09.08.2023 Bidding/Permit Set

ABBREVIATIONS

#	Number
&	And
@	At
ACT	Acoustic Ceiling Tile
AD	Area Drain
AFF	Above Finished Floor
ALUM	Aluminum
ANOD	Anodized
BSMT	Basement
BYND	Beyond
BOT	Bottom
CIP	Cast In Place
CHNL	Channel
CJ	Control Joint
CLG	Ceiling
CLR	Clear
CMU	Concrete Masonry Unit
COL	Column
CONC	Concrete
CONT	Continuous
CT	Ceramic Tile
DBL	Double
DEMO	Demolish or Demolition
DIA	Diameter
DIM	Dimension
DIMS	Dimensions
DN	Down
DR	Door
DWG	Drawing
EA	Each
E.T.	Expansion Joint
EL	Elevation
ELEC	Electrical
ELEV	Elevator or Elevation
EPDM	Ethylene Propylene Diene M-Class (Roofing)
EQ	Equal
EXIST	Existing
EXT	Exterior
FD	Floor Drain
FEC	Fire Extinguisher Cabinet
FIXT	Fixture
FLR	Floor
FM	Filled Metal
FO	Face Of
FND	Foundation
F.V.	Field Verify
GA	Gauge
GALV	Galvanized
GWB	Gypsum Wall Board
HC	Hollow Core
HI	High
HM	Hollow Metal
HP	High Point
HR	Hour
HVAC	Heating, Ventilating, & Air Conditioning
ILO	In Lieu Of
INSUL	Insulated or Insulation
INT	Interior
LO	Low
MAX	Maximum
MO	Masonry Opening
MECH	Mechanical
MEMBR	Membrane
MIN	Minimum
MRGWB	Moisture-Resistant Gyp. Wall Board
MTL	Metal
NIC	Not In Contract
NO	Number
NOM	Nominal
OC	On Center
OZ	Ounce
PCC	Pre-Cast Concrete
PLUMB	Plumbing
PLYD	Plywood
PTWD	Pressure Treated Wood
PT	Paint or Painted
PVC	Polyvinyl Chloride
RBR	Rubber
RCP	Reflected Ceiling Plan
RD	Roof Drain
REQD	Required
RM	Room
SIM	Similar
SPEC	Specified OR Specification
SPK	Sprinkler or Speaker
SSTL	Stainless Steel
STC	Sound Transmission Coefficient
STL	Steel
STRUCT	Structure or Structural
T&G	Tongue And Groove
TELE	Telephone
TLT	Toilet
T.O.	Top Of
T.O.C.	Top Of Concrete
T.O.S.	Top Of Steel
TPD	Toilet Paper Dispenser
T/D	Telephone/Data
TYP	Typical
UNO	Unless Noted Otherwise
U/S	Underside
VP	Vision Panel
w/	With
WD	Wood

SALINA TECH

Salina Area Technical College
Innovation and Automation Building

Lot 9 Berschel Ave. - Salina, Kansas 67401

M² Architects

M SQUARED Architects, P.A.

922 S. Marymount Rd / Salina, KS 67401
Website: msqarch.com
Phone: 913-523-3865

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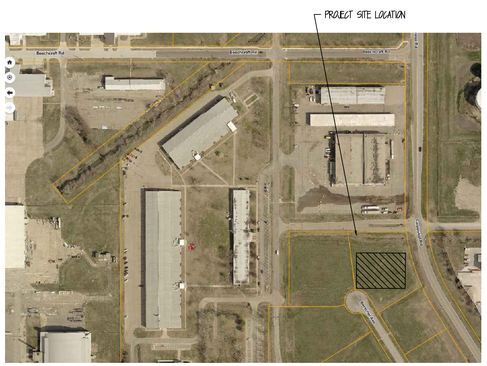
SITE LOCATION MAP

NOT TO SCALE



CONSULTANTS

Structural Engineer:

MKEC ENGINEERING SUCCESS

Structural & MEP Engineer – MKEC Engineering consultants, Inc.
411 N. Webb Road
Wichita, Kansas 67206

MEP Engineer:

Wilson & Company, Inc., Engineers & Architects
1700 E Iron Ave, Salina, Kansas 67401

CODE:

2012 International Building Code
2012 Uniform Mechanical Code (IAPMO)
2012 Uniform Plumbing Code (IAPMO)
2011 National Electrical Code
2012 International Fire Code
2009 International Energy Code
Americans with Disabilities Act
Kansas Fire Prevention Code

SHEET INDEX

GENERAL:
G100: COVER SHEET
ADA: ADA STANDARD DIAGRAMS & DRAWING SYMBOLS
CF100: CODE FOOTPRINT

CIVIL:
00: CERTIFICATE OF SURVEY
01: SITE AND DEMOLITION PLAN
02: GRADING & EROSION CONTROL PLAN
03: UTILITY PLAN
04: SANITARY SEWER LINE – PLANS & PROFILE
05: GRADING & EROSION CONTROL NOTES & DETAILS
06: DETAIL SHEET
07: DETAIL SHEET
08: DETAIL SHEET

ARCHITECTURAL:
AS100: ARCHITECTURAL SITE PLAN
A100: FIRST FLOOR BUILDING PLAN
A101: MEZZANINE FLOOR PLAN, INTERIOR ELEVATIONS
A102: REFLECTED CEILING PLAN
A103: ROOF PLAN & DETAILS
A104: DOOR SCHEDULE, WINDOW SCHEDULE, DETAILS
A200: EXTERIOR ELEVATIONS
A300: BUILDING SECTIONS
A301: BUILDING SECTIONS
A302: WALL SECTIONS
A303: WALL SECTIONS
A400: RESTROOM INTERIOR ELEVATIONS
A401: INTERIOR ELEVATIONS
A402: ENLARGED AUDITORIUM & RESTROOM PLANS
A403: ENLARGED STAIR PLAN AND STAIR SECTIONS
A404: FINISH PLANS AND SCHEDULES

PLUMBING:
FP-101: 1ST FLOOR FIRE PROTECTION PLAN
FP-102: 2ND FLOOR FIRE PROTECTION PLAN
P-001: PLUMBING SYMBOL LEGEND & GENERAL NOTES
P-101: PLUMBING 1ST FLOOR DOMESTIC WATER PLAN – AREA A
P-102: PLUMBING 1ST FLOOR DOMESTIC WATER PLAN – AREA B
P-103: PLUMBING 1ST FLOOR DOMESTIC WATER PLAN – AREA C
P-104: PLUMBING 1ST FLOOR WASTE & VENT PLAN – AREA A
P-105: PLUMBING 1ST FLOOR WASTE & VENT PLAN – AREA B
P-106: PLUMBING 1ST FLOOR WASTE & VENT PLAN – AREA C
P-107: PLUMBING 2ND FLOOR DOMESTIC WATER PLAN – AREA A
P-108: PLUMBING 2ND FLOOR WASTE & VENT PLAN – AREA A
P-501: PLUMBING DETAILS
P-601: PLUMBING SCHEDULE

MECHANICAL:
M-001: MECHANICAL GENERAL NOTES AND LEGENDS
M-101: MECHANICAL HVAC PLAN FIRST FLOOR
M-102: MECHANICAL HVAC PLAN MEZZANINE LEVEL
M-103: MECHANICAL PIPING PLAN – FIRST FLOOR
M-104: MECHANICAL PIPING PLAN – MEZZANINE LEVEL
M-501: MECHANICAL DETAILS
M-601: MECHANICAL DETAILS
M-602: MECHANICAL VRF PIPING DIAGRAMS
M-603: MECHANICAL VRF WIRING DIAGRAMS
M-604: MECHANICAL SEQUENCE OF OPERATIONS

ELECTRICAL:
E-001: ELECTRICAL SYMBOL LEGEND & GENERAL NOTES
ES-101: ELECTRICAL SITE PLAN
E-101: ELECTRICAL 1ST FLOOR LIGHTING PLAN
E-102: ELECTRICAL 1ST FLOOR LIGHTING PLAN
E-103: ELECTRICAL 1ST FLOOR LIGHTING PLAN
E-104: ELECTRICAL 2ND FLOOR LIGHTING PLAN
E-105: ELECTRICAL 1ST FLOOR POWER PLAN
E-106: ELECTRICAL 1ST FLOOR POWER PLAN
E-107: ELECTRICAL 1ST FLOOR POWER PLAN
E-108: ELECTRICAL 2ND FLOOR POWER PLAN
E-109: ELECTRICAL 1ST FLOOR SPECIAL SYSTEM PLAN
E-110: ELECTRICAL 1ST FLOOR SPECIAL SYSTEM PLAN
E-111: ELECTRICAL 1ST FLOOR SPECIAL SYSTEM PLAN
E-112: ELECTRICAL 2ND FLOOR SPECIAL SYSTEM PLAN
E-501: ELECTRICAL DETAIL PLAN
E-601: ELECTRICAL ONE-LINE DIAGRAM
E-701: ELECTRICAL SCHEDULES
E-702: ELECTRICAL SCHEDULES

Revisions:

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LLOYD M. MCCABE LICENSED KANSAS ARCHITECT 13,365

09/08/2023

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
Cover Sheet

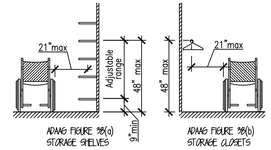
Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
G100

DRAWN BY: Mike

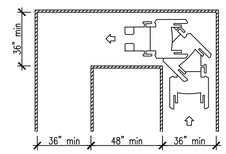
FOR REFERENCE ONLY



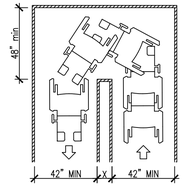
ADAAG FIGURE 38(a) STORAGE SHELVES

ADAAG FIGURE 38(b) STORAGE CLOSETS

ADA SHELVES AND CLOSETS
1/4" = 1'-0"



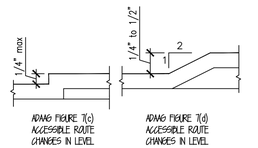
ADAAG FIGURE 7(a) ACCESSIBLE ROUTE 90° TURN



NOTE: Dimensions shown apply when X < 48"

ADAAG FIGURE 7(b) ACCESSIBLE ROUTE TURNS AROUND AN OBSTRUCTION

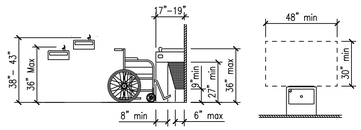
ADA ACCESSIBLE ROUTE TURNS
1/4" = 1'-0"



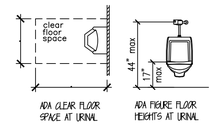
ADAAG FIGURE 7(c) ACCESSIBLE ROUTE CHANGES IN LEVEL

ADAAG FIGURE 7(d) ACCESSIBLE ROUTE CHANGES IN LEVEL

ADA CHANGES IN LEVEL
1/4" = 1'-0"



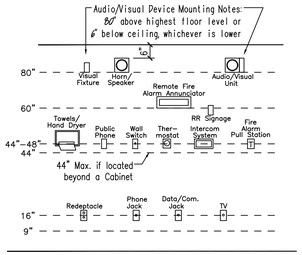
ADA DRINKING FOUNTAIN LAYOUTS
1/4" = 1'-0"



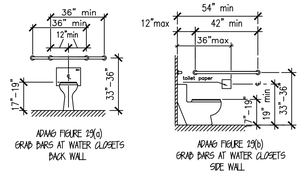
ADA CLEAR FLOOR SPACE AT URINAL

ADA FIGURE FLOOR HEIGHTS AT URINAL

ADA URINAL LAYOUTS
1/4" = 1'-0"



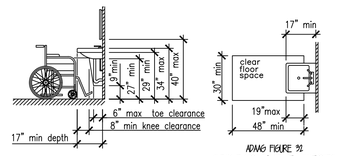
ADA DEVICE MOUNTING HEIGHTS
3/8" = 1'-0"



ADAAG FIGURE 23(a) GRAB BARS AT WATER CLOSETS BACK WALL

ADAAG FIGURE 23(b) GRAB BARS AT WATER CLOSETS SIDE WALL

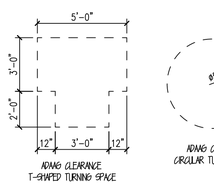
ADA TOILET AND GRAP BAR LAYOUTS
1/4" = 1'-0"



ADAAG FIGURE 5 LAVATORY CLEARANCES

ADAAG FIGURE 5 CLEAR FLOOR SPACE AT LAVATORIES

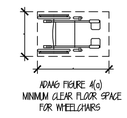
ADA LAVATORY LAYOUTS
1/4" = 1'-0"



ADAAG CLEARANCE T-SHAPED TURNING SPACE

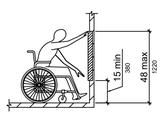
ADAAG CLEARANCE CIRCULAR TURNING SPACE

ADA TURNING SPACE CLEARANCE
1/4" = 1'-0"

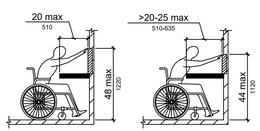


ADAAG FIGURE 4(a) MINIMUM CLEAR FLOOR SPACE FOR WHEELCHAIRS

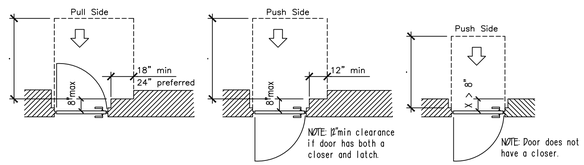
WHEELCHAIR SPACE
1/4" = 1'-0"



ADA UNOBSTRUCTED FORWARD REACH
1/4" = 1'-0"



ADA OBSTRUCTED FORWARD REACH
1/4" = 1'-0"



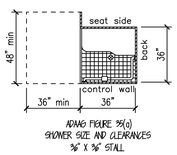
NOTE: 12"min clearance if door has both a closer and latch

NOTE: Door does not have a closer.

RECESSED DOORS AND GATES: When recessing a door due to wall thickness or other fixed elements, the fixed element shall not project more than 8" inches beyond the face of the doorway. Doors. Recessed doors where the plane of the doorway is offset more than 8 inches (205 mm) from any obstruction within 18 inches (455 mm) measured laterally on the latch side of the door shall provide maneuvering clearances for front approach.

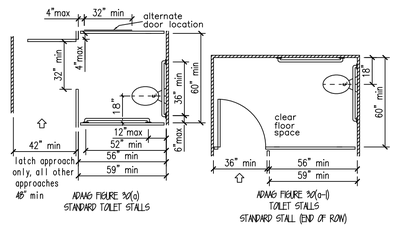
NOTE: 404.2.4.3 Recessed doors

ADA CLEARANCES AT RECESSED DOORS AND GATES
1/4" = 1'-0"



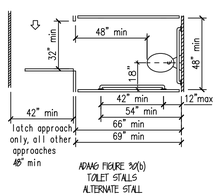
ADAAG FIGURE 35(a) SHOWER SIZE AND CLEARANCES 36" X 36" STALL

ADA SHOWER
1/4" = 1'-0"

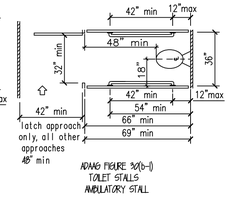


ADAAG FIGURE 30(a) STANDARD TOILET STALLS

ADAAG FIGURE 30(a-1) TOILET STALLS STANDARD STALL (END OF ROW)

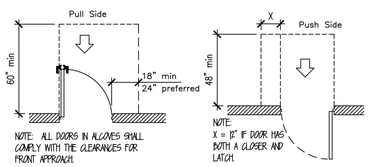


ADAAG FIGURE 30(b) TOILET STALLS ALTERNATE STALL



ADAAG FIGURE 30(b-1) TOILET STALLS AMBULATORY STALL

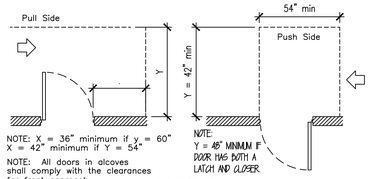
ADA TOILET STALL / GRAP BAR LAYOUTS
1/4" = 1'-0"



NOTE: ALL DOORS IN ALCOVES SHALL COMPLY WITH THE CLEARANCES FOR FRONT APPROACH.

NOTE: X = 12" IF DOOR HAS BOTH A CLOSER AND LATCH

ADAAG FIGURE 25(a) MANEUVERING CLEARANCES AT DOORS FRONT APPROACHES - SWINGING DOORS

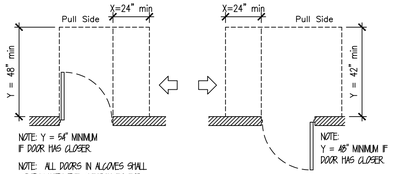


NOTE: X = 36" minimum if y = 60" X = 42" minimum if Y = 54"

NOTE: All doors in alcoves shall comply with the clearances for front approach.

NOTE: Y = 48" MINIMUM IF DOOR HAS BOTH A LATCH AND CLOSER.

ADAAG FIGURE 25(b) MANEUVERING CLEARANCES AT DOORS HINGE SIDE APPROACHES - SWINGING DOORS



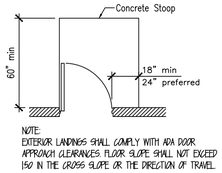
NOTE: Y = 54" MINIMUM IF DOOR HAS CLOSER.

NOTE: ALL DOORS IN ALCOVES SHALL COMPLY WITH THE CLEARANCES FOR FRONT APPROACH.

NOTE: Y = 48" MINIMUM IF DOOR HAS CLOSER.

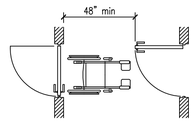
ADAAG FIGURE 25(c) MANEUVERING CLEARANCES AT DOORS LATCH SIDE APPROACHES - SWINGING DOORS

ADA STANARD CLEARANCES AT DOORS
1/4" = 1'-0"

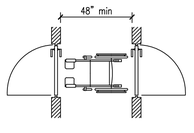


NOTE: EXTERIOR LANDINGS SHALL COMPLY WITH ADA DOOR APPROACH. CLEARANCES FLOOR SLOPE SHALL NOT EXCEED 1:50 IN THE CROSS SLOPE OR THE DIRECTION OF TRAVEL.

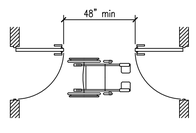
EXTERIOR DOOR LANDING



TWO HINGED DOORS IN SERIES



TWO HINGED DOORS IN SERIES



TWO HINGED DOORS IN SERIES

Revisions:

M² Architects

922 S. Marymount Rd / Salina, KS 67401
Website: msqarch.com
Phone: 913-523-3865
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Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
ADA

Date:
09-08-23

Project Number:
23-014

SHEET NUMBER:
ADA

DRAWN BY: Mike

PROJECT DATA:

PROJECT DESCRIPTION:	Salina Tech College Industrial Maintenance and Innovation Building
FACILITY : (Name & Address)	Salina Technical College Berschel Ave Salina, Kansas 67401
Submittal For:	New Building
OWNER : (Name & Address)	Salina Technical College 2562 Centennial Rd Salina, Kansas 67401
RESPONDING FIRE SERVICE:	Salina Fire Department
LOCAL BUILDING OFFICIAL:	Salina Kansas Building Services
ARCHITECT : (Name/Address/Phone	M SQUARED Architects, P.A, 922 S Marymount Rd Salina, Kansas 67401 P: 913-523-3865 Mike McCall – mike@msqarch.com
CODES USED IN DESIGN:	2012 International Building Code 2012 Uniform Mechanical Code (IAPMO) 2012 Uniform Plumbing Code (IAPMO) 2011 National Electrical Code 2012 International Fire Code 2009 International Energy Code Americans with Disabilities Act Kansas Fire Prevention Code

PROJECT DATA:

PROJECT TYPE:	New Building
CONSTRUCTION TYPE:	II–B
OCCUPANCY GROUP:	B / S1
NUMBER OF FLOORS:	2
ALLOWABLE BUILDING CRITERIA:	2 Stories per Table 503 Actual Stories: 2
ALLOWABLE BUILDING CRITERIA:	55' Height per Table 503 Actual Height: 33'+/–
STRUCTURAL FIRE RATING:	Allowable: 0 hour Actual: 0 hour
SPRINKLER SYSTEM:	Yes
FIRE ALARM SYSTEM:	Yes
EMERGENCY LIGHT: EMERGENCY POWER:	Battery Wall Packs None
SMOKE CONTROL SYSTEM:	No
WATER SUPPLY REQ. FIRE SPRINKLER SYSTEM:	Salina City Water Supply

AREA REPORT:

BUILDING SEPARATION:	47'+ North Yard 50'+ East Yard 60'+ South Yard 60'+ West Yard 4 Declared Open Yards
BASIC ALLOWABLE AREA:	23,000 SF (Table 503)
MULTI-STORY INCREASE:	00,000 SF
STREET FRONTAGE INCREASE:	57% (506.3)
SPRINKLER INCREASE:	300%
TOTAL ALLOWABLE ALL FLOORS:	200,352 Sq.Ft.
ALLOWABLE AREA any 1 FLOOR:	100,176 Sq.Ft.
ACTUAL AREA: First Floor Mezzanine Total:	15,815 Sq.Ft. Total 1,857 Sq.Ft. Total 17,672 Sq.Ft. Total

OCCUPANT LOAD:

TOTAL OCCUPANT LOAD:	311 Occupants – Gross Sqft

Plumbing Fixtures Count:

155 Men – Required: 3 Toilets – 2 Urinals – 3 Lavatories
Provided – 3 Toilets – 2 Urinals – 4 Lavatories
156 Women – Required: 5 Toilets – 4 Lavatories
Provided – 6 Toilets – 5 Lavatories

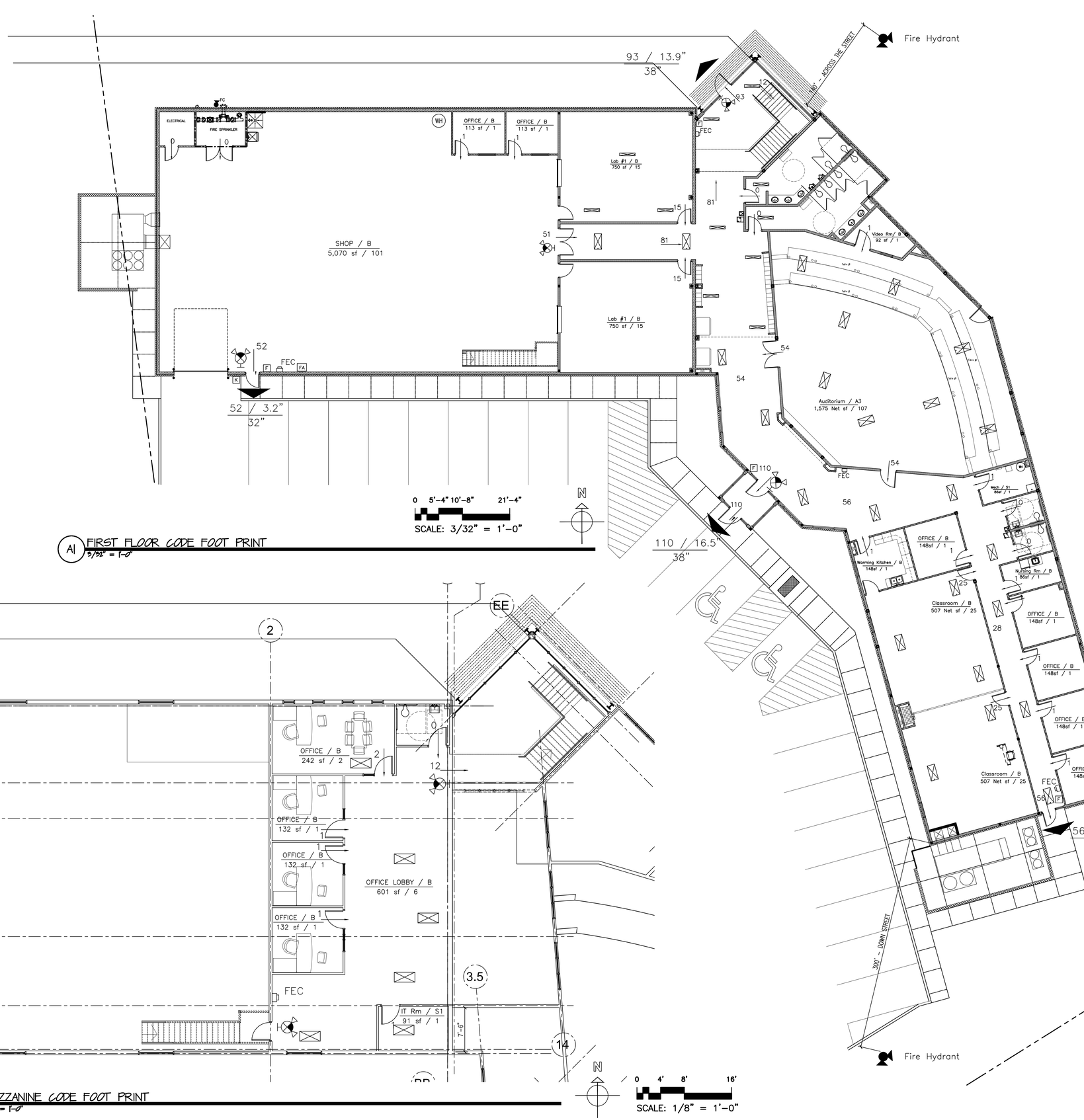
Parking Count:

Faculty :	11 = 11 Spaces
Students:	50 Students/8= 6 Spaces 17 Spaces Required
	Total: 43 Spaces Provided – 2 Handicap Provided

Legend

- Fire Hydrant
- FEC / FE — Fire Extinguishers 75' Distance Max
- Emergency Light
- Exit Light and Emergency Light
- Exit Light
- FC — Fire Department Connection
- 1 Hr Fire Rated
- Room Name/# — 240 sf / 12 — Occupancy / Number of Occupants / Square Footage of Room
- Exit
- Occupant Exit Requirement / Required Exit Width — 16 / 3.2" — Provided Exit Width
- FA — Fire Alarm Panel
- F — Fire Alarm Pull Station
- K — Knox Box

STATE LAW ESTABLISHES:
MINIMUM LIFE SAFETY AND HAS UNIFORM FORCE AND EFFECT THROUGHOUT KANSAS. K.S.A. 31-133 and K.S.A. 2003 Supp. 31-134 require that all occupied structures conform to the basic life safety requirements:
a) Existing occupied buildings cannot have hazardous conditions which slow speedy exits.
b) Alterations of existing buildings cannot make existing conditions worse or block exits;
c) New construction and changes in use are subject to greater life safety requirements.



A1 FIRST FLOOR CODE FOOT PRINT
3/32" = 1'-0"

A2 MEZZANINE CODE FOOT PRINT
1/8" = 1'-0"

M² Architects
922 S. Marymount Rd / Salina, KS 67401
Website: msqarch.com
Phone: 913-523-3865

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LLOYD M. MCCALL LICENSED KANSAS ARCHITECT 13,365

09/08/2023

Revisions:

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
Code Footprint

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
CF100

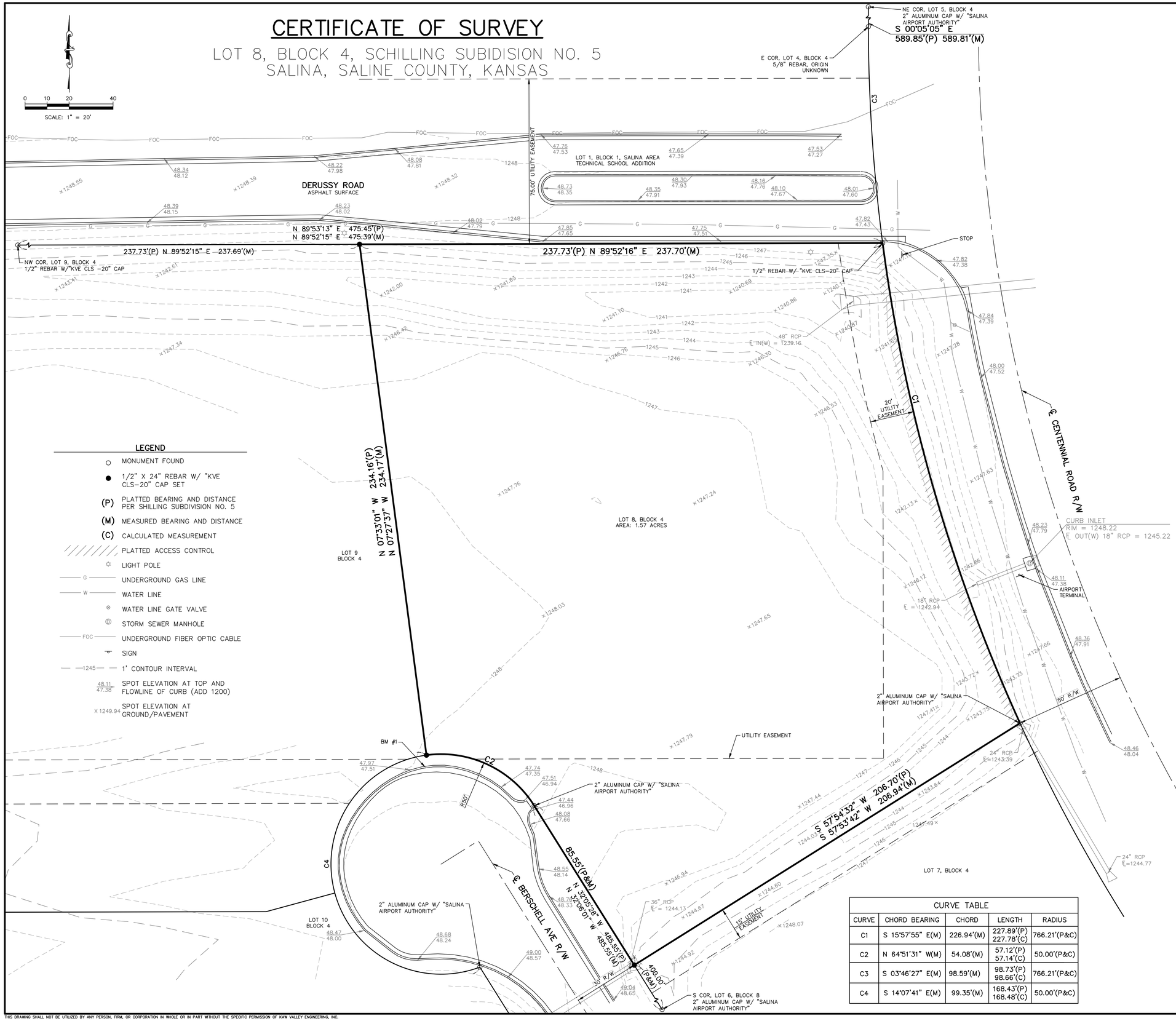
DRAWN BY: Mike

CERTIFICATE OF SURVEY

LOT 8, BLOCK 4, SCHILLING SUBIDISION NO. 5
SALINA, SALINE COUNTY, KANSAS

0 10 20 40

SCALE: 1" = 20'



LEGEND

- ○ MONUMENT FOUND
- ● 1/2" X 24" REBAR W/ "KVE CLS-20" CAP SET
- (P) PLATTED BEARING AND DISTANCE PER SHILLING SUBDIVISION NO. 5
- (M) MEASURED BEARING AND DISTANCE
- (C) CALCULATED MEASUREMENT
- PLATTED ACCESS CONTROL
- ☼ LIGHT POLE
- G UNDERGROUND GAS LINE
- W WATER LINE
- ⊗ WATER LINE GATE VALVE
- Ⓓ STORM SEWER MANHOLE
- FOC UNDERGROUND FIBER OPTIC CABLE
- SIGN
- 1245 1' CONTOUR INTERVAL
- 48.11 / 47.38 SPOT ELEVATION AT TOP AND FLOWLINE OF CURB (ADD 1200)
- X 1249.94 SPOT ELEVATION AT GROUND/PAVEMENT

CURVE TABLE				
CURVE	CHORD BEARING	CHORD	LENGTH	RADIUS
C1	S 15°57'55" E(M)	226.94'(M)	227.89'(P) 227.78'(C)	766.21'(P&C)
C2	N 64°51'31" W(M)	54.08'(M)	57.12'(P) 57.14'(C)	50.00'(P&C)
C3	S 03°46'27" E(M)	98.59'(M)	98.73'(P) 98.66'(C)	766.21'(P&C)
C4	S 14°07'41" E(M)	99.35'(M)	168.43'(P) 168.48'(C)	50.00'(P&C)

SURVEYED PROPERTY DESCRIPTION:
LOT 8, BLOCK 4 SCHILLING SUBDIVISION NUMBER 5, CITY OF SALINA, SALINE COUNTY, KANSAS

BASIS OF BEARINGS:
THE BASIS OF BEARING FOR THIS SURVEY IS A PLATTED BEARING OF S 00°05'05" E ON THE EAST LINE OF LOT 4, BLOCK 4 SCHILLING SUBDIVISION NO. 5, SALINA, SALINE COUNTY, KANSAS.

UNDERGROUND UTILITY STATEMENT:
WITH REGARD TO UNDERGROUND UTILITIES, INFORMATION FROM THE SOURCES LISTED HEREON WILL BE COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION MAY BE NECESSARY. ONE CALL TICKET NUMBER 23225211.

SURVEYOR'S NOTES:
1. A TITLE COMMITMENT FOR THE SURVEYED PARCEL WAS NOT PROVIDED BY CLIENT.
2. EXCEPT AS SPECIFICALLY STATED OR SHOWN HEREON, THIS SURVEY DOES NOT PURPORT TO REFLECT ANY OF THE FOLLOWING WHICH MAY BE APPLICABLE TO THE SUBJECT REAL ESTATE: UNPLATTED EASEMENTS; UNPLATTED BUILDING SETBACK LINES; RESTRICTIVE COVENANTS; SUBDIVISION RESTRICTIONS; ZONING OR OTHER LAND-USE REGULATIONS, AND ANY OTHER FACTS WHICH AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
3. EXCEPT AS SPECIFICALLY STATED OR SHOWN HEREON, THERE IS NO EVIDENCE OF OCCUPATION ALONG THE PERIMETER LINES OF THE SURVEYED PARCEL.
4. THIS CERTIFICATE OF SURVEY DOES NOT REPRESENT AN "ALTA/NSPS LAND TITLE SURVEY."
5. SEE APPLICABLE CITY OF SALINA CODES FOR CONDITIONS THAT MIGHT AFFECT THE DEVELOPMENT OF THIS SURVEYED PARCEL.
6. BEARINGS AND DISTANCES SHOWN WERE MEASURED BY INSTRUMENT ON THE GROUND.

FLOOD STATEMENT:
THE ACCURACY OF ANY FLOOD HAZARD DATA SHOWN HEREON IS SUBJECT TO MAP SCALE UNCERTAINTY AND TO ANY OTHER UNCERTAINTY IN LOCATION OR ELEVATION ON THE REFERENCED FLOOD INSURANCE RATE MAP. THE SURVEYED PROPERTY LIES WITHIN FLOOD HAZARD ZONE "X" AS SAID PROPERTY PLOTS BY SCALE ON THE FLOOD INSURANCE RATE MAP NUMBER 20169C0217C EFFECTIVE DATE APRIL 18, 2018.

