOF COMPONENTS IS 0.9D+1.0W.
   A. 'W' IS AS SHOWN IN THE TABLE BELOW.
   B. 'D' IS THE COMPONENT SELF WEIGHT.

BEAM CONNECTION SCHEDULE

DOUBLE ANGLE REQUIRED AT BEAM TO COLUMN CONNECTION			SINGLE PLATE AND WT's	
BEAM SIZE	MIN ROWS OF BOLTS	MIN DESIGN SHEAR (V) KIPS (SERVICE LOADS)	MIN ROWS OF BOLTS	MIN DESIGN SHEAR (V) KIPS (SERVICE LOADS)
W8-W10	2	17	2	8
W12-W14	3	29	3	16
W16	3	35	4	26
W18	4	60	4	26
W21	4	70	5	36
W24	5	90	6	45
W27	6	100	7	55
W30	7	120	8	65
W33-W36	7	120	9	75

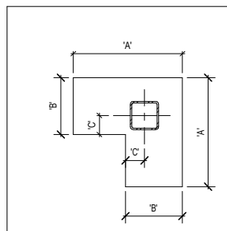
NOTES:
1. FABRICATOR TO DESIGN CONNECTION - # BOLTS, CONNECTOR PLATE/ANGLE, WELDS, CONFIGURATION BASED ON CRITERIA SHOWN IN TABLE & AISC REQUIREMENTS. DESIGN CALCULATIONS TO BE SIGNED BY ENGINEER LICENSED IN THE STATE THAT PROJECT EXISTS
2. MINIMUM CONNECTION SHOWN IN TABLES SHALL BE USED FOR DESIGN UNLESS END REACTIONS, SHOWN ON DRAWINGS, EXCEED MINIMUM DESIGN SHEAR. WHERE END REACTIONS ARE NOT SHOWN ON PLAN, USE MINIMUM DESIGN SHEARS LISTED ABOVE
3. PROPORTION ALL CONNECTION ELEMENTS, INCLUDING, BUT NOT LIMITED TO, BOLTS, WELDS, PLATES, TEES, ANGLES, BEAM WEBS AND COPES FOR MAXIMUM EFFECT OF THE DESIGN FORCES, INCLUDING V, H, AND THEIR ECCENTRICITIES (e). (SUPPORT HAS NOT BEEN DESIGNED FOR MOMENT DUE TO CONNECTION ECCENTRICITY.)
4. BOLT SIZE AND GRADE SHALL BE SELECTED FROM THE FOLLOWING:
   3/4" Ø A325, 7/8" Ø A325, 1" Ø A490, 1 1/8" Ø A490
5. BOLTED CONNECTIONS IN BEAMS WITH AXIAL FORCES, BEAM-TO-COLUMN CONNECTIONS AND BEAMS BRACING TRUSS CHORDS, SHALL BE SLIP CRITICAL USING TYPE "SC" BOLT VALUES



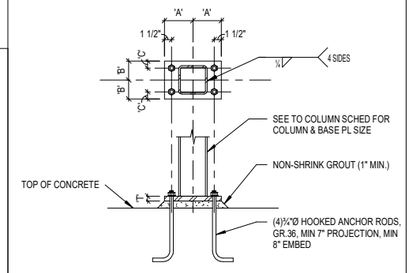
STEEL COLUMN BASE PLATE SCHEDULE

COLUMN MARK	SIZE	BASE PL MARK	BASE PLATE DIMENSIONS				REMARKS
			'A'	'B'	'C'	'T'	
C-1	HSS3x3x5/16	BP-2	8"	5"	1.5"	.5"	SEE 9/S804
C-2	HSS8x8x3/8	BP-1	7"	7"	1.5"	.75"	NOTE 1
C-3	W10X68	BP-1	8"	8"	1.5"	.75"	NOTE 1

NOTES
1). SEE BASE PLATE DIAGRAM THIS SHEET FOR TYPICAL COL.
2). 3/8" STIFFENER PLATES CENTERED BELOW COLUMN ON EACH SIDE



BP-2



BP-1

CONCRETE PIER SCHEDULE

MARK	WIDTH	LENGTH	VERTICAL REINFORCEMENT	HORIZONTAL TIES	COMMENTS
P1	1' - 8"	1' - 8"	(8) #5	#3 @ 12" OC + (3) @ 3" OC AT TOP	
P1	1' - 8"	1' - 8"	(8) #5	#3 @ 12" OC + (3) @ 3" OC AT TOP	
P1	1' - 8"	1' - 8"	(8) #5	#3 @ 12" OC + (3) @ 3" OC AT TOP	
P1	1' - 8"	1' - 8"	(8) #5	#3 @ 12" OC + (3) @ 3" OC AT TOP	
P1	1' - 10"	1' - 10"	(8) #5	#3 @ 12" OC + (3) @ 3" OC AT TOP	
P2	1' - 10"	1' - 10"	(8) #5	#3 @ 12" OC + (3) @ 3" OC AT TOP	

DESIGN DATA

CLASSIFICATION	
BUILDING RISK CATEGORY	CATEGORY IV
SNOW LOADS:	
GROUND SNOW LOAD (Pg)	40 PSF
UNBALANCED/ DRIFTING/ SLIDING	SEE DIAGRAMS
EXPOSURE FACTOR (Ce)	1.0
THERMAL FACTOR (Ct)	1.0
IMPORTANCE FACTOR (Is)	1.2
TYPICAL ROOF DESIGN LOAD (Pf)	34 PSF
SLOPED ROOF FACTOR (Cs)	1.0
LIVE LOADS:	
ROOF	20 PSF
SLAB ON GRADE	250 PSF
STORAGE	100 PSF (SEE PLAN)
PRECAST PLANK CEILING	50 PSF/300 LB
DEAD LOADS:	
ROOF	15 PSF
PRECAST PLANK CEILING	68 PSF (ASSUMED)
COLLATERAL (LIGHTING, SPRINKLER, DUCTWORK, CEILING) (1)	8 PSF
PRECAST PLANK CEILING	68 PSF
(1) APPLIED TO PRECAST CEILINGS AND TRUSS LOWER CHORDS. DOES NOT INCLUDE CONCENTRATED LOADS OF ROOF TOP OR SUSPENDED EQUIPEMENT. COORDINATE THOSE LOADS WITH MECHANICAL.	
WIND LOADS:	
BASIC WIND SPEED (3-SECOND GUST)	118 MPH
WIND EXPOSURE CATEGORY	C
INTERNAL PRESSURE COEFFICIENT (GCpi) (1)	±0.18
(1) ENCLOSED BUILDING (OVERHEAD DOORS TO REMAIN CLOSED DURING WIND EVENTS AND TO BE DESIGNED FOR THE GREATER OF THE C&C LOAD OR THE SURFACE LOAD GIVEN IN THE SPECIFICATIONS)	
SEISMIC LOADS:	
IMPORTANCE FACTOR (Ie)	1.50
SEISMIC DESIGN CATEGORY	A
SITE CLASS	D
GEOTECHNICAL CRITERIA:	
NET ALLOWABLE SOIL DESIGN BEARING PRESSURE	2500 PSF
AT REST EARTH PRESSURE (EQUIVALENT FLUID)	95 PSF/FT

CONCRETE SLAB SCHEDULE

MARK	THICKNESS	REINFORCEMENT	COMMENTS
S1	4"	#4 @ 12" OC EW	EPOXY COAT BARS
S2	5"	#4 @ 12" OC EW	
S3	6"	#4 @ 16" OC EW, #5 @ 12" OC EW	
S4	8"		
S5	1' - 0"	#5 @ 12" OC EW @ BOTTOM, #4 @ 18" OC @ TOP	
S6	1' - 0"	#5 @ 12" OC EW @ BOTTOM, #4 @ 18" OC @ TOP	EPOXY COAT BARS
S7	1' - 0"	#5 @ 8" O.C. TOP & BOTTOM LONGITUDAL, #5 @ 12" O.C. TOP & BOTTOM TRANSVERS	SEE DETAIL 3/S305 FOR REINF OVER OPENINGS

FOOTING SCHEDULE

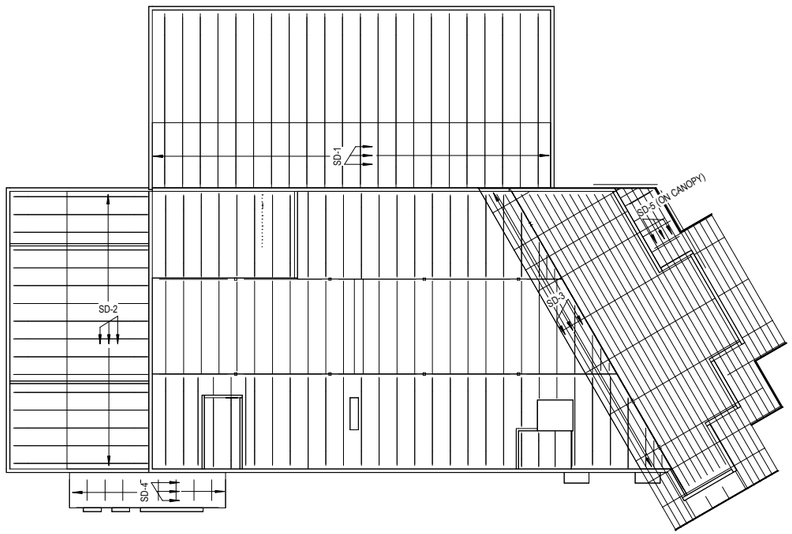
MARK	THICKNESS (T)	WIDTH (W)	LONG REINFORCEMENT	TRANS REINFORCING	COMMENTS
F6	15"	6'	(7) #6	(7) #6	
F9	18"	9'	(8) #6	(8) #6	
F10	20"	10'	(10) #6	(10) #6	
WF2.0	12"	2'	(3) #5		
WF2.1	12"	3'	(3) #5		THICKENED SLAB FOOTING
WF3.0	12"	3'	(4) #5	#5 @ 16" O.C.	
WF4.0	12"	4'	(6) #5	#5 @ 16" O.C.	
WF5.0	12"	5'	(7) #5	#5 @ 12" O.C.	

FOUNDATION WALL SCHEDULE

MARK	WALL THICKNESS	HORIZONTAL REINFORCEMENT	VERTICAL REINFORCEMENT	COMMENTS
FW1	12"	#5 @ 12" OC + (2) @ TOP AND BOT	#5 @ 18" OC	
FW2	8"	#5 @ 12" OC + (2) @ TOP AND BOT	#5 @ 18" OC	
W1	12"	#5 @ 12" OC EW	#5 @ 12" OC EW	

LABEL	MAX LOAD	DRIFT LENGTH	NOTES
SD-1	65 PSF	16.5 FT.	
SD-2	75 PSF	15.5 FT.	
SD-3	65 PSF	13 FT.	
SD-4	75 PSF	10 FT.	
SD-5	75 PSF	10 FT.	LOAD ON LOW CANOPY ROOF

NOTES:
1. ALL LOADS ARE UNFACTORED.
2. JOIST MANUFACTURER TO ACCOUNT FOR ALL DRIFT LOADS AND VERIFY JOISTS SUPPLIED ARE CAPABLE OF SUPPORTING THIS ADDITIONAL LOADING



DRIFTING/ SLIDING ON LOWER ROOFS

SUPERIMPOSED ON BALANCED SNOW LOAD

2

PRECAST HOLLOWCORE PLANK SCHEDULE						
HATCH	PLANK DEPTH	TOPPING THICKNESS	TOPPING REINF.	FIRE RATING	LOADING	NOTES
	10"	3"	NONE	2-HR	DL=15PSF + PLANK, LL=50PSF	
	10"	3"	NONE	2-HR	DL=15PSF + PLANK, LL=50PSF	RECESSED PLANK AREA
	NONE	NONE	NONE	NONE	NONE	
	10"	3"	NONE	2-HR	DL=15PSF + PLANK, LL=100PSF	LIGHT STORAGE/ASSEMBLY AREA

NOTES:
1. PRECAST PLANK MANUFACTURER TO CHECK PLANKS ADJACENT TO OPENINGS, MECHANICAL OR OTHERS AS SHOWN ON PLANS, FOR ADDITIONAL LOAD CAUSED BY SLAB OPENINGS. REFERENCE PROJECT DRAWINGS FOR MORE INFORMATION.
2. PLANK CAMBER SHALL BE 1 INCH OR LESS
3. PLANK DEPTH ASSUMED - SHALL BE VERIFIED BY HOLLOW CORE PLANK MFR. IF THICKER PLANK IS REQUIRED. CONTACT AOR AND EOR. PLANK MFR SHALL BE RESPONSIBLE FOR SELECTING WIDTH AND LAYOUT.
4. ALL OPENINGS REQUIRED IN PLANK, BUT NOT SHOWN, SHALL BE COORDINATED WITH PRECAST SUPPLIER.
5. PRECAST PLANK MANUFACTURER TO DESIGN PLANKS FOR ADDITIONAL EQUIPMENT LOADS WHERE REQUIRED. SEE MECHANICAL FOR LOCATION.

PRECAST LOADING PLAN KEY:

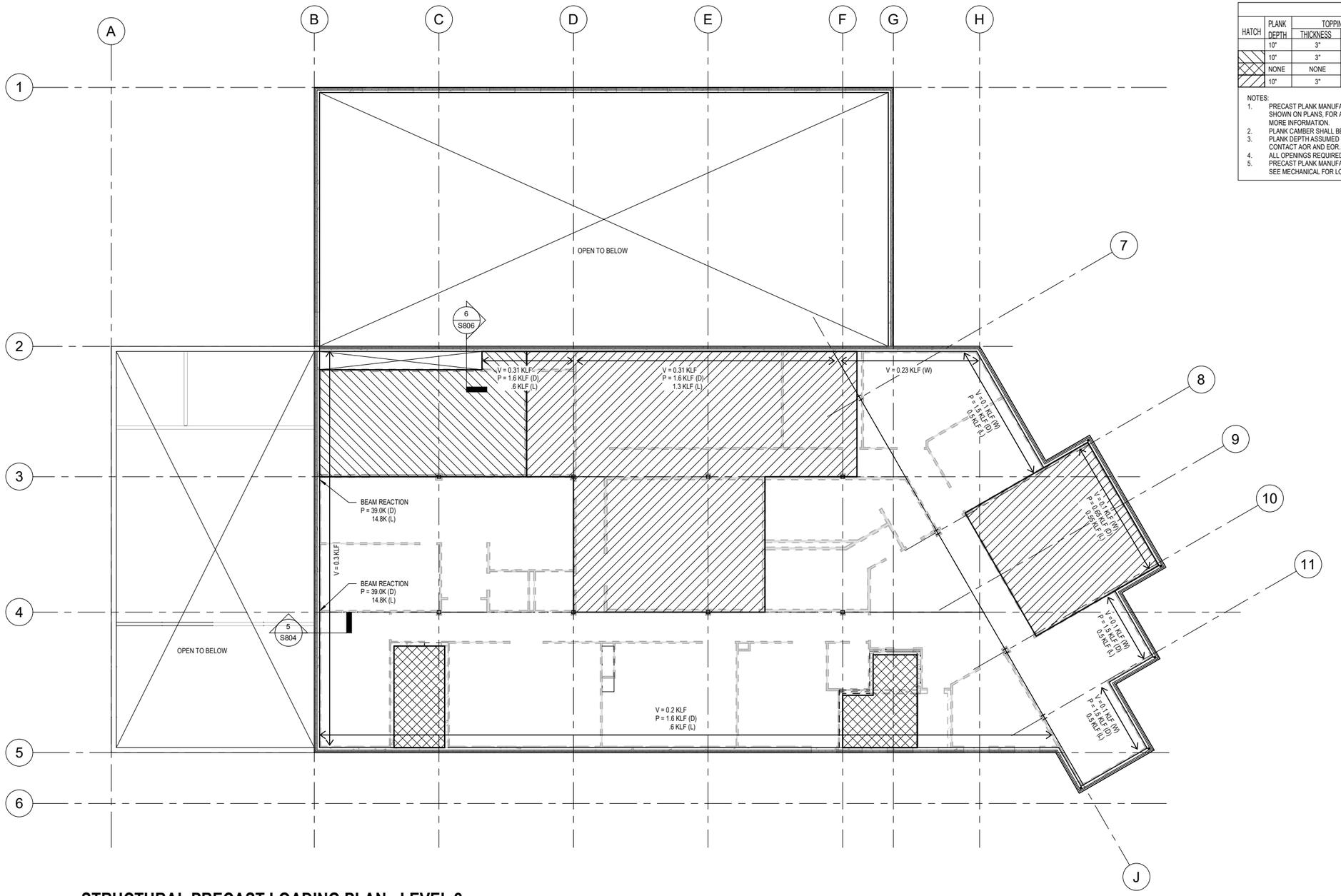
1. GC TO COORDINATE ALL MEP OPENINGS IN PRECAST PRIOR TO FABRICATION.

2. SEE ARCHITECTURAL SHEETS FOR ALL OPENING SIZES AND LOCATIONS. PRECAST TO BE SELF SUPPORTING OVER OPENINGS.

3. REACTIONS SHOWN AS FOLLOWS:
   P = MAXIMUM VERTICAL REACTION - KIPS, KIPS/FT
   V = MAXIMUM SHEAR REACTION - KIPS, KIPS/FT
   M = MAXIMUM MOMENT REACTION - KIPS, KIPS/FT

4. ALL REACTIONS SHOWN ARE SERVICE LOADS AND SHOULD BE FACTORED FOR FINAL DESIGN. LOAD CATEGORIES ARE AS FOLLOWS:
   D = DEAD LOAD
   L = LIVE LOAD
   Lr = ROOF LIVE LOAD
   S = SNOW LOAD
   W = WIND LOAD

5. LOADS SHOWN ARE THE LOADS BEING TRANSFERRED TO THE WALL PANELS AT THE DIAPHRAGM OF THE REFERENCED LEVEL AND ARE NOT A CUMULATIVE SUMMATION OF THE LOADS AT THAT LOCATION.



STRUCTURAL PRECAST LOADING PLAN - LEVEL 2

SCALE: 3/64" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL PRECAST LOADING PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S004	201

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PRECAST HOLLOWCORE PLANK SCHEDULE						
HATCH	PLANK DEPTH	TOPPING THICKNESS	TOPPING REINF.	FIRE RATING	LOADING	NOTES
	10"	3"	NONE	2-HR	DL=15PSF + PLANK, LL=50PSF	
	10"	3"	NONE	2-HR	DL=15PSF + PLANK, LL=50PSF	RECESSED PLANK AREA
	NONE	NONE	NONE	NONE	NONE	
	10"	3"	NONE	2-HR	DL=15PSF + PLANK, LL=100PSF	LIGHT STORAGE/ASSEMBLY AREA

NOTES:
1. PRECAST PLANK MANUFACTURER TO CHECK PLANKS ADJACENT TO OPENINGS, MECHANICAL OR OTHERS AS SHOWN ON PLANS, FOR ADDITIONAL LOAD CAUSED BY SLAB OPENINGS. REFERENCE PROJECT DRAWINGS FOR MORE INFORMATION.
2. PLANK CAMBER SHALL BE 1 INCH OR LESS
3. PLANK DEPTH ASSUMED - SHALL BE VERIFIED BY HOLLOW CORE PLANK MFR. IF THICKER PLANK IS REQUIRED. CONTACT AOR AND EOR. PLANK MFR SHALL BE RESPONSIBLE FOR SELECTING WIDTH AND LAYOUT.
4. ALL OPENINGS REQUIRED IN PLANK, BUT NOT SHOWN, SHALL BE COORDINATED WITH PRECAST SUPPLIER.
5. PRECAST PLANK MANUFACTURER TO DESIGN PLANKS FOR ADDITIONAL EQUIPMENT LOADS WHERE REQUIRED. SEE MECHANICAL FOR LOCATION.

PRECAST LOADING PLAN KEY:

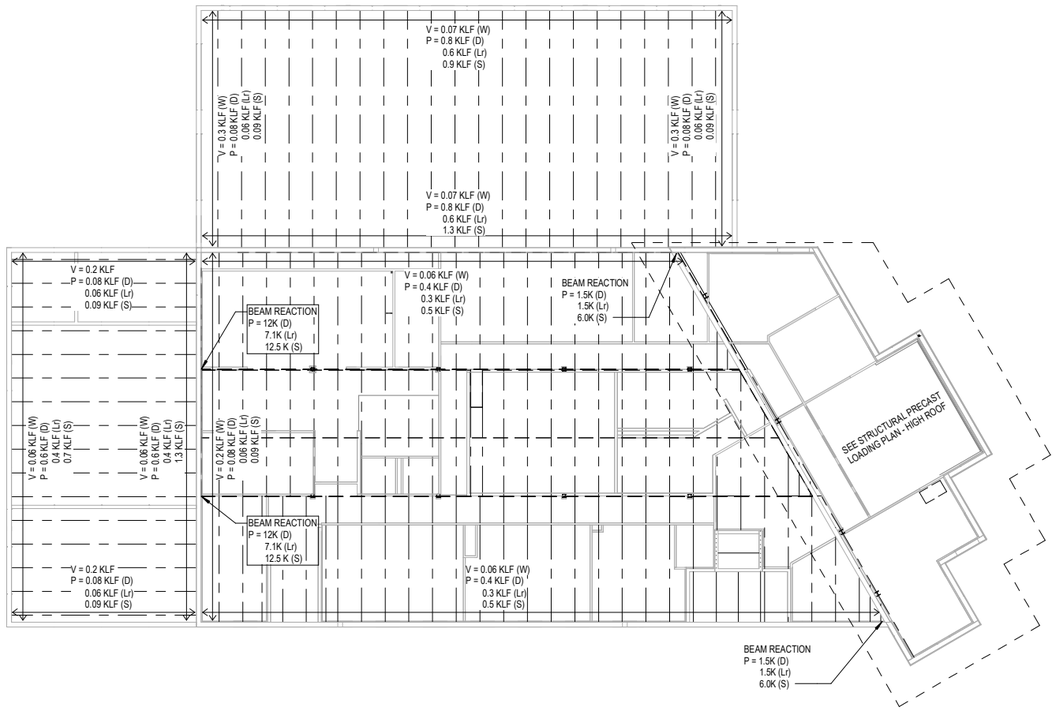
1. GC TO COORDINATE ALL MEP OPENINGS IN PRECAST PRIOR TO FABRICATION.

2. SEE ARCHITECTURAL SHEETS FOR ALL OPENING SIZES AND LOCATIONS. PRECAST TO BE SELF SUPPORTING OVER OPENINGS.

3. REACTIONS SHOWN AS FOLLOWS:
   P = MAXIMUM VERTICAL REACTION - KIPS, KIPS/FT
   V = MAXIMUM SHEAR REACTION - KIPS, KIPS/FT
   M = MAXIMUM MOMENT REACTION - KIPS, KIPS/FT

4. ALL REACTIONS SHOWN ARE SERVICE LOADS AND SHOULD BE FACTORED FOR FINAL DESIGN.
   LOAD CATEGORIES ARE AS FOLLOWS:
   D = DEAD LOAD
   L = LIVE LOAD
   Lr = ROOF LIVE LOAD
   S = SNOW LOAD
   W = WIND LOAD

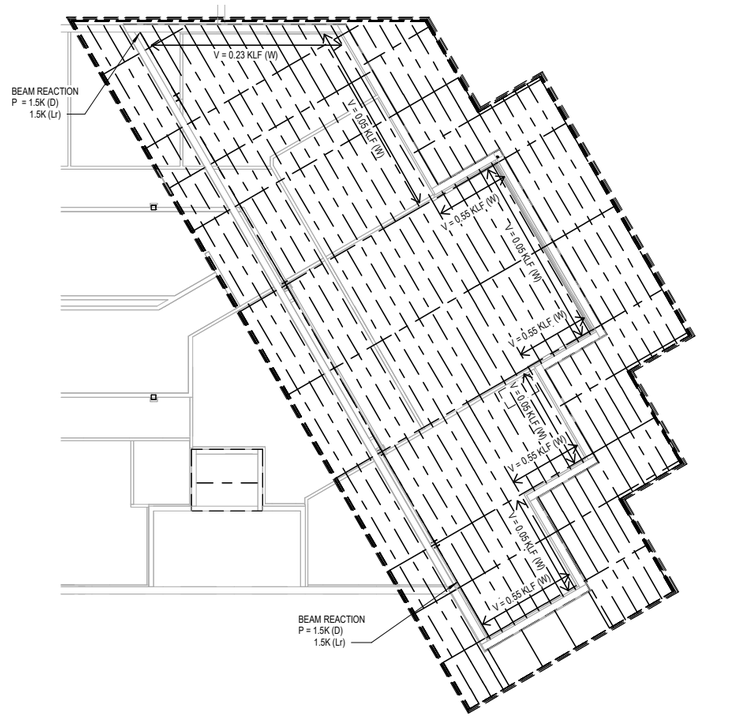
5. LOADS SHOWN ARE THE LOADS BEING TRANSFERRED TO THE WALL PANELS AT THE DIAPHRAGM OF THE REFERENCED LEVEL AND ARE NOT A CUMULATIVE SUMMATION OF THE LOADS AT THAT LOCATION.



STRUCTURAL PRECAST LOADING PLAN - ROOF

SCALE: 1/32" = 1'-0"

0' 4' 10' 20'



STRUCTURAL PRECAST LOADING PLAN - ROOF

SCALE: 3/64" = 1'-0"

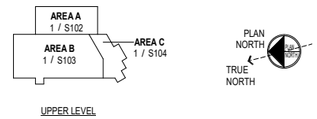
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL PRECAST LOADING PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S005	202

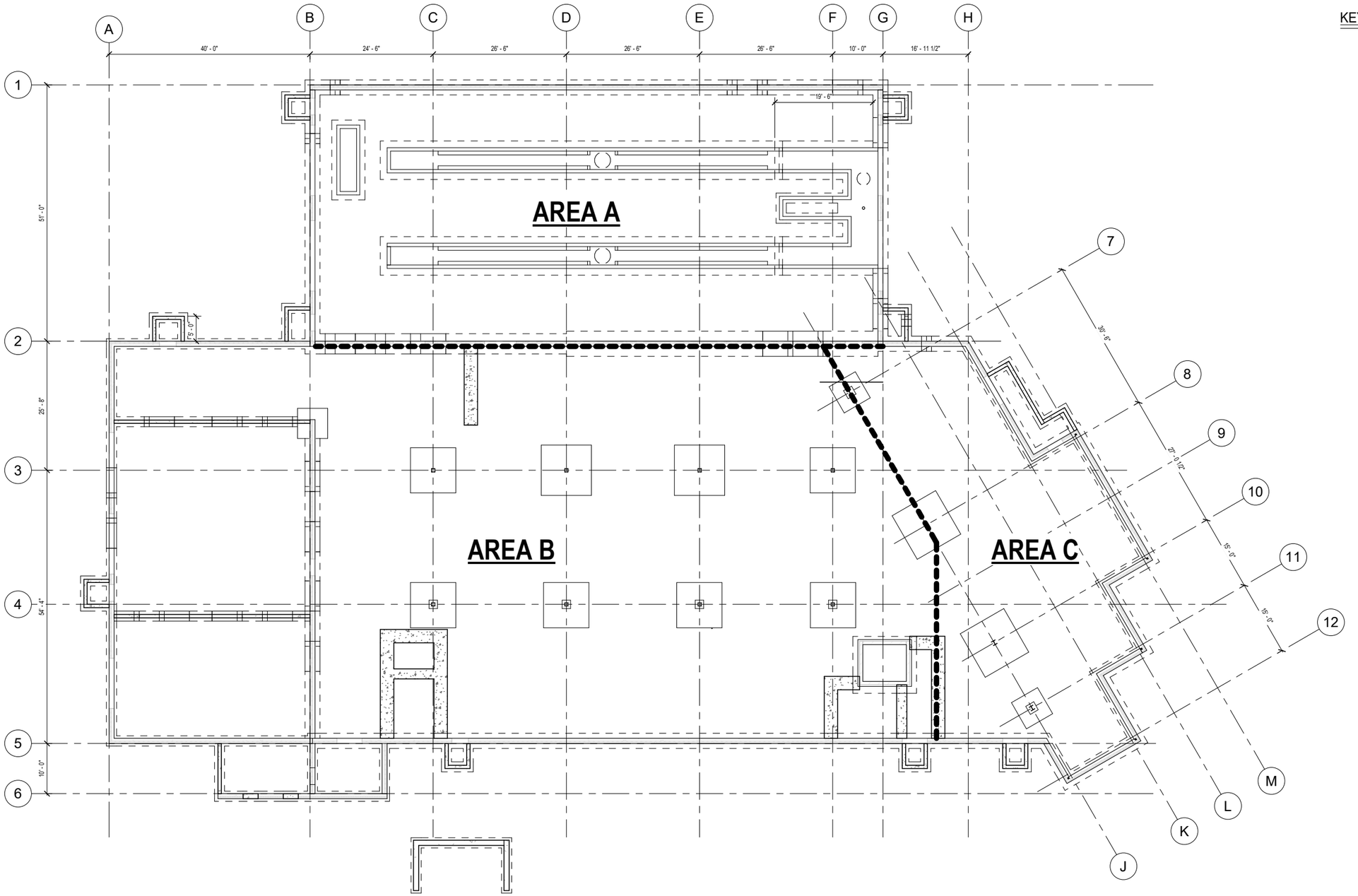
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2

KEY PLAN



UPPER LEVEL



STRUCTURAL FOUNDATION REFERENCE PLAN

SCALE: 3/64" = 1'-0"

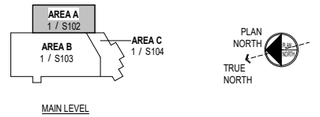
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL FOUNDATION REFERENCE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S101	203

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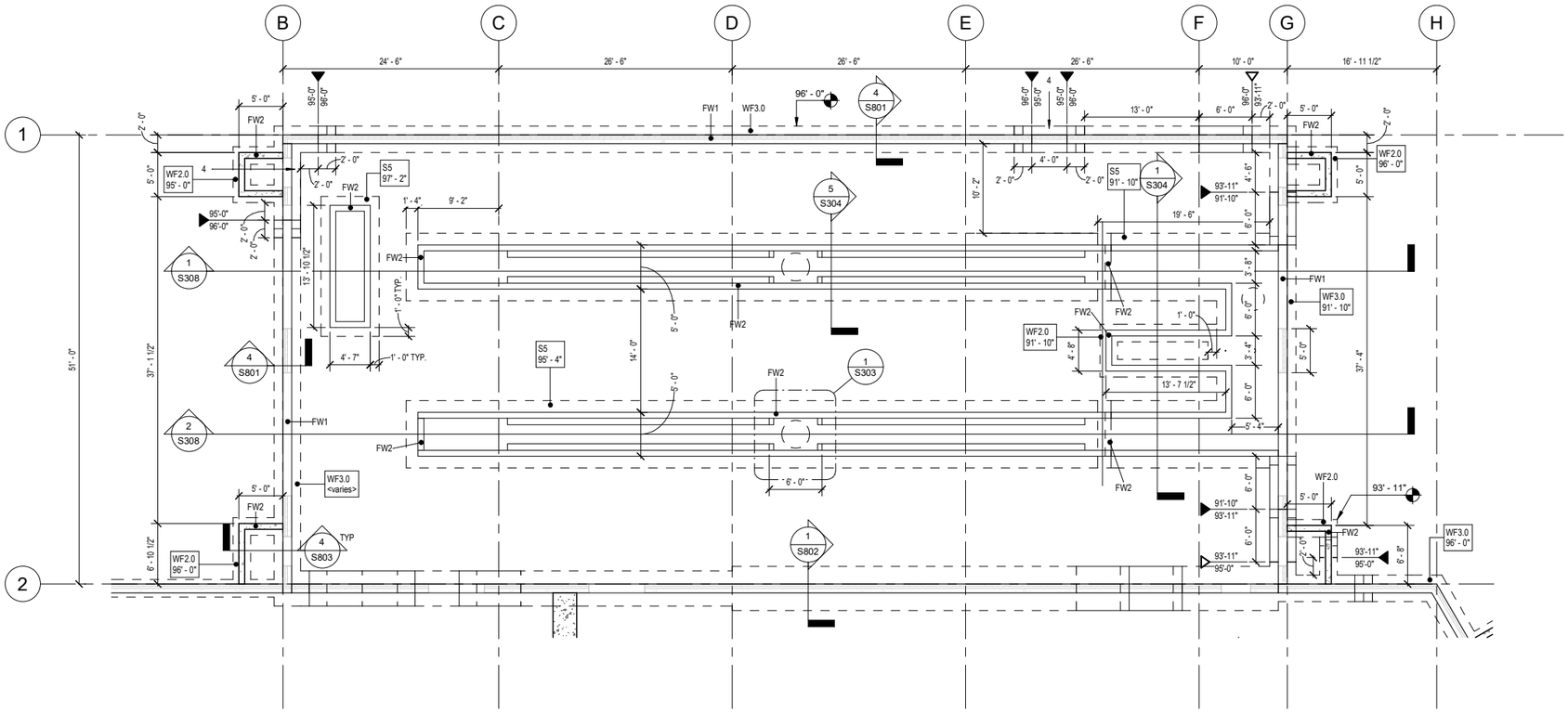
KEY PLAN



MAIN LEVEL

FOUNDATION NOTES:

1. B = BOTTOM, T = TOP, LW = LONG WAY, SW = SHORT WAY, EW = EACH WAY, EF = EACH FACE.
2. ALL REINFORCEMENT BARS TO BE BOTTOM BARS UNLESS NOTED OTHERWISE.
3. PIPE PENETRATIONS ARE APPROXIMATE. FINAL LOCATION TO BE COORDINATED WITH MECHANICAL.
4. FOUNDATION STEP TO BE CENTERED ON PLUMBING PENETRATION. STEP TO EXTEND 2'-0" EACH SIDE OF PENETRATION. SEE DETAIL 7/S801 FOR WALL PENETRATION REINFORCEMENT REQUIREMENTS.
5. TOP OF FOUNDATION WALL ELEVATION = 99'-0" UNO



STRUCTURAL FOUNDATION PLAN (AREA A)

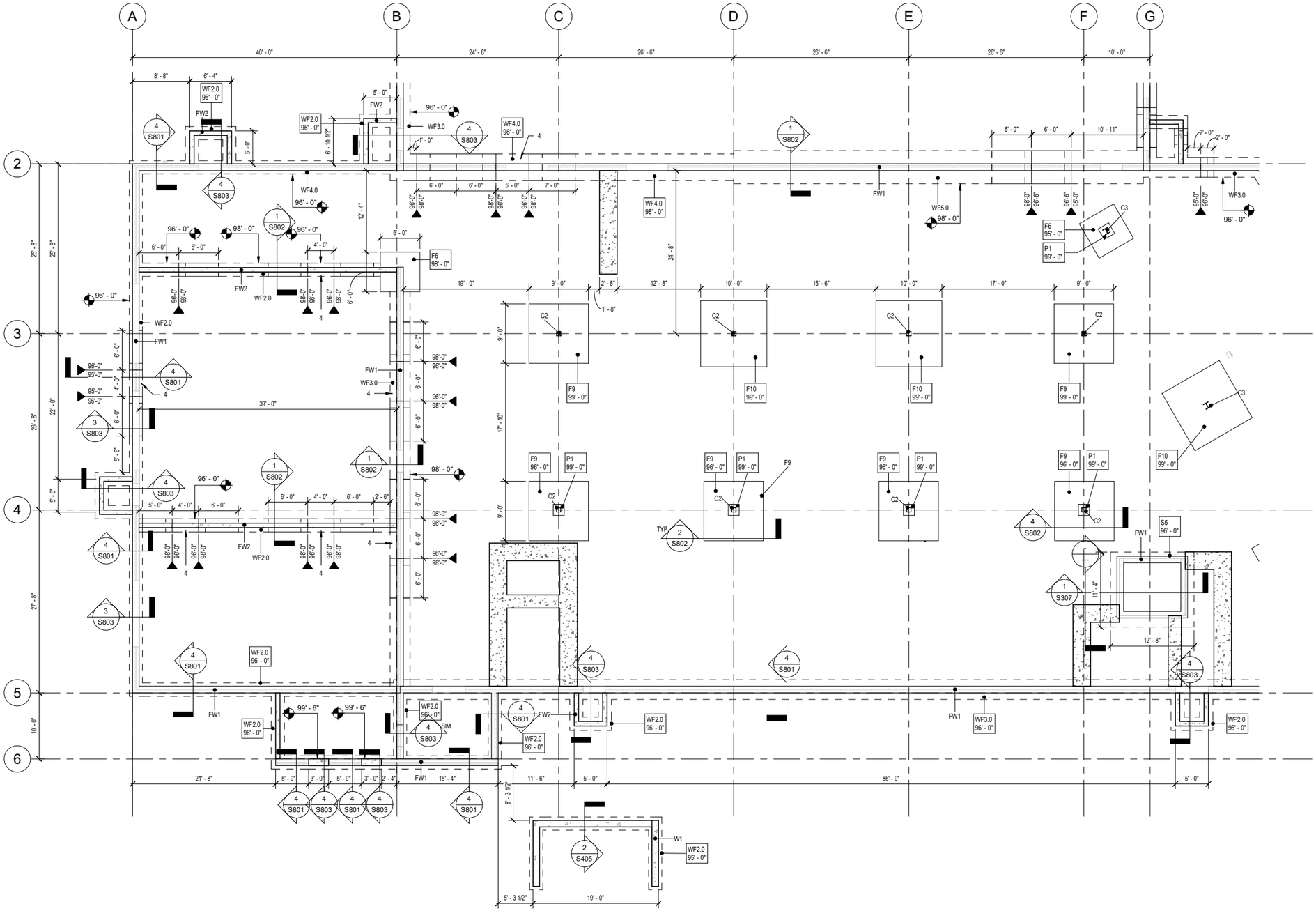
SCALE: 1/16" = 1'-0"

0' 2' 5' 10'

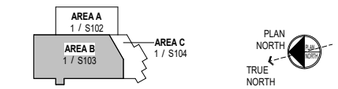
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL FOUNDATION PLAN (AREA A)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S102	204

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt

PLOT DATE: 4/29/2024 10:28:40 AM



KEY PLAN



FOUNDATION NOTES:

1. B = BOTTOM, T = TOP, LW = LONG WAY, SW = SHORT WAY, EW = EACH WAY, EF = EACH FACE.
2. ALL REINFORCEMENT BARS TO BE BOTTOM BARS UNLESS NOTED OTHERWISE.
3. PIPE PENETRATIONS ARE APPROXIMATE. FINAL LOCATION TO BE COORDINATED WITH MECHANICAL.
4. FOUNDATION STEP TO BE CENTERED ON PLUMBING PENETRATION. STEP TO EXTEND 2'-0" EACH SIDE OF PENETRATION. SEE DETAIL 7/S801 FOR WALL PENETRATION REINFORCEMENT REQUIREMENTS.

STRUCTURAL FOUNDATION PLAN (AREA B)

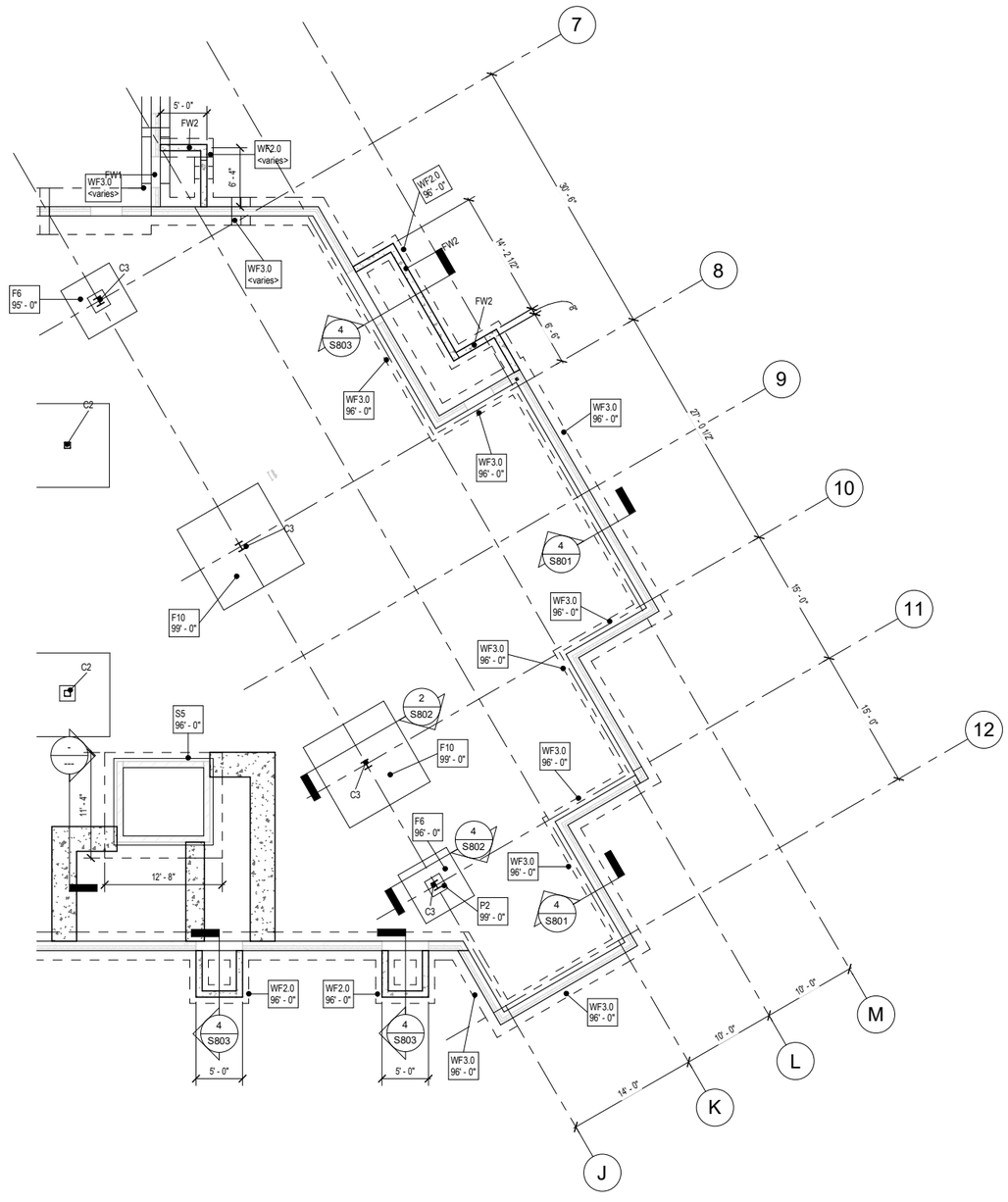
SCALE: 1/8" = 1'-0"

0' 2' 5' 10'

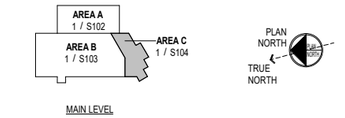
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL FOUNDATION PLAN (AREA B)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S103	205

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt

PLOT DATE: 4/29/2024 10:28:41 AM



KEY PLAN



MAIN LEVEL

FOUNDATION NOTES:

1. B = BOTTOM, T = TOP, LW = LONG WAY, SW = SHORT WAY, EW = EACH WAY, EF = EACH FACE.
2. ALL REINFORCEMENT BARS TO BE BOTTOM BARS UNLESS NOTED OTHERWISE.
3. PIPE PENETRATIONS ARE APPROXIMATE. FINAL LOCATION TO BE COORDINATED WITH MECHANICAL.

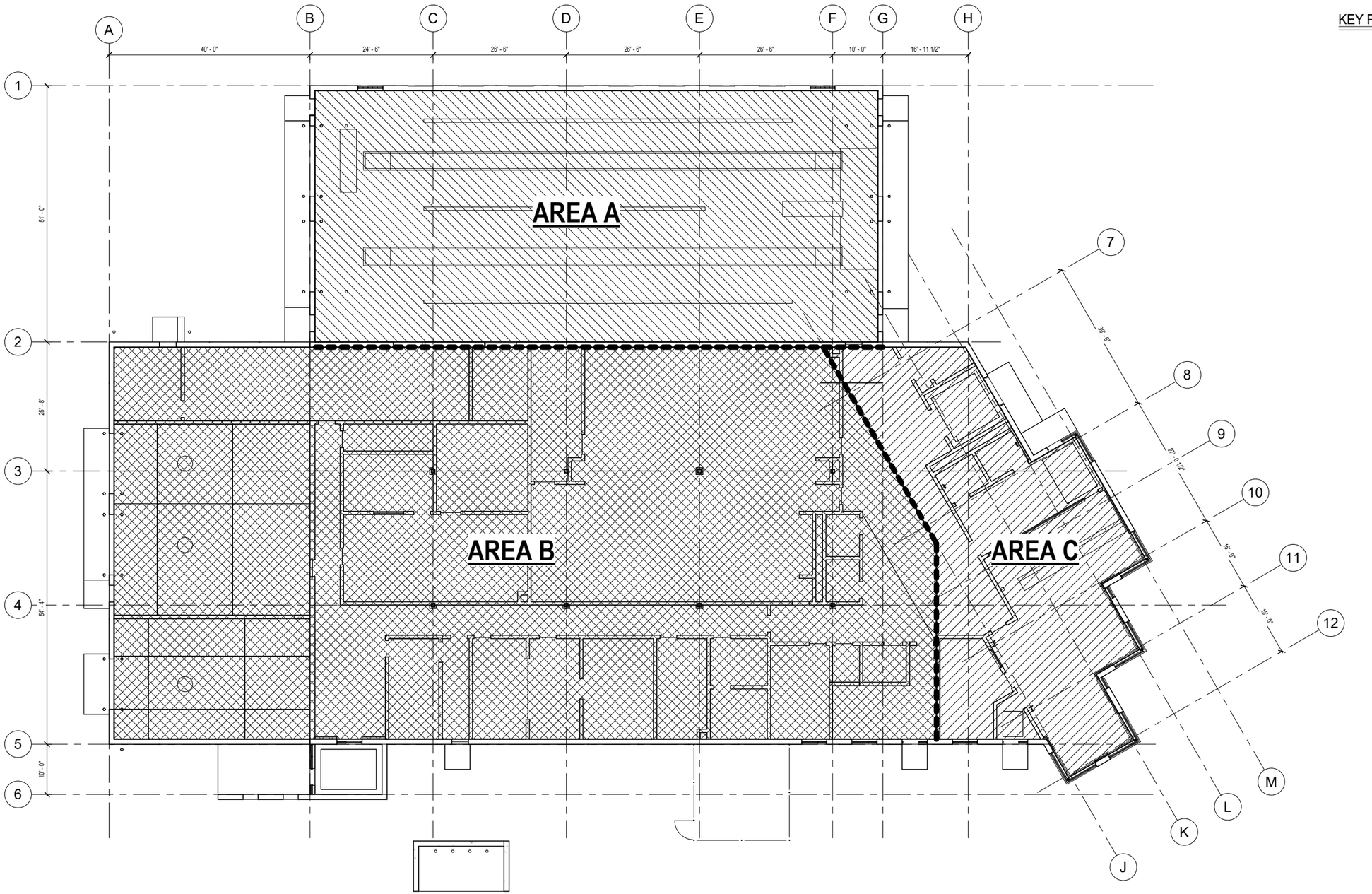
STRUCTURAL FOUNDATION PLAN (AREA C)

SCALE: 1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL FOUNDATION PLAN (AREA C)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S104	206

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KEY PLAN



UPPER LEVEL

STRUCTURAL MAIN LEVEL FRAMING REFERENCE PLAN

SCALE: 3/64" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL MAIN LEVEL FRAMING REFERENCE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S201	207

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PLOT DATE: 4/29/2024 10:28:42 AM

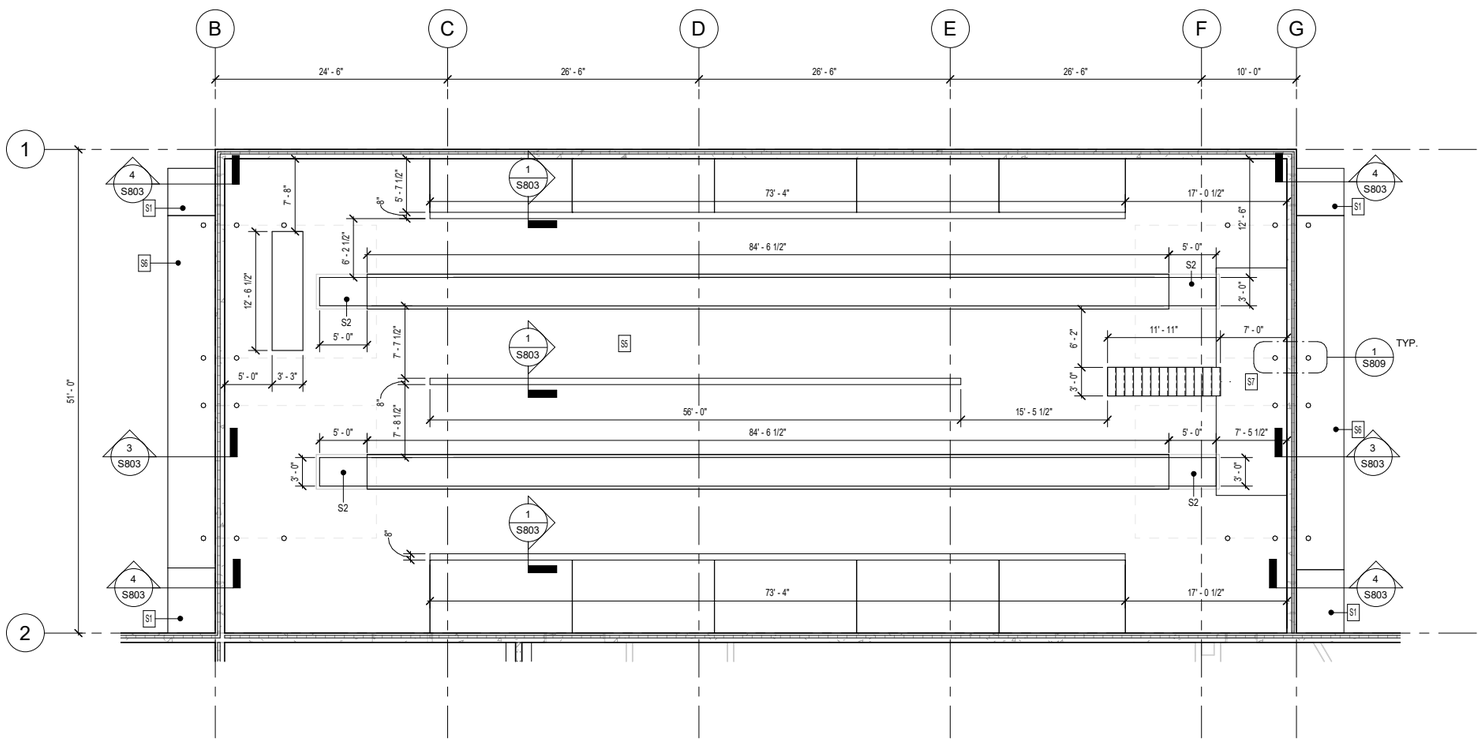
KEY PLAN



MAIN LEVEL

GENERAL NOTES:

1. REFER TO NON-BEARING MASONRY LINTEL SCHEDULE ON S/804 FOR INFORMATION.
2. GROUT ALL LINTELS SOLID.
3. CONTRACTOR RESPONSIBLE FOR ALL LINTELS THAT ARE SHOWN AND ANY THAT ARE REQUIRED BUT NOT SHOWN.



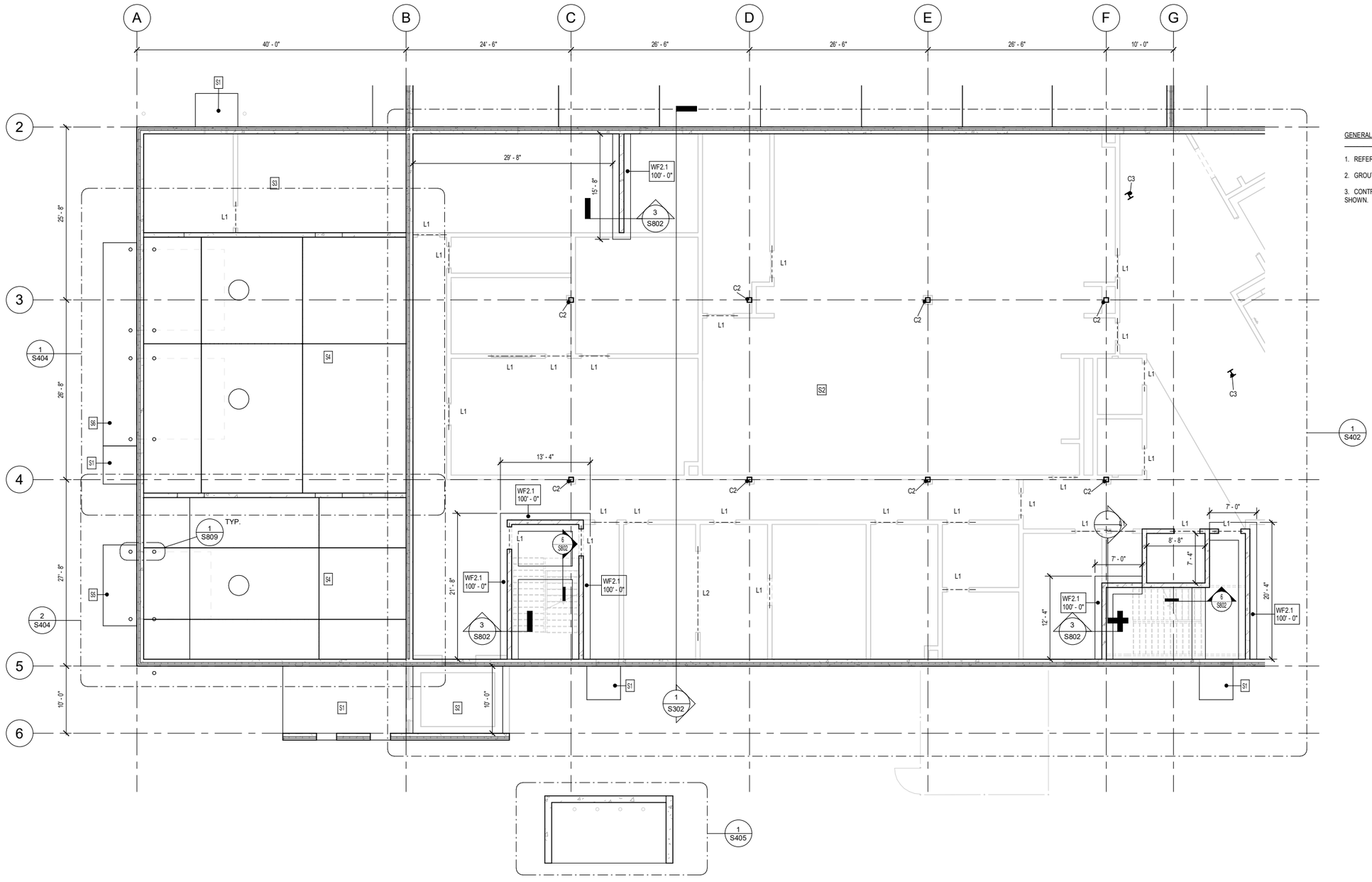
STRUCTURAL FRAMING PLAN - MAIN LEVEL (AREA A)

SCALE: 1/16" = 1'-0"

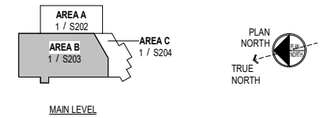
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL FRAMING PLAN - MAIN LEVEL (AREA A)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S202	208

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt PLOT DATE: 4/29/2024 10:28:42 AM



KEY PLAN



MAIN LEVEL

GENERAL NOTES:

1. REFER TO NON-BEARING MASONRY LINTEL SCHEDULE ON S/804 FOR INFORMATION.
2. GROUT ALL LINTELS SOLID.
3. CONTRACTOR RESPONSIBLE FOR ALL LINTELS THAT ARE SHOWN AND ANY THAT ARE REQUIRED BUT NOT SHOWN.

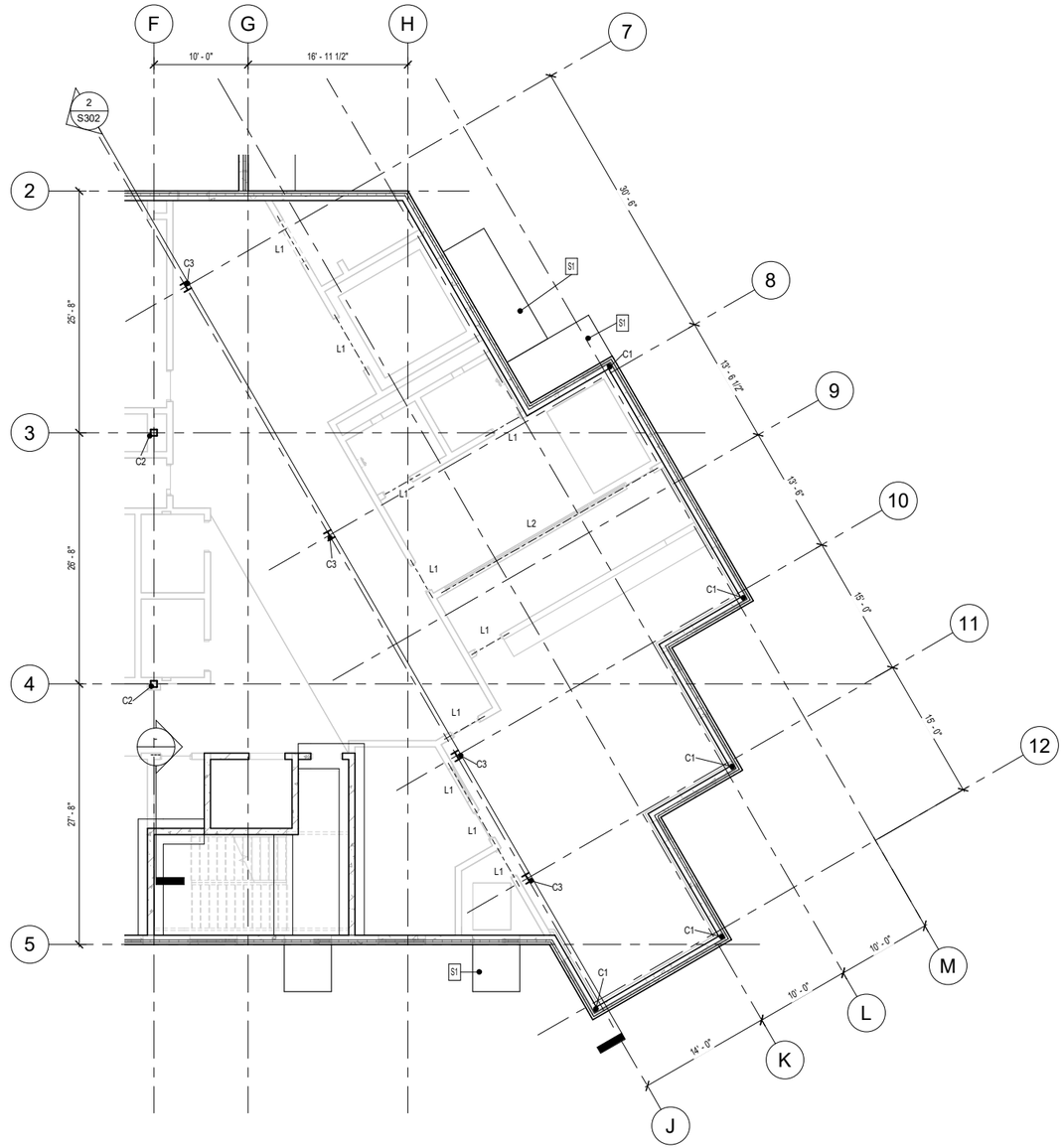
STRUCTURAL FRAMING PLAN - MAIN LEVEL (AREA B)

SCALE: 1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL FRAMING PLAN - MAIN LEVEL (AREA B)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S203	209

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt PLOT DATE: 4/29/2024 10:28:43 AM



KEY PLAN



MAIN LEVEL

GENERAL NOTES:

1. REFER TO NON-BEARING MASONRY LINTEL SCHEDULE ON S/804 FOR INFORMATION.
2. GROUT ALL LINTELS SOLID.
3. CONTRACTOR RESPONSIBLE FOR ALL LINTELS THAT ARE SHOWN AND ANY THAT ARE REQUIRED BUT NOT SHOWN.

STRUCTURAL FRAMING PLAN - MAIN LEVEL (AREA C)

SCALE: 1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL FRAMING PLAN - MAIN LEVEL (AREA C)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S204	210

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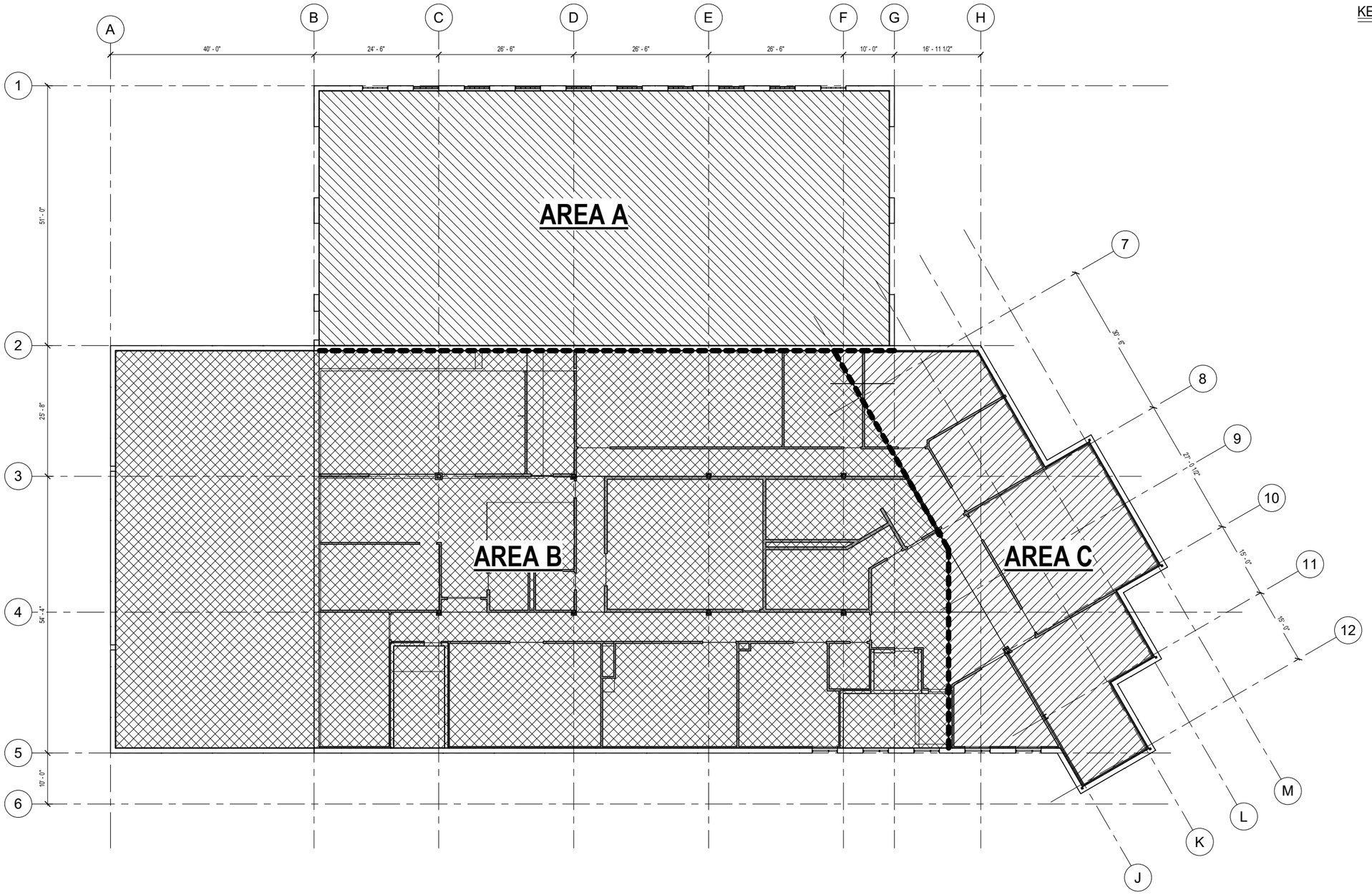
2

KEY PLAN



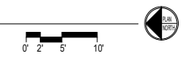


UPPER LEVEL



STRUCTURAL UPPER LEVEL FRAMING REFERENCE PLAN

SCALE: 3/64" = 1'-0"



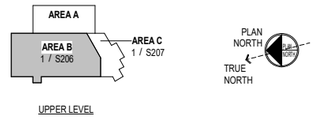
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL UPPER LEVEL FRAMING REFERENCE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S205	211

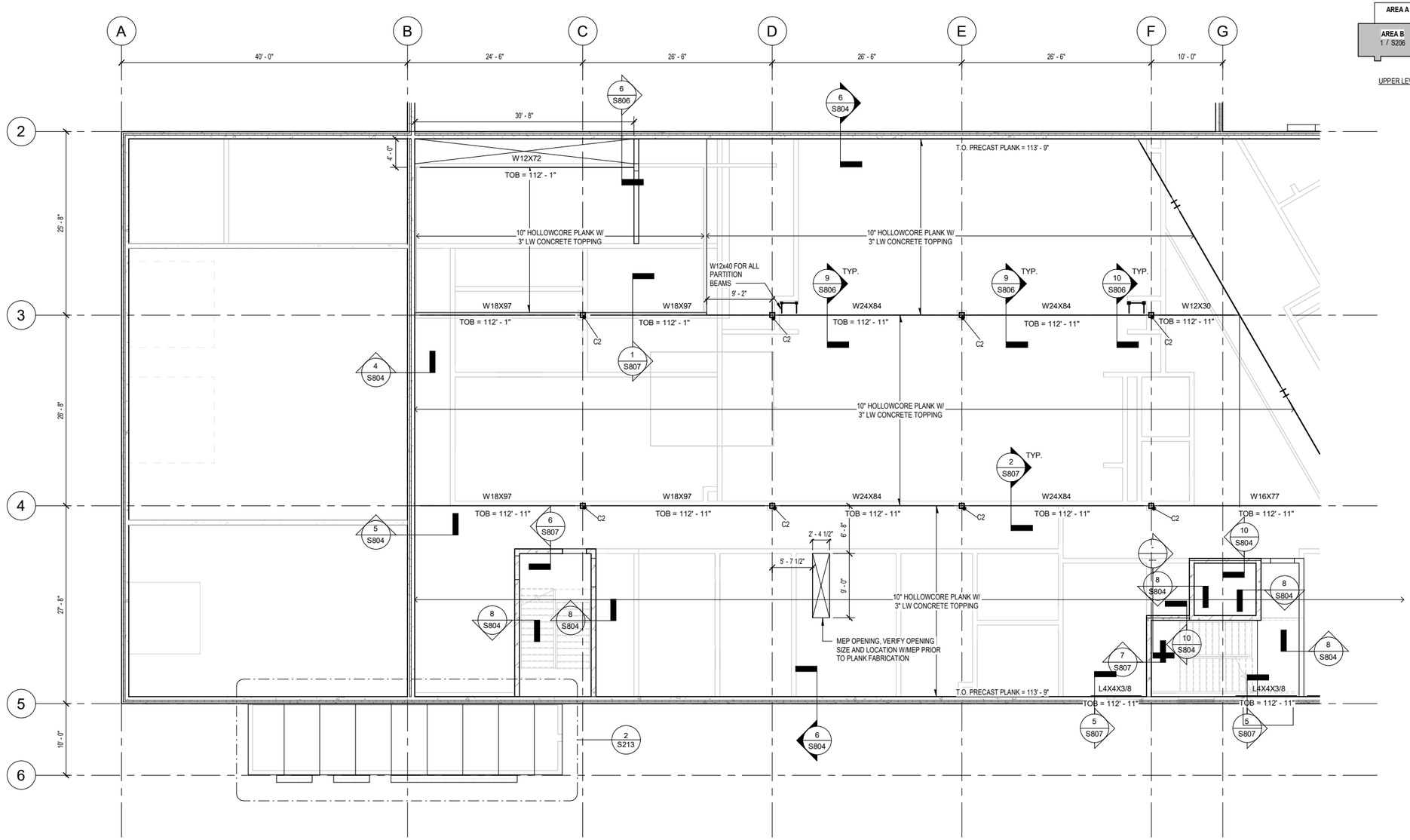
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PLOT DATE: 4/29/2024 10:28:44 AM

2

KEY PLAN





UPPER LEVEL STRUCTURAL FLOOR FRAMING PLAN - AREA B

SCALE: 1/16" = 1'-0"

0' 2' 5' 10'

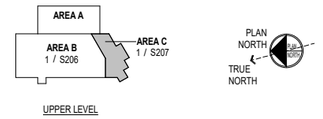
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL FLOOR FRAMING - UPPER LEVEL (AREA B)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S206	212

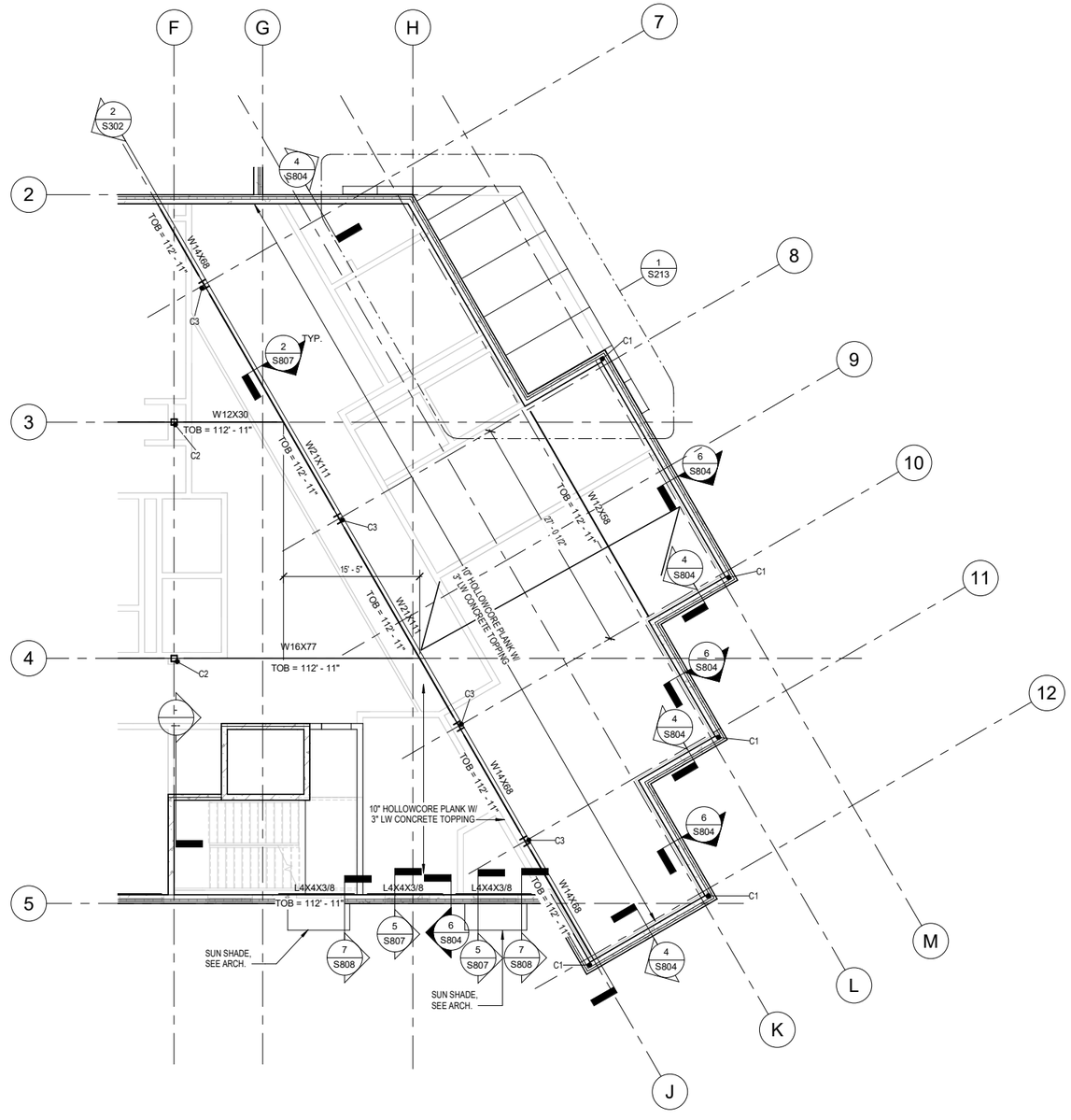
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PLOT DATE: 4/29/2024 10:28:45 AM

2

KEY PLAN





UPPER LEVEL STRUCTURAL FLOOR FRAMING PLAN - AREA C

SCALE: 1/16" = 1'-0"

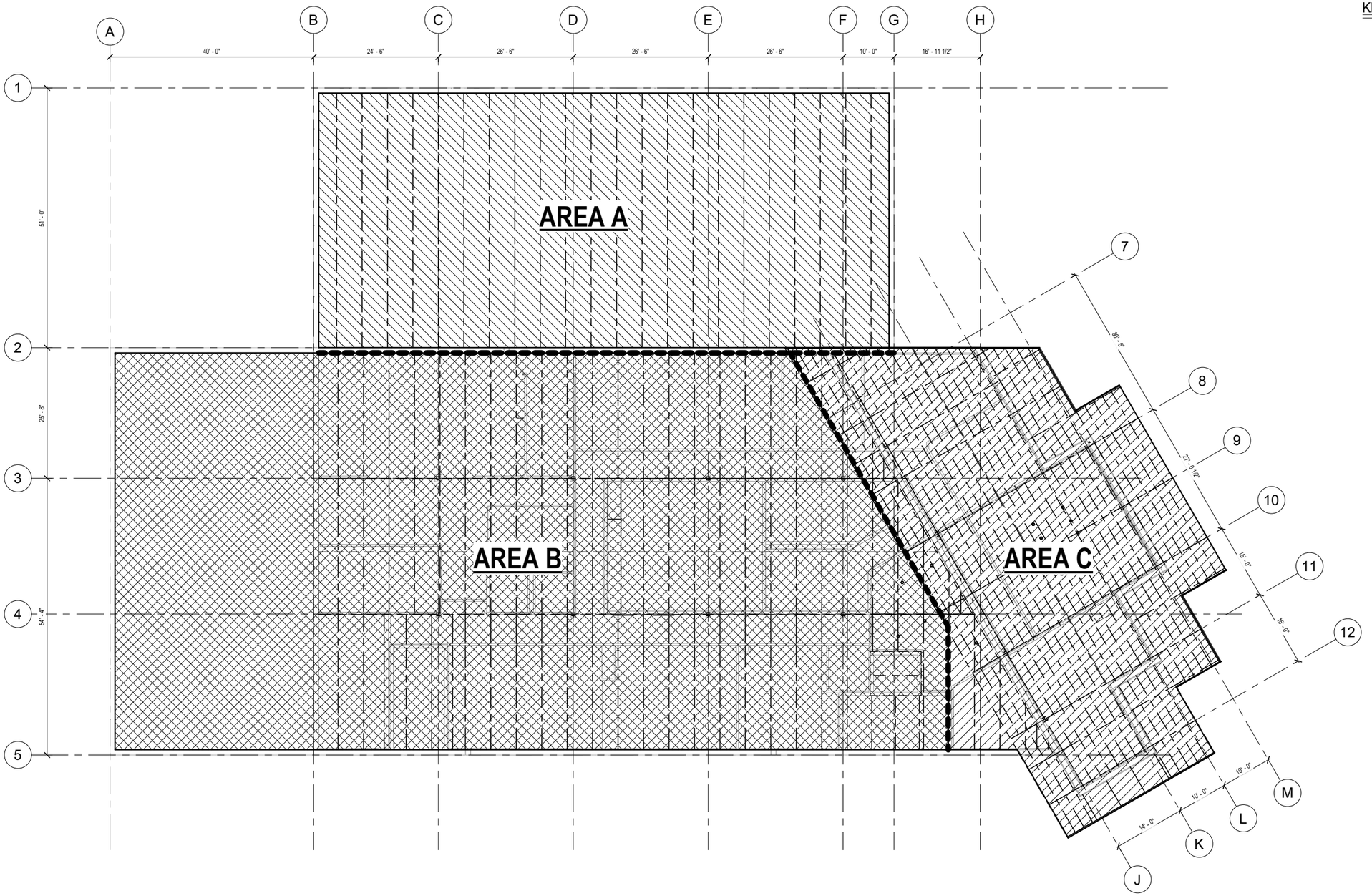
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL FLOOR FRAMING - UPPER LEVEL (AREA C)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S207	213

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt

PLOT DATE: 4/29/2024 10:28:45 AM

2



KEY PLAN



UPPER LEVEL

STRUCTURAL ROOF FRAMING REFERENCE PLAN

SCALE: 3/64" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ROOF FRAMING REFERENCE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S208	214

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PLOT DATE: 4/29/2024 10:28:46 AM

2

KEY PLAN



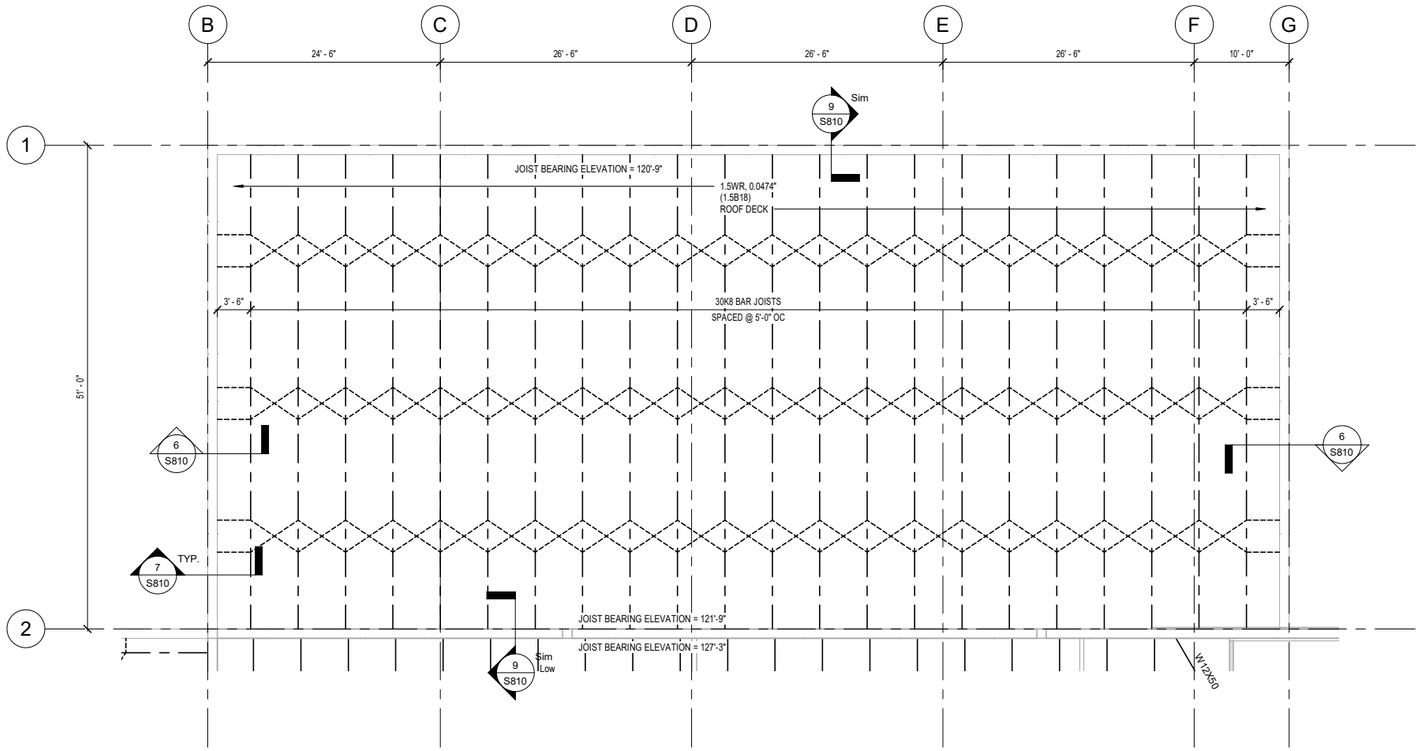
UPPER LEVEL

GENERAL NOTES:

1. COORDINATE JOIST LOCATIONS WITH ARCHITECTURAL PLANS.

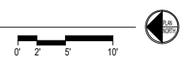
2. CONTRACTOR IS RESPONSIBLE FOR DESIGN AND CONSTRUCTION COSTS THAT OCCUR AS A RESULT OF CHAGES TO THE JOIST LAYOUT SHOWN.

3. JOISTS BRIDGING SHOWN FOR BIDDING PURPOSES ONLY. JOIST SUPPLIER TO DESIGN AND SUPPLY ALL REQUIRED JOIST BRIDGING AND PROVIDE BRIDGING LOADS TO PRECAST WALL SUPPLIER FOR EMBED DESIGN.



STRUCTURAL ROOF FRAMING PLAN (AREA A)

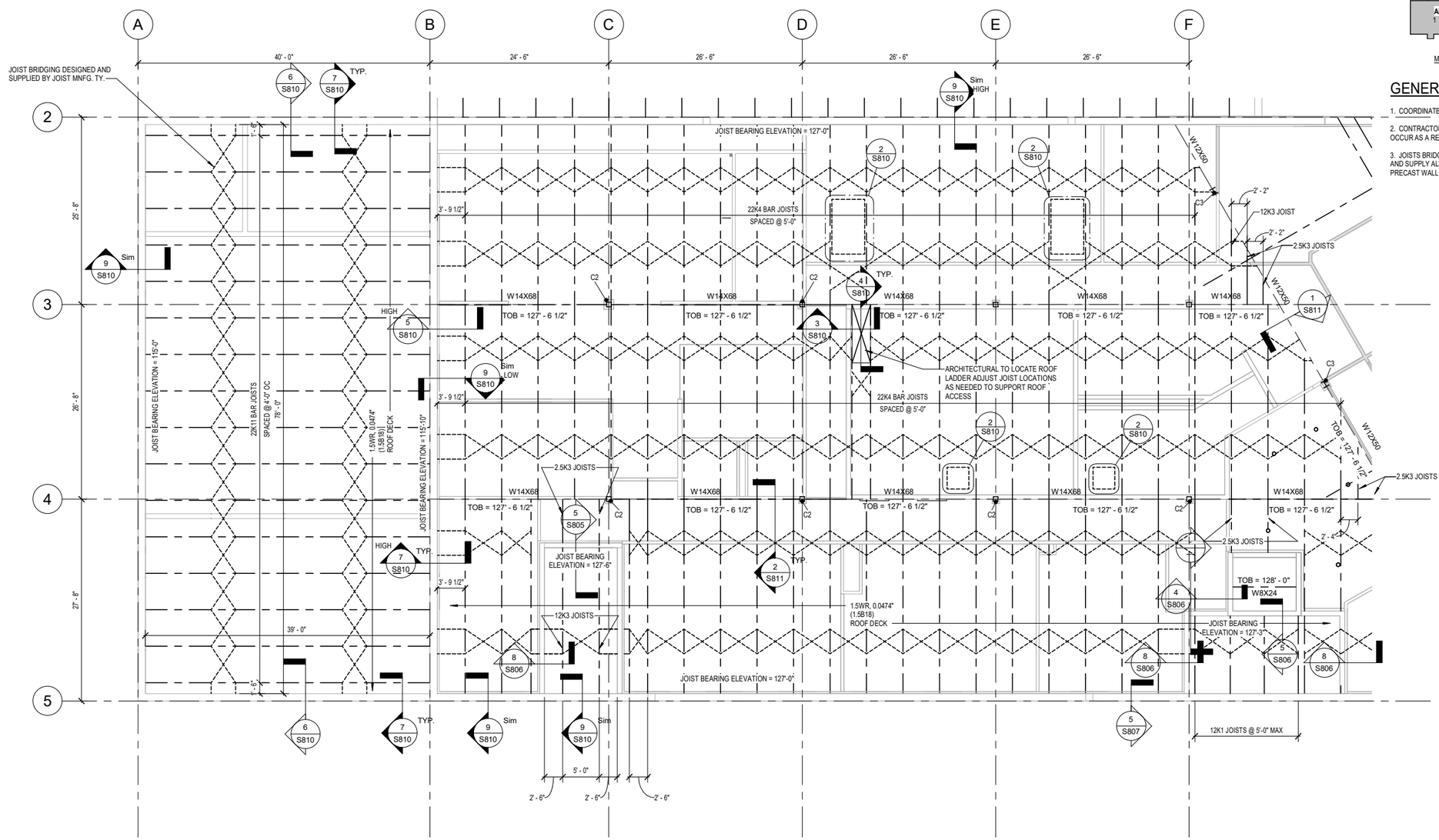
SCALE: 1/16" = 1'-0"



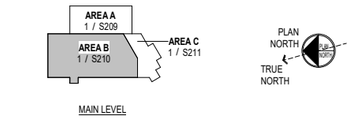
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ROOF FRAMING PLAN (AREA A)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S209	215

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PLOT DATE: 4/29/2024 10:28:46 AM



KEY PLAN



GENERAL NOTES:

1. COORDINATE JOIST LOCATIONS WITH ARCHITECTURAL PLANS.
2. CONTRACTOR IS RESPONSIBLE FOR DESIGN AND CONSTRUCTION COSTS THAT OCCUR AS A RESULT OF CHAGES TO THE JOIST LAYOUT SHOWN.
3. JOISTS BRIDGING SHOWN FOR BIDDING PURPOSES ONLY. JOIST SUPPLIER TO DESIGN AND SUPPLY ALL REQUIRED JOIST BRIDGING AND PROVIDE BRIDGING LOADS TO PRECAST WALL SUPPLIER FOR EMBED DESIGN.

STRUCTURAL ROOF FRAMING PLAN (AREA B)

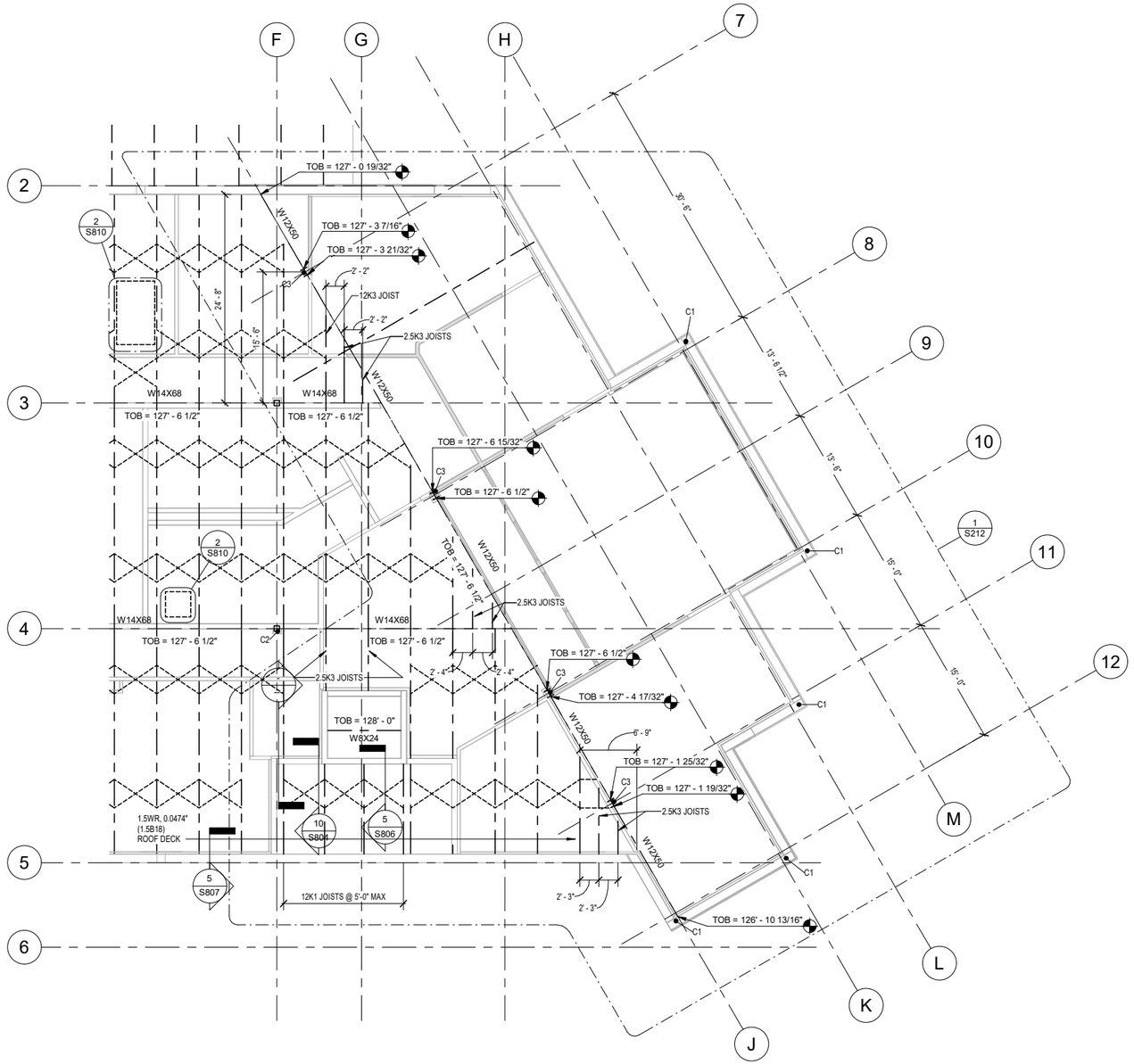
SCALE: 1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ROOF FRAMING PLAN (AREA B)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S210	216

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt

PLOT DATE: 4/29/2024 10:28:47 AM



KEY PLAN



MAIN LEVEL

GENERAL NOTES:

1. COORDINATE JOIST LOCATIONS WITH ARCHITECTURAL PLANS.

2. CONTRACTOR IS RESPONSIBLE FOR DESIGN AND CONSTRUCTION COSTS THAT OCCUR AS A RESULT OF CHAGES TO THE JOIST LAYOUT SHOWN.

3. JOISTS BRIDGING SHOWN FOR BIDDING PURPOSES ONLY. JOIST SUPPLIER TO DESIGN AND SUPPLY ALL REQUIRED JOIST BRIDGING AND PROVIDE BRIDGING LOADS TO PRECAST WALL SUPPLIER FOR EMBED DESIGN.

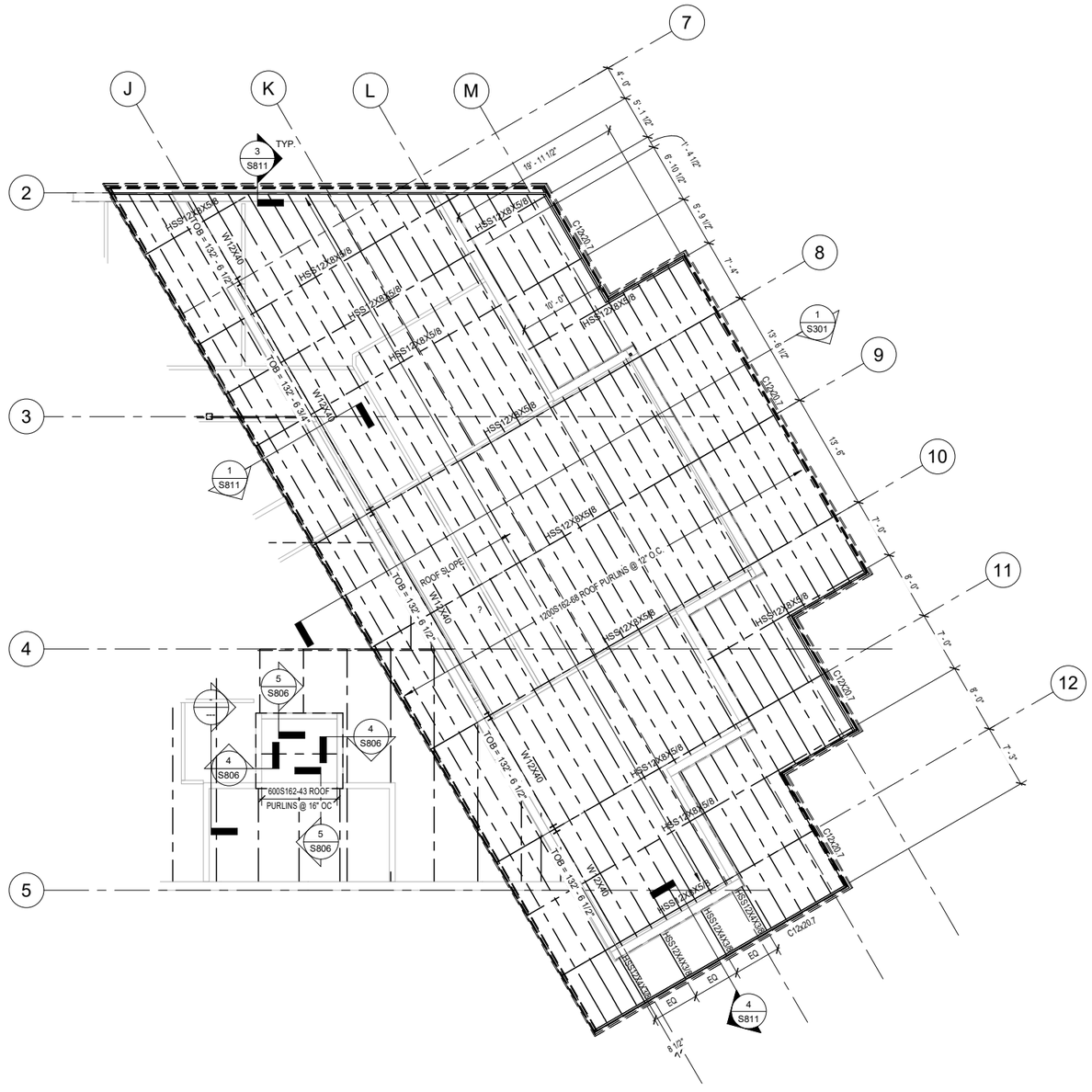
STRUCTURAL ROOF FRAMING PLAN (AREA C)

SCALE: 1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ROOF FRAMING PLAN (AREA C)	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S211	217

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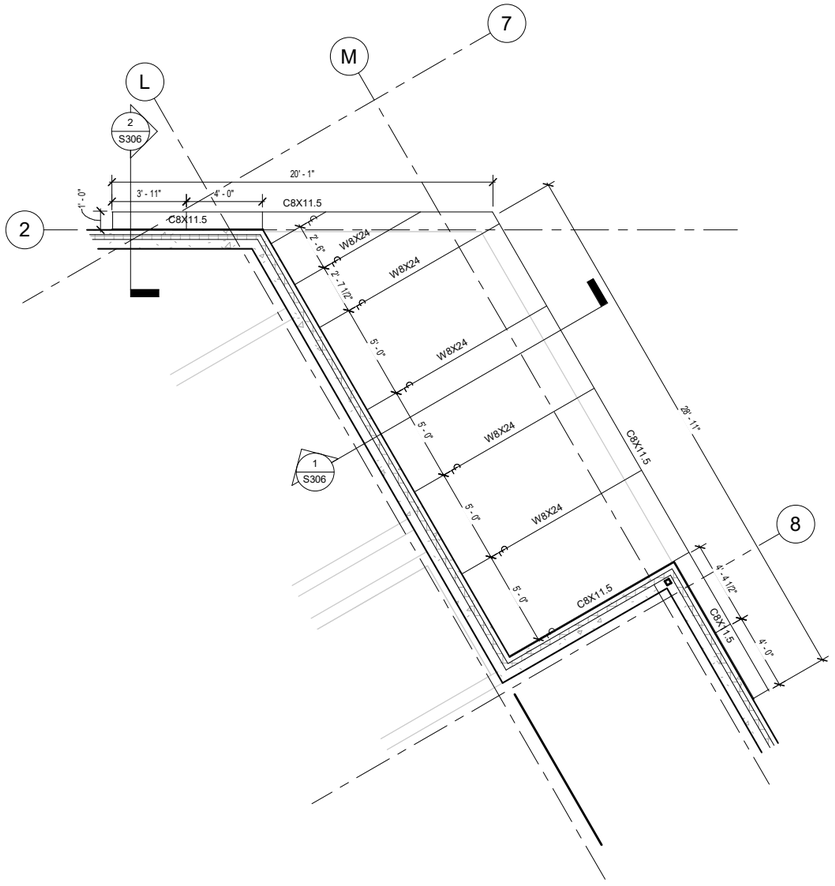
STRUCTURAL ROOF FRAMING - ENLARGED PLAN

SCALE: 1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ENLARGED PLANS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S212	218

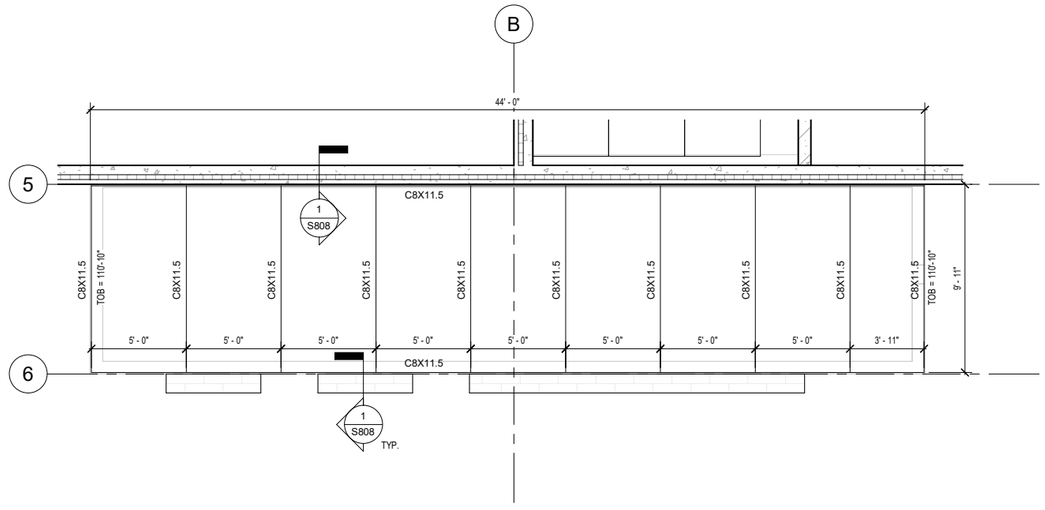
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STRUCTURAL CANOPY 1 OVERVIEW

SCALE: 1/8" = 1'-0"

0' 1' 2' 5'



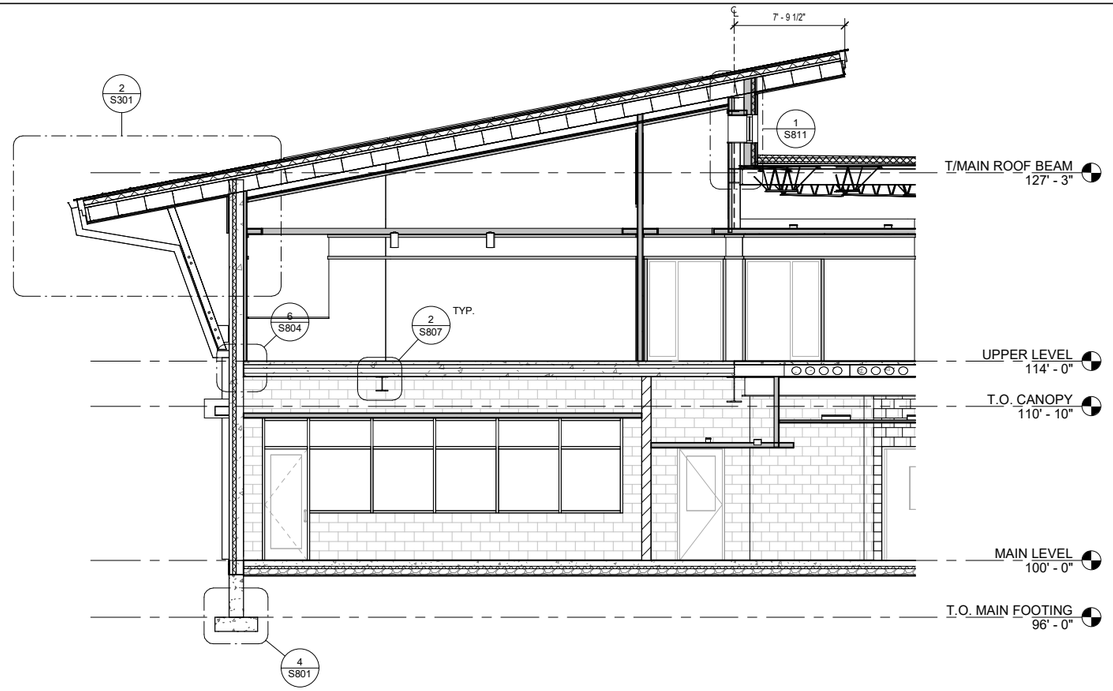
STRUCTURAL CANOPY 2 OVERVIEW

SCALE: 1/8" = 1'-0"

0' 1' 2' 5'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ENLARGED PLANS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S213	219

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt PLOT DATE: 4/29/2024 10:28:48 AM

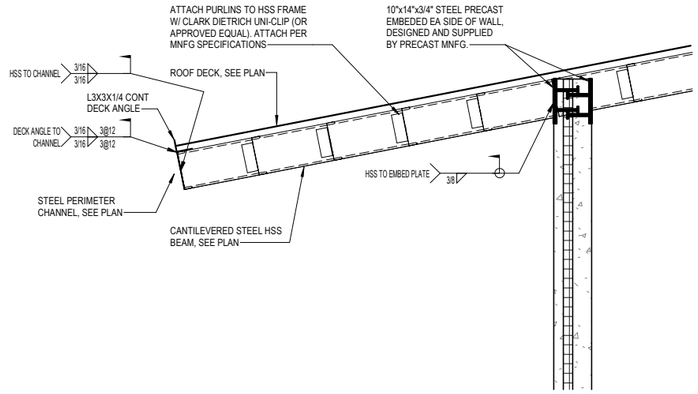


1 BUILDING CROSS SECTION - AREA C

SCALE: 3/32" = 1'-0"

S301

0' 2' 5' 10'



2 ROOF OVERHANG DETAIL

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

S301

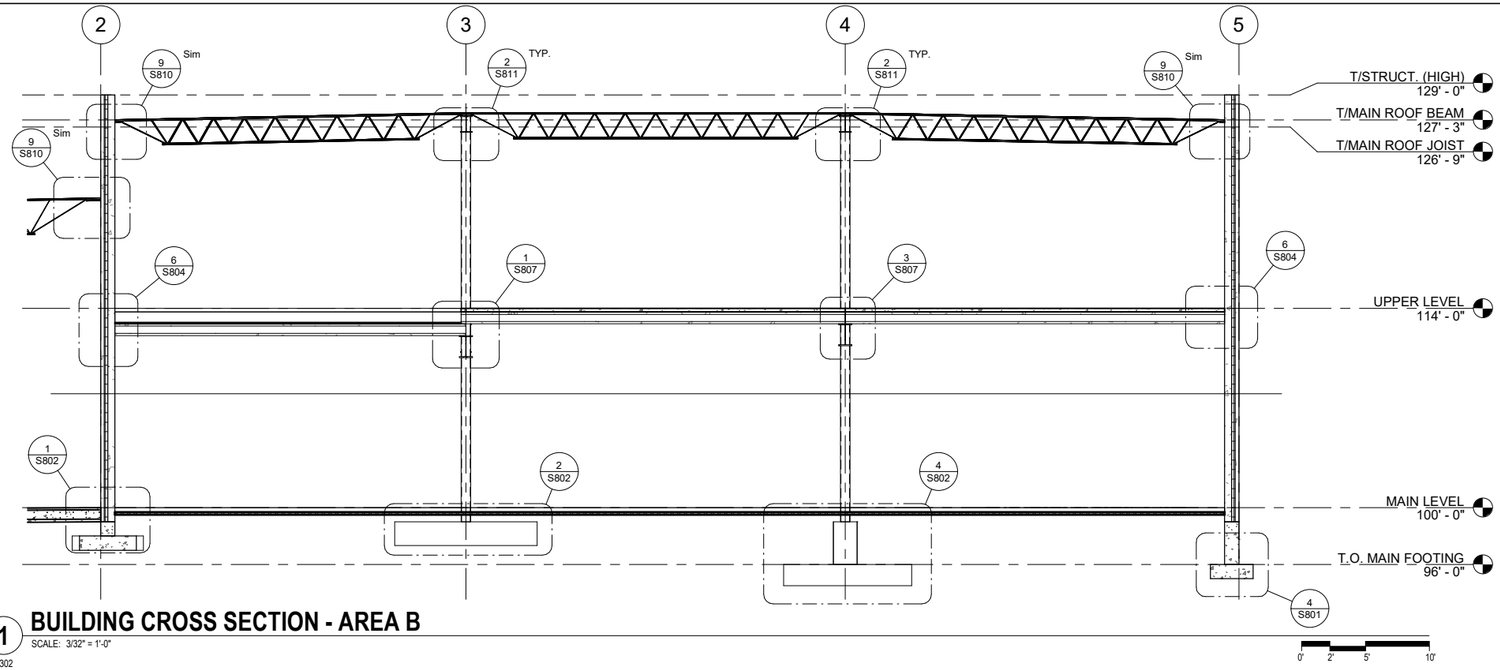
0" 6" 1' 3'

2

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S301	220

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt

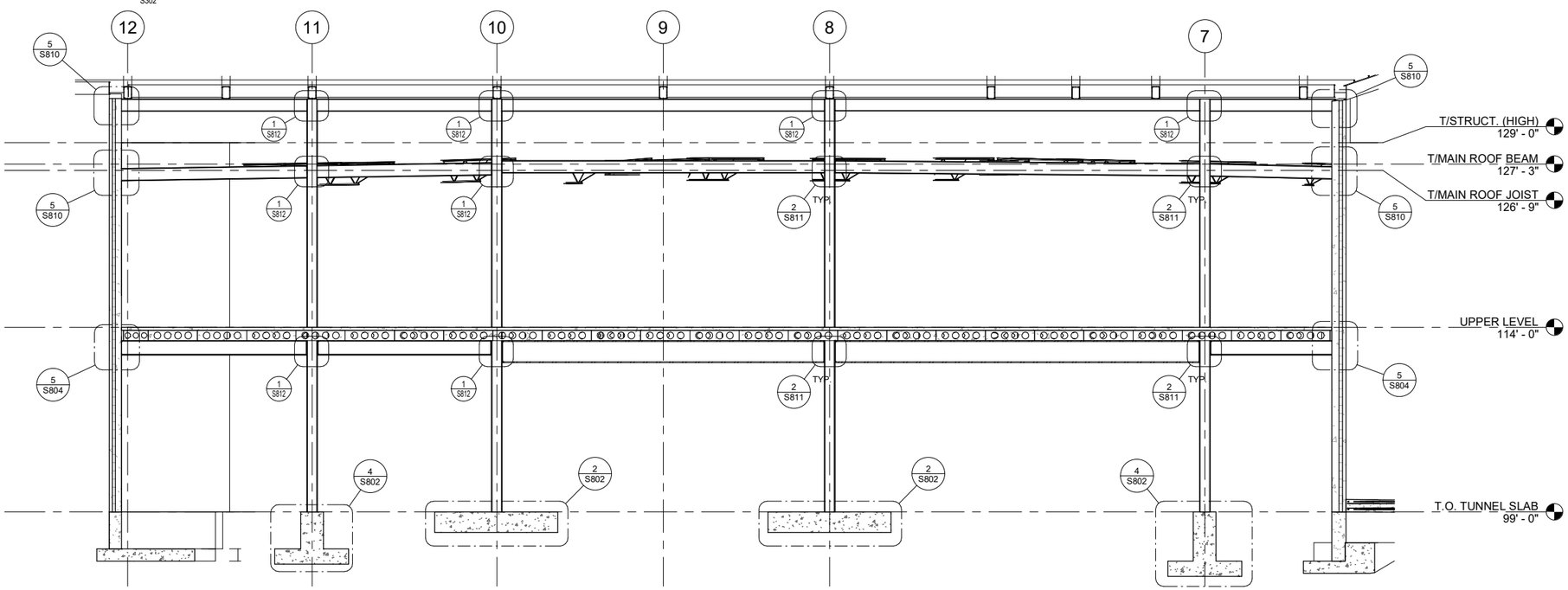
PLOT DATE: 4/29/2024 10:28:49 AM



1 BUILDING CROSS SECTION - AREA B

SCALE: 3/32" = 1'-0"

S302



2 BUILDING CROSS SECTION - AREA C

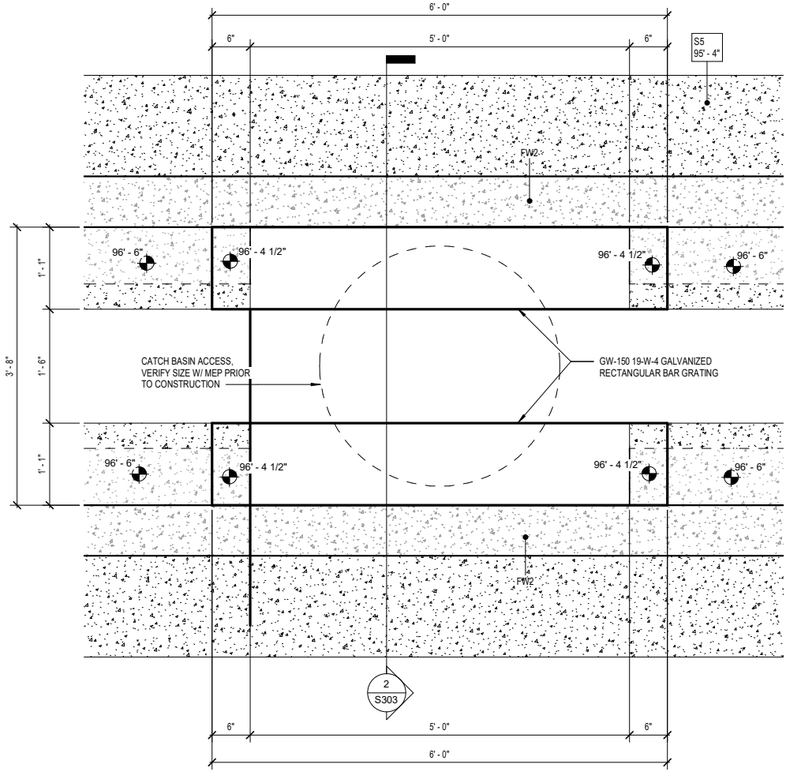
SCALE: 3/16" = 1'-0"

S302

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S302	221

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt

PLOT DATE: 4/29/2024 10:28:49 AM

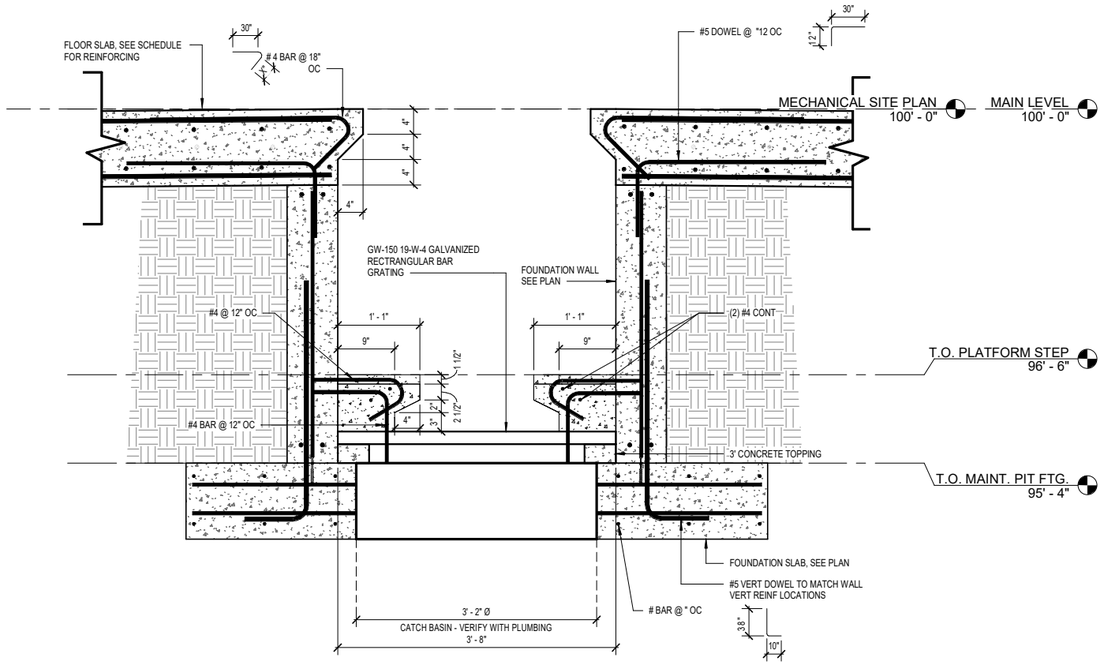


1 INSPECTION PIT CATCH BASIN DETAIL

SCALE: 1/2" = 1'-0"

S303

0" 3" 6" 1' - 6"

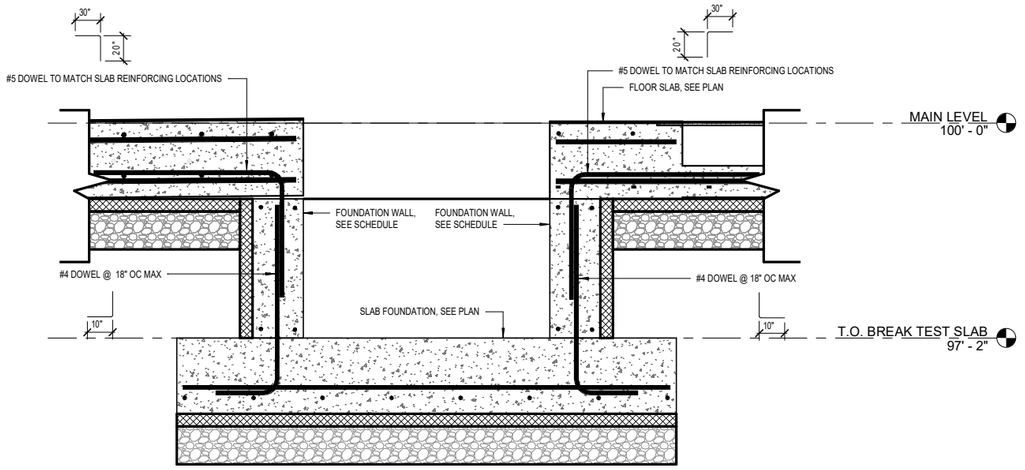


2 INSPECTION PIT CATCH BASIN CROSS SECTION

SCALE: 1/2" = 1'-0"

S303

0" 3" 6" 1' - 6"



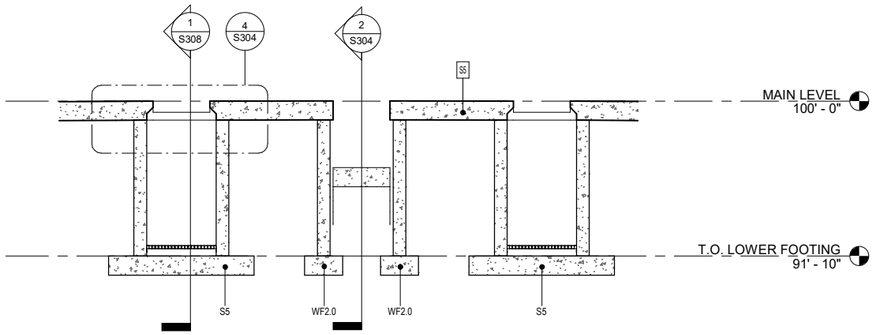
3 BREAK INSPECTION PIT - CROSS SECTION

SCALE: 1/2" = 1'-0"

S303

0" 3" 6" 1' - 6"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S303	222

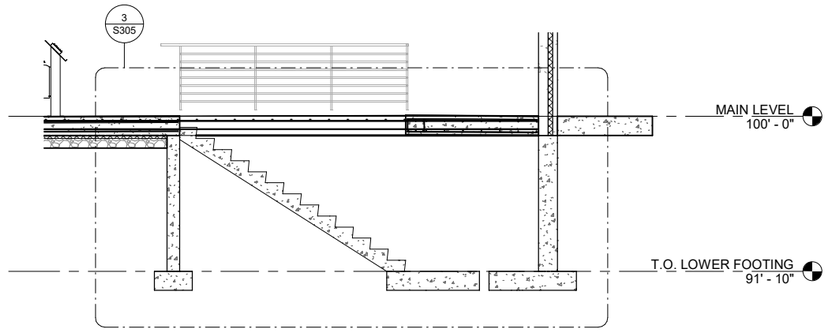


1 CROSS SECTION

SCALE: 1/8" = 1'-0"

S304

0' 1' 2' 5'

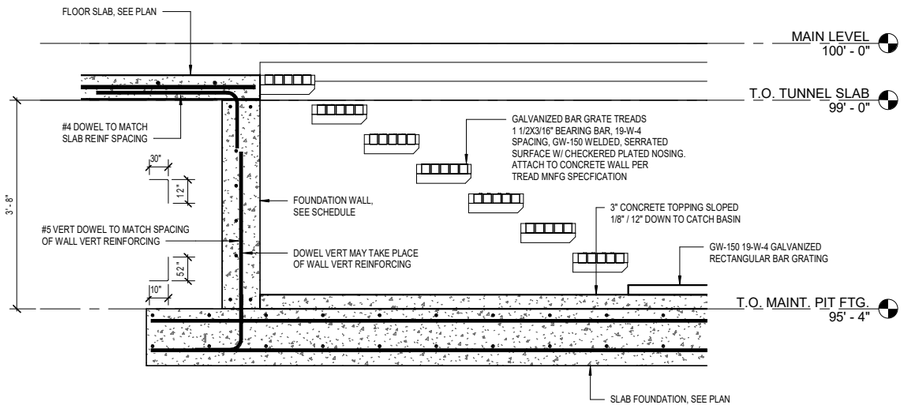


2 CROSS SECTION

SCALE: 1/8" = 1'-0"

S304

0' 1' 2' 5'

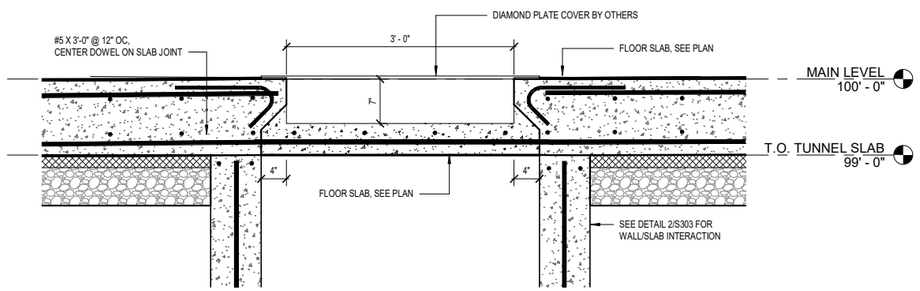


3 INSPECTION PIT DETAIL

SCALE: 3/8" = 1'-0"

S304

0" 4" 8" 2'

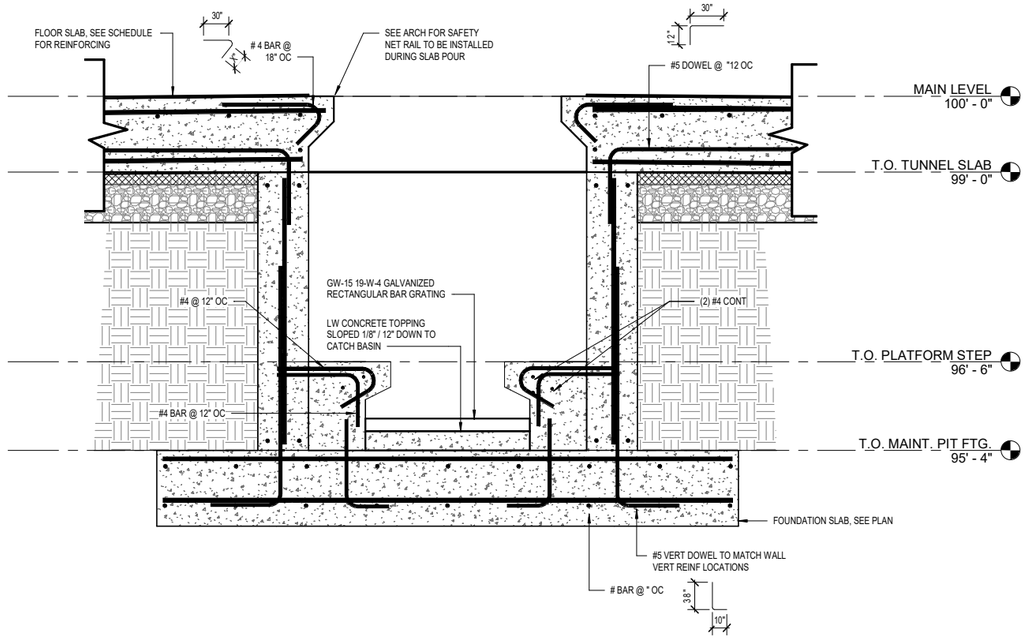


4 SAFETY NET COLLECTION POCKET DETAIL

SCALE: 1/2" = 1'-0"

S304

0" 3" 6" 1' - 6"



5 CROSS SECTION

SCALE: 1/2" = 1'-0"

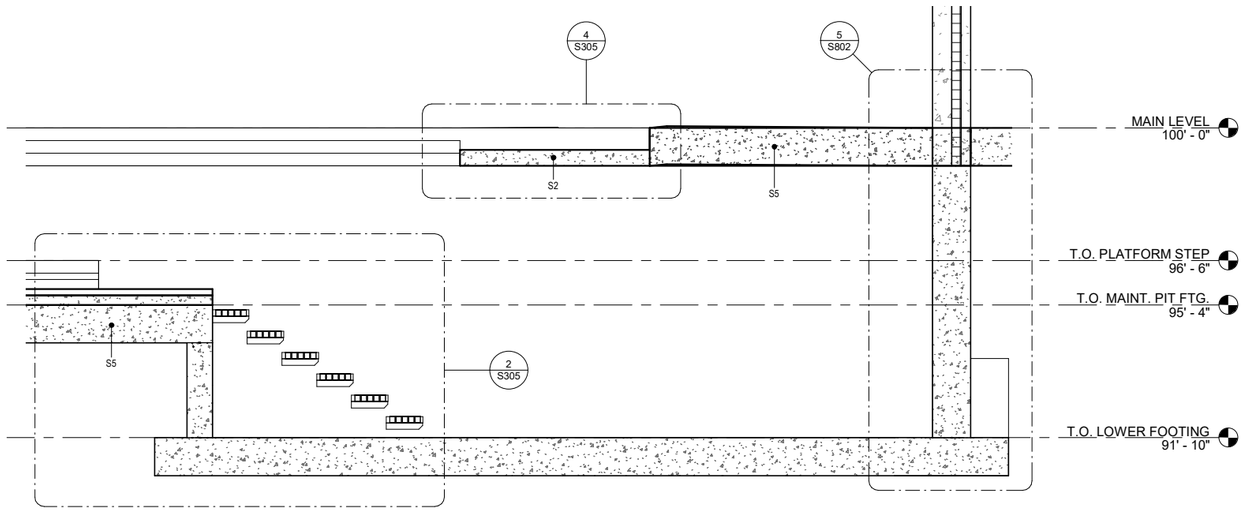
S304

0" 3" 6" 1' - 6"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S304	223

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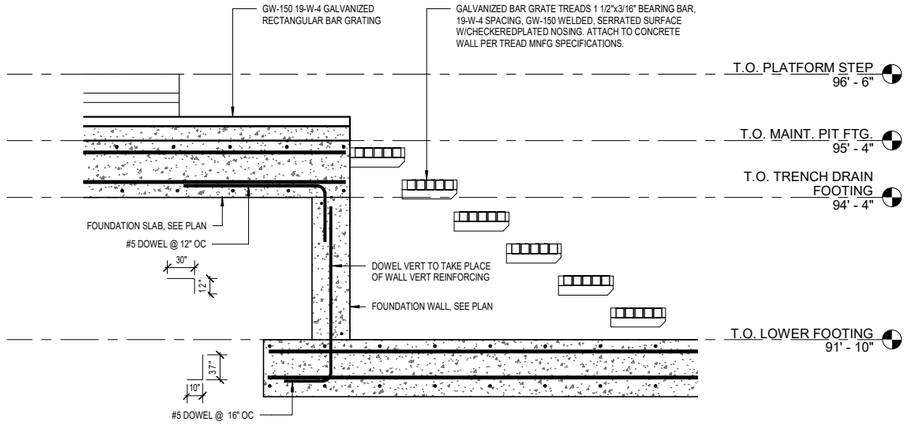
PLOT DATE: 4/29/2024 10:28:51 AM



1 CROSS SECTION

S305 SCALE: 1/4" = 1'-0"

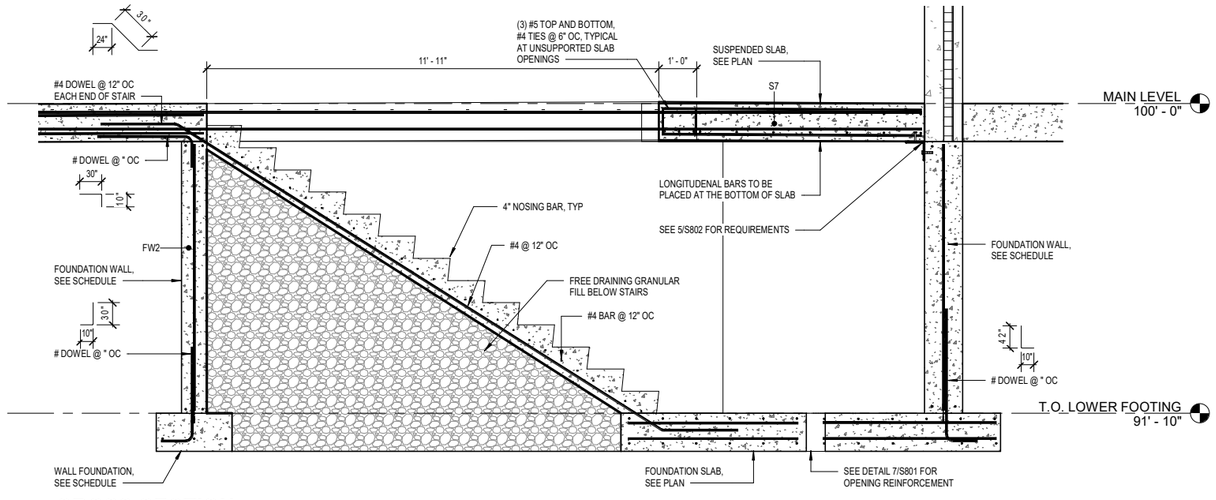
0" 6" 1' 3'



2 INSPECTION PIT STAIR CROSS SECTION

S305 SCALE: 3/8" = 1'-0"

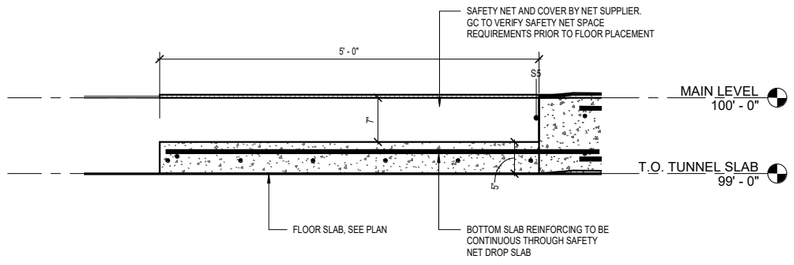
0" 4" 8" 2'



3 CROSS SECTION

S305 SCALE: 1/4" = 1'-0"

0" 6" 1' 3'



4 SAFETY NET COLLECTION CROSS SECTION

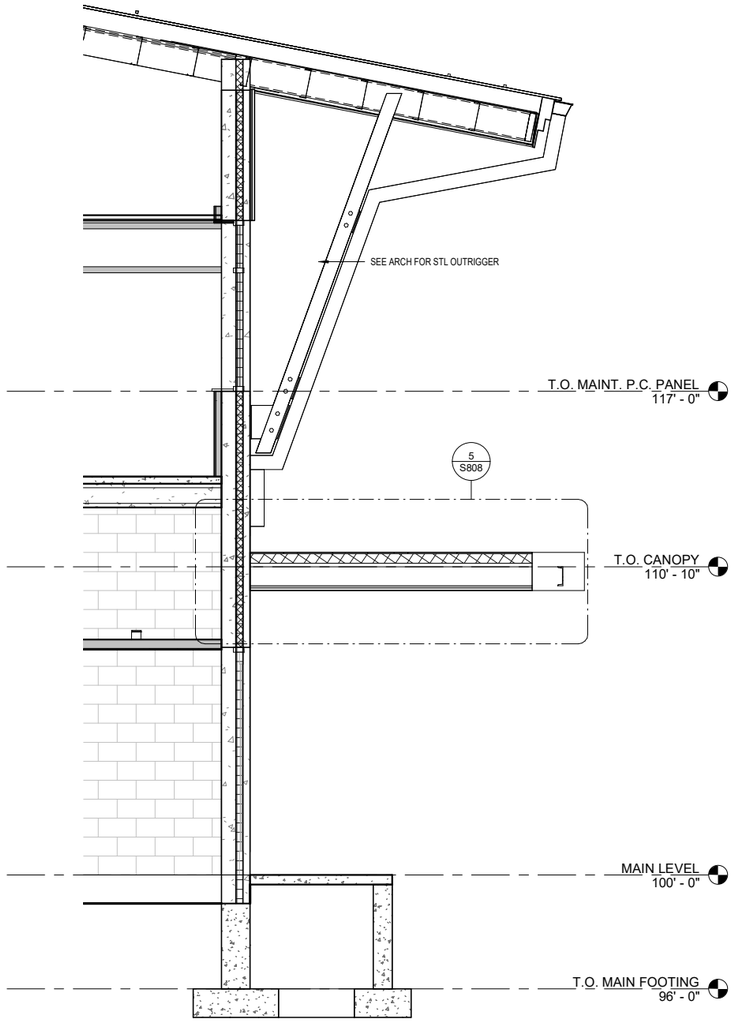
S305 SCALE: 1/2" = 1'-0"

0" 3" 6" 1' - 6"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S305	224

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt PLOT DATE: 4/29/2024 10:28:52 AM

2

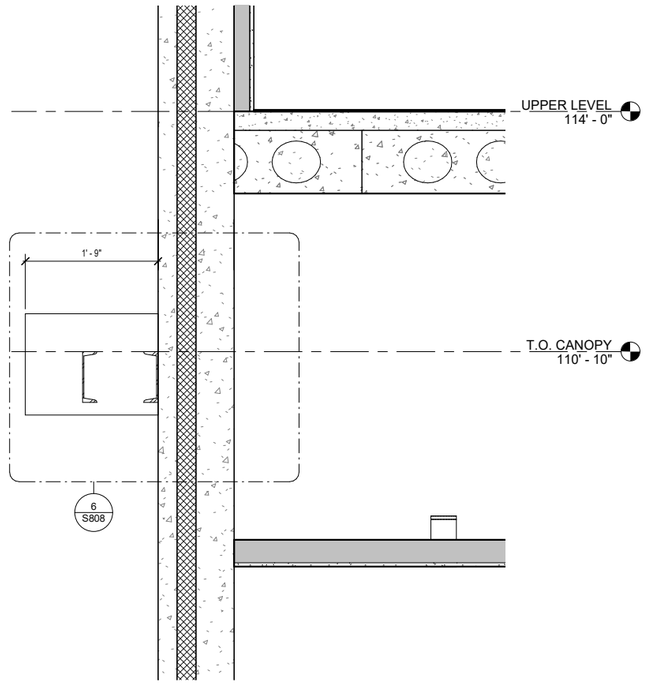


1 CANOPY CROSS-SECTION

SCALE: 3/16" = 1'-0"

S306

0" 1" 2" 4"



2 CANOPY CROSS-SECTION

SCALE: 1/2" = 1'-0"

S306

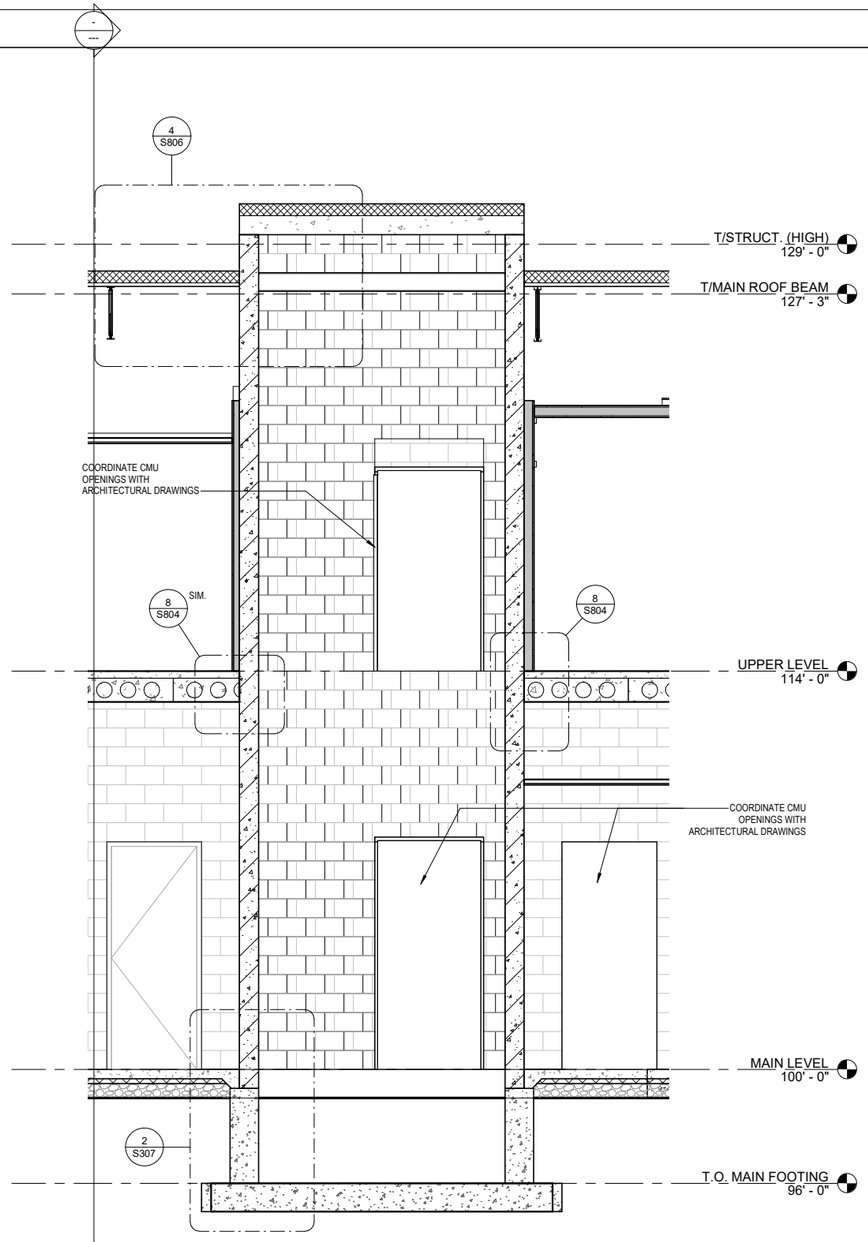
0" 3" 6" 1' - 6"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S306	225

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PLOT DATE: 4/29/2024 10:28:53 AM

2

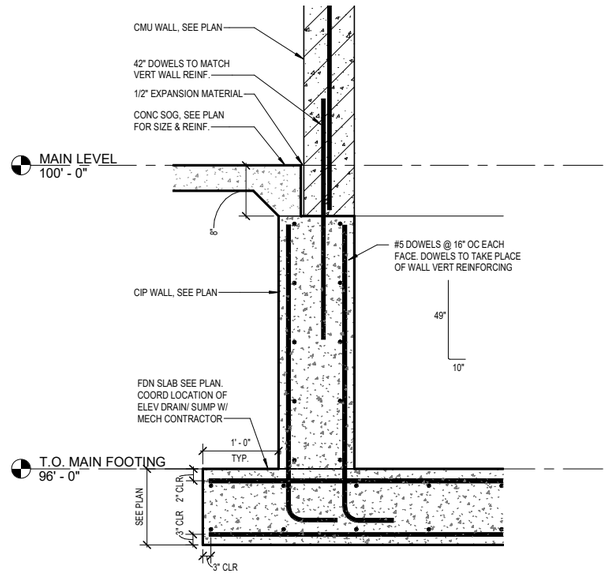


1 CROSS SECTION

SCALE: 3/16" = 1'-0"

S307

0" 1' 2' 4'

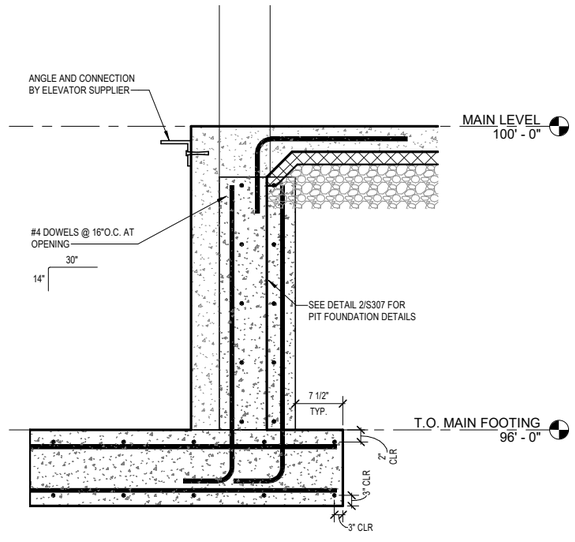


2 TYP. ELEVATOR FOUNDATION DETAIL

SCALE: 1/2" = 1'-0"

S307

0" 3" 6" 1' - 6"



3 ELEVATOR DOOR OPENING FOUNDATION DETAIL

SCALE: 1/2" = 1'-0"

S307

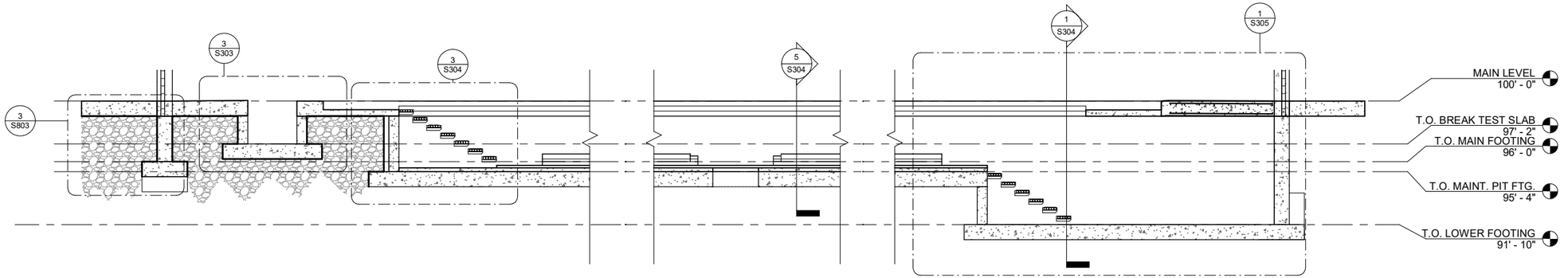
0" 3" 6" 1' - 6"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S307	226

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt

PLOT DATE: 4/29/2024 10:28:53 AM

2

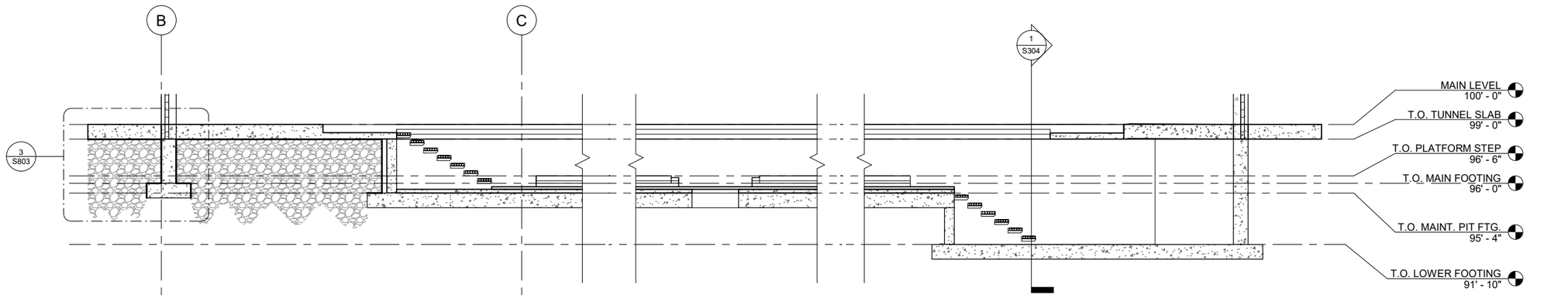


1 CROSS SECTION

SCALE: 1/8" = 1'-0"

S308

0' 1' 2' 5'



2 CROSS SECTION

SCALE: 1/8" = 1'-0"

S308

0' 1' 2' 5'

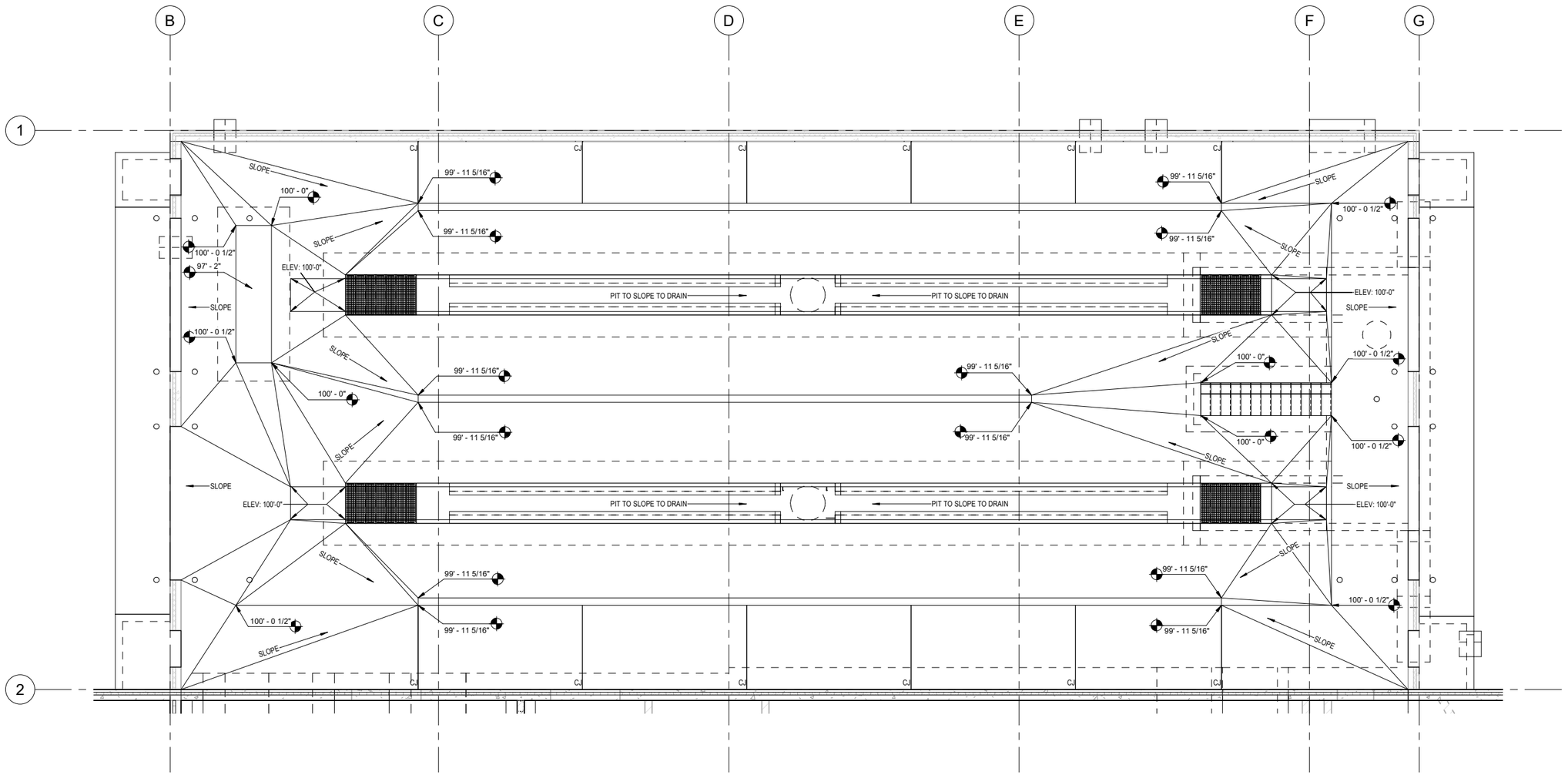
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL SECTIONS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S308	227

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt

PLOT DATE: 4/29/2024 10:28:54 AM

SLAB ELEVATION PLAN NOTES:

1. SLAB ELEVATION AT PRECAST WALLS TO BE 100'-0" UNLESS NOTED OTHERWISE
2. SLAB JOINTS TO BE SPACED AS SPECIFIED ON S001 UNLESS NOTED OTHERWISE



INSPECTION GARAGE - SLAB ELEVATION PLAN

SCALE: 3/32" = 1'-0"

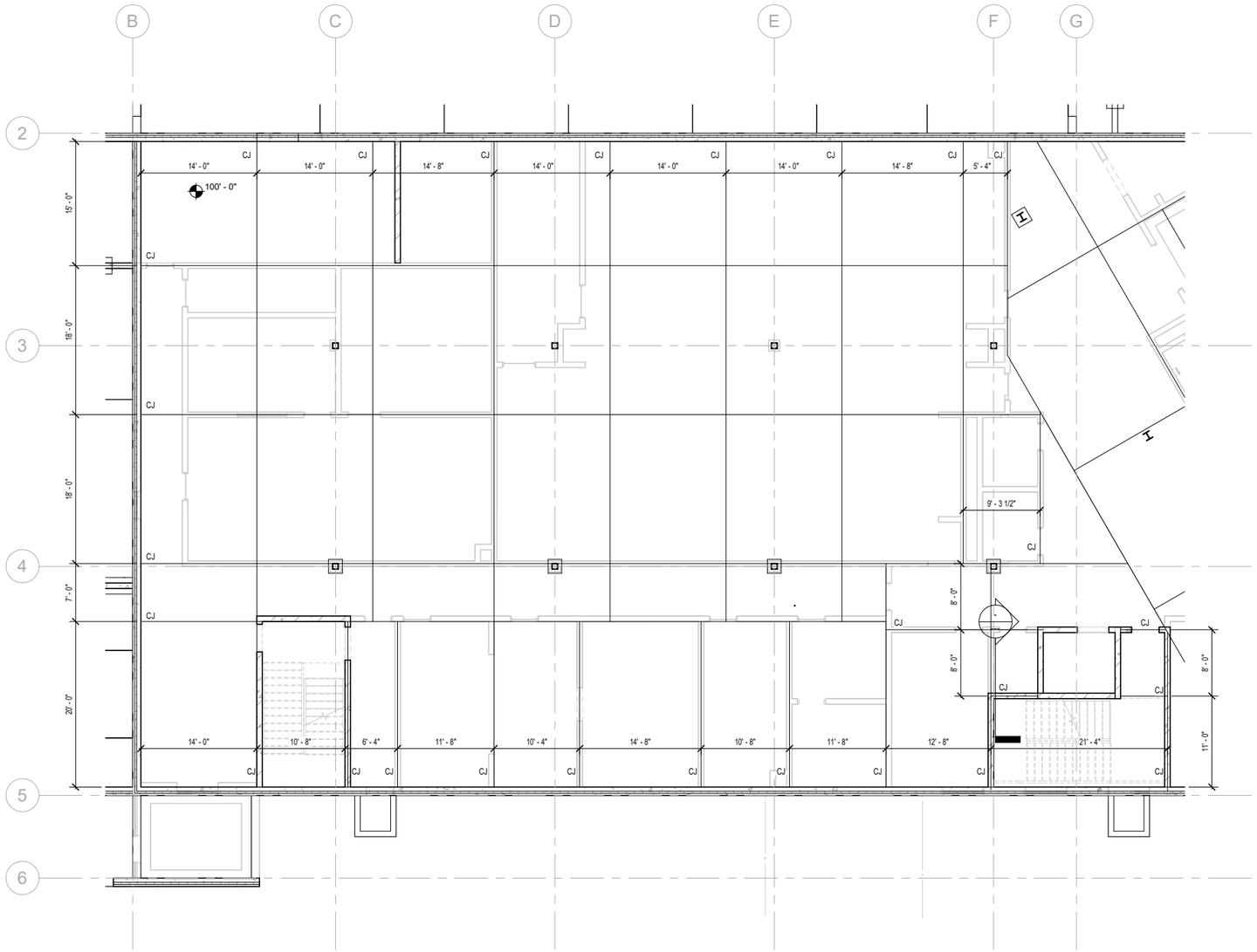
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ENLARGED PLANS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S401	228

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt PLOT DATE: 4/29/2024 10:28:55 AM

SLAB ELEVATION PLAN NOTES:

1. SLAB ELEVATION AT PRECAST WALLS TO BE 100'-0" UNLESS NOTED OTHERWISE
2. SLAB JOINTS TO BE SPACED AS SPECIFIED ON S001 UNLESS NOTED OTHERWISE



AREA B - SLAB ELEVATION ENLARGED PLAN

SCALE: 3/32" = 1'-0"

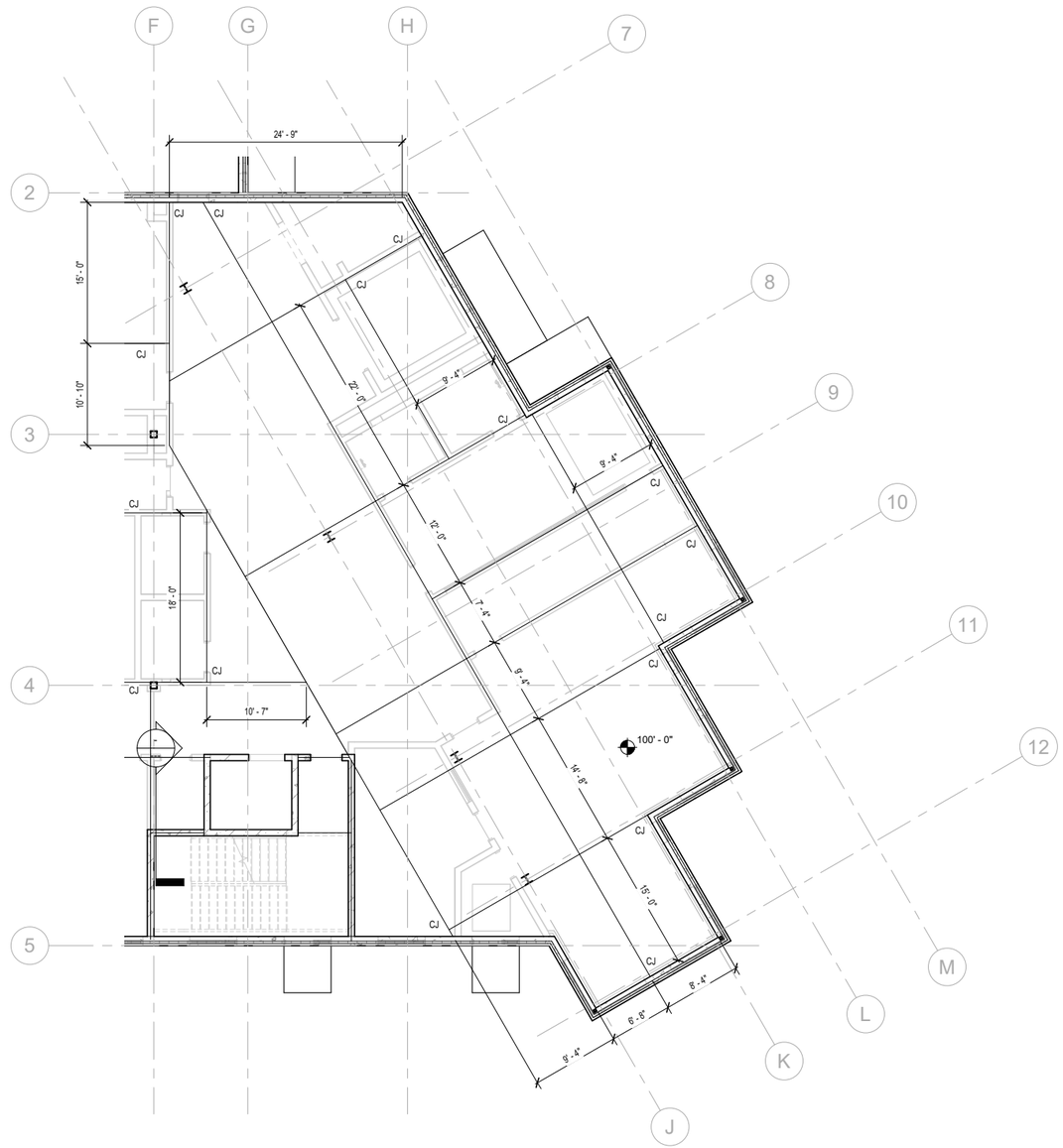
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ENLARGED PLANS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S402	229

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt PLOT DATE: 4/29/2024 10:28:55 AM

SLAB ELEVATION PLAN NOTES:

1. SLAB ELEVATION AT PRECAST WALLS TO BE 100'-0" UNLESS NOTED OTHERWISE
2. SLAB JOINTS TO BE SPACED AS SPECIFIED ON S001 UNLESS NOTED OTHERWISE



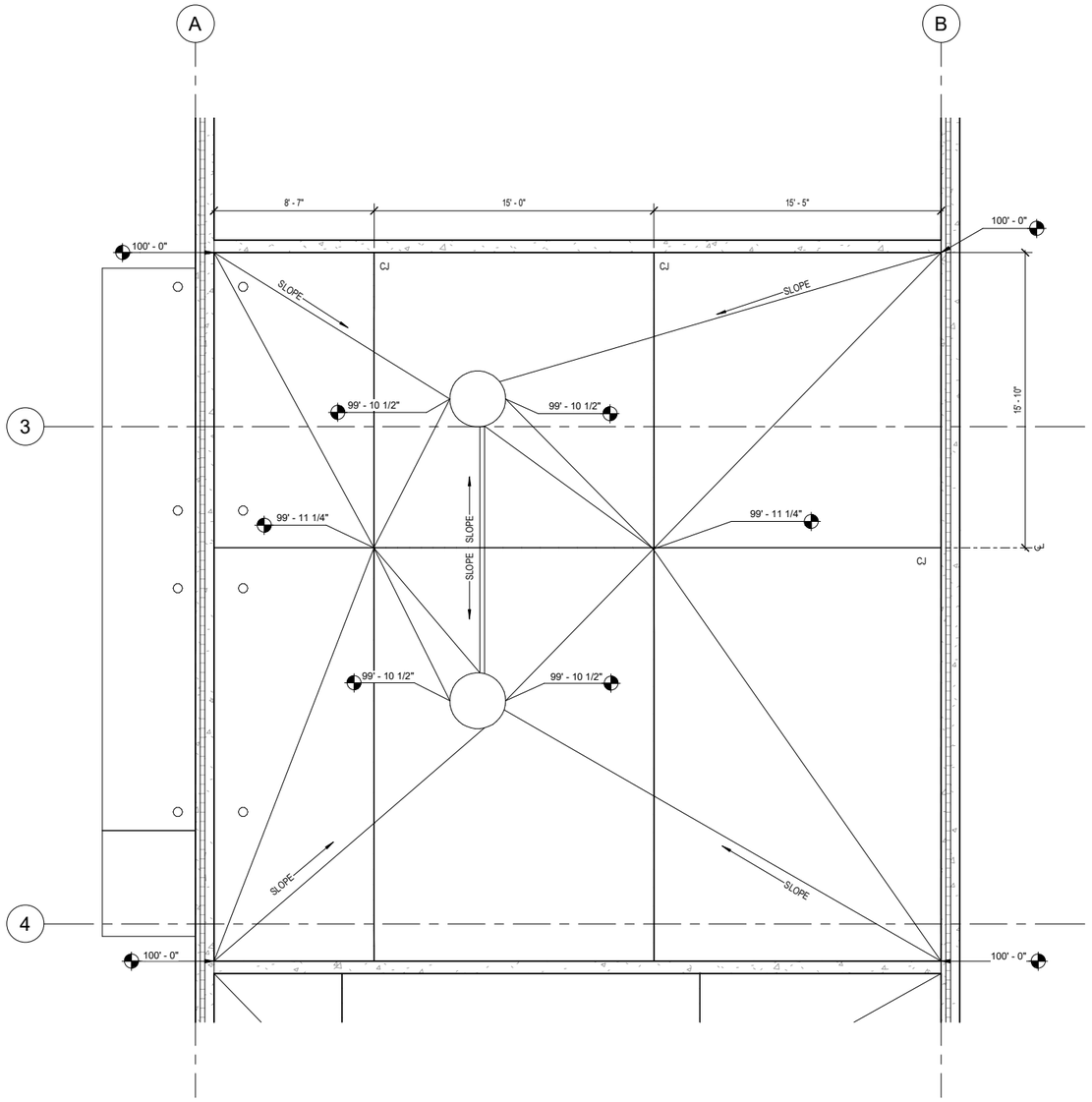
AREA C - SLAB ELEVATION ENLARGED PLAN

SCALE: 1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ENLARGED PLANS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S403	230

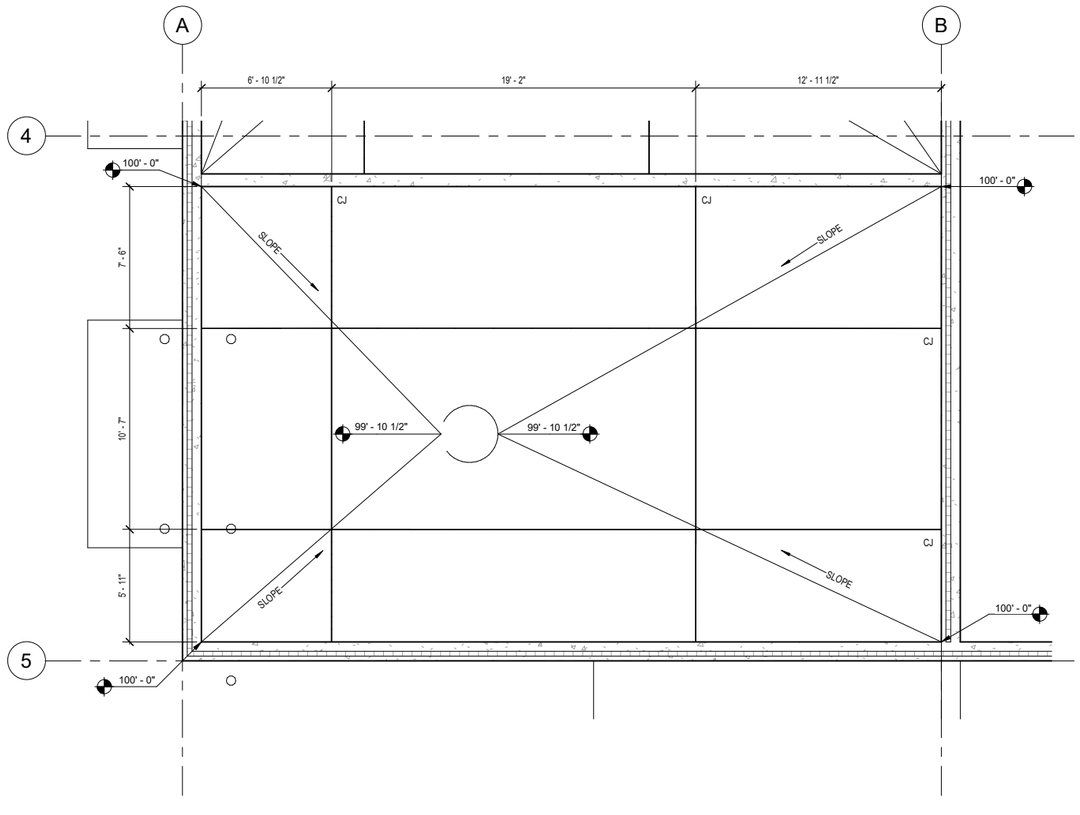
Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt PLOT DATE: 4/29/2024 10:28:56 AM



MAINTENANCE GARAGE - ENLARGED PLAN

SCALE: 1/8" = 1'-0"

0' 1' 2' 5'



MAINTENANCE BAY - ENLARGED PLAN

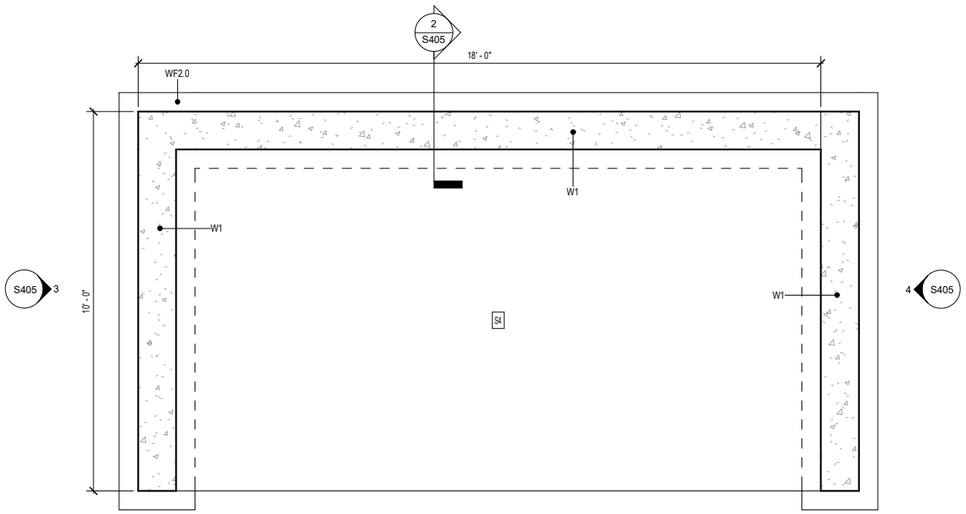
SCALE: 1/8" = 1'-0"

0' 1' 2' 5'

2

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ENLARGED PLANS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S404	

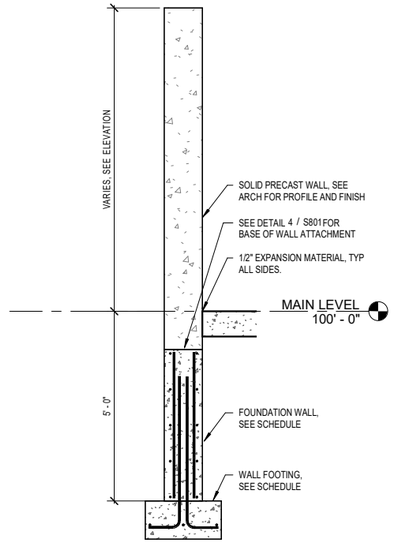
Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt PLOT DATE: 4/29/2024 10:28:56 AM



1 TRASH ENCLOSURE ENLARGED PLAN

S405 SCALE: 1/4" = 1'-0"

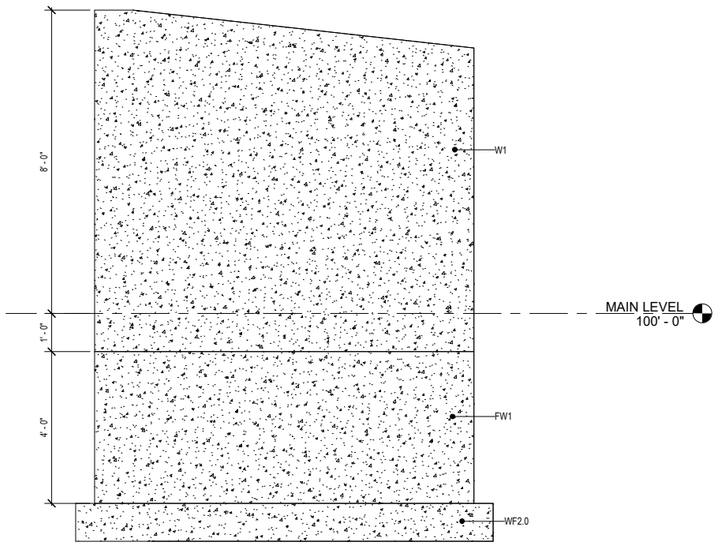
0" 6" 1' 3'



2 TRASH ENCLOSURE - CROSS SECTION

S405 SCALE: 1/4" = 1'-0"

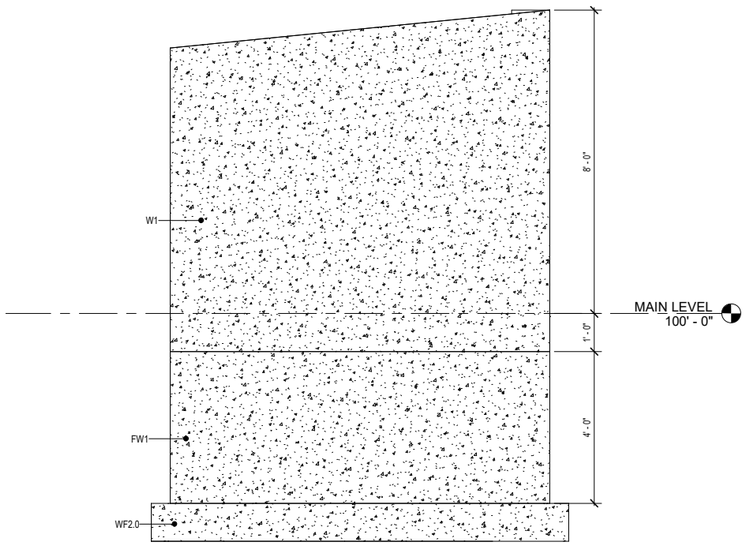
0" 6" 1' 3'



3 TRASH ENCLOSURE - ELEVATION A

S405 SCALE: 1/4" = 1'-0"

0" 6" 1' 3'

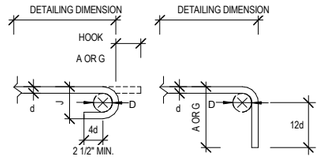


4 TRASH ENCLOSURE - ELEVATION B

S405 SCALE: 1/4" = 1'-0"

0" 6" 1' 3'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ENLARGED PLANS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S405	232



END HOOK DIMENSIONS

BAR SIZE	D	180° HOOKS		90° HOOKS
		A or G	J	A or G
#3	2¼"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3⅜"	7"	5"	10"
#6	4½"	8"	6"	12"
#7	5¼"	10"	7"	14"
#8	6"	11"	8"	16"
#9	9½"	15"	11¾"	19"
#10	10¾"	17"	13¼"	22"
#11	12"	19"	14¾"	24"
#14	18¼"	27"	21¾"	31"
#18	24"	36"	28½"	41"

STANDARD HOOK DETAILS SHALL FOLLOW CURRENT EDITION OF ACI 318

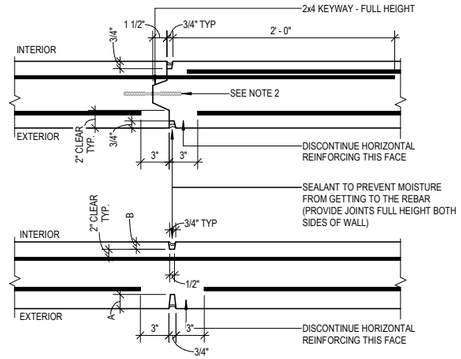
1 STANDARD REINFORCING HOOK SCHEDULE

SCALE: 6" = 1'-0"

S801

CONTROL JOINT DIMENSIONS

	FOUNDATION WALL THICKNESS			
	8"	10"	12"	16"
A	1 1/4"	1 3/4"	2 1/4"	3 1/2"
B	3/4"	3/4"	3/4"	3/4"

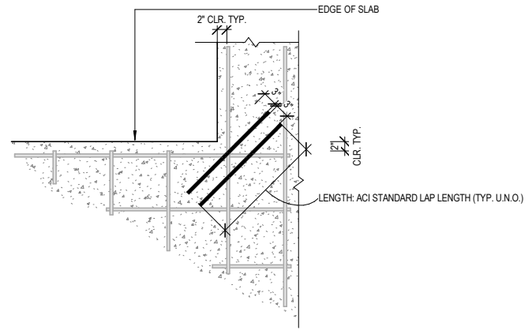


NOTE:
1. VERTICAL REINFORCING NOT SHOWN FOR CLARITY. SEE PLAN AND SECTIONS FOR REINFORCING REQUIREMENTS
2. PROVIDE CONTINUOUS PVC WATERSTOP CENETERED IN CJ OF WALLS IN LIQUID RETAINING STRUCTURES.
3. FOUNDATION WALL JOINTS SHALL BE SPACED AT 30' MAX INTERVALS, U.N.O. SUBMIT PROPOSED JOINT LOCATIONS FOR REVIEW.

2 TYPICAL FOUNDATION WALL JOINT (CJ) DETAIL

SCALE: 3/4" = 1'-0"

S801



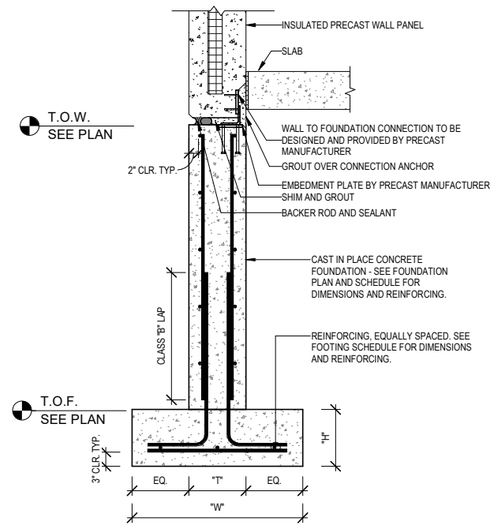
SLAB REINFORCING	ADDITIONAL CORNER BARS
WWF	(1) #4
#4	(1) #4
#5	(1) #5
#6	(1) #6
#7	(2) #5
#8	(2) #5

NOTE:
1. USE LARGEST DIAMETER BAR IN EITHER DIRECTION WHEN DETERMINING CORNER BAR REQUIREMENTS.
2. WHEN SLAB HAS TOP REINFORCEMENT LAYER ONLY, PLACE DIAGONAL BARS BELOW TOP REINFORCEMENT.
3. WHEN SLAB HAS BOTTOM REINFORCEMENT LAYER ONLY, PLACE DIAGONAL BARS AT MID-DEPTH.
4. WHEN SLAB HAS TOP AND BOTTOM REINFORCEMENT LAYERS, PLACE DIAGONAL BARS BETWEEN LAYERS.
5. PROVIDE BENT BARS WHERE SHOWN ON PLANS.

3 TYPICAL SLAB REENTRANT CORNER DETAIL

SCALE: 3/8" = 1'-0"

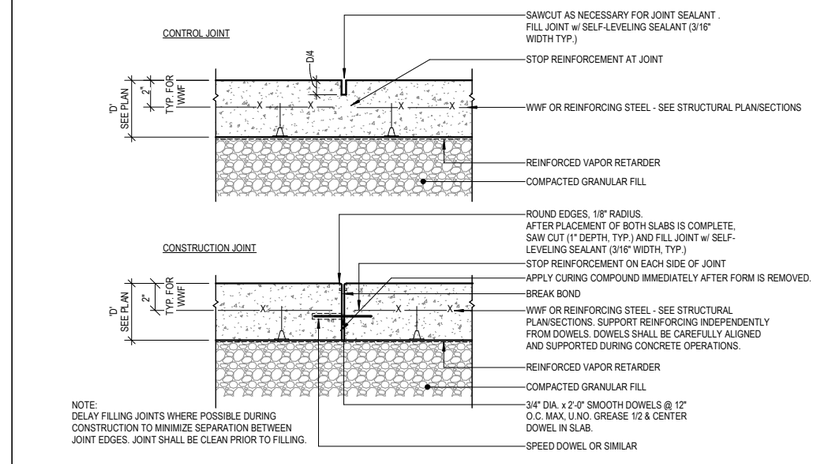
S801



4 TYPICAL FOOTING AND FOUNDATION WALL DETAIL

SCALE: 3/8" = 1'-0"

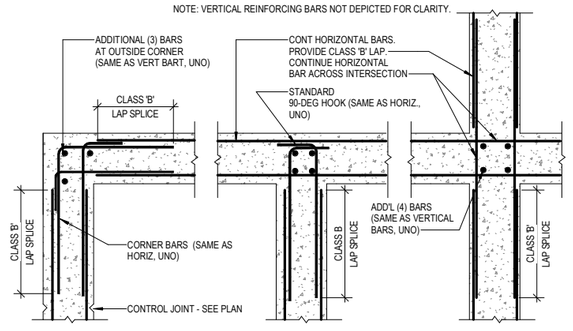
S801



5 TYPICAL SLAB ON GRADE JOINT (CJ) DETAIL

SCALE: 3/16" = 1'-0"

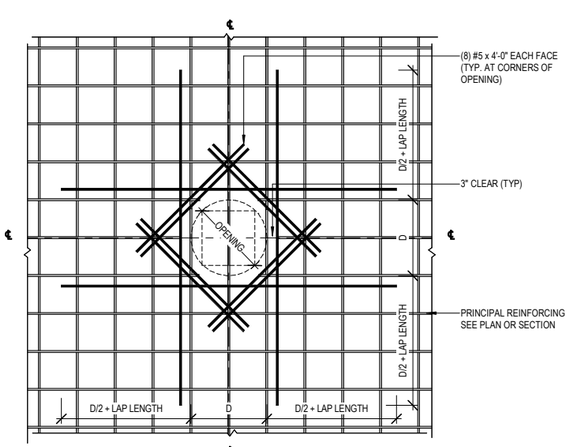
S801



6 TYPICAL CORNER/INTERSECTION REINFORCING DETAIL

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

S801



NOTE:
1. ADDITIONAL REINFORCING SIMILAR AT RECTANGULAR OPENINGS, UNLESS NOTED OR DETAILED OTHERWISE. UNLESS SHOWN OTHERWISE ON DRAWINGS, PROVIDE EXTRA REINFORCING AROUND OPENINGS. ADDITIONAL REINFORCING SHALL BE THE SAME SIZE AS THE DISCONTINUOUS REINFORCEMENT AT OPENING. QUANTITY OF REINFORCING IN EACH DIRECTION SHALL BE EQUAL TO OR ONE GREATER THAN THE NUMBER OF DISCONTINUOUS BARS. PLACE 1/2 OF ADDITIONAL REINFORCING BARS EACH SIDE OF OPENING
2. ADDITIONAL BARS MAY TERMINATE AT THE END OF THE WALL WITH A STANDARD HOOK WHERE THE LENGTH OF THE WALL WILL NOT PERMIT BARS TO EXTEND AS SHOWN ABOVE.