BENCHMARKS:
DATUM: JF 1057/ C292 NAVD 88 ELEV =1245.55

BM #1: CHISELED SQUARE ON THE BACK OF CURB OF THE NORTH BERSCHEL CUL-DE-SAC CURB. NAVD 88 ELEV=1247.98

UTILITY CONTACTS

NATURAL GAS SERVICE
KANSAS GAS SERVICE
1001 EDISON PLACE
SALINA, KANSAS 67401
CONTACT: MATT PATON
PHONE: 785-376-7657
EMAIL: matthew.paton@onegas.com

ELECTRIC SERVICE
EVERGY
1001 EDISON PLACE
SALINA, KANSAS 67401
CONTACT: JEFF ZUERCHER
PHONE: 785-822-3588 OFFICE
795-577-3945 CELL

WATER, SANITARY, & STORM SERVICE
CITY OF SALINA
300 W. ASH STREET
SALINA, KANSAS 67401
PHONE: 785-826-7305

TELEPHONE, INTERNET & TELEVISION SERVICE
AT&T
154 N. BROADWAY, ROOM 210
WICHITA, KANSAS 67202-2104
CONTACT: CHANCE COLLINS
PHONE: 316-776-6010
EMAIL: cc8353@att.com

COX COMMUNICATION
2950 S. 9TH STREET SUITE A
SALINA, KANSAS 67401
PHONE: 785-404-6299
WEBSITE: www.cox.com

ZAYO GROUP
BOULDER, COLORADO
PHONE: 866-364-6033
WEBSITE: www.zayo.com

ONE CALL KANSAS
CALL (811)

KAW VALLEY ENGINEERING
1627 SUNFLOWER LANE
SALINA, KANSAS 67401
PH. (785) 823-3400
so@kveng.com | www.kveng.com

PROJECT NO. E23D3417
DRAWN BY ZEK
CHECKED BY JEP
CFN 3417EC
SHEET 00

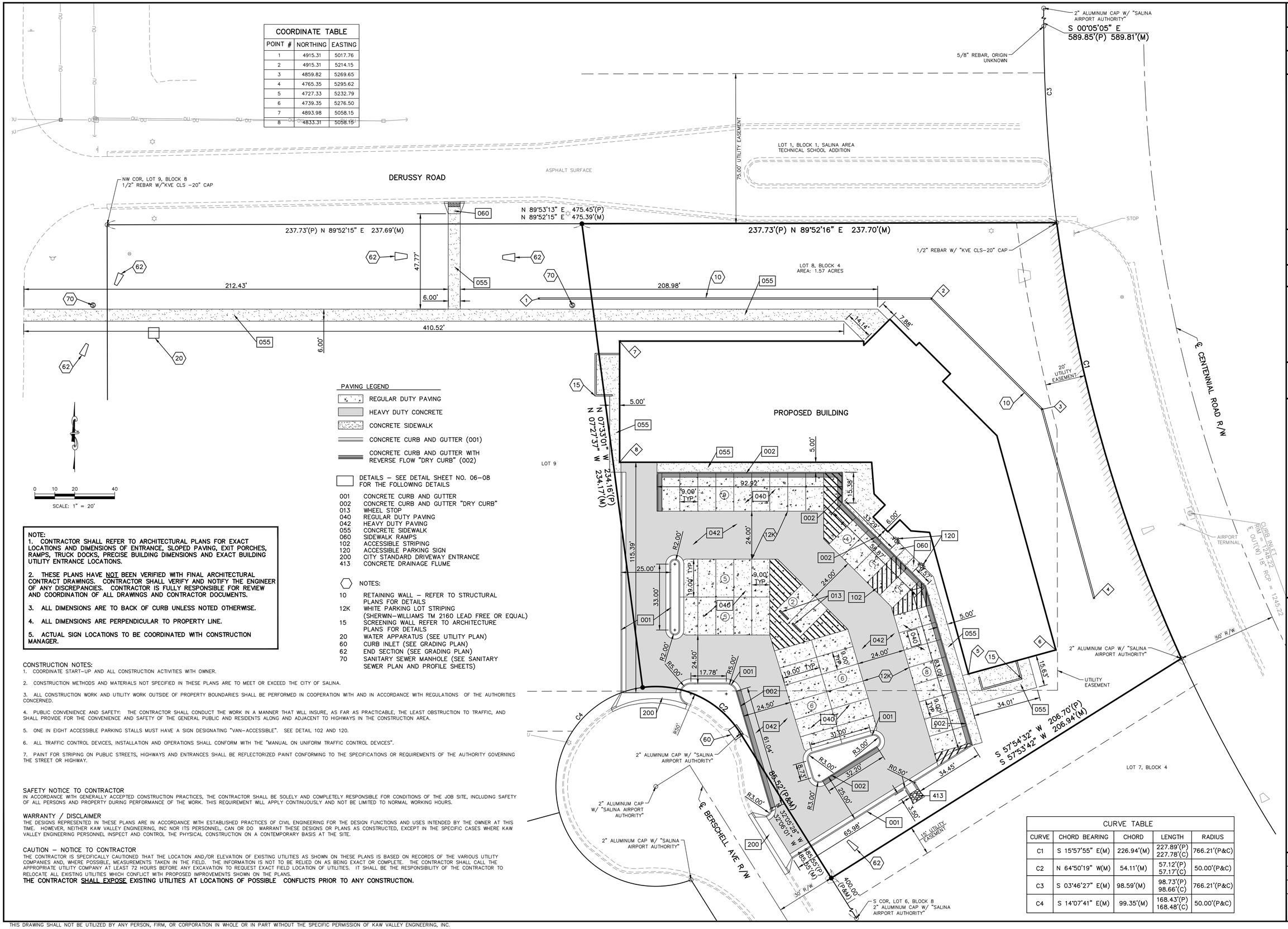
PROJECT:
SALINA TECH CAMPUS EXPANSION
2562 CENTENNIAL ROAD
SALINA, KANSAS 67401

PREPARED FOR:
M² ARCHITECTS
922 S. MARYMOUNT ROAD
SALINA, KANSAS 67401

KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER SURVEYING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION NO. LS-20. EXPIRES 12/31/24

THIS DRAWING SHALL NOT BE UTILIZED BY ANY PERSON, FIRM, OR CORPORATION IN WHOLE OR IN PART WITHOUT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING, INC.

COORDINATE TABLE		
POINT #	NORTHING	EASTING
1	4915.31	5017.76
2	4915.31	5214.15
3	4859.82	5269.65
4	4765.35	5295.62
5	4727.33	5232.79
6	4739.35	5276.50
7	4893.98	5058.15
8	4833.31	5058.15



CURVE TABLE				
CURVE	CHORD BEARING	CHORD	LENGTH	RADIUS
C1	S 15°57'55" E(M)	226.94'(M)	227.89'(P) 227.78'(C)	766.21'(P&C)
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C4	S 14°07'41" E(M)	99.35'(M)	168.43'(P) 168.48'(C)	50.00'(P&C)

NOTE:
1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

2. THESE PLANS HAVE NOT BEEN VERIFIED WITH FINAL ARCHITECTURAL CONTRACT DRAWINGS. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR IS FULLY RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND CONTRACTOR DOCUMENTS.

3. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS NOTED OTHERWISE.

4. ALL DIMENSIONS ARE PERPENDICULAR TO PROPERTY LINE.

5. ACTUAL SIGN LOCATIONS TO BE COORDINATED WITH CONSTRUCTION MANAGER.

CONSTRUCTION NOTES:
1. COORDINATE START-UP AND ALL CONSTRUCTION ACTIVITIES WITH OWNER.

2. CONSTRUCTION METHODS AND MATERIALS NOT SPECIFIED IN THESE PLANS ARE TO MEET OR EXCEED THE CITY OF SALINA.

3. ALL CONSTRUCTION WORK AND UTILITY WORK OUTSIDE OF PROPERTY BOUNDARIES SHALL BE PERFORMED IN COOPERATION WITH AND IN ACCORDANCE WITH REGULATIONS OF THE AUTHORITIES CONCERNED.

4. PUBLIC CONVENIENCE AND SAFETY: THE CONTRACTOR SHALL CONDUCT THE WORK IN A MANNER THAT WILL INSURE, AS FAR AS PRACTICABLE, THE LEAST OBSTRUCTION TO TRAFFIC, AND SHALL PROVIDE FOR THE CONVENIENCE AND SAFETY OF THE GENERAL PUBLIC AND RESIDENTS ALONG AND ADJACENT TO HIGHWAYS IN THE CONSTRUCTION AREA.

5. ONE IN EIGHT ACCESSIBLE PARKING STALLS MUST HAVE A SIGN DESIGNATING "VAN-ACCESSIBLE". SEE DETAIL 102 AND 120.

6. ALL TRAFFIC CONTROL DEVICES, INSTALLATION AND OPERATIONS SHALL CONFORM WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

7. PAINT FOR STRIPING ON PUBLIC STREETS, HIGHWAYS AND ENTRANCES SHALL BE REFLECTORIZED PAINT CONFORMING TO THE SPECIFICATIONS OR REQUIREMENTS OF THE AUTHORITY GOVERNING THE STREET OR HIGHWAY.

SAFETY NOTICE TO CONTRACTOR
IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY / DISCLAIMER
THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL, CAN OR DO WARRANT THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

CAUTION – NOTICE TO CONTRACTOR
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

REV	DATE	DESCRIPTION	DSN	DWN	CHK
0	09/08/23	INITIAL ISSUE	M.JR	TDA	M.JR

MATTHEW J. ROWE
LICENSED
29241
9/8/23
KANSAS
PROFESSIONAL ENGINEER

MATTHEW J. ROWE
ENGINEER
KS # 29241

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KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-11.5. EXPIRES 12/31/24

SALINA TECH CAMPUS EXPANSION
2562 CENTENNIAL ROAD
SALINA, KANSAS 67401

PRELIMINARY
SITE & DIMENSION PLAN

PROJ. NO. E23D3417
DESIGNER MJR | DRAWN BY TDA
CFN 3417SP
SHEET 01 | REV 0

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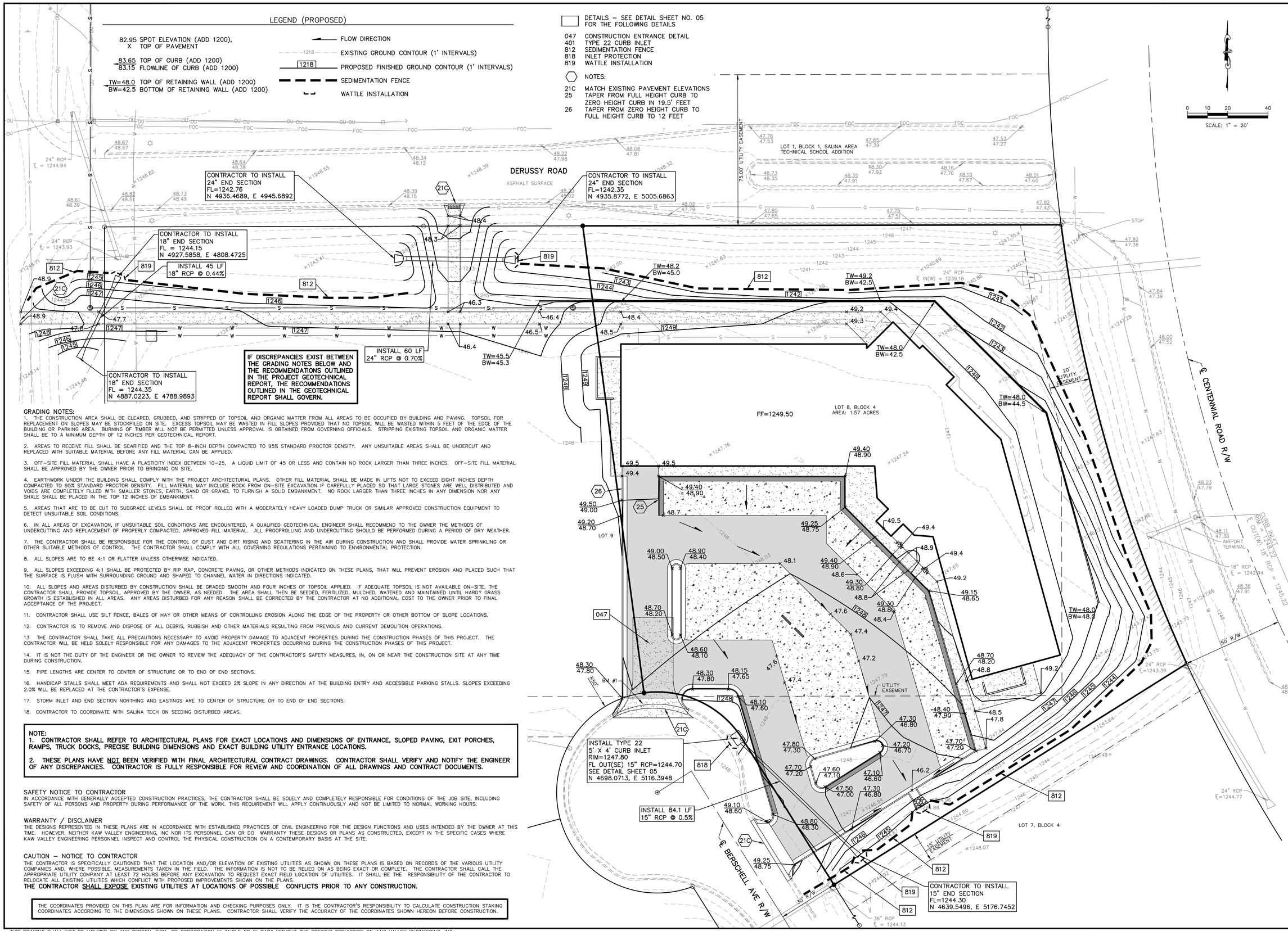

GRADING NOTES:

1. THE CONSTRUCTION AREA SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL AND ORGANIC MATTER FROM ALL AREAS TO BE OCCUPIED BY BUILDING AND PAVING. TOPSOIL FOR REPLACEMENT ON SLOPES MAY BE STOCKPILED ON SITE. EXCESS TOPSOIL MAY BE WASTED IN FILL SLOPES PROVIDED THAT NO TOPSOIL WILL BE WASTED WITHIN 5 FEET OF THE EDGE OF THE BUILDING OR PARKING AREA. BURNING OF TIMBER WILL NOT BE PERMITTED UNLESS APPROVAL IS OBTAINED FROM GOVERNING OFFICIALS. STRIPPING EXISTING TOPSOIL AND ORGANIC MATTER SHALL BE TO A MINIMUM DEPTH OF 12 INCHES PER GEOTECHNICAL REPORT.

2. AREAS TO RECEIVE FILL SHALL BE SCARIFIED AND THE TOP 8-INCH DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. ANY UNSUITABLE AREAS SHALL BE UNDERCUT AND REPLACED WITH SUITABLE MATERIAL BEFORE ANY FILL MATERIAL CAN BE APPLIED.

3. OFF-SITE FILL MATERIAL SHALL HAVE A PLASTICITY INDEX BETWEEN 10-25, A LIQUID LIMIT OF 45 OR LESS AND CONTAIN NO ROCK LARGER THAN THREE INCHES. OFF-SITE FILL MATERIAL SHALL BE APPROVED BY THE OWNER PRIOR TO BRINGING ON SITE.

4. EARTHWORK UNDER THE BUILDING SHALL COMPLY WITH THE PROJECT ARCHITECTURAL PLANS. OTHER FILL MATERIAL SHALL BE MADE IN LIFTS NOT TO EXCEED EIGHT INCHES DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. FILL MATERIAL MAY INCLUDE ROCK FROM ON-SITE EXCAVATION IF CAREFULLY PLACED SO THAT LARGE STONES ARE WELL DISTRIBUTED AND VOIDS ARE COMPLETELY FILLED WITH SMALLER STONES, EARTH, SAND OR GRAVEL TO FURNISH A SOLID EMBANKMENT. NO ROCK LARGER THAN THREE INCHES IN ANY DIMENSION NOR ANY SHALE SHALL BE PLACED IN THE TOP 12 INCHES OF EMBANKMENT.

5. AREAS THAT ARE TO BE CUT TO SUBGRADE LEVELS SHALL BE PROOF ROLLED WITH A MODERATELY HEAVY LOADED DUMP TRUCK OR SIMILAR APPROVED CONSTRUCTION EQUIPMENT TO DETECT UNSUITABLE SOIL CONDITIONS.

6. IN ALL AREAS OF EXCAVATION, IF UNSUITABLE SOIL CONDITIONS ARE ENCOUNTERED, A QUALIFIED GEOTECHNICAL ENGINEER SHALL RECOMMEND TO THE OWNER THE METHODS OF UNDERCUTTING AND REPLACEMENT OF PROPERLY COMPACTED, APPROVED FILL MATERIAL. ALL PROOFROLLING AND UNDERCUTTING SHOULD BE PERFORMED DURING A PERIOD OF DRY WEATHER.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.

8. ALL SLOPES ARE TO BE 4:1 OR FLATTER UNLESS OTHERWISE INDICATED.

9. ALL SLOPES EXCEEDING 4:1 SHALL BE PROTECTED BY RIP RAP, CONCRETE PAVING, OR OTHER METHODS INDICATED ON THESE PLANS, THAT WILL PREVENT EROSION AND PLACED SUCH THAT THE SURFACE IS FLUSH WITH SURROUNDING GROUND AND SHAPED TO CHANNEL WATER IN DIRECTIONS INDICATED.

10. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND FOUR INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON-SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

11. CONTRACTOR SHALL USE SILT FENCE, BALES OF HAY OR OTHER MEANS OF CONTROLLING EROSION ALONG THE EDGE OF THE PROPERTY OR OTHER BOTTOM OF SLOPE LOCATIONS.

12. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS.

13. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.

14. IT IS NOT THE DUTY OF THE ENGINEER OR THE OWNER TO REVIEW THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE AT ANY TIME DURING CONSTRUCTION.

15. PIPE LENGTHS ARE CENTER TO CENTER OF STRUCTURE OR TO END OF END SECTIONS.

16. HANDICAP STALLS SHALL MEET ADA REQUIREMENTS AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION AT THE BUILDING ENTRY AND ACCESSIBLE PARKING STALLS. SLOPES EXCEEDING 2.0% WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

17. STORM INLET AND END SECTION NORTHING AND EASTINGS ARE TO CENTER OF STRUCTURE OR TO END OF END SECTIONS.

18. CONTRACTOR TO COORDINATE WITH SALINA TECH ON SEEDING DISTURBED AREAS.

NOTE:
1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

2. THESE PLANS HAVE NOT BEEN VERIFIED WITH FINAL ARCHITECTURAL CONTRACT DRAWINGS. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR IS FULLY RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND CONTRACT DOCUMENTS.

SAFETY NOTICE TO CONTRACTOR

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WARRANTY / DISCLAIMER

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THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

THE COORDINATES PROVIDED ON THIS PLAN ARE FOR INFORMATION AND CHECKING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE CONSTRUCTION STAKING COORDINATES ACCORDING TO THE DIMENSIONS SHOWN ON THESE PLANS. CONTRACTOR SHALL VERIFY THE ACCURACY OF THE COORDINATES SHOWN HEREON BEFORE CONSTRUCTION.

REV	DATE	DESCRIPTION	DSN	DWN	CHK
0	09/08/23	INITIAL ISSUE	MJR	TDA	MJR

MATTHEW J. ROWE LICENSED 29241 9/8/23 KANSAS PROFESSIONAL ENGINEER

MATTHEW J. ROWE
ENGINEER
KS # 29241

KAW VALLEY ENGINEERING
1627 SUNFLOWER LANE
SALINA, KANSAS 67401
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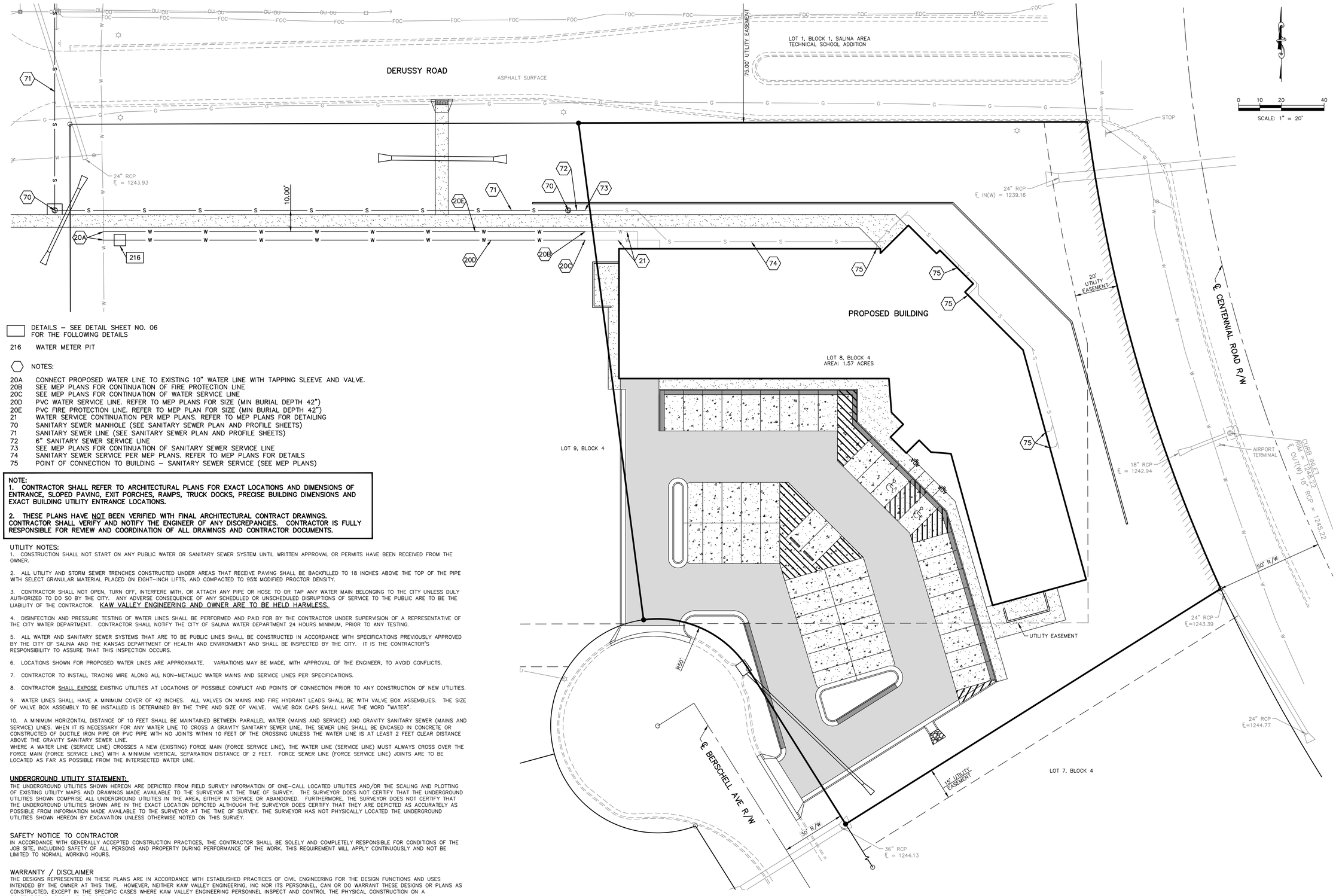
KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN THE STATE OF KANSAS BY STATE CERTIFICATE OF AUTHORIZATION # E-115. EXPIRES 12/31/24

SALINA TECH CAMPUS EXPANSION
2562 CENTENNIAL ROAD
SALINA, KANSAS 67401

PRELIMINARY
GRADING & EROSION CONTROL PLAN

PROJ. NO.	
E23D3417	
DESIGNER	DRAWN BY
MJR	TDA
CFN	
3417GP	
SHEET	REV
02	0

THIS DRAWING SHALL NOT BE UTILIZED BY ANY PERSON, FIRM, OR CORPORATION IN WHOLE OR IN PART WITHOUT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING, INC.



DETAILS – SEE DETAIL SHEET NO. 06 FOR THE FOLLOWING DETAILS

216 WATER METER PIT

NOTES:

20A CONNECT PROPOSED WATER LINE TO EXISTING 10" WATER LINE WITH TAPPING SLEEVE AND VALVE.
20B SEE MEP PLANS FOR CONTINUATION OF FIRE PROTECTION LINE
20C SEE MEP PLANS FOR CONTINUATION OF WATER SERVICE LINE
20D PVC WATER SERVICE LINE. REFER TO MEP PLANS FOR SIZE (MIN BURIAL DEPTH 42")
20E PVC FIRE PROTECTION LINE. REFER TO MEP PLAN FOR SIZE (MIN BURIAL DEPTH 42")
21 WATER SERVICE CONTINUATION PER MEP PLANS. REFER TO MEP PLANS FOR DETAILING
70 SANITARY SEWER MANHOLE (SEE SANITARY SEWER PLAN AND PROFILE SHEETS)
71 SANITARY SEWER LINE (SEE SANITARY SEWER PLAN AND PROFILE SHEETS)
72 6" SANITARY SEWER SERVICE LINE
73 SEE MEP PLANS FOR CONTINUATION OF SANITARY SEWER SERVICE LINE
74 SANITARY SEWER SERVICE PER MEP PLANS. REFER TO MEP PLANS FOR DETAILS
75 POINT OF CONNECTION TO BUILDING – SANITARY SEWER SERVICE (SEE MEP PLANS)

NOTE:
1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

2. THESE PLANS HAVE NOT BEEN VERIFIED WITH FINAL ARCHITECTURAL CONTRACT DRAWINGS. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR IS FULLY RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND CONTRACTOR DOCUMENTS.

UTILITY NOTES:

1. CONSTRUCTION SHALL NOT START ON ANY PUBLIC WATER OR SANITARY SEWER SYSTEM UNTIL WRITTEN APPROVAL OR PERMITS HAVE BEEN RECEIVED FROM THE OWNER.

2. ALL UTILITY AND STORM SEWER TRENCHES CONSTRUCTED UNDER AREAS THAT RECEIVE PAVING SHALL BE BACKFILLED TO 18 INCHES ABOVE THE TOP OF THE PIPE WITH SELECT GRANULAR MATERIAL PLACED ON EIGHT-INCH LIFTS, AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY.

3. CONTRACTOR SHALL NOT OPEN, TURN OFF, INTERFERE WITH, OR ATTACH ANY PIPE OR HOSE TO OR TAP ANY WATER MAIN BELONGING TO THE CITY UNLESS DULY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCE OF ANY SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE LIABILITY OF THE CONTRACTOR. KAW VALLEY ENGINEERING AND OWNER ARE TO BE HELD HARMLESS.

4. DISINFECTION AND PRESSURE TESTING OF WATER LINES SHALL BE PERFORMED AND PAID FOR BY THE CONTRACTOR UNDER SUPERVISION OF A REPRESENTATIVE OF THE CITY WATER DEPARTMENT. CONTRACTOR SHALL NOTIFY THE CITY OF SALINA WATER DEPARTMENT 24 HOURS MINIMUM, PRIOR TO ANY TESTING.

5. ALL WATER AND SANITARY SEWER SYSTEMS THAT ARE TO BE PUBLIC LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS PREVIOUSLY APPROVED BY THE CITY OF SALINA AND THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT AND SHALL BE INSPECTED BY THE CITY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THIS INSPECTION OCCURS.

6. LOCATIONS SHOWN FOR PROPOSED WATER LINES ARE APPROXIMATE. VARIATIONS MAY BE MADE, WITH APPROVAL OF THE ENGINEER, TO AVOID CONFLICTS.

7. CONTRACTOR TO INSTALL TRACING WIRE ALONG ALL NON-METALLIC WATER MAINS AND SERVICE LINES PER SPECIFICATIONS.

8. CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF NEW UTILITIES.

9. WATER LINES SHALL HAVE A MINIMUM COVER OF 42 INCHES. ALL VALVES ON MAINS AND FIRE HYDRANT LEADS SHALL BE WITH VALVE BOX ASSEMBLIES. THE SIZE OF VALVE BOX ASSEMBLY TO BE INSTALLED IS DETERMINED BY THE TYPE AND SIZE OF VALVE. VALVE BOX CAPS SHALL HAVE THE WORD "WATER".

10. A MINIMUM HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN PARALLEL WATER (MAINS AND SERVICE) AND GRAVITY SANITARY SEWER (MAINS AND SERVICE) LINES. WHEN IT IS NECESSARY FOR ANY WATER LINE TO CROSS A GRAVITY SANITARY SEWER LINE, THE SEWER LINE SHALL BE ENCASED IN CONCRETE OR CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE WITH NO JOINTS WITHIN 10 FEET OF THE CROSSING UNLESS THE WATER LINE IS AT LEAST 2 FEET CLEAR DISTANCE ABOVE THE GRAVITY SANITARY SEWER LINE.
WHERE A WATER LINE (SERVICE LINE) CROSSES A NEW (EXISTING) FORCE MAIN (FORCE SERVICE LINE), THE WATER LINE (SERVICE LINE) MUST ALWAYS CROSS OVER THE FORCE MAIN (FORCE SERVICE LINE) WITH A MINIMUM VERTICAL SEPARATION DISTANCE OF 2 FEET. FORCE SEWER LINE (FORCE SERVICE LINE) JOINTS ARE TO BE LOCATED AS FAR AS POSSIBLE FROM THE INTERSECTED WATER LINE.

UNDERGROUND UTILITY STATEMENT:

THE UNDERGROUND UTILITIES SHOWN HEREON ARE DEPICTED FROM FIELD SURVEY INFORMATION OF ONE-CALL LOCATED UTILITIES AND/OR THE SCALING AND PLOTTING OF EXISTING UTILITY MAPS AND DRAWINGS MADE AVAILABLE TO THE SURVEYOR AT THE TIME OF SURVEY. THE SURVEYOR DOES NOT CERTIFY THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL UNDERGROUND UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHERMORE, THE SURVEYOR DOES NOT CERTIFY THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION DEPICTED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE DEPICTED AS ACCURATELY AS POSSIBLE FROM INFORMATION MADE AVAILABLE TO THE SURVEYOR AT THE TIME OF SURVEY. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES SHOWN HEREON BY EXCAVATION UNLESS OTHERWISE NOTED ON THIS SURVEY.

SAFETY NOTICE TO CONTRACTOR

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY / DISCLAIMER

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL, CAN OR DO WARRANT THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

CAUTION – NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

THIS DRAWING SHALL NOT BE UTILIZED BY ANY PERSON, FIRM, OR CORPORATION IN WHOLE OR IN PART WITHOUT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING, INC.

REV	DATE	DESCRIPTION	DSN	DWN	CHK
0	09/08/23	INITIAL ISSUE	MJR	TDA	MJR

MATTHEW J. ROWE LICENSED 29241 9/8/23 KANSAS PROFESSIONAL ENGINEER

MATTHEW J. ROWE
ENGINEER
KS # 29241

1627 SUNFLOWER LANE
SALINA, KANSAS 67401
PH. (785) 823-3400
so@kveng.com | www.kveng.com

KAW VALLEY ENGINEERING

KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN KANSAS. STATE CERTIFICATE OF AUTHORIZATION # E-11,5. EXPIRES 12/31/24.

SALINA TECH CAMPUS EXPANSION
2562 CENTENNIAL ROAD
SALINA, KANSAS 67401

PRELIMINARY
UTILITY PLAN

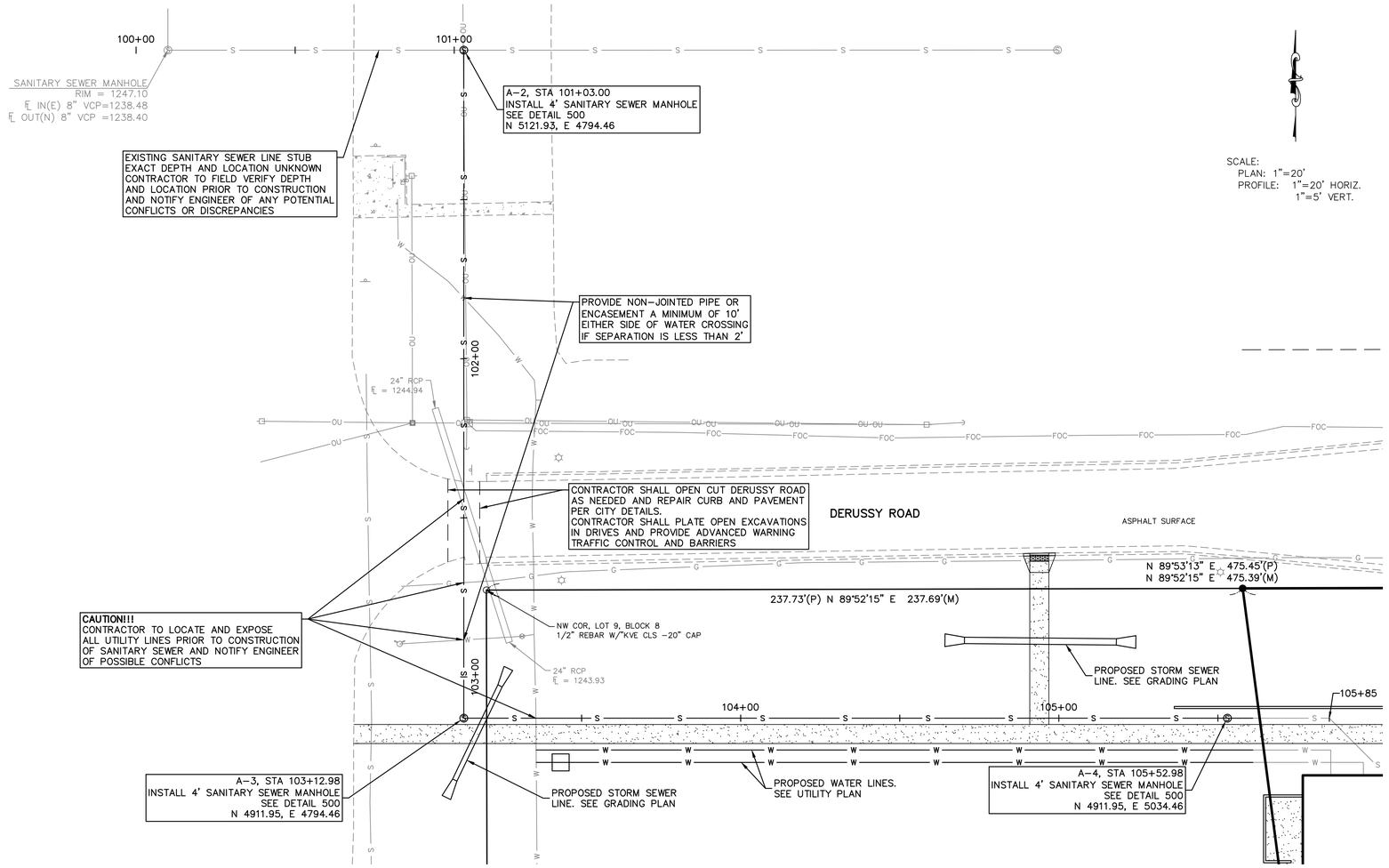
PROJ. NO.	
E23D3417	
DESIGNER	DRAWN BY
MJR	TDA
CFN	
3417UP	
SHEET	REV
03	0

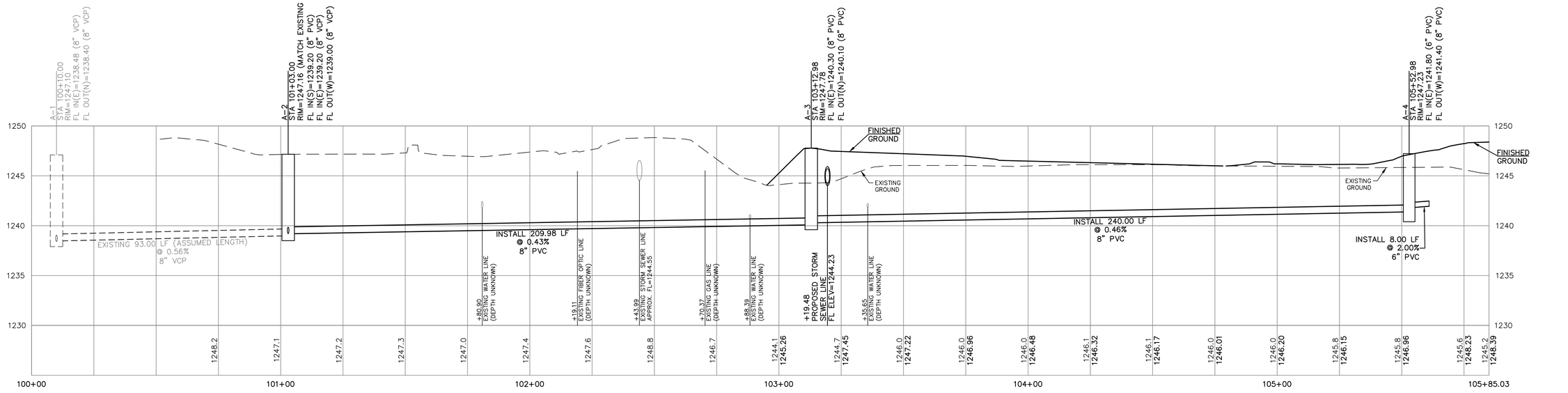
SEPARATION OF WATER MAINS AND SANITARY SEWERS:

1. A MINIMUM HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN WATER (MAINS AND SERVICE) AND SANITARY SEWER (MAINS AND SERVICE) LINES.
2. WHERE A WATER MAIN MUST CROSS A SEWER LINE, MAINTAIN 2 FEET VERTICAL SEPARATION WITH THE WATER MAIN ABOVE THE SEWER.
3. BUILDERS TO MAINTAIN MINIMUM 10' SEPARATION FROM THE OUTSIDE EDGE OF SANITARY SEWER MANHOLES TO THE OUTSIDE EDGE OF WATER SERVICE LINES WHEN RUNNING SERVICE LINES TO HOUSE.

GENERAL NOTES:

1. ALL SANITARY SEWER SERVICE LINE WILL BE AT A MIN 2% GRADE.
2. ALL NORTHING AND EASTING WAS TAKEN FROM CENTER OF STRUCTURE. REFERENCE DETAIL FOR ACTUAL LID LOCATION.





REV	DATE	DESCRIPTION	DSN	DWN	CHK
0	09/08/23	INITIAL ISSUE	MJR	TDA	MJR

MATTHEW J. ROWE LICENSED 29241 9/8/23 KANSAS PROFESSIONAL ENGINEER

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KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-115. EXPIRES 12/31/24

SALINA TECH CAMPUS EXPANSION
2562 CENTENNIAL ROAD
SALINA, KANSAS 67401

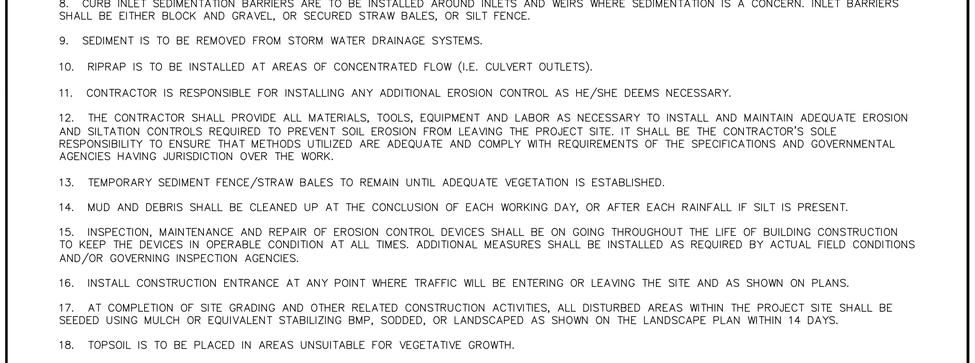
PRELIMINARY
SANITARY SEWER LINE - PLAN & PROFILE

PROJ. NO.	E23D3417
DESIGNER	DRAWN BY
MJR	TDA
CFN	3417SPP
SHEET	REV
04	0

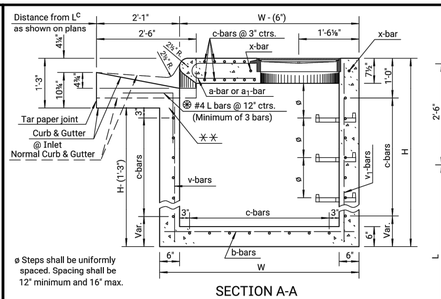
THIS DRAWING SHALL NOT BE UTILIZED BY ANY PERSON, FIRM, OR CORPORATION IN WHOLE OR IN PART WITHOUT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING, INC.

GENERAL NOTES:

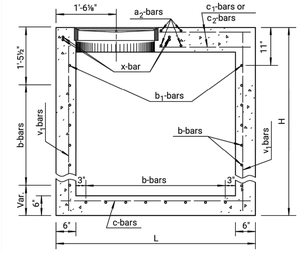
1. PROPERTY LINE IS LIMITS OF CONSTRUCTION EXCEPT AS SHOWN.
2. THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE DRAWINGS PRIOR TO BEGINNING EARTHWORK OPERATIONS.
3. THE CONTRACTOR SHALL MAINTAIN ALL SILT CONTROL MEASURES DURING CONSTRUCTION.
4. ALL SILT SHALL REMAIN ON SITE AND SURROUNDING STREETS SHALL BE KEPT CLEAR OF ALL MUD AND DEBRIS.
5. A SEDIMENTATION BARRIER IS TO BE INSTALLED AS SHOWN.
6. ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE SEDIMENTATION BARRIERS MAINTAINED AS NEEDED TO PREVENT SEDIMENTATION BYPASS OF THE BARRIER.
7. SLOPES ARE TO BE LEFT IN A ROUGH CONDITION DURING GRADING.
8. CURB INLET SEDIMENTATION BARRIERS ARE TO BE INSTALLED AROUND INLETS AND WEIRS WHERE SEDIMENTATION IS A CONCERN. INLET BARRIERS SHALL BE EITHER BLOCK AND GRAVEL, OR SECURED STRAW BALES, OR SILT FENCE.
9. SEDIMENT IS TO BE REMOVED FROM STORM WATER DRAINAGE SYSTEMS.
10. RIPRAP IS TO BE INSTALLED AT AREAS OF CONCENTRATED FLOW (I.E. CULVERT OUTLETS).
11. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ANY ADDITIONAL EROSION CONTROL AS HE/SHE DEEMS NECESSARY.
12. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR AS NECESSARY TO INSTALL AND MAINTAIN ADEQUATE EROSION AND SILTATION CONTROLS REQUIRED TO PREVENT SOIL EROSION FROM LEAVING THE PROJECT SITE. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THAT METHODS UTILIZED ARE ADEQUATE AND COMPLY WITH REQUIREMENTS OF THE SPECIFICATIONS AND GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
13. TEMPORARY SEDIMENT FENCE/STRAW BALES TO REMAIN UNTIL ADEQUATE VEGETATION IS ESTABLISHED.
14. MUD AND DEBRIS SHALL BE CLEANED UP AT THE CONCLUSION OF EACH WORKING DAY, OR AFTER EACH RAINFALL IF SILT IS PRESENT.
15. INSPECTION, MAINTENANCE AND REPAIR OF EROSION CONTROL DEVICES SHALL BE ON GOING THROUGHOUT THE LIFE OF BUILDING CONSTRUCTION TO KEEP THE DEVICES IN OPERABLE CONDITION AT ALL TIMES. ADDITIONAL MEASURES SHALL BE INSTALLED AS REQUIRED BY ACTUAL FIELD CONDITIONS AND/OR GOVERNING INSPECTION AGENCIES.
16. INSTALL CONSTRUCTION ENTRANCE AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING THE SITE AND AS SHOWN ON PLANS.
17. AT COMPLETION OF SITE GRADING AND OTHER RELATED CONSTRUCTION ACTIVITIES, ALL DISTURBED AREAS WITHIN THE PROJECT SITE SHALL BE SEEDED USING MULCH OR EQUIVALENT STABILIZING BMP, SODDED, OR LANDSCAPED AS SHOWN ON THE LANDSCAPE PLAN WITHIN 14 DAYS.
18. TOPSOIL IS TO BE PLACED IN AREAS UNSUITABLE FOR VEGETATIVE GROWTH.
19. STRIP TOPSOIL PRIOR TO EXCAVATION, STOCKPILE AND SPREAD ONTO DISKED SUBGRADE (4" MIN) A THICKNESS OF 4 INCHES.
20. ROCK LINING (RIPRAP) SHALL BE DURABLE STONE CONTAINING A COMBINED TOTAL OF NOT MORE THAN 10 PERCENT OF EARTH, SAND, SHALE AND NON-DURABLE ROCK. AT LEAST 60 PERCENT OF THE MASS SHALL BE OF PIECES HAVING A MINIMUM WEIGHT OF 150 POUNDS OR MORE PER CUBIC FOOT.
21. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR RESOLVING COMPLAINTS IN THE EVENT THAT COMPLAINTS OR DAMAGE CLAIMS ARE FILED DUE TO DAMAGES OCCURRING ADJACENT TO OR DOWNSTREAM FROM PROPERTY BY SEDIMENT RESULTING FROM EROSION ON THE PROJECT SITE.
22. GOOD HOUSEKEEPING PRACTICES SHALL BE MAINTAINED ON SITE TO KEEP SOLID WASTE FROM ENTRY INTO WATERS.
23. ALL FUELING FACILITIES PRESENT ON SITE SHALL ADHERE TO APPLICABLE FEDERAL AND STATE REQUIREMENTS CONCERNING UNDERGROUND STORAGE, ABOVE GROUND STORAGE AND DISPENSERS, INCLUDING SPILL PREVENTION, CONTROL AND COUNTER MEASURES.
24. RIGHT OF WAY TO BE STABILIZED AS REQUIRED BY APWA SECTION 2400.
25. EROSION CONTROL IS TO BE PLACED IN PHASING AS CONSTRUCTION PROGRESSES.
26. MINIMAL WASHING OF CONCRETE EQUIPMENT ALLOWED, CHUTE ETC. CONCRETE WASHOUT OF THE DRUM IS NOT ALLOWED. ANY PIT/WASHOUT AREA NEEDS TO BE MAINTAINED IN A NON-DISCHARGING MANNER AND ANY WASTE RESIDUE WILL NEED TO BE CLEANED OUT AND REMOVED AT THE END OF PROJECT.
27. CONTRACTOR/DEVELOPER IS RESPONSIBLE FOR HAVING LOT BUILDERS FOLLOW THE GUIDELINES OF "CONTROLLING EROSION WHEN BUILDING YOUR HOME" PROVIDED BY KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT.
28. EROSION CONTROL SEDIMENT FENCE TO BE INSTALLED 1'-0" BEHIND CURB & GUTTER UPON COMPLETION OF BACKFILL OF CURB IN ALL AREAS WHERE SLOPES FROM LOT DRAIN TOWARDS CURB. UPON COMPLETION OF FINAL GRADING THE TOES OF ALL EMBANKMENTS IN EXCESS OF TWO FEET IN HEIGHT WILL HAVE EROSION CONTROL SEDIMENT FENCE INSTALLED.



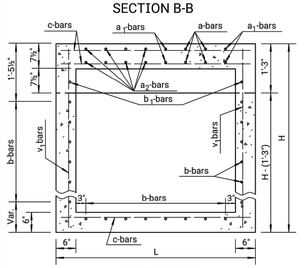
SEDIMENTATION FENCE 812



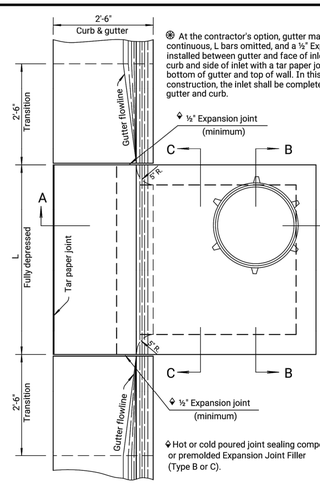
SECTION A-A



SECTION B-B

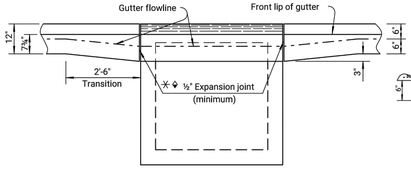


SECTION C-C



PLAN

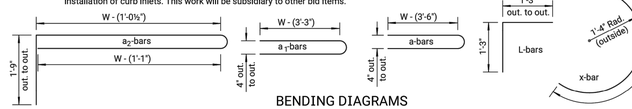
At the contractor's option, gutter may be constructed continuous, L bars omitted, and a ½" Expansion joint installed between gutter and face of inlet and between curb and side of inlet with a tar paper joint between bottom of gutter and top of wall. In this method of construction, the inlet shall be completely free of the gutter and curb.



ELEVATION

STEP DETAILS

Note: Transition gutter from normal depth of 6" to 9" at inlet in 2'-6". Curb and Gutter sections shall be shaped as shown where required by the installation of curb inlets. This work will be subsidiary to other bid items.

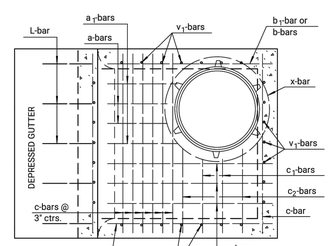


BENDING DIAGRAMS

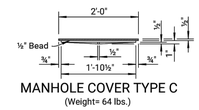
Note: Reinforcing steel for L bars is not included in the steel quantity and is subsidiary to the other inlet items.

GENERAL NOTES

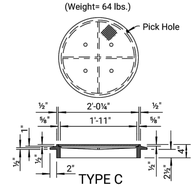
Use Concrete Grade 3.0 throughout. All exposed edges shall be finished with an edging tool.
At the contractors option Concrete Grade 3.0 (AE) or mix used in concrete pavement may be used throughout.
In general, pipes will enter and leave manhole at various positions. Where possible bend bars around pipes.
Floor of manhole to be shaped as shown in various "EXAMPLES" with unreinforced Concrete Grade 3.0.
Manhole opening and steps, where used, shall be placed to afford easy access to top of shaped invert. Top reinforcing bars to be adjusted accordingly.
All castings shall be gray iron and shall comply with the KDOT Standard Specifications.
When so ordered by the Engineer, the top of the manhole shall be sloped slightly to approximately fit the ground line or other conditions.
Dimensions and weights of cast iron as shown on this sheet are minimum. Larger dimensions and/or heavier weights of cast iron may be used.
Steps shall be installed in all storm sewer inlets when specified in the plans or when "H" is equal to or greater than six feet. Steps shall comply with the KDOT Standard Specification.
No reduction in concrete quantities shall be made for pipe openings.
When directed by the Engineer, a small opening in the back of the inlet shall be provided in order to drain a low area. Reinforcing bars shall extend through the opening. No reduction in concrete quantities will be made for this opening.
No addition in concrete quantities shall be made for shaping floor of inlet.
No reduction in pay length of curb, gutter, or curb & gutter will be made through the inlet area.
The weight of castings includes no allowance for fillets and overruns.
Curb and Gutter sections shall be shaped as shown where required by the installation of curb inlets. This work shall be subsidiary to other bid items.
See sheet entitled "Reinforcing Steel for Inlets and Manholes" for details and quantities.
For additional notes and details on Light Type Cast Iron Manhole Cover and Ring Type C and Cast Iron Steps, see Standard Drawing RD633 "Reinforced Concrete Manhole".
All reinforcing steel shall be #4 at 6" centers except where noted. Minimum clear distance to reinforcement shall be 1½".



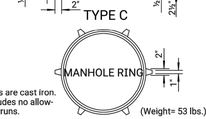
REINFORCING STEEL TOP VIEW



MANHOLE COVER TYPE C
(Weight= 64 lbs.)



TYPE C



(Weight= 53 lbs.)

NOTE: All manhole castings are cast iron. Weight of castings includes no allowance for fillets and overruns.

* LIGHT TYPE MANHOLE COVER & RING

* Rings with four equally spaced lugs will be permitted.

NO.	DATE	REVISIONS	BY	APPD.
7	10-31-17	Joint Filler Type C Added	A.L.K.	S.W.K.
6	1-28-05	Changed Class to Grade concrete	S.W.K.	J.D.S.
5	12-1-1497	Revised step spacing	R.J.S.	J.D.S.
4	3-20-96		R.J.S.	J.D.S.

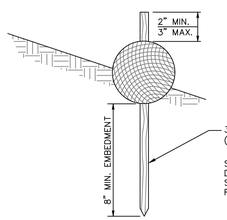
KANSAS DEPARTMENT OF TRANSPORTATION

401

TYPE 22 CURB INLET

RD646

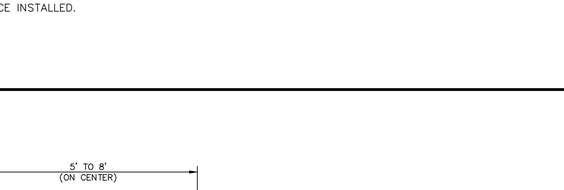
FINAL APPROVAL	3-5-18	APP'D.	Scott W. King
DESIGNED	DETAILED	QUANTITIES	TRACED
DESIGN OK	DETAIL OK	QUAN.OK	TRACE OK



WATTLE NOTES:
1. FIBER LOGS MAY BE USED IN LIEU OF WATTLES.
2. THE DIAMETER OF WATTLE OR FIBER LOG SHALL BE AT LEAST 12-INCHES.
3. WATTLES OR FIBER LOGS MUST BE WRAPPED WITH NON-PLASTIC WRAPPING. COCONUT OR ASPEN FIBER SHALL BE USED FOR FIBER LOGS AND WATTLES.
4. THE WATTLES OR FIBER LOGS SHALL BE INSPECTED AFTER EVERY RAINFALL TO DETERMINE IF ANY PART OF THE BARRIER NEEDS TO BE REPAIRED OR REPLACED. IF IT IS DETERMINED THAT THE BARRIER NEEDS ANY REPAIR OR REPLACEMENT THIS SHALL BE DONE IMMEDIATELY.
5. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH RAINFALL OR BEFORE THEY ACCUMULATE TO 1/2 OF THE WATTLE OR FIBER LOG HEIGHT.
6. INSTALL WATTLES OR FIBER LOGS SNUGLY INTO THE TRENCH. ABUT ADJACENT WATTLES OR FIBER LOGS TIGHTLY, END TO END, WITHOUT OVERLAPPING THE ENDS.
7. STAKES SHALL BE INSTALLED AT EACH END OF WATTLE OR FIBER LOG, AND AT 4' O.C. ALONG ENTIRE LENGTH.
8. PROVIDE MULTIPLE WATTLES UPHILL FOR WATTLE DITCH CHECK CONFIGURATION OR AS NEEDED.
9. WATER FROM TRENCH DEWATERING TO BE PUMPED BEHIND COMPOST BERM OR WATTLE TO BE FILTERED.

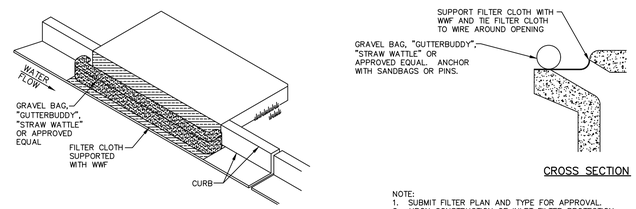
WATTLE INSTALLATION 819

N.T.S.



CONSTRUCTION ENTRANCE NOTES:
1. STONE SIZE – USE 2" STONE OR RECLAIMED OR RECYCLED EQUIVALENT.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET.
3. THICKNESS – NOT LESS THAN (6) INCHES.
4. WIDTH – TWENTY (20) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED AFTER EACH RAIN.

CONSTRUCTION ENTRANCE DETAIL 047



NOTE:
1. SUBMIT FILTER PLAN AND TYPE FOR APPROVAL.
2. UPON CONSTRUCTION OF INLET FILTER PROTECTION WILL BE PROVIDED. HAY BALES NO LONGER APPROVED.
3. INLET FILTER PROTECTION TO BE LEFT IN PLACE AFTER CONSTRUCTION OF THIS PROJECT. DEVELOPER-OWNER TO DIRECT LOT BUILDER TO MAINTAIN EROSION CONTROL WHILE CONSTRUCTING HOMES OR MAINTAIN THEMSELVES.
4. INLET FILTER TO REMAIN IN PLACE UNTIL 90% OF DRAINAGE AREA IS SODDED OR SEEDED.

INLET FILTER PROTECTION 818

N.T.S.

REV	DATE	DESCRIPTION	DSN	DWN	CHK
0	09/08/23	INITIAL ISSUE	M.JR	TDA	M.JR

MATTHEW J. ROWE LICENSED 29241 9/8/23 KANSAS PROFESSIONAL ENGINEER

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KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANS SITE CERTIFICATE OF AUTHORIZATION # E-11,5. EXPIRES 12/31/24

SALINA TECH CAMPUS EXPANSION
2562 CENTENNIAL ROAD
SALINA, KANSAS 67401

PRELIMINARY
GRADING & EROSION CONTROL NOTES & DETAILS

PROJ. NO.	E23D3417
DESIGNER	MJR
DRAWN BY	TDA
CFN	3417GP
SHEET	05
REV	0

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				

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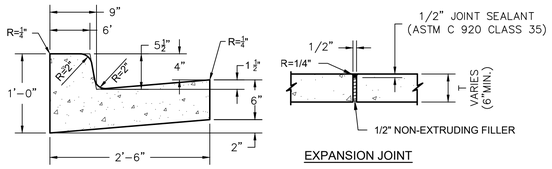


STANDARD TYPE "B" CURB **001**

TYPE "B - DRY" CURB **002**

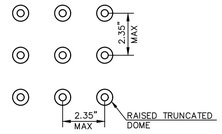
EXPANSION JOINT

CONTRACTION JOINT

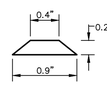
NOTES:
1. IN TRANSITIONS, WATER SHALL FLOW FROM THE GUTTER OF TYPE "B" CURB TO THE LIP OF TYPE "B – DRY" CURB AT 0.5% MIN. SLOPE.
2. GUTTER SLOPE IN HANDICAP ACCESSIBLE STALLS AND ACCESS AISLES SHALL NOT EXCEED 2.0%.

TYPE "B" CURB & GUTTER NOTES:
1. ¾" PREMOLDED EXPANSION JOINTS SHALL BE PLACED AT POINTS OF CURVATURE, CURB RETURNS, CURB INLETS AND AT 250' CENTERS. THE EXPANSION JOINTS SHALL BE DOWELED IN ACCORDANCE WITH THE SPECIFICATIONS. CONTRACTION JOINTS SHALL BE 2" DEEP AND PLACED AT 15' INTERVALS EQUALLY SPACED BETWEEN EXPANSION JOINTS.
2. PORTLAND CEMENT CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS WITH 6% ENTRAINED AIR ±2% AND SHALL MEET OR EXCEED THE KANSAS DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
3. SEE SIDEWALK RAMP DETAILS FOR TYPICAL SIDEWALK RAMP CURB & GUTTER SECTIONS.
4. DETAILS AS SHOWN FOR CONCRETE AND ASPHALT PAVING. WHEN USED WITH CONCRETE PAVING POURED MONOLITHICALLY WITH CURB NO MODIFICATIONS ARE REQUIRED. WHEN CURB AND CONCRETE PAVING ARE TO BE POURED SEPARATELY #4 BARS, 24" LONG ARE TO BE PROVIDED TO TIE CURB TOGETHER WITH CONCRETE PAVING.
5. ALL REINFORCING SHALL BE 60 ksi EPOXY COATED DEFORMED BARS.
6. CURBS TO BE CONSTRUCTED ON MINIMUM 6 INCHES OF COMPACTED WELL GRADED BASE ROCK.

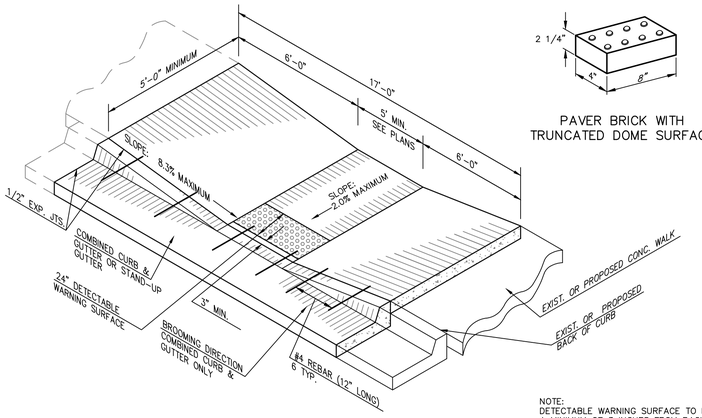
CONCRETE CURB



DETECTABLE WARNING SURFACE PATTERN



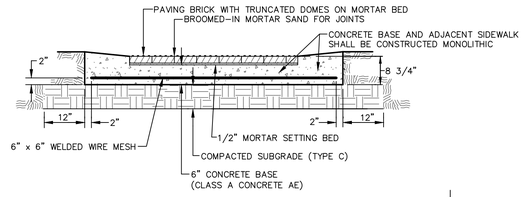
RAISED TRUNCATED DOME DETAIL



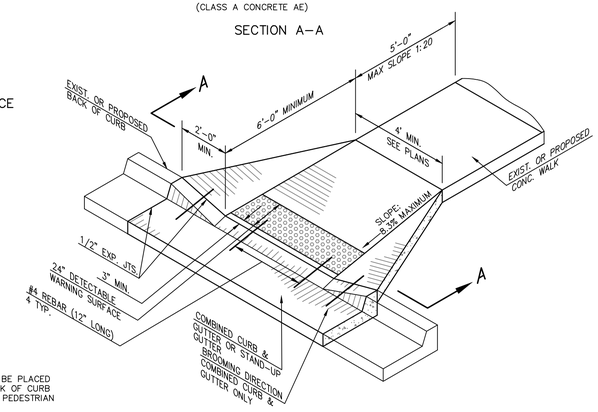
ISOMETRIC OF RAMP WITH LANDING

PAVER BRICK WITH TRUNCATED DOME SURFACE

NOTE:
DETECTABLE WARNING SURFACE TO BE PLACED A MINIMUM OF 3 INCHES FROM BACK OF CURB AND ALIGNED IN THE DIRECTION OF PEDESTRIAN TRAVEL.



SECTION A–A



ISOMETRIC OF RAMP WITH PERPENDICULAR WALK SHOWN

SIDEWALK RAMPS 060

REV	DATE	DESCRIPTION
0	09/08/23	INITIAL ISSUE
DSN	M.JR	
DWN	TDA	
CHK	M.JR	

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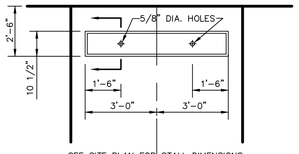
SALINA TECH CAMPUS EXPANSION
2562 CENTENNIAL ROAD
SALINA, KANSAS 67401

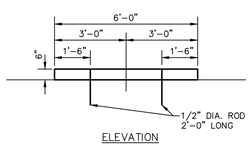
PRELIMINARY DETAIL SHEET

PROJ. NO.	E23D3417
DESIGNER	DRAWN BY
MJR	TDA
CFN	3417TYP
SHEET	REV
06	0

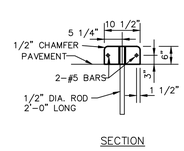


SEE SITE PLAN FOR STALL DIMENSIONS

PLAN

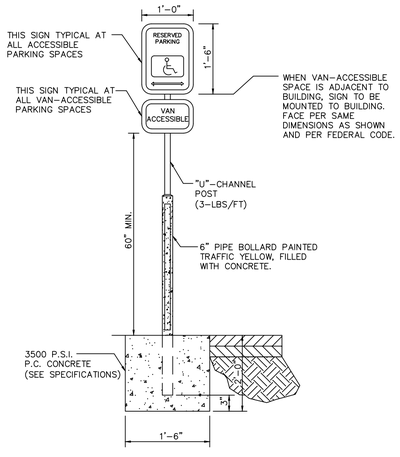


ELEVATION

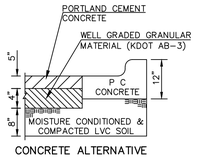


SECTION

CONCRETE WHEEL STOP 013

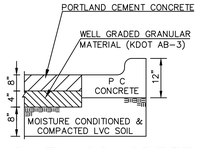


ACCESSIBLE PARKING SIGN 120



CONCRETE ALTERNATIVE

REGULAR DUTY PAVING 040



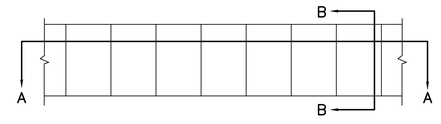
HEAVY DUTY CONCRETE 042

1. FLEXIBLE PAVEMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE KANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR STATE ROAD & BRIDGE CONSTRUCTION.

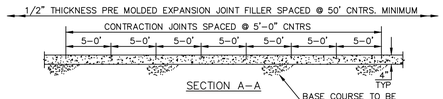
   ASPHALT SURFACE COURSE – TYPE BM–2, APWA TYPE 3
   ASPHALT BASE COURSE – TYPE BM–2B, APWA TYPE 1

2. PORTLAND CEMENT CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS WITH 6% ENTRAINED AIR ±2% AND SHALL MEET OR EXCEED THE SPECIFICATIONS SET FORTH IN THE LATEST EDITION OF THE KANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR STATE ROAD & BRIDGE CONSTRUCTION.

3. HEAVY DUTY CONCRETE IS AN OPTIONAL PAVEMENT FOR DETAIL 041 HEAVY DUTY ASPHALT. WHEN PLANS SPECIFY DETAIL 042 NO ALTERNATES ARE ALLOWED.

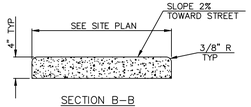


PLAN VIEW



SECTION A–A

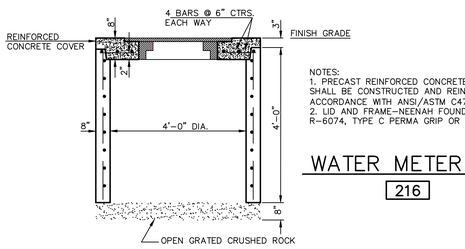
NOTE: WHERE SIDEWALKS ARE INTEGRAL WITH DRIVE ENTRANCES INCREASE DEPTH TO 6" AND PROVIDE REINFORCING USING 6x6 #10 WIRE MINIMUM.



SECTION B–B

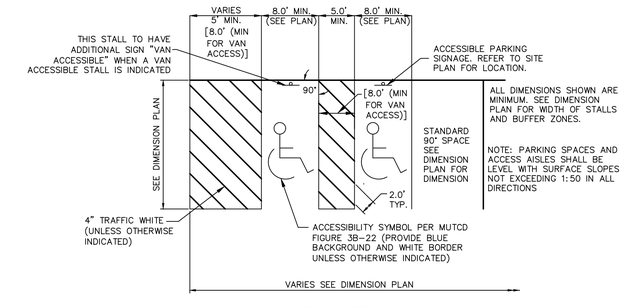
CONCRETE SIDEWALK 055

NOTE: CONCRETE SHALL BE CLASS A WITH f'c = 3000 PSI.



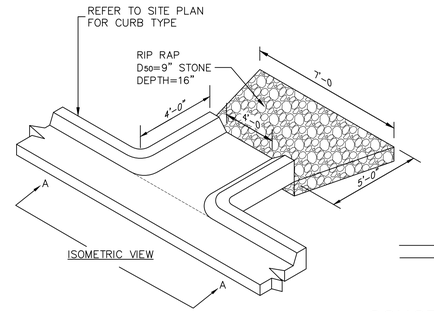
NOTES:
1. PRECAST REINFORCED CONCRETE MANHOLE SHALL BE CONSTRUCTED AND REINFORCED IN ACCORDANCE WITH ANSI/ASTM C478.
2. LID AND FRAME–NEENAH FOUNDRY R–6074, TYPE C PERMA GRIP OR EQUAL.