7 TYPICAL DIAGONAL REINFORCING AT CONCRETE WALL AND SLAB OPENINGS DETAIL

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

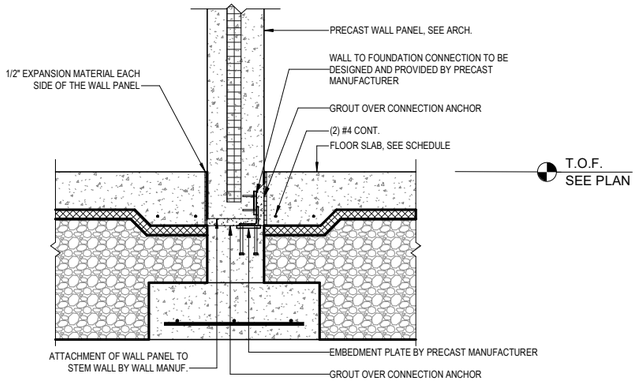
S801

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL FOUNDATION DETAILS	ISSUE DATE: 5/1/24 / ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S801

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2

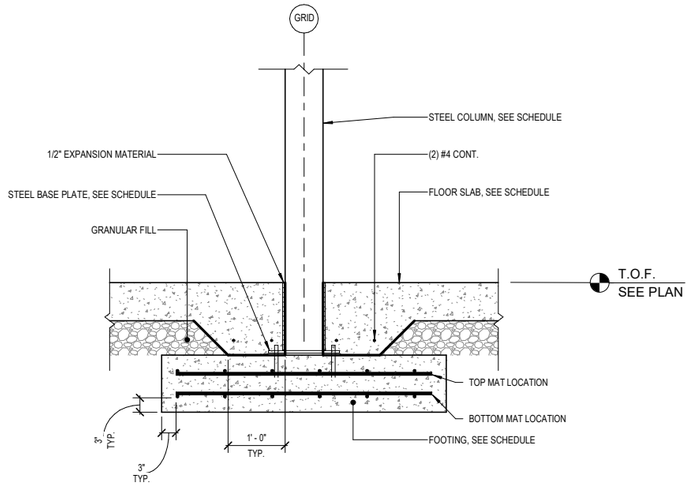


1 INTERIOR PRECAST WALL FOUNDATION DETAIL

SCALE: 3/8" = 1'-0"

S802

0" 4" 8" 2'

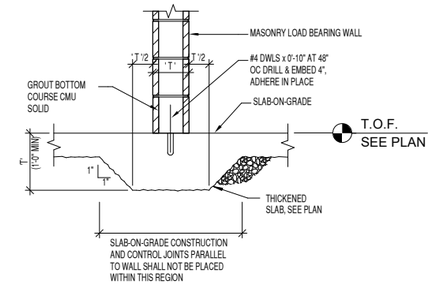


2 INTERIOR COLUMN FOUNDATION DETAIL

SCALE: 3/8" = 1'-0"

S802

0" 4" 8" 2'

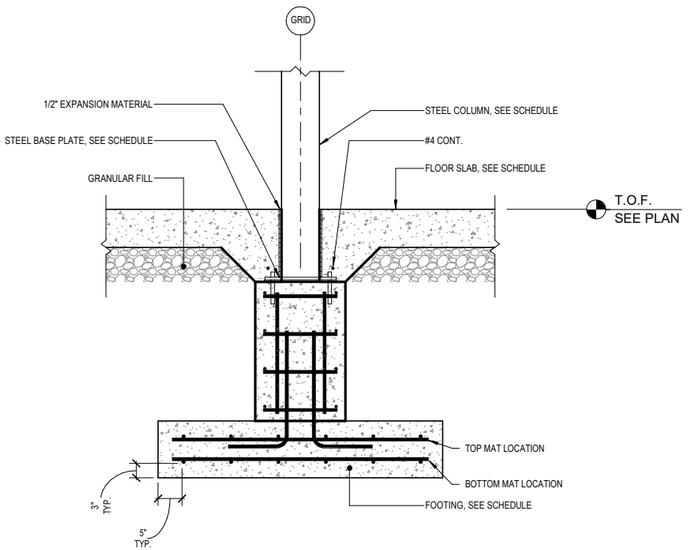


3 TYPICAL THICKENED SLAB AT LOAD BEARING CMU WALL

SCALE: 3/8" = 1'-0"

S802

0" 4" 8" 2'

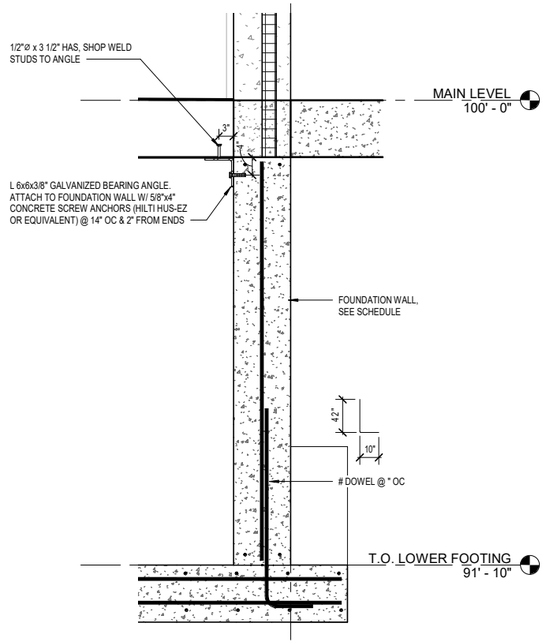


4 TYPICAL CONCRETE PIER DETAIL

SCALE: 3/8" = 1'-0"

S802

0" 4" 8" 2'

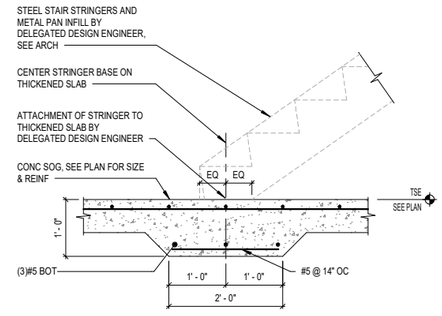


5 INSPECTION PIT DETAIL

SCALE: 3/8" = 1'-0"

S802

0" 4" 8" 2'



6 THICKENED SLAB AT STEEL STAIR

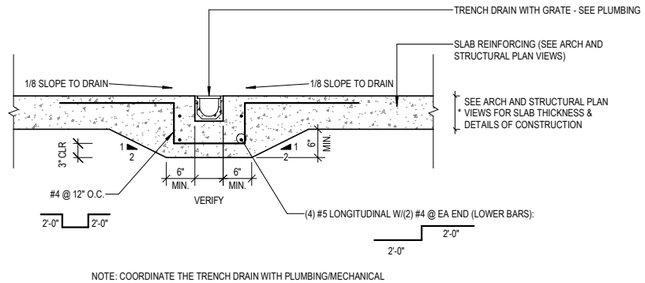
SCALE: 3/8" = 1'-0"

S802

0" 4" 8" 2'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL FOUNDATION DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
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2



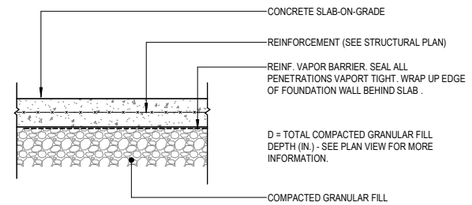
NOTE: COORDINATE THE TRENCH DRAIN WITH PLUMBING/MECHANICAL

1 TYPICAL TRENCH DRAIN REINFORCING DETAIL

SCALE: 3/8" = 1'-0"

S803

0" 4" 8" 2'

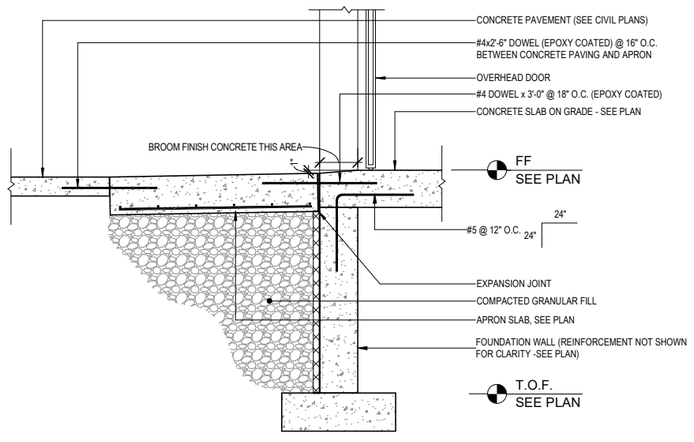


2 TYPICAL SLAB-ON-GRADE VAPOR BARRIER DETAIL

SCALE: 3/16" = 1'-0"

S803

0' 1' 2' 4'

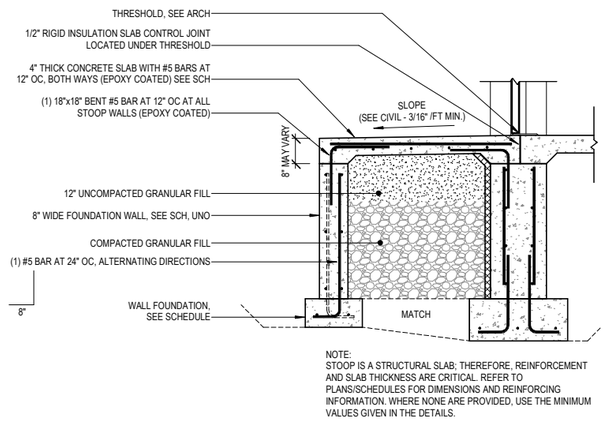


3 TYPICAL CONCRETE APRON DETAIL

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

S803

0" 6" 1' 3'



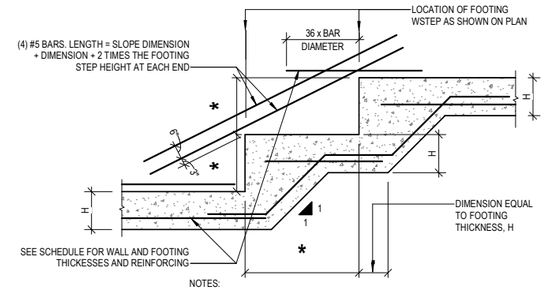
NOTE:
STOOP IS A STRUCTURAL SLAB; THEREFORE, REINFORCEMENT AND SLAB THICKNESS ARE CRITICAL. REFER TO PLANS/SCHEDULES FOR DIMENSIONS AND REINFORCING INFORMATION. WHERE NONE ARE PROVIDED, USE THE MINIMUM VALUES GIVEN IN THE DETAILS.

4 TYPICAL STOOP DETAIL

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

S803

0" 6" 1' 3'



NOTES:
1. SEE PLAN FOR FOOTING STEP DIMENSIONS
2. STEPPED FOOTING TO BE POURED MONOLITHICALLY
3. MULTIPLE STEP SHOWN, SINGLE STEP SIMILAR
4. * INDICATES SEE FOUNDATION PLAN FOR DIMENSIONS

5 TYPICAL STEPPED FOOTING DETAIL

SCALE: 3/16" = 1'-0"

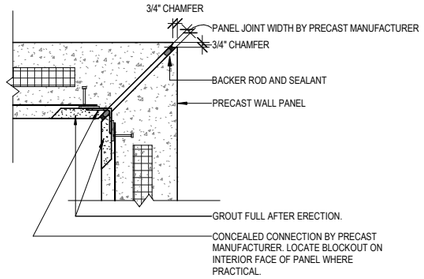
S803

0' 1' 2' 4'

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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S803	235

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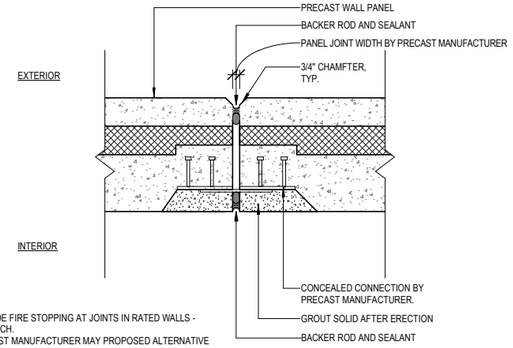


NOTE:
1. PROVIDE FIRE STOPPING AT JOINTS IN RATED WALLS - SEE ARCH.
2. PRECAST MANUFACTURER MAY PROPOSED ALTERNATIVE CORNER CONFIGURATION FOR REVIEW BY ENGINEER.

1 TYPICAL PRECAST WALL OUTSIDE CORNER DETAIL

S804 SCALE: 1/2" = 1'-0"

0" 3" 6" 1' - 6"

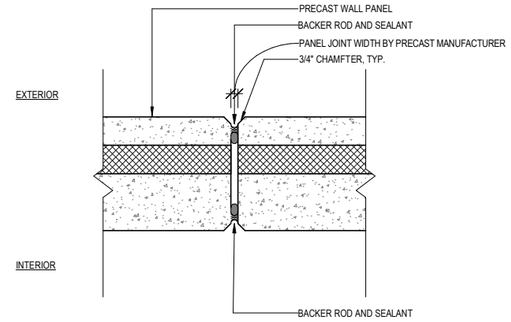


NOTE:
1. PROVIDE FIRE STOPPING AT JOINTS IN RATED WALLS - SEE ARCH.
2. PRECAST MANUFACTURER MAY PROPOSED ALTERNATIVE CONFIGURATION FOR REVIEW BY ENGINEER.

2 TYPICAL PRECAST PANEL TO PANEL DETAIL

S804 SCALE: 3/4" = 1'-0"

0" 2" 4" 1'

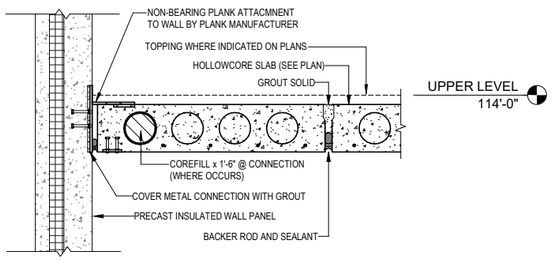


NOTE:
1. PROVIDE FIRE STOPPING AT JOINTS IN RATED WALLS - SEE ARCH.
2. PRECAST MANUFACTURER MAY PROPOSED ALTERNATIVE CONFIGURATION FOR REVIEW BY ENGINEER.

3 TYPICAL PRECAST PANEL VERTICAL JOINT DETAIL

S804 SCALE: 3/4" = 1'-0"

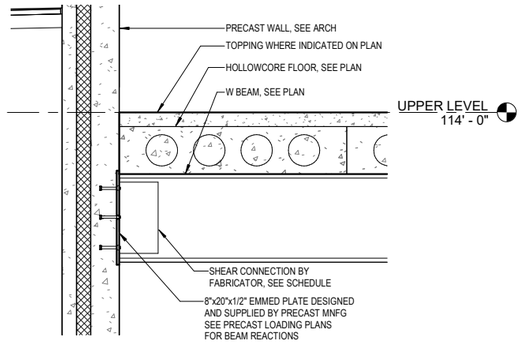
0" 2" 4" 1'



4 TYPICAL PC PLANK NON-BEARING DETAIL

S804 SCALE: 3/8" = 1'-0"

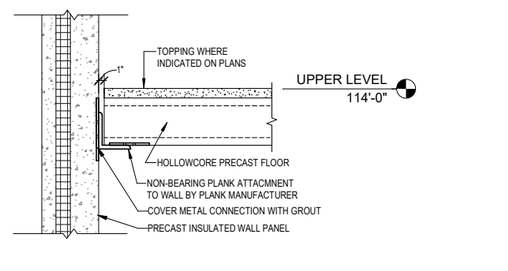
0" 4" 8" 2'



5 STEEL BEAM CONNECTION

S804 SCALE: 3/8" = 1'-0"

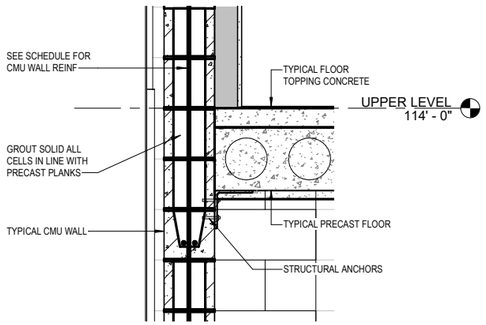
0" 4" 8" 2'



6 TYP. PC PLANK @ BEARING DETAIL

S804 SCALE: 3/8" = 1'-0"

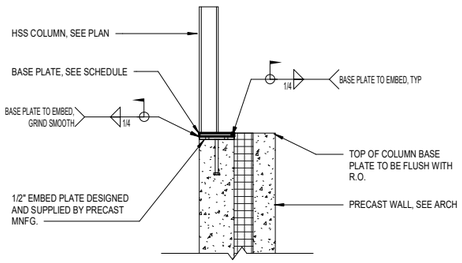
0" 4" 8" 2'



8 TYP. PRECAST TO CMU WALL

S804 SCALE: 1/2" = 1'-0"

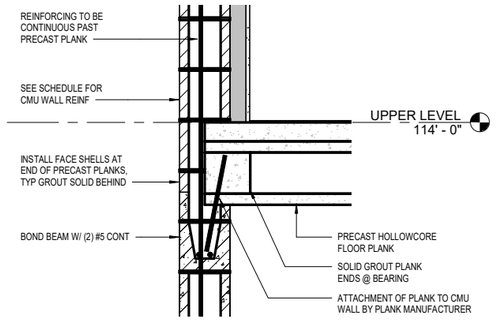
0" 3" 6" 1' - 6"



9 PRECAST PANEL SUPPORT COLUMN DETAIL

S804 SCALE: 1/2" = 1'-0"

0" 3" 6" 1' - 6"



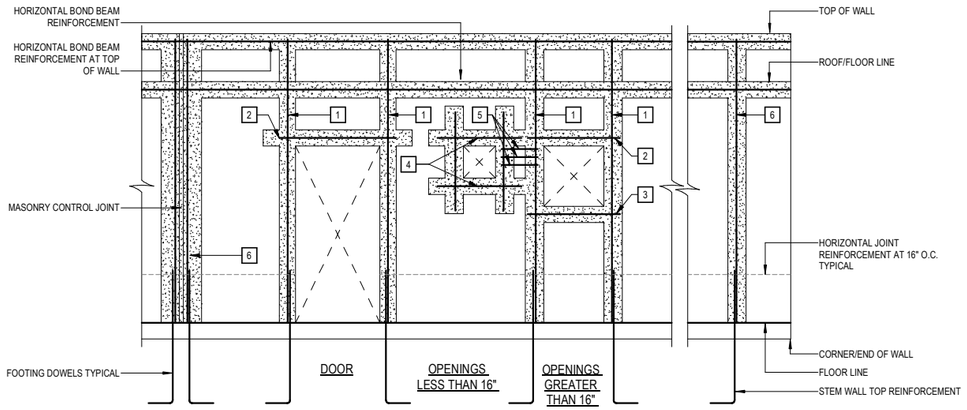
10 PRECAST BEARING @ CMU WALL

S804 SCALE: 1/2" = 1'-0"

0" 3" 6" 1' - 6"

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1. JAMB REINFORCEMENT PER LINTEL SCHEDULE OR LINTEL DETAILS
2. REINFORCEMENT PER LINTEL SCHEDULE OR LINTEL DETAILS
3. (1) #6 SILL BAR. EXTEND 2'-0" PAST OPENING
4. (1) #4 EACH SIDE OF OPENING UNLESS NOTED OTHERWISE EXTEND 2'-0" PAST OPENING
5. WHEN "W" IS LESS THAN 2'-0" AT 8" CMU WALLS AND 3'-0" AT 12" CMU WALLS, ADD 1/4" CLOSED TIES SETS AT 8" O.C.
6. REINFORCE VERTICAL CELLS AT EDGE OF WALL AND ADJACENT TO CONTROL JOINTS

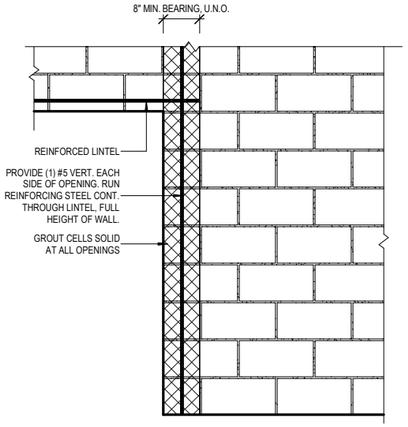
NOTE:
1. LAP LENGTHS AND EMBEDMENTS SHALL COMPLY WITH GENERAL STRUCTURAL NOTES
2. GROUT SOLID ALL CELLS WITH REINFORCEMENT
3. USE BOND BEAM BLOCKS WITH OPEN BOTTOMS ONLY AT BOND BEAM LOCATIONS
4. DO NOT USE THROUGH-TYPE BLOCKS AT BOND BEAMS. DO NOT CONTINUE BOND BEAM REINFORCING THROUGH CONTROL JOINTS.
5. ALL MASONRY SHALL BE LAID IN RUNNING (COMMON) BOND, UNLESS NOTED OTHERWISE.
6. REFER TO DETAILS FOR THE LOCATION OF ADDITIONAL BOND BEAMS
7. HORIZONTAL JOINT REINFORCING SHALL BE 8" O.C. BELOW GRADE AND IN PARAPETS
8. CONTRACTOR TO COORDINATE STRUCTURAL, ARCHITECTURAL, PLUMBING, PROCESS MECHANICAL, ELECTRICAL, ETC. PLANS FOR OPENINGS DETAILS, DIMENSIONS, ELEVATIONS, ETC.

1 TYPICAL CMU WALL REINFORCING AT OPENING

S805

SCALE: 1/2" = 1'-0"

0" 3" 6" 1' - 6"



NOTES:
1. SEE DRAWINGS FOR LINTEL TYPES. WHERE LINTEL TYPES ARE NOT SHOWN, PROVIDE LINTES FROM THE FOLLOWING SCHEDULE BASED ON WALL THICKNESS AND CLEAR OPENINGS WIDTH. VERIFY ALL LINTEL TYPES WITH ENGINEER PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED LINTELS, EVEN WHERE NOT SHOWN.
2. OPENINGS 8" OR LESS MAY OCCUR WITHOUT LINTEL REINFORCING AS LONG AS NO REINFORCING IS INTERRUPTED.
3. LINTEL REINFORCING SHALL NOT BE SPLICED. GROUTING SHALL HAVE NO VERTICAL OR HORIZONTAL JOINTS FULL HEIGHT AND LENGTH OF LINTEL.
4. LINTEL BLOCKS SHALL BE GROUTED SOLID.
5. PROVIDE SHORING FOR ALL LINTELS A MINIMUM OF 7 DAYS AFTER GROUTING OR UNTIL GROUT REACHES FULL DESIGN STRENGTH.

NON-BEARING MASONRY LINTEL SCHEDULE

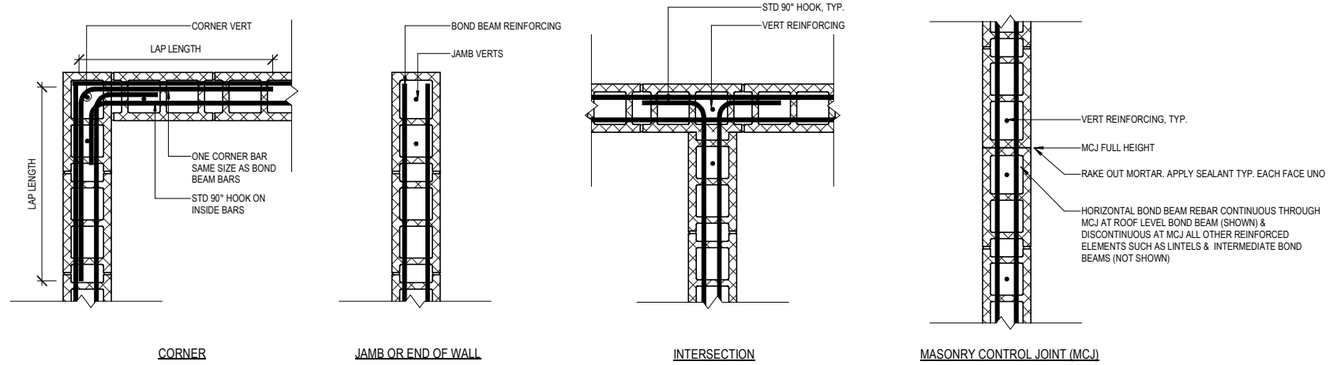
ROUGH OPENING WIDTH (LINTEL SPAN) FOR LINTELS NOT SPECIFIED ON PLAN	6" CMU WALL	8" CMU WALL		12" CMU WALL	
TYPE MARK		L1	L2		
0'-8" TO 6'-0"	(1) #4	(2) #4		(2) #4	
6'-1" TO 12'-0"			(2) #4		(2) #4
12'-1" TO 16'-0"			(2) #5		(2) #5

2 TYPICAL MASONRY LINTEL BEARING DETAIL

S805

SCALE: 3/8" = 1'-0"

0" 4" 8" 2'

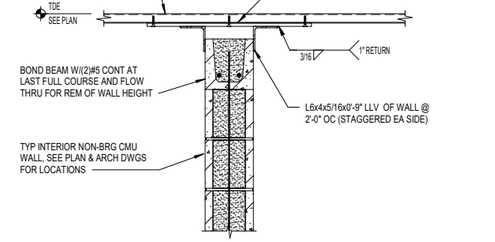


3 TYPICAL CMU BOND BEAM CORNER REINFORCING DETAIL

S805

SCALE: 1/2" = 1'-0"

0" 3" 6" 1' - 6"

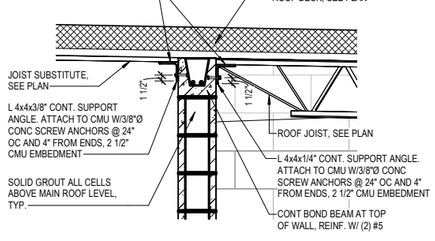


4 TYP NON-BRG CMU WALL TO ROOF DECK

S805

SCALE: 1/2" = 1'-0"

0" 3" 6" 1' - 6"



5 ROOF BEARING AT STAIR WELL

S805

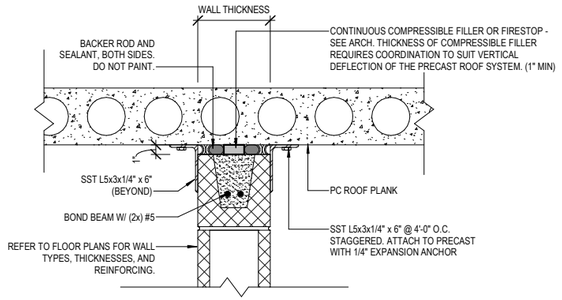
SCALE: 3/8" = 1'-0"

0" 4" 8" 2'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL CMU DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
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PLOT DATE: 4/29/2024 10:29:00 AM



NOTE: ALL PARTITIONS MUST BE LATERALLY BRACED TO THE BUILDING STRUCTURE BY EXTENDING THE WALLS FULL HEIGHT TO THE PC DECK AND PROVIDING A DEFLECTION JOINT AS SHOWN, U.N.O.

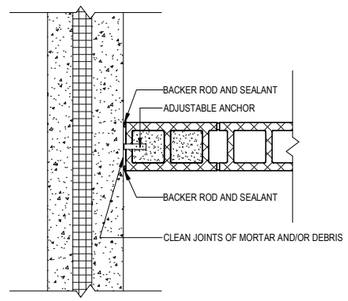
1 TYPICAL NON-LOAD BEARING CMU WALL CONNECTION AT PC PLANK DETAIL

SCALE: 3/4" = 1'-0"

S806

0" 2" 4" 1'

PLAN VIEW



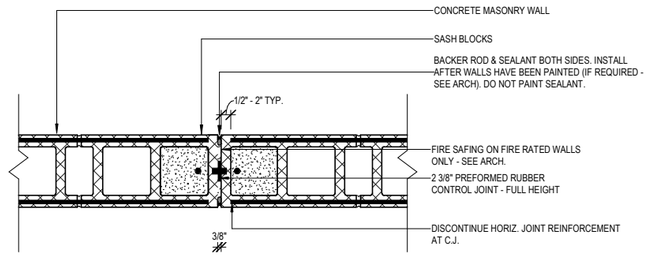
NOTE: DO NOT PAINT SEALANT ON NON-RATED WALLS. IF FIRE SAFING IS REQUIRED (SEE ARCH.), PROVIDE FIRE SAFE SEALANT AND PAINT.

2 TYPICAL CMU TO PRECAST WALL CONNECTION DETAIL

SCALE: 1/2" = 1'-0"

S806

0" 3" 6" 1' - 6"



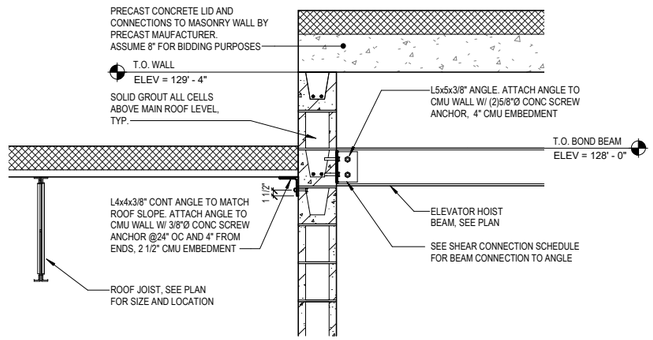
NOTE:
SEE STRUCTURAL PLANS/SECTIONS FOR REINFORCING REQUIREMENTS

3 TYPICAL CMU CONTROL JOINTS AT INTERIOR WALLS DETAIL

SCALE: 3/4" = 1'-0"

S806

0" 2" 4" 1'

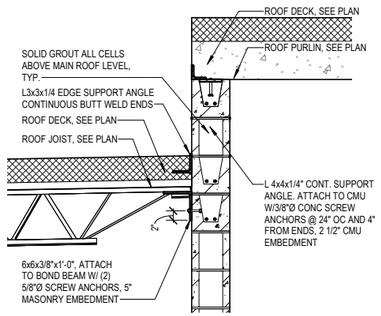


4 ELEVATOR SHAFT SECTION @ ROOF - NON-BEARING

SCALE: 3/8" = 1'-0"

S806

0" 4" 8" 2'

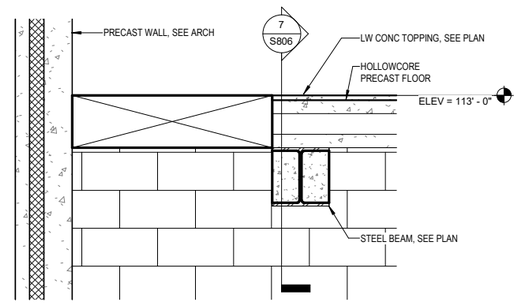


5 ROOF BEARING AT ELEVATOR SHAFT

SCALE: 3/8" = 1'-0"

S806

0" 4" 8" 2'

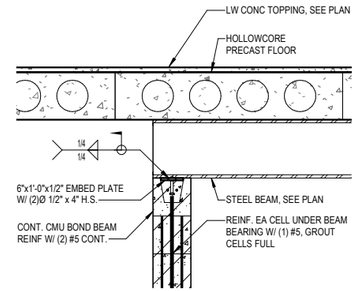


6 BEAM TO CMU BEARING DETAIL

SCALE: 3/8" = 1'-0"

S806

0" 4" 8" 2'

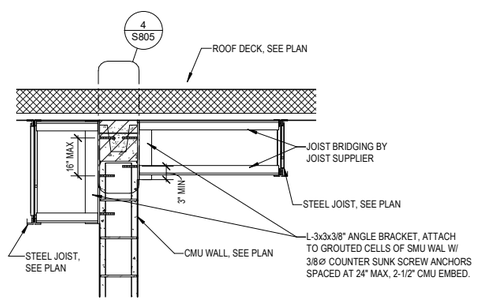


7 BEAM TO CMU BEARING DETAIL

SCALE: 3/8" = 1'-0"

S806

0" 4" 8" 2'

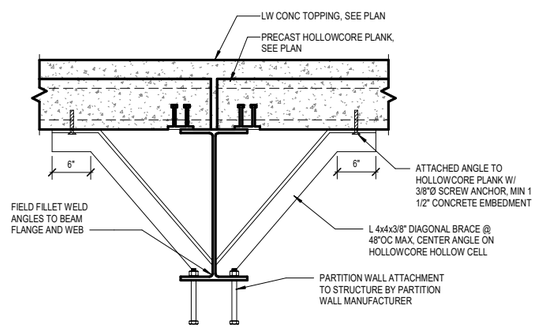


8 STAIR WELL CMU WALL DETAIL

SCALE: 3/8" = 1'-0"

S806

0" 4" 8" 2'

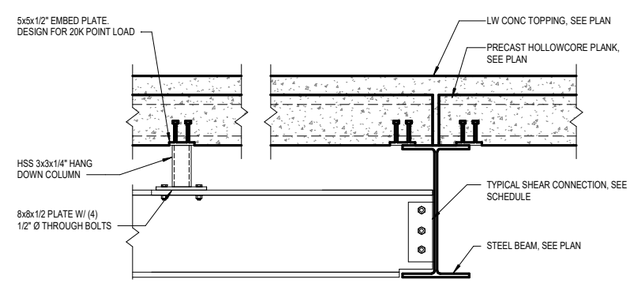


9 PARTITION WALL SUPPORT FRAMING DETAIL

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

S806

0" 6" 1' 3'



10 PARTITION WALL STORAGE BEAM DETAIL

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

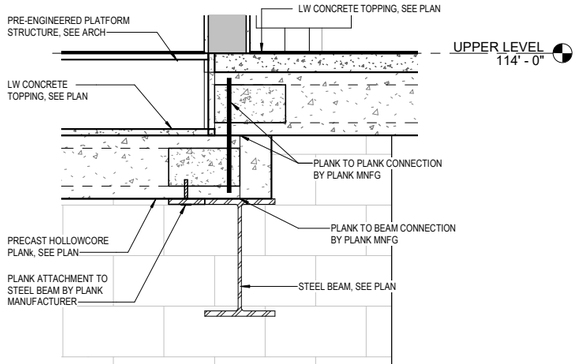
S806

0" 6" 1' 3'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL CMU DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S806	

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PLOT DATE: 4/29/2024 10:29:01 AM

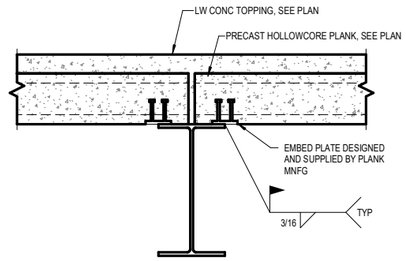


1 DROPPED PC PLANK OVERLAP BEARING DETAIL

SCALE: 1/2" = 1'-0"

S807

0" 3" 6" 1' - 6"

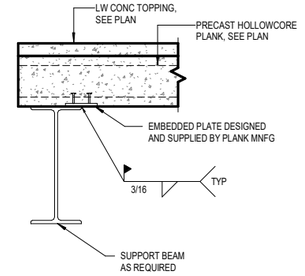


2 PRECAST BRG. ON STEEL - TWO WAY

SCALE: 1/2" = 1'-0"

S807

0" 3" 6" 1' - 6"

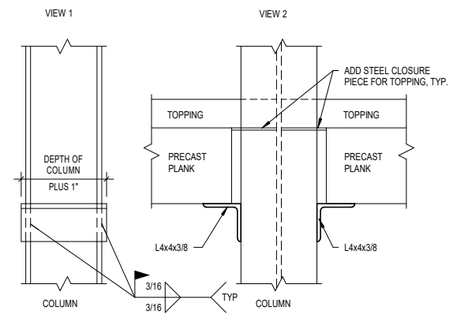


3 PRECAST BRG. ON STEEL - ONE WAY

SCALE: 1/2" = 1'-0"

S807

0" 3" 6" 1' - 6"

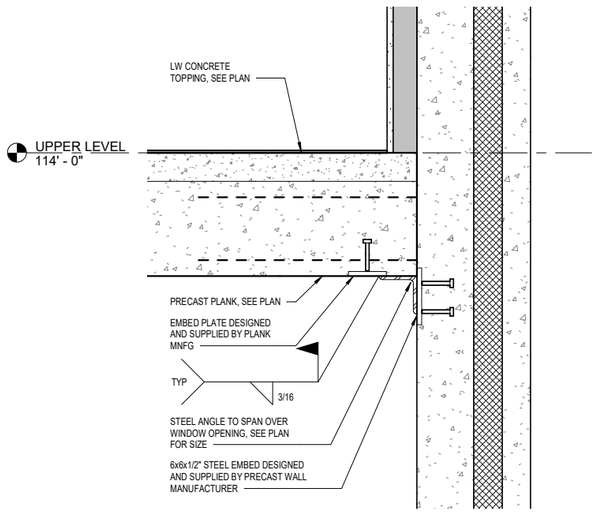


4 COLUMN PENETRATIONS THROUGH PRECAST

SCALE: 3/4" = 1'-0"

S807

0" 2" 4" 1'

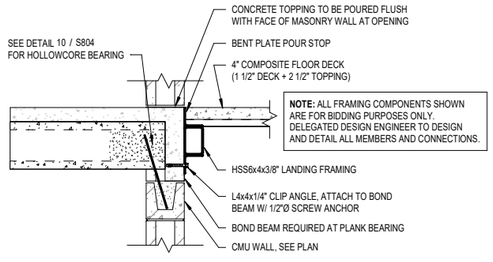


5 PRECAST BRG @ WINDOW OPENING

SCALE: 3/4" = 1'-0"

S807

0" 2" 4" 1'

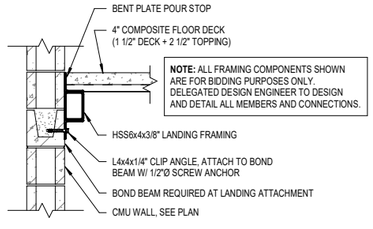


6 STAIR LANDING DETAIL

SCALE: 3/4" = 1'-0"

S807

0" 2" 4" 1'

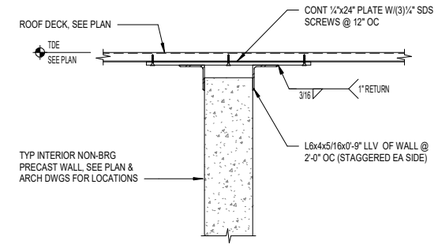


7 INTERMEDEATE STAIR LANDING DETAIL

SCALE: 3/4" = 1'-0"

S807

0" 2" 4" 1'

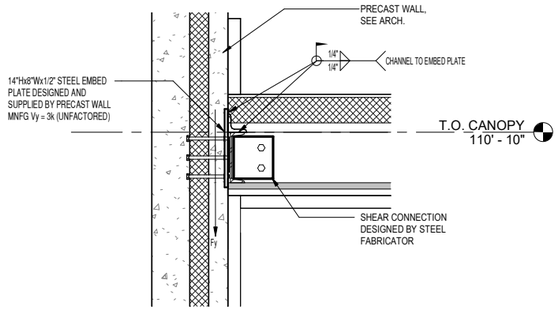


8 TYP NON-BRG PRECAST WALL TO ROOF DECK

SCALE: 1/2" = 1'-0"

S807

0" 3" 6" 1' - 6"

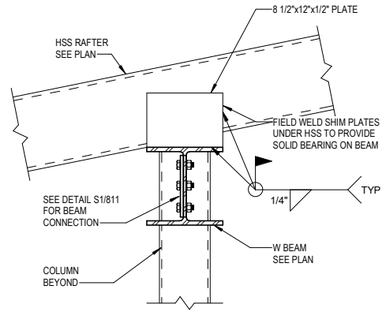


1 TYP. CANOPY CONNECTION DETAIL

SCALE: 1/2" = 1'-0"

S808

0" 3" 6" 1' - 6"

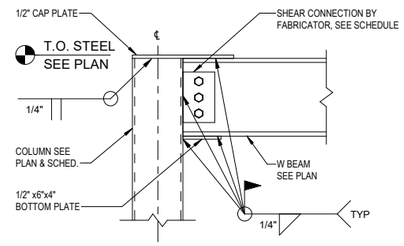


2 RAFTER TO BEAM CONNECTION

SCALE: 1/2" = 1'-0"

S808

0" 3" 6" 1' - 6"

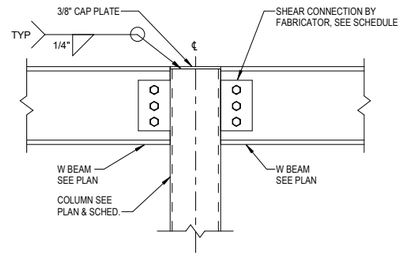


3 MOMENT CONNECTION

SCALE: 1/2" = 1'-0"

S808

0" 3" 6" 1' - 6"

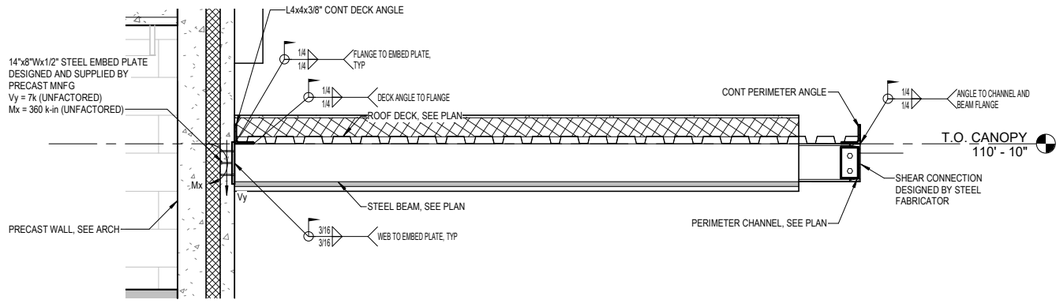


4 STRUCTURAL STEEL BEAM TO IN-LINE COLUMN CONNECTION

SCALE: 1/2" = 1'-0"

S808

0" 3" 6" 1' - 6"

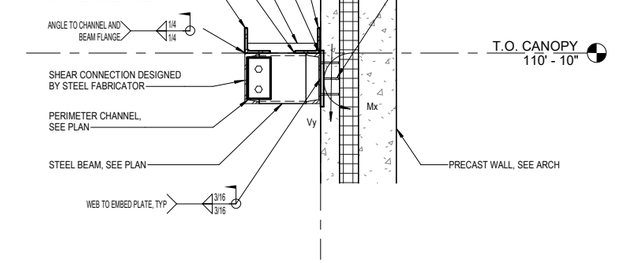


5 MAIN CANOPY FRAMING DETAIL

SCALE: 3/8" = 1'-0"

S808

0" 4" 8" 2'

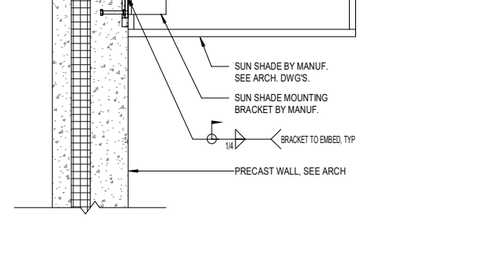


6 SIDE CANOPY FRAMING DETAIL

SCALE: 1/2" = 1'-0"

S808

0" 3" 6" 1' - 6"

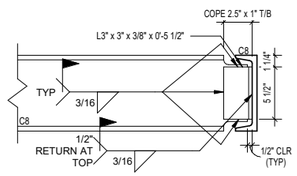


7 SUN SHADE TO PRECAST PANEL DETAIL

SCALE: 1/2" = 1'-0"

S808

0" 3" 6" 1' - 6"



8 CHANNEL TO CHANNEL CONNECTION

SCALE: 3/4" = 1'-0"

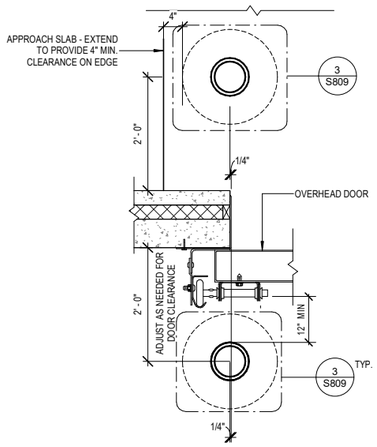
S808

0" 2" 4" 1'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL CANOPY DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S808	240

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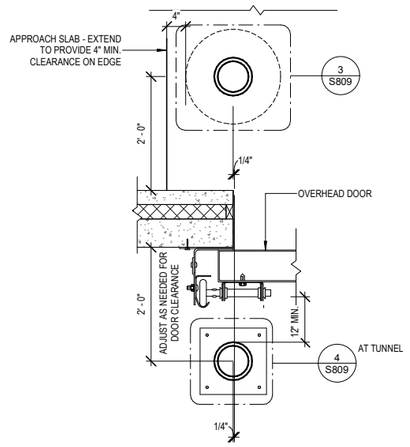
PLOT DATE: 4/29/2024 10:29:02 AM



1 TYPICAL BOLLARD PLACEMENT DETAIL

SCALE: N.T.S.

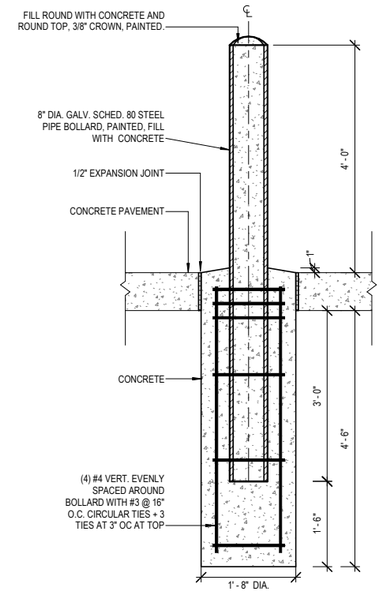
S809



2 BOLLARD AT TUNNEL PLACEMENT DETAIL

SCALE: N.T.S.

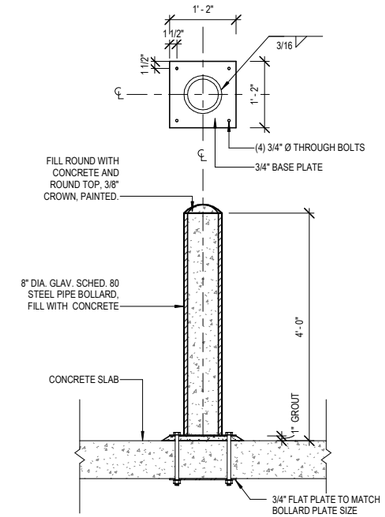
S809



3 TYPICAL BOLLARD DETAIL

SCALE: N.T.S.

S809



4 TYPICAL BOLLARD ON SUSPENDED SLAB DETAIL

SCALE: N.T.S.

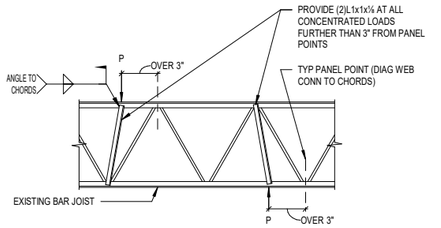
S809

2

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL BOLLARD DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S809	241

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt

PLOT DATE: 4/29/2024 10:29:03 AM

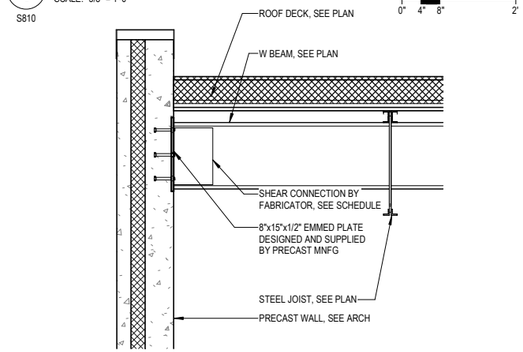


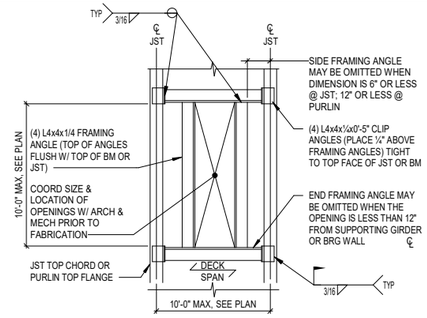
P=LOADS OVER 100 lbs MORE THAN 3" FROM PANEL POINT

1. THIS DETAIL IS APPLICABLE TO ALL CONCENTRATED LOADS ATTACHED TO JOISTS, WHETHER INDICATED ON STRUCTURAL DRAWINGS ON NOT. LOAD EXAMPLES INCLUDE:
   A. ROOF TOP UNITS (RTU's)
   B. HANGING PLUMBING, MECHANICAL STEEL PIPES, SPRINKLER PIPING
   C. HANGING BASKETBALL GOALS
   D. KITCHEN HOODS
2. SEE MECHANICAL, ELECTRICAL, PLUMBING, FIRE SAFETY, AND ARCHITECTURAL DRAWINGS FOR LOCATIONS.

1 TYPICAL JOIST POINT LOAD REINF DETAIL

S810 SCALE: 3/8" = 1'-0"



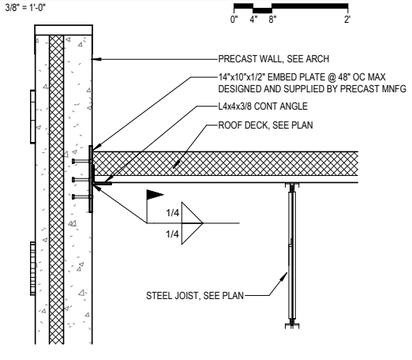


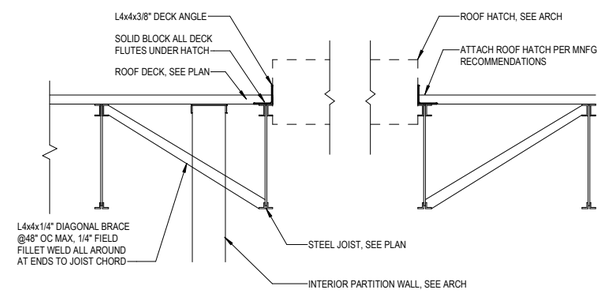
NOTE:

1. AT JST FRAMING - CLIP ANGLES TO BE LOCATED @ TOP CHORD PANEL POINTS OR PROVIDE 2-L1½"x1½"x3/16" FROM BRG POINT OF FRAME TO BOT CHORD PANEL POINT OF JST FIELD WELD IN PLACE.

2 ROOF OPENING SUPPORT DETAIL

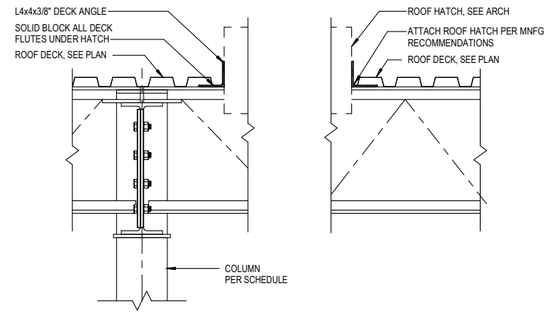
S810 SCALE: 3/8" = 1'-0"





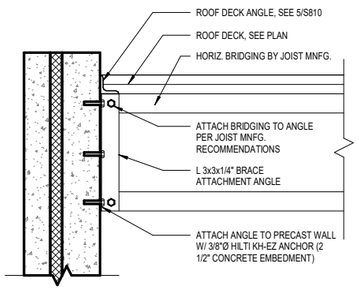
3 ROOF HATCH SECTION

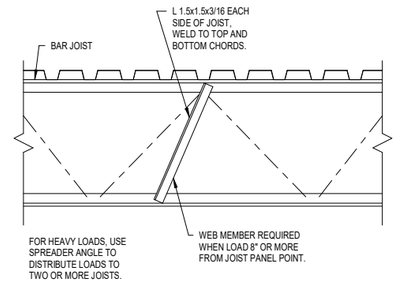
S810 SCALE: 3/8" = 1'-0"



4 ROOF HATCH SECTION 2

S810 SCALE: 1/2" = 1'-0"





5 TYPICAL ROOF DETAIL AT BEARING WALL

S810 SCALE: 3/8" = 1'-0"

6 TYPICAL ROOF DETAIL AT NON-BEARING WALL

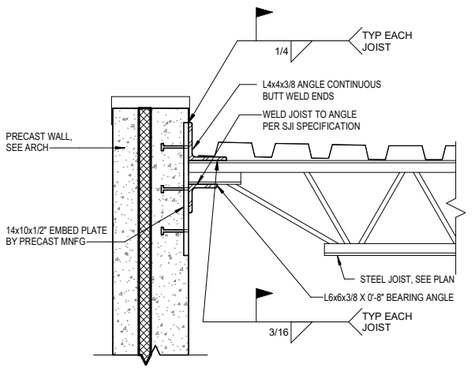
S810 SCALE: 3/8" = 1'-0"

7 JOIST BRIDGING ATTACHMENT DETAIL

S810 SCALE: 1/2" = 1'-0"

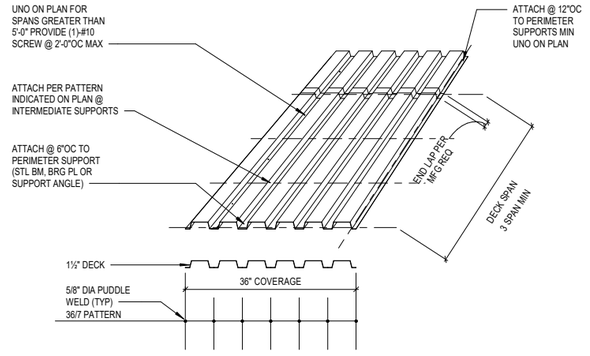
8 STANDARD BOTTOM CHORD SUPPORT

S810 SCALE: 1/2" = 1'-0"



9 TYPICAL ROOF JOIST BEARING DETAIL PRECAST WALL

S810 SCALE: 3/4" = 1'-0"



NOTES:

1. ALL PUDDLE WELDS ARE 5/8"Ø. WELD WASHERS SHALL BE USED WHEN WELDING STL ROOF DECK TO LESS THAN 22GA THICKNESS
2. DECK FASTENING REQ SHALL NOT BE LESS THAN THE MFG'S RECOMMENDATIONS OR AS SHOWN ABOVE & ON PLANS.
3. WHERE WELDS ARE USED, ENSURE THAT WELDS @ DECK END LAPS ADEQUATELY PENETRATE BOTH LAYERS OF DECK

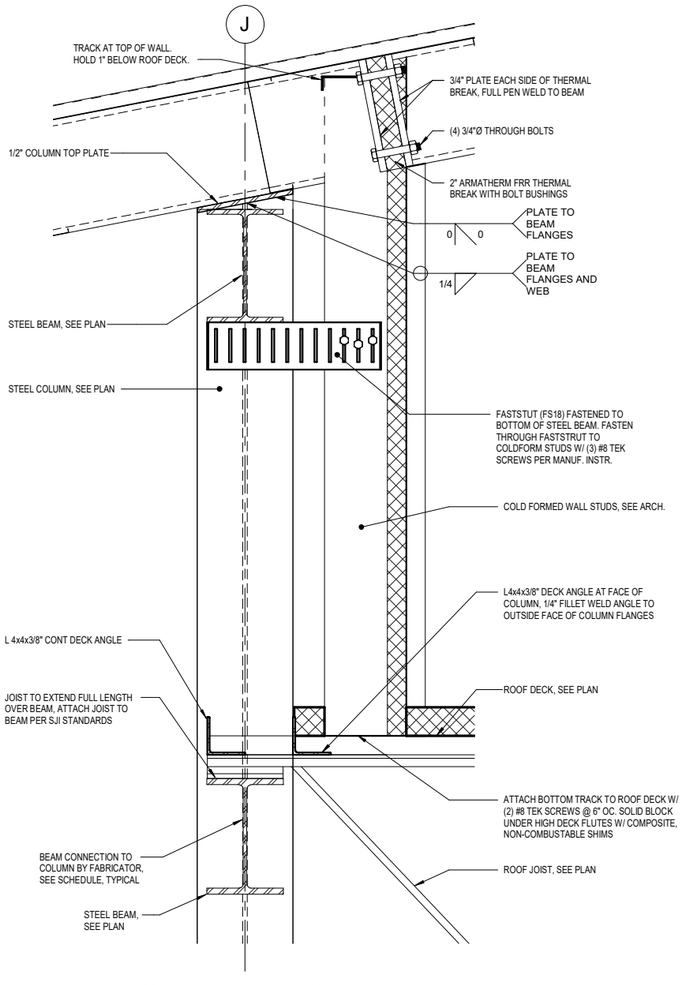
10 ROOF DECK WELD PATTERNS

S810 SCALE: 3/4" = 1'-0"

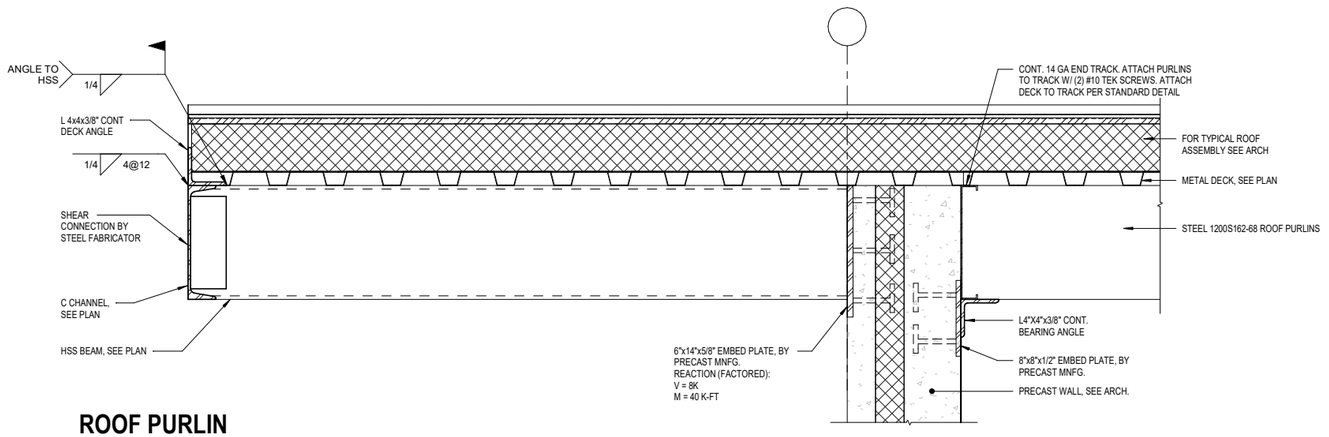
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ROOF FRAMING DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S810	242

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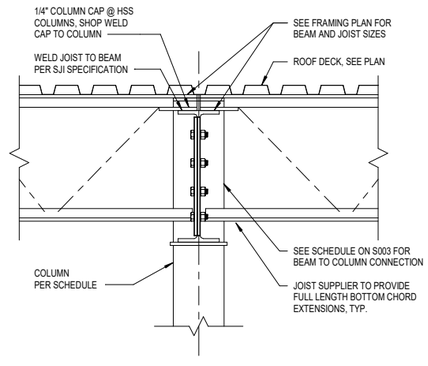
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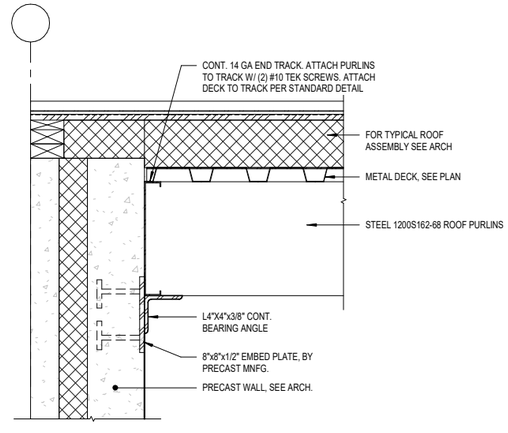
1 TYPICAL ROOF FRAMING CAP DETAIL
S811
SCALE: 3/4" = 1'-0"
0" 2" 4" 1'



4 ROOF PURLIN BEARING DETAIL @ PRECAST WALL
S811
SCALE: 3/4" = 1'-0"
0" 2" 4" 1'



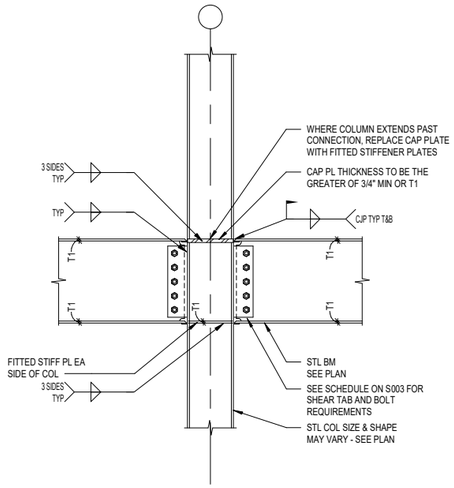
2 TYPICAL ROOF JOIST BEARING DETAIL @ STEEL BEAM
S811
SCALE: 1/2" = 1'-0"
0" 3" 6" 1' - 6"



3 TYPICAL ROOF PURLIN BEARING DETAIL @ PRECAST WALL
S811
SCALE: 3/4" = 1'-0"
0" 2" 4" 1'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL ROOF FRAMING DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S811	243

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_S21.rvt PLOT DATE: 4/29/2024 10:29:04 AM



1 MOMENT CONNECTION AT INTERIOR JOINT

SCALE: 3/8" = 1'-0"

S812

2

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			STRUCTURAL STEEL FRAMING DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. S812	244

PROJECT GENERAL NOTES:

FLOW TESTS AND HYDRAULIC CALCULATIONS:

1. CONTRACTOR SHALL PERFORM FLOW TEST PRIOR TO PREPARATION OF DESIGN CALCULATIONS. TEST SHALL BE REPRESENTATIVE OF HIGH WATER USE PERIODS. CONTRACTOR SHALL CONTACT THE USER AGENCY AND LOCAL MUNICIPALITY AT LEAST 7 DAYS PRIOR TO ANY TEST. COORDINATE SYSTEM DISRUPTION (INCLUDING EXACT TIME AND APPROXIMATE DURATION OF TEST) WITH ALL PARTIES. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SERVICE DISRUPTIONS RESULTING FROM IMPROPER NOTIFICATION.

MISCELLANEOUS NOTES:

2. SPRINKLER GUARDS: PROVIDE HEAD GUARDS ON ALL EXPOSED SPRINKLER HEADS LOCATED BELOW 7'-0" A.F.F., WITHIN 24" OF MECHANICAL EQUIPMENT, ACCESS PANELS OR HATCHES, BENEATH DUCTWORK, AND OTHER AREAS WHERE INCIDENTAL CONTACT MAY OCCUR.
3. FIRE PROTECTION CONTRACTOR SHALL PROVIDE A COMPLETE FIRE PROTECTION SYSTEM INCLUDING ALL NECESSARY PIPING, VALVES, CONTROLS, FITTINGS, HARDWARE, AND ALL APPLICABLE ELECTRICAL EQUIPMENT.
4. COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE WISCONSIN BUILDING CODES, INTERNATIONAL BUILDING CODES, LOCAL FIRE CHIEF OR FIRE MARSHAL, INSURANCE UNDERWRITER, APPLICABLE NFPA STANDARDS, AND OTHER RECOGNIZED INDUSTRY STANDARDS.
5. ALL SYSTEM COMPONENTS SHALL BE U.L. LISTED AND F.M. APPROVED. EQUIPMENT AND RISER ASSEMBLIES SHALL BE U.L. LISTED AND F.M. APPROVED AS ASSEMBLIES, NOT INDIVIDUAL COMPONENTS. WHERE QUICK-RESPONSE TYPE SPRINKLER HEADS ARE SPECIFIED, THE SPRINKLER HEADS ALONE MAY BE U.L. LISTED ONLY, PROVIDED THAT THEIR USE IS ACCEPTED AND APPROVED BY THE OWNER'S INSURANCE UNDERWRITER AND THE LOCAL FIRE CHIEF.
6. PIPING AND SYSTEM COMPONENTS SHALL BE INSTALLED IN LOCATIONS WITH ADEQUATE HEAT TO PREVENT FREEZING. DO NOT INSTALL PIPING WITHIN EXTERIOR WALLS OR ADJACENT TO AREAS SUBJECT TO FREEZING CONDITIONS.
7. INSTALL SPRINKLER PIPING SO THAT THE SYSTEM CAN BE DRAINED IN ACCORDANCE WITH NFPA-13. WHERE POSSIBLE, SLOPE TO MAIN DRAIN VALVE. PROVIDE AUXILIARY DRAINS FOR TRAPPED PIPING. MINIMIZE THE USE OF AUXILIARY DRAINS WHEREVER POSSIBLE. AUXILIARY DRAINS SHALL BE EQUIPPED WITH THREADED HOSE CONNECTIONS FOR DRAINAGE OR PIPE TO GRADE OR SEWER RECEPTOR WHERE INDICATED. PIPE FULL FLOWING DRAINS, INCLUDING BUT NOT LIMITED TO DRAIN RISERS, MAIN DRAINS AND INSPECTOR'S TEST CONNECTIONS, TO EXTERIOR GRADE. ALL DRAIN LOCATIONS SHALL BE IDENTIFIED ON A FRAMED FLOOR PLAN LOCATED IN THE SPRINKLER ROOM.
8. INSTALL INSPECTOR'S TEST CONNECTIONS SIZED AND LOCATED IN ACCORDANCE WITH NFPA STANDARDS, COMPLETE WITH SHUT-OFF VALVE.
9. ROUTE ALL PIPING AS NECESSARY TO AVOID STRUCTURAL, MECHANICAL, ELECTRICAL, AND OTHER PIPING OBSTRUCTIONS IN CEILING PLENUMS, WALL CHASES, AND OTHER AREAS OF INSTALLATION. PROVIDE ADDITIONAL TEES, ELBOWS, BENDS, AUXILIARY DRAINS, SPRINKLER HEADS, ETC. AS NECESSARY TO ACCOMMODATE OTHER TRADES. DO NOT ROUTE PIPING IN EXTERIOR WALLS, ABOVE ELECTRICAL PANELBOARDS, OR WITHIN ANY DESIGNATED AND/OR CODE REQUIRED EQUIPMENT CLEARANCES. CLOSELY COORDINATE PIPE ROUTING WITH OTHER TRADES TO AVOID CONFLICT IN THE FIELD. ADJUST ROUTING AS NECESSARY TO MAINTAIN REASONABLE ACCESS TO MECHANICAL EQUIPMENT, PLUMBING CLEANOUTS, ELECTRICAL DISCONNECTS, OR OTHER EQUIPMENT REQUIRING PERIODIC SERVICE AND MAINTENANCE.
10. WHERE OBSTRUCTIONS (DUCTWORK, EQUIPMENT, ETC.) ARE GREATER THAN 48" WIDE, FIRE SUPPRESSION CONTRACTOR SHALL PROVIDE ADDITIONAL SPRINKLER HEADS BENEATH OBSTRUCTION. PROVIDE ADDITIONAL PIPING, SPRINKLERS, AND FITTINGS AS REQUIRED. NOT ALL OBSTRUCTIONS AND ADDITIONAL SPRINKLERS MAY BE INDICATED.
11. EXPOSED PIPING SHALL BE ROUTED AS TIGHT TO THE STRUCTURE AND WALL SURFACES AS POSSIBLE. INCLUDE ADDITIONAL OFFSETS AS REQUIRED.
12. SUPPLY ALL PENDENT SPRINKLERS INSTALLED WITHIN SUSPENDED CEILINGS WITH A RETURN BEND CONFIGURATION.

COORDINATION:

13. CONTRACTORS ARE RESPONSIBLE FOR COORDINATING AND SCHEDULING WORK BETWEEN ALL TRADES AND BETWEEN CONSTRUCTION ACTIVITIES AND THE OCCUPANTS OF THE BUILDING SUCH THAT WORK IS COMPLETED IN A TIMELY MANNER.
14. CONTRACTOR SHALL VERIFY SIZES AND LOCATIONS OF EQUIPMENT WITH APPROVED SHOP AND FABRICATION DRAWINGS BEFORE PROCEEDING WITH THE WORK.
15. CONTRACTORS AND SUBCONTRACTORS SHALL CAREFULLY REVIEW ALL CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE SCOPE OF WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DRAWING SET.
16. DRAWINGS ARE INTENDED TO SHOW SCOPE OF WORK ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE FIRE SUPPRESSION SYSTEM DESIGN, PLANS, APPROVALS, AND INSTALLATION. CONTRACTOR SHALL PROVIDE ALL REQUIRED PIPING, VALVES, APPURTENANCES, AND EQUIPMENT NECESSARY FOR A COMPLETE SYSTEM. ADDITIONAL TEES, ELBOWS, BENDS, HEADS, ETC. SHALL BE PROVIDED AS NECESSARY TO MEET CODE AND AVOID EXISTING OBSTRUCTIONS. AT THE END OF CONSTRUCTION, THE ENTIRE SYSTEM SHALL FULLY COMPLY WITH THE LOCAL FIRE CHIEF, WISCONSIN BUILDING CODES, AND APPLICABLE NFPA STANDARDS.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL DESIGN, PLANNING, HEAD LAYOUT, HYDRAULIC CALCULATIONS, AND COMPLETE REGULATORY APPROVAL. ALL WORK TO BE PERFORMED BY LICENSED PERSONS EMPLOYED BY THE SPRINKLER CONTRACTOR.

FIRESTOPPING:

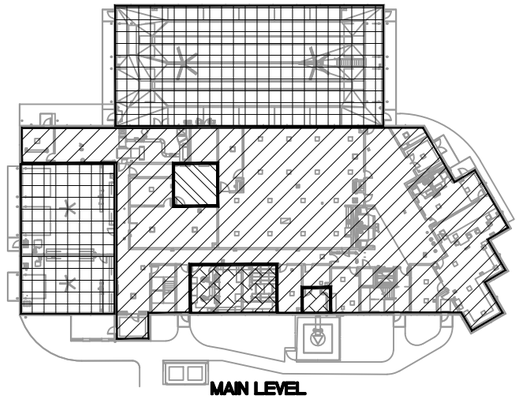
18. CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF ALL RATED ENCLOSURES (SMOKE AND FIRE RATED) THROUGHOUT THE FACILITY. SEAL ALL PENETRATIONS (RATED AND NON-RATED) IN ACCORDANCE WITH SPECIFICATION SECTION 07 84 00 AND SECTION 21 05 00 (SEALING AND FIRESTOPPING REQUIREMENTS).
19. FINAL FIRESTOPPING: ALL PENETRATIONS IN FLOORS, ROOFS, OR FIRE-RATED PARTITIONS SHALL BE SEALED WITH AN APPROVED FIRE-PROTECTION MATERIAL IN A MANNER FULLY COMPLIANT WITH THE MANUFACTURER'S SPECIFICATIONS AND RESULTING IN A UL-APPROVED ASSEMBLY.

PROTECTION OF BUILDING EQUIPMENT:

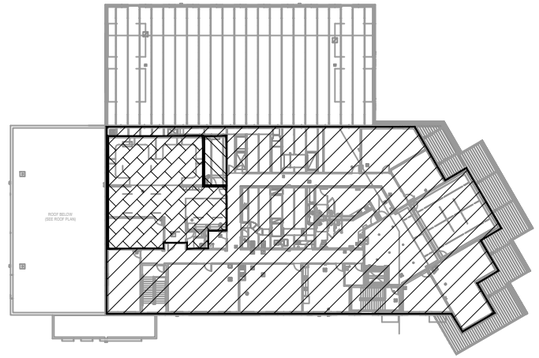
20. THE CONTRACTOR SHALL EFFECTIVELY PROTECT, AT HER/HIS OWN EXPENSE, SUCH OF HIS/HER WORK, MATERIALS, OR EQUIPMENT AS IT IS LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD.
21. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGE SO DONE TO HIS/HER WORK UNTIL FULLY AND FINALLY ACCEPTED.
22. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT MOTORS, PUMPS, FANS, ELECTRICAL EQUIPMENT, HEATING EQUIPMENT, AND ALL SIMILAR ITEMS OF EQUIPMENT FROM DIRT, GRIME, PLASTER, AND WATER DURING ALL PHASES OF CONSTRUCTION.
23. DO NOT DRILL THROUGH ANY STRUCTURAL MEMBER WITHOUT PRIOR CONSENT. ANY HOLES MADE THROUGH STRUCTURAL MEMBERS OF THE BUILDING SHALL BE VERIFIED AND APPROVED IN WRITING BY A STRUCTURAL ENGINEER.
24. REPAIR CEILINGS, WALLS, AND FINISHES AS NECESSARY TO MATCH PRECONSTRUCTION CONDITIONS AND REPLACE ANY CEILING TILES DAMAGED FROM INSTALLATION OF THE SPRINKLER SYSTEM.

CEILING TILE CARE:

25. CLEAN ALL FINGERPRINTS AND MARKS FROM THE CEILING TILES AT THE COMPLETION OF CONSTRUCTION WITHIN THE SPACE.
26. CENTER OF TILE INSTALLATION IS REQUIRED. ALIGN ALL SPRINKLER HEADS WITHIN ROOM.



MAIN LEVEL



UPPER LEVEL

SUPPRESSION SYSTEM TYPE

- WET PIPE SPRINKLER SYSTEM
- DRY PIPE SPRINKLER SYSTEM
- SINGLE INTERLOCK PREACTION SPRINKLER SYSTEM
- CLEAN AGENT FIRE EXTINGUISHING SYSTEM

HAZARD CLASSIFICATIONS

- LT — LIGHT HAZARD – 0.10 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
- OH1 — ORDINARY HAZARD GROUP 1 – 0.15 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
- OH2 — ORDINARY HAZARD GROUP 2 – 0.20 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
- EH1 — EXTRA HAZARD GROUP 1 – 0.30 GPM/SF OVER HYDRAULICALLY MOST REMOTE 2,500 S.F.

SPRINKLER HEAD LEGEND

- CONCEALED SIDEWALL SPRINKLER HEAD
- CONCEALED, EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- VERTICAL SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE VERTICAL SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL EXTENDED COVERAGE SPRINKLER HEAD
- CONCEALED PENDENT SPRINKLER HEAD
- CONCEALED PENDENT, EXTENDED COVERAGE SPRINKLER HEAD
- PENDENT SPRINKLER HEAD
- PENDENT, EXTENDED COVERAGE SPRINKLER HEAD
- PENDENT SPRINKLER HEAD, DEEP ESCUTCHEON
- UPRIGHT SPRINKLER HEAD
- UPRIGHT, EXTENDED COVERAGE SPRINKLER HEAD
- SEMI-RECESSED PENDENT SPRINKLER HEAD
- SEMI-RECESSED PENDENT, EXTENDED COVERAGE SPRINKLER HEAD

ABBREVIATIONS

AFF	–	ABOVE FINISHED FLOOR
ALT	–	ALTERNATE
AP	–	ACCESS PANEL
BOP	–	BOTTOM OF PIPE ELEVATION
CFCI	–	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
CFM	–	CUBIC FEET PER MINUTE
CL	–	CENTERLINE
CLG	–	CEILING
CONN	–	CONNECTION/CONNECT
COP	–	CENTER OF PIPE
EC	–	ELECTRICAL/FIRE ALARM CONTRACTOR
EL	–	ELEVATION
ETR	–	EXISTING TO REMAIN
FD	–	FLOOR DRAIN
FP	–	FIRE PROTECTION
FPC	–	FIRE PROTECTION CONTRACTOR
FPM	–	FEET PER MINUTE
FPS	–	FEET PER SECOND
GA	–	GAUGE
GPC	–	GENERAL PRIME CONTRACTOR
GPM	–	GALLONS PER MINUTE
HG	–	HEAD GUARD
HT	–	HIGH TEMPERATURE
IT	–	INTERMEDIATE TEMPERATURE
MECH	–	MECHANICAL
MEP	–	MECHANICAL, ELECTRICAL AND PIPING
NA	–	NOT APPLICABLE
NC	–	NORMALLY CLOSED
NO	–	NORMALLY OPEN
NPS	–	NOMINAL PIPE SIZE
NPT	–	NATIONAL PIPE THREAD
NTS	–	NOT TO SCALE
OC	–	ON CENTER
OFCI	–	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	–	OWNER FURNISHED, OWNER INSTALLED
PC	–	PLUMBING CONTRACTOR
PSI	–	POUNDS PER SQUARE INCH
TBR	–	TO BE REMOVED
TD	–	TRENCH DRAIN
TOP	–	TOP OF PIPE ELEVATION
X	–	EXISTING

FLOW TEST

THE FIRE PROTECTION CONTRACTOR SHALL CONDUCT A FLOW TEST FOR USE IN PREPARATION OF HYDRAULIC CALCULATIONS WITHIN 90 DAYS OF SUBMITTAL. THE FOLLOWING IS PROVIDED FOR REFERENCE ONLY.

DATE: SEPTEMBER 1, 2022
FLOW TEST #: N/A
HYDRANT LOCATION: EAST FRONTAGE ROAD AND POPLAR ROAD

FLOW HYDRANT	RESIDUAL HYDRANT
W1038	W1040
EAST FRONTAGE ROAD	EAST FRONTAGE ROAD

STATIC: 50 PSI
RESIDUAL: 39 PSI
GALLONS FLOWING: 750 GPM
MAIN SIZE: 8" PVC



PIPING

SINGLE	DOUBLE	
		ELBOW DOWN
		ELBOW UP
		BOTTOM CONNECTION (45° OR 90°)
		TOP CONNECTION (45° OR 90°)
D	D	45° PIPE RISE(R) /DROP(D)
N/A		TEE

CLEAN AGENT SYSTEM SYMBOLS

- PHOTOELECTRIC SMOKE DETECTOR
- HEAT DETECTOR – 135°F
- CLEAN AGENT ALARM HORN/STROBE – WALL MOUNTED; xx = INDICATES STROBE INTENSITY IN CANDELA
- CLEAN AGENT STROBE – WALL MOUNTED; xx = INDICATES STROBE INTENSITY IN CANDELA
- CLEAN AGENT DISCHARGE LIGHT – RED LENS – WALL MOUNTED
- CLEAN AGENT 2ND ALARM BELL – RED – WALL MOUNTED
- CLEAN AGENT INHIBIT INDICATOR LIGHT
- KOS — KEY OPERATED BYPASS/DISCHARGE DISABLE SWITCH
- FACP — FIRE ALARM/SUPPRESSION CONTROL PANEL
- CLEAN AGENT CYLINDER WITH MOUNTING FRAME
- MM — MONITOR MODULE
- CLEAN AGENT NOZZLE 360°
- CR — CONTROL RELAY
- CLEAN AGENT NOZZLE 180°
- RM — RELEASE MODULE

PIPING SPECIALTIES

- GENERAL PIPELINE STRAINER WITHOUT DRAIN
- GENERAL PIPELINE STRAINER WITH DRAIN
- FLANGE
- UNION
- 2" AND SMALLER, CAP OR PLUG 2 1/2" AND LARGER, BLIND FLANGE
- HEAT TRACE TERMINATION POINT
- HEAT TRACE POWER CONNECTION POINT
- PRESSURE GAUGE (WITH GAUGE VALVE)
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- DIRECTION OF PITCH (DOWN)
- DIRECTION OF FLOW
- PIPE GUIDE
- PIPE SLEEVE
- ANCHOR
- FD — FLOOR DRAIN (FD)

VALVES

- BUTTERFLY VALVE
- GATE VALVE
- GLOBE VALVE
- BALL VALVE
- SHUTOFF VALVE (BUTTERFLY VALVE FOR 2 1/2" AND LARGER. BALL VALVE FOR 2" AND SMALLER)
- DRAIN VALVE
- DRAIN VALVE WITH CAP
- SWING CHECK VALVE
- DOUBLE CHECK VALVE ASSEMBLY
- STANDPIPE WITH HOSE VALVE

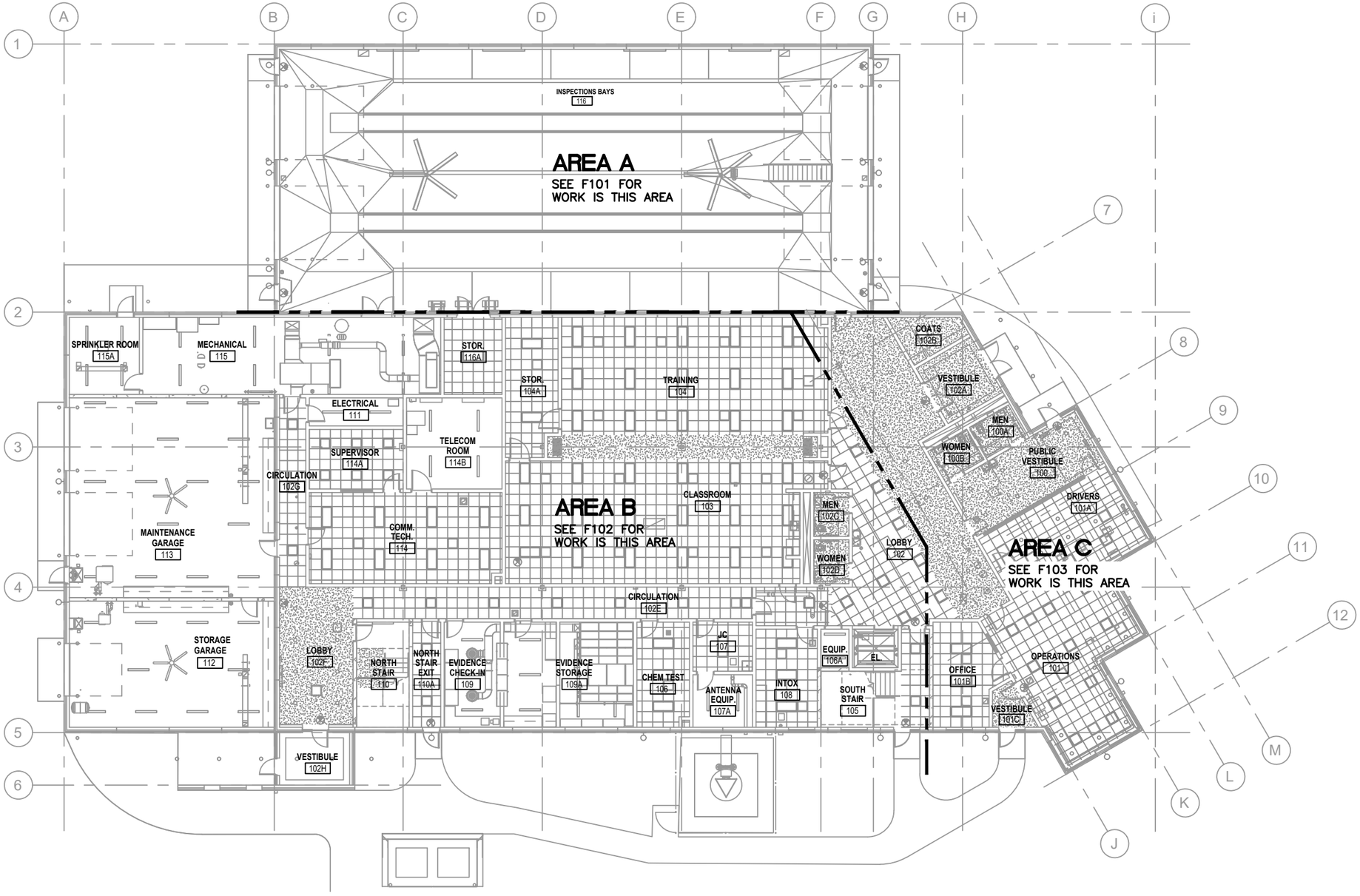
SHEET SYMBOLS

- FLOW DIRECTION DESIGNATION
- LINE CONTINUE BREAK
- POC — NEW POINT OF CONNECTION TO EXISTING WORK DESIGNATION
- X/FXXX — PLAN DETAIL REFERENCE: TOP DESIGNATES DETAIL NUMBER BOTTOM DESIGNATES ON WHICH SHEET DETAIL APPEARS
- X — PLAN BOX NOTE DESIGNATION
- X — PLAN BOX NOTE ITEMS
- X — GENERAL NOTE ITEMS
- X — REVISION NUMBER DESIGNATION
- ELEVATION DESIGNATION
- PLAN NORTH
- XX / FXXX — DETAIL REFERENCE: TOP DESIGNATES DETAIL NUMBER BOTTOM DESIGNATES ON WHICH SHEET DETAIL APPEARS

PLANS PREPARED BY: CMG & ASSOCIATES, INC., DEFOREST, WI			ABBREVIATIONS, SYMBOLS, HAZARD CLASSIFICATIONS, SPRINKLER HEAD LEGEND AND GENERAL NOTES	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. F001	

PLOT DATE: 8/22/2022 7:21:11 AM

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01 F100 OVERALL FIRE SUPPRESSION PLAN

MAIN LEVEL

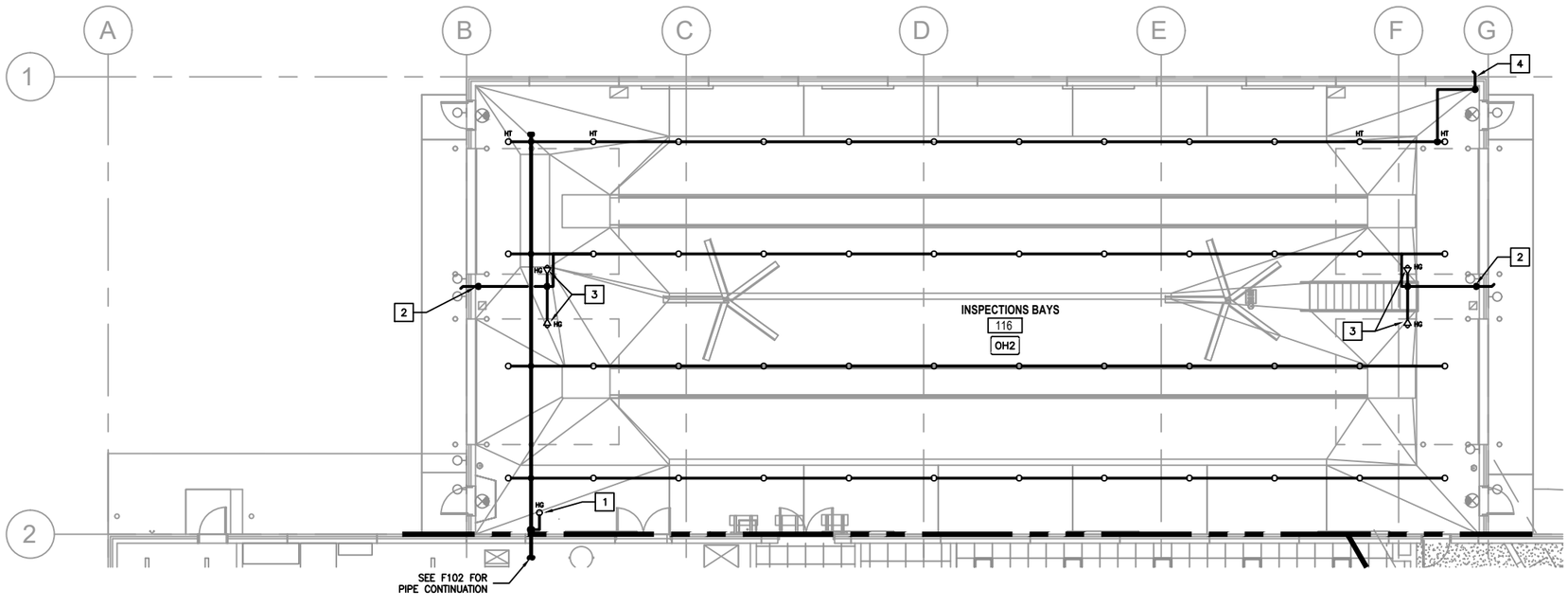
SCALE: 3/64" = 1'-0"

NORTH

PLANS PREPARED BY: CMG & ASSOCIATES, INC., DEFOREST, WI			OVERALL FIRE SUPPRESSION PLAN: MAIN LEVEL	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. F100	

PLOT DATE: 8/22/2022 7:21:11 AM

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01 F101 FIRE SUPPRESSION PLAN

MAIN LEVEL- AREA A

SCALE: 1/16" = 1'-0"

0' 4' 8' 16' 24'

NORTH

SHEET NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE AND/OR SMOKE RATED CONSTRUCTION.
2. EXTERIOR OVERHANGS ARE NON-COMBUSTIBLE CONSTRUCTION.
3. FIRE PROTECTION CONTRACTOR SHALL PROVIDE AUXILIARY DRAINS IN ACCORDANCE WITH NFPA-13. CONTRACTOR SHALL CLEARLY INDICATE ALL REQUIRED LOCATIONS ON SHOP DRAWINGS SUBMITTALS. FABRICATION DRAWINGS SHALL BE UPDATED WITH ACTUAL INSTALLED LOCATIONS FOR RECORD DRAWINGS.
4. DRY AND PREACTION SYSTEM PIPING SHALL BE ARRANGED TO POSITIVELY DRAIN. SLOPE ALL PIPING BACK TO RISER WHERE POSSIBLE. AVOID THE USE OF LOW POINT DRAINS UNLESS NECESSARY.
5. ALL EXTERIOR DRAIN TERMINATIONS SHALL BE MADE AT 24" ABOVE FINISHED GRADE AND CONFIGURED TO DIRECT WATER AWAY FROM THE BUILDING.
6. HIGH VOLUME LOW SPEED FANS SHALL BE INTERLOCKED TO SHUTDOWN UPON LOW PRESSURE SWITCH OPERATION. COORDINATE INTERLOCK AND TESTING WITH DIVISION 23, 26 AND 28 CONTRACTORS.

[X] INSTALLATION NOTES

1. PROVIDE SPRINKLER PROTECTION BENEATH MECHANICAL EQUIPMENT AND DUCTWORK AS THE WIDTH OF THE EQUIPMENT IS IN EXCESS OF 4'-0". COORDINATE SPRINKLER DROP WITH MECHANICAL EQUIPMENT CONNECTION LOCATIONS AND ACCESS PANEL LOCATIONS.
2. ROUTE PIPING DOWN TIGHT TO WALL TO DRUM DRIP ASSEMBLY. LOCATE THE TOP VALVE OF THE ASSEMBLY AT 5'-0" A.F.F. AND ROUTE DRAIN DISCHARGE TO GRADE.
3. FURNISH AND INSTALL EXTENDED COVERAGE SIDEWALL SPRINKLER BENEATH OVERHEAD GARAGE DOOR. PROVIDE HEAVY DUTY HEAD GUARDS ON SPRINKLERS.
4. ROUTE PIPING TO INSPECTOR'S TEST CONNECTION DOWN TIGHT TO WALL. TERMINATE TEST CONNECTION TO DIRECT WATER AWAY FROM THE BUILDING DOORS.

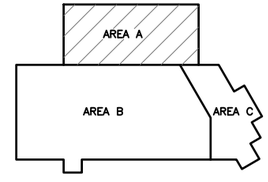
SPRINKLER HEAD LEGEND

- CONCEALED SIDEWALL SPRINKLER HEAD
- CONCEALED, EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- VERTICAL SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE VERTICAL SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL EXTENDED COVERAGE SPRINKLER HEAD
- CONCEALED PENDENT SPRINKLER HEAD
- CONCEALED PENDENT, EXTENDED COVERAGE SPRINKLER HEAD
- PENDENT SPRINKLER HEAD
- PENDENT, EXTENDED COVERAGE SPRINKLER HEAD
- PENDENT SPRINKLER HEAD, DEEP ESCUTCHEON
- UPRIGHT SPRINKLER HEAD
- UPRIGHT, EXTENDED COVERAGE SPRINKLER HEAD
- SEMI-RECESSED PENDENT SPRINKLER HEAD
- SEMI-RECESSED PENDENT, EXTENDED COVERAGE SPRINKLER HEAD

NOTE:
1. SEE SPECIFICATIONS SECTIONS (DMISION 21) FOR HEAD TEMPERATURE RATING REQUIREMENTS. "HT" INDICATES HIGH TEMPERATURE "IT" INDICATES INTERMEDIATE TEMPERATURE HEAD LOCATIONS. COORDINATE WITH CONDITIONS ON SITE AND PROVIDE ADDITIONAL AS REQUIRED.
2. "HG" INDICATES LOCATIONS WHERE SPRINKLER HEAD GUARDS ARE REQUIRED.
3. ALL SPRINKLERS SHALL BE INSTALLED CENTER OF TILE.

HAZARD CLASSIFICATIONS

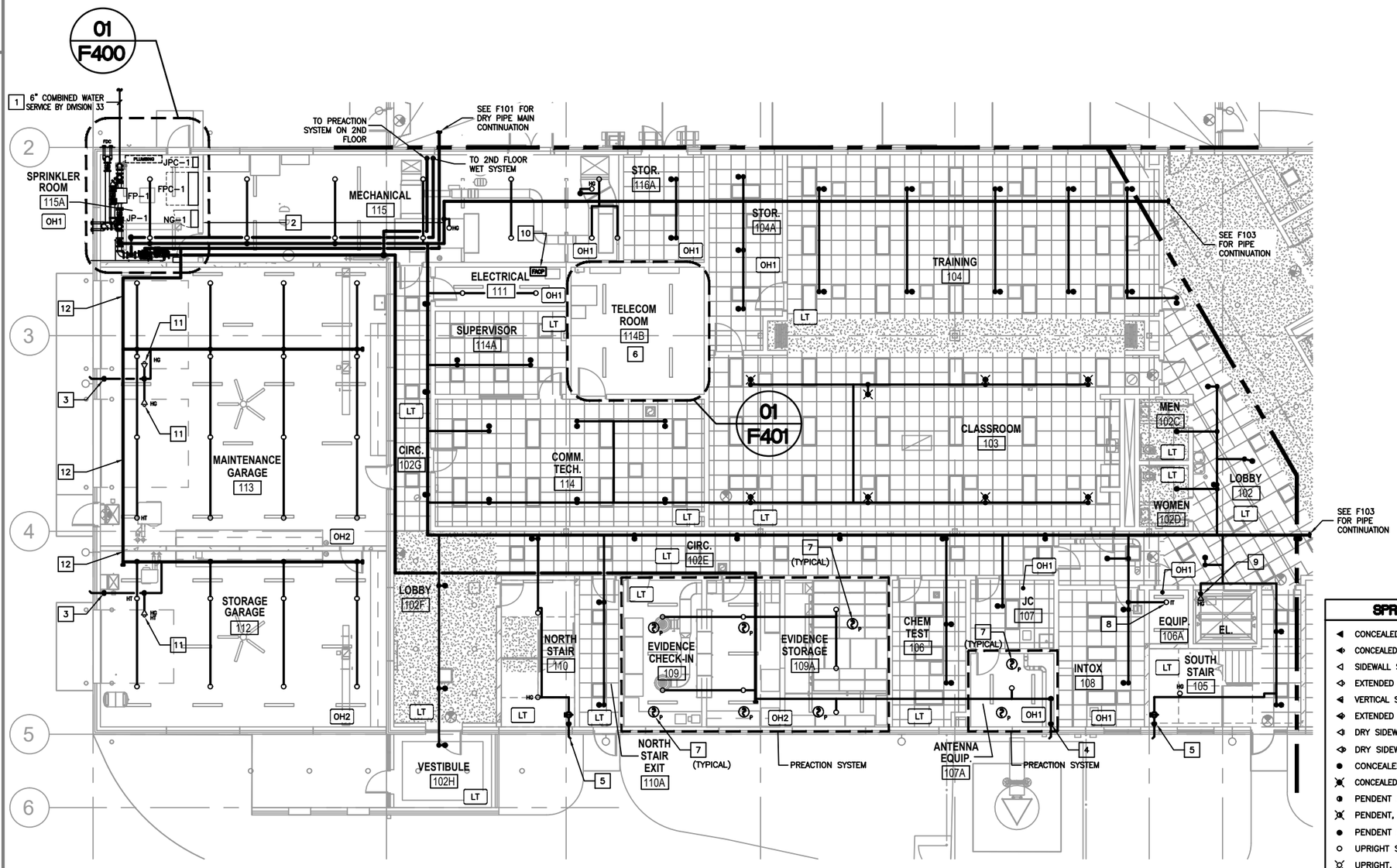
LT	LIGHT HAZARD – 0.10 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
OH1	ORDINARY HAZARD GROUP 1 – 0.15 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
OH2	ORDINARY HAZARD GROUP 2 – 0.20 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
EH1	EXTRA HAZARD GROUP 1 – 0.30 GPM/SF OVER HYDRAULICALLY MOST REMOTE 2,500 S.F.



KEY PLAN

PLANS PREPARED BY: CMG & ASSOCIATES, INC., DEFOREST, WI			FIRE SUPPRESSION PLAN: MAIN LEVEL - AREA A	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. F101	

PLOT DATE: 8/22/2022 7:21:11 AM



01
F102

FIRE SUPPRESSION PLAN

MAIN LEVEL - AREA B

SCALE: 1/16" = 1'-0"

0' 4' 8' 16' 24'

NORTH

SHEET NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE AND/OR SMOKE RATED CONSTRUCTION.
2. EXTERIOR OVERHANGS ARE NON-COMBUSTIBLE CONSTRUCTION.
3. FIRE PROTECTION CONTRACTOR SHALL PROVIDE AUXILIARY DRAINS IN ACCORDANCE WITH NFPA-13. CONTRACTOR SHALL CLEARLY INDICATE ALL REQUIRED LOCATIONS ON SHOP DRAWINGS SUBMITTALS. FABRICATION DRAWINGS SHALL BE UPDATED WITH ACTUAL INSTALLED LOCATIONS FOR RECORD DRAWINGS.
4. DRY AND PREACTION SYSTEM PIPING SHALL BE ARRANGED TO POSITIVELY DRAIN. SLOPE ALL PIPING BACK TO RISER WHERE POSSIBLE. AVOID THE USE OF LOW POINT DRAINS UNLESS NECESSARY.
5. ALL EXTERIOR DRAIN TERMINATIONS SHALL BE MADE AT 24" ABOVE FINISHED GRADE AND CONFIGURED TO DIRECT WATER AWAY FROM THE BUILDING.
6. HIGH VOLUME LOW SPEED FANS SHALL BE INTERLOCKED TO SHUTDOWN UPON LOW PRESSURE SWITCH OPERATION. COORDINATE INTERLOCK AND TESTING WITH DIVISION 23, 26 AND 28 CONTRACTORS.

X INSTALLATION NOTES

1. 6" COMBINED FIRE PROTECTION AND DOMESTIC WATER SERVICE BY DIVISION 33. THE DIVISION 33 CONTRACTOR WILL CONDUCT THE PRESSURE TEST; HOWEVER, THE FIRE PROTECTION CONTRACTOR SHALL CONDUCT THE FLUSHING OF THE MAIN.
2. COORDINATE FIRE PROTECTION MAIN ROUTING THROUGH MECHANICAL ROOM WITH MEP TRADES. AS PIPING TURNS TO CIRCULATION 102G AND TO INSPECTION BAYS 116, THERE IS A PROMINENT DUCT MAIN TO COORDINATE WITH.
3. ROUTE PIPING DOWN TIGHT TO WALL TO DRUM DRIP ASSEMBLY. LOCATE THE TOP VALVE OF THE ASSEMBLY AT 5'-0" A.F.F. AND ROUTE DRAIN DISCHARGE TO GRADE.
4. ROUTE PIPING TO INSPECTOR'S TEST CONNECTION DOWN TIGHT TO WALL.
5. ROUTE AUXILIARY DRAIN DOWN TIGHT TO CORNER TO STAIRWELL AND DISCHARGE TO GRADE.
6. ROOM PROTECTED BY CLEAN AGENT EXTINGUISHING SYSTEM. SEE F401 FOR DETAILS.
7. PHOTOELECTRIC SMOKE DETECTORS SHALL BE CONNECTED TO THE ADDRESSABLE FIRE ALARM/SUPPRESSION CONTROL PANEL FOR PREACTION SPRINKLER SYSTEM RELEASE. COORDINATE LOCATIONS OF SMOKE DETECTORS TO BE AT LEAST 3'-0" FROM SUPPLY OR RETURN AIR GRILLES.
8. LOCATE SPRINKLER HEAD IN ELEVATOR MACHINE ROOM WITHIN 24" OF HEAT DETECTOR.
9. ROUTE BRANCH LINE TO SPRINKLER IN ELEVATOR PIT. COORDINATE SPRINKLER LOCATION WITH ELEVATOR MACHINE AND EQUIPMENT RAIL LOCATIONS.
10. FIRE ALARM/SUPPRESSION CONTROL PANEL WILL SERVE BOTH CLEAN AGENT AND PREACTION SYSTEM RELEASING AS WELL AS BUILDING FIRE ALARM FUNCTIONS. SEE SECTION 21 22 00 FOR SPECIFICATIONS AND ELECTRICAL DRAWINGS FOR BUILDING FIRE ALARM DEVICES.
11. FURNISH AND INSTALL EXTENDED COVERAGE SIDEWALL SPRINKLER BENEATH OVERHEAD GARAGE DOOR. PROVIDE HEAVY DUTY HEAD GUARDS ON SPRINKLERS.
12. COORDINATE DRY PIPE MAIN ROUTING WITH MECHANICAL PIPING AND UNIT HEATERS IN AREA. FOLLOW SAME ROUTING AS MECHANICAL PIPING.

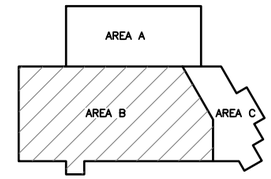
SPRINKLER HEAD LEGEND

- CONCEALED SIDEWALL SPRINKLER HEAD
- CONCEALED, EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- VERTICAL SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE VERTICAL SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL EXTENDED COVERAGE SPRINKLER HEAD
- CONCEALED PENDENT SPRINKLER HEAD
- CONCEALED PENDENT, EXTENDED COVERAGE SPRINKLER HEAD
- PENDENT SPRINKLER HEAD
- PENDENT, EXTENDED COVERAGE SPRINKLER HEAD
- PENDENT SPRINKLER HEAD, DEEP ESCUTCHEON
- UPRIGHT SPRINKLER HEAD
- UPRIGHT, EXTENDED COVERAGE SPRINKLER HEAD
- SEMI-RECESSED PENDENT SPRINKLER HEAD
- SEMI-RECESSED PENDENT, EXTENDED COVERAGE SPRINKLER HEAD

NOTE:
1. SEE SPECIFICATIONS SECTIONS (DIVISION 21) FOR HEAD TEMPERATURE RATING REQUIREMENTS. COORDINATE WITH CONDITIONS ON SITE AND PROVIDE ADDITIONAL AS REQUIRED.
2. "HG" INDICATES LOCATIONS WHERE SPRINKLER HEAD GUARDS ARE REQUIRED.
3. ALL SPRINKLERS SHALL BE INSTALLED CENTER OF TILE.

HAZARD CLASSIFICATIONS

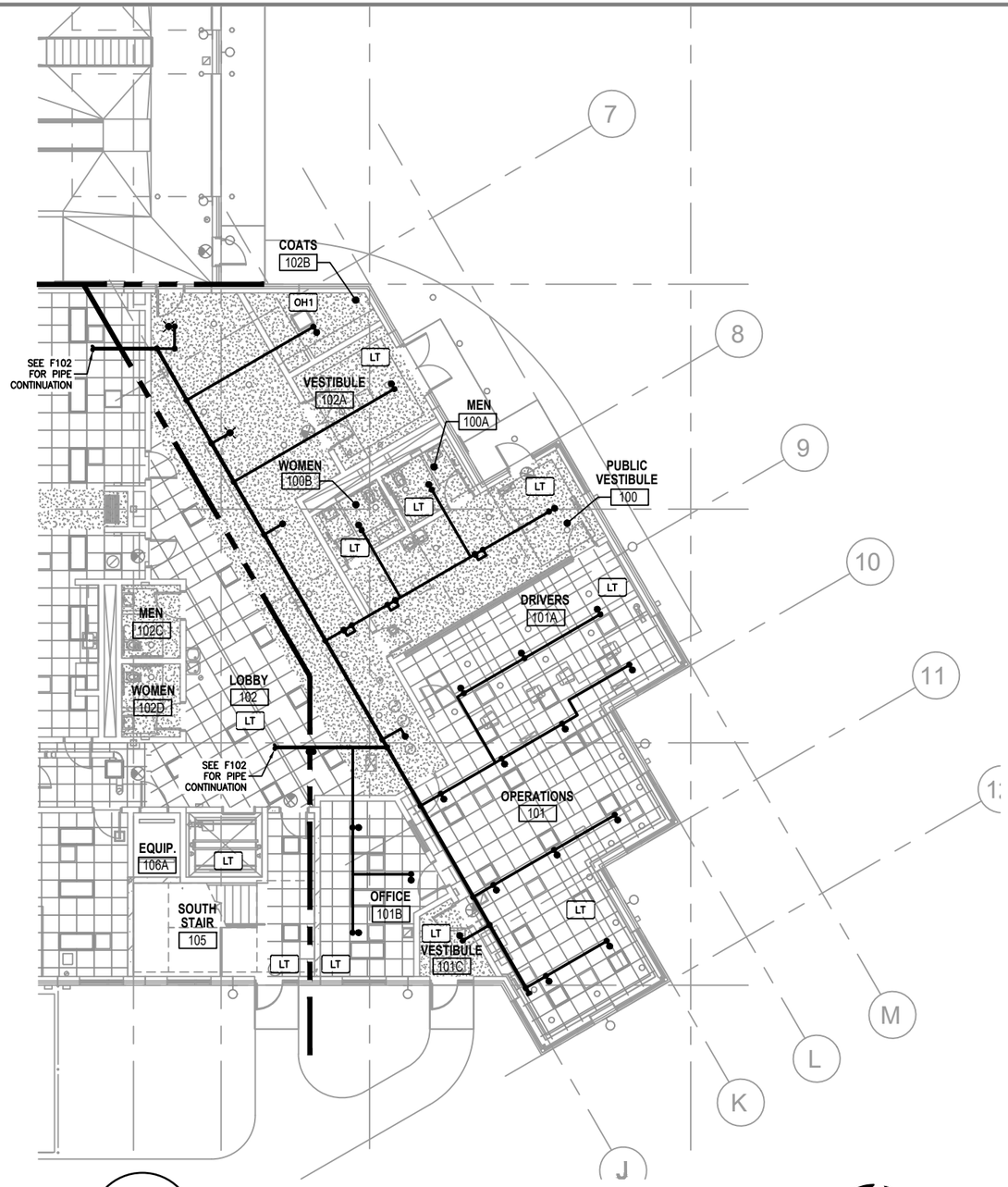
LT	LIGHT HAZARD – 0.10 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
OH1	ORDINARY HAZARD GROUP 1 – 0.15 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
OH2	ORDINARY HAZARD GROUP 2 – 0.20 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
EH1	EXTRA HAZARD GROUP 1 – 0.30 GPM/SF OVER HYDRAULICALLY MOST REMOTE 2,500 S.F.



KEY PLAN

PLANS PREPARED BY: CMG & ASSOCIATES, INC., DEFOREST, WI			FIRE SUPPRESSION PLAN: MAIN LEVEL - AREA B	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. F102	

PLOT DATE: 8/22/2022 7:21:11 AM



01
F103

FIRE SUPPRESSION PLAN

MAIN LEVEL- AREA C

SCALE: 1/16" = 1'-0"

0' 4' 8' 16' 24'

NORTH

SHEET NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE AND/OR SMOKE RATED CONSTRUCTION.
2. EXTERIOR OVERHANGS ARE NON-COMBUSTIBLE CONSTRUCTION.
3. FIRE PROTECTION CONTRACTOR SHALL PROVIDE AUXILIARY DRAINS IN ACCORDANCE WITH NFPA-13. CONTRACTOR SHALL CLEARLY INDICATE ALL REQUIRED LOCATIONS ON SHOP DRAWINGS SUBMITTALS. FABRICATION DRAWINGS SHALL BE UPDATED WITH ACTUAL INSTALLED LOCATIONS FOR RECORD DRAWINGS.
4. DRY AND PREACTION SYSTEM PIPING SHALL BE ARRANGED TO POSITIVELY DRAIN. SLOPE ALL PIPING BACK TO RISER WHERE POSSIBLE. AVOID THE USE OF LOW POINT DRAINS UNLESS NECESSARY.
5. ALL EXTERIOR DRAIN TERMINATIONS SHALL BE MADE AT 24" ABOVE FINISHED GRADE AND CONFIGURED TO DIRECT WATER AWAY FROM THE BUILDING.

[X] INSTALLATION NOTES

1. KEYED NOTES NOT USED THIS SHEET.

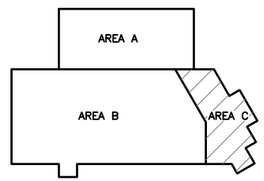
SPRINKLER HEAD LEGEND

- CONCEALED SIDEWALL SPRINKLER HEAD
- CONCEALED, EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- VERTICAL SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE VERTICAL SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL EXTENDED COVERAGE SPRINKLER HEAD
- CONCEALED PENDENT SPRINKLER HEAD
- CONCEALED PENDENT, EXTENDED COVERAGE SPRINKLER HEAD
- PENDENT SPRINKLER HEAD
- PENDENT, EXTENDED COVERAGE SPRINKLER HEAD
- PENDENT SPRINKLER HEAD, DEEP ESCUTCHEON
- UPRIGHT SPRINKLER HEAD
- UPRIGHT, EXTENDED COVERAGE SPRINKLER HEAD
- SEMI-RECESSED PENDENT SPRINKLER HEAD
- SEMI-RECESSED PENDENT, EXTENDED COVERAGE SPRINKLER HEAD

NOTE:
1. SEE SPECIFICATIONS SECTIONS (DIVISION 21) FOR HEAD TEMPERATURE RATING REQUIREMENTS. "HT" INDICATES HIGH TEMPERATURE "IT" INDICATES INTERMEDIATE TEMPERATURE HEAD LOCATIONS. COORDINATE WITH CONDITIONS ON SITE AND PROVIDE ADDITIONAL AS REQUIRED.
2. "HG" INDICATES LOCATIONS WHERE SPRINKLER HEAD GUARDS ARE REQUIRED.
3. ALL SPRINKLERS SHALL BE INSTALLED CENTER OF TILE.

HAZARD CLASSIFICATIONS

LT	LIGHT HAZARD – 0.10 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
OH1	ORDINARY HAZARD GROUP 1 – 0.15 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
OH2	ORDINARY HAZARD GROUP 2 – 0.20 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
EH1	EXTRA HAZARD GROUP 1 – 0.30 GPM/SF OVER HYDRAULICALLY MOST REMOTE 2,500 S.F.



KEY PLAN

PLANS PREPARED BY: CMG & ASSOCIATES, INC., DEFOREST, WI			FIRE SUPPRESSION PLAN: MAIN LEVEL - AREA C	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. F103	

PLOT DATE: 8/22/2022 7:21:11 AM

2



01 F104 OVERALL FIRE SUPPRESSION PLAN

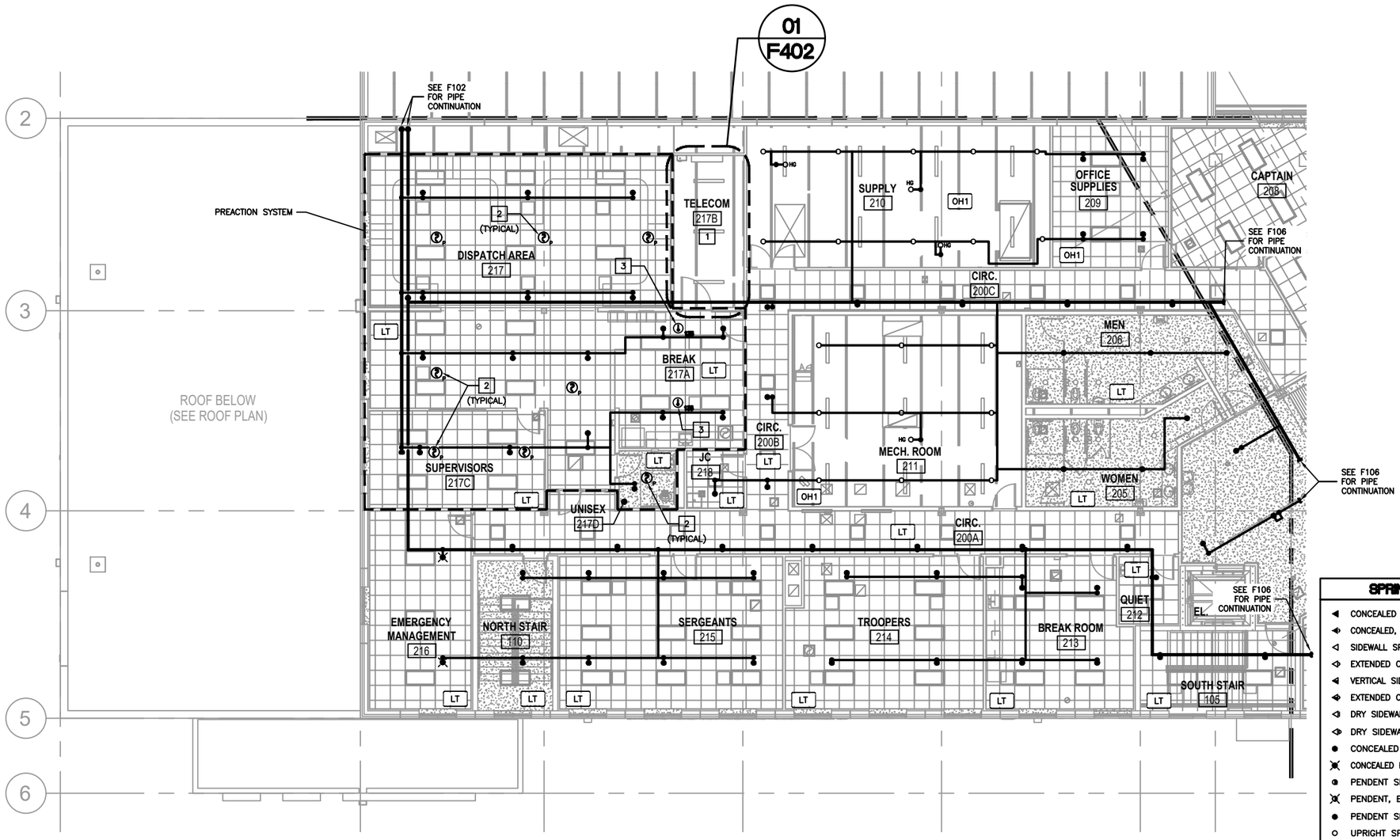
UPPER LEVEL

SCALE: 3/64" = 1'-0"

NORTH

PLANS PREPARED BY: CMG & ASSOCIATES, INC., DEFOREST, WI			OVERALL FIRE SUPPRESSION PLAN: UPPER LEVEL	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. F104	

PLOT DATE: 8/22/2022 7:21:11 AM



01
F105

FIRE SUPPRESSION PLAN

UPPER LEVEL- AREA B

SCALE: 1/16" = 1'-0"

0' 4' 8' 16' 24'

NORTH

SHEET NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE AND/OR SMOKE RATED CONSTRUCTION.
2. FIRE PROTECTION CONTRACTOR SHALL PROVIDE AUXILIARY DRAINS IN ACCORDANCE WITH NFPA–13. CONTRACTOR SHALL CLEARLY INDICATE ALL REQUIRED LOCATIONS ON SHOP DRAWINGS SUBMITTALS. FABRICATION DRAWINGS SHALL BE UPDATED WITH ACTUAL INSTALLED LOCATIONS FOR RECORD DRAWINGS.
3. DRY AND PREACTION SYSTEM PIPING SHALL BE ARRANGED TO POSITIVELY DRAIN. SLOPE ALL PIPING BACK TO RISER WHERE POSSIBLE. AVOID THE USE OF LOW POINT DRAINS UNLESS NECESSARY.

[X] INSTALLATION NOTES

1. ROOM PROTECTED BY CLEAN AGENT EXTINGUISHING SYSTEM. SEE F402 FOR DETAILS.
2. PHOTOELECTRIC SMOKE DETECTORS SHALL BE CONNECTED TO THE ADDRESSABLE FIRE ALARM/SUPPRESSION CONTROL PANEL FOR PREACTION SPRINKLER SYSTEM RELEASE. COORDINATE LOCATIONS OF SMOKE DETECTORS TO BE AT LEAST 3'–0" FROM SUPPLY OR RETURN AIR GRILLES.
3. HEAT DETECTORS SHALL BE CONNECTED TO THE ADDRESSABLE FIRE ALARM/SUPPRESSION CONTROL PANEL FOR PREACTION SPRINKLER SYSTEM RELEASE. COORDINATE LOCATIONS OF HEAT DETECTORS TO BE AT LEAST 3'–0" FROM SUPPLY OR RETURN AIR GRILLES.

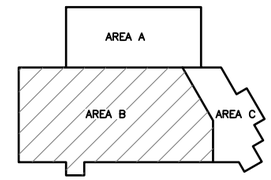
SPRINKLER HEAD LEGEND

- CONCEALED SIDEWALL SPRINKLER HEAD
- CONCEALED, EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- VERTICAL SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE VERTICAL SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL EXTENDED COVERAGE SPRINKLER HEAD
- CONCEALED PENDENT SPRINKLER HEAD
- CONCEALED PENDENT, EXTENDED COVERAGE SPRINKLER HEAD
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NOTE:
1. SEE SPECIFICATIONS SECTIONS (DIVISION 21) FOR HEAD TEMPERATURE RATING REQUIREMENTS. "HT" INDICATES HIGH TEMPERATURE "IT" INDICATES INTERMEDIATE TEMPERATURE HEAD LOCATIONS. COORDINATE WITH CONDITIONS ON SITE AND PROVIDE ADDITIONAL AS REQUIRED.
2. "HG" INDICATES LOCATIONS WHERE SPRINKLER HEAD GUARDS ARE REQUIRED.
3. ALL SPRINKLERS SHALL BE INSTALLED CENTER OF TILE.

HAZARD CLASSIFICATIONS

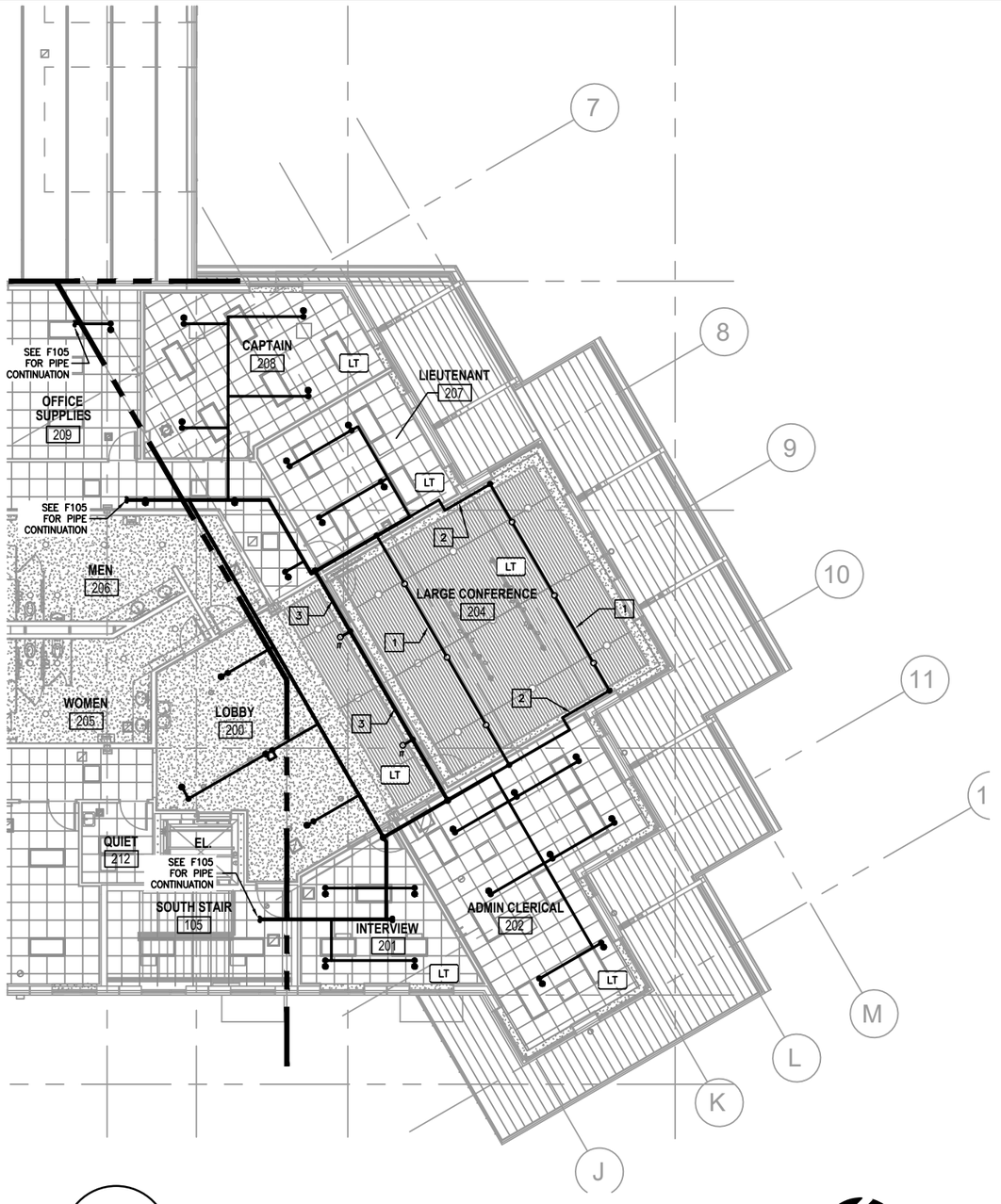
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EH1	EXTRA HAZARD GROUP 1 – 0.30 GPM/SF OVER HYDRAULICALLY MOST REMOTE 2,500 S.F.



KEY PLAN

PLANS PREPARED BY: CMG & ASSOCIATES, INC., DEFOREST, WI			FIRE SUPPRESSION PLAN: UPPER LEVEL - AREA B	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. F105	251

PLOT DATE: 8/22/2022 7:21:11 AM



01 / F106 FIRE SUPPRESSION PLAN

UPPER LEVEL - AREA C

SCALE: 1/16" = 1'-0"

0' 4' 8' 16' 24'

NORTH

SHEET NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE AND/OR SMOKE RATED CONSTRUCTION.
2. FIRE PROTECTION CONTRACTOR SHALL PROVIDE AUXILIARY DRAINS IN ACCORDANCE WITH NFPA-13. CONTRACTOR SHALL CLEARLY INDICATE ALL REQUIRED LOCATIONS ON SHOP DRAWINGS SUBMITTALS. FABRICATION DRAWINGS SHALL BE UPDATED WITH ACTUAL INSTALLED LOCATIONS FOR RECORD DRAWINGS.
3. DRY AND PREACTION SYSTEM PIPING SHALL BE ARRANGED TO POSITIVELY DRAIN. SLOPE ALL PIPING BACK TO RISER WHERE POSSIBLE. AVOID THE USE OF LOW POINT DRAINS UNLESS NECESSARY.

[X] INSTALLATION NOTES

1. ROUTE SPRINKLER LINE EXPOSED THROUGH CONFERENCE ROOM. PAINT OUT SPRINKLER PIPING TO BLEND IN WITH SURROUNDING FINISHES. PROVIDE BRASS UPRIGHT SPRINKLERS TO SERVE CONFERENCE ROOM. USE THREADED FITTINGS ON ALL EXPOSED PIPING IN CONFERENCE ROOM. VERIFY SPRINKLER AND PIPE FINISHES WITH ARCHITECT.
2. ROUTE BRANCH LINE INTO CONFERENCE ROOM ABOVE WALL PROJECTION. HOLD PIPING AS TIGHT TO WALL/PROJECTION AS POSSIBLE TO MINIMIZE APPEARANCE/VISIBILITY. PAINT OUT SPRINKLER PIPING TO BLEND IN WITH SURROUNDING FINISHES. USE THREADED FITTINGS ON ALL EXPOSED PIPING IN CONFERENCE ROOM. VERIFY SPRINKLER AND PIPE FINISHES WITH ARCHITECT.
3. ROUTE SPRINKLER LINE EXPOSED THROUGH CLERESTORY LOBBY AREA. COORDINATE PIPE ROUTING WITH WINDOW LOCATION. PAINT OUT SPRINKLER PIPING TO BLEND IN WITH SURROUNDING FINISHES. PROVIDE BRASS UPRIGHT SPRINKLERS TO SERVE UPPER LOBBY. USE THREADED FITTINGS ON EXPOSED PIPING. VERIFY SPRINKLER AND PIPE FINISHES WITH ARCHITECT.

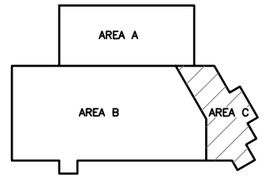
SPRINKLER HEAD LEGEND

- CONCEALED SIDEWALL SPRINKLER HEAD
- CONCEALED, EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- VERTICAL SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE VERTICAL SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL SPRINKLER HEAD
- DRY SIDEWALL EXTENDED COVERAGE SPRINKLER HEAD
- CONCEALED PENDENT SPRINKLER HEAD
- CONCEALED PENDENT, EXTENDED COVERAGE SPRINKLER HEAD
- PENDENT SPRINKLER HEAD
- PENDENT, EXTENDED COVERAGE SPRINKLER HEAD
- PENDENT SPRINKLER HEAD, DEEP ESCUTCHEON
- UPRIGHT SPRINKLER HEAD
- UPRIGHT, EXTENDED COVERAGE SPRINKLER HEAD
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- SEMI-RECESSED PENDENT, EXTENDED COVERAGE SPRINKLER HEAD

NOTE:
1. SEE SPECIFICATIONS SECTIONS (DIVISION 21) FOR HEAD TEMPERATURE RATING REQUIREMENTS. "HT" INDICATES HIGH TEMPERATURE "IT" INDICATES INTERMEDIATE TEMPERATURE HEAD LOCATIONS. COORDINATE WITH CONDITIONS ON SITE AND PROVIDE ADDITIONAL AS REQUIRED.
2. "HG" INDICATES LOCATIONS WHERE SPRINKLER HEAD GUARDS ARE REQUIRED.
3. ALL SPRINKLERS SHALL BE INSTALLED CENTER OF TILE.

HAZARD CLASSIFICATIONS

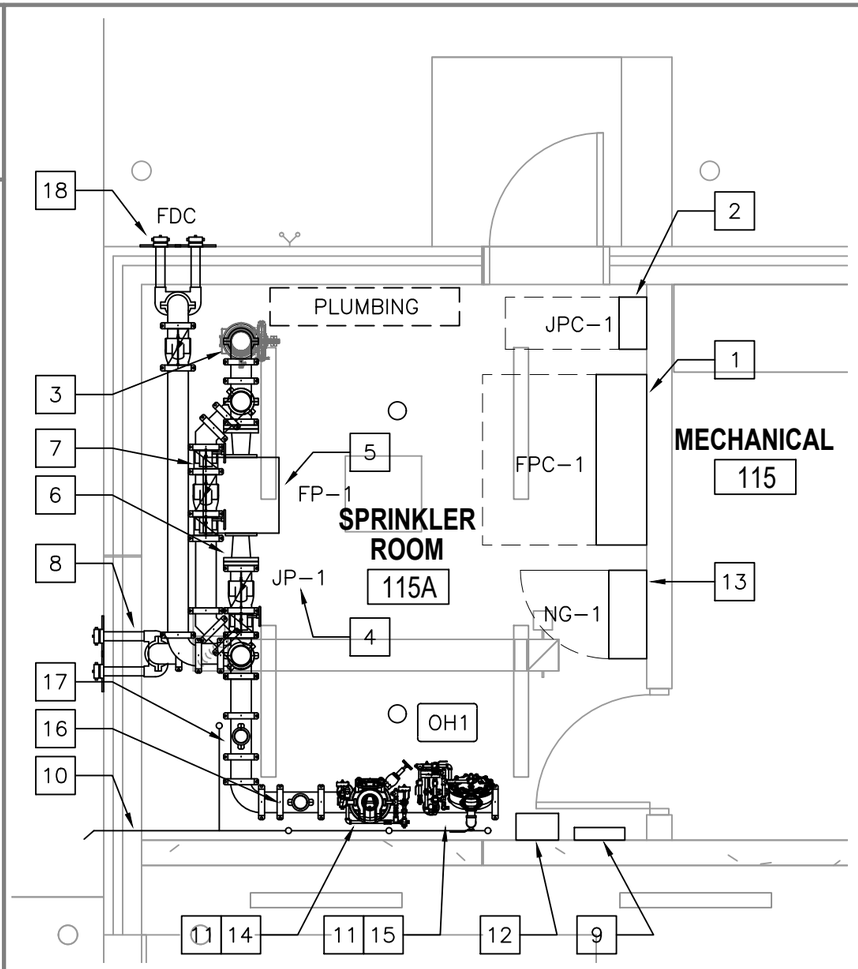
LT	LIGHT HAZARD – 0.10 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
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OH2	ORDINARY HAZARD GROUP 2 – 0.20 GPM/SF OVER HYDRAULICALLY MOST REMOTE 1,500 S.F.
EH1	EXTRA HAZARD GROUP 1 – 0.30 GPM/SF OVER HYDRAULICALLY MOST REMOTE 2,500 S.F.



KEY PLAN

PLANS PREPARED BY: CMG & ASSOCIATES, INC., DEFOREST, WI			FIRE SUPPRESSION PLAN: UPPER LEVEL - AREA C	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. F106	

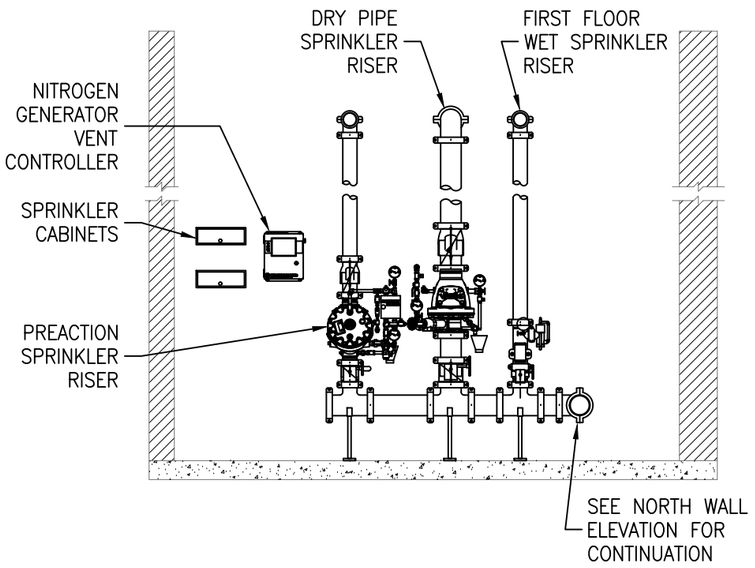
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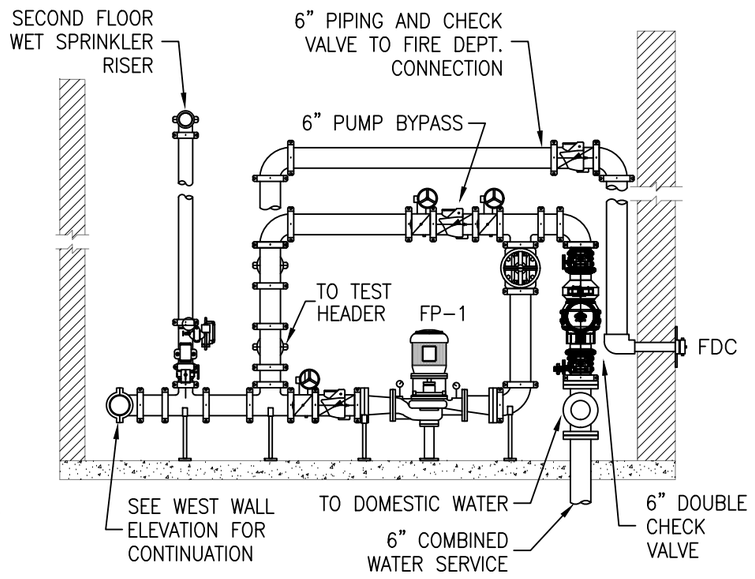
01 F400 ENLARGED SPRINKLER ROOM PLAN

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

0' 1' 2' 4' 6'



WEST WALL



NORTH WALL

02 F400 FIRE PUMP AND RISER ELEVATIONS

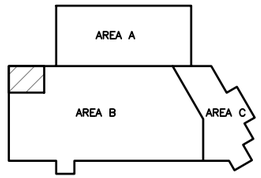
NO SCALE

SHEET NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE AND/OR SMOKE RATED CONSTRUCTION.
2. FIRE PROTECTION CONTRACTOR SHALL PROVIDE AUXILIARY DRAINS IN ACCORDANCE WITH NFPA–13. CONTRACTOR SHALL CLEARLY INDICATE ALL REQUIRED LOCATIONS ON SHOP DRAWINGS SUBMITTALS. FABRICATION DRAWINGS SHALL BE UPDATED WITH ACTUAL INSTALLED LOCATIONS FOR RECORD DRAWINGS.
3. DRY AND PREACTION SYSTEM PIPING SHALL BE ARRANGED TO POSITIVELY DRAIN. SLOPE ALL PIPING BACK TO RISER WHERE POSSIBLE. AVOID THE USE OF LOW POINT DRAINS UNLESS NECESSARY.
4. CONCRETE EQUIPMENT PADS SHALL BE PROVIDED BY DIVISION 3. COORDINATE SIZES AND LOCATIONS.
5. NOTE THAT ALL LOCATIONS ARE APPROXIMATE AND DIAGRAMMATIC IN NATURE. CONTRACTORS ARE EXPECTED TO COORDINATE WITH FIELD CONDITIONS AND ADJUST ACCORDINGLY.
6. PROVIDE VALVE MAP FOR EACH FLOOR SHOWING LOCATION OF ALL CONTROL VALVES, INSPECTOR'S TEST CONNECTIONS, MAIN DRAINS, AND AUXILIARY DRAINS. IDENTIFY AREAS WHICH HAVE DIFFERENT FIRE SUPPRESSION SYSTEMS, SUCH AS DRY SPRINKLER SYSTEMS AND PREACTION SYSTEMS. PLAN OR PLANS SHALL BE FRAMED IN PLEXIGLASS AND MOUNTED TO THE WALL. IN ADDITION, PROVIDE LAMINATED 8.5" X 11" PLANS WITH THE SAME INFORMATION IN A 3–RING BINDER OR KEY RING HUNG TO THE WALL.

[X] INSTALLATION NOTES

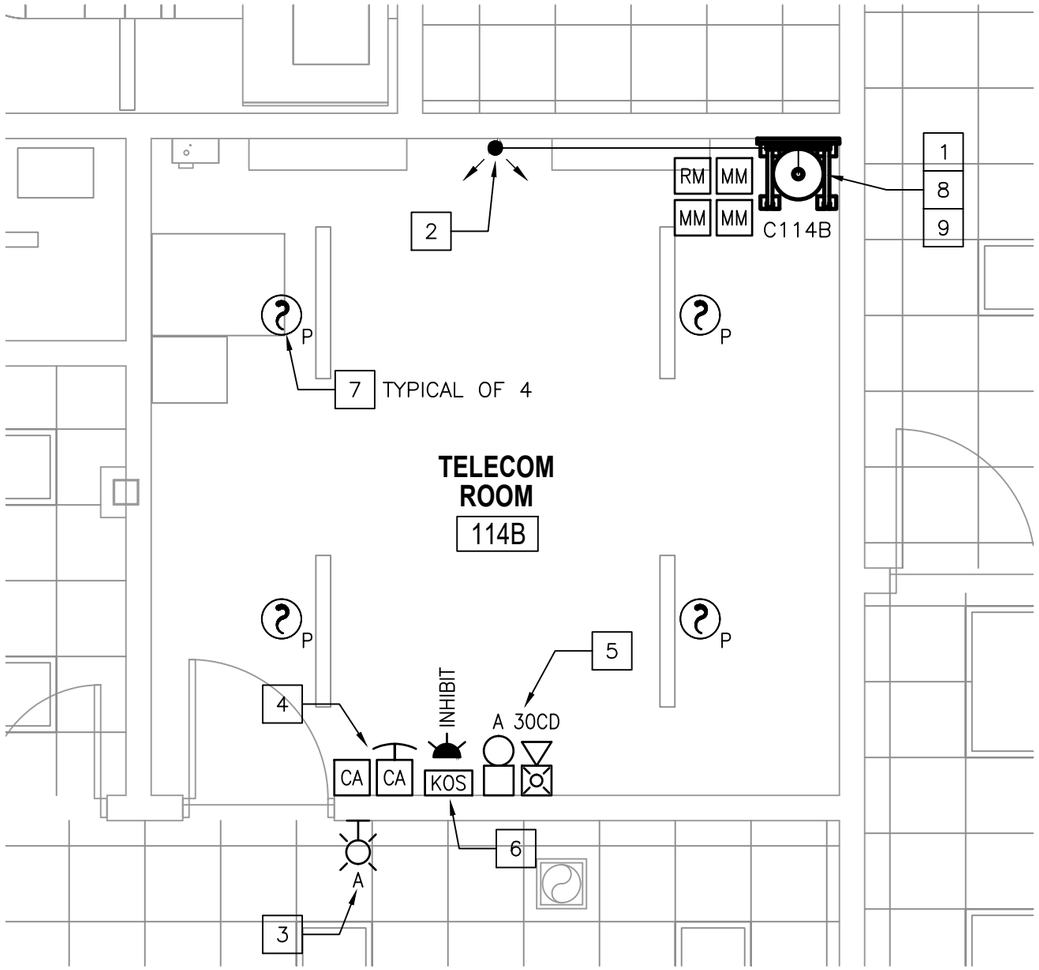
1. FURNISH AND INSTALL NEW FIRE PUMP CONTROLLER (FPC–1). SET UNIT ON A NOMINAL 4" HIGH CONCRETE EQUIPMENT PAD.
2. FURNISH AND INSTALL NEW JOCKEY PUMP CONTROLLER (JPC–1).
3. FROM 6" WATER SERVICE, PROVIDE 6" DOUBLE CHECK VALVE IN VERTICAL. INSTALL PER SPS382 FOR CLEARANCES.
4. PROVIDE NEW JOCKEY PUMP (JP–1). PIPE SENSING LINE TO NEW JOCKEY PUMP CONTROLLER. CONCRETE PAD WILL BE PROVIDED BY THE DIVISION 3 CONTRACTOR.
5. FURNISH AND INSTALL NEW FIRE PUMP (FP–1). CONCRETE PAD WILL BE PROVIDED BY THE DIVISION 3 CONTRACTOR.
6. PROVIDE EXTRA HEAVY DUTY FITTING AT PUMP DISCHARGE.
7. ROUTE FIRE PUMP BYPASS PIPING IN VERTICAL BETWEEN PUMP SUCTION AND DISCHARGE PIPING. BYPASS PIPING IS SHOWN OFFSET FOR CLARITY IN PLAN VIEW.
8. FURNISH AND INSTALL FIRE PUMP TEST HEADER.
9. FURNISH AND INSTALL SPRINKLER HEAD CABINETS FOR SPARE SPRINKLERS REQUIRED BY SPECIFICATION AND NFPA 13.
10. CONNECT ALL DRAINS TO 2" DRAIN LINE. ROUTE 2" GANG DRAIN TO EXTERIOR.
11. INSTALL ONE (1) VENT ASSEMBLY ON EACH OF THE PREACTION AND DRY SYSTEM RISERS. ROUTE TUBING FROM INDIVIDUAL VENT ASSEMBLIES TO VENT CONTROLLER.
12. PROVIDE VENT CONTROLLER TO MONITOR PREACTION AND DRY PIPE SYSTEMS. FIRE ALARM SYSTEM WILL MONITOR THE SUPERVISORY OUTPUT CONTACT ON THE VENT CONTROLLER.
13. FURNISH AND INSTALL NITROGEN GENERATOR TO SERVE THE PREACTION AND DRY PIPE SPRINKLER SYSTEMS. THE NITROGEN GENERATOR SHALL BE SIZED TO MEET THE SYSTEM VOLUME AND SHALL MEET NFPA–13 REQUIREMENT FOR 30–MINUTE SYSTEM FILL TIME. INTERFACE NITROGEN GENERATOR WITH AIR MAINTENANCE DEVICES. NITROGEN GENERATOR SHALL BE MONITORED FOR: SYSTEM POWER, BYPASS MODE ALARM AND LEAK MONITORING BY THE FIRE ALARM SYSTEM.
14. PROVIDE DRY PIPE SPRINKLER SYSTEM RISER TO SERVE AREAS AS SHOWN ON F001.
15. PROVIDE DELUGE VALVE WITH PREACTION TRIM TO SERVE AREAS AS SHOWN ON F001.
16. PROVIDE WET SPRINKLER RISER TO SERVE FIRST FLOOR.
17. PROVIDE WET SPRINKLER RISER TO SERVE SECOND FLOOR.
18. PROVIDE FLUSH TWO–WAY FIRE DEPARTMENT CONNECTION LABELED AS "AUTO–SPRINKLER." COORDINATE WITH DIVISION 28 TO LOCATE THE HORN/STROBE ABOVE THE FIRE DEPARTMENT CONNECTION.



KEY PLAN

PLANS PREPARED BY: CMG & ASSOCIATES, INC., DEFOREST, WI			FIRE PROTECTION - ENLARGED SPRINKLER ROOM PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. F400	253

PLOT DATE: 8/22/2022 7:21:11 AM

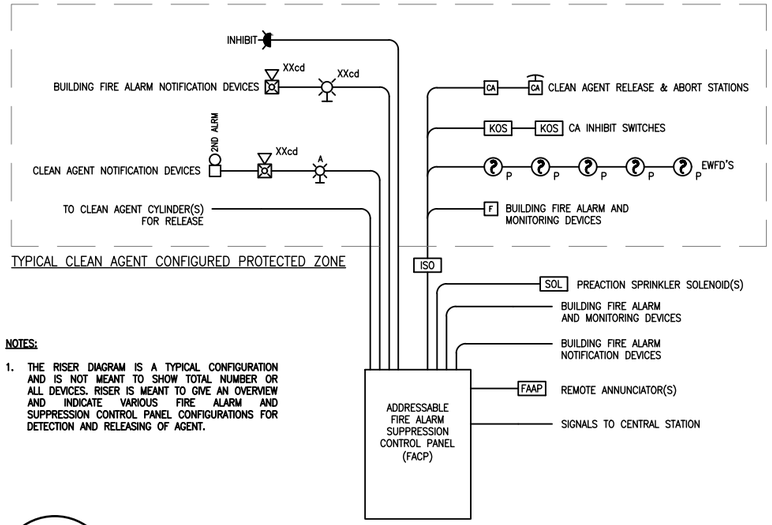


01 F401 ENLARGED TELECOM ROOM PLAN

MAIN LEVEL

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

0' 1' 2' 4' 6'



TYPICAL CLEAN AGENT CONFIGURED PROTECTED ZONE

NOTES:

1. THE RISER DIAGRAM IS A TYPICAL CONFIGURATION AND IS NOT MEANT TO SHOW TOTAL NUMBER OR ALL DEVICES. RISER IS MEANT TO GIVE AN OVERVIEW AND INDICATE VARIOUS FIRE ALARM AND SUPPRESSION CONTROL PANEL CONFIGURATIONS FOR DETECTION AND RELEASING OF AGENT.

02 F401 TYPICAL RISER DIAGRAM

NO SCALE

SHEET NOTES

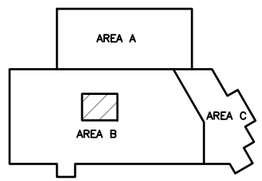
1. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE AND/OR SMOKE RATED CONSTRUCTION.
2. FIRE PROTECTION CONTRACTOR SHALL VERIFY THE ENCLOSURE VOLUME AND PROVIDE CLEAN AGENT CALCULATIONS. FINAL DESIGN, ENGINEERING AND INSTALLATION IN ACCORDANCE WITH SPECIFICATION SECTION 212200.
3. COORDINATE 180° NOZZLE INSTALLATION AND PIPE ROUTING ALONG PERIMETER WALLS OF CLEAN AGENT ZONE WITH OTHER TRADES.
4. ROUGH-IN OF DEVICES SHALL BE DONE IN SUCH A MANNER THAT LIFT COVERS AND SIGNAGE MAY BE INSTALLED ABOVE/BENEATH THE DEVICE. SPACE DEVICES ACCORDINGLY. COORDINATE WITH THE CONTRACTOR TO LOCATE ROUGH-IN SO THAT THIS ALSO COORDINATES WITH THE WORK OF OTHER TRADES.
5. PROVIDE CLEAR, HINGED PROTECTIVE COVERS ON ALL CLEAN AGENT MANUAL RELEASE STATIONS.
6. CLEAN AGENT PIPING SHALL BE BRACED AT ALL CHANGES IN DIRECTION AND AT THE NOZZLE TO PREVENT MOVEMENT DURING DISCHARGE.
7. MECHANICAL EQUIPMENT IS CONTAINED WITHIN THE ROOM AND WILL CONTINUE TO OPERATE DURING AND AFTER DISCHARGE. HVAC SHUTDOWN IS NOT REQUIRED.

[X] INSTALLATION NOTES

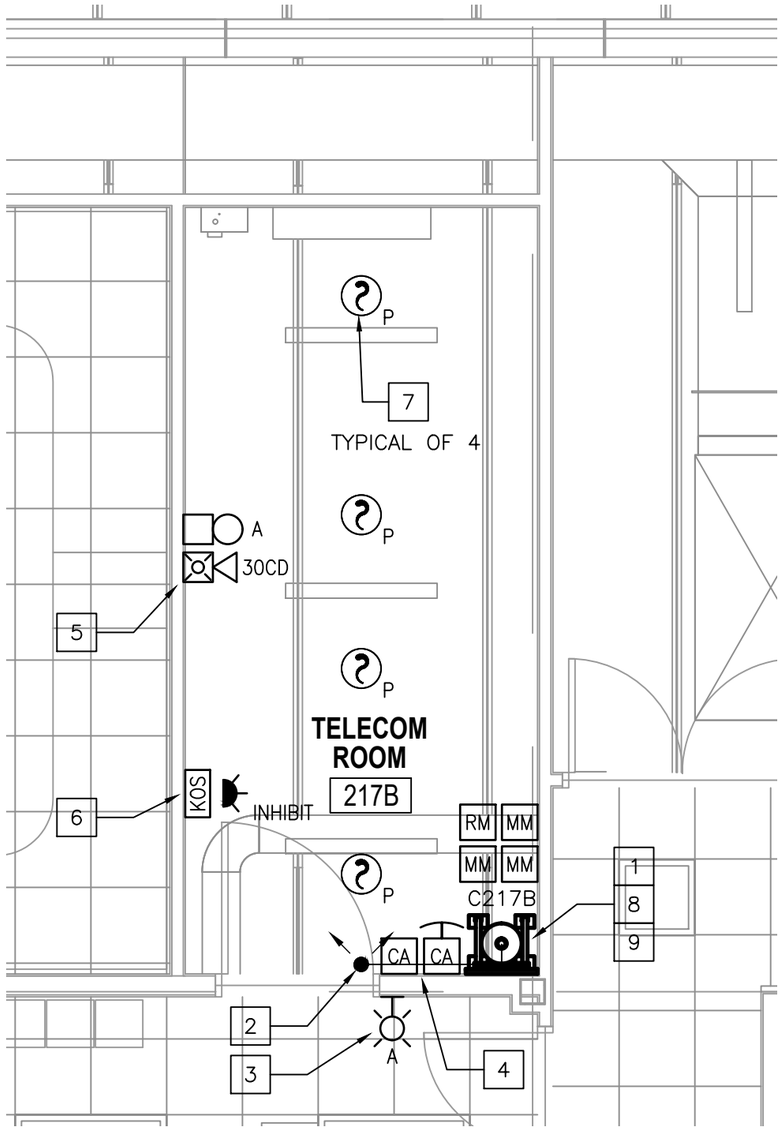
1. FURNISH AND INSTALL CLEAN AGENT CYLINDER(S) COMPLETE WITH REQUIRED BRACING. SEE CYLINDER BRACING DETAILS ON SHEET FP502.
2. ROUTE CLEAN AGENT PIPING PROVIDING 180° NOZZLES TO PROTECT THE SPACE. COORDINATE NOZZLE LOCATIONS AND PIPE ROUTING WITH OBSTRUCTIONS.
3. FURNISH AND INSTALL CLEAN AGENT DISCHARGE LIGHT AND SIGNAGE.
4. FURNISH AND INSTALL CLEAN AGENT MANUAL RELEASE, ABORT STATION, AND SIGNAGE.
5. FURNISH AND INSTALL FIRST ALARM HORN/STROBE, SECOND ALARM BELL, AND SIGNAGE.
6. FURNISH AND INSTALL CLEAN AGENT MAINTENANCE SWITCH, INDICATING LIGHT, AND SIGNAGE.
7. FURNISH AND INSTALL PHOTOELECTRIC SMOKE DETECTOR. DETECTOR PLACEMENT SHALL BE A MINIMUM OF 36" FROM A MECHANICAL SUPPLY DIFFUSER.
8. PROVIDE DISCHARGE PRESSURE SWITCH AND CYLINDER PRESSURE MONITORING.
9. PROVIDE RELEASING MODULE FOR CLEAN AGENT CYLINDER. ALSO, INSTALL MONITORING FOR RELEASE SUPERVISION.

FIRESTOPPING AND FAN TESTING:

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING WALL, DOOR, AND FIRE/SMOKE STOPPING CONSTRUCTION THROUGHOUT THE BUILDING WHICH MEETS THE REQUIREMENTS OF THE UL LISTED ASSEMBLIES SPECIFIED AND/OR INSTALLED. UPON COMPLETION OF THIS CONSTRUCTION, THE FIRE PROTECTION CONTRACTOR WILL PROVIDE FAN INTEGRITY TESTING IN COMPLIANCE WITH NFPA-2001. SHOULD A SPACE NOT MEET THE REQUIREMENTS OF THIS TESTING, THE GENERAL CONTRACTOR, AT NO ADDITIONAL COST TO THE OWNER, SHALL PROVIDE FOR ANY MODIFICATIONS REQUIRED TO THE CONSTRUCTION (WHICH MEET THE SPECIFICATIONS FOR THE PROJECT) TO INSURE THE REQUIREMENTS OF THE FAN INTEGRITY TEST ARE MET. ALL TESTING SHALL BE DONE IN THE PRESENCE OF THE OWNER.



KEY PLAN



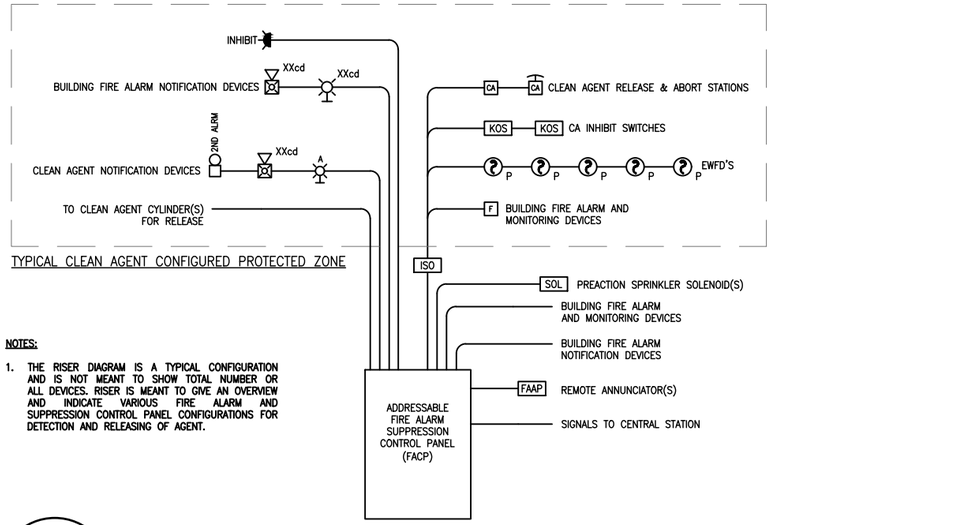
01 F402

ENLARGED TELECOM ROOM PLAN

UPPER LEVEL

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

0' 1' 2' 4' 6'



NOTES:

1. THE RISER DIAGRAM IS A TYPICAL CONFIGURATION AND IS NOT MEANT TO SHOW TOTAL NUMBER OR ALL DEVICES. RISER IS MEANT TO GIVE AN OVERVIEW AND INDICATE VARIOUS FIRE ALARM AND SUPPRESSION CONTROL PANEL CONFIGURATIONS FOR DETECTION AND RELEASING OF AGENT.

02 F402

TYPICAL RISER DIAGRAM

NO SCALE

SHEET NOTES

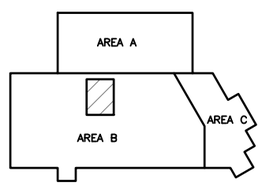
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3. COORDINATE 180° NOZZLE INSTALLATION AND PIPE ROUTING ALONG PERIMETER WALLS OF CLEAN AGENT ZONE WITH OTHER TRADES.
4. ROUGH-IN OF DEVICES SHALL BE DONE IN SUCH A MANNER THAT LIFT COVERS AND SIGNAGE MAY BE INSTALLED ABOVE/BENEATH THE DEVICE. SPACE DEVICES ACCORDINGLY. COORDINATE WITH THE CONTRACTOR TO LOCATE ROUGH-IN SO THAT THIS ALSO COORDINATES WITH THE WORK OF OTHER TRADES.
5. PROVIDE CLEAR, HINGED PROTECTIVE COVERS ON ALL CLEAN AGENT MANUAL RELEASE STATIONS.
6. CLEAN AGENT PIPING SHALL BE BRACED AT ALL CHANGES IN DIRECTION AND AT THE NOZZLE TO PREVENT MOVEMENT DURING DISCHARGE.
7. MECHANICAL EQUIPMENT IS CONTAINED WITHIN THE ROOM AND WILL CONTINUE TO OPERATE DURING AND AFTER DISCHARGE. HVAC SHUTDOWN IS NOT REQUIRED.

[X] INSTALLATION NOTES

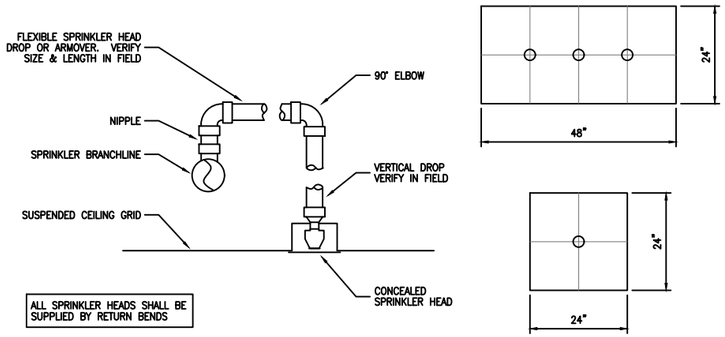
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2. ROUTE CLEAN AGENT PIPING PROVIDING 180° NOZZLES TO PROTECT THE SPACE. COORDINATE NOZZLE LOCATIONS AND PIPE ROUTING WITH OBSTRUCTIONS.
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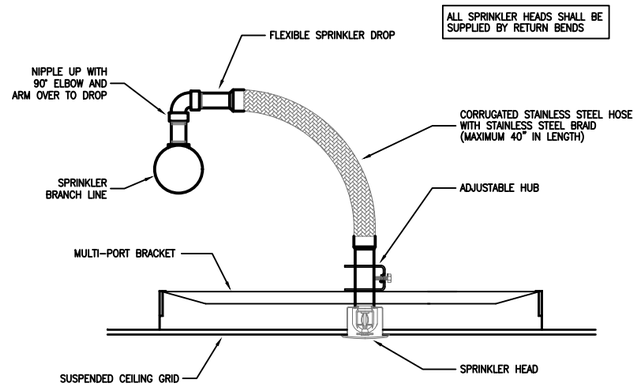


KEY PLAN



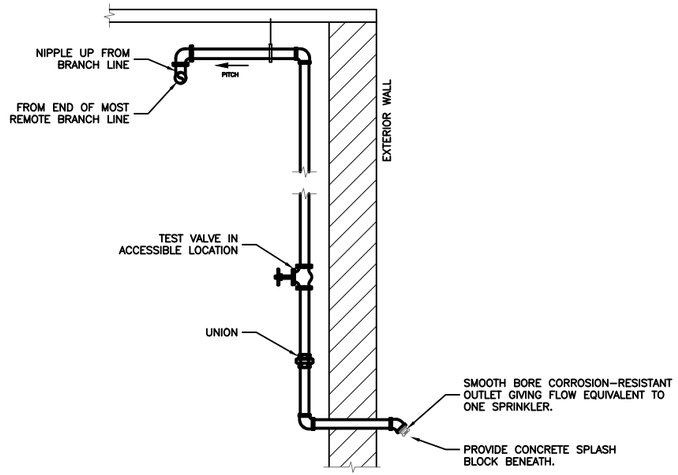
01 F500 TYPICAL RETURN BEND ASSEMBLY AND CENTER OF TILE DETAIL

DIAGRAMMATIC — NO SCALE



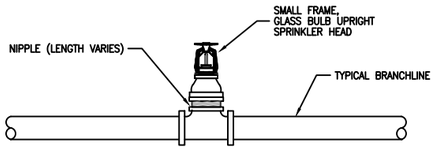
02 F500 FLEXIBLE SPRINKLER HEAD DROP DETAIL

DIAGRAMMATIC — NO SCALE



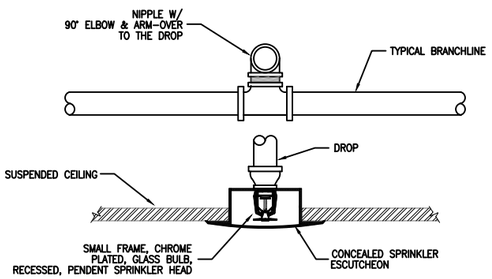
03 F500 INSPECTORS TEST CONNECTION DETAIL

PREACTION / DRY SYSTEM - DIAGRAMMATIC — NO SCALE



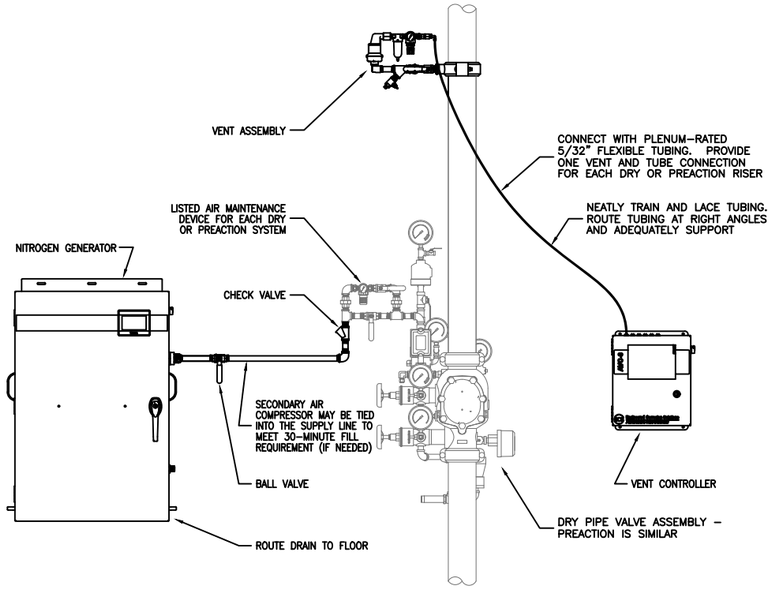
04 F500 UPRIGHT SPRINKLER HEAD DETAIL

DIAGRAMMATIC — NO SCALE



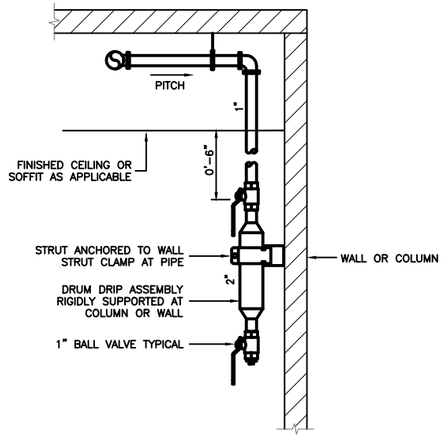
05 F500 SPRINKLER HEAD WITH CONCEALED ESCUTCHEON DETAIL

DIAGRAMMATIC — NO SCALE



06 F500 NITROGEN GENERATOR INSTALLATION DETAIL

DIAGRAMMATIC — NO SCALE

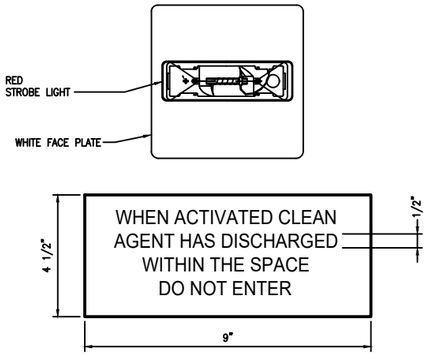


07 F500 AUXILIARY DRAIN DRUMP DRIP DETAIL

PREACTION / DRY SYSTEM - DIAGRAMMATIC — NO SCALE

PLANS PREPARED BY: CMG & ASSOCIATES, INC., DEFOREST, WI			FIRE PROTECTION DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. F500	

PLOT DATE: 8/22/2022 7:21:11 AM



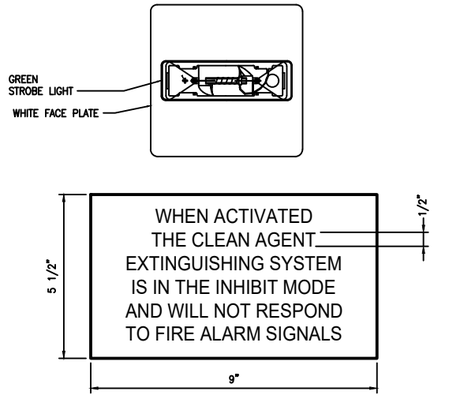
SIGN: RED BACKGROUND WITH WHITE LETTERS
DIMENSIONS ARE APPROXIMATE

NOTE:

SIGN PLACED UNDER DISCHARGE LIGHT AT EACH ENTRANCE TO THE PROTECTED SPACE.

01 F501 TYPICAL CLEAN AGENT DISCHARGE LIGHT DETAIL

DIAGRAMMATIC



SIGN: RED BACKGROUND WITH WHITE LETTERS
DIMENSIONS ARE APPROXIMATE



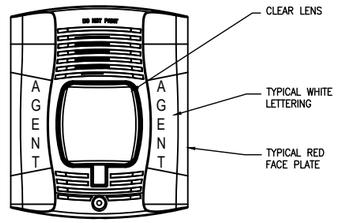
CLEAN AGENT INHIBIT SWITCH LEGEND PLATE

NOTE:

THE INHIBIT LIGHT FLASHES TO INDICATE THAT THE CLEAN AGENT SYSTEM IS LOCKED OUT TO PREVENT AUTOMATIC DISCHARGE. THIS SWITCH IS USED FOR SERVICING THE FIRE ALARM SYSTEM. THIS SWITCH SHALL BE MONITORED BY THE FIRE ALARM/SUPPRESSION SYSTEM.

02 F501 TYPICAL CLEAN AGENT INHIBIT DETAIL

DIAGRAMMATIC



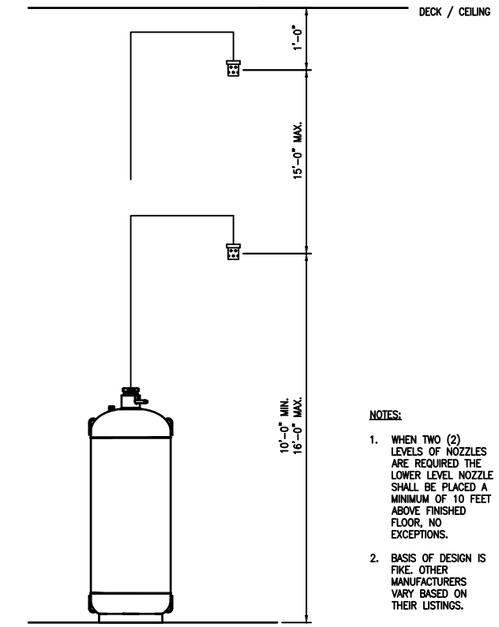
SIGN: RED BACKGROUND WITH WHITE LETTERS
DIMENSIONS ARE APPROXIMATE

NOTE:

HORN/STOBE ACTIVATES WHEN ANY FM200 ZONE DEVICE IS CLEAN AGENT ZONE IN ALARM CONDITION, REFER TO THE SEQUENCE OF OPERATIONS.

03 F501 TYPICAL CLEAN AGENT ZONE ALARM NOTIFICATION DEVICE DETAIL

DIAGRAMMATIC

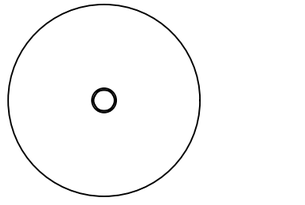


NOTES:

1. WHEN TWO (2) LEVELS OF NOZZLES ARE REQUIRED THE LOWER LEVEL NOZZLE SHALL BE PLACED A MINIMUM OF 10 FEET ABOVE FINISHED FLOOR, NO EXCEPTIONS.
2. BASIS OF DESIGN IS FIKE. OTHER MANUFACTURERS VARY BASED ON THEIR LISTINGS.

04 F501 TYPICAL NOZZLE HEIGHT DETAILS

DIAGRAMMATIC



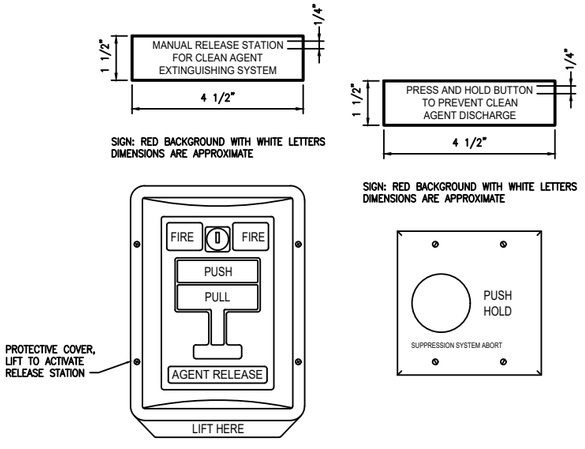
SIGN: RED BACKGROUND WITH WHITE LETTERS
DIMENSIONS ARE APPROXIMATE

NOTE:

BELL RINGS WHEN ANY TWO DEVICES CROSS ZONE IN ALARM CONDITION, REFER TO THE SEQUENCE OF OPERATIONS.

05 F501 TYPICAL CLEAN AGENT SECOND ALARM BELL DETAIL

DIAGRAMMATIC



SIGN: RED BACKGROUND WITH WHITE LETTERS
DIMENSIONS ARE APPROXIMATE

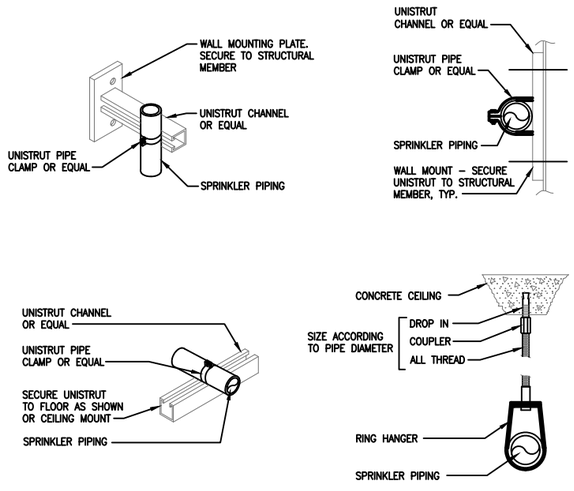
SIGN: RED BACKGROUND WITH WHITE LETTERS
DIMENSIONS ARE APPROXIMATE

NOTES:

1. REFERENCE SPECIFICATIONS FOR REQUIREMENTS, DETAILS AND SIGNAGE.

06 F501 TYPICAL CLEAN AGENT RELEASE AND ABORT DETAIL

DIAGRAMMATIC — NO SCALE



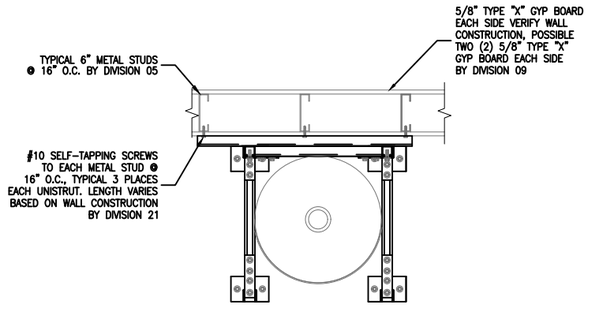
07 F501 TYPICAL PIPE SUPPORT DETAILS

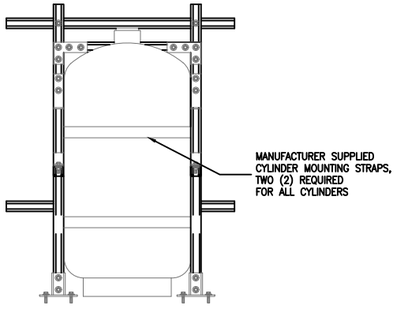
DIAGRAMMATIC — NO SCALE

2

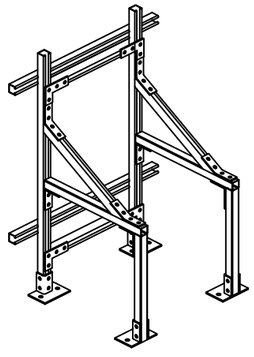
GENERAL NOTES

1. REFERENCE SHEET FP001 FOR ADDITIONAL NOTES AND REQUIREMENTS.
2. BASIS OF DESIGN AND DIMENSIONS ARE FIKE 375 LB (DETAILS 1–4).
3. DIMENSIONS SHOWN ARE APPROXIMATE BASED DATA SHEETS SUPPLIED BY FIKE. ACTUAL DIMENSIONS MAY VARY. CONTRACTOR TO CONFIRM.
4. OTHER MANUFACTURER CYLINDER DIMENSIONS VARY. MODIFY ALL PIECES AS REQUIRED TO KEEP THE FRAME WORK PROPORTIONAL TO THE DRAWINGS SHOWN. FRAME WORK SHALL NOT BECOME A TRIPPING HAZARD.
5. THE ARCHITECT/ENGINEER FIRM IS NOT RESPONSIBLE FOR SUPPLYING, BUILDING OR INSTALLATION FOR THE CYLINDER SUPPORT FRAME WORK. DIVISION 212200 SHALL BE RESPONSIBLE TO BUILD SUCH FRAME WORK BASED ON THE MANUFACTURERS EQUIPMENT SUPPLIED IN ORDER TO MEET THE SEISMIC REQUIREMENTS FOR SECURING THE CYLINDERS.
6. ALL CYLINDERS REQUIRE TWO (2) CYLINDER STRAPS FOR SECURING.
7. SECURING CYLINDERS USING STRAPS AND UNISTRUT AS SHOWN BY THE MANUFACTURERS INSTALLATION GUIDE TO WALLS IS NOT ACCEPTABLE.
8. DIVISION 212200 CONTRACTOR SHALL SUBMIT ENGINEER APPROVED DIMENSIONED DRAWINGS OF ALL CYLINDER MOUNTING FRAME WORK AND DETAILS OF HARDWARE USED FOR FINAL APPROVAL.
9. REFER TO THE SEISMIC REQUIREMENTS IN THE SPECIFICATIONS SECTION 210548 VIBRATION AND SEISMIC CONTROLS FOR FIRE SUPPRESSION PIPING AND EQUIPMENT.
10. WHERE NITROGEN DRIVER CYLINDERS ARE UTILIZED, PROVIDE SEISMIC BRACING OF CYLINDERS PER SECTION 210548.
11. NITROGEN PILOT CYLINDER PIPING/PNEUMATIC TUBING SHALL BE NEATLY AND CLEANLY ROUTED BETWEEN CYLINDERS AND ADEQUATELY SUPPORTED.