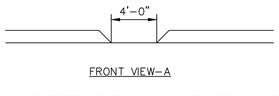
WATER METER PIT 216



90° SPACE STRIPING

ACCESSIBLE STRIPING 102





FRONT VIEW–A

CONCRETE DRAINAGE FLUME 413

NOT TO SCALE

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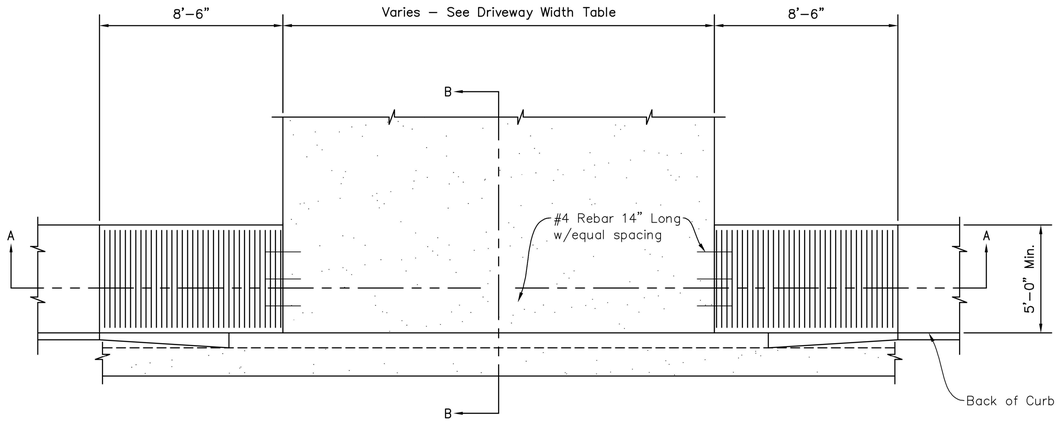
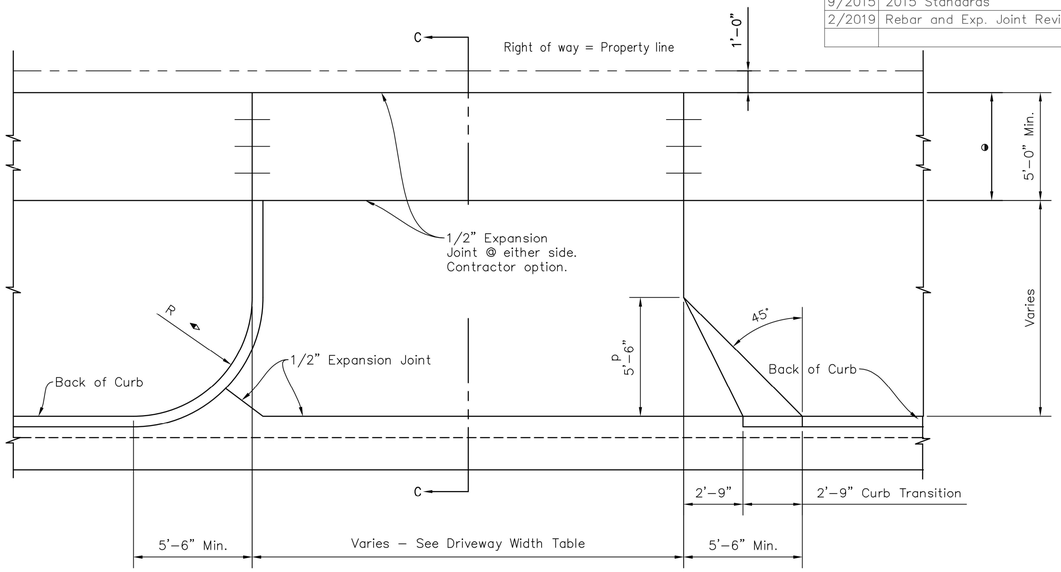


TYPICAL DRIVEWAY w/ CURBSIDE SIDEWALK DETAIL



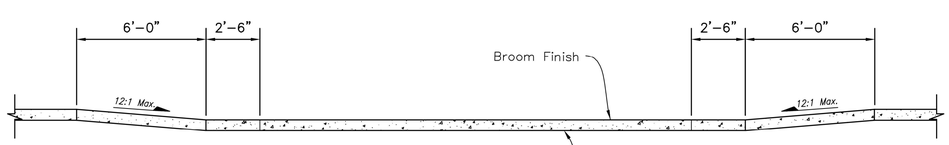
WITH RADIUS

WITH 45° WING

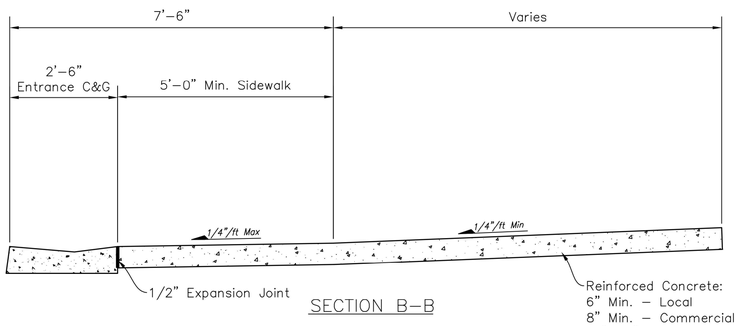
◑ Match adjacent sidewalk width

Driveway Type	Radius
Commercial	15' min.
Single Residential	5.5' min
Double Residential	3' min.

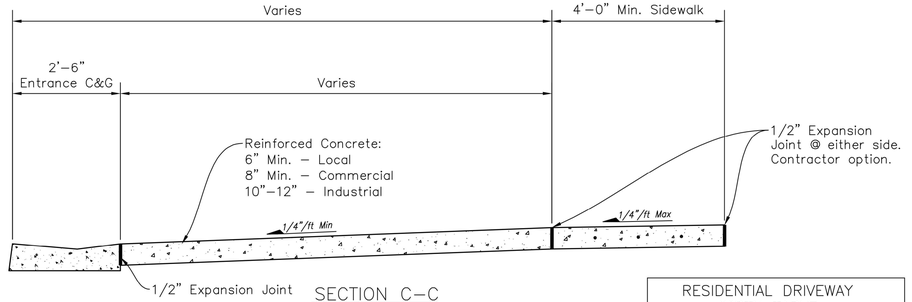
TYPICAL DRIVEWAY w/ PROPERTY LINE SIDEWALK DETAIL



SECTION A–A



SECTION B–B



SECTION C–C

RESIDENTIAL DRIVEWAY WIDTH TABLE	
LOT WIDTH	MAXIMUM DRIVEWAY
50 ft or Less	20 ft
51 ft to 60 ft	24 ft
61 ft' to 74 ft	30 ft
75 ft or Greater	30 ft
*with front facing attached 3 car garage or carport	36 ft
Minimum Driveway Width = 8'–0"	

GENERAL NOTES:

1. All driveway approach construction shall be subject to City inspection at all times by the City Engineer or his representative.

2. All driveway approach construction shall be placed normal to center line of roadway in a true and neat manner.

3. All driveway approach construction shall be no less than 5'–6" from adjacent property unless with written consent from adjacent property owner.

4. Before placement of concrete, the subgrade shall be thoroughly moistened. Concrete may not be placed on frozen or muddy subgrade or when ambient air temperature is 40° F. or less without adequate frost protection.

5. All concrete within the right–of–way shall be placed with a minimum 4,000 psi concrete mix design "(Grade 3.0 (AE))". Upon placement of concrete, the surface shall be broom finished and protected against premature drying with white pigmented curing compound for a period no less than seven (7) days. (When the ambient air temperature is expected to remain at or below 40° F, the white pigmented curing compound will be substituted with thermal blankets).

6. Entrance and driveway pavements shall have a uniform thickness:
   a. Residential– 6"concrete and reinforced with a minimum 6X6– W1.4xW1.4 welded wire reinforcement. Approximate weight of welded wire mesh = 21 lbs. per 100 sq. ft.
   b. Commercial– 8" min. concrete with #4 rebar mat.
   c. Industrial– 10"–12" concrete with #4 rebar mat.

Expansion joints will be that of a preformed material, one half (1/2") thickness, and shall be placed wherever new work joins existing work; at ends of all driveway, alley and street returns where returns meet existing construction; and at intervals not to exceed one hundred fifty (150') feet for all straight runs.

7. Concrete Pavement shall be jointed w/ 1/8" wide, T/3 depth, contraction joints not to exceed 10' x 10' slabs.

200

CITY OF SALINA, KANSAS
PUBLIC WORKS – ENGINEERING – UTILITIES

STANDARD DETAILS
DRIVEWAY DETAILS

PROJ. NO. | DATE | SHEET: 4
FILENAME: 4 Driveway Details.DWG

DATE	REVISIONS
9/2015	2015 Standards
2/2019	Rebar and Exp. Joint Revision

REV	DATE	DESCRIPTION	DSN	DWN	CHK
0	09/08/23	INITIAL ISSUE	MJR	TDA	MJR

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29241
9/8/23
KANSAS
PROFESSIONAL ENGINEER

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KS # 29241

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KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E–115. EXPIRES 12/31/24

SALINA TECH CAMPUS EXPANSION
2562 CENTENNIAL ROAD
SALINA, KANSAS 67401

PRELIMINARY
DETAIL SHEET

PROJ. NO. E23D3417
DESIGNER MJR | DRAWN BY TDA
CFN 3417TYP
SHEET 07 | REV 0

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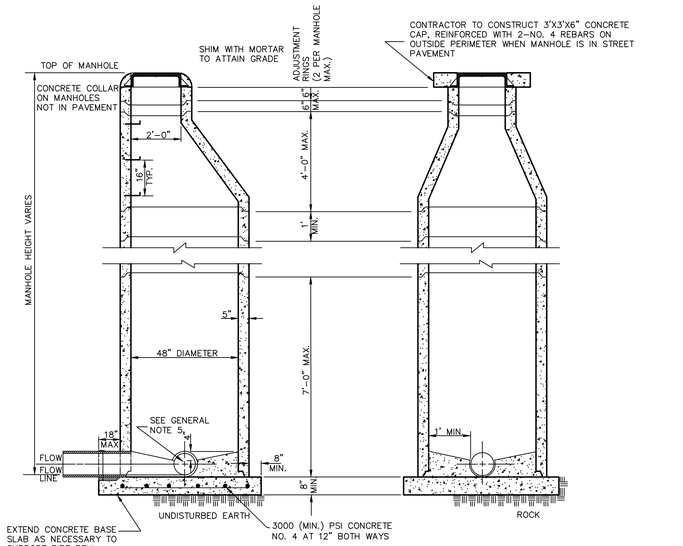

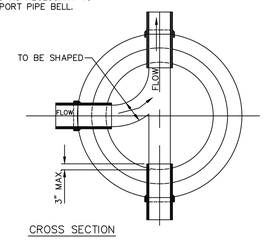

CROSS SECTION

GENERAL NOTES:
1. ALL PRECAST REINFORCED CONCRETE MANHOLES SHALL CONFORM TO ASTM C-478.
2. ALL MANHOLES ARE 48" INSIDE DIAMETER UNLESS NOTED OTHERWISE.
3. ALL MANHOLES OVER 4 FEET IN HEIGHT SHALL HAVE STEPS 16" ON CENTER EXCEPT WHERE SHOWN OTHERWISE.
4. ALL MANHOLES SHALL HAVE A STANDARD DURABLE PROTECTIVE EXTERNAL COATING APPLIED PER MANUFACTURER'S RECOMMENDATION.
5. UNLESS FLEXIBLE GASKETS ARE USED IN MANHOLE WALL FOR PIPE CONNECTION, PROVIDE CONCRETE SUPPORT FOR PIPE TO THE FIRST FLEXIBLE JOINT. DO NOT ALLOW CONCRETE TO RESTRICT JOINT MOVEMENT.
6. MANHOLE RING AND COVER - NEENAH FOUNDRY R-1535 OR EQUAL
7. CONCRETE INVERTS TO BE SHAPED AND FINISHED WITH A SMOOTH, UNOBSTRUCTED SURFACE. ENSURE THAT FLOWLINE GRADES AND ELEVATIONS ARE CONSISTENT WITH INLET AND OUTLET FLOWLINES.

SANITARY MANHOLE 500

REV	DATE	DESCRIPTION	DSN	DWN	CHK
0	09/08/23	INITIAL ISSUE	M.JR	TDA	M.JR

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9/8/23
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KAW VALLEY ENGINEERING

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SALINA TECH CAMPUS EXPANSION
2562 CENTENNIAL ROAD
SALINA, KANSAS 67401

PRELIMINARY
DETAIL SHEET

PROJ. NO.	E23D3417
DESIGNER	DRAWN BY
MJR	TDA
CFN	3417TYP
SHEET	REV
08	0

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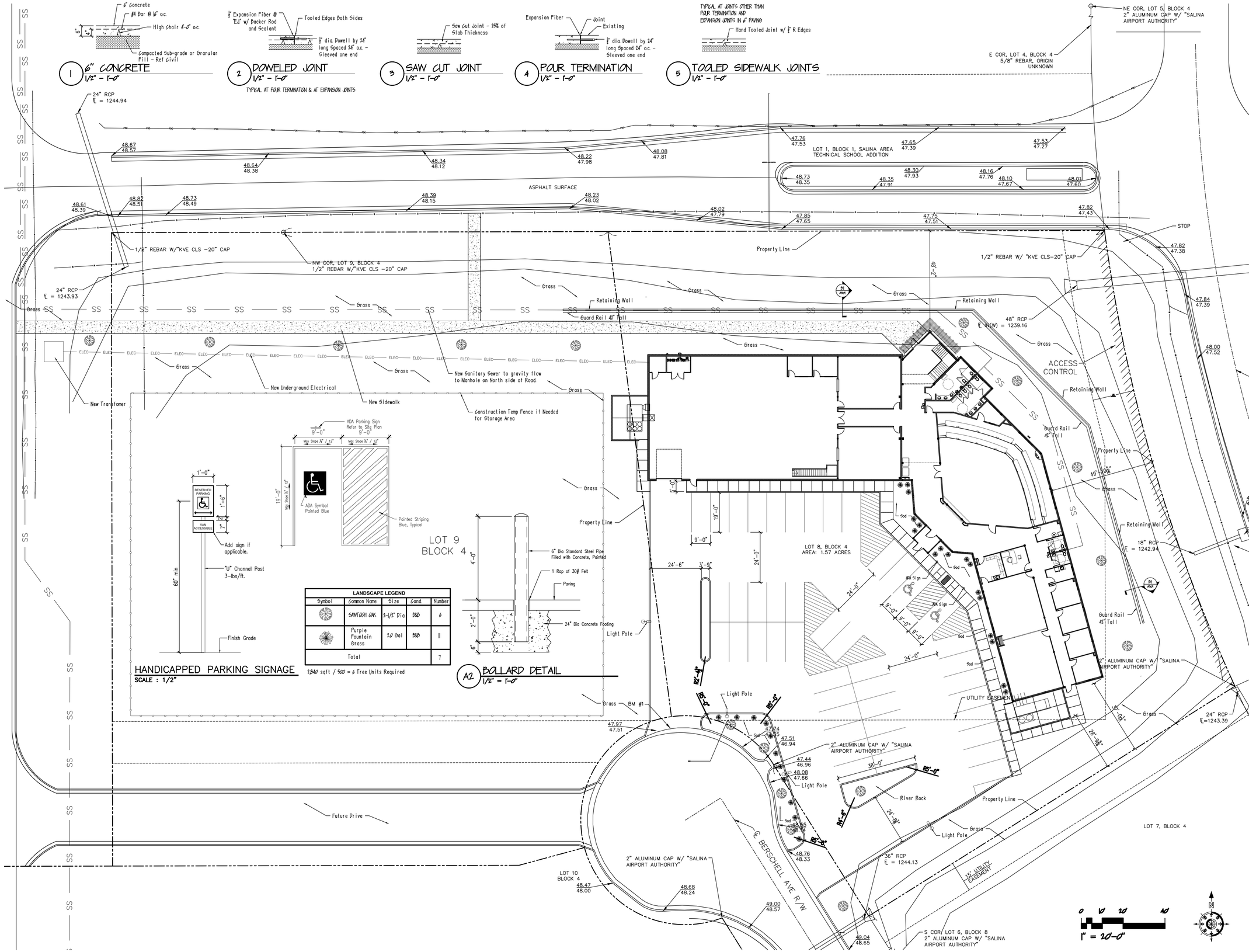
1 6" CONCRETE
1/2" = 1'-0"

2 DOWELED JOINT
1/2" = 1'-0"
TYPICAL AT POUR TERMINATION & AT EXPANSION JOINTS

3 SAW CUT JOINT
1/2" = 1'-0"

4 POUR TERMINATION
1/2" = 1'-0"

5 TOOLED SIDEWALK JOINTS
1/2" = 1'-0"



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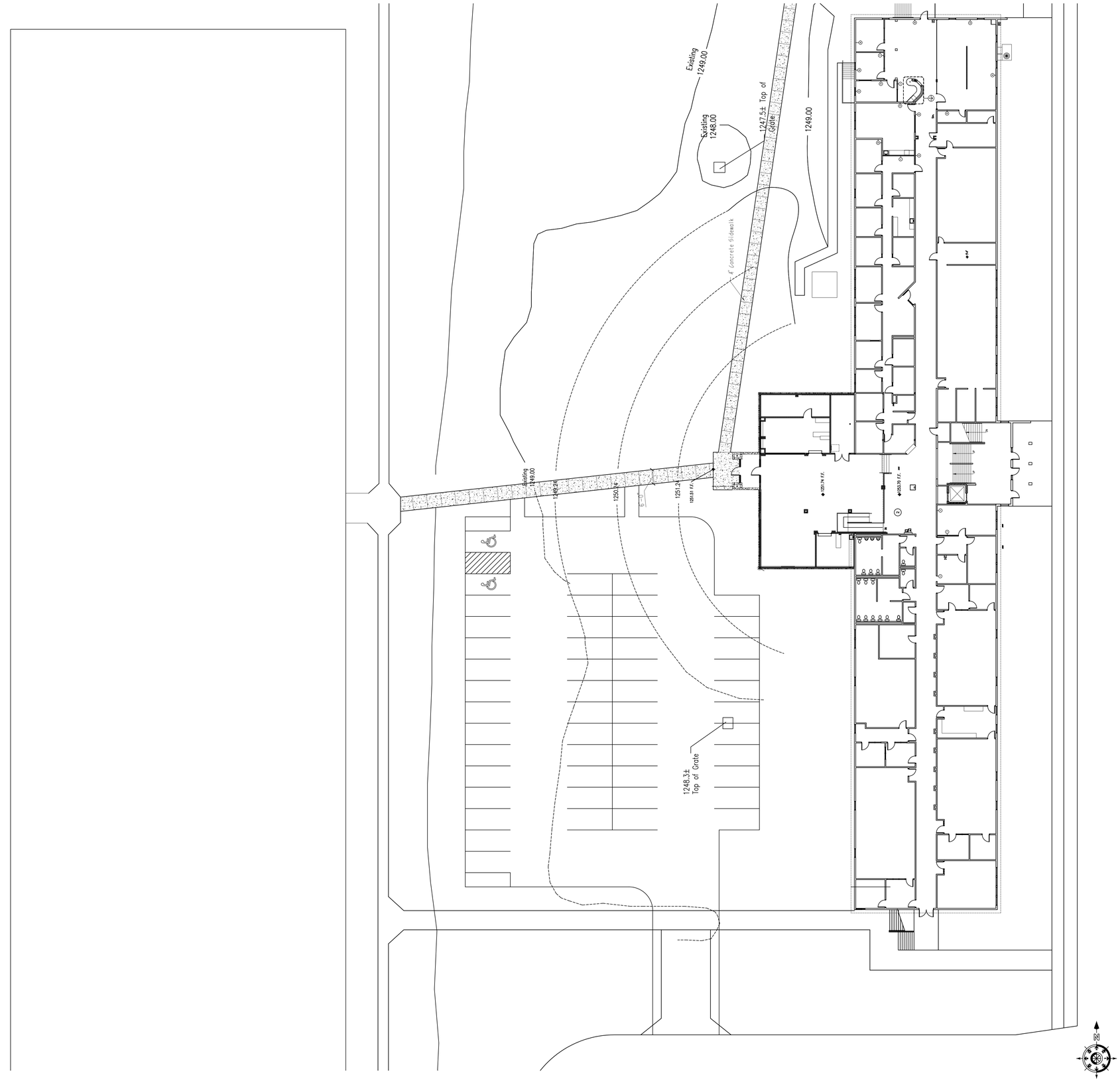
LLOYD M. MCCARTY LICENSED KANSAS ARCHITECT 13365
09/08/2023

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
Site Plan

Date: 09-08-23
Project Number: 23-014
SHEET NUMBER:
AS100
DRAWN BY: Mike



A1 SITE PLAN
1" = 20'-0"

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Salina Area Tech -
Industrial Maintenance & Automation Building
Salina, Kansas

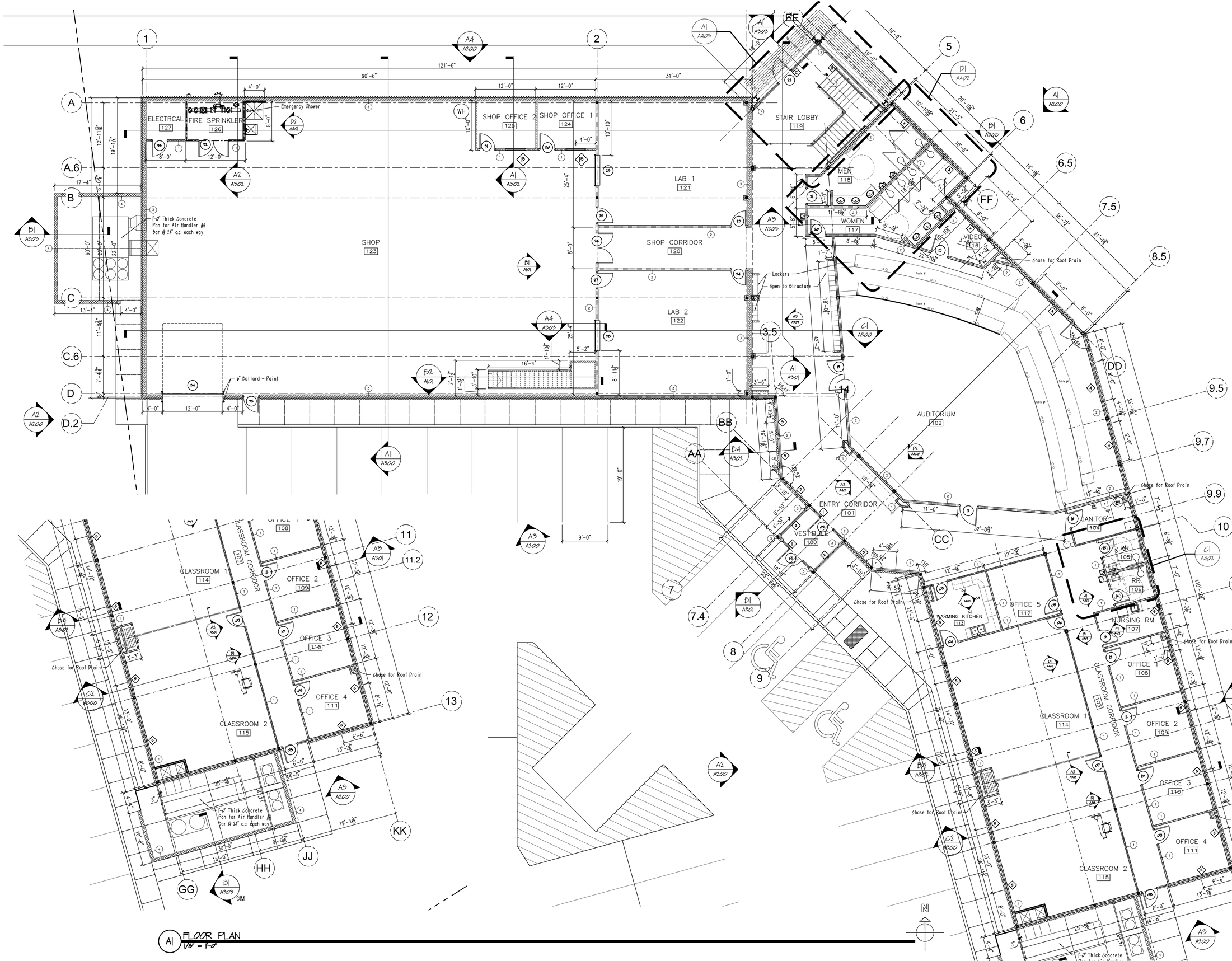
Drawing:
Site Plan

Date:
09-08-23

Project Number:
23-014

SHEET NUMBER:
AS101

DRAWN BY: Mike



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

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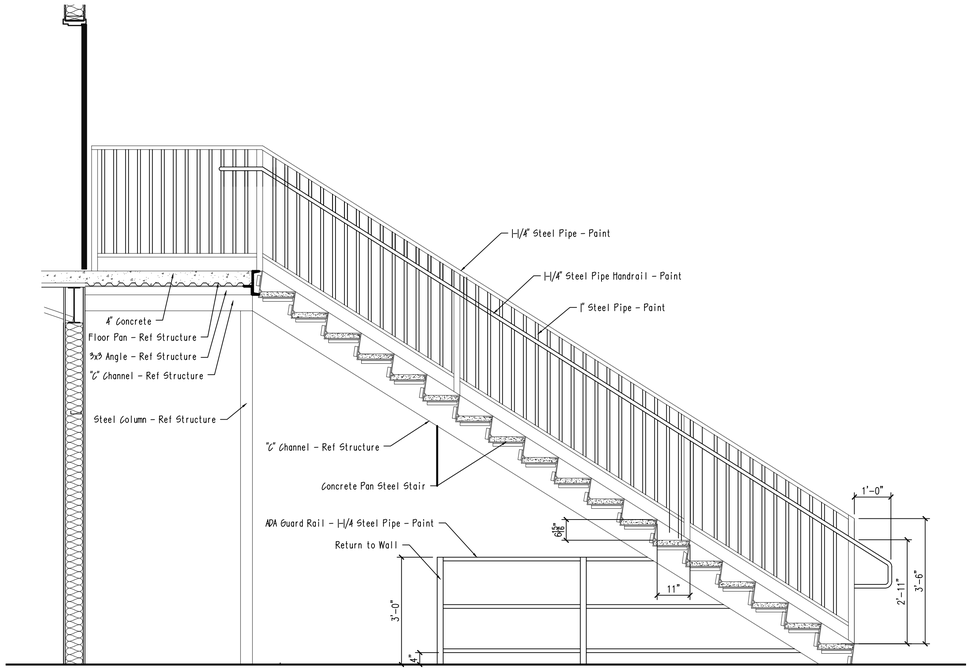
09/08/2023

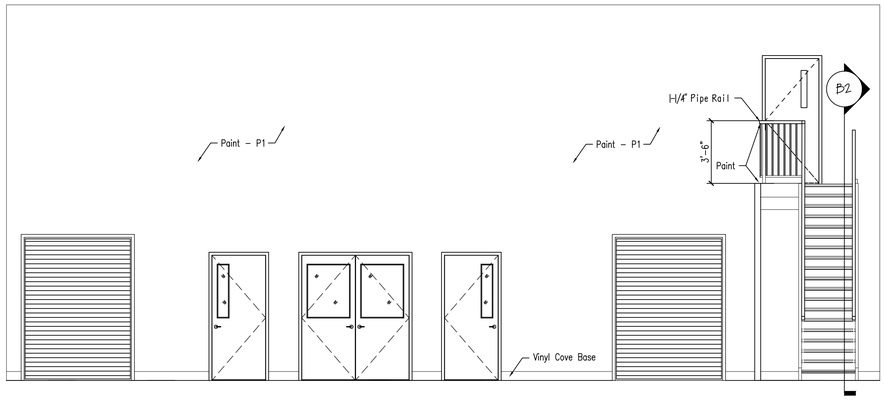
Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
Building Plan

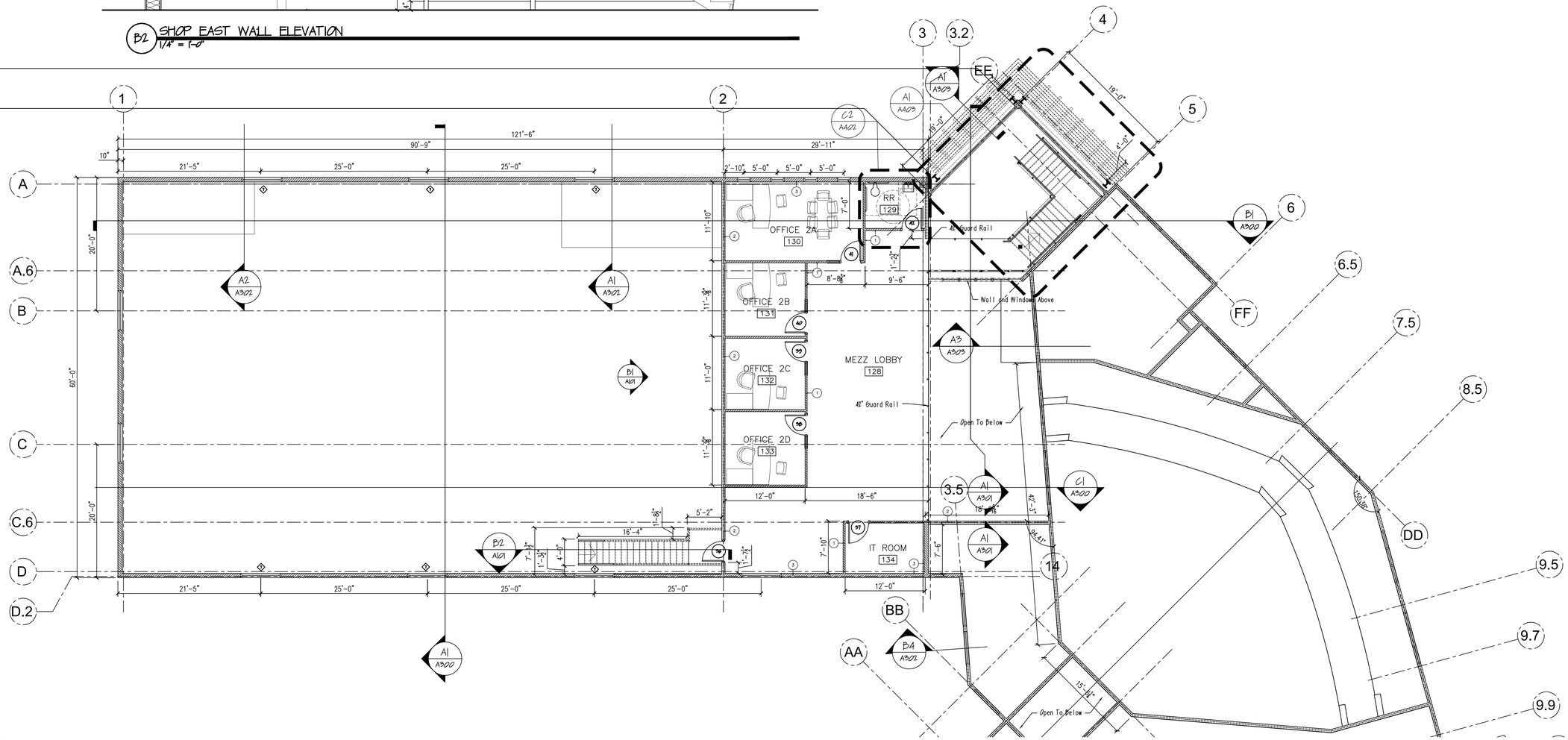
Date: 09-08-23
Project Number: 23-014
SHEET NUMBER: **A100**
DRAWN BY: Mike



B2 SHOP EAST WALL ELEVATION
1/4" = 1'-0"



B1 SHOP EAST WALL ELEVATION
1/4" = 1'-0"



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

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LLOYD M. MCCABE LICENSED 13,365 KANSAS ARCHITECT

09/08/2023

Revisions:

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

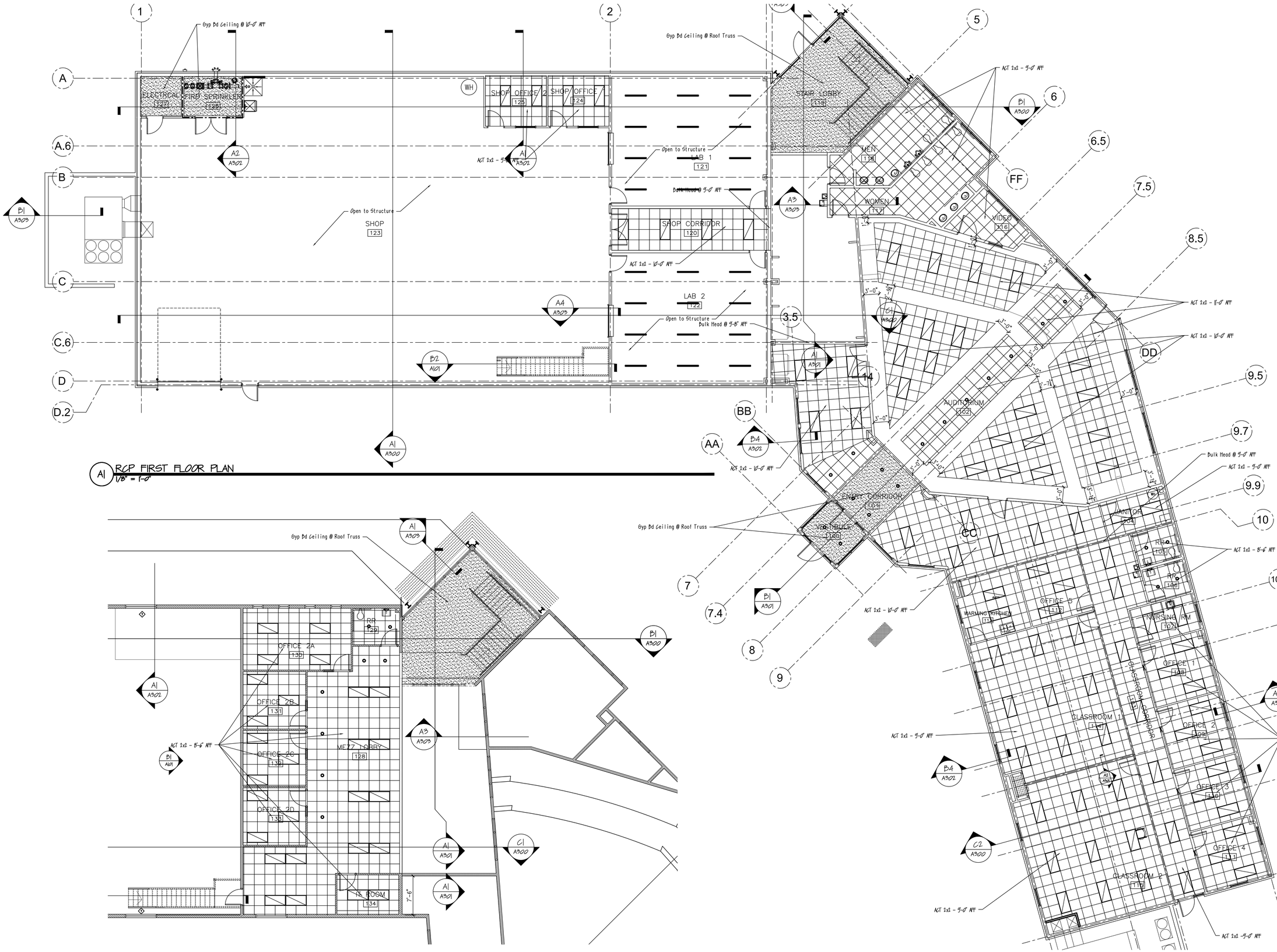
Drawing:
Mezzanine Plan

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
A101

DRAWN BY: Mike



A1 RCP FIRST FLOOR PLAN
1/8" = 1'-0"

A2 RCP MEZZANINE FLOOR PLAN
1/8" = 1'-0"

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09/08/2023

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

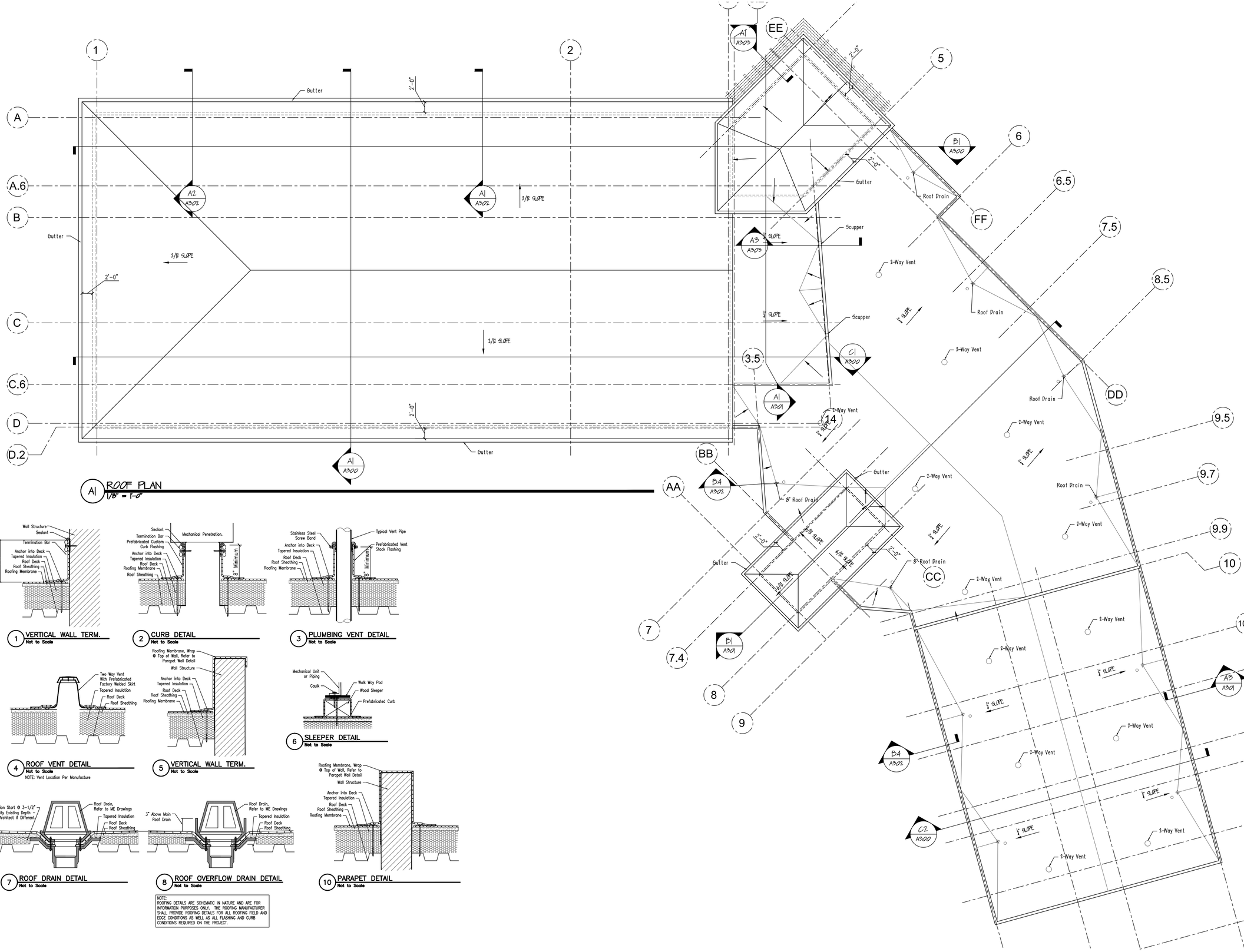
Drawing:
RCP Plan

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
A102

DRAWN BY: Mike



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

1 VERTICAL WALL TERM.
Not to Scale

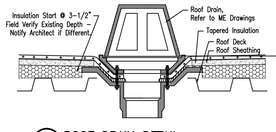
2 CURB DETAIL
Not to Scale

3 PLUMBING VENT DETAIL
Not to Scale

4 ROOF VENT DETAIL
Not to Scale
NOTE: Vent Location Per Manufacture

5 VERTICAL WALL TERM.
Not to Scale

6 SLEEPER DETAIL
Not to Scale



7 ROOF DRAIN DETAIL
Not to Scale

8 ROOF OVERFLOW DRAIN DETAIL
Not to Scale

NOTE:
ROOFING DETAILS ARE SCHEMATIC IN NATURE AND ARE FOR INFORMATION PURPOSES ONLY. THE ROOFING MANUFACTURER SHALL PROVIDE ROOFING DETAILS FOR ALL ROOFING FIELD AND EDGE CONDITIONS AS WELL AS ALL FLASHING AND CURB CONDITIONS REQUIRED ON THE PROJECT.

10 PARAPET DETAIL
Not to Scale

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09/08/2023

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

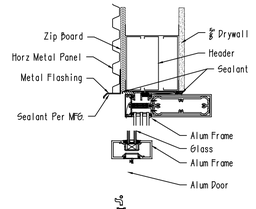
Drawing:
Roof Plan

Date: 09-08-23

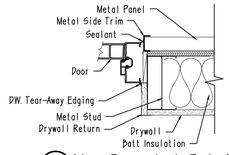
Project Number: 23-014

SHEET NUMBER:
A103

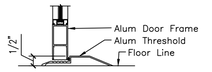
DRAWN BY: Mike



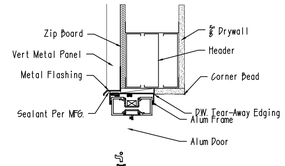
1 Alum Door Head Detail
H/2" = 1'-0"



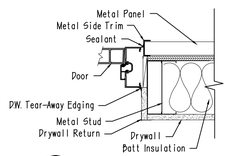
2 Alum Door Jamb Detail
H/2" = 1'-0"



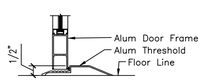
3 Alum Door Sill Detail
H/2" = 1'-0"



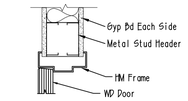
4 Alum Door Head Detail
H/2" = 1'-0"



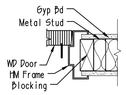
5 Alum Door Jamb Detail
H/2" = 1'-0"



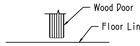
6 Alum Door Sill Detail
H/2" = 1'-0"



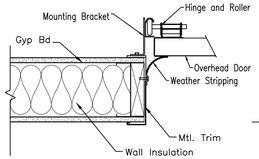
7 INTERIOR DOOR HEAD
H/2" = 1'-0"



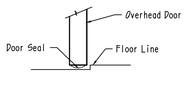
8 INTERIOR DOOR JAMB
H/2" = 1'-0"



9 INTERIOR DOOR SILL
H/2" = 1'-0"

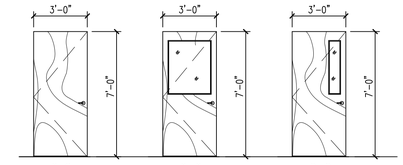


10 OVERHEAD DOOR JAMB
H/2" = 1'-0"

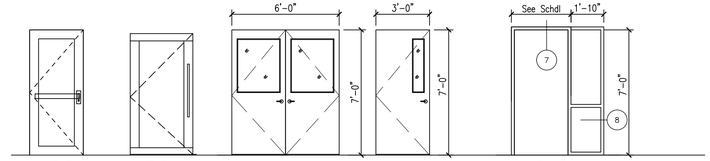


11 OVERHEAD DOOR SILL
H/2" = 1'-0"

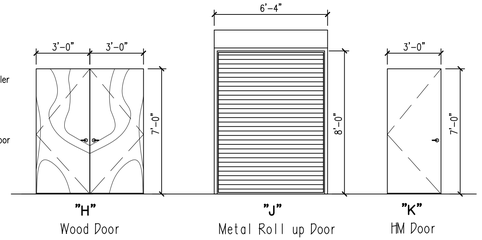
DOOR TYPES



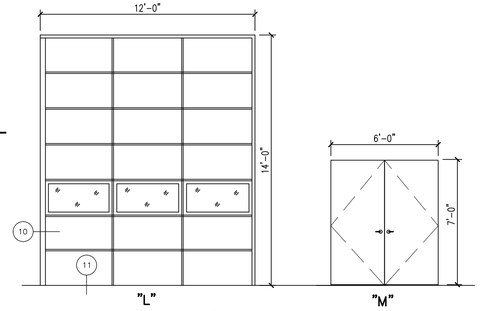
"A" Wood Door
"B" Wood Door
"C" Wood Door



"D" Alum Door
"E" Alum Door
"F" HM Door
"G" HM Door

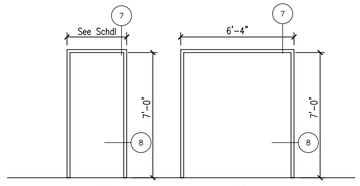


"H" Wood Door
"J" Metal Roll up Door
"K" HM Door



"L" Insulated Overhead Door
"M" HM Door

FRAME TYPES



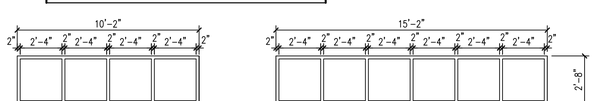
"AA" Hollow Metal Door Frame
"BB" Hollow Metal Door Frame

"CC" Hollow Metal Door Frame

DOOR AND FRAME SCHEDULE

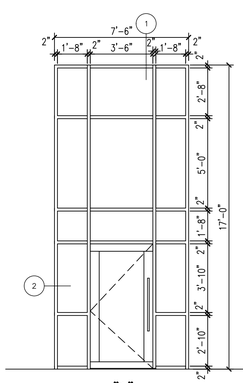
MARK	DOOR SIZE WD	DOOR SIZE HGT	DOOR SIZE THK	DOOR MATL	DOOR GLAZING	Door Elev	FRAME MATL	FRAME EL	FIRE RATING LABEL	Remarks
1	3'-6"	7'-0"	1 3/4"	ALUM	TEMP	E	ALUM	--	--	ADA Opener
2	3'-6"	7'-0"	1 3/4"	ALUM	TEMP	E	ALUM	--	--	ADA Opener
3	3'-0"	7'-0"	1 3/4"	WD	TEMP	C	HM	CC	--	--
4	3'-0"	7'-0"	1 3/4"	WD	TEMP	C	HM	CC	--	--
5	3'-0"	7'-0"	1 3/4"	WD	TEMP	C	HM	CC	--	--
6	3'-0"	7'-0"	1 3/4"	WD	TEMP	C	HM	CC	--	--
7	3'-0"	7'-0"	1 3/4"	WD	TEMP	C	HM	CC	--	--
8	3'-0"	7'-0"	1 3/4"	ALUM	TEMP	E	ALUM	--	--	--
9	3'-0"	7'-0"	1 3/4"	WD	TEMP	C	HM	CC	--	--
10	3'-0"	7'-0"	1 3/4"	WD	TEMP	C	HM	CC	--	--
11	3'-0"	7'-0"	1 3/4"	WD	TEMP	C	HM	CC	--	--
12	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
13	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
14	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
15	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
16	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
17	3'-6"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
18	6'-0"	7'-0"	1 3/8"	WD	--	H	HM	D	--	--
19	3'-6"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
20	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
21	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
22	3'-6"	7'-0"	1 3/4"	ALUM	TEMP	E	ALUM	--	--	ADA Opener
23	3'-0"	7'-0"	1 3/4"	WD	TEMP	C	HM	CC	--	--
24	3'-0"	7'-0"	1 3/4"	WD	TEMP	C	HM	CC	--	--
25	3'-0"	7'-0"	1 3/4"	HM	TEMP	G	HM	B	--	--
26	6'-0"	7'-0"	1 3/4"	HM	TEMP	F	HM	BB	--	--
27	3'-0"	7'-0"	1 3/4"	HM	TEMP	G	HM	B	--	--
28	6'-0"	8'-0"	1"	STEEL	--	J	STEEL	--	--	--
29	6'-0"	8'-0"	1"	STEEL	--	J	STEEL	--	--	--
30	3'-0"	7'-0"	1 3/4"	WD	TEMP	C	HM	CC	--	--
31	3'-0"	7'-0"	1 3/4"	WD	TEMP	C	HM	CC	60 MIN	--
32	6'-0"	8'-0"	1 3/4"	HM	--	E	HM	E	--	--
33	3'-0"	8'-0"	1 3/4"	HM	--	K	HM	AA	--	--
34	12'-0"	14'-0"	1 3/4"	STEEL	TEMP	L	STEEL	--	--	--
35	3'-0"	8'-0"	1 3/4"	ALUM	TEMP	E	ALUM	--	--	--
36	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
37	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
38	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
39	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
40	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
41	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--
42	3'-0"	7'-0"	1 3/4"	WD	--	A	HM	AA	--	--

WiNDOW TYPES

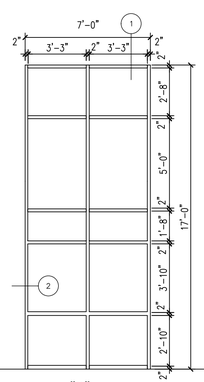


"6" Alum Frame

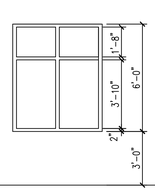
"9" Alum Frame



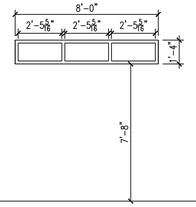
"1" Alum Frame - Manco 250xpt Curtain Wall - 6"



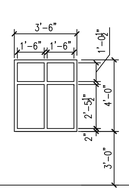
"2" Alum Frame - Manco 250xpt Curtain Wall - 6"



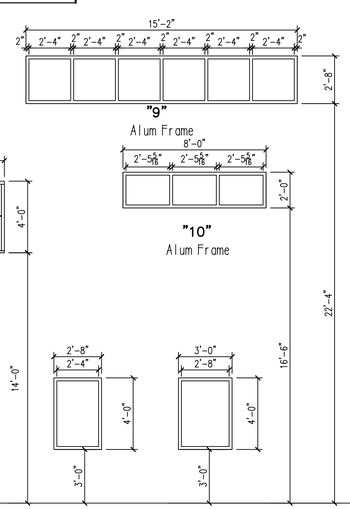
"3" Alum Frame



"4" Alum Frame



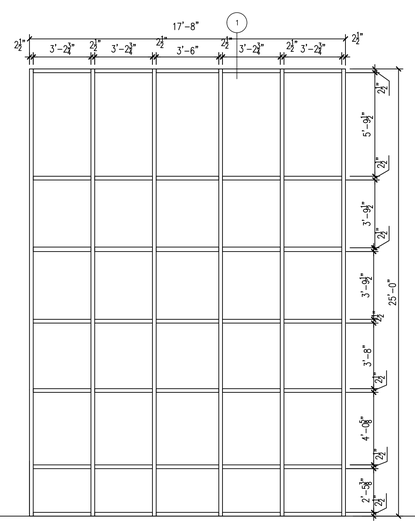
"5" Alum Frame



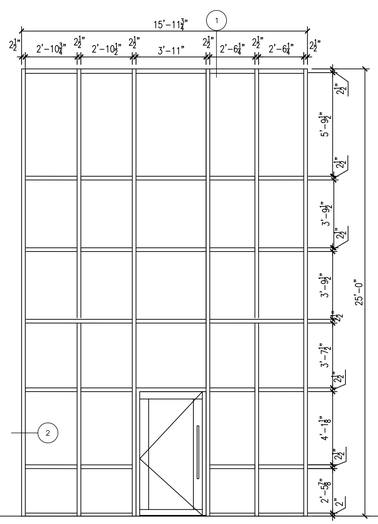
"7" Kalwall
"10" Alum Frame

"8" Alum Frame

"13" Alum Frame



"11" Alum Frame - Manco 250xpt Curtain Wall - 6"



Alum Frame - Manco 250xpt Curtain Wall - 6"

General Notes:

1. All Exterior Window and Door Glass to be Tinted.

Revisions:

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LLOYD M. MCCABE LICENSED KANSAS ARCHITECT 13,385
09/08/2023

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
Door Schedule
Window Schedule

Date: 09-08-23
Project Number: 23-014
SHEET NUMBER: **A104**
DRAWN BY: Mike

EXTERIOR FINISH LEGEND

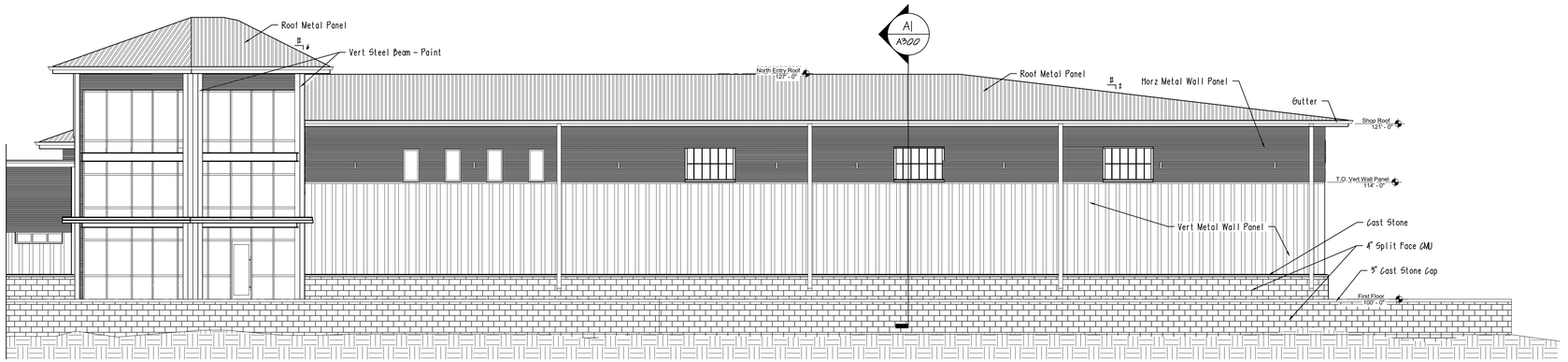
Exterior Finishes:

Metal Panel:
- Horizontal Panel – MBCI – Masterline 16 – Color – Brite Red
- Vertical Panel – MBCI – PBU – Color – Ash Gray
- Roof Panel – Entry Roofs – MBCI – Battenlock HS – 12" width
  Color – Brite Red
- Shop Roof – MBCI – Battenlock HS – 16" width
  Color: – Polar White

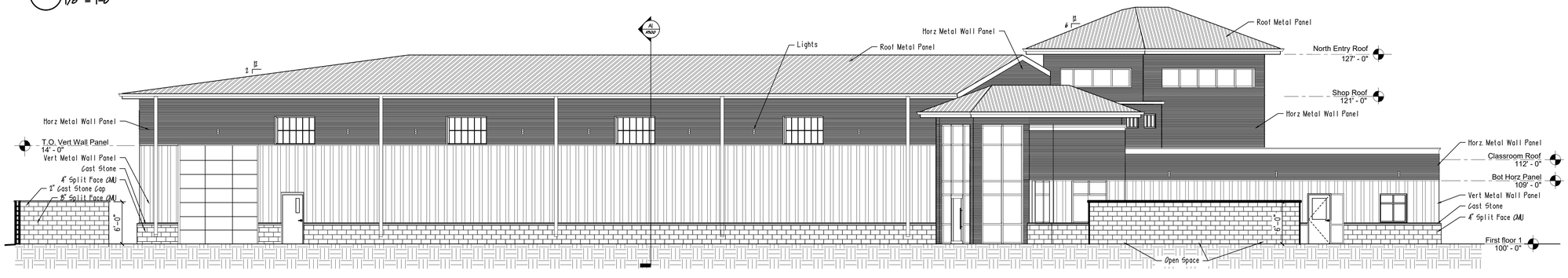
CMU Block:
- Midwest Block & Brick – Athenia Split Face Block – 4" x 8" x 16" – Color Slate

Metal Parapet Cap:
- Metal – See detail – Color Brite Red to match horizontal Panel.

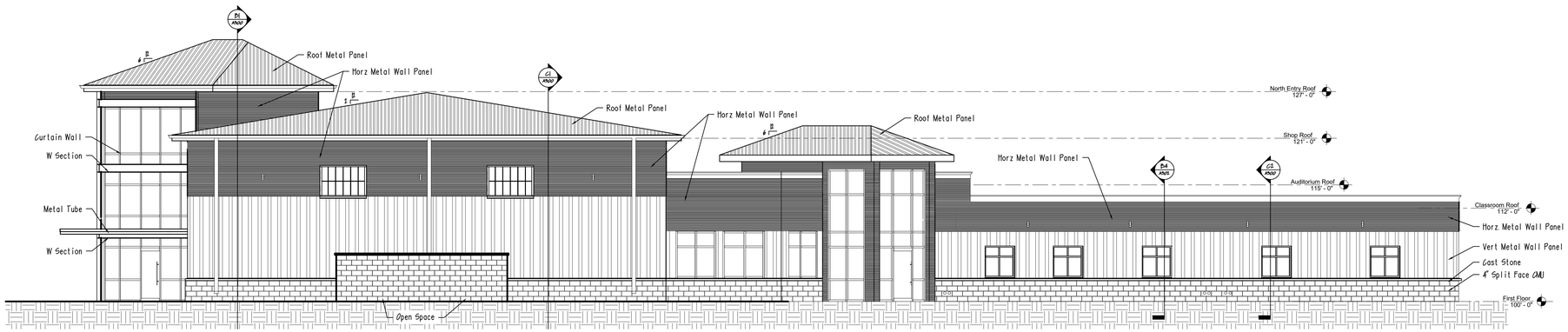
Cast Stone Cap:
- Wainscot Sill – Architectural Cast Stone, Inc. – S-600 – Gray – See Wall Detail for Dimensions



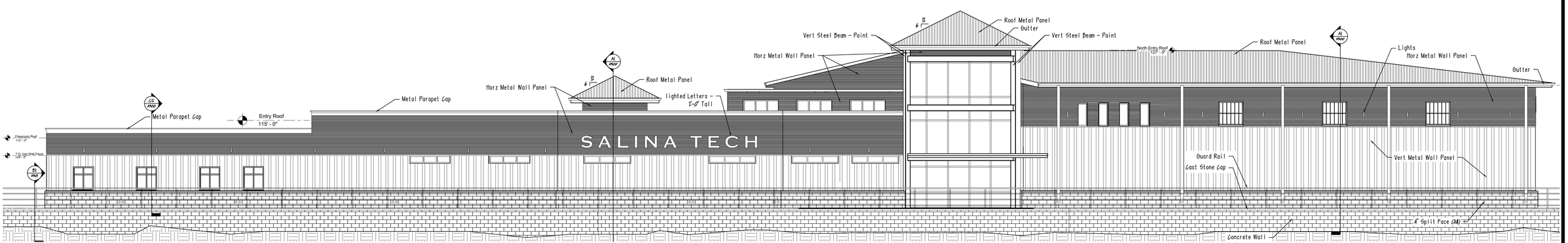
A4 EXTERIOR ELEVATION
1/8" = 1'-0"



A3 EXTERIOR ELEVATION
1/8" = 1'-0"



A2 EXTERIOR ELEVATION
1/8" = 1'-0"



A1 EXTERIOR ELEVATION
1/8" = 1'-0"

Revisions:

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LLOYD M. MCCLARD LICENSED 13365 KANSAS ARCHITECT

09/08/2023

Salina Area Tech – Industrial Maintenance & Automation Building
Salina, Kansas

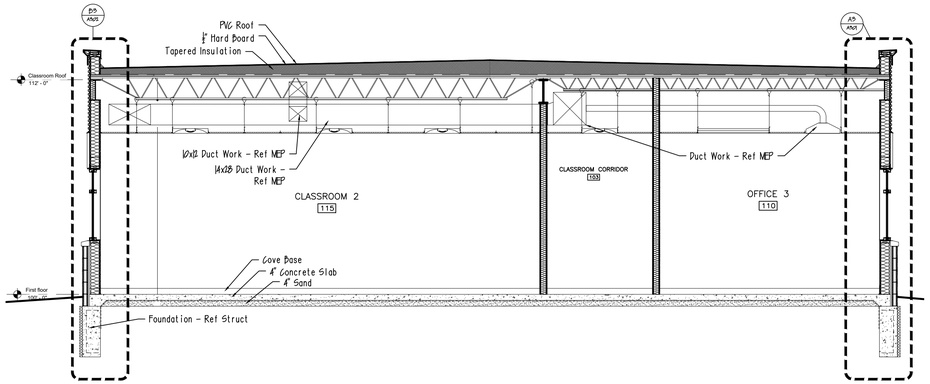
Drawing:
Exterior Elevations

Date: 09-08-23

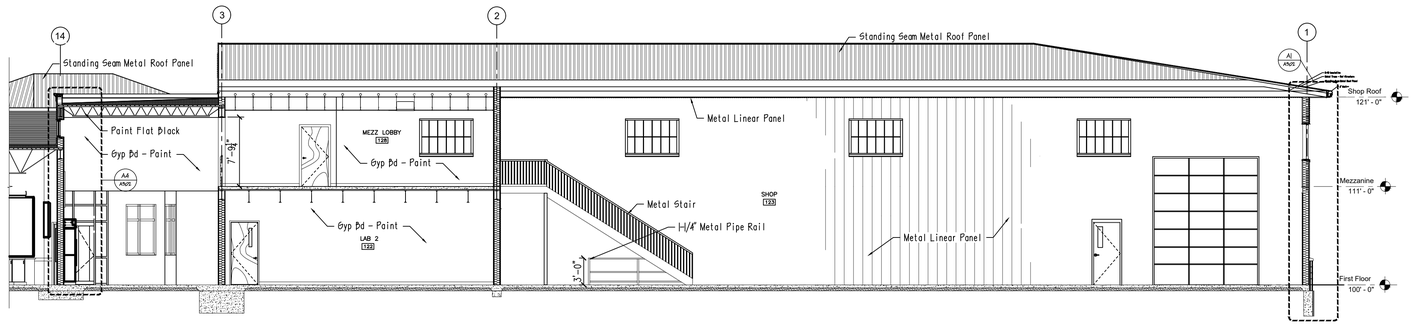
Project Number: 23-014

SHEET NUMBER:
A200

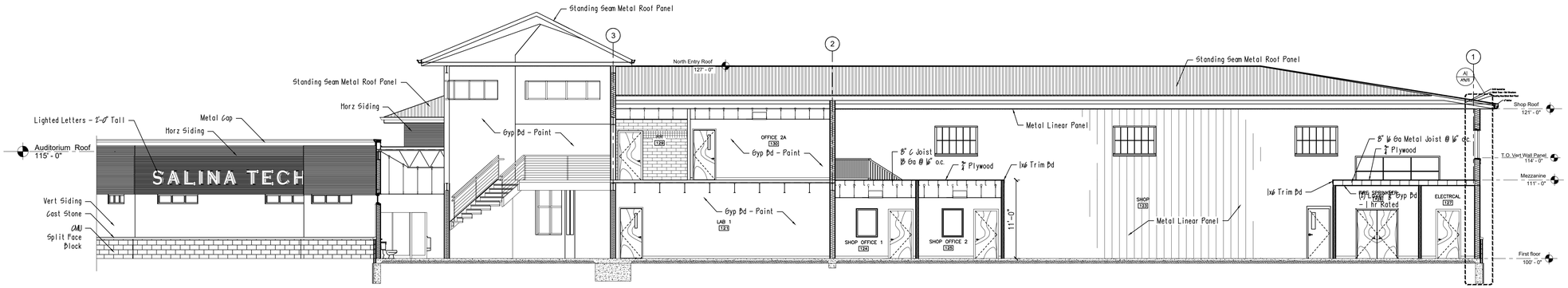
DRAWN BY: Mike



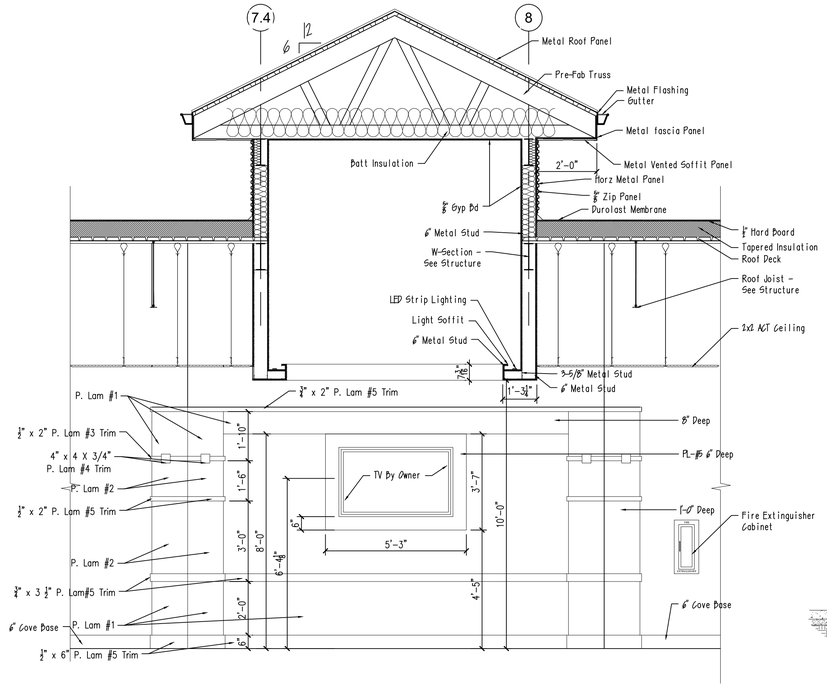
C2 BUILDING SECTION
1/4" = 1'-0"



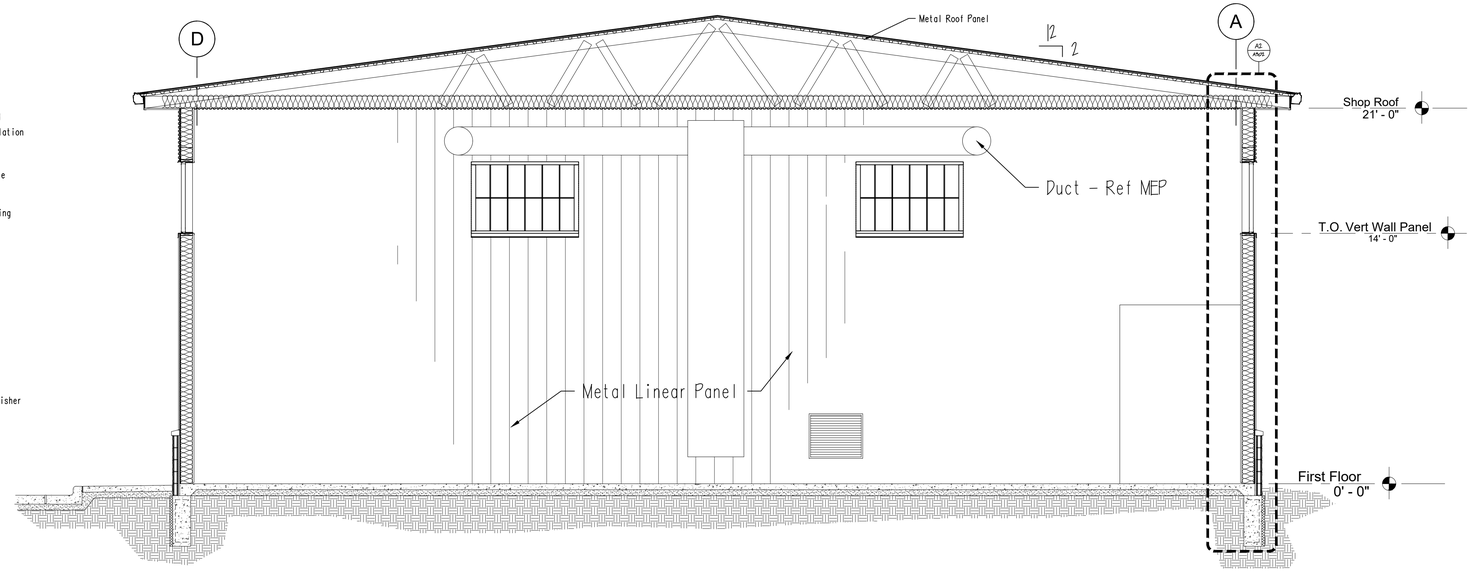
C1 BUILDING SECTION
1/8" = 1'-0"



B1 BUILDING SECTION
1/8" = 1'-0"



A2 FRONT ENTRY HALL SECTION/ELEVATION
3/8" = 1'-0"



A1 SHOP BUILDING SECTION
1/4" = 1'-0"

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LLOYD M. MCCLARD LICENSED 13,365 KANSAS ARCHITECT

09/08/2023

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

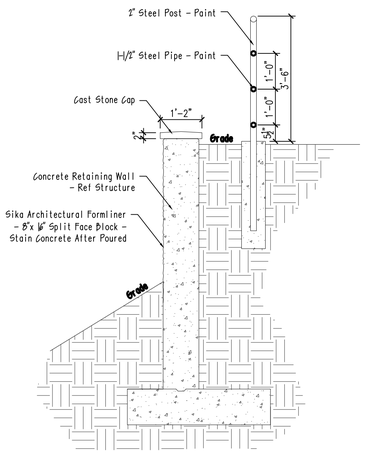
Drawing:
Building Sections

Date: 09-08-23

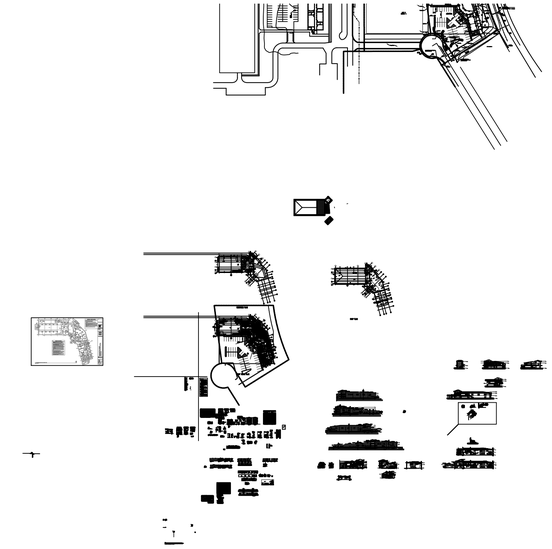
Project Number: 23-014

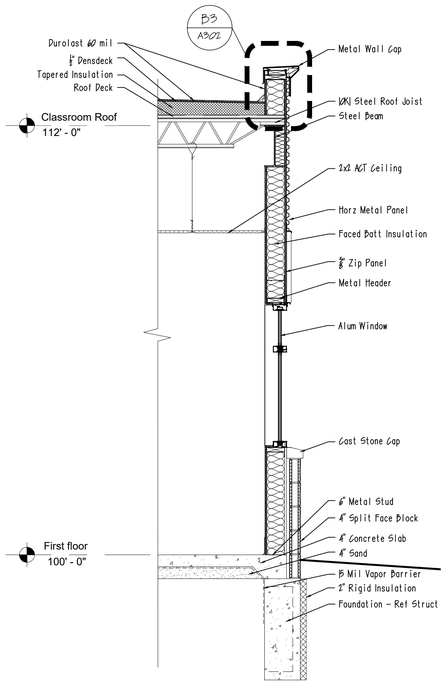
SHEET NUMBER:
A300

DRAWN BY: Mike

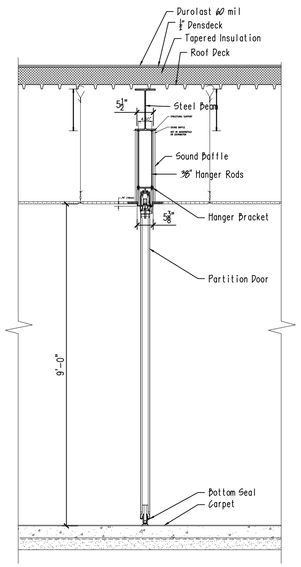


B2 RETAINING WALL SECTION
1/2" = 1'-0"