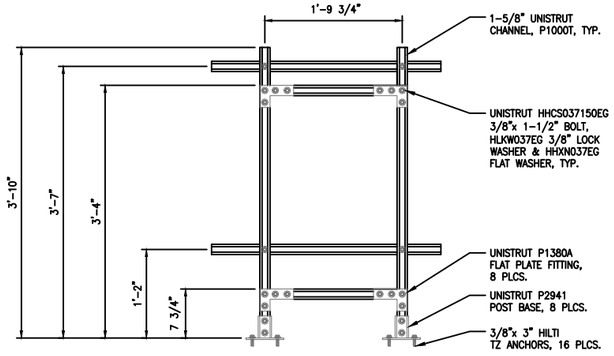




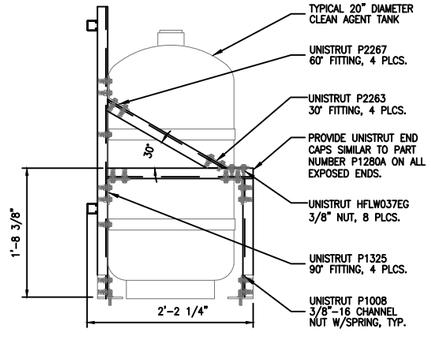
01 F502 FRONT AND TOP VIEW DIAGRAMMATIC



02 F502 ISOMETRIC VIEW DIAGRAMMATIC



03 F502 FRONT VIEW - BACK FRAME DIAGRAMMATIC



04 F502 LEFT SIDE VIEW DIAGRAMMATIC

PUMP SCHEDULE

BASIS OF DESIGN

MARK	MANUFACTURER	MODEL	MOTOR FRAME	FLOW RATE	PRESSURE	HORSEPOWER	VOLTAGE	PHASE	FREQUENCY	NOTES
FP-1	AURORA	4-383-7C	–	500 GPM	40 PSI	25 HP	208 V	3 PHASE	60 HZ	1
JP-1	AURORA	–	TEFC	5 GPM	60 PSI	1/2 HP	208 V	3 PHASE	60 HZ	2

NOTES:
1. PROVIDE WITH EATON SERIES #EPCT OR EQUAL (FPC-1) ACROSS THE LINE FULL VOLTAGE STARTING CONTROLLER AND TRANSFER SWITCH.
2. FURNISH WITH EATON SERIES #XTJP OR EQUAL (JPC-1) JOCKEY PUMP CONTROLLER.

NITROGEN GENERATOR SCHEDULE

BASIS OF DESIGN

MARK	MANUFACTURER	MODEL	TOTAL CAPACITY (GALLONS)	SINGLE SYSTEM CAPACITY @ 40 PSIG (GALLONS)	POWER			NITROGEN/ AIR CONNECTION	NOTES
					VOLTAGE	AMPERAGE	PHASE		
NG-1	ECS	AG-2000	2,000	800	200-240	10	1	1/2"	ALL

NOTES:
1. VERIFY NITROGEN GENERATOR SIZE BASED ON TOTAL DRY AND PREACTION SYSTEM VOLUME. EQUIPMENT SHALL BE SIZED TO MEET 30-MINUTE FILL REQUIREMENT PER NFPA-13.
2. COORDINATE INSTALLATION AND CONNECTIONS TO EQUIPMENT WITH ELECTRICAL AND FIRE ALARM CONTRACTORS.
3. PROVIDE ECS MODEL #AVC-2 SMART VENT CONTROLLER.

ESTIMATED FK-5-1-12 CLEAN AGENT VOLUMETRIC CALCULATIONS BASED ON MINIMUM 4.52% DESIGN CONCENTRATION

FLOOR NO.	ROOM NO.	ROOM NAME	AREA SQ. FT.	CEILING HT. FT.	VOLUME CU. FT.	FLOODING FACTOR	LBS. REQUIRED FK-5-1-12	MIN. LBS. FK-5-1-12	* EST. CYL. PER RM.	ROOM NOTES:
1	114B	TELECOM ROOM	177.1	11'-11"	2,110.5	0.041	159.5	160.0	1	
2	217B	TELECOM ROOM	137.8	12'-11"	1,779.9	0.041	98.5	100.0	1	
			179.0	VARIES	2,401.6	0.041	258.0	260.0		

NOTES:
1. ACTUAL FK-5-1-12 DESIGN SHALL BE BASED ON NFPA 2001 – CURRENT EDITION AND THE MANUFACTURERS UL LISTING AND FM APPROVAL.
2. AGENT QUANTITIES ARE APPROXIMATE AND BASED ON ROOM VOLUME. ADDITIONAL AGENT MAY BE REQUIRED FOR ROOM VOLUME OR TO MEET CODE/MANUFACTURER DESIGN REQUIREMENTS.
3. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THE ROOM VOLUME FOR THE CORRECT AMOUNT OF AGENT FOR EACH ZONE BEING PROTECTED. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AS-BUILT LEAKAGE RATES FROM ALL ENCLOSURES BASED ON THE RESULTS OF NFPA 2001 ROOM INTEGRITY TESTING PROCEDURES. THE RESULTS OF THE INTEGRITY TESTS MAY NECESSITATE A DIFFERENT QUANTITY OF AGENT, INSTALLATION MECHANICAL VENTS, OR ADDITIONAL CONSTRUCTION WORK TO SEAL ENCLOSURES. CONTRACTOR IS RESPONSIBLE FOR PROVIDING SYSTEMS CAPABLE OF SATISFYING THE DESIGN REQUIREMENT WITHOUT ADDITIONAL COSTS TO OWNER.
4. THE HVAC SYSTEM WILL CONTINUE TO OPERATE IN THE EVENT OF CLEAN AGENT DISCHARGE. ALL HVAC EQUIPMENT IS CONTAINED WITHIN THE ROOM. SET FAN TEST EQUIPMENT FOR CONTINUOUS MIXING DURING ROOM INTEGRITY TESTING.

* BASIS OF DESIGN IS KIDDE FK-5-1-12 CYLINDERS. QUANTITY OF CYLINDERS BASED ON SIZES PROVIDED BY KIDDE AND IS BASED ON AMOUNT OF AGENT PER CYLINDER. EACH MANUFACTURER PROVIDES THEIR OWN CYLINDER SIZES AND QUANTITY OF AGENT PER CYLINDER. QUANTITY OF CYLINDERS ON THE DRAWINGS IS BASED ON KIDDE FK-5-1-12 CYLINDER SIZES. IF OTHER MANUFACTURERS ARE PROVIDED QUANTITY OF CYLINDERS CHANGE BASED ON THEIR REQUIREMENTS.

INSTALLATION NOTES

1. CONTRACTOR IS RESPONSIBLE TO COORDINATE DIVISION OF WORK BETWEEN TRADES TO CAPTURE THE FULL SCOPE OF WORK.

OPERATION MATRIX SCHEDULE

● INDICATES DESIRED RESPONSE

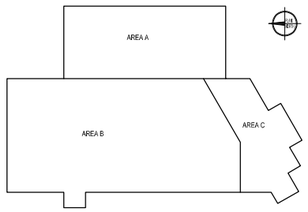
			OUTPUTS: 1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	
			DISPLAY ALARM MESSAGE AT THE FACP																														
			DISPLAY SUPERVISORY PRE-ALARM MESSAGE AT THE FACP																														
			DISPLAY TROUBLE MESSAGE AT THE FACP																														
			DISPLAY SUPERVISORY MESSAGE AT THE FACP																														
			DISPLAY DISCHARGE MESSAGE AT THE FACP																														
			DISPLAY ABORT MESSAGE AT THE FACP																														
			RECORD EVENTS IN SYSTEM HISTORY MEMORY																														
			ACTIVATE BUILDING EVACUATION SIGNALS - HORNS/STROBES BUILDING WIDE INCLUDING CLEAN AGENT ZONES - BUILDING ALARM																														
			ACTIVATE RESPECTIVE CLEAN AGENT ZONE EVACUATION SIGNALS - CLEAN AGENT ZONE HORN/STROBES - CLEAN AGENT ZONE ALARM																														
			ACTIVATE CLEAN AGENT PRE-DISCHARGE BELL IN ALARM ZONE - (2) DEVICES IN ALARM WITHIN THE SPACE - 2ND ALARM																														
			ACTIVATE FLASHING RED LIGHT OUTSIDE ALL ENTRANCES TO ALARM ZONE - CLEAN AGENT DISCHARGE																														
			ACTIVATE FLASHING INHIBIT LIGHT IN THE PROTECTED SPACE - CLEAN AGENT INHIBIT																														
			SEND SIGNAL VIA CONTACTS FOR BAS MONITORING - COORDINATE WITH DIVISION 25 BUILDING AUTOMATION SYSTEMS																														
			INHIBIT THE RELEASE OF CLEAN AGENT IN THE ZONE																														
			START 30 SECOND TIME DELAY FOR CLEAN AGENT DISCHARGE WITHIN PROTECTED ZONE																														
			DISCHARGE CLEAN AGENT IN PROTECTED ZONE																														
			ACTIVATE PREACTION SOLENOID IN ALARM ZONE																														
			SEND ALARM SIGNAL TO CENTRAL STATION MONITORING STATION																														
			SEND TROUBLE SIGNAL TO CENTRAL STATION MONITORING STATION																														
			SEND SUPERVISORY SIGNAL TO CENTRAL STATION MONITORING STATION																														
INPUTS																																	
	1		ANY ONE (1) PHOTOELECTRIC SMOKE DETECTOR IN ANY PREACTION SPRINKLER ZONE IN PRE-ALARM (0.5%/ft)		●					●																	●						1
	2		ANY ONE (1) PHOTOELECTRIC SMOKE DETECTOR IN ANY PREACTION SPRINKLER ZONE IN ALARM (2%/FT)	●						●		●												●		●							2
	3		ANY ONE (1) HEAT DETECTOR IN ANY PREACION SPRINKLER ZONE IN PRE-ALARM (120°F)		●					●																		●					3
	4		ANY ONE (1) HEAT DETECTOR IN ANY PREACION SPRINKLER ZONE IN ALARM (135°F)	●						●		●												●		●							4
	5		NITROGEN GENERATOR FAULT CONDITIONS				●			●																		●					5
	6		NITROGEN GENERATOR TROUBLE CONDITION			●				●																			●					6
			CLEAN AGENT ZONE FUNCTIONS																														
	4		MANUAL CLEAN AGENT RELEASE PULL STATION – AT ALL EXITS BY DOOR(S) FROM FM-200 PROTECTED SPACE	●						●		●	●	●								●						●						4
	5		CLEAN AGENT ABORT STATION – AT ALL EXITS BY DOOR(S) FROM FM-200 PROTECTED SPACE					●		●											●								●				5
	6		ANY ONE (1) PHOTOELECTRIC SMOKE DETECTOR IN THE PROTECTED ZONE IN PRE-ALARM (0.5%/ft)		●					●																				●			6
	7		ANY ONE (1) PHOTOELECTRIC SMOKE DETECTOR IN THE PROTECTED ZONE IN ALARM (2%/ft)	●						●		●	●														●						7
	8		ANY TWO (2) PHOTOELECTRIC SMOKE DETECTORS IN THE PROTECTED ZONE IN ALARM (2%/ft)	●						●		●	●	●										●			●						8
	9		30 SECOND TIME DELAY EXPIRES (ABORT STATION NOT ACTIVATED)					●		●					●			●					●			●						9
	10		KEY OPERATED INHIBIT SWITCH IN THE INHIBIT POSITION – CLEAN AGENT			●	●			●						●				●								●	●			10
	11		FACP PANEL TROUBLE CONDITION			●				●																		●					11

NOTE:

ACTIVATING THE ABORT STATION DOES NOT STOP THE 30 SECOND COUNTDOWN TIMER, ONLY INTERRUPTS THE COUNTDOWN AND HOLDS AT 10 SECONDS FOR UL ABORTS. IF THE ABORT STATION IS RELEASED THE COUNTDOWN WILL CONTINUE UNTIL TIME EXPIRES AND CLEAN AGENT RELEASE WILL OCCUR.
ACTIVATING THE ABORT STATION DOES NOT INHIBIT THE MANUAL RELEASE OF CLEAN AGENT.

THE 30 SECOND DELAY OF CLEAN AGENT IS TO PROVIDE ENOUGH TIME FOR PERSONNEL TO EVACUATE ADJUST TIME DELAY AS NECESSARY.

BUILDING FIRE ALARM NOTIFICATION DEVICES SHALL BE INSTALLED THROUGHOUT THE BUILDING AS PER NFPA-72, CURRENT EDITION. ADDITIONAL HORN/STROBES AND PRE-DISCHARGE BELLS MAY BE REQUIRED DEPENDING ON SIZE OF ROOM.



OVERALL KEY PLAN

PLUMBING LEGEND

GENERAL SYMBOLS

100.0'	INVERT ELEVATION
1	KEYNOTES DEMOLITION
1	KEYNOTES FIRE PROTECTION
1	KEYNOTES NEW OR REMODEL
1	KEYNOTES NEW OR REMODEL
1	KEYNOTES NEW OR REMODEL
	FLOOR DRAIN
	HOSE BIBB OR WALL HYDRANT
	ROOF DRAIN
	PLUMBING FIXTURE/EQUIPMENT (NEW)
	PLUMBING FIXTURE/EQUIPMENT (DEMO)
	PLUMBING FIXTURE/EQUIPMENT (EXISTING)
ROOM NAME 101	INDICATES ROOM NAME INDICATES ROOM NUMBER
A P1	SECTION CUT
	CALLOUT BUBBLE
1 P1	CALLOUT REFERENCE DETAIL NUMBER CALLOUT REFERENCE SHEET NUMBER
1	REVISION NUMBER
	REVISION CLOUD
AA	MATCH PIPE BREAK
SEE SHEET P..... FOR CONTINUATION.	CONTINUATION OF PIPE BREAK

PIPING SYMBOLS ABBREVIATIONS

	AQUASTAT
	BALANCING VALVE
	BALL VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	DOMESTIC WATER CIRCULATING PUMP
	FLEXIBLE PIPE
X	FIXTURE VALVE
GAS	GAS METER
	GAS PRESSURE REGULATOR
	GATE VALVE
	INDICATES DIRECTION OF WATER FLOW
E	PIPE CAP
C	PIPE ELEVATION UP OR DOWN
	PIPE RISER UP
	PIPE TEE – BOTTOM CONNECTION
	PIPE TEE – TOP CONNECTION
	PIPE UNION
1"	PIPE SIZE
H	POINT OF CONNECTION/RECONNECTION
	PRESSURE GAUGE
	PRESSURE REDUCING VALVE
	REDUCE PRESSURE BACKFLOW PREVENTER
	STRAINER
	SOLENOID VALVE
	TEMPERATURE AND RELIEF PRESSURE VALVE
	THERMOMETER
	VACUUM RELIEF VALVE
	WATER HAMMER ARRESTOR
	WATER METER

PIPING SYSTEM ABBREVIATIONS

A	COMPRESSED AIR (A.)
CD	CONDENSATE DRAIN (C.D.)
-	COLD WATER (C.W.)
G	GAS (NATURAL, PROPANE) (G.)
- -	HOT WATER (H.W.)
- - -	HOT WATER RETURN (H.W.R.)
IW	INDIRECT WASTE (I.W.)
LW	LOCAL WASTE (L.W.)
NP	NON-POTABLE WATER (N.P.)
PD	PUMP DISCHARGE (P.D.)
RL	RAIN LEADER (R.L.)
SS	SANITARY SEWER, SANITARY WASTE (W.)
ST	STORM SEWER (ST.)
T	TEMPERED WATER (T.W.)
V	VENT (V.)
C.I.	CAST IRON PIPING
C.V.	CIRCUIT VENT
D.I.	DUCTILE IRON
F.V.	FRESH AIR VENT
L.V.	LOCAL VENT
R.V.	RELIEF VENT
W.	WASTE (SANITARY)
V.	VENT (SANITARY)
V.T.R.	VENT THRU ROOF
V.T.W.	VENT THRU WALL

EQUIPMENT ABBREVIATIONS

A.C.	AIR COMPRESSOR
A.H.	AIR HOSE STATION
A.H.R.	AIR HOSE REEL
B.F.P.	BACKFLOW PREVENTER
B.P.	BOOSTER PUMP
C.O.	CLEAN OUT
D.W.C.P.	DOMESTIC WATER CIRCULATING PUMP
E.P.	EJECTOR PUMP
E.T.	EXPANSION TANK
E.W.H.	ELECTRIC WATER HEATER
F.C.O.	FLOOR CLEAN OUT
F.D.	FLOOR DRAIN
F.G.C.O.	FINISH GRADE CLEAN OUT
FLT.	FILTER
G.C.B.	GARAGE CATCH BASIN
G.W.H.	GAS WATER HEATER
H.B.	HOSE BIBB
H.T.	HOLDING TANK
M.V.	MIXING VALVE
O.I.	OIL INTERCEPTOR
O.S.	OPEN SITE DRAIN (HUB DRAIN)
P.G.	PRESSURE GAUGE
P.R.V.	PRESSURE REDUCING VALVE
P.T.	PRESSURE TANK
R.D.	ROOF DRAIN
R.P.B.P.	REDUCE PRESSURE BACKFLOW PREVENTER
S.P.	SUMP PUMP
T.D.	TRENCH DRAIN
T.P.V.	TEMPERATURE/PRESSURE RELIEF VALVE
V.B.	VACUUM BREAKER
W.C.O.	WALL CLEAN OUT
W.H.A.	WATER HAMMER ARRESTOR
W.H.	WALL HYDRANT
WTR. MTR.	WATER METER
W.H.R.	WATER HOSE REEL

FIXTURES ABBREVIATIONS

A.C.W.	AUTOMATIC CLOTHES WASHER
D.W.	DISHWASHER
E.W.C.	ELECTRIC WATER COOLER
E.W.	EMERGENCY EYE WASH
E.W./SH.	EMERGENCY EYE WASH/SHOWER
H.S.	HAND SINK
I.M.	ICE MAKER
L.	LAVATORY SINK
L.T.	LAUNDRY TRAY
M.S.	MOP SINK
S.	SINK
U.	URINAL
W.C.	WATER CLOSET
W.F.	WASH FOUNTAIN

GENERAL ABBREVIATIONS

A.B.	AIR BREAK
A.F.C.	ABOVE FINISH CEILING
A.F.F.	ABOVE FINISH FLOOR
A.F.G.	ABOVE FINISH GRADE
A.F.R.	ABOVE FINISHED ROOF
A.G.	AIR GAP
A.P.	ACCESS PANEL
AVG.	AVERAGE
B.F.F.	BELOW FINISH FLOOR
B.F.G.	BELOW FINISH GRADE
B.T.U.	BRITISH THERMAL UNIT
B.T.U.H.	BRITISH THERMAL UNIT PER HOUR
CL	CENTERLINE
CLG.	CEILING
C.O.	CLEAN OUT
CONT.	CONTINUE
CU. FT.	CUBIC FEET
CU. IN.	CUBIC INCHES
°	DEGREE
D.D.C.	DIRECT DIGITAL CONTROLS
D.F.U.	DRAINAGE FIXTURE UNITS
DIA. or ø	DIAMETER
DN.	DOWN
DWG.	DRAWING
ELEC.	ELECTRICAL
EXIST.	EXISTING
° F	DEGREES FAHRENHEIT
FIN. FL.	FINISH FLOOR
FL.	FLOOR
F.P.M.	FEET PER MINUTE
F.P.S.	FOOT PER SECOND
ft.	FEET
GAL.	GALLONS
G.P.H.	GALLONS PER HOUR
G.P.M.	GALLONS PER MINUTE
HD.	HEAD (FEET)
I.E.	INVERT ELEVATION
H.P.	HORSEPOWER
HTG.	HEATING
H.V.A.C.	HEATING, VENTILATION AND AIR CONDITIONING
I.D.	INSIDE DIAMETER
IN.	INCH OR INCHES
k.w.	KILOWATT
lbs	POUNDS
L.W.T.	LEAVING WATER TEMPERATURE
MAX.	MAXIMUM
M.B.H.	THOUSAND B.T.U.H.
MECH.	MECHANICAL
MFG.	MANUFACTURER
MIN.	MINIMUM
MTD.	MOUNTED
N.I.C.	NOT IN CONTRACT
N.P.S.	NOMINAL PIPE SIZE
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
psi	POUNDS PER SQUARE INCH
psig	POUNDS PER SQUARE INCH GAUGE
RM.	ROOM
R.P.M.	REVOLUTIONS PER MINUTE
# sq.ft.	SQUARE FEET
S.P.	STATIC PRESSURE
SPEC.	SPECIFICATION
STD.	STANDARD
TEMP.	TEMPERATURE
TSTAT	THERMOSTAT
TYP.	TYPICAL
V.	VOLTS
w.c.	WATER COLUMN (GAS)
W.S.F.U.	WATER SUPPLY FIXTURE UNITS
W/	WITH
Mezz.	MEZZANINE LEVEL
2nd.	UPPER LEVEL FLOOR
1st.	MAIN LEVEL FLOOR

MECHANICAL EQUIPMENT ABBREVIATIONS

B.	BOILER (BY M.C.)
F.	FURNACE (BY M.C.)
H.	HUMIDIFIER (BY M.C.)
M.A.U.	MAKE UP AIR UNIT (BY M.C.)
RAD.	INFRARED RADIANT GAS HEATER (BY M.C.)
R.T.U.	ROOF TOP UNIT (BY M.C.)
U.H.	UNIT HEATER (BY M.C.)

FIRE PROTECTION ABBREVIATIONS

FP	FIRE PROTECTION SYSTEM (F.P.)
F.D.C.	FIRE DEPARTMENT CONNECTION
F.P.P.	FIRE PROTECTION PUMP
J.P.	JOCKEY PUMP

CODE ABBREVIATIONS

D.S.P.S.	DEPT. SAFETY PROFESSIONAL SERVICES
I.E.C.C.	INTERNATIONAL ENERGY CONSERVATION CODE
I.F.G.C.	INTERNATIONAL FUEL GAS CODE
N.F.P.A.	NATIONAL FIRE PROTECTION ASSOCIATION
N.F.P.A. 54	NATIONAL FUEL GAS CODE

LINE TYPE KEY

- ——— NEW WORK BELOW IN GRADE BY PLUMBING CONTRACTOR (DARK THICK SOLID LINE)
- ——— NEW WORK BY PLUMBING CONTRACTOR (DARK SOLID LINE)
- ——— NEW WORK BY OTHERS AND/OR EXISTING TO REMAIN (LIGHT SOLID LINE)
- - - - - - EXISTING TO BE REMOVED BY PLUMBING CONTRACTOR (DARK SHORT DASHED LINE)

CONTRACTOR ABBREVIATION KEY

ABBR:	CONTRACTOR:
E.C.	ELECTRICAL CONTRACTOR
F.P.C.	FIRE PROTECTION CONTRACTOR
G.C.	GENERAL CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR

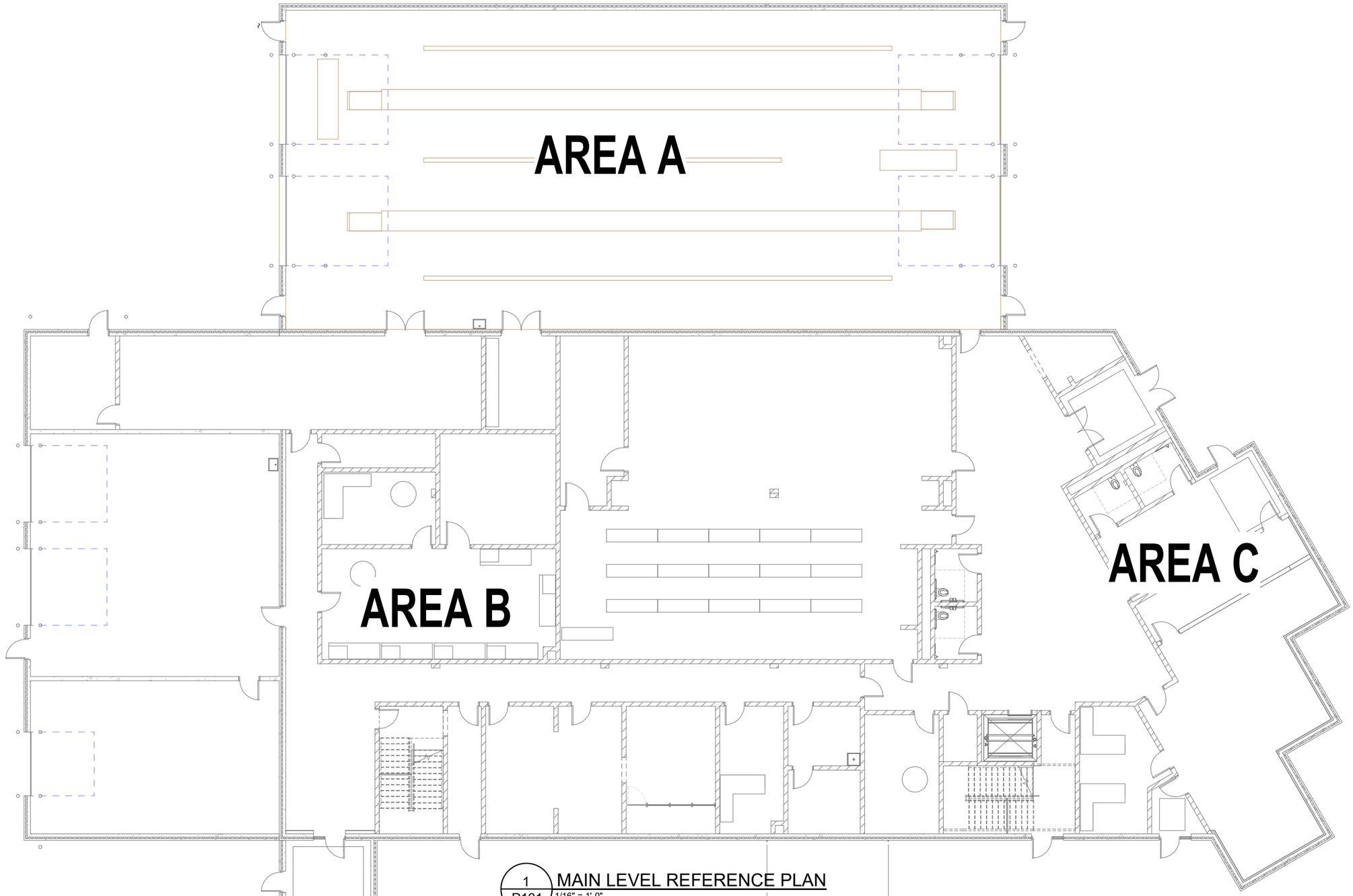
PLUMBING SHEET INDEX

SHEET #	SHEET NAME	SHEET #	SHEET NAME
P001	PLUMBING GENERAL INFORMATION SHEET	P301	PLUMBING STORM/RAIN LEADER SCHEMATICS
P101	PLUMBING MAIN LEVEL REFERENCE PLAN	P302	PLUMBING WASTE AND VENT SCHEMATIC – AREA A
P102	PLUMBING UPPER LEVEL REFERENCE PLAN	P303	PLUMBING WASTE AND VENT SCHEMATIC – FIRST FLOOR – AREA B & C
P201	PLUMBING MAIN LEVEL FLOOR PLAN – AREA A – BELOW FLOOR	P304	PLUMBING WASTE AND VENT SCHEMATIC – SECOND FLOOR – AREA B
P202	PLUMBING MAIN LEVEL FLOOR PLAN – AREA B – BELOW FLOOR	P305	PLUMBING WATER PIPING SCHEMATIC – AREA A
P203	PLUMBING MAIN LEVEL FLOOR PLAN – AREA C – BELOW FLOOR	P306	PLUMBING WATER PIPING SCHEMATIC – FIRST FLOOR – AREA B & C
P204	PLUMBING MAIN LEVEL FLOOR PLAN – AREA A – ABOVE FLOOR	P307	PLUMBING WATER PIPING SCHEMATIC – SECOND FLOOR – AREA B
P205	PLUMBING MAIN LEVEL FLOOR PLAN – AREA B – ABOVE FLOOR SANITARY	P308	PLUMBING GAS PIPING SCHEMATIC
P206	PLUMBING MAIN LEVEL FLOOR PLAN – AREA B – ABOVE FLOOR	P401	PLUMBING SCHEDULES
P207	PLUMBING MAIN LEVEL FLOOR PLAN – AREA C – ABOVE FLOOR	P402	PLUMBING DETAILS
P208	PLUMBING UPPER LEVEL FLOOR PLAN – AREA A	P403	PLUMBING DETAILS
P209	PLUMBING UPPER LEVEL FLOOR PLAN – AREA B		
P210	PLUMBING UPPER LEVEL FLOOR PLAN – AREA C		
P211	PLUMBING ROOF PLAN – AREA A		
P212	PLUMBING ROOF PLAN – AREA B & C		

GENERAL PLUMBING NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH NATIONAL, STATE, & LOCAL CODES; AS WELL AS THE NATIONALLY RECOGNIZED TESTING AND APPROVAL AGENCIES.
2. PLUMBING, MECHANICAL, ELECTRICAL AND FIRE PROTECTION CONTRACTORS SHALL COORDINATE WITH ONE ANOTHER ALONG WITH OTHER TRADES BEFORE BEGINNING ANY INSTALLATION AND CONTINUING THROUGHOUT PROJECT.
3. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.
4. PLUMBING CONTRACTOR SHALL FIELD VERIFY DIMENSIONS, WALL HEIGHTS, DOOR SWINGS, WINDOW LOCATIONS, AND ANY OTHER INFORMATION CRITICAL TO THE PLACEMENT OF PIPING AND EQUIPMENT. COORDINATE ANY POSSIBLE CONFLICTS WITH GENERAL CONTRACTOR OR PROJECT MANAGER BEFORE PERFORMING ANY WORK.
5. PROVIDE THE OWNER WITH TRAINING AND WITH OPERATION AND MAINTENANCE MANUALS FOR THE FURNISHED EQUIPMENT PRIOR TO COMPLETION OF WORK.
6. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, EQUIPMENT SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY VERIFY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES.
7. THE INSTALLING CONTRACTOR SHALL VERIFY REQUIREMENTS FOR SUPPORTED EQUIPMENT AND COMPONENTS OF ANY KIND WITH THE BUILDING AND/OR SUPPORT STRUCTURE DESIGNER PRIOR TO INSTALLATION. APEX ENGINEERING DOES NOT PROVIDE STRUCTURAL DESIGN SERVICES.
8. COORDINATE ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES WITH ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OF EQUIPMENT ORDERS.
9. VERIFY ALL SANITARY AND STORM PIPING INVERT ELEVATIONS AND COORDINATE INVERTS AT ALL FOOTINGS AND FOUNDATION WALLS WITH GENERAL CONTRACTOR.
10. COORDINATE WATER METER SIZES WITH CITY UTILITIES EARLY IN PROJECT TO ENSURE CITY HAS WATER METER AT TIME OF INSTALLATION. COORDINATE WATER METER LOCATION AND INSTALLATION TIME FRAME WITH CITY UTILITIES. INSTALL PRESSURE REDUCING VALVE, PRESSURE GAUGE, ETC. IN ACCORDANCE WITH CITY UTILITIES REQUIREMENTS.
11. ALL CONTROLS SHALL BE PROPERLY TESTED, ADJUSTED AND CALIBRATED BEFORE WORK IS COMPLETED..
12. EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY BETWEEN DIFFERENT MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING, ETC.
13. DO NOT BLOCK TUBE/COIL PULL OR EQUIPMENT SERVICE CLEARANCES.
14. REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS.
15. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR EXPENSE TO OTHERS.
16. MAINTAIN WORKING CLEARANCES AT ELECTRICAL EQUIPMENT SUCH AS ELECTRICAL PANELS, MOTOR STARTERS, SWITCHES AND DISCONNECTS PER N.E.C. REQUIREMENTS.
17. CONTRACTOR IS RESPONSIBLE FOR ALL COST ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF DESIGN.
18. MAINTAIN A MINIMUM OF 10' BETWEEN ROOF EDGE AND ALL ROOFTOP GAS PIPING AND VENT THRU ROOF, INCLUDING WATER HEATER INTAKE AND EXHAUST VENT PIPING.
19. ALL EQUIPMENT, AND PIPING SHALL BE KEPT CLEAN FROM DIRT & DEBRIS. DO NOT ALLOW THE INSIDE OF PLUMBING PIPING TO BE EXPOSED DURING CONSTRUCTION.
20. FOR ALL FIRE RATED PENETRATIONS, ONLY USE U.L. LISTED, TESTED, AND APPROVED MATERIALS AND METHODS THAT MEET DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES APPROVAL. COORDINATE WITH ARCHITECTURAL PLANS AND GENERAL CONTRACTOR ON LOCATION AND RATING OF ALL FIRE RATED WALLS, CEILINGS, FLOORS, ETC. USE FIRE RATED MATERIALS AND METHODS THAT MEET DEPARTMENT OF COMMERCE APPROVAL
21. REFER TO ARCHITECTURAL ELEVATION PLAN FOR ALL LAVATORY, WATER COOLER, ETC. MOUNTING HEIGHTS.
22. COORDINATE ACCESS PANEL IN HARD CEILINGS FOR CONTROL/ISOLATION VALVES WITH ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL LIGHT FIXTURES, LIGHT FIXTURE SUPPORT RODS, AND FIRE SPRINKLER HEADS FOR INTERFERENCE.
23. DRAINS SHALL BE INSTALLED AT ALL LOW POINTS OF WATER PIPING SYSTEMS.
24. PROVIDE AND INSTALL PIPE SLEEVE AT ALL BUILDING FOUNDATION PENETRATIONS. CORE DRILL THRU FOUNDATION WALL WHERE REQUIRED.
25. PROVIDE AND INSTALL PIPE SLEEVE AND SEAL ALL FLOOR AND WALL PENETRATIONS AIR AND WATER TIGHT. CORE DRILL THRU FLOOR AS REQUIRED.
26. COORDINATE WITH MECHANICAL CONTRACTOR ON FLOOR DRAIN/OPEN SITE LOCATIONS WITH MECHANICAL EQUIPMENT.
27. COORDINATE WITH FIRE PROTECTION CONTRACTOR ON FLOOR DRAIN/OPEN SITE LOCATIONS WITH FIRE PROTECTION EQUIPMENT.
28. SHUT-OFF VALVES INSTALLED IN INSULATED PIPING SHALL BE PROVIDED WITH EXTENDED OPERATOR HANDLE TO OUTSIDE OF INSULATION.
29. PLUMBING CONTRACTOR SHALL VERIFY ALL SANITARY AND WATER PIPING LOCATION, INVERTS, AND CONDITION BEFORE PERFORMING ANY WORK.
30. CHASE SERVING A TOILET ROOM GROUP SHALL HAVE WALL CLEANOUTS LOCATED ABOVE FLOOD RIM OF THE CARRIER SYSTEM.
31. FLUSH HANDLES FOR A.D.A. WATER CLOSETS SHALL BE LOCATED ON THE APPROACH SIDE OF WATER CLOSET.
32. COORDINATE WITH MECHANICAL CONTRACTOR ON GAS CONNECTION SIZE, LOCATION, AND PRESSURE REQUIREMENTS FOR MECHANICAL EQUIPMENT.
33. GAS PRESSURE REGULATORS MAY BE SUPPLIED WITH VENT LIMITER WHERE REQUIRED BY NFPA, INTERNATIONAL FUEL GAS CODE, AND THE GAS FIRE EQUIPMENT MANUFACTURER SPECIFICATIONS. ATMOSPHERE VENTING SHALL BE INDIVIDUALLY VENTED TO THE EXTERIOR THRU ROOF OR SIDE WALL. VENT PIPING SHALL BE PROVIDED WITH WEATHER CAP AND PRIMED AND PAINTED. COLOR TO MATCH OR AS DIRECTED BY ARCHITECT AND/OR GENERAL CONTRACTOR.
34. ALL EXTERIOR PLUMBING PIPING SHALL BE PRIMED AND PAINTED. COLOR TO MATCH EXTERIOR WALL OR ROOF, OR AS DIRECTED BY ARCHITECT AND/OR GENERAL CONTRACTOR.
35. NO PIPING SHALL BE INSTALLED ABOVE ELECTRICAL EQUIPMENT UNLESS OTHERWISE NOTED. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL EQUIPMENT LOCATIONS. COORDINATE WITH ELECTRICAL CONTRACTOR FOR EXACT LOCATIONS.
36. GAS WATER HEATER EXHAUST AND INTAKE VENT PIPING TO BE INSTALLED AS PER MANUFACTURER SPECIFICATIONS. VENT PIPING SHALL BE A MINIMUM DISTANCE OF 10'-0" FROM ANY MECHANICAL OUTSIDE AIR INTAKES. COORDINATE PIPE RUN WITH MECHANICAL FURNACE/BOILER INTAKE AND EXHAUST VENT PIPING. COORDINATE WITH MECHANICAL AND GENERAL CONTRACTOR.
37. OUTSIDE AIR INTAKES SHALL BE A MINIMUM DISTANCE OF 10'-0" FROM ANY EXHAUST/RELIEF OUTLET, FLUE, GAS OR PLUMBING VENT. COORDINATE WITH RESPECTIVE TRADES.
38. COORDINATE WATER AND WASTE PIPING FOR CLOTHES WASHER WITH DRYER DUCT VENTING.
39. SEAL ALL EXTERIOR OPENINGS WATER TIGHT.
40. PLUMBING CONTRACTOR TO THOROUGHLY CLEAN ALL EXPOSED PIPING FOR PAINTING AS SPECIFIED. PAINTING BY PAINTING CONTRACTOR.
41. PROVIDE SIGNAGE AT ALL EYEWASH AND EYEWASH/SHOWERS INDICATING EMERGENCY FIXTURE AND LOCATION. INSTALL AS PER ANSI Z358.1
42. PROVIDE PVC JACKET ON ALL EXPOSED PIPE INSULATION LOCATED BETWEEN FINISH FLOOR AND TO A POINT OF 10'-0" ABOVE FINISH FLOOR.

2



1 P101 MAIN LEVEL REFERENCE PLAN

1/16" = 1'-0"

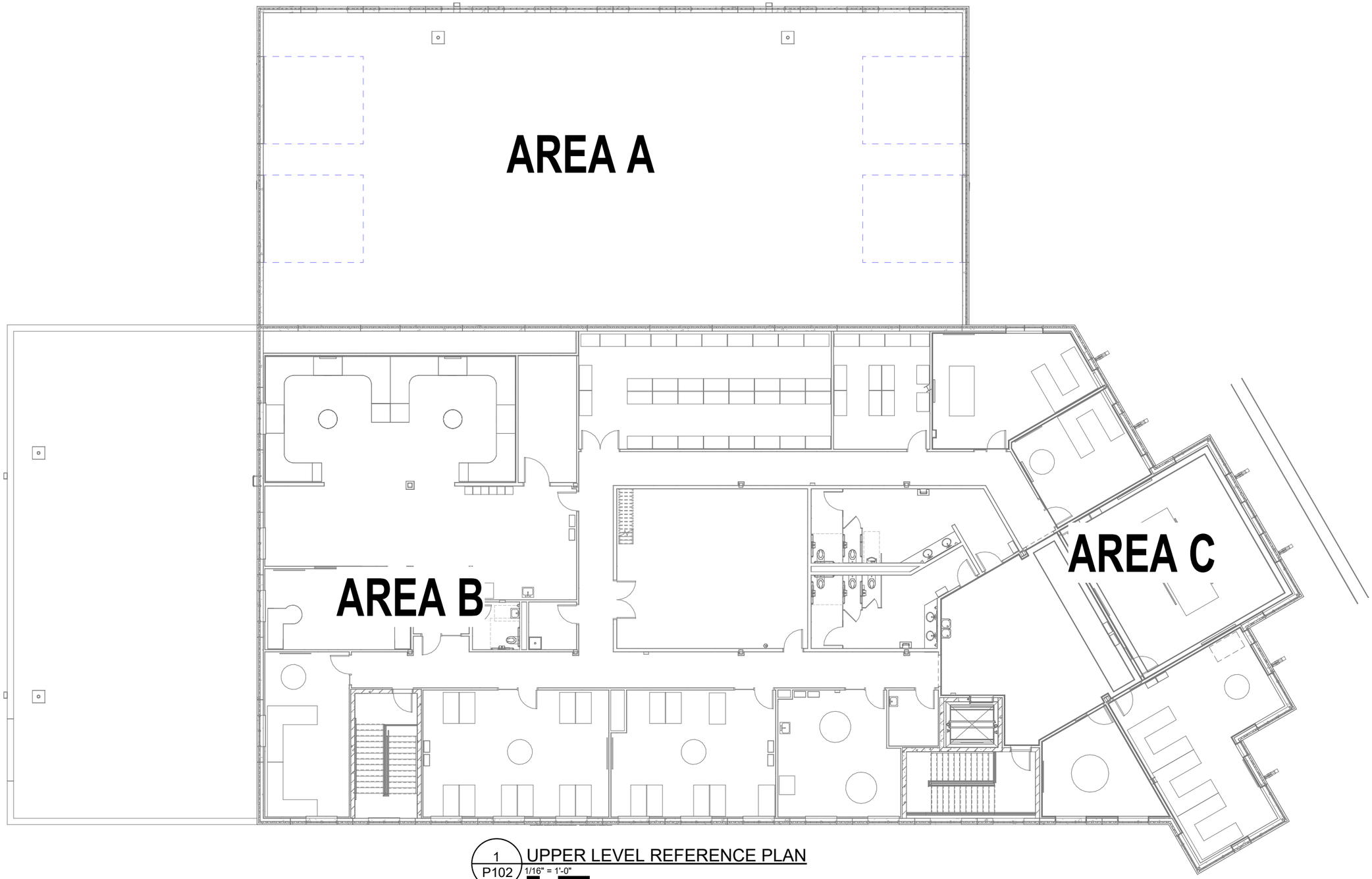
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING MAIN LEVEL REFERENCE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P101	

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1 / P102 UPPER LEVEL REFERENCE PLAN

1/16" = 1'-0"

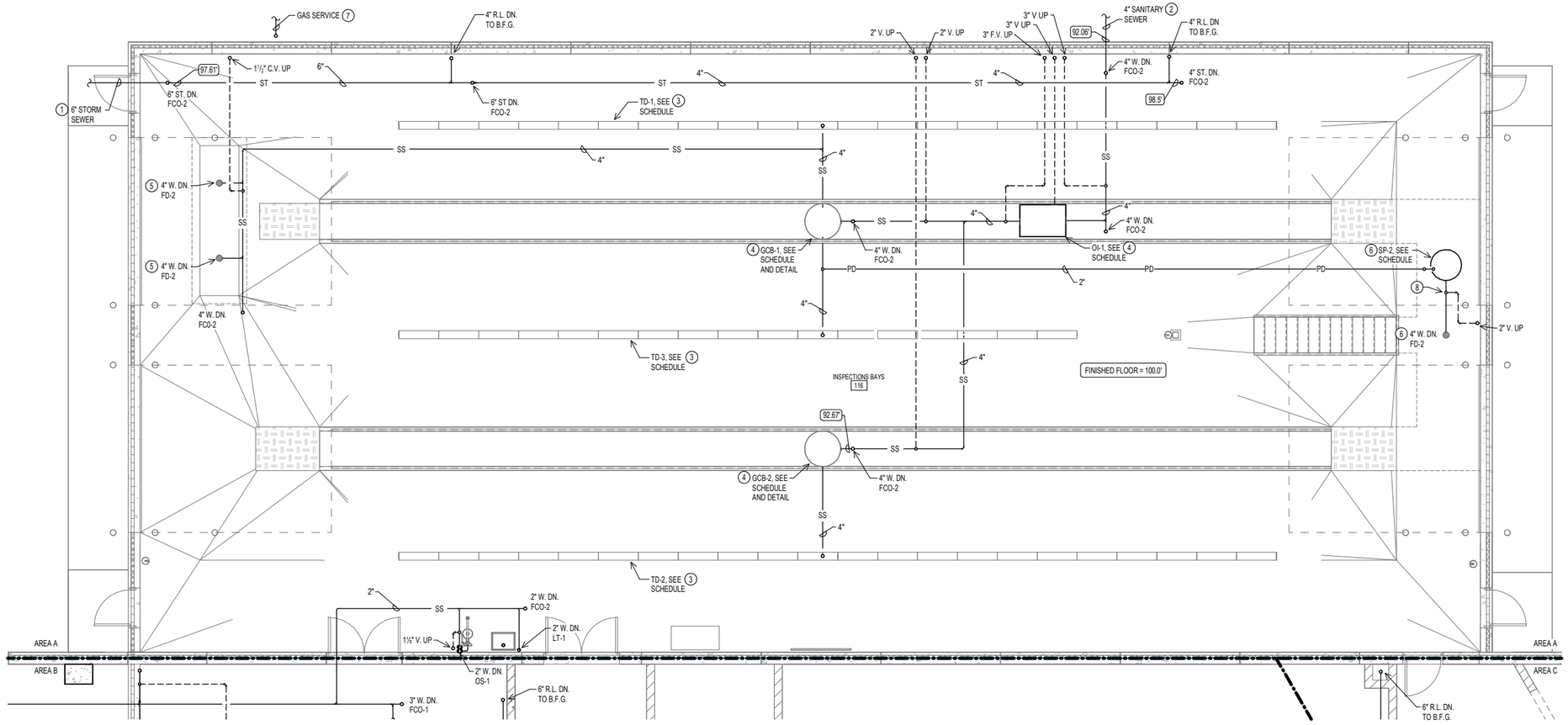
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING UPPER LEVEL REFERENCE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P102	

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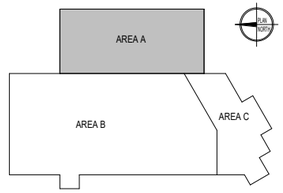
#	PLUMBING NOTES-201
1	CONTINUATION OF STORM SEWER PIPING BY CIVIL CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE PIPE SIZE AND INVERT ELEVATION AND LOCATION WITH CIVIL CONTRACTOR.
2	CONTINUATION OF SANITARY SEWER PIPING BY CIVIL CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE PIPE SIZE AND INVERT ELEVATION AND LOCATION WITH CIVIL CONTRACTOR.
3	INSTALL TRENCH DRAIN SYSTEM AS PER MANUFACTURER SPECIFICATIONS. VERIFY PROPER FITTING OF TRENCH DRAIN GRATES AFTER INSTALLATION OF TRENCH CHANNELS BEFORE CONCRETE POUR.
4	INSTALL GARAGE CATCH BASIN AND OIL INTERCEPTOR AT INSPECTION TRENCH FLOOR LEVEL.
5	INSTALL FLOOR DRAINS IN BOTTOM OF BRAKE CHECK PIT. COORDINATE LOCATION WITH BRAKE CHECK SUPPLIER/INSTALLATION CONTRACTOR.
6	FLOOR DRAIN AND SUMP PUMP AT FLOOR OF TUNNEL TO INSPECTION TRENCH.
7	NEW GAS SERVICE BY GAS UTILITIES. COORDINATE GAS SERVICE INSTALL AND GAS LOAD OF 1,947,900 BTUH WITH GAS UTILITIES.
8	VENT CONNECTION TO WASTE PIPE TO BE WITHIN 12" FROM SUMP PUMP AS PER CODE.

1 P201 MAIN LEVEL FLOOR PLAN - AREA A

3/32" = 1'-0"

0' 1' 2'-6" 5'

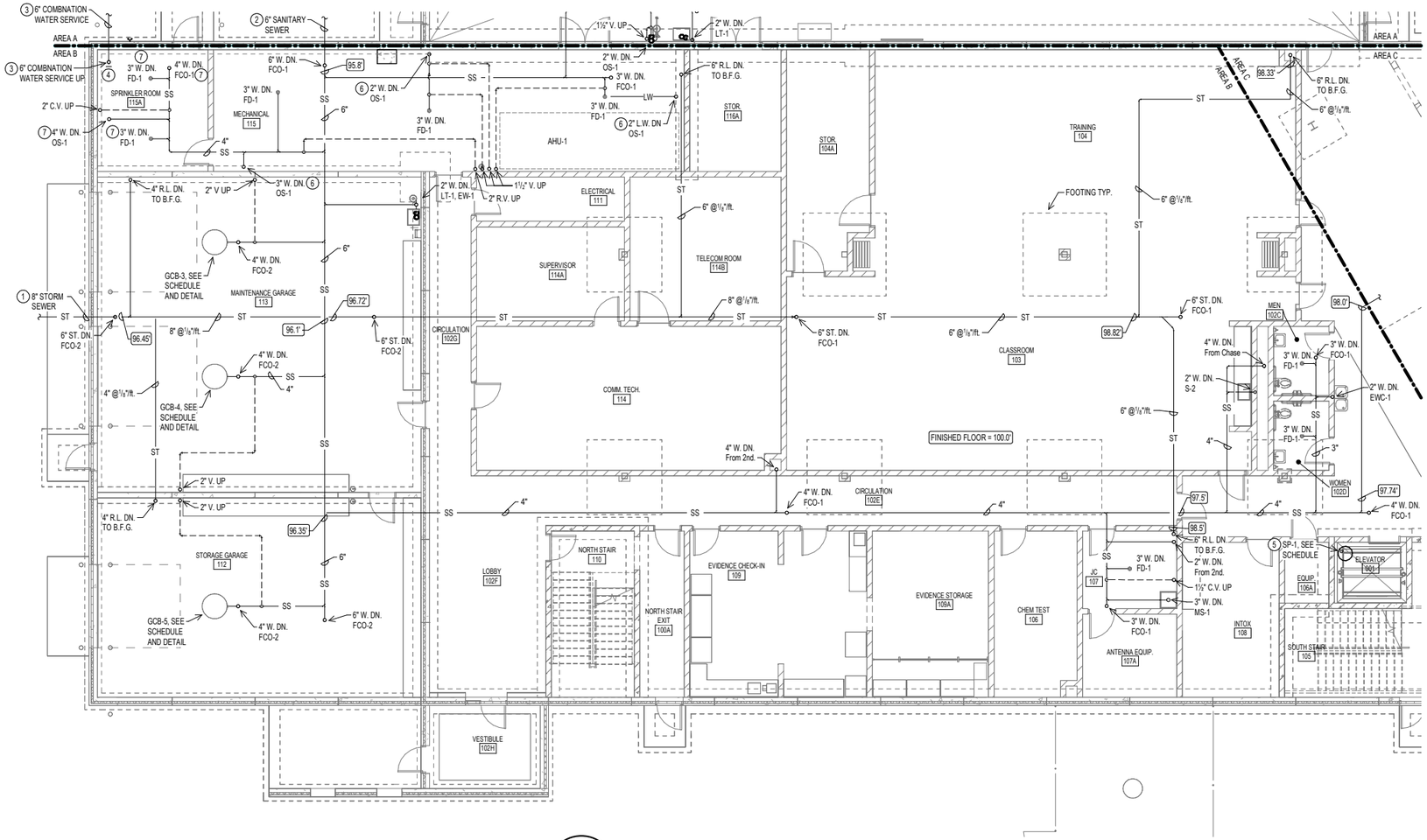
BELOW FLOOR.



KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING MAIN LEVEL FLOOR PLAN - AREA A - BELOW FLOOR	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P201	263

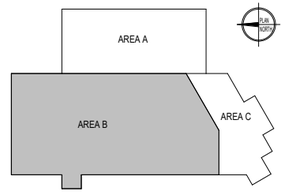
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1 P202 MAIN LEVEL FLOOR PLAN - AREA B
1/16" = 1'-0"
0' 2' 5' 10'
BELOW FLOOR

PLUMBING NOTES-202

#	
1	CONTINUATION OF STORM SEWER PIPING BY CIVIL CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE PIPE SIZE AND INVERT ELEVATION AND LOCATION WITH CIVIL CONTRACTOR.
2	CONTINUATION OF SANITARY SEWER PIPING BY CIVIL CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE PIPE SIZE AND INVERT ELEVATION AND LOCATION WITH CIVIL CONTRACTOR.
3	CONTINUATION OF COMBINATION WATER SERVICE PIPING BY CIVIL CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE PIPE SIZE AND INVERT ELEVATION AND LOCATION WITH CIVIL CONTRACTOR. PLUMBING CONTRACTOR IS REQUIRED TO INSTALL COMBINATION WATER SERVICE FROM A POINT OF 18" ABOVE FINISH FLOOR TO 5 FEET BEYOND BUILDING FOUNDATION. COORDINATE NEW WATER SERVICE LOCATION WITH CIVIL AND FIRE PROTECTION CONTRACTOR.
4	PROVIDE THRUST BLOCK AS PER NFPA-24.
5	COORDINATE SUMP PUMP LOCATION IN ELEVATOR PIT WITH ELEVATOR CONTRACTOR.
6	COORDINATE LOCATION OF OPEN SITE DRAIN WITH MECHANICAL CONTRACTOR.
7	COORDINATE LOCATION OF OPEN SITE AND FLOOR DRAINS WITH FIRE PROTECTION CONTRACTOR.

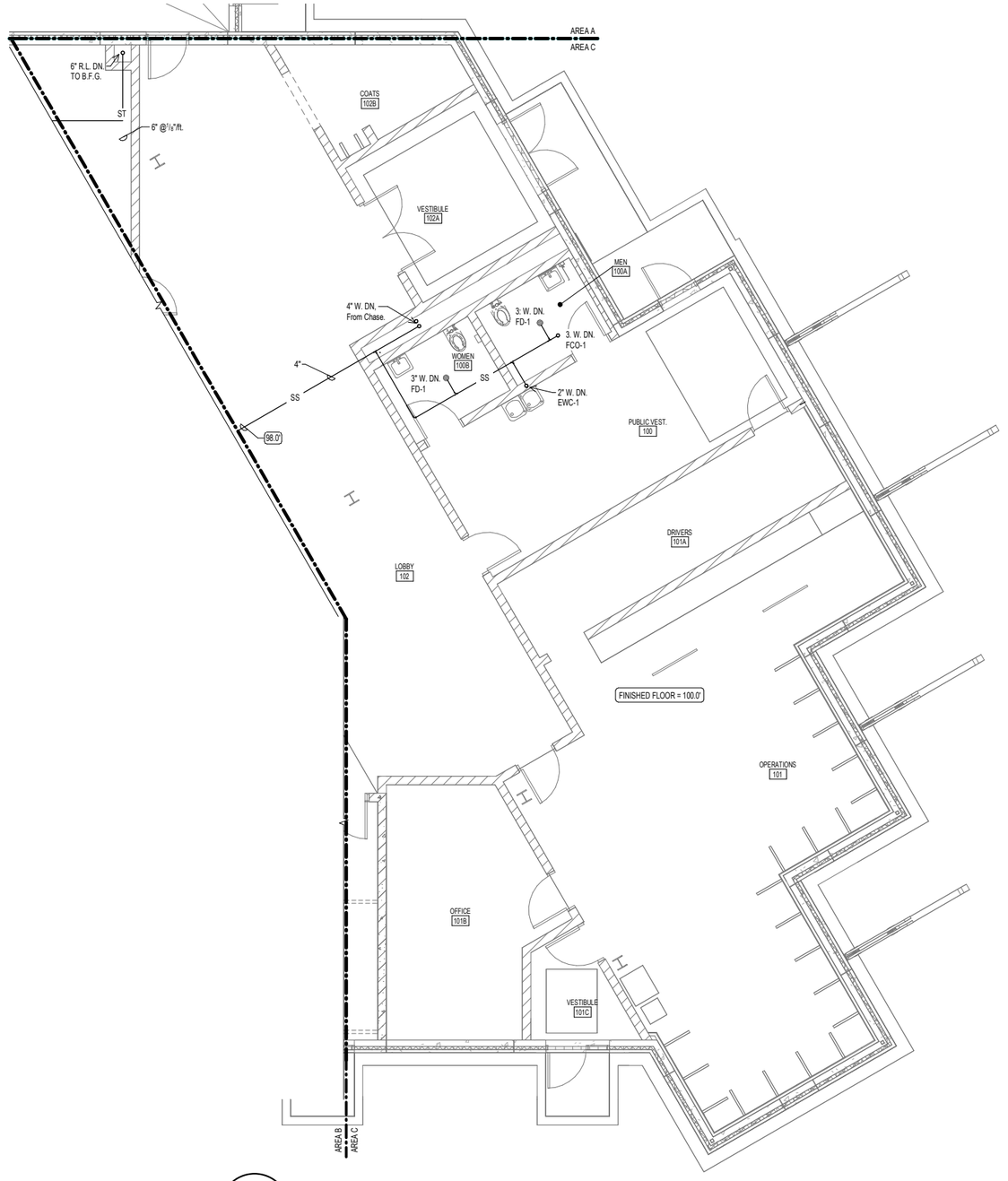


KEY PLAN

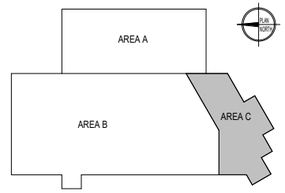
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING MAIN LEVEL FLOOR PLAN - AREA B - BELOW FLOOR	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P202	264

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1 / P203 MAIN LEVEL FLOOR PLAN - AREA C
BELOW FLOOR
3/32" = 1'-0"
0" 1' 2'-6" 5'



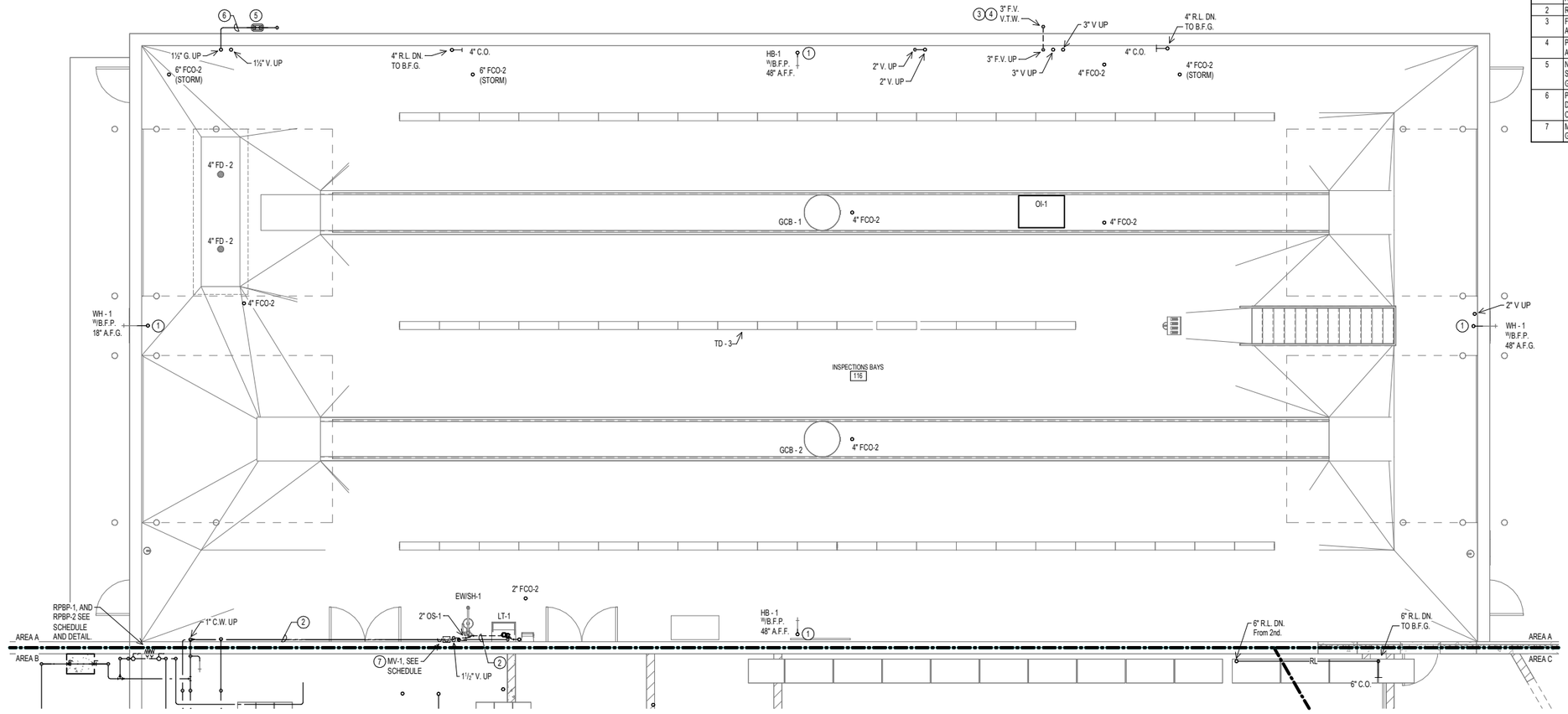
KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING MAIN LEVEL FLOOR PLAN - AREA C - BELOW FLOOR	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P203	265

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#	PLUMBING NOTES-204
1	¾" COLD WATER DOWN TO WH-1 AND HB-1, PROVIDE BALL VALVE ON VERTICAL SUPPLY AT 60" ABOVE FINISH FLOOR.
2	RUN PIPING ALONG WALL.
3	FRESH AIR WALL VENT TERMINATION FOR OIL WASTE TO BE AT A MINIMUM OF 14 FEET ABOVE FINISH GRADE.
4	PRIME AND PAINT VENT PIPING THRU WALL. COORDINATE COLOR WITH ARCHITECT AND GENERAL CONTRACTOR.
5	NEW GAS SERVICE AND GAS METER SET BY GAS UTILITIES. COORDINATE GAS SERVICE. GAS METER AND REQUIRED GAS PRESSURE ALONG WITH GAS LOAD WITH GAS UTILITIES. 2 psig, 1,948,900 btu/h GAS LOAD.
6	PRIME AND PAINT ALL EXTERIOR GAS PIPING. GAS PIPING TO BE FREE OF RUST AND DEBRIS BEFORE PRIMING. COORDINATE COLOR WITH ARCHITECT AND GENERAL CONTRACTOR.
7	MOUNT MIXING VALVE AT 48" TO 60" ABOVE FINISH FLOOR, COORDINATE WITH GENERAL CONTRACTOR TO NOT INTERFERE WITH DOOR SWING.

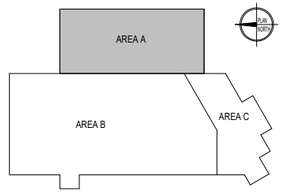


1 / P204 MAIN LEVEL FLOOR PLAN - AREA A

ABOVE FLOOR

3/32" = 1'-0"

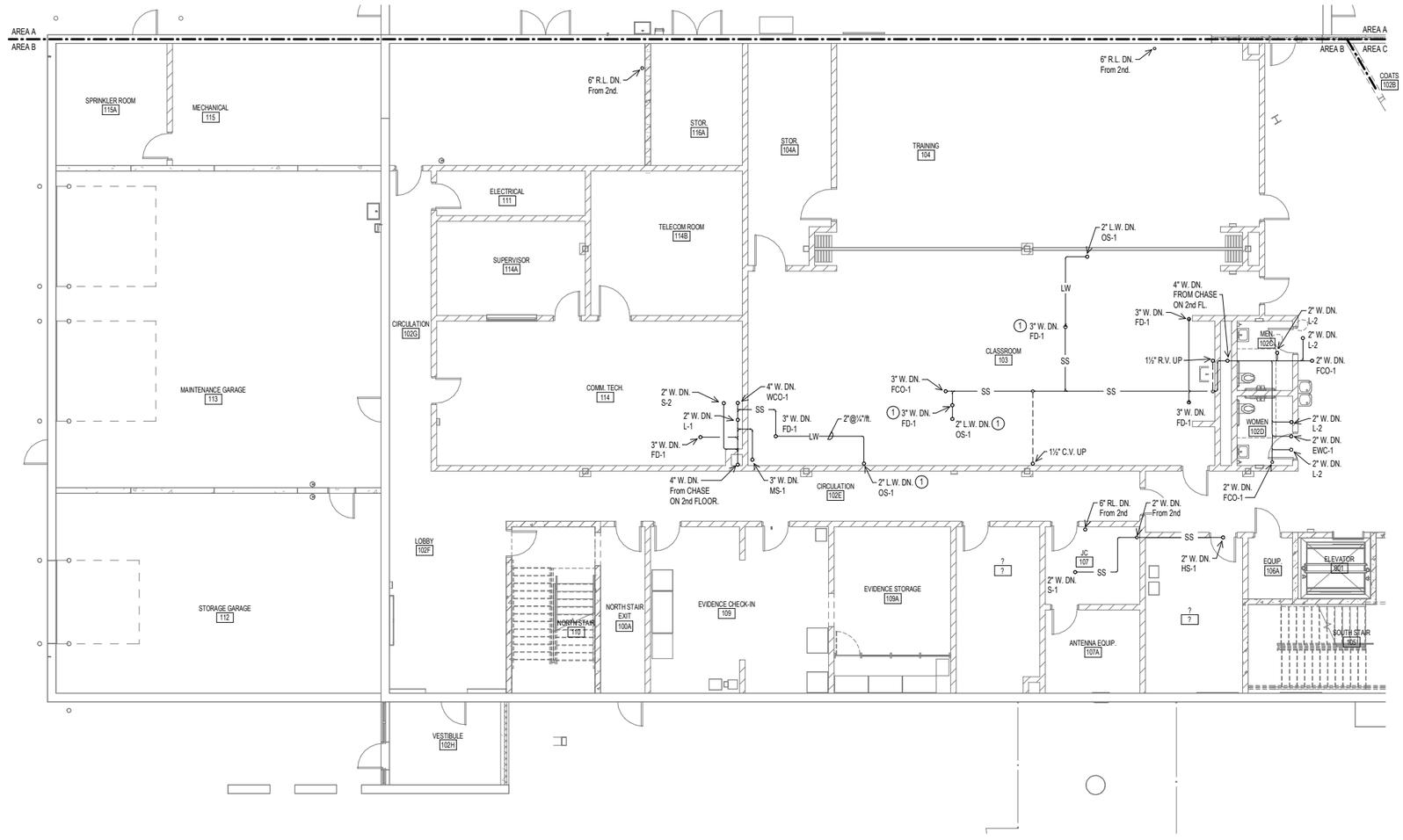
0' 1" 2'-6" 5'



KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING MAIN LEVEL FLOOR PLAN - AREA A - ABOVE FLOOR	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P204	266

#	PLUMBING NOTES-205
1	COORDINATE LOCATION OF OPEN SITE AND FLOOR DRAINS WITH MECHANICAL CONTRACTOR.

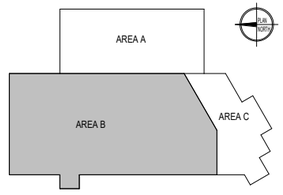


1 P205 MAIN LEVEL FLOOR PLAN - AREA B

1/16" = 1'-0"

ABOVE FLOOR - SANITARY

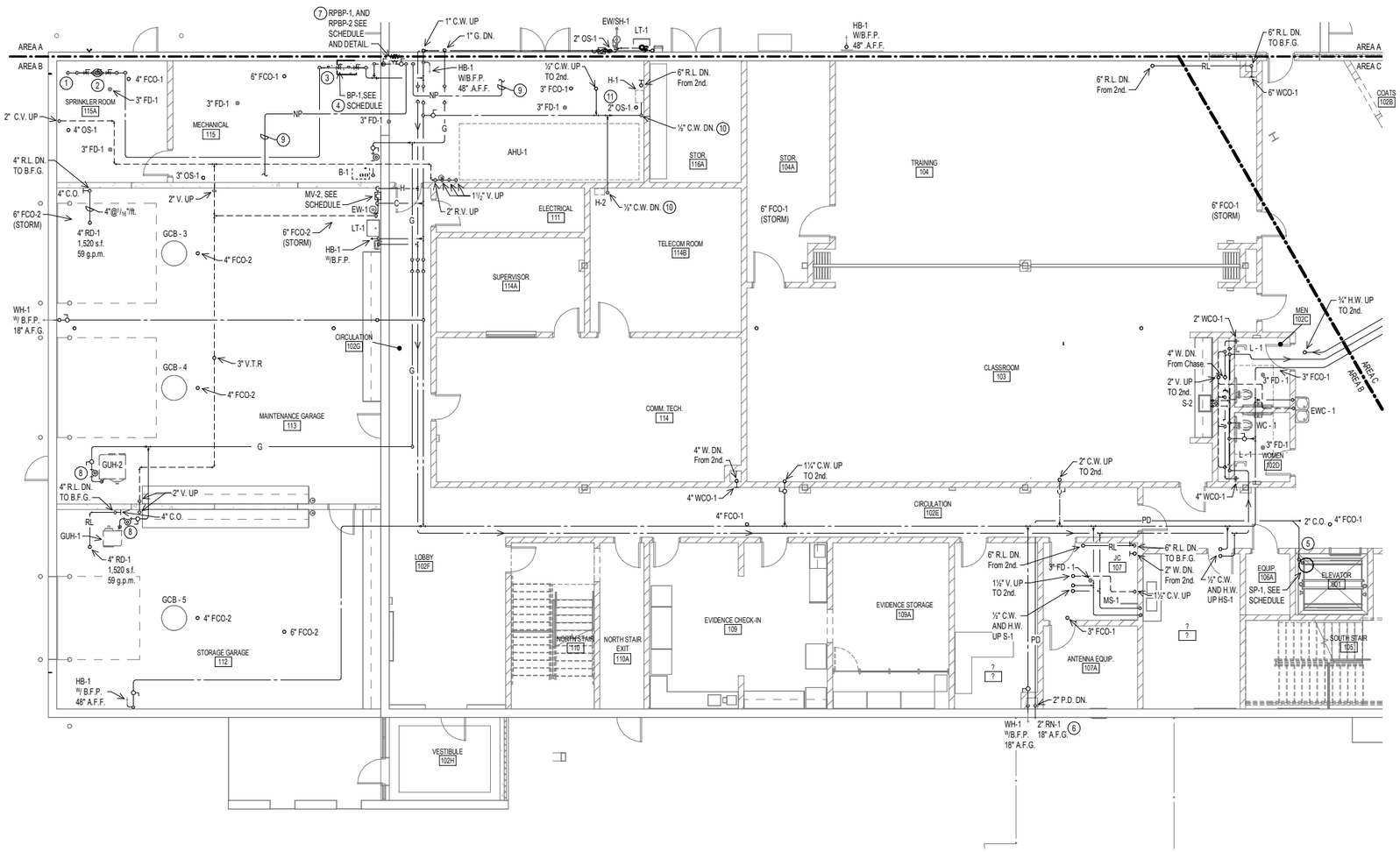
0' 2' 5' 10'



KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING MAIN LEVEL FLOOR PLAN - AREA B - ABOVE FLOOR SANITARY	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P205	

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PLUMBING NOTES-206

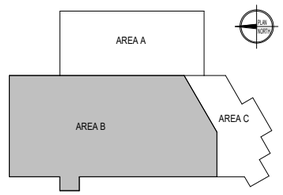
#	
1	PLUMBING CONTRACTOR TO PROVIDE A 6"x 6"x 4" TEE AT NEW COMBINATION WATER SERVICE. CONTINUATION OF 2" DOMESTIC WATER BY PLUMBING CONTRACTOR. CONTINUATION OF 6" FIRE RISER WITH DOUBLE CHECK BACKFLOW PREVENTER BY FIRE PROTECTION CONTRACTOR.
2	2" WATER METER WITH 2" BYPASS PIPING. WATER METER SUPPLIED AND INSTALLED BY CITY UTILITIES. COORDINATE WATER METER INSTALL WITH CITY UTILITIES.
3	4" HIGH CONCRETE PAD BY GENERAL CONTRACTOR. COORDINATE SIZE AND LOCATION OF CONCRETE PAD WITH GENERAL CONTRACTOR.
4	PROVIDE BYPASS WITH VALVE AT BOOSTER PUMP.
5	COORDINATE PUMP DISCHARGE PIPING WITH ELEVATOR CONTRACTOR.
6	PUMP DISCHARGE RN-1 AT 18" ABOVE FINISH GRADE. COORDINATE LOCATION WITH GENERAL CONTRACTOR. SPLASH BLOCKING IF REQUIRED BY OTHERS.
7	STACK REDUCE PRESSURE BACKFLOW PREVENTER ON WALL. PROVIDE PROPER DISTANCE BETWEEN VALVES FOR TESTING AND MAINTENANCE. INSTALL VALVES PER CODE.
8	PROVIDE 2 psig DOWN TO 7" WATER COLUMN (w.c.) GAS PRESSURE REGULATOR. INSTALL GAS REGULATOR AS PER REGULATOR AND GAS EQUIPMENT MANUFACTURER'S SPECIFICATIONS.
9	CONTINUATION OF NON-POTABLE WATER BY MECHANICAL CONTRACTOR. COORDINATE WITH MECHANICAL CONTRACTOR.
10	HUMIDIFIER HAS INTEGRATED AIR GAP FOR WATER FILL.
11	PROVIDE 2" OS-1 WITH 4" FUNNEL.

1 P206 — MAIN LEVEL FLOOR PLAN - AREA B

1/16" = 1'-0"

0' 2' 5' 10'

ABOVE FLOOR

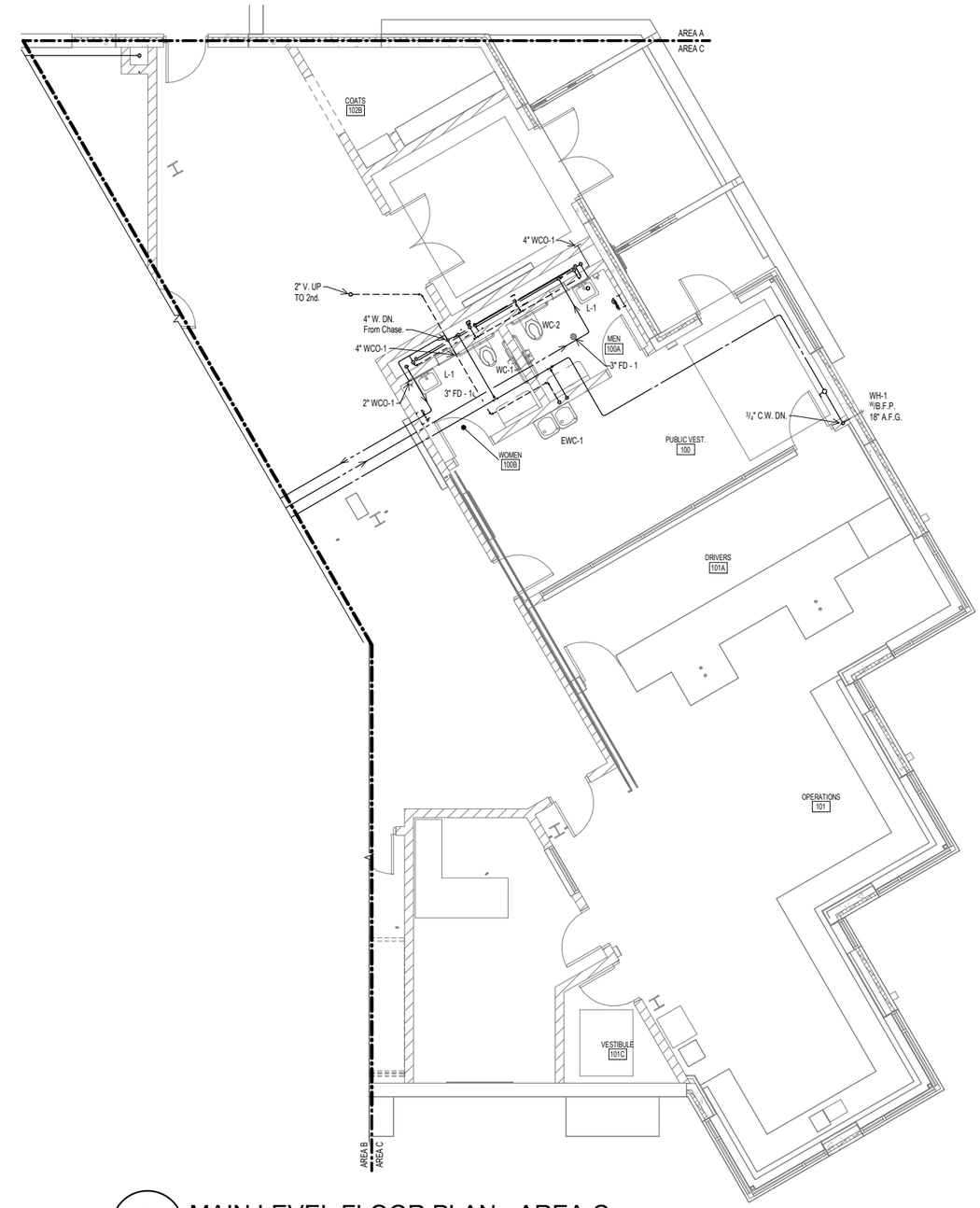


KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING MAIN LEVEL FLOOR PLAN - AREA B - ABOVE FLOOR	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P206	268

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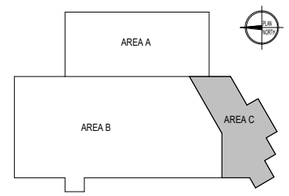
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1 / P207 MAIN LEVEL FLOOR PLAN - AREA C

3/32" = 1'-0"

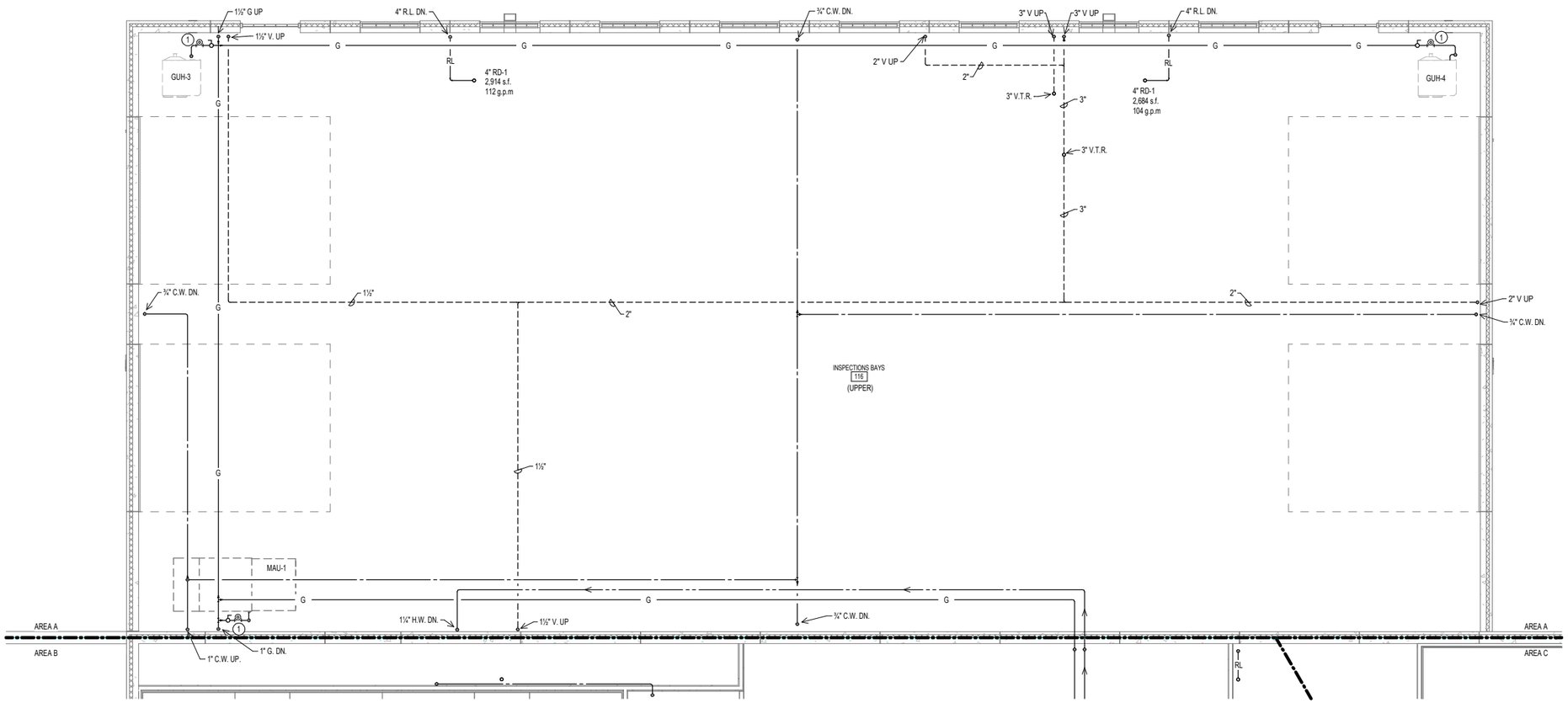
0' 1' 2'-6" 5'



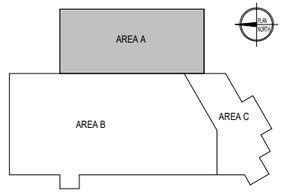
KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING MAIN LEVEL FLOOR PLAN - AREA C - ABOVE FLOOR	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P207	269

#	PLUMBING NOTES-208
1	PROVIDE 2 psig DOWN TO 7" WATER COLUMN (w.c.) GAS PRESSURE REGULATOR. INSTALL GAS REGULATOR AS PER REGULATOR AND GAS EQUIPMENT MANUFACTURERS SPECIFICATIONS.



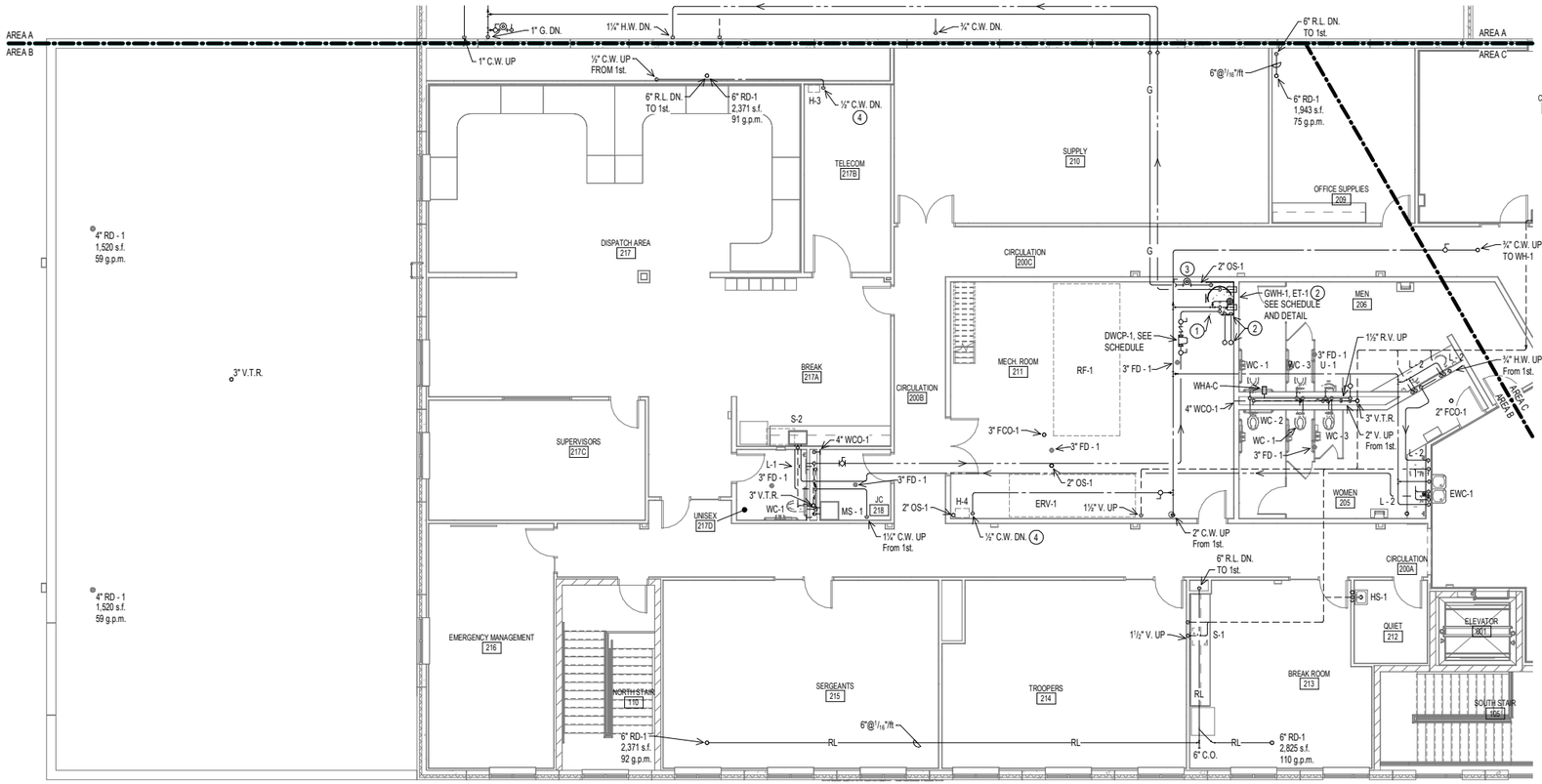
1 P208 UPPER LEVEL FLOOR PLAN - AREA A
3/32" = 1'-0"
0' 1' 2'-6" 5'



KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING UPPER LEVEL FLOOR PLAN - AREA A	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P208	270

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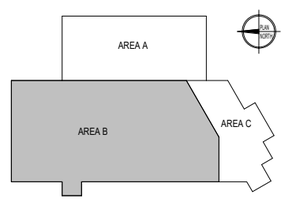


1 P209 UPPER LEVEL FLOOR PLAN - AREA B

1/16" = 1'-0"

0' 2' 5' 10'

#	PLUMBING NOTES-209
1	4" HIGH CONCRETE PAD BY GENERAL CONTRACTOR. COORDINATE SIZE AND LOCATION OF CONCRETE PAD WITH GENERAL CONTRACTOR.
2	EXTEND EXHAUST AND INTAKE VENT PIPING FROM GAS WATER HEATER THRU ROOF. PRIME AND PAINT INTAKE AND EXHAUST TERMINATIONS, COORDINATE COLOR WITH ARCHITECT.
3	PROVIDE 2 psig DOWN TO 7" WATER COLUMN (w.c.) GAS PRESSURE REGULATOR. INSTALL GAS REGULATOR AS PER REGULATOR AND GAS EQUIPMENT MANUFACTURER'S SPECIFICATIONS.
4	HUMIDIFIER HAS INTEGRATED AIR GAP FOR WATER FILL.



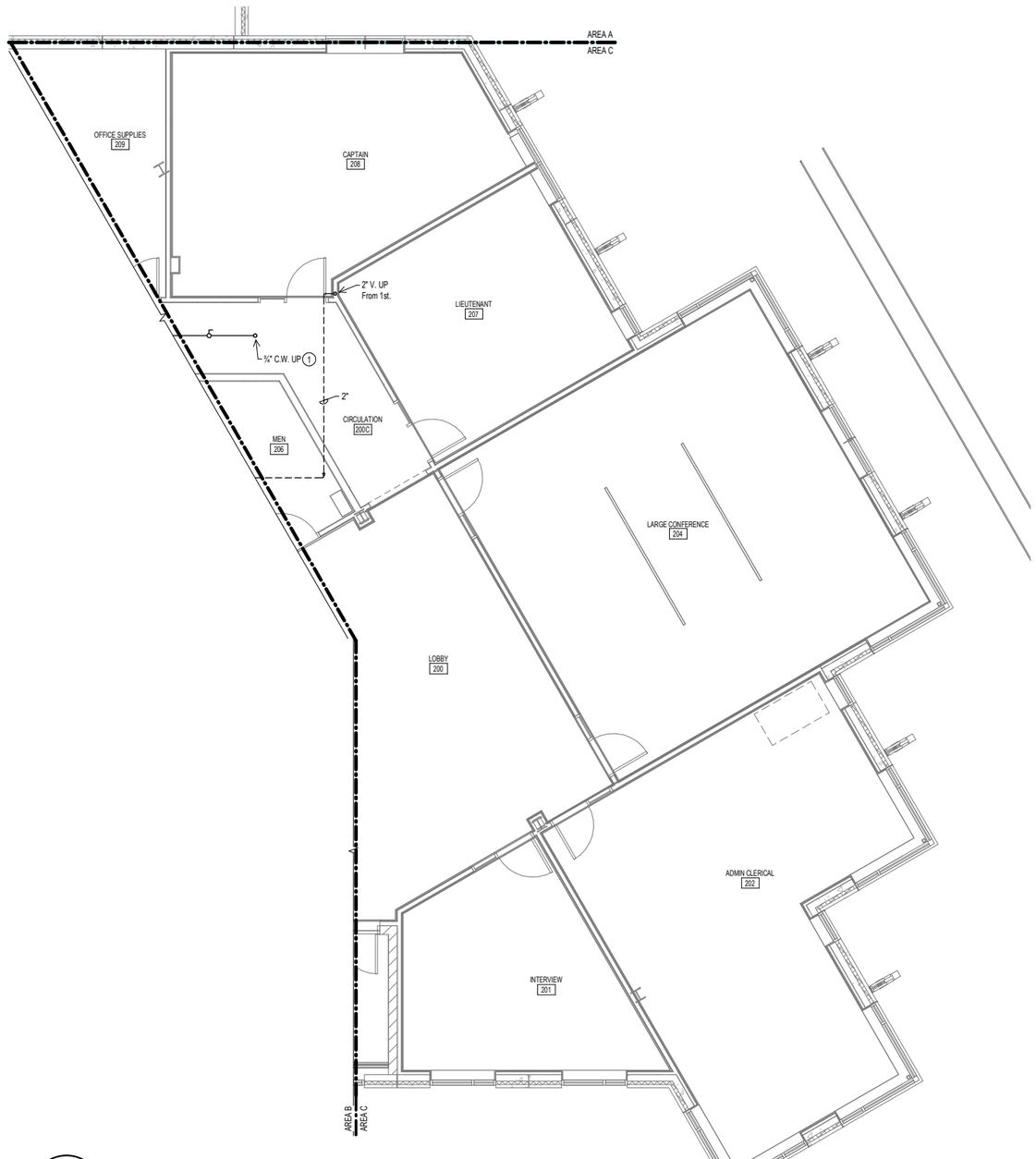
KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING UPPER LEVEL FLOOR PLAN - AREA B	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P209	271

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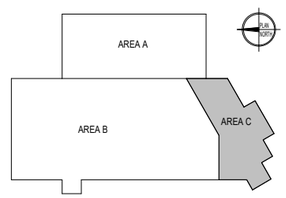
#	PLUMBING NOTES-210
1	EXTEND COLD WATER UP TO WALL HYDRANT ABOVE AREA 'B' ROOF LINE LOCATED UNDER SOFFIT OF SLOPPED ROOF OF AREA 'C'



1 P210 UPPER LEVEL FLOOR PLAN - AREA C

3/32" = 1'-0"

0' 1' 2'-6" 5'



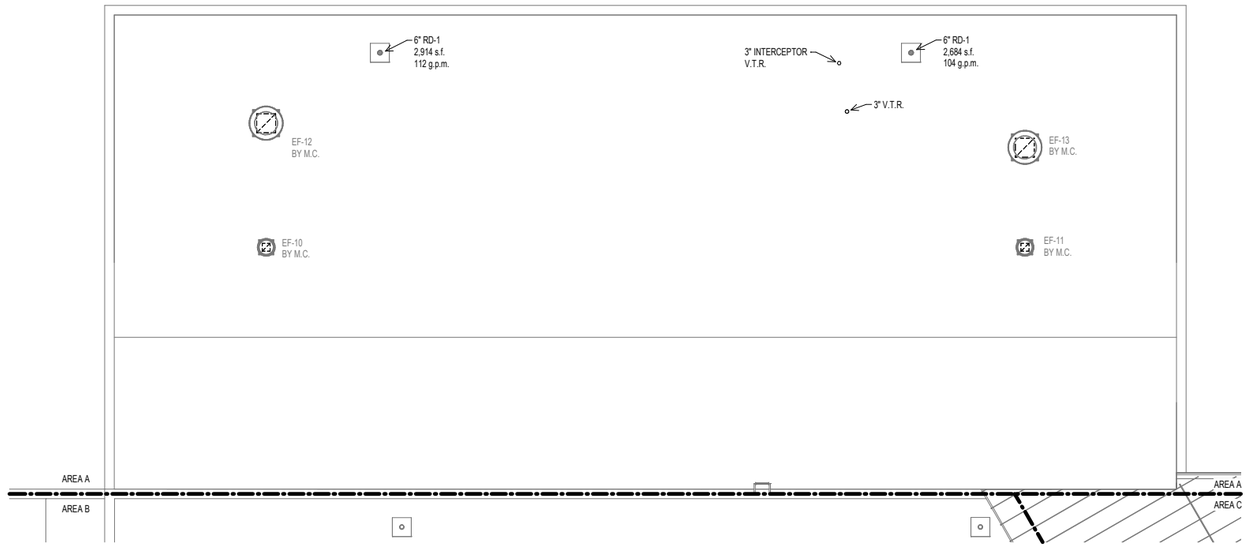
KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING UPPER LEVEL FLOOR PLAN - AERA C	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P210	272

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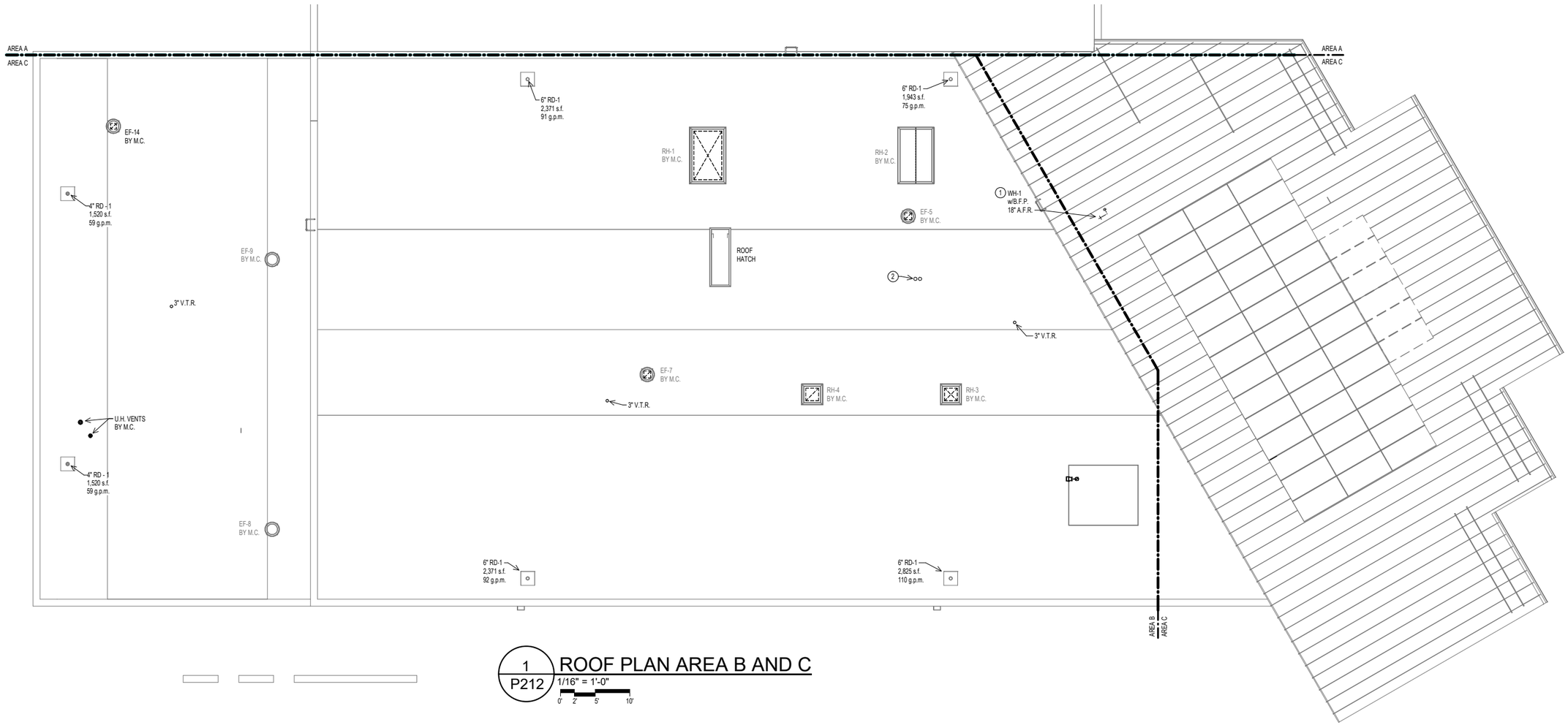
1 / P211 ROOF PLAN AREA A

1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING ROOF PLAN AREA A	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P211	273

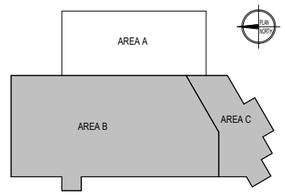
#	PLUMBING NOTES-212
1	WALL HYDRANT LOCATED UNDER SOFFIT OF SLOPED ROOF, FOR ACCESS FROM FLAT ROOF OF AREA - B.
2	EXTEND EXHAUST AND INTAKE VENT PIPING FROM GAS WATER HEATER THRU ROOF. INSTALL EXHAUST AND INTAKE VENT THRU ROOF AS PER MANUFACTURES SPECIFICATIONS.



1 / P212 ROOF PLAN AREA B AND C

1/16" = 1'-0"

0' 2' 5' 10'



KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			PLUMBING ROOF PLAN AREA B & C	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P212	274

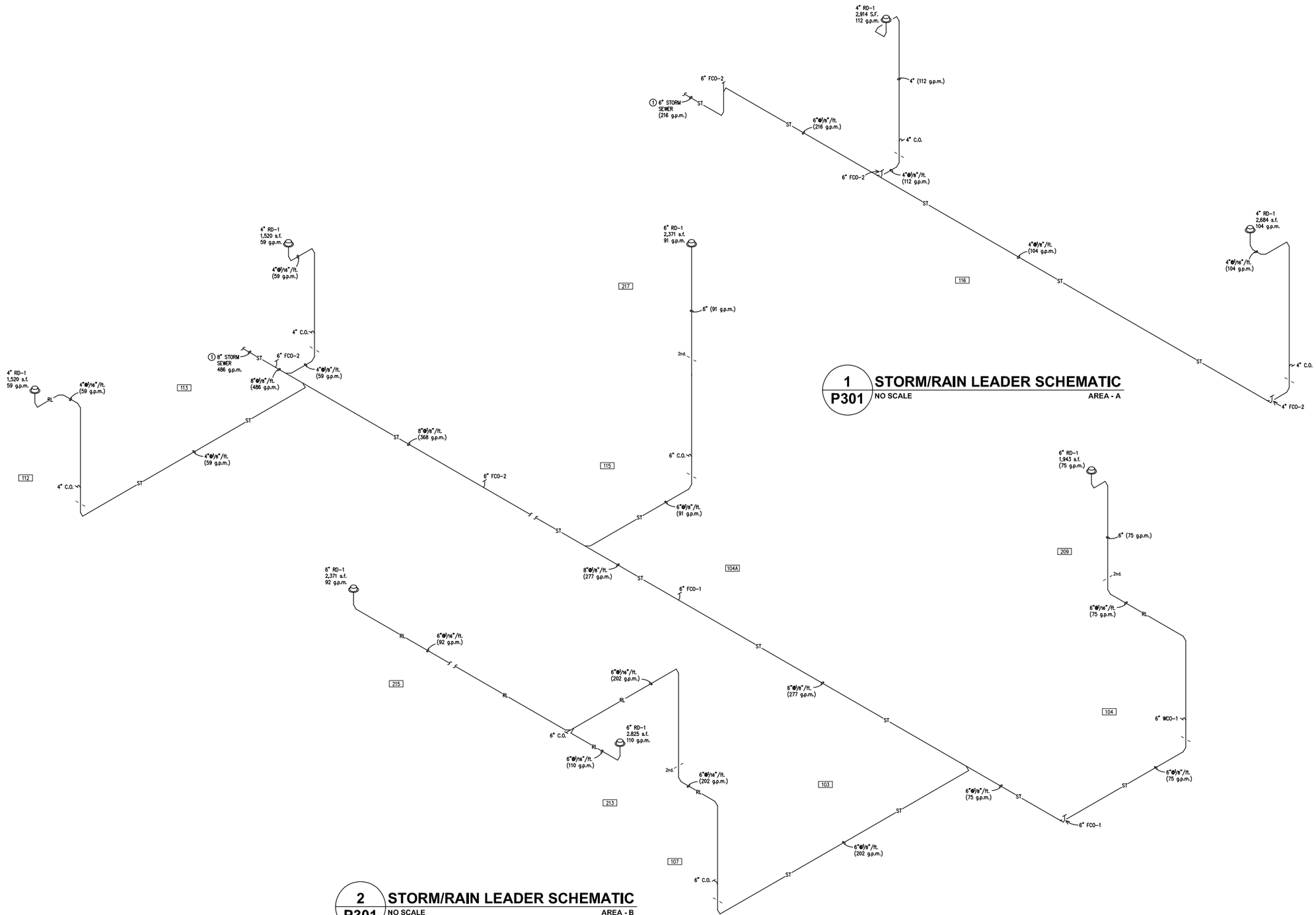
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PLOT DATE: 4/25/2024 11:23:40 AM

2

PLUMBING NOTES:

1. CONTINUATION OF STORM SEWER PIPING BY CIVIL CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE PIPE SIZE AND INVERT ELEVATION AND LOCATION WITH CIVIL CONTRACTOR.



1 / P301 STORM/RAIN LEADER SCHEMATIC
NO SCALE — AREA - A

2 / P301 STORM/RAIN LEADER SCHEMATIC
NO SCALE — AREA - B

PLANS PREPARED BY: APEX ENGINEERING, INC., EAU CLAIRE, WI			PLUMBING STORM/RAIN LEADER SCHEMATICS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-73	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO.: P301	275

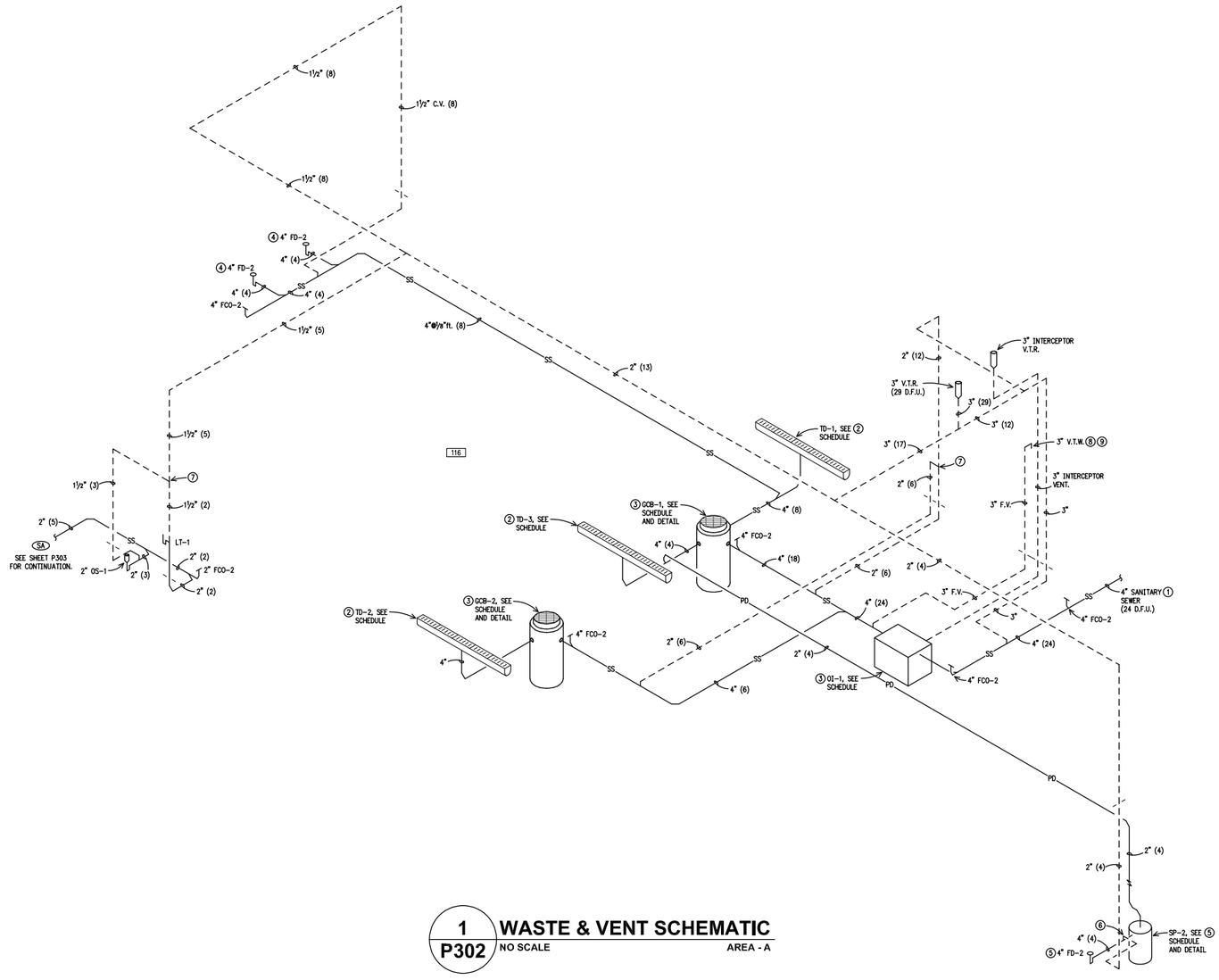
21107 p301 - p308.dwg

PLOT DATE: 4/25/2024 11:24 AM

2

PLUMBING NOTES:

1. CONTINUATION OF SANITARY SEWER PIPING BY CIVIL CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE PIPE SIZE AND INVERT ELEVATION AND LOCATION WITH CIVIL CONTRACTOR.
2. INSTALL TRENCH DRAIN SYSTEM AS PER MANUFACTURER SPECIFICATIONS. VERIFY PROPER FITTING OF TRENCH DRAIN GRATES AFTER INSTALLATION OF TRENCH CHANNELS BEFORE CONCRETE POUR.
3. INSTALL GARAGE CATCH BASIN AND OIL INTERCEPTOR AT INSPECTION TRENCH FLOOR LEVEL.
4. INSTALL FLOOR DRAINS IN BOTTOM OF BRAKE CHECK PIT. COORDINATE LOCATION OF FLOOR DRAINS WITH BRAKE CHECK SUPPLIER/INSTALLATION CONTRACTOR.
5. FLOOR DRAIN AND SUMP PUMP AT FLOOR OF TUNNEL TO INSPECTION TRENCH.
6. VENT CONNECTION TO WASTE PIPE TO BE WITHIN 12' FROM SUMP PUMP AS PER CODE.
7. CONNECTION OF VENT PIPING TO BE AT A MINIMUM OF 38" ABOVE FINISH FLOOR OR AT A MINIMUM OF 2" HIGHER THAN HIGHEST FLOOD RIM BEING SERVED BY THE VENT SYSTEM.
8. INSTALL VENT THRU WALL AT A 14'-0" ABOVE FINISH FLOOR. INSTALL VENT THRU WALL AS PER CODE. PRIME AND PAINT VENT THRU WALL, COORDINATE COLOR WITH ARCHITECT AND GENERAL CONTRACTOR.
9. PRIME AND PAINT VENT THRU WALL. COORDINATE COLOR WITH ARCHITECT AND GENERAL CONTRACTOR.

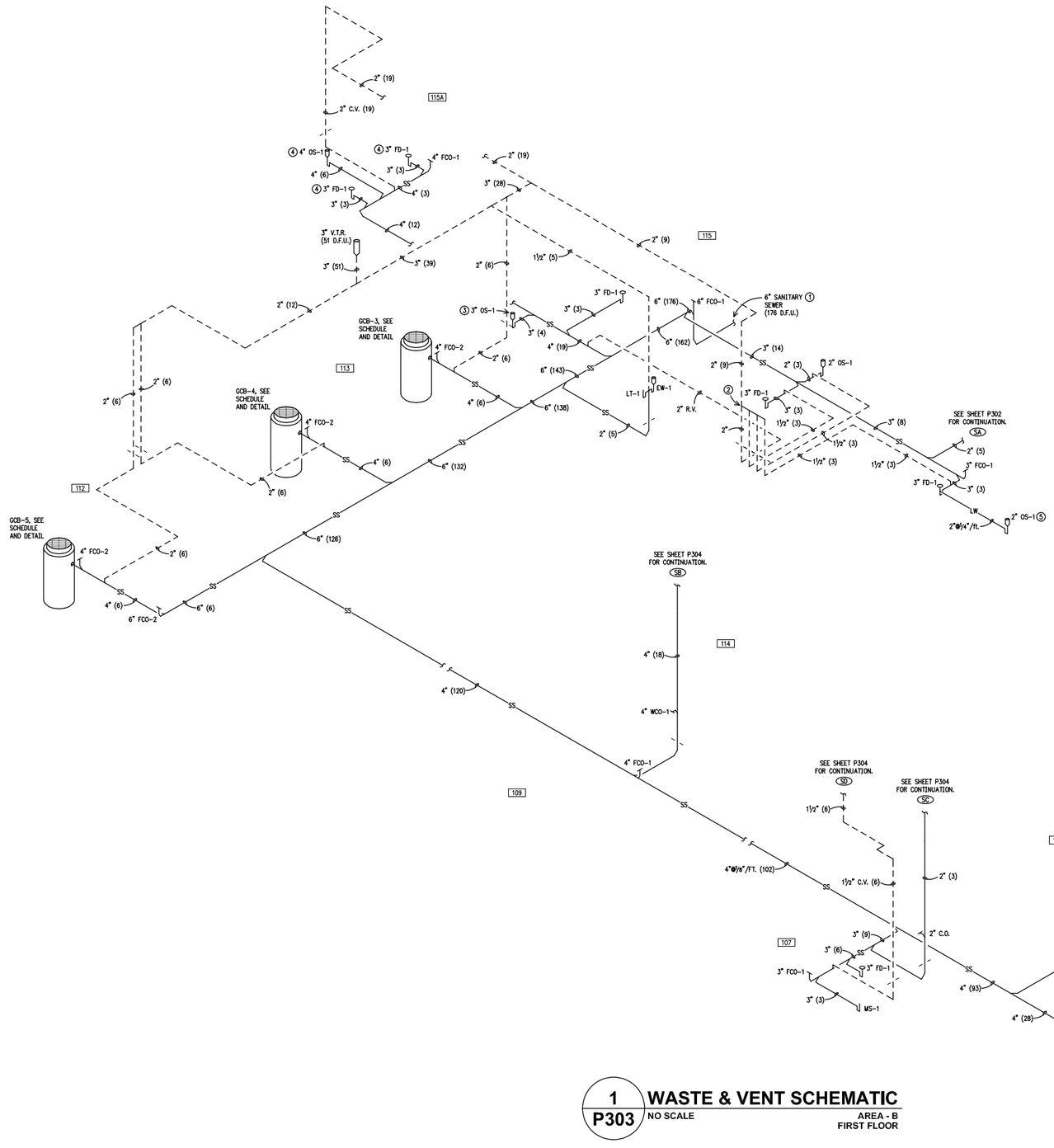


1 / P302 WASTE & VENT SCHEMATIC
NO SCALE — AREA - A

PLANS PREPARED BY: APEX ENGINEERING, INC., EAU CLAIRE, WI			PLUMBING WASTE AND VENT SCHEMATIC - AREA A	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-73	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO: P302	276

21107 p302 - P303 - p304.dwg

PLOT DATE: 4/25/2024 11:25 AM



1 P303 **WASTE & VENT SCHEMATIC**
NO SCALE
AREA - B
FIRST FLOOR

2 P303 **WASTE & VENT SCHEMATIC**
NO SCALE
AREA - C

PLUMBING NOTES:

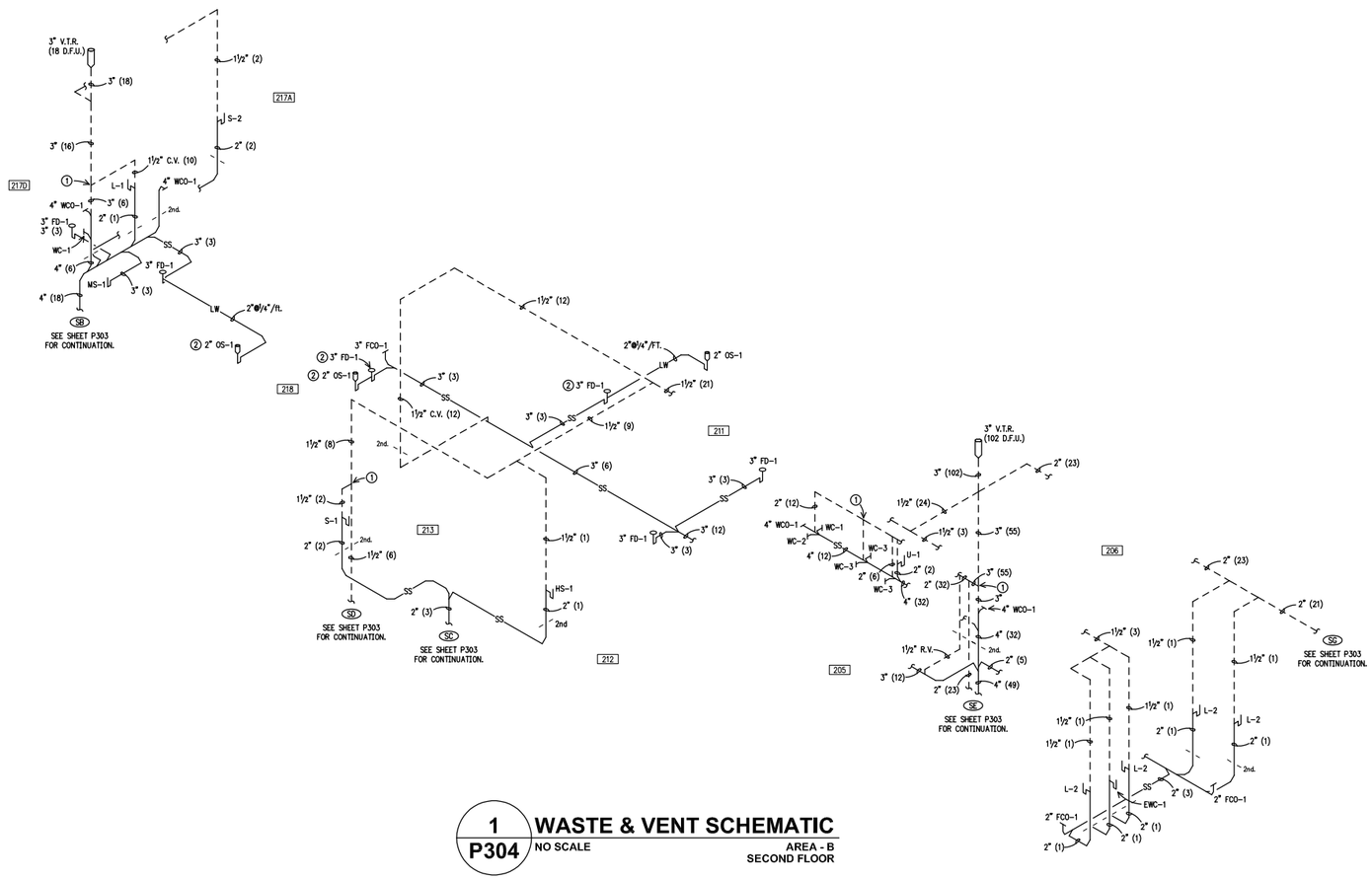
1. CONTINUATION OF SANITARY SEWER PIPING BY CIVIL CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE PIPE SIZE AND INVERT ELEVATION AND LOCATION WITH CIVIL CONTRACTOR.
2. CONNECTION OF VENT PIPING TO BE AT A MINIMUM OF 38" ABOVE FINISH FLOOR OR AT A MINIMUM OF 2" HIGHER THAN HIGHEST FLOOD RIM BEING SERVED BY THE VENT SYSTEM.
3. COORDINATE LOCATION OF OPEN SITE DRAIN WITH MECHANICAL CONTRACTOR.
4. COORDINATE LOCATION OF OPEN SITE AND FLOOR DRAINS WITH FIRE PROTECTION CONTRACTOR.
5. PROVIDE 2" OS-1 WITH 4" FUNNEL.

PLANS PREPARED BY: APEX ENGINEERING, INC., EAU CLAIRE, WI			PLUMBING WASTE AND VENT SCHEMATIC - FIRST FLOOR - AREA B & C	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-73	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P303	277

2

PLUMBING NOTES:

1. CONNECTION OF VENT PIPING TO BE AT A MINIMUM OF 38" ABOVE FINISH FLOOR OR AT A MINIMUM OF 2" HIGHER THAN HIGHEST FLOOD RIM BEING SERVED BY THE VENT SYSTEM.
2. COORDINATE LOCATION OF OPEN SITE AND FLOOR DRAIN WITH MECHANICAL CONTRACTOR.



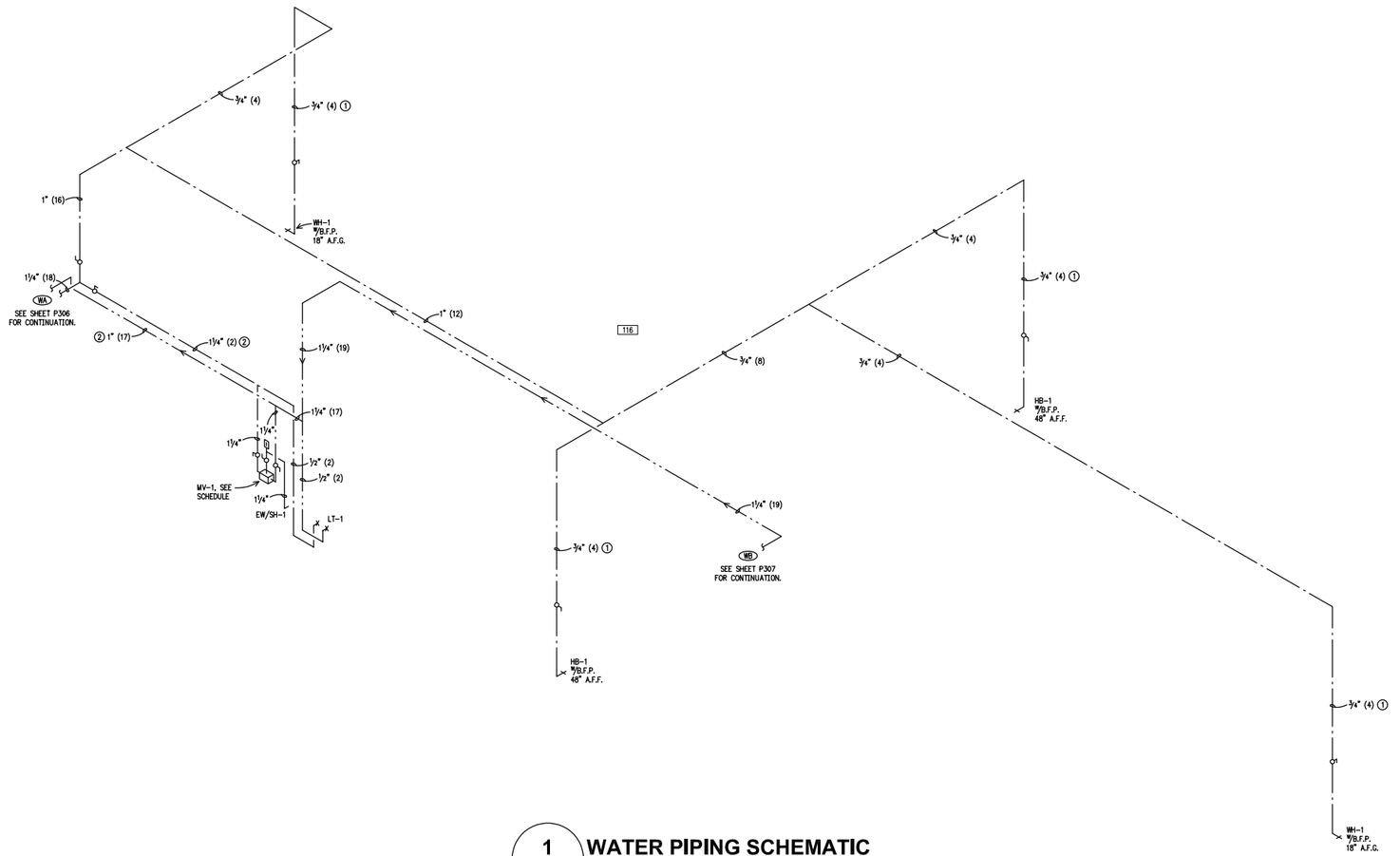
1 / P304 WASTE & VENT SCHEMATIC
NO SCALE
AREA - B
SECOND FLOOR

PLANS PREPARED BY: APEX ENGINEERING, INC., EAU CLAIRE, WI			PLUMBING WASTE AND VENT SCHEMATIC - SECOND FLOOR - AREA B	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-73	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO: P304	278

2

PLUMBING NOTES:

1. ¾" COLD WATER DOWN TO WH-1 AND HB-1, PROVIDE BALL VALVE ON VERTICAL SUPPLY AT 60" ABOVE FINISH FLOOR.
2. RUN PIPING ALONG WALL.



1 / P305 WATER PIPING SCHEMATIC
NO SCALE — AREA - A

WATER PIPE SIZING CHART

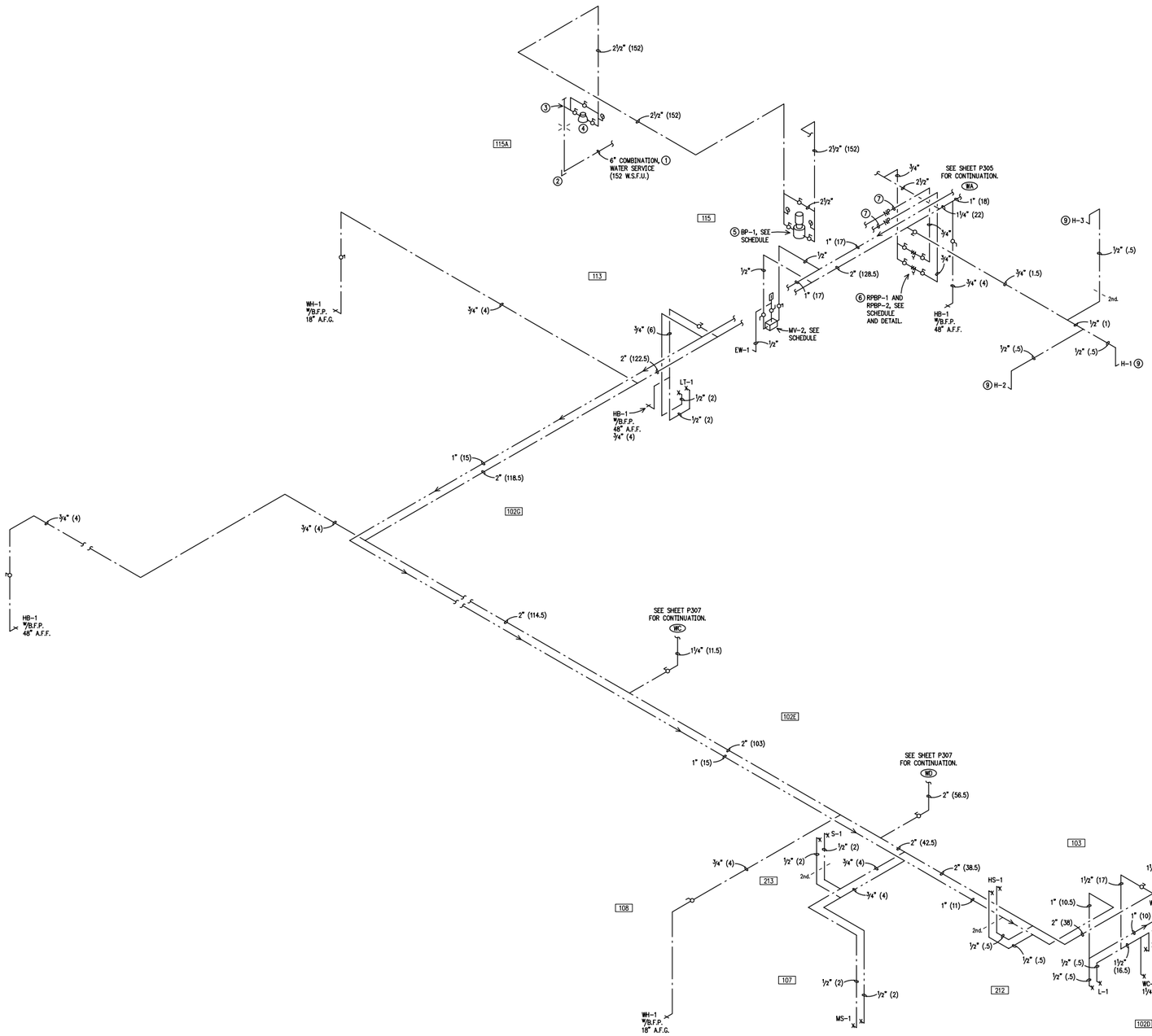
PIPE MATERIAL	WATER SUPPLY FIXTURE UNITES PER PIPE SIZE FOR 'A' VALUE = 8															
	1/2"		3/4"		1"		1-1/4"		1-1/2"		2"		2-1/2"		3"		4"	
	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.
TYPE 'L' COPPER **	–	3	–	10.5	–	26.5	15	58	37	107	136	260	356	469	698	752	–	–
	–		–		–		–		–		–		119 GPM		169 GPM		–	
STAINLESS STEEL	–	4	–	10	–	23	17.5	63	46	124	163	293	358	471	809	837	–	–
	–		–		–		–		–		83 GPM		119 GPM		184 GPM		–	
TYPE PEXa	–	2	–	6.5	–	15	–	28	13.5	55	53	135	–	–	–	–	–	–
	–		–		–		–		–		51 GPM		–		–		–	
	F.V. = FLUSH VALVE WATER CLOSETS, F.T. = FLUSH TANK WATER CLOSET AND ALL OTHER FIXTURES															

** SCHEMATICS ARE SIZED BASED ON TYPE 'L' COPPER FOR PIPING ABOVE FINISH FLOOR. ANY ABOVE FINISH FLOOR PIPING BEING INSTALLED USING STAINLESS STEEL OR PEXa PIPING SHALL BE SIZED FOR THE PIPING W.S.F.U. PER SCHEDULE ABOVE.

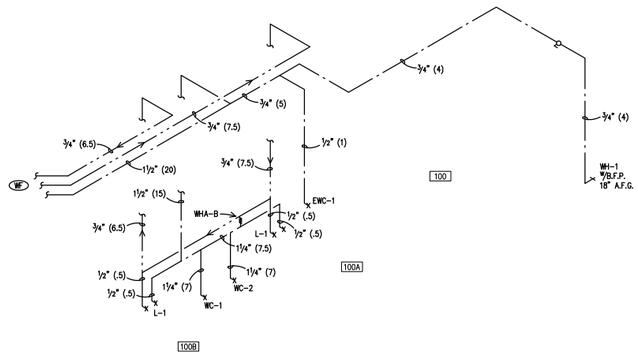
PLANS PREPARED BY: APEX ENGINEERING, INC., EAU CLAIRE, WI			PLUMBING WATER PIPING SCHEMATIC - AREA A	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-73	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO.: P305	279

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2



1 P306 **WATER PIPING SCHEMATIC**
NO SCALE
AREA - B
FIRST FLOOR



2 P306 **WATER PIPING SCHEMATIC**
NO SCALE
AREA - C

WATER PIPE SIZING CHART

PIPE MATERIAL	WATER SUPPLY FIXTURE UNITES PER PIPE SIZE FOR 'A' VALUE = 8															
	1/2"		3/4"		1"		1-1/4"		1-1/2"		2"		2-1/2"		3"		4"	
	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.
TYPE 'L' COPPER **	–	3	–	10.5	–	26.5	15	58	37	107	136	260	356	469	698	752	–	–
	–		–		–		–		–		–		119 GPM		169 GPM		–	
STAINLESS STEEL	–	4	–	10	–	23	17.5	63	46	124	163	293	358	471	809	837	–	–
	–		–		–		–		–		83 GPM		119 GPM		184 GPM		–	
TYPE PEXa	–	2	–	6.5	–	15	–	28	13.5	55	53	135	–	–	–	–	–	–
	–		–		–		–		–		51 GPM		–		–		–	
	F.V. = FLUSH VALVE WATER CLOSETS, F.T. = FLUSH TANK WATER CLOSET AND ALL OTHER FIXTURES																	

** SCHEMATICS ARE SIZED BASED ON TYPE 'L' COPPER FOR PIPING ABOVE FINISH FLOOR. ANY ABOVE FINISH FLOOR PIPING BEING INSTALLED USING STAINLESS STEEL OR PEXa PIPING SHALL BE SIZED FOR THE PIPING W.S.F.U. PER SCHEDULE ABOVE.

PLUMBING NOTES:

1. CONTINUATION OF COMBINATION WATER SERVICE PIPING BY CIVIL CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE PIPE SIZE AND INVERT ELEVATION AND LOCATION WITH CIVIL CONTRACTOR. PLUMBING CONTRACTOR IS REQUIRED TO INSTALL COMBINATION WATER SERVICE FROM A POINT OF 18" ABOVE FINISH FLOOR TO 5 FEET BEYOND BUILDING FOUNDATION. COORDINATE NEW WATER SERVICE LOCATION WITH CIVIL AND FIRE PROTECTION CONTRACTOR.
2. PROVIDE THRUST BLOCK AS PER NFPA-24
3. PLUMBING CONTRACTOR TO PROVIDE A 6"x 6"x 4" TEE AT NEW COMBINATION WATER SERVICE. CONTINUATION OF 2" DOMESTIC WATER BY PLUMBING CONTRACTOR. CONTINUATION OF 6" FIRE RISER WITH DOUBLE CHECK BACKFLOW PREVENTER BY FIRE PROTECTION CONTRACTOR.
4. 2" WATER METER WITH 2" BYPASS PIPING. WATER METER SUPPLIED BY CITY UTILITIES. COORDINATE WATER METER INSTALL WITH CITY UTILITIES.
5. PROVIDE BYPASS WITH VALVE AT BOOSTER PUMP.
6. STACK REDUCE PRESSURE BACKFLOW PREVENTER ON WALL. PROVIDE PROPER DISTANCE BETWEEN VALVES FOR TESTING AND MAINTENANCE. INSTALL VALVES PER CODE.
7. CONTINUATION OF NON-POTABLE WATER BY MECHANICAL CONTRACTOR COORDINATE WITH MECHANICAL CONTRACTOR.
8. EXTEND COLD WATER UP TO WALL HYDRANT SERVING AREA 'B' ROOF. WALL HYDRANT LOCATED UNDER SOFFIT OF SLOPPED ROOF OF AREA 'C'.
9. HUMIDIFIER HAS INTEGRATED AIR GAP FOR WATER FILL.

PLANS PREPARED BY: APEX ENGINEERING, INC., EAU CLAIRE, WI			PLUMBING WATER PIPING SCHEMATIC - FIRST FLOOR - AREA B & C	ISSUE DATE: 5/1/24
PROJECT NO: 1130-44-73	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P306

ISSUE FOR: FINAL

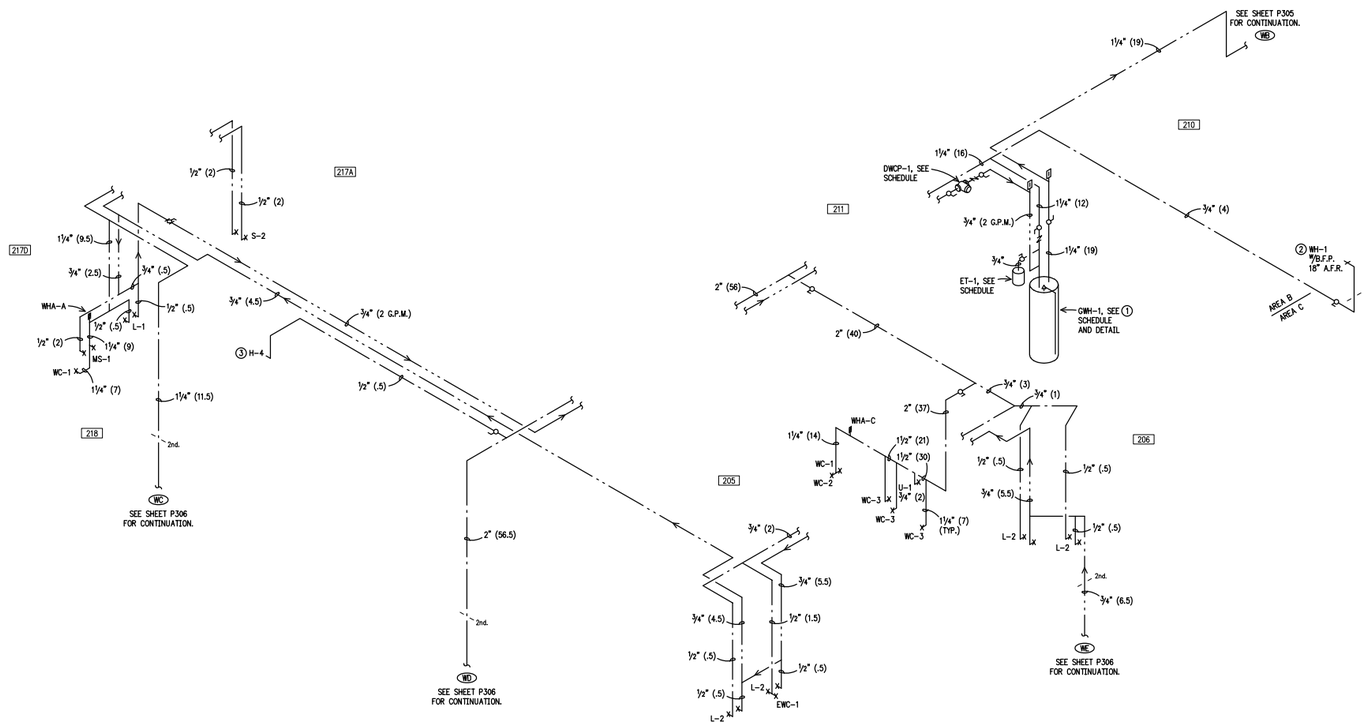
21107 p305 - p306 - p307.dwg

PLOT DATE: 4/25/2024 11:27 AM

2

PLUMBING NOTES:

1. EXTEND EXHAUST AND INTAKE VENT PIPING FROM GAS WATER HEATER THRU ROOF.
2. EXTEND COLD WATER UP TO WALL HYDRANT SERVING AREA 'B' ROOF. WALL HYDRANT LOCATED UNDER SOFFIT OF SLOPPED ROOF OF AREA 'C'.
3. HUMIDIFIER HAS INTEGRATED AIR GAP FOR WATER FILL.



1 P307 WATER PIPING SCHEMATIC
NO SCALE
AREA - B
SECOND FLOOR

WATER PIPE SIZING CHART

PIPE MATERIAL	WATER SUPPLY FIXTURE UNITES PER PIPE SIZE FOR 'A' VALUE = 8															
	1/2"		3/4"		1"		1-1/4"		1-1/2"		2"		2-1/2"		3"		4"	
	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.	F.V.	F.T.
TYPE 'L' COPPER **	–	3	–	10.5	–	26.5	15	58	37	107	136	260	356	469	698	752	–	–
	–		–		–		–		–		–		119 GPM		169 GPM		–	
STAINLESS STEEL	–	4	–	10	–	23	17.5	63	46	124	163	293	358	471	809	837	–	–
	–		–		–		–		–		83 GPM		119 GPM		184 GPM		–	
TYPE PEXa	–	2	–	6.5	–	15	–	28	13.5	55	53	135	–	–	–	–	–	–
	–		–		–		–		–		51 GPM		–		–		–	
	F.V. = FLUSH VALVE WATER CLOSETS, F.T. = FLUSH TANK WATER CLOSET AND ALL OTHER FIXTURES															

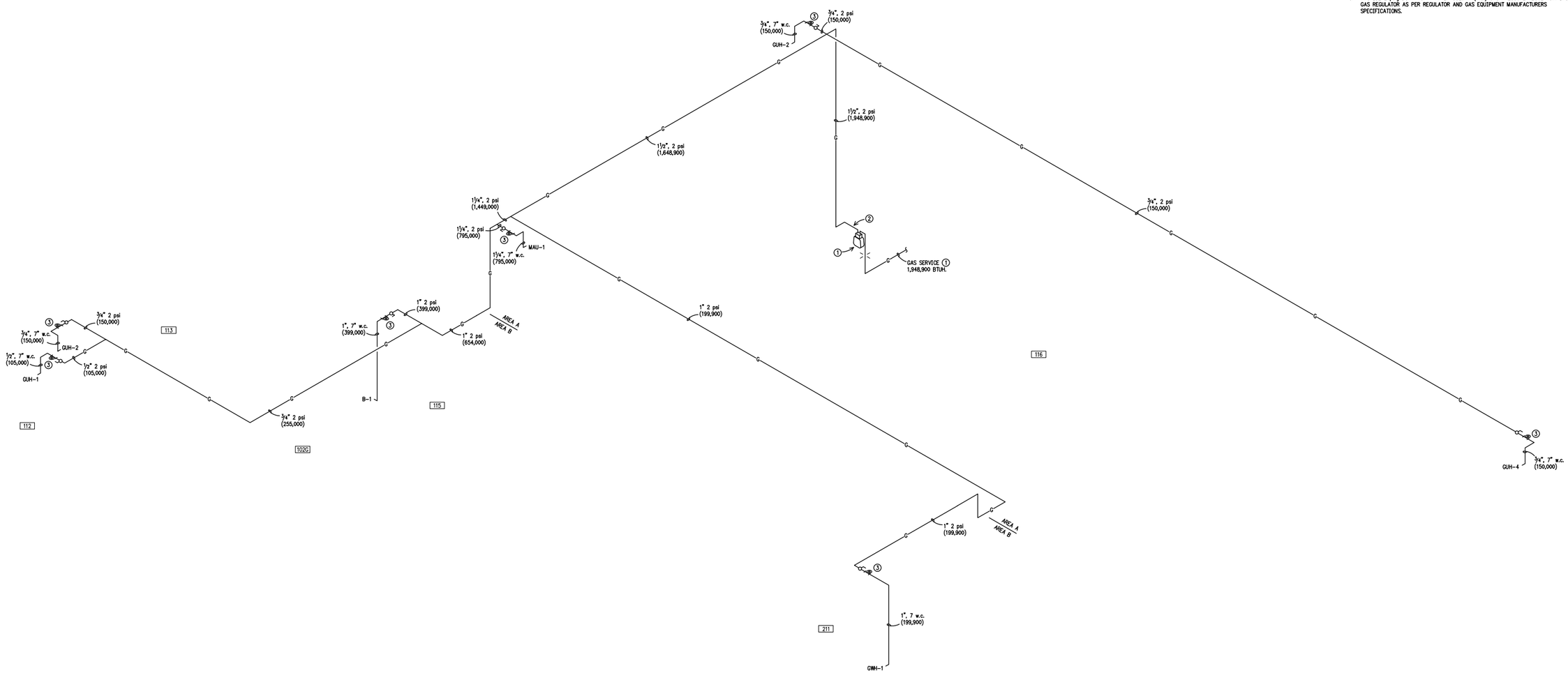
** SCHEMATICS ARE SIZED BASED ON TYPE 'L' COPPER FOR PIPING ABOVE FINISH FLOOR. ANY ABOVE FINISH FLOOR PIPING BEING INSTALLED USING STAINLESS STEEL OR PEXa PIPING SHALL BE SIZED FOR THE PIPING W.S.F.U. PER SCHEDULE ABOVE.

PLANS PREPARED BY: APEX ENGINEERING, INC., EAU CLAIRE, WI			PLUMBING WATER PIPING SCHEMATIC - SECOND FLOOR - AREA B	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-73	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P307	281

2

PLUMBING NOTES:

1. NEW GAS SERVICE AND GAS METER BY GAS UTILITIES. COORDINATE GAS SERVICE INSTALL AND GAS LOAD OF 1,948,900 BTUH WITH GAS UTILITIES.
2. PRIME AND PAINT ALL EXTERIOR GAS PIPING. GAS PIPING TO BE FREE OF RUST AND DEBRIS BEFORE PRIMING. COORDINATE COLOR WITH ARCHITECT AND GENERAL CONTRACTOR.
3. PROVIDE 2 psig DOWN TO 7" WATER COLUMN (w.c.) GAS PRESSURE REGULATOR. INSTALL GAS REGULATOR AS PER REGULATOR AND GAS EQUIPMENT MANUFACTURERS SPECIFICATIONS.



1 / P308 GAS PIPING SCHEMATIC
NO SCALE — AREA - A AND B

PLANS PREPARED BY: APEX ENGINEERING, INC., EAU CLAIRE, WI			PLUMBING GAS PIPING SCHEMATIC	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-73	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO: P308	282

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WATER CALCULATIONS

INFORMATION REQUIRED TO CALCULATE WATER SERVICE SIZE

1. DEMAND OF BUILDING IN GALLONS PER MINUTE. WSFU's 152 = (GPM) 81
2. DIFFERENCE IN ELEVATION FROM MAIN OR EXTERNAL PRESSURE TANK TO BUILDING CONTROL VALVE. (FEET) 22
3. SIZE OF WATER METER (WHEN METER IS REQUIRED) (INCHES) 2
4. DEVELOPED LENGTH FROM MAIN OR EXTERNAL PRESSURE TANK TO BUILDING CONTROL VALVE. (FEET) 400
5. LOW PRESSURE AT X MAIN IN STREET __INTERNAL PRESSURE TANK __AFTER P.R.V. (PSI) 70

CALCULATE WATER SERVICE PRESSURE LOSS

6. LOW PRESSURE AT MAIN IN STREET OR EXTERNAL PRESSURE TANK. (VALUE OF # 5 ABOVE) (PSI) 70
7. DETERMINE PRESSURE LOSS DUE TO FRICTION IN 8 INCH DIAMETER WATER SERVICE. – (WATER SERVICE PIPING MATERIAL IS DUCTILE IRON) SUBTRACT VALUE OF "7" –; SUBTOTAL 70
8. DETERMINE PRESSURE LOSS DUE TO ELEVATION, – (MULTIPLY THE VALUE OF # 2 ABOVE BY .434) SUBTRACT VALUE OF "8" 9.5
9. AVAILABLE PRESSURE AFTER THE BLDG. CONTROL VALVE. (ENTER IN "B" BELOW) SUBTOTAL 60.5

CALCULATE THE PRESSURE AVAILABLE FOR UNIFORM LOSS (VALUE OF "A")

B. AVAILABLE PRESSURE AFTER THE BLDG. CONTROL VALVE. (FROM "9" ABOVE) VALUE OF "B" 60.5

C. PRESSURE LOSS OF WATER METER (WHEN METER IS REQUIRED) SUBTRACT VALUE OF "C" 4.7; SUBTOTAL 55.8

D. PRESSURE AT CONTROLLING FIXTURE. (CONTROLLING FIXTURE IS WATER CLOSET) SUBTRACT VALUE OF "D" 25; SUBTOTAL 30.8

E. DIFFERENCE IN ELEVATION BETWEEN THE BUILDING CONTROL VALVE AND THE CONTROLLING FIXTURE IN FEET 17 x .434 PS/FT. – SUBTRACT VALUE OF "E" 7.4; SUBTOTAL 23.4

F. PRESSURE LOSS DUE TO WATER TREATMENT DEVICES, INSTANTANEOUS WATER HEATERS AND BACKFLOW PREVENTS WHICH SERVE THE CONTROLLING FIXTURE. (PRESSURE LOSS DUE TO –) SUBTRACT VALUE OF "F" –; SUBTOTAL 23.4

G. DEVELOPED LENGTH FROM BUILDING CONTROL VALVE TO CONTROLLING FIXTURE IN FEET 190 x 1.5 DIVIDE BY VALUE OF "G" 285; SUBTOTAL .082

(WATER DISTRIBUTION PIPING MATERIAL IS TYPE 'L' COPPER) MULTIPLY BY 100

A. PRESSURE AVAILABLE FOR UNIFORM LOSS – "A" = 8.2

GAS FIRED WATER HEATER SCHEDULE

(OR EQUAL)

UNIT NO.	ROOM NO.	STORAGE CAPACITY	RECOVERY	MAX. L.W.T.	FUEL TYPE	BTU INPUT PER HOUR	T.P.R. VALVE	BASIS OF DESIGN	REMARKS
GWH-1	211	100 GALLON	294 GPH at 80° Rise	120° F	NATURAL	199,900	FURNISHED	A.O. SMITH BTH-199	① ② ③ ④

① INSTALL INTAKE AND EXHAUST PIPING AS PER MANUFACTURER SPECIFICATIONS.
② INSTALL GAS REGULATOR AS PER WATER HEATER AND REGULATORS MANUFACTURERS SPECIFICATIONS.
③ INSTALL NEUTRALIZER KIT ON CONDENSATE DRAIN.
④ PROVIDE WITH BUILDING MANAGEMENT SYSTEM BACnet, COORDINATE CONNECTION WITH M.C.

EXPANSION TANK SCHEDULE

(OR EQUAL)

UNIT NO.	ROOM NO.	TANK SIZE	DIA.	HEIGHT	SYSTEM CONN.	BASIS OF DESIGN	REMARKS
ET-1	211	4.5 GALLON	11"	15"	¾"	APOLLO EXTP5	– PROVIDE CHECK VALVE ON COLD WATER SUPPLY. – PROVIDE BALL VALVE ON EXPANSION TANK SUPPLY.

CIRCULATING PUMP SCHEDULE

(OR EQUAL)

UNIT NO.	ROOM NO.	SERVICE	TYPE	G.P.M.	HEAD	WATTS	ELECTRICAL CHARACTERISTICS	R.P.M.	BASIS OF DESIGN	REMARKS
DWCP-1	211	DOMESTIC HOT WATER	IN-LINE STAINLESS STEEL	2	7'	70	115/1	VARIABLE	BELL & GOSSETT ecocirc 20-18SS	① ② ③

① PROVIDE CHECK VALVE IN HOT WATER RETURN WITH BALANCE VALVE.
② PROVIDE THERMOMETER AT PUMP.
③ INTERLOCK PUMP WITH AQUASTAT CONTROLLER.

MIXING VALVE SCHEDULE

(OR EQUAL)

UNIT NO.	ROOM NO.	INLET	OUTLET	L.W.T.	FINISH	CONNECTED FIXTURES	BASIS OF DESIGN	REMARKS
MV-1	116	1¼"	1¼"	85° F	ROUGH BRONZE	EYEWASH / SHOWER	LAWLER 911 84701	① ②
MV-2	113	½"	½"	85° F	ROUGH BRONZE	EYEWASH	LAWLER 911E/F 84909	① ②

① PROVIDE SURFACE MOUNT, LOCKING STAINLESS STEEL CABINET.
② PROVIDE THERMOMETER AT MIXING VALVE.

REDUCED PRESSURE BACKFLOW PREVENTER

(OR EQUAL)

UNIT NO.	ROOM NO.	SIZE	WATER TEMPERATURE	PRESSURE DROP	REPR. MFGR. & MODEL NO.	ACCESSORIES	REMARKS
RPBP-1	115	¾"	40° F.	12 psi AT 10 gpm	WATTS LF919QT	WATTS 919AGC AIR GAP CONNECTION	– HOT WATER HEATING MAKE UP.
RPBP-2	115	¾"	40° F.	12 psi AT 10 gpm	WATTS LF919QT	WATTS 919AGC AIR GAP CONNECTION	– CHILLER WATER COOLING MAKE UP.

① PLUMBING CONTRACTOR IS RESPONSIBLE TO HAVE A CERTIFIED PERSON TO TEST AND REGISTER ASSEMBLY WITH SAFETY AND BUILDING DIVISION.

GARAGE CATCH BASIN SCHEDULE

(OR EQUAL)

UNIT NO.	ROOM NO.	SIZE DIA. x HT.	FRAME MFR. (OR EQUAL)	GRATE TYPE	BEARING SURFACE	GRATE FREE OPEN AREA	LOCAL VENT	BASIS OF DESIGN	REMARKS
GCB-1	116	36" x 48"	NEENAH R-2540A	"E"	36"	1.1 s.f.	NO	TOPP INDUSTRIES FB36X48	①
GCB-2	116	36" x 48"	NEENAH R-2540A	"E"	36"	1.1 s.f.	NO	TOPP INDUSTRIES FB36X48	①
GCB-3	113	36" x 48"	NEENAH R-2540A	"E"	36"	1.1 s.f.	NO	TOPP INDUSTRIES FB36X48	①
GCB-4	112	36" x 48"	NEENAH R-2540A	"E"	36"	1.1 s.f.	NO	TOPP INDUSTRIES FB36X48	①
GCB-5	112	36" x 48"	NEENAH R-2540A	"E"	36"	1.1 s.f.	NO	TOPP INDUSTRIES FB36X48	①

① PROVIDE EXTENSION RINGS AS REQUIRED TO BRING FRAME AND GRATE UP TO FINISH FLOOR.

TRENCH DRAIN SCHEDULE

(OR EQUAL)

UNIT NO.	ROOM NO.	SIZE W x L	TOTAL LENGTH	TYPE	GRATE	OUTLET	END CAPS	BASIS OF DESIGN	REMARKS
TD-1	116	8" x 40" (22 SECTION)	880 in. (73.33 ft.)	POLYMER CONCRETE	DUCTILE IRON CLASS 'E'	4" END OR BOTTOM	YES	ACO POWER DRAIN S200K	①
TD-2	116	8" x 40" (22 SECTION)	880 in. (73.33 ft.)	POLYMER CONCRETE	DUCTILE IRON CLASS 'E'	4" END OR BOTTOM	YES	ACO POWER DRAIN S200K	①
TD-3	116	8" x 40" (17 SECTION)	680 in. (56 ft. 8 in.)	POLYMER CONCRETE	DUCTILE IRON CLASS 'E'	4" END OR BOTTOM	YES	ACO POWER DRAIN S200K	①

① INSTALL PER TRENCH DRAIN MANUFACTURER SPECIFICATIONS.

OIL INTERCEPTOR SCHEDULE

(OR EQUAL)

UNIT NO.	ROOM NO.	INLET & OUTLET	VENT	FLOW RATE	LIQUID CAPACITY	OIL CAPACITY	SAND CAPACITY	BASIS OF DESIGN	REMARKS
GI-1	116	4" / 4"	3"	75 GPM	110 GALLON	93 GALLON	11 GALLON	SCHIER OS-75 ①	– PROVIDE EXTENSION RINGS AS REQUIRED. – COMPOSITE COVER WITH WATER/GAS TIGHT SEAL.

① STRIEM C24-M COMPOSITE 2,000 LB RATED COVER.

SUMP PUMP SCHEDULE

(OR EQUAL)

UNIT NO.	FT. HD.	G.P.M.	R.P.M.	H.P.	SOLID SIZE	DISCH. SIZE	ELECTRICAL CHAR.	CONTROL PANEL	BASIN DIA x DEEP	BASIN COVER	BASIS OF DESIGN	REMARKS
SP-1	25'	30	3450	½	¾"	1½"	115/1	PIGGY BACK FLOAT	24" x 36" POLYETHYLENE	PERFORATED STEEL COVER	LIBERTY ELV280	① ②
SP-2	15'	20	3450	1/3	¾"	1½"	120/1/60	PIGGY BACK FLOAT	22" x 25" POLYETHYLENE	FIBERGLASS SOLID COVER	LIBERTY SPAC-237	①

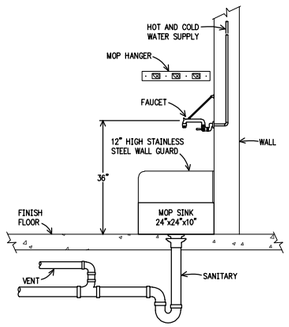
① PROVIDE CHECK VALVE ON DISCHARGE.
② PROVIDED WITH OIL DETECTION SYSTEM.

BOOSTER PUMP SCHEDULE

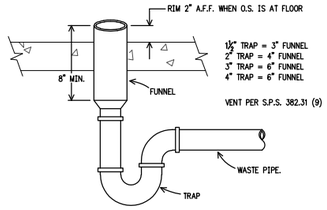
(OR EQUAL)

PUMP NO.	BASIS OF DESIGN	DISCRG. PRESS.	G.P.M.	H.P.	ELECT. CHAR.	MOTOR RPM	INLET PRESSURE	TYPE	BOOST	PRESSURE TANK	CONTROLLER	REMARKS
BP-1	GRUNDFOS CRE15-1N-GJ-A-E-HQQE	70 psig	79	2	208/1	VFD	50 psig	SIMPLEX	20 psig	34 GALLON	BUILT-IN PRESSURE CONTROL VALVE.	① ② ③ ④ ⑤

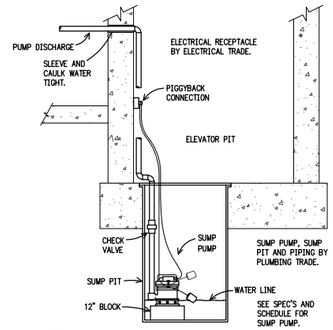
① NET BOOST PRESSURE IS CALCULATED BY SYSTEM SET PRESSURE MINUS SUCTION PRESSURE LESS SYSTEM LOSSES OF 5 PSI.
② SYSTEM SUBMITTALS SHALL INCLUDE CERTIFICATE CSA 108 AND UL 778 STANDARDS. THE SYSTEM SHALL BE CERTIFIED TO NSF 372.
③ THE CONTROL PANEL SHALL BE UL 508A LABELED.
④ PROVIDE 1-YEAR WARRANTY ON COMPLETE SYSTEM AND INCLUDE WARRANTY CERTIFICATE WITH DETAILS IN SUBMITTALS.
⑤ EXPANSION TANK TO BE SUPPLIED WITH BOOSTER PUMP, AMTROL THERM-X-TROL ST-60V, INSTALL PER MANUFACTURERS SPECIFICATIONS.



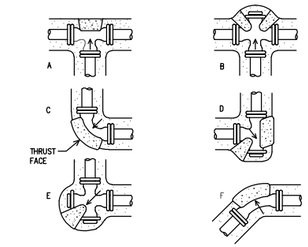
10 P402 — MOP SINK DETAIL
NO SCALE



7 P402 — OPEN SITE DRAIN DETAIL
NO SCALE



4 P402 — SUMP PUMP DETAIL
NO SCALE (ELEVATOR PIT)

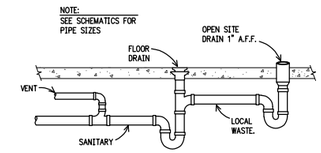


SIZE OF THRUST FACE FOR 150 PSI PIPE IN 4000# LOAD BEARING SOIL

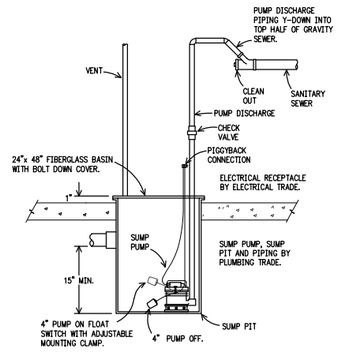
PIPE SIZE	A	B (EACH)	C	D (EACH)	E	F
4"	12"x12"	12"x12"	12"x12"	12"x12"	12"x12"	12"x12"
6"	12"x12"	12"x12"	18"x18"	12"x12"	18"x18"	12"x12"
8"	18"x18"	12"x12"	24"x24"	15"x15"	24"x24"	18"x18"
10"	24"x24"	15"x15"	30"x30"	18"x18"	30"x30"	24"x24"
12"	30"x30"	18"x18"	36"x36"	24"x24"	36"x36"	30"x30"
14"	36"x36"	24"x24"	39"x39"	24"x24"	36"x36"	36"x36"
16"	36"x36"	24"x24"	45"x45"	27"x27"	45"x45"	36"x36"

IN SOFT CLAY OR SAND INCREASE BY 50%

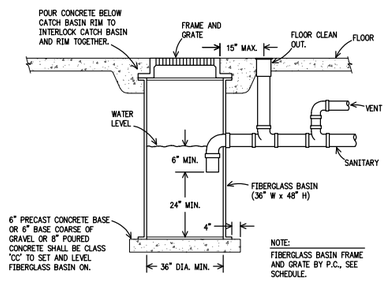
1 P402 — THRUST BLOCK DETAIL
NO SCALE



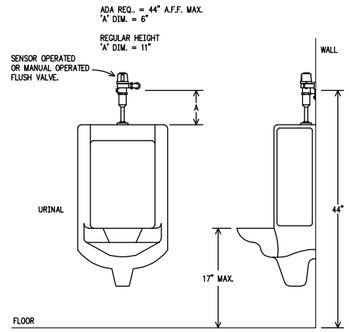
8 P402 — LOCAL WASTE DETAIL
NO SCALE



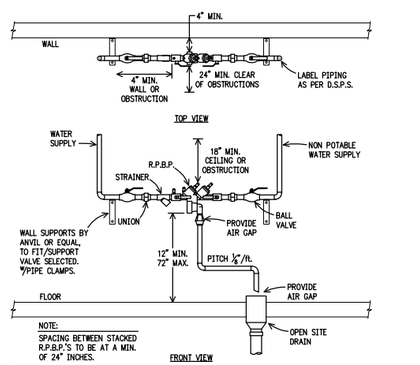
5 P402 — SUMP PUMP DETAIL
NO SCALE



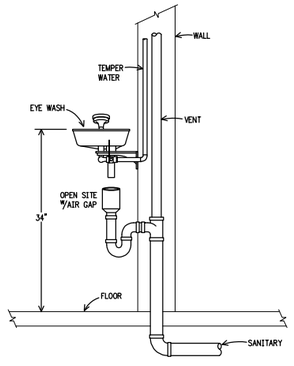
2 P402 — GARAGE CATCH BASIN DETAIL
NO SCALE (FIBERGLASS BASIN)



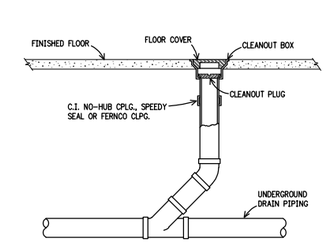
11 P402 — URINAL FLUSH VALVE HEIGHT DETAIL
NO SCALE A.D.A. WALL HUNG



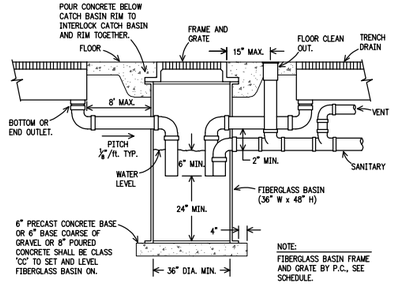
9 P402 — CROSS CONNECTION CONTROL DETAIL
NO SCALE REDUCED PRESSURE BACKFLOW DEVICE



12 P402 — EYE WASH DETAIL
NO SCALE



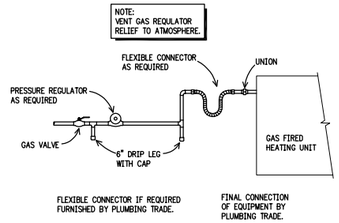
6 P402 — CLEANOUT DETAIL
NO SCALE (INTERIOR)



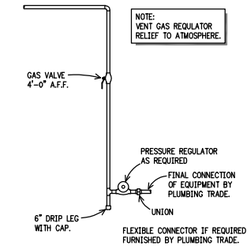
3 P402 — GARAGE CATCH BASIN DETAIL
NO SCALE (FIBERGLASS BASIN w/TRENCH DRAIN)

PLANS PREPARED BY: APEX ENGINEERING, INC., EAU CLAIRE, WI			PLUMBING DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-73	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. P402	284

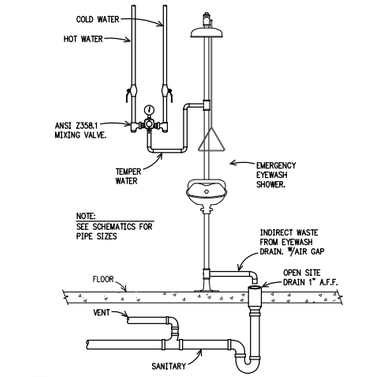
21107 p401 - p402 - p403.dwg PLOT DATE: 4/25/2024 11:31 AM



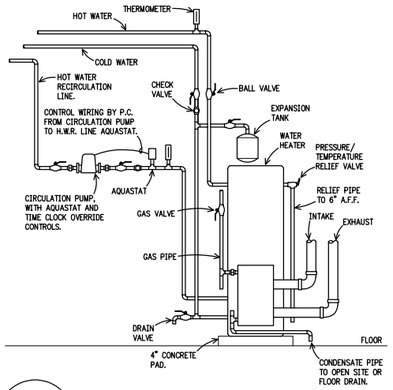
4 / P403 GAS CONNECTION DETAIL
NO SCALE — STRUCTURE MOUNTED EQUIP.



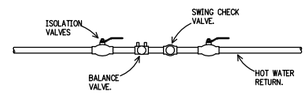
5 / P403 GAS CONNECTION DETAIL
NO SCALE — FLOOR MOUNTED EQUIPMENT



1 / P403 EYEWASH/SHOWER DETAIL
NO SCALE — with LOCAL WASTE



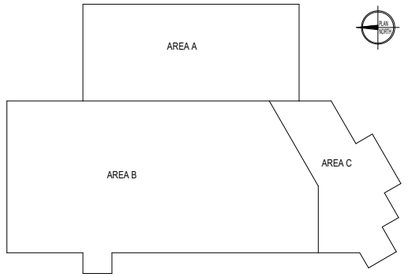
2 / P403 GAS WATER HEATER DETAIL
NO SCALE — SEALED COMBUSTION UNIT w/HOT WATER RETURN



3 / P403 BALANCE VALVE DETAIL
NO SCALE — DOMESTIC HOT WATER RETURN

GENERAL MECHANICAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH NATIONAL, STATE, & LOCAL CODES; AS WELL AS THE NATIONALLY RECOGNIZED TESTING AND APPROVAL AGENCIES.
2. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.
3. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, EQUIPMENT SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY VERIFY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES.
4. COORDINATE ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES WITH ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OF EQUIPMENT ORDERS.
5. EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY BETWEEN DIFFERENT MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING, DUCTWORK, ETC.
6. DO NOT BLOCK TUBE/COIL PULL OR EQUIPMENT SERVICE CLEARANCES.
7. REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS.
8. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR EXPENSE TO OTHERS.
9. MAINTAIN WORKING CLEARANCES AT ELECTRICAL EQUIPMENT SUCH AS ELECTRICAL PANELS, MOTOR STARTERS, SWITCHES AND DISCONNECTS PER NEC REQUIREMENTS.
10. CONTRACTOR IS RESPONSIBLE FOR ALL COST ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF DESIGN.
11. MAINTAIN A MINIMUM OF 10' BETWEEN ROOF EDGE AND ALL ROOFTOP EQUIPMENT, INCLUDING EXHAUST FANS. IF 10' IS NOT MAINTAINED, M.C. SHALL INSTALL GUARD RAIL AS REQUIRED BY IMC 304.11.
12. ALL EQUIPMENT, DUCTWORK, & PIPING SHALL BE KEPT CLEAN FROM DIRT & DEBRIS. DO NOT ALLOW THE INSIDE OF DUCT & LINER TO BE EXPOSED DURING CONSTRUCTION.
13. ALL DUCTWORK SHALL BE CONSTRUCTED TO SMACNA STANDARDS IN ACCORDANCE WITH THE APPROPRIATE PRESSURE CLASSIFICATION.
14. DUCTWORK SIZE LISTED ON PLANS ARE INTERNAL FREE AREA DIMENSIONS. THE FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED.
15. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL, TECHNOLOGY AUDIO/VISUAL, AND OTHER MECHANICAL PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES.
16. COORDINATE GRILLE/DIFFUSER & ACCESS PANEL LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL LIGHT FIXTURES, LIGHT FIXTURE SUPPORT RODS AND FIRE SPRINKLER HEADS FOR FREE INTERFERENCE.
17. AIR VENTS SHALL BE INSTALLED AT ALL HIGH POINTS & DRAINS AT ALL LOW POINTS OF WATER PIPING SYSTEMS.
18. PIPING CONNECTIONS WITH UNIONS OR FLANGES SHALL BE MADE TO COILS OR TUBE BUNDLES TO FACILITATE REMOVAL OF THAT ITEM WITHOUT DISTURBING THE BRANCH VALVES AND/OR PIPING.
19. ALL ROOF CURBS SHALL BE 18" TALL UNLESS OTHERWISE NOTED ON PLANS. ALL ROOF CURBS FOR OUTSIDE AIR INTAKE SHALL BE 30" TALL UNLESS OTHERWISE NOTED ON PLANS.
20. MANUAL VOLUME DAMPERS SHALL BE INSTALLED AT EACH BRANCH TAKE-OFF FROM MAIN SUPPLY, RETURN, & EXHAUST DUCTS. DAMPERS SHALL BE LOCATED AS CLOSE TO THE BRANCH TAKE-OFF AS POSSIBLE & INSTALLED TO ALLOW FOR EASY ACCESS.
21. VOLUME DAMPERS INSTALLED IN EXTERNALLY INSULATED DUCTWORK SHALL BE PROVIDED WITH EXTENDED OPERATOR HANDLE TO OUTSIDE OF INSULATION WITH SHEET METAL STANDOFF FOR SUPPORT.
22. SHUT-OFF VALVES INSTALLED IN INSULATED PIPING SHALL BE PROVIDED WITH EXTENDED OPERATOR HANDLE TO OUTSIDE OF INSULATION.
23. DUCT SIZE TO DIFFUSERS, REGISTERS AND GRILLES SHALL BE SAME SIZE AS NECK SIZE UNLESS NOTED OR DETAILED OTHERWISE.
24. INLET DUCT SIZE TO SUPPLY AIR TERMINAL UNITS SHALL BE SAME AS INLET UNLESS OTHERWISE NOTED.
25. SUPPLY AIR DUCTWORK DOWNSTREAM OF VAV'S SHALL BE INTERNALLY ACOUSTICALLY LINED FOR A MINIMUM OF 5' FOR SOUND ATTENUATION UNLESS OTHERWISE INDICATED. MAINTAIN INTERNAL FREE AREA.
26. ALL MITERED RECTANGULAR/SQUARE ELBOWS SHALL HAVE AIR TURNING VANES AS SPECIFIED.
27. PIPING TO TERMINAL HEATING AND COOLING DEVICES SHALL BE 3/4" UNLESS OTHERWISE NOTED.
28. NO PIPING OR DUCTWORK SHALL BE INSTALLED ABOVE ELECTRICAL EQUIPMENT, UNLESS OTHERWISE NOTED. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL EQUIPMENT LOCATIONS. COORDINATE WITH ELECTRICAL TRADE FOR EXACT LOCATIONS.
29. ALL SIDEWALL GRILLES SHALL BE ALIGNED VERTICALLY AND HORIZONTALLY WHEREVER POSSIBLE, UNLESS OTHERWISE NOTED.
30. OUTSIDE AIR INTAKES SHALL BE A MINIMUM DISTANCE OF 10'-0" FROM ANY EXHAUST/RELIEF OUTLET, FLUE, GAS OR PLUMBING VENT. COORDINATE WITH RESPECTIVE TRADES.
31. SEAL ALL EXTERIOR OPENINGS WATER TIGHT.
32. CAREFULLY COORDINATE IN-FLOOR TUBING LAYOUTS WITH ALL OTHER TRADES, INCLUDING BUT NOT LIMITED TO FLOOR DRAINS, PLUMBING FIXTURES, AND PIPING.
33. STAPLE IN-FLOOR TUBING LINES DIRECTLY TO FOAM INSULATION. MAXIMUM SPACING BETWEEN STAPLES SHALL BE 3' O.C. PROVIDE A MINIMUM OF (3) STAPLES AT EACH CHANGE OF DIRECTION 90° OR LARGER.
34. ALL BELOW SLAB INSULATION SHALL BE FURNISHED AND INSTALLED BY G.C.
35. PRESSURE TEST COMPLETE IN-FLOOR HEATING SYSTEM AS REQUIRED PRIOR TO CONCRETE POUR. MONITOR AND MAINTAIN SYSTEM PRESSURES DURING ENTIRE CONCRETE POUR.



OVERALL KEY PLAN

LINE TYPE KEY
——— NEW WORK BY MECHANICAL CONTRACTOR (DARK SOLID LINE)
——— NEW WORK BY OTHERS AND/OR EXISTING TO REMAIN (LIGHT SOLID LINE)

CONTRACTOR ABBREVIATION KEY

ABBR:	CONTRACTOR:
E.C.	ELECTRICAL CONTRACTOR
F.P.C.	FIRE PROTECTION CONTRACTOR
G.C.	GENERAL CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
T.C.C.	TEMPERATURE CONTROL CONTRACTOR

HYDRONIC PIPE SIZING CHART

REQUIRED PIPE SIZE	COPPER PIPE (GPM)	STEEL PIPE (GPM)
¾"	0 - 3.0	0 - 3.5
1"	3.1 - 6.5	3.6 - 6.7
1¼"	6.6 - 11.0	6.8 - 14.0
1½"	11.1 - 18.0	14.1 - 21.0
2"	18.1 - 38.0	21.1 - 42.0
2½"	38.1 - 68.0	42.1 - 68.0
3"	68.1 - 110.0	68.1 - 120.0

MECHANICAL SHEET INDEX

SHEET #	SHEET NAME
M001	MECHANICAL GENERAL INFO SHEET
M100	MECHANICAL SITE PLAN
M101	MECHANICAL MAIN LEVEL REFERENCE PLAN
M102	MECHANICAL UPPER LEVEL REFERENCE PLAN
M200	MECHANICAL MAIN LEVEL FLOOR PLAN - AREA A DUCTWORK
M201	MECHANICAL MAIN LEVEL FLOOR PLAN - AREA B DUCTWORK
M202	MECHANICAL MAIN LEVEL FLOOR PLAN - AREA C DUCTWORK
M203	MECHANICAL UPPER LEVEL FLOOR PLAN - AREA A DUCTWORK
M204	MECHANICAL UPPER LEVEL FLOOR PLAN - AREA B DUCTWORK
M205	MECHANICAL UPPER LEVEL FLOOR PLAN - AREA C DUCTWORK
M206	MECHANICAL MAIN LEVEL FLOOR PLAN - AREA A PIPING
M207	MECHANICAL MAIN LEVEL FLOOR PLAN - AREA B PIPING
M208	MECHANICAL MAIN LEVEL FLOOR PLAN - AREA C PIPING
M209	MECHANICAL UPPER LEVEL FLOOR PLAN - AREA A PIPING
M210	MECHANICAL UPPER LEVEL FLOOR PLAN - AREA B PIPING
M211	MECHANICAL UPPER LEVEL FLOOR PLAN - AREA C PIPING
M300	ENLARGED 115 MECHANICAL ROOM
M301	ENLARGED 211 MECHANICAL ROOM
M400	MECHANICAL SECTIONS - 211 MECH. ROOM
M401	MECHANICAL SECTION - SOUTHEAST
M402	MECHANICAL SECTION - INSPECTION BAYS NORTH
M403	MECHANICAL SECTION - INSPECTION BAYS WEST
M404	MECHANICAL SECTION - MAINTENANCE GARAGE WEST
M500	MECHANICAL SCHEDULES
M501	MECHANICAL SCHEDULES
M600	MECHANICAL DETAILS
M601	MECHANICAL DETAILS
M602	MECHANICAL DETAILS

MECHANICAL (HVAC) LEGEND

GENERAL SYMBOLS

- T — THERMOSTAT
- S — SPACE SENSOR (AS INDICATED)
- $ — WALL SWITCH OR TIMER
- # — NEW OR REMODEL KEYNOTES
- XXX / # — MECHANICAL EQUIPMENT TAG
- MECHANICAL EQUIPMENT (NEW)
- INDICATES DIRECTION OF AIR FLOW
- CEILING DIFFUSER
- XXXX CD-# / # CFM — CEILING DIFFUSER SIZE AND TYPE / AIR VOLUME
- RETURN/EXHAUST/TRANSFER GRILLE
- SUPPLY GRILLE OR REGISTER
- SIDEWALL RETURN/EXHAUST/TRANSFER GRILLE
- SIDEWALL SUPPLY/TRANSFER GRILLE
- x_XX-# / # CFM — GRILLE SIZE AND TYPE / AIR VOLUME
- D.G. — DOOR GRILLE (BY GENERAL TRADE)
- U.C. — DOOR UNDERCUT (BY GENERAL TRADE)
- ROOM NAME / ### — INDICATES ROOM NAME / INDICATES ROOM NUMBER
- # / M# — SECTION CUT
- CALLOUT BUBBLE
- # / M# — CALLOUT REFERENCE DETAIL NUMBER / CALLOUT REFERENCE SHEET NUMBER
- 1 — REVISION NUMBER
- REVISION CLOUD

DUCTWORK SYMBOLS

- RADIUS ELBOW
- MITERED ELBOW W/ TURNING VANES
- SUPPLY/OUTSIDE/MIXED AIR DUCT DOWN
- SUPPLY/OUTSIDE/MIXED AIR DUCT UP
- RETURN/EXHAUST/TRANSFER AIR DUCT DOWN
- RETURN/EXHAUST/TRANSFER AIR DUCT UP
- ROUND DUCT DOWN
- ROUND DUCT UP
- DUCT OFFSET (AS INDICATED)
- ACOUSTIC DUCT LINER
- FABRIC AIR DISPERSION SYSTEM
- FLEXIBLE DUCT
- SQUARE/RECTANGULAR DUCT BREAK
- MANUAL BALANCING (VOLUME) DAMPER
- CONTROL DAMPER W/ ACTUATOR
- FIRE DAMPER (1½ OR 3 HR AS INDICATED)
- DUCT SMOKE DETECTOR
- DUCT STATIC PRESSURE SENSOR
- ROUND DUCT OR 2-LINE PIPE BREAK

DUCTWORK SYSTEM ABBREVIATIONS

EA	EXHAUST AIR
MA	MIXED AIR (OA + RA)
OA	OUTSIDE AIR
RA	RETURN AIR
RFA	RELIEF AIR
SA	SUPPLY AIR
TA	TRANSFER AIR

PIPING SYMBOLS

- CHECK VALVE
- BALL VALVE
- BUTTERFLY VALVE
- 2-WAY CONTROL VALVE
- 3-WAY CONTROL VALVE
- RELIEF VALVE
- PRESSURE REDUCING VALVE
- BALANCE VALVE (B.V.)
- AUTOMATIC FLOW CONTROL VALVE (A.F.V.)
- FLOW MEASURING DEVICE (F.M.D.)
- STRAINER
- THERMOMETER
- TEMPERATURE SENSOR
- PRESSURE GAUGE
- UNION (OR FLANGE)
- AUTOMATIC AIR VENT
- CAPPED PIPING
- PIPE ANCHOR
- PIPE ALIGNMENT GUIDE
- SINGLE LINE PIPE BREAK
- INDICATES DIRECTION OF WATER FLOW
- PIPE REDUCER
- PIPE DOWN
- PIPE UP
- TEE - BOTTOM CONNECTION
- TEE - TOP CONNECTION
- PIPE ELEVATION CHANGE
- CIRCULATING PUMP

PIPING SYSTEM ABBREVIATIONS

AC	REFRIGERANT
CD	CONDENSATE DRAIN
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
GWR	GEOTHERMAL WATER RETURN
GWS	GEOTHERMAL WATER SUPPLY
HPR	HEAT PUMP WATER RETURN
HPS	HEAT PUMP WATER SUPPLY
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
PC	PUMPED CONDENSATE

EQUIPMENT ABBREVIATIONS

AF	AIR FILTER
AFMS	AIRFLOW MEASURING STATION
AHU	AIR HANDLING UNIT
B	BOILER
BT	BUFFER TANK
C	CONVECTOR
CP	CIRCULATING PUMP
CUH	CABINET UNIT HEATER
DAC	DUCTLESS SPLIT SYSTEM AIR CONDITIONING
DAS	DIRT AND AIR SEPARATOR
DF	DESTRATIFICATION FAN
DS	DUCT SILENCER (SOUND ATTENUATOR)
EF	EXHAUST FAN
EFH	ELECTRIC FAN-FORCED HEATER
ERV	ENERGY RECOVERY VENTILATOR
ET	EXPANSION TANK
FAD	FABRIC AIR DISPERSION SYSTEM
FWS	HYDRONIC FLOOR WARMING SYSTEM
GRDs	GRILLES, REGISTERS, AND DIFFUSERS
GUH	GAS FIRED UNIT HEATER
H	HUMIDIFIER
HS	HYDRAULIC SEPARATOR
L	LOUVER
MAU	MAKEUP AIR UNIT
RF	RETURN FAN
RH	ROOF HOOD
SF	SUPPLY FAN
TCP	TEMPERATURE CONTROL PANEL
UH	UNIT HEATER
VAV	VARIABLE AIR VOLUME UNIT
VFD	VARIABLE FREQUENCY DRIVE
WF	WALL FIN
WHP	WATER-TO-WATER HEAT PUMP

GRD ABBREVIATIONS

CD	CEILING DIFFUSER
EG	EXHAUST GRILLE
FG	FLOOR GRILLE
RG	RETURN GRILLE
SG	SUPPLY GRILLE
TG	TRANSFER GRILLE

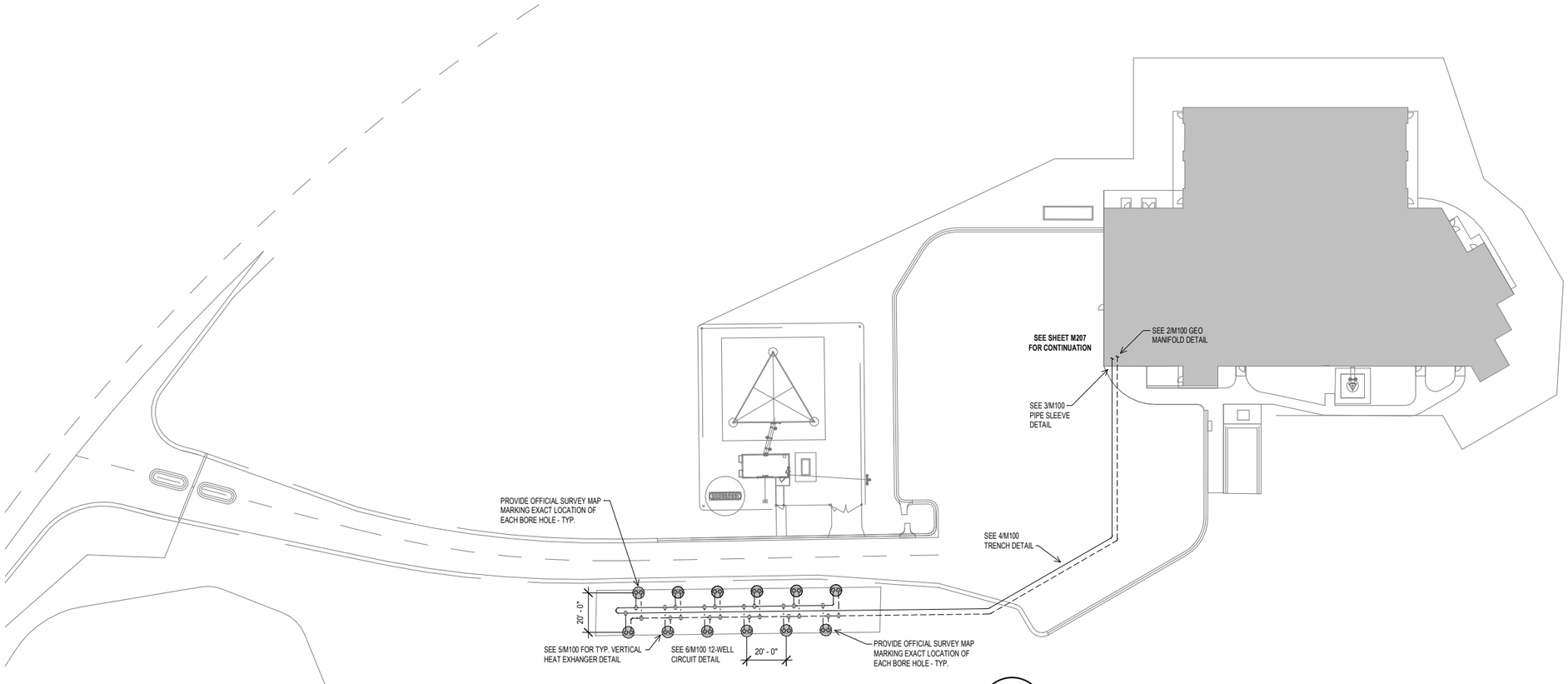
GENERAL ABBREVIATIONS

A	AMPERE	HP	HORSEPOWER
A/C	AIR CONDITIONING	HTG.	HEATING
A.D.	ACCESS DOOR	HVAC	HEATING, VENTILATION AND AIR CONDITIONING
A.F.F.	ABOVE FINISH FLOOR	HW	HOT WATER
A.F.G.	ABOVE FINISH GRADE	HZ	HERTZ (FREQUENCY)
A.F.R.	ABOVE FINISHED ROOF	I.A.	INDOOR AIR
AMPS	AMPERES	ID	INSIDE DIAMETER
AUX	AUXILIARY	IN.	INCH OR INCHES
AVG	AVERAGE	KW	KILOWATT
B.I.	BACKWARD INCLINE	LAT	LEAVING AIR TEMPERATURE
B.D.D.	BACKDRAFT DAMPER	LBS	POUNDS
BHP	BRAKE HORSEPOWER	LDB	LEAVING DRY BULB TEMPERATURE
BSMT	BASEMENT	LWB	LEAVING WET BULB TEMPERATURE
BTU	BRITISH THERMAL UNIT	LWT	LEAVING WATER TEMPERATURE
BTUH	BRITISH THERMAL UNIT PER HOUR	MAT	MIXED AIR TEMPERATURE
CAP.	CAPACITY	MAX.	MAXIMUM
CFM	CUBIC FEET PER MINUTE	MBH	THOUSAND BTUH
CL	CENTERLINE	MCA	MINIMUM CIRCUIT AMPS
CLG.	COOLING	MECH.	MECHANICAL
CEIL.	CEILING	MFG.	MANUFACTURER
C.O.	CLEANOUT	MOCP	MAXIMUM OVER CURRENT PROTECTION
CONT.	CONTINUE	M.O.D.	MOTOR OPERATED DAMPER
CU FT.	CUBIC FEET	MTD.	MOUNTED
CU IN.	CUBIC INCHES	N/C	NOT IN CONTRACT
ΔP	CHANGE IN PRESSURE	NOM.	NOMINAL
ΔT	CHANGE IN TEMPERATURE	NPS	NOMINAL PIPE SIZE
°	DEGREE	NTS	NOT TO SCALE
DB	DRY BULB	OAT	OUTSIDE AIR TEMPERATURE
DC	DIRECT CURRENT	O.A.	OUTSIDE AIR
DDC	DIRECT DIGITAL CONTROLS	O.B.D.	OPPOSED BLADE DAMPER
DIA.	DIAMETER	O.E.D.	OPEN ENDED DUCT
DISC.	DISCONNECT	O.C.	ON CENTER
DN.	DOWN	OD	OUTSIDE DIAMETER
DP	DIFFERENTIAL PRESSURE	PD	PRESSURE DROP
DWG.	DRAWING	PSI	POUNDS PER SQUARE INCH
DWPT	DEWPOINT	PSIG	PSI GAUGE
DX	DIRECT EXPANSION (REFRIGERATION)	ø	ROUND DIAMETER
EAT	ENTERING AIR TEMPERATURE	RAT	RETURN AIR TEMPERATURE
EDB	ENTERING DRY BULB TEMPERATURE	RM.	ROOM
EFF.	EFFICIENCY	RPM	REVOLUTIONS PER MINUTE
EL.	ELEVATION	SAT	SUPPLY AIR TEMPERATURE
EWB	ENTERING WET BULB TEMPERATURE	SD	SMOKE DAMPER
ESP	EXTERNAL STATIC PRESSURE	SQ. FT.	SQUARE FEET
ETR	EXISTING TO REMAIN	SHT.	SHEET
EWT	ENTERING WATER TEMPERATURE	SM	SMOKE DETECTOR
EX.	EXISTING	SP	STATIC PRESSURE
EXH.	EXHAUST	SPEC.	SPECIFICATION
°F	DEGREES FAHRENHEIT	SPD.	SPEED
F.C.	FORWARD CURVED	S.S.	STAINLESS STEEL
F.D.	FIRE DAMPER	STD.	STANDARD
FLA	FULL LOAD AMPS	T.A.	THROW AWAY
FLR.	FLOOR	TEMP.	TEMPERATURE
FPI	FINS PER INCH	TSP	TOTAL STATIC PRESSURE
FPM	FEET PER MINUTE	TSTAT	THERMOSTAT
FPS	FEET PER SECOND	TYP.	TYPICAL
FT	FEET	V	VOLTS
GAL	GALLONS	V.D.	VOLUME (BALANCING) DAMPER
GPH	GALLONS PER HOUR	VEL	VELOCITY
GPM	GALLONS PER MINUTE	WB	WET BULB
GRV	GRAVITY RELIEF VENT	W/	WITH
HD	HEAD (FEET)	Z.D.	ZONE DAMPER

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Designed By: JKM

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL GENERAL INFO SHEET	ISSUE DATE: 5/1/24 / ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M001

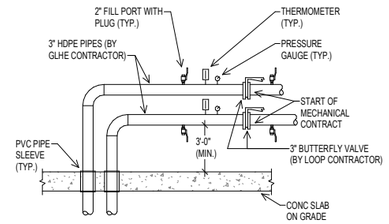
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1 M100 MECHANICAL SITE PLAN
1/64" = 1'-0"
0' 8' 20' 40'

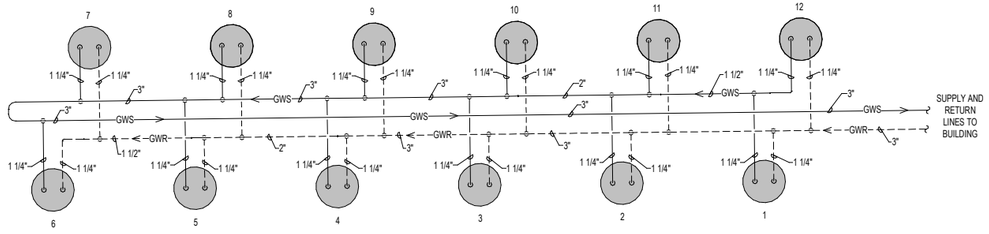
GENERAL GEO LOOP HEAT EXCHANGER NOTES:

1. GEOTHERMAL LOOP HEAT EXCHANGER (GLHE) CONTRACTOR TO COORDINATE ALL LOOP PIPING WITH NEW AND EXISTING SITE UTILITIES AND PIPING.
2. MAINTAIN A MINIMUM OF 10'-0" SEPARATION BETWEEN GEOTHERMAL PIPING AND ALL NEW OR EXISTING SEWER, WATER, AND STORM PIPING. WHERE GEOTHERMAL PIPING MUST CROSS SEWER, WATER, OR STORM LINES, GLHE CONTRACTOR SHALL FURNISH AND INSTALL RIGID SHEETS OF 24"x48"x2" FOAM INSULATION BETWEEN PIPING. EXTEND INSULATION A MINIMUM OF 2'-0" BEYOND LIMITS OF GEOTHERMAL LINES.
3. GLHE CONTRACTOR TO PROVIDE 25% MIXTURE OF GEO BLEND PROPYLENE GLYCOL WITH RUST AND CORROSION INHIBITORS FOR ENTIRE GEOTHERMAL PIPING SYSTEM.
4. SITE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL EXCESS TOP SOIL TO APPROXIMATE FINISHED GRADE ELEVATIONS. GLHE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATING AND BACKFILLING AS REQUIRED TO INSTALL GEOTHERMAL LOOP FIELD COMPLETE. UNSUITABLE SOILS, AND ALL OTHER WASTE MATERIALS SHALL BE STRIPPED AND REMOVED FROM WORK AREA PRIOR TO EXCAVATING FOR LATERAL GEOTHERMAL PIPE TRENCHES. TRENCHES, BACKFILL, AND COMPACTION SHALL CONFORM PER SPEC SECTION 31 00 00 EXCAVATION, TRENCHING, AND FILL. USE GRANULAR BACKFILL AND SUITABLE BACKFILL MATERIAL ONLY.
5. GLHE CONTRACTOR SHALL CONSTRUCT VERTICAL HEAT EXCHANGER INSTALLATION RELATIVE TO FINAL FINISHED GRADE ELEVATIONS.
6. GLHE CONTRACTOR SHALL BACKFILL ENTIRE GEOTHERMAL INSTALLATION INCLUDING TRENCHES TO THE APPROXIMATE FINAL GRADE ELEVATIONS. SITE GRADING CONTRACTOR SHALL COMPLETE FINAL GRADING REQUIREMENTS. REFERENCE SPEC SECTION 31 00 00 EXCAVATION, TRENCHING, AND FILL FOR ALL TRENCHING AND BACKFILL REQUIREMENTS.



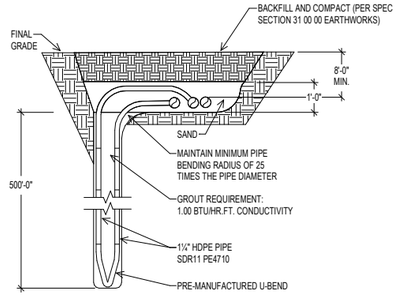
NOTE:
GEOTHERMAL LOOP HEAT EXCHANGER (GLHE) CONTRACTOR SHALL FILL AND PURGE SYSTEM WITH 25% GEO BLEND PROPYLENE GLYCOL WITH RUST/CORROSION INHIBITORS.

2 M100 GEO WATER MANIFOLD
NO SCALE



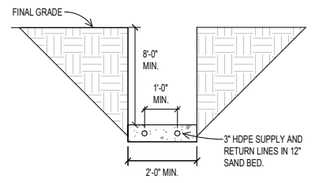
6 M100 12 - WELL CIRCUIT DETAIL
NO SCALE

NOTE:
- PROVIDE TRACE WIRE IN CENTER OF TRENCH AND INSTALL AT SAME ELEVATION AS TUBING.
- PROVIDE FOILED BACK WARNING TAPE IN CENTER AND BOTH EDGES OF TRENCH AND INSTALL AT 3'-0" ABOVE TUBING.
- EXTEND BOTH TRACE WIRE AND WARNING TAPE ALONG ENTIRE LENGTH OF ALL HEADER PIPING.
-TERMINATE TRACE WIRE IN SEALED BOX ON BUILDING.

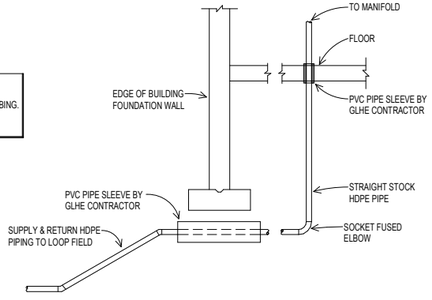


5 M100 TYP. VERTICAL HEAT EXCHANGER
NO SCALE

NOTE:
- PROVIDE TRACE WIRE IN CENTER OF TRENCH AND INSTALL AT SAME ELEVATION AS TUBING.
- PROVIDE FOILED BACK WARNING TAPE IN CENTER AND BOTH EDGES OF TRENCH AND INSTALL AT 3'-0" ABOVE TUBING.
- EXTEND BOTH TRACE WIRE AND WARNING TAPE ALONG ENTIRE LENGTH OF ALL HEADER PIPING.
-TERMINATE TRACE WIRE IN SEALED BOX ON BUILDING.



4 M100 TRENCH DETAIL
NO SCALE

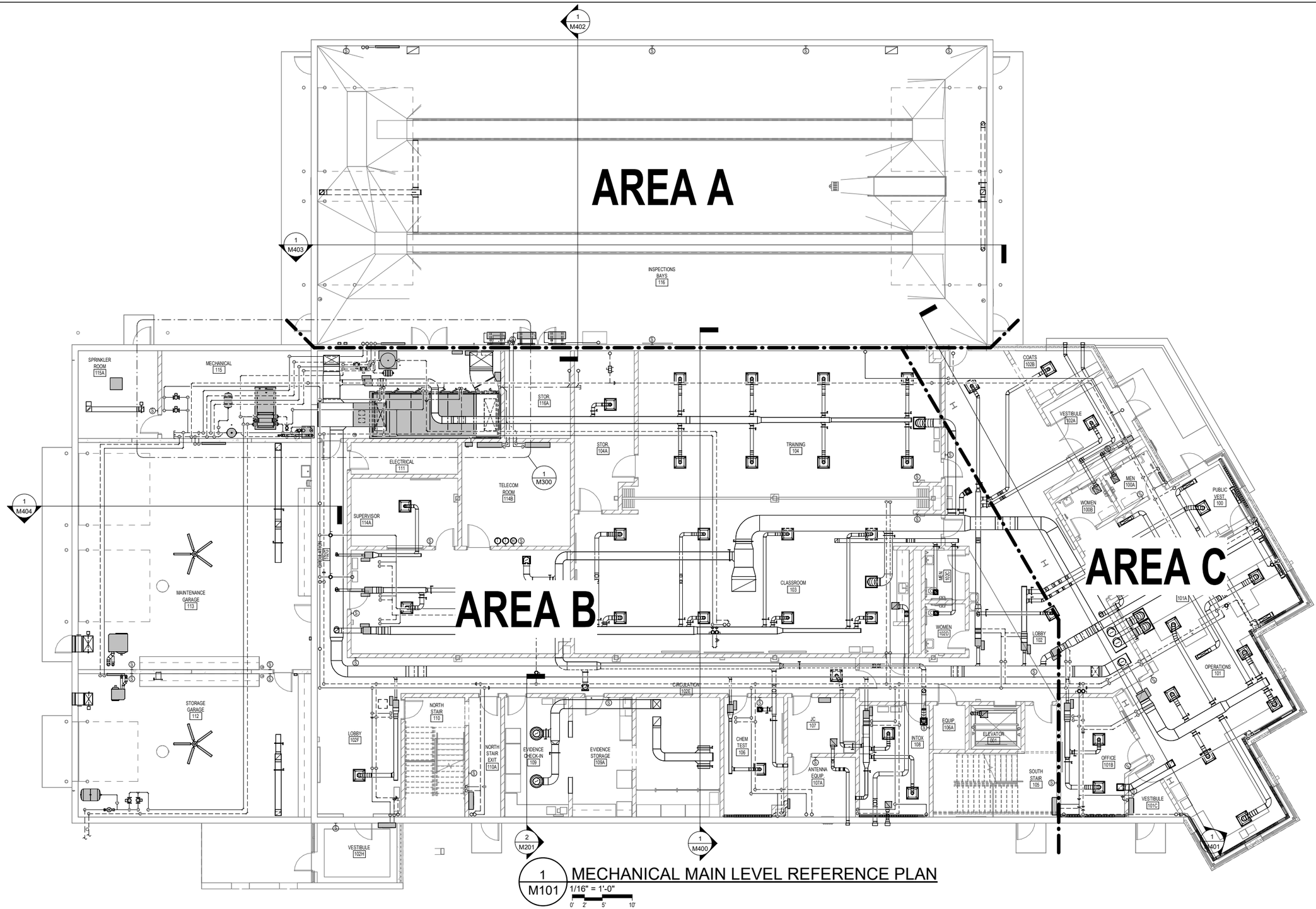


3 M100 PIPE SLEEVE
NO SCALE

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL SITE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M100	287

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1 M101 — MECHANICAL MAIN LEVEL REFERENCE PLAN

1/16" = 1'-0"

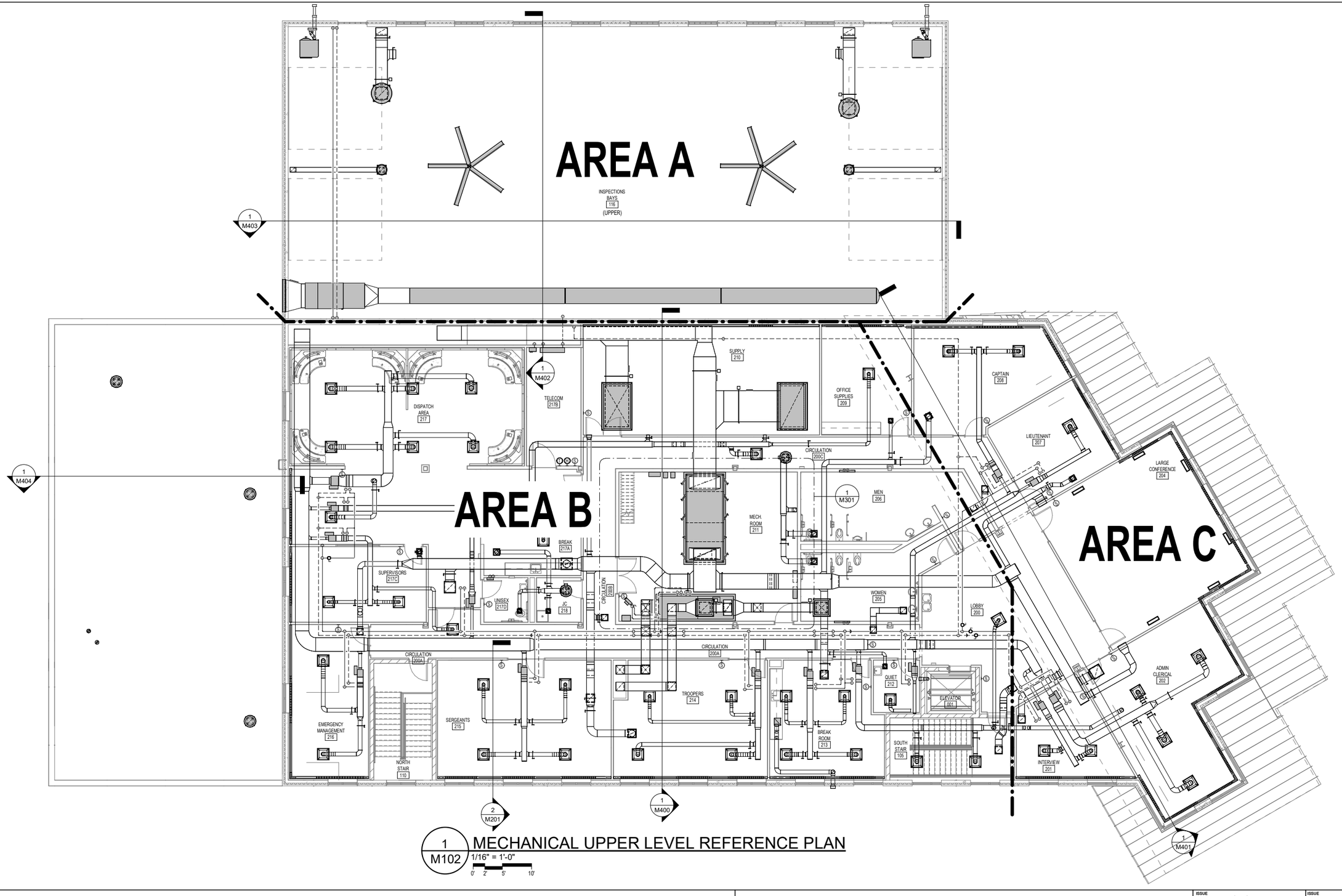
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL MAIN LEVEL REFERENCE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M101	288

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PLOT DATE: 4/24/2024 3:08:04 PM

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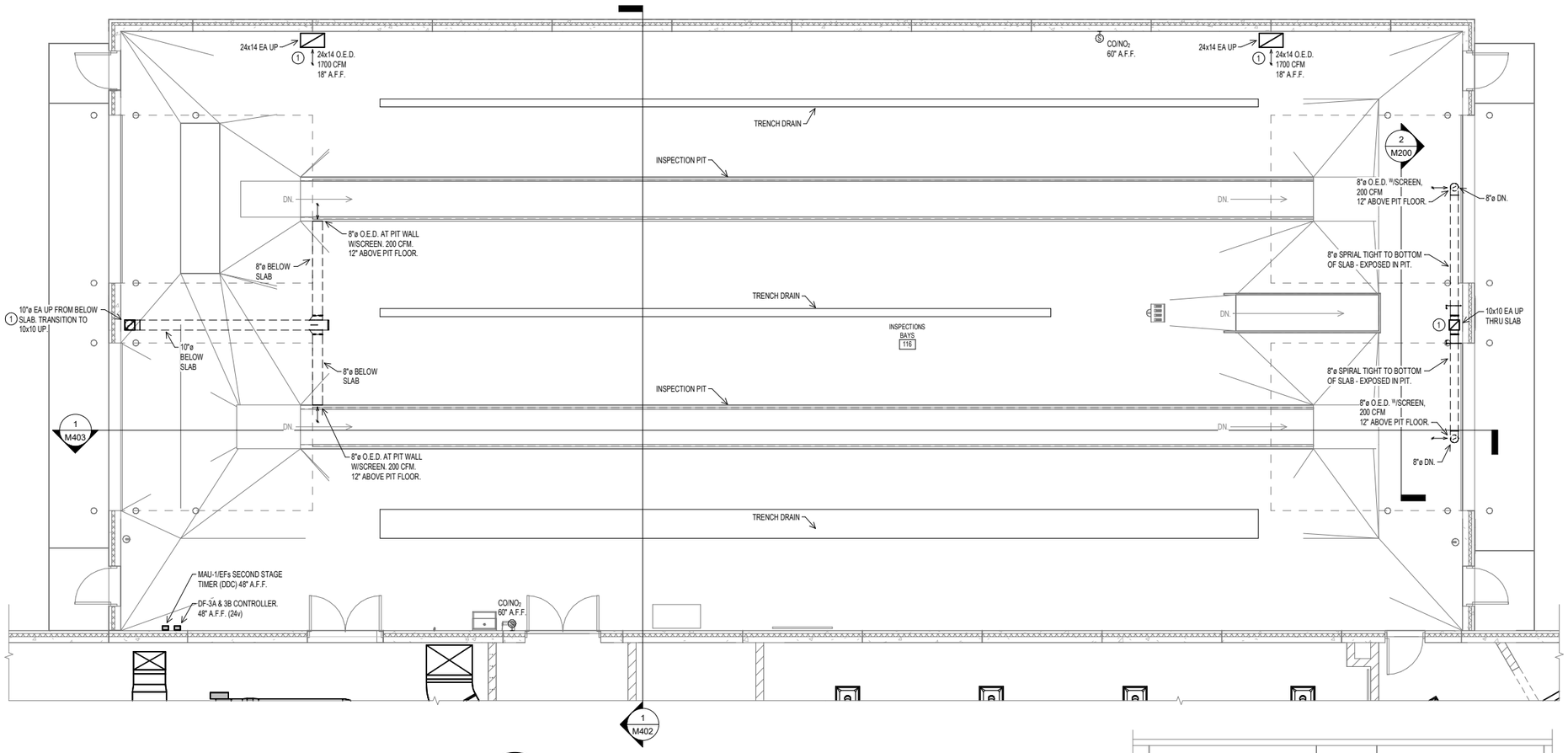
1 M102 MECHANICAL UPPER LEVEL REFERENCE PLAN

1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL UPPER LEVEL REFERENCE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M102	

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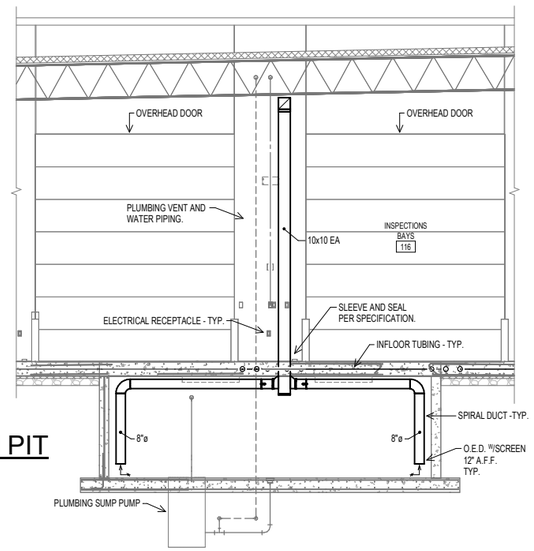


1 M200 MECHANICAL MAIN LEVEL FLOOR PLAN - AREA A

3/16" = 1'-0"

0' 1' 2' 5'

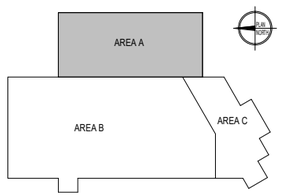
DUCTWORK



2 M200 MECHANICAL SECTION - SOUTH PIT

3/32" = 1'-0"

0' 1' 2' 5'



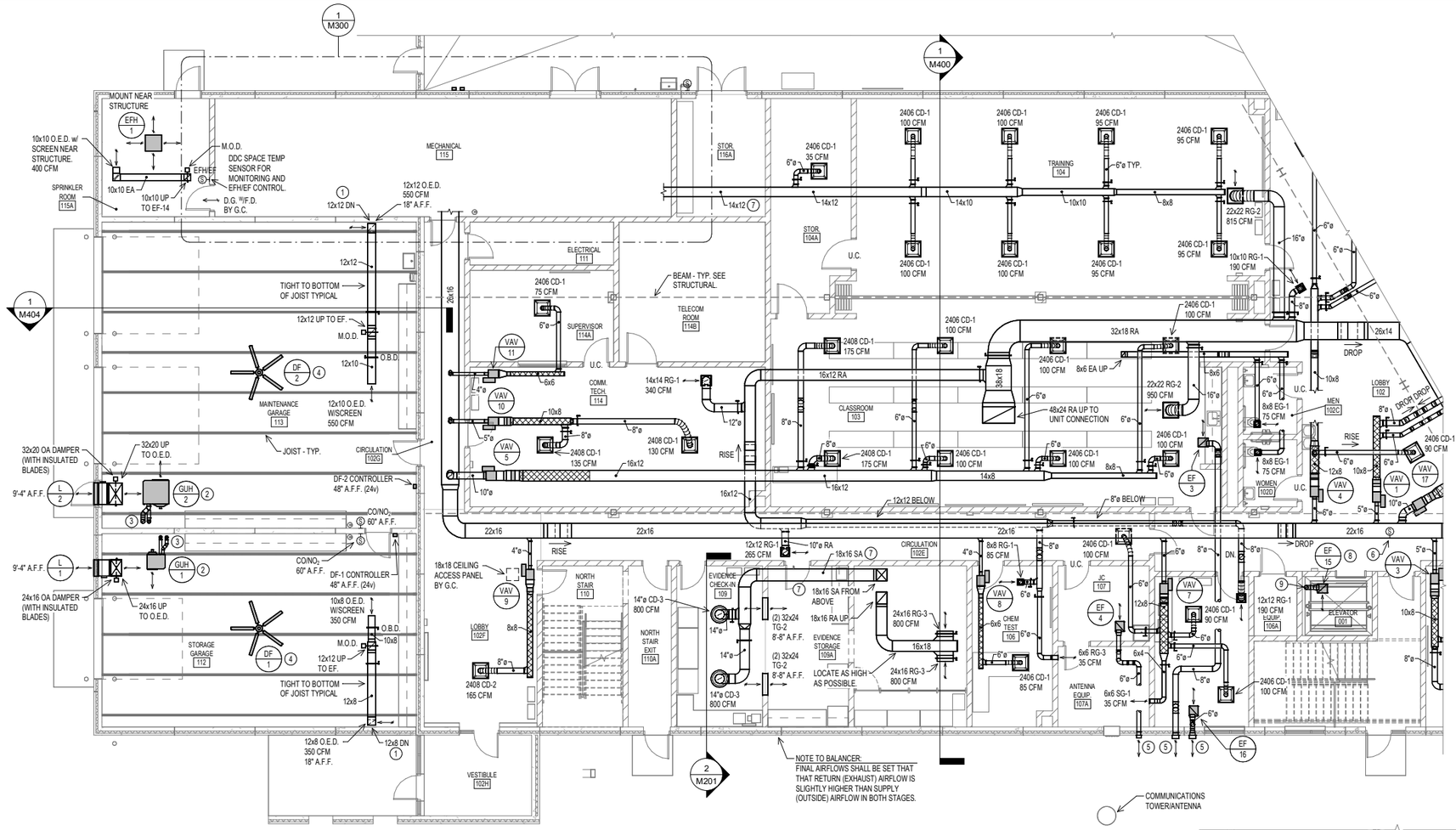
KEY PLAN

MECHANICAL KEYNOTES - M200

#	
1	PROVIDE 20 GAUGE DUCT DROP MINIMUM UP TO 10' ABOVE FLOOR. SECURE TO WALL. PROVIDE HEMMED OR FLANGED EDGES AT O.E.D. W/SCREEN

2

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL MAIN LEVEL FLOOR PLAN - AREA A DUCTWORK	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M200	290



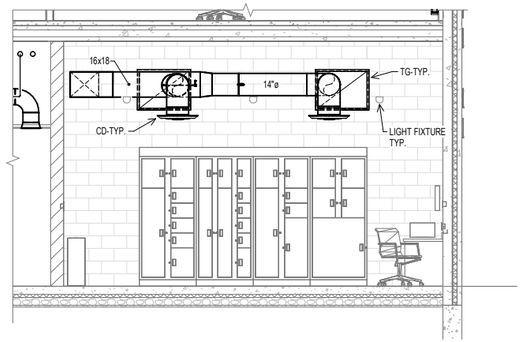
1 M201 MECHANICAL MAIN LEVEL FLOOR PLAN - AREA B

DUCTWORK

1/16" = 1'-0"

0' 2' 5' 10'

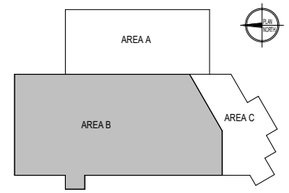
#	MECHANICAL KEYNOTES - M201
1	PROVIDE 20 GAUGE DUCT DROP MINIMUM UP TO 10' ABOVE FLOOR. SECURE TO WALL. PROVIDE HEMMED OR FLANGED EDGES AT O.E.D.
2	MOUNT UNIT FROM STRUCTURE APPROXIMATELY 10'-6" A.F.F. MAINTAIN MFG. AND ALL REQUIRED CLEARANCES. PROVIDE PROTECTIVE FRAME AROUND UNIT PER CODE (IMC 304.6) TO PROTECT FROM VEHICLES (UNITS INSTALLED WITHIN 12" OF TOP OF OVERHEAD DOOR).
3	VENT/INTAKE PIPES WITH CONCENTRIC VENT THRU ROOF. SIZE AND TERMINATE PER MFG. REQUIREMENTS. SEAL PENETRATION WATER TIGHT.
4	MOUNT FAN FROM STRUCTURE APPROXIMATELY 12' A.F.F. MAINTAIN MFG. AND ALL REQUIRED CLEARANCES.
5	ALUMINUM WALL CAP WITH SCREEN APPROXIMATELY 11'-6" A.F.F. PAINT TO MATCH WALL COLOR OR PROVIDE FACTORY PAINTED. COLOR CHOICE BY ARCHITECT.
6	DUCT STATIC PRESSURE SENSOR.
7	INSULATE EXPOSED SA DUCT IN THIS ROOM WITH 2" RIGID FIBERGLASS AND LAG AND MASTIC COVERING.
8	LOCATE EXHAUST FAN INLET NEAR HYDRAULICS/HYDRAULIC VENT. COORDINATE EXACT FAN LOCATION WITH ELEVATOR INSTALLER. MAINTAIN ALL REQUIRED CLEARANCES.
9	6"ø EXHAUST DUCT UP ALONG ELEVATOR SHAFT. COORDINATE EXACT LOCATION WITH ELEVATOR INSTALLER. MAINTAIN ALL REQUIRED CLEARANCES.



2 M201 EVIDENCE CHECK-INROOM

1/8" = 1'-0"

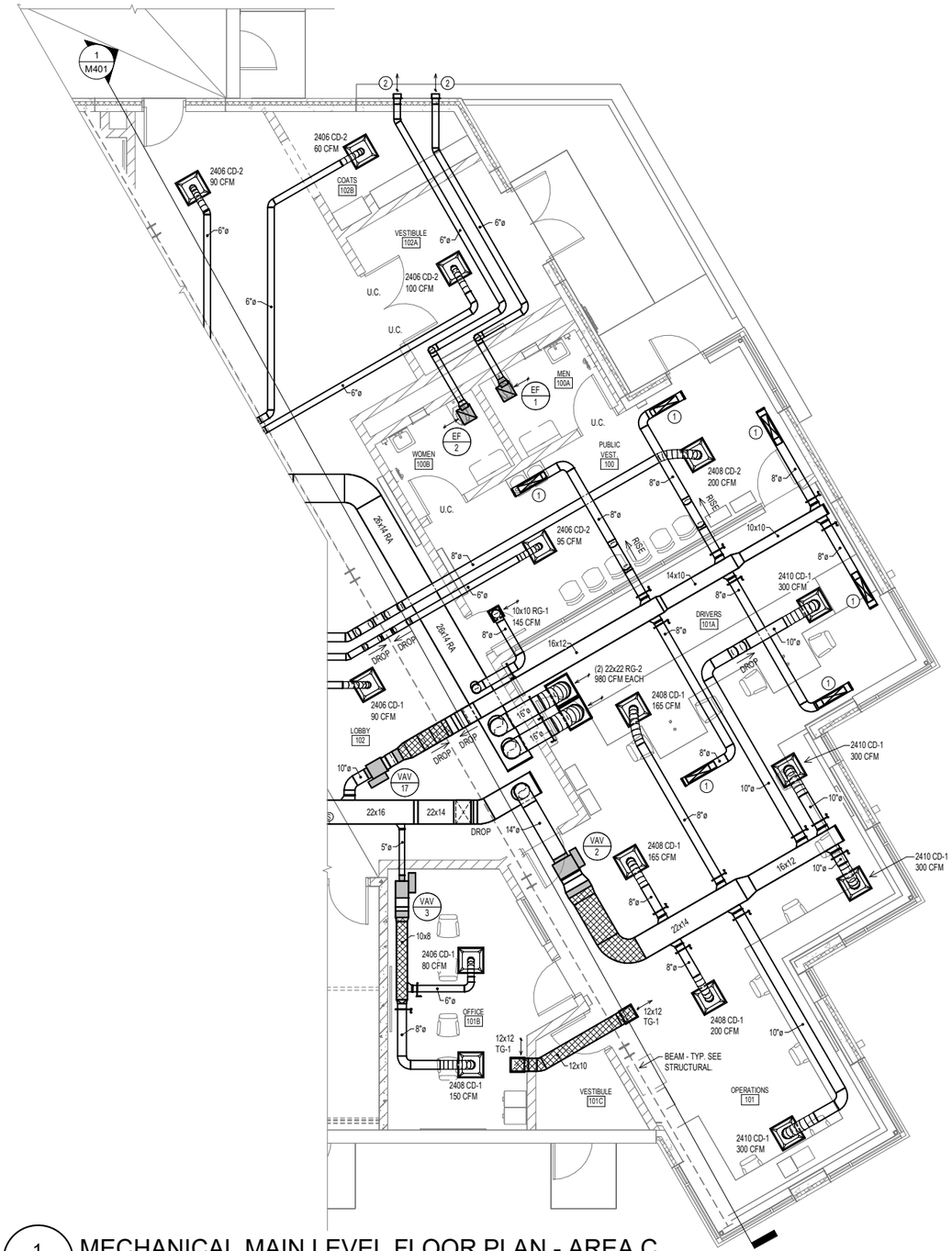
0' 1' 2' 5'



KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL MAIN LEVEL FLOOR PLAN - AREA B DUCTWORK	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M201	291

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1 M202 MECHANICAL MAIN LEVEL FLOOR PLAN - AREA C

3/32" = 1'-0"

0' 1' 2' 5'

DUCTWORK

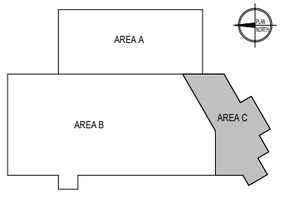
MECHANICAL KEYNOTES - M202

#	
1	24x6 SA DUCT UP TO 24x6 FLOOR GRILLE ABOVE. COORDINATE FLOOR OPENING WITH STRUCTURE/G.C.
2	ALUMINUM WALL CAP WITH SCREEN APPROXIMATELY 9' A.F.F. PAINT TO MATCH WALL COLOR OR PROVIDE FACTORY PAINTED. COLOR CHOICE BY ARCHITECT.

FIRST FLOOR AIR BALANCE (AHU-1)

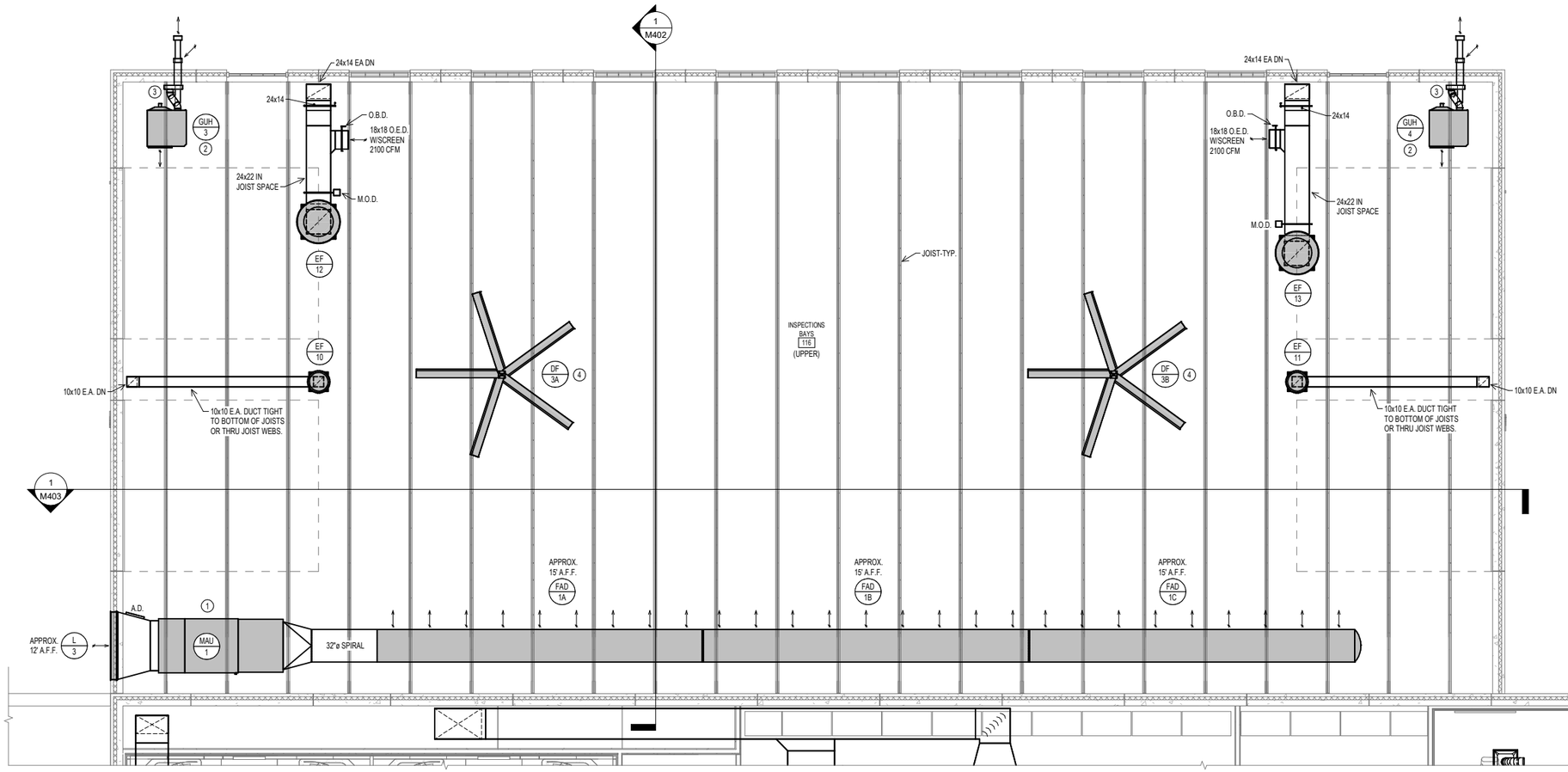
ROOM #	SA CFM	RA CFM	EA CFM	EA/TA DESCRIPTION
100	295	295	-	
100 A	-	-	75 *	DOOR UNDERCUT
100 B	-	-	75 *	DOOR UNDERCUT
101/101A	1730	1960	-	230 CFM TRANSFERRED FROM 101B
101 B	230	-	-	230 CFM TRANSFERRED INTO 101.
102/102B	240	190	-	75 CFM INTO 102 C AND 75 CFM INTO 102 D, 100 CFM FROM 102 A
102 A	100	-	-	100 CFM INTO 102
102 C	-	-	75	DOOR UNDERCUT - 75 CFM FROM 102
102 D	-	-	75	DOOR UNDERCUT - 75 CFM FROM 102
102 E	100	100	-	
102 F	165	165	-	
103	950	950	200 *	
104	780	815	-	35 CFM FROM 104 A
104 A	35	-	-	DOOR UNDERCUT - 35 CFM INTO 104
106	190	190	-	
107	-	-	75 *	DOOR UNDERCUT
107 A	35	35	-	
108	85	85	-	
114	265	340	-	75 CFM FROM 114 A
114 A	75	-	-	DOOR UNDERCUT - 75 CFM INTO 114
TOTAL	5,275	5,125	150	

* INTERMITTENT EXHAUST - NOT INCLUDED IN TOTALS.



KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL MAIN LEVEL FLOOR PLAN - AREA C DUCTWORK	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M202	292



1 / M203 MECHANICAL UPPER LEVEL FLOOR PLAN - AREA A

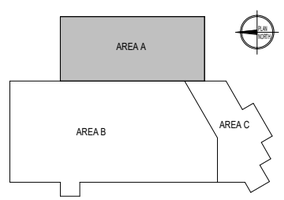
3/32" = 1'-0"

0' 1' 2' 5'

DUCTWORK

MECHANICAL KEYNOTES - M203

#	
1	MOUNT UNIT FROM STRUCTURE APPROXIMATELY 14' A.F.F. MAINTAIN MFG. AND ALL REQUIRED CLEARANCES. PROVIDE PROTECTIVE FRAME AROUND UNIT PER CODE TO PROTECT FROM VEHICLES (UNIT IS INSTALLED WITHIN 12" OF TOP OF OVERHEAD DOOR).
2	MOUNT UNIT FROM STRUCTURE APPROXIMATELY 16' A.F.F. MAINTAIN MFG. AND ALL REQUIRED CLEARANCES. PROVIDE PROTECTIVE FRAME AROUND UNIT PER CODE TO PROTECT FROM VEHICLES (UNIT IS INSTALLED WITHIN 12" OF TOP OF OVERHEAD DOOR).
3	VENT/INTAKE PIPES WITH CONCENTRIC VENT THRU WALL. SIZE AND TERMINATE PER MFG. REQUIREMENTS. SEAL PENETRATION WATER TIGHT.
4	MOUNT FAN FROM STRUCTURE APPROXIMATELY 17' A.F.F. MAINTAIN MFG. AND ALL REQUIRED CLEARANCES.



KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL UPPER LEVEL FLOOR PLAN - AREA A DUCTWORK	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M203	293

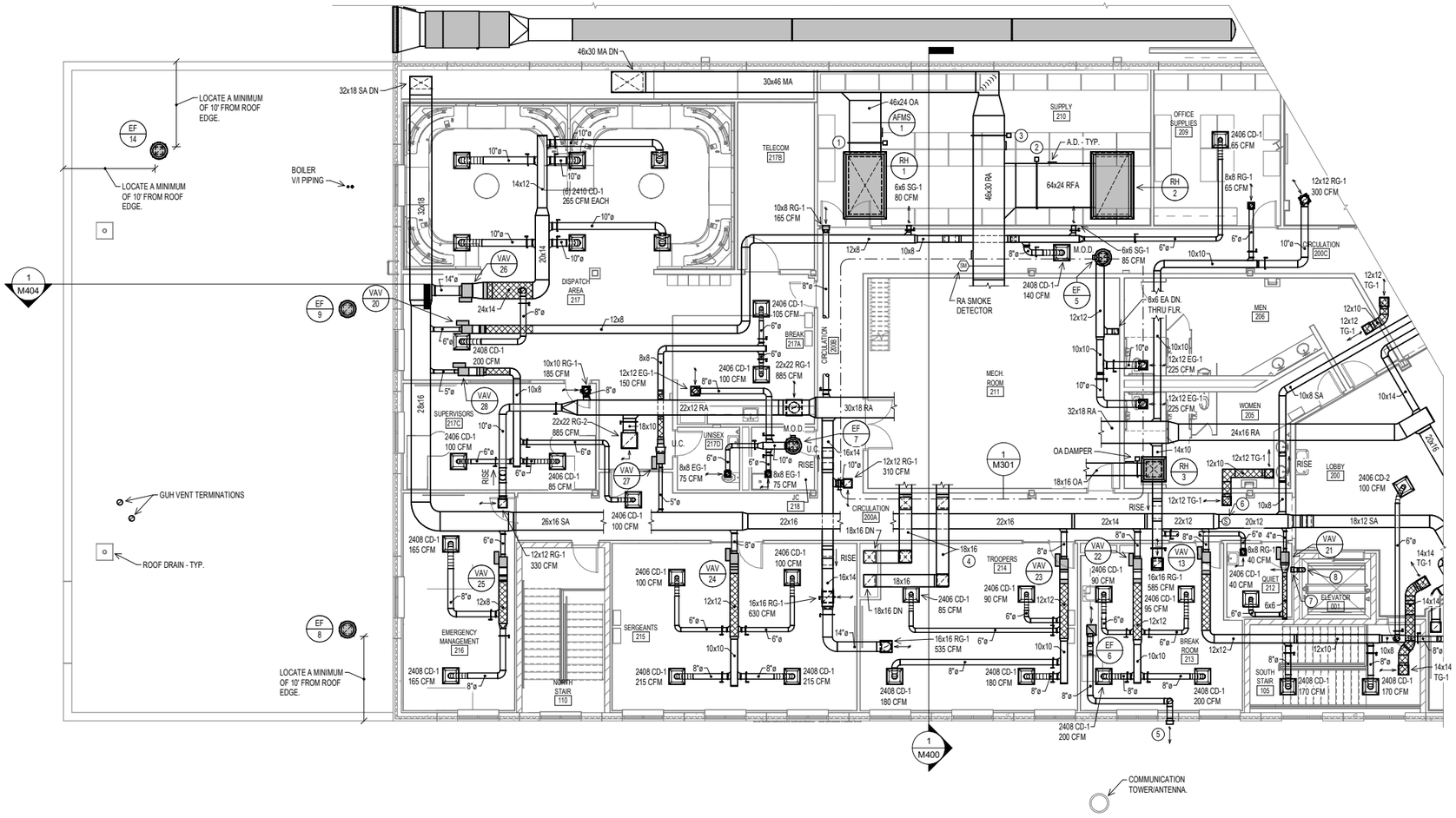
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2

MECHANICAL KEYNOTES - M204

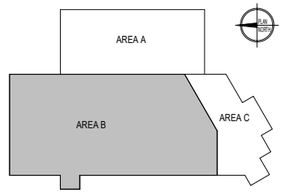
#	
1	OUTSIDE AIR CONTROL DAMPER.
2	RELIEF AIR CONTROL DAMPER.
3	RETURN AIR CONTROL DAMPER
4	IN JOIST SPACE.
5	ALUMINUM WALL CAP WITH SCREEN APPROXIMATELY 11'-6" A.F.F. PAINT TO MATCH WALL COLOR OR PROVIDE FACTORY PAINTED. COLOR CHOICE BY ARCHITECT.
6	DUCT STATIC PRESSURE SENSOR.
7	ALUMINUM WALL CAP WITH SCREEN. TERMINATE ABOVE 2nd FLOOR ROOF. PAINT TO MATCH WALL COLOR OR PROVIDE FACTORY PAINTED. COLOR CHOICE BY ARCHITECT.
8	6"ø EA DUCT FROM BELOW. COORDINATE EXACT LOCATION WITH ELEVATOR INSTALLER. MAINTAIN ALL REQUIRED CLEARANCES. INSULATE DUCT WITHIN 5' OF EXTERIOR WALL PENETRATION OR AS ALLOWED BY ELEVATOR CLEARANCES.



1 M204 MECHANICAL UPPER LEVEL FLOOR PLAN - AREA B DUCTWORK

1/16" = 1'-0"

0' 2' 5' 10'



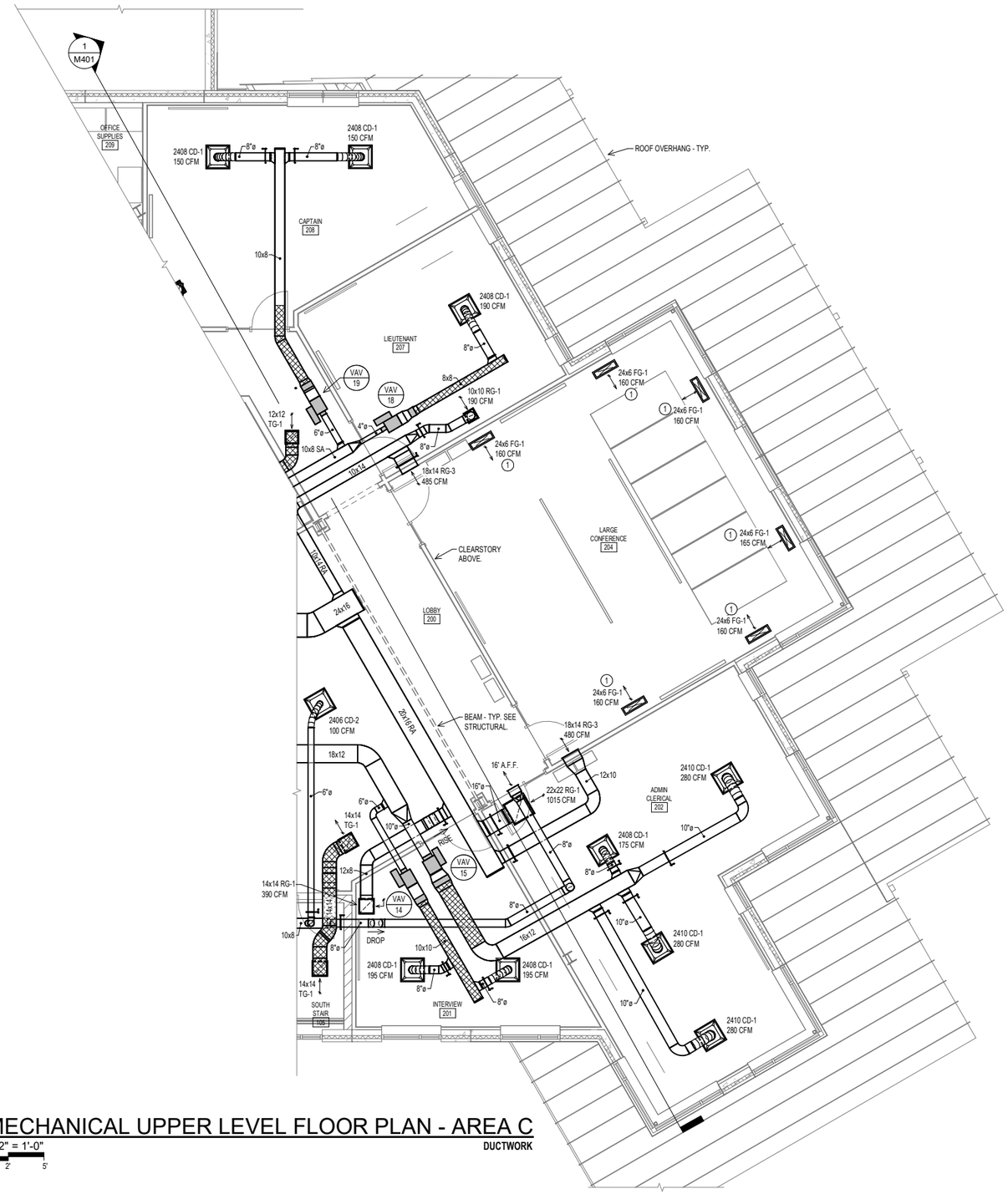
KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL UPPER LEVEL FLOOR PLAN - AREA B DUCTWORK	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M204	294

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#	MECHANICAL KEYNOTES - M205
1	COORDINATE FLOOR OPENING AND LOCATION WITH STRUCTURE/G.C.

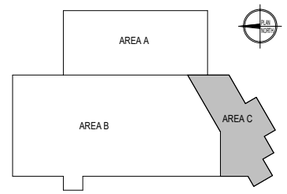


1 M205 MECHANICAL UPPER LEVEL FLOOR PLAN - AREA C
3/32" = 1'-0"
0' 1" 2' 5'
DUCTWORK

SECOND FLOOR AIR BALANCE (AHU-1)

ROOM #	SA CFM	RA CFM	EA CFM	EA/TA DESCRIPTION
105/200	595	145	-	225 CFM INTO 205 & 225 CFM INTO 206
200 A	100	100		
200 C	140	65		75 CFM INTO 218
201	390	390	-	
202	1015	1015	-	
204	965	965	-	
205	-	-	225	OVERHEAD TRANSFER - 225 CFM FROM 200
206	-	-	225	OVERHEAD TRANSFER - 225 CFM FROM 200
207	190	190	-	
208	300	300	-	
209	65	65	-	
210	165	165	-	
212	40	40	-	
213	585	585	200 *	
214	535	535	-	
215	630	630	-	
216	330	330	-	
217/217A	1995	1770	150	75 CFM INTO 217 D
217 C	185	185	-	
217 D	-	-	75	DOOR UNDERCUT - 75 CFM FRPM 217
218	-	-	75	DOOR UNDERCUT - 75 CFM FRPM 200 C
TOTAL	8,225	7,475	750	

* INTERMITTENT EXHAUST - NOT INCLUDED IN TOTALS.

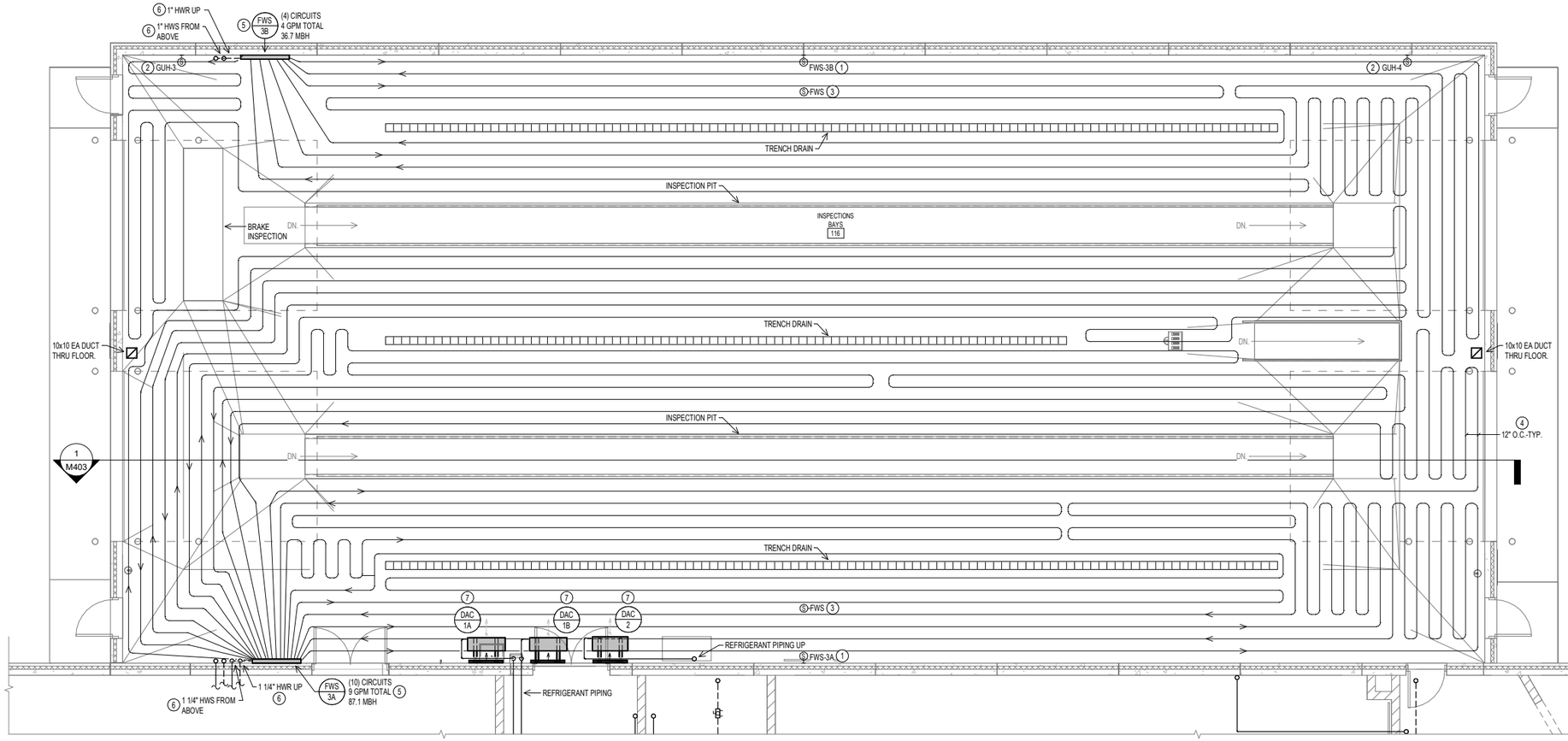


KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL UPPER LEVEL FLOOR PLAN - AREA C DUCTWORK	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M205	295

2

#	MECHANICAL KEYNOTES - M206
1	FLOOR WARMING SPACE TEMPERATURE SENSOR. SPACE TEMPERATURE SETPOINT - 68°F (ADJ.).
2	GAS FIRED UNIT HEATER SPACE TEMPERATURE SENSOR. SPACE TEMPERATURE SETPOINT - 68°F (ADJ.). MAINTAIN A 2°F DIFFERENTIAL WITH FLOOR WARMING SYSTEM SET POINT.
3	SLAB SENSOR FOR DDC MONITORING. LOCATE FLOOR WARMING SENSOR BULB IN METALLIC CONDUIT. POSITION CONDUIT IN MIDDLE OF CONCRETE SLAB HEIGHT AND CENTERED BETWEEN LOOPS.
4	STAPLE ALL TUBING DIRECTLY TO FOAM INSULATION. MAXIMUM SPACING BETWEEN STAPLES SHALL BE 3' O.C. PROVIDE A MINIMUM OF (3) STAPLES AT EACH CHANGE OF DIRECTION OF 90° OR LARGER.
5	INSTALL MANIFOLDS IN WHITE SURFACE MOUNTED CABINET EQUAL TO REHAU 249. PROVIDE ADDITIONAL ENCLOSURE FOR EXPOSED PEX TUBING FROM FLOOR TO MATCH CABINET.
6	COVER PIPES WITH PVC JACKET AS SPECIFIED.
7	MOUNT UNIT FROM WALL APPROXIMATELY 11' A.F.F.

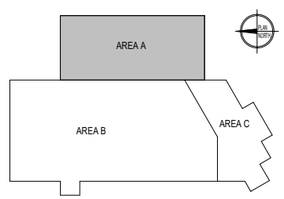


1 M206 MECHANICAL MAIN LEVEL FLOOR PLAN - AREA A

PIPING

3/32" = 1'-0"

0' 1' 2' 5'



KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL MAIN LEVEL FLOOR PLAN - AREA A PIPING	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M206	296

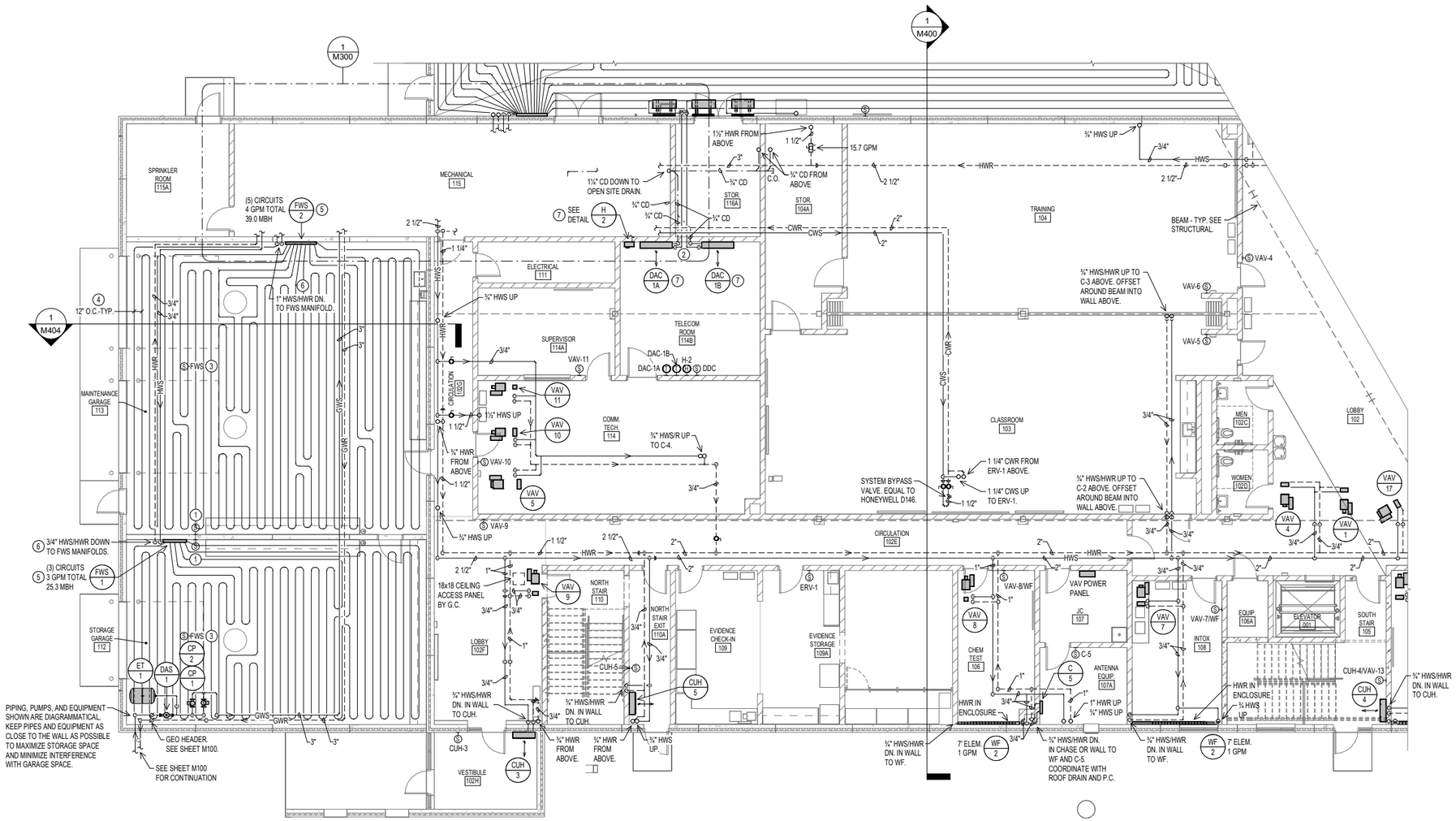
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2

(#) MECHANICAL KEYNOTES - M207

1	SPACE TEMPERATURE SENSOR. FLOOR WARMING SETPOINT - 68°F (ADJ.). GAS FIRED UNIT HEATER SETPOINT - 66°F (ADJ.). MAINTAIN A 2°F DIFFERENTIAL WITH FLOOR WARMING SYSTEM SETPOINT.
2	REFRIGERANT PIPING. SIZE PER MFG. REQUIREMENTS. SEAL ALL WALL PENETRATIONS AS SPECIFIED.
3	SLAB SENSOR FOR DDC MONITORING. LOCATE FLOOR WARMING SENSOR BULB IN METALLIC CONDUIT. POSITION CONDUIT IN MIDDLE OF CONCRETE SLAB HEIGHT AND CENTERED BETWEEN LOOPS.
4	STAPLE ALL TUBING DIRECTLY TO FOAM INSULATION. MAXIMUM SPACING BETWEEN STAPLES SHALL BE 3' O.C. PROVIDE A MINIMUM OF (3) STAPLES AT EACH CHANGE OF DIRECTION OF 90° OR LARGER.
5	INSTALL MANIFOLDS IN WHITE SURFACE MOUNTED CABINET EQUAL TO REHAU 249. PROVIDE ADDITIONAL ENCLOSURE FOR EXPOSED PEX TUBING FROM FLOOR TO MATCH CABINET.
6	COVER PIPES WITH PVC JACKET AS SPECIFIED.
7	MOUNT UNIT FROM WALL APPROXIMATELY 9' A.F.F. COORDINATE WITH OWNER AND EQUIPMENT LAYOUT.

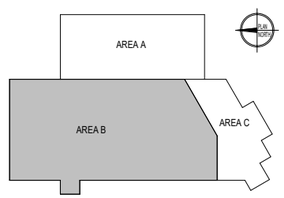


1 M207 MECHANICAL MAIN LEVEL FLOOR PLAN - AREA B

1/16" = 1'-0"

0' 2' 5' 10'

PIPING



KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL MAIN LEVEL FLOOR PLAN - AREA B PIPING	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M207	297

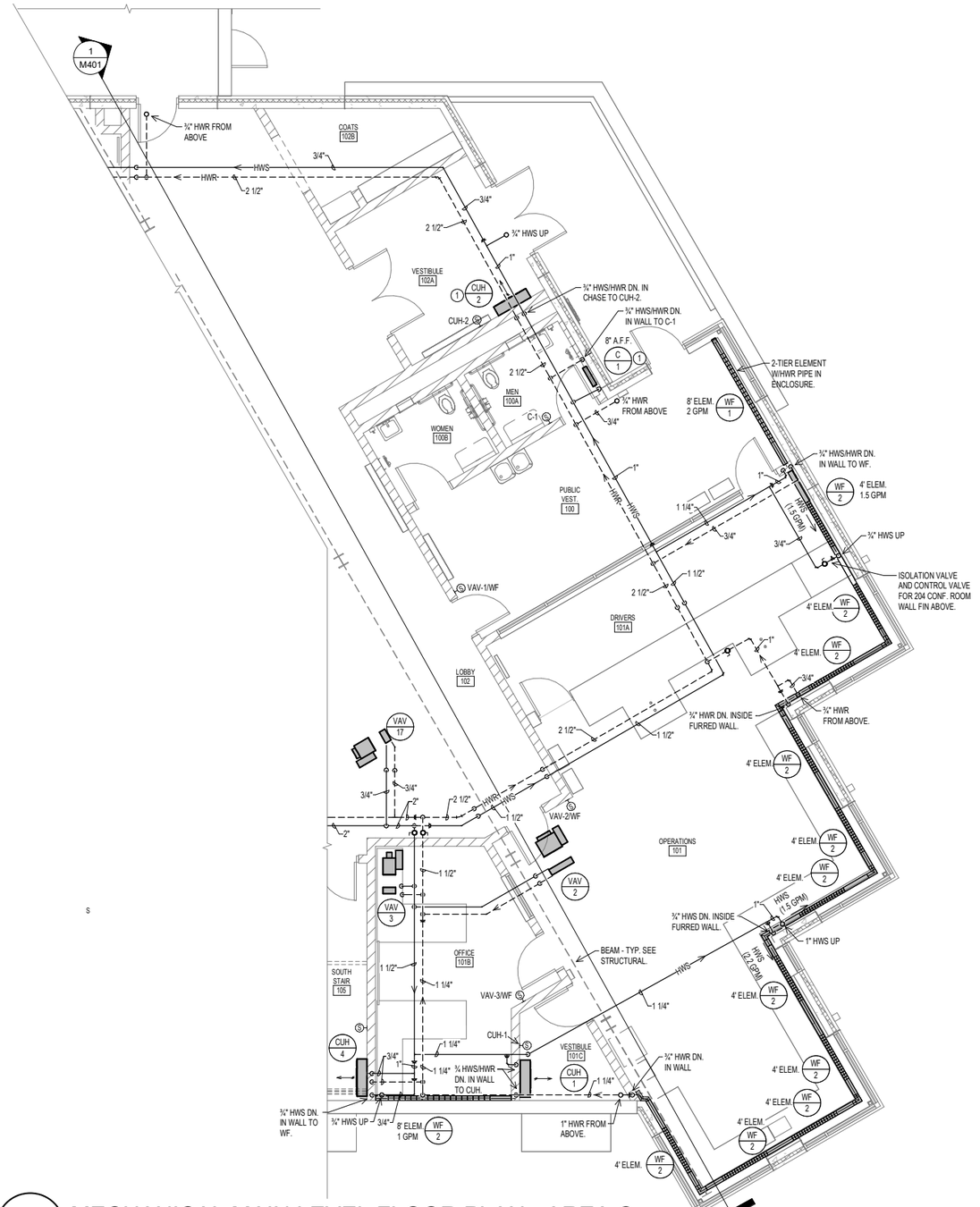
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2

ⓐ MECHANICAL KEYNOTES - M208

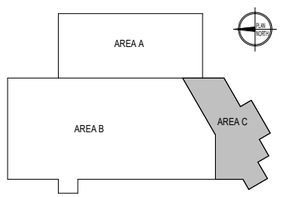
1	LOCATE VALVES INSIDE UNIT.



1 M208 **MECHANICAL MAIN LEVEL FLOOR PLAN - AREA C PIPING**

3/32" = 1'-0"

0' 1' 2' 5'

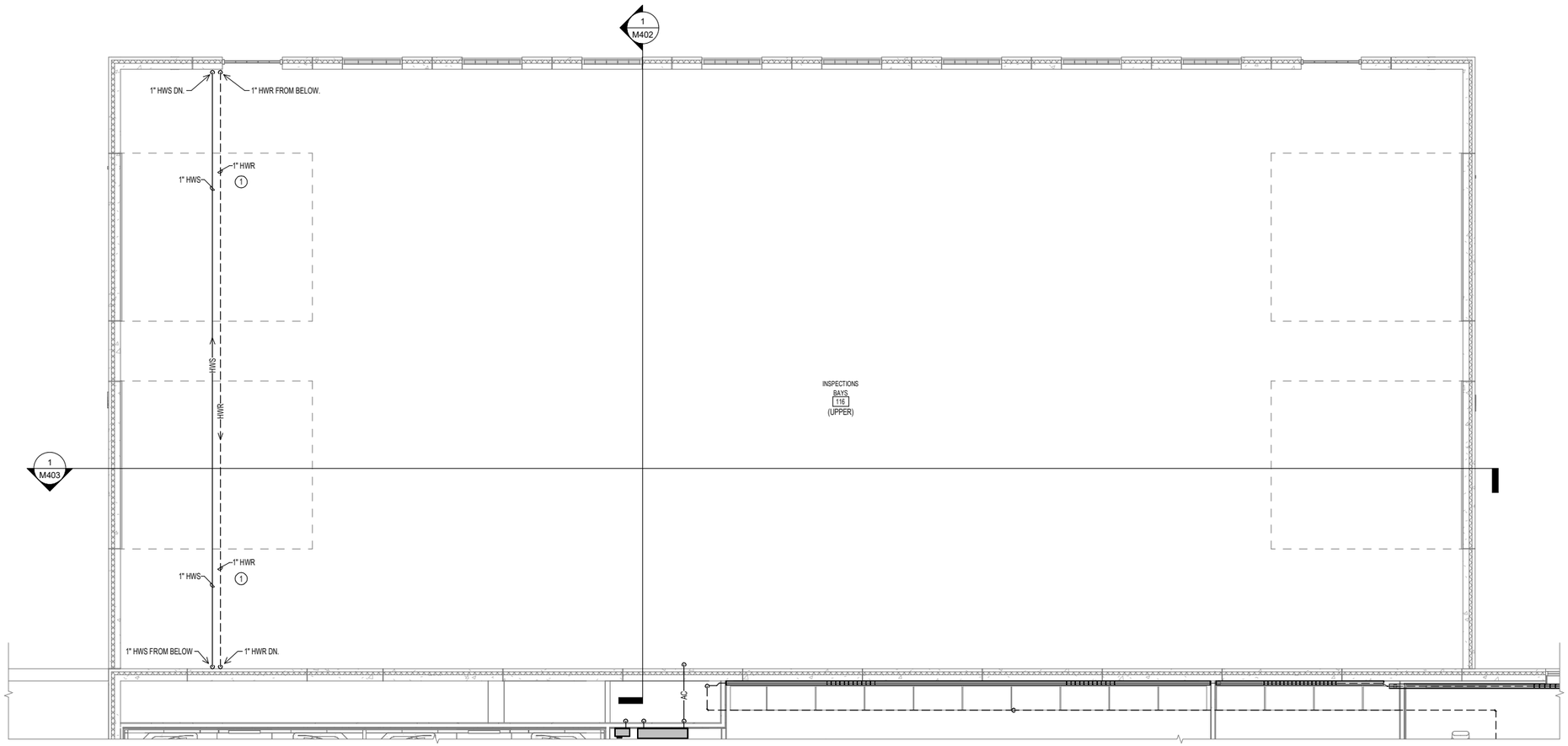


KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL MAIN LEVEL FLOOR PLAN - AREA C PIPING	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M208	298

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#	MECHANICAL KEYNOTES - M209
1	PIPING TIGHT TO STRUCTURE.

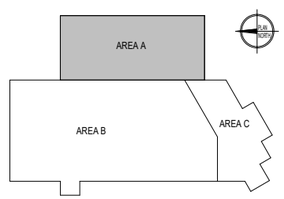


1 M209 MECHANICAL UPPER LEVEL FLOOR PLAN - AREA A

3/32" = 1'-0"

0' 1' 2' 5'

PIPING



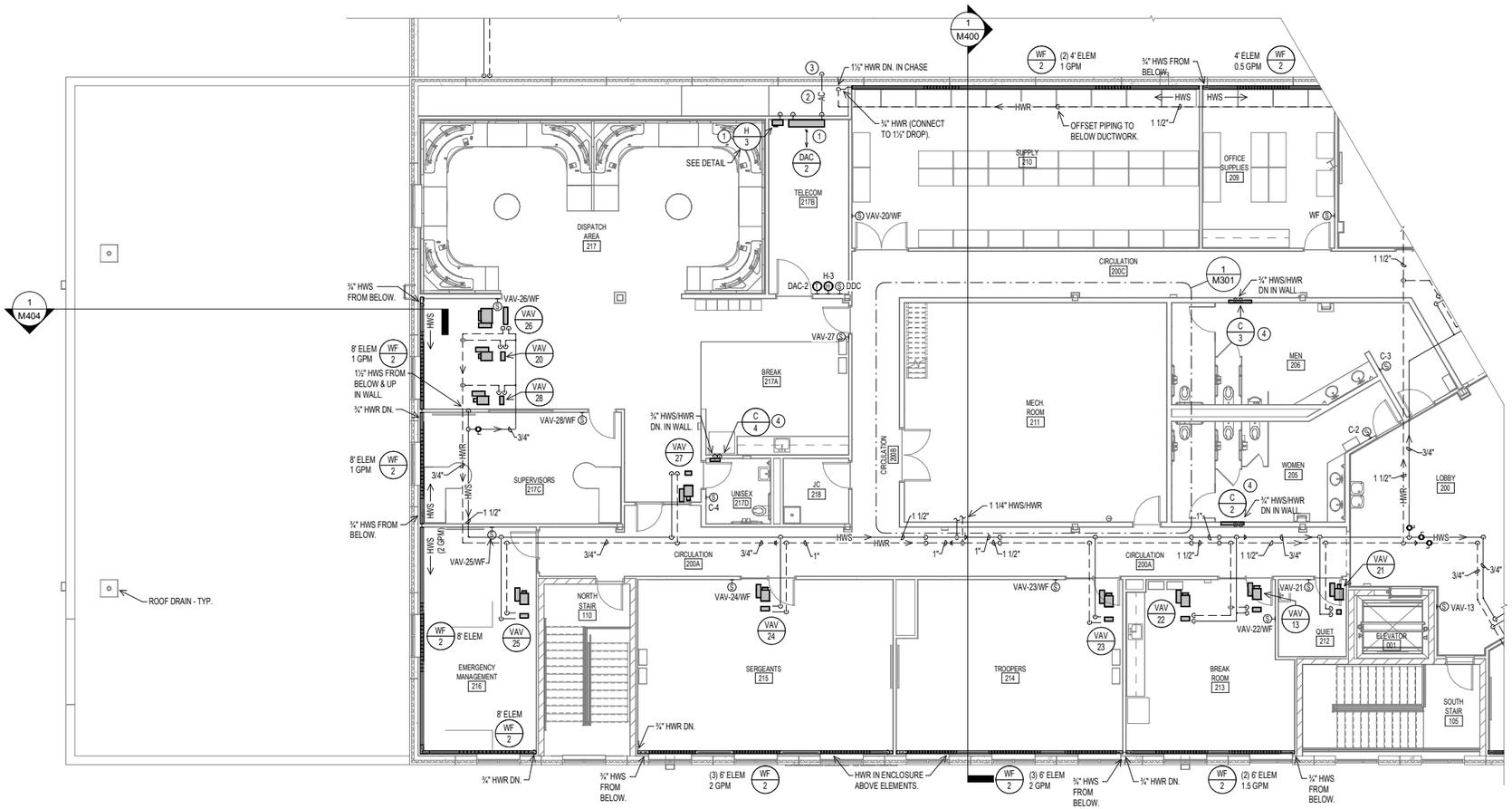
KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL UPPER LEVEL FLOOR PLAN - AREA A PIPING	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M209	299

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PLOT DATE: 4/24/2024 3:08:26 PM

#	MECHANICAL KEYNOTES - M210
1	MOUNT UNIT FROM WALL APPROXIMATELY 9' A.F.F. COORDINATE WITH OWNER AND EQUIPMENT LAYOUT.
2	REFRIGERANT PIPING SIZE PER MFG. REQUIREMENTS. SEAL ALL WALL PENETRATIONS AS SPECIFIED.
3	REFRIGERANT PIPING DOWN TO CONDENSING UNIT. SEE SHEET M206 FOR CONTINUATION.
4	MOUNT UNIT APPROXIMATELY 8" A.F.F.

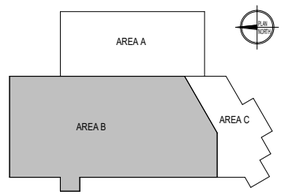


1 M210 MECHANICAL UPPER LEVEL FLOOR PLAN - AREA B

1/16" = 1'-0"

0' 2' 5' 10'

PIPING



KEY PLAN

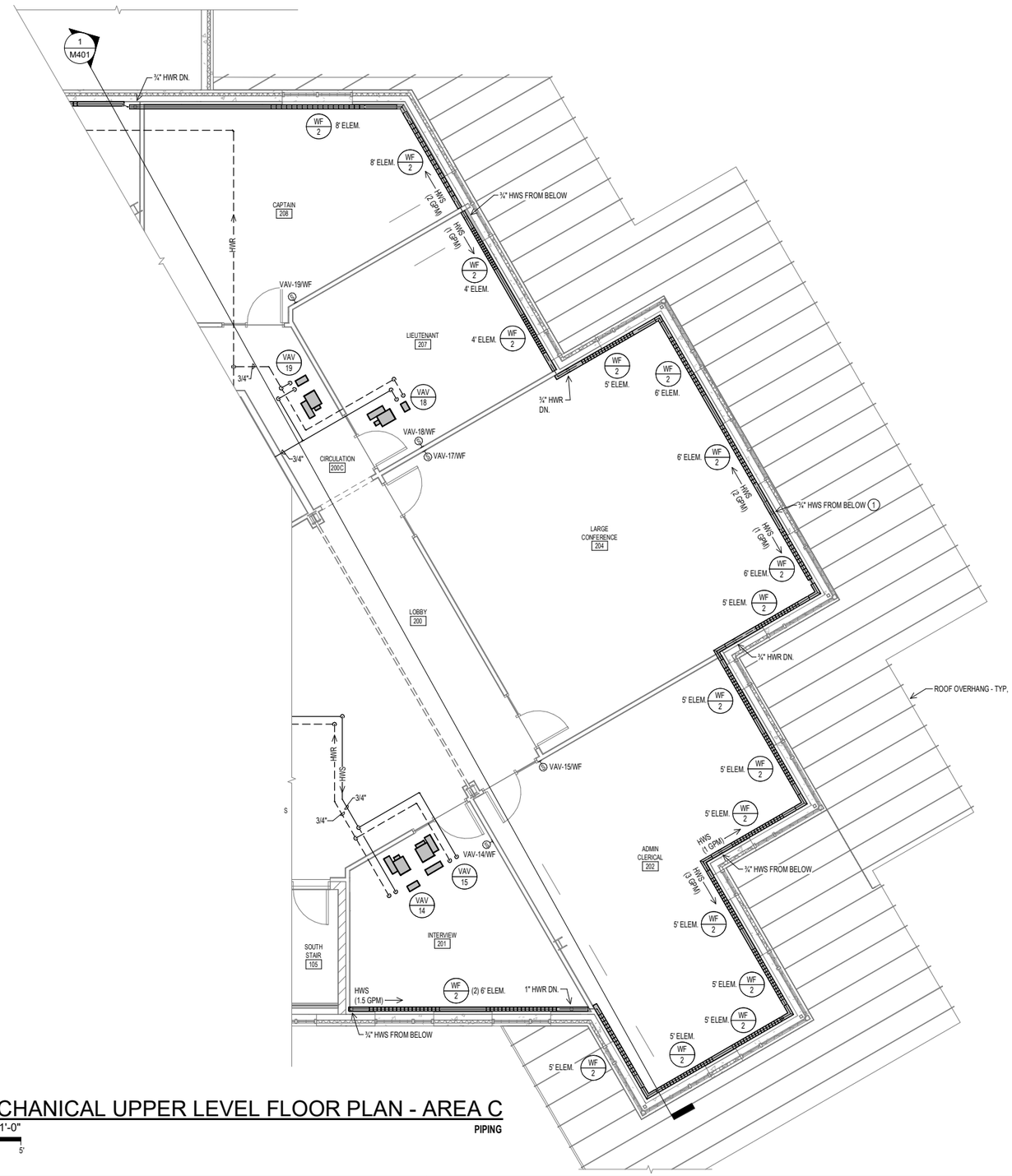
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL UPPER LEVEL FLOOR PLAN - AREA B PIPING	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M210	300

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2

MECHANICAL KEYNOTES - M211

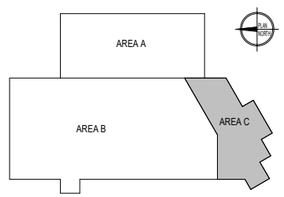
#	
1	CONTROL VALVE FOR THIS ROOM WF IS LOCATED IN CEILING SPACE BELOW.



1 M211 MECHANICAL UPPER LEVEL FLOOR PLAN - AREA C PIPING

3/32" = 1'-0"

0' 1' 2' 5'

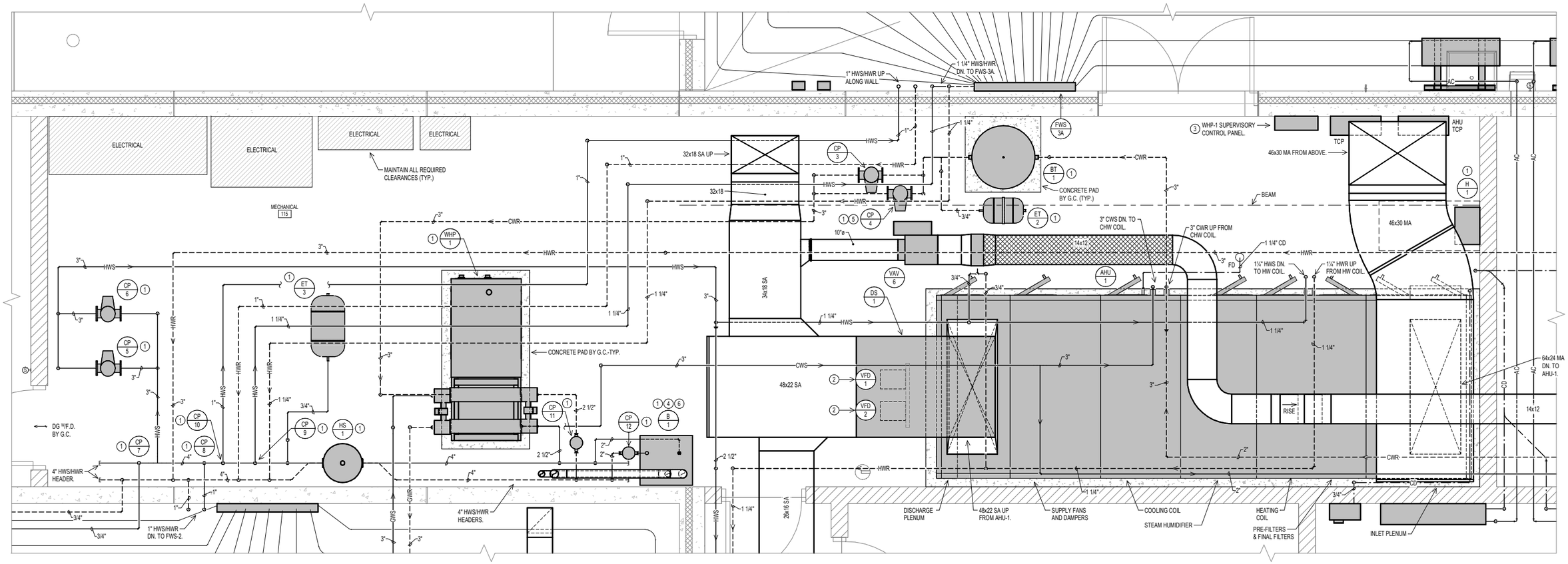


KEY PLAN

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL UPPER LEVEL FLOOR PLAN - AREA C PIPING	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M211	301

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#	MECHANICAL KEYNOTES - M300
1	SEE DETAIL(S).
2	LOCATE ON STAND FROM FLOOR.
3	PANEL CAN BE MOUNTED AT WHP PER MANUFACTURER REQUIREMENTS.
4	MOUNT FROM WALL PER MANUFACTURER REQUIREMENTS.
5	LOCATE PUMPS, PIPING, AND ACCESSORIES AS CLOSE TO WALL TO MAXIMIZE MECHANICAL ROOM SPACE. MAINTAIN ALL REQUIRED CLEARANCES.
6	BOILER VENT/INTAKE PIPES UP THRU ROOF. MAINTAIN ALL REQUIRED CLEARANCES.



1/M300 ENLARGED 115 MECHANICAL ROOM

1/4" = 1'-0"

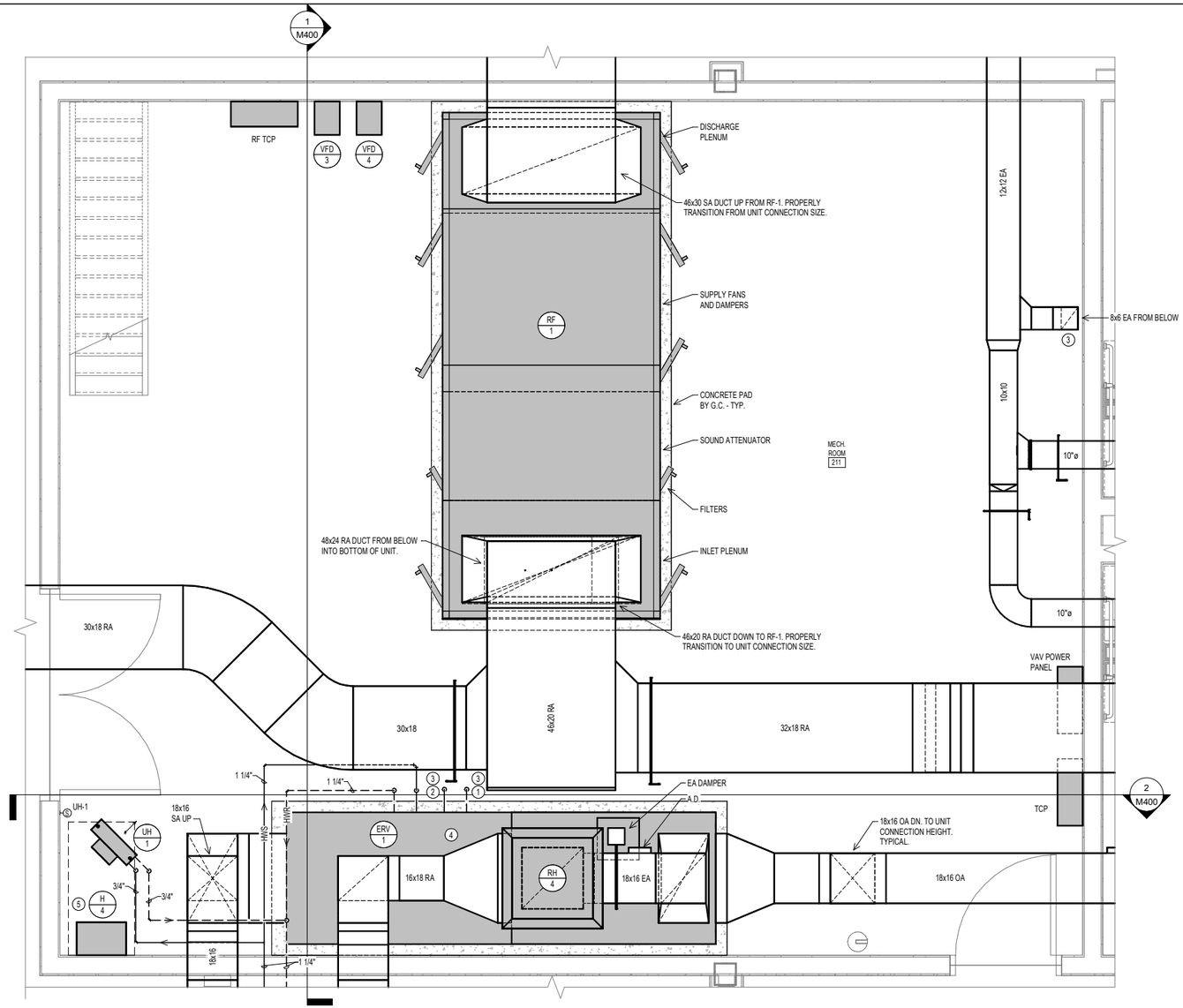
0" 6" 1' 3'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ENLARGED 115 MECHANICAL ROOM	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M300	

Autodesk Docs://KLENG 21001 - SWEF/21107 MECH R21_mikebAPVMK.rvt PLOT DATE: 4/24/2024 3:08:30 PM

MECHANICAL KEYNOTES - M301

#	
1	1¼" CWR DOWN THRU FLOOR.
2	1¼" CWS FROM BELOW.
3	SLEEVE AND SEAL FLOOR PENETRATION AS SPECIFIED.
4	SEE DETAIL FOR ERV PIPING CONNECTIONS.
5	SEE DETAIL(S).



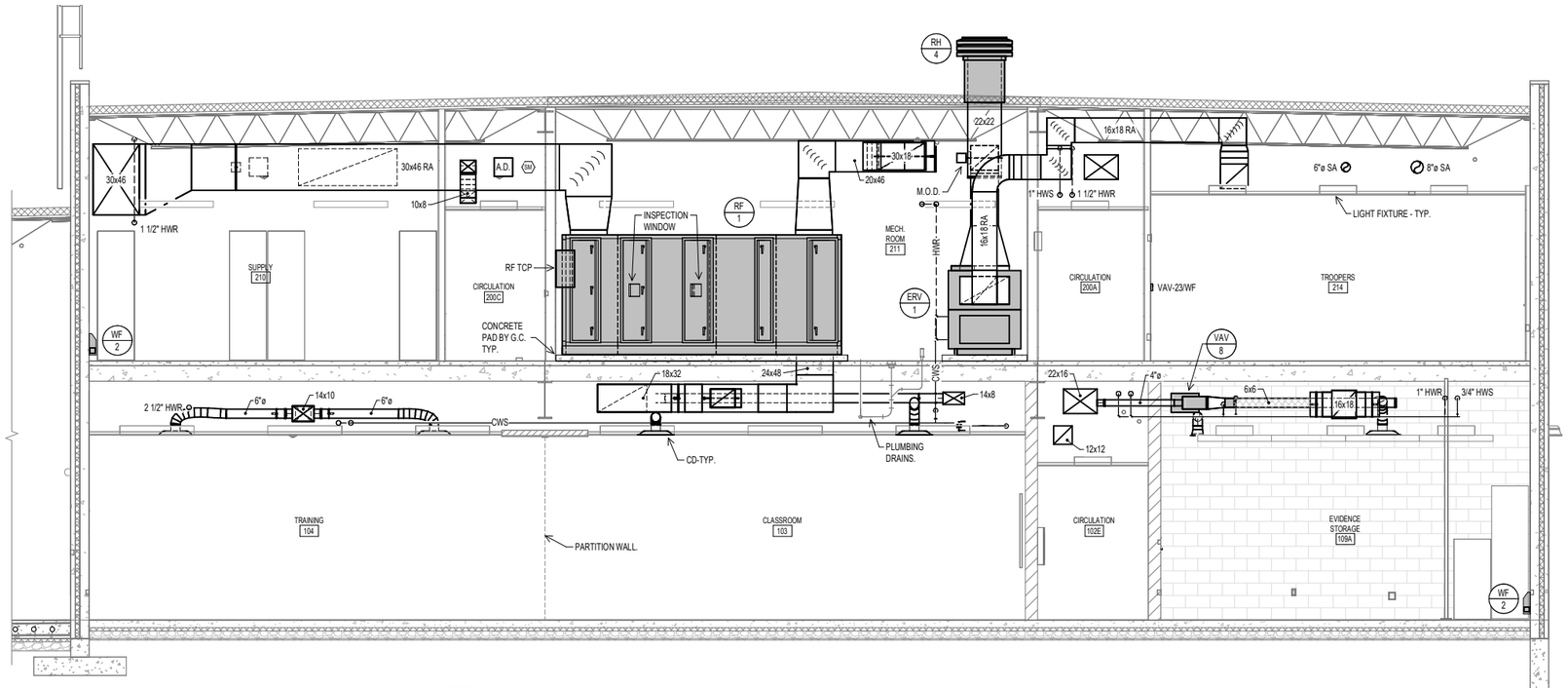
1/M301 ENLARGED 211 MECHANICAL ROOM

1/4" = 1'-0"

0" 6" 1' 3'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ENLARGED 211 MECHANICAL ROOM	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M301	303

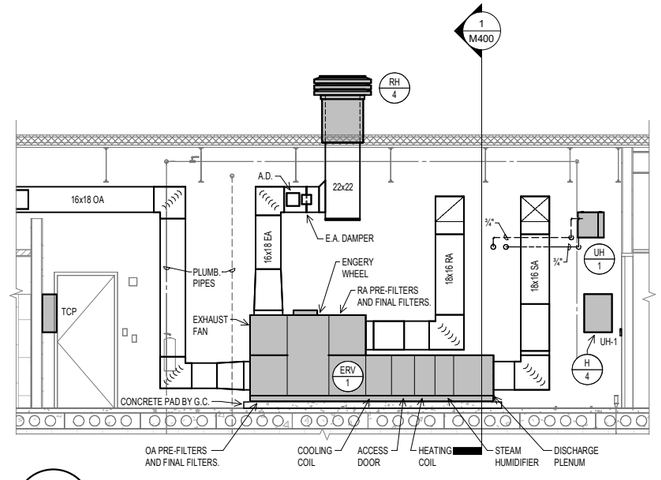
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1 M400 MECHANICAL SECTION - 211 MECH ROOM

1/8" = 1'-0"

0' 1' 2' 5'



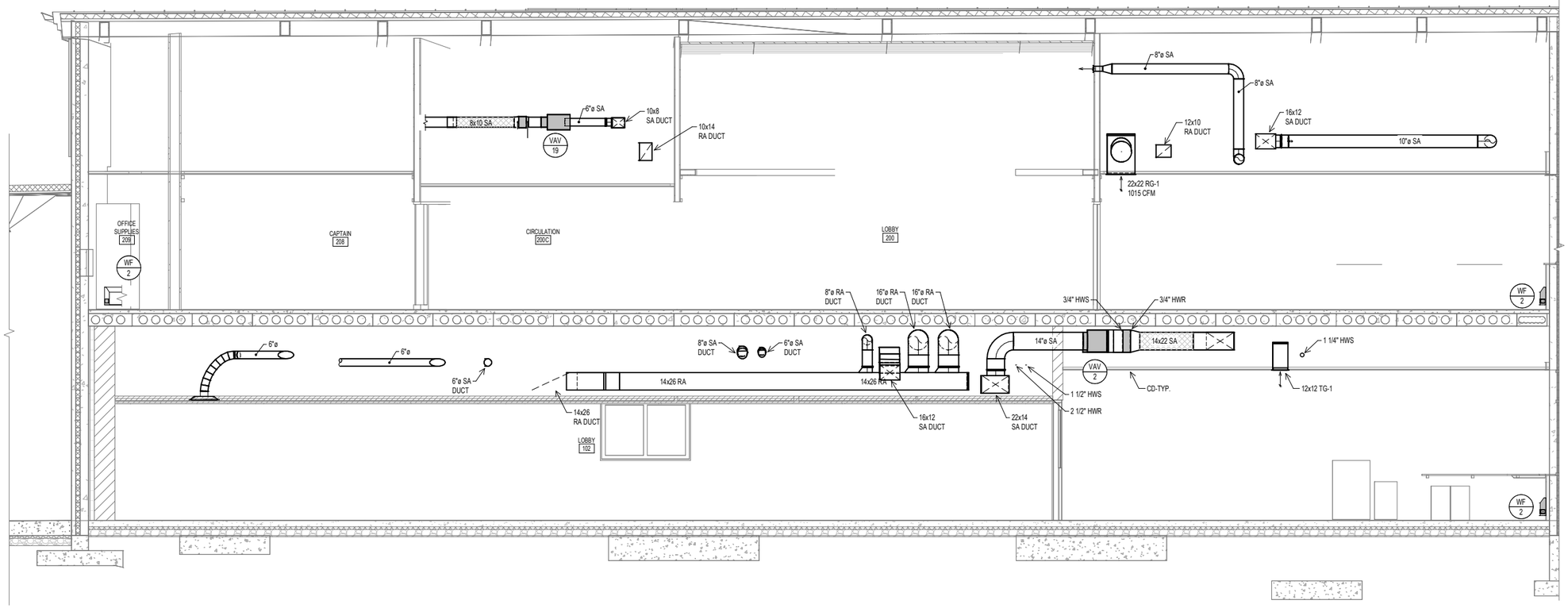
2 M400 MECHANICAL SECTION - 211 MECH ROOM

1/8" = 1'-0"

0' 1' 2' 5'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL SECTIONS - 211 MECH. ROOM	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M400	304

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1 M401 MECHANICAL SECTION - SOUTHEAST

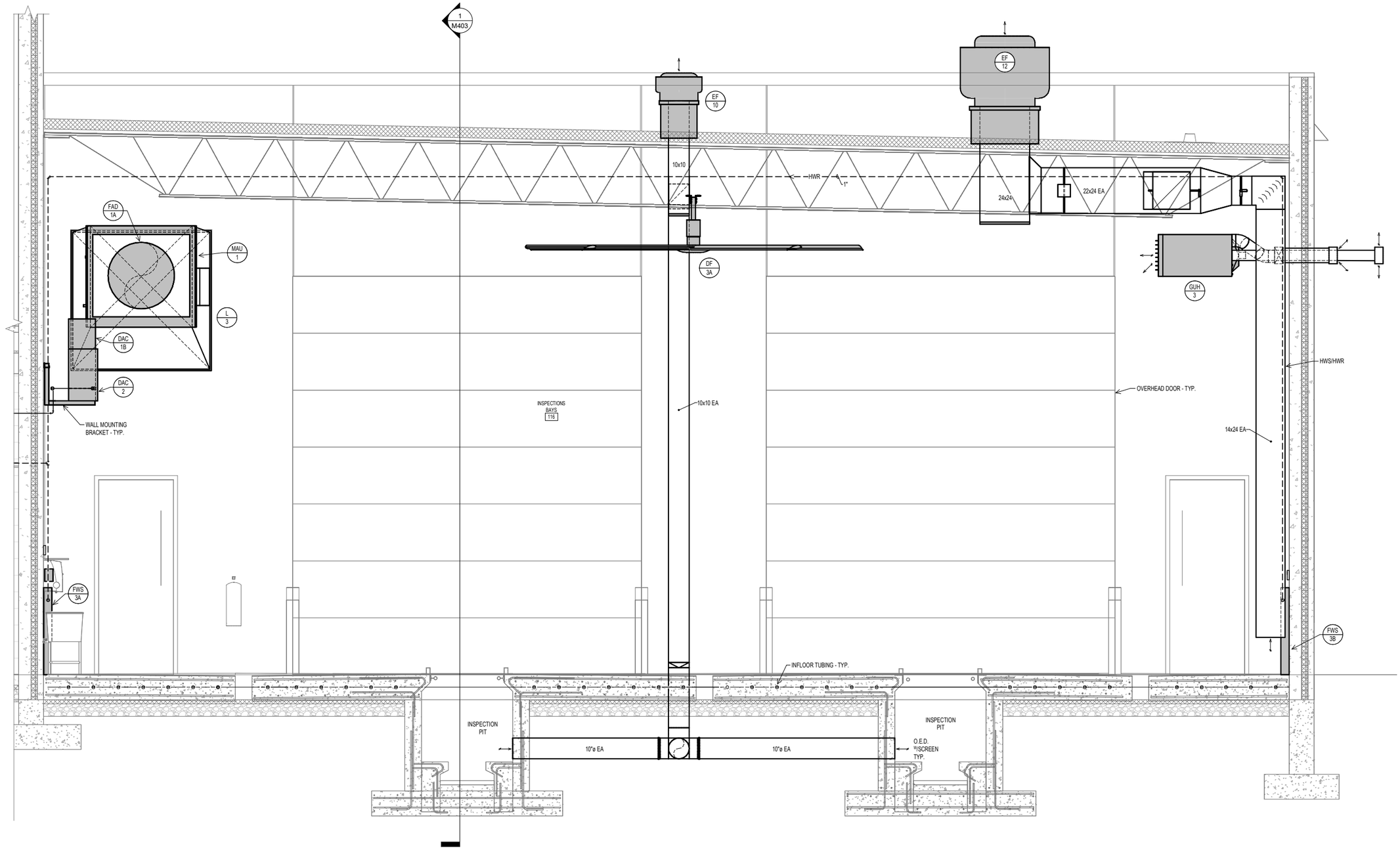
1/8" = 1'-0"

0' 1' 2' 5'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL SECTION - SOUTHEAST	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M401	305

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2



1 / M402 MECHANICAL SECTION - INSPECTION BAYS NORTH

1/4" = 1'-0"

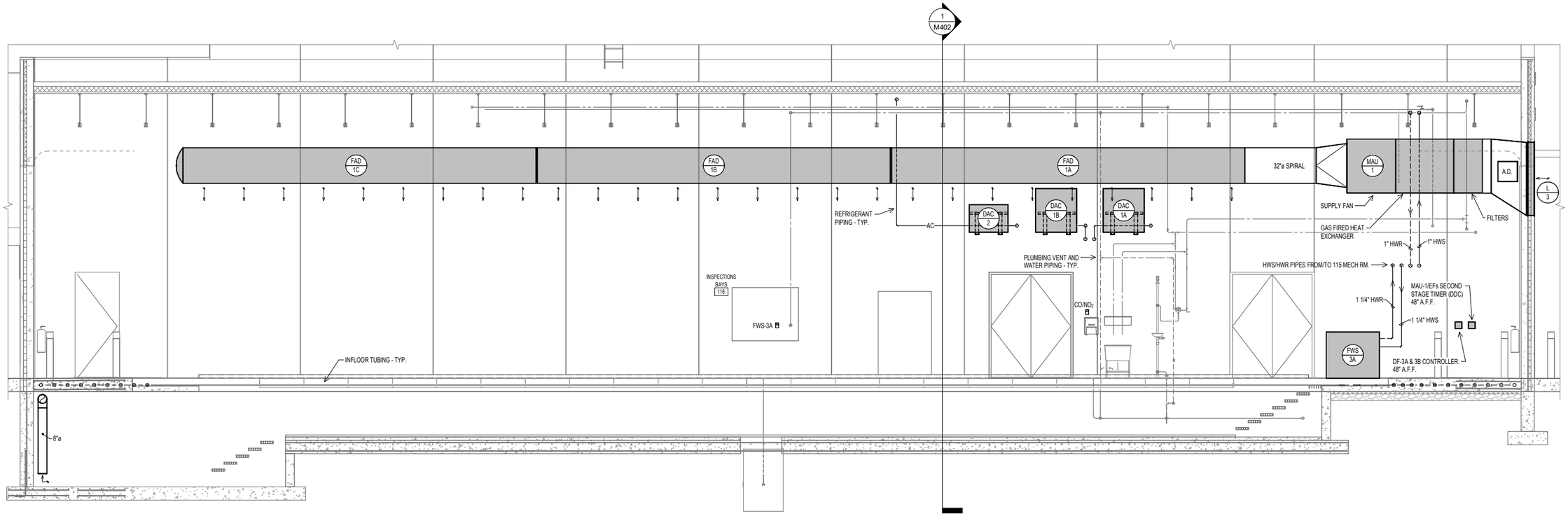
0" 6" 1' 3'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL SECTION - INSPECTION BAYS NORTH	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M402	

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PLOT DATE: 4/24/2024 3:08:34 PM

2



1 M403 MECHANICAL SECTION - INSPECTION BAYS WEST

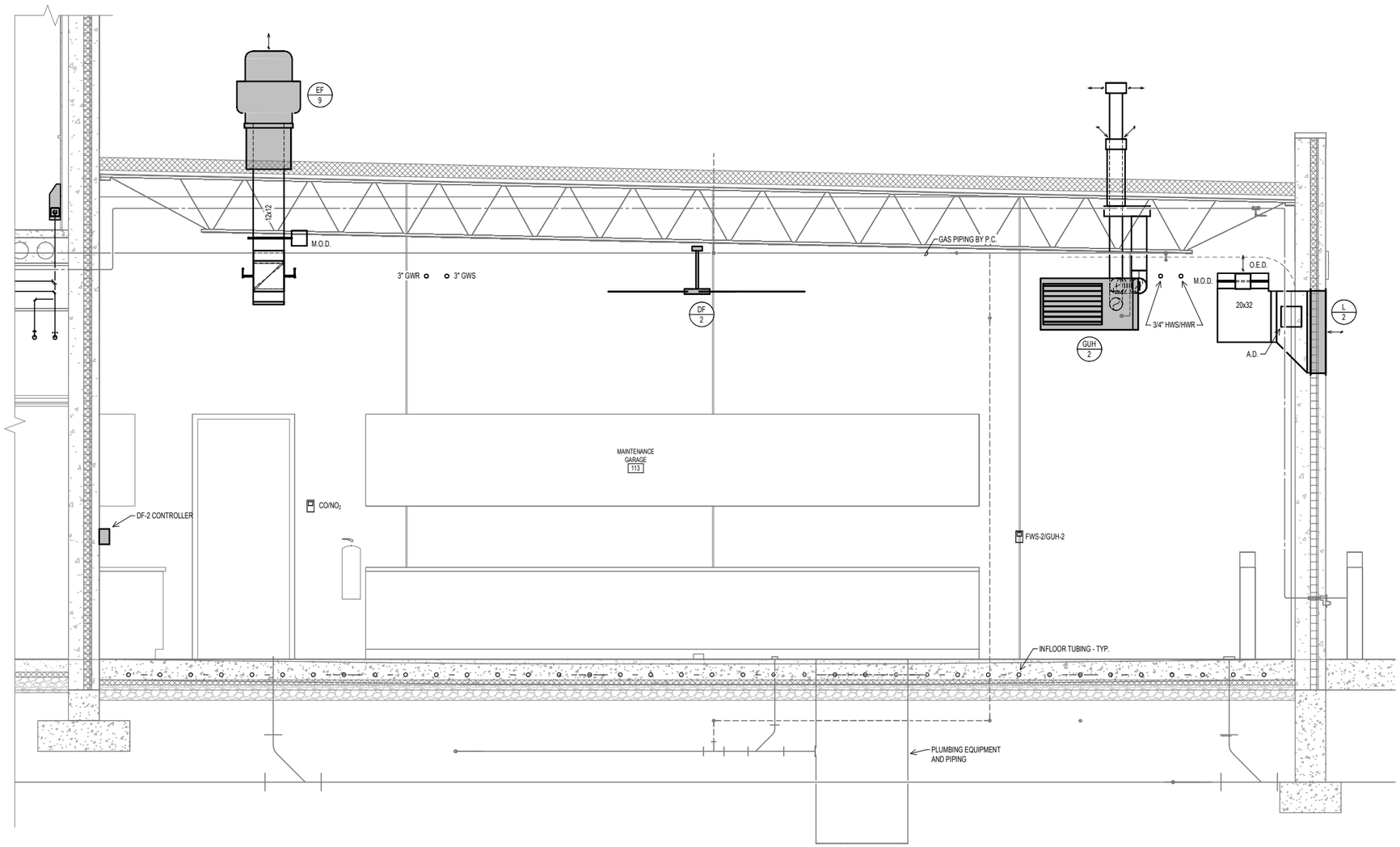
1/8" = 1'-0"

0' 1' 2' 5'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL SECTION - INSPECTION BAYS WEST	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M403	307

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2



1
M404

MECHANICAL SECTION - MAINTENANCE GARAGE WEST

1/4" = 1'-0"

0" 6" 1' 3'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL SECTION - MAINTENANCE GARAGE WEST	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M404	308

Autodesk Docs://KLENG 21001 - SWEF/21107 MECH R21_mikebAPVMK.rvt PLOT DATE: 4/24/2024 3:08:36 PM

VARIABLE FREQUENCY DRIVE (VFD) SCHEDULE

PLAN SYMBOL	ROOM NO.	SERVICE	MOTOR BHP	MOTOR HP	ELEC. CHAR.	INTEGRAL BYPASS (YES/NO)	MANUFACTURER & MODEL NO.	ACCESSORIES/NOTES
VFD-1	115	AHU-1 SUPPLY FAN #1	SEE AHU-1 SCHEDULE	SEE AHU-1 SCHEDULE	208/3	NO	SEE 23 05 14 SPECIFICATIONS.	SEE 23 05 14 SPECIFICATIONS.
VFD-2	115	AHU-1 SUPPLY FAN #2	SEE AHU-1 SCHEDULE	SEE AHU-1 SCHEDULE	208/3	NO	SEE 23 05 14 SPECIFICATIONS.	SEE 23 05 14 SPECIFICATIONS.
VFD-3	211	RF-1 RETURN FAN #1	SEE RF-1 SCHEDULE	SEE RF-1 SCHEDULE	208/3	NO	SEE 23 05 14 SPECIFICATIONS.	SEE 23 05 14 SPECIFICATIONS.
VFD-4	211	RF-1 RETURN FAN #2	SEE RF-1 SCHEDULE	SEE RF-1 SCHEDULE	208/3	NO	SEE 23 05 14 SPECIFICATIONS.	SEE 23 05 14 SPECIFICATIONS.

AIR FLOW MEASURING STATION SCHEDULE

PLAN SYMBOL	ROOM NO.	SYSTEM	MAX. CFM	MAX. VELOCITY (FPM)	MIN. CFM	MIN VELOCITY (FPM)	TYPE	DUCT SIZE (W" x H")	MANUFACTURER & MODEL NO.	ACCESSORIES	NOTES
AFMS-1	210	AHU-1 OA	13,500	1,925	1,600	228	THERMAL DISPERSION	46x24	EBTRON ADVANTAGE IV	DUCT ACCESS DOOR	MAINTAIN ALL MFG. REQUIRED INSTALLATION DISTANCES.

FABRIC AIR DISPERSION SYSTEM SCHEDULE

PLAN SYMBOL	UNIT CFM	DIA. (IN.)	APPROX. TOTAL LENGTH	ELBOW (YES/NO)	MATERIAL	USDA APPROVED	ANTI-MICROBIAL TREATMENT	INT S.P.	VENT OPENING(S)				HANGER TYPE	MATER. COLOR	MANUFACTURER & MODEL NO.	ACCESSORIES/ NOTES
									TYPE	SIZE	POS.	THROW				
FAD-1A	[1]	32	26'-7" [2]	NO	PERMEABLE FABRIC	NO	NO	0.48"	ORIFLOW	0.56"ø 1.16"ø 2.32"ø 2.25"ø	6:00 7:30 8:30 9:00	10' 26' 52' 50'	[3]	[4]	FABRICAIR COMBI 70	ROUND INLET.
FAD-1B	[1]	32	26'-7" [2]	NO	PERMEABLE FABRIC	NO	NO	0.48"	ORIFLOW	0.56"ø 1.16"ø 2.32"ø 2.25"ø	6:00 7:30 8:30 9:00	10' 26' 52' 50'	[3]	[4]	FABRICAIR COMBI 70	
FAD-1C	[1]	32	26'-7" [2]	NO	PERMEABLE FABRIC	NO	NO	0.48"	ORIFLOW	0.56"ø 1.16"ø 2.32"ø 2.25"ø	6:00 7:30 8:30 9:00	10' 26' 52' 50'	[3]	[4]	FABRIC AIR COMBI 70	ROUND END CAP WITH ZIPPER.

[1] 3,800/7,600 CFM TOTAL FOR FAD-1 SYSTEM (5,700 CFM AVG. DESIGN).
[2] 80' TOTAL LENGTH.
[3] TYPE 1, ALL IN ONE 180° DUCT SUPPORT - DUCT ALWAYS OPEN EVEN DURING UNIT SHUTDOWN.
[4] COLOR CHOICE BY ARCHITECT.

DESTRATIFICATION (CEILING) FAN SCHEDULE

PLAN SYMBOL	ROOM NO.	TYPE	DIA. (IN.)	ACTUAL VOLUME (CFM)	COVERAGE AREA (SQ. FT.)	RPM/ MAX RPM	MOTOR (HP/W)	ELEC. CHAR	APPROX. WEIGHT (LBS)	MANUFACTURER & MODEL NO.	CONTROL [3]	ACCESSORIES/NOTES
DF-1	112	HVLS	84	7,116	936	66/134	1/10	120/1	30	GREENHECK DC-5-7-MV	24V WALL-MOUNTED TOUCHSCREEN CONTROLLER.	[1] [3]
DF-2	113	HVLS	84	11,137	1,482	103/134	1/10	120/1	30	GREENHECK DC-5-7-MV	24V WALL-MOUNTED TOUCHSCREEN CONTROLLER.	[1] [3]
DF-3A	116	HVLS	168	29,973	2,800	41/76	1/4	120/1	95	GREENHECK DC-5-14	24V WALL-MOUNTED TOUCHSCREEN CONTROLLER.	[1] [2] [3]
DF-3B	116	HVLS	168	29,973	2,800	41/76	1/4	120/1	95	GREENHECK DC-5-14	24V WALL-MOUNTED TOUCHSCREEN CONTROLLER.	[1] [2] [3]

[1] MOUNTING BRACKETS/I-BEAM, DOWNROD (COORDINATE LENGTH WITH STRUCTURE AND REQUIRED MOUNTING HEIGHT), AND GUY WIRE KIT.
[2] SINGLE CONTROLLER TO OPERATE BOTH FANS.
[3] FIRE ALARM DISABLE.

DUCT SILENCER (SOUND ATTENUATOR) SCHEDULE

PLAN SYMBOL	CFM	SIZE (WxH)	LENGTH	P.D. ASTM E-477	DYNAMIC INSERTION LOSS (Db/O.B.)								MANUFACTURER & MODEL NO.	ACCESSORIES/NOTES
					63	125	250	500	1000	2000	4000	8000		
DS-1	13,500	48x22	72" [1]	0.12"	8	12	19	26	30	27	23	17	VAW SYSTEMS REA-22V80	SEE SPECIFICATIONS

[1] ELBOW SILENCER: LEG A - 28", LEG B - 66".

VARIABLE AIR VOLUME UNIT SCHEDULE

PLAN SYMBOL	ROOM NO.	AHU SYSTEM	VAV BOX [1]							REHEAT COIL [4]										OCC. [3] SENSOR INTERLOCK	MFGR. & MODEL NO.
			INLET SIZE	MAX. CFM	MIN. CFM (OCC.)	MIN. CFM (UNOCC.)	OA CFM (OCC.) [2]	MAX P.D.	INLET S.P.	CFM	COIL SIZE	E.W.T. (°F)	L.W.T. (°F)	E.A.T. (°F)	L.A.T. (°F)	MBH	GPM	MAX. W.P.D.	MAX. A.P.D.		
VAV-1	100	AHU-1	5"ø	295	90	90	85	0.25"	0.80"	90	12x6 2-ROW	135	115	55	90	3.5	0.4	1"	0.25"	NO	ETI SDR
VAV-2	101 101A	AHU-1	14"ø	1,730	520	0	40	0.25"	0.80"	520	24x18 1-ROW	135	115	55	80	14.3	1.5	1"	0.25"	YES	ETI SDR
VAV-3	101B	AHU-1	5"ø	230	70	70	30	0.25"	0.80"	100	12x6 2-ROW	135	115	55	80	2.8	0.3	1"	0.25"	NO	ETI SDR
VAV-4	102 102A	AHU-1	6"ø	340	100	100	0	0.25"	0.80"	100	12x9 2-ROW	135	115	55	105	5.5	0.6	1"	0.25"	NO	ETI SDR
VAV-5	103	AHU-1	10"ø	950	285	0	230	0.25"	0.80"	285	15x15 1-ROW	135	115	55	80	7.9	0.8	1"	0.25"	YES	ETI SDR
VAV-6	104	AHU-1	10"ø	815	245	0	205	0.25"	0.80"	245	15x15 1-ROW	135	115	55	80	6.8	0.7	1"	0.25"	YES	ETI SDR
VAV-7	107A	AHU-1	6"ø	325	95	95	20	0.25"	0.80"	95	12x9 2-ROW	135	115	55	80	2.7	0.3	1"	0.25"	NO	ETI SDR
VAV-8	106	AHU-1	4"ø	85	25	25	20	0.25"	0.80"	85	6x6 2-ROW	135	115	55	80	2.4	0.3	1"	0.25"	NO	ETI SDR
VAV-9	102F	AHU-1	4"ø	165	50	50	0	0.25"	0.80"	100	9x6 2-ROW	135	115	55	80	2.8	0.3	1"	0.25"	NO	ETI SDR
VAV-10	114	AHU-1	5"ø	265	80	80	60	0.25"	0.80"	100	12x6 2-ROW	135	115	55	80	2.8	0.3	1"	0.25"	NO	ETI SDR
VAV-11	114A	AHU-1	4"ø	75	25	25	20	0.25"	0.80"	75	6x6 2-ROW	135	115	55	80	2.1	0.3	1"	0.25"	NO	ETI SDR
VAV-13	200	AHU-1	8"ø	595	175	0	0	0.25"	0.80"	175	12x12 2-ROW	135	115	55	115	11.6	1.2	1"	0.25"	NO	ETI SDR
VAV-14	201	AHU-1	6"ø	390	120	120	85	0.25"	0.80"	120	12x9 1-ROW	135	115	55	80	3.3	0.4	1"	0.25"	NO	ETI SDR
VAV-15	202	AHU-1	10"ø	1,015	305	0	20	0.25"	0.80"	305	18x15 1-ROW	135	115	55	80	8.4	0.9	1"	0.25"	YES	ETI SDR
VAV-17	204	AHU-1	10"ø	965	290	0	115	0.25"	0.80"	290	15x15 1-ROW	135	115	55	80	8.0	0.9	1"	0.25"	YES	ETI SDR
VAV-18	207	AHU-1	4"ø	190	55	55	30	0.25"	0.80"	100	9x6 2-ROW	135	115	55	80	2.8	0.3	1"	0.25"	NO	ETI SDR
VAV-19	208	AHU-1	6"ø	300	90	90	50	0.25"	0.80"	100	12x9 2-ROW	135	115	55	80	2.8	0.3	1"	0.25"	NO	ETI SDR
VAV-20	200C 209-210	AHU-1	6"ø	370	110	0	0	0.25"	0.80"	110	12x9 2-ROW	135	115	55	90	4.3	0.5	1"	0.25"	NO	ETI SDR
VAV-21	212	AHU-1	4"ø	40	15	15	20	0.25"	0.80"	40	6x6 2-ROW	135	115	55	95	1.8	0.2	1"	0.25"	NO	ETI SDR
VAV-22	213	AHU-1	8"ø	585	175	175	290	0.25"	0.80"	175	12x12 1-ROW	135	115	55	80	4.9	0.5	1"	0.25"	NO	ETI SDR
VAV-23	214	AHU-1	8"ø	535	160	0	40	0.25"	0.80"	160	12x12 1-ROW	135	115	55	80	4.4	0.5	1"	0.25"	YES	ETI SDR
VAV-24	215	AHU-1	8"ø	630	190	0	50	0.25"	0.80"	190	12x12 1-ROW	135	115	55	80	5.3	0.6	1"	0.25"	YES	ETI SDR
VAV-25	216	AHU-1	6"ø	330	100	100	45	0.25"	0.80"	100	12x9 2-ROW	135	115	55	80	2.8	0.3	1"	0.25"	NO	ETI SDR
VAV-26	217	AHU-1	14"ø	1,790	535	535	30	0.25"	0.80"	535	24x18 2-ROW	135	115	55	100	26.5	2.7	1"	0.25"	NO	ETI SDR
VAV-27	217A	AHU-1	5"ø	205	60	60	85	0.25"	0.80"	100	9x6 2-ROW	135	115	55	100	5.0	0.5	1"	0.25"	NO	ETI SDR
VAV-28	217C 200A	AHU-1	5"ø	285	85	85	30	0.25"	0.80"	100	12x6 2-ROW	135	115	55	80	2.8	0.3	1"	0.25"	NO	ETI SDR

[1] NEITHER RADIATED NOR DISCHARGE SOUND LEVELS SHALL EXCEED 35 NC AT 1.5" STATIC PRESSURE WHEN TESTED PER ARI STANDARD 885-98.
[2] OCC OA VENT CFM FOR ADJUSTING AHU OA VENT RATE BASED ON OCCUPANCY OF SPACE.
[3] OCCUPANCY SENSOR PROVIDED AND INSTALLED BY E.C. TEMPERATURE CONTROL WIRING TO OCC. SENSOR BY 23 09 14 CONTRACTOR.
[4] ALL COILS SHALL BE PROVIDED SEPARATE FROM VAV AND OF SIZE INDICATED (HOT WATER BOOSTER/REHEAT COILS). SEE DETAILS.
NOTE: NO VAV-12, OR VAV-16.

EXHAUST FAN SCHEDULE

PLAN SYMBOL	ROOM NO.	SYSTEM	CFM	EXT. S.P.	WHEEL TYPE & SIZE	RPM/ MAX RPM	BHP	MOTOR (HP/W)	ELEC. CHAR.	DAMPER TYPE/SIZE	DRIVE	FAN TYPE	MANUFACTURER & MODEL NO.	CONTROL/NOTES
EF-1	100A	TOILET	75	0.30"	F.C.-7.94"	578/ 650	-	30 W	120/1	B.D.D. 6"ø	[1]	CEILING	GREENHECK SP-B110ES	INTERLOCK WITH LIGHT SWITCH/SENSOR BY E.C.
EF-2	100B	TOILET	75	0.30"	F.C.-7.94"	578/ 650	-	30 W	120/1	B.D.D. 6"ø	[1]	CEILING	GREENHECK SP-B110ES	INTERLOCK WITH LIGHT SWITCH/SENSOR BY E.C.
EF-3	103	GENERAL	200	0.30"	F.C.-7.75"	1037/ 1340	-	27 W	120/1	B.D.D. 8"ø	[1]	CEILING	GREENHECK SP-A390-VG	0-60 MINUTE DIGITAL TIMER BY E.C.
EF-4	107	JANITOR	75	0.30"	F.C.-7.94"	578/ 650	-	30 W	120/1	B.D.D. 6"ø	[1]	CEILING	GREENHECK SP-B110ES	INTERLOCK WITH LIGHT SWITCH/SENSOR BY E.C.
EF-5	102C & D 205-206	TOILETS	600	0.40"	B.I.-11.19"	1179/ 1725	0.08	1/4 HP	120/1	[4] M.O.D. 12x12	[1]	CENTRIFUGAL DOWNBLAST	GREENHECK G-099-VG	INTERLOCK WITH AHU-1 OCCUPIED CYCLE. [2]
EF-6	213	GENERAL	200	0.30"	F.C.-7.75"	1037/ 1340	-	27 W	120/1	B.D.D. 8"ø	[1]	CEILING	GREENHECK SP-A390-VG	0-60 MINUTE DIGITAL TIMER BY E.C.
EF-7	217A & D 218	TOILET/ JANITOR	300	0.40"	B.I.-10.88"	1279/ 1725	0.04	1/10 HP	120/1	[4] M.O.D. 10x10	[1]	CENTRIFUGAL DOWNBLAST	GREENHECK G-090-VG	INTERLOCK WITH AHU-1 OCCUPIED CYCLE. [2]
EF-8	112	VEHICLE	700	0.40"	B.I.-11.19"	1262/ 1725	0.09	1/4 HP	120/1	[4] M.O.D. 12x12	[1]	CENTRIFUGAL UPBLAST	GREENHECK CUE-099-VG	DDC SPACE OCCUPANCY SCHEDULE AND GAS DETECTION SYS. [2]
EF-9	113	VEHICLE	1,100	0.40"	B.I.-13.06"	1139/ 1400	0.13	1/4 HP	120/1	[4] M.O.D. 12x12	[1]	CENTRIFUGAL UPBLAST	GREENHECK CUE-120-VG	DDC OCCUPANCY SCHEDULE. [2]
EF-10	116	VEHICLE PIT	400	0.50"	B.I.-10.88"	1408/ 1725	0.08	1/6 HP	120/1	B.D.D. 10x10	[1]	CENTRIFUGAL UPBLAST	GREENHECK CUE-095-VG	RUN CONTINUOUS. [2]
EF-11	116	VEHICLE PIT	400	0.50"	B.I.-10.88"	1408/ 1725	0.08	1/6 HP	120/1	B.D.D. 10x10	[1]	CENTRIFUGAL UPBLAST	GREENHECK CUE-095-VG	RUN CONTINUOUS. [2]
EF-12	116	VEHICLE	[3]	0.40"	B.I.-18.50"	1117/ 1325	0.81	2 HP	208/1	[4] M.O.D. 24x22	[1]	CENTRIFUGAL UPBLAST	GREENHECK CUE-180-VG	DDC SPACE OCCUPANCY SCHEDULE AND GAS DETECTION SYS. [2]
EF-13	116	VEHICLE	[3]	0.40"	B.I.-18.50"	1117/ 1325	0.81	2 HP	208/1	[4] M.O.D. 24x22	[1]	CENTRIFUGAL UPBLAST	GREENHECK CUE-180-VG	DDC SPACE OCCUPANCY SCHEDULE AND GAS DETECTION SYS. [2]
EF-14	115A	HEAT REMOVAL	400	0.30"	B.I.-10.88"	1257/ 1725	0.04	1/10 HP	120/1	[4] M.O.D. 10x10	[1]	CENTRIFUGAL DOWNBLAST	GREENHECK G-090-VG	CONTROL BY T.C.C. [2]
EF-15	001	ELEV.	75	0.30"	F.C.-7.94"	578/ 650	-	30 W	120/1	B.D.D. 6"ø	[1]	CEILING	GREENHECK SP-B110ES	INTERLOCK WITH AHU-1 OCCUOIED CYCLE.
EF-16	108	INTOX.	75	0.30"	F.C.-7.94"	578/ 650	-	30 W	120/1	B.D.D. 6"ø	[1]	CEILING	GREENHECK SP-B110ES	INTERLOCK WITH LIGHT SWITCH/SENSOR BY E.C.

[1] DIRECT DRIVE ECM WITH POTENTIOMETER DIAL ON MOTOR FOR BALANCING.
[2] FACTORY PAINTED FAN, CURB, AND CURB CAP. COLOR CHOICE BY ARCHITECT. 18"H ROOF CURB WITH HINGED CURB CAP. CURB PROVIDED BY M.C. AND INSTALLED BY G.C.
[3] 2-SPEED EXHAUST FAN: 1,900 CFM (NORMAL OCCUPANCY), 3,800 CFM (TIMER/GAS ALARM OR TIMER).
[4] DAMPER AND ACTUATOR PROVIDED BY 23 09 14 CONTRACTOR.

AIR HANDLING UNIT SCHEDULE

PLAN SYMBOL	ROOM NO.	SERVES	CFM	O.A. CFM	UNIT TYPE	SUPPLY AIR FAN(S) [2]								FACE & B.P.	MIXING BOX	FILTERS	APPROX. WEIGHT (LBS)	MANUFACTURER & MODEL NO.
						TYPE/ CLASS	SIZE	EXT. S.P.	TOTAL S.P.	RPM/ MAX RPM	BHP	HP	VFD	ELEC. CHAR.				
AHU-1	115	MAIN BLDG.	13,500	1,600	INDOOR VAV	[4] PLEN./II	18.25"	1.60"	[6] 4.73"	2,524/ 2,979	7.45	10	YES [5]	208/3	NO	NO	[1]	5,800	YORK XTI-63x87 [3]

[1] 2" MERV 8 PREFILTERS AND 12" MERV 13 FINAL FILTERS.
[2] DUAL DIRECT DRIVE FANS. PHYSICAL AND ELECTRICAL DATA SCHEDULED IS FOR EACH INDIVIDUAL SUPPLY AIR FAN. 1800 RPM FAN MOTORS.
[3] PERFORATED LINER REQUIRED IN FAN AND DISCHARGE PLENUM SECTIONS. AHRI 260 UNIT DISCHARGE SOUND POWER LEVELS (dB) - 63/91, 125/84, 250/85, 500/89, 1000/86, 2000/81, 4000/78, 8000/77.
[4] PROVIDE WITH FAN INLET PIEZOMETERS FOR AIRFLOW MEASURING BY 23 09 14 CONTRACTOR. PROVIDE WITH MOTORIZED INLET DAMPERS. ACTUATORS AND CONTROL BY 23 09 14 CONTRACTOR.
[5] REMOTE MOUNTED. SEE PLANS.
[6] INCLUDES 0.50" DIRTY FILTER ALLOWANCE FOR BOTH FILTER BANKS.

AIR HANDLING UNIT COIL SCHEDULE

PLAN SYMBOL	HOT WATER COIL											CHILLED WATER COIL										
	CFM	COIL AREA	E.W.T. (°F)	L.W.T. (°F)	E.A.T. (°F)	L.A.T. (°F)	MBH	GPM	MAX W.P.D.	MAX A.P.D.	MAX FPI	CFM	COIL AREA	E.W.T. (°F)	L.W.T. (°F)	E.A.T. (°F)	L.A.T. (°F)	SENS. MBH	TOTAL MBH	GPM	MAX W.P.D.	MAX A.P.D	MAX FPI
AHU-1	4,050	21.7 SQ. FT.	135	115	35	55	89.1	9	1"	0.05"	8 1-ROW	13,500	26.5 SQ. FT.	44	54.2	76.6/ 63.6	54.3/ 53.0	333	420	82	11"	0.80"	9 6-ROW

NOTE: BLANK SECTION W/DRAIN PAN AND DRAIN FOR HUMIDIFER GRID (H-1). SEE PLANS AND SPECIFICATIONS SECTION 23 73 13.

RETURN FAN SCHEDULE

PLAN SYMBOL	ROOM NO.	SYSTEM	CFM	EXT. S.P.	TOTAL S.P.	FAN TYPE/ CLASS	FAN SIZE	RPM/ MOTOR RPM	BHP	HP	ELEC. CHAR.	VFD	MIXING BOX	FILTERS	APPROX. WEIGHT (LBS)	MANUFACTURER & MODEL NO.	ACCESSORIES/NOTES
RF-1	211	AHU-1	13,500	0.75"	2.25" [6]	[2] [4] PLEN./II	16.5"	2,818/ 3,275	5.01	7.5	208/3	YES [5]	YES	2" MERV 8	4,100	YORK XTI-72x78 [3]	AIR HANDLING UNIT WITH SOUND ATTENUATOR. [1]

[1] SOUND ATTENUATOR: 20"Lx60"Hx60"W, 540 FPM, DYNAMIC INSERTION LOSS BY OCATAVE BAND (dB) - 63/3, 125/7, 250/17, 500/19, 1000/15, 2000/12, 4000/9, 8000/8 (PER AHRI 260). UNIT SOUND POWER LEVEL AT INLET: 63/77, 125/73, 250/70, 500/76, 1000/67, 2000/66, 4000/68, 8000/68 (PER AHRI 260).
[2] DUAL DIRECT DRIVE FANS. PHYSICAL AND ELECTRICAL DATA SCHEDULED IS FOR EACH INDIVIDUAL FAN. 3600 RPM FAN MOTORS.
[3] PERFORATED LINER REQUIRED IN FAN AND DISCHARGE PLENUM SECTIONS.
[4] PROVIDE WITH FAN INLET PIEZOMETERS FOR AIFLOW MEASURING BY 23 09 14 CONTRACTOR. PROVIDE WITH MOTORIZED INLET DAMPERS. ACTUATORS AND CONTROL BY 23 09 14 CONTRACTOR.
[5] REMOTE MOUNTED. SEE PLANS.
[6] INCLUDES 0.50" DIRTY FILTER ALLOWANCE.

AIR TO AIR ENERGY RECOVERY UNIT SCHEDULE

PLAN SYMBOL	ROOM NO.	SERVES	UNIT TYPE	SUPPLY AIR FAN							EXHAUST AIR FAN								MCA	ELEC. CHAR.	APPROX. WEIGHT (LBS)	MANUFACTURER & MODEL NO.
				CFM	TYPE/ CLASS	SIZE	EXT. S.P.	TOT. S.P.	RPM	BHP	HP	ECM	CFM	TYPE/ CLASS	SIZE	EXT. S.P.	TOT. S.P.	RPM	BHP	HP	ECM				
ERV-1	211	EVIDENCE AREA	2-STAGE INDOOR	[3]	PLEN./II	16.6"	0.75"	2.23"	1,703/ 2,500	0.99	3.22	YES	[3]	PLEN./II	16.6"	0.75"	1.99"	1,671/ 2,500	0.97	3.22	YES	31.26	208/3 [2]	1,700	SWEGON GOLD F RX-011 [1] [4]

[1] 2" MERV 8 PREFILTERS AND MERV 13 BAG-TYPE FINAL FILTERS FOR BOTH AIR STREAMS.
[2] 208-480/3 TRANSFORMER TO BE PROVIDED WITH UNIT. INSTALLATION AND WIRING BY E.C.
[3] UNOCCUPIED: 800 CFM, OCCUPIED: 1,600 CFM. OCCUPANCY SENSORS PROVIDED AND INSTALLED BY E.C. TEMPERATURE CONTROL WIRING TO OCC. SENSORS BY 23 09 14 CONTRACTOR.
[4] MOTORIZED INTAKE AND DISCHARGE DAMPERS/ACTUATORS PROVIDED BY 23 09 14 CONTRACTOR (24 V). WIRE DAMPERS TO UNIT CONTROLLER.

AIR TO AIR ENERGY RECOVERY UNIT WHEEL SCHEDULE

PLAN SYMBOL	CORE MAT'L	WINTER (IA)		SUMMER (IA)		WINTER (OA)		SUMMER (OA)		WINTER (SA)		SUMMER (SA)		WINTER EFF.		SUMMER EFF.			ACCESSORIES/NOTES
		D.B.T. (°F)	RH (%)	D.B.T. (°F)	RH (%)	D.B.T. (°F)	W.B.T. (°F)	D.B.T. (°F)	W.B.T. (°F)	D.B.T. (°F)	W.B.T. (°F)	D.B.T. (°F)	W.B.T. (°F)	SENS. (%)	LAT. (%)	SENS (%)	LAT. (%)	NET (%)	
ERV-1	3A ALUM. WHEEL	70	30	72	50	-15	-15	88	75	56	45.6	75.4	64.1	83.6	89.0	79.0	64.7	N/A	[1]

[1] VARIABLE SPEED WHEEL WITH DIFFERENTIAL PRESSURE SENSOR (FROST PROTECTION).

AIR TO AIR ENERGY RECOVERY UNIT COIL SCHEDULE

PLAN SYMBOL	HOT WATER COIL									CHILLED WATER COIL										ACCESS. NOTES
	CFM	COIL AREA	E.W.T. (°F)	L.W.T. (°F)	E.A.T. (°F)	L.A.T. (°F)	MBH	GPM	MAX W.P.D.	MAX A.P.D.	MAX F.P.I.	CFM	COIL AREA	E.W.T. (°F)	L.W.T. (°F)	E.A.T. (°F)	L.A.T. (°F)	SENS. MBH	TOTAL MBH	GPM	MAX W.P.D.	MAX APD	MAX FPI	
ERV-1	1,600	4.5 SQ. FT.	135	115	20	80	104	11	5"	0.08"	9 (2 ROW)	1,600	4.5 SQ. FT.	44	54	76.8/ 65.1	55.0/ 54.2	38.0	54.4	11	8"	0.30"	11 (3 ROW)	[1] [2]

[1] HEATING AND COOLING CONTROL VALVE KITS (WITH ACTUATOR, FREEZE GUARD SENSOR, CONNECTION CABLE AND VALVE). WIRING BY 23 09 14 CONTRACTOR.
[2] BLANK SECTION W/ DRAIN PAN AND DRAIN FOR HUMIDIFIER GRID (H-4). SEE PLAN AND SPECIFICATION SECTION 23 73 13.

DIRECT FIRED GAS MAKE-UP AIR UNIT SCHEDULE

PLAN SYMBOL	CFM	E.A.T. (°F)	L.A.T. (°F)	GAS TYPE	INPUT (MBH)	MIN. GAS PRESS.	GAS CONN. SIZE	EXT. S.P.	MOTOR BHP	MOTOR HP	ELEC. CHAR.	DAMPER	FILTER	APPROX. WEIGHT (LBS)	MANUFACTURER & MODEL NO.	ACCESSORIES/NOTES
MAU-1	3,800/ 7,600	-15	80	NAT.	795	14" WG	1"	0.75"	3.23	5	208/3	MOTORIZED INTAKE	2" MERV 8	1,400	GREENHECK DGX-P120-H32-MF	[1]

[1] 100% OA 2-STAGE INDOOR UNIT, DIRECT DRIVE MIXED FLOW FAN WITH VFD. MICROPROCESSOR WITH BACNET MSTP CONTROL. DISCHARGE AIR TEMPERATURE CONTROL. ELECTRONIC BURNER WITH MODULATION WITH DISCHARGE AIR SENSOR SET AT 80°F (ADJ.), AND GAS MANIFOLD - COORDINATE WITH P.C. GAS DETECTION SYSTEM BY 23 09 14 CONTRACTOR.

ROOF HOOD SCHEDULE

PLAN SYMBOL	ROOM NO.	AREA/UNIT SERVED	INTAKE OR RELIEF	CFM	SIZE	FREE AREA (SQ. FT.)	MAXIMUM THROAT VEL. (FPM)	DAMPER		MATERIAL	ROOF CURB [2]	MANUFACTURER & MODEL NO.	ACCESSORIES/NOTES
								TYPE	MOTOR VOLT.				
RH-1	210	AHU-1	INTAKE	13,500	84"x48" (34.75"H)	27.26	500	N/A	-	ALUMINUM	30"H	GREENHECK WIH	[1]
RH-2	210	RF-1	RELIEF	13,500	84"x48" (34.75"H)	27.26	500	N/A	-	ALUMINUM	18"H	GREENHECK WRH	[1]
RH-3	205	ERV-1	INTAKE	1,600	22"x22" (12.25"H)	3.78	500	N/A	-	ALUMINUM	30"H	GREENHECK WIH	[1]
RH-4	211	ERV-1	RELIEF (EXHAUST)	1,600	22"x22" (12.25"H)	3.78	500	N/A	-	ALUMINUM	18"H	GREENHECK WRH	[1]

[1] FACTORY PAINTED HOOD, CURB, AND CURB CAP. COLOR CHOICE BY ARCHITECT.
[2] CURB PROVIDED BY M.C. AND INSTALLED BY G.C.

LOUVER SCHEDULE

PLAN SYMBOL	ROOM NO.	DIMENSIONS (W"xH")	CFM	FREE AREA (SQ. FT.)	VELOCITY (FPM)	FLANGE	CONSTRUCTION	DAMPER		MANUFACTURER & MODEL NO.	ACCESSORIES/NOTES
								TYPE	MOTOR VOLT.		
L-1	112	24x32	700	2.73	257	NO	ALUMINUM	N/A	-	GREENHECK ESD-635	COLOR CHOICE BY ARCHITECT.
L-2	113	32x32	1,100	3.75	293	NO	ALUMINUM	N/A	-	GREENHECK ESD-635	COLOR CHOICE BY ARCHITECT.
L-3	116	66x66	7,600	18.41	413	NO	ALUMINUM	N/A	-	GREENHECK ESD-635	COLOR CHOICE BY ARCHITECT.

HUMIDIFIER SCHEDULE

PLAN SYMBOL	ROOM NO.	TYPE	CAPACITY LBS/HR	CONTROL [1]	kW	FLA	ELEC. CHAR.	MANUFACTURER & MODEL NO.	ACCESSORIES	NOTES
H-1	115	ELECTRODE STEAM GEN.	50	RA DUCT HUMIDITY SENSOR	16.5	55	208/3	DRISTEEM XTP-017	RAPIDSORB STEAM DISPERSION	UNIT PROVIDED WITH INTEGRAL AIR GAP FOR WATER FILL.
H-2	114B	ELECTRODE STEAM GEN.	5	SPACE SENSOR	1.7	17	120/1	DRISTEEM XTP-002/SDU-006E	HUMIDISTAT	UNIT PROVIDED WITH INTEGRAL AIR GAP FOR WATER FILL.
H-3	217B	ELECTRODE STEAM GEN.	5	SPACE SENSOR	1.7	17	120/1	DRISTEEM XTP-002/SDU-006E	HUMIDISTAT	UNIT PROVIDED WITH INTEGRAL AIR GAP FOR WATER FILL.
H-4	211	ELECTRODE STEAM GEN.	50	RA DUCT HUMIDITY SENSOR	16.5	55	208/3	DRISTEEM XTP-017	RAPIDSORB STEAM DISPERSION	UNIT PROVIDED WITH INTEGRAL AIR GAP FOR WATER FILL.

[1] BY 23 09 14 CONTRACTOR.

ELECTRIC FAN FORCED HEATER SCHEDULE

PLAN SYMBOL	ROOM NO.	KW	MBH	ELEC. CHAR.	SURFACE/RECESS MOUNTING	WALL/CEILING INSTALLATION	CONTROL TYPE	MANUFACTURER & MODEL NO.	ACCESSORIES/NOTES
EFH-1	115A	2	6.8	208/1	SURFACE	CEILING	24V	MARKEL F3472	RADIAL DIFFUSER, CONTROL TRANSFORMER.

GRILLE, REGISTER, AND DIFFUSER SCHEDULE

PLAN SYMBOL	DESCRIPTION	MATERIAL	MANUFACTURER & MODEL NO.	ACCESSORIES/ NOTES
CD-1	24x24 SQUARE FACE, ROUND NECK, 360° HORIZONTAL THROW CEILING DIFFUSER FOR LAY-IN CEILING INSTALLATION.	ALUMINUM	PRICE ASPD	WHITE FINISH
CD-2	24x24 SQUARE FACE, ROUND NECK, 360° HORIZONTAL THROW CEILING DIFFUSER FOR HARD CEILING INSTALLATION.	ALUMINUM	PRICE ASPD	WHITE FINISH, SURFACE MOUNT FRAME
CD-3	ROUND CEILING DIFFUSER, FULLY ADJUSTABLE CORE, REMOVABLE INNER CORE, SPONGE RUBBER GASKET, EXPOSED DUCT MOUNTING INSTALLATION.	ALUMINUM	PRICE RCDA	ALUMINUM FINISH
EG-1	SQUARE PATTERN GRILLE, FIXED CORE OF ½"x½"x½" FABRICATED ALUMINUM SQUARES, FLAT FRAME WITH 1¼" MARGIN, FOR SURFACE MOUNT INSTALLATION.	ALUMINUM	PRICE 80	WHITE FINISH
FG-1	LINEAR BAR GRILLE FOR FLOOR APPLICATION, ¾" BAR WIDTH, ¼" BAR SPACING, 15° BAR DEFLECTION, CARPET MOUNTING FRAME.	ALUMINUM	PRICE LBPH 26C	ALUMINUM FINISH
RG-1	SQUARE PATTERN GRILLE, FIXED CORE OF ½"x½"x½" FABRICATED ALUMINUM SQUARES, FLAT FRAME WITH 1¼" MARGIN, FOR SURFACE MOUNT INSTALLATION.	ALUMINUM	PRICE 80	WHITE FINISH
RG-2	22x22 SQUARE PATTERN GRILLE, FIXED CORE OF ½"x½"x½" FABRICATED ALUMINUM SQUARES, FLAT FRAME WITH 1¼" MARGIN, FOR LAY-IN CEILING INSTALLATION.	ALUMINUM	PRICE 80	WHITE FINISH WITH NO SCREW HOLES
RG-3	SIDEWALL GRILLE, STATIONARY DEFLECTION VANES, 45° AIRFOIL DEFLECTION VANES, ½" O.C., FLAT FRAME WITH 1¼" MARGIN, HORIZONTAL FRONT BLADES.	ALUMINUM	PRICE 70	WHITE FINISH
SG-1	DOUBLE DEFLECTION SUPPLY GRILLE, INDIVIDUALLY ADJUSTABLE VANES, ¾" O.C., FLAT FRAME WITH 1¼" MARGIN, VERTICAL FRONT BLADES.	ALUMINUM	PRICE 620	WHITE FINISH
TG-1	SQUARE PATTERN GRILLE, FIXED CORE OF ½"x½"x½" FABRICATED ALUMINUM SQUARES, FLAT FRAME WITH 1¼" MARGIN, FOR SURFACE MOUNT INSTALLATION.	ALUMINUM	PRICE 80	WHITE FINISH
TG-2	HEAVY DUTY SIDEWALL GRILLE, 45° DEFLECTION VANES, ½" O.C., 1¼" MARGIN, HORIZONTAL FRONT.	ALUMINUM	PRICE 98	WHITE FINISH

DUCTWORK/INSULATION SCHEDULE

SYSTEM [1]	LOW PRESSURE				MED. PRESSURE		HIGH PRESSURE		INSULATION			
	MAX PRES.	SEAL			MAX PRES.	SEAL	MAX PRES.	SEAL	INTERNAL/ THICKNESS		EXTERNAL/ THICKNESS	
		A	B	C		A						
OA, MA, RFA, AND EA DUCTWORK (DOWNSTREAM OF ERV) IN MECH ROOMS & 210 SUPPLY (INCLUDES L-1 THRU L-3 OA)	2"	X			4" [3]	X			NO	-	YES [2]	2"
CONCEALED SUPPLY AIR DUCTWORK UPSTREAM OF VAVs					4" [3]	X			NO	-	YES	R6 MIN.
CONCEALED SUPPLY AIR DUCTWORK DOWNSTREAM OF VAVs	2"	X							YES - WITHIN 5-10' OF VAV	1"	YES - WHERE NOT LINED.	R6 MIN.
TRANSFER AIR DUCTWORK	2"	X							YES	1/2"	NO	-
EXHAUST AIR DUCTS AND DROPS THRU ROOF AND AS DETAILED (EF-5, EF-7 THRU EF-14)	2"	X							NO	-	YES [2]	2"
EXHAUST AIR DUCTWORK WITHIN 5-10' OF EXTERIOR WALL (EF-1 THRU EF-4, EF-6 & EF-15 & EF-16)	2"	X							NO	-	YES - WRAP	2"
RETURN AIR DUCTWORK & MAU-1 SUPPLY AIR DUCTWORK	2"	X							NO	-	NO	-
GUH COMBUSTION AIR DUCTWORK	2"	X							NO	-	YES - SEE DETAILS	1"

[1] THIS SCHEDULE IS INTENDED AS A GUIDE AND DOES NOT REPRESENT COMPLETE INSULATION REQUIREMENTS FOR THE PROJECT. REFER TO WRITTEN MECHANICAL SPECIFICATION SECTIONS AND DETAILS ON PLAN SHEETS FOR FURTHER REQUIREMENTS.
[2] WITH LAG AND MASTIC COVER AS SPECIFIED (WHERE EXPOSED). [3] SUPPLY AIR DUCTWORK UPSTREAM OF VAVs.

CABINET UNIT HEATER SCHEDULE

PLAN SYMBOL	ROOM NO.	TYPE	CFM	E.A.T. (°F)	E.W.T. (°F)	L.W.T. (°F)	MBH	GPM	MAX. W.P.D. (FT.)	FAN [3]		ELEC. CHAR.	RECESS	CABINET			MANUFACTURER & MODEL NO.	ACCESSORIES/ NOTES
										MOTOR HP	SPEED			H"	L"	D"		
CUH-1	101C	INVERTED FLOW	240	60	130	110	9.5	1.0	0.1	1/15	MED.	120/1	NONE	25	43	9.5	STERLING WI-03	[1]
CUH-2	102A	INVERTED FLOW	240	60	130	110	9.5	1.0	0.1	1/15	MED.	120/1	NONE	25	43	9.5	STERLING WI-03	[1]
CUH-3	102H	INVERTED FLOW	240	60	130	110	14.9	2.0	0.4	1/15	MED.	120/1	NONE	25	43	9.5	STERLING WI-03	[1] [2]
CUH-4	105	INVERTED FLOW	240	60	130	110	9.5	1.0	0.1	1/15	MED.	120/1	NONE	25	43	9.5	STERLING WI-03	[1]
CUH-5	110A	INVERTED FLOW	240	60	130	110	9.5	1.0	0.1	1/15	MED.	120/1	NONE	25	43	9.5	STERLING WI-03	[1]

[1] COLOR CHOICE BY ARCHITECT.
[2] 2-ROW COIL.
[3] EC MOTOR.

UNIT HEATER SCHEDULE

PLAN SYMBOL	ROOM NO.	TYPE	CFM	E.A.T. (°F)	HEATING MEDIUM	E.W.T. (°F)	L.W.T. (°F)	MBH	GPM	MAX. W.P.D. (FT.)	FAN		ELEC. CHAR.	MANUFACTURER & MODEL NO.	ACCESS/NOTES
											MOTOR W/HP	MOTOR RPM			
UH-1	211	HORIZONTAL THROW	245	60	WATER	135	115	4.3	0.5	0.8	16 W	1550	120/1	STERLING HS-108A	TOTALLY ENCLOSED MOTOR WITH THERMAL OVERLOAD.

CONVECTOR SCHEDULE

PLAN SYMBOL	ROOM NO.	TYPE	DIMENSIONS (H"xD"xL")	HEATING MEDIUM	E.W.T. (F°)	L.W.T. (F°)	BTUH	GPM	P.D. (FT.)	RECESS	MANUFACTURER AND MODEL NO.	ACCESSORIES/NOTES
C-1	100A	FRONT INLET & OUTLET GRILLES	20x4x20	WATER	135	125	700	0.2	0.1	FULL	STERLING FWG-A	COLOR CHOICE BY ARCHITECT.
C-2	205	FRONT INLET & OUTLET GRILLES	32x4x32	WATER	135	125	1,600	0.4	0.2	FULL	STERLING FWG-A	COLOR CHOICE BY ARCHITECT.
C-3	206	FRONT INLET & OUTLET GRILLES	32x4x32	WATER	135	125	1,600	0.4	0.2	FULL	STERLING FWG-A	COLOR CHOICE BY ARCHITECT.
C-4	217D	FRONT OUTLET BOTTOM INLET	20x4x14	WATER	135	125	700	0.2	0.1	NONE	STERLING W-A	COLOR CHOICE BY ARCHITECT.
C-5	107A	FRONT OUTLET BOTTOM INLET	24x4x32	WATER	135	125	1480	0.3	0.1	NONE	STERLING W-A	COLOR CHOICE BY ARCHITECT.

WALL FIN RADIATION SCHEDULE

PLAN SYMBOL	GRILLE TYPE	HEATING MEDIUM	E.W.T. (°F)	L.W.T. (°F)	BTUH/ LIN. FT.	ELEMENT					ENCLOSURE DIMENSIONS (H"xD")	MANUFACTURER & MODEL NO.	ACCESSORIES	NOTES
						ROWS	PIPE SIZE	FIN SIZE (H"xD")	FINS/FT.	LENGTH (FT)				
WF-1	SLOPE TOP	WATER	135	125	1,220	2	3/4"	4¼"x4¼"	50	SEE PLANS	24"x5⅝"	STERLING JVB-S24	END CAPS, HANGERS, AND VALVE ACCESS DOORS.	COLOR CHOICE [1] BY ARCHITECT.
WF-2	SLIMLINE SLOPE TOP	WATER	135	125	550	2	3/4"	3⅛"x2⅜"	50	SEE PLANS	14"x3⅜"	STERLING JVK-S14	END CAPS, HANGERS, AND VALVE ACCESS DOORS.	COLOR CHOICE [2] BY ARCHITECT.

[1] MOUNT A MINIMUM OF 4" A.F.F. PER MANUFACTURER REQUIREMENTS. COORDINATE EXACT LOCATION WITH G.C.
[2] MOUNT A MINIMUM OF 2" A.F.F. PER MANUFACTURER REQUIREMENTS. COORDINATE EXACT LOCATION WITH G.C.

FLOOR WARMING SYSTEM SCHEDULE

PLAN SYMBOL	HEATING MEDIUM	TUBING				CONTROL	MANIFOLDS	CIRCUITS	MAX P.D. (FT) [1]	MANUFACTURER & MODEL NO.	ACCESSORIES	NOTES
		TEMP. (°F)	DIA.	MAX. LENGTH	SPACING							
FWS-1	WATER	135	5/8"	340'	12" O.C.	SEE PLANS AND SPEC.	S.S. WITH GAUGES	3	5	ROTH X-PERT S5	TUBE FASTENERS	2" SLAB & PERIMETER INSULATION BY G.C.
FWS-2	WATER	135	5/8"	340'	12" O.C.	SEE PLANS AND SPEC.	S.S. WITH GAUGES	5	4	ROTH X-PERT S5	TUBE FASTENERS	2" SLAB & PERIMETER INSULATION BY G.C.
FWS-3A	WATER	135	5/8"	340'	12" O.C.	SEE PLANS AND SPEC.	S.S. WITH GAUGES	10	12	ROTH X-PERT S5	TUBE FASTENERS	2" SLAB & PERIMETER INSULATION BY G.C.
FWS-3B	WATER	135	5/8"	340'	12" O.C.	SEE PLANS AND SPEC.	S.S. WITH GAUGES	4	4	ROTH X-PERT S5	TUBE FASTENERS	2" SLAB & PERIMETER INSULATION BY G.C.

[1] FLOOR WARMING SYSTEM SUPPLIER SHALL VERIFY THE QUANTITY OF ALL CIRCUITS REQUIRED FOR EACH MANIFOLD TO PROVIDE A MAXIMUM PRESSURE DROP OF 12' OR LESS.

GAS FIRED UNIT HEATER SCHEDULE

PLAN SYMBOL	ROOM NO.	TYPE	CFM	GAS TYPE	INPUT (MBH)	OUTPUT (MBH)	GAS CONN. SIZE	HEAT EXCH. MATERIAL	IGNITOR	FAN MOTOR			APPROX. WEIGHT (LBS)	MANUFACTURER & MODEL NO.	ACCESSORIES/ NOTES
										HP	RPM	ELEC. CHAR.			
GUH-1	112	SEPARATED COMBUSTION	1,345	NAT.	105	87.2	1/2"	STAINLESS STEEL	DIRECT SPARK	1/4	1,050	120/1	105	REZNOR UDZ-100	[1] [2]
GUH-2	113	SEPARATED COMBUSTION	1,921	NAT.	150	124.5	1/2"	STAINLESS STEEL	DIRECT SPARK	1/4	1,050	120/1	180	REZNOR UDZ-150	[1] [2]
GUH-3	116	SEPARATED COMBUSTION	1,921	NAT.	150	124.5	1/2"	STAINLESS STEEL	DIRECT SPARK	1/4	1,050	120/1	180	REZNOR UDZ-150	[1] [2]
GUH-4	116	SEPARATED COMBUSTION	1,921	NAT.	150	124.5	1/2"	STAINLESS STEEL	DIRECT SPARK	1/4	1,050	120/1	180	REZNOR UDZ-150	[1] [2]

[1] TOTALLY ENCLOSED FAN MOTOR, CONCENTRIC TERMINATION, HANGER KIT, HORIZONTAL & VERTICAL DISCHARGE LOUVERS, AND 2-STAGE GAS VALVE.
[2] SPACE TEMPERATURE SENSOR AND CONTROL BY T.C.C.

DUCTLESS SPLIT SYSTEM AIR CONDITIONER SCHEDULE

PLAN SYMBOL	NOM. TON	REFRIG. TYPE	SUCT. LINE [1]	LIQUID LINE [1]	CONDENSING (OUTDOOR) UNIT					EVAPORATOR COIL/INDOOR UNIT						ACCESSORIES/ NOTES
					SEER	COMPR. TYPE	MCA	ELEC. CHAR.	MANUFACTURER & MODEL NO.	CFM	O.A. CFM	EXT. S.P.	FAN SPEEDS	ELEC. CHAR.	MANUFACTURER & MODEL NO.	
DAC-1A	3	R410A	⅜"	⅜"	18.0	INVERTER ROTARY	24.9 [2]	208/1	SAMSUNG AC036BXSCCC/AA	699-830	-	-	3	208/1	SAMSUNG AC036BNTDCH/AA	[3]
DAC-1B	3	R410A	⅜"	⅜"	18.0	INVERTER ROTARY	24.9 [2]	208/1	SAMSUNG AC036BXSCCC/AA	699-830	-	-	3	208/1	SAMSUNG AC036BNTDCH/AA	[3]
DAC-2	1.5	R410A	½"	¼"	20.0	INVERTER ROTARY	13.5 [2]	208/1	SAMSUNG AC018BXSCCC/AA	441-615	-	-	3	208/1	SAMSUNG AC018BNADCH/AA	[3]

[1] SIZE REFRIGERANT PIPING PER MANUFACTURER REQUIREMENTS.
[2] SYSTEM MCA.
[3] WALL MOUNT BRACKETS FOR INDOOR AND OUTDOOR UNITS. WALL-MOUNTED WIRED THERMOSTAT.

WATER TO WATER HEAT PUMP SCHEDULE

PLAN SYMBOL	ROOM NO.	SOURCE					LOAD (COOLING & HEATING)								MCA	ELEC. CHAR.	MANUFACTURER & MODEL NO.	ACCESS./ NOTES
		FLUID	E.W.T. (°F)	L.W.T. (°F)	GPM	P.D. (FT)	FLUID	E.W.T. (°F)	L.W.T. (°F)	CLG. (MBH)	EER	HTG. (MBH)	C.O.P.	GPM	P.D. (FT)				
WHP-1	115	25% P.G.	85 (C) 34 (H)	96.7 (C) 28.8 (H)	108	5.6	WATER	54 (C) 120 (H)	43.8 (C) 135 (H)	524.54	16.3	440.8	2.8	100 (C) 60 (H)	3.3 (C) 1.4 (H)	(2) 88	208/3	WATER FURNACE WCRDM020E3CBBS3B6GWN00NSSS	SEE SPECS. [1]

[1] REMOTE SUPERVISORY CONTROL PANEL. WIRED BY 23 09 14 CONTRACTOR.

BOILER SCHEDULE

PLAN SYMBOL	ROOM NO.	TYPE	HEATING MEDIUM	MINIMUM FLOW AT FULL INPUT (GPM)	GROSS INPUT (MBH)	GROSS OUTPUT (MBH)	AHRI EFF. (80-180)	FUEL [1]	TURNDOWN	ELEC. CHAR.	APPROX. WEIGHT (LBS)	MANUFACTURER & MODEL NO.	ACCESSORIES/NOTES
B-1	115	HIGH EFF.	WATER	19	399	379	95.1%	NAT. GAS	5.5:1	120/1	200	TRIANGLE TUBE PRESTIGE SOLO 399	30 PSI RELIEF VALVE. SEE DETAILS.

[1] 1" GAS CONNECTION.

CIRCULATING PUMP SCHEDULE

PLAN SYMBOL	ROOM NO.	SERVICE	FLUID TYPE	TYPE	FLOW (GPM)	HEAD (FT)	MIN. NPSH REQ'D	MIN. EFF. (%)	SIZE (IN.)			MOTOR				MANUFACTURER & MODEL NO.	ACCESS./ NOTES
									SUCT.	DISCH.	IMP.	BHP	HP/W	DESIGN RPM/ RPM	ELEC. CHAR.	VFD/ ECM	
CP-1	112	GEOTHERMAL SYSTEM	25% P.G.	VERTICAL INLINE CLOSE-COUPLED	108	80	14'	70	2	2	4.8	3.13	5 HP	3427/ 3500	208/3	VFD	TACO SKV2006D	[1]
CP-2	112	GEOTHERMAL SYSTEM	25% P.G.	VERTICAL INLINE CLOSE-COUPLED	108	80	14'	70	2	2	4.8	3.13	5 HP	3427/ 3500	208/3	VFD	TACO SKV2006D	[1]
CP-3	115	CHW SYSTEM	WATER	VERTICAL INLINE CLOSE-COUPLED	93	55	3'	69	2	2	7.5	1.87	3 HP	1730/ 1760	208/3	VFD	TACO SKV2009D	[2]
CP-4	115	CHW SYSTEM	WATER	VERTICAL INLINE CLOSE-COUPLED	93	55	3'	69	2	2	7.5	1.87	3 HP	1730/ 1760	208/3	VFD	TACO SKV2009D	[2]
CP-5	115	HOT WATER SYSTEM	WATER	VERTICAL INLINE CLOSE-COUPLED	74.6	40	3'	71	2	2	6.7	1.00	2 HP	165/ 760	208/3	VFD	TACO SKV2007D	[2]
CP-6	115	HOT WATER SYSTEM	WATER	VERTICAL INLINE CLOSE-COUPLED	74.6	40	3'	71	2	2	6.7	1.00	2 HP	165/ 1760	208/3	VFD	TACO SKV2007D	[2]
CP-7	115	FWS-1	WATER	INLINE CIRC. (WET ROTOR)	3	20	-	-	3/4	3/4	PER MFG.	-	1/8 HP	3250	120/1	NO	TACO 0014	
CP-8	115	FWS-2	WATER	INLINE CIRC. (WET ROTOR)	4	15	-	-	1	1	PER MFG.	-	1/8 HP	3280	120/1	NO	TACO 0014	
CP-9	115	FWS-3A	WATER	INLINE CIRC. (WET ROTOR)	9	25	-	-	1 1/4	1 1/4	PER MFG.	-	1/6 HP	3200	120/1	NO	TACO 0013	
CP-10	115	FWS-3B	WATER	INLINE CIRC. (WET ROTOR)	4	20	-	-	1	1	PER MFG.	-	1/2 HP	3250	120/1	NO	TACO 0011	
CP-11	115	WHP-1	WATER	INLINE CIRC. (WET ROTOR)	60	10	-	49	1 1/2	1 1/2	PER MFG.	-	0.4 HP	3500	120/1	ECM	TACO VR15L	
CP-12	115	B-1	WATER	INLINE CIRC. (WET ROTOR)	30	10	-	59	1 1/2	1 1/2	PER MFG.	-	0.4 HP	2700	120/1	ECM	TACO VR15L	

[1] MOTOR-MOUNTED VFD.
[2] MOTOR-MOUNTED VFD WITH INTEGRAL DP/SPEED CONTROL.

DIRT AND AIR SEPARATOR SCHEDULE

PLAN SYMBOL	ROOM NO.	TYPE	FLUID	FLUID TEMP. (AVG.)	SYSTEM GPM	MFG. SUGGESTED GPM	SIZE	COALESCING MEDIUM	RATED WORKING PRESS.	MANUFACTURER & MODEL NO.	ACCESSORIES/NOTES
DAS-1	112	COALESCING	25% P.G.	55°F	108	[1]	3"	STAINLESS STEEL	150 PSIG	CALEFFI NA546	SEE DETAIL AND SPECIFICATIONS.

[1] 90 GPM BASED ON 4.0 FT/S FLOW VELOCITY.

EXPANSION TANK SCHEDULE

PLAN SYMBOL	ROOM NO.	TYPE	FLUID	FLUID TEMP. (AVG.)	MINIMUM PRECHARGED PRESSURE	MAXIMUM OPERATING PRESSURE	EXPAN. VOLUME (GAL.)	MIN. TANK VOLUME (GAL.)	DIMENSIONS (L"xDIA")	MANUFACTURER & MODEL NO.	ACCESSORIES/NOTES
ET-1	112	ASME HORIZONTAL	25% P.G.	100°F	12	30	34.0	68.0	41x24	AMTROL AX-120	[1] [2]
ET-2	115	ASME HORIZONTAL	WATER	80°F	12	30	2.4	8.0	19x12	AMTROL AX-15	[1] [2]
ET-3	115	ASME HORIZONTAL	WATER	135°F	12	30	11.3	21.7	29x16	AMTROL AX-40	[1] [2]

[1] SEE AIR CONTROL DETAIL. CHARGE TO FILL PRESSURE (12 PSI).
[2] AUTOMATIC AIR VENT, DRAIN VALVE, AND PRESSURE GAUGE.

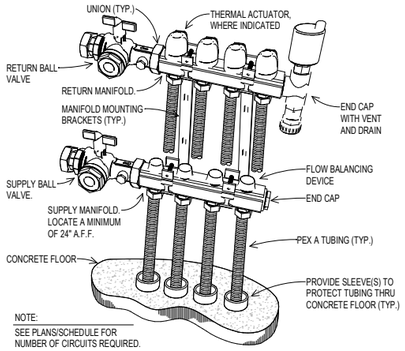
BUFFER TANK SCHEDULE

PLAN SYMBOL	ROOM NO.	STORAGE CAPACITY (GAL)	FLUID TEMP. (AVE.)	INLET SIDE CONNECTION	OUTLET SIDE CONNECTION	DRAIN VALVE CONN.	VENT CONN.	AQUASTAT CONN	MANUFACTURER & MODEL NO.	ACCESSORIES/NOTES
BT-1	115	200	80°F	3"	3"	3/4"	3/4"	N/A	AMTROL CWBT200-3-150	AIR VENT. DRAIN VALVE.

HYDRAULIC SEPARATOR SCHEDULE

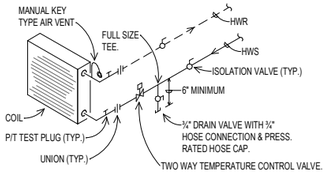
PLAN SYMBOL	ROOM NO.	TYPE	FLUID TEMP. (AVE.)	INLET AND OUTLET CONNECTIONS	INLET AND OUTLET SIZES	CONN. TYPE	MAX GPM	MAX OP. PRESS.	MANUFACTURER & MODEL NO.	ACCESSORIES/NOTES
HS-1	115	COALESCING	125°F	4	4"	FLANGE	124	150 PSI	CALEFFI SEP4 NA549	[1]

[1] STEEL TANK WITH 300 SERIES S.S. COALESCING ELEMENT, 3/4" HIGH CAPACITY AIR ELEMINATOR AND 3/4" FULL PORT BRASS DRAIN VALVE.