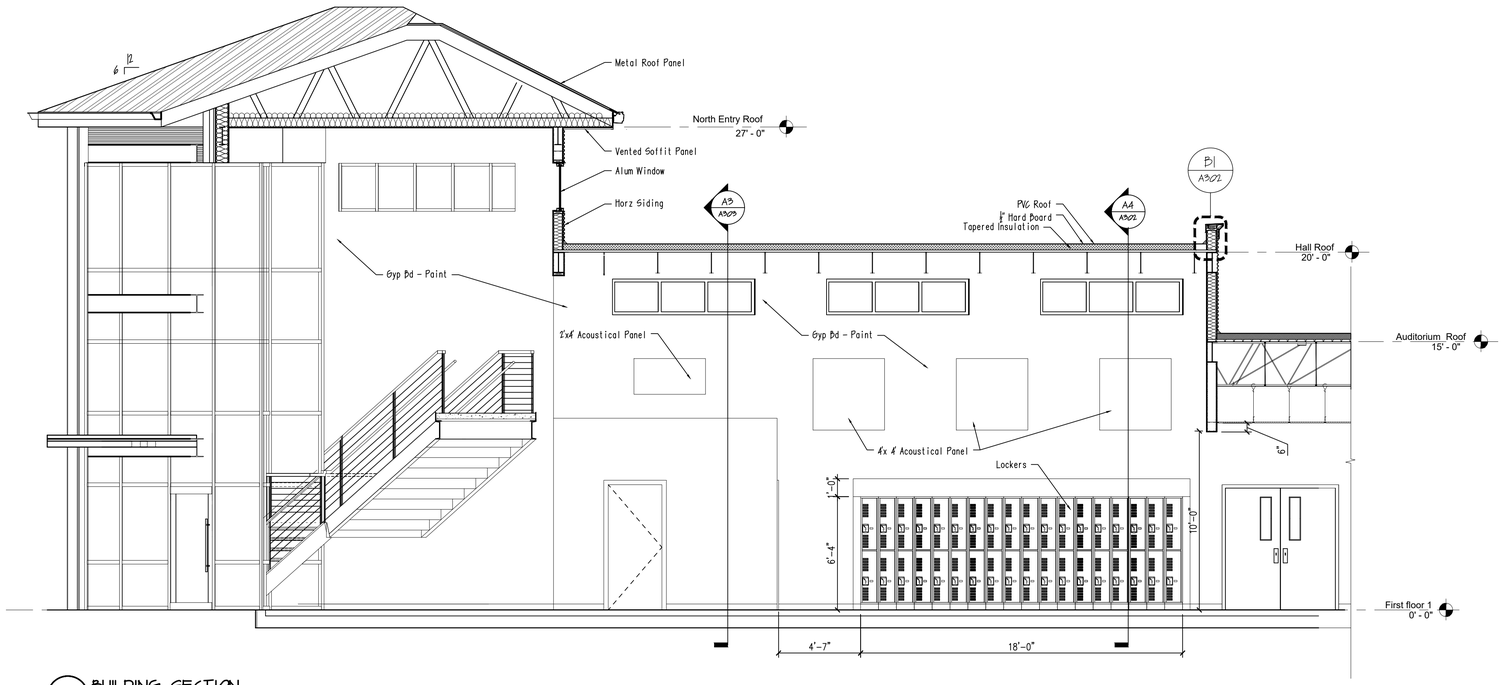




B3 CLASSROOM EAST WALL SECTION
1/2" = 1'-0"



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



B1 BUILDING SECTION
1/4" = 1'-0"

A1 BUILDING SECTION
1/4" = 1'-0"

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LLOYD M. MCCARL LICENSED KANSAS ARCHITECT 13,365

09/08/2023

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

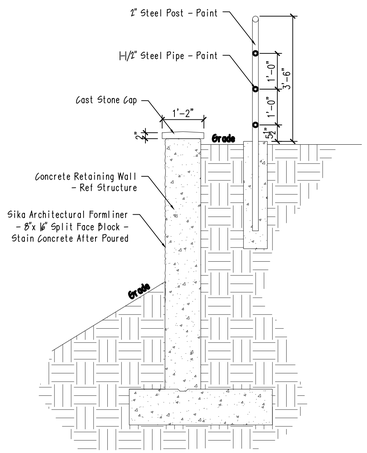
Drawing:
Building Sections

Date: 09-08-23

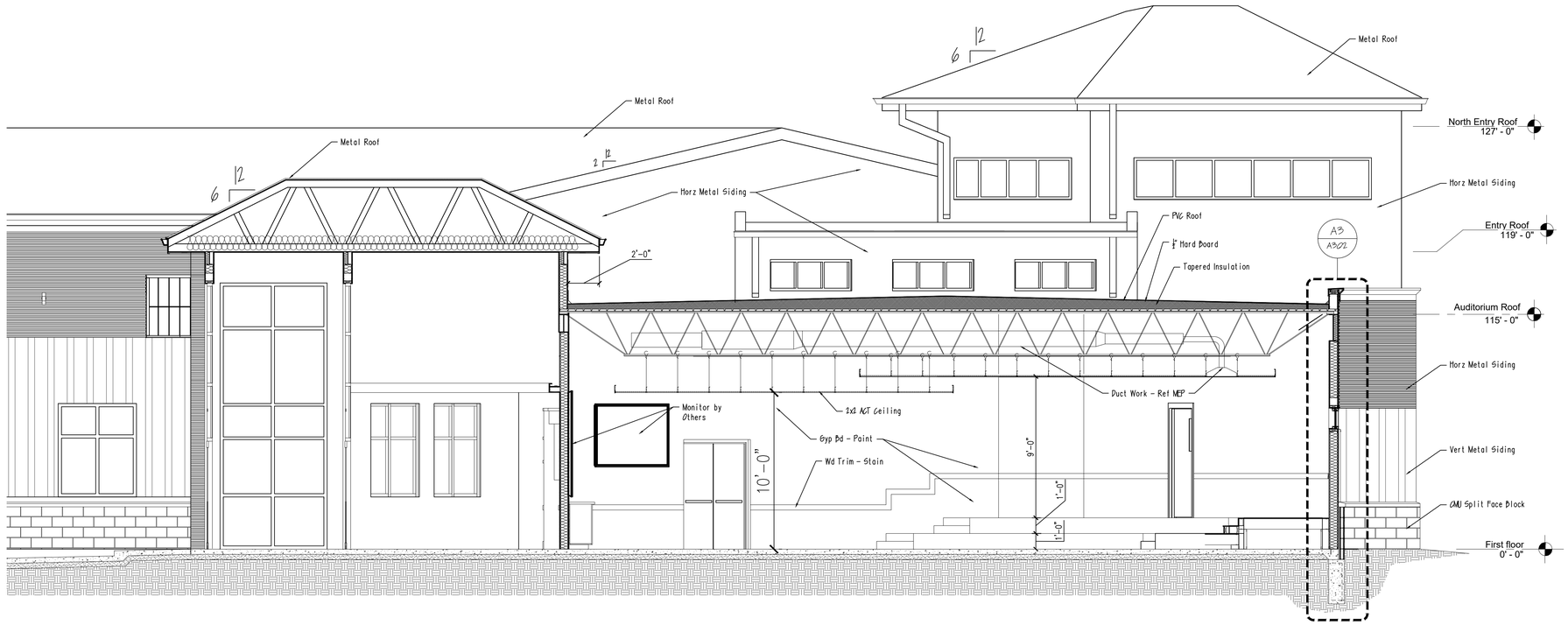
Project Number: 23-014

SHEET NUMBER:
A301

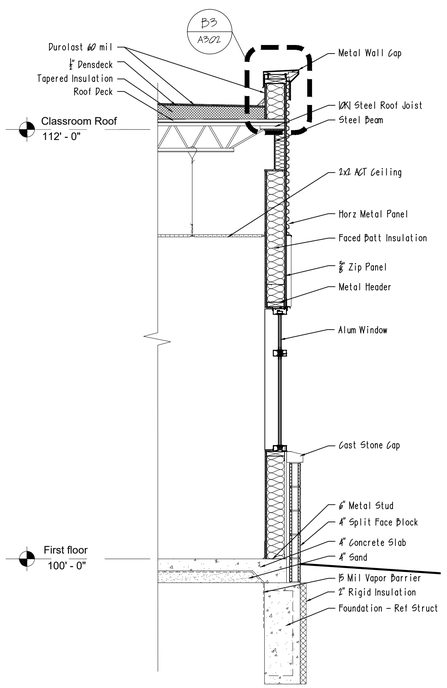
DRAWN BY: Mike



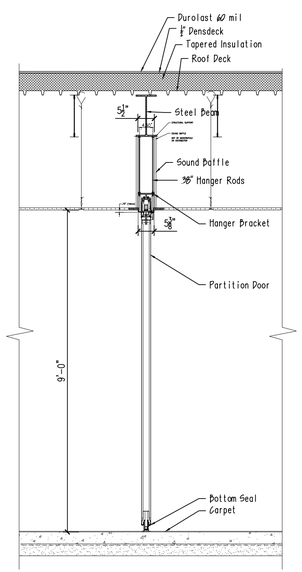
B2 RETAINING WALL SECTION
1/2" = 1'-0"



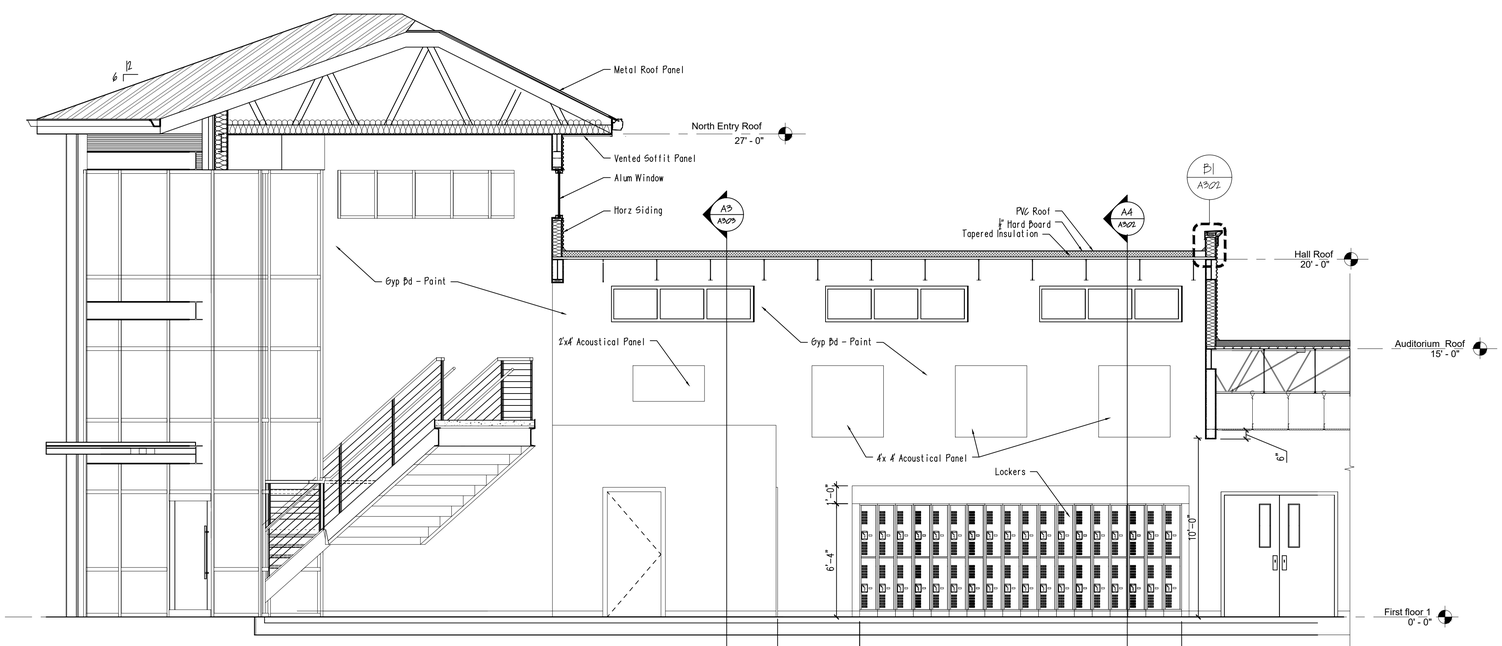
B1 BUILDING SECTION
1/4" = 1'-0"



B3 CLASSROOM EAST WALL SECTION
1/2" = 1'-0"



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



A1 BUILDING SECTION
1/4" = 1'-0"

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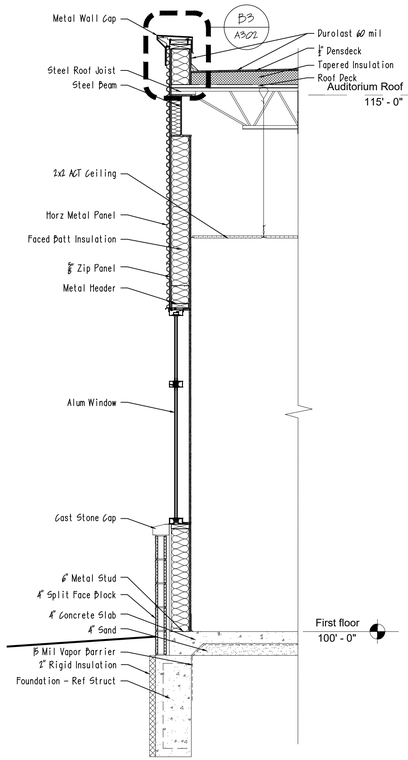
LLOYD M. MCCABE LICENSED KANSAS ARCHITECT 13,385
09/08/2023

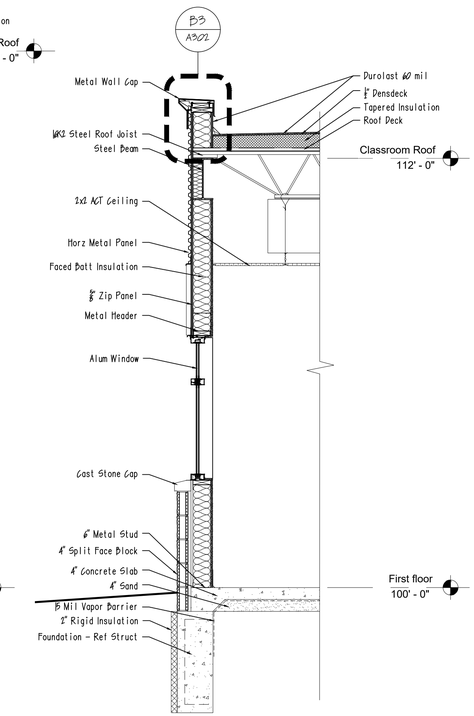
Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
Building Sections

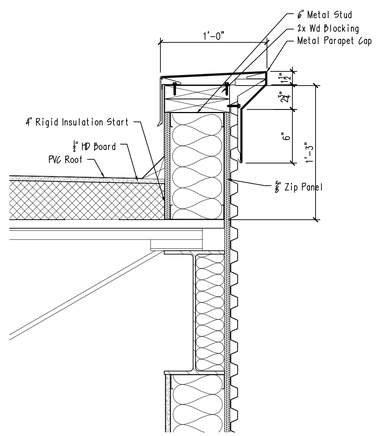
Date: 09-08-23
Project Number: 23-014
SHEET NUMBER: **A301**
DRAWN BY: Mike



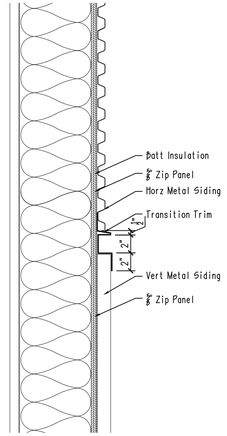
B5 WALL SECTION @ AUDOTPRIUM CORRDIOR
1/2" = 1'-0"



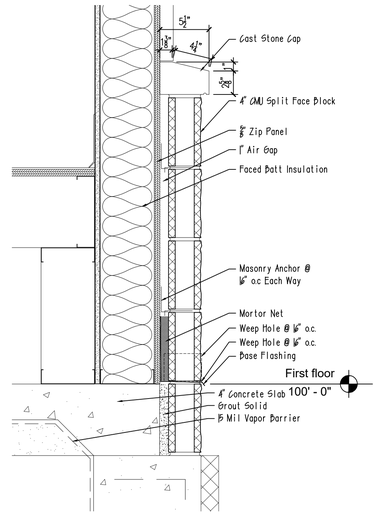
B4 WALL SECTION @ CLASSROOM
1/2" = 1'-0"



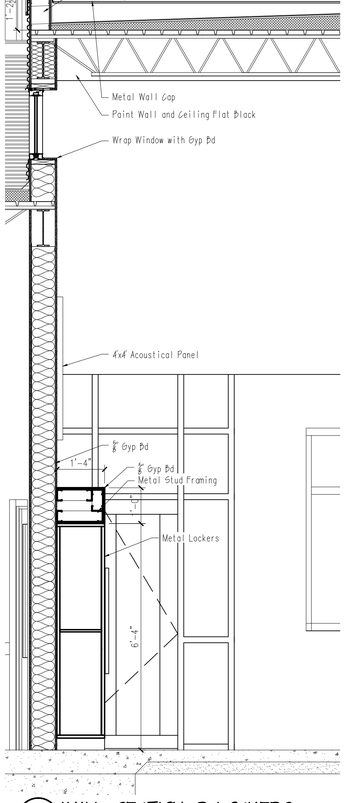
B3 PARAPET CAP DETAIL
1-1/2" = 1'-0"



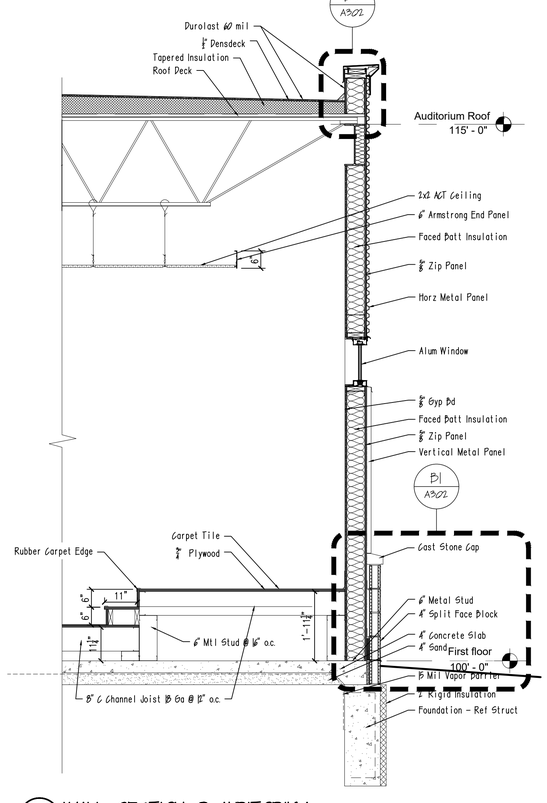
B2 METAL PANEL TRANSITION DETAIL
1-1/2" = 1'-0"



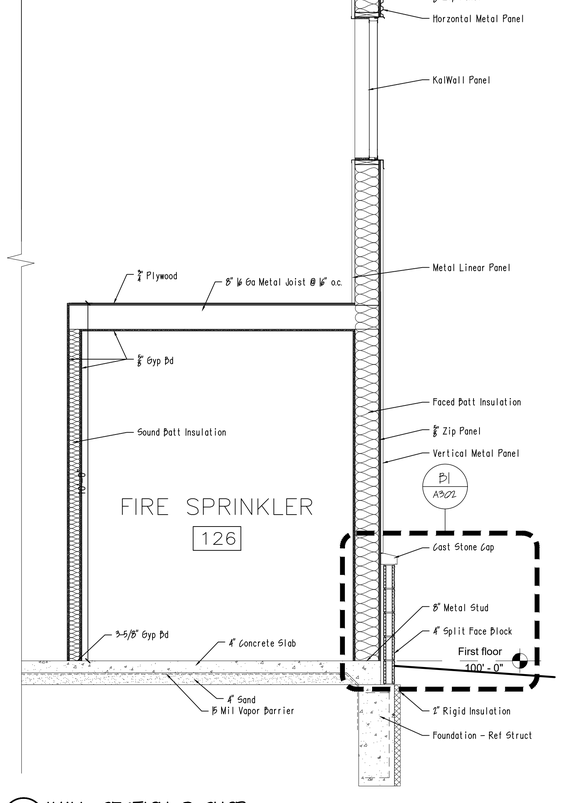
B1 PARAPET CAP DETAIL
1-1/2" = 1'-0"



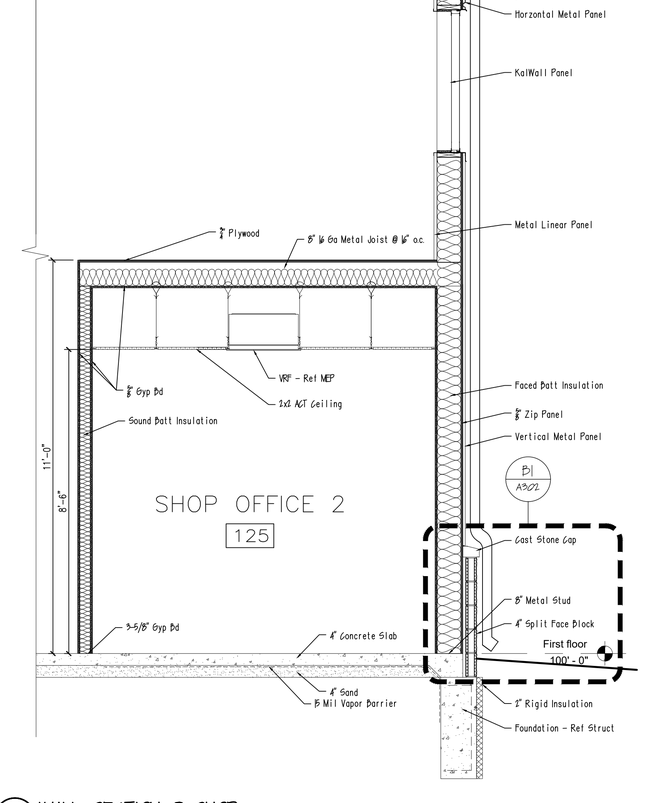
A4 WALL SECTION @ LOCKERS
1/2" = 1'-0"



A3 WALL SECTION @ AUDITORIUM
1/2" = 1'-0"



A2 WALL SECTION @ SHOP
1/2" = 1'-0"



A1 WALL SECTION @ SHOP
1/2" = 1'-0"

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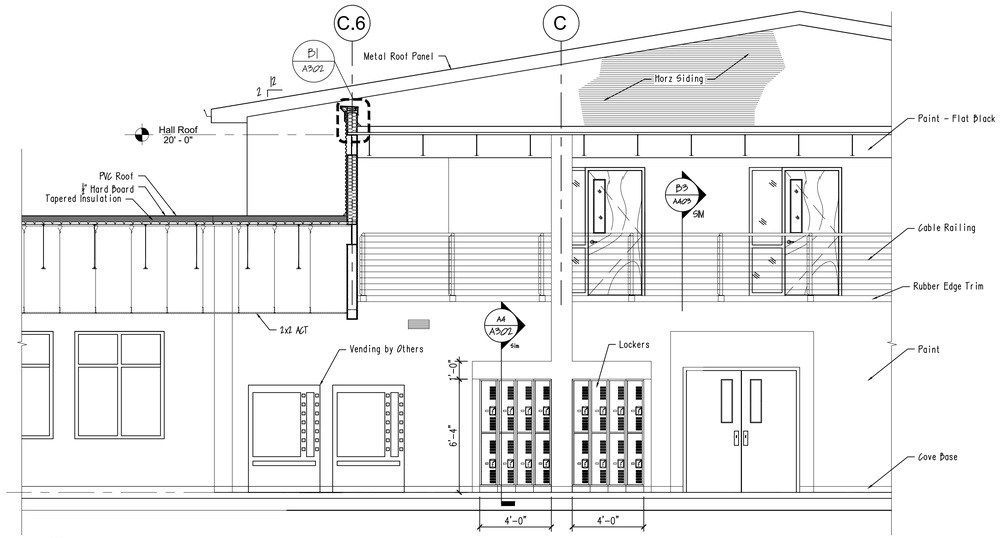
LLOYD M. MCCARTY
LICENSED
13,365
KANSAS
ARCHITECT

09/08/2023

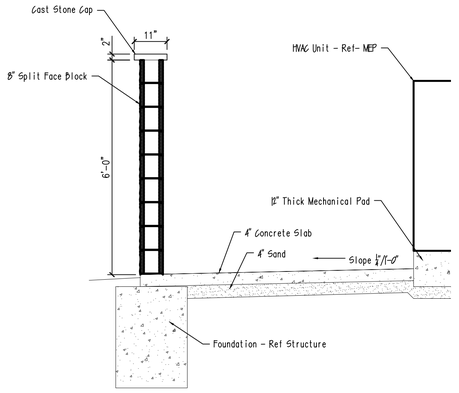
Salina Area Tech -
Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
Building Sections

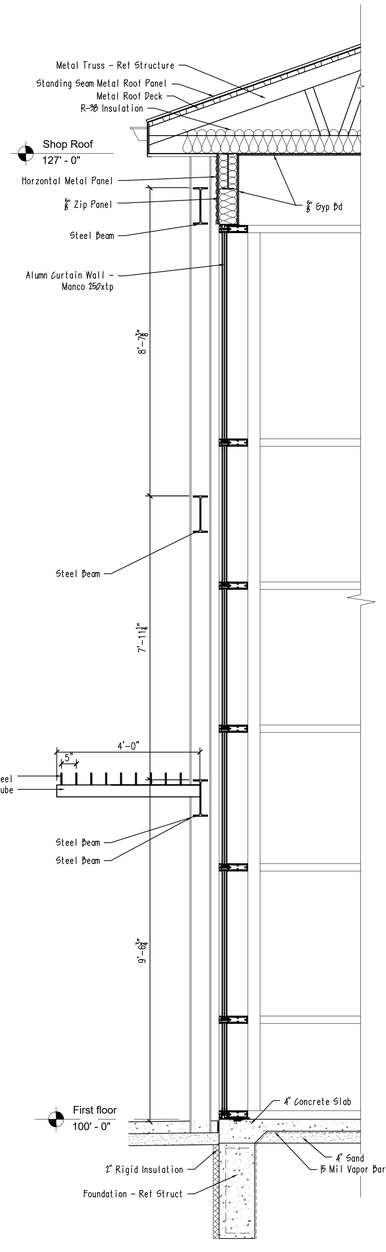
Date: 09-08-23
Project Number: 23-014
SHEET NUMBER:
A302
DRAWN BY: Mike

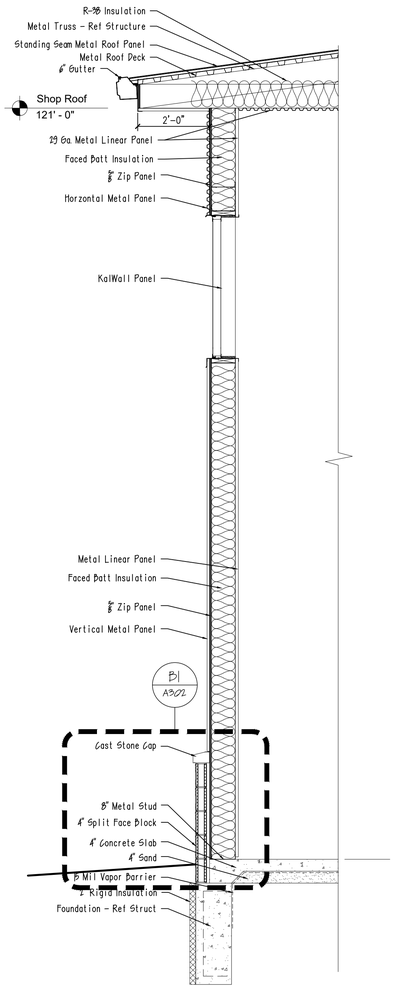


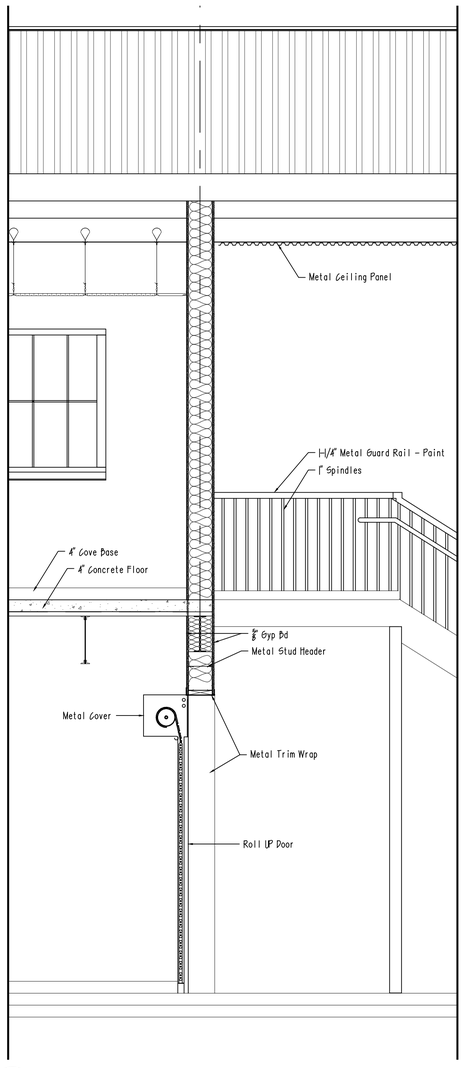
B2 CORRIDOR SECTION/ELEVATION
1/4" = 1'-0"



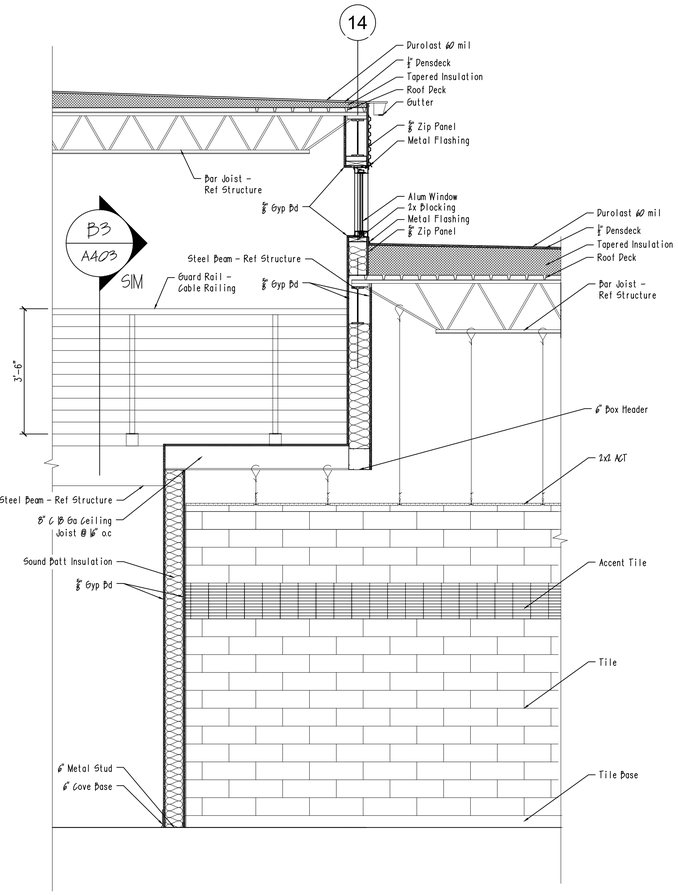
B1 MECHANICAL ENCLOSURE
1/2" = 1'-0"







A4 WALL SECTION @ ROLL UP DOOR
1/2" = 1'-0"



A3 WALL SECTION WOMEN'S RESTROOM
1/2" = 1'-0"

A2 WALL SECTION @ SHOP
1/2" = 1'-0"

A1 WALL SECTION @ SHOP
1/2" = 1'-0"

Revisions:

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LLOYD M. MCCABE LICENSED 13,386 KANSAS ARCHITECT

09/08/2023

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

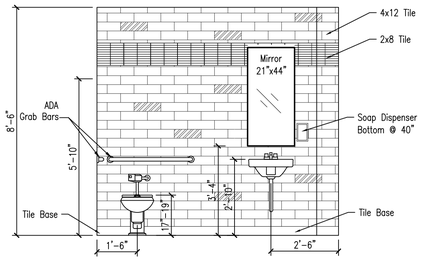
Drawing:
Building Sections

Date: 09-08-23

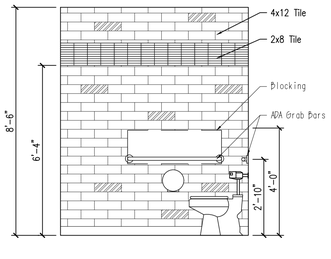
Project Number: 23-014

SHEET NUMBER:
A303

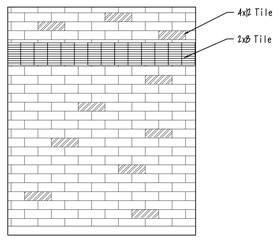
DRAWN BY: Mike



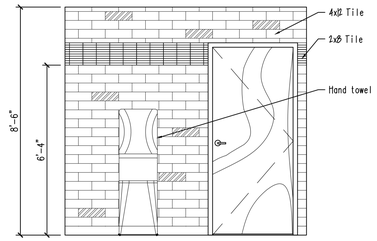
E4 2ND FLOOR UNISEX RESTROOM
3/8" = 1'-0"



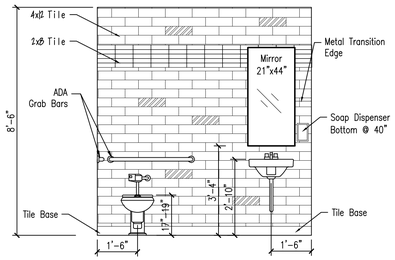
E3 2ND FLOOR UNISEX RESTROOM
3/8" = 1'-0"



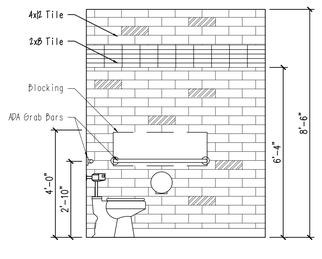
E2 2ND FLOOR UNISEX RESTROOM
3/8" = 1'-0"



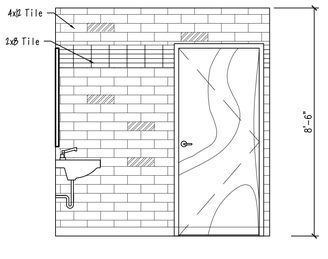
E1 2ND FLOOR UNISEX RESTROOM
3/8" = 1'-0"



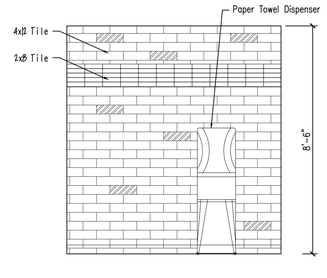
D4 1ST FLOOR UNISEX RESTROOM
3/8" = 1'-0"



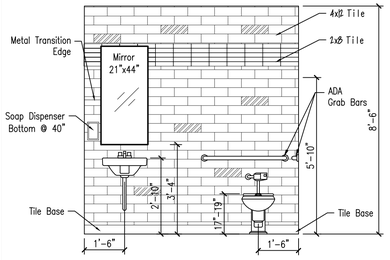
D3 1ST FLOOR UNISEX RESTROOM
3/8" = 1'-0"



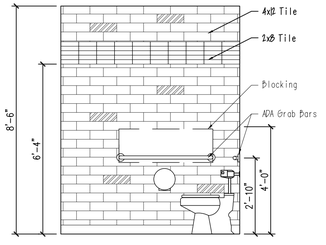
D2 1ST FLOOR UNISEX RESTROOM
3/8" = 1'-0"



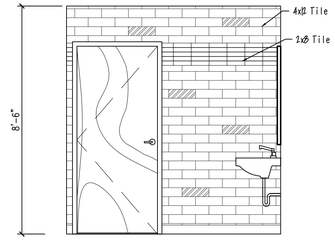
D1 1ST FLOOR UNISEX RESTROOM
3/8" = 1'-0"



C4 1ST FLOOR UNISEX RESTROOM
3/8" = 1'-0"



C3 1ST FLOOR UNISEX RESTROOM
3/8" = 1'-0"



C2 1ST FLOOR UNISEX RESTROOM
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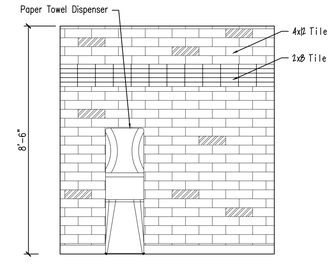
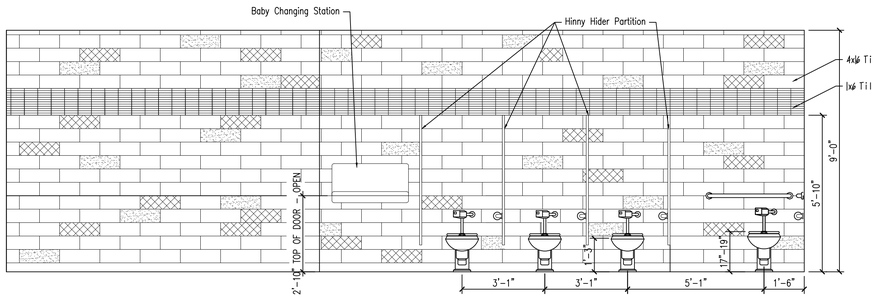
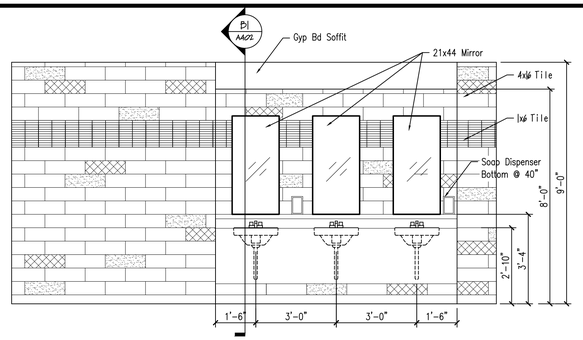


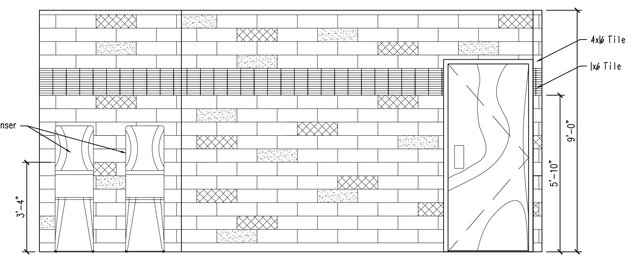
C1 1ST FLOOR UNISEX RESTROOM
3/8" = 1'-0"



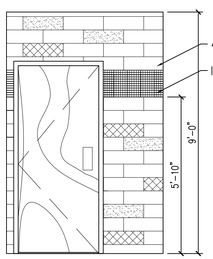
B3 WOMEN RESTROOM ELEVATION
3/8" = 1'-0"



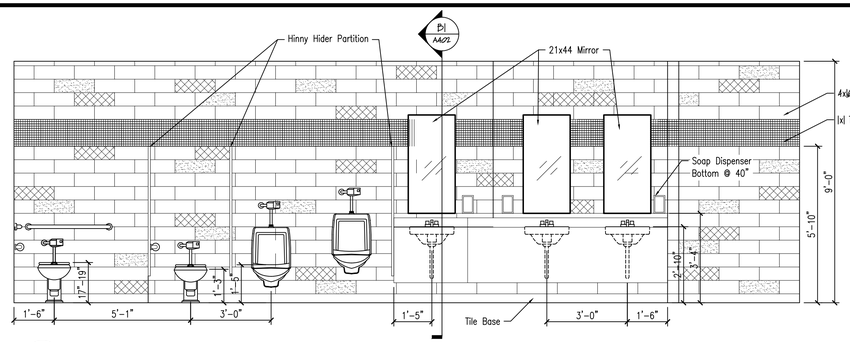
B2 WOMEN RESTROOM ELEVATION
3/8" = 1'-0"



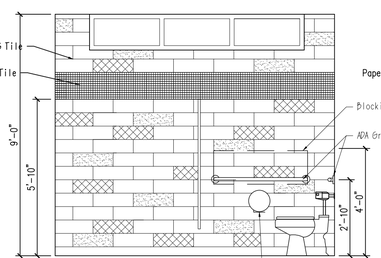
B1 WOMEN RESTROOM ELEVATION
3/8" = 1'-0"



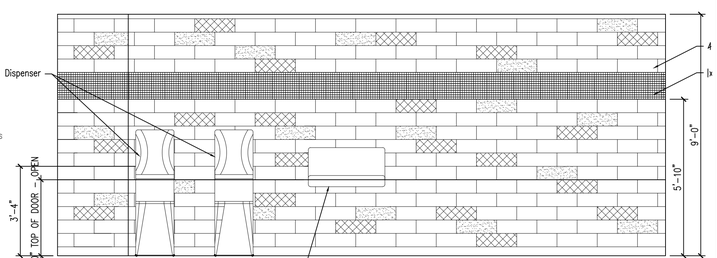
A4 MEN RESTROOM ELEVATION
3/8" = 1'-0"



A3 MEN RESTROOM ELEVATION
3/8" = 1'-0"



A2 MEN RESTROOM ELEVATION
3/8" = 1'-0"



A1 MEN RESTROOM ELEVATION
3/8" = 1'-0"

Revisions:

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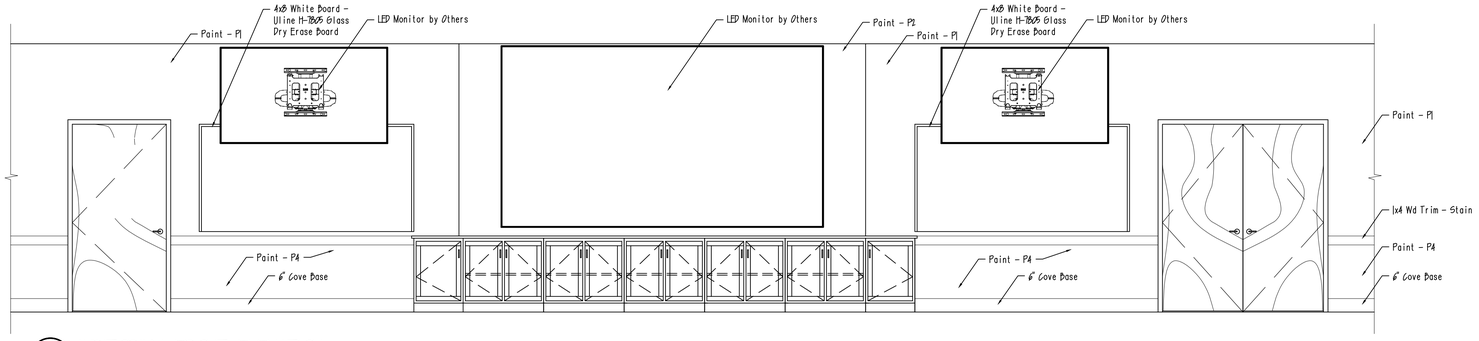
KANSAS
ARCHITECT
09/08/2023

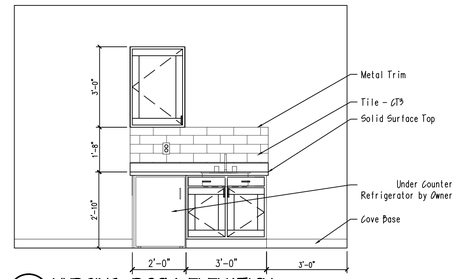
Salina Area Tech -
Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
Interior Elevations

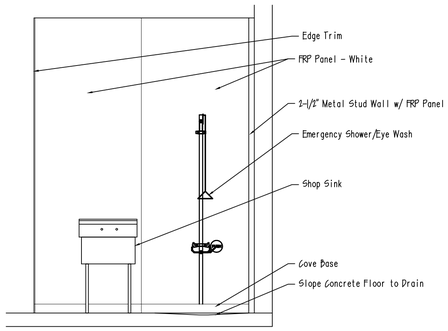
Date: 09-08-23
Project Number: 23-014
SHEET NUMBER: **A400**
DRAWN BY: Mike



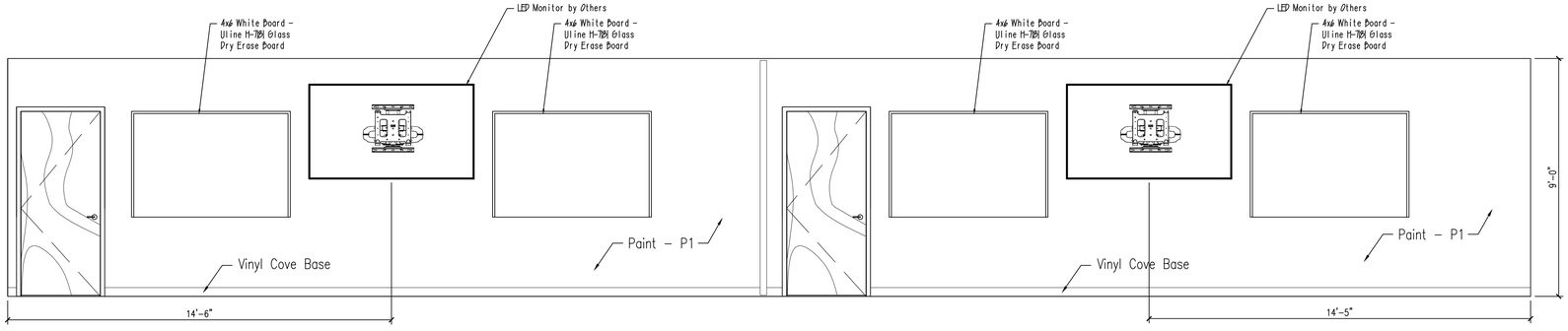
E1 AUDITORIUM FRONT ELEVATION
3/8" = 1'-0"



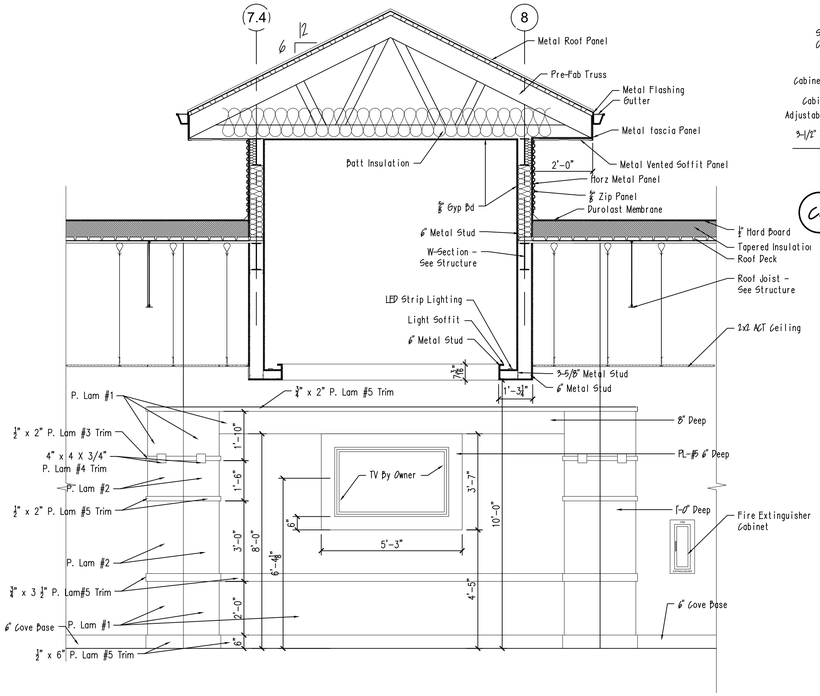
E1 NURSING ROOM ELEVATION
3/8" = 1'-0"



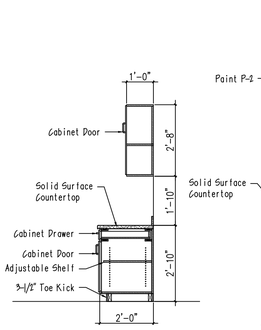
D2 SHOP EMERGENCY SHOWER/SINK ELEVATION
3/8" = 1'-0"



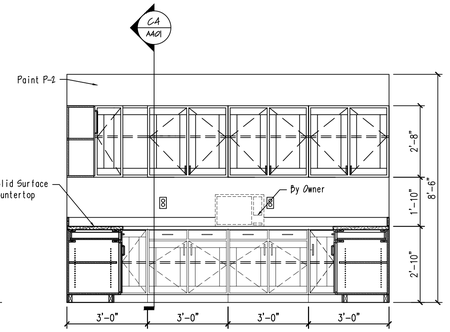
D1 CLASSROOM ELEVATION
3/8" = 1'-0"



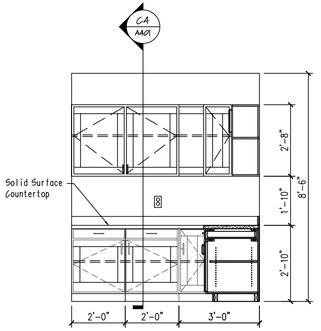
A2 ENTERIOR ENTRY ELEVATION
3/8" = 1'-0"



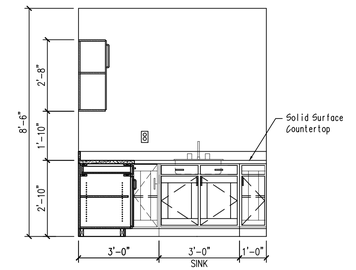
C4 CABINET SECTION
3/8" = 1'-0"



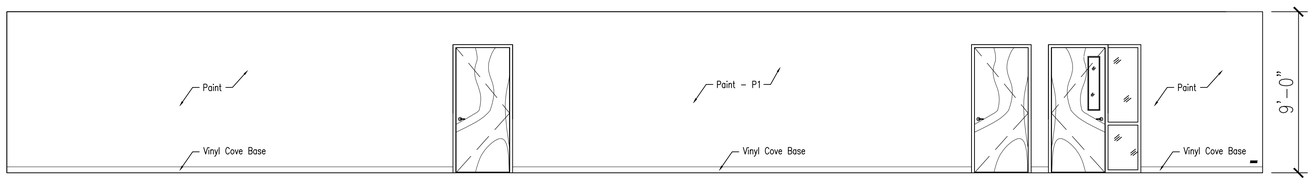
C3 INTERIOR WARMING KITCHEN ELEVATION
3/8" = 1'-0"



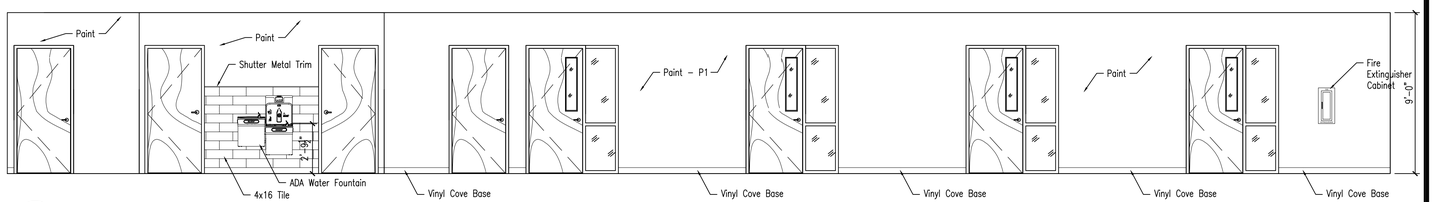
C2 INTERIOR WARMING KITCHEN ELEVATION
3/8" = 1'-0"



C1 INTERIOR WARMING KITCHEN ELEVATION
3/8" = 1'-0"



B1 INTERIOR CORRIDOR ELEVATION
1/4" = 1'-0"



A1 INTERIOR CORRIDOR ELEVATION
1/4" = 1'-0"

Revisions:

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LLOYD M. MCCARTY LICENSED 13,385 KANSAS ARCHITECT

09/08/2023

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

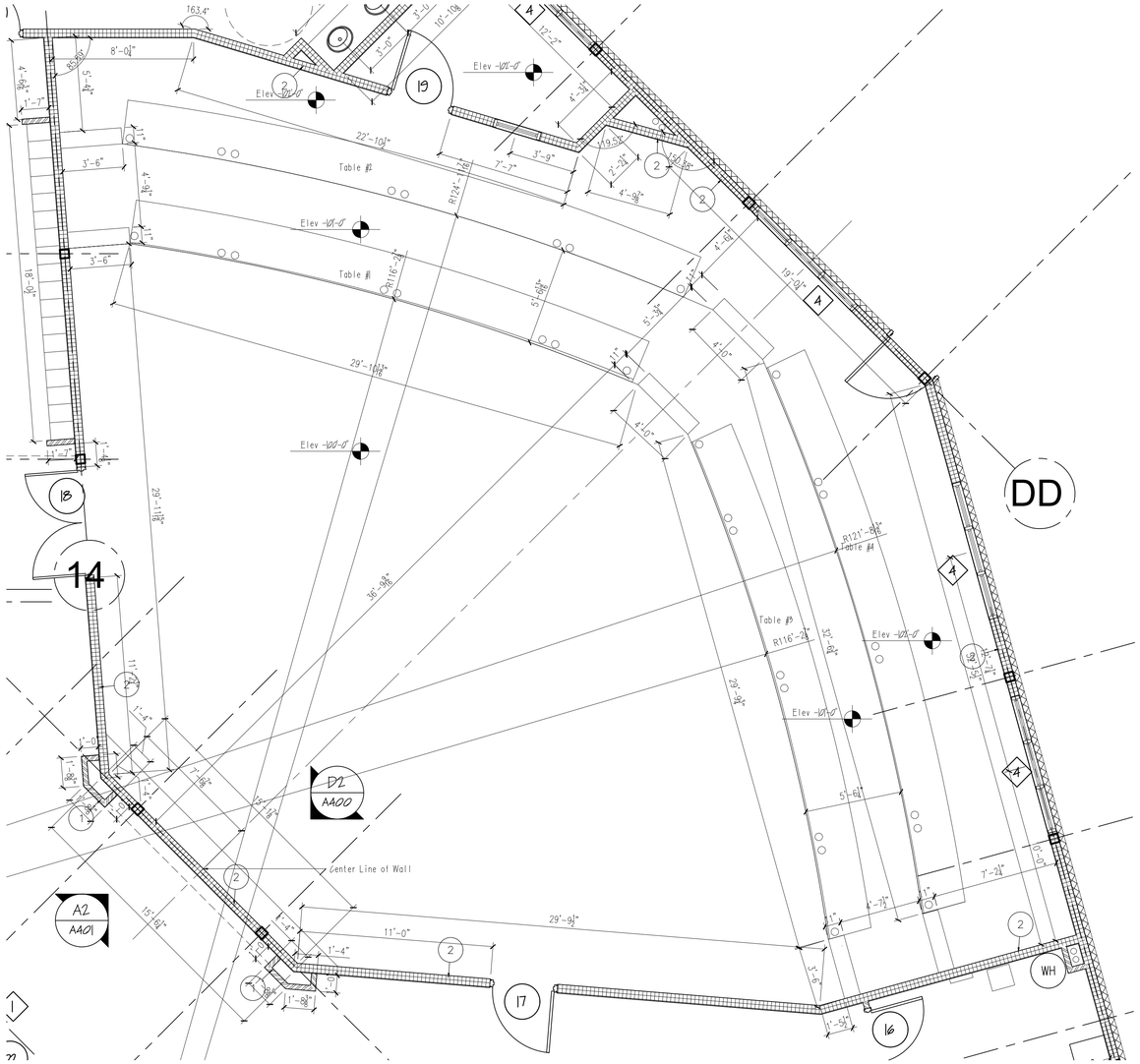
Drawing:
Interior Elevations

Date: 09-08-23

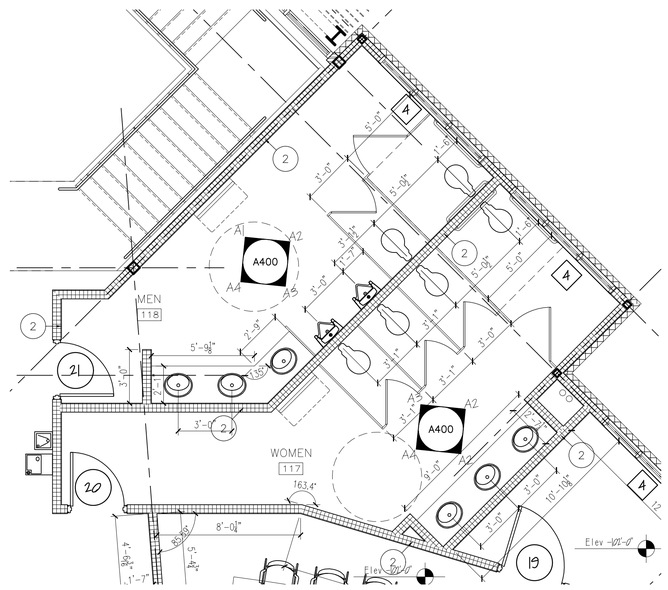
Project Number: 23-014

SHEET NUMBER:
A401

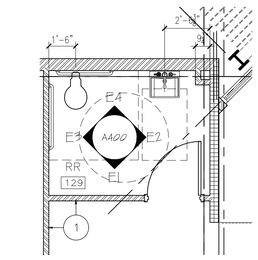
DRAWN BY: Mike



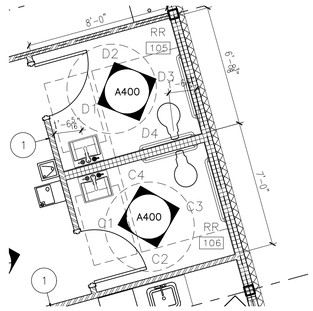
B2 AUDITORIUM ENLARGED PLAN
1/4" = 1'-0"



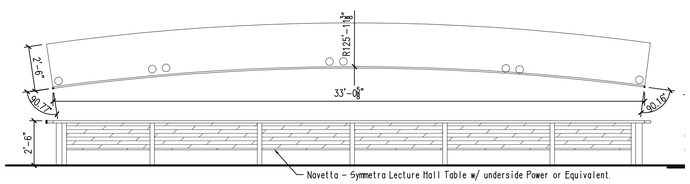
D1 RESTROOM ENLARGED PLAN
1/4" = 1'-0"



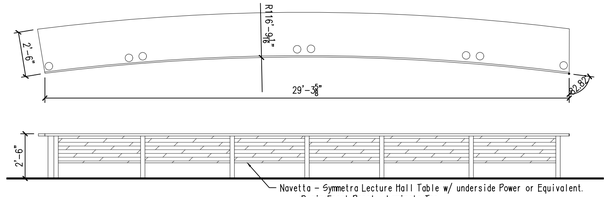
C2 ADA RESTROOM PLAN
1/4" = 1'-0"



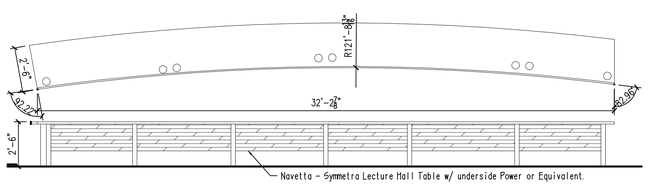
C1 ADA RESTROOM PLAN
1/4" = 1'-0"



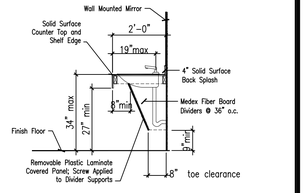
B4 AUDITORIUM LECTURE TABLES - TABLE #2
1/4" = 1'-0"



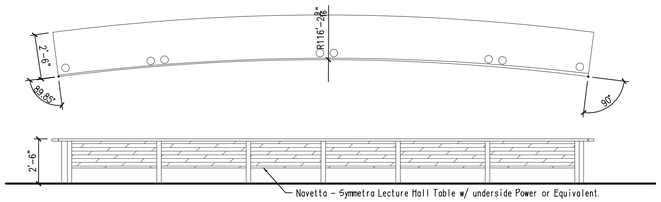
B2 AUDITORIUM LECTURE TABLES - TABLE #2
1/4" = 1'-0"



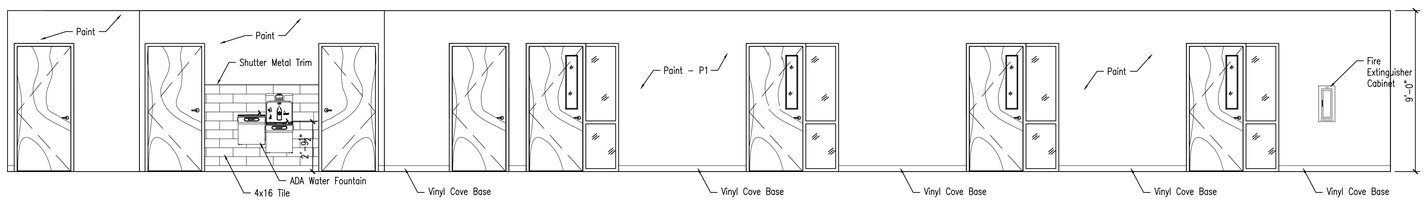
B3 AUDITORIUM LECTURE TABLES - TABLE #4
1/4" = 1'-0"



B1 RESTROOM VANITRY SECTION
3/8" = 1'-0"



A2 AUDITORIUM LECTURE TABLES - TABLE #1
1/4" = 1'-0"



A1 INTERIOR CORRIDOR ELEVATION
1/4" = 1'-0"

Revisions:

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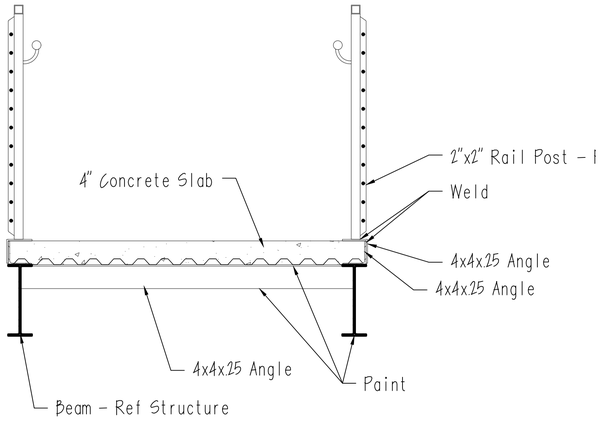
LLOYD M. MCCARL LICENSED KANSAS ARCHITECT 13365
09/08/2023

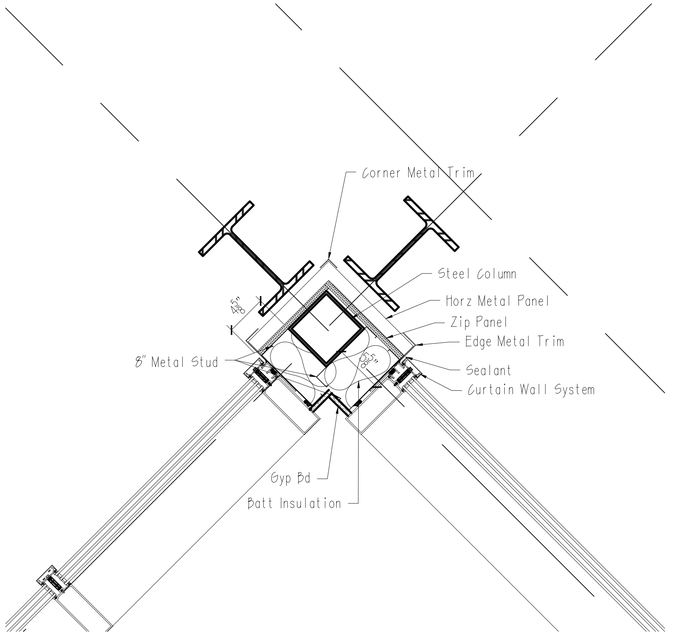
Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
Interior Elevations

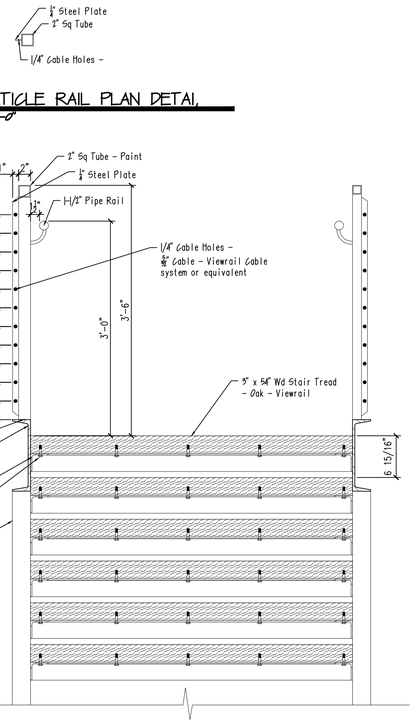
Date: 09-08-23
Project Number: 23-014
SHEET NUMBER: **A402**
DRAWN BY: Mike



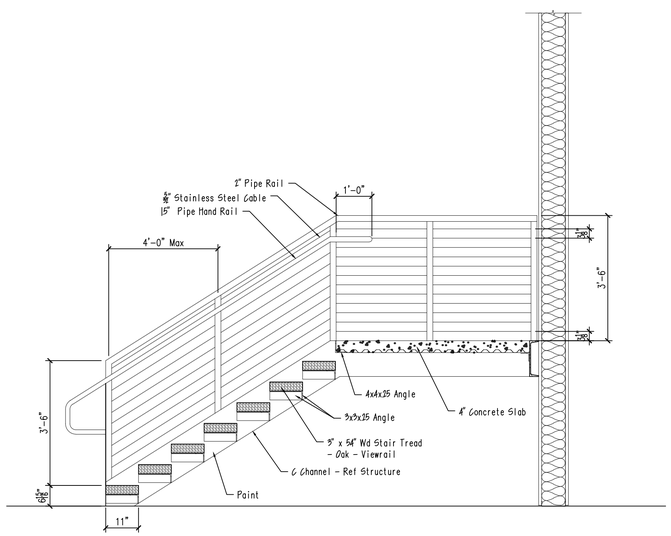
B3 BRIDGE CROSS SECTION
1" = 1'-0"



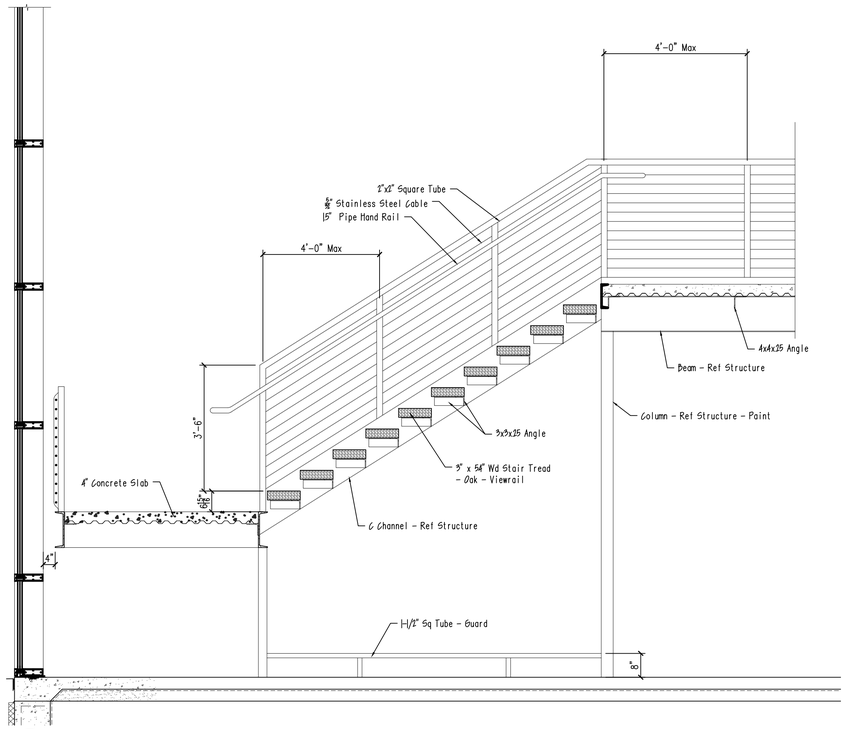
B2 CURTAIN WALL PLAN DETAIL @ CORNER
1 1/2" = 1'-0"