NOTE:
SEE PLANS/SCHEDULE FOR NUMBER OF CIRCUITS REQUIRED.

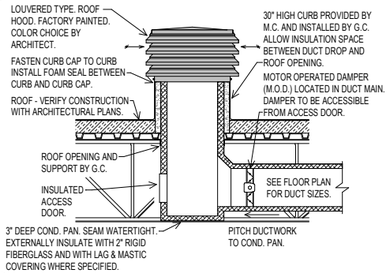
11 / M600 INFLOOR TUBING SYSTEM DETAIL
NO SCALE



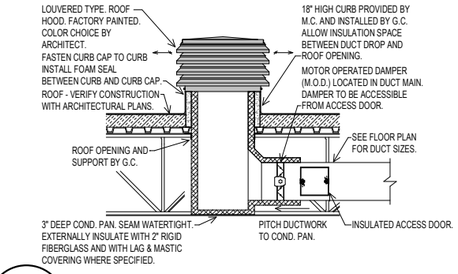
NOTE:
WHEN LINE SIZE IS LARGER THAN CONTROL VALVE, REDUCERS SHALL BE INSTALLED DIRECTLY AT INLET AND OUTLET OF CONTROL VALVE.

NOTE:
PROVIDE A MINIMUM OF 6" CLEAR. FROM PIPING SPECIALTIES TO COIL CONNECTIONS.

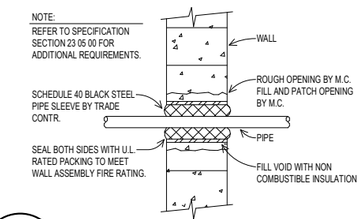
12 / M600 TYPICAL COIL PIPING DETAIL
NO SCALE (VAV REHEAT COILS)



13 / M600 INTAKE ROOF HOOD DETAIL
NO SCALE (RH-1 & 3)

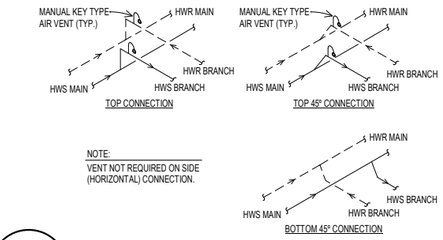


14 / M600 RELIEF ROOF HOOD DETAIL
NO SCALE (RH-2 & 4)



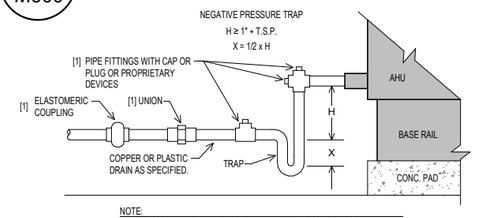
NOTE:
REFER TO SPECIFICATION SECTION 23 05 00 FOR ADDITIONAL REQUIREMENTS.

7 / M600 PIPE SLEEVE DETAIL
NO SCALE



NOTE:
VENT NOT REQUIRED ON SIDE (HORIZONTAL) CONNECTION.

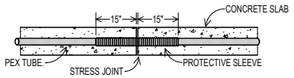
8 / M600 HW BRANCH PIPING DETAIL
NO SCALE



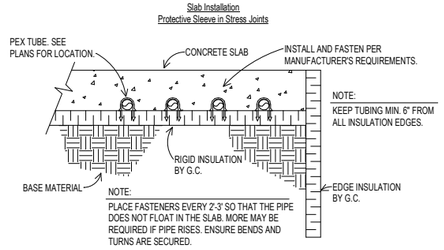
NOTE:
VERIFY TRAP HEIGHTS WITH ACTUAL AHUs PROVIDED AND MFG. INSTALLATION REQUIREMENTS. MAINTAIN PROPER PITCH TO TERMINATION.

[1] NOT AN INSTALLATION DETAIL - SHOWN AS EXAMPLES TO MEET IMC 307.2.5 DRAIN LINE MAINTENANCE. DRAIN LINES SHALL BE CONFIGURED TO PERMIT THE CLEARING OF BLOCKAGES AND PERFORMANCE OF MAINTENANCE WITHOUT REQUIRING THE DRAIN LINE TO BE CUT.

9 / M600 CONDENSATE DRAIN PIPE DETAIL
NO SCALE

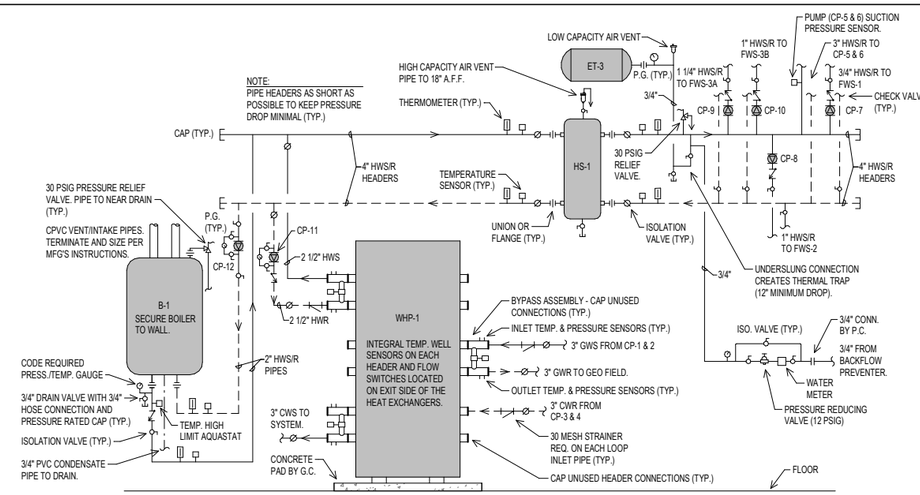


Slab Installation
Protective Sleeve in Stress Joints

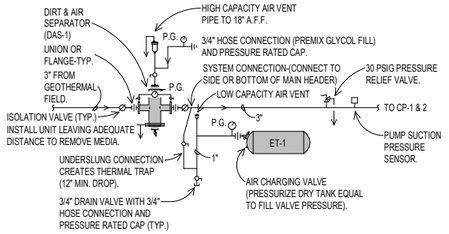


NOTE:
PLACE FASTENERS EVERY 2'-3' SO THAT THE PIPE DOES NOT FLOAT IN THE SLAB. MORE MAY BE REQUIRED IF PIPE RISES. ENSURE BENDS AND TURNS ARE SECURED.

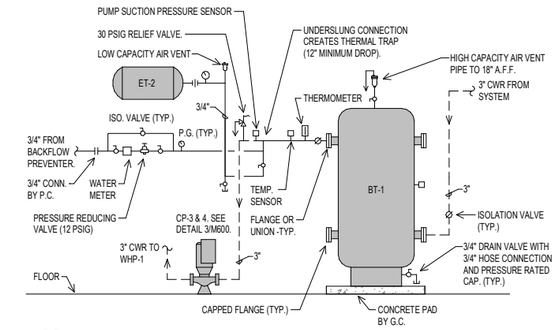
10 / M600 FLOOR WARMING DETAIL
NO SCALE



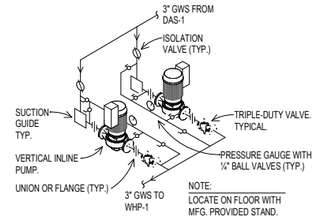
1 / M600 HOT WATER SYSTEM DETAIL
NO SCALE



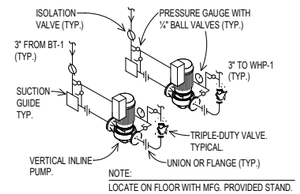
5 / M600 AIR CONTROL DETAIL
NO SCALE (GEOTHERMAL WATER)



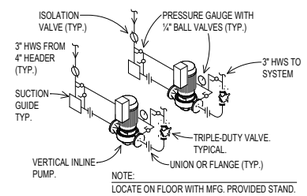
6 / M600 CHILLED WATER SYSETM DETAIL
NO SCALE



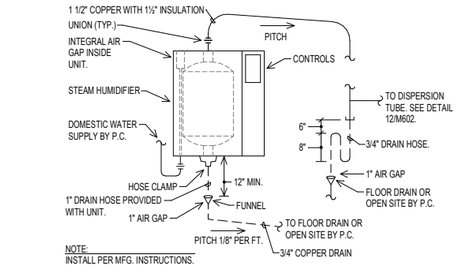
2 / M600 CIRCULATING PUMP DETAIL
NO SCALE (VERTICAL INLINE)(CP-1 & 2)



3 / M600 CIRCULATING PUMP DETAIL
NO SCALE (VERTICAL INLINE)(CP-3 & 4)

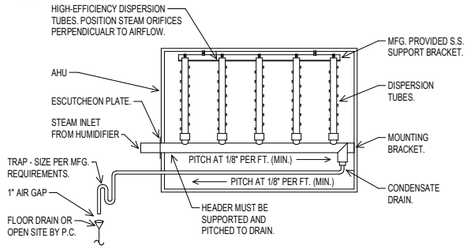


4 / M600 CIRCULATING PUMP DETAIL
NO SCALE (VERTICAL INLINE)(CP-5 & 6)



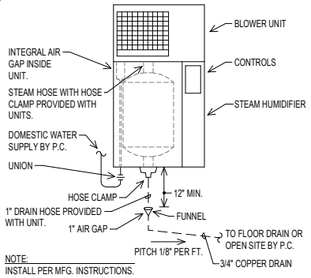
11 M601 STEAM HUMIDIFIER DETAIL

NO SCALE (H-1, H-4 SIMILAR)



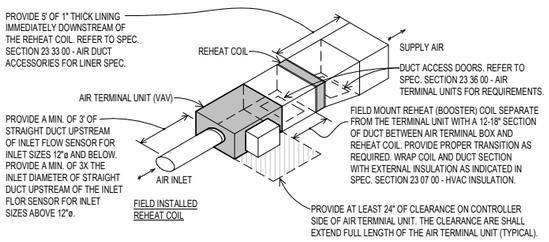
12 M601 DISPERSION TUBE DETAIL

NO SCALE (H-1 & 4 DISPERSION TUBE)



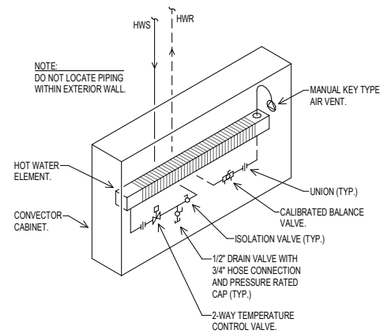
13 M601 STEAM HUMIDIFIER DETAIL

NO SCALE (H-2 & 3)



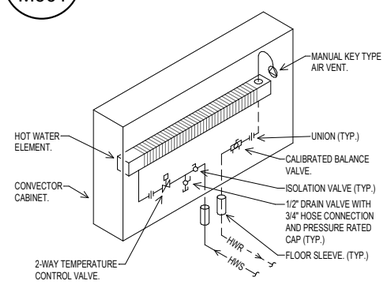
14 M601 SUPPLY AIR TERMINAL UNIT DETAIL

NO SCALE (VAV WITH REHEAT COIL)



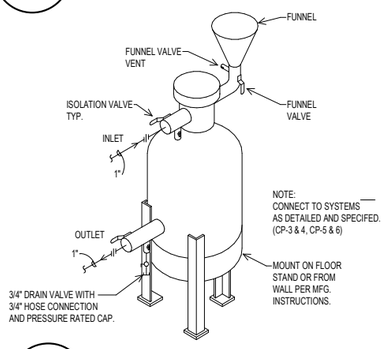
7 M601 CONVECTOR DETAIL

NO SCALE (C-1 & 5) (DOWNFEED)



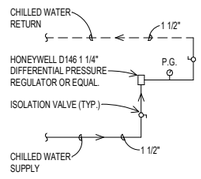
8 M601 CONVECTOR DETAIL

NO SCALE (C-2, 3, & 4) (UPFEED)



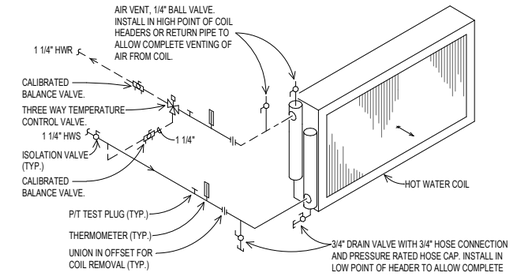
9 M601 POT FEEDER DETAIL

NO SCALE



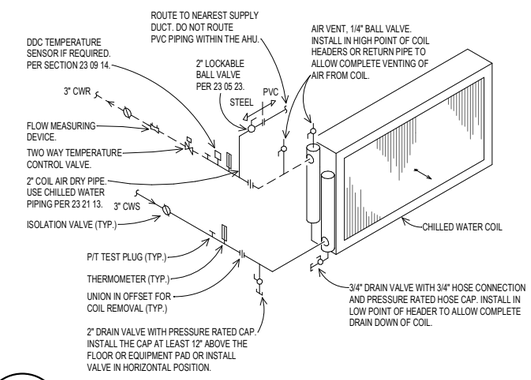
10 M601 SYSTEM BYPASS DETAIL

NO SCALE (CHILLED WATER)



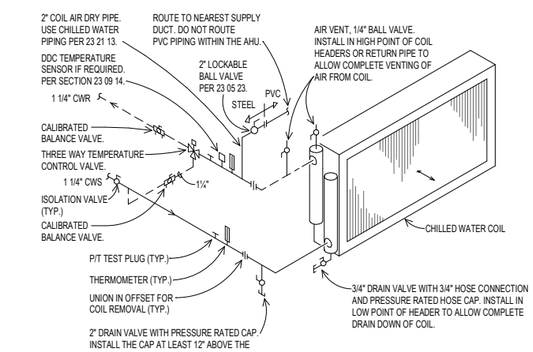
4 M601 HOT WATER COIL PIPING DETAIL

NO SCALE (AHU-1 & ERV-1)



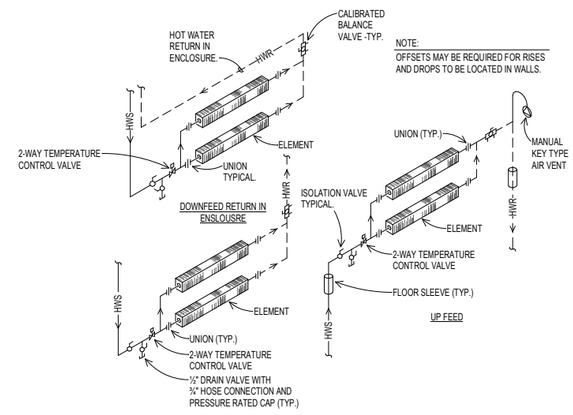
5 M601 CHILLED WATER COIL PIPING DETAIL

NO SCALE (AHU-1)



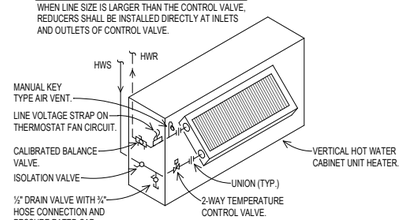
6 M601 CHILLED WATER COIL PIPING DETAIL

NO SCALE (ERV-1)



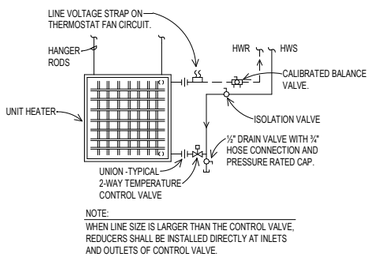
1 M601 WALL FIN PIPING DETAIL

NO SCALE (WF-1 & 2)



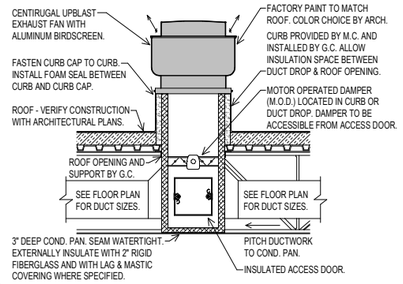
2 M601 CABINET UNIT HEATER DETAIL

NO SCALE (CUH-1 THRU 5)

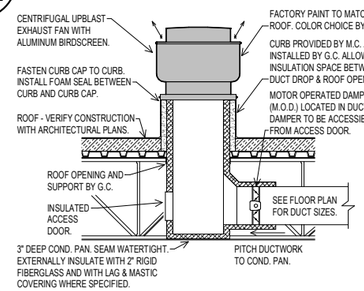


3 M601 UNIT HEATER PIPING DETAIL

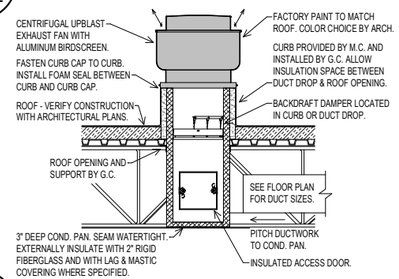
NO SCALE (UH-1)



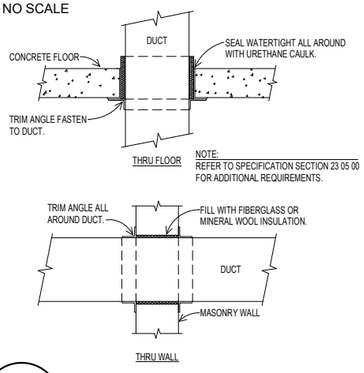
11 M602 **UPBLAST EXHAUST FAN DETAIL**
NO SCALE (EF-8 & 9)



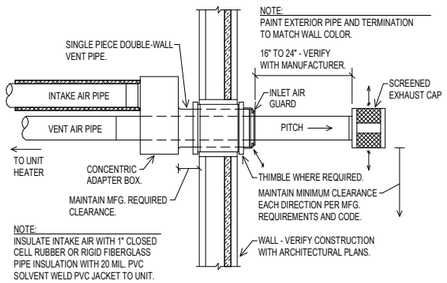
12 M602 **UPBLAST EXHAUST FAN DETAIL**
NO SCALE (EF-12 & 13)



13 M602 **UPBLAST EXHAUST FAN DETAIL**
NO SCALE (EF-10 & 11)



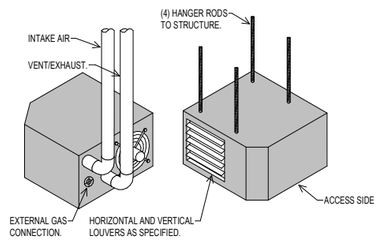
14 M602 **DUCT SLEEVE DETAIL**
NO SCALE



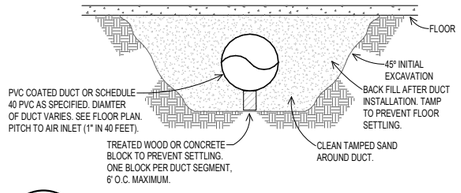
IFGC 503.2.3 DIRECT-VENT APPLIANCES:
LISTED DIRECT-VENT APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACURER'S INSTRUCTIONS AND IFGC 503.8, ITEM #3.

IFGC 503.8, ITEM #3:
THE VENT TERMINAL SHALL BE LOCATED NOT LESS THAN 12" FROM ANY AIR OPENING INTO A BUILDING.

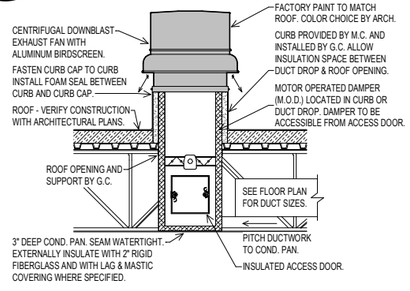
7 M602 **CONCENTRIC VENTING DETAIL**
NO SCALE (GUH-3 & 4)



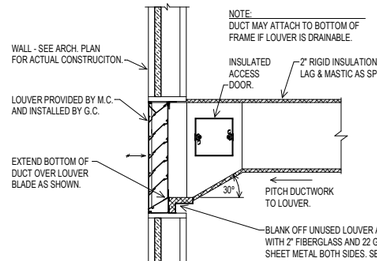
8 M602 **UNIT HEATER DETAIL**
NO SCALE (UH-1 & 2) (GUH-3 & 4 SIMILAR)



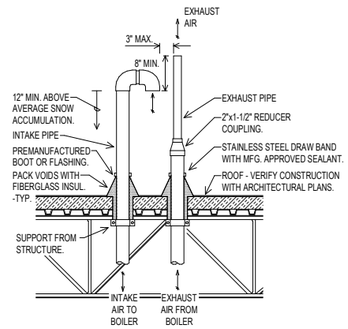
9 M602 **UNDERGROUND DUCT DETAIL**
NO SCALE (INSPECTION BAY)



10 M602 **DOWNBLAST EXHAUST FAN DETAIL**
NO SCALE (EF-5, 7, & 14)



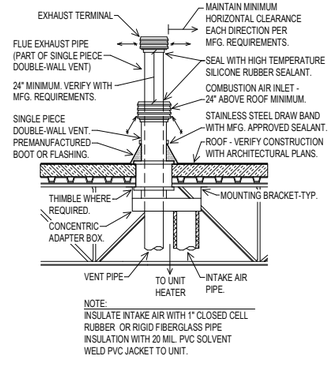
4 M602 **LOUVER CONNECTION DETAIL**
NO SCALE (MAU-1/L-3)



IFGC 503.2.3 DIRECT-VENT APPLIANCES:
LISTED DIRECT-VENT APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACURER'S INSTRUCTIONS AND IFGC 503.8, ITEM #3.

IFGC 503.8, ITEM #3:
THE VENT TERMINAL SHALL BE LOCATED NOT LESS THAN 12" FROM ANY AIR OPENING INTO A BUILDING.

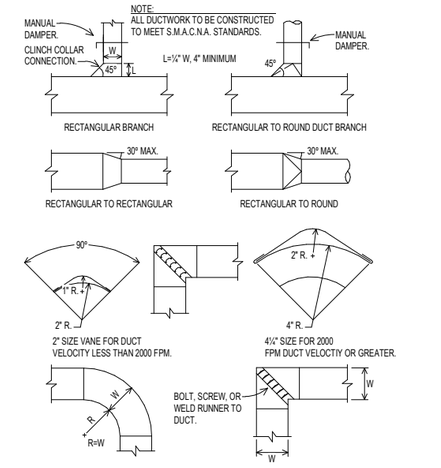
5 M602 **VENT/INTAKE TERMINATION**
NO SCALE (B-1)



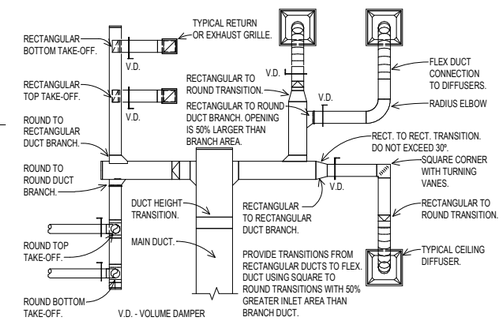
IFGC 503.2.3 DIRECT-VENT APPLIANCES:
LISTED DIRECT-VENT APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACURER'S INSTRUCTIONS AND IFGC 503.8, ITEM #3.

IFGC 503.8, ITEM #3:
THE VENT TERMINAL SHALL BE LOCATED NOT LESS THAN 12" FROM ANY AIR OPENING INTO A BUILDING.

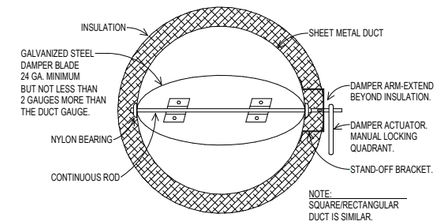
6 M602 **CONCENTRIC VENTING DETAIL**
NO SCALE (GUH-1 & 2)



1 M602 **DUCTWORK DETAIL**
NO SCALE



2 M602 **TYPICAL DUCT CONDITIONS**
NO SCALE



3 M602 **TYPICAL DAMPER DETAIL**
NO SCALE

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MECHANICAL DETAILS	ISSUE DATE: 5/1/24 / ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. M602

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ELECTRICAL SYMBOL LEGEND

(NOT ALL SYMBOLS APPLY TO THIS PROJECT)

ABBREVIATIONS

A	AMPS, AMPERE
AC	ALTERNATING CURRENT
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AVAILABLE INTERRUPTING CURRENT
AL	ALUMINUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ATSC	AUTOMATIC TRANSFER SWITCH CONTROL
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CO	CONDUIT ONLY
CU	COPPER
DC	DIRECT CURRENT
DIA	DIAMETER
E	EMERGENCY
EX	EXISTING
F (FUT)	FUTURE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FDR	FEEDER
FUT.	FUTURE
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFP	GROUND FAULT PROTECTION
GND	GROUND
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
IG	ISOLATED GROUND
KCMIL	THOUSAND CIRCULAR MOLS
KV	KILOVOLT
KVA	KILOVOLT AMPS
KW	KILOWATT
KWH	KILOWATT HOUR
LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, AND GROUND
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MIN	MINIMUM
MH	MANHOLE
MTS	MANUAL TRANSFER SWITCH
N	NEW
NA	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NEUT	NEUTRAL
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NL	NORMAL
OH	OVERHEAD
P	POLE
PA	PUBLIC ADDRESS
PC	PHOTOCELL
PH	PHASE
RSC	RIGID STEEL CONDUIT
SEC	SECURITY
SPD	SURGE PROTECTIVE DEVICE
SW	SWITCH
TCP	TEMPERATURE CONTROL PANEL
TMB	TELEPHONE MOUNTING BOARD
TV	TELEVISION
TYP.	TYPICAL
U/G	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UL	UNDERWRITERS' LABORATORIES
UON	UNLESS OTHERWISE NOTED
UPS	UUNINTERRUPTIBLR POWER SUPPLY
V	VOLTS, VOLTAGE
VFD	VARIABLE FREQUENCY DRIVE
W	WIRE
WP	WEATHERPROOF
XFER	TRANSFER
XFMR (TRANSF)	TRANSFORMER

REFERENCE

- (#) KEYED NOTE REFERENCE - NEW NOTE
- [#] KEYED NOTE REFERENCE - DEMOLITION
- +48" DENOTES MOUNTING HEIGHT AFF
- (#) KEYED NOTE REFERENCE - DEMOLITION

GENERAL DRAWING SYMBOLS

- NUMBER / SHEET — DETAIL
- LETTER / SHEET — SECTION
- NORTH — NORTH ARROW

EQUIPMENT NAMING CONVENTION

- 1, 2, 3, . . = SUBFED PANEL
- A, B, C, ... = SEQUENCE OF PANELS OF THIS TYPE

H	=	(480/277) VOLT PAMELBOARD
L	=	(208/120) VOLT PANELBOARD
DB	=	DISTRIBUTION BOARD
MDP	=	MAIN DISTRIBUTION PANEL
MCC	=	MOTOR CONTROL CENTER
I	=	ISOLATED PANELBOARD
SES	=	SERVICE ENTRANCE SECTION
ATS	=	AUTOMATIC TRANSFER SWITCH
PDU	=	POWER DISTRIBUTION UNIT
UPS	=	UNINTERRUPTABLE POWER SUPPLY
B	=	BUSWAY

BLANK FOR NORMAL POWER

E	=	EMERGENCY
EL	=	EMERGENCY-LIFE SAFTY-BRANCH
EC	=	EMERGENCY-CRITICAL-BRANCH
EQ	=	EMERGENCY-EQUIPMENT-BRANCH

RACEWAY & CONDUCTORS

BRANCH CIRCUIT GENERAL INFORMATION:
BRANCH CIRCUITS FROM OVERCURRENT PROTECTION (20A) TO FURTHEST DEVICE SHALL NOT EXCEED 75 FEET FOR #12AWG COPPER AND 150 FEET FOR #10 AWG COPPER; MEASURED ALONG CONDUCTORS. BRANCH CIRCUITS EXCEEDING 150 FEET WILL BE SIZED SO THAT VOLTAGE DROP DOES NOT EXCEED 5%.

- CONCEALED RACEWAY BETWEEN DEVICES AND OR EQUIPMENT IN WALLS OR IN CEILING SPACE
- UNDERGROUND RACEWAY BETWEEN DEVICES AND OR EQUIPMENT
- CONDUIT TURNS (DOWN / UP)
- CONDUIT STUBBED AND CAPPED

EQUIPMENT

SYMBOL

- MSB — MAIN SWITCHBOARD. DASHED LINES INDICATE CLEARANCES.
- DB — DISTRIBUTION BOARD. DASHED LINES INDICATE CLEARANCES.
- H1A — FLUSH MOUNTED PANELBOARD. DASHED LINES INDICATE CLEARANCES.
- L1A — SURFACE MOUNTED PANELBOARD. DASHED LINES INDICATE CLEARANCES.
- MCC — MOTOR CONTROL CENTER. DASHED LINRS INDICATE CLEARANCES.
- T T1A — DRY TYPE TRANSFORMOR, WITH NAME
- VFD — VARIABLE FREQUENCY DRIVE
- ATS / ATS-1 — AUTOMATIC TRANSFER SWITCH. DASHED LINES INDICATE CLEARANCES.
- G — GROUND BAR

UTILITIES

UT	FACILITY TRANSFORMER
S	PAD MOUNTED SWITCH
CC	CONNECTION CABINET (UTILITY METER MOUNT)
PM	PRIMARY SITE METER ENCLOSURE
ME	METER ENCLOSURE. EITHER ON BUILDING OR ON UTILITY EQUIPMENT
CT	CT ENCLOSURE. EITHER ON BUILDING OR ON UTILITY EQUIPMENT
MH	MANHOLE - POWER OR COMMUNICATION AS INDICATED ON PLANS
HH	HAND HOLE - POWER OR COMMUNICATION AS INDICATED ON PLANS
EG	ENGINE GENERATOR
TP	TELECOMMUNICATION PEDESTAL
TVP	TELEVISION PEDESTAL

UTILITIES

SYMBOL — DESCRIPTION

DEVICE INDICATOR LETTER "X" EQUALS DESIGNATION BELOW (TYPICAL FOR MOST RECEPTACLE TYPES):
BLANK FOR NORMAL POWER
E = EMERGENCY
GFI = GFCI RATED
IG = ISOLATED GROUND
T = TAMPERPROOF
WP/GFI = WEATHERPROOF AND GFCI
WP = WEATHERPROOF

SYMBOL	DESCRIPTION	MOUNTING LOC.	MOUNTING HT.
X	IN FLOOR DULEX RECEPTACLE. CONFIGURATION AS INDICATED ON PLANS.	FLOOR	VARIES SEE ARCH SHEETS
X	IN FLOOR DOUBLE DULEX RECEPTACLE. CONFIGURATION AS INDICATED ON PLANS.		
X	COMBINATION POWER/COMMUNICATION IN FLOOR OUTLET. CONFIGURATION AS INDICATED ON PLANS.		
X	CEILING MOUNTED DUPLEX RECEPTACLE	CEILING	FLUSH
X	CEILING MOUNTED DOUBLE DUPLEX RECEPTACLE		
X	SIMPLEX RECEPTACLE	WALL, UON	=18" A.F.F. TO BOTTOM OF DEVICE UON
X	DUPLEX RECEPTACLE DOUBLE DUPLEX RECEPTACLE (QUADPLEX)		
X	DOUBLE DUPLEX RECEPTACLE (QUADPLEX)		
X	SPECIAL PURPOSE RECEPTACLE, NEMA CONFIGURATION AND AMPERAGE AS NOTED ON PLANS		
	DIVIDED CHANNEL SURFACE MOUNTED RACEWAY	WALL, UON	VARIES SEE PLANS
	PLUGMOLD		
J	WALL MOUNTED CODE SIZE J-BOX	VARIES SEE PLANS	VARIES SEE PLANS
J	CODE SIZE JUNCTION BOX		
TCP	TEMPERTURE CONTROL PANEL PROVIDED BY DIVISION 23		
CR	CORD REEL		
T	THERMOSTAT	WALL	+44" UON
DO	ADA DOOR OPERATOR		
PB	PUSHBUTTON		
SC	SPEED CONTROL SWITCH		
S	STOP PANIC PUSH BUTTON		
	OHD PUSHBUTTON CONTROL		
ECB	ENCLOSED CIRCUIT BREAKER AMPERAGE/NEMA ENCLOSURE RATING, 3 POLE U.O.N.	VARIES	VARIES
X	X EQUALS FUSE SIZE		
Y	Y EQUALS DISCONNECT SIZE		
	MAGNETIC MOTOR STARTER		
	COMBINATION STARTER		
XXX / #	EQUIPMENT NAME PER SCHEDULE / EQUIPMENT # PER SCHEDULE	NA	NA
S	MOTOR. NU.BER IMDICATES HORSEPOWER RATING FOR 1HP AND LARGER		
F	MOTOR "F" INDICATES FRACTIONAL HORSEPOWER		

LIGHTING

REFER TO LUMINAIRE SCHEDULE FOR ALL LUMINAIRE TYPES WHETHER WALL MOUNTED OR CEILING MOUNTED.

SYMBOL	DESCRIPTION	MOUNTING LOC.	MOUNTING HT.
FIXTURE TYPE / X	SWITCH LEGS OR RELAY # / XX	CEILING	REFER TO LIGHTING SHEETS
X - XX	CIRCUIT #		
	PANEL DESIGNATION		
	LINEAR DIRECT/INDIRECT LUMINAIRE. CABLE OR STEM MOUNTED.		
	DOWN LIGHT LUMINAIRE; CEILING MOUNTED		
	PENDANT FIXTURE; CEILING MOUNTED		
	WALL MOUNTED LINEAR LUMINAIRE	VARIES	
	WALL MOUNTED LUMINAIRE		
	TRACK MOUNTED LUMINAIRES		
	STRIP/INDUSTRIAL LUMINAIRE		
WALL / CEILING	EXIT LUMINAIRE. SHADED SIDE INDICATES FACE SIDE. PROVIDE DIRECTIONAL ARROW(S) AS INDICATED ON PLANS	VARIES	
	COMBINATION EXIT SIGM/EM LIGHT		
	EMERGENCY LIGHT; CEILING MOUNTED		
	EMERGENCY LIGHT; WALL MOUNTED		
	EMERGENCY LIGHT - REMOE HEAD; WALL MOUNTED		
	POLE MOUNTED LUMINAIRE	EXTERIOR	AS DETAILED
	POST TOP MOUNTED LUMINAIRE		
	BOLLARD LUMINAIRE		
	FLOOD LIGHT		
PC	PHOTOCELL		
Sx	DEVICE INDICATOR LETTER "X" EQUALS DESIGNATION BELOW (TYPICAL FOR MOST SWITCH TYPES): a = SMALL CASE LETTER DENOTES SWITCHING CONTROL; 2 = DOUBLE POLE TOGGLE SWITCH; 3 = THREE-WAY TOGGLE SWITCH; 4 = FOUR=WAY TOGGLE SWITCH; P = PILOT LIGHT TOGGLE SWITCH; M = MOMENTARY CONTACT SWITCH; K = KEY OPERATED SWITCH; WP = WEATHERPROOF TOGGLE SWITCH; T = MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD PROTECTION; D = DIMMER SWITCH; LV = LOW VOLTAGE	WALL	=44" UON
MS	OCCUPANCY/VACANCY SENSOR SWITCH: TYPE AS INDICATED ON PLANS		
MS	OCCUPANCY/VACANCY SENSOR; TYPE AS INDICATED ON PLANS	CEILING	SURFACE
ALS	AMBIENT LIGHT SENSOR		
LCP	LIGHTING CONTROL PANEL	WALL	74" TO TOP

DEMOLITION

SYMBOL	DESCRIPTION	NOTES
S	DASHED SYMBOL INDICATES EXISTING DEVICE OR EQUIPMENT TO BE REMOVED	REFER TO DEMOLITION PLANS FOR ADDITIONAL INFORMATION
R	REMOVED EXISTING RACEWAY IN ALL ACCESSIBLE AREAS. CAPPED AMD ABANDONED IF IN INACCESSIBLE AREA	
S	SOLID SYMBOL, LIGHTERIN COLOR INDICATES EXISTING DEVICE OR EQUIPMENT TO REMAIN	
EX	EXISTING CONDUIT TO REMAIN	

FIRE ALARM

SYMBOL	DESCRIPTION	MOUNTING LOC.	MOUNTING HT.
FACP	MAIN FIRE ALARM CONTROL PANEL	WALL	-
FAAP	FIRE ALARM ANNUNCIATOR PANEL		
	PULL STATION	WALL	+44"
H	FIRE ALARM HORN	WALL	+80" UON
S	FIRE ALARM SPEAKER		
H ##	FIRE ALARM HORN/STROBE (##) IS CANDELA RATING		
S ##	FIRE ALARM SPEAKER/STROBE (##) IS CANDELA RATING		
##	FIRE ALARM STROBE (##) IS CANDELA RATING		
B	FIRE ALARM BELL		
S	SMOKE DETECTOR	CEILING	SURFACE
H	HEAT DETECTOR		
S ER	SMOKE DETECTOR; ELEVATOR RECALL		
H ER	HEAT DETECTOR; ELEVATOR RECALL		
H ##	CEILING MOUNTED HORN/STROBE (##) IS CANDELA RATING		
H	CEILING MOUNTEG HORN		
##	CEILING MOUNTEG STROBE (##) IS CANDELA RATING		
S DUCT SMOKE DETECTOR	DUCT MOUNTED SMOKE DETECTOR	AT DUCT	SEE PLANS
TS	TAMPER SWITCH	PIPE	SEE PLANS
FS	FLOW SWITCH		
DH	MAGNETIC DOOR HOLD OPEN	VARIES	SEE PLANS
CM	CONTROL MODULE		
MM	MONITORING MODULE		
RTS	REMOTE TEST SWITCH		
S	LOUD HORN SPEAKER		

ONE - LINE DIAGRAM

SYMBOL	DESCRIPTION
300/3	CIRCUIT BREAKER; RATING/NO. POLES. SETTINGS AND PROTECTIONAS NOTED IN SPECIFICATION OR ON DRAWINGS.
T1A 112.5KV 480V - 208Y/120V K-13	TRANSFORMER NAME; TRANSFORNOR KVA RATING; PRIMARY VOLTAGE AND WIRING CONFIGURATION; SECONDARY VOLTAGE AND WIRING CONFIGURATION; K RATING (IF APPLICABLE)
	CURRENT TRANSFORMER
400A	DISCONNECT SWITCH. "400A" DENOTES AMPERAGE RATING
400A	FUSED DISCONNECT SWITCH. "400A" DENOTES AMPERAGE RATING
GFP	CIRCUIT BREAKER WITH GROUND FAULT FUNCTION
ST	CIRCUIT BREAKER WITH SHUNT TRIP OPERATION
	GROUNDING ELECTRODE
N	TRANSFER SWITCH. SEE PLANS FOR TYPE OF SWITCH
SPD	SURGE PROTECTIVE DEVICE
M	ELECTRONIC METER
	GENERATOR
VFD	VFD CONNECTION
M	MOTOR CONNECTION

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ELECTRICAL GENERAL INFORMATION	ISSUE DATE: 5/1/24 / ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E000

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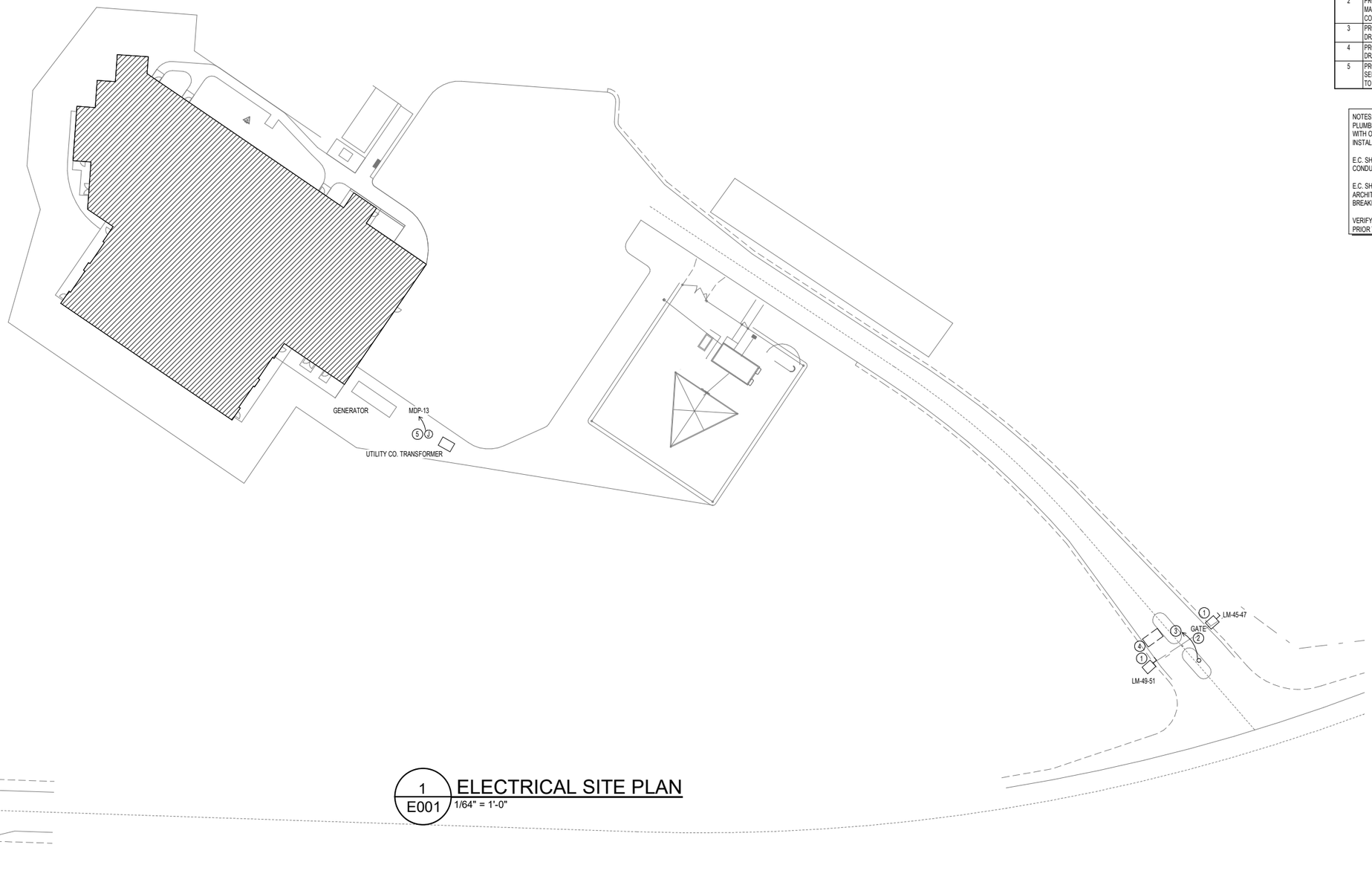
ⓕ	KEYNOTES - E001
1	E.C. SHALL PROVIDE A COMPLETE SYSTEM. COORDINATE WITH EQUIPMENT VENDOR FOR EXACT REQUIREMENTS PRIOR TO INSTALLATION.
2	PROVIDE NEMA 3R, 30/2 FUSIBLE DISCONNECT WITH FUSES SIZED PER MANUFACTURER RECOMMENDATIONS FOR A 1.0 HP, 208V, 1-PHASE GATE OPERATOR. COORDINATE WITH EQUIPMENT VENDOR FOR EXACT REQUIREMENTS.
3	PROVIDE (1) 1" C. FROM GATE CARD READER TO 114B. COORDINATE WITH SECURITY DRAWINGS.
4	PROVIDE (1) 1-1/2" C. FROM LOOP DETECTOR TO 114B. COORDINATE WITH SECURITY DRAWINGS.
5	PROVIDE FEEDER TO SERVE SITE LIGHTING PANEL. PANEL PROVIDED UNDER SEPARATE PROJECT. COORDINATE REQUIREMENTS WITH SEPARATE PROJECT PRIOR TO ROUGH-IN.

NOTES:
PLUMBING, MECHANICAL AND ELECTRICAL CONTRACTORS SHALL COORDINATE WITH ONE ANOTHER ALONG WITH OTHER TRADES BEFORE BEGINNIG ANY INSTALLATION AND CONTINUING THROUGHOUT THE PROJECT.

E.C. SHALL VERIFY VOLTAGE DROP AND PROVIDE APPROPRIATELY SIZED CONDUCTORS TO LIMIT VOLTAGE DROP TO 2.5%

E.C. SHALL VERIFY VOLTAGE AND REQUIRED DEVICES FOR ALL OWNER AND ARCHITECT SUPPLED EQUIPMENT PRIOR TO INSTALLATION. PROVIDE CIRCUIT BREAKERS IN PANELS PER MANUFACTURER RECOMMENDATIONS.

VERIFY LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.



1 / E001 ELECTRICAL SITE PLAN
1/64" = 1'-0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ELECTRICAL SITE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E001	315

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MOTOR, HVAC & EQUIPMENT SCHEDULE

PLAN SYMBOL	CIRCUIT NUMBER	FEEDER SIZE	CHARACTERISTICS			DISCONNECT DEVICE				STARTER					CONTROLS/CONTROL WIRING				NOTES
			KW HP-FLA	VOLTS/ PHASE	UNIT LOCATION	CHARACTERISTICS	NEMA TYPE	PROVIDED BY	LOCATION	CHARACTERISTICS	NEMA SIZE	NEMA TYPE	PROVIDED BY	LOCATION	CHARACTERISTICS	WIRE BY	PROVIDED BY	LOCATION	
AHU-1	LM-1-3-5, LM-7-9-11	3-#3+1-#8 GND.	58.5MCA	208/3	115	INTEGRAL TO VFD	-	M.C.	115	VFD	-	-	M.C.	115	HVAC CONTROLS	TCC	TCC	SEE MECH	1,9,11
B-1	LM-29	2-#12+1#12 GND.	10.0FLA	120/1	115	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
BP-1	LM-25-27	2-#12+1#12 GND.	2.0HP	208/1	115	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	PLUMBING CONTROLS	P.C.	P.C.	SEE PLUM	2
CP-1	LA-61-63-35	3-#10+1-#10 GND.	5.0HP	208/3	112	INTEGRAL TO VFD	-	M.C.	MOTOR MOUNTED	VFD	-	-	M.C.	MOTOR MOUNTED	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CP-2	LA-67-69-71	3-#10+1-#10 GND.	5.0HP	208/3	112	INTEGRAL TO VFD	-	M.C.	MOTOR MOUNTED	VFD	-	-	M.C.	MOTOR MOUNTED	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CP-3	LM-2-4-6	3-#12+1-#12 GND.	3.0HP	208/3	115	INTEGRAL TO VFD	-	M.C.	MOTOR MOUNTED	VFD	-	-	M.C.	MOTOR MOUNTED	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CP-4	LM-8-10-12	3-#12+1-#12 GND.	3.0HP	208/3	115	INTEGRAL TO VFD	-	M.C.	MOTOR MOUNTED	VFD	-	-	M.C.	MOTOR MOUNTED	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CP-5	LM-14-16-18	3-#12+1-#12 GND.	2.0HP	208/3	115	INTEGRAL TO VFD	-	M.C.	MOTOR MOUNTED	VFD	-	-	M.C.	MOTOR MOUNTED	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CP-6	LM-20-22-24	3-#12+1-#12 GND.	2.0HP	208/3	115	INTEGRAL TO VFD	-	M.C.	MOTOR MOUNTED	VFD	-	-	M.C.	MOTOR MOUNTED	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CP-7	LM-13	2-#12+1#12 GND.	1/8HP	120/1	115	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CP-8	LM-15	2-#12+1#12 GND.	1/8HP	120/1	115	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CP-9	LM-17	2-#12+1#12 GND.	1/6HP	120/1	115	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CP-10	LM-19	2-#12+1#12 GND.	1/2HP	120/1	115	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CP-11	LM-21	2-#12+1#12 GND.	0.4HP	120/1	115	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CP-12	LM-23	2-#12+1#12 GND.	0.4HP	120/1	115	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CUH-1	LB-43	2-#12+1#12 GND.	1/1SHP	120/1	101C	INTEGRAL	-	-	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CUH-2	LB-43	2-#12+1#12 GND.	1/1SHP	120/1	102A	INTEGRAL	-	-	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CUH-3	LB-43	2-#12+1#12 GND.	1/1SHP	120/1	102H	INTEGRAL	-	-	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CUH-4	LB-43	2-#12+1#12 GND.	1/1SHP	120/1	105	INTEGRAL	-	-	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
CUH-5	LB-43	2-#12+1#12 GND.	1/1SHP	120/1	110A	INTEGRAL	-	-	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
DAC-1A	LM-32-34	2-#10+1-#10 GND.	24.9MCA	208/1	116//114B	NOTE 6	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
DAC-1B	LM-36-38	2-#10+1-#10 GND.	24.9MCA	208/1	116//114B	NOTE 6	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
DAC-2	LM-40-42	2-#12+1#12 GND.	13.5MCA	208/1	116/217B	NOTE 6	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
DF-1	LA-62	2-#12+1#12 GND.	1/10HP	120/1	112	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
DF-2	LA-62	2-#12+1#12 GND.	1/10HP	120/1	113	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
DF-3A	LA-46	2-#12+1#12 GND.	1/4HP	120/1	116	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
DF-3B	LA-46	2-#12+1#12 GND.	1/4HP	120/1	116	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
DWCP-1	LC-47	2-#12+1#12 GND.	60.0W	120/1	211	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	PLUMBING CONTROLS	P.C.	P.C.	SEE PLUM	2
EF-1	LB-45	2-#12+1#12 GND.	30.0W	120/1	100A	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	RELAY	-	-	E.C.	AT UNIT	INTERLOCK WITH LIGHTING	E.C.	E.C.	SEE MECH	1
EF-2	LB-45	2-#12+1#12 GND.	30.0W	120/1	100B	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	RELAY	-	-	E.C.	AT UNIT	INTERLOCK WITH LIGHTING	E.C.	E.C.	SEE MECH	1
EF-3	LB-45	2-#12+1#12 GND.	27.0W	120/1	103	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	-	-	-	-	-	DIGITAL TIMER SWITCH	E.C.	E.C.	SEE MECH	1
EF-4	LB-45	2-#12+1#12 GND.	30.0W	120/1	107	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	RELAY	-	-	E.C.	AT UNIT	INTERLOCK WITH LIGHTING	E.C.	E.C.	SEE MECH	1
EF-5	LC-11	2-#12+1#12 GND.	1/4HP	120/1	200C	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	RELAY	-	-	E.C.	AT UNIT	INTERLOCK WITH AHU-1	TCC	TCC	SEE MECH	1
EF-6	LC-11	2-#12+1#12 GND.	27.0W	120/1	213	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	-	-	-	-	-	DIGITAL TIMER	E.C.	E.C.	SEE MECH	1
EF-7	LC-11	2-#12+1#12 GND.	1/10HP	120/1	218	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	RELAY	-	-	E.C.	AT UNIT	INTERLOCK WITH AHU-1	TCC	TCC	SEE MECH	1
EF-8	LA-58	2-#12+1#12 GND.	1/4HP	120/1	ROOF	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	RELAY	-	-	E.C.	AT UNIT	HVAC CONTROLS	TCC	TCC	SEE MECH	1
EF-9	LA-58	2-#12+1#12 GND.	1/4HP	120/1	ROOF	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	RELAY	-	-	E.C.	AT UNIT	HVAC CONTROLS	TCC	TCC	SEE MECH	1
EF-10	LA-48	2-#12+1#12 GND.	1/6HP	120/1	116	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	-	-	-	-	-	RUNS CONTINUOUS	-	-	SEE MECH	1
EF-11	LA-48	2-#12+1#12 GND.	1/6HP	120/1	116	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	-	-	-	-	-	RUNS CONTINUOUS	-	-	SEE MECH	1
EF-12	LA-50-52	3-#12+1-#12 GND.	2.0HP	208/1	116	HEAVY DUTY FUSED DISCONNECT	3R	E.C.	AT UNIT	RELAY	-	-	E.C.	AT UNIT	HVAC CONTROLS	TCC	TCC	SEE MECH	1
EF-13	LA-54-56	3-#12+1-#12 GND.	2.0HP	208/1	116	HEAVY DUTY FUSED DISCONNECT	3R	E.C.	AT UNIT	RELAY	-	-	E.C.	AT UNIT	HVAC CONTROLS	TCC	TCC	SEE MECH	1
EF-14	LM-44	3-#12+1-#12 GND.	1/10HP	120/1	115A	DISCONNECT FURNISHED WITH UNIT	-	M.C.	115A	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
EF-15	ELV-2	2-#12+1#12 GND.	30.0W	120/1	001	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	RELAY	-	-	E.C.	AT UNIT	INTERLOCK WITH AHU-1	TCC	TCC	SEE MECH	1
EF-16	LB-45	2-#12+1#12 GND.	30.0W	120/1	108	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	RELAY	-	-	E.C.	AT UNIT	INTERLOCK WITH LIGHTING	E.C.	E.C.	SEE MECH	1
EFH-1	LM-39-41	2-#12+1#12 GND.	2.0KW	208/1	115A	INTEGRAL	-	-	115A	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
ELM-1	MDP-12	3-#3/0+1-#6 GND.	35.0HP	208/3	106A	BUSSMANN POWER MODULE	1	E.C.	115A	-	-	-	-	-	ELEVATOR CONTROLS	G.C.	G.C.	SEE ARCH	3
ERV-1	LC-62-64-66	3-#8+1-#10 GND.	31.26MCA	208/3	211	HEAVY DUTY FUSED DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1,10
FP-1	SEE ONE-LINE DIAGRAM	2-#1+1#6 GND.	25.0HP	208/3	115A	INTEGRAL TO CONTROLLER	1	F.P.	115A	-	-	-	-	-	FIRE PROTECTION CONTROLS	E.C.	F.P.	SEE FP	7
GUH-1	LA-60	2-#12+1#12 GND.	1/4HP	120/1	112	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
GUH-2	LA-60	2-#12+1#12 GND.	1/4HP	120/1	113	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
GUH-3	LA-44	2-#12+1#12 GND.	1/4HP	120/1	116	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
GUH-4	LA-44	2-#12+1#12 GND.	1/4HP	120/1	116	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
GWH-1	LC-47	2-#12+1#12 GND.	10.0FLA	120/1	211	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	PLUMBING CONTROLS	P.C.	P.C.	SEE PLUM	2
H-1	LM-26-28-30	3-#3+1-#8 GND.	55.0FLA	208/3	115	HEAVY DUTY FUSED DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
H-2	LB-39	2-#10+1-#10 GND.	17.0FLA	120/1	114B	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
H-3	LC-45	2-#10+1-#10 GND.	17.0FLA	120/1	217B	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT		-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
H-4	LC-56-58-60	3-#3+1-#8 GND.	55.0FLA	208/3	211	HEAVY DUTY FUSED DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
JP-1	MDP-9	3-#12+1-#12 GND.	3/4HP	208/3	115A	INTEGRAL TO CONTROLLER	-	F.P.	115A	-	-	-	-	-	FIRE PROTECTION CONTROLS	E.C.	F.P.	SEE FP	7
MAU-1	LA-49-51-53	3-#10+1-#10 GND.	5.0HP	208/3	116	DISCONNECT FURNISHED WITH UNIT	-	M.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
OHD-1	LA-55-57-59	3-#12+1-#12 GND.	3/4HP	208/3	113	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	PUSHBUTTON AND SENSOR	E.C.	G.C.	SEE ARCH	3,4,5
OHD-2	LA-55-57-59	3-#12+1-#12 GND.	3/4HP	208/3	113	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	PUSHBUTTON AND SENSOR	E.C.	G.C.	SEE ARCH	3,4,5
OHD-3	LA-55-57-59	3-#12+1-#12 GND.	3/4HP	208/3	112	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	PUSHBUTTON AND SENSOR	E.C.	G.C.	SEE ARCH	3,4,5
OHD-4	LA-43-45-47	3-#12+1-#12 GND.	3/4HP	208/3	116	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	PUSHBUTTON AND SENSOR	E.C.	G.C.	SEE ARCH	3,4,5
OHD-5	LA-43-45-47	3-#12+1-#12 GND.	3/4HP	208/3	116	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	PUSHBUTTON AND SENSOR	E.C.	G.C.	SEE ARCH	3,4,5
OHD-6	LA-43-45-47	3-#12+1-#12 GND.	3/4HP	208/3	116	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	PUSHBUTTON AND SENSOR	E.C.	G.C.	SEE ARCH	3,4,5
OHD-7	LA-43-45-47	3-#12+1-#12 GND.	3/4HP	208/3	116	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	PUSHBUTTON AND SENSOR	E.C.	G.C.	SEE ARCH	3,4,5
RF-1	LC-44-46-48, LC-50-52-54	3-#10+1-#10 GND.	7.5HP	208/3	211	INTEGRAL TO VFD	-	M.C.	AT UNIT	VFD	-	-	-	211	HVAC CONTROLS	TCC	TCC	SEE MECH	1,9,13
SP-1	ELV-4	2-#12+1#12 GND.	1/2HP	120/1	001	INTERGAL PLUG, PROVIDE RECEPTACLE	1	E.C.	AT UNIT	-	-	-	-	-	HIGH LEVEL ALARM, PROVIDE REC	E.C.	P.C.	SEE PLUM	2
SP-2	LA-64	2-#12+1#12 GND.	1/3HP	120/1	116	INTERGAL PLUG, PROVIDE RECEPTACLE	1	E.C.	AT UNIT	-	-	-	-	-	HIGH LEVEL ALARM, PROVIDE REC	E.C.	P.C.	SEE PLUM	2
UH-1	LC-43	2-#12+1#12 GND.	16W	120/1	211	MANUAL TOGGLE CONTROLLER/DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1
WHP-1	MDP-10, MDP-11	3-#1 + 1-#6 GND.	78.2FLA EACH	208/3	115	HEAVY DUTY FUSED DISCONNECT	1	E.C.	AT UNIT	-	-	-	-	-	HVAC CONTROLS	TCC	TCC	SEE MECH	1,8

NOTES:
1. SEE MECHANICAL SHEETS FOR LOCATION OF EQUIPMENT AND COORDINATION OF WORK.
2. SEE PLUMBING SHEETS FOR LOCATION OF EQUIPMENT AND COORDINATION OF WORK.
3. SEE ARCHITECTURAL SHEETS FOR LOCATION OF EQUIPMENT AND COORDINATION OF WORK. FIELD CALCULATE VOLTAGE DROP PER ACTUAL CONDUIT ROUTE AND SIZE CONDUCTORS PER CODE.
4. E.C. SHALL VERIFY AND COORDINATE PURCHASED EQUIPMENT REQUIREMENTS, AND MOTOR/CONTROL LOCATIONS PRIOR TO INSTALL. E.C. IS RESPONSIBLE FOR PROVIDING A COMPLETE WORKING SYSTEM.
5. LOW VOLTAGE CONTROL WIRING SHALL BE INSTALLED IN CONDUIT.
6. POWER TO INDOOR UNIT PROVIDED BY OUTDOOR CONDENSING UNIT. PROVIDE RACEWAY AND CONDUCTORS BETWEEN INDOOR AND OUTDOOR UNITS PER MANUFACTURERS RECOMMENDATIONS. PROVIDE MANUAL TOGGLE CONTROLLER/DISCONNECT AT INDOOR UNIT AND HEAVY DUTY FUSED DISCONNECT AT OUTDOOR UNIT.
7. SEE FIRE PROTECTION SHEETS FOR LOCATION OF EQUIPMENT AND COORDINATION OF WORK.
8. UNIT REQUIRES TWO CONNECTIONS OF THE SAME TYPE. PROVIDE (2) DISCONNECTS AND (2) SEPARATE FEEDS.
9. UNIT REQUIRED TWO CONNECTIONS OF THE SAME TYPE. VFD'S PROVIDED BY MC FOR BOTH CONNETCIONS. PROVIDE (2) SEPARATE FEEDS.
10. 480V - 208V THREE PHASE TRANSFORMER FURNISHED LOOSE WITH UNIT BY M.C. WIRING BY E.C.
11. PROVIDE (5) TYPE 'G' LUMINAIRES AND SWITCH FOR UNIT. CIRCUIT TO LM-53. REFER TO SPECIFICATION 23 73 13.
12. PROVIDE (3) TYPE 'G' LUMINAIRES AND SWITCH FOR UNIT. CIRCUIT TO LC-23. REFER TO SPECIFICATION 23 73 13.

PLAN SYMBOLS
AHU - AIR HANDLING UNIT
B - BOILER
BP - BOOSTER PUMP
CP - CIRCULATION PUMP
CUH - CABINET UNIT HEATER
DAC - DUCTLESS AIR CONDITIONER
DF - DESTRATIFICATION FAN
DWCP - DOMESTIC WATER CIRCULATION PUMP
EF - EXHAUST FAN
ELM - ELEVATOR MOTOR
ERV - ENERGY RECOVERY UNIT
FP - FIRE PUMP
GUH - GAS UNIT HEATER
GWH - GAS WATER HEATER
H - HUMIDIFIER
JP - JOCKEY PUMP
MAU - MAIKE-UP AIR UNIT
OHD - OVERHEAD DOOR
RF - RETURN FAN
SP - SUMP PUMP
UH - UNIT HEATER
WHP - WATER SOURCE HEAT PUMP

LIGHTING FIXTURE SCHEDULE

DES	DESCRIPTION	LIGHTING FIXTURE		LAMP DATA		VOLT	MNTG TYPE	CEILING TYPE	MNTG HEIGHT	FIXT. DEPTH	ACCEPTABLE MFG.	SEE NOTE
		MFG.	PART NUMBER	TEMP.	LUMENS							
A1	2'X2' ARCHITECTURAL TROFFER	METALUX	22CZSCT3-UNV	4000K	SELECTABLE	UNV	RECESSED	GRID	VARIES	3-1/4"	ACUITY, CURRENT	1,2
A2	2'X2' ARCHITECTURAL TROFFER	METALUX	22CZSCT3-UNV	4000K	SELECTABLE	UNV	RECESSED	GRID	VARIES	3-1/4"	ACUITY, CURRENT	1,3
B1	2'X4' ARCHITECTURAL TROFFER	METALUX	24CZSCT3-UNV	4000K	SELECTABLE	UNV	RECESSED	GRID	VARIES	3-1/4"	ACUITY, CURRENT	1,2
B2	2'X4' ARCHITECTURAL TROFFER	METALUX	24CZSCT3-UNV	4000K	SELECTABLE	UNV	RECESSED	GRID	VARIES	3-1/4"	ACUITY, CURRENT	1,4
C	LED DOWNLIGHT	HALO	ML5615LSVWFL9FSE010-H750ICATD010 -692SC	4000K	SELECTABLE	UNV	RECESSED	VARIES	VARIES	7"	ACUITY, CURRENT	1
D2	2' WALL BRACKET	METALUX	2BCLED-LD4-16SL-F-UNV-L840-CD1	4000K	1600	UNV	WALL	-	NOTE 5	4-1/2"	ACUITY, CURRENT	1,5
E1	UNIVERSAL EXIT SIGN	SURE LITE	LPX-6-WGS11	-	-	UNV	UNIVERSAL	VARIES	VARIES	-	ACUITY, CURRENT	1
G	4' VAPORTITE STRIP	METALUX	4VT2-LD5-6-DR-W-UNV-L840-CD1-WL	4000K	6000	UNV	WALL	-	VARIES	5-7/8"	ACUITY, CURRENT	1
H1	4' LENSED STRIP	METALUX	4SNX-SL3-LW-UNV-CC83-CD1	4000K	SELECTABLE	UNV	VARIES	VARIES	VARIES	3-1/2"	ACUITY, CURRENT	1,2
H2	4' LENSED STRIP	METALUX	4SNX-SL3-LW-UNV-CC83-CD1	4000K	SELECTABLE	UNV	VARIES	VARIES	VARIES	3-1/2"	ACUITY, CURRENT	1,3
H2E	4' LENSED STRIP WITH BATTERY BACK-UP	METALUX	4SNX-SL3-LW-UNV-CC83-CD1-EL14W	4000K	SELECTABLE	UNV	VARIES	VARIES	VARIES	3-1/2"	ACUITY, CURRENT	1,3
H3	4' LENSED STRIP	METALUX	4SNX-SL3-LW-UNV-CC83-CD1	4000K	SELECTABLE	UNV	VARIES	VARIES	VARIES	3-1/2"	ACUITY, CURRENT	1,4
H3E	4' LENSED STRIP WITH BATTERY BACK-UP	METALUX	4SNX-SL3-LW-UNV-CC83-CD1-EL14W	4000K	SELECTABLE	UNV	VARIES	VARIES	VARIES	3-1/2"	ACUITY, CURRENT	1,4
J	2'X4' ARCHITECTURAL TROFFER	METALUX	24CZ-LD5-45-UNV-L840-CD1	4000K	4500	UNV	RECESSED	GRID	VARIES	3-1/4"	ACUITY, CURRENT	1
K	COVE LIGHTING	ACCLAIM	FLEXOSI-4	4000K	235LM/FT	24VDC	MOUNT IN CHANNEL	-	-	-	ACUITY, CURRENT	1
M	8' VAPORTITE	LITHONIA	FEML96-18000LM-IMAFL-WD-MVOLT-CZ10-50K-90CRI	5000K	18000	UNV	WALL	-	8'-0"	-	COOPER, CURRENT	1
P	4' HIGHBAY	METALUX	OHBL-60-HE-W-UNV-L950-CD	5000K	60000	UNV	MOUNTED TO STRUCTURE	EXPOSED	VARIES	3-3/8"	ACUITY, CURRENT	1
Q	4' HAZARDOUS LOCATION LINEAR	LDPI	LENM-4-2-LED-V1-SS	5000K	9000	UNV	WALL	-	BELOW LIP	5-0"	COOPER, ACUITY	1
R	4" CYLINDER PENDANT	SPI	SIP12065-L16W-120-277V-4000K-DF_80-DR_DIM1-28W-90-DF_MA01	4000K	8000	UNV	PENDANT	VARIES	VARIES	12"	COOPER, CURRENT	1
T	12' TRACK LIGHTING	HALO	L653-P-L808-30-FL-940-P	4000K	3000	120V	PENDANT	-	8'-0"	-	ACUITY, CURRENT	1,7
TL	TRAFFIC LIGHT	LIFT MASTER	RGL-CTL	-	-	120V	WALL	-	-	-	COOPER, ACUITY	1,6
U	4' STAIR FIXTURE	METALUX	4SWLED-32SL-LW-ETRD-L840-CD1-SVPD2	4000K	3200	UNV	WALL	-	8'-0"	-	ACUITY, CURRENT	1
UL	EXTERIOR UP/DOWN LIGHT	INSIGHT	SSL-UD-MO-40K-55-40K-55-WM-120-NO-TG-CRF	4000K	2200	120V	WALL	-	10'-8"	-	COOPER, CURRENT	1
V	COVE LIGHT	AXIS	CCW-L-O-CL48-300-80-40-W-UNV-DP-1-	4000K	300LM/FT	UNV	COVE	-	-	1-5/8"	ACUITY, CURRENT	1
WB	EXTERIOR WALL PACK	STREETWORKS	GAW-SA1-B-740-U-T4FT-BZ	4000K	6000	UNV	WALL	-	VARIES	-	ACUITY, CURRENT	1

GENERAL LIGHTING FIXTURE NOTES:

SEE SPECIFICATIONS SECTIONS 26 51 00 FOR ADDITIONAL INFORMATION REGARDING LIGHTING FIXTURE AND INSTALLATION REQUIREMENTS. MANUFACTURERS NAMES AND CATALOG NUMBER ARE USED FOR ESTABLISHING THE QUALITY AND PERFORMANCE ONLY. EQUIPMENT MANUFACTURER BY OTHERS ARE EQUALLY ACCEPTABLE PROVIDED THEY MEET OR EXCEED QUALITY, DIMENSIONS AND PERFORMANCE. OWNER IS PLANNING ON SUBMITTING FOR FOCUS ON ENERGY REBATES. ALL FIXTURES SHALL BE DLC LISTED IF AVAILABLE.

LIGHTING FIXTURE NOTES:

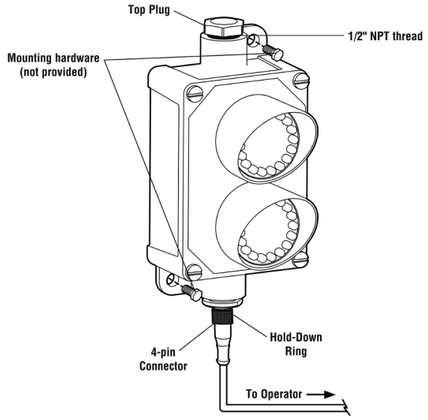
1. FIXTURE MODEL NUMBER MAY NOT REFLECT ALL MOUNTING HARDWARE. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY MOUNTING EQUIPMENT, LENSES, STEMS, SAFETY CHAINS END PLATES AND ALL OTHER HARDWARE NECESSARY FOR A COMPLETE INSTALLATION. SEE MOUNTING DETAILS WHEN APPLICABLE.
2. SET TO LOW LUMEN OUTPUT.
3. SET TO MID LUMEN OUTPUT.
4. SET TO HIGH LUMEN OUTPUT.
5. MOUNT FIXTURE ABOVE MIRROR.
6. FURNISH AND INSTALL SIGNAL LIGHTING FIXTURE PER MANUFACTURER'S DIRECTIONS. REFER TO DETAIL ON SHEET E004. MOUNT AT 30 DEGREES TO ALLOW BETTER DRIVER VISIBILITY. VERIFY COMPATIBILITY WITH PURCHASED DOOR OPERATOR PRIOR TO PURCHASE.
7. PROVIDE (6) TRACK HEADS ON 12' TRACK.

INSTALLATION

The Traffic Light should be mounted at a height which maximizes visibility.

1. Secure the Traffic Light to the mounting surface with appropriate hardware (not provided).
2. Insert the 4-pin connector into the base of the Traffic Light and turn the hold-down ring clockwise until snug.

NOTE: *NPT mounting is recommended when a flat surface is not available. The Traffic Light housing has 1/2" NPT thread on the top. Remove top plug to allow NPT mounting. It will accept polished 304 stainless steel or anodized aluminum pipe threads. The bottom thread is for the 4-pin connector only (not for NPT mounting).*

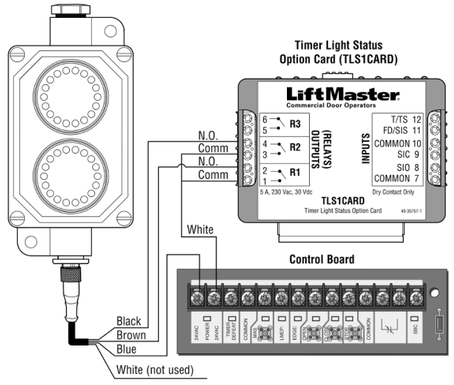


WIRING

Traffic Light Signal Control

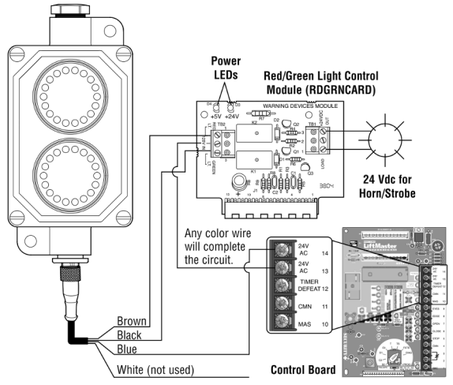
Logic 4 and Logic 5.0 Operators

Requires a Timer Light Status Card (TLS1CARD).



Logic 3 Operator

Requires a Red/Green Light Control Module (RDGRNCARD).



NOTE: *In most cases the Traffic Light can be powered by the operator's transformer. If multiple accessories are powered by the operator, such as 2 sets of Traffic Lights and photoelectric sensors, a transformer upgrade may be required. (See Transformer Upgrades below.) A 460 V operator will not require a transformer upgrade.*

Transformer Upgrades

Factory installed upgrade to 40 Va transformer..... 902140VAL
Field replacement 120 Vac/40 Va transformer.....21-32780
Field replacement 230 Vac/40 Va transformer.....21-32781

Optional Accessories

4-Pin, 15 ft. (4.6 m) Cable with Pigtail 4PCWPT-15
External Power Supply.....100MAPS
Provides enough power to operate one RGL-CTL Red/Green Light.
Input: 110VAC Output Amperage: 100mA
Output Voltage: 24VDC Cable Leads: 38 ft. (11.6 m)

WARRANTY

One Year Limited Warranty

LiftMaster warrants to the first consumer purchaser of this product that is free from defect in materials and/or workmanship for a period of 1 year from the date of purchase.

LIGHTING CONTROL SCHEDULE

LIGHTING CONTROL SEQUENCE IDENTIFICATION	NETWORK CONTROL SYSTEM	TIMECLOCK	VACANCY SENSOR	OCCUPANCY SENSOR	AUTO OFF TIME (MINUTES)	DIMMING TYPE	DIMMING LEVEL	AFTER HOURS OVERRIDE	OVERRIDE DURATION (MINUTES)	MANUAL ON/OFF	NOTES
LC-1	X		X		15	0-10V	10%				
LC-2	X			X	15						
LC-3	X	X				0-10V	10%	X	2 HOURS		
LC-4										X	
LC-5	X		X		15						

GENERAL NOTES:

A. PROVIDE ALL PARTS AND ACCESSORIES NECESSARY TO MAKE A FUNCTIONAL LIGHTING CONTROL SYSTEM WITH ALL CONTROLS AS MARKED ABOVE.
B. SUPPLIER TO PROVIDE COMPLETE WIRING DIAGRAM PRIOR TO INSTALLATION.
C. IF DIMMING IS CALLED FOR IN SCHEDULE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND PROVIDE ALL NECESSARY PARTS, BALLASTS, DRIVERS, ETC. TO PROVIDE THE DIMMING FUNCTION.
D. E.C. TO PROVIDE ALL WIRING NECESSARY INCLUDING ANY 0-10V CONTROL WIRING.

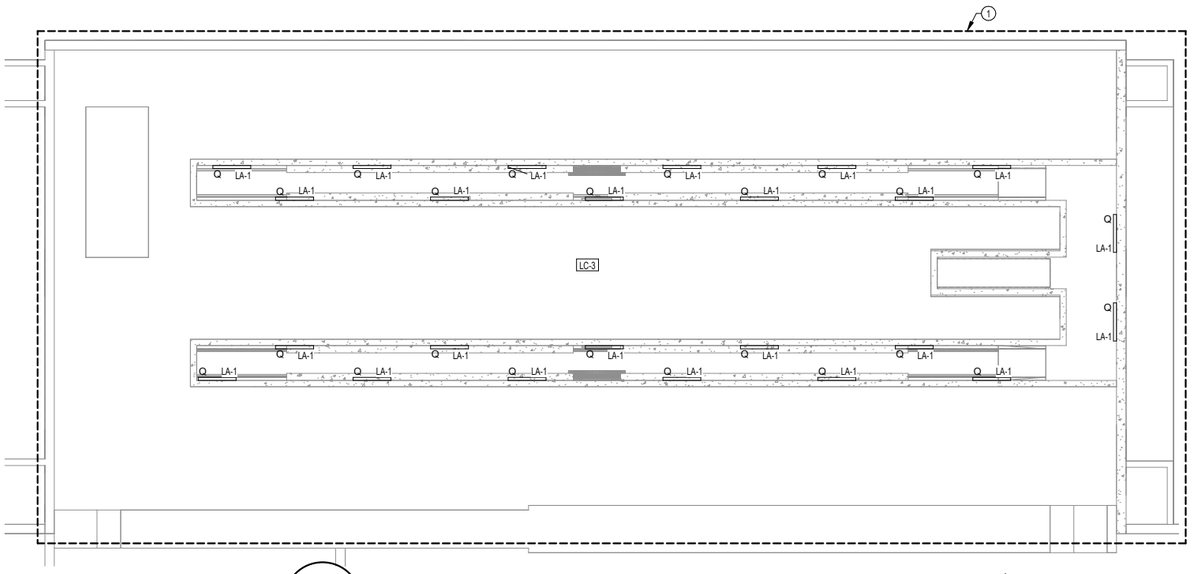
LOW VOLTAGE LIGHTING CONTROL PANEL (LCP)

RELAY #	CIRCUIT #	CONTROL SWITCHES	AREA CONTROLLED
CR-1*	EM-5	PHOTO CELL/TIME CLOCK	BUILDING MOUNTED LIGHTING
CR-2	LA-19	PHOTO CELL/TIME CLOCK	BUILDING MOUNTED LIGHTING
CR-3			
CR-4			
CR-5			
CR-6			
CR-7			
CR-8			

NOTES:

- PROVIDE PHOTO CELL ON ROOF FACING NORTH.
- COORDINATE ALL SET TIMES WITH OWNER.
* PROVIDE AN EMERGENCY LIGHTING CONTROL UNIT EQUAL TO A ILC-ESRN. LIGHTS SHALL COME ON REGARDLESS OF SWITCH POSITION IF A POWER FAILURE IS SENSED. COORDINATE LOCATION OF CONTROL UNIT WITH OWNER FOR TEST BUTTON ACCESS.

#	KEYNOTES - E100
1	THIS AREA SHALL BE WIRED AS CLASS 1, DIVISION 2 AREA.



1 E100 ELECTRICAL INSPECTION PIT LIGHTING PLAN

1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ELECTRICAL INSPECTION PIT LIGHTING PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E100	319

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#	KEYNOTES - E101
1	SEE SHEET E102 FOR LIGHTING ABOVE IN THIS AREA.
2	PROVIDE AUXILIARY CONTACT IN ROOM CONTROLLER/MOTION SENSOR TO INTERLOCK HVAC EQUIPMENT SERVING SPACE. COORDINATE WITH MECHANICAL.
3	PROVIDE AN EMERGENCY LIGHTING CONTROL UNIT EQUAL TO ILC-ESRN. LIGHTS SHALL COME ON REGARDLESS OF SWITCH POSITION IF A POWER FAILURE IS SENSED. COORDINATE LOCTAION OF CONTROL UNIT WITH OWNER FOR TEST BUTTON ACCESS.
4	MOUNT LUMINAIRES IN THIS SPACE 12'-0" A.F.F.

1 E101 ELECTRICAL MAIN LEVEL LIGHTING PLAN

1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ELECTRICAL MAIN LEVEL LIGHTING PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E101	320

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#	KEYNOTES - E102
1	SEE SHEET E101 FOR LIGHTING AND LIGHTING CONTROLS BELOW IN THIS AREA.
2	PROVIDE AUXILIARY CONTACT IN ROOM CONTROLLER/MOTION SENSOR TO INTERLOCK HVAC EQUIPMENT SERVING SPACE. COORDINATE WITH MECHANICAL.
3	TRACK LIGHTING TYPE T UTILIZES LINE VOLTAGE DIMMING. PROVIDE COMPATIBLE CONTROLS.
4	PROVIDE AN EMERGENCY LIGHTING CONTROL UNIT EQUAL TO ILC-ESRN. LIGHTS SHALL COME ON REGARDLESS OF SWITCH POSITION IF A POWER FAILURE IS SENSED. COORDINATE LOCTAION OF CONTROL UNIT WITH OWNER FOR TEST BUTTON ACCESS.



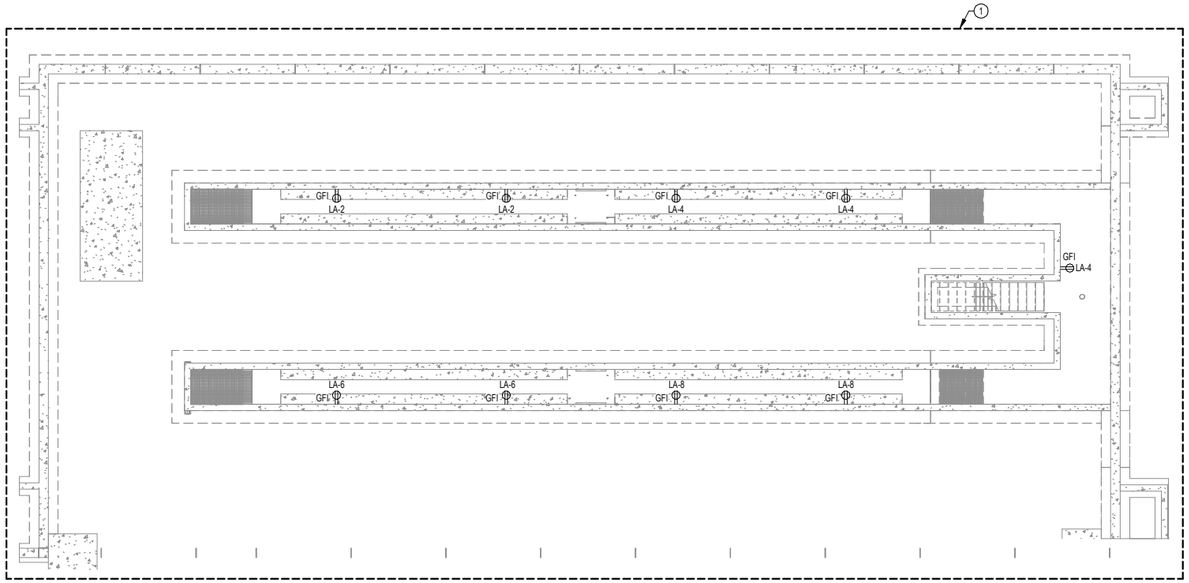
1 / E102 ELECTRICAL UPPER LEVEL LIGHTING PLAN

1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ELECTRICAL UPPER LEVEL LIGHTING PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E102	321

#	KEYNOTES - E200
1	THIS AREA SHALL BE WIRED AS CLASS 1, DIVISION 2 AREA.



1 E200 ELECTRICAL INSPECTION PIT POWER PLAN

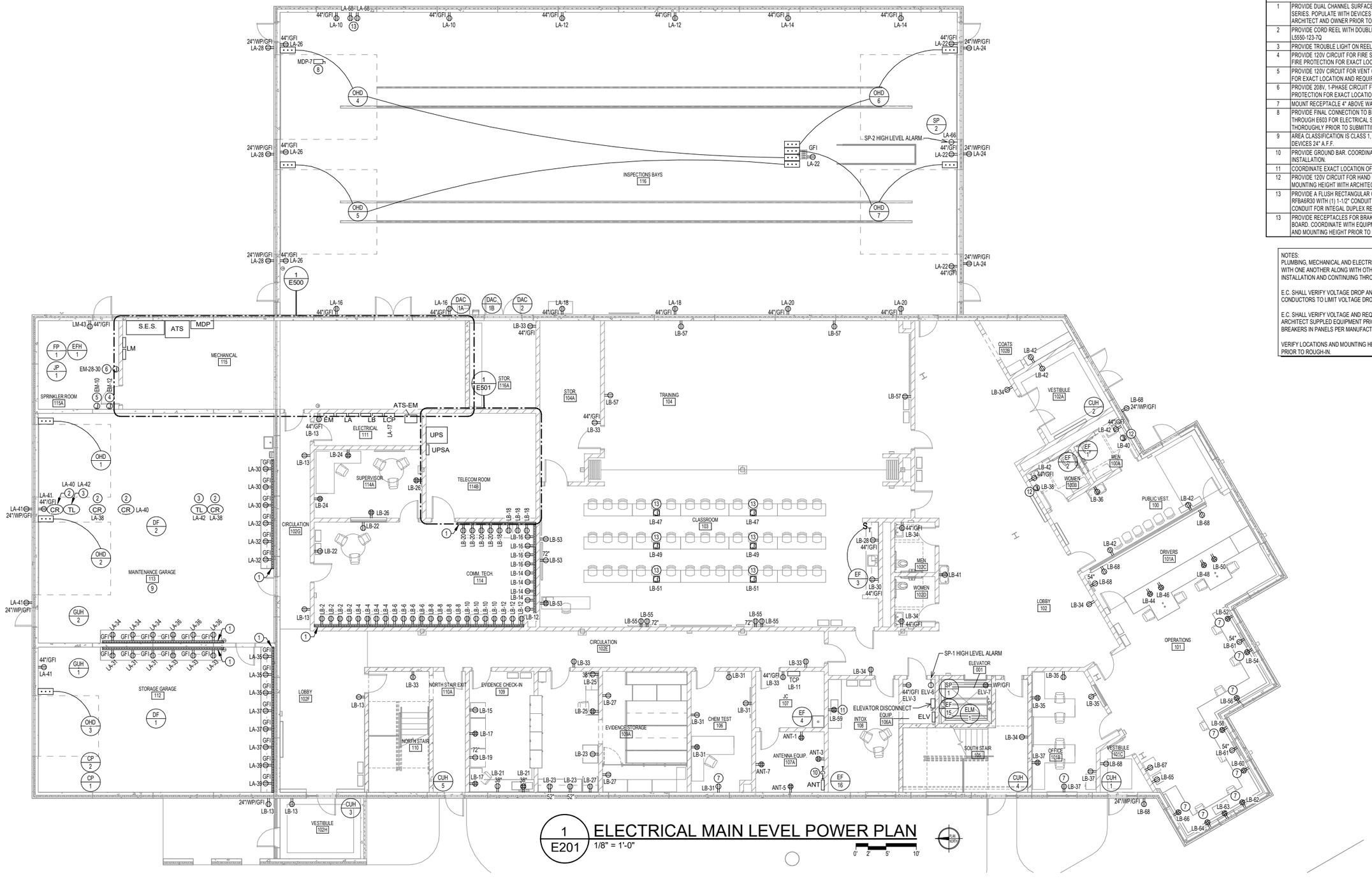
1/16" = 1'-0"

0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ELECTRICAL INSPECTION PIT POWER PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E200	322

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1 E201 ELECTRICAL MAIN LEVEL POWER PLAN
1/8" = 1'-0"

0' 2' 5' 10'

KEYNOTES - E201

#	
1	PROVIDE DUAL CHANNEL SURFACE MOUNTED RACEWAY EQUAL TO WIREMOLD 4000 SERIES. POPULATE WITH DEVICES INDICATED. COORDINATE MOUNTING HEIGHT WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.
2	PROVIDE CORD REEL WITH DOUBLE DUPLEX RECEPTACLE EQUAL TO A REELCRAFT L5550-123-TQ
3	PROVIDE TROUBLE LIGHT ON REEL EQUAL TO A REELCRAFT L4050-163-10
4	PROVIDE 120V CIRCUIT FOR FIRE SUPPRESSION CONTROL PANEL. COORDINATE WITH FIRE PROTECTION FOR EXACT LOCATION AND REQUIREMENTS.
5	PROVIDE 120V CIRCUIT FOR VENT CONTROLLER. COORDINATE WITH FIRE PROTECTION FOR EXACT LOCATION AND REQUIREMENTS.
6	PROVIDE 208V, 1-PHASE CIRCUIT FOR NITROGEN GENERATOR. COORDINATE WITH FIRE PROTECTION FOR EXACT LOCATION AND REQUIREMENTS.
7	MOUNT RECEPTACLE 4" ABOVE WALL FIN. COORDINATE WITH MECHANICAL.
8	PROVIDE FINAL CONNECTION TO BRAKE TEST SYSTEM. REFER TO DETAIL SHEETS E600 THROUGH E603 FOR ELECTRICAL SYSTEM REQUIREMENTS. COORDINATE THOROUGHLY PRIOR TO SUBMITTING BID.
9	AREA CLASSIFICATION IS CLASS 1, DIVISION 2 - 18" A.F.F. MOUNT ALL EQUIPMENT AND DEVICES 24" A.F.F.
10	PROVIDE GROUND BAR. COORDINATE LOCATION WITH OWNER PRIOR TO INSTALLATION.
11	COORDINATE EXACT LOCATION OF DEVICE WITH OWNER PRIOR TO ROUGH-IN.
12	PROVIDE 120V CIRCUIT FOR HAND DRYER. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.
13	PROVIDE A FLUSH RECTANGULAR CONCRETE FLOOR BOX EQUAL TO A LEGRAND RFBA6R30 WITH (1) 1-1/2" CONDUIT TO NEAREST ACCESSIBLE GRID CEILING AND ONE CONDUIT FOR INTEGAL DUPLEX RECEPTACLE.
13	PROVIDE RECEPTACLES FOR BRAKE TEST CONSOLE AND ASSOCIATED DISPLAY BOARD. COORDINATE WITH EQUIPMENT VENDOR AND OWNER FOR EXACT LOCATIONS AND MOUNTING HEIGHT PRIOR TO ROUGH-IN.

NOTES:
PLUMBING, MECHANICAL AND ELECTRICAL CONTRACTORS SHALL COORDINATE WITH ONE ANOTHER ALONG WITH OTHER TRADES BEFORE BEGINNIG ANY INSTALLATION AND CONTINUING THROUGHOUT THE PROJECT.

E.C. SHALL VERIFY VOLTAGE DROP AND PROVIDE APPROPRIATELY SIZED CONDUCTORS TO LIMIT VOLTAGE DROP TO 2.5%

E.C. SHALL VERIFY VOLTAGE AND REQUIRED DEVICES FOR ALL OWNER AND ARCHITECT SUPPLIED EQUIPMENT PRIOR TO INSTALLATION. PROVIDE CIRCUIT BREAKERS IN PANELS PER MANUFACTURER RECOMMENDATIONS.

VERIFY LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ELECTRICAL MAIN LEVEL POWER PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E201	323

NOTES:
PLUMBING, MECHANICAL AND ELECTRICAL CONTRACTORS SHALL COORDINATE WITH ONE ANOTHER ALONG WITH OTHER TRADES BEFORE BEGINNIG ANY INSTALLATION AND CONTINUING THROUGHOUT THE PROJECT.

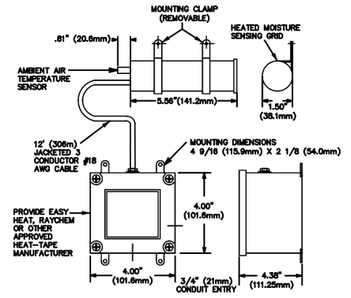
E.C. SHALL VERIFY VOLTAGE DROP AND PROVIDE APPROPRIATELY SIZED CONDUCTORS TO LIMIT VOLTAGE DROP TO 2.5%

E.C. SHALL VERIFY VOLTAGE AND REQUIRED DEVICES FOR ALL OWNER AND ARCHITECT SUPPLED EQUIPMENT PRIOR TO INSTALLATION. PROVIDE CIRCUIT BREAKERS IN PANELS PER MANUFACTURER RECOMMENDATIONS.

VERIFY LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.

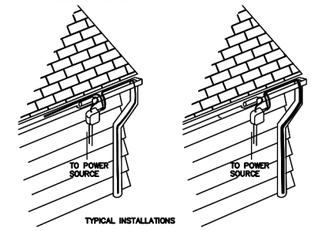
KEYNOTES - E202

#	
1	PROVIDE BOX MOUNTED TO SUNKEN FLOOR WITH DOUBLE DUPLEX RECEPTACLE. CIRCUIT EACH DUPLEX RECEPTACLE TO SEPARATE CIRCUIT (2 CIRCUITS PER DOUBLE DUPLEX) COORDINATE WITH OWNER FOR EXACT LOCATION PRIOR TO ROUGH-IN
2	PROVIDE J-BOX SURFACE MOUNTED TO SUNKEN FLOOR WITH (1) 1" CONDUIT TO WEATHERHEAD AT EXTERIOR OF BUILDING FOR ANTENNA. SEE KEYNOTE #3 ON THIS SHEET.
3	PROVIDE (6) WEATHERHEADS FOR ANTENNAS IN DISPATCH AREA.
4	PROVIDE RECEPTACLE MOUNTED IN SOFFIT FOR HEAT TAPE CONNECTION. CONNECT TO HEAT TAPE CONTROLLER.
5	MOUNT RECEPTACLE 4" ABOVE WALL FIN. COORDINATE WITH MECHANICAL.
6	PROVIDE NEMA 3R, 100/3 DISCONNECT WITH 70A FUSES FOR PHOTOVOLTAIC SYSTEM. PROVIDE (4) #1 + (1) # 2 GND. TO S.E.S. CONDUCTORS SIZED TO LIMIT VOLTAGE DROP TO 1-1/2%.
7	PROVIDE HEAT TAPE CONTROL PANEL AS SPECIFIED. PROVIDE HEAT TAPE CABLE FOR ALL GUTTERS AND DOWNSPOUTS ON THE BUILDING. REFER TO ARCHITECTURAL DRAWINGS AND DETAILS FOR ESTIMATING LENGTH. HEAT TAPE SHALL TERMINATE 18" INTO CATCH BASINS.VERIFY TERMINATION LOCATIONS PRIOR TO ROUGH-IN



SIMPLIFIED DRAWING OF INSTALLATIONS USING BOTH CONSTANT WATTAGE AND SELF-LIMITING HEATING CABLES FOLLOW. THESE SHOW TYPICAL HEATING CABLE PLACEMENT ALONG WITH A SENSOR AND CONTROL ENCLOSURE LOCATIONS. REFER TO INSTALLATION DATA PROVIDED BY HEATING CABLE MANUFACTURE AND THE INSTRUCTION MANUAL FOR MORE DETAILED INFORMATION.

INSTALLATIONS MUST MEET THE REQUIREMENT OF BOTH THE LOCAL AND NATIONAL ELECTRICAL CODES.



2 / E202 HEAT TAPE DETAIL
NO SCALE

1 / E202 ELECTRICAL UPPER LEVEL POWER PLAN
1/16" = 1'-0"
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ELECTRICAL UPPER LEVEL POWER PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E202	324

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KEYED LOW VOLTAGE PLAN NOTES

1. LOCATION OF WIRELESS ACCESS ROUTER. PROVIDE ONE (1) CAT6A CABLE TO ELECTRICAL/TELECOM ROOM 114B. PROVIDE A 6' SERVICE LOOP ON BOTH ENDS OF CABLE. PROVIDE A 'BISCUIT' TYPE DATA JACK AS DIRECTED BY WISONSIN D.O.T. IT DEPARTMENT
2. PROVIDE ONE (1) CAT6 DATA CABLES TO EQUIPMENT RACK PATCH PANEL LOCATED IN ELECTRIC/TELECOM ROOM 114B AND TERMINATE BOTH ENDS. COORDINATE HEIGHT WITH ELECTRICAL.
3. PROVIDE TWO (2) CAT6 DATA CABLES TO EQUIPMENT RACK PATCH PANEL LOCATED IN ELECTRIC/TELECOM ROOM 114B AND TERMINATE BOTH ENDS.
4. PROVIDE THREE (3) CAT6 DATA CABLES TO EQUIPMENT RACK PATCH PANEL LOCATED IN ELECTRIC/TELECOM ROOM 114B AND TERMINATE BOTH ENDS.
5. PROVIDE CABLE TRAY AS SPECIFIED, COORDINATE WITH HVAC DUCT WORK AND MECHANICAL PIPING.
6. WALL MOUNTED PHONE
7. INTERIOR WALL MOUNTED APHONE INTERCOM W/BUZZER
9. PROVIDE AND INSTALL WALL MOUNTED PUBLIC ADDRESS SPEAKER. ROUTE #14/2 AWG SPEAKER CABLE TO SOUND AMPLIFIER LOCATED IN TELECOM ROOM 114B. (TYP. OF 2) REFER TO DETAIL
10. 2 HILTI 4" SPEED SLEEVE FOR PENETRATIONS THROUGH FIRE WALL, ABOVE CEILING. STOP TRAY 8" BEFORE CABLES ENTER SLEEVE.
11. PROVIDE ONE (1) CAT6 DATA FOR MONITOR. DISCUSS FINAL LOCATION WITH OWNER.
12. PROVIDE A 6"X6"X4" JUNCTION BOX MOUNTED AT 18" A.F.F FOR CLASSROOM AREA FOR A/V EQUIPMENT WIRING. STUB A 2" EMT CONDUIT FROM J-BOX TO ABOVE SUSPENDED CEILING. PROVIDE LOW VOLTAGE WIRING AS REQUIRED BETWEEN INSTRUCTIORS STATION AND WALL MOUNTED MONITORS
13. (2) 4" CONDUITS FOR IT CLOSET TO IT CLOSET
14. CONNECT BOTH IT CLOSETS WITH SINGLE MODE FIBER TO TIA STANDERS
15. ELEVATOR CARD READER TO BE LOCATED INSIDE OF THE ELEVATOR CAR

GENERAL PLAN NOTES

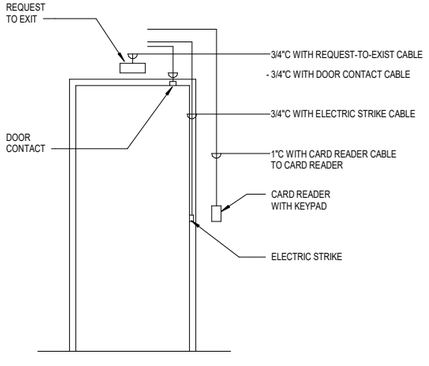
GENERAL NOTES ON THIS SHEET ARE APPLICABLE TO THE SECURITY SHEETS ONLY.

1. CONTRACTOR TO COMMUNICATE WITH DOA DCP ELECTRONIC SECURITY (RENEE SCOVILL) DOADCPELECTRONICSECURITY@WISCONSIN.GOV FOR CORRDINATION OF DOOR ACCESS SYSTEM INCLUDING MONITORING.
2. CAMERAS SYSTEM TO BE EXACQ NVR USING AXIS CAMERAS. SECURITY PANEL TO BE SOFTWARE HOUSE ISTAR ULTRA. SECURITY VENDOR MUST BE CERTIFIED TO PERFORM WORK FOR THE STATE.
3. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL JUNCTION BOXES AND CONDUIT AS REQUIRED FOR BOTH THE INSTALLATION OF THE CAMERAS AND DOOR ACCESS SYSTEMS.
4. MOUNT ALL ACCESS CARD READER/KEYPAD AT 42" AFF. SOME DOOR LOCATIONS MAY REQUIRE MULLIAN READER INSTALL.
5. REVIEW INTERCOMM MASTER LOCATION FOR BOTH FIRST AND SECOND FLOOR USE.
6. OUTDOOR CAMERAS TO BE MOUNTED AT 15' OFF GROUND.
7. ELECTRIC DOOR STRIKES PROVIDED BY DIV 8 CONTRACTOR, WIRED BY DIVISION 28 CONTRACTOR.
8. REVIEW CAMERAS IN PROJECT. NEWER CAMERAS MAY BE AVAILABLE OR SPECIFIED CAMERAS MAY BE DISCONTINUED. REVIEW WITH ENGINEER PRIOR TO PROJECT START.
9. COORDINATE WITH THE GATE OPENER CONTRACTOR FOR PROPER CARD ACCESS AND PEDASTAL INSTALLATION.
10. LOCATE PANELS AND RACK MOUNTED NVR IN TELECOM RM 114B.
11. INCLUDE ALL CAMERA MOUNTS REQUIRED FOR PROPER INSTALLATION.
12. ROOM 201 WILL REQUIRE THE ABILITY TO RECORD VOICE COMMUNICATIONS.
13. MEDIA CONVERTER WILL BE REQUIRED.

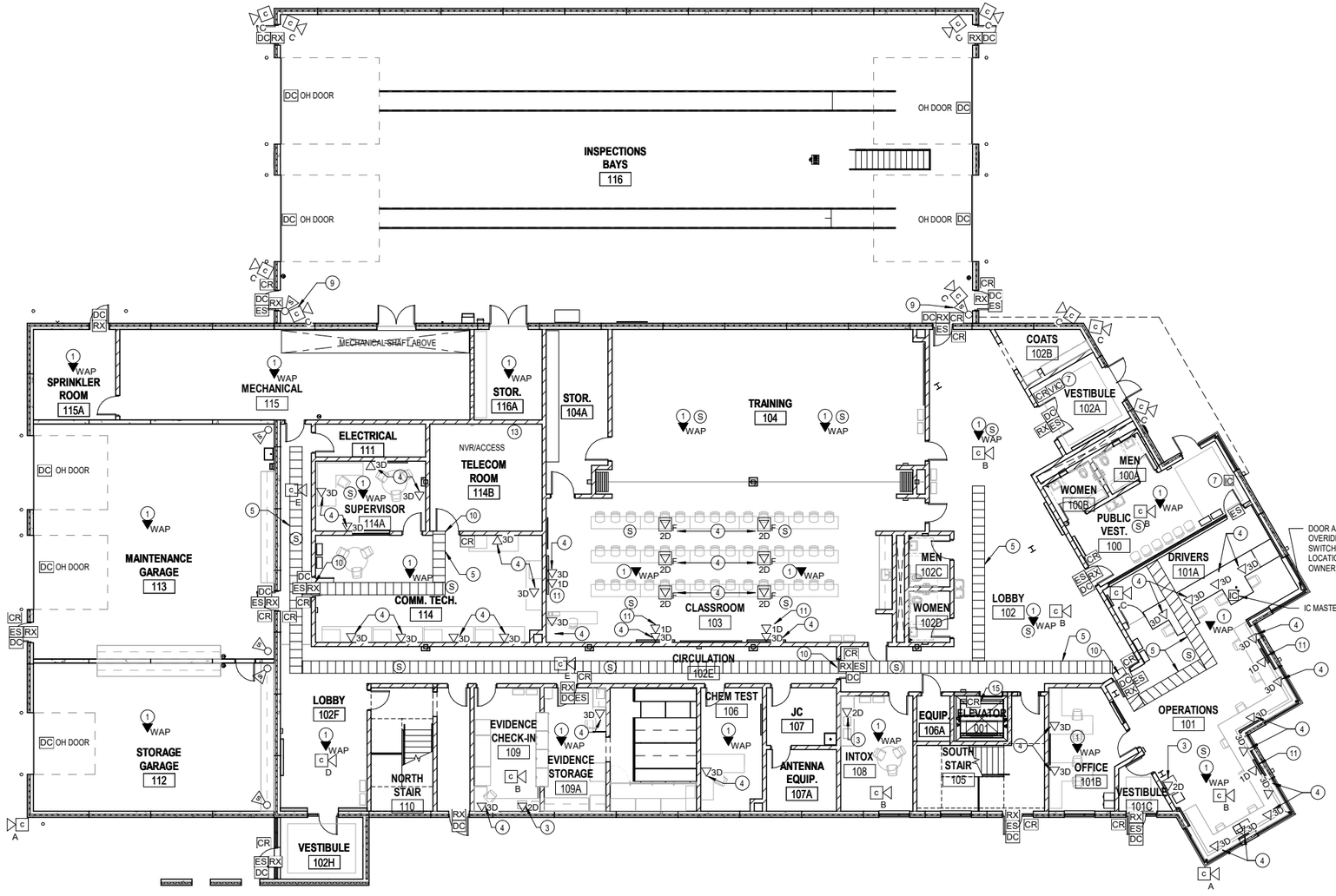
NOTE: USE COMPOSITE CABLES WHERE MULITPLE LINES ARE RUN TO THE SAME LOCATION AT DOORS.

LOW VOLTAGE LEGEND

3D	INFORMATION OUTLET
W	WALL MOUNTED PHONE
F 2D	INFORMATION OUTLET FLOOR BOX
WAP	WIRELESS ACCESS POINT
S	CEILING MOUNTED SPEAKER
S	WALL MOUNTED SPEAKER
C A	CAMERA'S A: AXIS P3727-PLE B: AXIS M4327-P C: AXIS P1468-LE D: AXIS M3086-V E: AXIS P4705-PLVE
IC	INTERCOM
VIC	VIDEO INTERCOM
CR	CARD READER
DC	DOOR CONTACT
RX	REQUEST TO EXIT
ES	ELECTRIC STRIKE



1 E203 TYP. DOOR SECURITY LAYOUT
1/8" = 1'-0"



2 E203 MAIN LEVEL LOW VOLTAGE PLAN
3/64" = 1'-0"
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			MAIN LEVEL LOW VOLTAGE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E203	325

KEYED LOW VOLTAGE PLAN NOTES

1. LOCATION OF WIRELESS ACCESS ROUTER. PROVIDE ONE (1) CAT6A CABLE TO ELECTRICAL/TELECOM ROOM 114B. PROVIDE A 6' SERVICE LOOP ON BOTH ENDS OF CABLE. PROVIDE A 'BISCUIT' TYPE DATA JACK AS DIRECTED BY WISONSIN D.O.T. IT DEPARTMENT
2. PROVIDE ONE (1) CAT6 DATA CABLES TO EQUIPMENT RACK PATCH PANEL LOCATED IN ELECTRIC/TELECOM ROOM 114B AND TERMINATE BOTH ENDS. COORDINATE HEIGHT WITH ELECTRICAL.
3. PROVIDE TWO (2) CAT6 DATA CABLES TO EQUIPMENT RACK PATCH PANEL LOCATED IN ELECTRIC/TELECOM ROOM 114B AND TERMINATE BOTH ENDS.
4. PROVIDE THREE (3) CAT6 DATA CABLES TO EQUIPMENT RACK PATCH PANEL LOCATED IN ELECTRIC/TELECOM ROOM 114B AND TERMINATE BOTH ENDS.
5. PROVIDE CABLE TRAY AS SPECIFIED, COORDINATE WITH HVAC DUCT WORK AND MECHANICAL PIPING.
6. WALL MOUNTED PHONE
7. INTERIOR WALL MOUNTED APHONE INTERCOM W/BUZZER
9. PROVIDE AND INSTALL WALL MOUNTED PUBLIC ADDRESS SPEAKER. ROUTE #14/2 AWG SPEAKER CABLE TO SOUND AMPLIFIER LOCATED IN TELECOM ROOM 114B. (TYP. OF 2) REFER TO DETAIL
10. 2 HILTI 4" SPEED SLEEVE FOR PENETRATIONS THROUGH FIRE WALL, ABOVE CEILING. STOP TRAY 8" BEFORE CABLES ENTER SLEEVE.
11. PROVIDE ONE (1) CAT6 DATA FOR MONITOR. DISCUSS FINAL LOCATION WITH OWNER.
12. PROVIDE A 6"X6"X4" JUNCTION BOX MOUNTED AT 18" A.F.F FOR CLASSROOM AREA FOR A/V EQUIPMENT WIRING. STUB A 2" EMT CONDUIT FROM J-BOX TO ABOVE SUSPENDED CEILING. PROVIDE LOW VOLTAGE WIRING AS REQUIRED BETWEEN INSTRUCTIORS STATION AND WALL MOUNTED MONITORS
13. (2) 4" CONDUITS FOR IT CLOSET TO IT CLOSET
14. CONNECT BOTH IT CLOSETS WITH SINGLE MODE FIBER TO TIA STANDERS
15. ELEVATOR CARD READER TO BE LOCATED INSIDE OF THE ELEVATOR CAR

GENERAL PLAN NOTES

GENERAL NOTES ON THIS SHEET ARE APPLICABLE TO THE SECURITY SHEETS ONLY.

1. CONTRACTOR TO COMMUNICATE WITH DOA DCP ELECTRONIC SECURITY (RENEE SCOVILL) DOADCPELECTRONICSECURITY@WISCONSIN.GOV FOR CORRDINATION OF DOOR ACCESS SYSTEM INCLUDING MONITORING.

2. CAMERAS SYSTEM TO BE EXACQ NVR USING AXIS CAMERAS. SECURITY PANEL TO BE SOFTWARE HOUSE ISTAR ULTRA. SECURITY VENDOR MUST BE CERTIFIED TO PERFORM WORK FOR THE STATE.

3. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL JUNCTION BOXES AND CONDUIT AS REQUIRED FOR BOTH THE INSTALLATION OF THE CAMERAS AND DOOR ACCESS SYSTEMS.

4. MOUNT ALL ACCESS CARD READER/KEYPAD AT 42" AFF. SOME DOOR LOCATIONS MAY REQUIRE MULLIAN READER INSTALL.

5. REVIEW INTERCOMM MASTER LOCATION FOR BOTH FIRST AND SECOND FLOOR USE.

6. OUTDOOR CAMERAS TO BE MOUNTED AT 15' OFF GROUND.

7. ELECTRIC DOOR STRIKES PROVIDED BY DIV 8 CONTRACTOR, WIRED BY DIVISION 28 CONTRACTOR.

8. REVIEW CAMERAS IN PROJECT. NEWER CAMERAS MAY BE AVAILABLE OR SPECIFIED CAMERAS MAY BE DISCONTINUED. REVIEW WITH ENGINEER PRIOR TO PROJECT START.

9. COORDINATE WITH THE GATE OPENER CONTRACTOR FOR PROPER CARD ACCESS AND PEDASTAL INSTALLATION.

10. LOCATE PANELS AND RACK MOUNTED NVR IN TELECOM RM 114B.

11. INCLUDE ALL CAMERA MOUNTS REQUIRED FOR PROPER INSTALLATION.

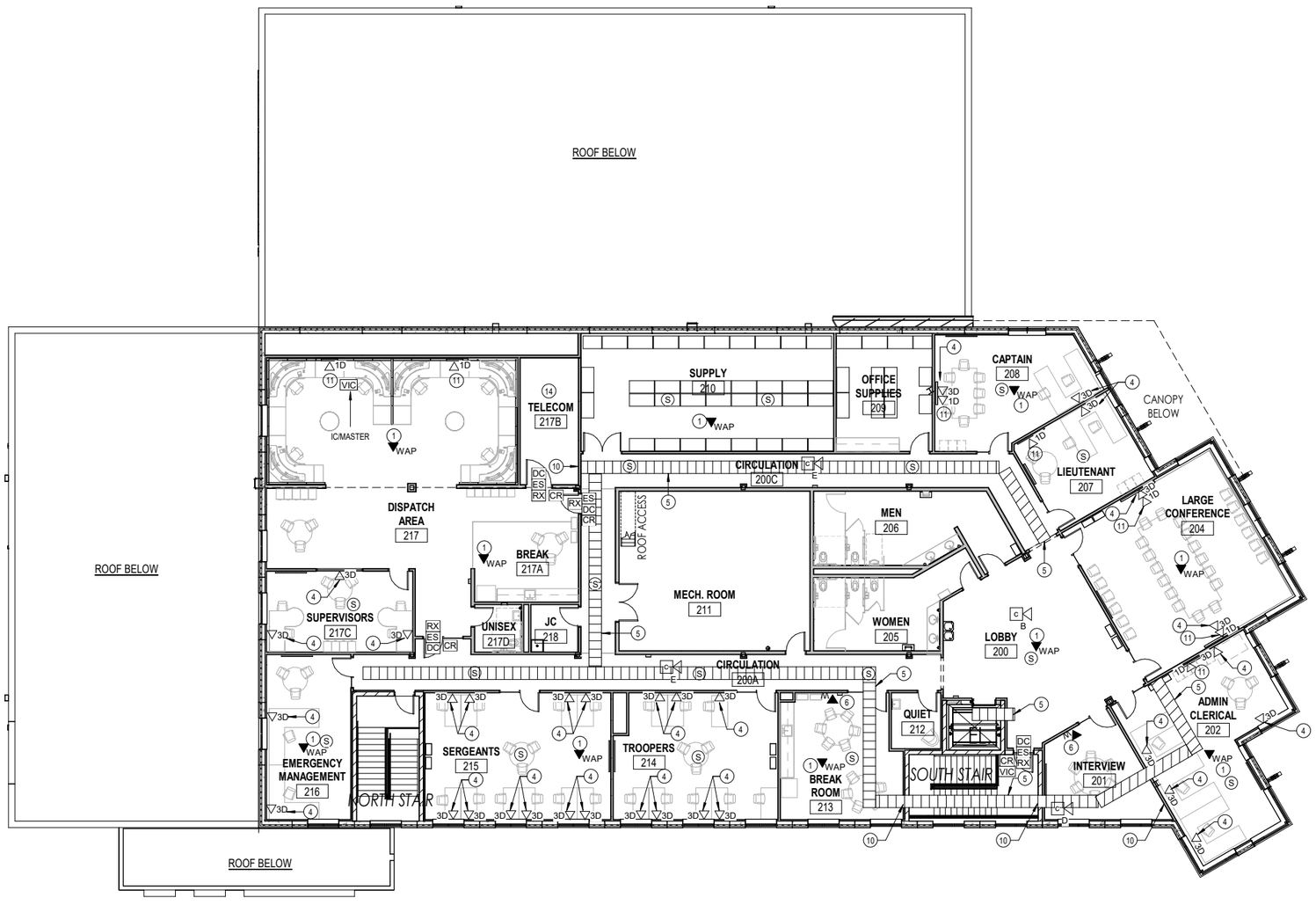
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NOTE: USE COMPOSITE CABLES WHERE MULITPLE LINES ARE RUN TO THE SAME LOCATION AT DOORS.

LOW VOLTAGE LEGEND

INDICATES # OF DATA LINES REQ'D → 3D	INFORMATION OUTLET
W	WALL MOUNTED PHONE
INDICATES # OF DATA LINES REQ'D → F 2D	INFORMATION OUTLET FLOOR BOX
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S	CEILING MOUNTED SPEAKER
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IC	INTERCOM
VIC	VIDEO INTERCOM
CR	CARD READER
DC	DOOR CONTACT
RX	REQUEST TO EXIT
ES	ELECTRIC STRIKE



E204 UPPER LEVEL LOW VOLTAGE PLAN
3/ 64" = 1'-0"
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			UPPER LEVEL LOW VOLATAGE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E204	326

Autodesk Docs://KLENG 21001 - SWEF/KLENG 21001 SWEF_A21.rvt PLOT DATE: 4/29/2024 11:00:02 AM

KEYED LOW VOLTAGE PLAN NOTES

1. LOCATION OF WIRELESS ACCESS ROUTER. PROVIDE ONE (1) CAT6A CABLE TO ELECTRICAL/TELECOM ROOM 114B. PROVIDE A 6' SERVICE LOOP ON BOTH ENDS OF CABLE. PROVIDE A 'BISCUIT' TYPE DATA JACK AS DIRECTED BY WISONSIN D.O.T. IT DEPARTMENT
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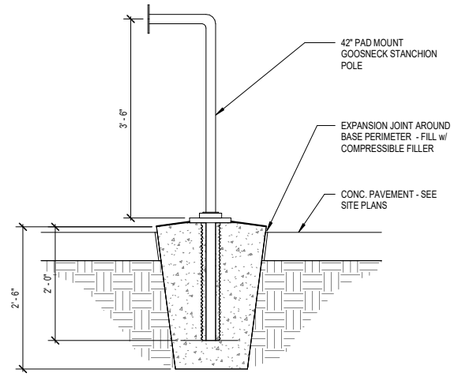
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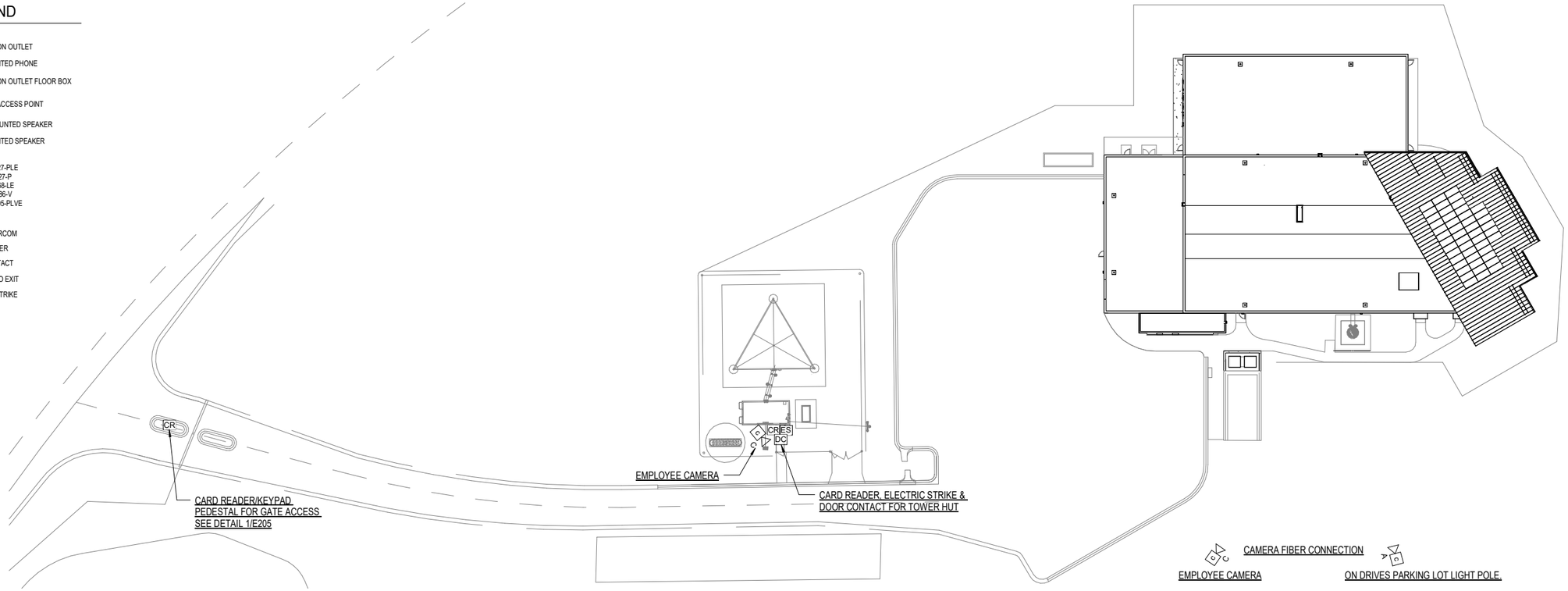
NOTE: USE COMPOSITE CABLES WHERE MULITPLE LINES ARE RUN TO THE SAME LOCATION AT DOORS.



1/E205 CARD READER PEDESTAL
3/4" = 1'-0"

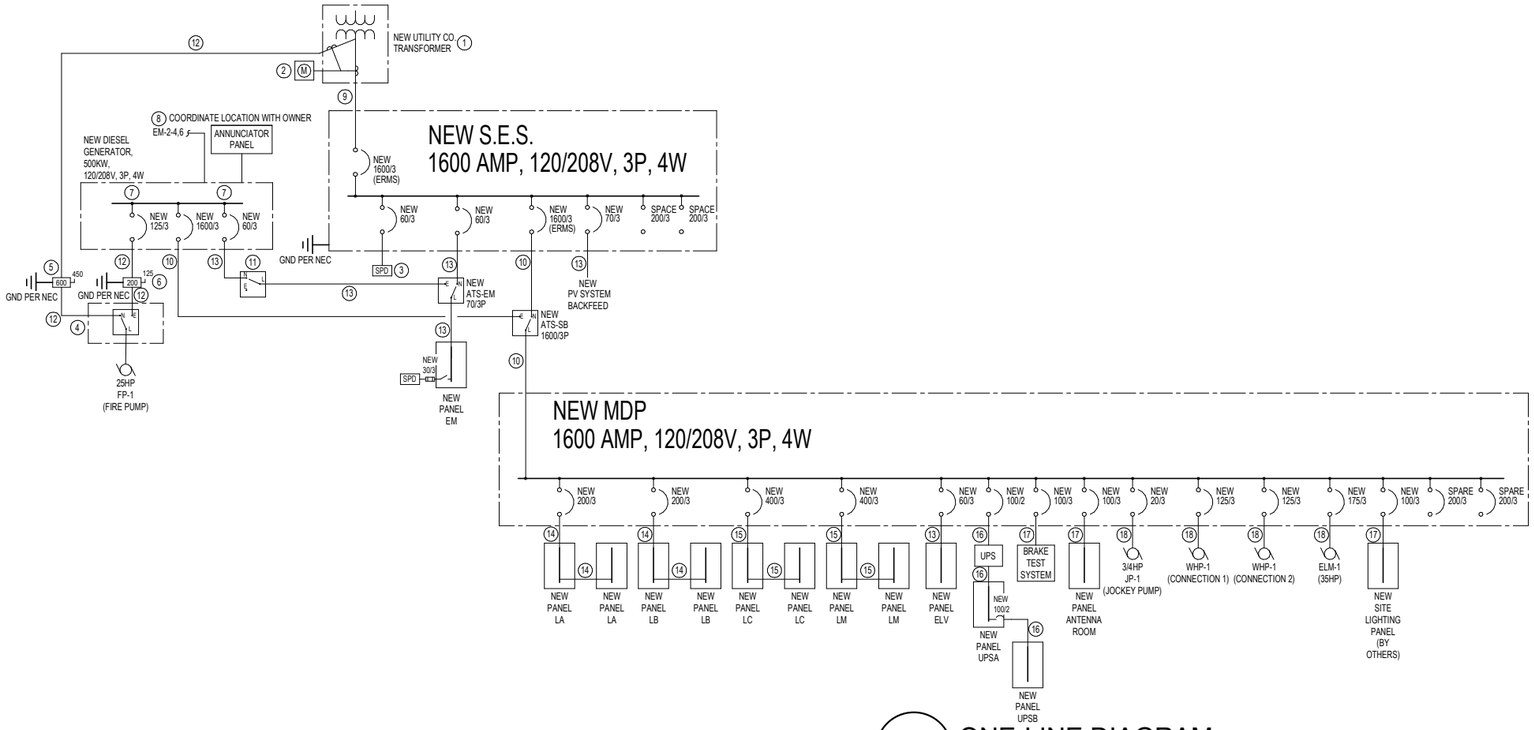
LOW VOLTAGE LEGEND

- INDICATES # OF DATA LINES REQ'D → 3D — INFORMATION OUTLET
- W — WALL MOUNTED PHONE
- INDICATES # OF DATA LINES REQ'D → F 2D — INFORMATION OUTLET FLOOR BOX
- WAP — WIRELESS ACCESS POINT
- S — CEILING MOUNTED SPEAKER
- S — WALL MOUNTED SPEAKER
- INDICATES TYPE OF CAMERA REQ'D → C A — CAMERA'S
  - A: AXIS P3727-PLE
  - B: AXIS M4327-P
  - C: AXIS P1468-LE
  - D: AXIS M3086-V
  - E: AXIS P4705-PLVE
- IC — INTERCOM
- VIC — VIDEO INTERCOM
- CR — CARD READER
- DC — DOOR CONTACT
- RX — REQUEST TO EXIT
- ES — ELECTRIC STRIKE



2/E205 SITE LOW VOLTAGE PLAN
1" = 60'-0"
0' 10' 20' 40'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			SITE LOW VOLTAGE PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E205	327



1 E301 ONE-LINE DIAGRAM
NO SCALE

KEYNOTES - E301

1	NEW UTILITY CO. TRANSFORMER. COORDINATE WITH UTILITY CO. FOR SERVICE REQUIREMENTS AND LOCATION. PROVIDE ALL APPURTENANCES AS REQUIRED BY THE UTILITY CO AND FOR A FULLY FUNCTIONING SYSTEM. METER SOCKET AND PAD BY EC. NO CT CABINET IS NEEDED.
2	COORDINATE WITH UTILITY CO. FOR FIRE PUMP CONNECTION AND METERING REQUIREMENTS.
3	COORDINATE CIRCUIT BREAKER AND CONDUCTORS SIZE WITH PURCHASED EQUIPMENT. PROVIDE PER MANUFACTURERS RECOMMENDATIONS.
4	FIRE PUMP CONTROLLER WITH INTEGRAL AUTOMATIC TRANSFER SWITCH PROVIDED BY OTHERS.
5	PROVIDE SERVICE RATED DISCONNECT, LOCKABLE IN THE 'ON' POSITION, PAINTED RED. PROVIDE RED MYCARTA LABEL WITH 'FIRE PUMP DISCONNECTING MEANS' IN 1.5" HIGH ENGRAVED LETTERS. COORDINATE EXACT LOCATION WITH THE FIRE MARSHALL. FEEDERS SHALL BE ROUTED OUTSIDE OF THE BUILDING, TURNING DIRECTLY INTO TH E ATS, OR SHALL BE INSTALLED IN RMC RACEWAY, ENCASED IN NO LESS THAN 2" OF CONCRETE.
6	PROVIDE SERVICE RATED DISCONNECT, LOCKABLE IN THE 'ON' POSITION, PAINTED RED. PROVIDE RED MYCARTA LABEL WITH 'FIRE PUMP GENERATOR DISCONNECTING MEANS' IN 1.5" HIGH ENGRAVED LETTERS. COORDINATE EXACT LOCATION WITH THE FIRE MARSHALL. FEEDERS SHALL BE ROUTED OUTSIDE OF THE BUILDING, TURNING DIRECTLY INTO TH E ATS, OR SHALL BE INSTALLED IN RMC RACEWAY, ENCASED IN NO LESS THAN 2" OF CONCRETE.
7	PROVIDE RED ENGRAVED LABEL NEXT TO DISCONNECT IDENTIFYING LOAD AND LOAD TYPE SERVED.
8	COORDINATE WITH PURCHASED EQUIPMENT. INCLUDE GENERATOR HEATER AND CHARGER AS WELL AS CONDUIT(S) FOR COMMUNICATIONS.
9	PROVIDE 5-SETS OF 4" C. WITH (4) 400KCMIL EACH.
10	PROVIDE 5-SETS OF 4" C. WITH (4) 400KCMIL + (1) #4/0 GND. EACH.
11	PROVIDE MANUAL TRANSFER SWITCH WITH INTEGRAL CAM-LOK EQUAL TO AN ASCO #J-03-MTQ-A-150-N-M IN NEMA 3R ENCLOSURE. LOCATE NEAR GENERATOR.
12	PROVIDE (4) #1 + (1) # 6 GND. IN 1-1/2" C.
13	PROVIDE (4) #4 + (1) #6 GND IN 1-1/4" C.
14	PROVIDE (4) #3/0 + (1) #6 GND. IN 2" C.
15	PROVIDE (4) 500KCMIL + (1) #3 GND IN 3" C.
16	PROVIDE (3) #1 + (1) #6 GND. IN 1-1/2" C.
17	PROVIDE (4) #1 + (1) #6 GND IN 2" C.
18	REFER TO EQUIPMENT CONNECTION SCHEDULE ON SHEET E002 FOR REQUIREMENTS.

2

PANEL: LC
VOLTAGE: 208Y/120V-3P-4W
MOUNTING: SURFACE
FED FROM: MDP
BUS RATING: 400A
MAIN: MLO
22KAIC

TYP	DESCRIPTION	BRK	LOAD	NO.	PH A	PH B	PH C	NO.	LOAD	BRK	DESCRIPTION	TYP
C	LTG - 217, 217A,B,C,D, 218, 215	20A	1453	1	2173			2	720	20A	REC - 217, 217A	R
C	LTG - 200, 200A,B,C, 110, 205, 206	20A	1640	3		3140		4	1500	20A	**REC - REFRIGERATOR 217A	R
C	LTG - 105, 201, 202, 213, 214	20A	1124	5			1484	6	360	20A	REC - COUNTER 217A	R
C	LTG - 204, 207-210, 200	20A	1519	7	1879			8	360	20A	REC - COUNTER 217A	R
C	LTG - TRACK & COVE 204, 203	20A	1448	9		2528		10	1080	20A	REC - 217C	R
M	EF-5, EF-6, EF-7	20A	1086	11			1806	12	720	20A	REC - 216	R
R	REC - 217D, 218	20A	360	13	1260			14	900	20A	REC - 216	R
	SPARE	20A		15		720		16	720	20A	REC - 215	R
R	REC - 204	20A	720	17			1440	18	720	20A	REC - 215	R
R	REC - 204	20A	720	19	1440			20	720	20A	REC - 215	R
R	REC - 204	20A	360	21		1080		22	720	20A	REC - 215	R
N	RF-1 LIGHTING AND REC'S	20A	600	23			1320	24	720	20A	REC - 215	R
R	REC - 202	20A	720	25	1260			26	540	20A	REC - 215	R
R	REC - 202	20A	720	27		1440		28	720	20A	REC - 214	R
R	REC - 202	20A	720	29			1440	30	720	20A	REC - 214	R
R	REC - 202	20A	1080	31	1805			32	720	20A	REC - 214	R
R	**REC - REFRIGERATOR 213	20A	1500	33		2220		34	720	20A	REC - 214	R
R	REC - COUNTER 213	20A	360	35			720	36	360	20A	REC - 214	R
R	REC - COUNTER 213	20A	360	37	900			38	540	20A	REC - 212	R
R	REC - COUNTER 213	20A	360	39		960		40	600	20A	**REC - DRINKING FOUNTAIN 200	R
R	REC - 213	20A	720	41			1620	42	900	20A	REC - 201	R

PANEL: LC
(SECTION 2)

TYP	DESCRIPTION	BRK	LOAD	NO.	PH A	PH B	PH C	NO.	LOAD	BRK	DESCRIPTION	TYP
M	UH-1	20A	180	43	2388			44	2208	30A	RF-1 CONNECTION 1	M
C	H-3	25A	2040	45		4248		46	2208	/	" "	M
M	GWH-1, DWCP-1	20A	1260	47			3468	48	2208	/	" "	M
N	TCP - 211	20A	600	49	2908			50	2208	30A	RF-1 CONNECTION 2	M
N	TCP - 211	20A	600	51		2808		52	2208	/	" "	M
N	VAV POWER PANEL	20A	600	53			2808	54	2208	3P	" "	M
R	REC - 207	20A	1080	55	7680			56	6600	80A	H-4	C
R	REC - 208	20A	900	57		7500		58	6600	/	" "	C
R	REC - 208	20A	360	59			6960	60	6600	3P	" "	C
R	REC - 209, 210, 206,205	20A	1080	61	4080			62	3000	35A	ERV-1	M
R	REC - 200, 200C, 200B	20A	1080	63		4080		64	3000	/	" "	M
N	REC - 211, 200A	20A	900	65			3900	66	3000	3P	" "	M
R	REC - COPIER 202	20A	1500	67	1500			68		20A	SPARE	
R	REC - SHREDDER 202	20A	600	69		600		70		20A	SPARE	
R	REC - COUNTER 209	20A	360	71			360	72		20A	SPARE	
	SPARE	20A		73	0			74		20A	SPARE	
	SPARE	20A		75		0		76		20A	SPARE	
	SPARE	20A		77			0	78		20A	SPARE	
	SPARE	20A		79	0			80		20A	SPARE	
	SPARE	20A		81		0		82		20A	SPARE	
	SPARE	20A		83			0	84		20A	SPARE	

BUS TOTALS (kVA)		9572	11728	7724
CONNECTED:	87.8	0	0	0
DEMAND:	84.4	7096	7416	6762
		600	600	1200
BUS TOTALS (AMPS)		7400	7490	6000
CONNECTED:	243.8	0	0	0
DEMAND:	234.2	27561	30166	29637

C - CONTINUOUS LOAD (*125%)
LM - LARGEST MOTOR LOAD (*125%)
M - MOTOR LOAD
N - NON-CONTINUOUS LOAD
R - RECEPTACLE DEMAND (100% 10KVA, 50% OF REMAINING)
K - KITCHEN LOAD (65% OF LOAD)
**TOTAL DEMAND PER PHASE (VA)

** PROVIDE GFCI CB

PANEL: LB
VOLTAGE: 208Y/120V-3P-4W
MOUNTING: SURFACE
FED FROM: MDP
BUS RATING: 225A
MAIN: MLO
35KAIC

TYP	DESCRIPTION	BRK	LOAD	NO.	PH A	PH B	PH C	NO.	LOAD	BRK	DESCRIPTION	TYP
C	LTG - 103, 104, 104A, 116A	20A	1716	1	2436			2	720	20A	REC - WIREMOLD 114	R
C	LTG - 114, 114A, 114B, 102EFGH	20A	1305	3			2025	4	720	20A	REC - WIREMOLD 114	R
C	LTG - 106-110A	20A	1682	5				6	720	20A	REC - WIREMOLD 114	R
C	LTG - SOUTH COMMON SPACES	20A	1025	7	1745			8	720	20A	REC - WIREMOLD 114	R
C	LTG - 109, 109A	20A	715	9		1435		10	720	20A	REC - WIREMOLD 114	R
N	TCP - 107	20A	600	11			1320	12	720	20A	REC - WIREMOLD 114	R
R	REC - 111, 102G, 102F, 102H, EXT	20A	1080	13	1800			14	720	20A	REC - WIREMOLD 114	R
R	REC - FREEZER 109	20A	1500	15		2220		16	720	20A	REC - WIREMOLD 114	R
R	REC - 109	20A	720	17			1440	18	720	20A	REC - WIREMOLD 114	R
R	REC - FUME HOOD 109	20A	1500	19	2220			20	720	20A	REC - WIREMOLD 114	R
R	REC - 109	20A	540	21			900	22	360	20A	REC - GENERAL 114	R
R	REC - 109A	20A	540	23				24	720	20A	REC - 114A	R
R	REC - 109A	20A	540	25	1260			26	720	20A	REC - 114A	R
R	REC - FREEZER 109A	20A	1500	27			1860	28	360	20A	REC - COUNTER 103	R
R	REC - 109A	20A	360	29		1440		30	360	20A	REC - COUNTER 103	R
R	REC - 106	20A	1080	31	1080			32	1080	20A	SPARE	
R	REC - 110, 102E, 104A, 116A	20A	1080	33			2160	34	1080	20A	REC - 102, 102C, 102D, 105	R
R	REC - 101B	20A	720	35				36	600	20A	**REC - DRINKING FOUNTAIN 100	R
R	REC - 101B	20A	720	37	2220			38	1500	20A	** HAND DRYER 100B	N
C	H-2	25A	2040	39			3540	40	1500	20A	** HAND DRYER 100A	N
R	**REC - DRINKING FOUNTAIN 102	20A	600	41				42	1080	20A	REC - 102A, 102B, 100A, 100B, 100	R

PANEL: LB
(SECTION 2)

TYP	DESCRIPTION	BRK	LOAD	NO.	PH A	PH B	PH C	NO.	LOAD	BRK	DESCRIPTION	TYP
M	CUH-1, CUH-2, CUH-3, CUH-4, CUH-5	20A	1560	43	1920			44	2208	30A	REC - 101	R
M	EF-1, EF-2, EF-3, EF-16, EF-4	20A	147	45			507	46	360	20A	REC - 101	R
R	REC - FLOOR BOXES 103	20A	720	47				48	360	20A	REC - 101	R
R	REC - FLOOR BOXES 103	20A	720	49	1080			50	360	20A	REC - 101	R
R	REC - FLOOR BOXES 103	20A	720	51		1080		52	360	20A	REC - 101	R
R	REC - 103	20A	720	53			1080	54	360	20A	REC - 101	R
R	REC - 103	20A	720	55	1080			56	360	20A	REC - 101	R
R	REC - 104	20A	720	57		1080		58	360	20A	REC - 101	R
R	REC - 108	20A	360	59			720	60	360	20A	REC - 101	R
R	REC - MONITORS 101	20A	360	61	720			62	3000	35A	ERV-1	M
R	REC - SCALE EQ. 101	20A	360	63		720		64	360	20A	REC - 101	R
R	REC - SHREDDER 101	20A	600	65			960	66	360	20A	REC - 101	R
R	REC - COPIER 101	20A	1500	67	2580			68	1080	20A	REC - EXTERIOR 101A, 101C	R
	SPARE	20A		69		0		70		20A	SPARE	
	SPARE	20A		71			0	72		20A	SPARE	
	SPARE	20A		73	0			74		20A	SPARE	
	SPARE	20A		75		0		76		20A	SPARE	
	SPARE	20A		77			0	78		20A	SPARE	
	SPARE	20A		79	0			80		20A	SPARE	
	SPARE	20A		81		0		82		20A	SPARE	
	SPARE	20A		83			0	84		20A	SPARE	

BUS TOTALS (kVA)		2741	4060	1682
CONNECTED:	51.7	0	0	0
DEMAND:	39.8	1560	147	0
		1500	1500	600
BUS TOTALS (AMPS)		8870	7610	7370
CONNECTED:	143.4	0	0	0
DEMAND:	110.4	15356	14332	10073

C - CONTINUOUS LOAD (*125%)
LM - LARGEST MOTOR LOAD (*125%)
M - MOTOR LOAD
N - NON-CONTINUOUS LOAD
R - RECEPTACLE DEMAND (100% 10KVA, 50% OF REMAINING)
K - KITCHEN LOAD (65% OF LOAD)
**TOTAL DEMAND PER PHASE (VA)

**PROVIDE GFCI PROTECTED CB

PANEL: LA
VOLTAGE: 208Y/120V-3P-4W
MOUNTING: SURFACE
FED FROM: MDP
BUS RATING: 225A
MAIN: MLO
35KAIC

TYP	DESCRIPTION	BRK	LOAD	NO.	PH A	PH B	PH C	NO.	LOAD	BRK	DESCRIPTION	TYP
C	LTG - INSPECTION PITS	20A	1908	1	1968			2	360	20A	REC - INSPECTION PIT	R
C	LTG - 116	20A	1352	3		1892		4	540	20A	REC - INSPECTION PIT	R
C	LTG - 116	20A	1352	5			1712	6	360	20A	REC - INSPECTION PIT	R
C	LTG - 116	20A	1352	7	1712			8	360	20A	REC - INSPECTION PIT	R
C	LTG - 116	20A	1352	9		1712		10	360	20A	REC - 116	R
C	LTG - 116	20A	832	11			1192	12	360	20A	REC - 116	R
C	LTG - 112, 113	20A	1272	13	1632			14	360	20A	REC - 116	R
C	LTG - 111, 115, 115A	20A	685	15		1045		16	360	20A	REC - 116	R
N	LIGHTING CONTROL PANEL	20A	600	17			960	18	360	20A	REC - 116	R
C	EXTERIOR LIGHTING	20A	308	19	668			20	360	20A	REC - 116	R
C	TRAFFIC LIGHTS	20A	180	21		900		22	720	20A	REC - 116	R
	SPARE	20A		23			540	24	540	20A	REC - 116 EXTERIOR	R
	SPARE	20A		25	540			26	540	20A	REC - 116	R
	SPARE	20A		27		540		28	540	20A	REC - 116 EXTERIOR	R
	SPARE	20A		29			540	30	540	20A	REC - COUNTERS 113	R
R	REC - COUNTERS 112	20A	540	31	1080			32	540	20A	REC - COUNTERS 113	R
R	REC - COUNTERS 112	20A	540	33		1080		34	540	20A	REC - COUNTERS 113	R
R	REC - COUNTERS 112	20A	540	35			1080	36	540	20A	REC - COUNTERS 113	R
R	REC - COUNTERS 112	20A	540	37	1260			38	720	20A	** CORD REELS 113	R
R	REC - COUNTERS 112	20A	180	39		900		40	720	20A	** CORD REELS 113	R
R	REC - 112, 113, EXTERIOR	20A	720	41			1080	42	360	20A	** TROUBLE LIGHTS 113	N

PANEL: LA
(SECTION 2)

TYP	DESCRIPTION	BRK	LOAD	NO.	PH A	PH B	PH C	NO.	LOAD	BRK	DESCRIPTION	TYP
M	OHD-4, OHD-5, OHD-6, OHD-7	20A	1680	43	3072			44	1392	20A	GUH-3, GUH-4	M
M	" "	/	1680	45		3072		46	1392	20A	DF-3A, DF-3B	M
M	" "	3P	1680	47			2736	48	1056	20A	EF-10, EF-11	M
M	MAU-1	30A	2004	49	3377			50	1373	20A	EF-12	M
M	" "	/	2004	51		3377		52	1373	2P	" "	M
M	" "	2P	2004	53			3377	54	1373	20A	EF-13	M
M	OHD-1, OHD-2, OHD-3	20A	1260	55	2633			56	1373	2P	" "	M
M	" "	/	1260	57		2652		58	1392	20A	EF-8, EF-9	M
M	" "	3P	1368	59			2652	60	1392	20A	GUH-1, GUH-2	M
M	CP-1	30A	2004	61	2724			62	720	20A	DF-1, DF-2	M
M	" "	/	2004	63		2868		64	864	20A	SP-2	M
M	" "	3P	2004	65			2184	66	180	20A	SP-3 HIGH LEVEL ALARM	R
M	CP-2	30A	2004	67	2364			68	360	20A	BRAKE TESTER CONSOLE	R
M	" "	/	2004	69		2004		70		20A	SPARE	
M	" "	3P	2004	71			2004	72		20A	SPARE	
	SPARE	20A		73	0			74		20A	SPARE	
	SPARE	20A		75		0		76		20A	SPARE	
	SPARE	20A		77			0	78		20A	SPARE	
	SPARE	20A		79	0			80		20A	SPARE	
	SPARE	20A		81		0		82		20A	SPARE	
	SPARE	20A		83			0	84		20A	SPARE	

BUS TOTALS (kVA)		4540	3569	2184
CONNECTED:	65.1	0	0	0
DEMAND:	66.1	1380	1273	960
		0	0	960
BUS TOTALS (AMPS)		4040	3950	3770
CONNECTED:	180.8	0	0	0
DEMAND:	183.6	23525	22384	20233

C - CONTINUOUS LOAD (*125%)
LM - LARGEST MOTOR LOAD (*125%)
M - MOTOR LOAD
N - NON-CONTINUOUS LOAD
R - RECEPTACLE DEMAND (100% 10KVA, 50% OF REMAINING)
K - KITCHEN LOAD (65% OF LOAD)
**TOTAL DEMAND PER PHASE (VA)

** PROVIDE GFCI CB

SWBD: S.E.S.
VOLTAGE: 208Y/120V-3P-4W
BUS RATING: 1600A
MAIN: 1600A
FED FROM: UTILITY
65KAIC

TYP	CKT	DESCRIPTION	TRIP	FRAME	PH A	PH B	PH C	TOT VA	AMPS	COMMENTS
1		SPD	60A					0	0.0	
N	2	PANEL EM	60A		1901	2565	2854	7320	20.3	
N	3	MDP	1600A		155635	162761	151449	469845	1304.2	
	4	PV CONNECTION	70A					0	0.0	
	5	SPACE						0	0.0	
	6	SPACE						0	0.0	
					0	0	0	0		C - CONTINUOUS LOAD (125%)
					0	0	0	0		LM - LARGEST MOTOR (125%)
					0	0	0	0		M - MOTOR LOAD
					157537	165326	154302	477165		N - NON CONTINUOUS LOAD
					157537	165326	154302	477165		TOTAL DEMAND PER PHASE (VA)

BUS TOTALS (KVA)
CONNECTED: 477.2
DEMAND: 477.2

BUS TOTALS (AMPS)
CONNECTED: 1324.5
DEMAND: 1324.5

SWBD: MDP
VOLTAGE: 208Y/120V-3P-4W
BUS RATING: 1600A
MAIN: MLO
FED FROM: S.E.S.
65KAIC

TYP	CKT	DESCRIPTION	TRIP	FRAME	PH A	PH B	PH C	TOT VA	AMPS	COMMENTS
N	1	PANEL LA	200A		23525	22384	20233	66142	183.6	
N	2	PANEL LB	200A		15356	14332	10073	39761	110.4	
N	3	PANEL LC	400A		27561	30166	29637	84364	234.2	
N	4	PANEL LM	400A		34170	32765	32343	99278	275.6	
N	5	PANEL ELV	60A		1185	1356	405	2946	8.2	
N	6	UPS	100A			7920	7920	15840	44.0	2-POLE CB
M	7	BRAKE TEST SYSTEM	100A		9600	9600	9600	28800	79.9	
N	8	PANEL ANT	100A		6400	6400	6400	19200	53.3	
M	9	JOCKEY PUMP	20A		420	420	420	1260	3.5	
M	10	WHP-1 CONNECTION 1	125A		9384	9384	9384	28152	78.1	
M	11	WHP-1 CONNECTION 2	125A		9384	9384	9384	28152	78.1	
LM	12	ELM-1	175A		12120	12120	12120	36360	100.9	
N	13	SITE LIGHTING PANEL	100A		3500	3500	3500	10500	29.1	
	14	SPARE	200A					0	0.0	
	15	SPARE	200A					0	0.0	
					0	0	0	0		C - CONTINUOUS LOAD (125%)
					12120	12120	12120	36360		LM - LARGEST MOTOR (125%)
					28788	28788	28788	86364		M - MOTOR LOAD
					111697	116823	107511	338031		N - NON CONTINUOUS LOAD
					155635	162761	151449	469845		TOTAL DEMAND PER PHASE (VA)

BUS TOTALS (KVA)
CONNECTED: 460.8
DEMAND: 469.8

BUS TOTALS (AMPS)
CONNECTED: 1278.9
DEMAND: 1304.2

FUSED COORDINATION PANEL: EM
VOLTAGE: 208Y/120V-3P-4W
BUS RATING: 125A
MAIN: MLO
FED FROM: S.E.S.
22KAIC

TYP	DESCRIPTION	FUSE	LOAD	NO.	PH A	PH B	PH C	NO.	LOAD	FUSE	DESCRIPTION	TYP
C	LTG - EMERGENCY MAIN LEVEL	20A	1521	1	3021			2	1500	20A	GENERATOR HEATER	
C	LTG - EMERGENCY UPPER LEVEL	20A	260	3		1760		4	1500	2P	" "	
C	LTG - EMERGENCY EXTERIOR	20A	491	5			1691	6	1200	20A	GENERATOR BATTERY CHARGER	
	SPARE	20A		7	600			8	600	20A	ELEVATOR CAB LIGHTING	
	SPARE	20A		9		1200		10	1200	20A	FIRE PROTECTION PANEL	N
	SPARE	20A		11			1200	12	1200	20A	VENT CONTROLLER	N
	SPARE	20A		13	0			14		20A	SPARE	
	SPARE	20A		15		0		16		20A	SPARE	
	SPARE	20A		17			0	18		20A	SPARE	
	SPARE	20A		19	0			20		20A	SPARE	
	SPARE	20A		21		0		22		20A	SPARE	
	SPARE	20A		23			0	24		20A	SPARE	
	SPARE	30A		25	0			26		20A	SPARE	
	" "	/		27		1040		28	1040	20A	NITROGEN GENERATOR	N
	" "	3P		29			1040	30	1040	2P	" "	N
	BUS TOTALS (kVA)				1521	260	491				C - CONTINUOUS LOAD (*125%)	
	CONNECTED:	11.6			0	0	0				LM - LARGEST MOTOR LOAD (*125%)	
	DEMAND:	7.3			0	0	0				M - MOTOR LOAD	
					0	2240	2240				N - NON-CONTINUOUS LOAD	
	BUS TOTALS (AMPS)				0	0	0				R - RECEPTACLE DEMAND (100% 10KVA, 50% OF REMAINING)	
	CONNECTED:	32.1			0	0	0				K - KITCHEN LOAD (65% OF LOAD)	
	DEMAND:	20.3			1901	2565	2854				TOTAL DEMAND PER PHASE (VA)	

PANEL: ANT
VOLTAGE: 208Y/120V-3P-4W
MOUNTING: SURFACE
FED FROM: MDP
BUS RATING: 125A
MAIN: MLO
10KAIC

TYP	DESCRIPTION	BRK	LOAD	NO.	PH A	PH B	PH C	NO.	LOAD	BRK	DESCRIPTION	TYP
R	REC - 107A	20A		1		0		2		20A	SPARE	
R	REC - 107A	20A		3			0	4		20A	SPARE	
R	REC - 107A	20A		5				6		20A	SPARE	
R	REC - 107A	20A		7	0			8		20A	SPARE	
	SPARE	20A		9		0		10		20A	SPARE	
	SPARE	20A		11			0	12		20A	SPARE	
	SPARE	20A		13	0			14		20A	SPARE	
	SPARE	20A		15		0		16		20A	SPARE	
	SPARE	20A		17			0	18		20A	SPARE	
	SPARE	20A		19	0			20		20A	SPARE	
	SPARE	20A		21		0		22		20A	SPARE	
	SPARE	20A		23			0	24		20A	SPARE	
	SPACE			25	0			26			SPACE	
	SPACE			27		0		28			SPACE	
	SPACE			29			0	30			SPACE	
	SPACE			31	0			32			SPACE	
	SPACE			33		0		34			SPACE	
	SPACE			35			0	36			SPACE	
	SPACE			37	0			38			SPACE	
	SPACE			39		0		40			SPACE	
	SPACE			41			0	42			SPACE	
	BUS TOTALS (kVA)							0	0		C - CONTINUOUS LOAD (*125%)	
	CONNECTED:	0.0			0	0	0	0			LM - LARGEST MOTOR LOAD (*125%)	
	DEMAND:	0.0			0	0	0	0			M - MOTOR LOAD	
					0	0	0	0			N - NON-CONTINUOUS LOAD	
	BUS TOTALS (AMPS)				0	0	0	0			R - RECEPTACLE DEMAND (100% 10KVA, 50% OF REMAINING)	
	CONNECTED:	0.0			0	0	0	0			K - KITCHEN LOAD (65% OF LOAD)	
	DEMAND:	0.0			0	0	0	0			TOTAL DEMAND PER PHASE (VA)	

PANEL: UPSB
VOLTAGE: 208Y/120V-1P-3W
MOUNTING: FLUSH
FED FROM: UPSA
BUS RATING: 125A
MAIN: MLO
22KAIC

TYP	DESCRIPTION	BRK	LOAD	NO.	PH A	PH B	PH C	NO.	LOAD	BRK	DESCRIPTION	TYP
N	REC - STATION 1 REC 1,1	20A	180	1	360			2	180	20A	REC - STATION 4 REC 1,1	N
N	REC - STATION 1 REC 1,2	20A	180	3		360		4	180	20A	REC - STATION 4 REC 1,2	N
N	REC - STATION 1 REC 2,1	20A	180	5	360			6	180	20A	REC - STATION 4 REC 2,1	N
N	REC - STATION 1 REC 2,2	20A	180	7		360		8	180	20A	REC - STATION 4 REC 2,2	N
N	REC - STATION 1 REC 3,1	20A	180	9	360			10	180	20A	REC - STATION 4 REC 3,1	N
N	REC - STATION 1 REC 3,2	20A	180	11			360	12	180	20A	REC - STATION 4 REC 3,2	N
N	REC - STATION 2 REC 1,1	20A	180	13		360		14	180	20A	REC - STATION 5 REC 1,1	N
N	REC - STATION 2 REC 1,2	20A	180	15			360	16	180	20A	REC - STATION 5 REC 1,2	N
N	REC - STATION 2 REC 2,1	20A	180	17	360			18	180	20A	REC - STATION 5 REC 2,1	N
N	REC - STATION 2 REC 2,2	20A	180	19		360		20	180	20A	REC - STATION 5 REC 2,2	N
N	REC - STATION 2 REC 3,1	20A	180	21	360			22	180	20A	REC - STATION 5 REC 3,1	N
N	REC - STATION 2 REC 3,2	20A	180	23		360		24	180	20A	REC - STATION 5 REC 3,2	N
N	REC - STATION 3 REC 1,1	20A	180	25	360			26	180	20A	REC - STATION 6 REC 1,1	N
N	REC - STATION 3 REC 1,2	20A	180	27		360		28	180	20A	REC - STATION 6 REC 1,2	N
N	REC - STATION 3 REC 2,1	20A	180	29	360			30	180	20A	REC - STATION 6 REC 2,1	N
N	REC - STATION 3 REC 2,2	20A	180	31		360		32	180	20A	REC - STATION 6 REC 2,2	N
N	REC - STATION 3 REC 3,1	20A	180	33	360			34	180	20A	REC - STATION 6 REC 3,1	N
N	REC - STATION 3 REC 3,2	20A	180	35		360		36	180	20A	REC - STATION 6 REC 3,2	N
	SPARE	20A		37	0			38		20A	SPARE	
	SPARE	20A		39		0		40		20A	SPARE	
	SPARE	20A		41	0			42		20A	SPARE	

PANEL: UPSB
(SECTION 2)

TYP	DESCRIPTION	BRK	LOAD	NO.	PH A	PH B	PH C	NO.	LOAD	BRK	DESCRIPTION	TYP
N	REC - RACK 1 RECEPTACLE 1	20A	180	43	540			44	360	20A	6-20R RECEPTACLE 1 RACK 1	N
N	REC - RACK 1 RECEPTACLE 2	20A	180	45			540	46	360	2P	" "	N
N	REC - RACK 2 RECEPTACLE 1	20A	180	47	360			48	180	20A	6-20R RECEPTACLE 2 RACK 1	N
N	REC - RACK 2 RECEPTACLE 2	20A	180	49			360	50	180	2P	" "	N
N	REC - RACK 3 RECEPTACLE 1	20A	180	51	360			52	180	20A	REC - 217B	N
N	REC - RACK 3 RECEPTACLE 2	20A	180	53			360	54	180	20A	REC - 217B	N
N	REC - RACK 4 RECEPTACLE 1	20A	180	55	360			56	180	20A	REC - 217B	N
N	REC - RACK 4 RECEPTACLE 2	20A	180	57			360	58	180	20A	REC - 217B	N
N	REC - MONITORS 217	20A	180	59	180			60		20A	SPARE	
N	REC - MONITORS 217	20A	180	61		180		62		20A	SPARE	
	SPARE	20A		63	0			64		20A	SPARE	
	SPARE	20A		65		0		66		20A	SPARE	
	SPARE	20A		67	0			68		20A	SPARE	
	SPARE	20A		69		0	70		20A	SPARE		
	SPACE			71	0			72			SPACE	
	SPACE			73		0		74			SPACE	
	SPACE			75	0			76			SPACE	
	SPACE			77		0		78			SPACE	
	SPACE			79	0			80			SPACE	
	SPACE			81		0		82			SPACE	
	SPACE			83			0	84			SPACE	

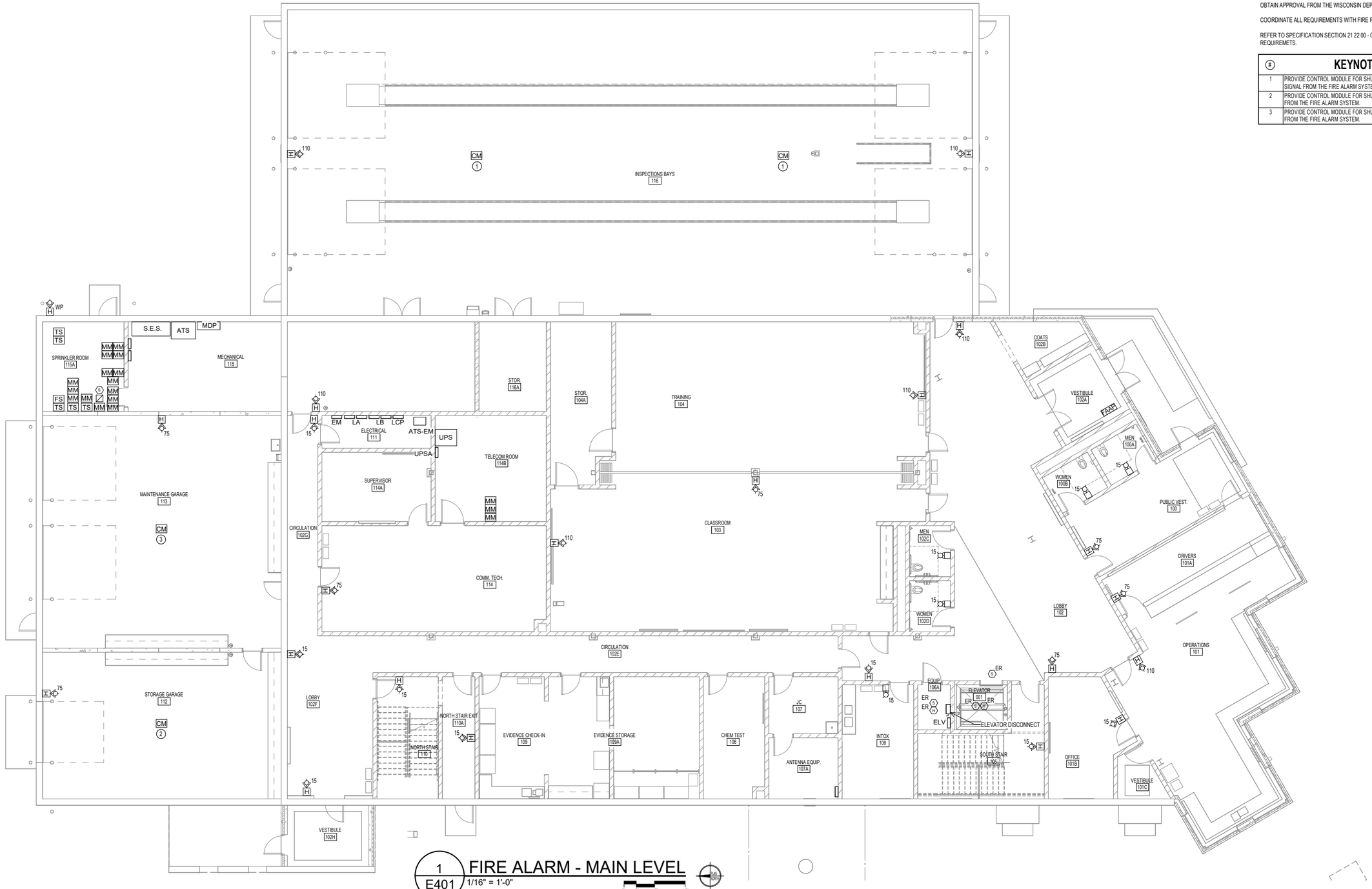
* BUS TOTALS (kVA)	

NOTE:
FIRE ALARM DRAWINGS ARE CONCEPTUAL ONLY. CONTRACTOR SHALL SUBMIT DOCUMENTS AND OBTAIN APPROVAL FROM THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES.

COORDINATE ALL REQUIREMENTS WITH FIRE PROTECTION CONTRACTOR.

REFER TO SPECIFICATION SECTION 21 22 00 - CLEAN AGENT FIRE EXTINGUISHING SYSTEMS FOR REQUIREMETS.

(#)	KEYNOTES - E401
1	PROVIDE CONTROL MODULE FOR SHUTDOWN OF DF-3A AND DF-3B UPON WATER FLOW SIGNAL FROM THE FIRE ALARM SYSTEM.
2	PROVIDE CONTROL MODULE FOR SHUTDOWN OF DF-1 UPON WATER FLOW SIGNAL FROM THE FIRE ALARM SYSTEM.
3	PROVIDE CONTROL MODULE FOR SHUTDOWN OF DF-2 UPON WATER FLOW SIGNAL FROM THE FIRE ALARM SYSTEM.



1 / E401 FIRE ALARM - MAIN LEVEL
1/16" = 1'-0"
0' 2' 5' 10'

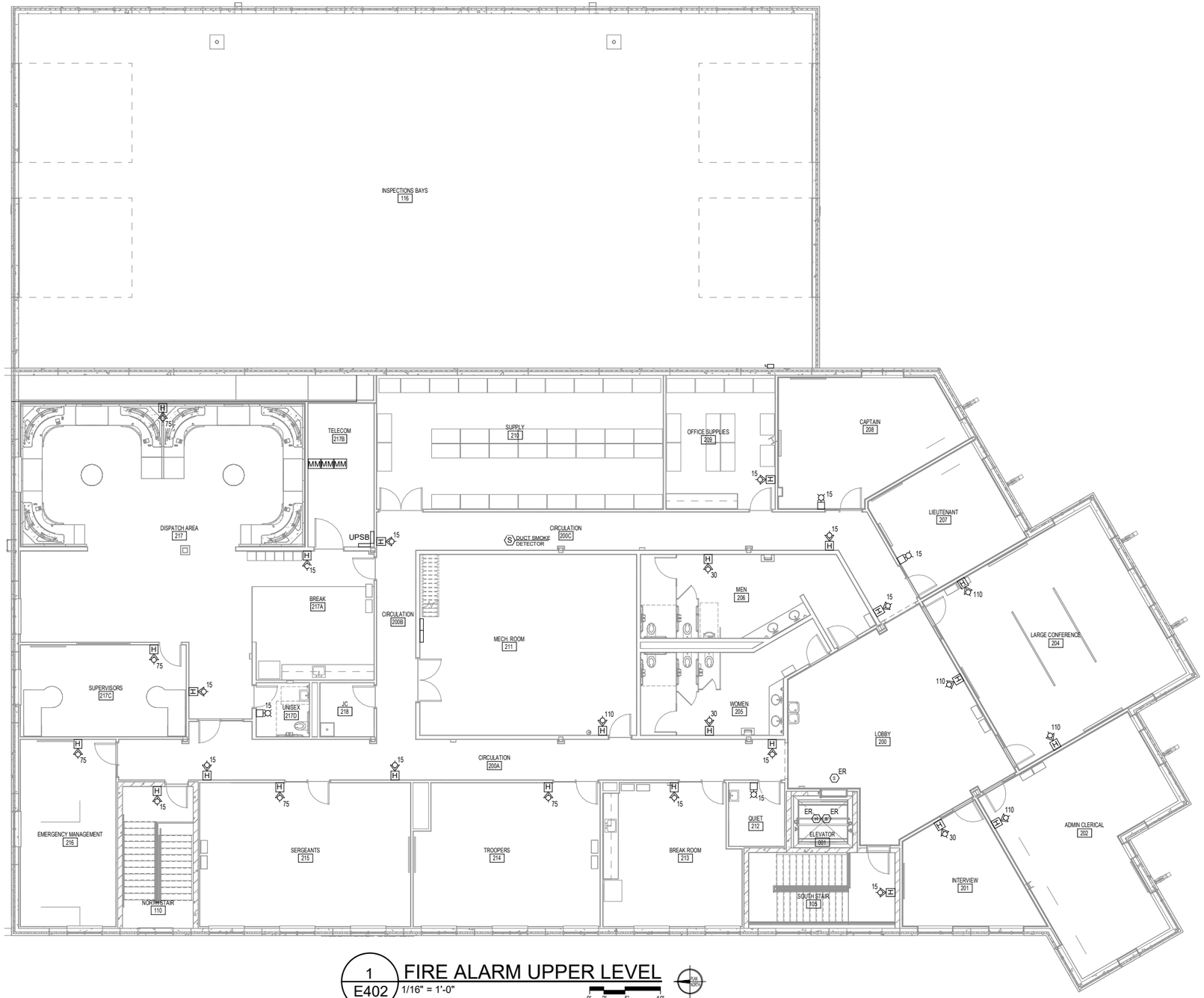
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			FIRE ALARM MAIN LEVEL	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E401	330

Autodesk Docs://KLENG 21001 - SWEF/21107 Elec_mikebAPVMK.rvt PLOT DATE: 4/26/2024 10:05:36 AM

NOTE:
FIRE ALARM DRAWINGS ARE CONCEPTUAL ONLY. CONTRACTOR SHALL SUBMIT DOCUMENTS AND OBTAIN APPROVAL FROM THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES.

COORDINATE ALL REQUIREMENTS WITH FIRE PROTECTION CONTRACTOR.

REFER TO SPECIFICATION SECTION 21 22 00 - CLEAN AGENT FIRE EXTINGUISHING SYSTEMS FOR REQUIREMETS.

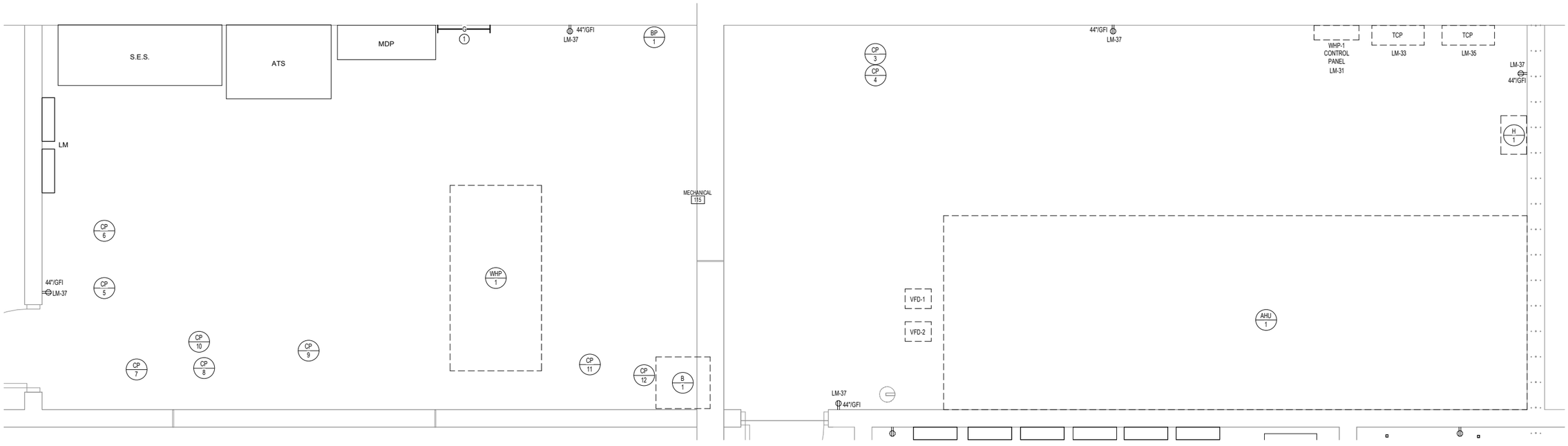


1 / E402 FIRE ALARM UPPER LEVEL
1/16" = 1'-0"
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			FIRE ALARM UPPER LEVEL	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E402	331

Autodesk Docs://KLENG 21001 - SWEF/21107 Elec_mikebAPVMK.rvt PLOT DATE: 4/26/2024 10:05:55 AM

#	KEYNOTES - E500
1	PROVIDE GROUND BAR. COORDINATE LOCATION WITH OWNER PRIOR TO INSTALLATION.

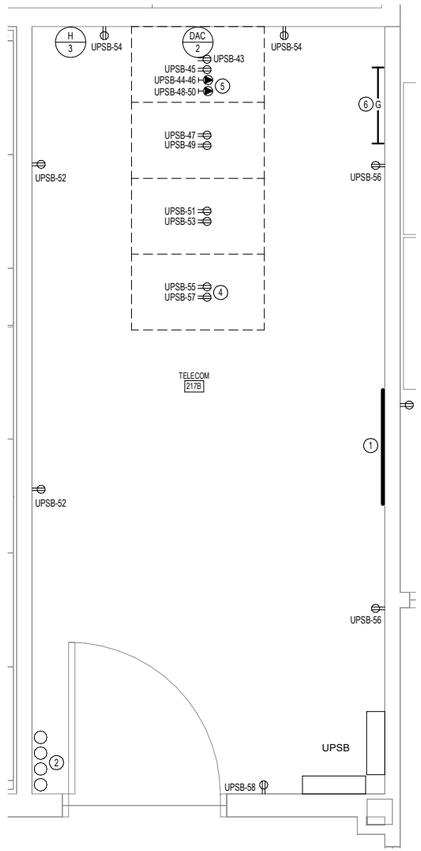


1 / E500 ENLARGED 115 MECHANICAL ROOM

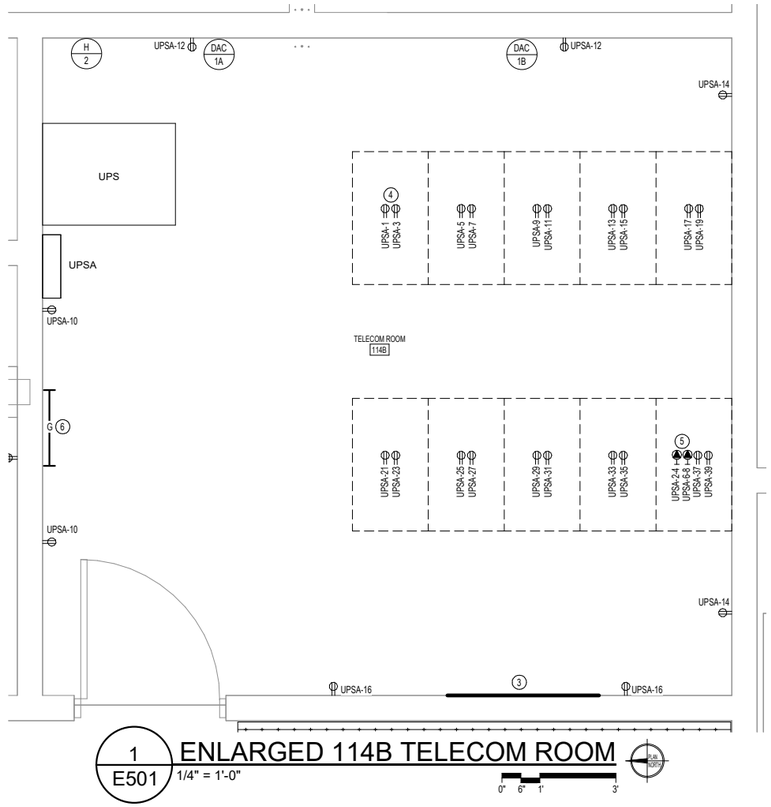
1/4" = 1'-0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ENLARGED 115 MECHANICAL ROOM	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E500	332

Autodesk Docs://KLENG 21001 - SWEF/21107 Elec_mikebAPVMK.rvt PLOT DATE: 4/26/2024 10:06:13 AM



2 E501 ENLARGED 217B TELECOM ROOM
1/4" = 1'-0"
0" 6" 1' 3'



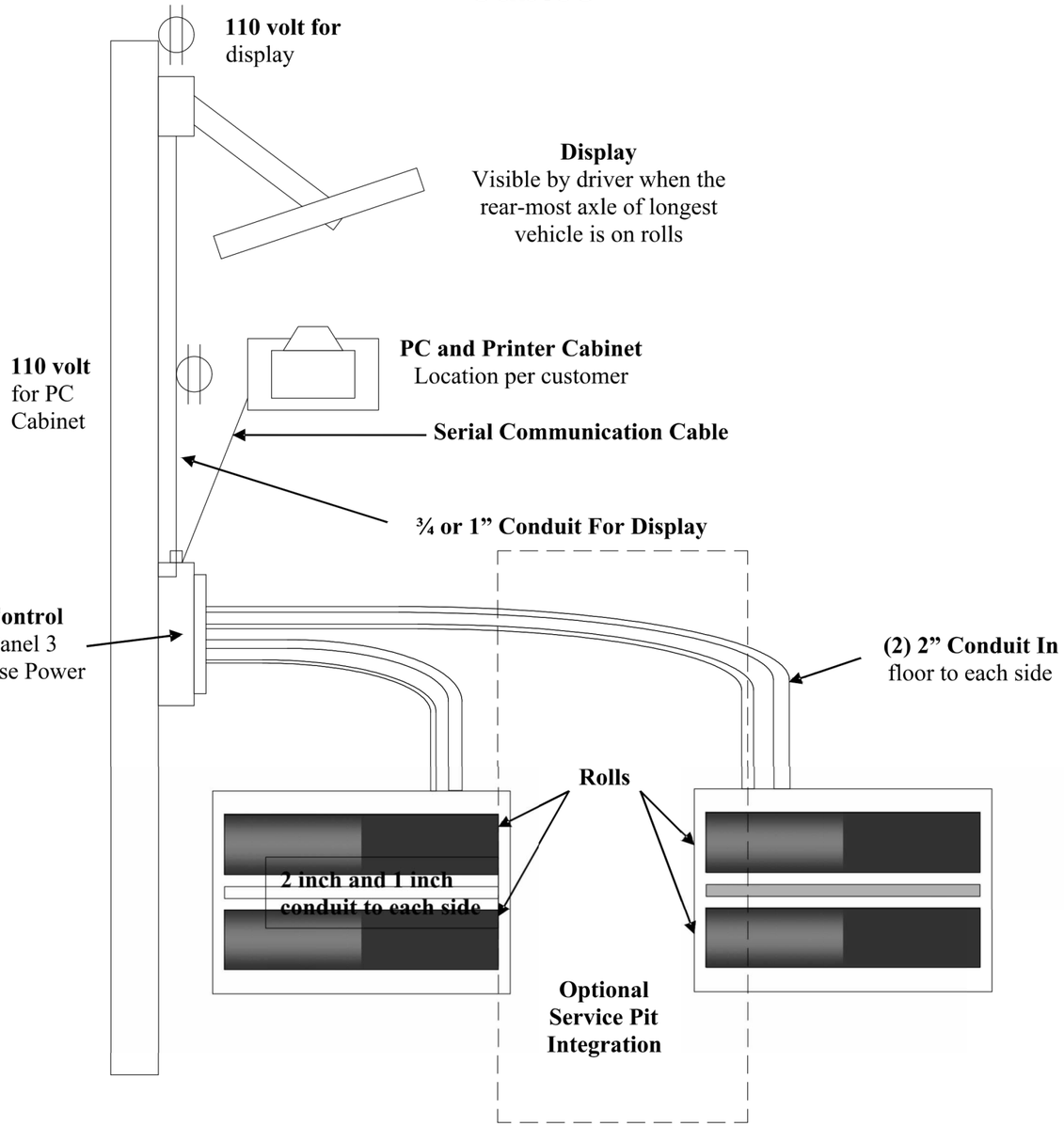
1 E501 ENLARGED 114B TELECOM ROOM
1/4" = 1'-0"
0" 6" 1' 3'

#	KEYNOTES - E501
1	PROVIDE 3/4" X 3' X 4' FIRE RATED PLYWOOD PAINTED TO MATCH WALLS. MOUNT 3' A.F.F.
2	PROVIDE (4) 2" CONDUITS TO TELECOM ROOM 114B. COORDINATE WITH OWNER FOR TERMINATION POINTS.
3	PROVIDE 3/4" X 4' X 8' FIRE RATED PLYWOOD PAINTED TO MATCH WALLS. MOUNT 3' A.F.F.
4	PROVIDE (2) NEMA 5-20R DUPLEX RECEPTACLES ON DROP CORDS WITH STRAIN RELIEF ABOVE EACH RACK (TYPICAL)
5	PROVIDE (2) NEMA L6-20R RECEPTACLES ON DROP CORDS WITH STRAIN RELIEF ABOVE RACK.
6	PROVIDE GROUND BAR. COORDINATE LOCATION WITH OWNER PRIOR TO INSTALLATION.

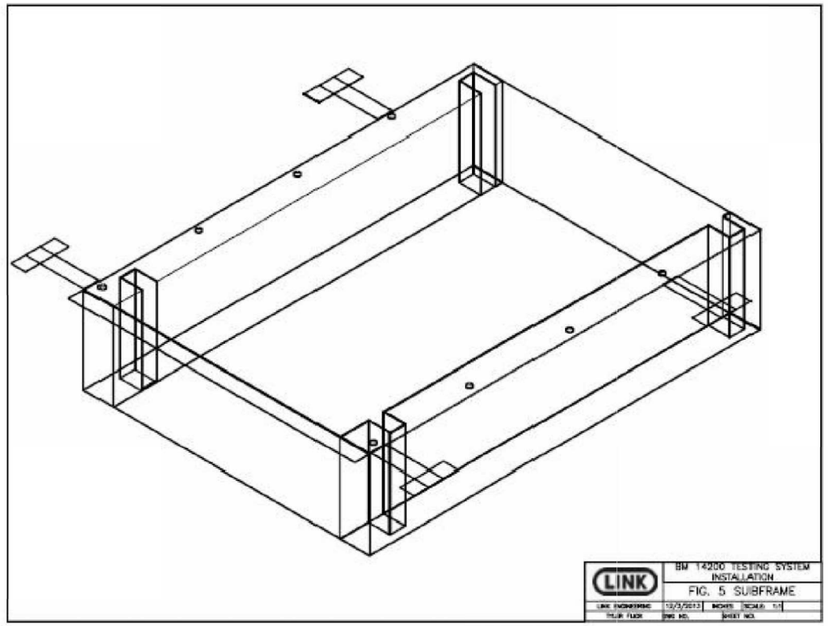
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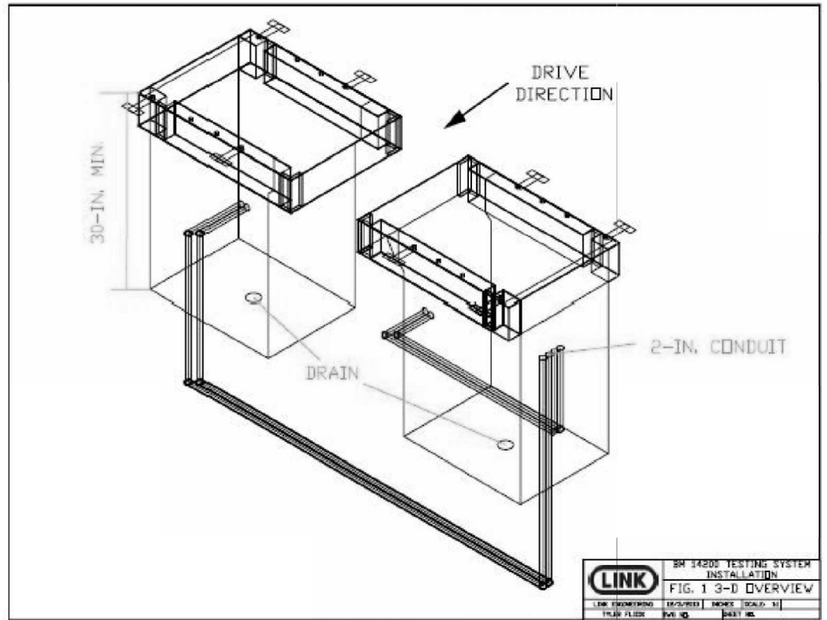
PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			ENLARGED 114B AND 217B TELECOM ROOMS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E501	333

System Layout Showing Interconnecting Cables



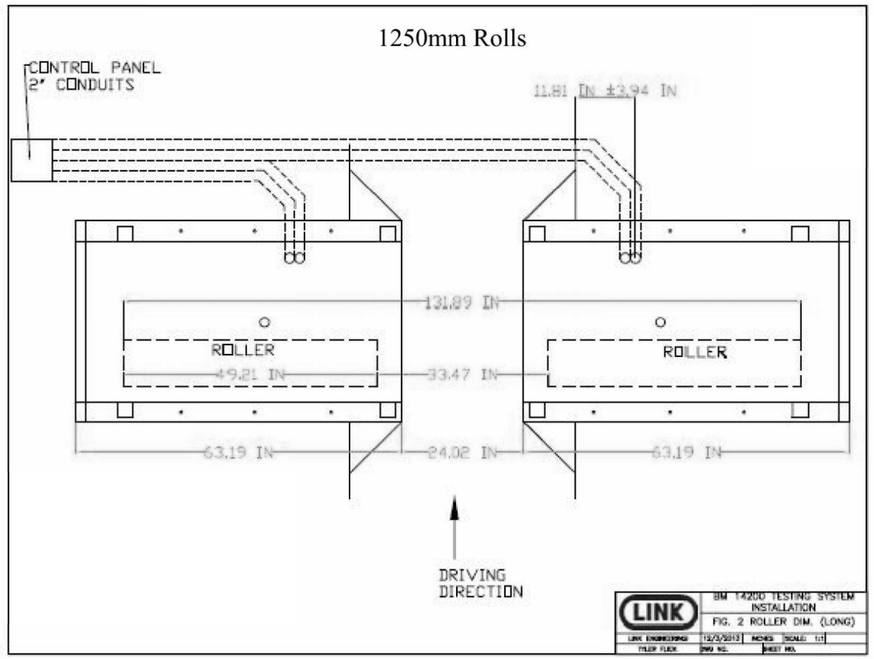
Sketches



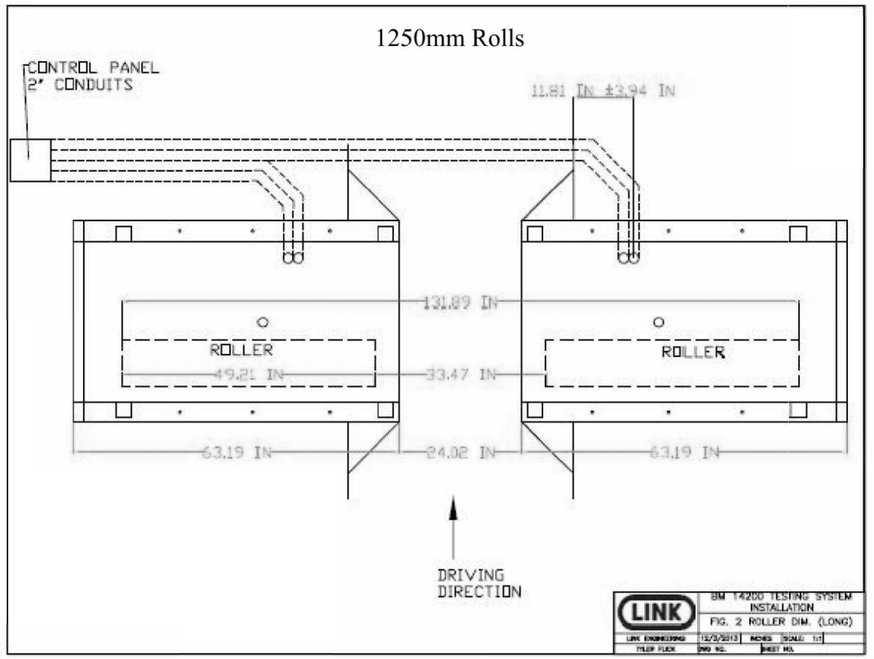


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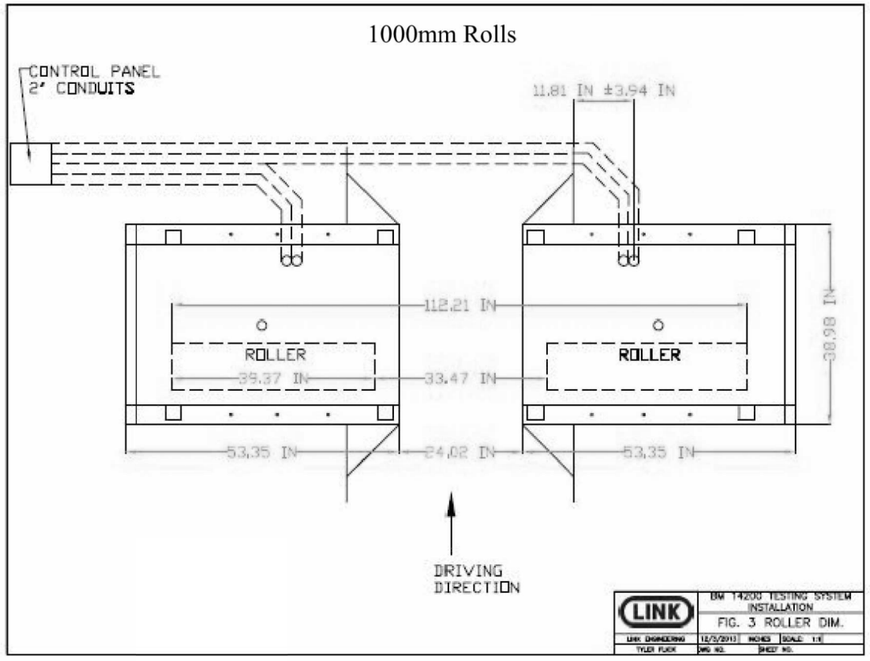
1250mm Rolls



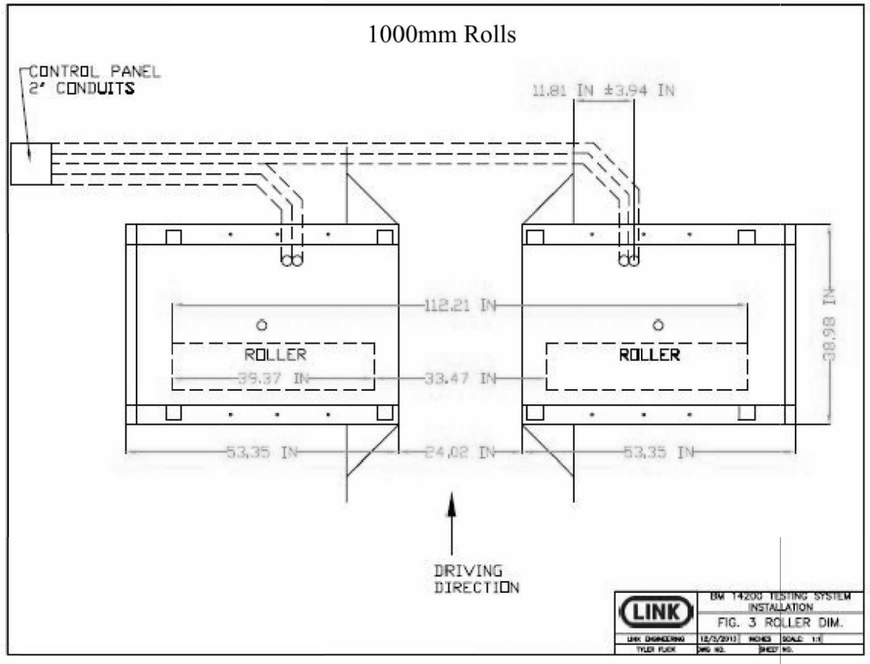
1250mm Rolls



1000mm Rolls



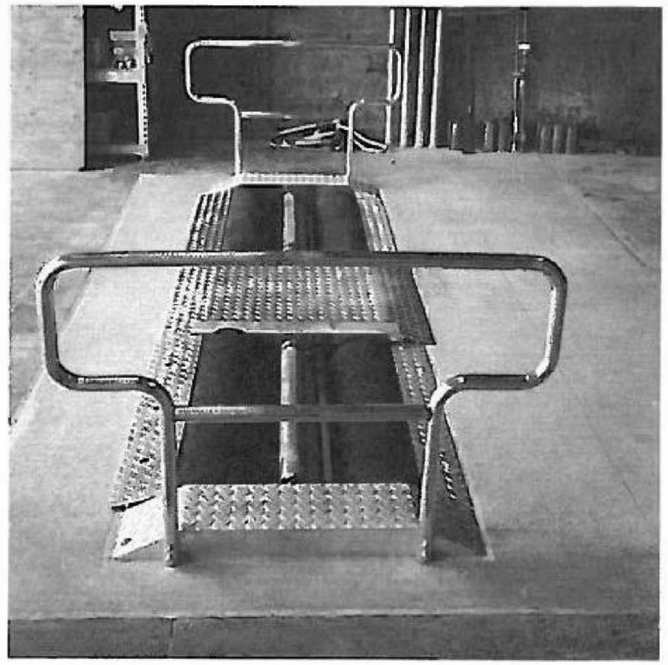
1000mm Rolls



PLANS PREPARED BY: APEX Engineering, Inc., Eau Claire, Wisconsin			ELECTRICAL DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. E601	335



Rollers each side of Pit



Rollers installed in floor

INSTALLATION INSTRUCTIONS

2

Pit Construction (see Subframe, Pit and Conduit drawings)

1. Cut floor (if necessary) and excavate pits for roller sets on either side of service pit. **Dimensions for rough excavation are 164 in. wide x 48 in. x 34 in. deep. Also dig** trenches for conduits running from the control panel area to the roller pits on each side of the service pit. Provide drain lines to carry away any water that could enter the pit. This is extremely important for outdoor installations.
2. After concrete pads set up for at least one day, place subframe (bolted together in one long frame) on pads and install electrical conduits in place. Follow conduit drawing carefully for conduit entry locations in pit. (Also see written description of conduits attached). Make sure top of subframe is level with building floor. Install three horizontal rows (equally spaced) of no 4 rebar and wire tie to the vertical rebar. This grid provides the pit wall reinforcement.
3. Cut plywood panels to fit inside subframe to form pit walls. Cross brace with wood blocking.
4. Reconfirm that conduits enter pit walls at correct locations as per drawing.
5. Pour concrete for pit walls.
6. When concrete has set up, remove cross-bracing and plywood panels and clean up all debris and excess concrete in pit.

Completing the installation

7. Install control panel and display. Provide main power (3 phase) to the control panel through a disconnect switch (not provided with tester) located near the panel. Main power conduit can enter through bottom of control panel via an in-floor conduit or from top or sides of panel.
8. Install 110 Volt AC outlets for computer and printer (usually near control panel)
9. Install pit safety system as shown below.
10. At this point LINK will come to complete the installation. The following will be needed from the customer:
    - □ Electrician to assist with wiring motors to control panel and pulling cable from control panel to display and wiring the pit safety system. Also for final check out.
    - □ High voltage wiring from control panel to motors (Four - 8 or 10 gage conductors are needed on each side).
    - □ Forklift and operator to assist in placing roller sets into the pit.

Additional Details for Installing Pit Safety System (Step 9)

The pit safety system consists of a pair of IR transmitters and receivers that are located at each end of the service pit. If a person is in the pit they cut one or both light beams and the tester will not start until the system is reset.

- □ Attach the brackets that hold the sensors (IR transmitters and receivers) to the pit end walls 18 inches down from the finished floor at the center of each end wall so that the transmitters and receivers aim at one another. Put one transmitter and one receiver on each end wall bracket and align them so that the transmitter is aligned with the receiver on the opposite wall
- □ Run conduits (½ or ¾ in) from each end wall bracket to the roller set pit that is closest to the control panel (usually the left).
- □ Pull transmitter and receiver cables through the conduits to the pit and then through the main conduit to the control panel

Items Not Provided by LINK:

- □ Excavation, rebar and concrete work
- □ Drainage for pit
- □ All electrical conduits
- □ 3-phase main power disconnect switch with lockout provision
- □ Wire – Building power to control panel, control panel to motors, two 110 Volt AD circuits (LINK provides all low voltage control and data wire and installs it.)
- □ Mounting of control panel and display (LINK provides necessary brackets)
- □ Forklift (or crane) and operator
- □ Mounting of the pit safety components in the pit

DETAILED DESCRIPTION OF CONDUITS & WIRING REQUIRED

Main Power to Control Panel – conduit size: as appropriate for 230v (verify with manufacturer that this system will operate at 208vac), 3 phase 80 amp or 460v, 3phase 50 amp, or 600v, 3 phase 40 amp service. This conduit can enter the control panel from top, sides or bottom. Conduits can also enter an optional eight-inch high "base box" used to mount the control panel on the floor. A disconnect between the power source and the control panel should be provided near the control panel. The bottom of the control panel has a large opening that aligns with an opening in the top of the base box. This main power wiring and disconnect box are to be provided by the customer.

Control Panel to Rollersets– conduit size: 2-inch minimum. These conduits (one for left rollerset and the jumper from left to right sides) must run underground and must enter the roller pit as shown on the pit drawing. They usually enter the control panel from the bottom. These conduits each contain 4 motor power conductors (10 gage for 600v& 460v or 8 gage for 230v) that run from the motor starters in the control panel to the motors in the pit. This wire is to be provided by the customer. The conduits also each contain a 10-conductor, low-voltage (insulation rated at 600v) control cable about 3/8 inch OD. (LINK provides this cable with the brake tester).

Control Panel to Computer – conduit size: 3/4-inch minimum. This conduit runs from the main control panel to the computer. It contains several small gage data lines (provided by LINK). It usually enters the control panel on the side or the bottom via the base box and runs to an area near the computer where it exits and connects to the computer.

115 Volt AC Outlets– standard 115 VAC (single phase) outlets must be provided at the computer/printer area. This wiring is to be provided by the customer.

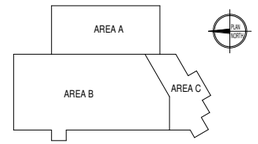
Pit Safety System – conduit size: 1/2 or 3/4 in. These conduits (two) run from the sensor brackets at each end of pit to roller set that is closest to control panel (usually the left side).

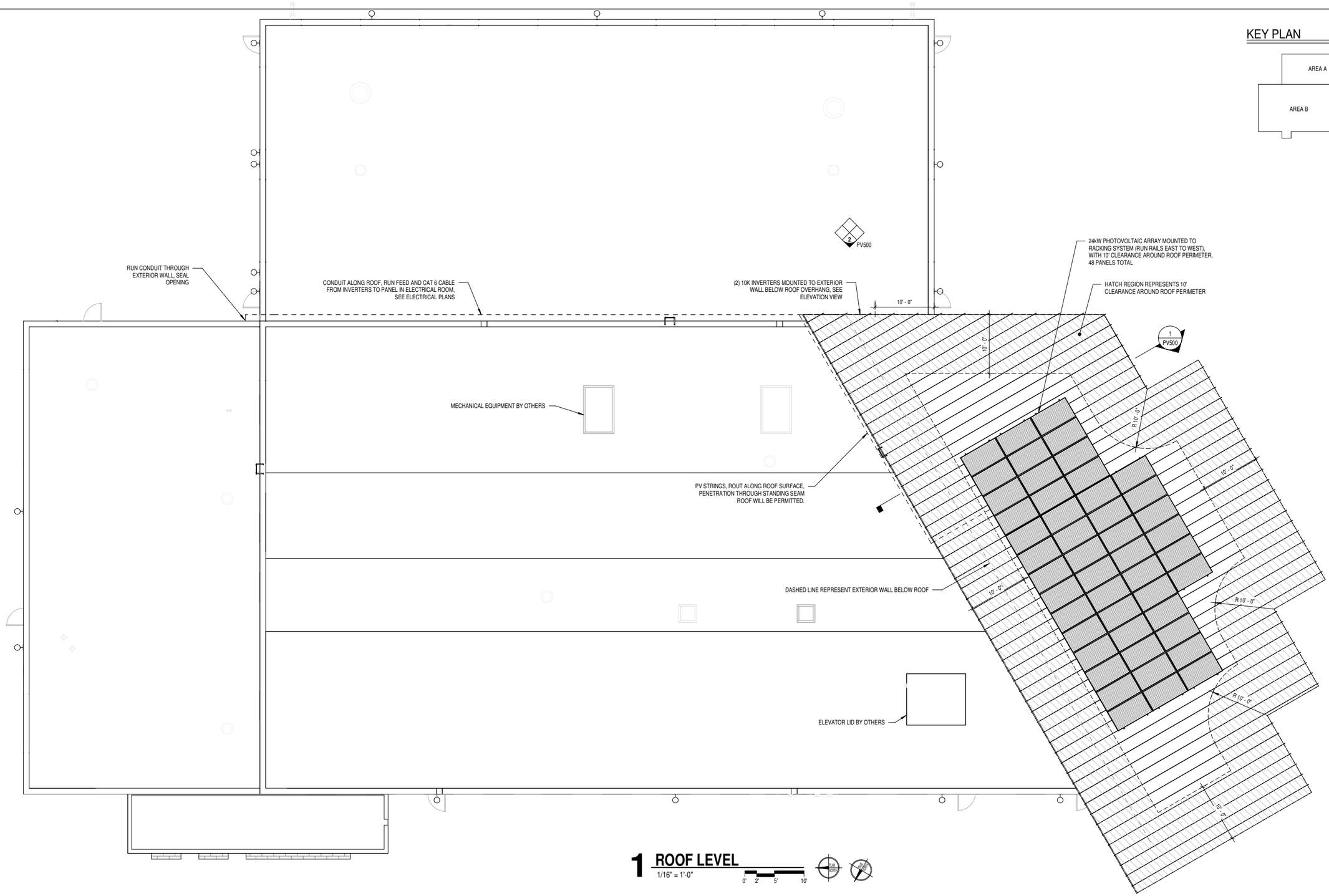
Notes:

1) All conduit work and high voltage (110 and 230, 460 or 600v) wiring to be provided by customer.
2) LINK to provide all low voltage data and control cables. Customer's electrician expected to pull these cables into conduits.
3) Excess motor wire and control cable, approximately 12", to be provided in pit to allow the rollersets to be pulled out of the pit.

2

KEY PLAN





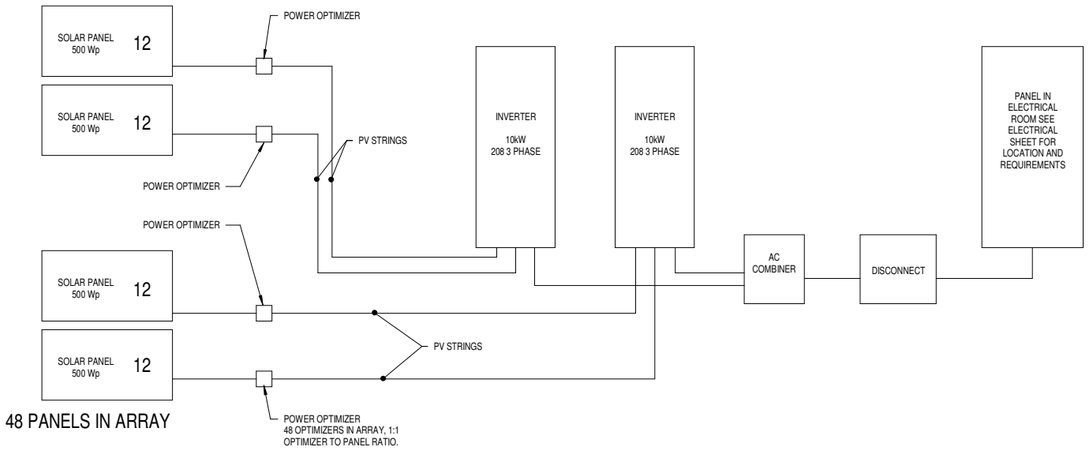
1 ROOF LEVEL
1/16" = 1'-0"
0' 2' 5' 10'

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			SOLAR ARRAY ROOF PLAN	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. PV300	338

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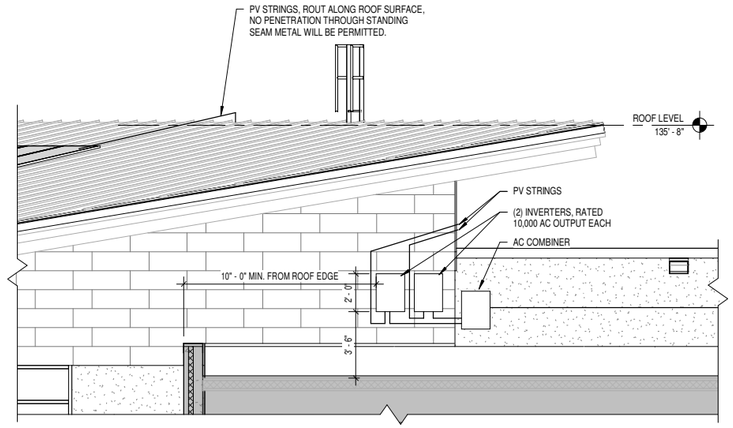
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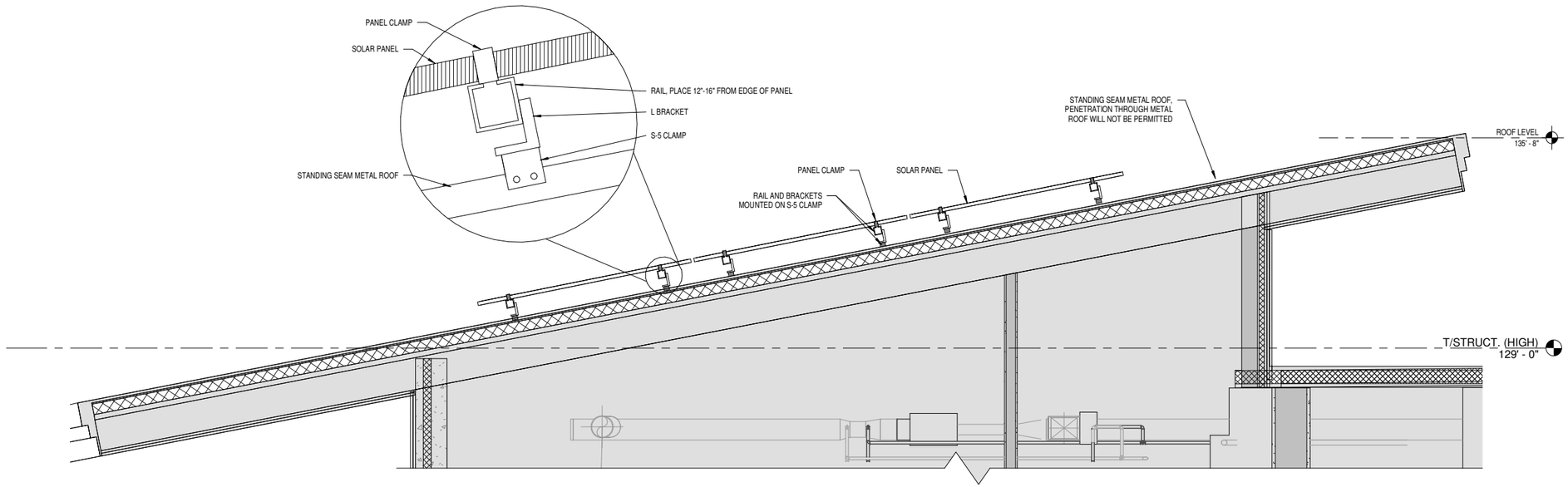
3 ONE-LINE POWER RISER DIAGRAM

N.T.S.



2 ELEVATION - INVERTERS

1/8" = 1'-0"



1 SOLAR ARRAY SECTION

1/4" = 1'-0"

PLANS PREPARED BY: CBS SQUARED, INC., CHIPPEWA FALLS, WI			SECTIONS & DETAILS	ISSUE DATE: 5/1/24	ISSUE FOR: FINAL
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	WRIGHTSTOWN SWEF & STATE PATROL POST FACILITY	SHEET NO. PV500	339

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PLOT DATE: 4/26/2024 10:20:36 AM

1130-44-74

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	11.000	11.000
0004	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0006	203.0216.S	Abatement of Asbestos Containing Material (project) 001. 1130-44-74	EACH	1.000	1.000
0008	204.0100	Removing Concrete Pavement	SY	2,100.000	2,100.000
0010	204.0110	Removing Asphaltic Surface	SY	4,075.000	4,075.000
0012	204.0150	Removing Curb & Gutter	LF	65.000	65.000
0014	204.0170	Removing Fence	LF	560.000	560.000
0016	204.0195	Removing Concrete Bases	EACH	10.000	10.000
0018	204.0225	Removing Septic Tanks	EACH	1.000	1.000
0020	204.0231	Removing Building (station) 001. STA 15+10'RE'	EACH	1.000	1.000
0022	204.0241	Site Clearance (parcel) 001. SWEF Site	EACH	1.000	1.000
0024	204.0265	Abandoning Wells	EACH	1.000	1.000
0026	204.9060.S	Removing (item description) 001. Street Light Assembly	EACH	10.000	10.000
0028	204.9060.S	Removing (item description) 002. Static Scale	EACH	1.000	1.000
0030	204.9090.S	Removing (item description) 001. Removing Electrical Conductors from Existing Conduit	LF	1,910.000	1,910.000
0032	204.9090.S	Removing (item description) 002. Removing or Abandoning Conduit	LF	1,815.000	1,815.000
0034	205.0100	Excavation Common	CY	10,000.000	10,000.000
0036	208.0100	Borrow	CY	16,143.000	16,143.000
0038	210.2100	Backfill Structure Type B	CY	3,300.000	3,300.000
0040	213.0100	Finishing Roadway (project) 001. 1130-44-74	EACH	1.000	1.000
0042	305.0110	Base Aggregate Dense 3/4-Inch	TON	300.000	300.000
0044	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	3,600.000	3,600.000
0046	311.0110	Breaker Run	TON	350.000	350.000
0048	455.0605	Tack Coat	GAL	350.000	350.000
0050	460.2000	Incentive Density HMA Pavement	DOL	690.000	690.000
0052	460.5223	HMA Pavement 3 LT 58-28 S	TON	625.000	625.000
0054	460.5224	HMA Pavement 4 LT 58-28 S	TON	490.000	490.000
0056	465.0315	Asphaltic Flumes	SY	15.000	15.000
0058	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	1.000	1.000
0060	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	1.000	1.000
0062	520.1030	Apron Endwalls for Culvert Pipe 30-Inch	EACH	2.000	2.000
0064	520.3330	Culvert Pipe Class III-A 30-Inch	LF	86.000	86.000
0066	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	126.000	126.000
0068	601.0600	Concrete Curb Pedestrian	LF	45.000	45.000
0070	602.0405	Concrete Sidewalk 4-Inch	SF	2,455.000	2,455.000
0072	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	10.000	10.000
0074	602.0810	Concrete Driveway 6-Inch	SY	285.000	285.000
0076	602.3010	Concrete Surface Drains	CY	0.900	0.900
0078	606.0100	Riprap Light	CY	10.000	10.000
0080	608.3012	Storm Sewer Pipe Class III-A 12-Inch	LF	56.000	56.000
0082	608.3015	Storm Sewer Pipe Class III-A 15-Inch	LF	34.000	34.000
0084	608.3018	Storm Sewer Pipe Class III-A 18-Inch	LF	38.000	38.000
0086	611.0612	Inlet Covers Type C	EACH	1.000	1.000
0088	611.0642	Inlet Covers Type MS	EACH	1.000	1.000
0090	611.3003	Inlets 3-FT Diameter	EACH	1.000	1.000
0092	611.3901	Inlets Median 1 Grate	EACH	1.000	1.000
0094	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	41.000	41.000
0096	612.0208	Pipe Underdrain Unperforated 8-Inch	LF	62.000	62.000
0098	612.0210	Pipe Underdrain Unperforated 10-Inch	LF	80.000	80.000

Estimate Of Quantities

1130-44-74

Line	Item	Item Description	Unit	Total	Qty
0100	612.0212	Pipe Underdrain Unperforated 12-Inch	LF	60.000	60.000
0102	616.0206	Fence Chain Link 6-FT	LF	425.000	425.000
0104	618.0100	Maintenance and Repair of Haul Roads (project) 001. 1130-44-74	EACH	1.000	1.000
0106	619.1000	Mobilization	EACH	1.000	1.000
0108	620.0200	Concrete Median Blunt Nose	SF	135.000	135.000
0110	624.0100	Water	MGAL	135.000	135.000
0112	625.0500	Salvaged Topsoil	SY	12,000.000	12,000.000
0114	627.0200	Mulching	SY	32,000.000	32,000.000
0116	628.1504	Silt Fence	LF	625.000	625.000
0118	628.1520	Silt Fence Maintenance	LF	7,500.000	7,500.000
0120	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0122	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0124	628.2006	Erosion Mat Urban Class I Type A	SY	7,500.000	7,500.000
0126	628.2008	Erosion Mat Urban Class I Type B	SY	1,000.000	1,000.000
0128	628.6510	Soil Stabilizer Type B	ACRE	3.000	3.000
0130	628.7005	Inlet Protection Type A	EACH	2.000	2.000
0132	628.7504	Temporary Ditch Checks	LF	260.000	260.000
0134	628.7555	Culvert Pipe Checks	EACH	20.000	20.000
0136	628.7560	Tracking Pads	EACH	3.000	3.000
0138	629.0210	Fertilizer Type B	CWT	12.000	12.000
0140	630.0110	Seeding Mixture No. 10	LB	275.000	275.000
0142	630.0130	Seeding Mixture No. 30	LB	125.000	125.000
0144	630.0140	Seeding Mixture No. 40	LB	15.000	15.000
0146	630.0200	Seeding Temporary	LB	250.000	250.000
0148	630.0300	Seeding Borrow Pit	LB	50.000	50.000
0150	630.0500	Seed Water	MGAL	500.000	500.000
0152	632.0201	Shrubs (species, root, size) 001. Everlow Yew, CG, #5	EACH	6.000	6.000
0154	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	6.000	6.000
0156	633.5200	Markers Culvert End	EACH	4.000	4.000
0158	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	1.000	1.000
0160	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	2.000	2.000
0162	637.2210	Signs Type II Reflective H	SF	17.930	17.930
0164	638.2102	Moving Signs Type II	EACH	1.000	1.000
0166	638.4000	Moving Small Sign Supports	EACH	1.000	1.000
0168	643.0300	Traffic Control Drums	DAY	19,000.000	19,000.000
0170	643.0420	Traffic Control Barricades Type III	DAY	4,500.000	4,500.000
0172	643.0705	Traffic Control Warning Lights Type A	DAY	6,800.000	6,800.000
0174	643.0900	Traffic Control Signs	DAY	7,000.000	7,000.000
0176	643.0910	Traffic Control Covering Signs Type I	EACH	3.000	3.000
0178	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000
0180	643.3165	Temporary Marking Line Paint 6-Inch	LF	600.000	600.000
0182	643.5000	Traffic Control	EACH	1.000	1.000
0184	645.0130	Geotextile Type R	SY	950.000	950.000
0186	646.1020	Marking Line Epoxy 4-Inch	LF	1,710.000	1,710.000
0188	646.5220	Marking Symbol Epoxy	EACH	1.000	1.000
0190	646.7020	Marking Diagonal Epoxy 6-Inch	LF	200.000	200.000
0192	646.8320	Marking Parking Stall Epoxy	LF	1,000.000	1,000.000
0194	650.4000	Construction Staking Storm Sewer	EACH	10.000	10.000
0196	650.4500	Construction Staking Subgrade	LF	3,431.000	3,431.000

1130-44-74

Line	Item	Item Description	Unit	Total	Qty
0198	650.5000	Construction Staking Base	LF	1,640.000	1,640.000
0200	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	791.000	791.000
0202	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
0204	650.8501	Construction Staking Electrical Installations (project) 001. 1130-44-74	EACH	1.000	1.000
0206	650.9000	Construction Staking Curb Ramps	EACH	1.000	1.000
0208	650.9500	Construction Staking Sidewalk (project) 001. 1130-44-74	EACH	1.000	1.000
0210	650.9911	Construction Staking Supplemental Control (project) 001. 1130-44-74	EACH	1.000	1.000
0212	650.9920	Construction Staking Slope Stakes	LF	3,431.000	3,431.000
0214	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,510.000	1,510.000
0216	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	60.000	60.000
0218	652.0240	Conduit Rigid Nonmetallic Schedule 40 4-Inch	LF	570.000	570.000
0220	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	6.000	6.000
0222	653.0905	Removing Pull Boxes	EACH	6.000	6.000
0224	654.0105	Concrete Bases Type 5	EACH	4.000	4.000
0226	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
0228	655.0610	Electrical Wire Lighting 12 AWG	LF	795.000	795.000
0230	655.0620	Electrical Wire Lighting 8 AWG	LF	4,622.000	4,622.000
0232	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	4.000	4.000
0234	657.0322	Poles Type 5-Aluminum	EACH	4.000	4.000
0236	657.0715	Luminaire Arms Truss Type 4 1/2-Inch Clamp 15-FT	EACH	5.000	5.000
0238	659.1120	Luminaires Utility LED B	EACH	5.000	5.000
0240	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0242	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	22.000	22.000
0244	671.0300	Fiber Optic Cable Marker	EACH	6.000	6.000
0246	673.0105	Communication Vault Type 1	EACH	3.000	3.000
0248	673.0200	Tracer Wire Marker Posts	EACH	6.000	6.000
0250	678.0012	Install Fiber Optic Cable Outdoor Plant 12-CT	LF	430.000	430.000
0252	690.0150	Sawing Asphalt	LF	485.000	485.000
0254	690.0250	Sawing Concrete	LF	45.000	45.000
0256	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,100.000	2,100.000
0258	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	5,760.000	5,760.000
0260	SPV.0035	Special 001. Washed Stone 3/4-Inch	CY	225.000	225.000
0262	SPV.0035	Special 002. Gray Granite Chips	CY	60.000	60.000
0264	SPV.0060	Special 001. Outlet Structure	EACH	1.000	1.000
0266	SPV.0060	Special 002. Secure Slide Type Class IV 18-FT Gate	EACH	2.000	2.000
0268	SPV.0060	Special 003. Trash Receptacles	EACH	5.000	5.000
0270	SPV.0060	Special 004. Fiber Optic Patch Panel	EACH	3.000	3.000
0272	SPV.0060	Special 005. Pipe Bollard	EACH	7.000	7.000
0274	SPV.0060	Special 006. Concrete Wheel Stops	EACH	2.000	2.000
0276	SPV.0060	Special 010. SWEF\Post Building, Electrical Service	EACH	1.000	1.000
0278	SPV.0060	Special 011. SWEF\Post Building, Natural Gas Service	EACH	1.000	1.000
0280	SPV.0060	Special 020. Sanitary Sewer Manhole w/Casting 5-FT Diameter	EACH	1.000	1.000
0282	SPV.0060	Special 021. Construction Staking Sanitary Sewer	EACH	1.000	1.000
0284	SPV.0060	Special 022. Sanitary Sewer Cleanout	EACH	2.000	2.000
0286	SPV.0060	Special 023. Sanitary Manhole 8-Inch Core	EACH	1.000	1.000
0288	SPV.0060	Special 030. Connect to Existing Water Main	EACH	1.000	1.000
0290	SPV.0060	Special 031. Gate Valve and Box 6-inch	EACH	2.000	2.000
0292	SPV.0060	Special 032. Gate Valve and Box 8 -inch	EACH	1.000	1.000
0294	SPV.0060	Special 033. Remove and Replace Hydrant	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0296	SPV.0060	Special 034. Furnish and Install Hydrant	EACH	1.000	1.000
0298	SPV.0060	Special 035. Construction Staking Water Main	EACH	1.000	1.000
0300	SPV.0060	Special 036. Maintain Water Service During Construction	EACH	1.000	1.000
0302	SPV.0060	Special 050. Lighted Bollard	EACH	4.000	4.000
0304	SPV.0060	Special 100. SWEF\Post Building, General Construction	EACH	1.000	1.000
0306	SPV.0060	Special 101. SWEF\Post Building, Plumbing	EACH	1.000	1.000
0308	SPV.0060	Special 102. SWEF\Post Building, Heating & Ventilation (HVAC)	EACH	1.000	1.000
0310	SPV.0060	Special 103. SWEF\Post Building, Electrical	EACH	1.000	1.000
0312	SPV.0060	Special 104. SWEF\Post Building, Generator	EACH	1.000	1.000
0314	SPV.0060	Special 105. SWEF\Post Building, Lightning and Grounding Protection	EACH	1.000	1.000
0316	SPV.0060	Special 106. SWEF\Post Building, Fire Suppression	EACH	1.000	1.000
0318	SPV.0060	Special 200. Main Communications Tower	EACH	1.000	1.000
0320	SPV.0060	Special 201. Auxiliary Communications Tower	EACH	1.000	1.000
0322	SPV.0060	Special 202. Main Communications Tower Generator	EACH	1.000	1.000
0324	SPV.0060	Special 203. Main Communications Tower Electrical Service	EACH	1.000	1.000
0326	SPV.0090	Special 001. Concrete Curb and Gutter 24-Inch Type A	LF	70.000	70.000
0328	SPV.0090	Special 002. Concrete Curb and Gutter 24-Inch Type D	LF	665.000	665.000
0330	SPV.0090	Special 003. 12-CT Fiber Optic Cable	LF	395.000	395.000
0332	SPV.0090	Special 004. Aluminum Landscape Edging	LF	175.000	175.000
0334	SPV.0090	Special 021. Sanitary Sewer Main 8-inch	LF	322.000	322.000
0336	SPV.0090	Special 022. Sanitary Sewer Service PVC 6-inch	LF	59.000	59.000
0338	SPV.0090	Special 023. Sanitary Sewer Lateral, 4-Inch	LF	95.000	95.000
0340	SPV.0090	Special 031. Water Main C900 6-inch	LF	59.000	59.000
0342	SPV.0090	Special 032. Water Main C900 8 -inch	LF	322.000	322.000
0344	SPV.0180	Special 001. Topsoil Stripping	SY	9,700.000	9,700.000
0346	SPV.0180	Special 002. Weed Barrier Fabric	SY	520.000	520.000
0348	SPV.0200	Special 020. Construct Outside Drop, 6-Inch	VF	7.000	7.000
0350	SPV.0200	Special 021. Construct Inside Drop, 8-Inch	VF	8.000	8.000

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MISC REMOVALS

CATEGORY	STATION	TO	STATION	LOCATION	201.0205 GRUBBING STA	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0150 REMOVING CURB & GUTTER LF	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	11+18'RE'	-	20+06'RE'	EXISTING RAMP	--	2,100	3,050	--	31	35
0010	52+75'F'	-	64+00'F'	SWEF SITE	11	--	--	--	--	--
0010				UNDISTRIBUTED	--	--	--	--	23	5
				CATEGORY 0010 TOTAL	11	2,100	3,050	--	54	40
0020	58+77'F'	-	61+62'F'	FRONTAGE ROAD	--	--	--	--	284	--
				CATEGORY 0020 TOTAL	--	--	--	--	284	--
0030	51+00'F'	-	53+50'F'	FRONTAGE ROAD	--	--	1,025	65	147	5
				CATEGORY 0030 TOTAL	--	--	1,025	65	147	5
				PROJECT TOTAL	11	2,100	4,075	65	485	45

REMOVING CULVERT

CATEGORY	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	REMARKS
0010	19+20'RE'	RIGHT	1	75 LF X 24-INCH CONCRETE CULVERT
		PROJECT TOTAL	1	

BUILDING REMOVAL

CATEGORY	LOCATION	204.9060.02 REMOVING (STATIC SCALE) EACH	203.0216.S ABATEMENT OF ASBESTOS CONTAINING MATERIAL (1130-44-74) EACH	204.0225 REMOVING SEPTIC TANKS EACH	204.0231.01 REMOVING BUILDING (15+10'RE') EACH	204.0241.01 SITE CLEARANCE (SWEF SITE) EACH	204.0265 ABANDONING WELLS EACH	659.5000.S LAMP, BALLAST, LED SWITCH DISPOSAL BY CONTRACTOR EACH	REMARKS
0010	SCALE BUILDING	1	1	1	1	1	1	22	SWEF
	PROJECT TOTAL	1	1	1	1	1	1	22	

LIGHTING REMOVALS

CATEGORY		ITEM	204.0195 REMOVING CONCRETE BASES EACH	204.9060.S.01 REMOVING STREET LIGHT ASSEMBLY EACH	653.0905 REMOVING PULL BOXES EACH
0010	EXLB	1	1	1	--
0010	EXLB	2	1	1	--
0010	EXLB	3	1	1	--
0010	EXLB	4	1	1	--
0010	EXLB	5	1	1	--
0010	EXLB	6	1	1	--
0010	EXLB	7	1	1	--
0010	EXLB	8	1	1	--
0010	EXLB	9	1	1	--
0010	EXLB	10	1	1	--
0010	EXPB	1	--	--	1
0010	EXPB	2	--	--	1
0010	EXPB	3	--	--	1
0010	EXPB	4	--	--	1
0010	EXPB	5	--	--	1
0010	EXPB	6	--	--	1
	PROJECT TOTAL		10	10	6

LIGHTING LINEAR REMOVALS

CATEGORY	FROM	-	TO	204.9090.S.01 REMOVING ELECTRICAL CONDUCTORS FROM EXISTING CONDUIT LF	204.9090.S.02 REMOVING OR ABANDONING CONDUIT LF
0010	EXLB4	-	EXLB3	165	165
0010	EXLB3	-	EXLB2	170	170
0010	EXLB2	-	EXLB1	115	115
0010	EXLB1	-	EXPB3	20	20
0010	EXPB3	-	EXPB2	55	55
0010	EXPB2	-	BUILDING	50	10
0010	BUILDING	-	EXPB1	50	10
0010	EXPB1	-	EXPB4	85	85
0010	EXPB4	-	EXLB7	20	20
0010	EXLB7	-	EXLB8	115	115
0010	EXLB8	-	EXPB5	55	55
0010	EXPB5	-	EXLB6	85	85
0010	EXLB6	-	EXLB5	315	315
0010	EXLB5	-	EXLB1	105	105
0010	EXLB1	-	EXPB1	75	75
0010	BUILDING	-	EXLB5	105	90
0010	EXPB5	-	EXLB9	115	115
0010	EXLB9	-	EXPB6	170	170
0010	EXPB6	-	EXLB10	40	40
	PROJECT TOTAL			1910	1815

EARTHWORK SUMMARY

CATEGORY	DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/ UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	STRUCTURE BACKFILL (6) FACTOR 1.00	UNEXPANDED FILL	EXPANDED FILL (7) FACTOR 1.25	MASS ORDINATE +/- (8)	WASTE (9)	(9)208.0100 BORROW	(10) 210.2100 STRUCTURE BACKFILL TYPE B	COMMENT
	DIVISION 1														
0010	T	50+10.7/51+36.7	Tower	--	507	--	--	507	2,012	2,515	-2,515	507	2,515	507	
			CAT 0010 TOTAL	507		--	--	507	2,012	2,515	-2,515	507	2,515	507	
0020	A	20+04.9/24+13.6	Access Road	1,336	--	--	1,336	--	1,847	2,309	-949	--	949	--	
0020	E	50+03.9/51+78.71	Employee Parking	--	98	--	--	215	2,096	2,620	-2,620	98	2,620	215	
0020	EL	1+09.2/3+62.5	Employee Parking	6	65	61	--	135	661	826	-768	126	768	135	
0020	EM	50+00.6/51+44.6	Employee Parking	--	--	56	--	--	618	773	-829	56	829	--	
0020	ER	10+00.0/12+38.6	Employee Parking	--	--	--	--	--	1,591	1,989	-1,989	--	1,989	--	
0020	F	58+76.5/61+62.6	Frontage Road	98	--	--	98	--	178	223	-125	--	125	--	
			CAT 0020 TOTAL	1,603		117	1,434	350	6,991	8,739	-7,278	280	7,278		SEE NOTE (10)
0030	BX	STA 0+00/5+85.2	Building Exterior	--	755	--	--	1,825	4,838	6,048	-6,048	755	6,048	1,825	
0030	D	10+00.0/10+45.0	Dumpster Pad	--	--	34	--	--	215	269	-303	34	303	--	
0030	P	50+04.9/53+05.5	Bottom of Pond	4,904	--	--	4,904	--	32	40	4,864	4,864	--	--	
0030	PB	60+05.9/68+72.6	Sides of Pond	1,470	--	--	1,470	--	314	393	1,078	1,078	--	--	
0030			UNDISTRIBUTED	--	761	--	--	--	--	--	--	--	--	618	
			CAT 0030 TOTAL	7,890		34	6,374	1,825	5,399	6,749	-409	6,731	6,350	2,793	
			PROJECT 1130-44-74 TOTAL	7,814	2,186	151	7,808	2,682	14,402	18,003	-10,202	7,518	16,144	3,300	
										18,003			11,926	1,724	

PROJECT TOTALS

TOTAL COMMON EXCAVATION 205.0100 (CY)	10,000
TOTAL BORROW 208.0100 (CY)	16,144
TOTAL STRUCTURAL BACKFILL TYPE B 210.2100 (CY)	3,300

FOR INFORMATION ONLY
ESTIMATED BUILDING FOUNDATION EXCAVATION
(INCIDENTAL TO "SWEF/POST BUILDING, GENERAL CONSTRUCTION")
2,815 CY EBS
5,000 CY STRUCTURE BACKFILL

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS ESTMATED, INCLUDED IN CUT BUT NOT SHOWN ON CROSS SECTIONS.
(3) EBS EXCAVATION TO BE BACKFILLED WITH STRUCTURE BACKFILL TYPE B, EBS WAS ASSUMED AS WASTE
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS ESTIMATED AND ASSUMED WASTE
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(6) STRUCTURE BACKFILL MEASURED AS CY IN PLACE
(7) EXPANDED FILL = UNEXPANDED FILL * 1.25
(8) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE PROJECT. + QUANTITY INDICATES AN EXCESS OF MATERIAL. - INDICATES A SHORTAGE OF MATERIAL .
(9) WASTE MAY BE UTILIZED AS BORROW IF DETERMINED TO BE SUITABLE BY ENGINEER. ALL AREAS INSIDE THE SLOPE INTERCEPT WILL EVENTUALLY BE INSIDE 1:1 OF PAVEMENT SUPPORT AREA FOR FINISHED SITE.
(10) STRUCTURE BACKFILL INCLUDES EBS BACKFILL, ALL STRUCTURE BACKFILL AROUND BUILDING PERIMETER IS CAT 0030

MISCELLANEOUS PROJECT ITEMS

CATEGORY		213.0100.01 FINISHING ROADWAY (1130-44-74) EACH	618.0100.01 MAINTENANCE AND REPAIR OF HAUL ROADS (1130-44-74) EACH	619.1000 MOBILIZATION EACH	SPV.0060.10 SWEF/POST BUILDING, ELECTRICAL SERVICE EACH	SPV.0060.11 SWEF\POST BUILDING, NATURAL GAS SERVICE EACH
0030	PROJECT 1130-44-74	1	1	1	1	1
	PROJECT TOTAL	1	1	1	1	1

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BASE AGGREGATE

CATEGORY	STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 *BASE AGGREGATE DENSE 1 1/4-INCH TON	311.0110 BREAKER RUN TON	624.0100 WATER MGAL	REMARKS
0020	STA 20++00.00'A' - STA 2443.27'A'	ACCESS ROAD	35	940	--	36	
0020	STA 50+03.82'E' - STA 51+78.71'E'	EMPLOYEE PARKING MAIN	--	1,070	--	41	
0020	STA 0+21.16'EL' - STA 3+69.19'EL'	EMPLOYEE PARKING LEFT EDGE	30	70	--	3	
0020	STA 50+00.00'EM' - STA 51+46.51'EM'	EMPLOYEE PARKING MIDDLE	--	330	--	13	
0020	STA 10+00.00'ER' - STA 12+46.58'ER'	EMPLOYEE PARKING RIGHT EDGE	--	50	--	2	
0020	STA 58+76.85'F' - STA 61+62.93'F'	FRONTAGE ROAD INTERSECTION	10	180	--	7	
		CATEGORY 0020 TOTAL	75	2,640	--	102	
0030	STA 51+00.00'F' - STA 53+50.00'F'	FRONTAGE ROAD	35	380	350	15	SANITARY AND WATER
0030	STA 10+00.00'D' - STA 10+45.00'D'	DUMPSTER PAD	--	80	--	3	
0030	STA 0+00.00'BX' - STA 5+85.21'BX'	BUILDING SIDEWALK	65	--	--	1	
0030	STA 50+00.00'P' - STA 53+02.00'P'	POND CHANNEL	60	--	--	1	
		UNDISTRIBUTED	65	160	--	13	
		CATEGORY 0030 TOTAL	225	620	350	33	
		PROJECT TOTAL	300	3,260	350	135	

* SEE "TOWER" TABLE FOR ADDITIONAL QUANTITIES

HOT MIX ASPHALT

CATEGORY	STATION - STATION	455.0605 TACK COAT GAL	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	REMARKS
0020	STA 20+00.00'A' - STA 24+43.27'A'	80	140	109	
0020	STA 50+03.82'E' - STA 51+78.71'E'	175	318	248	
0020	STA 58+76.85'F' - STA 61+62.93'F'	15	29	23	
	CATEGORY 0020 TOTAL	270	487	379	
0030	STA 51+00.00'F' - STA 53+50.00'F'	65	121	94	SANITARY AND WATER
0030	UNDISTRIBUTED	15	17	17	
	CATEGORY 0030 TOTAL	80	138	111	
	PROJECT TOTAL	350	625	490	

DRAINAGE PIPES

CATEGORY	FROM	-	TO	LOCATION	520.3330 CULVERT PIPE CLASS III-A 30-INCH LF	608.3012 STORM SEWER PIPE CLASS III-A 12-INCH LF	608.3015 STORM SEWER PIPE CLASS III-A 15-INCH LF	608.3018 STORM SEWER PIPE CLASS III-A 18-INCH LF	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	612.0208 PIPE UNDERDRAIN UNPERFORATED 8-INCH LF	612.0210 PIPE UNDERDRAIN UNPERFORATED 10-INCH LF	612.0212 12INCH LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	THICKNESS (IN)	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT
0010	100.1	-	100.0	POND	--	--	--	38	--	--	--	--	--	--	673.75	673.65	0.0026
				CAT 0010 TOTAL	--	--	--	38	--	--	--	--	--	--			
0020	4.1	-	4.0	ACCESS	--	56	--	--	--	--	--	--	--	--	685.65	685.24	0.0076
0020	21.2	-	21.1	ACCESS	86	--	--	--	--	--	--	--	1	0.079	674.75	674.50	0.0029
				CAT 0020 TOTAL	86	56	0	0	0	0	0	0	1				
0030	DOWNSPT	-	1.1	BUILDING	--	--	--	--	--	--	80	60	-	-	688.00	686.83	0.0308
0030	1.1	-	1.0	BUILDING	--	--	34	--	--	--	--	--	-	-	688.00	686.83	0.0308
0030	2.1	-	2.0	BUILDING	--	--	--	--	41	--	--	--	--	--	691.00	687.00	0.0981
0030	3.0	-	3.1	BUILDING	--	--	--	--	--	62	--	--	--	--	690.50	688.00	0.0397
				CAT 0020 TOTAL	0	0	34	0	41	62	80	60	0				
				PROJECT TOTAL	86	56	34	38	41	62	80	60	1	24			

*NON-BID ITEM: FOR INFORMATION ONLY

CONCRETE ITEMS

CATEGORY	STATION - STATION	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	601.0600 CONCRETE CURB PEDESTRIAN LF	602.0810 CONCRETE DRIVEWAY 6-INCH SY	602.3010 CONCRETE SURFACE DRAINS CY	620.0200 CONCRETE MEDIAN BLUNT NOSE SF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	SPV.0090.001 24-INCH CURB & GUTTER TYPE A LF	SPV.0090.002 24-INCH CURB & GUTTER TYPE D LF	REMARKS
0020	STA 20+00.00'A' - STA 24+43.27'A'	126	160	--	--	35	0.9	135	306	--	180	
0020	STA 50+03.82'E' - STA 51+78.71'E'	--	--	--	--	--	--	--	--	--	--	
0020	STA 0+21.16'EL' - STA 3+69.19'EL'	--	890	10	--	--	--	--	157	--	157	
0020	STA 50+00.00'EM' - STA 51+46.51'EM'	--	--	--	--	--	--	--	--	--	--	
0020	STA 10+00.00'ER' - STA 12+46.58'ER'	--	--	--	--	--	--	--	263	--	263	
0020	STA 51+00.00'F' - STA 53+50.00'F'	--	--	--	--	--	--	--	65	--	65	SANITARY AND WATER
	CAT 0020 TOTAL	126	1,050	10	--	35	0.9	135	791	--	665	
0030	STA 0+00.00'B' - STA 7+02.68'B'	--	1,405	--	--	--	--	--	--	--	--	
0030	STA 10+00.00'D' - STA 10+35.00'D'	--	--	--	45	45	--	--	--	70	--	
0030	50+02.01'P' - 53+05.52'P'	--	--	--	--	205	--	--	--	--	--	POND FLOWLINE
	CAT 0030 TOTAL	--	1,405	--	45	250	--	--	--	70	--	
	PROJECT TOTAL	126	2,455	10	45	285	0.9	135	791	70	665	

END PROTECTION

CATEGORY	LOCATION	465.0315 ASPHALTIC FLUMES SY	606.0100 RIPRAP LIGHT CY	628.7005 INLET PROTECTION TYPE A EACH	628.7555 CULVERT PIPE CHECKS EACH	645.0130 * GEOTEXTILE TYPE R SY
0030	ACCESS ROAD	15	10	2	20	30
	PROJECT TOTAL	15	10	2	20	30

*SEE "TOWERS" TABLE FOR ADDITIONAL QUANTITIES

DRAINAGE STRUCTURES

CATEGORY	STRUCTURE	STATION	OFFSET*	LOCATION	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH EACH	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	520.1030 APRON ENDWALLS FOR CULVERT PIPE 30-INCH EACH	611.0612 INLET COVERS TYPE C EACH	611.0642 INLET COVERS TYPE MS EACH	611.3003 INLETS 3-FT DIAMETER EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	633.5200 MARKERS CULVERT END EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.001 OUTLET STRUCTURE EACH	RIM** ELEVATION	INVERT*** ELEVATION	DEPTH**** FT
0010	100.0	53+40.7	21.5' RT	'P	--	1	--	--	--	--	--	1	1	--	--	673.65	--
0010	100.1	53+10.1	0.2' LT	'P	--	--	--	--	--	--	--	--	1	1	676.35	673.75	2.81
			CAT 0010 TOTAL		0	1	0	0	0	0	0	1	2	1			
0020	4.0	24+12.0	32.9'RT	'A'	1	--	--	--	--	--	--	1	1	--	--	685.24	--
0020	4.1	24+27.3	18.5'LT	'A'	--	--	--	--	1	--	1	--	1	--	690.06	685.65	4.58
0020	21.1	23+51.8	39.2'LT	'A'	--	--	1	--	--	--	--	1	--	--	--	674.50	--
0020	21.2	23+23.0	39.1'RT	'A'	--	--	1	--	--	--	--	1	--	--	--	674.75	--
			CAT 0020 TOTAL		1	0	2	0	1	0	1	3	2	0			
0030	1.0	49+83	319.1' LT	'E'	--	--	--	--	--	--	--	--	1	--	--	686.80	--
0030	1.1	50+11.3	294.2'LT	'E'	--	--	--	1	--	1	--	--	1	--	693.30	688.00	4.41
0030	2.0	49+42	120.6' LT	'E'	--	--	--	--	--	--	--	--	1	--	--	687.00	--
0030	2.1	49+38	80.0' LT	'E'	--	--	--	--	--	--	--	--	1	--	--	691.00	--
0030	3.0	49+60	76.1' LT	'E'	--	--	--	--	--	--	--	--	1	--	--	688.00	--
0030	3.1	50+22	80.5' LT	'E'	--	--	--	--	--	--	--	--	1	--	--	690.45	--
			CAT 0030 TOTAL		0	0	0	1	0	1	0	0	6	0			
			PROJECT TOTAL		1	1	2	1	1	1	1	4	10	1			

REMARKS:
*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
**RIM ELEV IS AT THE FLOW LINE OF THE INLET COVER

EROSION CONTROL ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.6510 SOIL STABILIZER TYPE B ACRE	628.7504 TEMPORARY DITCH CHECKS LF	629.0210 FERTILIZER TYPE B CWT	630.0110 SEEDING MIXTURE NO. 10 LB	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	630.0300 SEEDING BORROW PIT LB	630.0500 SEED WATER MGAL	SPV.0180.001 TOPSOIL STRIPPING SY
0030	STA 20+00.00'A' -		STA 24+43.27'A'	ACCESS ROAD	1,570	3,220	--	--	--	556	0.3	96	1.4	--	64	7	18	--	50	--
0030	STA 0+00.00'BX' -		STA 5+85.21'BX'	BUILDING FOUNDATION	160	3,670	--	--	--	--	0.7	75	2.1	--	--	--	91	--	75	4,800
0030	STA 10+00.00'D' -		STA 10+45.00'D'	DUMPSTER PAD	--	110	--	--	--	--	--	--	0.1	--	--	--	4	--	3	--
0030	STA 50+03.82'E' -		STA 51+78.71'E'	EMPLOYEE PARKING	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3,100
0030	STA 0+21.16'EL' -		STA 3+69.19'EL'	EMPLOYEE PARKING LT	--	570	500	6,000	--	150	0.1	24	0.7	--	27	--	16	--	26	--
0030	STA 10+00.00'ER' -		STA 11+31.7'ER'	EMPLOYEE PARKING RT	120	840	--	--	--	--	0.1	--	0.5	--	--	5	17	--	16	--
0030	STA 58+76.50'F' -		STA 61+62.50'F'	FRONTAGE ROAD	190	380	--	--	--	150	--	16	0.1	--	9	--	--	--	4	--
0030	STA 50+00.00'P' -		STA 53+02.00'P'	POND BOTTOM	5,730	11,460	--	--	5,800	--	1.2	--	3.6	155	--	--	--	--	129	--
0030	STA 60+00.00'PB' -		STA 68+54.89'PB'	POND SIDES	2,680	5,360	--	--	--	--	0.6	--	1.7	72	--	--	--	--	60	--
0030	STA 50+42.91'T' -		STA 51+51.15'T'	TOWER PAD	--	650	--	--	--	--	0.1	--	0.4	--	--	--	18	--	15	1,800
0030				UNDISTRIBUTED	1,550	5,740	125	1,500	1,700	144	0.1	49	1.4	48	25	3	86	50	123	--
				PROJECT TOTAL	12,000	32,000	625	7,500	7,500	1,000	3.0	260	12.0	275	125	15	250	50	500	9,700

SIGNING

CATEGORY	SIGN NUMBER	LOCATION	SIGN CODE	SIGN SIZE	WIDTH X HEIGHT	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
0020	1-1	EMPLOYEE PARKING	R7-8A	2S	18X24	1	--	1.50	--	--	RESERVED PARKING HANDICAPPED, THIS SPACE
0030	2-1M	KERRIGAN RD	R1-1		30X30	--	--	--	1	1	STOP SIGN
0020	3-1	ACCESS RD	R1-1	2S	30X30	--	1	5.18	--	--	STOP SIGN
0020	3-2	ACCESS RD	R5-11	2S	30X24	--	--	5.00	--	--	AUTHORIZED VEHICLES ONLY
0020	3-3	ACCESS RD	R5-1	2S	30X30	--	1	6.25	--	--	DO NOT ENTER
				PROJECT TOTAL		1	2	17.93	1	1	

CATEGORY		628.7560 TRACKING PADS EACH	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0030	**PROJECT 1130-44-74**	**3**	3	3
	PROJECT TOTAL	3	3	3

3

TRAFFIC CONTROL

CATEGORY	LOCATION	DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.0910 +TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH LF	643.5000 TRAFFIC CONTROL EACH	REMARKS
0010	IH 41/E. FRONTAGE ROAD	321	13,482	3,210	4,815	4,815	3	7	600	--	RAMP CLOSURE/SHOULDER CLOSURE
0010	E. FRONTAGE ROAD	90	1,800	--	--	450	--	--	--	--	SHOULDER CLOSURE
0010	E. FRONTAGE ROAD	21	--	378	567	315	--	21	--	--	ROAD CLOSURE
0010	UNDISTRIBUTED	0	3,718	912	1,418	1,420	--	--	--	1	ROAD CLOSURE
	PROJECT TOTAL		19,000	4,500	6,800	7,000	3 + SINGLE CYCLE	28	600	1	

PLANTING

CATEGORY	LOCATION	632.0201.01 SHRUBS (EVERLOW YEW, CG, #5) EACH	632.9101 LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES EACH	SPV.0035.002 GRAY GRANITE CHIPS CY	SPV.0060.003 TRASH RECEPTACLES EACH	SPV.0090.004 ALUMINUM LANDSCAPE EDGING LF	SPV.0180.002 WEED BARRIER FABRIC SY
0010	WRIGHTSTOWN SWEF/POST BUILDING	6	6	60	5	175	520
	PROJECT TOTAL	6	6	60	5	175	520

PAVEMENT MARKING

CATEGORY	STATION - STATION	646.1020 MARKING LINE EPOXY 4-INCH LF	646.5220 MARKING SYMBOL EPOXY EACH	646.7020 MARKING DIAGONAL EPOXY 6-INCH LF	646.8320 MARKING PARKING STALL EPOXY LF	REMARKS
0020	STA 20+00.00'A' - STA 24+43.27'A'	760	--	--	--	SOLID CENTER LINE
0020	STA 50+03.82'E' - STA 51+78.71'E'	--	1	200	1,000	EMPLOYEE PARKING
0020	STA 51+00.00'F' - STA 53+50.00'F'	650	--	--	--	SANITARY & WATER REPLACEMENT
0020	STA 58+76.85'F' - STA 61+62.93'F'	300	--	--	--	ACCESS ROAD CONNECTION
	PROJECT TOTAL	1,710	1	200	1,000	

LIGHTING CONTROL

CATEGORY	CABINET NUMBER	STATION	OFFSET	R/L	650.8501.01 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (1130-44-74) EACH	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30 EACH	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH
0020	CB1800	49+92'E'	48.0'	LT	1	1	1
	PROJECT TOTAL				1	1	1

3

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CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.9000 CURB RAMPS EACH	650.9500.01 SIDEWALK (1130-44-74) EACH	650.9911.01 SUPPLEMENTAL CONTROL (1130-44-74) EACH	650.9920 SLOPE STAKES LF
0010	50+02	-	53+06	P	304	--	--	--	--	304
0010	60+00	-	68+55	PB	856	--	--	--	--	856
			CAT 0010 TOTAL		1,160	--	--	--	--	1,160
0020	20+29.51	-	24+38	A	409	409	--	--	--	409
0020	50+04	-	51+79	E	175	175	--	--	--	175
0020	0+96	-	3+63	EL	267	267	1	--	--	267
0020	50+01	-	51+45	EM	145	145	--	--	--	145
0020	10+00	-	12+30	ER	231	231	--	--	--	231
0020	58+77	-	61+63	F	287	287	--	--	--	287
0020	50+11	-	51+37	T	126	126	--	--	--	126
			CAT 0020 TOTAL		1,640	1,640	1	--	--	1,640
0030	10+00	-	10+45	D	45	--	--	--	--	45
0030	0+00	-	5+85	BX	586	--	--	--	--	586
0030	PROJECT 1130-44-74				--	--	--	1	1	--
			CAT 0030 TOTAL		631	--	--	1	1	631
			PROJECT TOTAL		3,431	1,640	1	1	1	3,431

CABLE

CATEGORY	FROM STRUCT	TO STRUCT	FROM STATION	FROM OFFSET	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 *2-INCH LF	652.0240 4-INCH LF	671.0300 FIBER OPTIC CABLE MARKER EACH	673.0105 COMMUNICATION VAULT TYPE 1 EACH	673.0200 TRACER WIRE MARKER POSTS EACH	678.0012 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT (12-CT) LF	SPV.0060.004 **FIBER** OPTIC PATCH PANEL EACH	SPV.0090.003 **12-CT** FIBER OPTIC CABLE LF	REMARKS
0010	V01	EX	51+17'E'	166.7' LT	185	--	2	1	2	285	--	--	V01 TO EXISTING VAULT BY SCALE BLDG
0010	V00	V01	50+72'E'	164.6'LT	45	--	2	1	2	145	--	--	BUILDING TO V01
0010	V02	BLDG	51+07'E'	41.9' RT	135	--	2	1	2	--	1	235	TELCOM ROOM TO V02
0010	V02	TWR	51+07'E'	41.9' RT	60	--	--	--	--	--	2	160	TOWER SHELTER TO V02
0010	BLDG	TWR			--	570	--	--	--	--	--	--	TELCOM ROOM TO TOWER SHELTER
			PROJECT TOTAL		425	570	6	3	6	430	3	395	

*** ADDITIONAL QUANTITIES LOCATED IN "LIGHTING CONDUIT AND WIRE" TABLE**

STREET LIGHTS

CATEGORY	LIGHT NUMBER		STATION	OFFSET	R/L	654.0105 CONCRETE BASES TYPE 5 EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0715 LUMINAIRE ARMS TRUSS TYPE 4 1//2-INCH CLAMP 15-FT EACH	659.1120 LUMINAIRES UTILITY LED B EACH	SPV.0060.050 LIGHTED BOLLARD EACH	655.0610 WIRE LIGHTING 12AWG LF
0020	SL	1800	50+36'E'	25.0'	RT	1	1	1	1	1	--	159
0020	SL	1801	51+45'E'	4.9'	RT	1	1	1	1	1	--	159
0020	SL	1802	21+27'A'	13.7'	RT	1	1	1	1	1	--	159
0020	SL	1803	23+95'A'	0.0'	RT	1	1	1	2	2	--	318
0020	BLD	1800	50+87'E'	130.3'	LT	--	--	--	--	--	1	--
0020	BLD	1801	50+87'E'	112.8'	LT	--	--	--	--	--	1	--
0020	BLD	1802	50+84'E'	97.7'	LT	--	--	--	--	--	1	--
0020	BLD	1803	50+72'E'	87.5'	LT	--	--	--	--	--	1	--
			PROJECT TOTAL			4	4	4	5	5	4	795

LIGHTING CONDUIT AND WIRE

	FROM	-	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 *2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	REMARKS
CATEGORY 0010							
0020	CB1800	-	PB1800	--	10	--	PULL WIRE ONLY
0020	CB1800	-	PB1800	--	10	--	PULL WIRE ONLY
0020	CB1800	-	PB1800	--	10	--	PULL WIRE ONLY
0020	CB1800	-	PB1801	--	10	--	PULL WIRE ONLY
0020	CB1800	-	PB1801	--	10	--	PULL WIRE ONLY
0020	CB1800	-	PB1801	--	10	--	PULL WIRE ONLY
0020	PB1801	-	PB1802	45	--	--	PULL WIRE ONLY
0020	PB1801	-	PB1802	45	--	366	--
0020	PB1802	-	SL1800	50	--	378	--
0020	SL1800	-	PB1803	115	--	768	--
0020	PB1802	-	PB1803	160	--	--	PULL WIRE ONLY
0020	PB1803	-	SL1801	25	--	380	--
0020	PB1803	-	STUB	40	--	--	PULL WIRE ONLY
0020	PB1803	-	STUB	40	--	--	PULL WIRE ONLY
0020	PB1803	-	SL1802	105	--	708	--
0020	SL1802	-	PB1804	180	--	1,158	--
0020	PB1804	-	STUB	50	--	--	PULL WIRE ONLY
0020	PB1804	-	PB1805	90	--	636	--
0020	PB1805	-	SL1803	25	--	228	--
0020	BLD1803	-	BLD1802	20	--	--	PULL WIRE ONLY
0020	BLD1802	-	BLD1801	20	--	--	PULL WIRE ONLY
0020	BLD1801	-	BLD1800	20	--	--	PULL WIRE ONLY
0020	BLD1800	-	STUB	55	--	--	PULL WIRE ONLY
	PROJECT TOTAL			1085	60	4622	

* ADDITIONAL QUANTITIES FOUND IN "CABLE" TABLE

LIGHTING PULLBOXES

	PULLBOX NUMBER	STATION	OFFSET	SIDE	653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH
CATEGORY					
0020	PB1800	49+90'E'	41.0'	LT	1
0020	PB1801	49+94'E'	41.1'	LT	1
0020	PB1802	49+99'E'	1.4'	RT	1
0020	PB1803	20+24'A'	14.0'	RT	1
0020	PB1804	22+90'A'	17.2'	RT	1
0020	PB1805	23+94'A'	24.7'	RT	1
	PROJECT TOTAL				6

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SANITARY

ALL ITEMS IN THIS TABLE ARE CAT 0030

LOCATION	SPV.0060.020 SANITARY SEWER MANHOLE W/CASTING 5-FT DIAMETER EACH	SPV.0060.021 CONSTRUCTION STAKING SANITARY SEWER EACH	SPV.0060.022 SANITARY SEWER CLEANOUT EACH	SPV.0060.023 SANITARY MANHOLE 8-INCH CORE EACH	SPV.0090.021 SANITARY SEWER MAIN 8-INCH LF	SPV.0090.022 SANITARY SEWER SERVICE PVC 6-INCH LF	SPV.0090.023 SANITARY SEWER LATERAL, 4-INCH LF	SPV.200.020 CONSTRUCT INSIDE DROP, 6-INCH VF	SPV.0200.021 CONSTRUCT INSIDE DROP, 8-INCH VF
WRIGHTSTOWN SWEF/POST	1	1	2	1	322	59	95	7	8
PROJECT 1130-44-74 TOTAL	1	1	2	1	322	59	95	7	8

WATER

ALL ITEMS IN THIS TABLE ARE CAT 0030

LOCATION	SPV.0060.030 CONNECT TO EXISTING WATER MAIN EACH	SPV.0060.031 GATE VALVE AND BOX 6-INCH EACH	SPV.0060.032 GATE VALVE AND BOX 8-INCH EACH	SPV.0060.033 REMOVE AND REPLACE HYDRANT EACH	SPV.0060.034 FURNISH AND INSTALL HYDRANT EACH	SPV.0060.035 CONSTRUCTION STAKING WATER MAIN EACH	SPV.0060.036 MAINTAIN WATER SERVICE DURING CONSTRUCTION EACH	SPV.0090.031 WATER MAIN C900 6-INCH LF	SPV.0090.032 WATER MAIN C900 8-INCH LF
WRIGHTSTOWN SWEF/POST	1	2	1	1	1	1	1	59	322
PROJECT 1130-44-74 TOTAL	1	2	1	1	1	1	1	59	322

*WATER MAIN FITTINGS

FITTING LOCATION	* FITTING TYPE
STA 0+49.0, 24.7'LT	6-INCH 45 DEG. HORIZONTAL BEND
STA 0+57.0, 11.6'LT	6-INCH 90 DEG. HYDRANT LEAD BEND
STA 0+57.0, 16.0'LT	8-INCH x 6-INCH REDUCER
STA 0+58.5, 14.1'LT	8-INCH x 6-INCH TEE
STA 0+62.8, 10.6'LT	8-INCH 45 DEG. HORIZONTAL BEND
STA 3+40.7, 10.0'LT	8-INCH 45 DEG. HORIZONTAL BEND
STA 3+68.5, 34.0'LT	8-INCH x 6-INCH TEE
STA 3+64.5, 38.5'LT	6-INCH 90 DEG. HYDRANT LEAD BEND

*FITTINGS INCIDENTAL TO WATER MAIN CONSTRUCTION

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FENCING & BOLLARDS

STATION	TO	STATION	LOCATION	CAT 0010 204.0170 REMOVING FENCE LF	CAT 0010 616.0206 FENCE CHAIN LINK 6-FT LF	CAT 0010 SPV.0060.002 SECURE SLIDE TYPE CLASS IV 18-FT GATE EACH	CAT 0010 SPV.0060.005 PIPE BOLLARD EACH	CAT 0020 SPV.0060.006 CONCRETE WHEEL STOP EACH	REMARKS
59+23'F'	-	63+68'F'	E. FRONTAGE ROAD	435	425	2	--	--	
52+50'F'	-	54+00'F'	E. FRONTAGE ROAD	125	--	--	--	--	FOR UTILITY WORK
10+12'EL'	-	10+60'ER'	EMPLOYEE PKG	--	--	--	--	2	
10+12'ER'	-	10+60'ER'	EMPLOYEE PKG	--	--	--	5	--	ELECT. TRANS
12+05'ER'	-	12+15'ER'	EMPLOYEE PKG	--	--	--	2	--	ELECT. TRANS
			PROJECT TOTAL	560	425	2	7	2	

SWEF/POST BUILDING

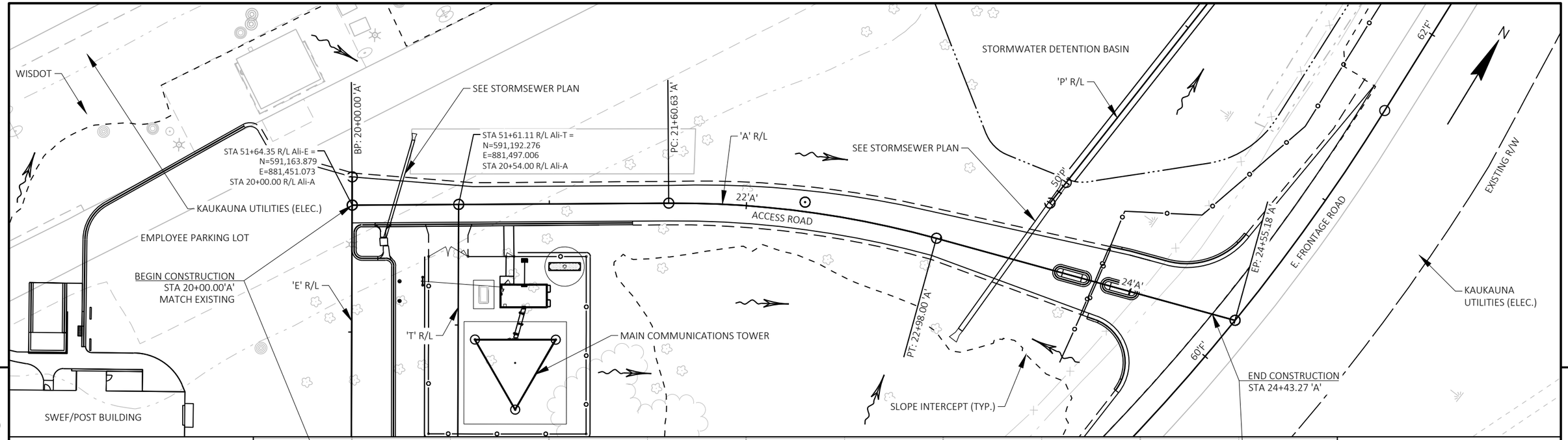
CATEGORY	LOCATION	SPV.0060.100 GENERAL CONSTRUCTION EACH	SPV.0060.101 PLUMBING EACH	SPV.0060.102 HEATING, VENTILATION AND AIR CONDITIONING EACH	SPV.0060.103 ELECTRICAL EACH	SPV.0060.104 GENERATOR EACH	SPV.0060.105 LIGHTNING AND GROUNDING PROTECTION EACH	SPV.0060.106 FIRE SURPRESSION EACH
0030	WRIGHTSTOWN SWEF/POST BUILDING	1	1	1	1	1	1	1
	PROJECT TOTAL	1	1	1	1	1	1	1

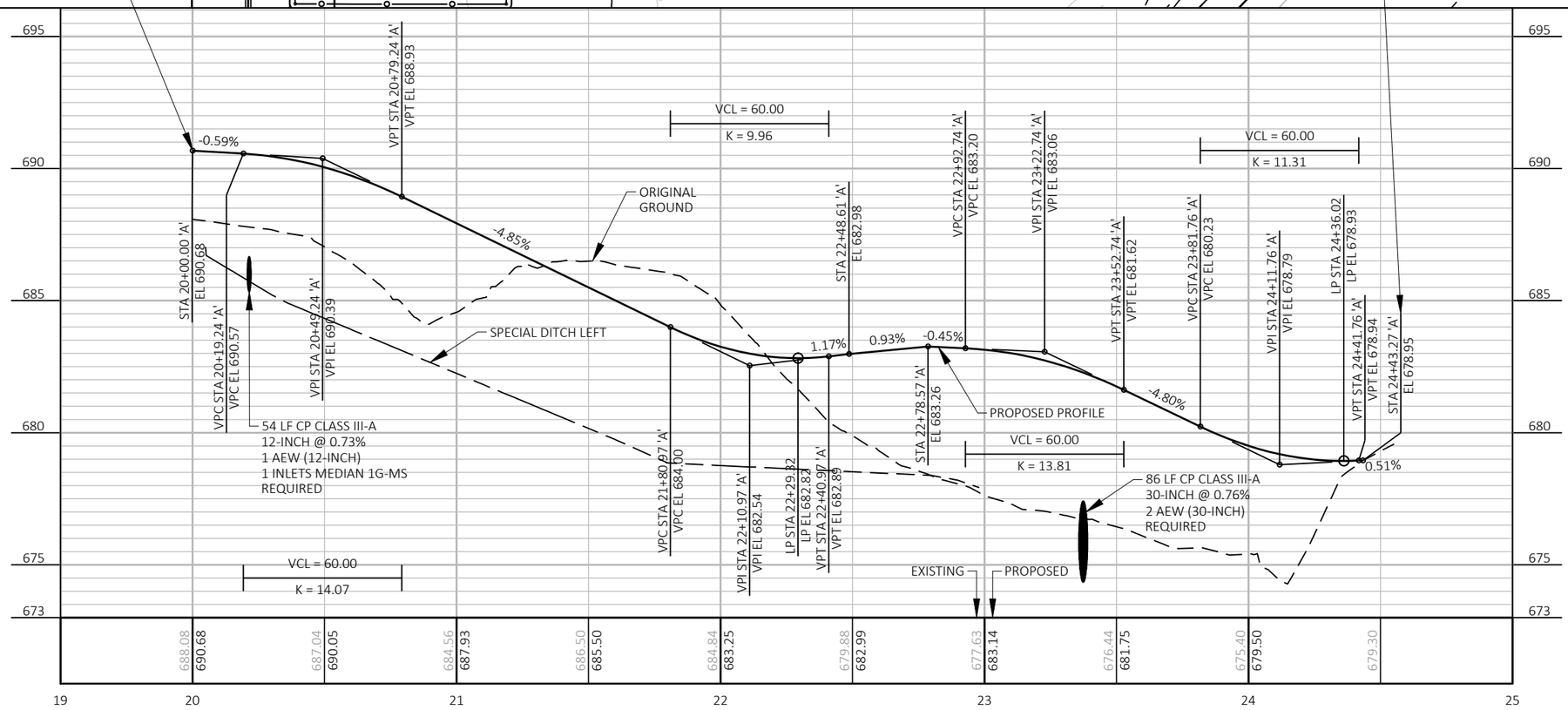
TOWERS

LOCATION	CAT 0010 *305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	CAT 0010 SPV.0060.200 MAIN COMMUNICATIONS TOWER EACH	CAT 0020 SPV.0060.201 AUXILIARY COMMUNICATIONS TOWER EACH	CAT 0010 SPV.0060.202 MAIN COMMUNICATIONS TOWER GENERATOR EACH	CAT 0010 SPV.0060.203 MAIN COMMUNICATIONS TOWER ELECTRICAL SERVICE EACH	CAT 0010 SPV.0035.001 WASHED STONE 3/4-INCH CY	CAT 0010 645.0130 +GEOTEXTILE TYPE R SY
WRIGHTSTOWN	340	1	1	1	1	225	920
	340	1	1	1	1	225	920

* SEE BASE AGGREGATE TABLE FOR ADDITIONAL QUANTITY

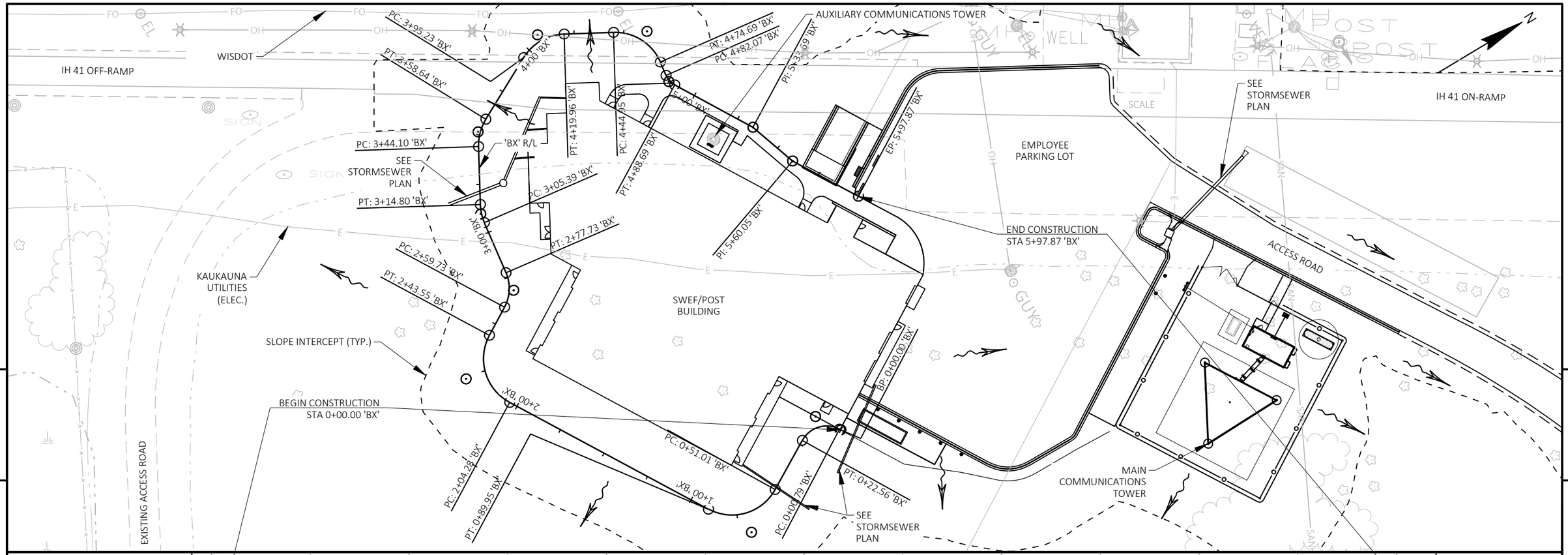
+ SEE "END PROTECTION" FOR ADDITIONAL QUANTIY





PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: R/L 'A' (ACCESS ROAD)	SHEET 355	E

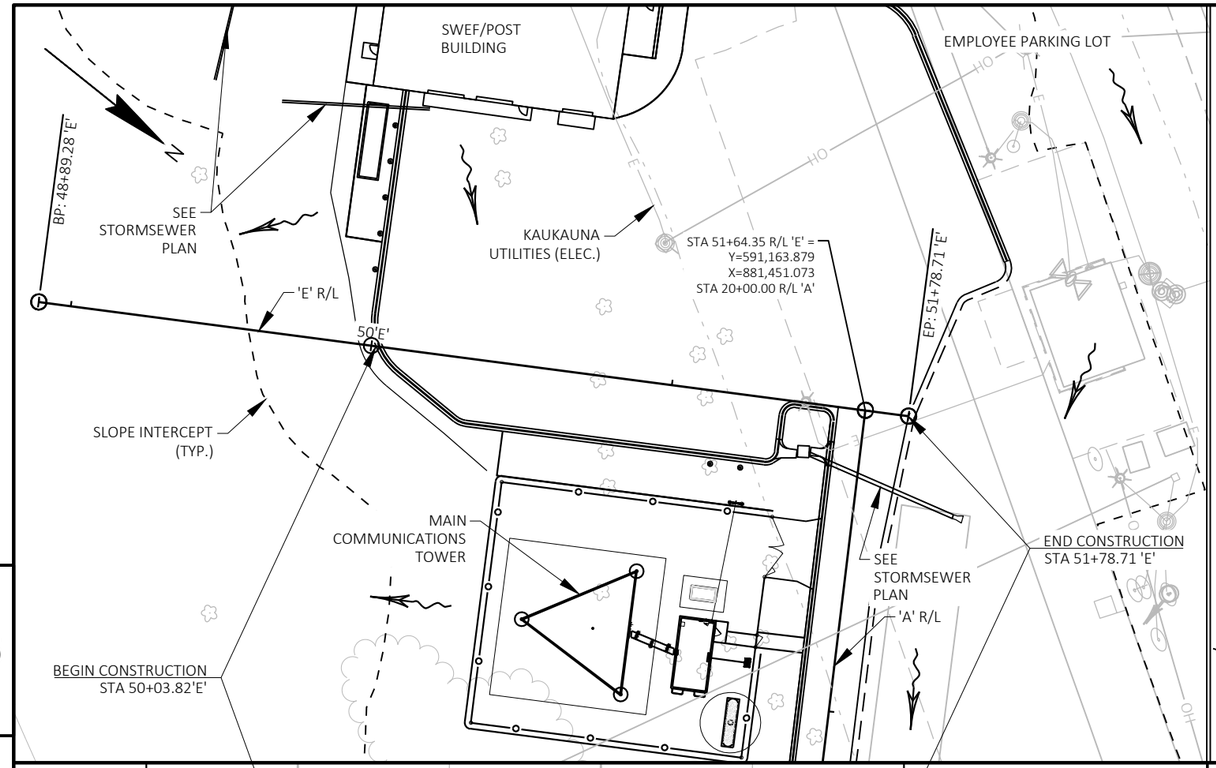
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LAYOUT NAME - 01
PLOT DATE : 4/26/2024 8:19 AM
PLOT BY : JON BLOMQUIST
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

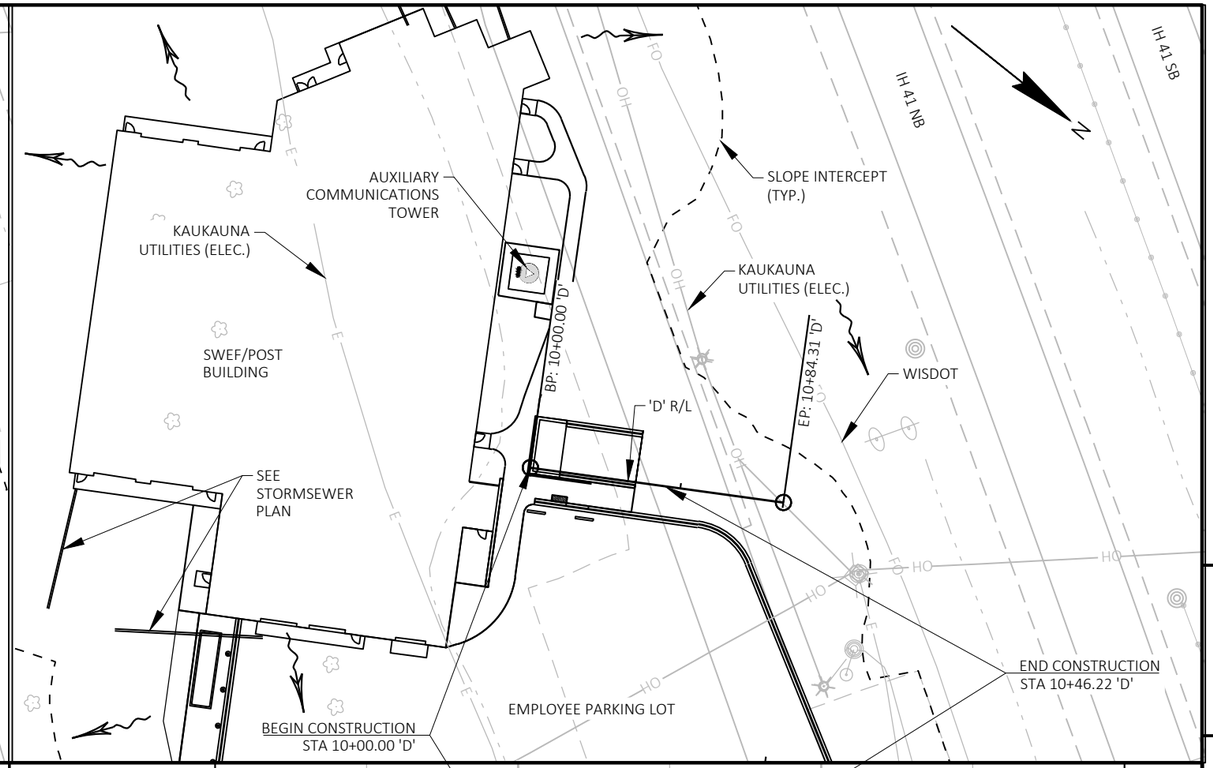


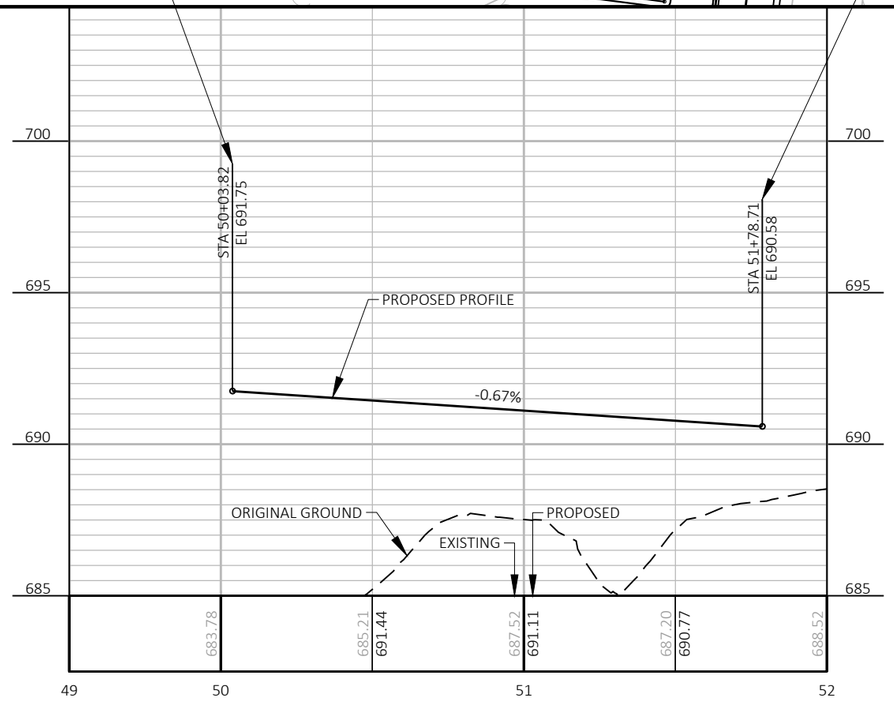
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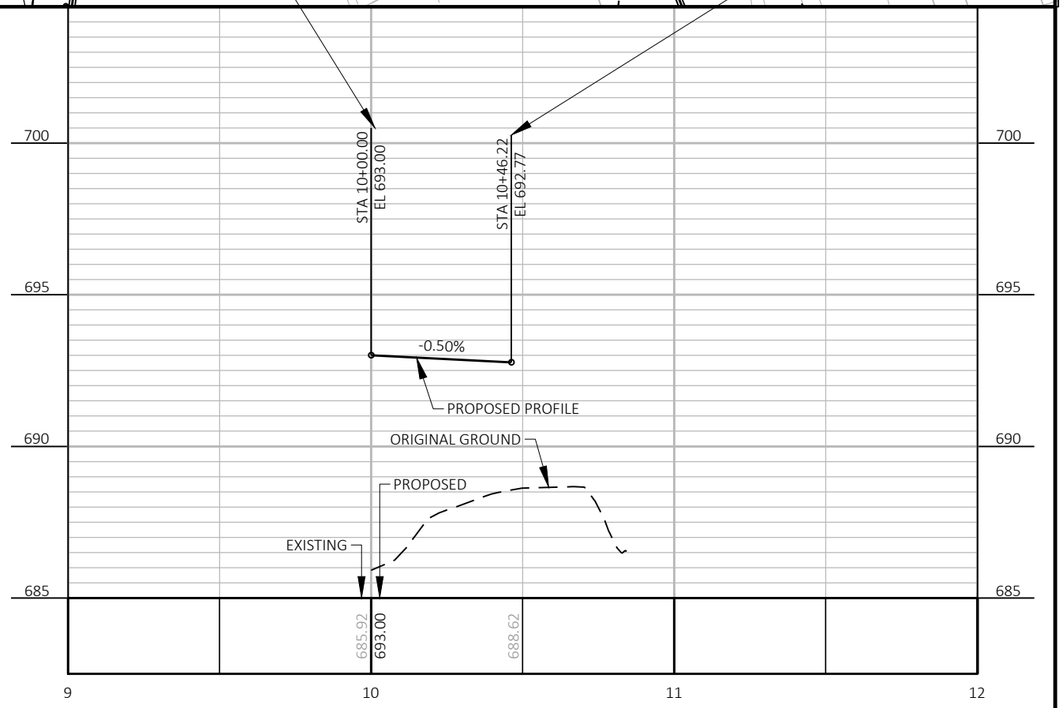
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LAYOUT NAME - 01

PLOT DATE : 4/26/2024 8:20 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:50 FT



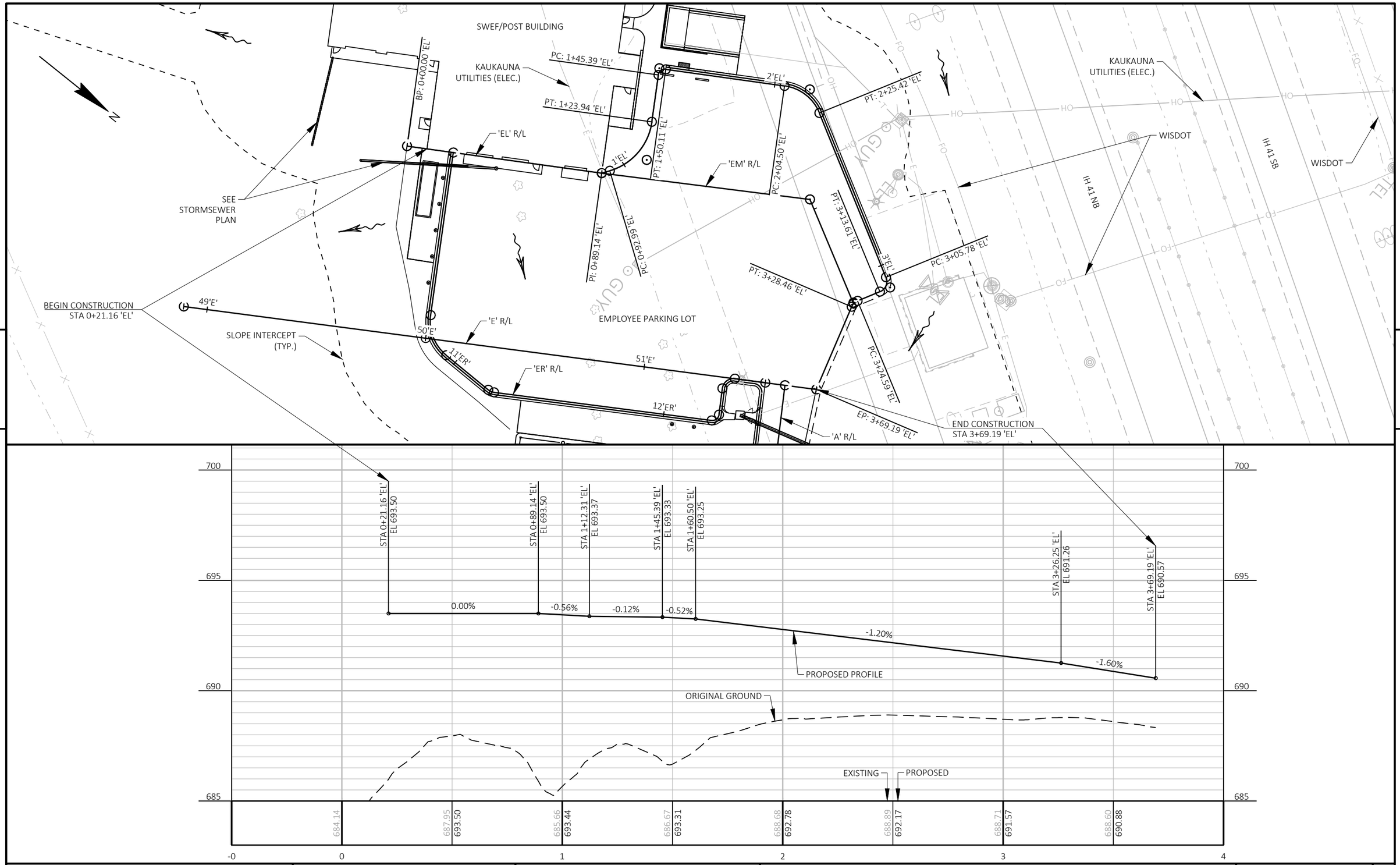






PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: R/L 'E' (EMPLOYEE PARKING) & R/L 'D' (DUMPSTER)	SHEET 357	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\050102_PP-E-PARK.DWG
LAYOUT NAME - 01
PLOT DATE : 4/26/2024 8:21 AM
PLOT BY : JON BLOMQUIST
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: R/L 'EL' (EMPLOYEE PARKING, LEFT EDGE)	SHEET 358 E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\050103_PP-EL-PARK.DWG
LAYOUT NAME - 01

PLOT DATE : 4/26/2024 8:22 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

SWEF/POST BUILDING

KAUKAUNA UTILITIES (ELEC.)

2+00 'EL'

'EL' R/L

1+00 'EL'

'EM' R/L

51+00 'EM'

3+00 'EL'

BP: 50+00.00 'EM'

PI: 50+95.26 'EM'

EP: 51+46.51 'EM'

SLOPE INTERCEPT (TYP.)

SEE STORMSEWER PLAN

EMPLOYEE PARKING LOT

E. FRONTAGE ROAD

EXISTING R/W

KAUKAUNA UTILITIES (ELEC.)

BEGIN CONSTRUCTION STA 50+00.00 'EM'

MAIN COMMUNICATIONS TOWER

'A' R/L

SEE STORMSEWER PLAN

END CONSTRUCTION STA 51+46.51 'EM'

KAUKAUNA UTILITIES (ELEC.)

IH 41 NB

IH 41 SB

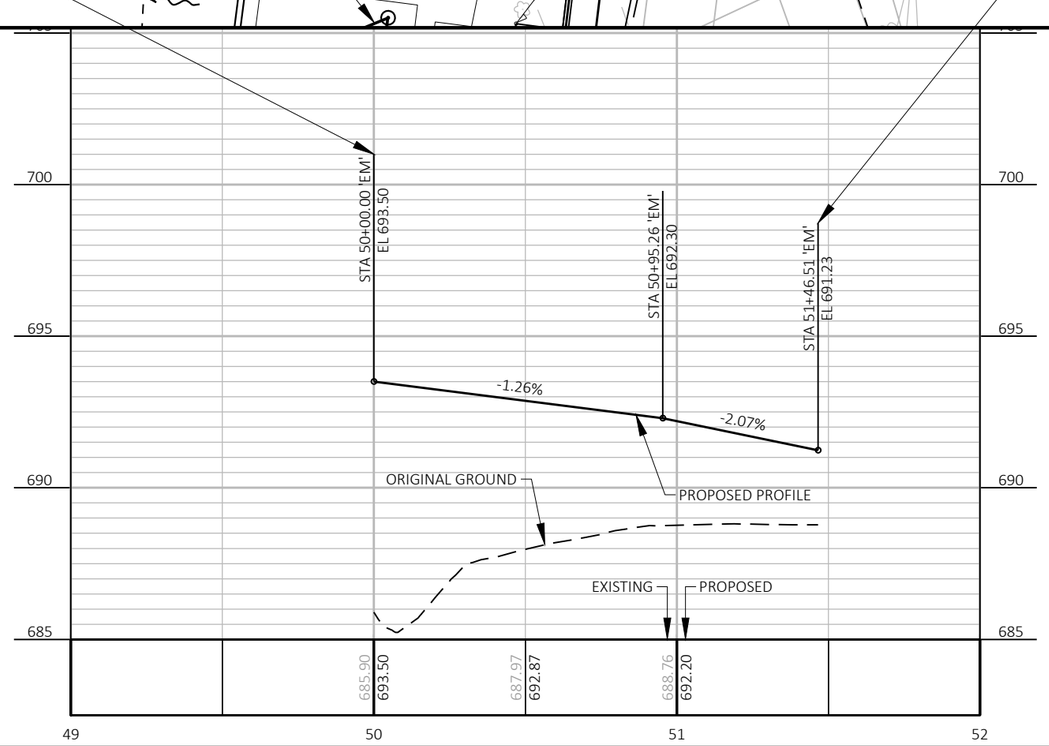
WISDOT

W. FRONTAGE ROAD

SCALE

5

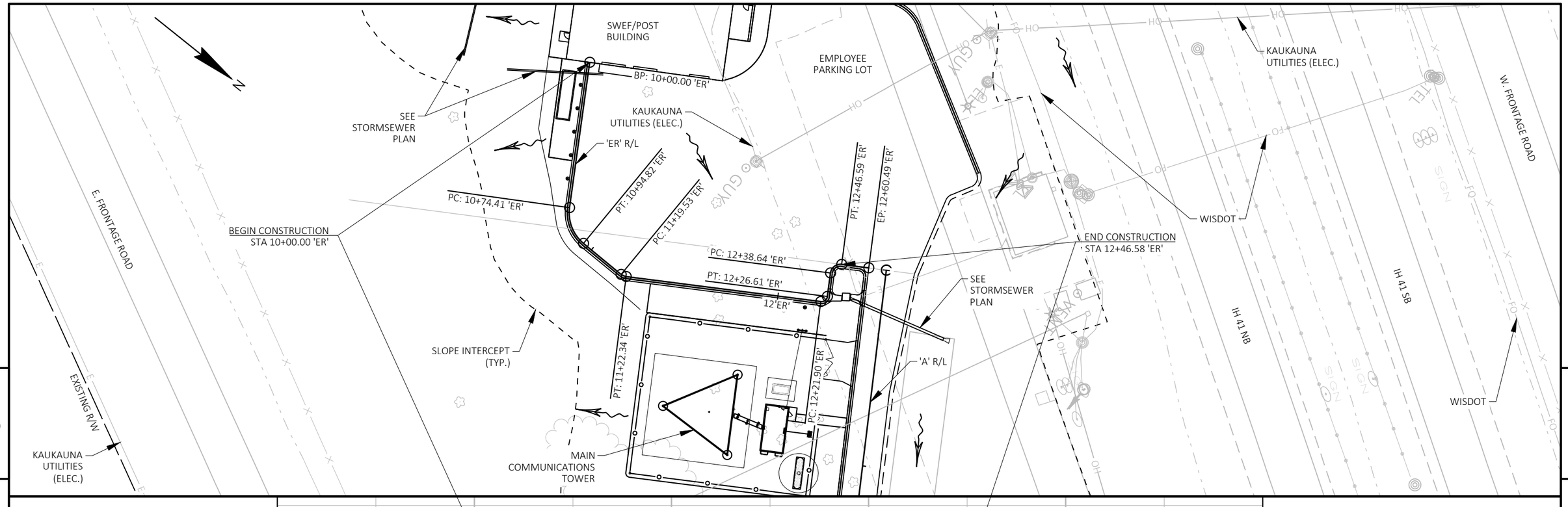
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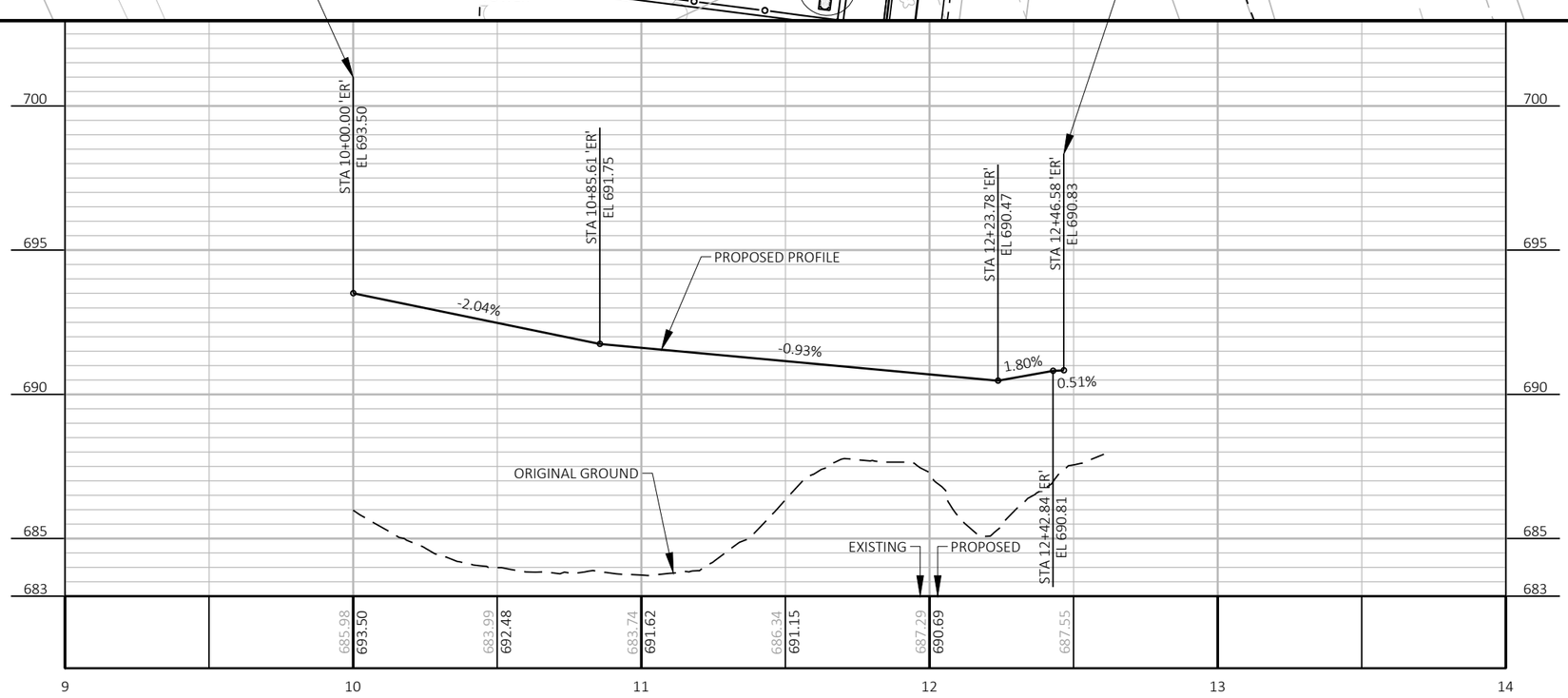


PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: R/L 'EM' (EMPLOYEE PARKING)	SHEET 359	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\050104_PP-EM-PARK.DWG
LAYOUT NAME - 01

PLOT DATE : 4/26/2024 8:23 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:50 FT

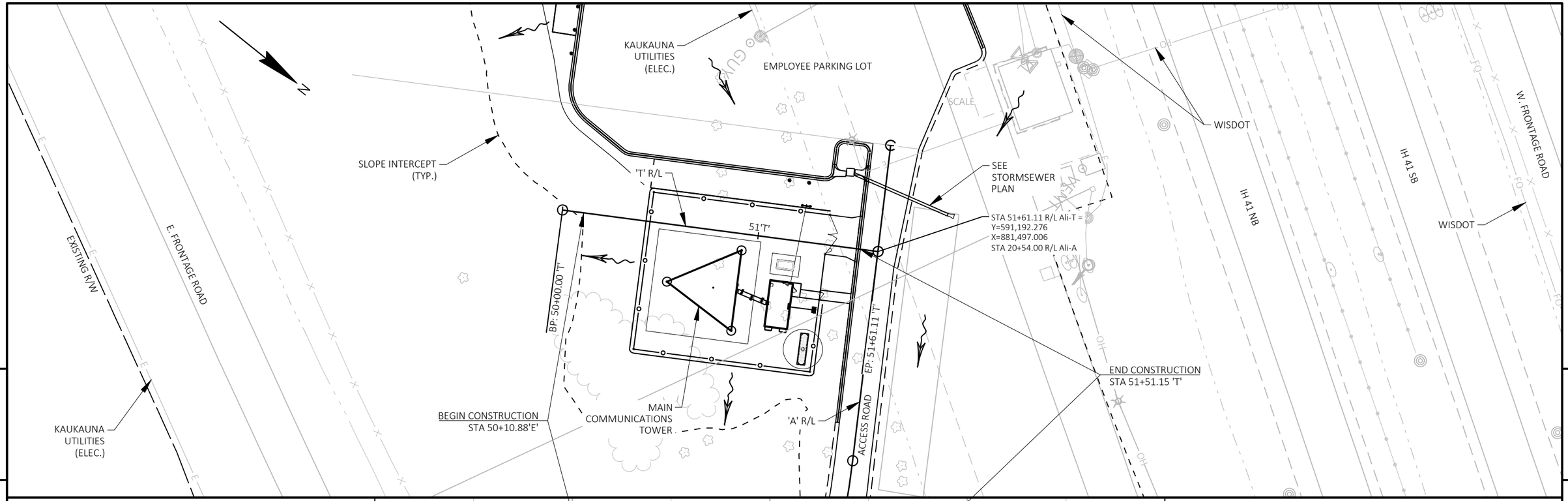


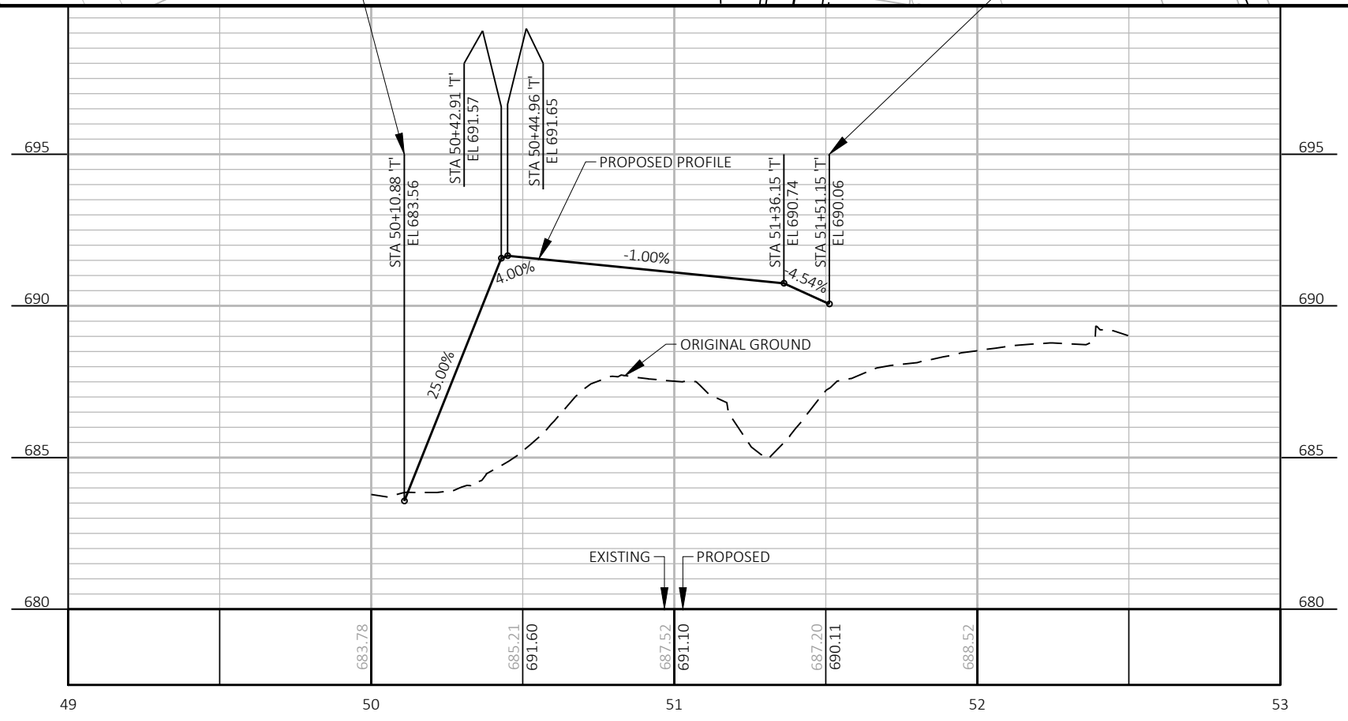


PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: R/L 'ER' (EMPLOYEE PARKING, RIGHT EDGE)	SHEET 360 E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\050105_PP-ER-PARK.DWG
LAYOUT NAME - 01

PLOT DATE : 4/26/2024 8:24 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:50 FT



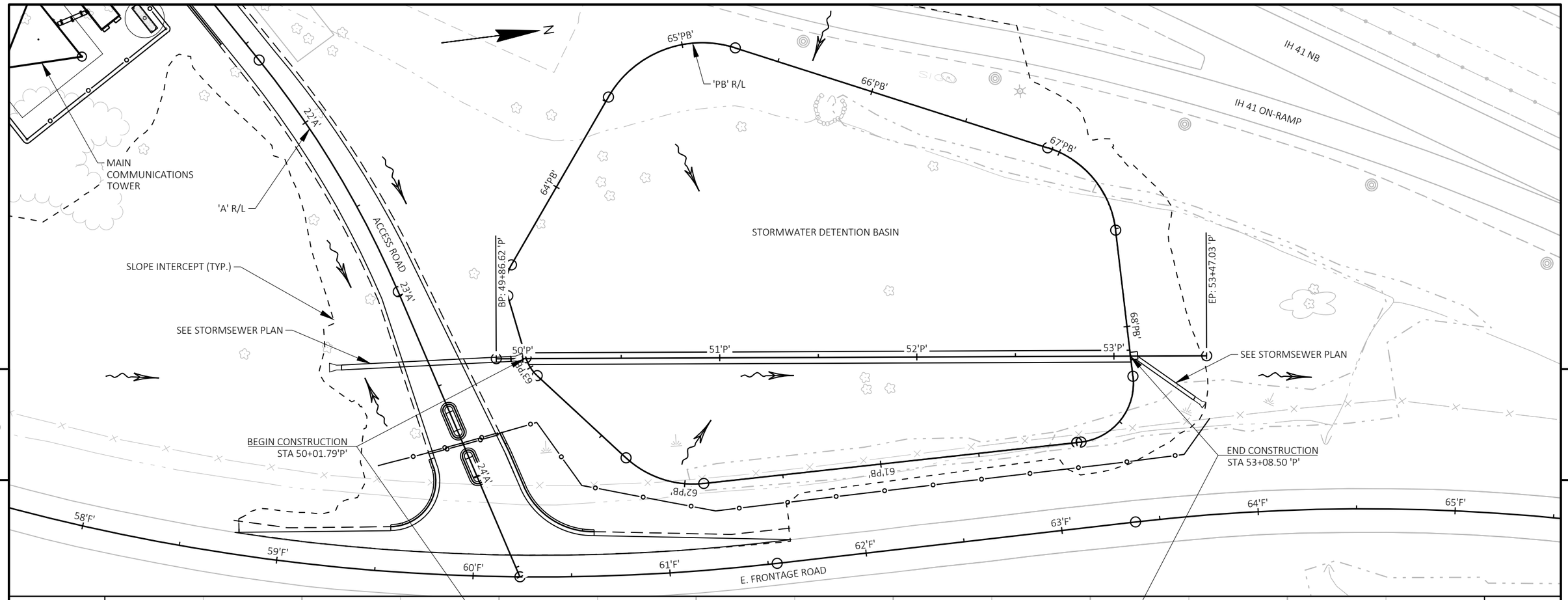


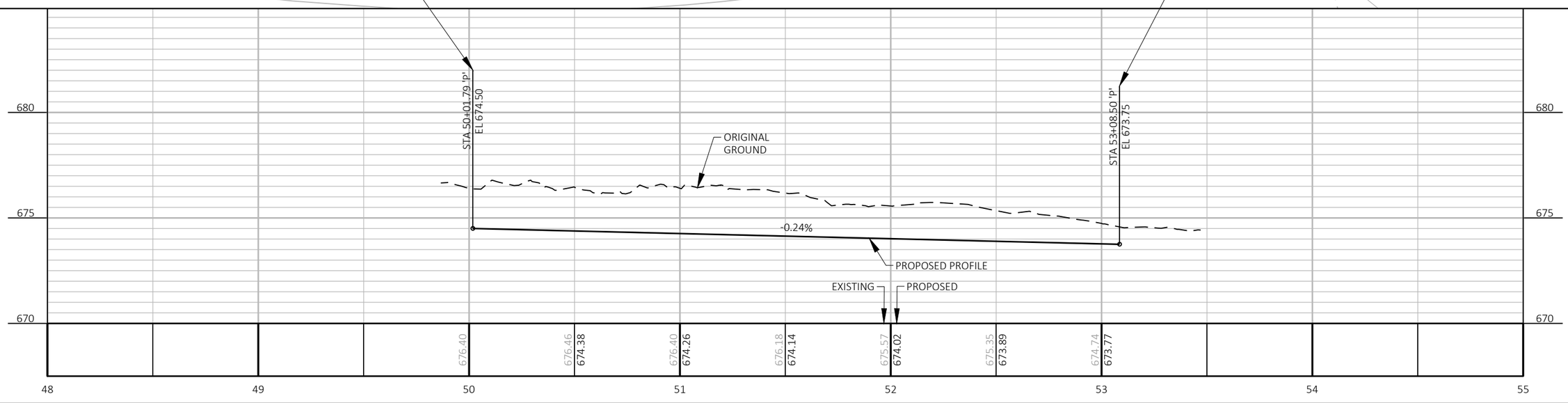
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: R/L 'T' (TOWER)	SHEET 361	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\050105_PP-T.DWG
LAYOUT NAME - 01

PLOT DATE : 4/26/2024 8:25 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



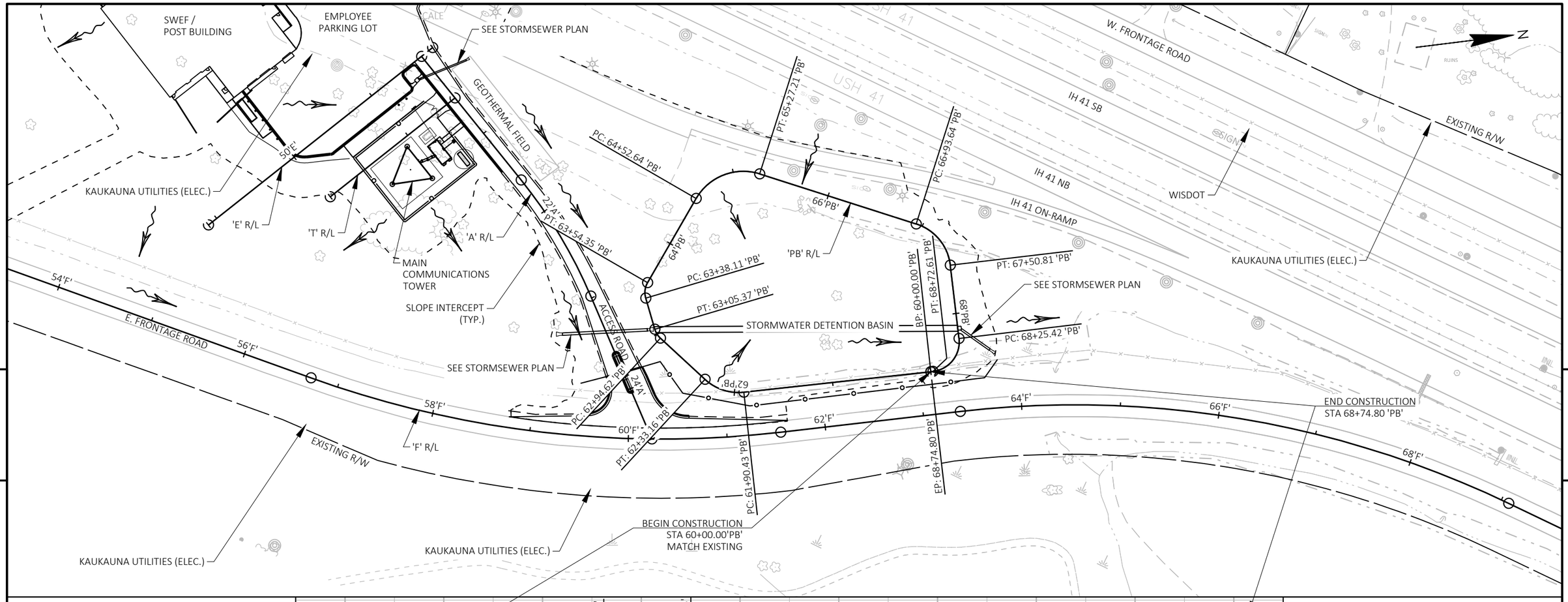


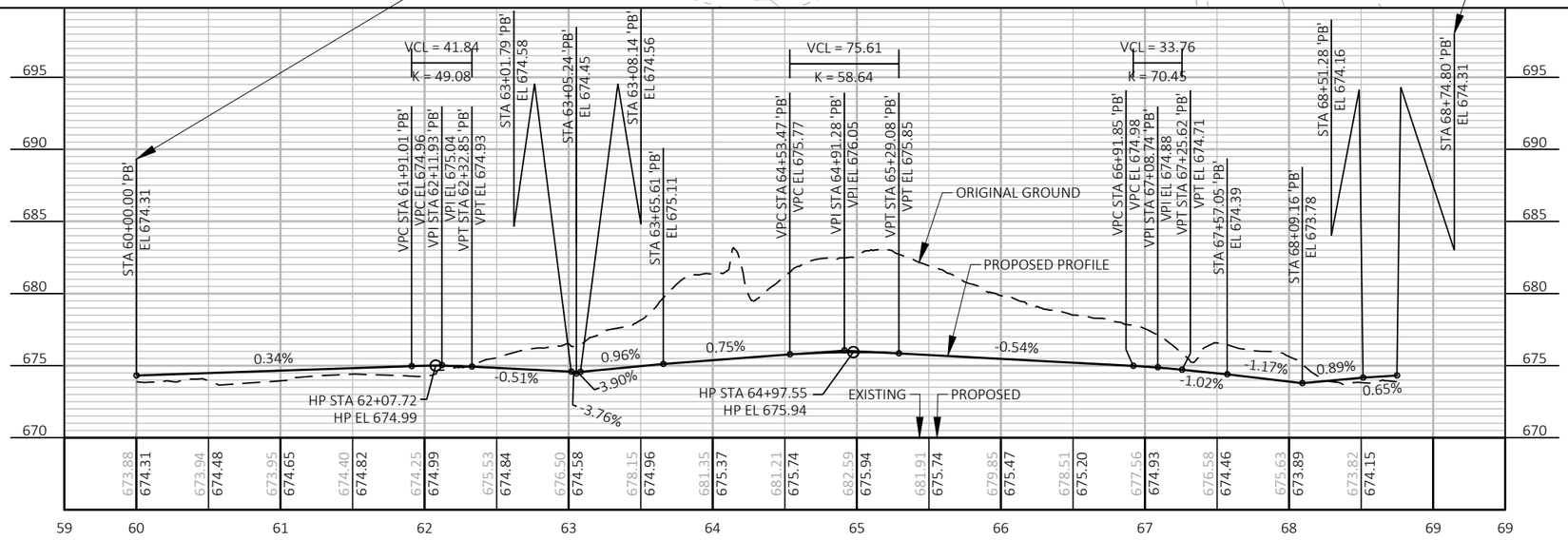
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: R/L 'P' (STORMWATER DETENTION BASIN, CHANNEL)	SHEET 362	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\050107_PP-POND.DWG
LAYOUT NAME - 01

PLOT DATE : 4/26/2024 8:26 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



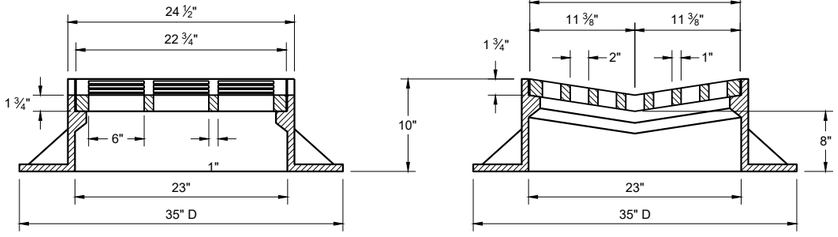


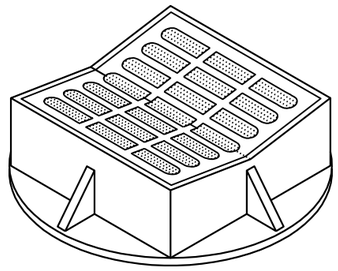
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: R/L 'PB' (STORMWATER DETENTION BASIN, BOTTOM)	SHEET 363	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\050108_PP-PB.DWG
LAYOUT NAME - 01
PLOT DATE : 4/26/2024 8:26 AM
PLOT BY : JON BLOMQUIST
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

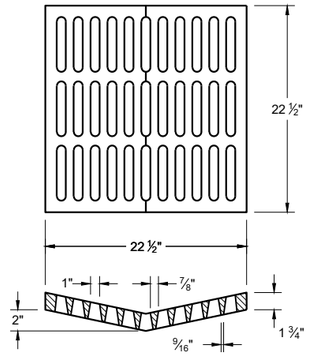
Standard Detail Drawing List

08A05-21B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C08-03	INLETS MEDIAN 1 AND 2 GRATE
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
09B02-10	CONDUIT
09B16-02	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C14-03	CONCRETE CONTROL CABINET BASE, TYPE L
09D04-03	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09H09-02	COMMUNICATION VAULT TYPE 1
11B02-02	CONCRETE MEDIAN NOSE
14A02-01	TREE PLANTING DETAIL
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C07-15A	PAVEMENT MARKING SYMBOLS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15C36-01	PARKING STALL MARKING
15D16-06	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY





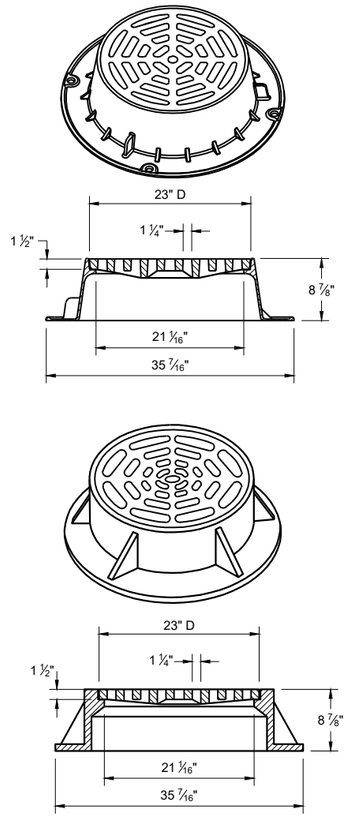
TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS POSSIBLE

NOTED AS TYPE B - A ON THE DRAINAGE TABLE



TYPE "C"

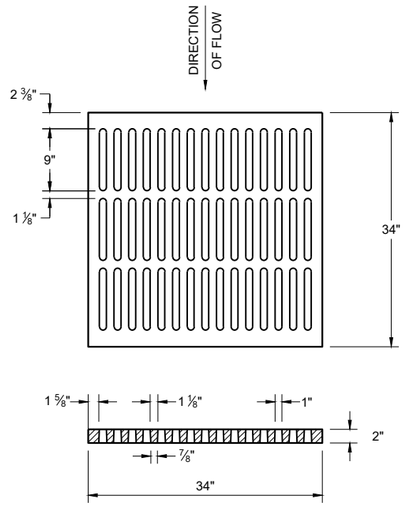
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

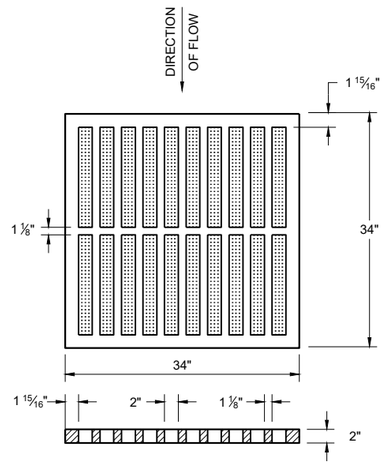
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS PERMITTED

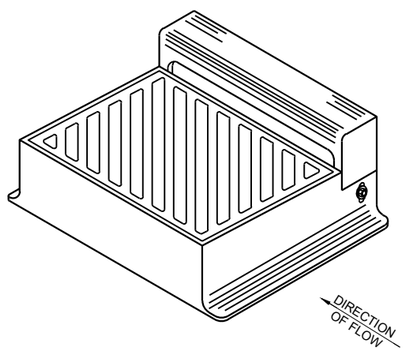
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



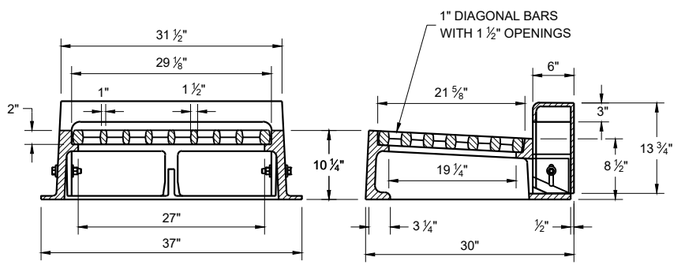
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON THE DRAINAGE TABLE



DIAGONAL SLOTS SHALL BE ORIENTEDTO THE DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.



TYPE "WM"

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

INLET COVERS TYPES B, B-A, C, MS, MS-A AND WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

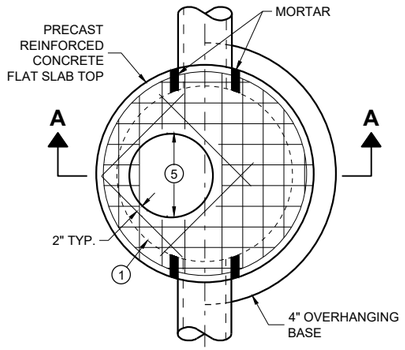
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

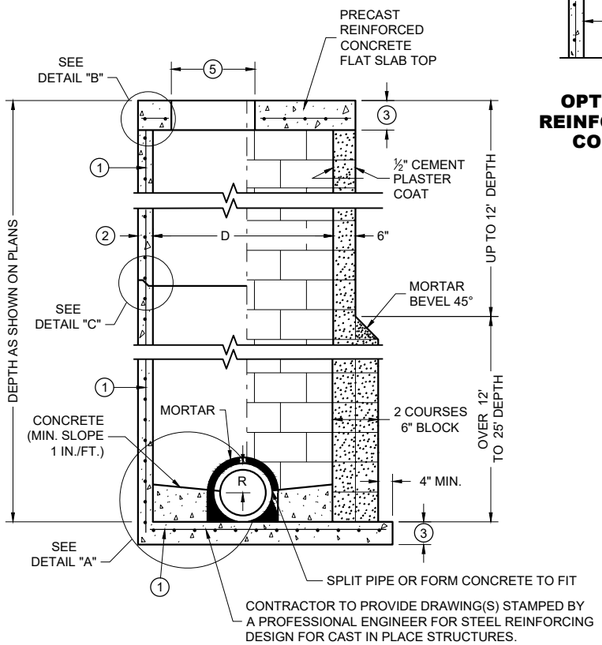
SDD 08A05-21b

SDD 08A05-21b



PLAN VIEW

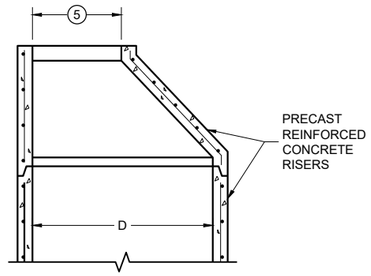
CIRCULAR OPENING



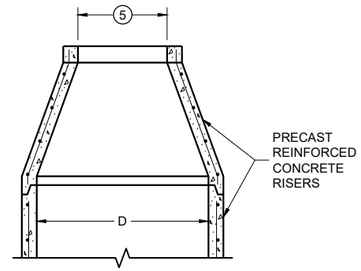
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

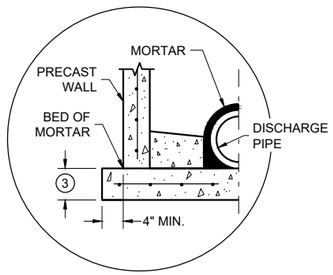
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



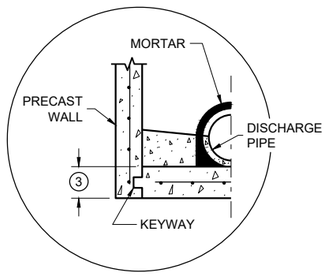
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

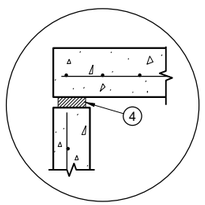


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

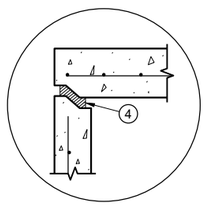


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

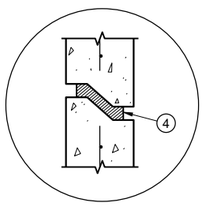
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

DETAIL "C"

MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) (5) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL IMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

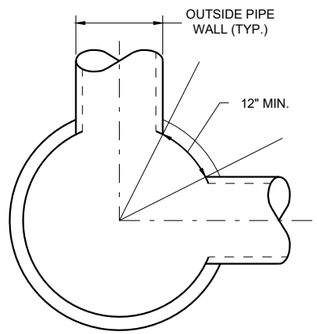
(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.

(5) SEE MANHOLE COVER OPENING MATRIX.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

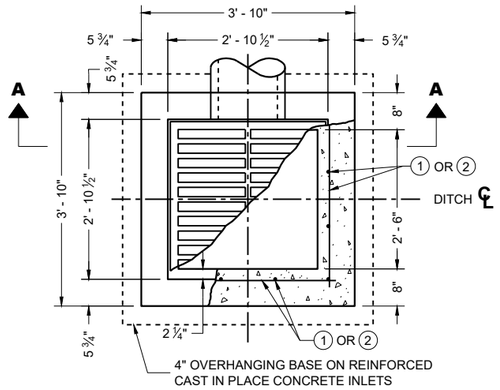
FHWA

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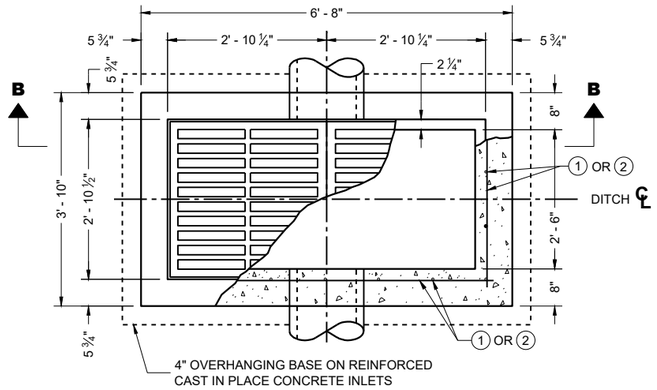
SDD 08B09-04

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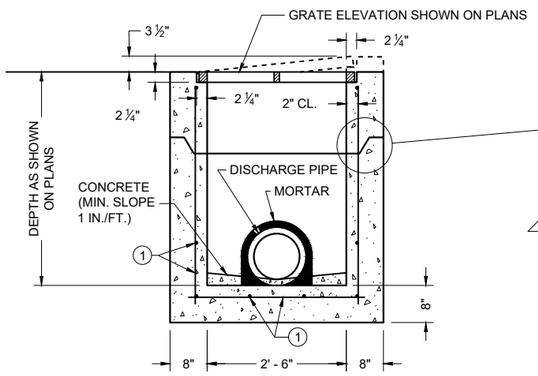
SDD 08B09-04



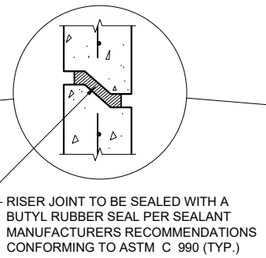
PLAN VIEW

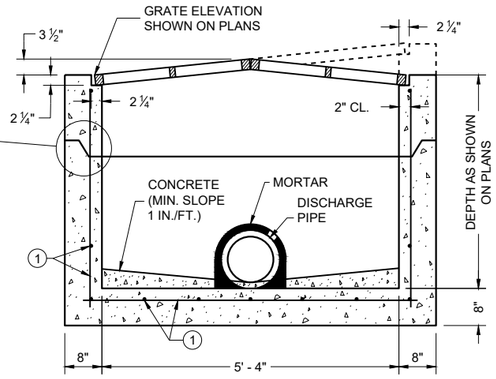


PLAN VIEW

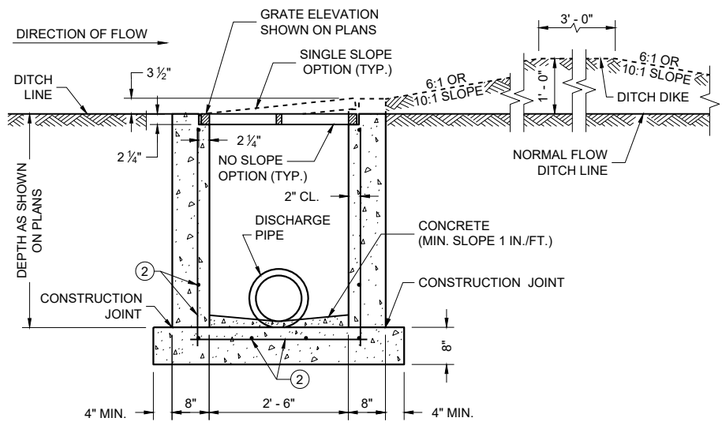


PRECAST REINFORCED CONCRETE SECTION A - A



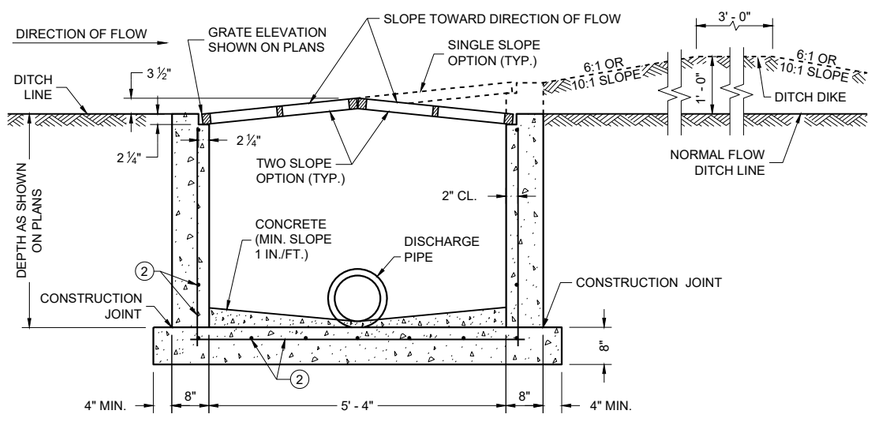


PRECAST REINFORCED CONCRETE SECTION B - B



REINFORCED CAST IN PLACE CONCRETE SECTION A - A

INLETS MEDIAN 1 GRATE



REINFORCED CAST IN PLACE CONCRETE SECTION B - B

INLETS MEDIAN 2 GRATE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

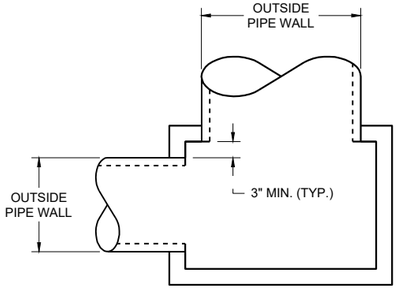
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

(2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.



DETAIL "A"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42

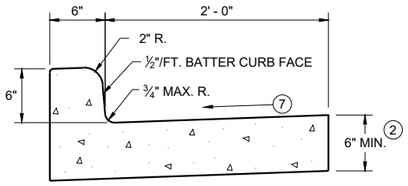
INLETS
MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

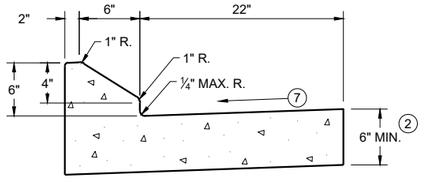
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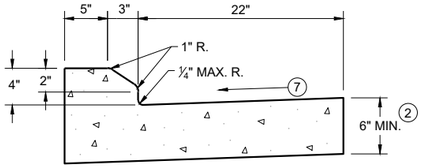
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SDD 08C08-03



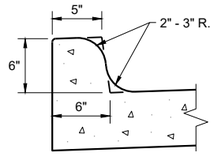
TYPES A (1) & D



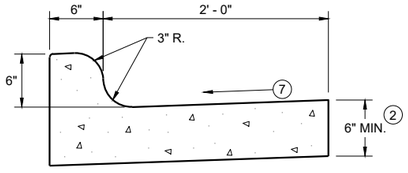
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

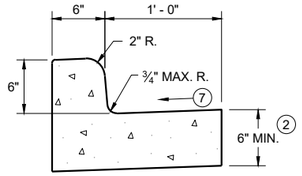


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



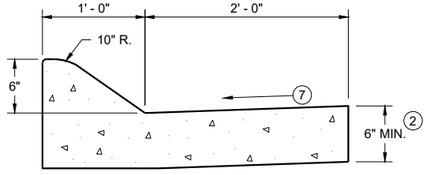
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

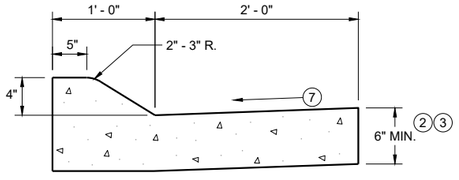


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

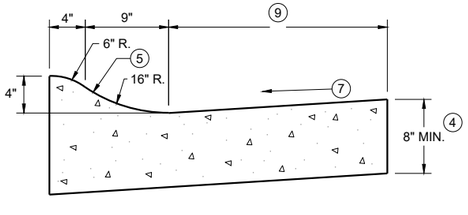


6" SLOPED CURB TYPES A (1) & D



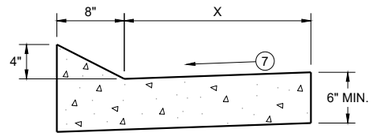
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

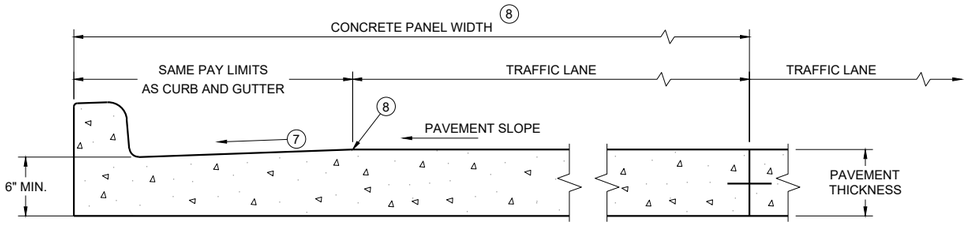


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

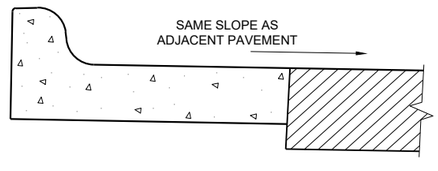
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

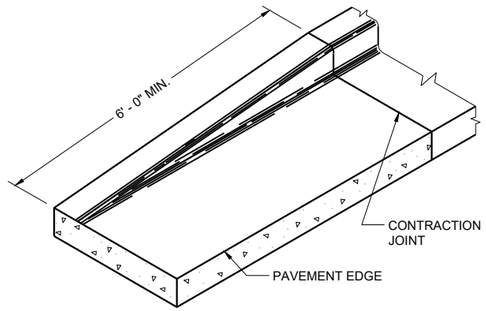
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

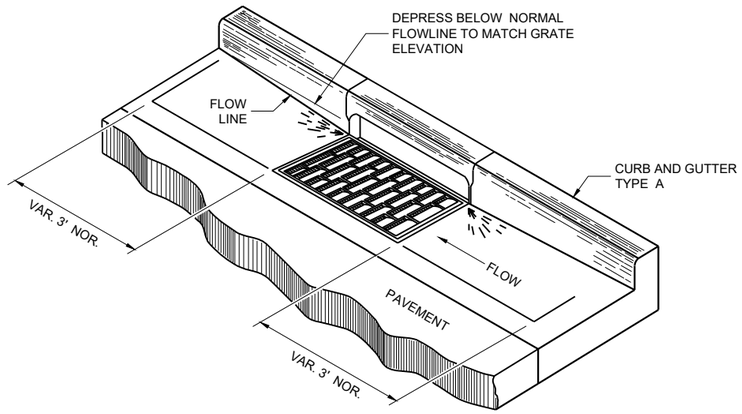
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

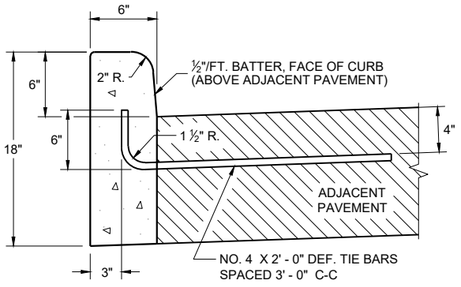
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

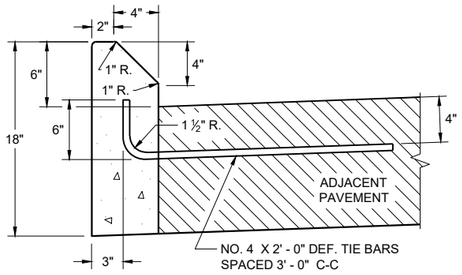
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

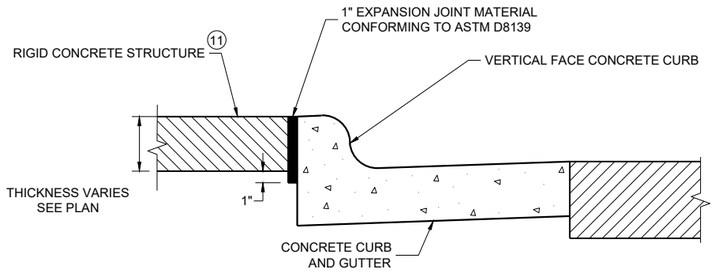


TYPES A (1) & D

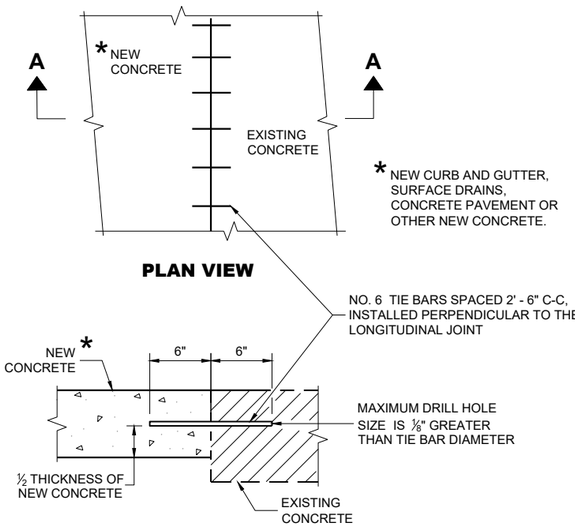


TYPES G (1) & J

CONCRETE CURB



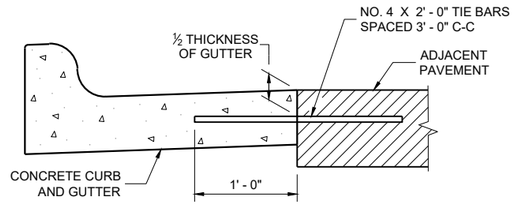
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



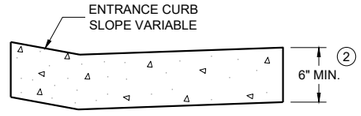
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

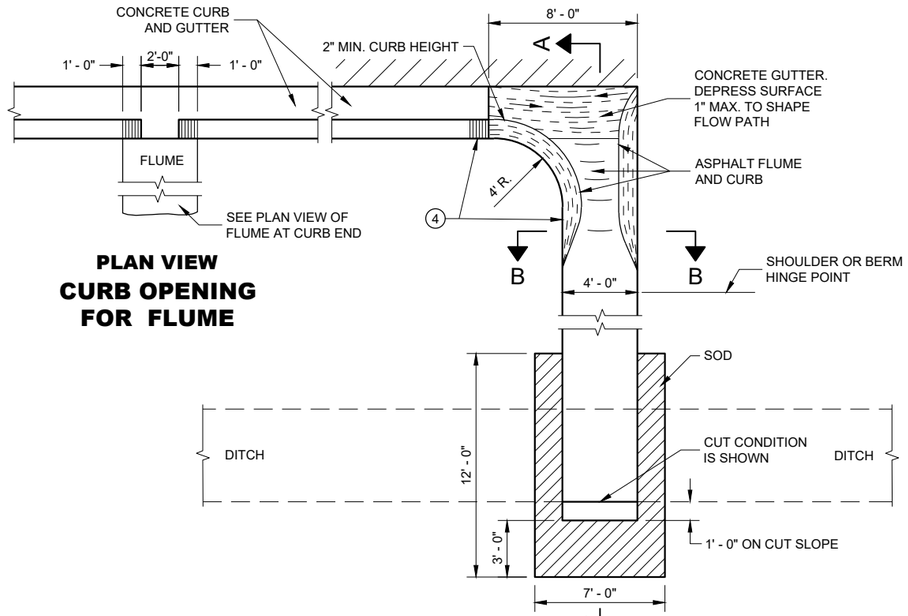
APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 08D01-23b

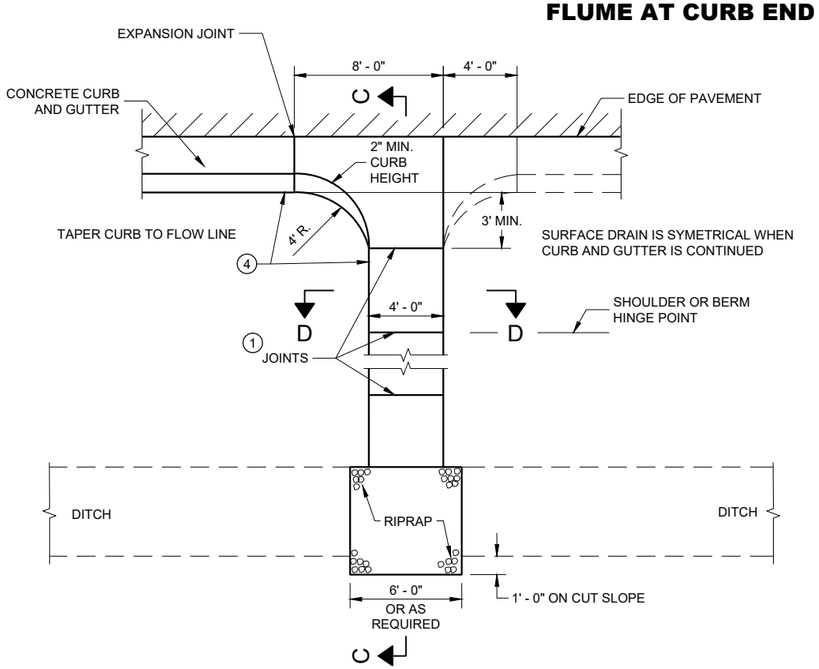
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



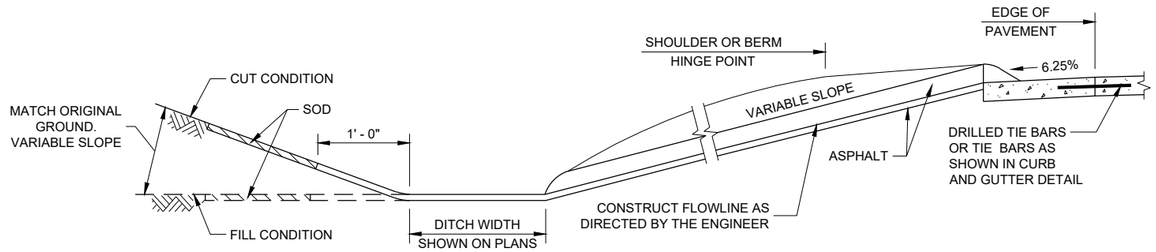
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

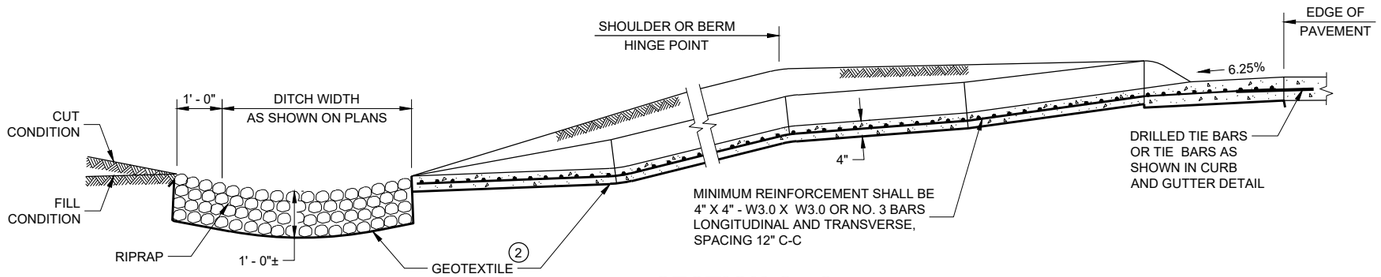
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

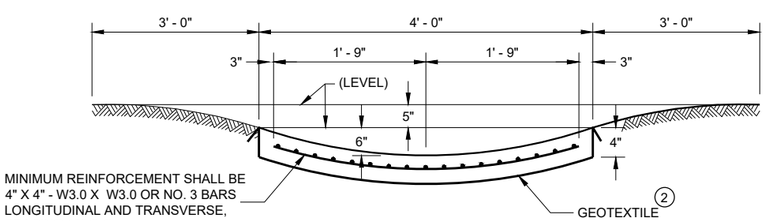


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

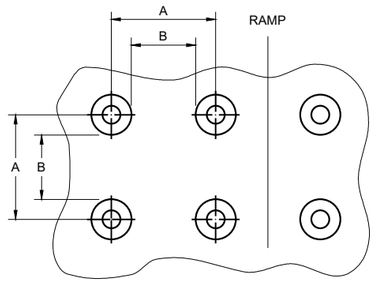
SDD 08D04 - 07

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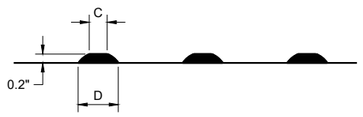
SDD 08D04 - 07

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

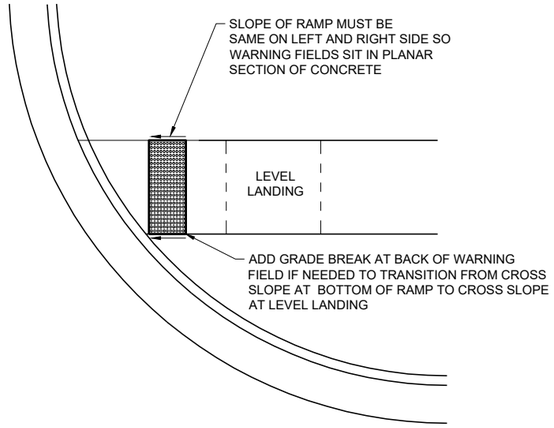
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

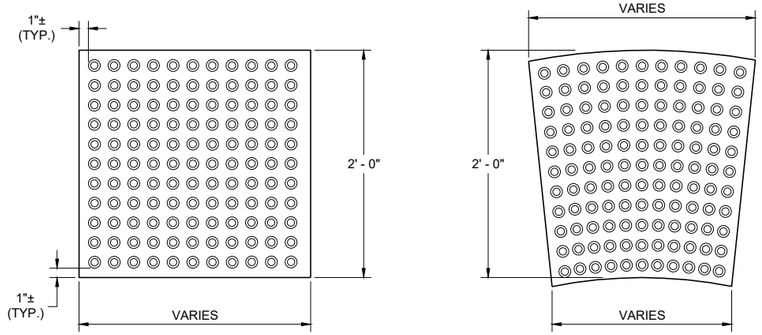
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

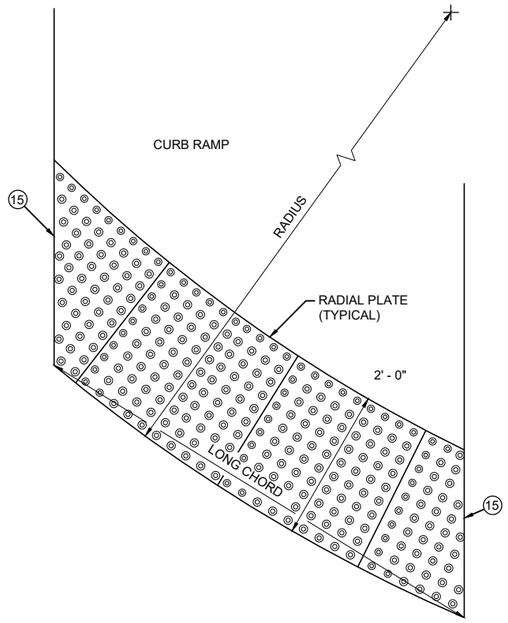
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



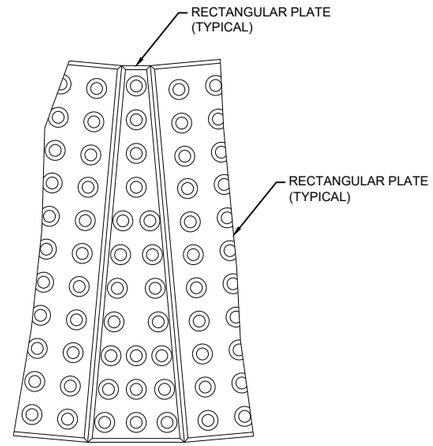
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

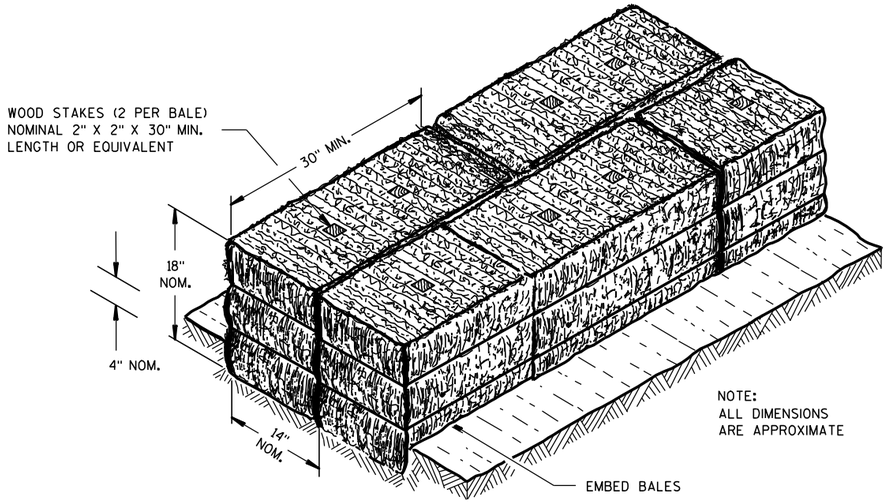
APPROVED

July 2023 — DATE

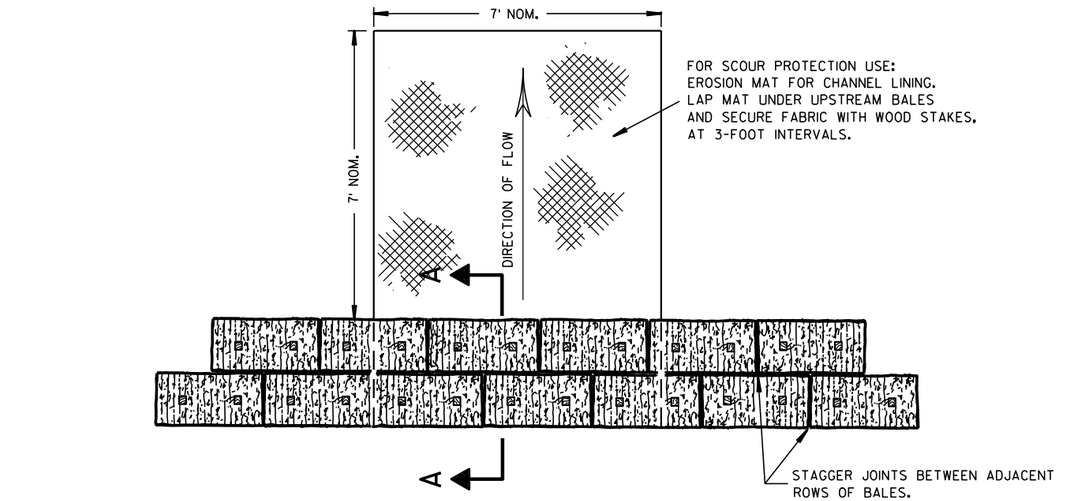
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

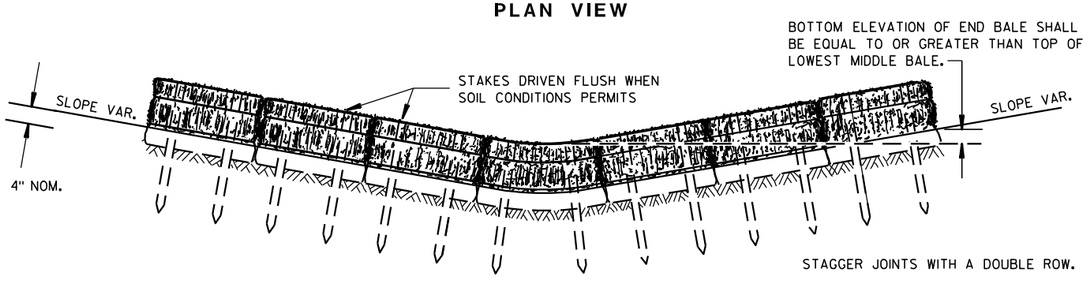
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SDD 08D05-21g



SECTION A-A



PLAN VIEW



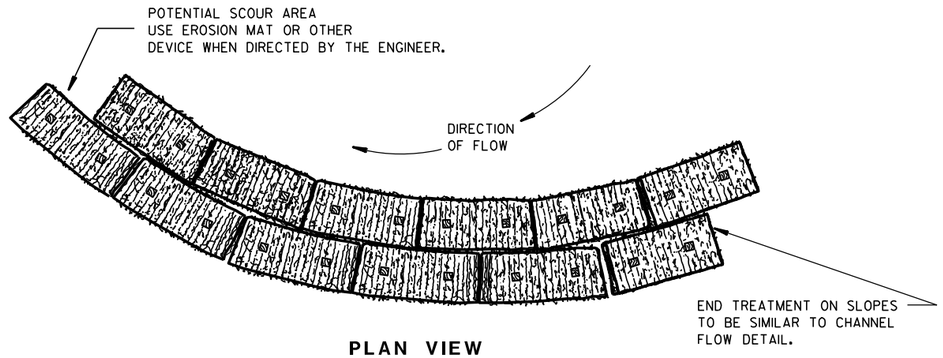
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

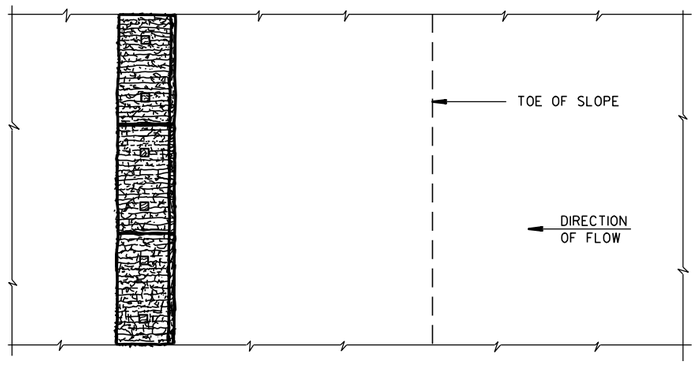
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

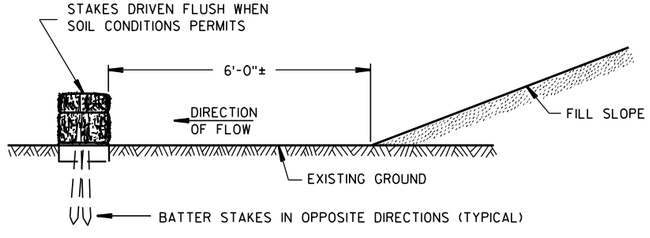


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

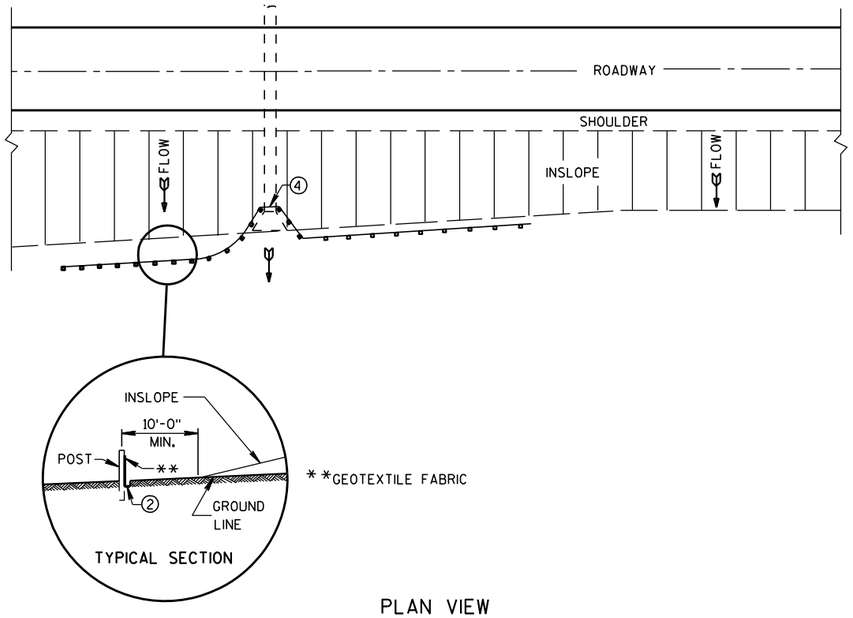
FHWA

6

S.D.D. 8 E 8-3

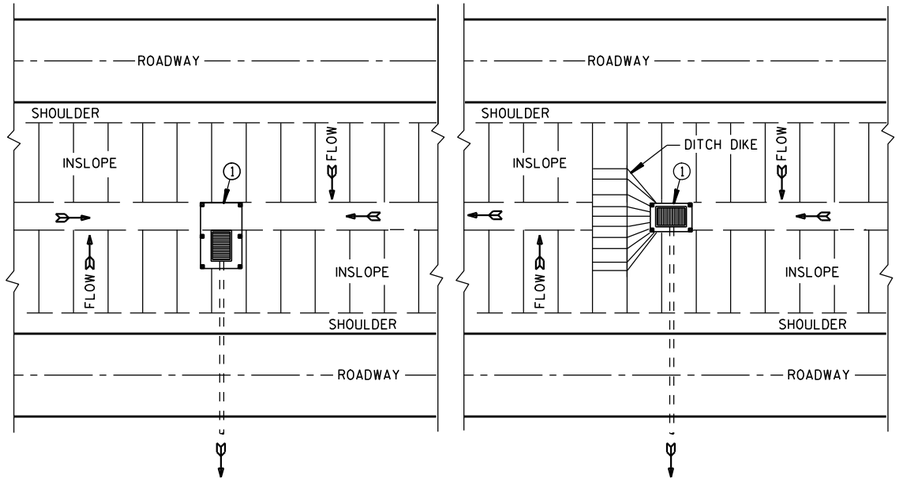
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



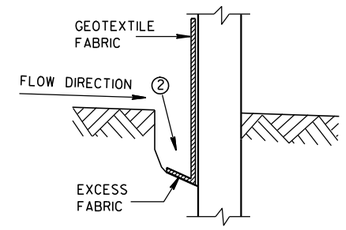
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

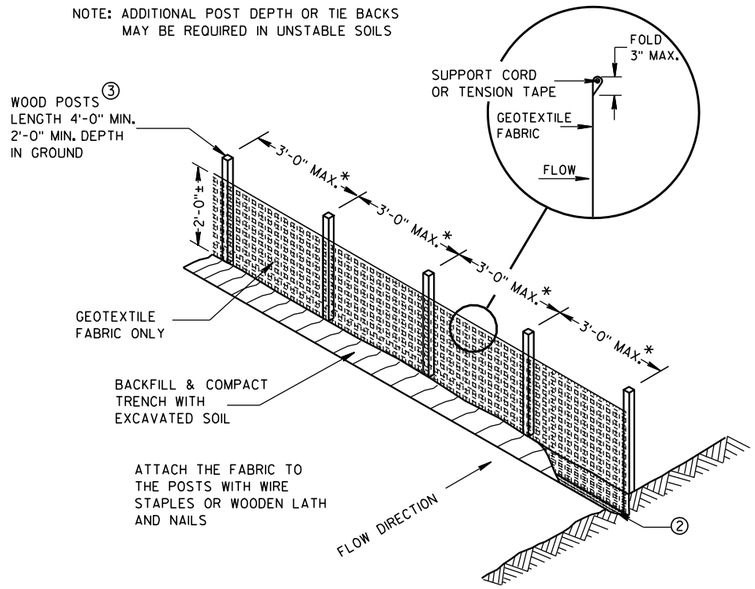
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

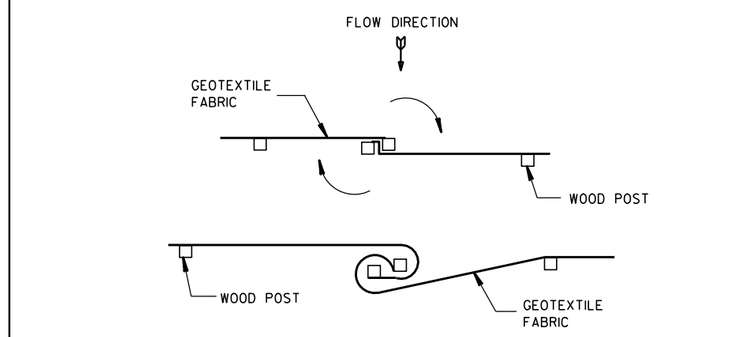


TRENCH DETAIL

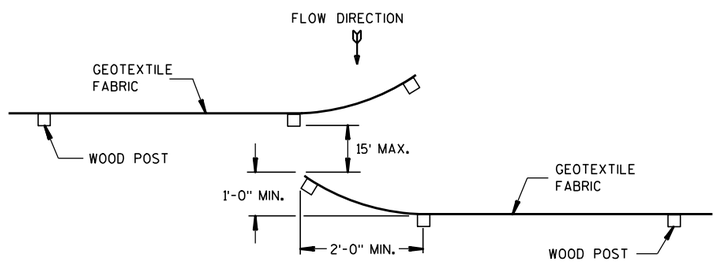


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

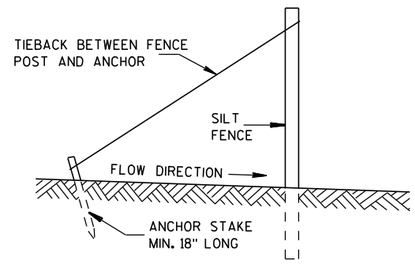


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

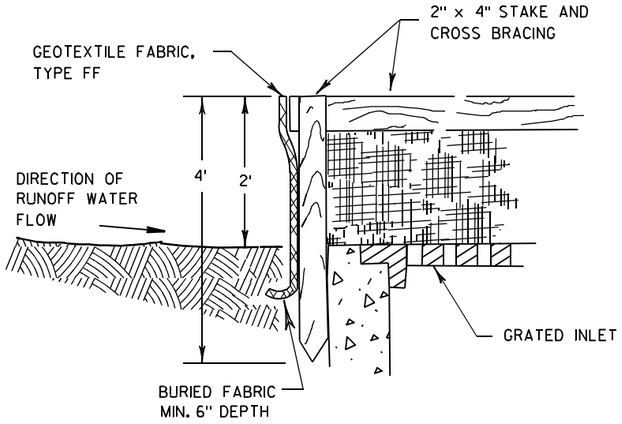
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

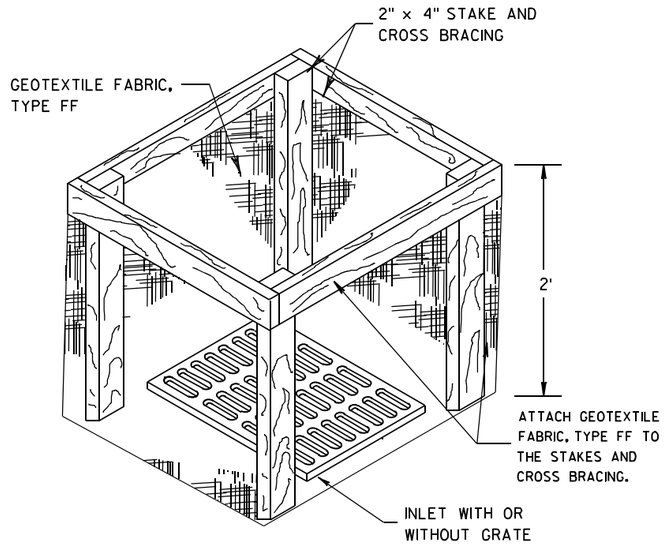
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S.D.D. 8 E 9-6

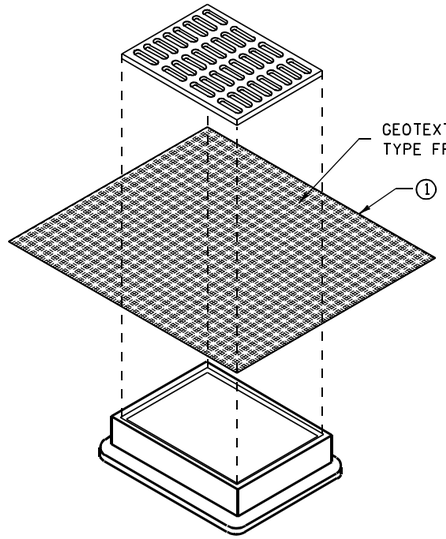
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S.D.D. 8 E 9-6



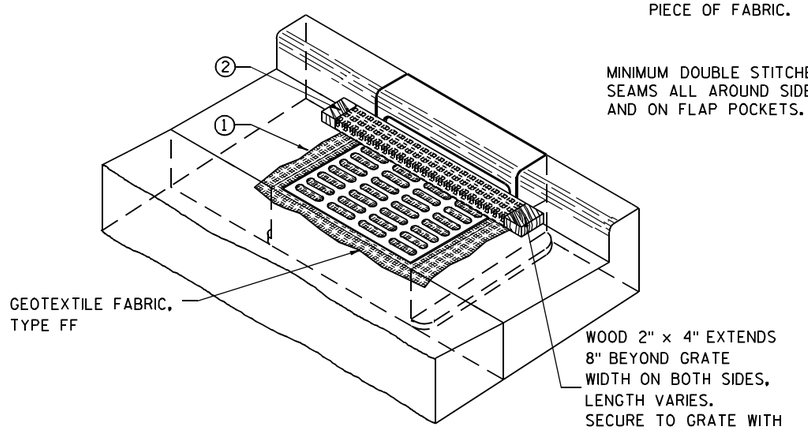


INLET PROTECTION, TYPE A

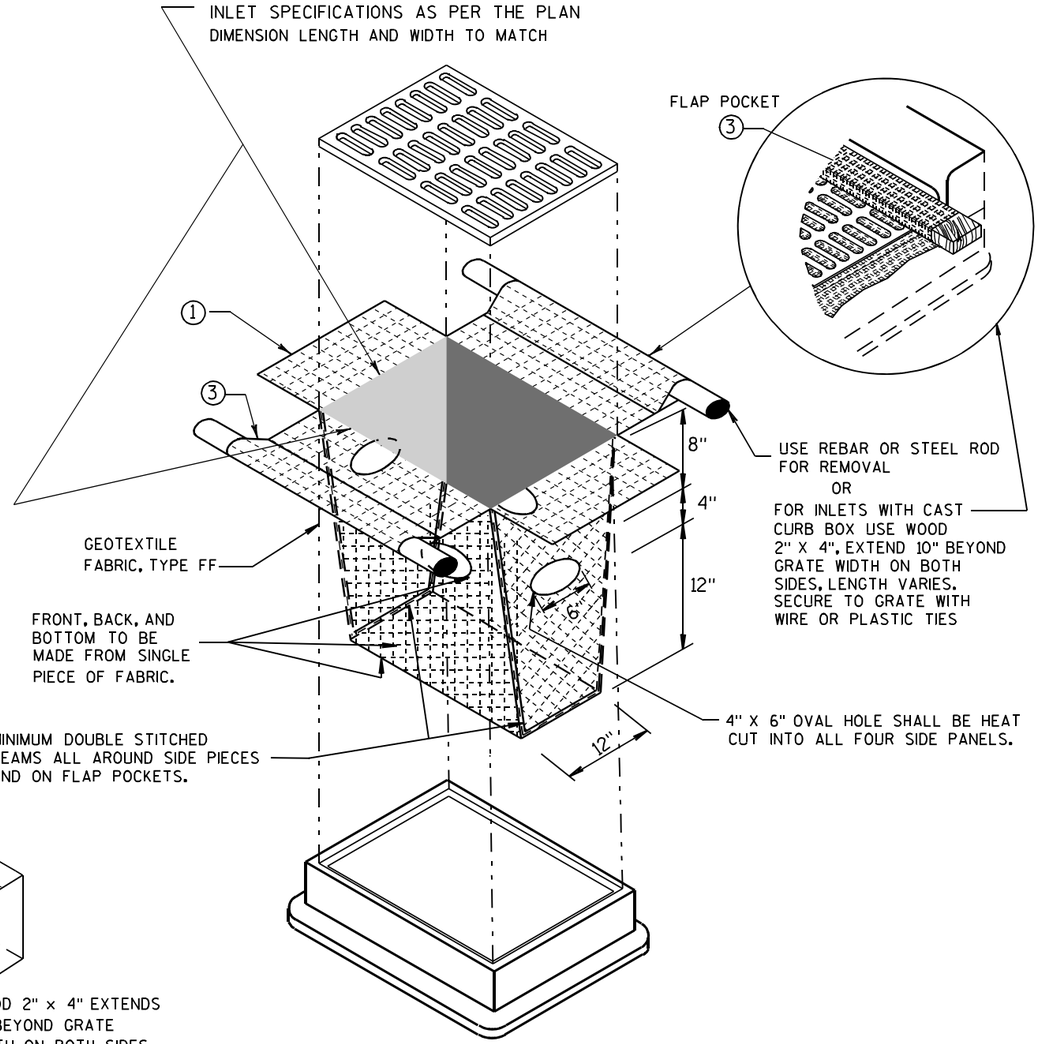


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

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

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

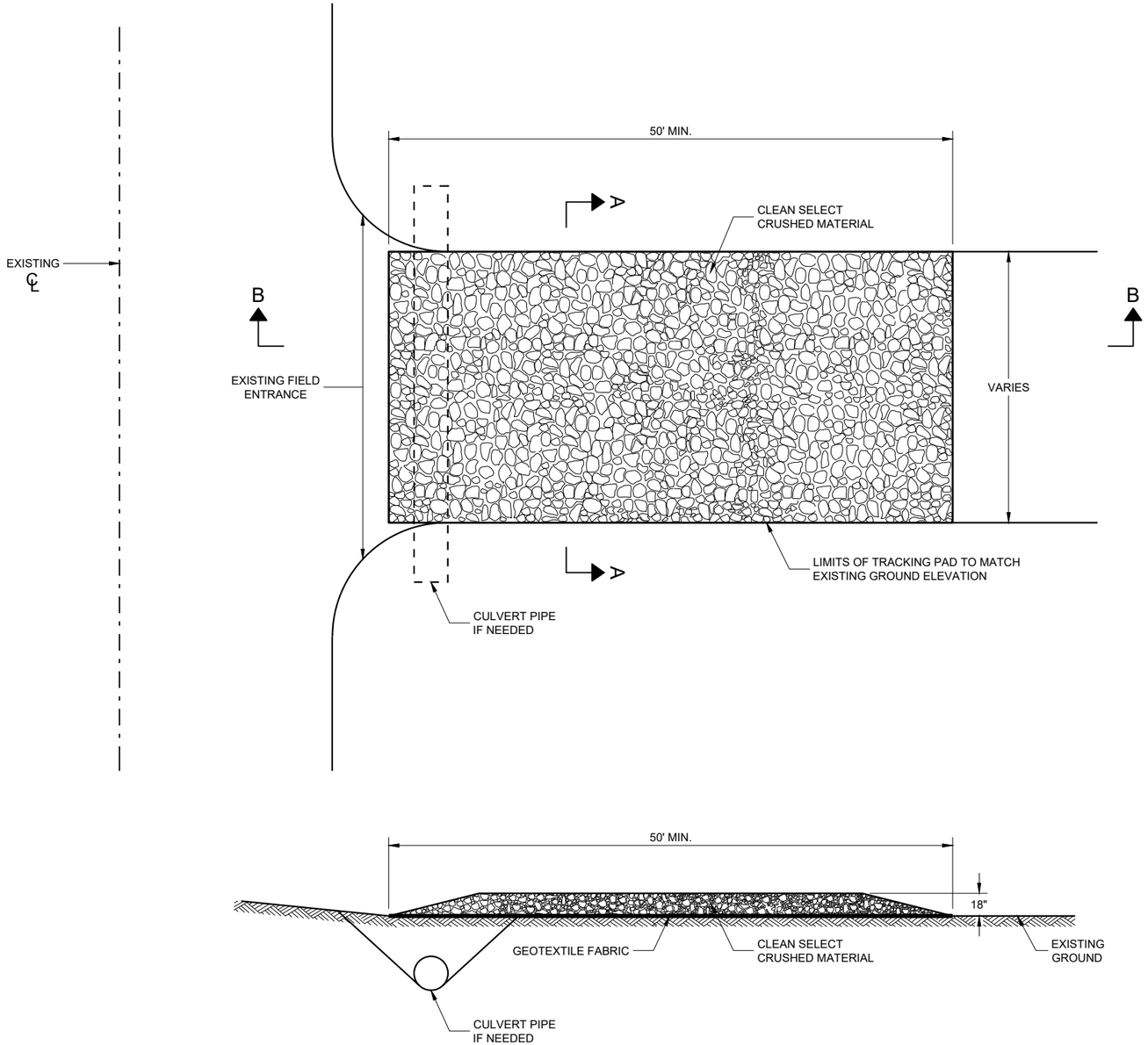
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



SECTION B - B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

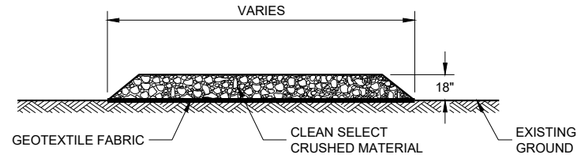
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A - A

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SDD 08E14 - 01

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

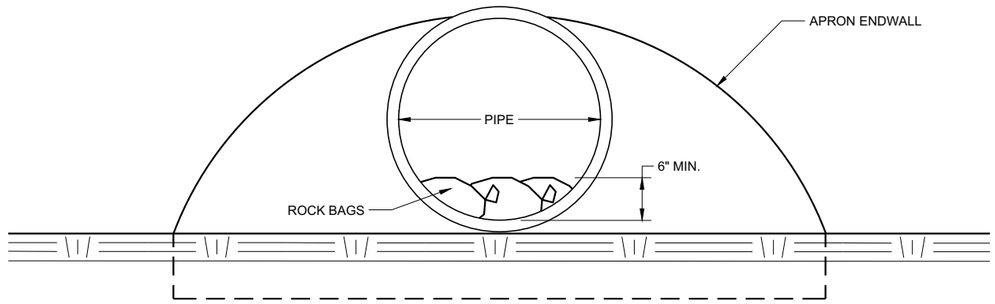
3/24/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

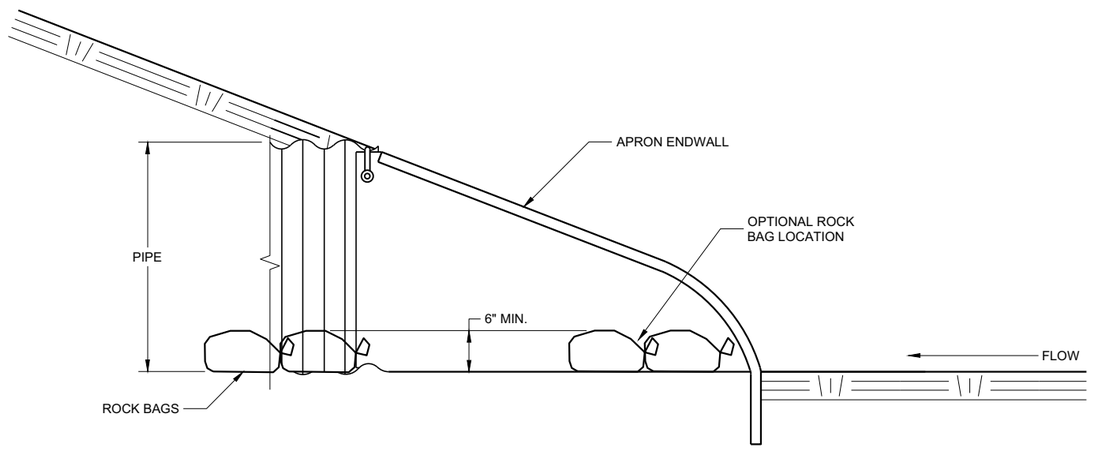
FHWA

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SDD 08E14 - 01



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	376

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

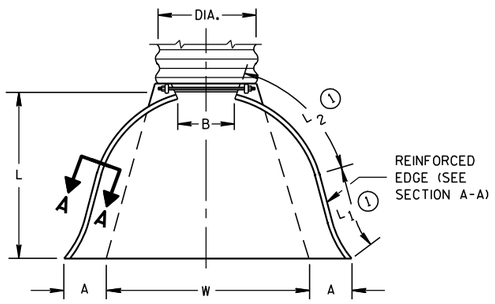
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

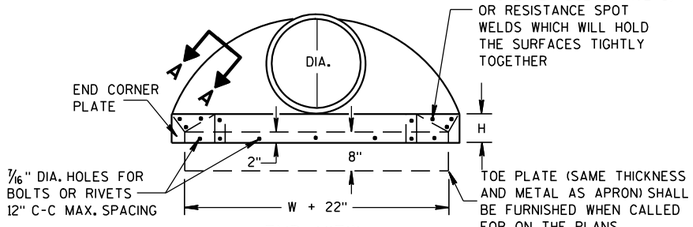
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

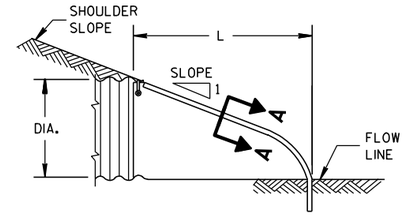
*MINIMUM
**MAXIMUM



PLAN VIEW

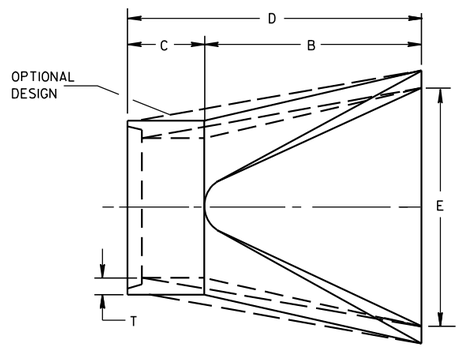


END VIEW

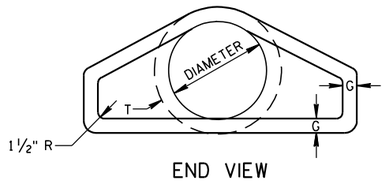


SIDE ELEVATION

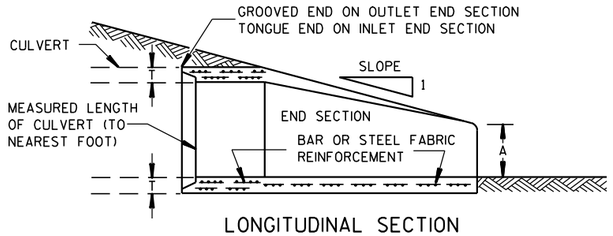
METAL ENDWALLS



PLAN

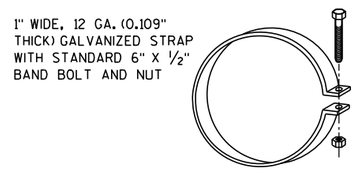


END VIEW



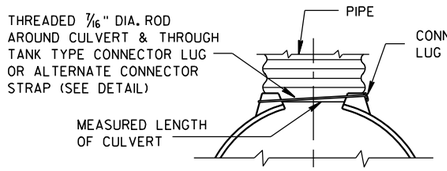
LONGITUDINAL SECTION

CONCRETE ENDWALLS

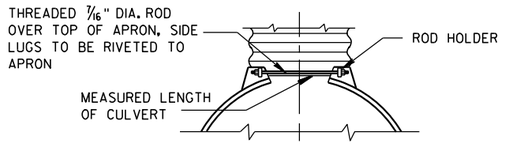


ALTERNATE FOR TYPE 1 CONNECTION

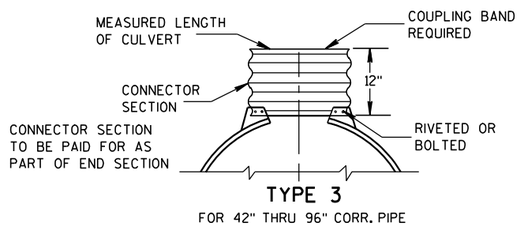
END SECTION CONNECTOR STRAP



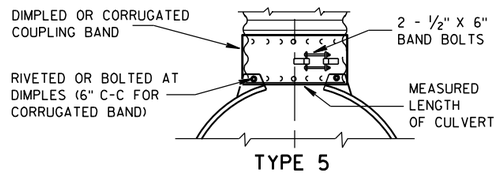
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

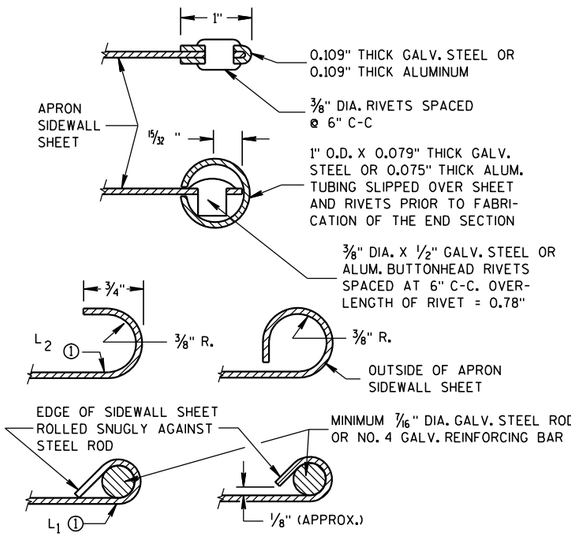
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

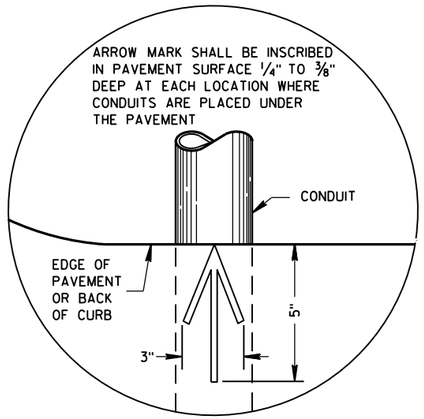
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOP 377 NEER
FHWA

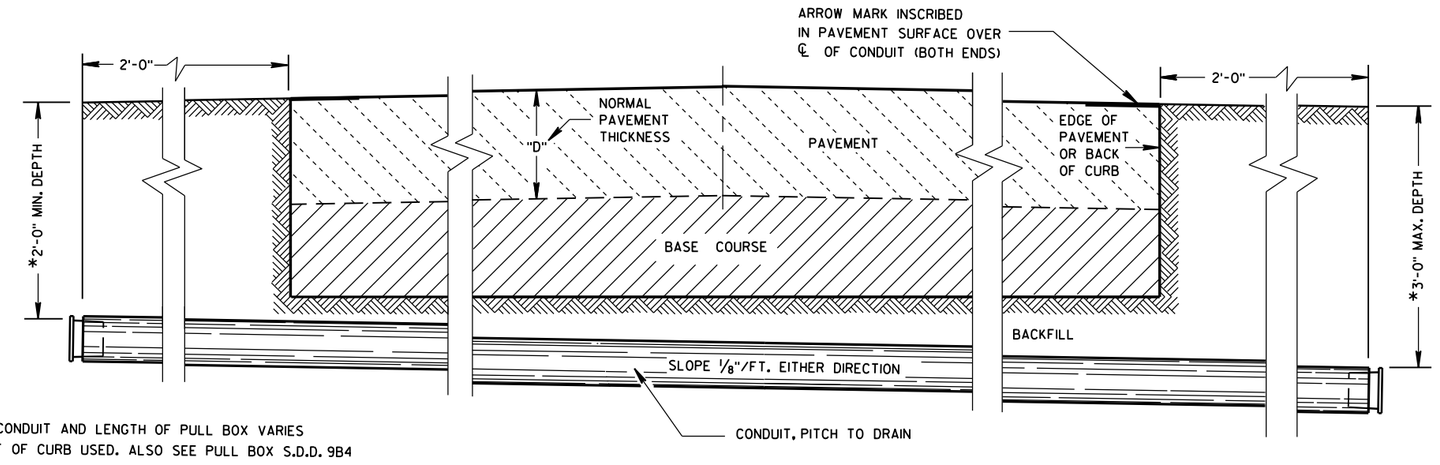
6

S.D.D. 8 F 1-11



PLAN VIEW

ARROW MARK



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

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

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

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

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

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

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

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

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

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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

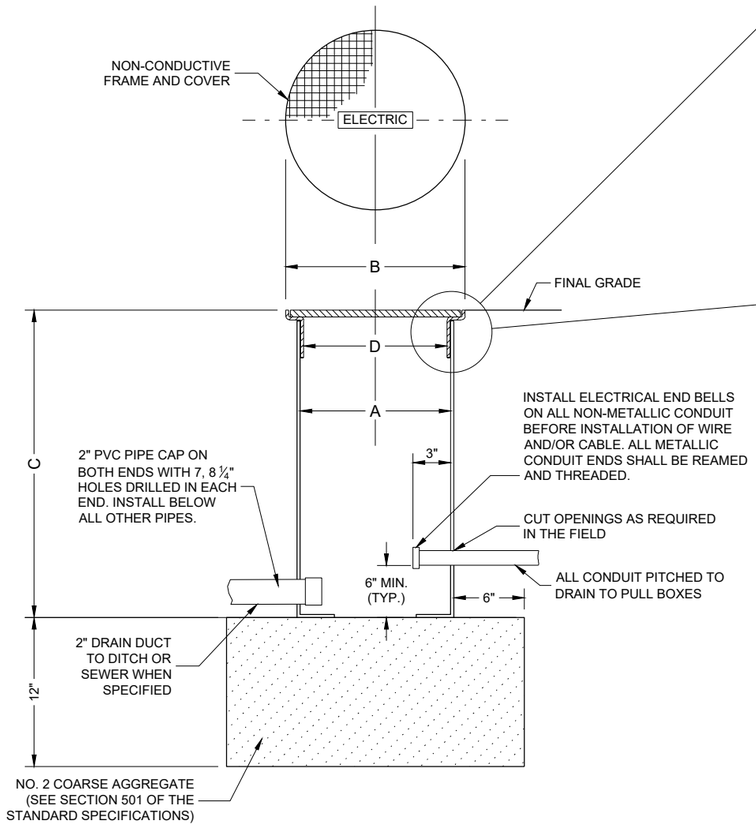
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

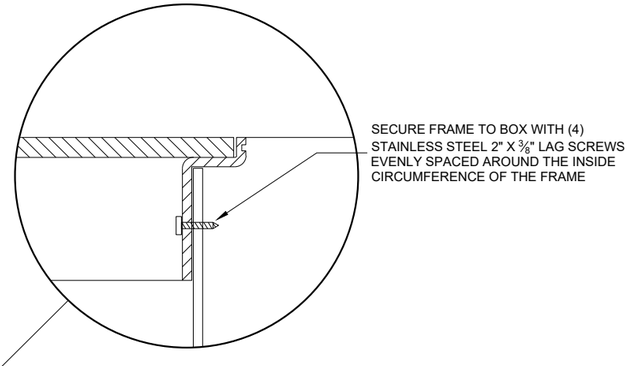
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

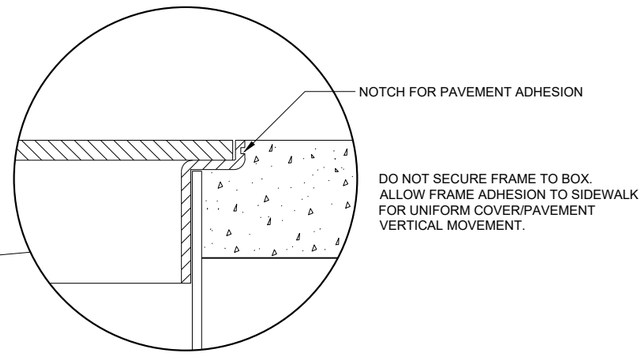
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



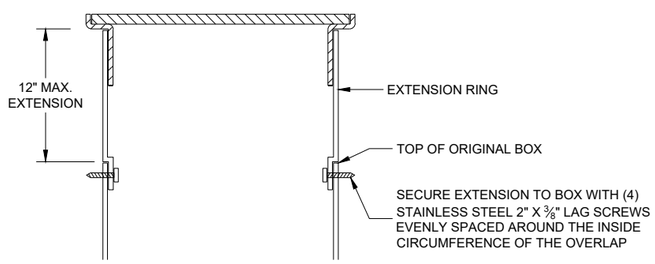
NON-CONDUCTIVE PULL BOX



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



BOX EXTENSION

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

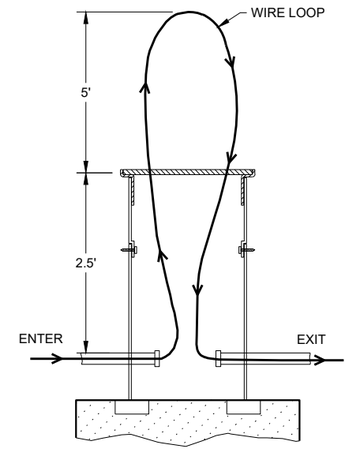
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

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

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

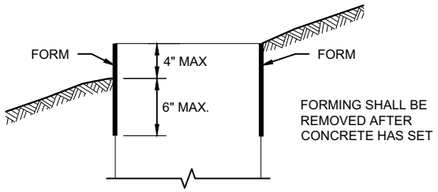
APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 379

FHWA

6
SDD 09B16 - 02

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

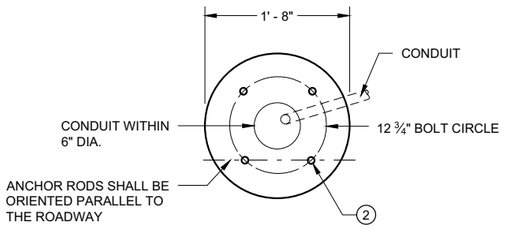
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

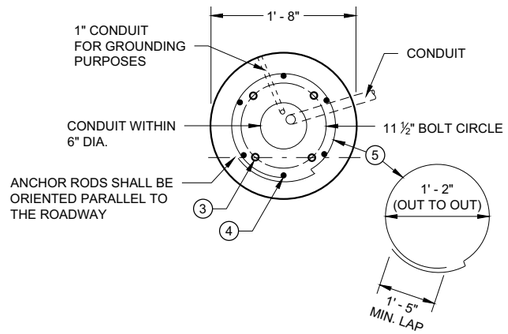
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

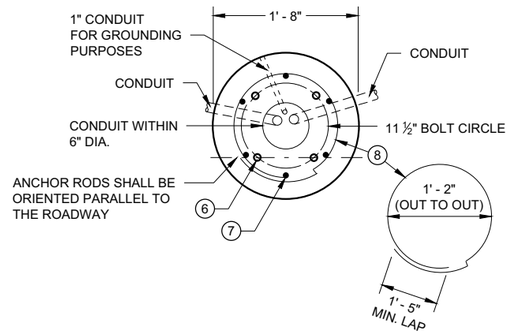
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

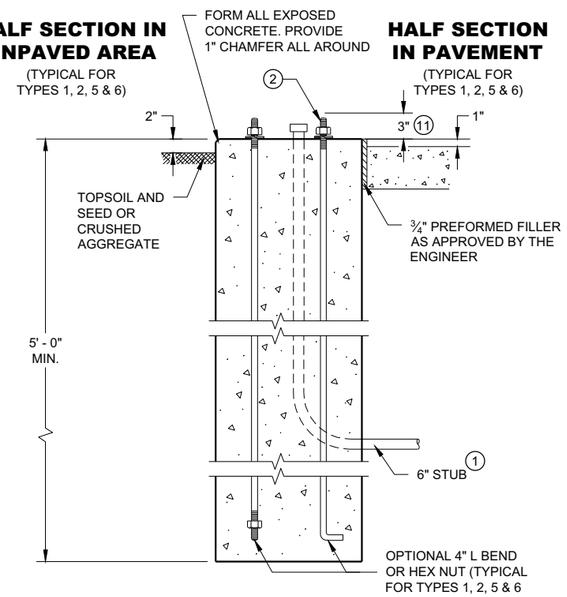
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

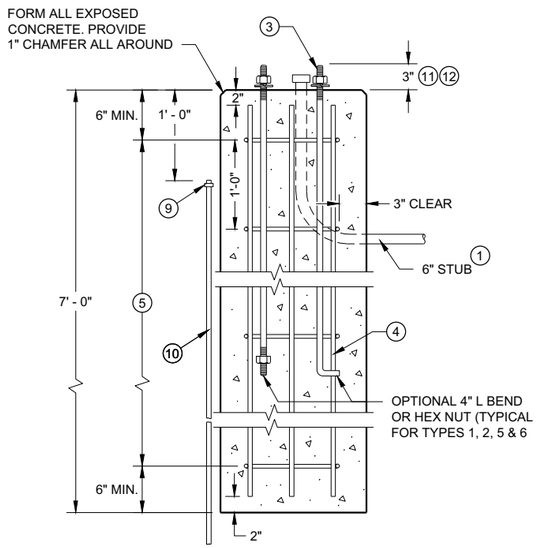
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

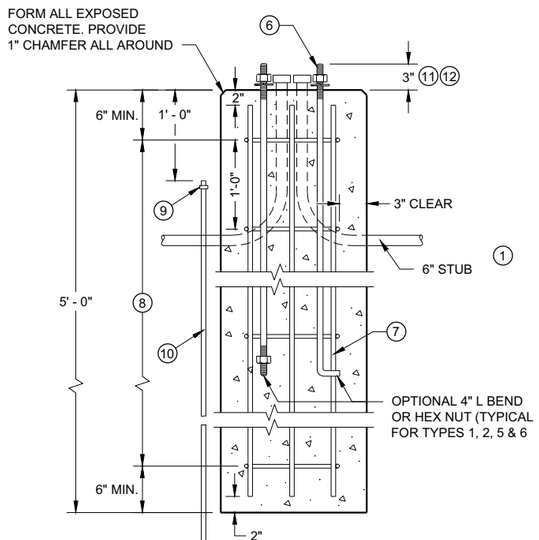
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 380

FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

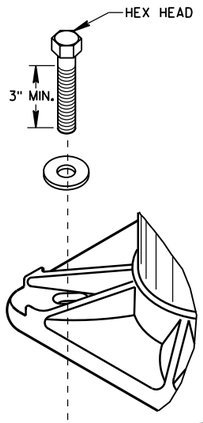
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

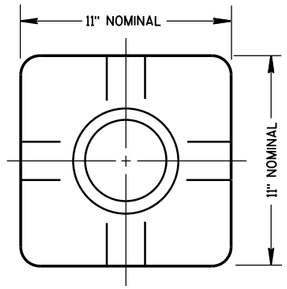
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

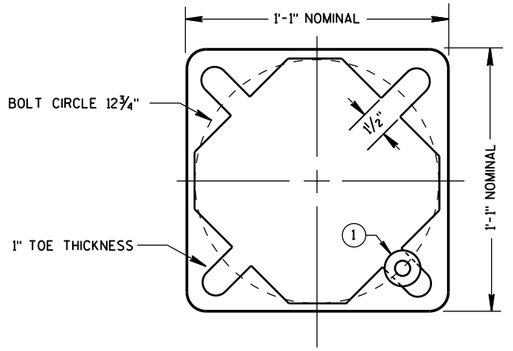
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

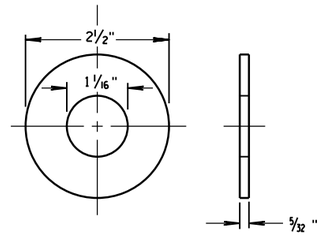




TOP VIEW
(PEDESTAL BASE)

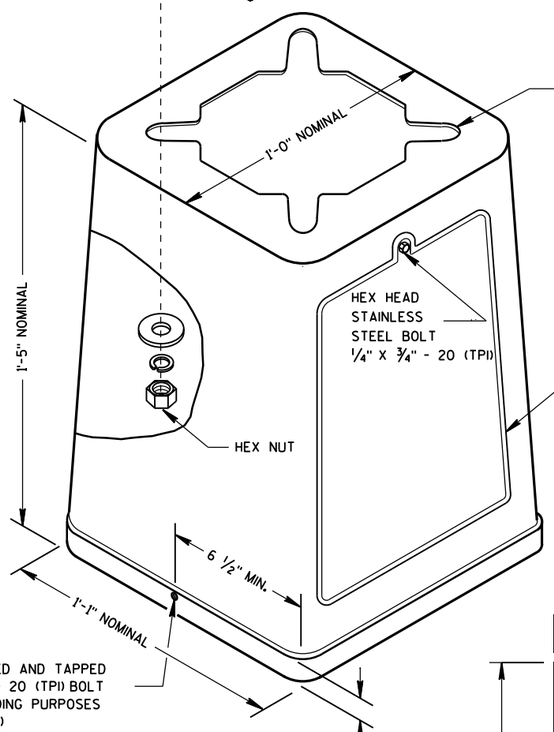


BOTTOM VIEW
(PEDESTAL BASE)

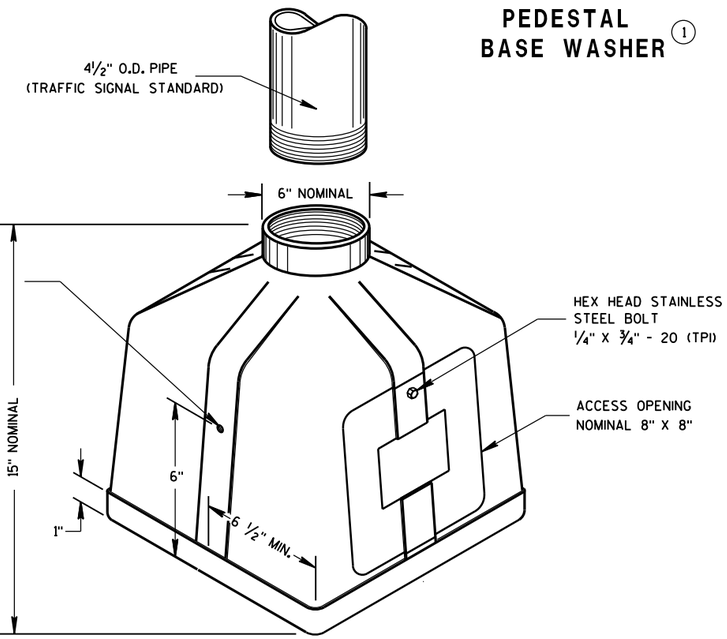


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

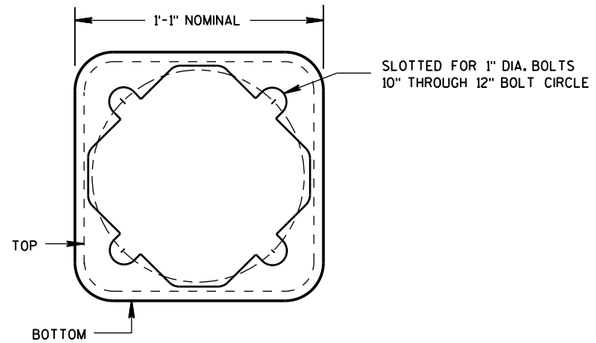


ISOMETRIC VIEW

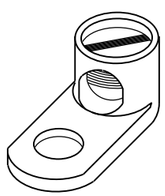


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

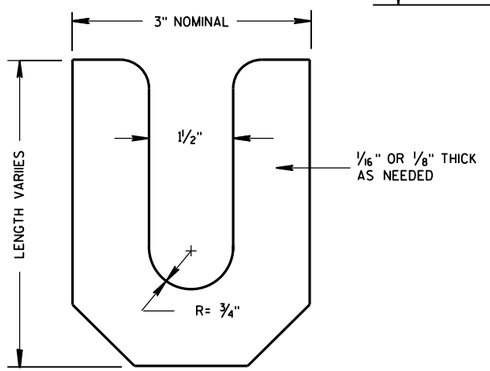


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
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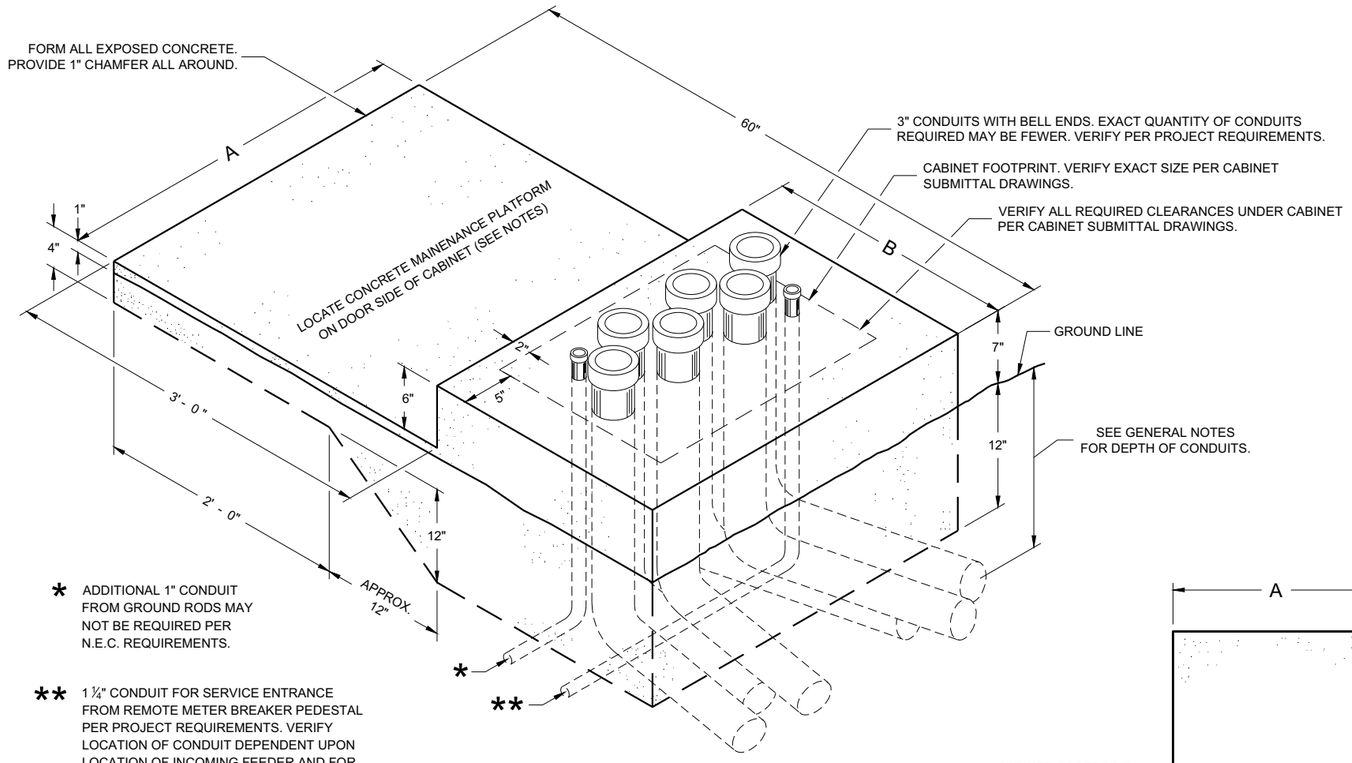
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 3-4

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S.D.D. 9 C 3-4



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

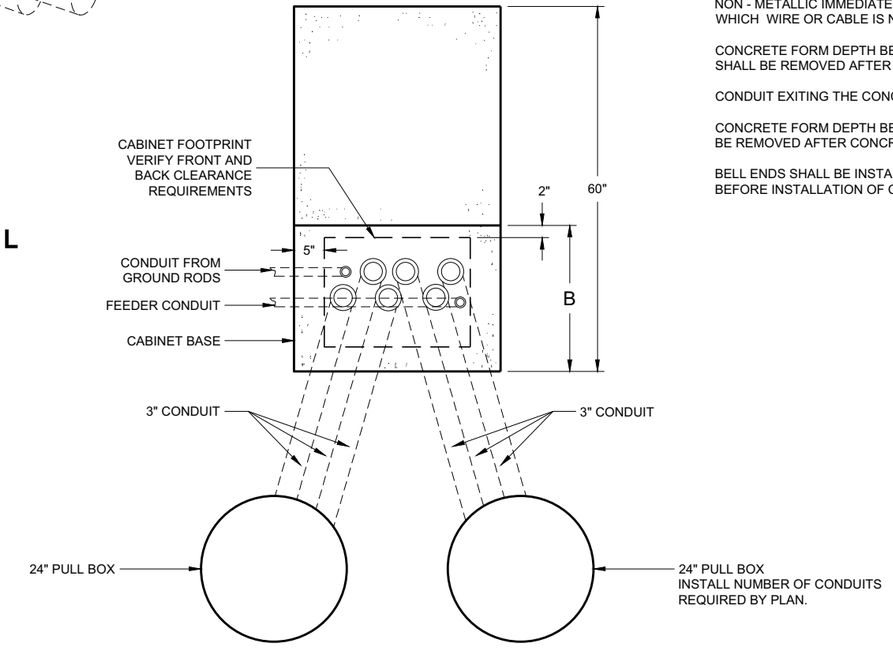
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

LOCATIONS SHALL BE AS SHOWN ON THE PLANS UNLESS DETERMINED BY THE ENGINEER IN THE FIELD.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCH MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE L

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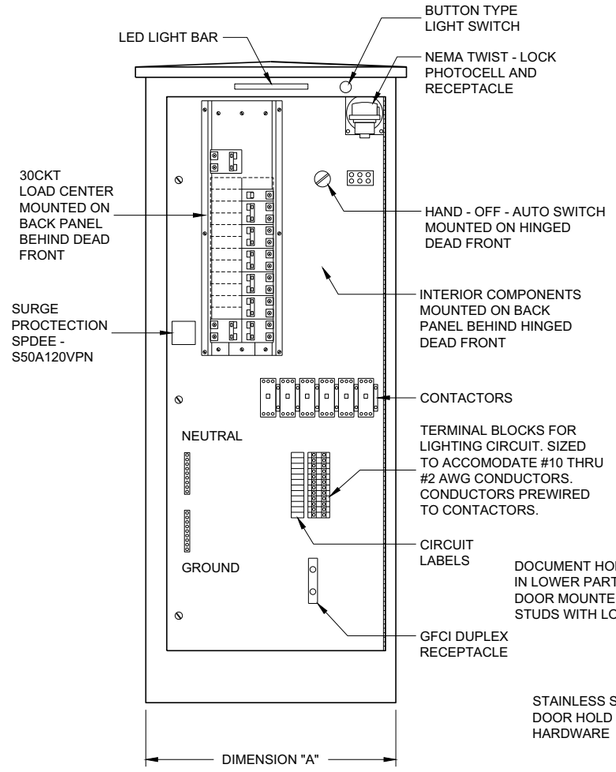
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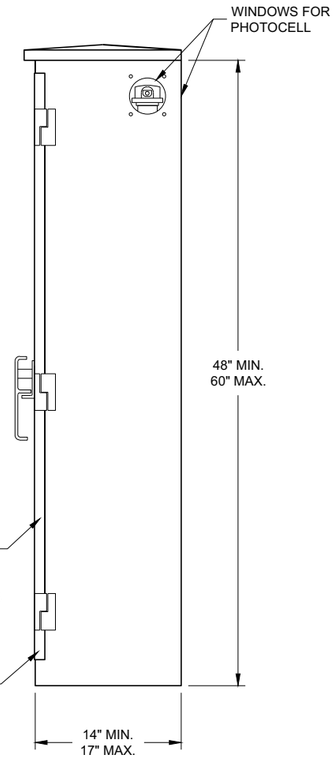
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FRONT INTERIOR ELEVATION



SIDE VIEW



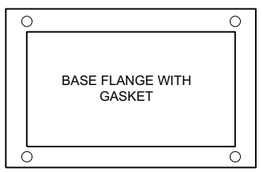
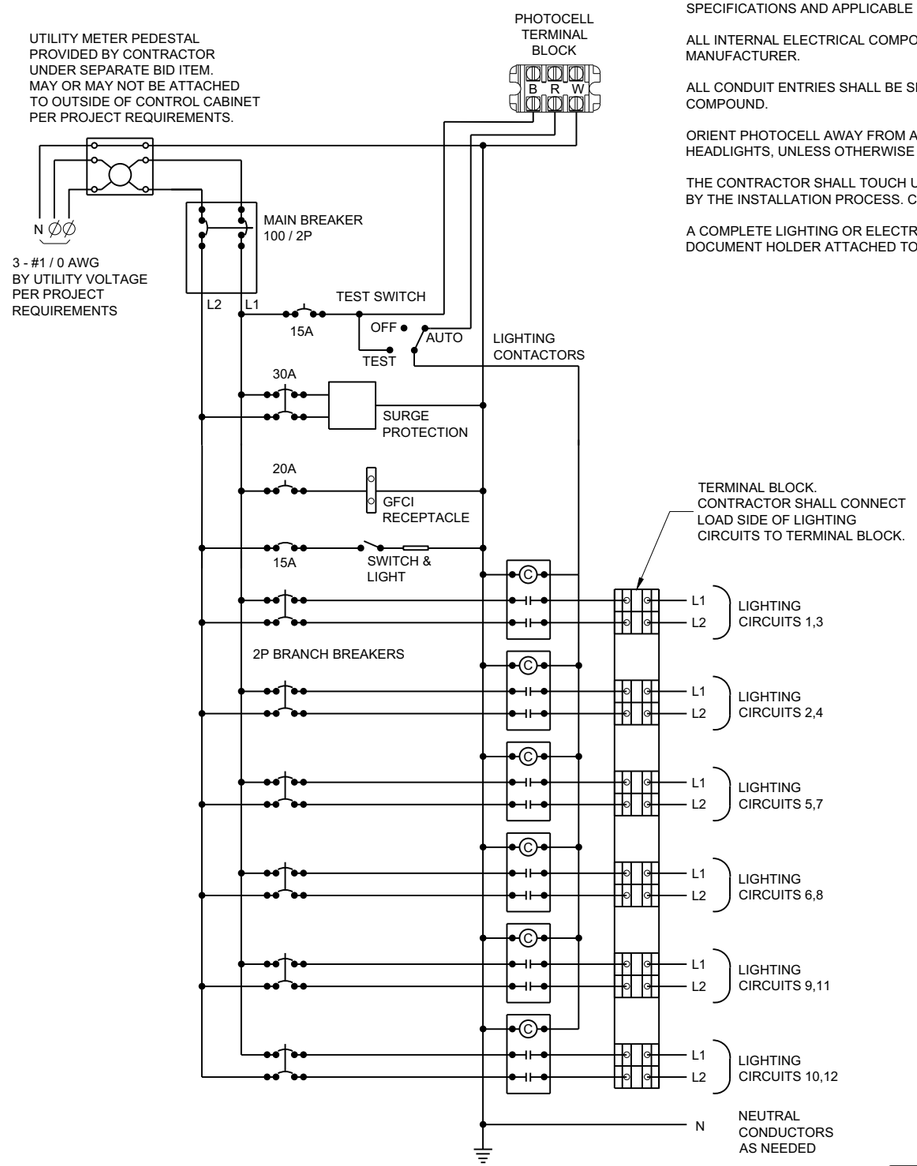


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE - WIRED BY THE CABINENT MANUFACTURER.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS, UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISION.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

LIGHTING CONTROL CABINET
120 / 240 VOLT

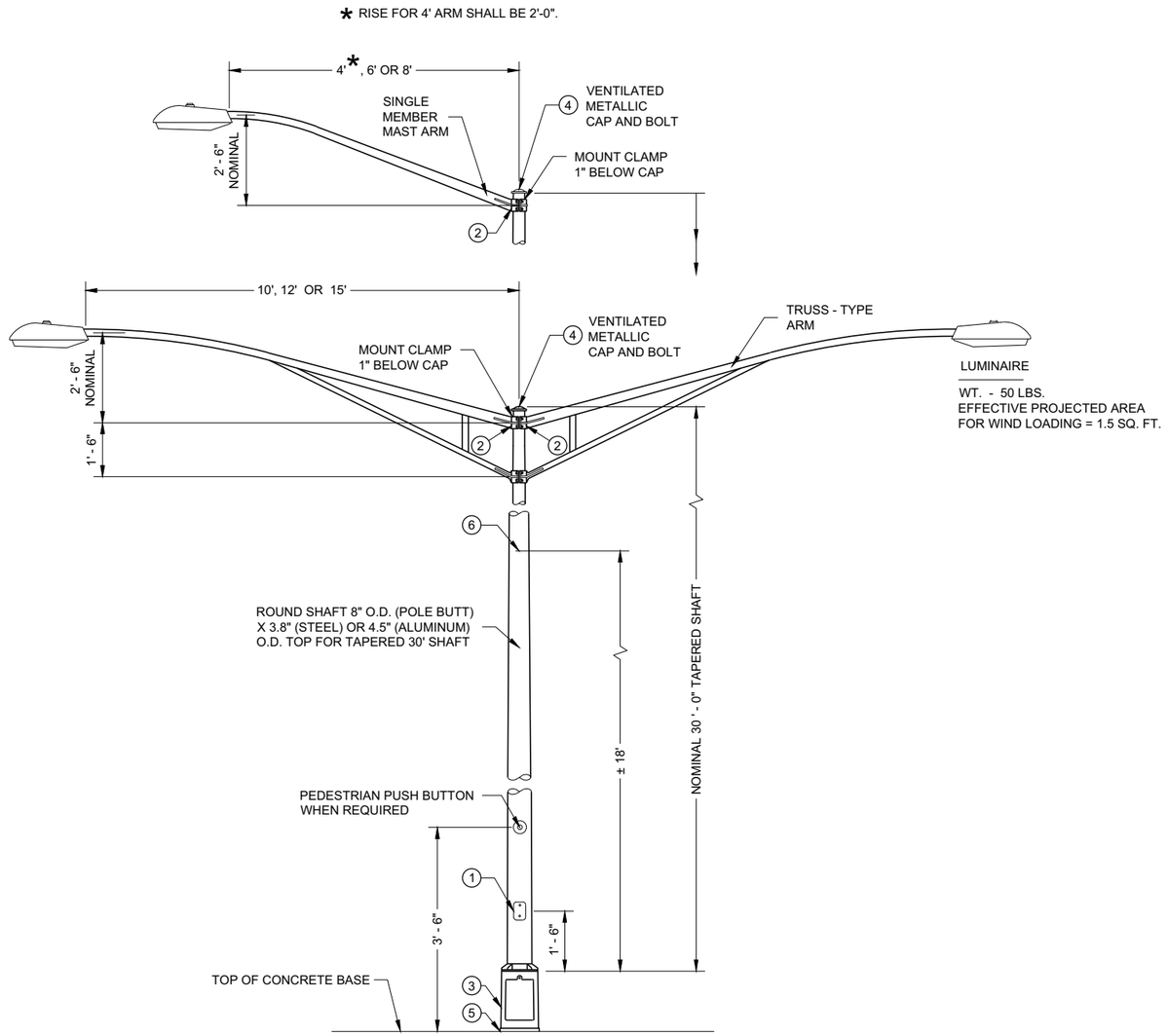
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November 2018
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TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

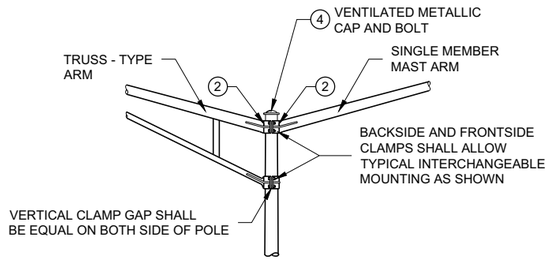
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

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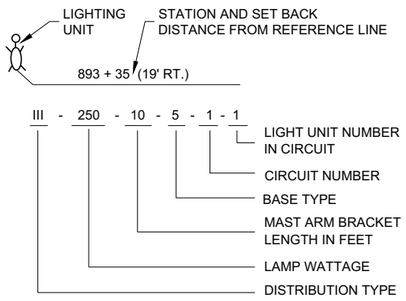
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GENERAL NOTES

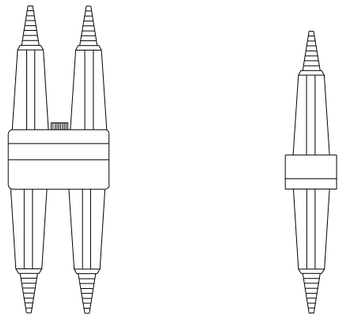
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

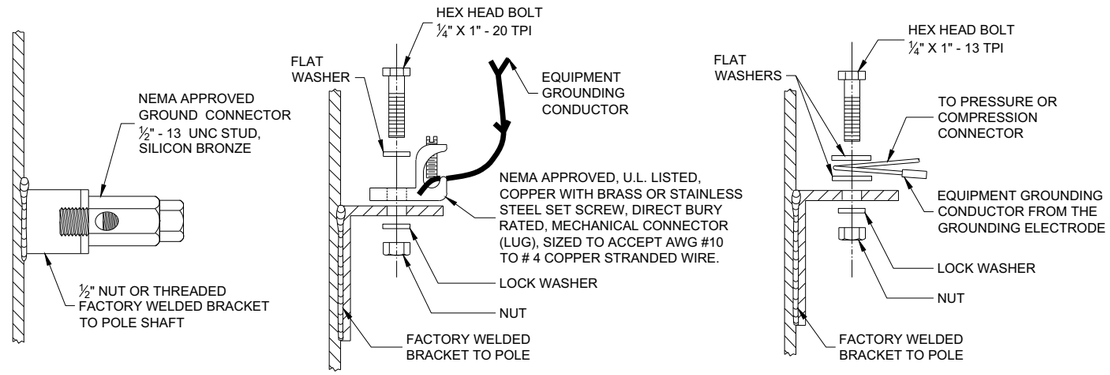


LIGHTING UNIT CODE
(TYPICAL)

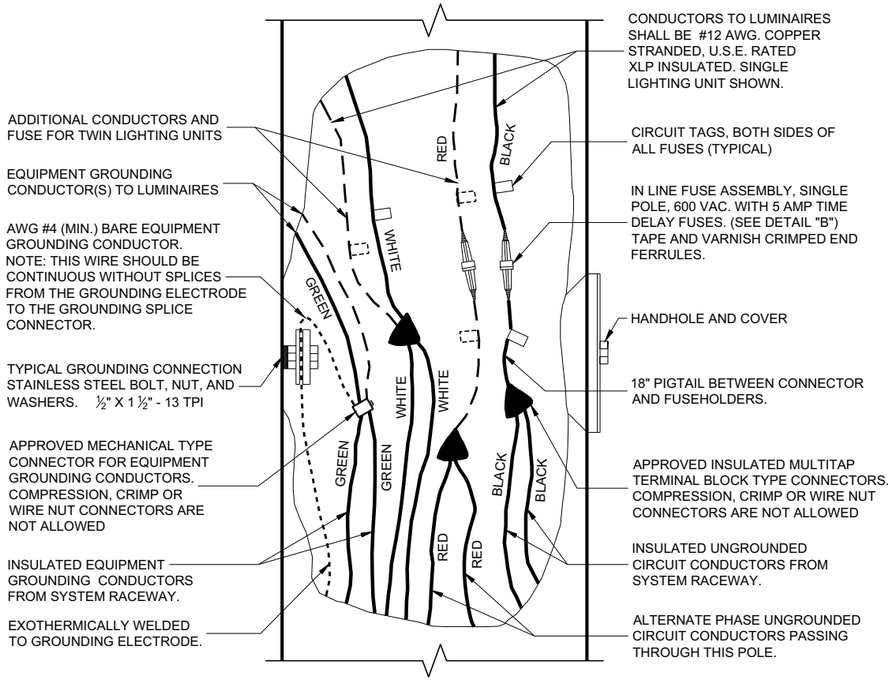


DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

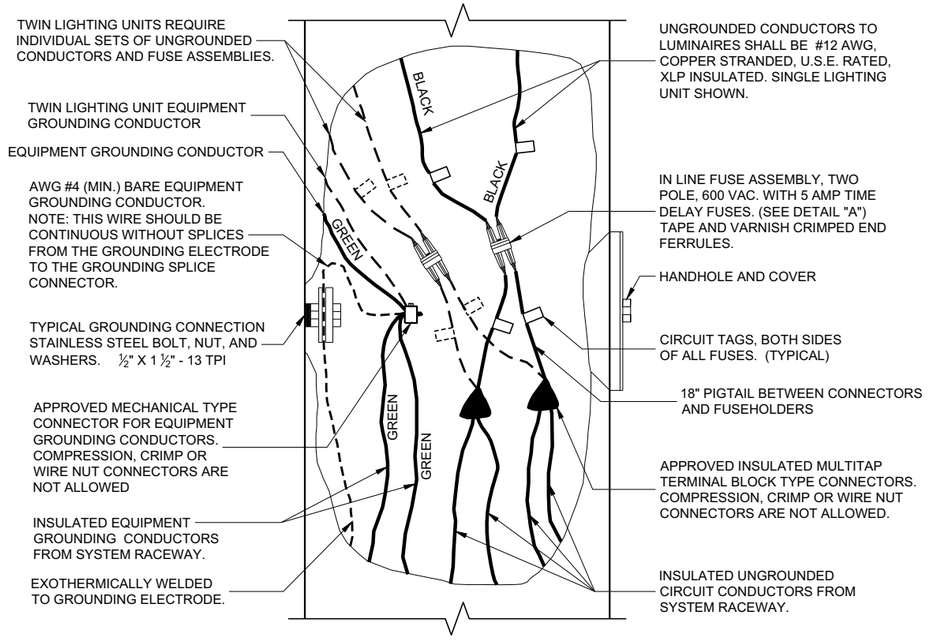
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

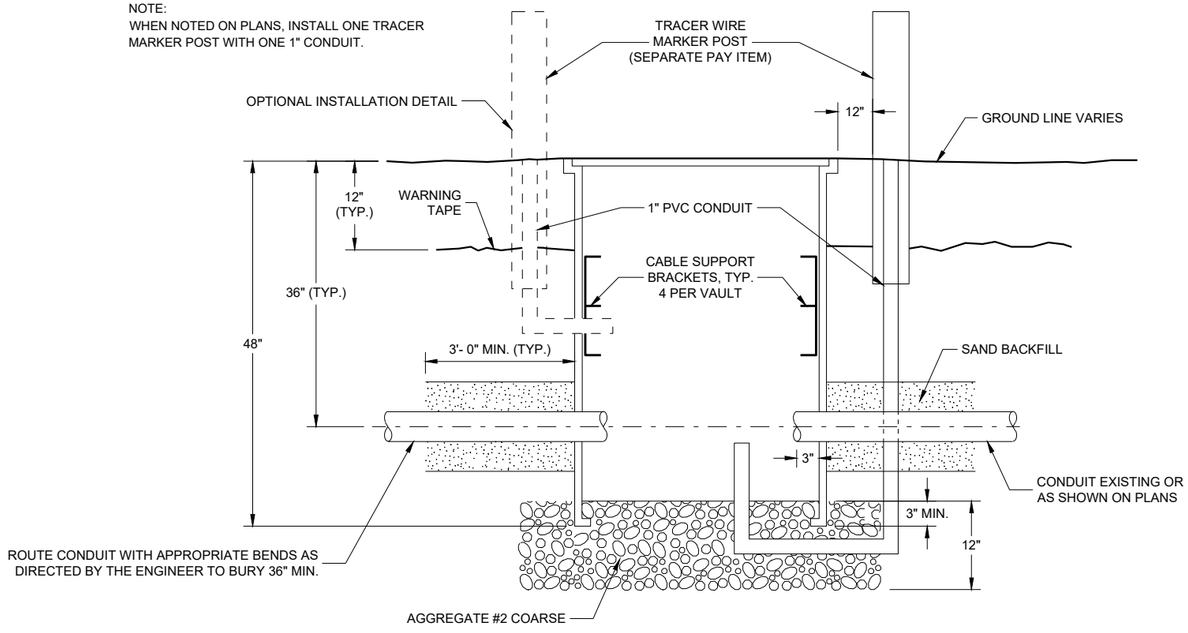
NON - FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
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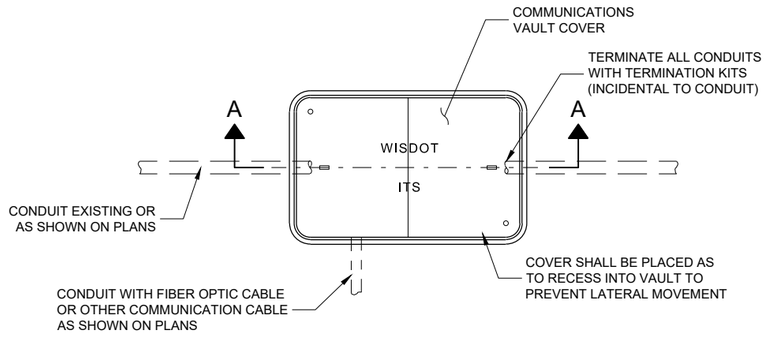
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November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 385

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NOTE:
WHEN NOTED ON PLANS, INSTALL ONE TRACER MARKER POST WITH ONE 1" CONDUIT.



SECTION A - A



PLAN VIEW

COMMUNICATIONS VAULT TYPE 1

GENERAL NOTES

PROVIDE VAULT WITH OPEN BASE.

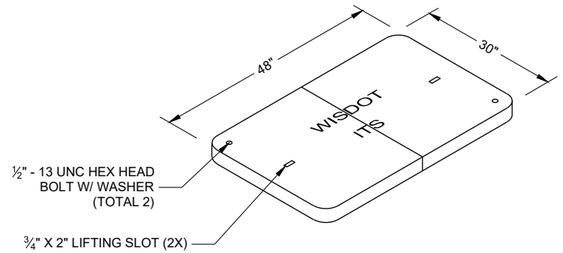
COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.

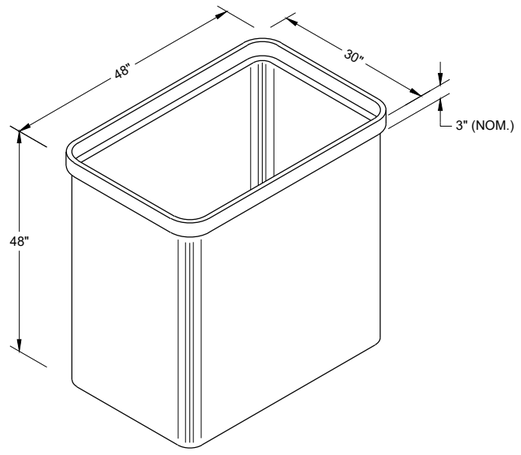
ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.

FIELD PLACEMENT OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.

FIBER TRACER MARKER POSTS SHALL BE CONSTRUCTED WITH HIGH-IMPACT PLASTIC MATERIAL WHICH IS FADE RESISTANT AND UV STABLE. ALL HARDWARE SHALL BE STAINLESS STEEL AND CONTAIN A MINIMUM OF FIVE STANDARD TERMINALS.





ISOMETRIC VIEW

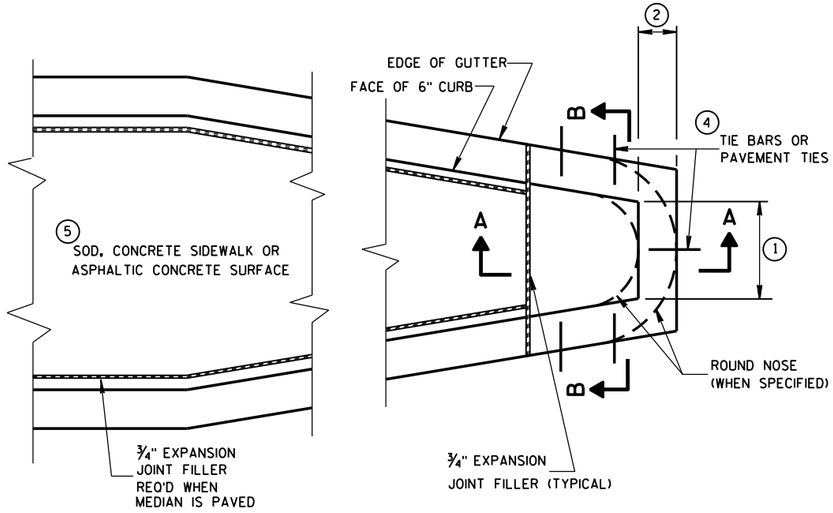
COMMUNICATION VAULT TYPE 1

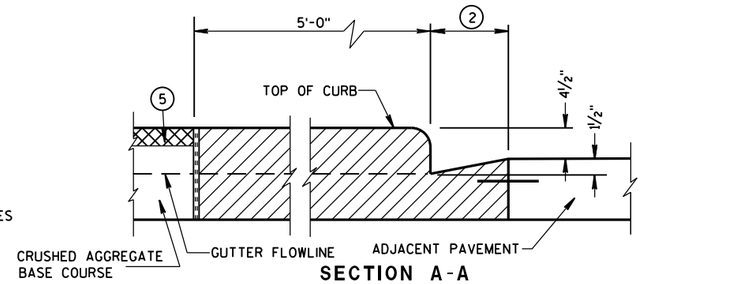
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 386

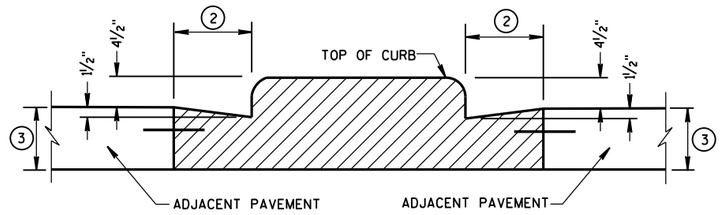
FHWA

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SDD 09H09 - 02





SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

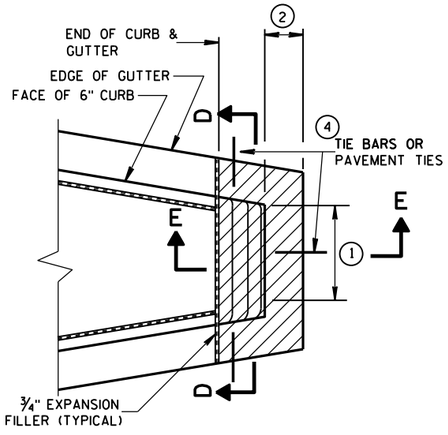
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

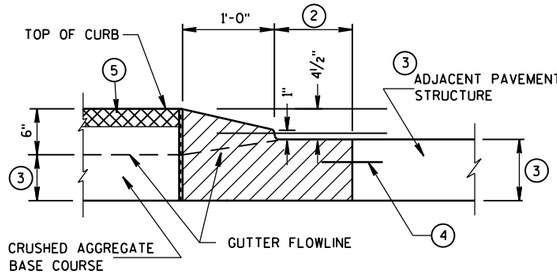
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

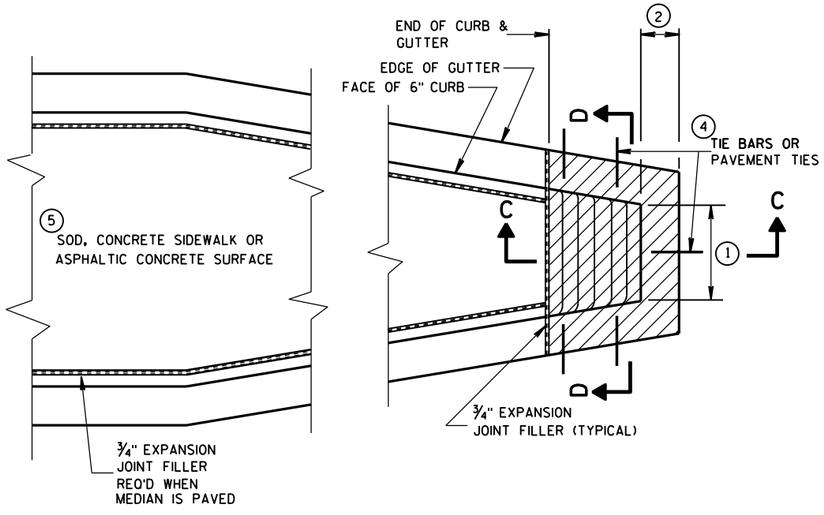
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

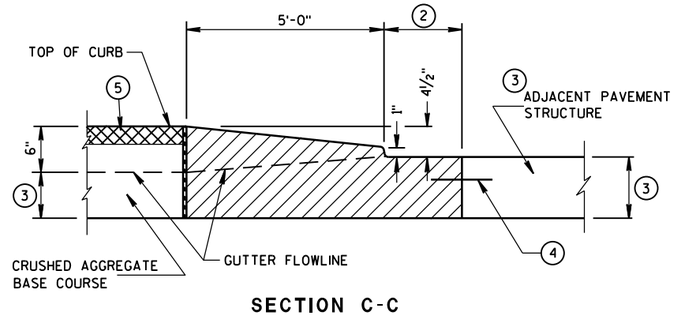




SECTION E-E

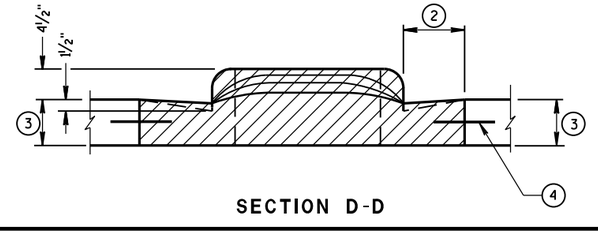
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

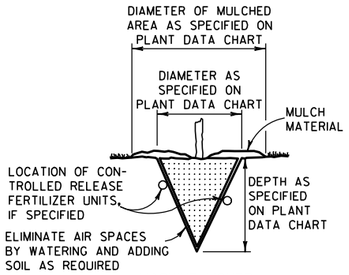
FHWA

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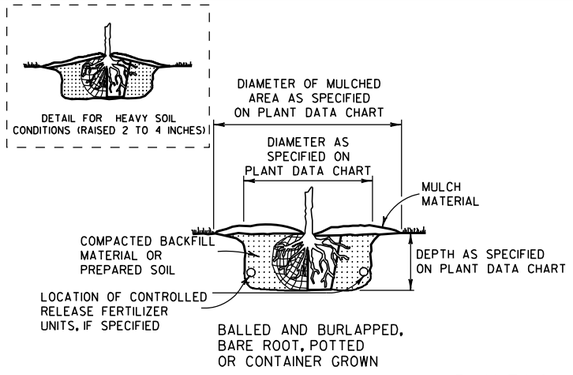
S.D.D. 11 B 2-2

6

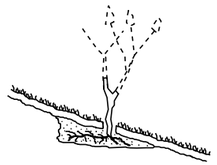
S.D.D. 11 B 2-2



MACHINE MOVED

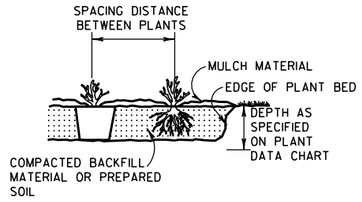


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



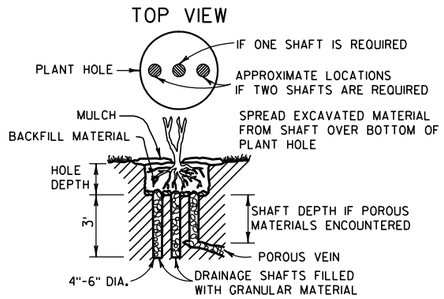
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



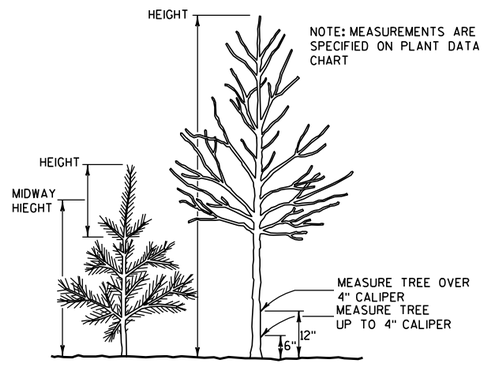
PREPARED BED (BARE ROOT AND POTTED)

PLANTING

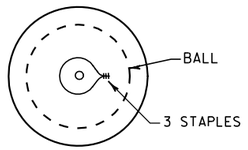


NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

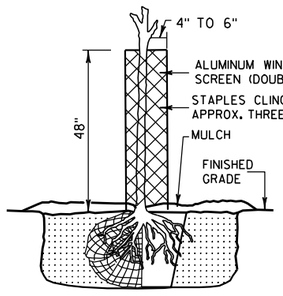
DRAINING



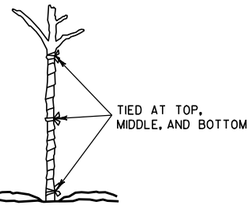
MEASURING



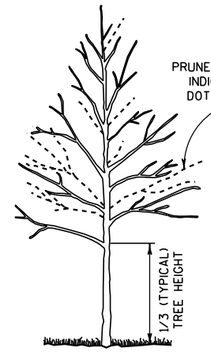
TOP VIEW



RODENT PROTECTION



WRAPPING



TALL DECIDUOUS TREES (ASH, MAPLE, LINDEN, OAK)

SINGLE STEMMED LOW DECIDUOUS TREES (CRABS AND OTHER SINGLE STEM TYPE)

MULTI-STEMMED LOW DECIDUOUS TREES OR LARGE SHRUBS (HAWTHORN, SERVICEBERRY)

NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

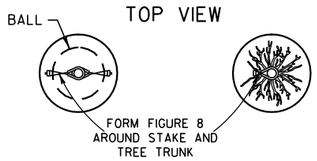


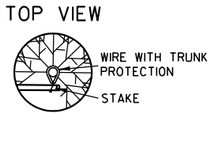
SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

SUMAC

TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

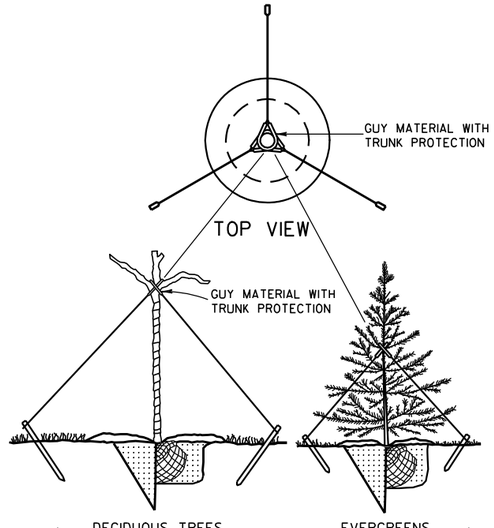
PRUNING



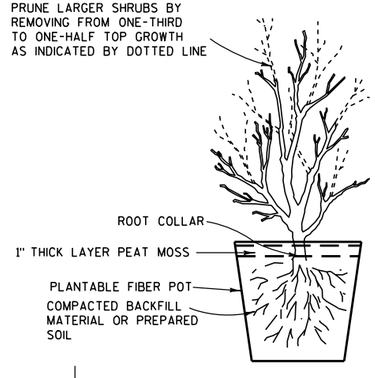


NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING



POTTING

NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

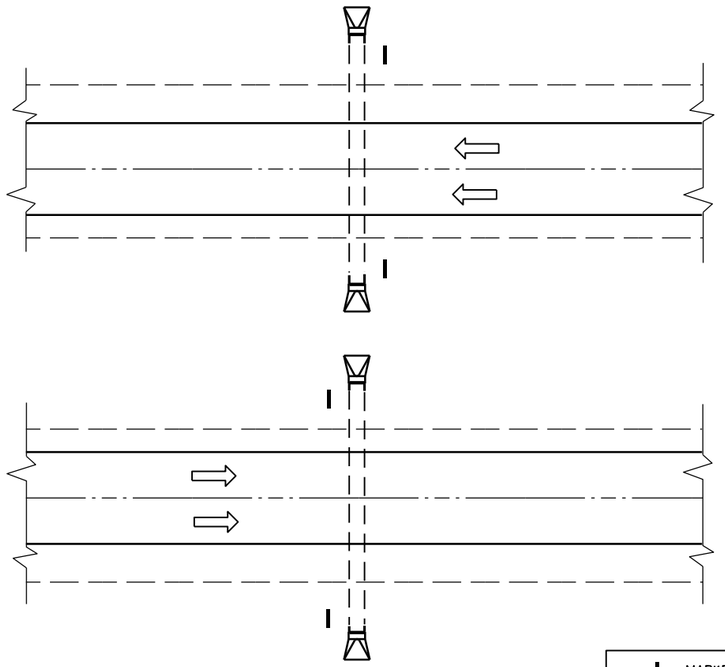
4/11/94
DATE

/S/ Rory L. Rhinesmith
CHIEF METHODS DEVELOPMENT ENGINEER

FHWA

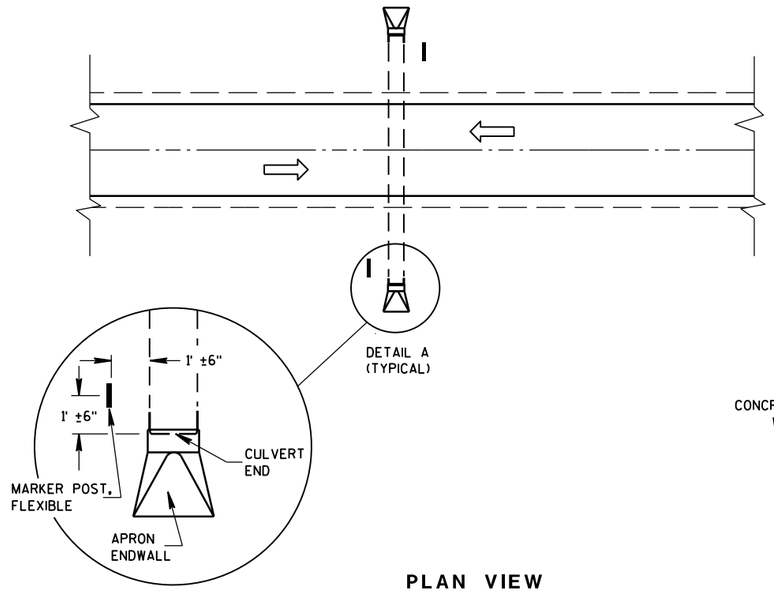
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S.D.D. 14 A 2-1



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

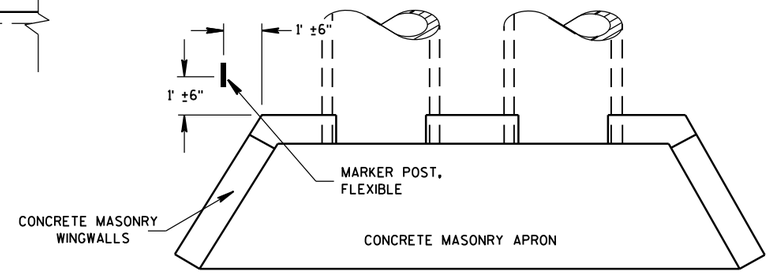
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

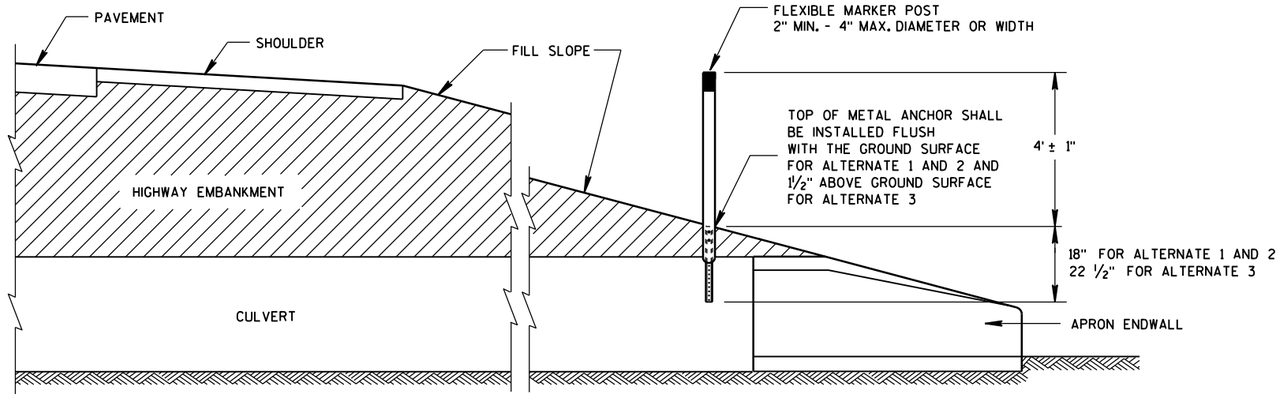
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

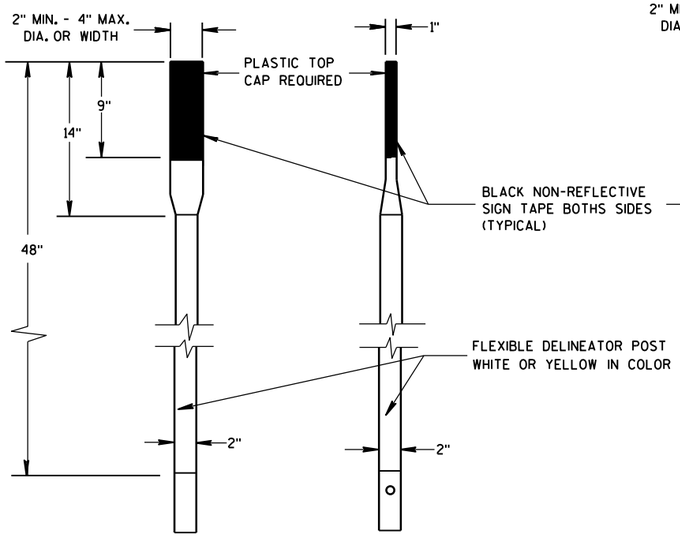
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

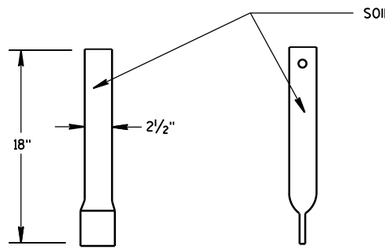
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S.D.D. 15 A 3-2a

6

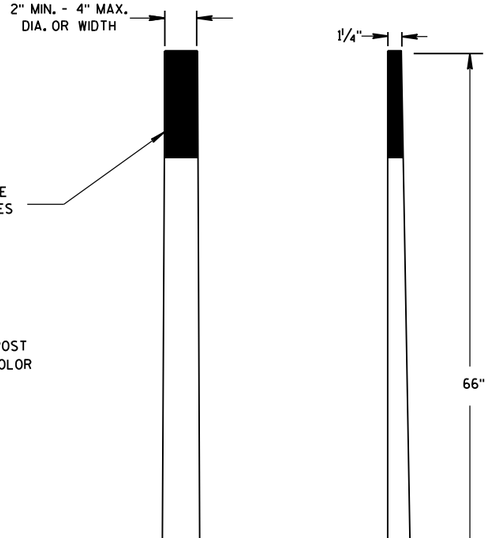
S.D.D. 15 A 3-2a





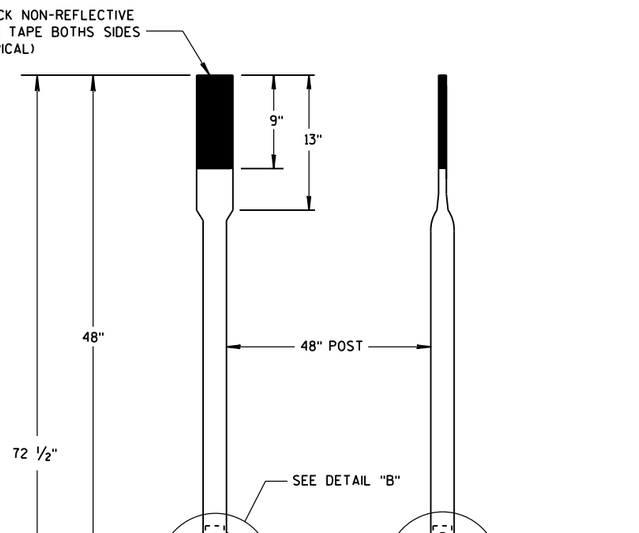
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

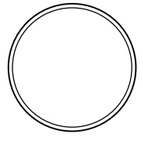
ALTERNATE 2



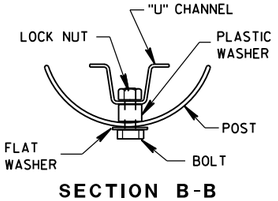
FRONT VIEW SIDE VIEW

ALTERNATE 3

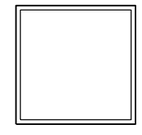
FLEXIBLE MARKER POSTS



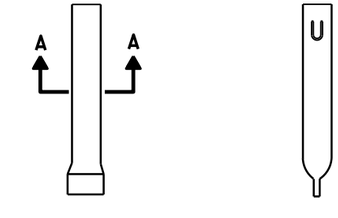
SECTION A-A



SECTION B-B

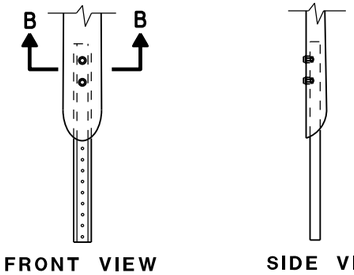


SECTION C-C



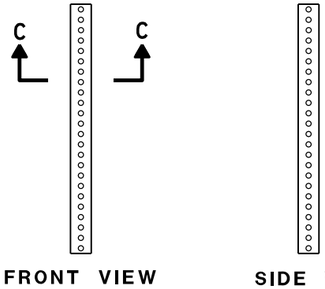
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

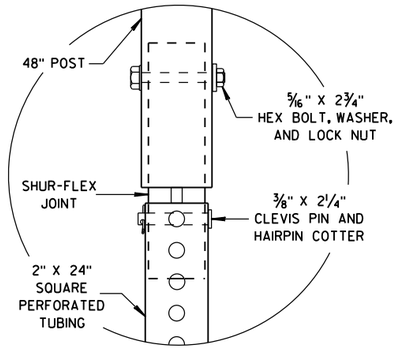
ALTERNATE 2



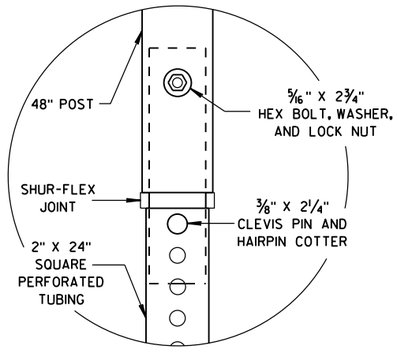
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

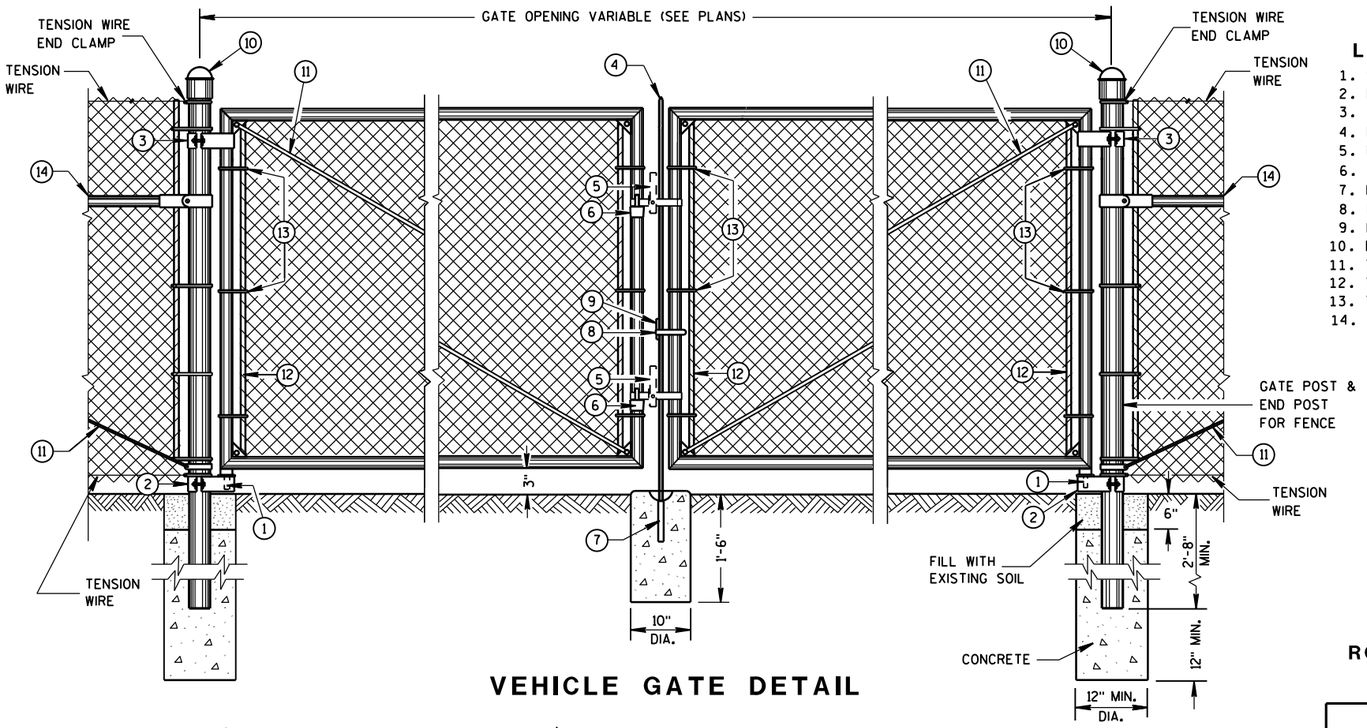
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

6

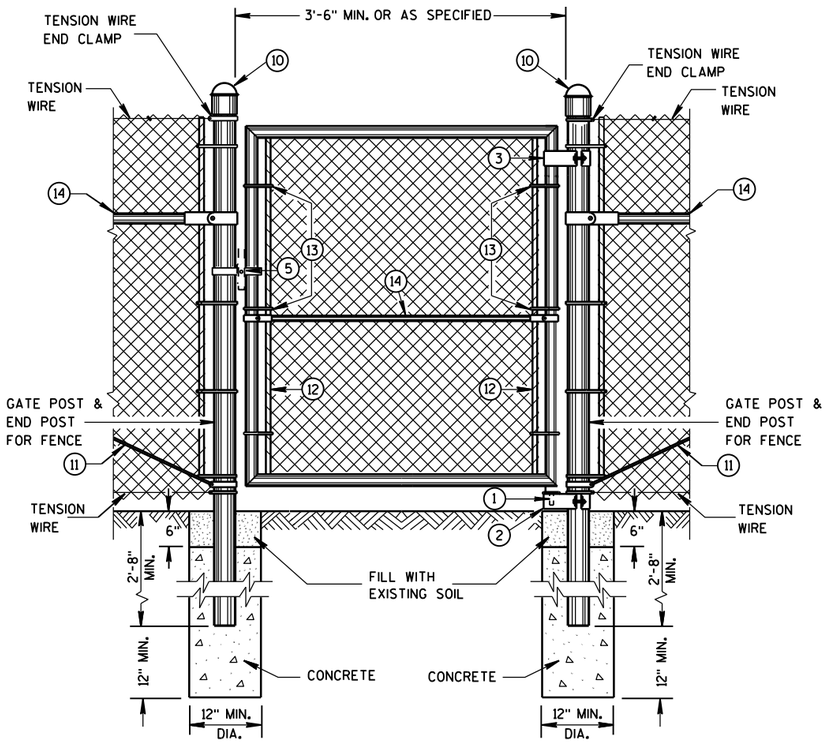
S.D.D. 15 A 3-2b

6

S.D.D. 15 A 3-2b



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

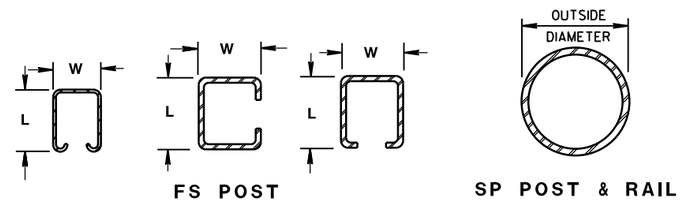
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



FS POST — SP POST & RAIL

CROSS SECTIONS OF POSTS AND RAILS

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

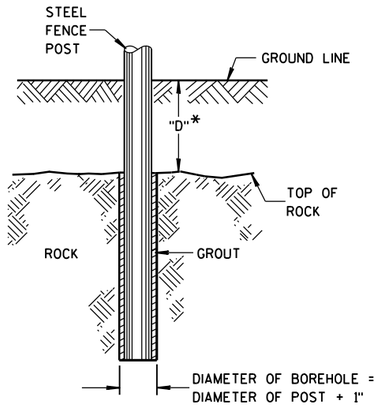
POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

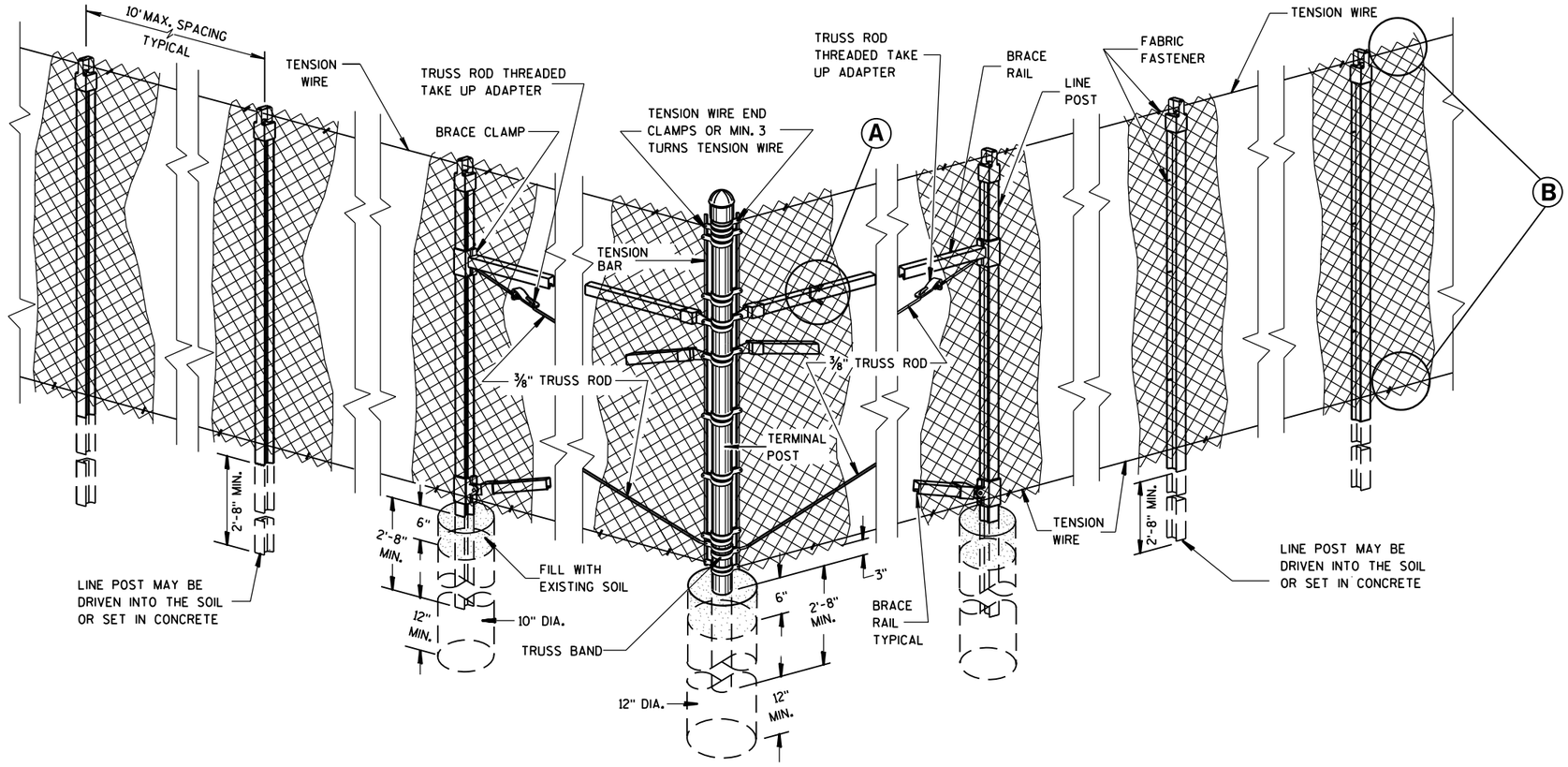
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S.D.D. 15 B 3-15a

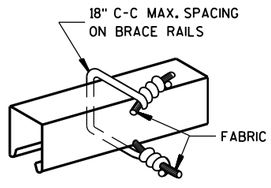


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



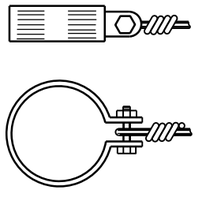
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



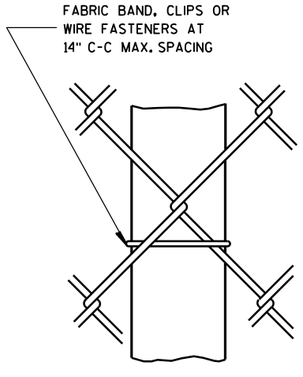
BRACE RAIL

FABRIC FASTENER

Ⓐ



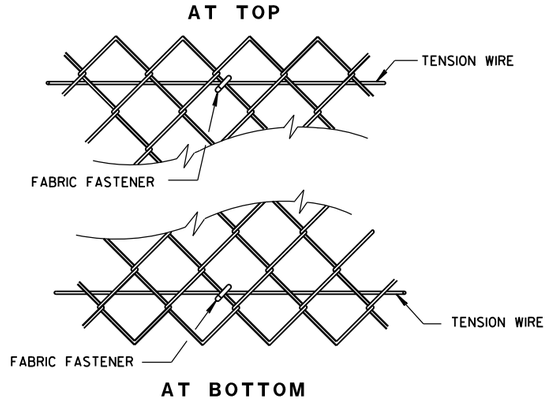
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

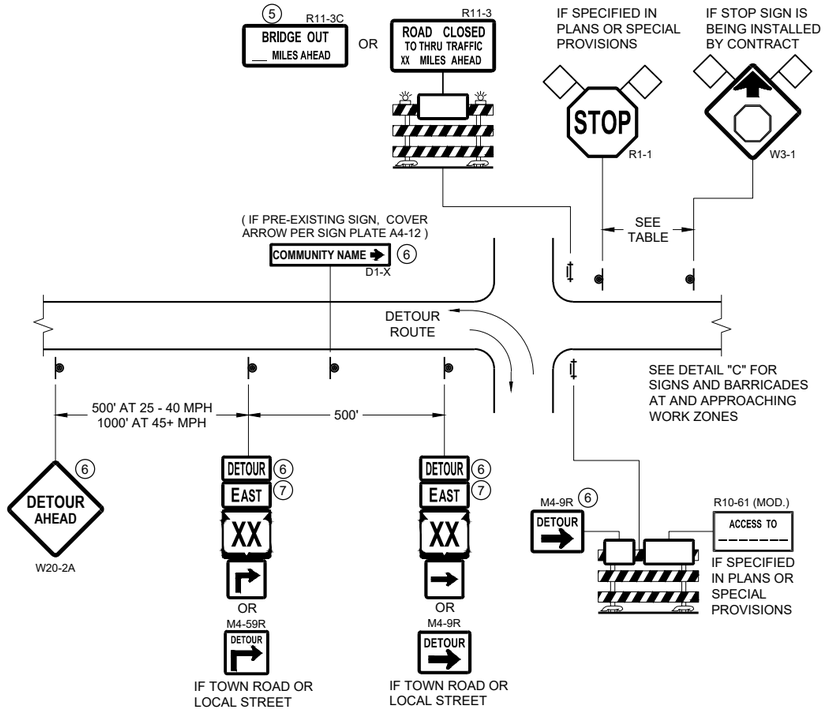
FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
FEB. 2015 DATE
FHWA
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

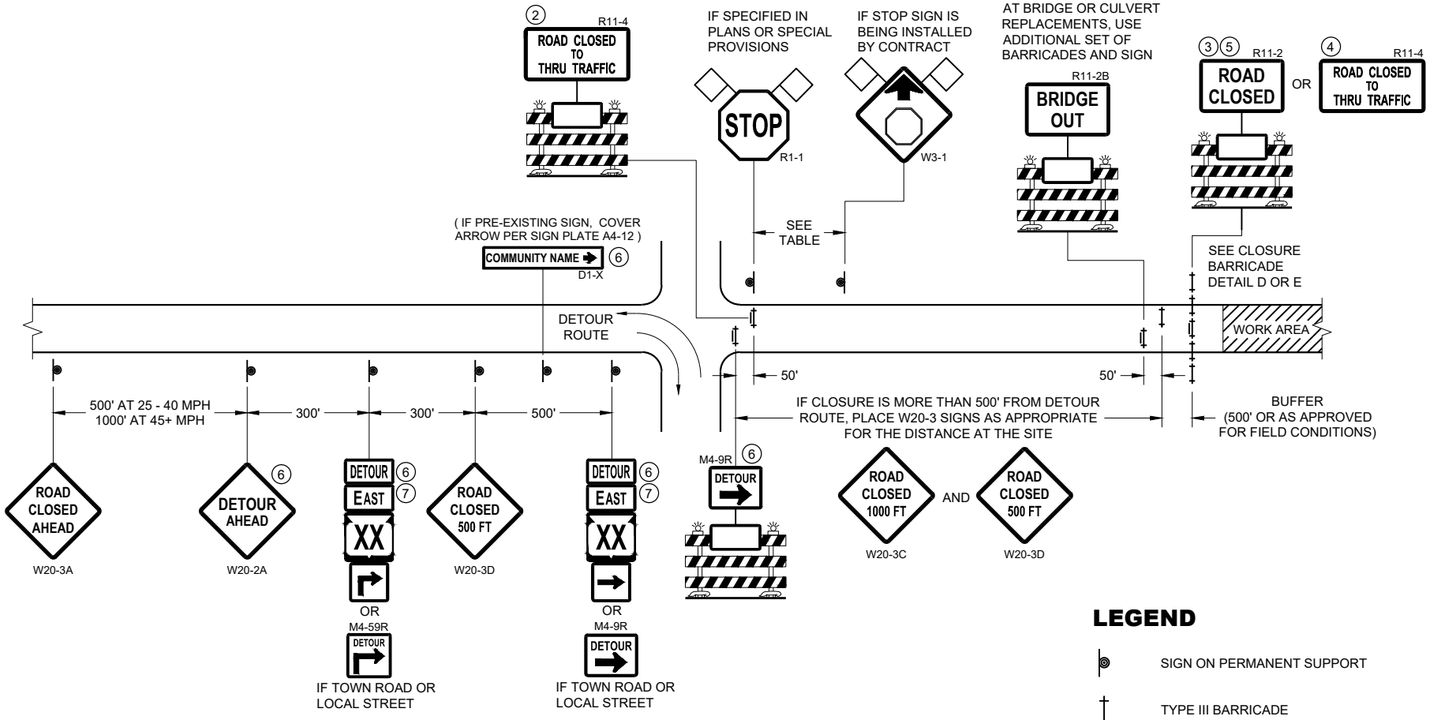
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S.D.D. 15 B 3-15b



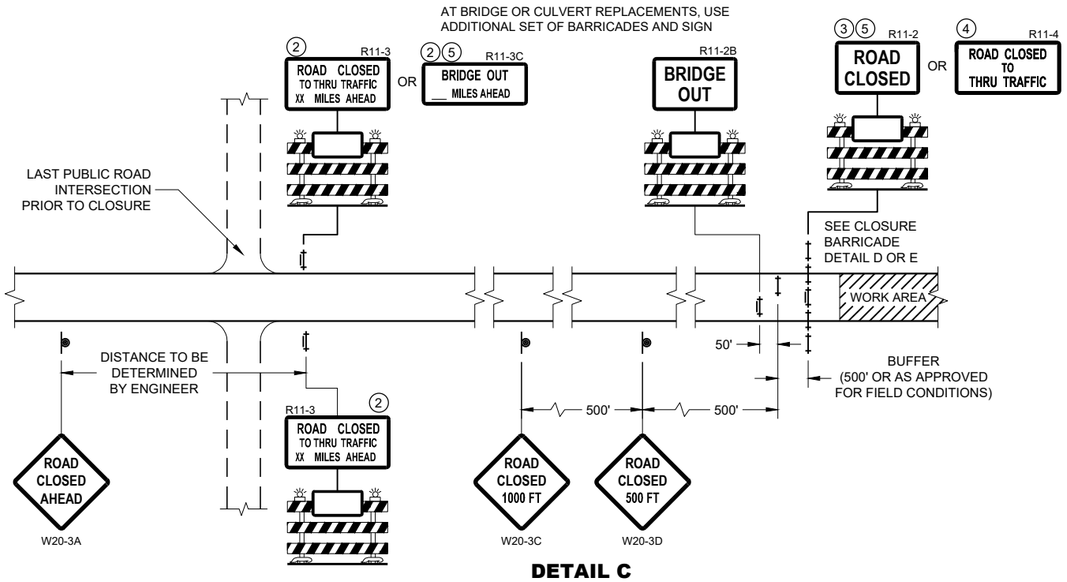
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

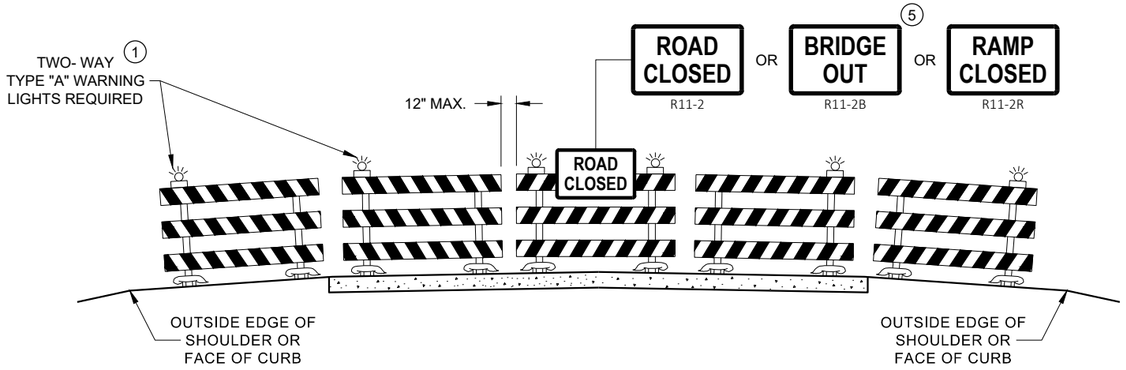
APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

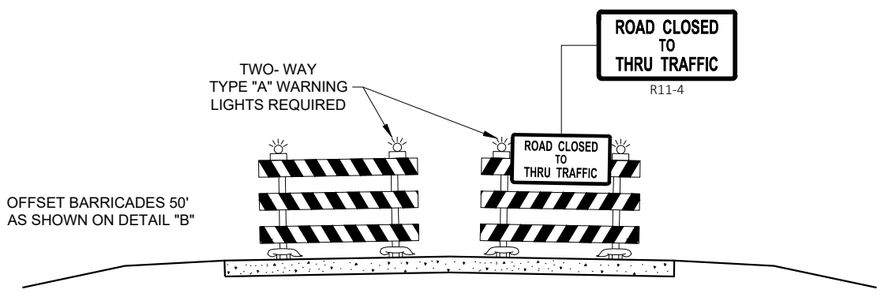
6

SDD 15C02 - 09a

SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

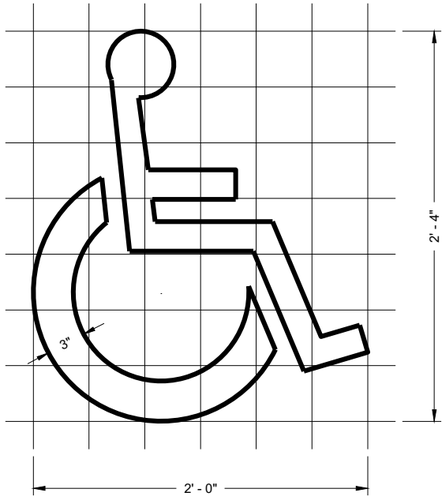
SDD 15C02 - 09b

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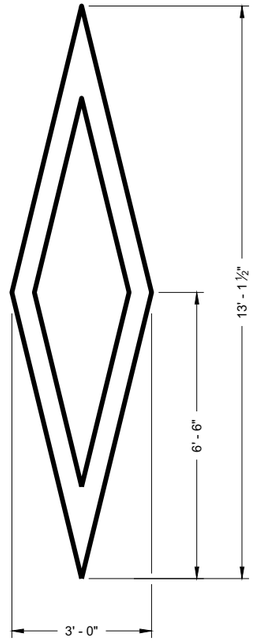
SDD 15C02 - 09b

GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

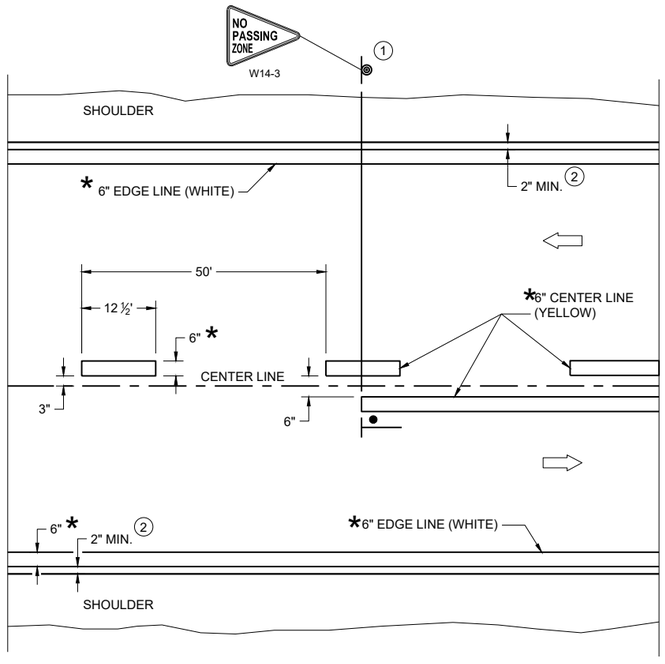
LEGEND

"T" MARKING

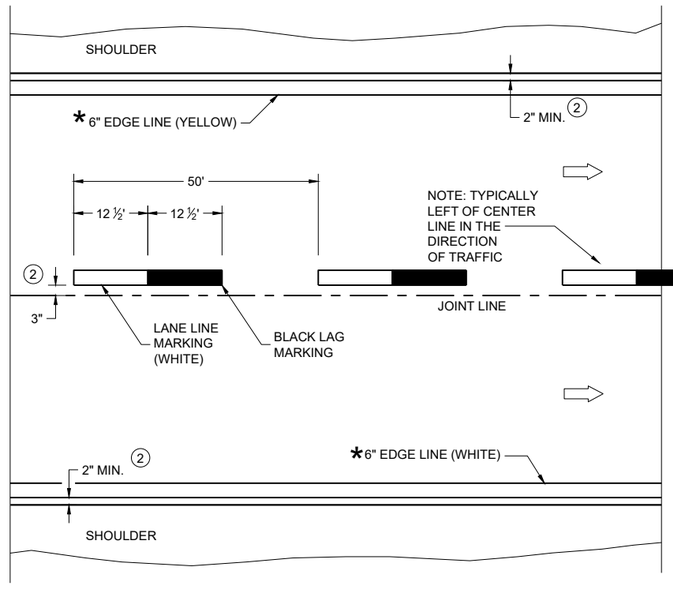
SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

SDD 15C08-23a

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

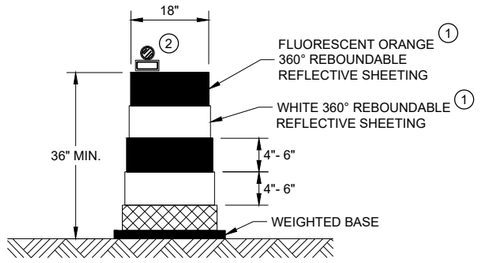
FHWA

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SDD 15C08-23a

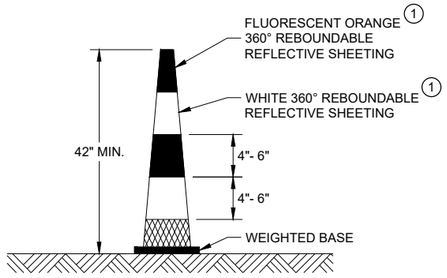
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

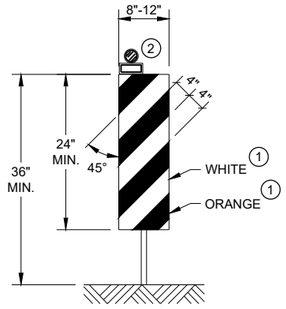
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

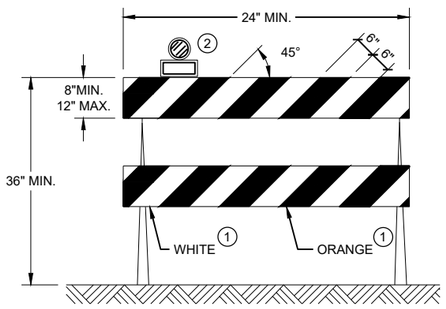
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



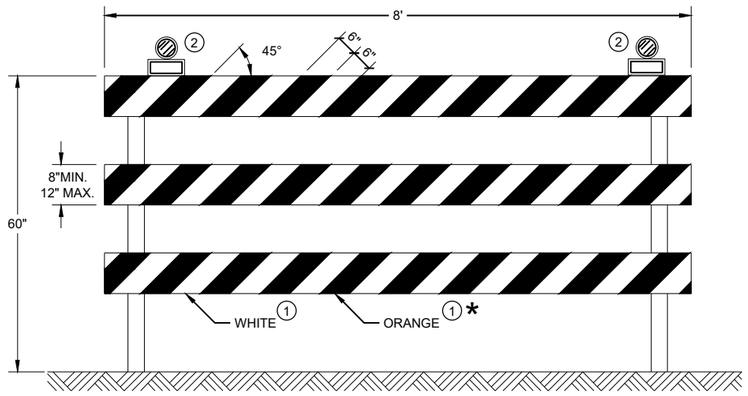
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 10b
SDD 15C11 - 10b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

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

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

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

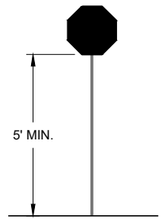
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



STOP/SLOW PADDLE ON SUPPORT STAFF

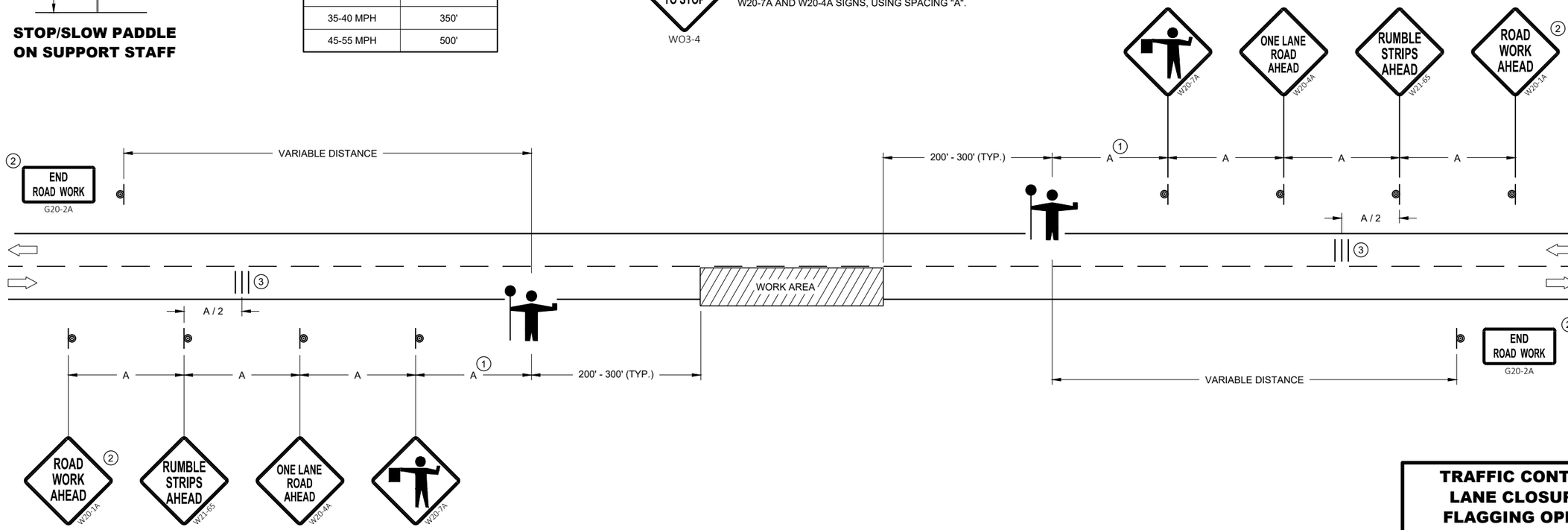
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

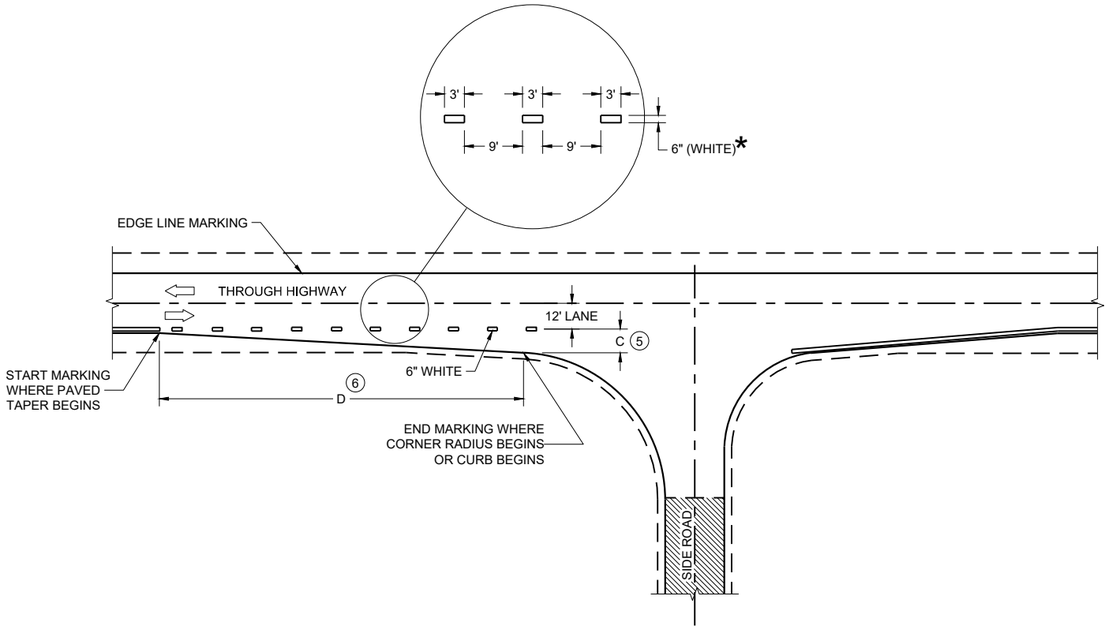
398

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SDD 15C12 - 09a

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SDD 15C12 - 09a



MINOR INTERSECTION

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

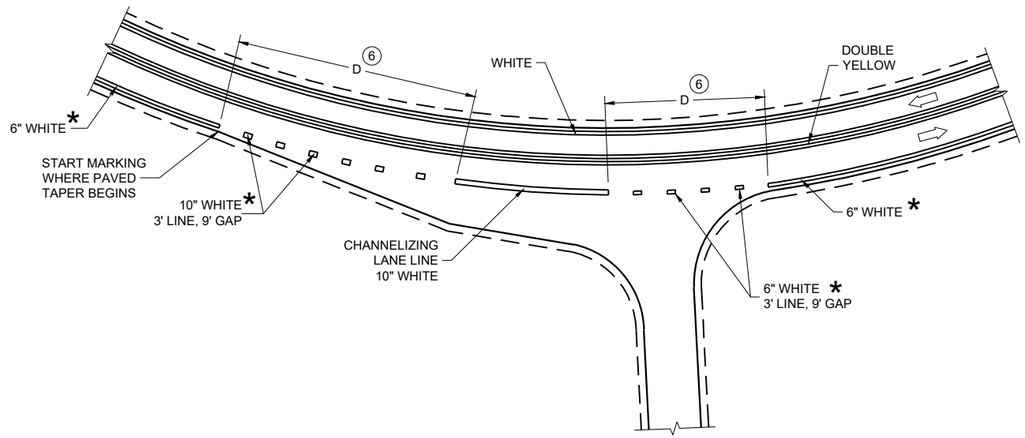
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

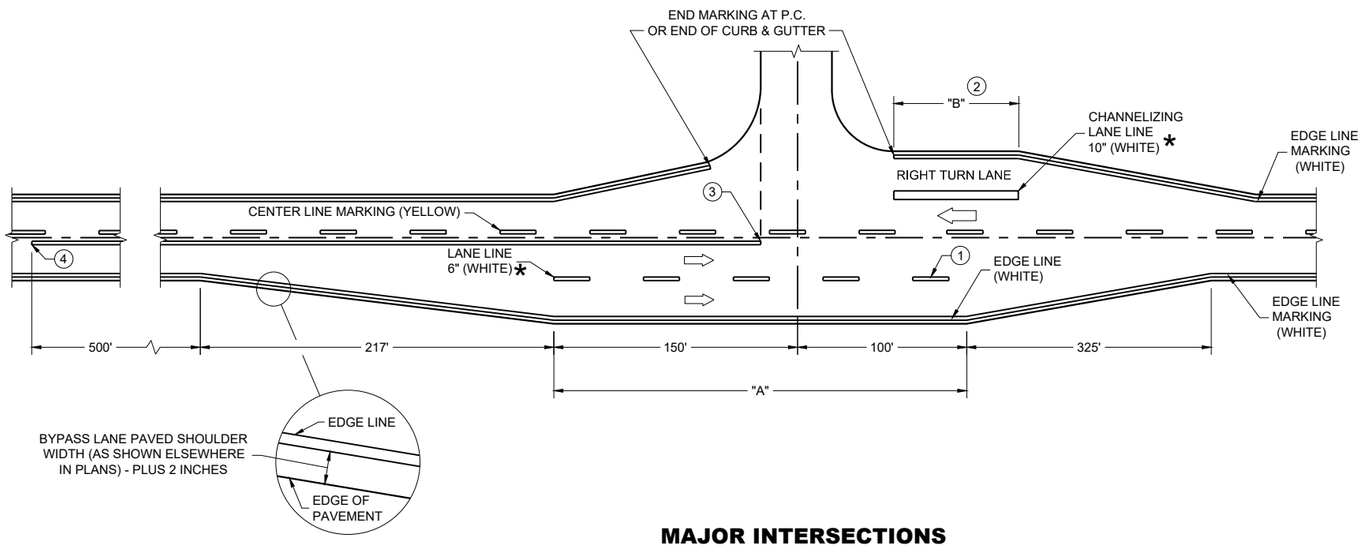
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

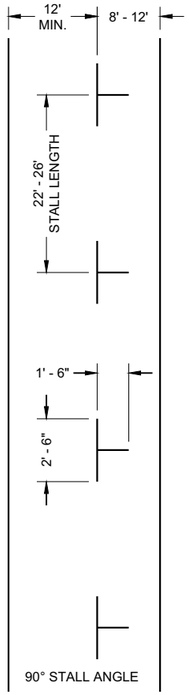
PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

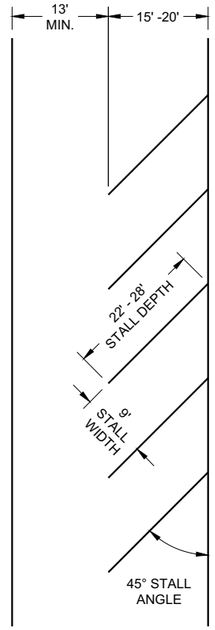
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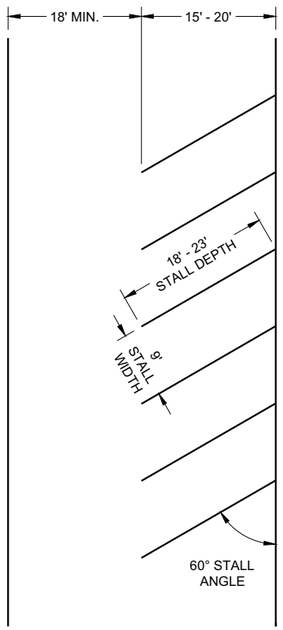
SDD 15C35-06a

SDD 15C35-06a



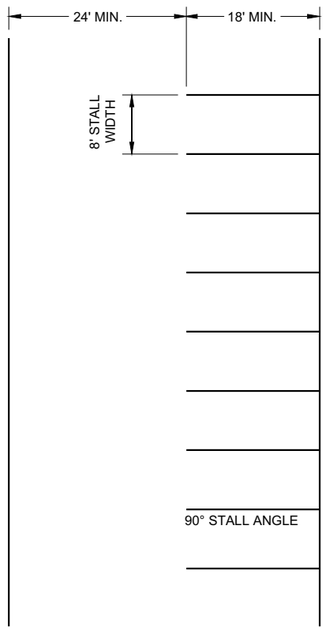
PARALLEL PARKING





ANGLED PARKING

(ANGLED PARKING IS NOT ALLOWED ON STATE HIGHWAYS UNLESS A DESIGN JUSTIFICATION HAS BEEN COMPLETED.)



PARKING LOTS

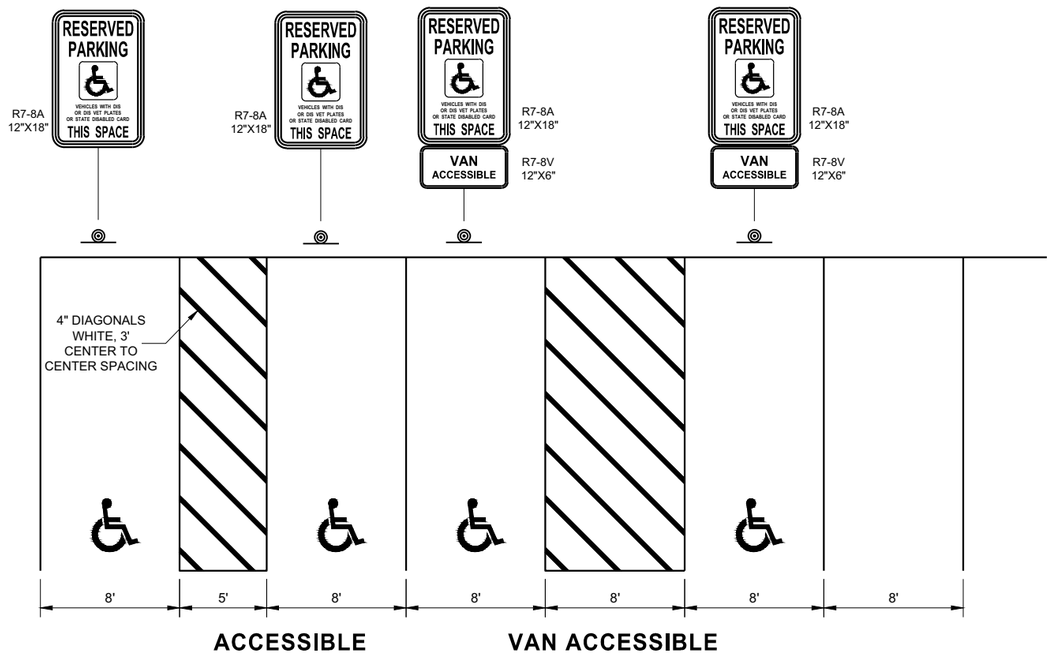
GENERAL NOTES

ALL LINES 4" WHITE (UNLESS OTHERWISE NOTED)

LAST PARKING STALL IS A MINIMUM OF 15' FROM THE CROSSWALK.

LEGEND

SIGN ON PERMANENT SUPPORT



ACCESSIBLE

VAN ACCESSIBLE

PARKING STALL MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

400

6

SDD 15C36 - 01

6

SDD 15C36 - 01

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

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

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

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

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

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

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

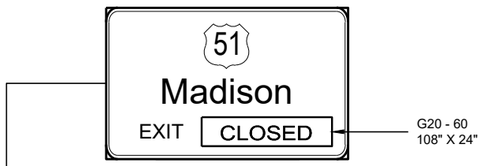
PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

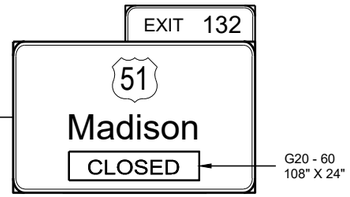
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

(1) W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

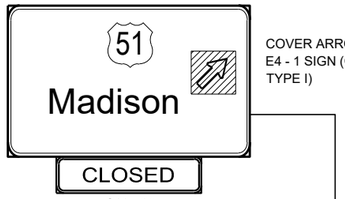
(2) PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



OR

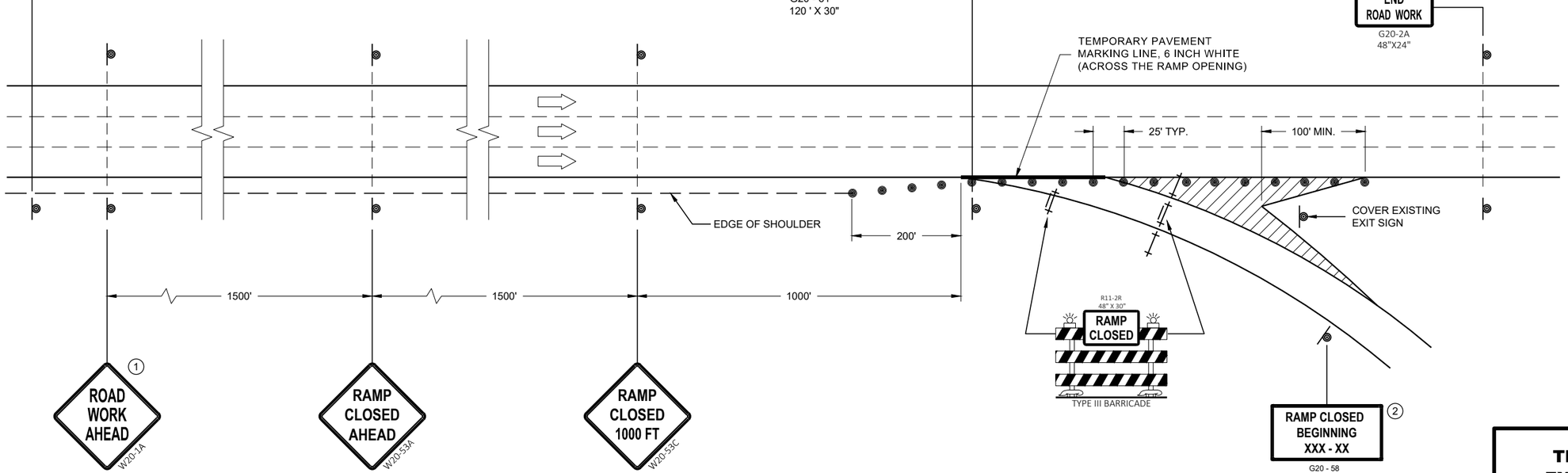


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



G20 - 61
120 ' X 30"

COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D16-06

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

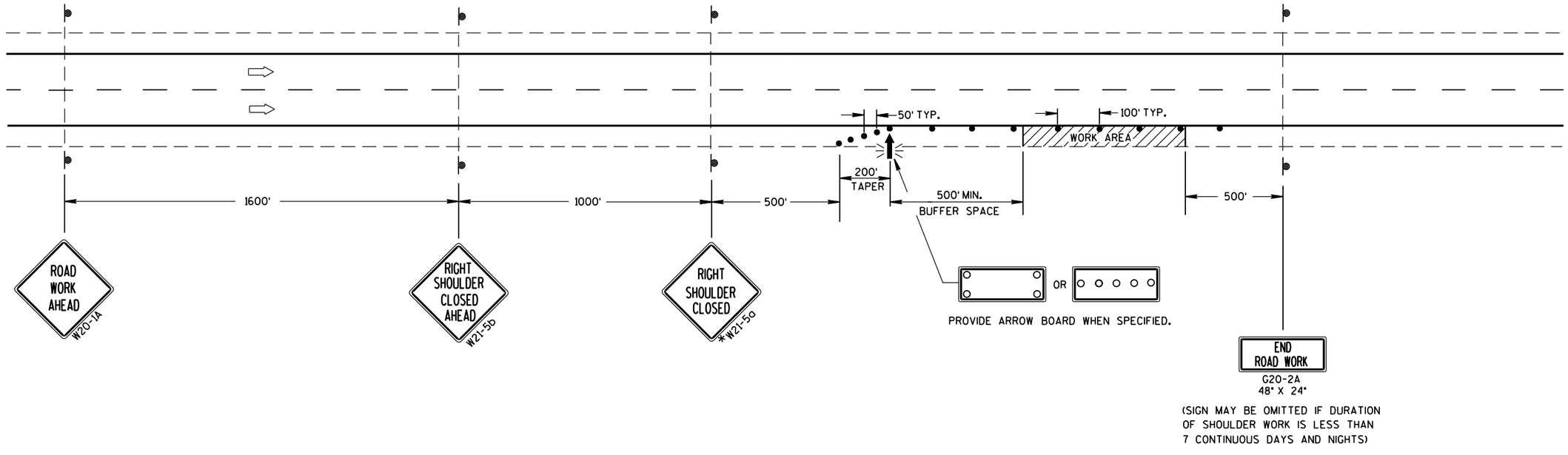
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

6

S.D.D. 15 D 27-3

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

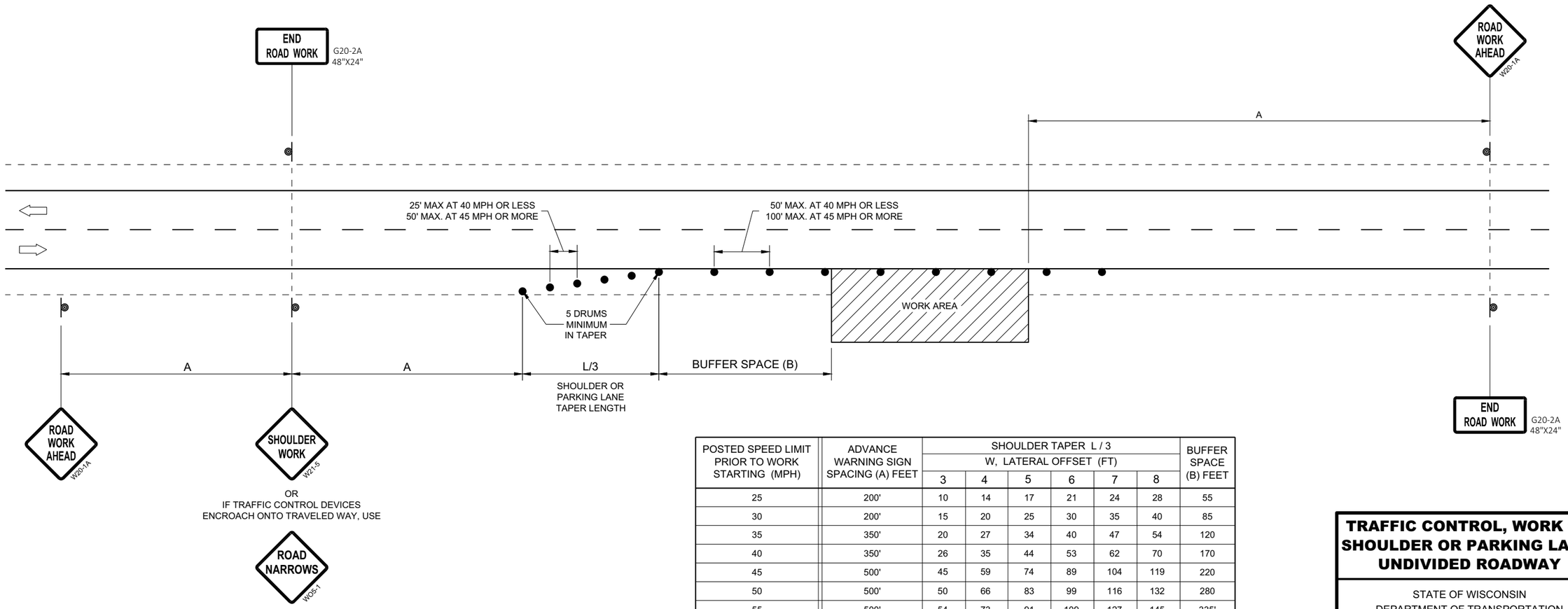
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

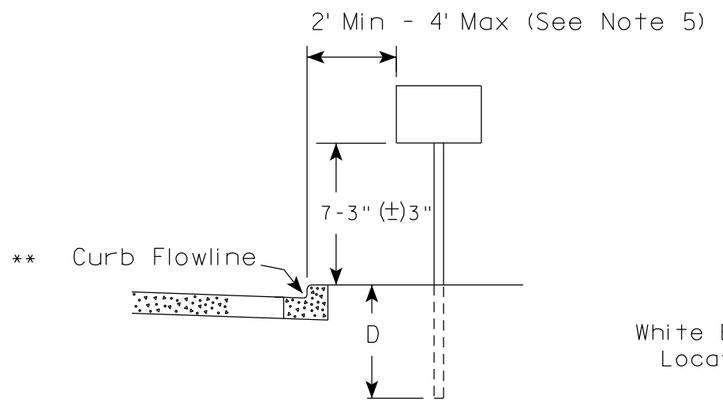
/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

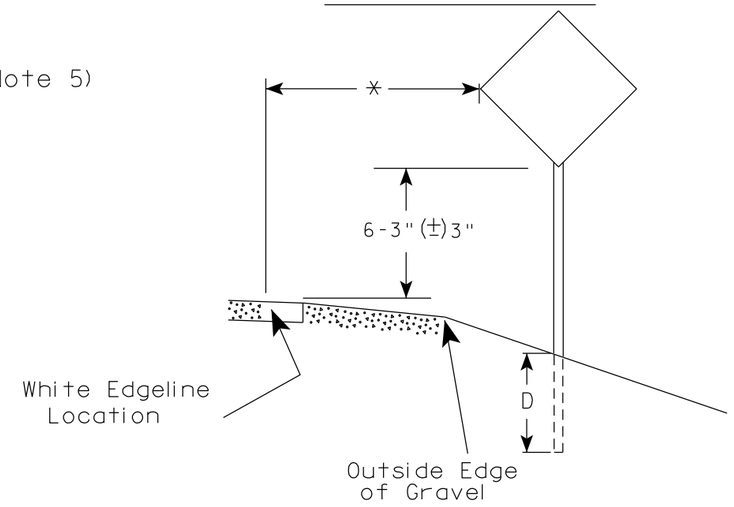
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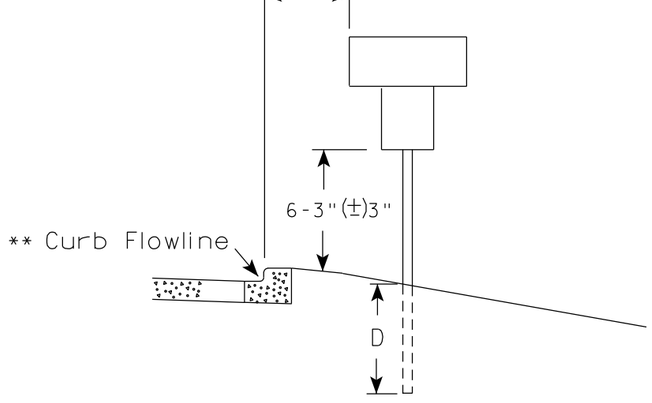
SDD 15D28 - 04

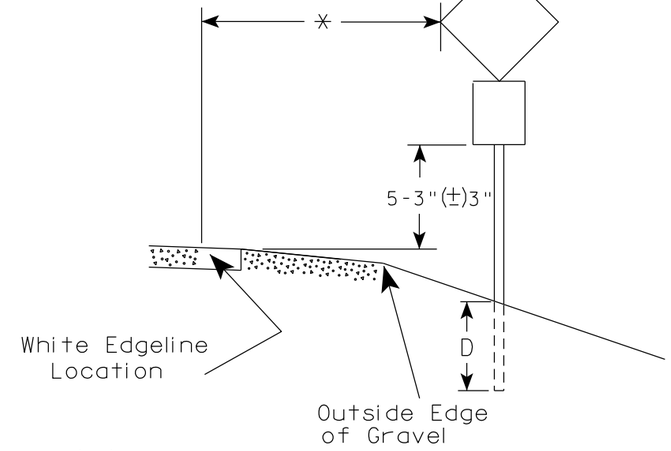
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

POST EMBEDMENT DEPTH

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

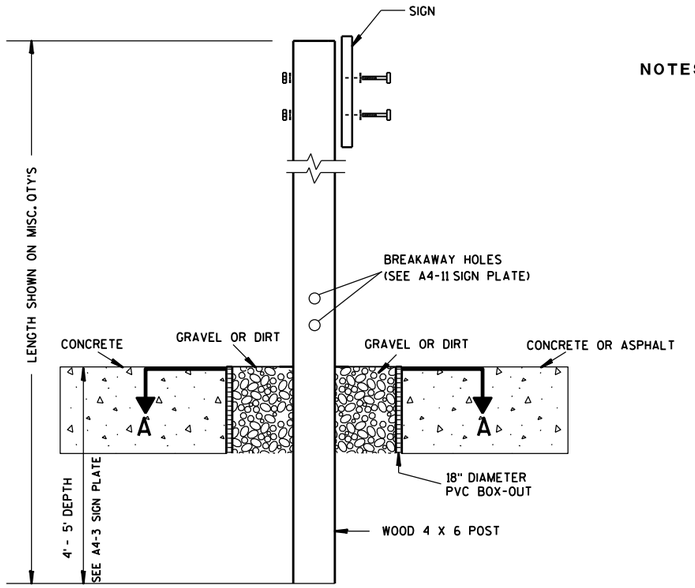
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

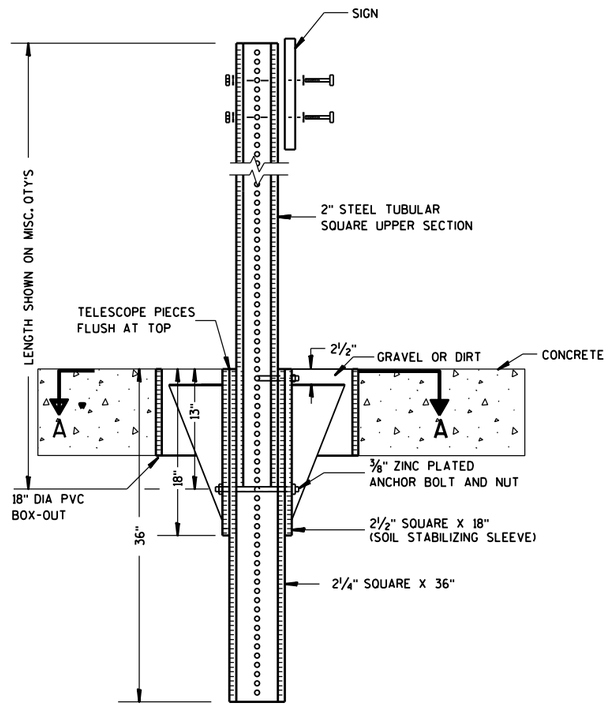
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 404	E



ELEVATION VIEW

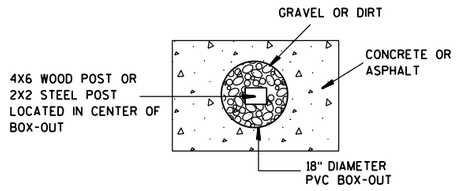
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

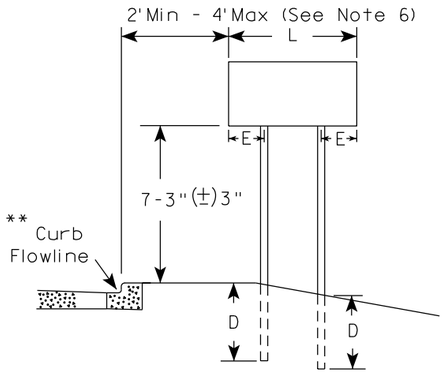
APPROVED Matthew R Rauch
for State Traffic Engineer

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

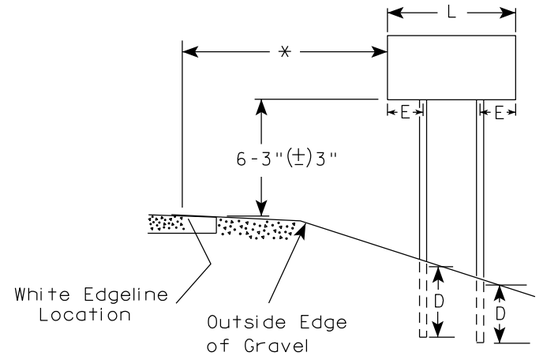
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

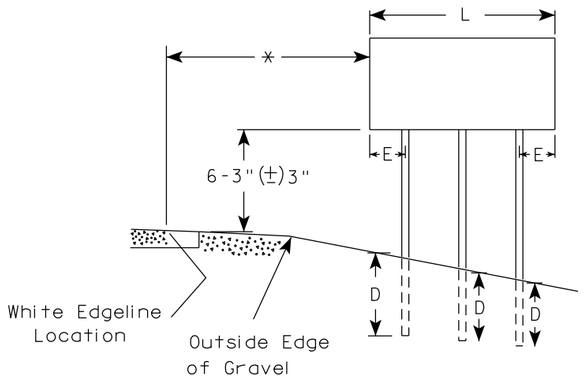
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

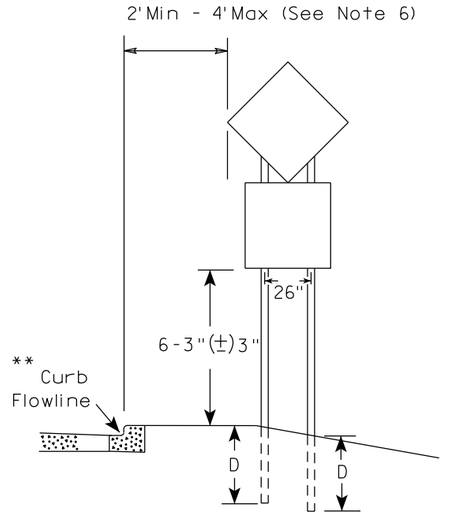
URBAN AREA



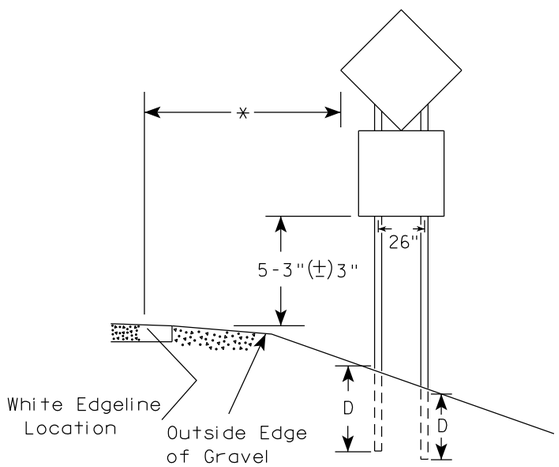
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

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

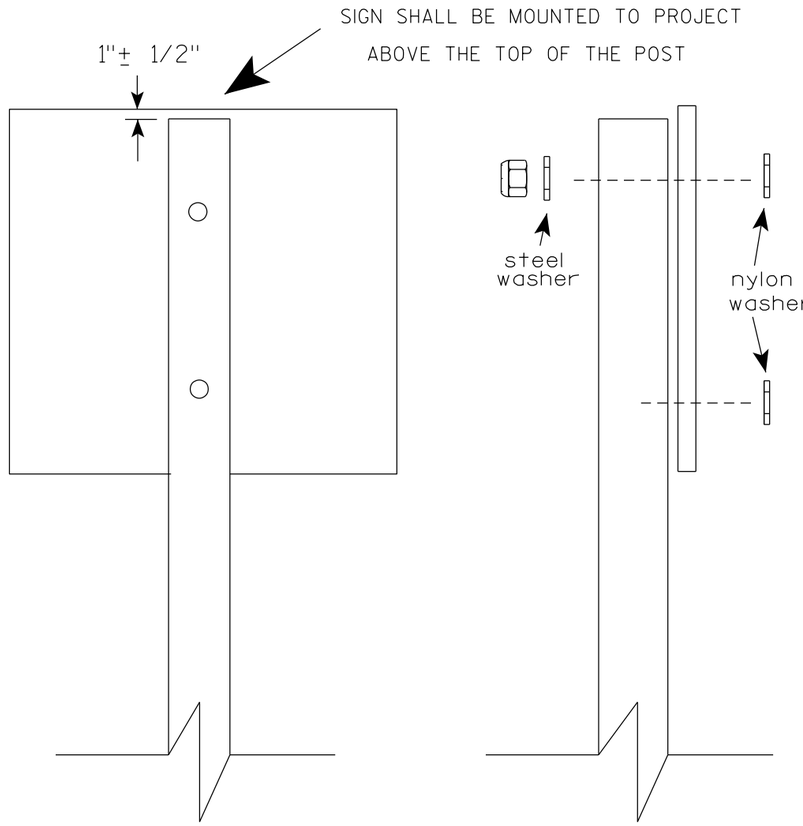
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

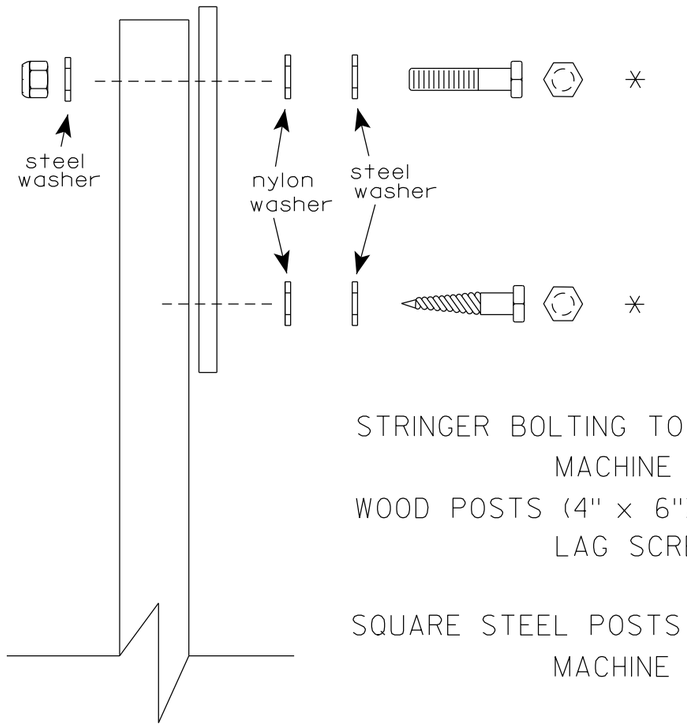
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 406	E





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

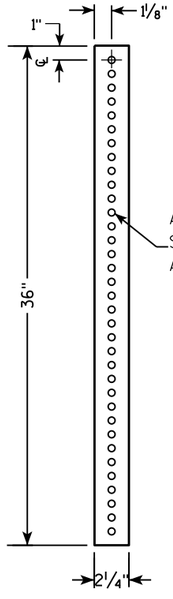
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

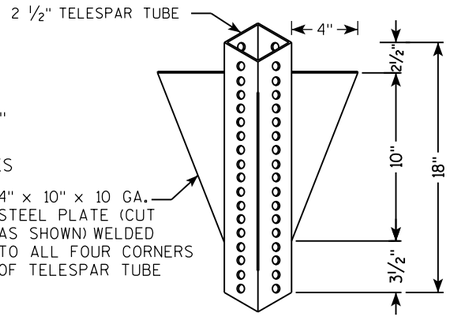
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

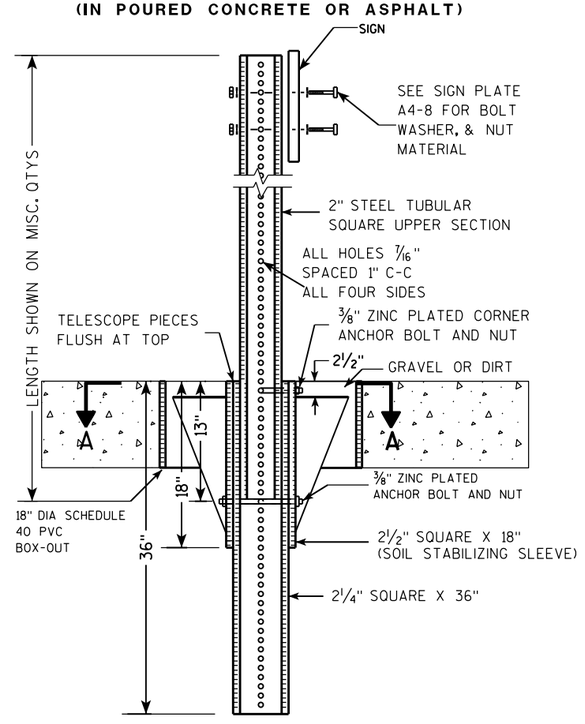
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



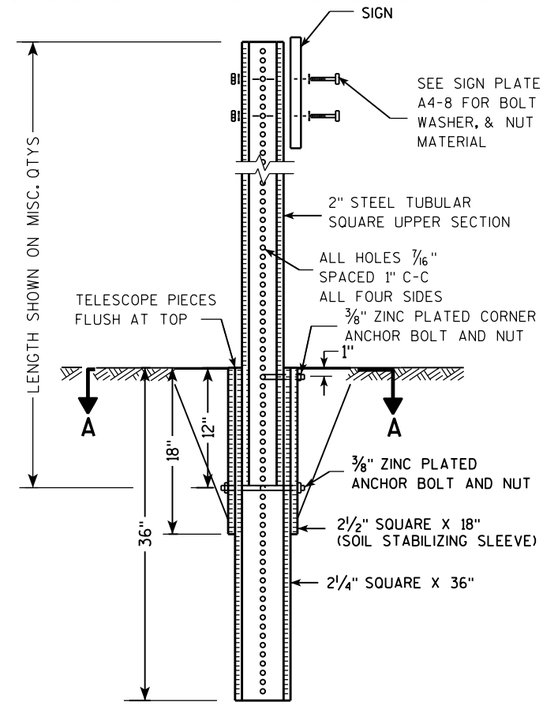
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

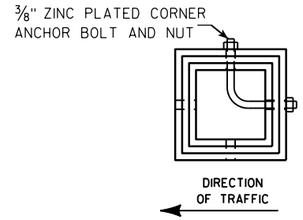


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

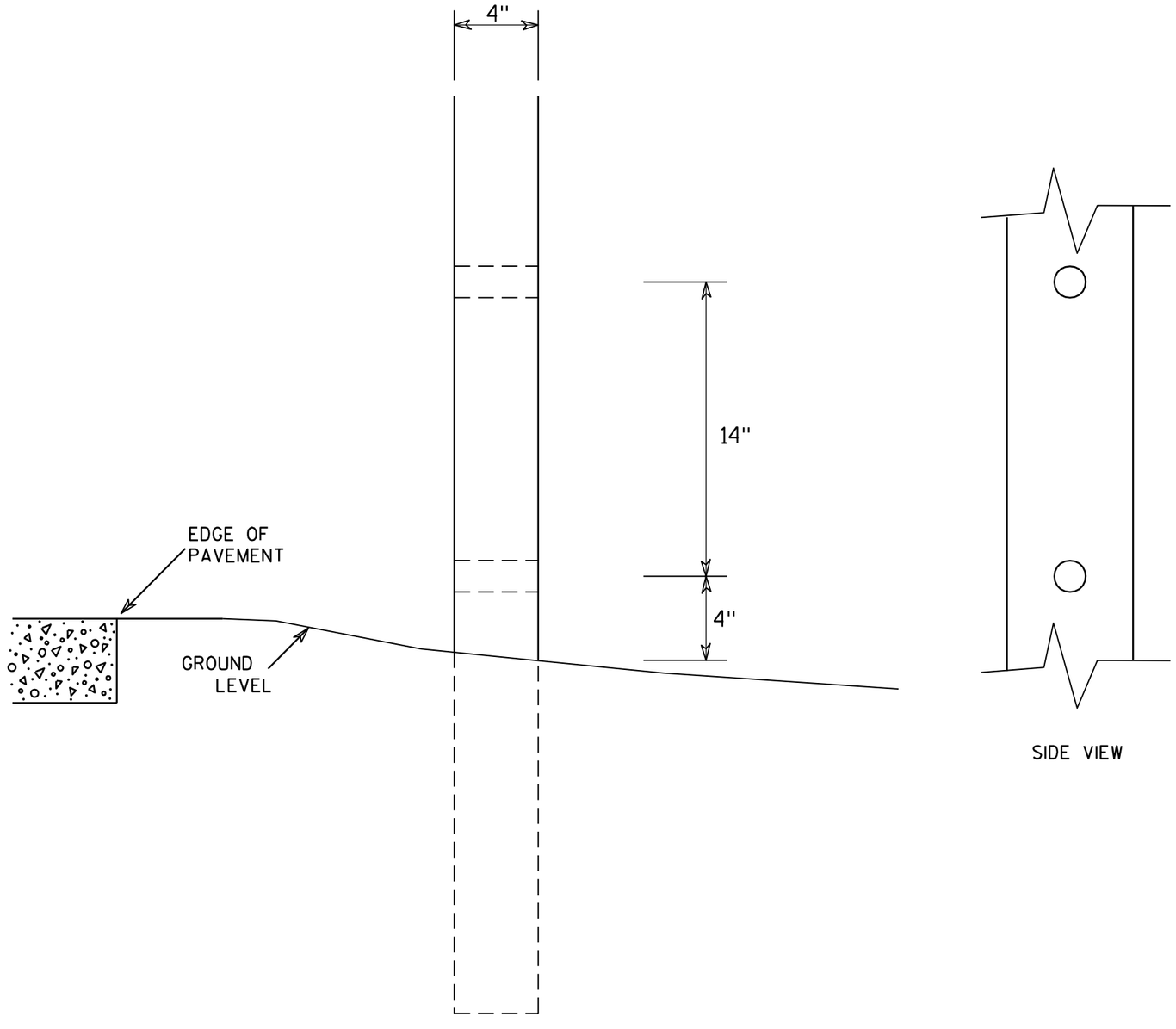
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 408 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

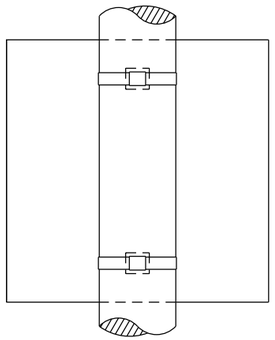
APPROVED Chester J Spang for State Traffic Engineer

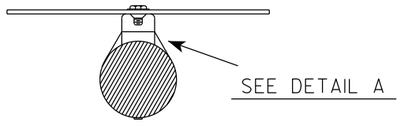
DATE 3/27/97 PLATE NO. A4-11.2

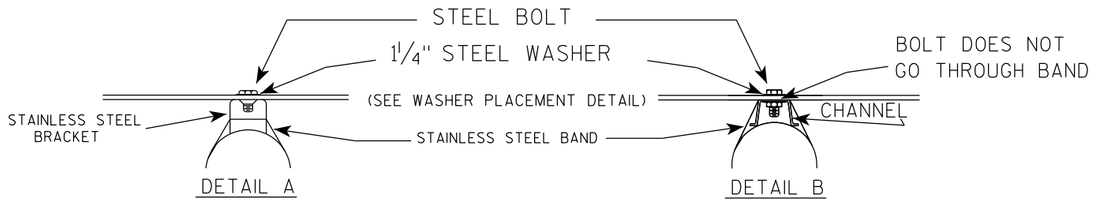
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 409	E

BANDING

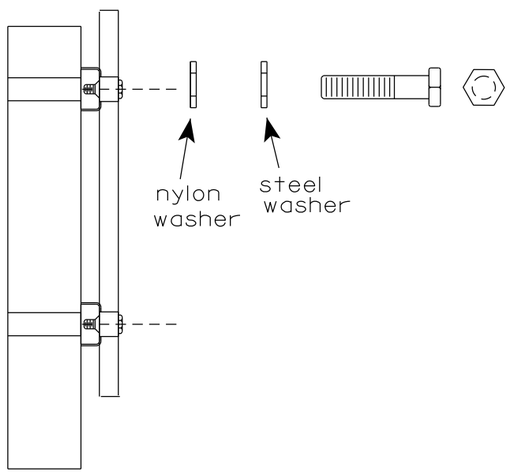
SINGLE SIGN







WASHER PLACEMENT

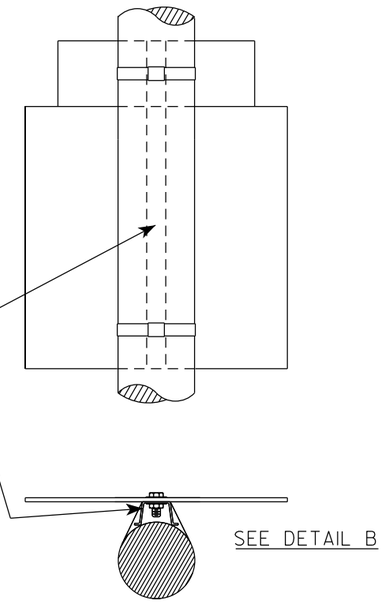


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

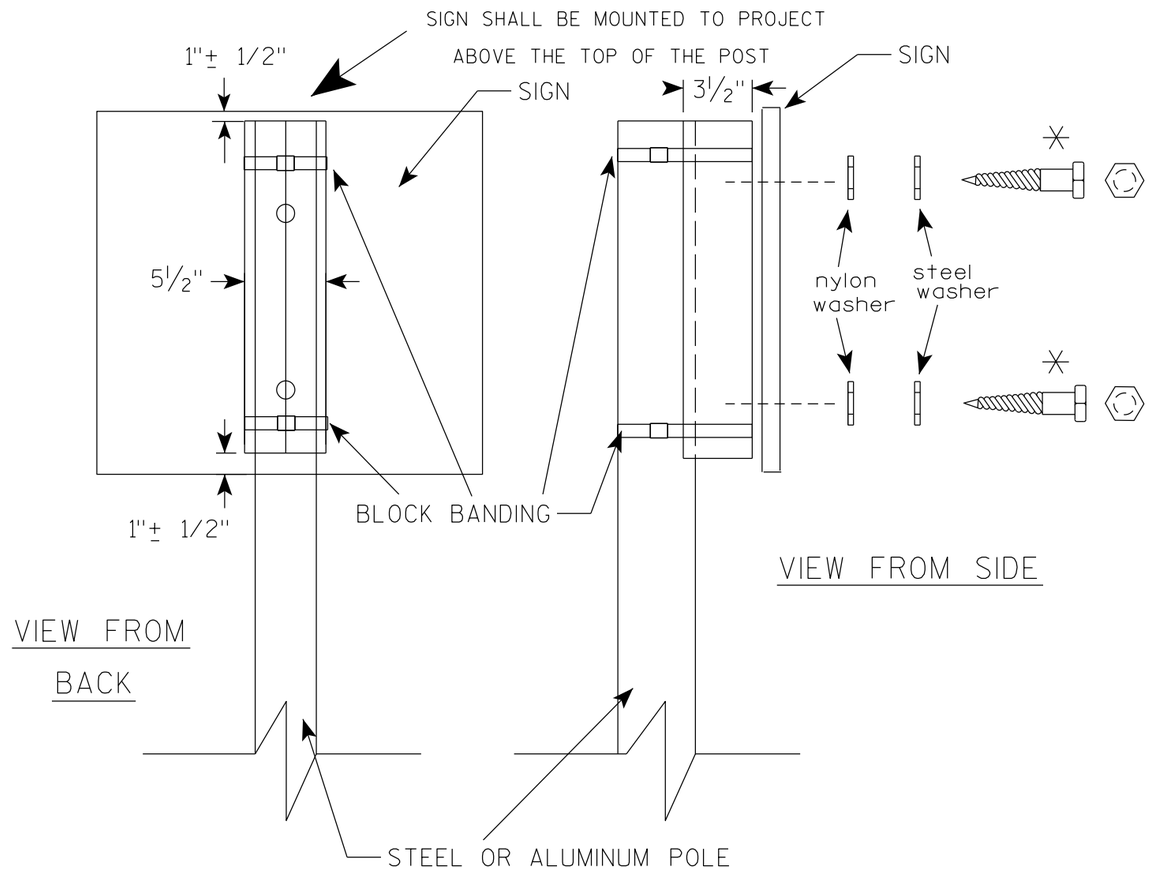
DATE 6/10/19 PLATE NO. A5-9.4

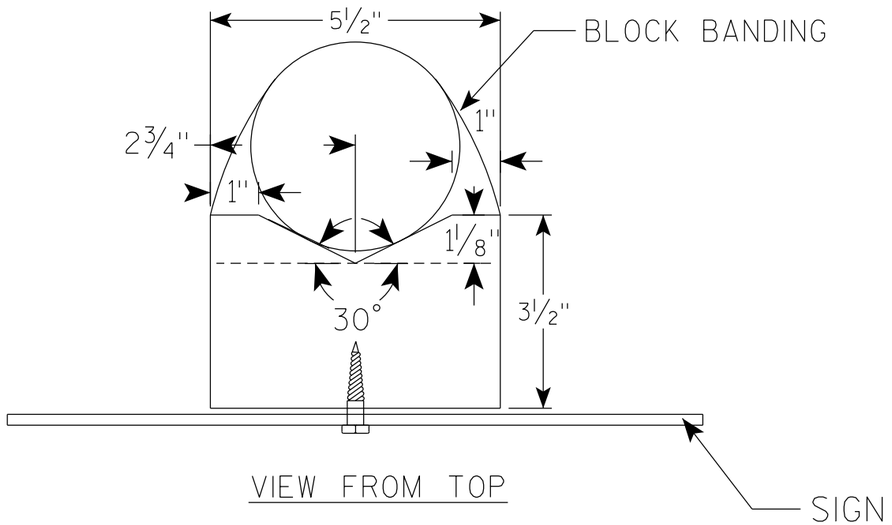
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 410	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

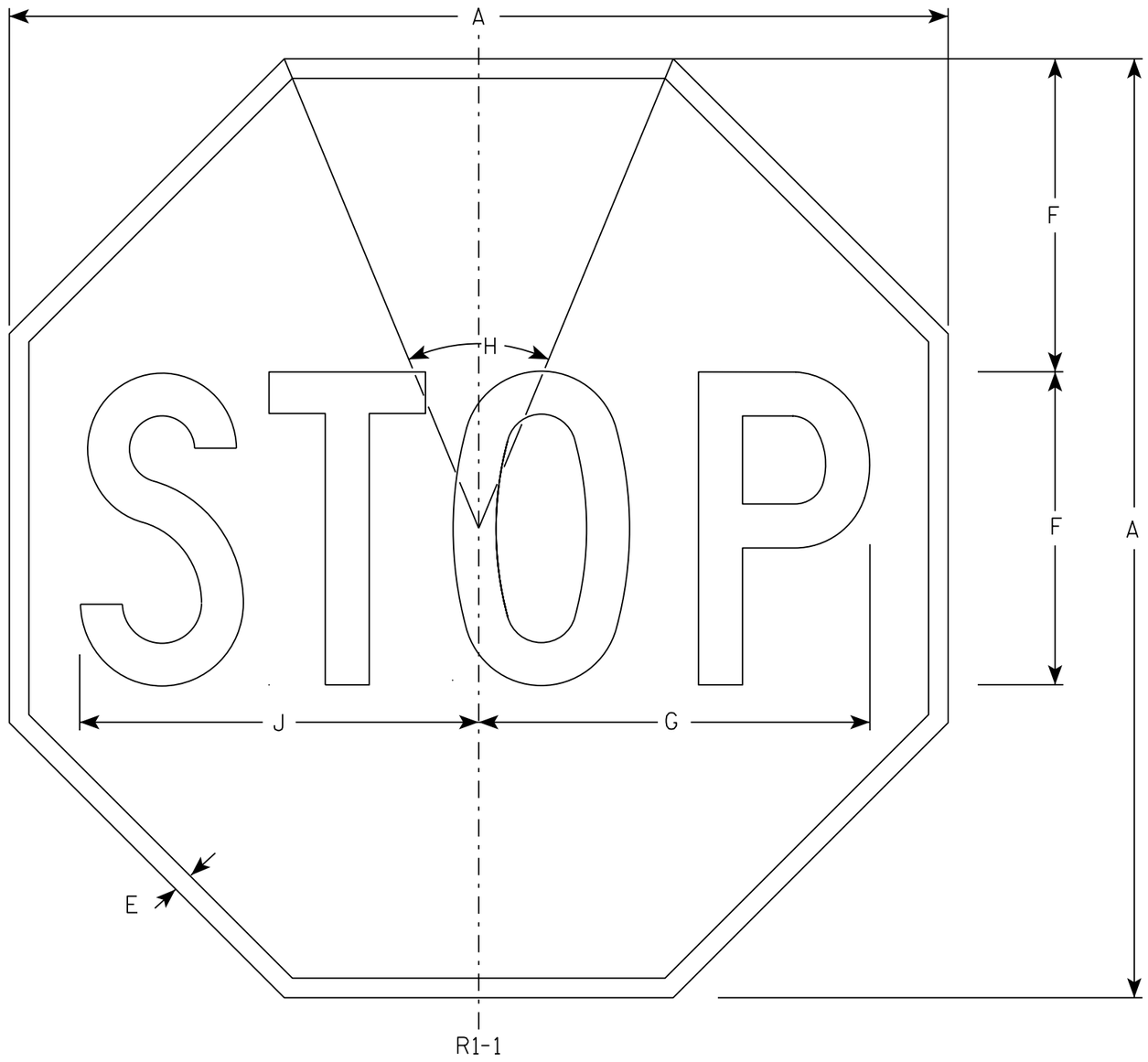
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 411 E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

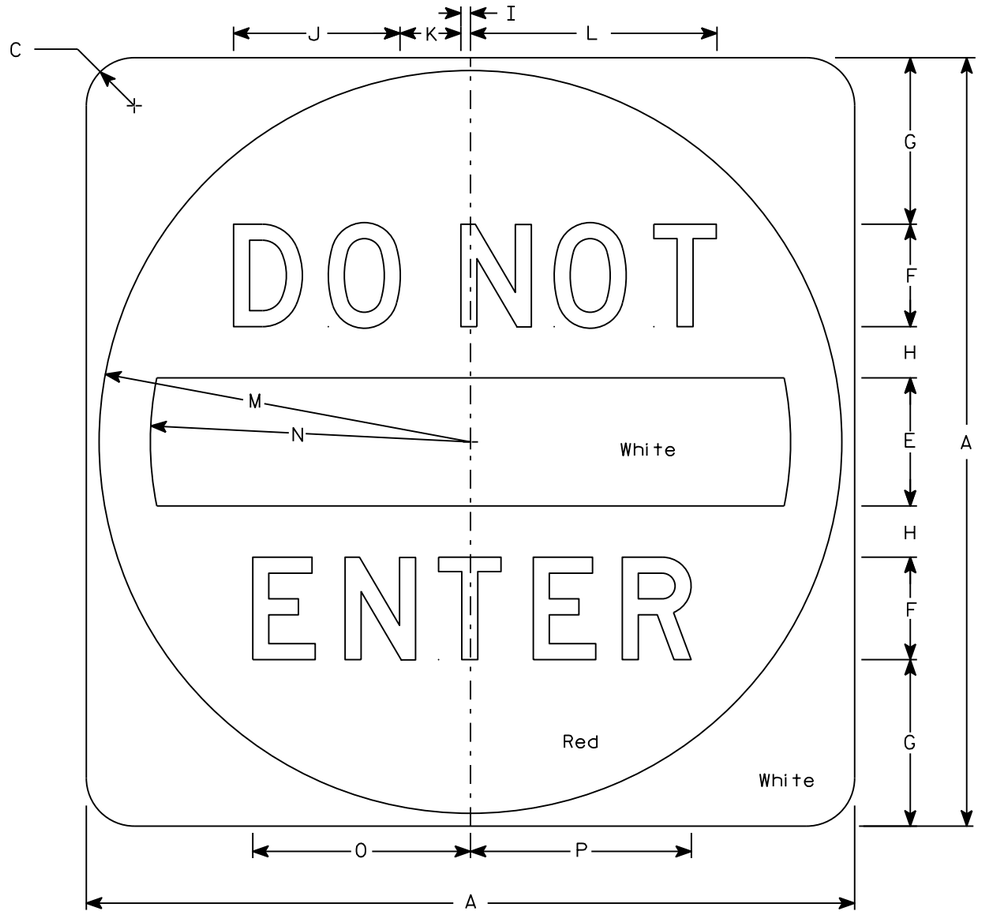
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 412	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

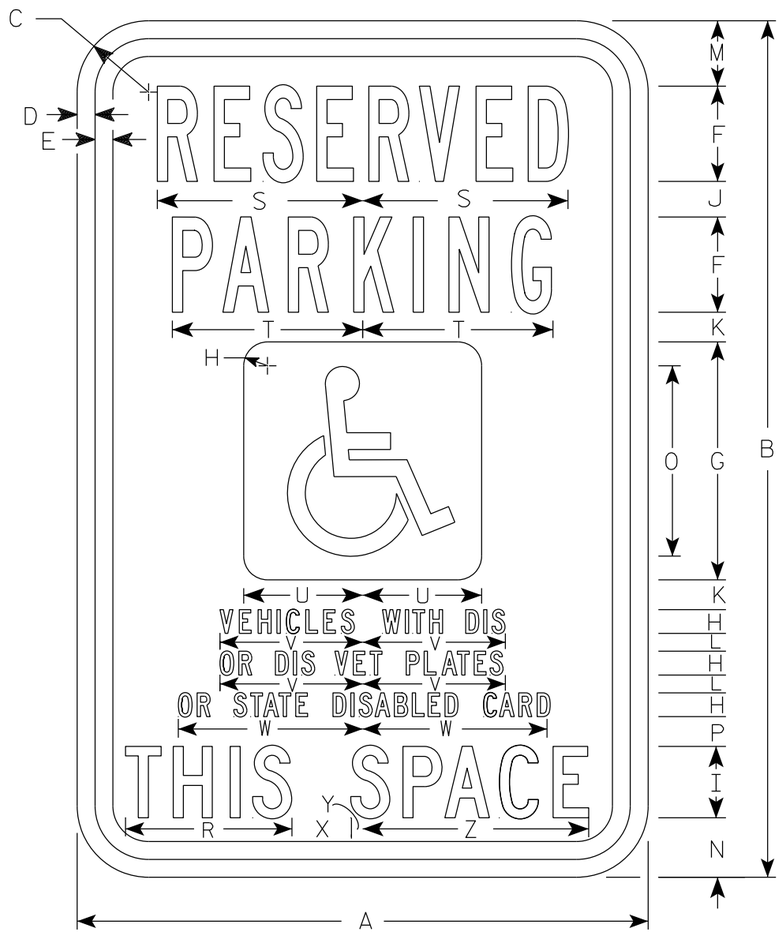
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 413 | E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R51.DGN PLOT DATE : 15-MAR-2018 14:31 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 5.914594:1.000000

WISDOT/CADDS SHEET 42



R7-8A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Sign is white Type H Reflective; paraplegic background is blue.
   Message - Legend and border are green; paraplegic symbol is white
3. Message Series - Lines 1 & 2 are Series B
   Lines 3, 4, 5 & 6 are Series C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	18	1 1/2	3/8	3/8	2	5	1/2	1 1/2	3/4	5/8	3/8	1 3/8	1 1/4	4	5/8		3 1/2	4 3/8	4	2 1/2	3	3 7/8	1 1/4	1/4	4 3/4	1.5
2M	18	24	1 1/2	3/8	1/2	3	6	3/4	2	7/8	5/8	1/2	1 7/8	2	5	3/4		4 5/8	6 1/2	5 3/8	3	4 1/2	5 7/8	1 1/2	1/4	6 3/8	3.0
3	18	24	1 1/2	3/8	1/2	3	6	3/4	2	7/8	5/8	1/2	1 7/8	2	5	3/4		4 5/8	6 1/2	5 3/8	3	4 1/2	5 7/8	1 1/2	1/4	6 3/8	3.0
4																											
5																											

STANDARD SIGN
R7-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/9/23 PLATE NO. R7-8A.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 414 | E

DIVISION 1 - 'A' CATEGORY 0020

STATION	DISTANCE	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMULATIVE VOL (CY)			MASS ORDINATE (5)
		CUT (1)	SALVAGED/ UNUSABLE PAVEMENT (2)	FILL (3)	STRUCTURE BACKFILL	EBS (4)	CUT	SALVAGED/ UNUSABLE PAVEMENT	FILL	STRUCTURE BACKFILL (5)	EBS	CUT	EXPANDED FILL FACTOR = 1.25	STRUCTURAL BACKFILL TYPE B	
20+04.87	0.00	17.1	--	66.7	--	--	--	--	--	--	--	--	--	--	--
20+16.57	11.70	31.9	--	64.1	--	--	11	--	28	--	--	11	35	--	-24
20+35.96	19.39	63.0	--	113.3	--	--	34	--	64	--	--	45	115	--	-70
20+61.07	25.11	93.7	--	123.9	--	--	73	--	110	--	--	118	253	--	-135
21+00.00	38.93	134.6	--	76.8	--	--	165	--	145	--	--	283	434	--	-151
21+18.30	18.30	142.9	--	43.9	--	--	94	--	41	--	--	377	485	--	-108
21+42.17	23.87	197.9	--	--	--	--	151	--	19	--	--	528	509	--	19
21+60.67	18.50	237.9	--	--	--	--	149	--	--	--	--	677	509	--	168
22+00.00	39.33	218.6	--	--	--	--	333	--	--	--	--	1,010	509	--	501
22+50.00	50.00	64.7	--	74.1	--	--	262	--	69	--	--	1,272	595	--	677
22+98.00	48.00	0.6	--	220.1	--	--	58	--	262	--	--	1,330	923	--	408
23+19.98	21.98	13.4	--	254.1	--	--	6	--	193	--	--	1,336	1,164	--	172
23+50.00	30.02	13.4	--	254.1	--	--	15	--	283	1	--	1,351	1,518	--	-167
23+86.60	36.60	--	--	309.6	--	--	9	--	382	2	--	1,360	1,995	--	-635
24+13.57	26.97	--	--	192.6	--	--	--	--	251	--	--	1,360	2,309	--	-949
						UNADJUSTED TOTALS	1,336	0	1,847	3	0				

DIVISION 1 - 'Bx' - CATEGORY 0030

STATION	DISTANCE	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMULATIVE VOL (CY)			MASS ORDINATE (5)
		CUT (1)	SALVAGED/ UNUSABLE PAVEMENT (2)	FILL (3)	STRUCTURE BACKFILL	EBS (4)	CUT	SALVAGED/ UNUSABLE PAVEMENT	FILL	STRUCTURE BACKFILL (5)	EBS	CUT	EXPANDED FILL FACTOR = 1.25	STRUCTURAL BACKFILL TYPE B	
0+00.00	0.00	--	--	101.7	58.7	37.0	--	--	--	--	--	--	--	--	--
0+15.51	15.51	--	--	284.3	75.1	85.9	--	--	111	73	35	--	139	108	-139
0+22.56	7.05	--	--	278.7	46.9	31.4	--	--	73	31	15	--	230	154	-230
0+48.79	26.23	--	--	321.3	53.4	33.6	--	--	291	81	32	--	594	267	-594
0+70.27	21.48	--	--	304.5	54.7	34.3	--	--	249	70	27	--	905	364	-905
0+90.68	20.41	--	--	271.9	56.5	34.5	--	--	218	68	26	--	1,178	458	-1,178
2+02.69	112.01	--	--	294.6	38.8	33.9	--	--	1,175	340	142	--	2,646	940	-2,646
2+23.37	20.68	--	--	239.9	36.9	30.1	--	--	205	54	25	--	2,903	1,019	-2,903
2+43.54	20.17	--	--	170.0	35.2	29.5	--	--	153	49	22	--	3,094	1,090	-3,094
2+72.90	29.36	--	--	279.4	78.4	55.2	--	--	244	108	46	--	3,399	1,244	-3,399
2+77.59	4.69	--	--	215.8	51.8	34.4	--	--	43	19	8	--	3,453	1,271	-3,453
3+01.57	23.98	--	--	252.5	109.0	55.0	--	--	208	111	40	--	3,713	1,422	-3,713
3+15.00	13.43	--	--	240.4	48.0	36.0	--	--	123	62	23	--	3,866	1,507	-3,866
3+44.40	29.40	--	--	188.0	38.1	33.4	--	--	233	85	38	--	4,158	1,630	-4,158
3+64.62	20.22	--	--	166.1	60.5	51.2	--	--	133	69	32	--	4,324	1,731	-4,324
3+77.15	12.53	--	--	129.3	30.1	30.3	--	--	69	40	19	--	4,410	1,790	-4,410
3+82.65	5.50	--	--	147.9	52.6	46.4	--	--	28	16	8	--	4,445	1,814	-4,445
3+94.89	12.24	--	--	131.8	28.5	29.6	--	--	63	35	17	--	4,524	1,866	-4,524
4+07.66	12.77	--	--	182.1	26.3	28.4	--	--	74	27	14	--	4,616	1,907	-4,616
4+19.96	12.30	--	--	191.6	26.0	28.1	--	--	85	25	13	--	4,723	1,945	-4,723
4+36.86	16.90	--	--	200.9	25.7	28.1	--	--	123	34	18	--	4,876	1,997	-4,876
4+44.95	8.09	--	--	286.8	35.7	55.1	--	--	73	21	12	--	4,968	2,030	-4,968
4+64.15	19.20	--	--	242.4	75.0	10.8	--	--	188	62	23	--	5,203	2,115	-5,203
4+91.99	27.84	--	--	164.5	29.5	28.1	--	--	210	74	20	--	5,465	2,209	-5,465
5+37.39	45.40	--	--	177.0	47.5	24.8	--	--	287	109	44	--	5,824	2,362	-5,824
5+65.15	27.76	--	--	107.5	46.4	34.0	--	--	146	78	30	--	6,006	2,470	-6,006
5+84.90	19.75	--	--	37.4	112.8	37.0	--	--	53	84	26	--	6,073	2,580	-6,073
						UNADJUSTED TOTALS	0	0	4,858	1,825	755				

NOTES:	
(1) - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
(2) - SALVAGED/UNUSABLE PAVEMENT MATERIAL	ESTIMATED. NOT SHOWN ON CROSS SECTIONS
(3) - FILL	DOES NOT INCLUDE "SALV/UNUSABLE PAVEMENT", "EBS", OR "STRUCTURE BACKFILL"
(4) - EBS	WILL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE B
(5) - STRUCTURE BACKFILL	INCLUDES "EBS" BACKFILL
(6) - MASS ORDINATE	[(CUT - SALV/PAVT) - (FILL* FILL FACTOR)]

9

9

PROJECT NO: 1130-44-74 | HWY: IH 41 | COUNTY: OUTAGAMIE | EARTHWORK DATA | SHEET 415 | E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090101-EW.DWG
LAYOUT NAME - 02

PLOT DATE : 4/29/2024 9:34 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 49

DIVISION - 'D' CATEGORY 0030

STATION	DISTANCE	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMULATIVE VOL (CY)			
		CUT (1)	SALVAGED/ UNUSABLE PAVEMENT (2)	FILL (3)	STRUCTURE BACKFILL	EBS (4)	CUT	SALVAGED/ UNUSABLE PAVEMENT	FILL	STRUCTURE BACKFILL (5)	EBS	CUT	EXPANDED FILL FACTOR = 1.25	STRUCTURAL BACKFILL TYPE B	MASS ORDINATE (5)
10+00.00	0.00	--	--	140.8	--	--	--	--	--	--	--	--	--	--	--
10+25.00	25.00	--	20.0	135.5	--	--	--	9	128	--	--	--	160	--	-169
10+45.00	20.00	--	47.0	98.2	--	--	--	25	87	--	--	--	269	--	-303
						UNADJUSTED TOTALS	0	34	215	0	0				

DIVISION 1 - 'E' CATEGORY 0020

STATION	DISTANCE	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMULATIVE VOL (CY)			
		CUT (1)	SALVAGED/ UNUSABLE PAVEMENT (2)	FILL (3)	STRUCTURE BACKFILL	EBS (4)	CUT	SALVAGED/ UNUSABLE PAVEMENT	FILL	STRUCTURE BACKFILL (5)	EBS	CUT	EXPANDED FILL FACTOR = 1.25	STRUCTURAL BACKFILL TYPE B	MASS ORDINATE (5)
50+03.9	0.00	--	--	590.4	40.5	30.4	--	--	--	--	--	--	--	--	--
50+32.5	28.64	--	--	522.0	21.0	31.4	--	--	554	66	33	--	693	587	-693
50+69.4	36.93	--	--	377.7	36.4	22.8	--	--	517	76	37	--	1,339	1,141	-1,339
51+35.6	66.18	--	--	297.8	--	--	--	--	730	73	28	--	2,251	1,899	-2,251
51+47.1	11.50	--	--	211.2	--	--	--	--	108	--	--	--	2,386	2,007	-2,386
51+64.7	17.60	--	--	162.8	--	--	--	--	122	--	--	--	2,539	2,129	-2,539
51+78.7	14.00	--	--	86.2	--	--	--	--	65	--	--	--	2,620	2,194	-2,620
						UNADJUSTED TOTALS	0	0	2,096	215	98				

DIVISION 1 - 'EL' CATEGORY 0020

STATION	DISTANCE	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMULATIVE VOL (CY)			
		CUT (1)	SALVAGED/ UNUSABLE PAVEMENT (2)	FILL (3)	STRUCTURE BACKFILL	EBS (4)	CUT	SALVAGED/ UNUSABLE PAVEMENT	FILL	STRUCTURE BACKFILL (5)	EBS	CUT	EXPANDED FILL FACTOR = 1.25	STRUCTURAL BACKFILL TYPE B	MASS ORDINATE (5)
1+09.20	0.00	--	--	43.1	77.6	--	--	--	--	--	--	--	--	--	--
1+23.94	14.74	--	--	48.6	31.0	14.9	--	--	25	34	4	--	31	38	-31
1+45.39	21.45	--	--	18.7	60.9	16.7	--	--	27	50	13	--	65	101	-65
1+47.88	2.49	--	--	28.9	--	30.0	--	--	2	5	2	--	68	108	-68
1+50.11	2.23	--	--	62.2	--	24.2	--	--	4	2	2	--	73	112	-73
1+92.06	44.18	--	20.0	66.0	--	--	--	16	78	25	25	--	165	158	-181
1+93.30	43.19	--	20.0	134.9	--	--	--	16	158	19	19	--	270	150	-286
2+04.50	11.20	--	20.0	113.3	--	--	--	8	51	--	--	--	334	150	-358
2+14.96	10.46	--	5.0	96.7	--	--	--	5	41	--	--	--	385	150	-414
2+25.42	10.46	--	--	113.5	--	--	--	1	41	--	--	--	436	150	-466
2+60.09	34.67	--	--	61.1	--	--	--	--	112	--	--	--	576	150	-606
2+87.87	27.78	--	--	49.7	--	--	--	--	57	--	--	--	648	150	-678
3+05.78	17.91	--	--	38.4	--	--	--	--	29	--	--	--	684	150	-714
3+09.69	3.91	--	--	11.7	--	--	--	--	4	--	--	--	689	150	-719
3+13.61	3.92	--	--	13.6	--	--	--	--	2	--	--	--	691	150	-721
3+20.75	7.14	--	--	11.8	--	--	--	--	3	--	--	--	695	150	-725
3+34.79	14.04	--	20.0	21.0	--	--	--	5	9	--	--	--	706	150	-741
3+62.50	27.71	11.4	--	14.7	--	--	6	10	18	--	--	--	729	150	-768
						UNADJUSTED TOTALS	6	61	661	135	65				

NOTES:	
(1) - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
(2) - SALVAGED/UNUSABLE PAVEMENT MATERIAL	ESTIMATED. NOT SHOWN ON CROSS SECTIONS
(3) - FILL	DOES NOT INCLUDE "SALV/UNUSABLE PAVEMENT", "EBS", OR "STRUCTURE BACKFILL"
(4) - EBS	WILL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE B
(5) - STRUCTURE BACKFILL	INCLUDES "EBS" BACKFILL
(6) - MASS ORDINATE	[(CUT - SALV/PAVT) - (FILL* FILL FACTOR)]

9

9

PROJECT NO: 1130-44-74 | HWY: IH 41 | COUNTY: OUTAGAMIE | EARTHWORK DATA | SHEET 416 | E

DIVISION 1 - 'EM' CATEGORY 0020

STATION	DISTANCE	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMULATIVE VOL (CY)			MASS ORDINATE (5)
		CUT (1)	SALVAGED/ UNUSABLE PAVEMENT (2)	FILL (3)	STRUCTURE BACKFILL	EBS (4)	CUT	SALVAGED/ UNUSABLE PAVEMENT	FILL	STRUCTURE BACKFILL (5)	EBS	CUT	EXPANDED FILL FACTOR = 1.25	STRUCTURAL BACKFILL TYPE B	
50+00.57	0.00	--	--	152.5	--	--	--	--	--	--	--	--	--	--	--
50+15.71	15.14	--	--	72.5	--	--	--	--	63	--	--	--	79	--	-79
50+23.16	7.45	--	--	236.8	--	--	--	--	43	--	--	--	133	--	-133
50+66.21	43.05	--	--	156.8	--	--	--	--	314	--	--	--	525	--	-525
50+77.41	11.20	--	22.0	136.7	--	--	--	5	61	--	--	--	601	--	-606
50+87.36	9.95	--	20.0	119.8	--	--	--	8	47	--	--	--	660	--	-673
50+95.26	7.90	--	19.0	92.5	--	--	--	6	31	--	--	--	699	--	-718
50+95.47	0.21	--	20.0	40.6	--	--	--	--	1	--	--	--	700	--	-719
51+23.27	27.80	--	20.0	32.0	--	--	--	21	37	--	--	--	746	--	-786
51+44.64	21.37	--	20.0	21.0	--	--	--	16	21	--	--	--	773	--	-829
						UNADJUSTED TOTALS	0	56	618	0	0				

DIVISION 1 - 'ER' CATEGORY 0020

STATION	DISTANCE	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMULATIVE VOL (CY)			MASS ORDINATE (5)
		CUT (1)	SALVAGED/ UNUSABLE PAVEMENT (2)	FILL (3)	STRUCTURE BACKFILL	EBS (4)	CUT	SALVAGED/ UNUSABLE PAVEMENT	FILL	STRUCTURE BACKFILL (5)	EBS	CUT	EXPANDED FILL FACTOR = 1.25	STRUCTURAL BACKFILL TYPE B	
10+00.00	0.00	--	--	304.8	--	--	--	--	--	--	--	--	--	--	--
10+36.97	36.97	--	--	383.1	--	--	--	--	471	--	--	--	589	--	-589
10+74.41	37.44	--	--	248.9	--	--	--	--	438	--	--	--	1,136	--	-1,136
10+80.85	6.44	--	--	221.7	--	--	--	--	56	--	--	--	1,206	--	-1,206
10+84.61	3.76	--	--	206.9	--	--	--	--	30	--	--	--	1,244	--	-1,244
10+94.82	10.21	--	--	203.6	--	--	--	--	78	--	--	--	1,341	--	-1,341
11+00.00	5.18	--	--	201.1	--	--	--	--	39	--	--	--	1,390	--	-1,390
11+19.53	19.53	--	--	193.4	--	--	--	--	143	--	--	--	1,569	--	-1,569
11+20.94	1.41	--	--	174.7	--	--	--	--	10	--	--	--	1,581	--	-1,581
11+22.34	1.40	--	--	149.1	--	--	--	--	8	--	--	--	1,591	--	-1,591
11+31.69	9.35	--	--	100.7	--	--	--	--	43	--	--	--	1,645	--	-1,645
11+50.00	18.31	--	--	86.0	--	--	--	--	63	--	--	--	1,724	--	-1,724
12+00.00	50.00	--	--	53.0	--	--	--	--	129	--	--	--	1,885	--	-1,885
12+21.90	21.90	--	--	87.1	--	--	--	--	57	--	--	--	1,956	--	-1,956
12+22.94	1.04	--	--	92.9	--	--	--	--	3	--	--	--	1,960	--	-1,960
12+26.61	3.67	--	--	33.1	--	--	--	--	9	--	--	--	1,971	--	-1,971
12+38.64	12.03	--	--	27.9	--	--	--	--	14	--	--	--	1,989	--	-1,989
						UNADJUSTED TOTALS	0	0	1,591	0	0				

DIVISION 1 - 'F' CATEGORY 0020

STATION	DISTANCE	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMULATIVE VOL (CY)			MASS ORDINATE (5)
		CUT (1)	SALVAGED/ UNUSABLE PAVEMENT (2)	FILL (3)	STRUCTURE BACKFILL	EBS (4)	CUT	SALVAGED/ UNUSABLE PAVEMENT	FILL	STRUCTURE BACKFILL (5)	EBS	CUT	EXPANDED FILL FACTOR = 1.25	STRUCTURAL BACKFILL TYPE B	
58+76.50	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--
59+03.61	27.11	11.4	--	--	--	--	6	--	--	--	--	--	--	--	6
59+43.16	39.55	9.3	--	7.2	--	--	15	--	5	--	--	--	6	--	15
59+56.06	12.90	7.6	--	49.9	--	--	4	--	14	--	--	--	24	--	1
59+82.93	26.87	6.1	--	6.6	--	--	7	--	28	--	--	--	59	--	-27
60+18.93	36.00	7.3	--	48.1	--	--	9	--	36	--	--	--	104	--	-63
60+42.05	23.12	9.1	--	75.7	--	--	7	--	53	--	--	--	170	--	-122
60+71.16	29.11	12.7	--	1.2	--	--	12	--	41	--	--	--	221	--	-161
61+32.31	61.15	13.5	--	--	--	--	30	--	1	--	--	--	223	--	-133
61+62.58	30.27	--	--	--	--	--	8	--	--	--	--	--	223	--	-125
						UNADJUSTED TOTALS	98	0	178	0	0				

NOTES:	
(1) - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
(2) - SALVAGED/UNUSABLE PAVEMENT MATERIAL	ESTIMATED. NOT SHOWN ON CROSS SECTIONS
(3) - FILL	DOES NOT INCLUDE "SALV/UNUSABLE PAVEMENT", "EBS", OR "STRUCTURE BACKFILL"
(4) - EBS	WILL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE B
(5) - STRUCTURE BACKFILL	INCLUDES "EBS" BACKFILL
(6) - MASS ORDINATE	[(CUT - SALV/PAVT) - (FILL* FILL FACTOR)]

9

9

PROJECT NO: 1130-44-74 | HWY: IH 41 | COUNTY: OUTAGAMIE | EARTHWORK DATA | SHEET 417 | E

DIVISION 1 - 'P' CATEGORY 0030

STATION	DISTANCE	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMULATIVE VOL (CY)			MASS ORDINATE (5)
		CUT (1)	SALVAGED/ UNUSABLE PAVEMENT (2)	FILL (3)	STRUCTURE BACKFILL	EBS (4)	CUT	SALVAGED/ UNUSABLE PAVEMENT	FILL	STRUCTURE BACKFILL (5)	EBS	CUT	EXPANDED FILL FACTOR = 1.25	STRUCTURAL BACKFILL TYPE B	
50+04.9	0.00	218.4	--	--	--	--	--	--	--	--	--	--	--	--	--
50+25.0	20.08	479.4	--	--	--	--	259	--	--	--	--	--	--	--	259
50+82.0	56.99	699.6	--	5.4	--	--	1,244	--	6	--	--	--	8	--	1,496
51+00.0	18.01	686.5	--	4.6	--	--	462	--	3	--	--	--	11	--	1,954
51+50.0	50.00	538.0	--	1.4	--	--	1,134	--	6	--	--	--	19	--	3,080
52+00.0	50.00	364.0	--	2.7	--	--	835	--	4	--	--	--	24	--	3,910
52+50.0	50.00	259.7	--	2.2	--	--	578	--	5	--	--	--	30	--	4,482
52+75.0	25.00	207.7	--	3.3	--	--	216	--	3	--	--	--	34	--	4,694
53+00.0	25.00	135.3	--	5.4	--	--	159	--	4	--	--	--	39	--	4,848
53+05.0	5.00	50.5	--	4.4	--	--	17	--	1	--	--	--	40	--	4,864
						UNADJUSTED TOTALS	4,904	0	32	0	0				

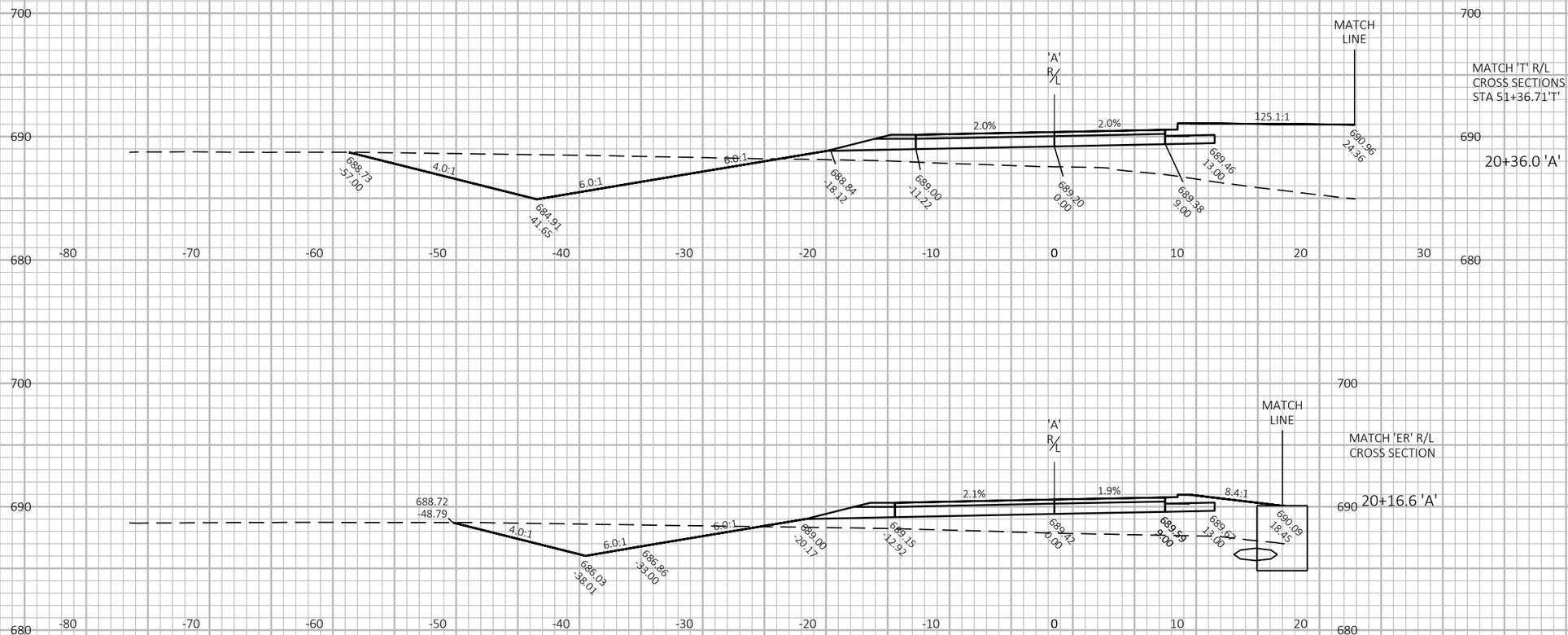
DIVISION 1 - 'PB' CATEGORY 0030

STATION	DISTANCE	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMULATIVE VOL (CY)			MASS ORDINATE (5)
		CUT (1)	SALVAGED/ UNUSABLE PAVEMENT (2)	FILL (3)	STRUCTURE BACKFILL	EBS (4)	CUT	SALVAGED/ UNUSABLE PAVEMENT	FILL	STRUCTURE BACKFILL (5)	EBS	CUT	EXPANDED FILL FACTOR = 1.25	STRUCTURAL BACKFILL TYPE B	
60+05.90	0.00	0.0	--	5.2	--	--	--	--	--	--	--	--	--	--	--
61+00.00	94.10	--	--	7.0	--	--	--	--	21	--	--	--	26	--	-26
61+52.98	52.98	--	--	10.0	--	--	--	--	17	--	--	--	48	--	-48
62+00.00	47.02	--	--	7.4	--	--	--	--	15	--	--	--	66	--	-66
62+26.13	26.13	0.5	--	2.5	--	--	--	--	5	--	--	--	73	--	-73
62+54.58	28.45	4.7	--	16.5	--	--	3	--	10	--	--	--	85	--	-82
63+00.00	45.42	8.3	--	2.4	--	--	11	--	16	--	--	--	105	--	-91
63+38.11	38.11	54.3	--	1.3	--	--	44	--	3	--	--	--	109	--	-51
63+50.00	11.89	62.0	--	--	--	--	26	--	--	--	--	--	109	--	-25
63+75.00	25.00	74.1	--	--	--	--	63	--	--	--	--	--	109	--	38
64+52.64	77.64	145.8	--	--	--	--	316	--	--	--	--	--	109	--	354
65+00.00	47.36	157.9	--	--	--	--	266	--	--	--	--	--	109	--	620
66+00.00	100.00	97.8	--	--	--	--	473	--	--	--	--	--	109	--	1,093
66+93.64	93.64	31.2	--	--	--	--	224	--	--	--	--	--	109	--	1,317
67+25.00	31.36	4.0	--	8.0	--	--	20	--	5	--	--	--	115	--	1,331
67+50.00	25.00	8.7	--	22.7	--	--	6	--	14	--	--	--	133	--	1,320
68+11.44	61.44	5.4	--	54.6	--	--	16	--	88	--	--	--	243	--	1,226
68+34.96	23.52	--	--	89.5	--	--	2	--	63	--	--	--	321	--	1,149
68+42.50	7.54	--	--	54.4	--	--	--	--	20	--	--	--	346	--	1,124
68+72.58	30.08	--	--	12.6	--	--	--	--	37	--	--	--	393	--	1,078
						UNADJUSTED TOTALS	1,470	0	314	0	0				

DIVISION 1 - 'T' CATEGORY 0010

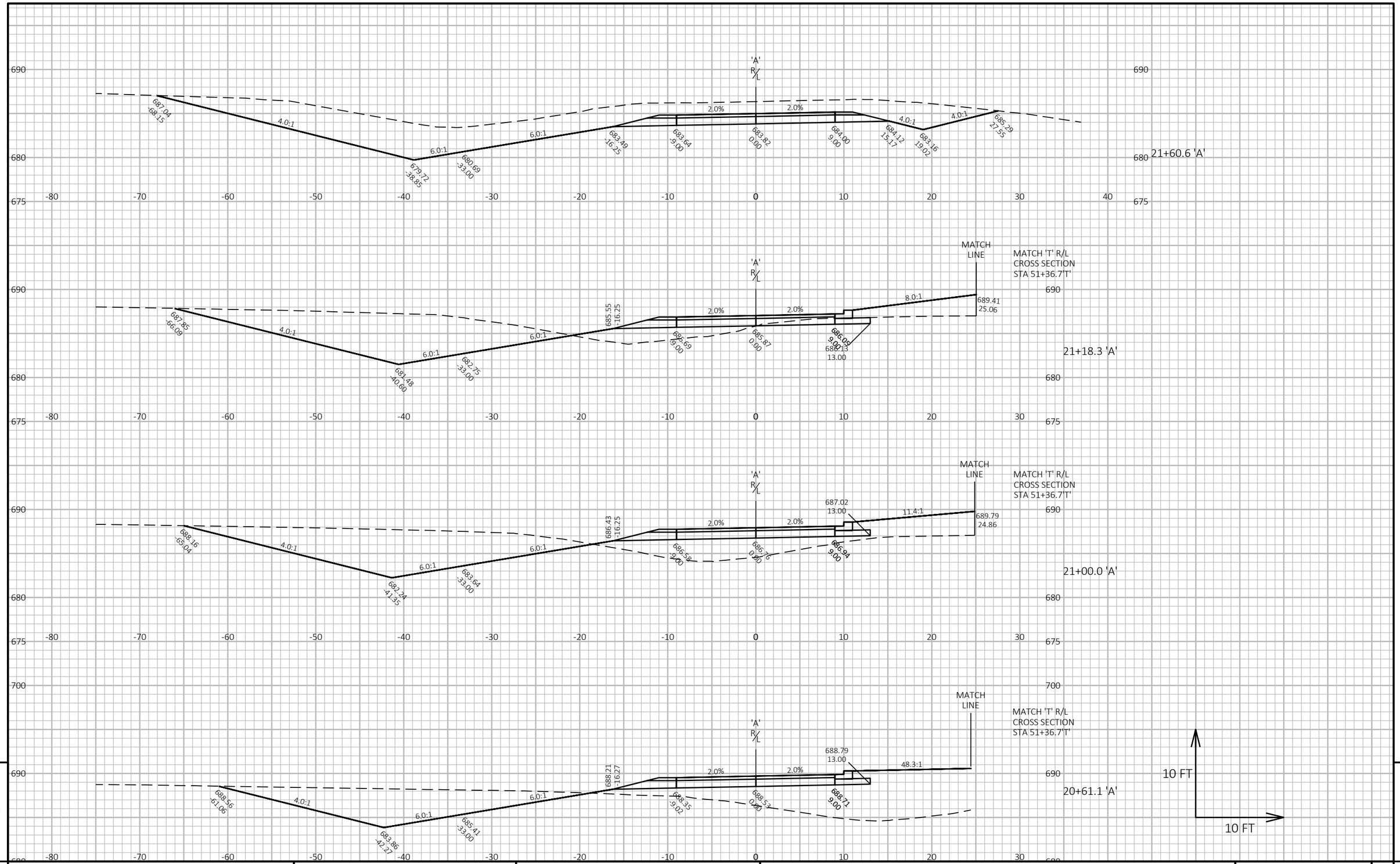
STATION	DISTANCE	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMULATIVE VOL (CY)			MASS ORDINATE (5)
		CUT (1)	SALVAGED/ UNUSABLE PAVEMENT (2)	FILL (3)	STRUCTURE BACKFILL	EBS (4)	CUT	SALVAGED/ UNUSABLE PAVEMENT	FILL	STRUCTURE BACKFILL (5)	EBS	CUT	EXPANDED FILL FACTOR = 1.25	STRUCTURAL BACKFILL TYPE B	
50+10.7	0.00	--	--	0.7	--	--	--	--	--	--	--	--	--	--	--
50+39.5	28.83	--	--	722.2	--	--	--	--	386	--	--	--	483	--	-483
50+44.8	5.21	--	--	745.1	--	188.1	--	--	72	18	18	--	573	--	-573
50+75.0	30.25	--	--	593.1	--	143.0	--	--	737	80	80	--	1,494	--	-1,494
51+00.0	25.00	--	--	351.5	--	197.1	--	--	437	157	157	--	2,040	--	-2,040
51+25.0	25.00	--	--	219.3	--	219.5	--	--	264	193	193	--	2,370	--	-2,370
51+36.7	11.68	--	--	318.9	--	53.7	--	--	116	59	59	--	2,515	--	-2,515
						UNADJUSTED TOTALS	0	0	2,012	507	507				

NOTES:	
(1) - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
(2) - SALVAGED/UNUSABLE PAVEMENT MATERIAL	ESTIMATED. NOT SHOWN ON CROSS SECTIONS
(3) - FILL	DOES NOT INCLUDE "SALV/UNUSABLE PAVEMENT", "EBS", OR "STRUCTURE BACKFILL"
(4) - EBS	WILL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE B
(5) - STRUCTURE BACKFILL	INCLUDES "EBS" BACKFILL
(6) - MASS ORDINATE	[(CUT - SALV/PAVT) - (FILL* FILL FACTOR)]



PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: ACCESS ROAD ('A' RL)	SHEET 419	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 01
PLOT DATE : 6/28/2024 12:37 PM
PLOT BY : JON BLOMQUIST
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

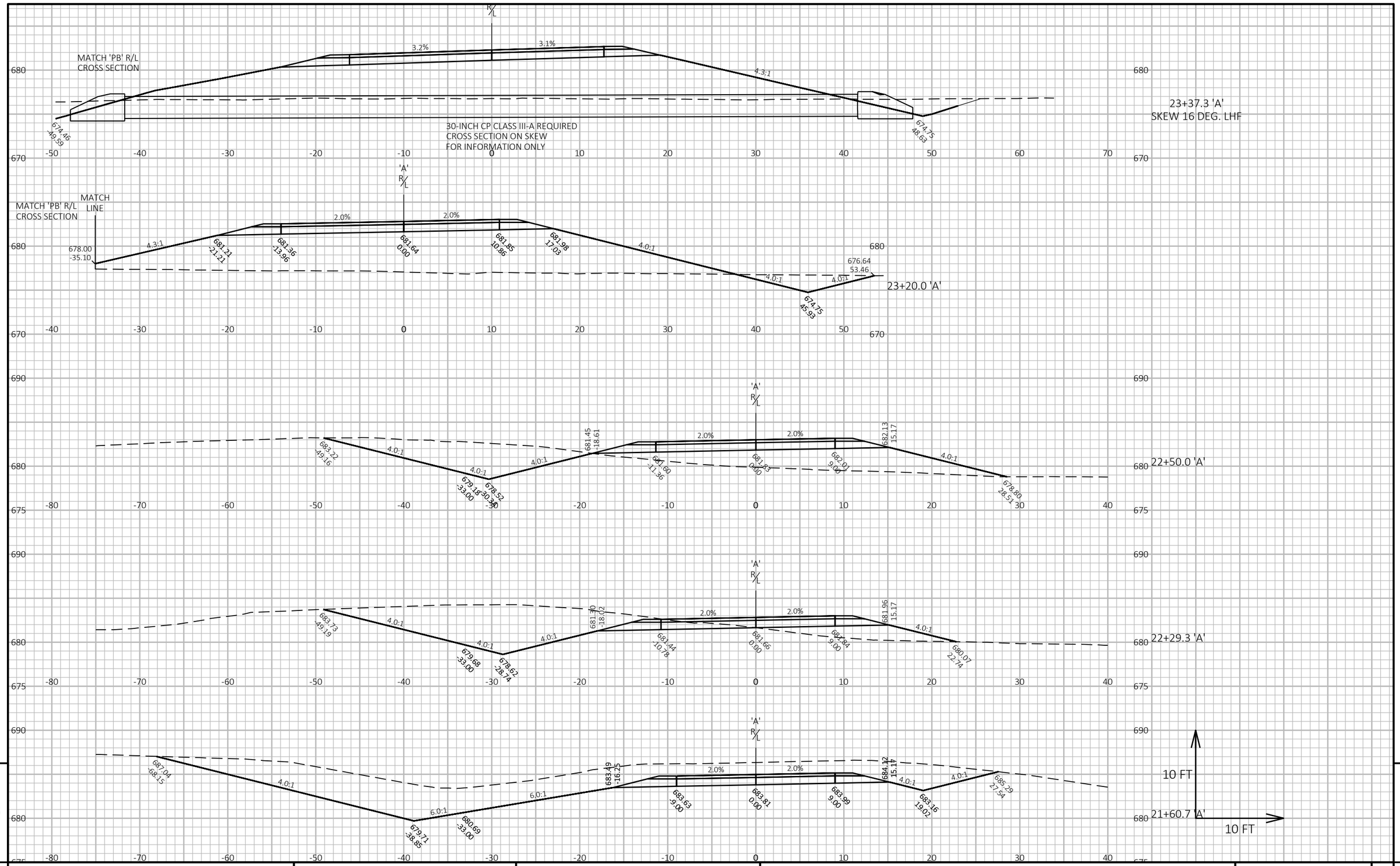


PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: ACCESS ROAD ('A' RL)	SHEET 420	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 4/29/2024 9:08 AM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: ACCESS ROAD ('A' RL)	SHEET 421	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 03

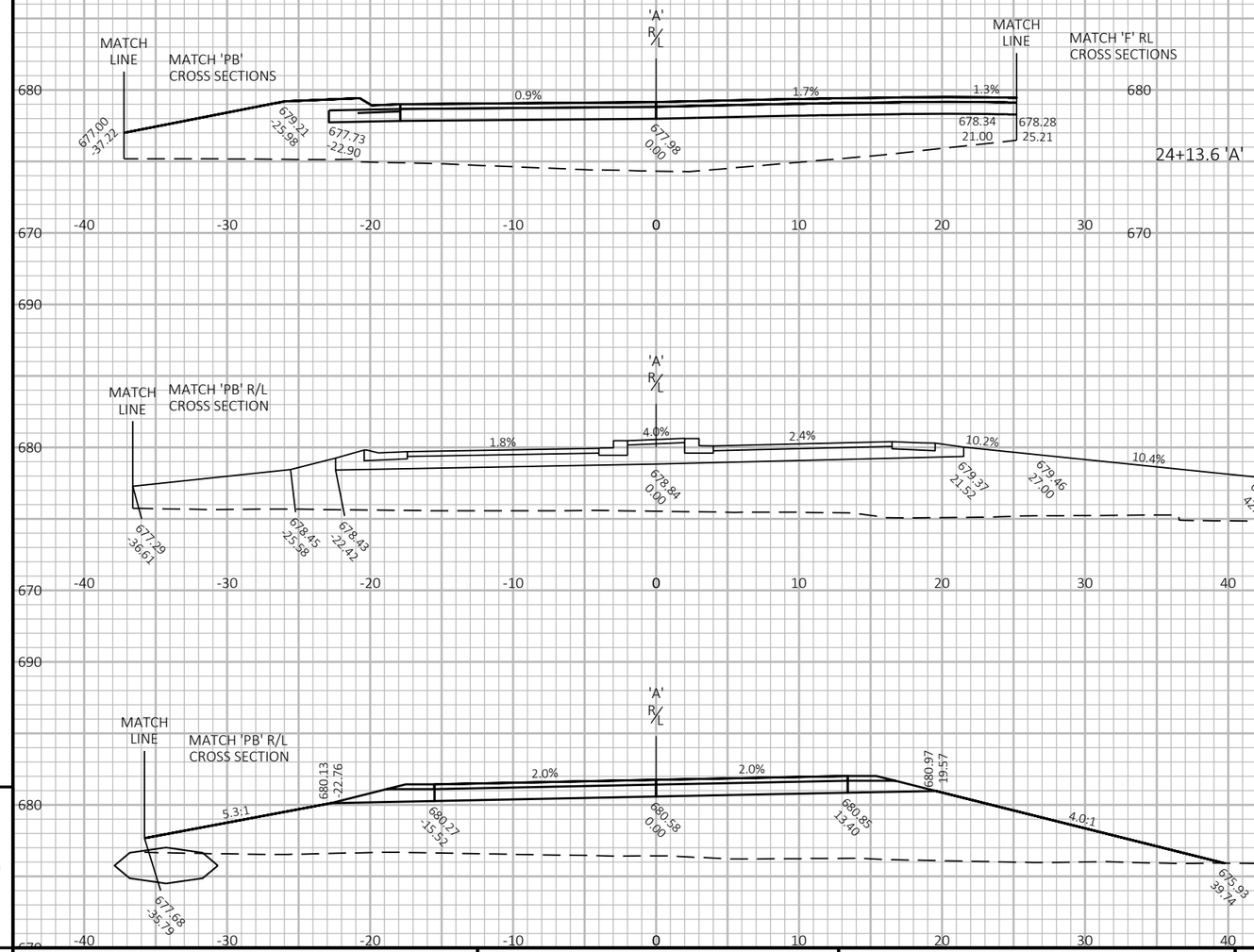
PLOT DATE : 4/29/2024 9:08 AM

PLOT BY : JON BLOMQUIST

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

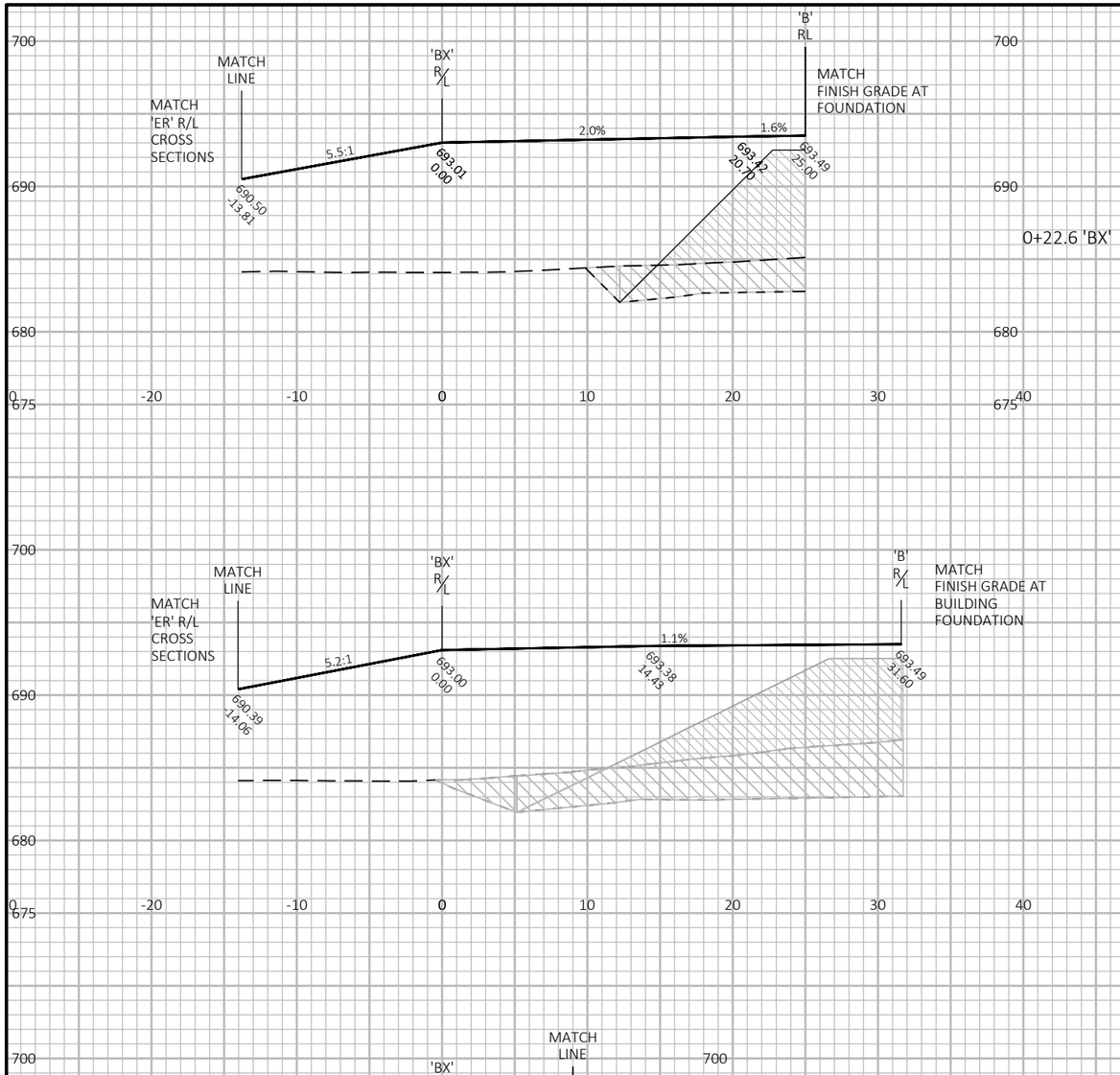
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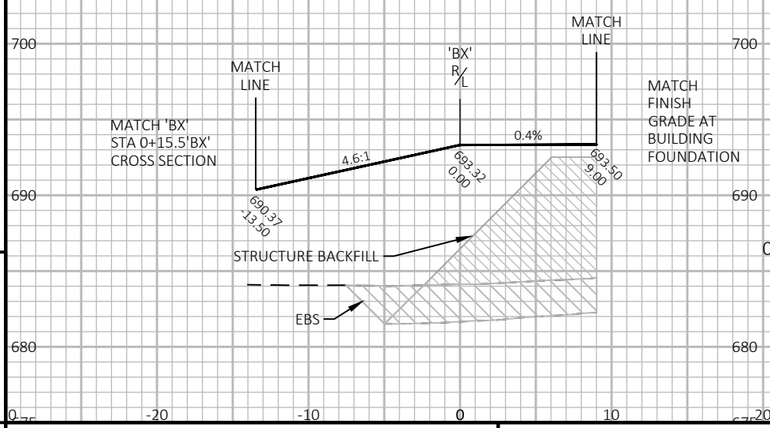
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: ACCESS ROAD ('A' RL)	SHEET 422	E

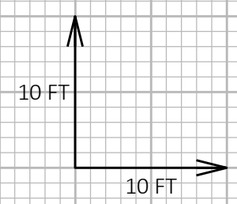
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 4/29/2024 9:08 AM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

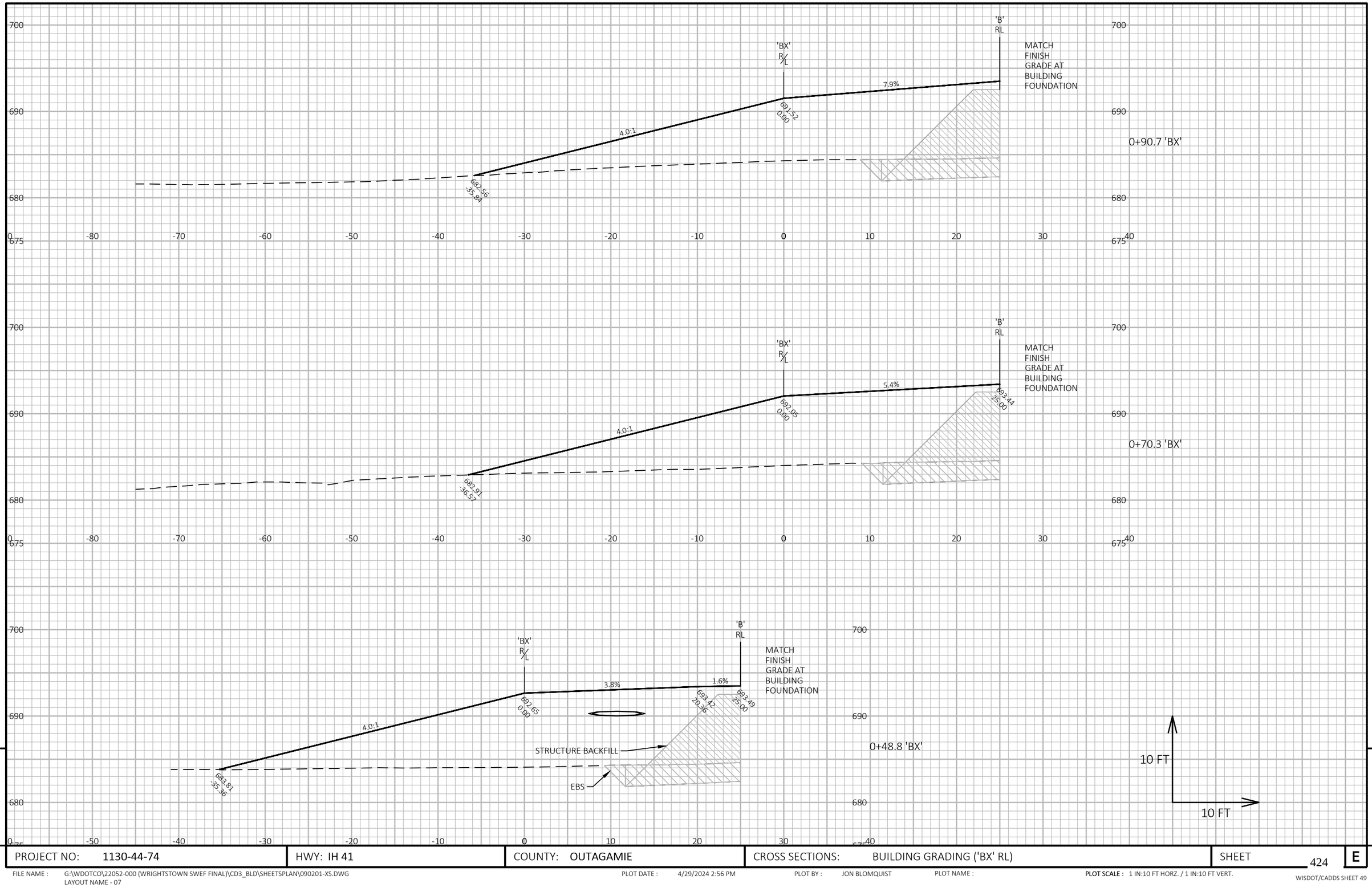
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: BUILDING GRADING ('BX' RL)	SHEET 423	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 06

PLOT DATE : 4/29/2024 2:55 PM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

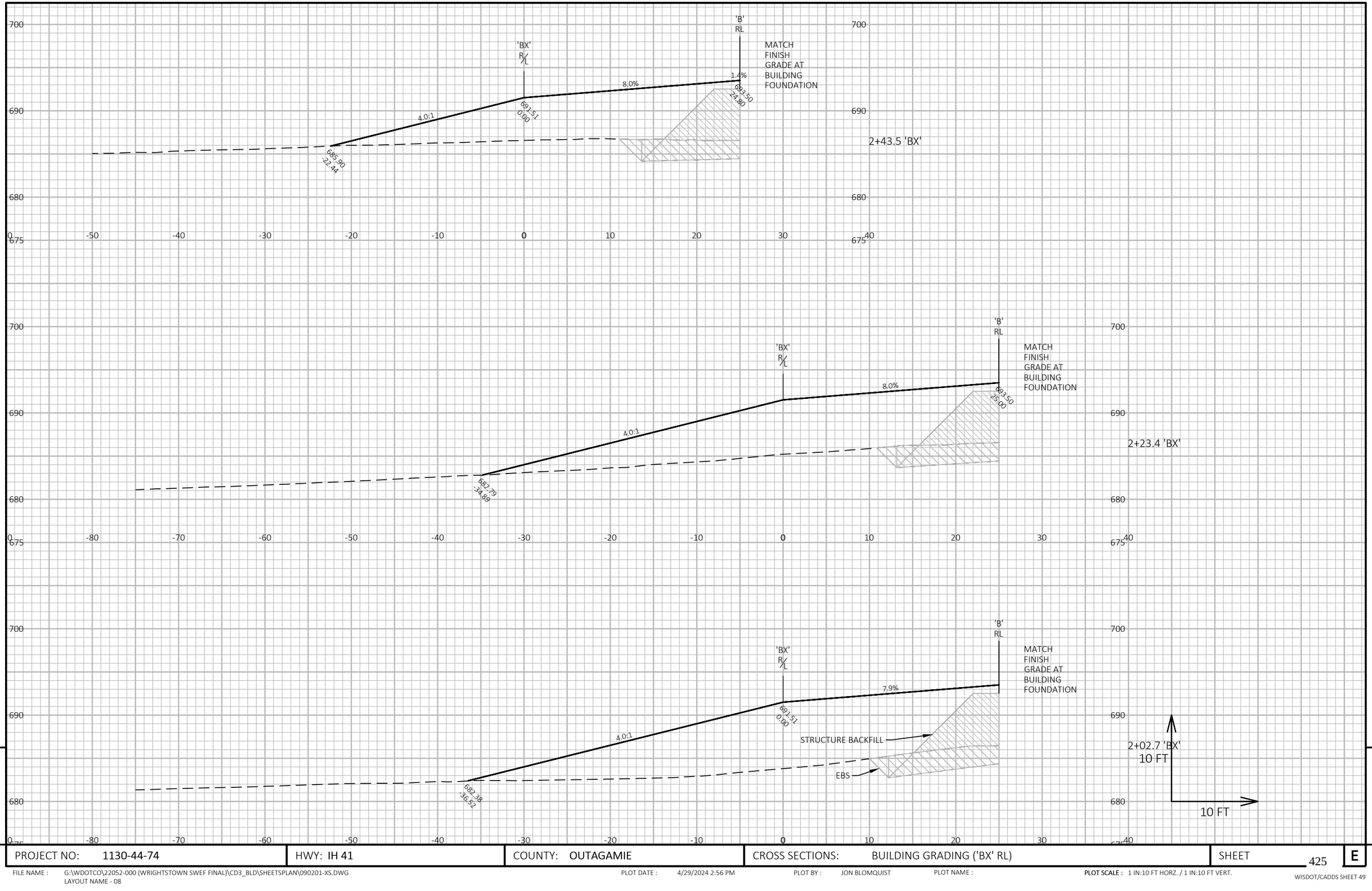
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: BUILDING GRADING ('BX' RL)	SHEET 424	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 4/29/2024 2:56 PM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

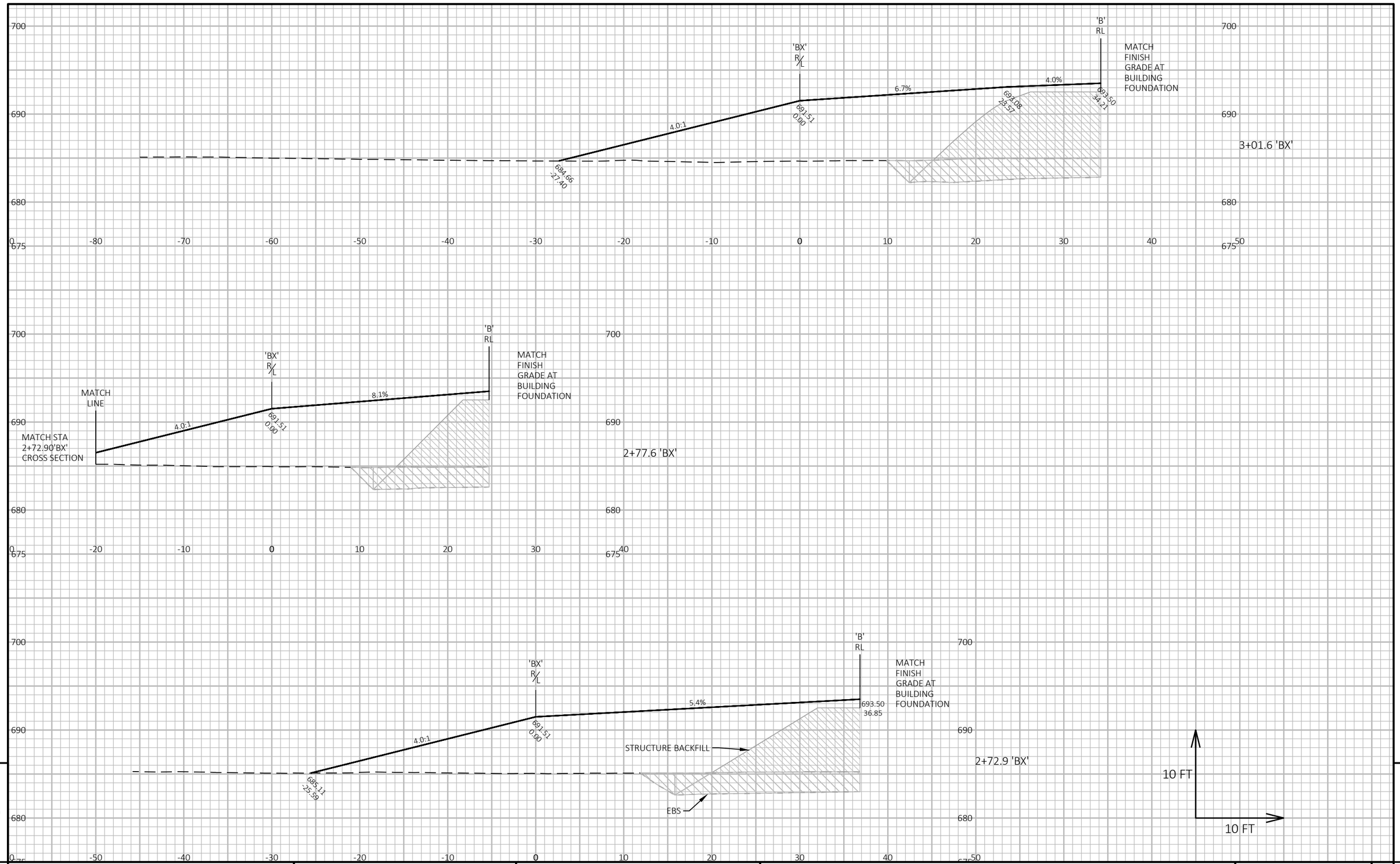
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: BUILDING GRADING ('BX' RL)	SHEET 425	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 4/29/2024 2:56 PM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

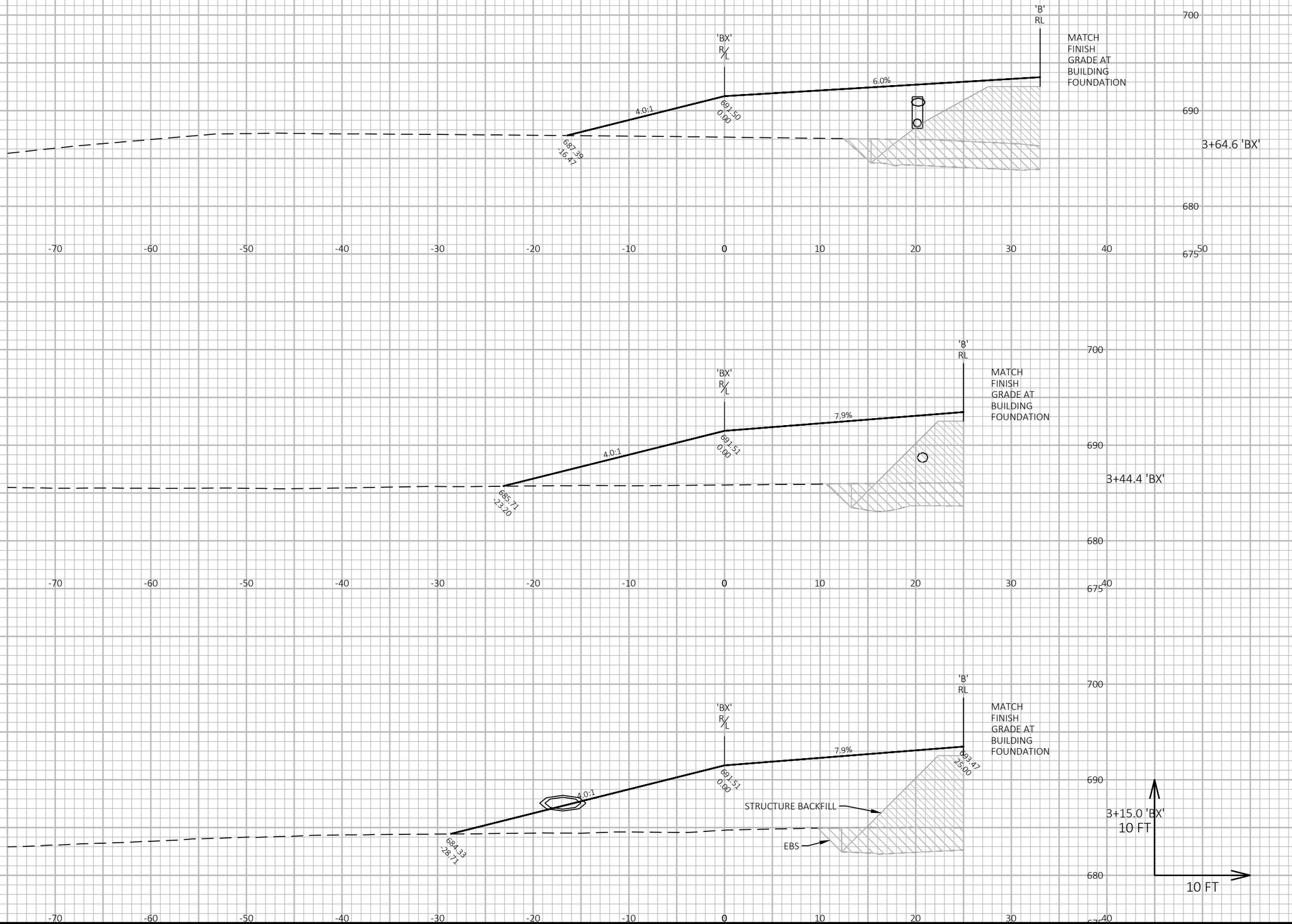


PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: BUILDING GRADING ('BX' RL)	SHEET 426	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 4/29/2024 2:56 PM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

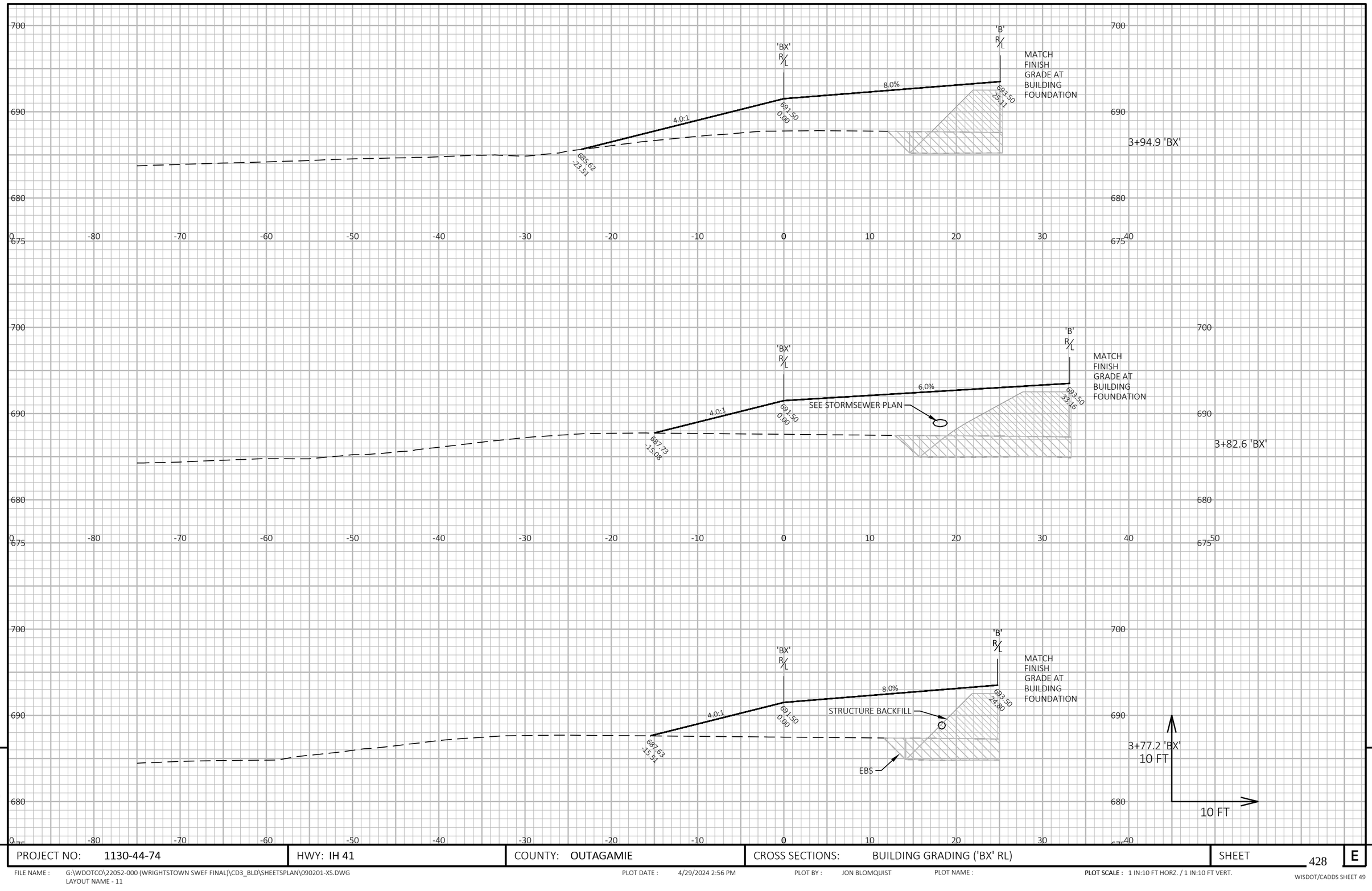
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: BUILDING GRADING ('BX' RL)	SHEET 427	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 4/29/2024 2:56 PM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

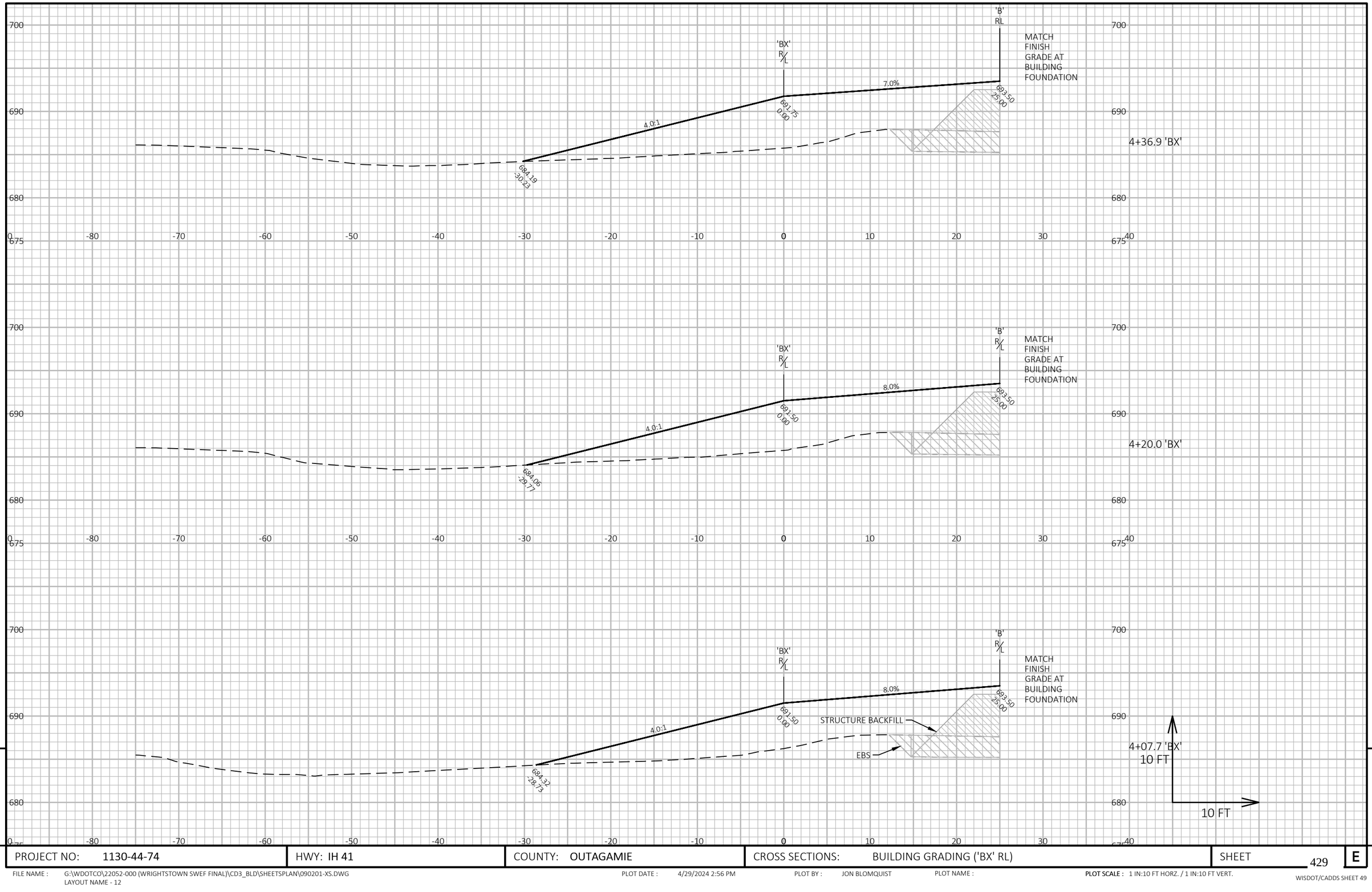
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: BUILDING GRADING ('BX' RL)	SHEET 428	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 11

PLOT DATE : 4/29/2024 2:56 PM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



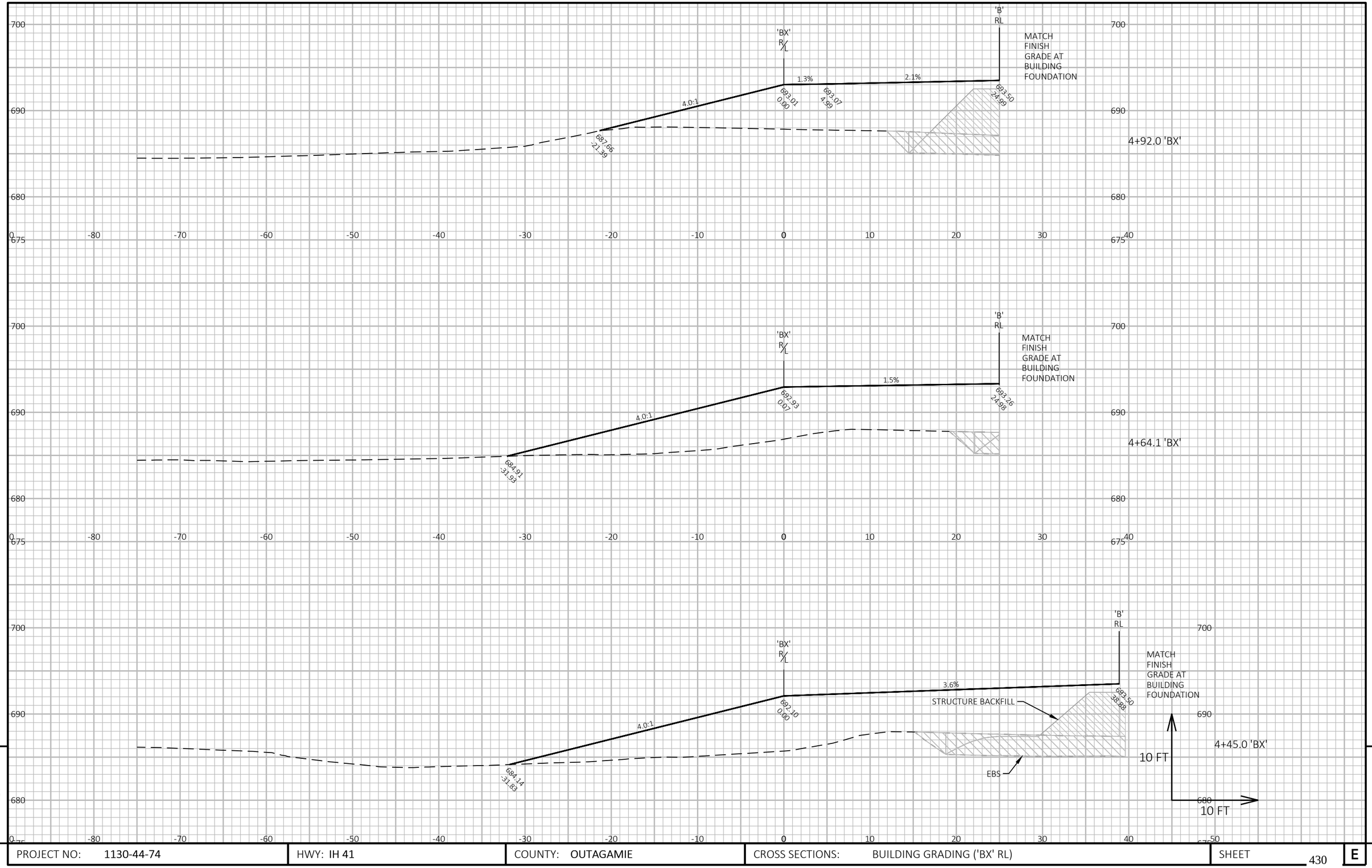
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9

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: BUILDING GRADING ('BX' RL)	SHEET 429	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 12

PLOT DATE : 4/29/2024 2:56 PM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: BUILDING GRADING ('BX' RL)	SHEET 430 E

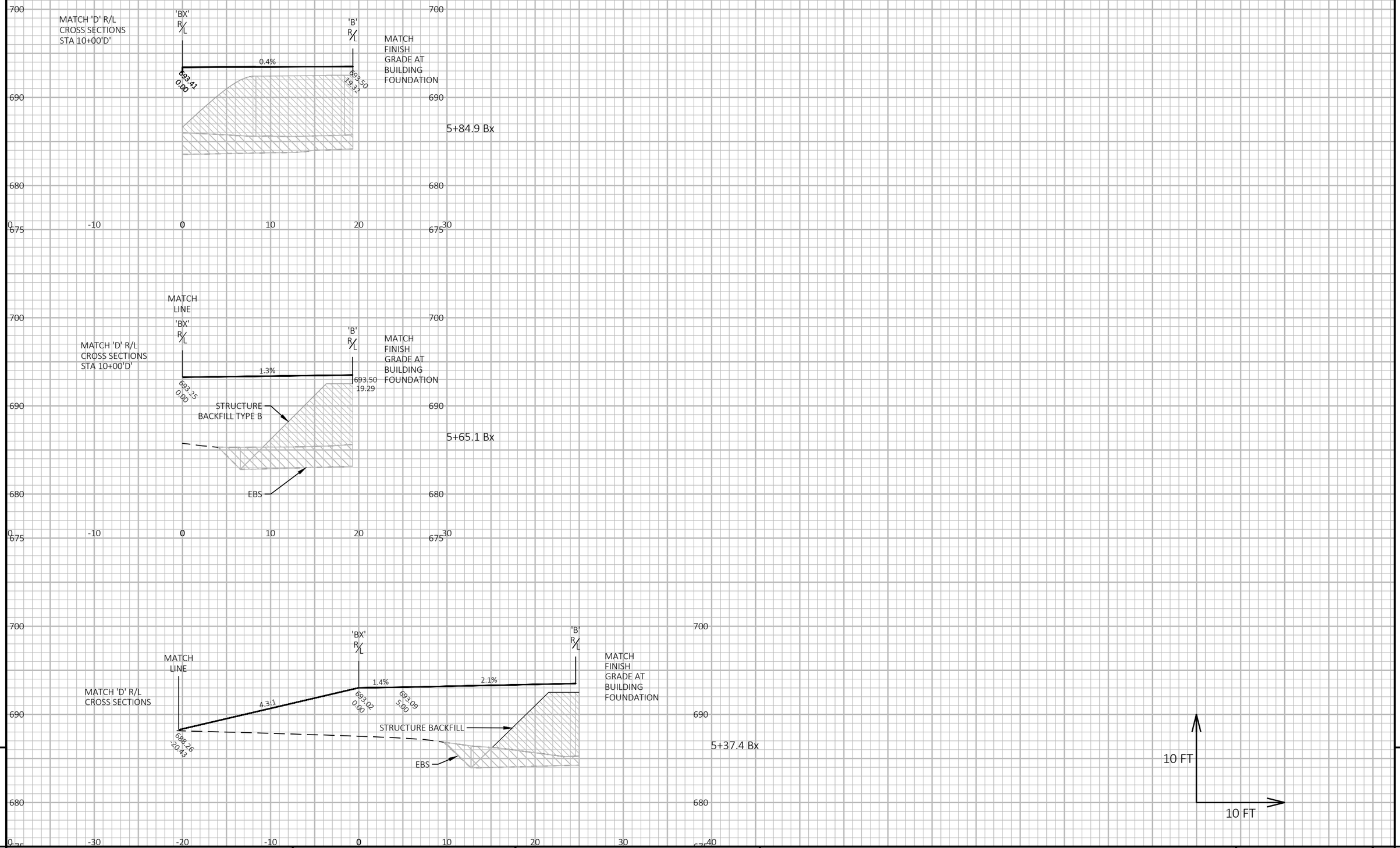
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 4/29/2024 2:56 PM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9

9

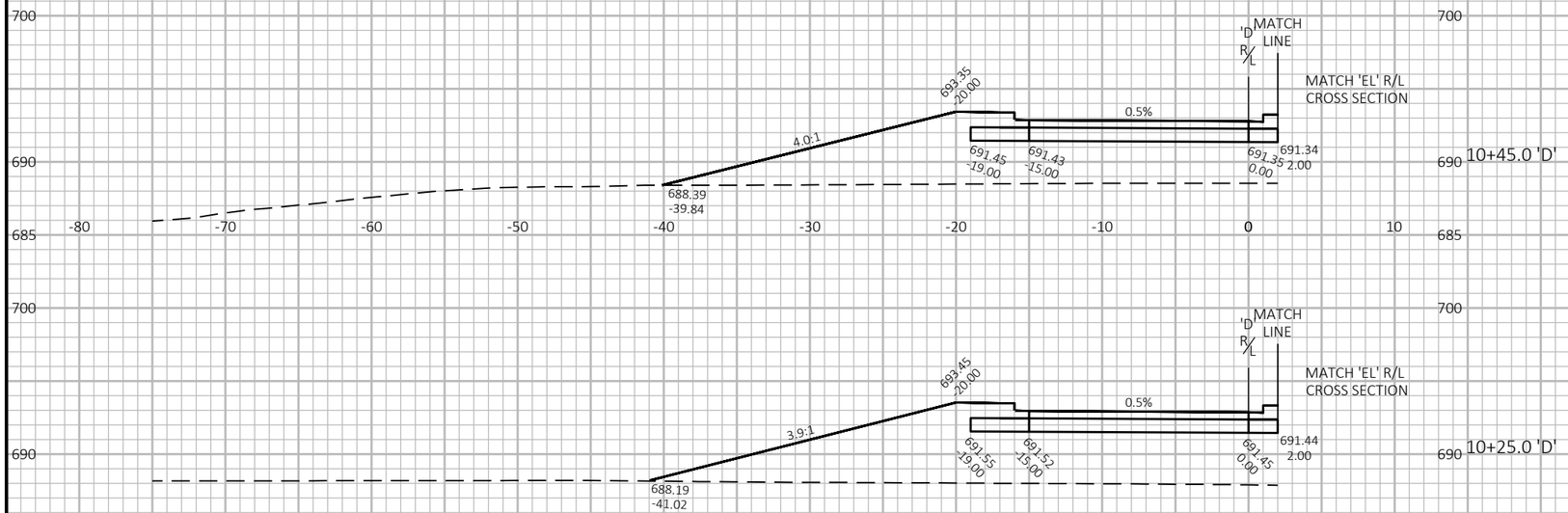


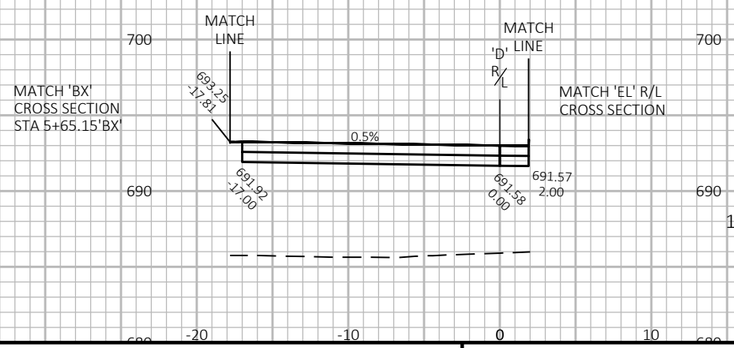
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: BUILDING GRADING ('BX' RL)	SHEET 431	E

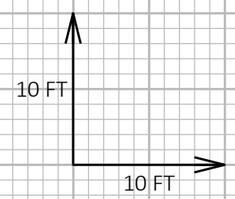
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 14

PLOT DATE : 4/29/2024 2:56 PM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

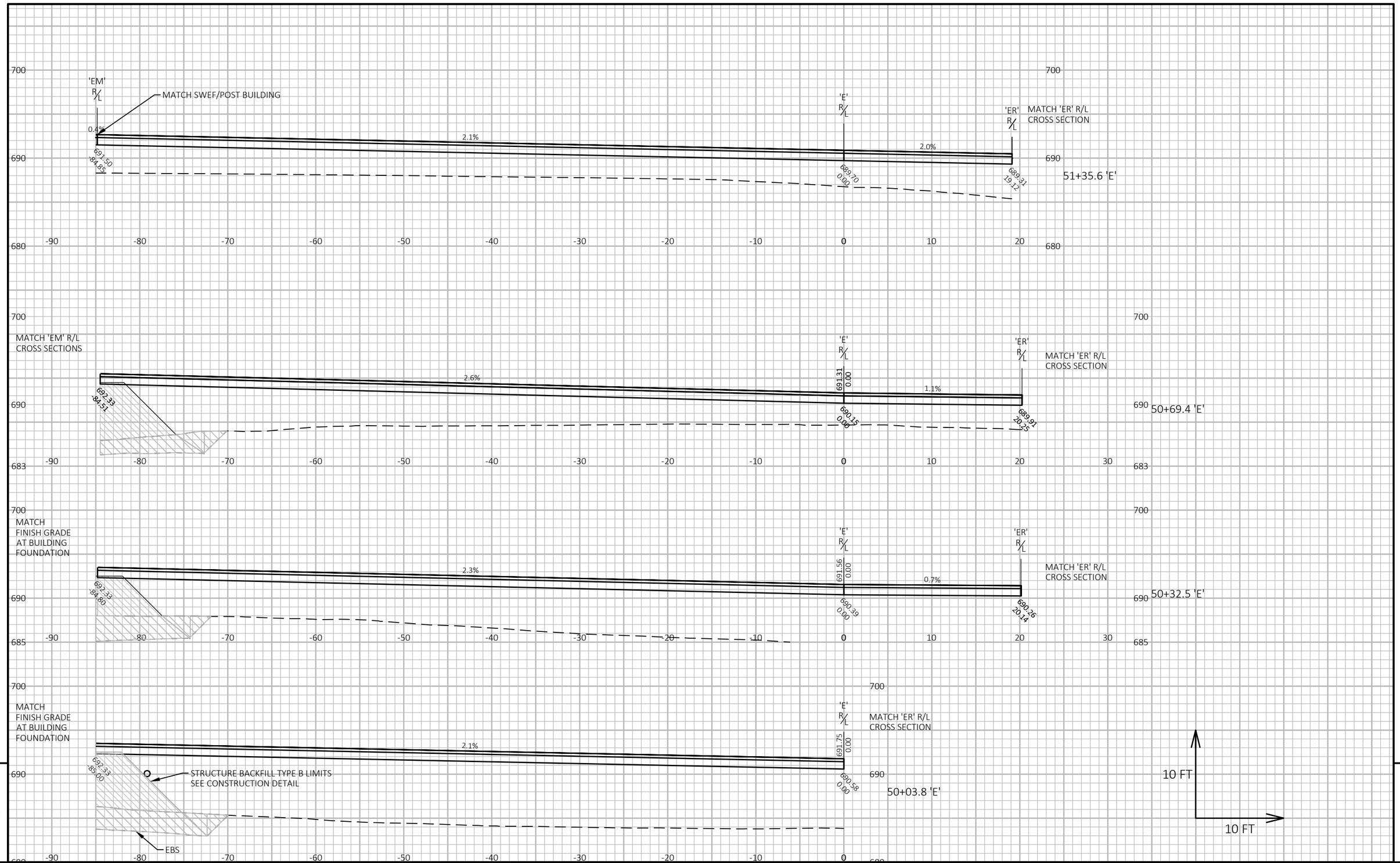
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: DUMPSTER PAD('D' RL)	SHEET 432	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 15

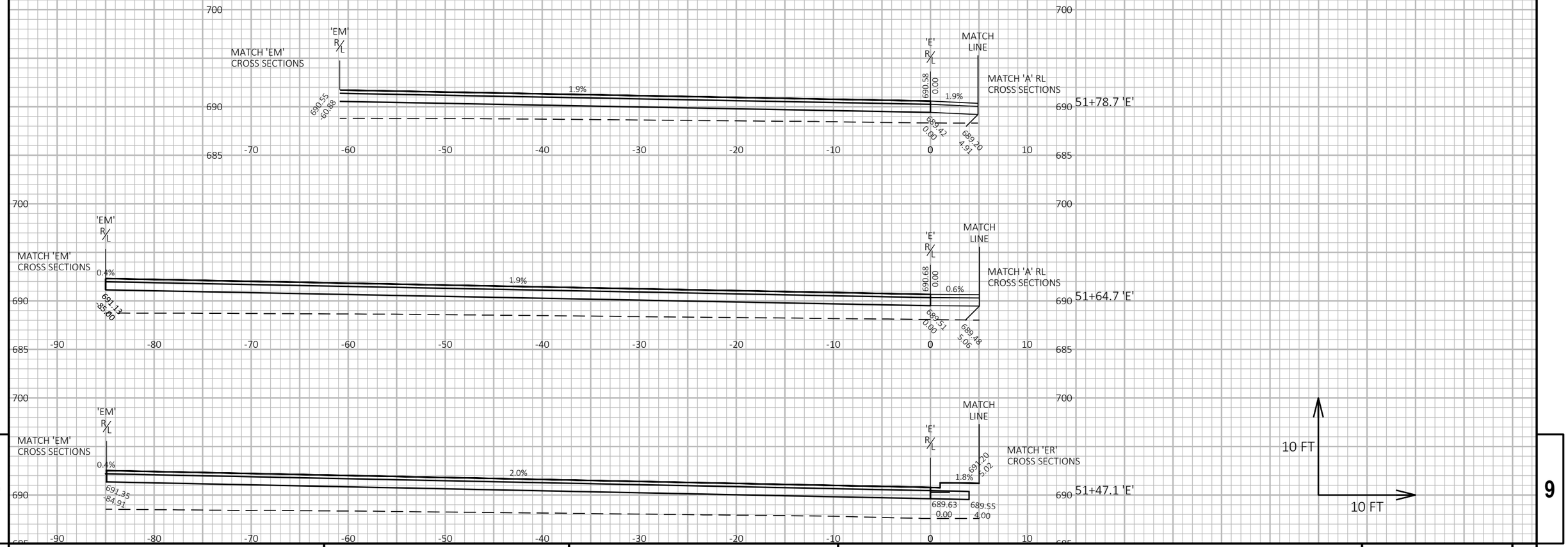
PLOT DATE : 4/29/2024 9:09 AM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: EMPLOYEE PARKING LOT('E' RL)	SHEET 433	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 16
PLOT DATE : 4/29/2024 9:09 AM
PLOT BY : JON BLOMQUIST
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: EMPLOYEE PARKING LOT('E' RL)	SHEET 434	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 17

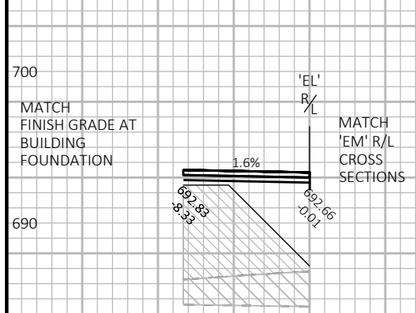
PLOT DATE : 4/29/2024 9:09 AM

PLOT BY : JON BLOMQUIST

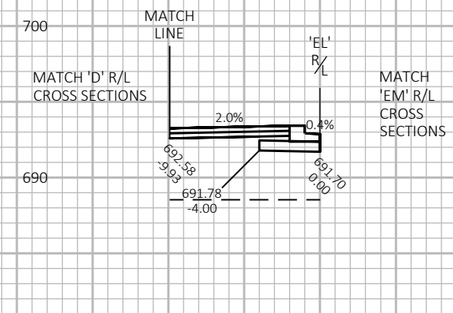
PLOT NAME :

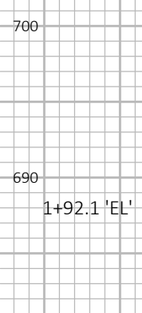
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

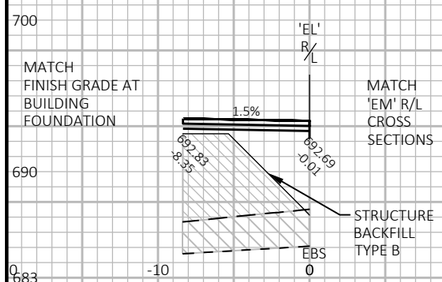
WISDOT/CADDS SHEET 49

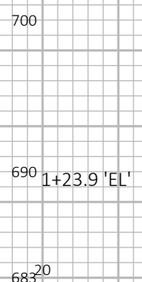


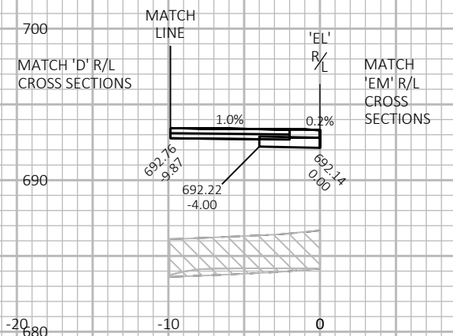


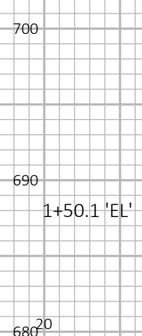


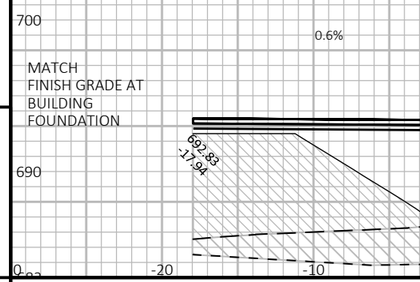


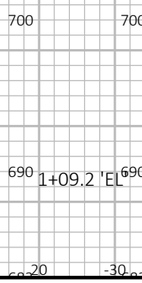


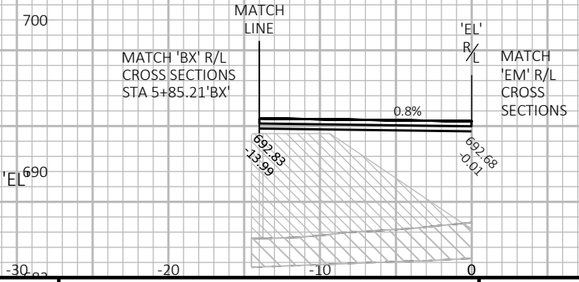














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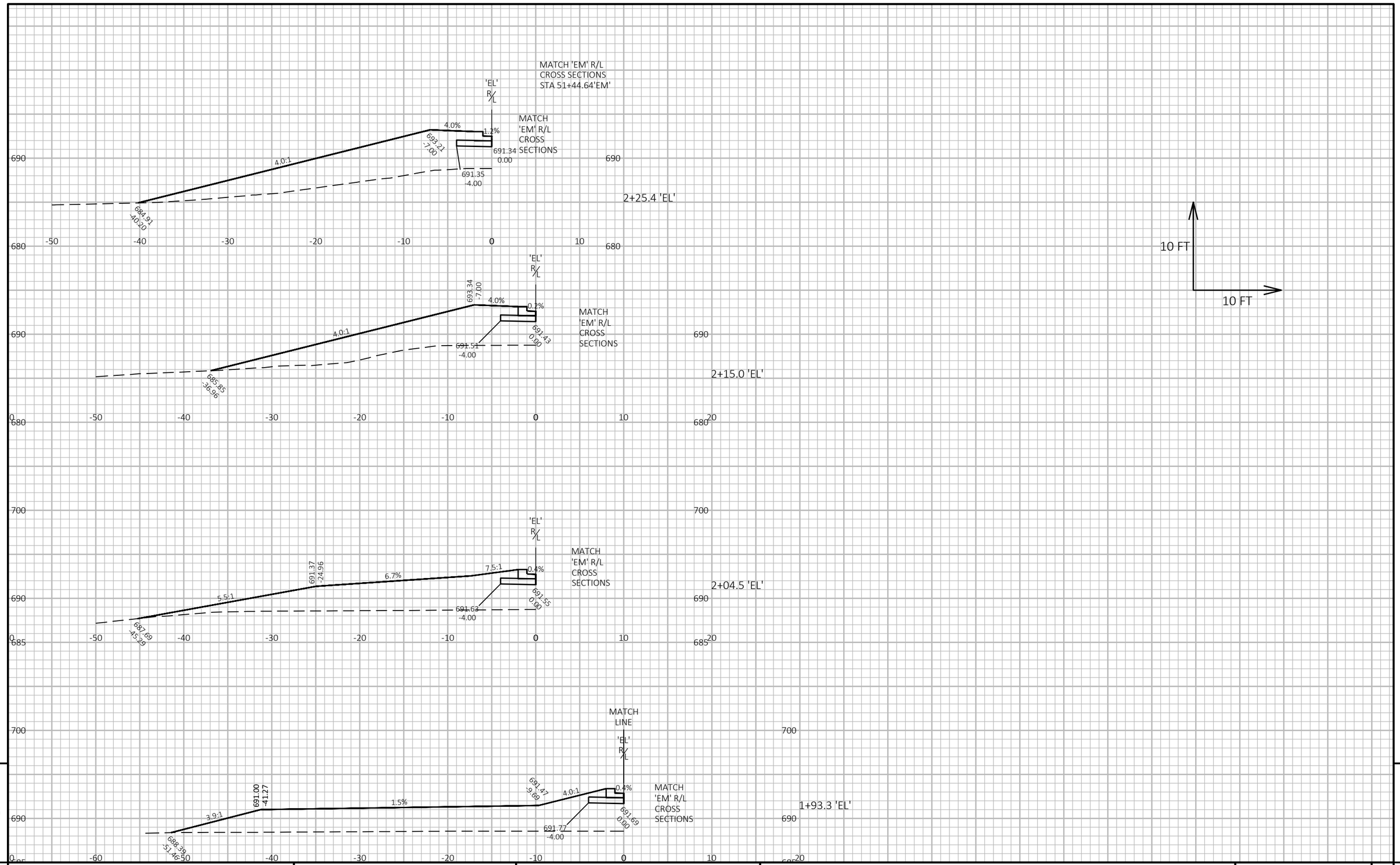
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: EMPLOYEE PARKING LOT('EL' RL)	SHEET 435	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 18

PLOT DATE : 4/29/2024 9:09 AM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

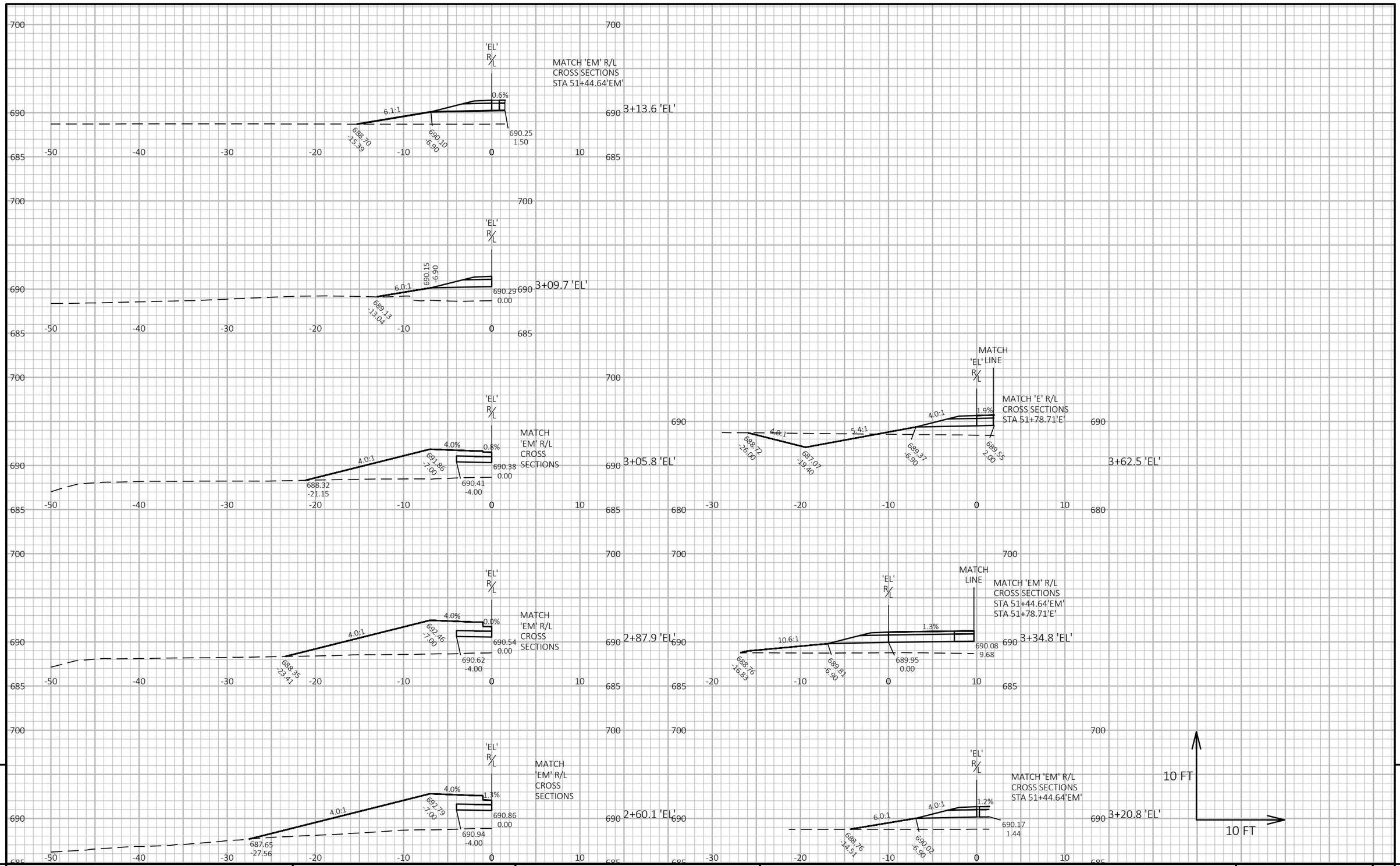
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: EMPLOYEE PARKING LOT('EL' RL)	SHEET 436	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 19

PLOT DATE : 4/29/2024 9:10 AM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

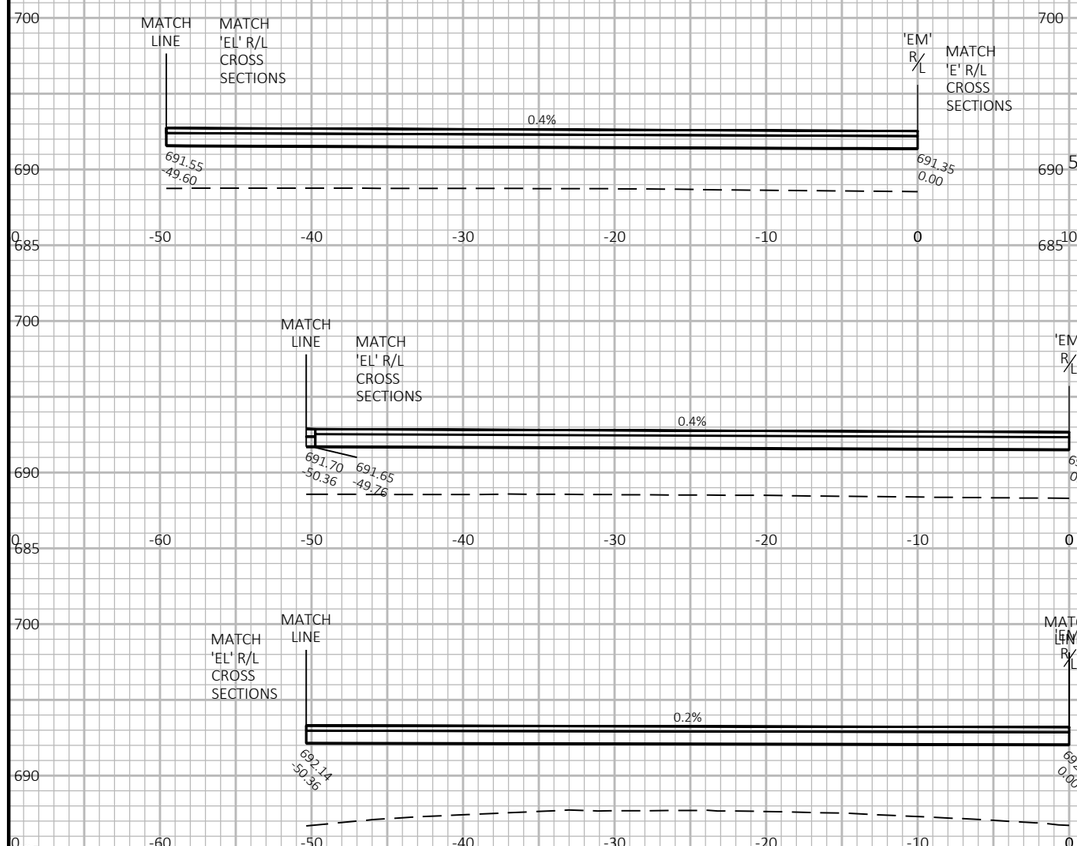


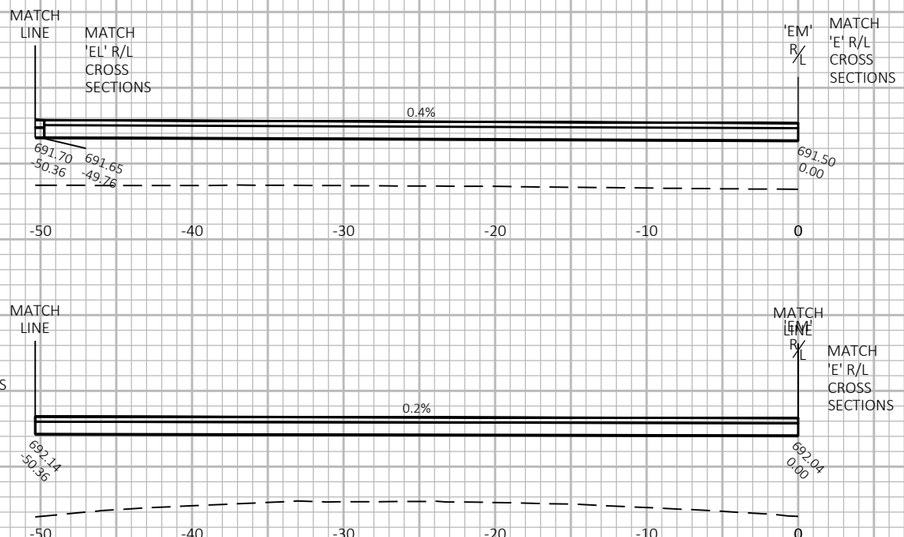
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: EMPLOYEE PARKING LOT('EL' RL)	SHEET 437	E

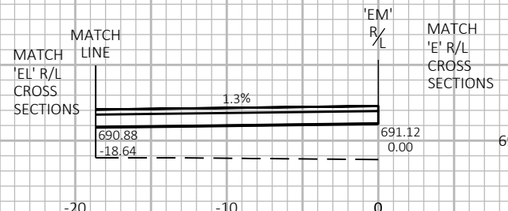
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 19 (2)

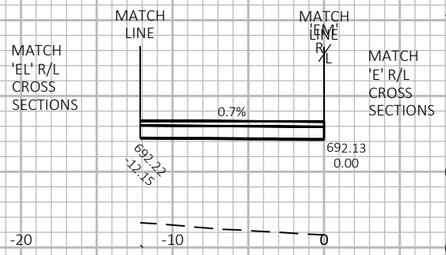
PLOT DATE : 4/29/2024 9:10 AM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

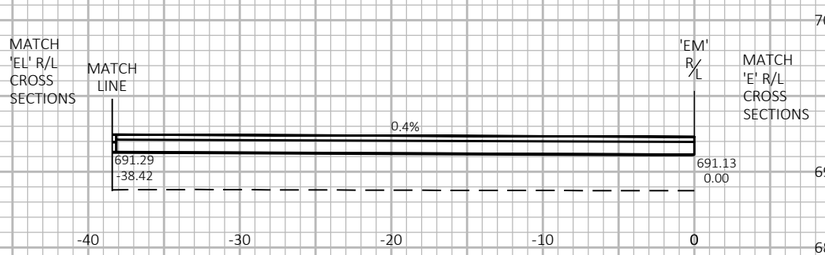
WISDOT/CADDS SHEET 49

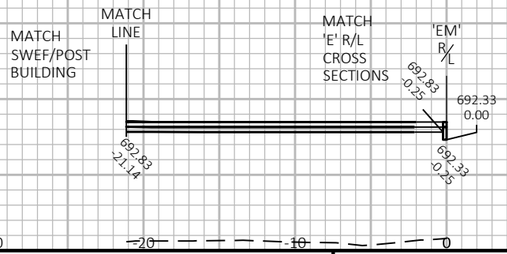


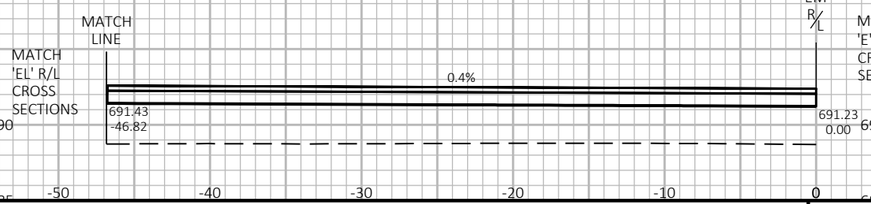


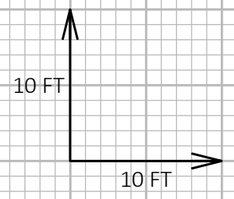












9

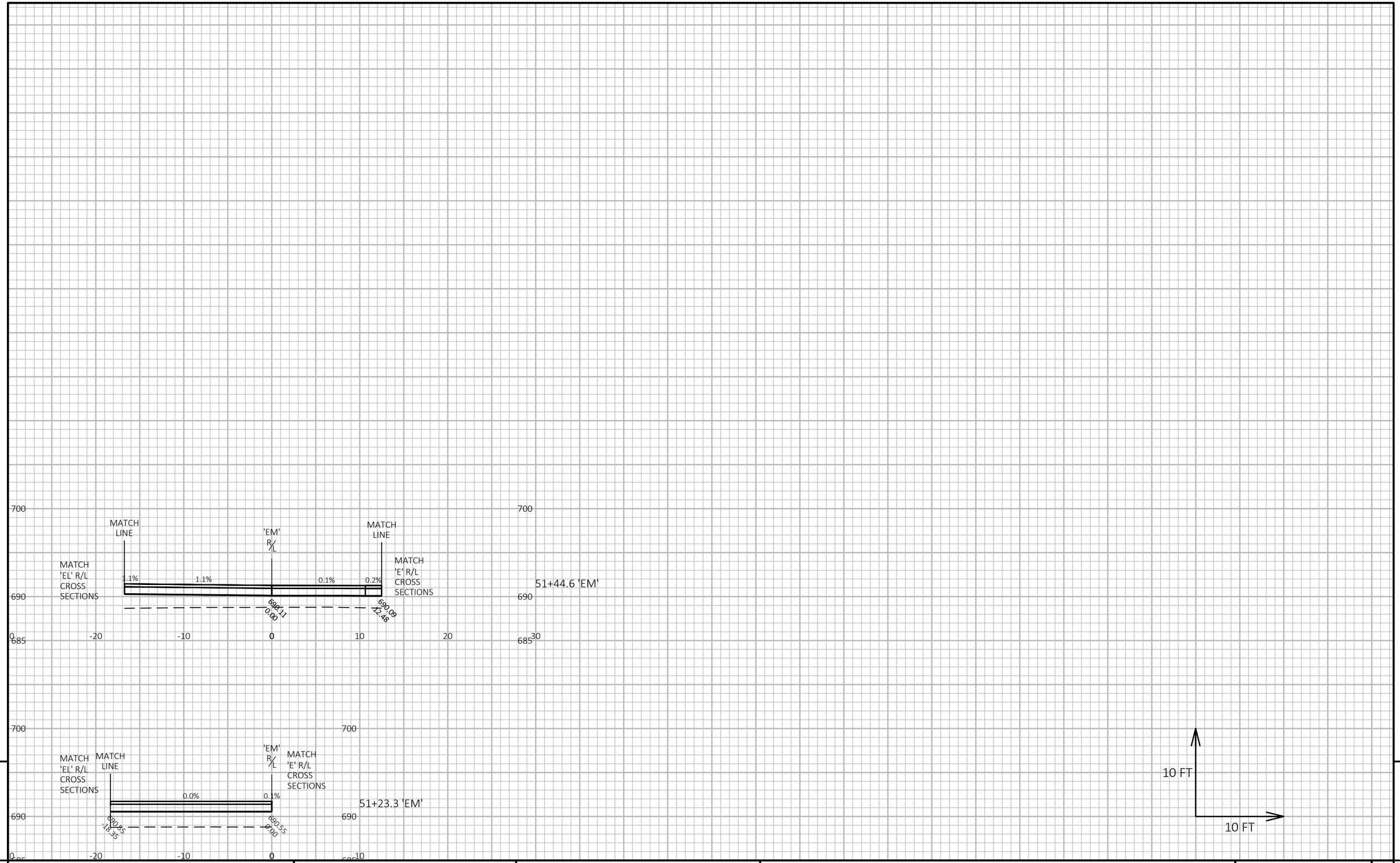
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: EMPLOYEE PARKING LOT('EM' RL)	SHEET 438	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 20

PLOT DATE : 4/29/2024 9:10 AM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

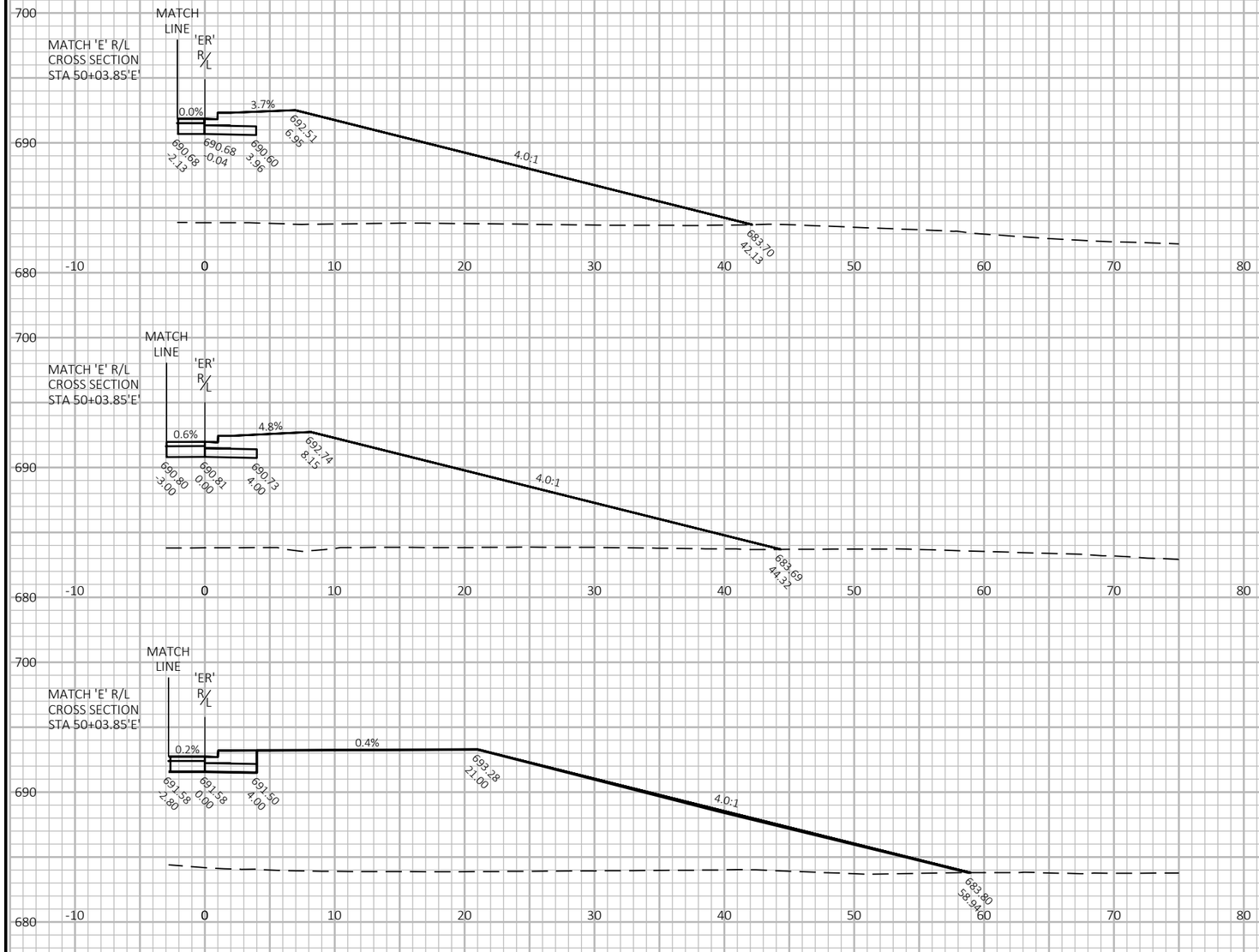
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: EMPLOYEE PARKING LOT('EM' RL)	SHEET 439	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 21

PLOT DATE : 4/29/2024 9:10 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

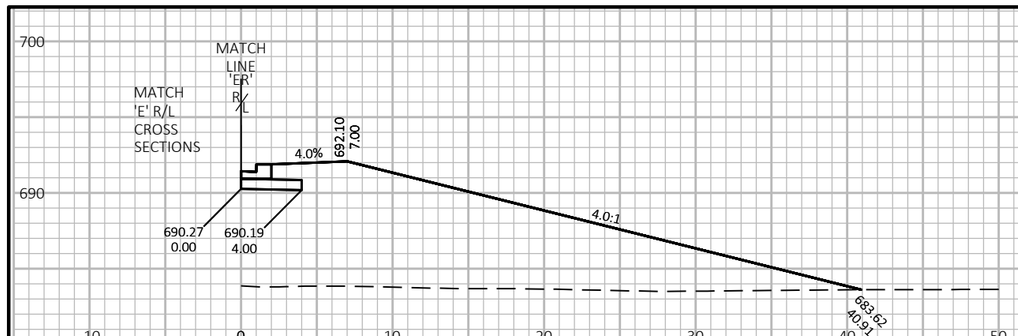


PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: EMPLOYEE PARKING LOT('ER' RL)	SHEET 440	E

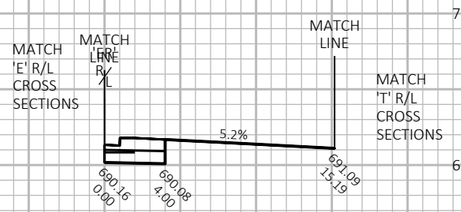
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 22

PLOT DATE : 4/29/2024 9:10 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



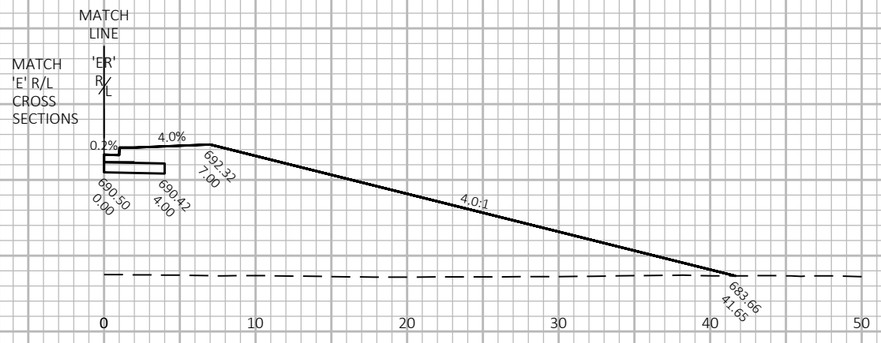
11+19.5 'ER'



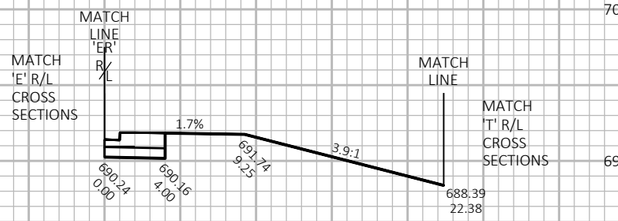


11+00.0 'ER'

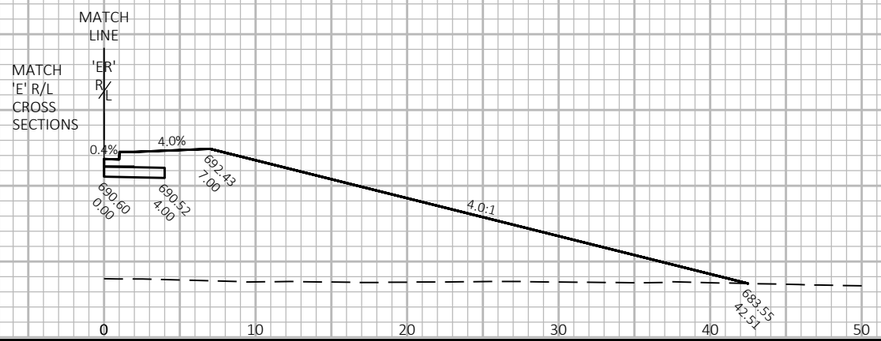
11+31.7 'ER'



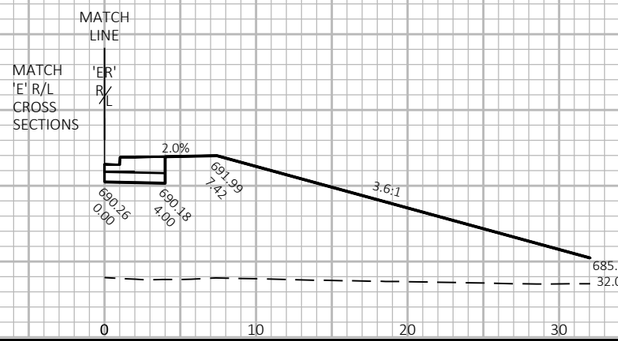
10+94.8 'ER'



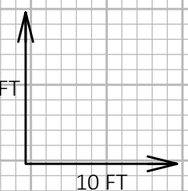
11+22.3 'ER'



10+84.6 'ER'



11+20.9 'ER'



9

9

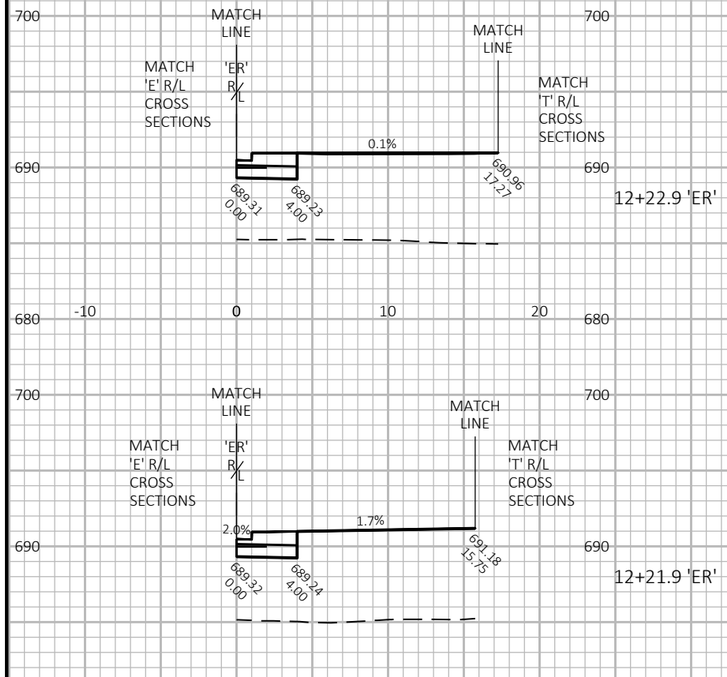
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: EMPLOYEE PARKING LOT('ER' RL)	SHEET 441	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 23

PLOT DATE : 4/29/2024 9:10 AM PLOT BY : JON BLOMQUIST PLOT NAME :

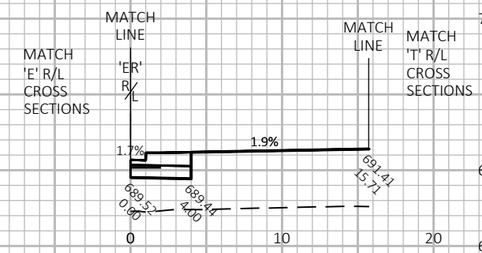
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

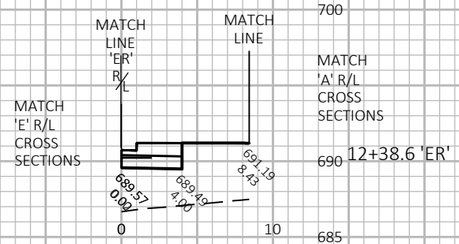


12+22.9 'ER'

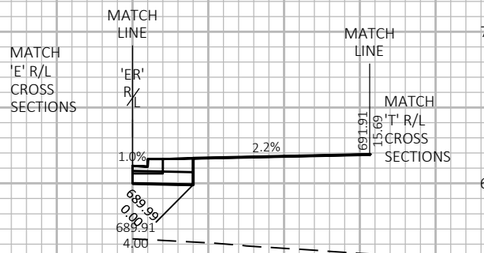
12+21.9 'ER'



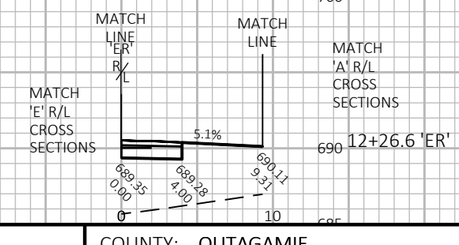
12+00.0 'ER'



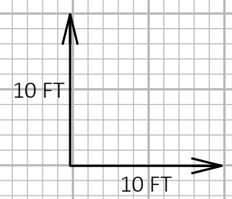
12+38.6 'ER'



11+50.0 'ER'



12+26.6 'ER'



9

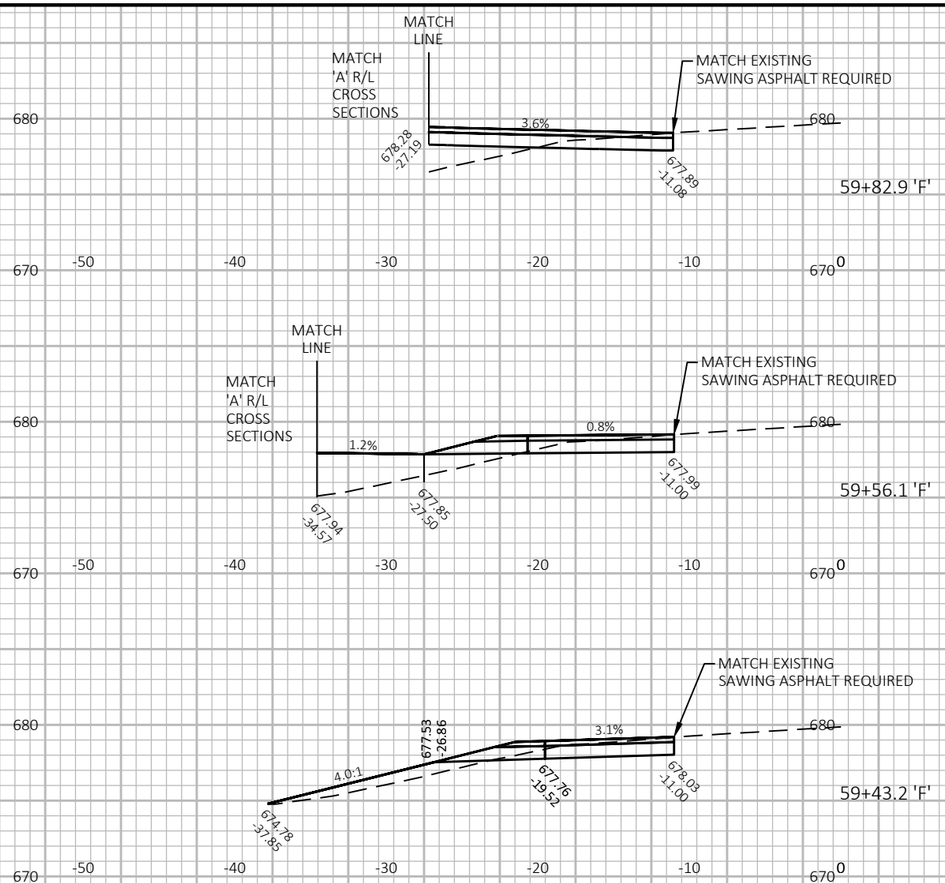
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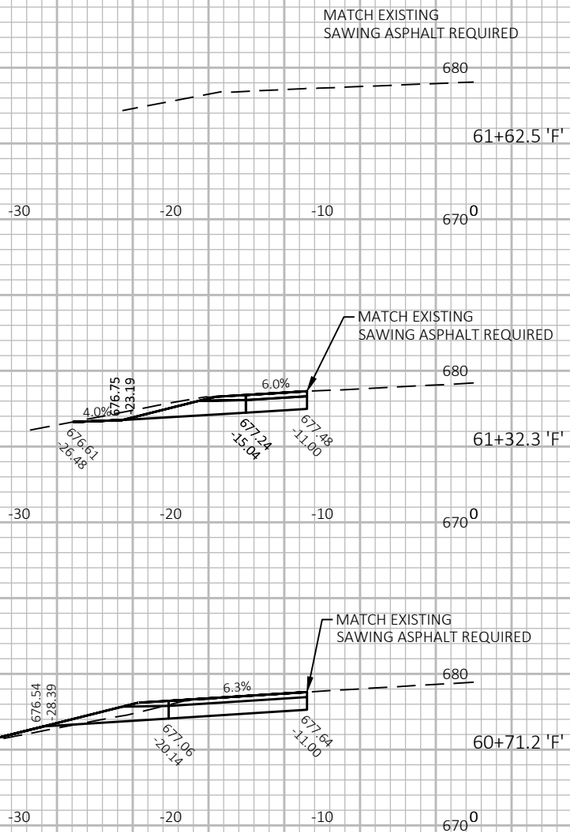
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: EMPLOYEE PARKING LOT('ER' RL)	SHEET 442	E

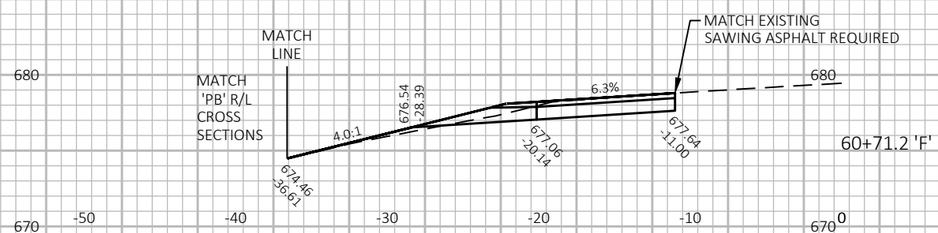
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 24

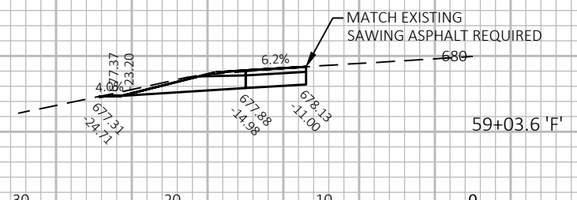
PLOT DATE : 4/29/2024 9:10 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

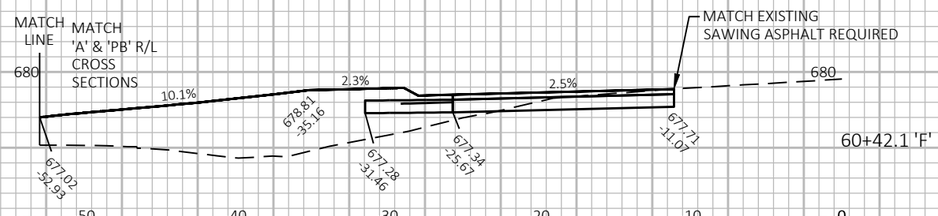
WISDOT/CADDS SHEET 49

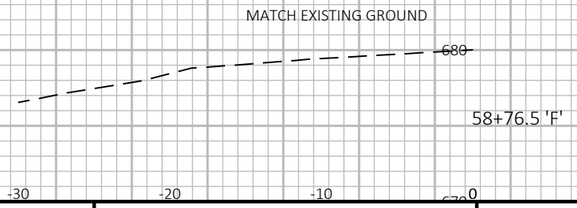


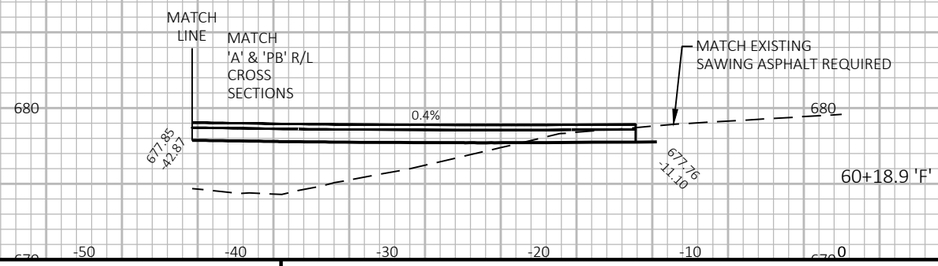


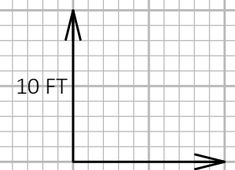












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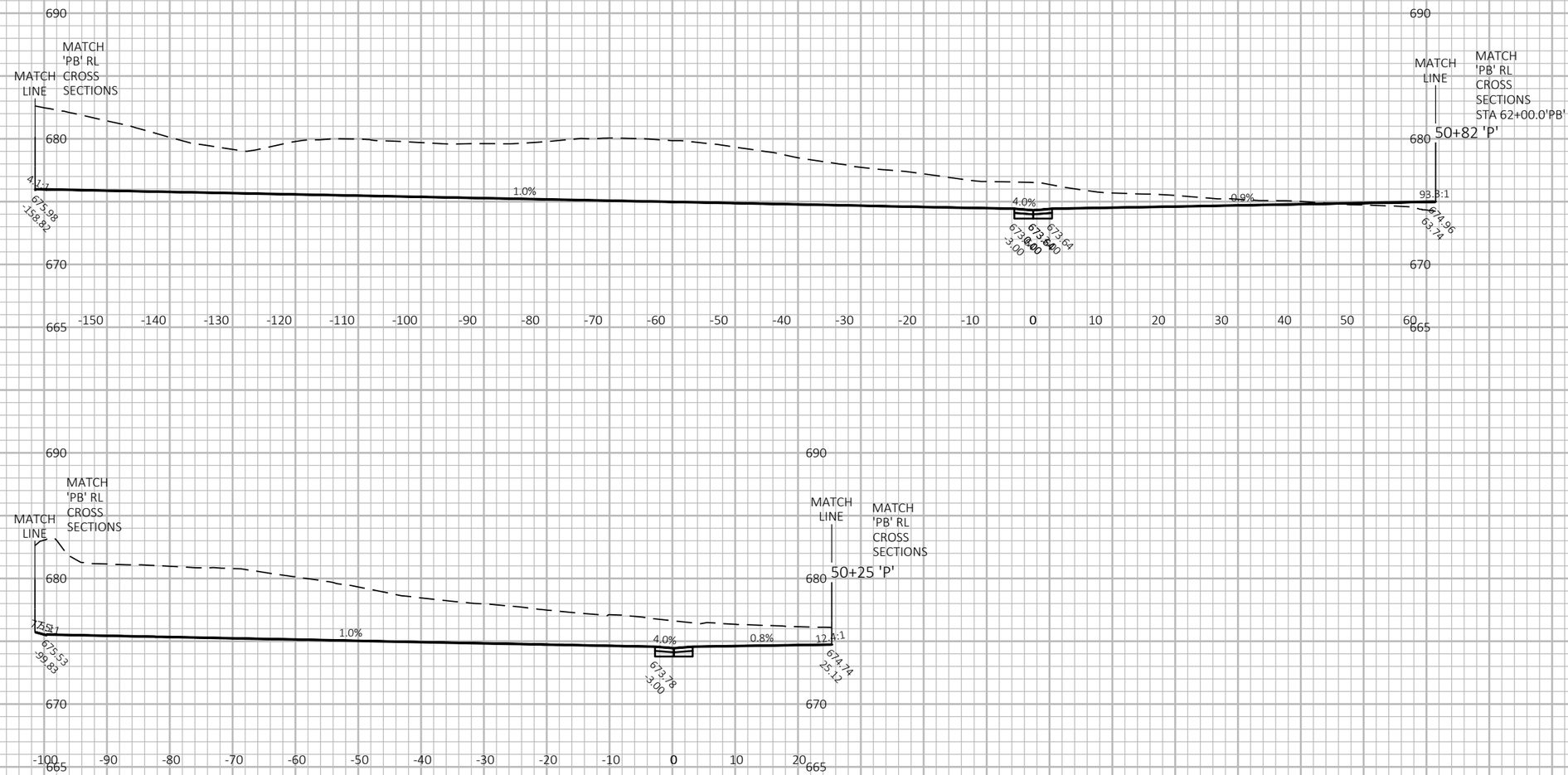
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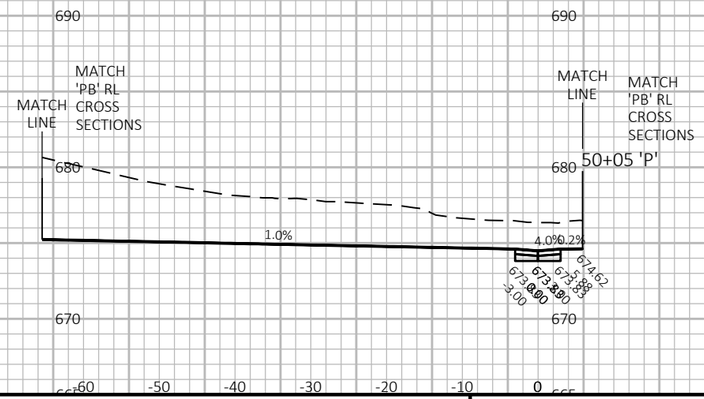
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: EAST FRONTAGE ROAD ('F' RL)	SHEET 443	E

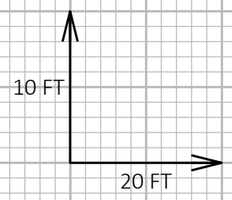
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 25

PLOT DATE : 4/29/2024 9:10 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

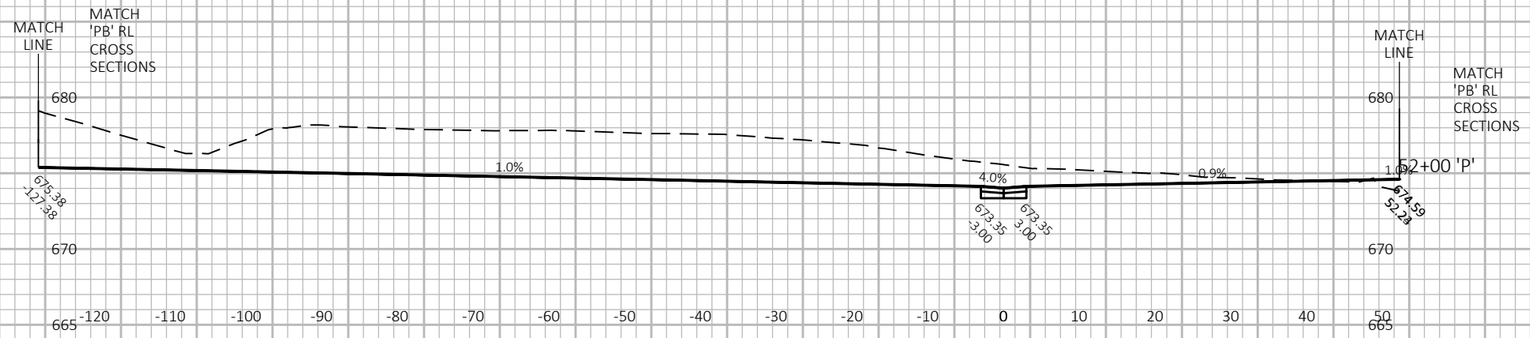
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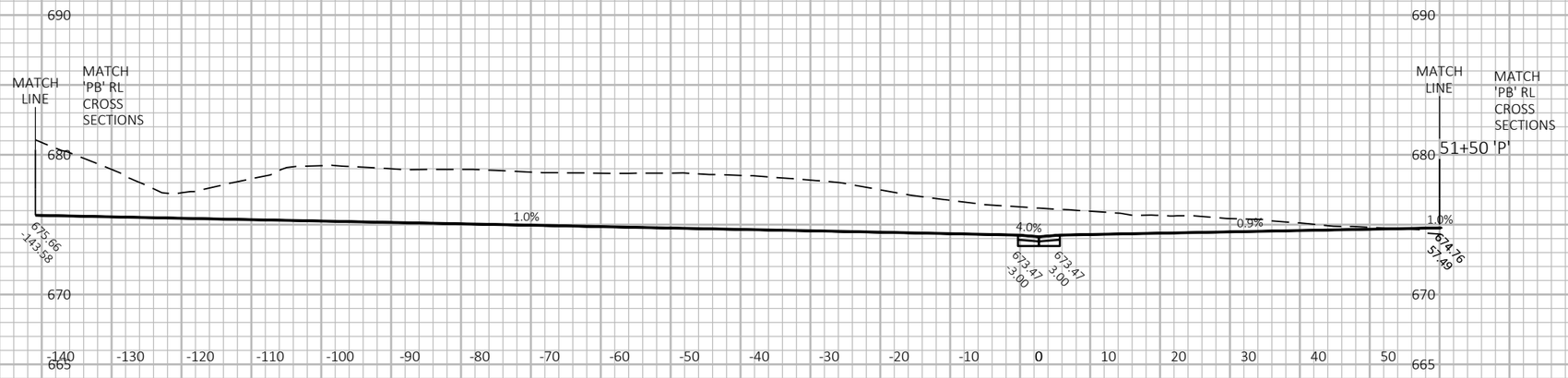
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: STORMWATER DETENTION BASIN ('P' RL)	SHEET 444	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 50

PLOT DATE : 4/29/2024 9:26 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49









9

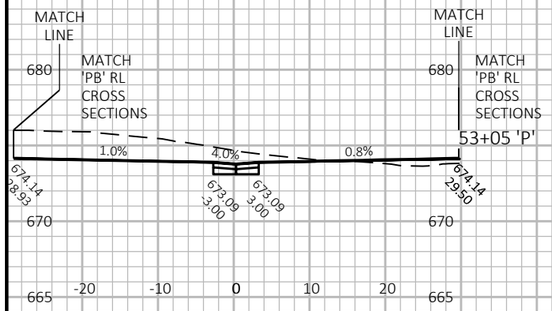
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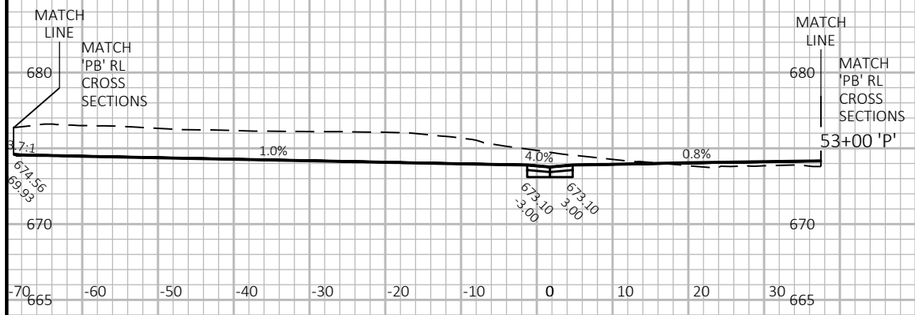
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: STORMWATER DETENTION BASIN ('P' RL)	SHEET 445	E

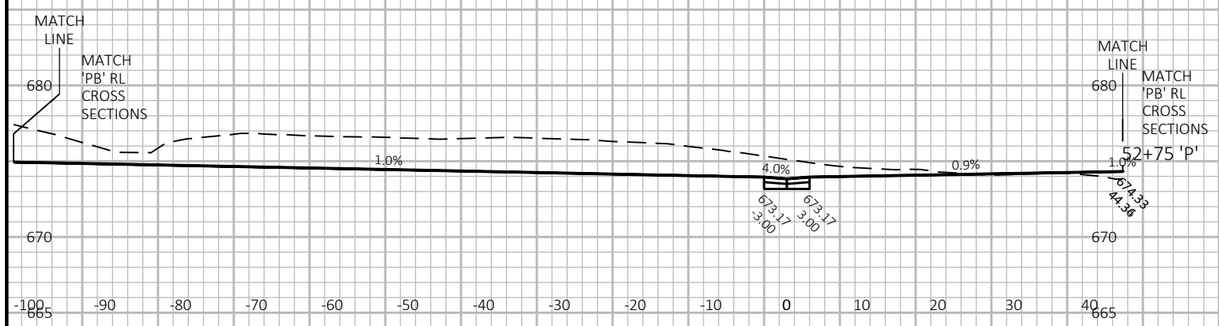
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 51

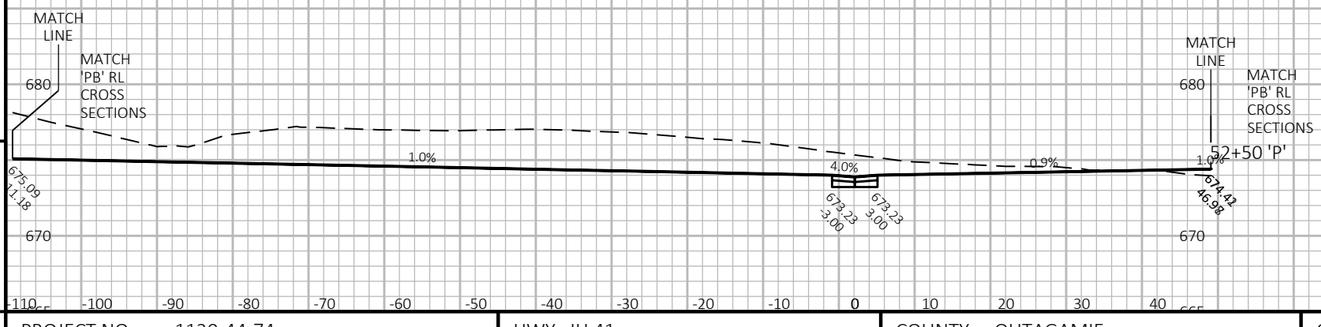
PLOT DATE : 4/29/2024 9:26 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

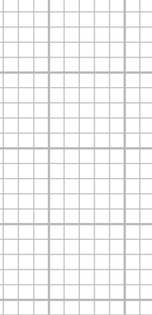
WISDOT/CADDS SHEET 49

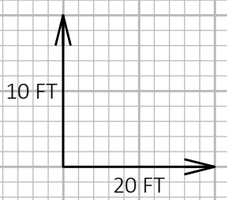












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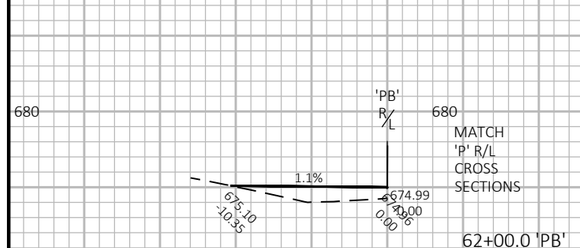
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PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: STORMWATER DETENTION BASIN ('P' RL)	SHEET 446	E

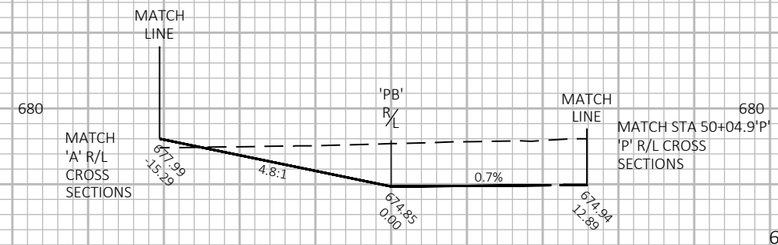
FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 52

PLOT DATE : 4/29/2024 9:26 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

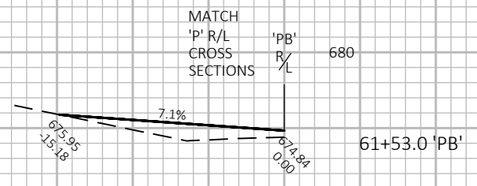
WISDOT/CADDS SHEET 49



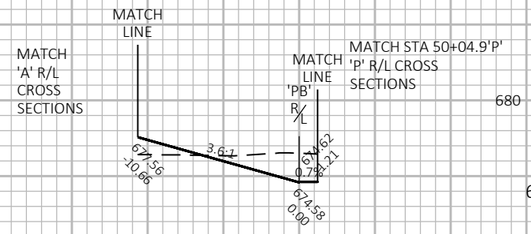
62+00.0 'PB'



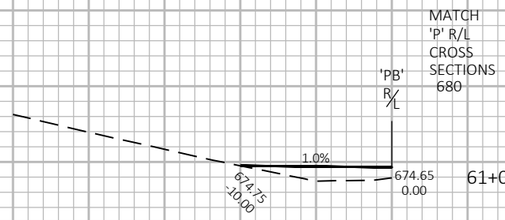
63+38.1 'PB'



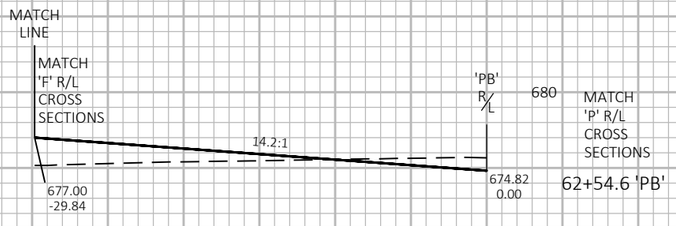
61+53.0 'PB'



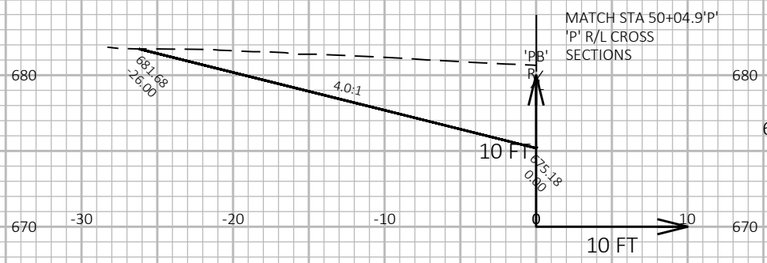
63+00.0 'PB'



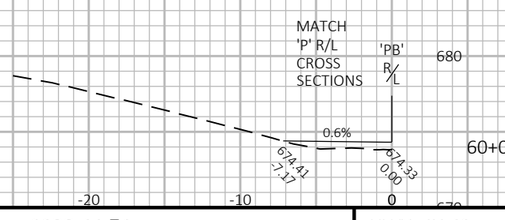
61+00.0 'PB'



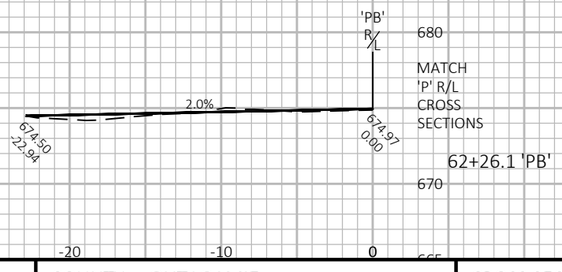
62+54.6 'PB'



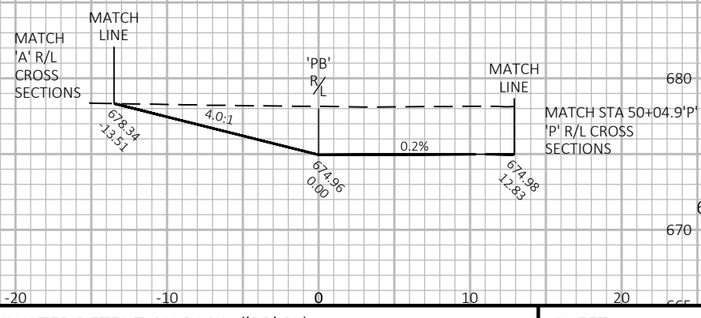
63+75.0 'PB'



60+05.9 'PB'



62+26.1 'PB'



63+50.0 'PB'

9

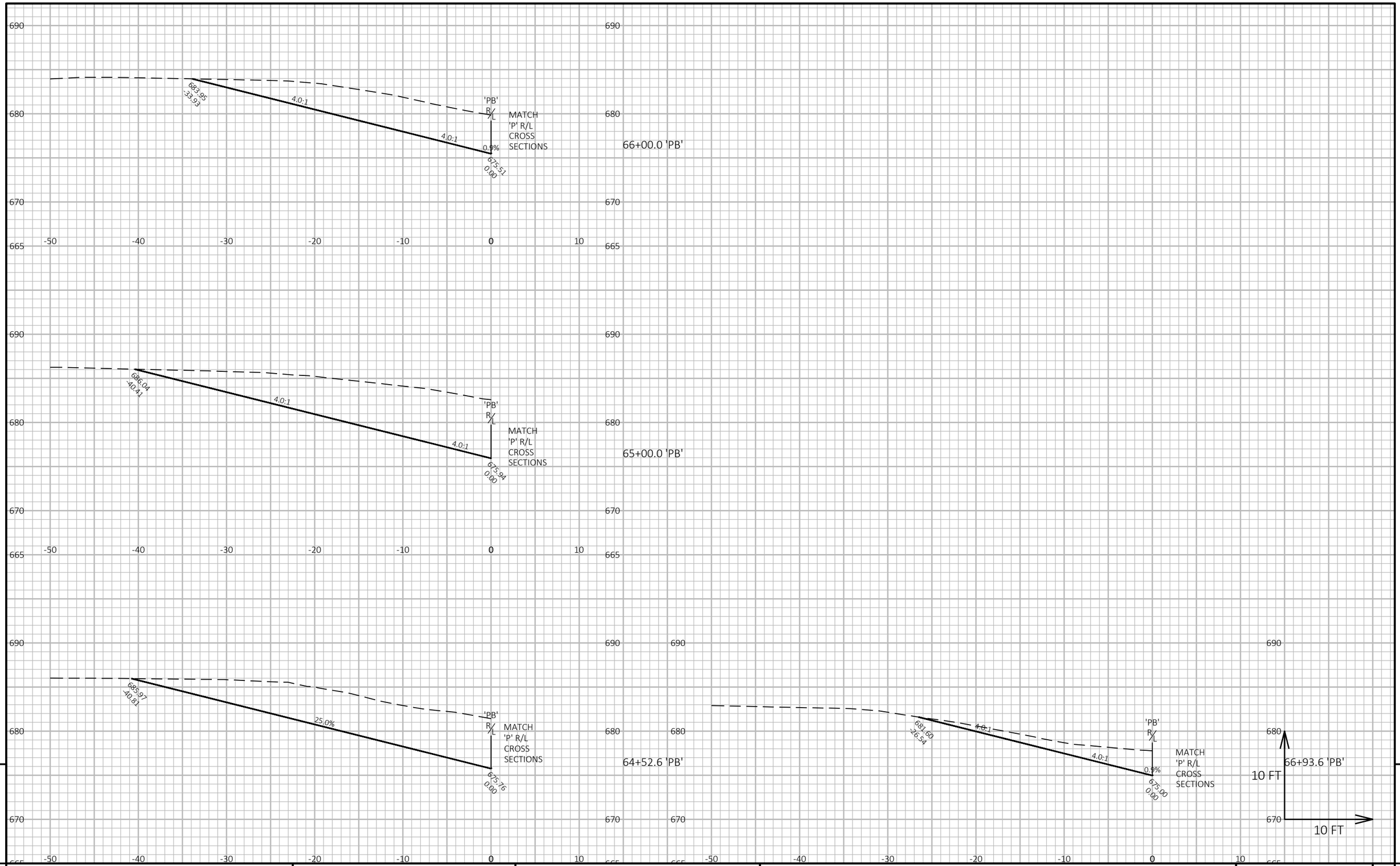
9

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: STORMWATER DETENTION BASIN ('PB' RL)	SHEET 447	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 26

PLOT DATE : 4/29/2024 9:10 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



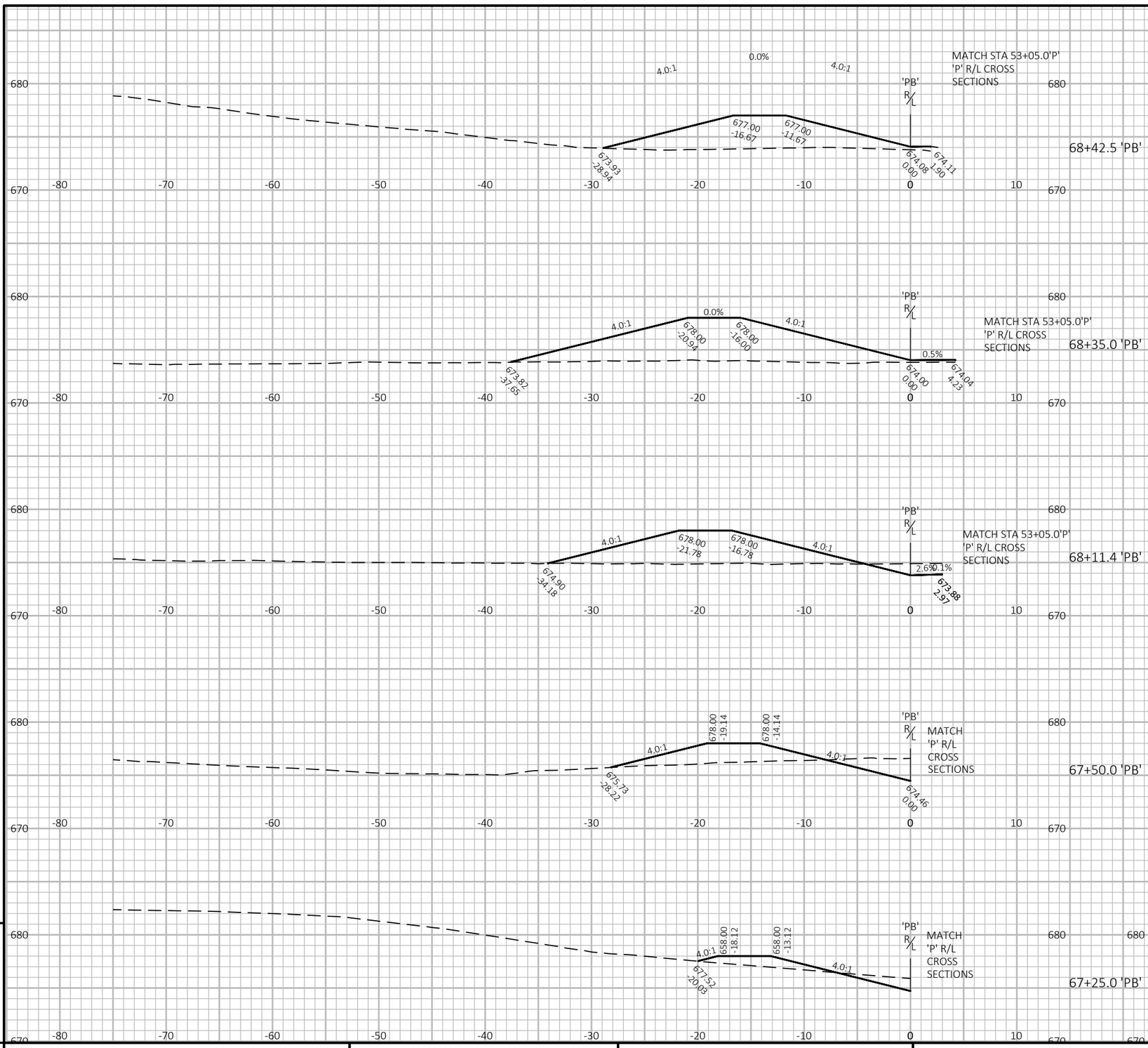
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9

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: STORMWATER DETENTION BASIN ('PB' RL)	SHEET 448	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 27

PLOT DATE : 4/29/2024 9:10 AM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

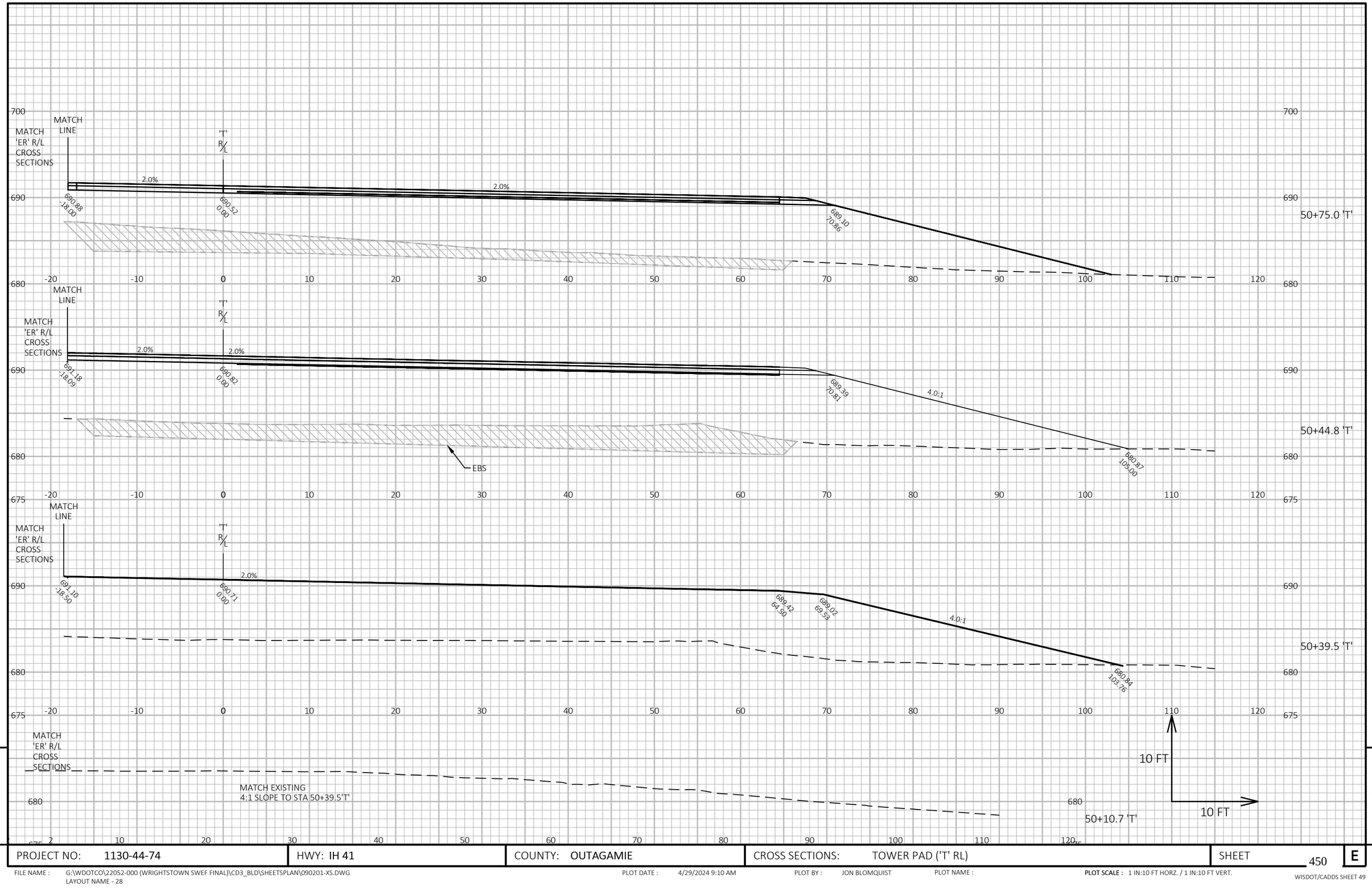


PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: STORMWATER DETENTION BASIN ('PB' RL)	SHEET 449	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 27 (2)

PLOT DATE : 4/29/2024 9:10 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

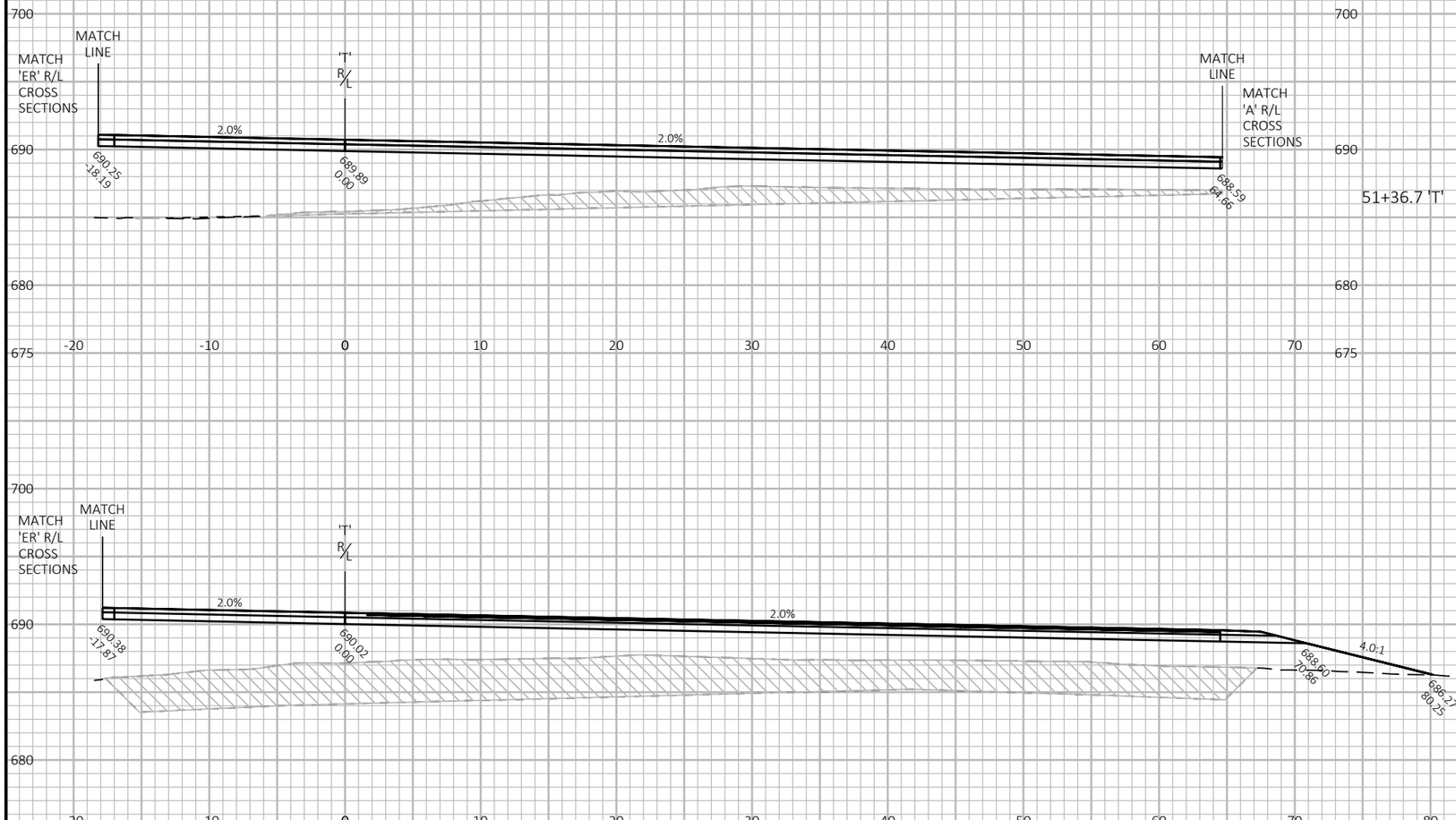


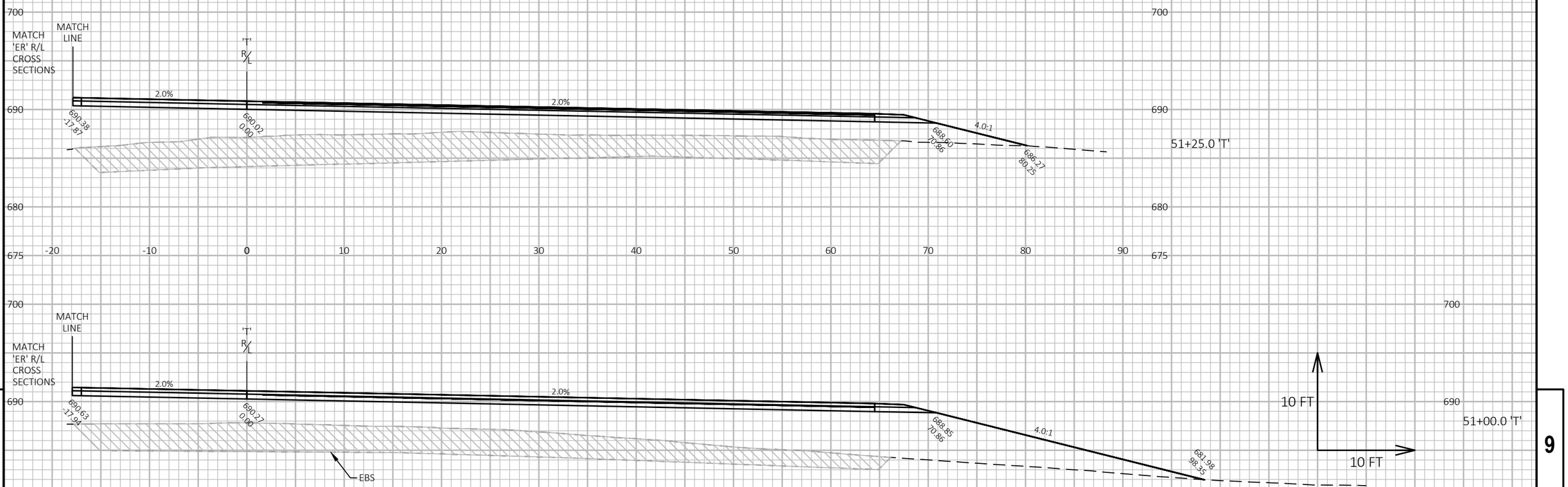
PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: TOWER PAD ('T' RL)	SHEET 450 E

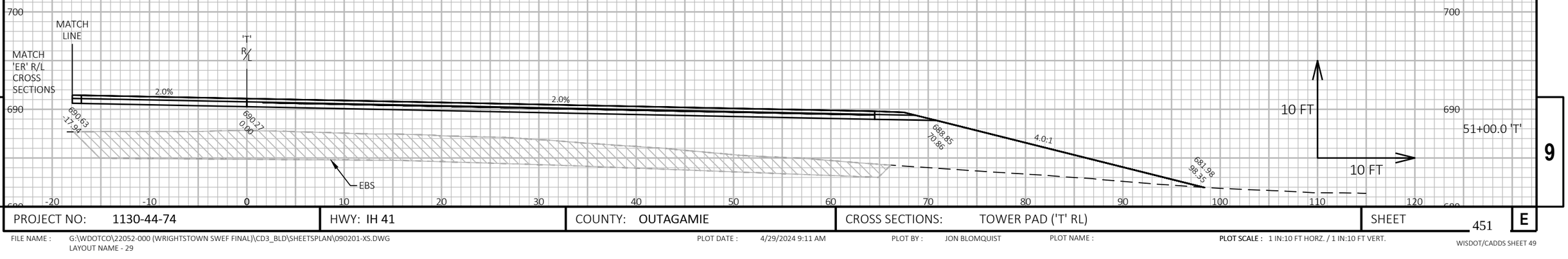
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LAYOUT NAME - 28

PLOT DATE : 4/29/2024 9:10 AM PLOT BY : JON BLOMQUIST PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

9

PROJECT NO: 1130-44-74	HWY: IH 41	COUNTY: OUTAGAMIE	CROSS SECTIONS: TOWER PAD ('T' RL)	SHEET 451	E

FILE NAME : G:\WDOTCO\22052-000 (WRIGHTSTOWN SWEF FINAL)\CD3_BLD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 29

PLOT DATE : 4/29/2024 9:11 AM PLOT BY : JON BLOMQUIST PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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through innovation and exceptional service.

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