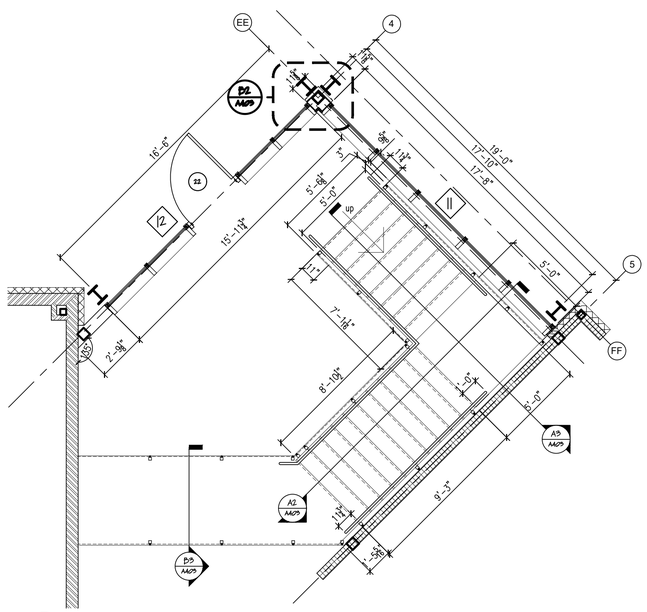
C1 VERTICLE RAIL PLAN DETAIL
1" = 1'-0"



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



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



A1 ENLARGED STAIR PLAN
1/4" = 1'-0"

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LLOYD M. MCCABE LICENSED 13,365 KANSAS ARCHITECT

09/08/2023

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
Enlarged Stair Plan
Stair Sections

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
A403

DRAWN BY: Mike

A1 FINISH FIRST FLOOR PLAN
1/8" = 1'-0"

A2 FINISH MEZZANINE FLOOR PLAN
1/8" = 1'-0"

ROOM FINISH SCHEDULE

Number	Room name	FLOOR	Base Cpve	WALLS				CEILING	
				N	S	E	W	MATL	HEIGHT
100	VESTIBULE	WOCP	CV6	PT/GLASS	PT/GLASS	PT/GLASS	PT/GLASS	GYP BD	18'-0"
101	ENTRY CORRIDOR	LVT	CV6	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	10'-0"
102	AUDITORIUM	CP	CV6	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	10'-0"
104	JANITOR	SC	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
105	RR	CT	CT	CT	CT	CT	CT	2X2 ACT	8'-6"
106	RR	CT	CT	CT	CT	CT	CT	2X2 ACT	8'-6"
107	NURSING RM	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
108	OFFICE 1	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
109	OFFICE 2	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
110	OFFICE 3	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
111	OFFICE 4	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
112	OFFICE 5	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
113	WARMING KITCHEN	LVT	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
114	CLASSROOM 1	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	9'-0"
115	CLASSROOM 2	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	9'-0"
116	VIDEO	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	9'-0"
117	WOMEN	CT	CT	CT	CT	CT	CT	2X2 ACT	9'-0"
118	MEN	CT	CT	CT	CT	CT	CT	2X2 ACT	9'-0"
119	STAIR LOBBY	WOCP	CV6	PT/GLASS	GYP/PT	PT/GLASS	GYP/PT	GYP BD	27'-0"
120	SHOP CORRIDOR	WOCP/LVT	CV6	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	9'-0"
121	LAB 1	SC	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	10'-6"
122	LAB 2	SC	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	10'-6"
123	SHOP	SC	---	LINEAR PANEL	LINEAR PANEL	GYP/PT	LINEAR PANEL	METAL PANEL	21'-0"
124	SHOP OFFICE 1	LVT	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
125	SHOP OFFICE 2	LVT	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
126	FIRE SPRINKLER	SC	---	GYP/PT	GYP/PT	GYP/PT	GYP/PT	GYP/PT	10'-3"
127	ELECTRICAL	SC	---	GYP/PT	GYP/PT	GYP/PT	GYP/PT	GYP/PT	10'-3"
128	MEZZ LOBBY	LVT	CV6	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
129	RR	CT	CT	CT	CT	CT	CT	2X2 ACT	8'-6"
130	OFFICE 2A	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
131	OFFICE 2B	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
132	OFFICE 2C	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
133	OFFICE 2D	CP	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"
134	IT ROOM	LVT	CV4	GYP/PT	GYP/PT	GYP/PT	GYP/PT	2X2 ACT	8'-6"

NOTE:
PT= Painted Surface / DW= Drywall Surface / TEMP= Tempered Glass / ACT= Suspended Acoustic Ceiling Tile / CP = Carpet Tile / WOCP = Walk off Carpet tile / CV4= 4" Cove Base / CV6= 6" Cove Base / SC = Sealed Concrete / LVT = Luxury Vinyl Tile / CT = Ceramic Tile

PAINT COLORS:
P1 – Sherwin Williams #SW7072 onLine– All Walls NOT noted on plan are P1
P2 – Sherwin Williams #SW6871 Positive Red
P3 – Sherwin Williams #SW6993 Black of Night – Auditorium area above ACT ceiling to be painted P3, Start at ACT Ceiling Line and and Open Structure Area's in main corridor.
P4 – Sherwin Williams #SW7075 Web Gray

Ceiling Tile:
ACT 2'x2'x⅝" – Armstrong – Dune – Tegular

Cove Base:
4" and 6" – See Schedule – Roppe Rubber or Equivalent – Color TBD

Restrooms:

Men – CT-1 Wall Tile – Field Color – Daltile – Color Wheel – 75% Matt Arctic White – 4x16
CT-2 Wall Tile – Accent Color – Daltile – Color Wheel – 15% Sea Breeze Linear – 4x16
CT-3 Wall tile – Accent Color – Daltile – Color Wheel – 10% Desert Gray X114 – 4x16
CT-4 Floor Tile – Daltile – Emergent – Metallic Look – Aluminum EM32 – 12x24
CT-7 Wall Tile – Accent Band – Daltile – Color Wave – Winter Blues CW27 – 1x1

Women – CT-1 Wall Tile – Field Color – Daltile – Color Wheel – 75% Matt Arctic White – 4x16
CT-5 Wall Tile – Accent Color – Daltile – Color Wheel – 15% Ocean Blue 1174 – 4x16
CT-3 Wall tile – Accent Color – Daltile – Color Wheel – 10% Desert Gray X114 – 4x16
CT-4 Floor Tile – Daltile – Emergent – Metallic Look – Aluminum EM32 – 12x24
CT-8 Wall Tile – Accent Band – Daltile – Mosaic – Horizon MR48 – 1x6

ADA Restrooms – CT-1 Wall Tile – Field Color – Daltile – Color Wheel – 75% Matt Arctic White – 4x12
CT- 6 Wall Tile – Accent Color – Daltile – Color Wheel – 15% Currant – 4x12
CT-3 Wall tile – Accent Color – Daltile – Color Wheel – 10% Desert Gray X114 – 4x12
CT-4 Floor Tile – Daltile – Emergent – Metallic Look – Aluminum EM32 – 12x24
CT-9 Wall Tile – Accent Band Color – Daltile – Color Wheel – Matte Black K711 – 2x8

COLUMN MATERIAL LIST:

PL1 – PIONITE #WC331-H – "VICTORIAN CHERRY"

PL2 – WILSONART #1818K-35 – "DEEPSTAR SLATE"

PL3 – FORMICA #2032 – "BRUSHED PEWTER"

PL4 – NEVEMAR #S1015T – "BURGUNDY"

PL5 – WILSONART #1595-60 – "BLACK"

CABINET MATERIAL LIST:

Casework – Exterior – Stain to match #WC331-H – "VICTORIAN CHERRY"

Casework – Interior – Formica #927-58 Folkstone

3mm PVC Edging at Doors – Doelliken Woodtape #3645 "Mahogany"

.018 PVC Edging at Cabinet Bodies – Doelliken Woodtape #3645 "Mahogany"

FINISH LEGEND

- CARPET TILE – J & J – Advance 7400/7477– Quarter Turn – Color 9277 Brick Path
- CARPET TILE – J & J – Analytic Diffuse 7330A– Quarter Turn – Color 9577 Cool Red
- LUXURY VINYL TILE – J & J – Tatami – 18" x 36" – 5mm – Color – LV13 Edo & LV18 Kyoto – Random Mix
- SEALED CONCRETE –
- WALK OFF CARPET TILE – J&J – Incognito Walk-off Modular – Alter Ego – 1899 Classified
- LUXURY VINYL TILE – J & J – Tatami – 18" x 36" – 5mm – Color – Framework – LV14 Partition
- LUXURY VINYL TILE – J & J – Tatami – 18" x 36" – 5mm – Color – Framework – LV14 Partition

Revisions:

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LLOYD M. MCCLAIN LICENSED KANSAS ARCHITECT 13365

09/08/2023

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
Interior Finish Plan

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
A404

DRAWN BY: Mike

BUILDING INFORMATION

A. DESIGN CODES
1. DESIGN AND CONSTRUCTION SHALL CONFORM TO THE "INTERNATIONAL BUILDING CODE, 2012 EDITION." REFER TO THE SPECIAL STRUCTURAL INSPECTION NOTES FOR ADDITIONAL REQUIREMENTS.
2. REFERENCED STANDARDS
   A. ASCE 7-10
   B. ACI 318-11
   C. AISC 360-10
   D. SJI 100-10
   E. SDI 2010
   F. AISI 100-10

B. DESIGN CRITERIA & LOADS
1. RISK CATEGORY II
2. SLAB ON GRADE LIVE LOAD: 150 PSF
3. FLOOR LOADS:
   A. STAIRS: 100 PSF
   B. RAISED PLATFORM: 100 PSF
   C. MEZZANINE: 70 PSF
4. ROOF LOADS:
   A. DEAD LOAD: 20 PSF + STEEL SELF-WEIGHT
   B. ROOF LIVE LOAD: 20 PSF (NON-REDUCIBLE)
   C. SNOW LOAD:
      1. P_g = 20 PSF WITH PROVISIONS FOR SNOW DRIFTING
      2. I_s = 1.0
5. WIND DESIGN:
   A. BASIC WIND SPEED 115 MPH (ULTIMATE)
   B. ALLOWABLE WIND SPEED 90 MPH
   C. EXPOSURE C
6. SEISMIC DESIGN:
   A. SEISMIC DESIGN CATEGORY B
   B. SITE CLASS D
   C. I_e = 1.0

GEOTECHNICAL & FOUNDATIONS

1. ALL SHALLOW FOUNDATIONS BEARING ON NATIVE, UNDISTURBED SOILS, OR NEW ENGINEERED, TESTED, CONTROLLED FILL ARE DESIGNED FOR A MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF. ALL PERIMETER AND EXTERIOR FOUNDATIONS SHALL EXTEND 3' - 0" MINIMUM BELOW FINAL ADJACENT GRADE. THE CONTRACTOR SHALL PROVIDE SOIL TESTING SERVICES TO CONFIRM SOIL CONDITIONS/ BEARING VALUES AND PROVIDE WRITTEN VERIFICATION TO THE OWNER'S REPRESENTATIVE AND ENGINEER. IF ACTUAL SITE CONDITIONS DO NOT SATISFY DESIGN REQUIREMENTS. COORDINATE ADJUSTMENTS WITH THE OWNER'S REPRESENTATION AND ENGINEER.
2. FOOTINGS MAY BE POURED TO NEAT LINES OF EXCAVATIONS PROVIDING VERTICAL LINES OF EXCAVATIONS CAN BE MAINTAINED DURING CONCRETE PLACEMENT.
3. BEAMS, COLUMNS, AND WALLS SHALL BE CENTERED ON SUPPORTING FOUNDATION ELEMENTS UNLESS NOTED OTHERWISE.
4. SURFACE WATER SHALL NOT BE ALLOWED TO STAND ADJACENT TO OR DRAIN TOWARDS THE FOUNDATION UNDER ANY CIRCUMSTANCES. PAVEMENTS OR GRADED SOIL AT THE PERIMETER OF THE BUILDING, EXCEPT AS REQUIRED AT EXITS OR AS NOTED, SHALL BE SLOPED AWAY AT 1/2 IN/FT MINIMUM FOR THE FIRST 10 FEET, UNLESS NOTED OTHERWISE ON CIVIL GRADING PLANS.

REINFORCED CONCRETE

A. CAST-IN-PLACE CONCRETE
1. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4". CONFIRM WITH ARCHITECT OR OWNER.
2. NO ALUMINUM SHALL BE EMBEDDED IN ANY CONCRETE.
3. CONCRETE MIX SPECIFICATIONS

	MIN. f'c	MAX. W/C	AIR CONTENT
A. FOUNDATIONS	3,500 PSI	0.55	5%
B. SLABS ON GRADE & METAL DECK	4,000 PSI	0.50	3% MAX.

4. ALL CONCRETE SHALL BE IN CONFORMANCE WITH THE LATEST ACI 301 STANDARDS PUBLICATION.
5. GROUT INDICATED ON PLANS AT BASE PLATES SHALL BE NON-METALLIC NON-SHRINK WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 6000 PSI AND CONFORM TO ASTM C1107.
6. ALL REINFORCING BARS SHALL MEET ASTM A615 GRADE 60.
7. REINFORCING BARS QUANTITIES SHOWN ARE FOR ESTIMATING PURPOSES ONLY.
8. PROVIDE 400 LBS. OF EXTRA BARS OF VARIOUS SIZES USED ON THIS PROJECT TO BE USED AS DIRECTED. INCLUDE LABOR FOR PLACEMENT.
9. MINIMUM REINFORCEMENT COVER (UNLESS NOTED OTHERWISE):
   A. FOUNDATIONS 3" CLEAR
   B. INTERIOR SLABS & WALLS 3/4" CLEAR
   C. EXTERIOR SLABS & WALLS 2" CLEAR
   D. ALL OTHER USES 2" CLEAR
10. REINFORCEMENT SHALL BE CONTINUOUS AND LAPPED 40 BAR DIAMETERS (2' - 0" MIN.) EXCEPT AS NOTED. PROVIDE CORNER BARS OF SAME SIZE AND SPACING.
11. REINFORCEMENT SHALL BE DETAILED IN ACCORDANCE WITH THE LATEST ACI DETAILING MANUAL BY A QUALIFIED AND EXPERIENCED PERSON AND FIRM. PLACE AND SUPPORT REINFORCING WITH ACCESSORIES: MAXIMUM SPACING - 48" CENTERS. USE 3" SBP, SLAB BOLSTER WITH PLATE, SUPPORTS AT ALL FOOTINGS.
12. CONTRACTOR SHALL VERIFY THAT ALL REINFORCEMENTS, INSERTS, SLEEVES AND EMBEDDED ITEMS ARE PROPERLY LOCATED AND RIGIDLY SECURED PRIOR TO CONCRETE PLACEMENT.
13. ALL ANCHORS WHERE NOTED SHALL BE MANUFACTURED BY HILTI, INC. AND INSTALLED PER HILTI SPECIFICATIONS. HILTI HY200 ANCHORS SHALL USE HILTI "SAFE SET" INSTALLATION METHOD. SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL WITH APPROPRIATE ICC-ES EVALUATION REPORTS.
14. ALL MESH SHALL MEET ASTM A1064: LAP A MINIMUM OF 8" OR ONE FULL MESH, WHICHEVER IS GREATER.
15. SLABS ON GRADE SHALL BE 4" THICK WITH 6X6 - W1.4XW1.4 WWF AT CENTER OF SLAB THICKNESS UNLESS NOTED OTHERWISE ON PLAN.

REINFORCED CONCRETE MASONRY

1. HOLLOW LOAD BEARING CONCRETE MASONRY UNITS SHALL MEET ASTM C90, GRADE N SPECIFICATIONS (F'm = 2000 PSI) UNLESS NOTED: MORTAR TYPE S. REFER TO THE REINFORCED CONCRETE MASONRY NOTES.
2. PROVIDE STANDARD LADDER TYPE HORIZONTAL MASONRY REINFORCEMENT AT EVERY OTHER COURSE AT ALL MASONRY WALLS.
3. ALL CONCRETE HOLLOW MASONRY (CMU) SHALL BE MODULAR TWO HOLE (NOMINAL 8 HIGH X 16 LONG TYPICALLY) UNITS, LIGHT-WEIGHT UNLESS NOTED, PLACED IN RUNNING BOND PATTERN. PROBLOCK IS STRUCTURALLY ACCEPTABLE.
4. USE LOW-LIFT GROUTING PROCEDURES AND PROVIDE GROUT CONFORMING TO ASTM 476 WITH MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.
5. MASONRY WALLS SHALL BE REINFORCED AS INDICATED ON THE DRAWINGS, WITH NOT LESS THAN #5 VERTICALS AT 48" INCHES O.C. MAXIMUM, STAGGERED
6. A MINIMUM OF (1) #5 VERTICAL SHALL BE PROVIDED AT WALL CORNERS, AT EACH SIDE OF OPENINGS, AND EACH SIDE OF CONTROL JOINTS (TYPICAL UNLESS NOTED).
7. VERTICAL REINFORCEMENT SHALL BE LAPPED 32 INCHES FOR #5 BARS OR USE AN APPROVED MECHANICAL COUPLER.
8. VERTICAL REINFORCEMENT AT JAMBS OF OPENINGS SHALL EXTEND THE FULL HEIGHT OF WALL, UNLESS NOTED.
9. PROVIDE DOWELS FROM CONCRETE THAT ARE THE SAME SIZE AND SPACING AS MASONRY WALL VERTICALS, UNLESS NOTED OTHERWISE ON PLAN.
10. HORIZONTAL REINFORCEMENT IN GROUTED CORE FILL BOND BEAMS SHALL BE CONTINUOUS AND LAPPED 40 BAR DIAMETERS (2' - 0" MIN.). PROVIDE CORNER BARS OF EQUAL SIZE.
11. ALL REINFORCING SHALL BE PROPERLY POSITIONED WITH CENTERING AND CAGING DEVICES WITH A MINIMUM GROUT COVERAGE OF 3/4".

STRUCTURAL STEEL

A. HOT ROLLED STEEL
1. MATERIAL SPECIFICATIONS:

a. WIDE FLANGES	ASTM A992	Fy = 50 KSI
b. ANGLES AND CHANNELS	ASTM A36	Fy = 36 KSI
c. PLATES & BASE PLATES	ASTM A36	Fy = 36 KSI
d. HSS	ASTM A500, GRADE C	Fy = 50 KSI
e. ANCHOR BOLTS	ASTM F1554, GRADE 55	

2. STRUCTURAL STEEL COLUMN ANCHOR BOLTS SHALL BE SET WITH A TEMPLATE.
3. ALL COLUMN ANCHOR BOLTS SHALL BE DOUBLE CHECKED FOR PROPER PROJECTION ABOVE CONCRETE AND SHALL BE SECURELY HELD IN POSITION DURING CONCRETE PLACEMENT.
4. STRUCTURAL STEEL SHALL BE NEW AND MEET THE TENTH EDITION A.I.S.C. "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS AND BRIDGES", AND THE "CODE OF STANDARD PRACTICES FOR STEEL BUILDINGS AND BRIDGES", EXCLUDING SECTION 4.4.1.B.
5. THE STRUCTURAL STEEL FABRICATOR SHALL BE AN AISC QUALITY CERTIFIED COMPANY FOR THE CATEGORY OF WORK IN THIS PROJECT OR PROVIDE A QUALITY ASSURANCE PLAN AND SPECIAL INSPECTIONS AS DEFINED IN THE CODE.
6. ALL STRUCTURAL STEEL FIELD CONNECTIONS SHALL HAVE STANDARD AISC FRAMING CONNECTIONS WITH A325N BOLTS AND WASHERS AS REQUIRED AND INSTALLED TO A SNUG-TIGHT CONDITION UNLESS NOTED OTHERWISE. ERECTION DRAWINGS SHALL SHOW ALL FIELD WELDS, AS APPROPRIATE.
7. STEEL BEAMS SHALL BE FABRICATED WITH MILL CAMBER UP.
8. ANY SHOP AND FIELD SPLICES WITHIN THE STEEL MEMBERS DESIGN LENGTH MUST BE MADE WITH A FULL PENETRATION WELD AND PROVED ADEQUATE BY NON-DESTRUCTIVE TESTING AT THE CONTRACTORS EXPENSE.
9. WELDING SHALL CONFORM TO CURRENT AWS "STRUCTURAL WELDING CODE - STEEL" AND "STRUCTURAL WELDING CODE - SHEET STEEL" SPECIFICATIONS AND BE COMPLETED BY AN AWS CERTIFIED WELDER.
10. ALL ROOF OPENINGS AND ROOFTOP EQUIPMENT LOCATIONS SHALL BE FIELD FRAMED WITH (1) L4X4X1/4 ALONG EACH EDGE. EXTEND EACH ANGLE TO SUPPORTS, BLOCK VERTICAL LEG AND FIELD WELD, TYPICAL UNLESS NOTED.

B. STEEL JOISTS
1. STEEL JOISTS SHALL BE FABRICATED AND ERECTED PER STEEL JOIST INSTITUTE (SJI) STANDARDS INCLUDING BRIDGING AND ATTACHMENTS. STEEL JOIST MANUFACTURER SHALL BE A CURRENT MEMBER OF SJI.
2. ALL ROOF JOISTS SHALL BE DESIGNED FOR AN ALLOWABLE STRESS NET UPLIFT PRESSURE OF 10 PSF UNLESS NOTED OTHERWISE.
3. THE OPEN WEB STEEL JOIST MARKED "SP" OR WITH NOTED CONCENTRATED LOADS HAVE BEEN SIZED ONLY FOR THE DESIGN UNIFORM DEAD AND LIVE LOADS, INCLUDING SNOW DRIFTING WHERE APPLICABLE, BUT DO NOT INCLUDE THE EFFECTS OF INDICATED CONCENTRATED LOADS SUCH AS MECHANICAL UNITS AND PIPING, WHICH ARE THE RESPONSIBILITY OF THE JOIST SUPPLIER.
4. CONCENTRATED LOADS OF MISCELLANEOUS SUSPENDED ITEMS FROM JOISTS SHALL BE ONLY AT THE TOP CHORD PANEL POINTS UNLESS OTHERWISE DETAILED.
5. ANY UTILITY LINE OVER 4"Ø OR UTILITY LINE WEIGHING OVER 17 LB/FT SHALL NOT BE SUPPORTED FROM THE OPEN WEB STEEL JOISTS WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.

C. METAL DECK
1. STEEL DECK MANUFACTURER SHALL BE A MEMBER OF THE STEEL DECK INSTITUTE (SDI).
2. UNLESS NOTED OTHERWISE, STEEL FLOOR DECK SHALL BE 1 INCH DEEP VULCRAFT 1.0C, 24 GA. OR REVIEWED EQUIVALENT. ERECT PER MANUFACTURER'S REQUIREMENT AND SPECIFICATIONS.
3. UNLESS NOTED OTHERWISE, STEEL ROOF DECK SHALL BE 1-1/2 INCH DEEP VULCRAFT 1.5B, 22 GA. OR REVIEWED EQUIVALENT, PAINTED AND ERECTED PER THE MANUFACTURER'S SPECIFICATIONS.
4. UNLESS NOTED OTHERWISE, ALL DECK ATTACHMENTS SHALL BE #12 SELF-DRILLING SCREWS, 5/8" PUDDLE WELDS, OR APPROVED POWER-ACTUATED EQUIVALENT. ATTACH DECK TO ALL SUPPORTING MEMBERS WITH 36/7 PATTERN AND SIDE LAP SEAM SCREW FASTENERS AT 9" O.C. MAXIMUM. ALL DECK SIDE LAP SEAMS SHALL BE SCREWED AT HALF POINTS MINIMUM, UNLESS NOTED.
5. ERECTION DRAWINGS SHALL CLEARLY SHOW ALL ATTACHMENT REQUIREMENTS OF ALL DECKS AND IF SPLIT OR PARTIAL PANELS ARE NEEDED TO FURNISH THE DIAPHRAGM WIDTH. ONE OPENING, 6" OR LESS IN DIAMETER, PER ROOF DECK SHEET WIDTH, FIELD CUT BY THE TRADES REQUIRING THEM IS PERMISSIBLE.
6. HOLES LARGER THAN 6" IN DIAMETER, MORE THAN ONE HOLE PER SHEET PER DECK SPAN OR MORE THAN ONE DECK RIB DAMAGED REQUIRES DECK REINFORCEMENT PER SDI. HOLES MORE THAN 12 INCHES IN DIAMETER OR 12 INCHES SQUARE REQUIRE A STEEL FRAME.

D. STRUCTURAL LIGHT GAGE STEEL:
1. ALL DESIGN SHALL BE IN CONFORMANCE WITH AISI "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS". WIND OR LATERAL LOAD DEFLECTION FOR WALLS SUPPORTING MASONRY VENEER SHALL BE LIMITED TO 1/600 OF THE SPAN. WIND OR LATERAL LOAD DEFLECTION AT ALL OTHER WALLS TO BE LIMITED TO 1/240 OF THE SPAN.
2. ALL EXTERIOR OR LOAD BEARING INTERIOR STUDS SHALL BE 6" CSJ AS MANUFACTURED BY CLARKDIETRICH, OR REVIEWED EQUIVALENT, AT 16 INCHES ON CENTER UNLESS NOTED OTHERWISE ON PLANS.
3. MINIMUM GAGE OF FRAMING SHALL BE 18 GAGE, UNLESS NOTED OTHERWISE.
4. TRACKS SHALL BE SECURELY ANCHORED TO THE SUPPORTING STRUCTURE TO PROPERLY TRANSFER IMPOSED LOADS, MINIMUM GAGE OF TRACKS SHALL BE 18 GAGE.
5. PROVIDE WALL STUD BRIDGING MECHANICALLY ATTACHED TO EACH STUD AT A MAXIMUM SPACING OF 4' - 0", OR AS RECOMMENDED BY THE MANUFACTURER.
6. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENTS TO PERPENDICULAR MEMBER. MEMBERS SHALL BE HELD POSITIVELY IN PLACE UNTIL PROPERLY FASTENED.
7. NOTCHES OR SPLICES IN ANY STRUCTURAL STUDS WILL NOT BE PERMITTED EXCEPT AS INDICATED ON THE DRAWINGS.
8. DO NOT NOTCH, DRILL OR CUT ANY HOLES IN LOAD BEARING STUDS FOR ELECTRICAL OR MECHANICAL EQUIPMENT EXCEPT AS INDICATED ON THE DRAWINGS.

E. LIGHT GAGE STEEL TRUSSES:
1. THE LIGHT GAGE STEEL PREFABRICATED TRUSS MANUFACTURER SHALL FURNISH SHOP DRAWINGS ALONG WITH SUPPORTING CALCULATIONS SEALED BY A PROJECT STATE LICENSED STRUCTURAL ENGINEER FOR ARCHITECTS REVIEW.
2. THE SHOP DRAWINGS SHALL INCLUDE PLACING PLANS OF ALL TRUSSES CLEARLY LABELED, DETAILS OF TRUSS CONNECTIONS AND ANCHORAGES DETAILS OF METAL CONNECTORS USED AT JOINTS AND ENGINEERING DESIGN DATA. THE ENGINEERING DESIGN FOR EACH TYPE OF TRUSS SHALL INCLUDE: TRUSS LOCATION IDENTIFICATION, ALL LOADINGS AND REACTIONS, STRESS GRADES, MEMBER STRESSES, JOINT CONNECTIONS, CONFIGURATION, TRUSS TO TRUSS CONNECTIONS, BRACING FOR LATERAL STABILITY OF THE COMPLETED FRAMING SYSTEM AND THE PROJECT STATE PROFESSIONAL ENGINEERS SEAL OF THE PERSON RESPONSIBLE FOR THE DESIGN OF THE TRUSSES/TRUSS SYSTEM.
3. DESIGN LIGHT GAGE STEEL TRUSSES FOR THE LIVE LOADS AS STATED IN THE STRUCTURAL GENERAL NOTES PLUS A 30 PSF DEAD LOAD; TRUSS WEIGHT NOT INCLUDED (TOP CHORD - 10 PSF AND BOTTOM CHORD - 10 PSF). TRUSSES TO BE SPACED AT MAXIMUM 4' - 0" CENTERS. (U.N. ON PLAN) LIVE LOAD DEFLECTION SHALL NOT EXCEED L/360. TOP AND BOTTOM CHORDS SHALL BE 3 1/2" MINIMUM DEEP.
4. ALL PREFABRICATED LIGHT GAGE STEEL TRUSSES SHALL BE ATTACHED TO SUPPORTS WITH A MECHANICAL ATTACHMENT.
5. THE TRUSS MANUFACTURER/SUPPLIER SHALL SUPPLY DESIGN AND CONNECTION HARDWARE FOR ALL TRUSS-TO-TRUSS CONNECTIONS.

F. INTERIOR NON-LOAD BEARING LIGHT GAGE STEEL
1. METAL STUD MANUFACTURERS GENERALLY RECOMMEND HORIZONTAL BRIDGING OR STRAPPING TO BE PROPERLY INSTALLED AT 5 FT. TO 6 FT. ON CENTER, MECHANICALLY ATTACHED TO EACH STUD TO PREVENT DAMAGE DURING CONSTRUCTION EVEN IF ONE SIDE OR BOTH SIDES ARE TO BE SHEATHED WITH RIGID FACING MATERIALS. HOWEVER, AT THE CONTRACTORS RISK AND OPTION, THE RECOMMENDED HORIZONTAL BRIDGING OR STRAPPING MAY BE OMITTED.
2. WHEN RIGID FACING MATERIALS ARE NOT ATTACHED TO EITHER SIDE, SUCH AS, ABOVE CEILINGS, HORIZONTAL BRIDGING OR STRAPPING AT EACH FACE SHALL BE PROPERLY INSTALLED.
3. WHERE THE TOP OF THE STUD WALLS TERMINATE AGAINST PRIMARY STRUCTURAL FRAMING, A "DEFLECTION TRACK" SHOULD BE USED TO ALLOW FOR VERTICAL MOVEMENT. ONE ROW OF THE RECOMMENDED HORIZONTAL BRIDGING SHALL BE PROPERLY INSTALLED BY MECHANICAL ATTACHMENTS TO EACH STUD AS CLOSE TO THE TOP AS POSSIBLE. ANY TEMPORARY SCREWS FROM THE TOP DEFLECTION TRACK TO THE METAL STUDS SHALL BE REMOVED AS SOON AS POSSIBLE TO ALLOW VERTICAL DEFLECTION OF THE PRIMARY FRAMING AND TO PREVENT DAMAGE TO THE STUD WALL.
4. METAL STUDS SHOULD NEVER BE ATTACHED DIRECTLY TO HORIZONTAL STRUCTURAL FRAMING SYSTEMS WITHOUT A DEFLECTION TRACK OR VERTICALLY SLOTTED CLIPS.

CONSTRUCTION NOTES

1. HOLES, PIPES, SLEEVES, ETC. NOT SHOWN ON THE DRAWINGS MUST BE REVIEWED BY THE ARCHITECT BEFORE PLACEMENT THROUGH STRUCTURAL MEMBERS.
2. IF MECHANICAL AND ELECTRICAL EQUIPMENT SIZES, WEIGHTS, OR LOCATIONS DO NOT COINCIDE WITH EQUIPMENT SHOWN ON THE PLANS, COORDINATE ADJUSTMENTS WITH THE ARCHITECT.
3. NO AREA OF THE STRUCTURE SHALL BE LOADED WITH CONSTRUCTION MATERIALS OR EQUIPMENT THAT EXCEEDS FINAL DESIGN CRITERIA.
4. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO EXECUTE AND DETERMINE FINAL ERECTION PROCEDURES, SEQUENCING AND TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES WHATEVER SHORING, SHEETING, TEMPORARY BRACING, GUYING OR TIE DOWNS WHICH MIGHT BE NECESSARY.
5. FABRICATORS AND SUPPLIERS SHALL CLEARLY NOTE AND HIGHLIGHT CHANGES MADE IN SHOP DRAWINGS WHICH DO NOT COMPLY WITH THE CONTRACT DOCUMENTS.
6. IF DISCREPANCIES EXIST BETWEEN STRUCTURAL PLANS, ARCHITECTURAL PLANS, OTHER PLANS, OR SPECIFICATIONS, THE CONTRACTOR OR SUB-CONTRACTOR SHALL PROVIDE A WRITTEN REQUEST FOR CLARIFICATION FROM THE ARCHITECT AND/OR ENGINEER BEFORE PROCEEDING WITH THE WORK.
7. THE STRUCTURE IS NOT DESIGNED FOR FUTURE EXPANSION.
8. CONTRACTOR TO VERIFY ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT IMMEDIATELY.

SPECIAL STRUCTURAL INSPECTION NOTES

1. SPECIAL STRUCTURAL INSPECTIONS SHALL BE PROVIDED BY THE OWNER OR OWNER'S REPRESENTATIVE MEETING THE REQUIREMENTS OF CHAPTER 17 OF THE CODE.
2. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR THE CONFORMANCE TO APPROVED DESING DRAWINGS, SPECIFICATIONS, AND CODE PROVISIONS.
3. THE SPECIAL INSPECTOR SHALL BE APPROVED BY THE OWNER, BUILDING OFFICIAL, ARCHITECT, AND LICENSED DESIGN ENGINEER AND FURNISH THE CODE REQUIRED REPORTS IN A TIMELY MANNER TO THE BUILDING OFFICIAL, ARCHITECT, AND ENGINEER.
4. SPECIAL INSPECTIONS AS REQUIRED BY CODE:
   A. STRUCTURAL STEEL: SECTION 1705.2 & SECTION AISC 360 CHAPTER N
   B. CONCRETE: SECTION 1705.3 AND TABLE 1705.3 (PERIODIC)
   C. MASONRY: SECTION 1705.4
   D. SOILS: SECTION 1705.6 AND TABLE 1705.6 (PERIODIC)

CONTINUOUS FOOTING SCHEDULE

TYPE	SIZE	REINF.
CF1	1' - 0" X 2' - 10" DP.	(2) #5 CONT. TOP & BOTT.
CF2	1' - 6" X 2' - 10" DP.	(2) #5 CONT. TOP & BOTT.
CF3	2' - 0" X 2' - 10" DP.	(3) #5 CONT. TOP & BOTT.
CF4	1' - 4" X 1' - 0" DP.	(2) #5 CONT. BOTT.
T.S.	1' - 0" X 8" DP.	(2) #4 CONT. BOTT.

T.S. = THICKENED SLAB

PAD FOOTING SCHEDULE

MARK	SIZE	REINF
A	3' - 0" X 3' - 0" X 1' - 4" DP.	(5) #4 E.W. BOTT.
B	4' - 0" X 4' - 0" X 1' - 4" DP.	(5) #4 E.W. BOTT.
C	5' - 0" X 5' - 0" X 1' - 4" DP.	(6) #5 E.W. BOTT.
D	6' - 0" X 6' - 0" X 1' - 4" DP.	(7) #6 E.W. BOTT.
E	3' - 0" X 3' - 0" X 2' - 10" DP.	(4) #4 E.W. BOTT.
F	4' - 0" X 4' - 0" X 2' - 10" DP.	(5) #4 E.W. BOTT.
G	5' - 0" X 5' - 0" X 2' - 10" DP.	(6) #5 E.W. BOTT.
H	6' - 0" X 6' - 0" X 2' - 10" DP.	(7) #6 E.W. BOTT.

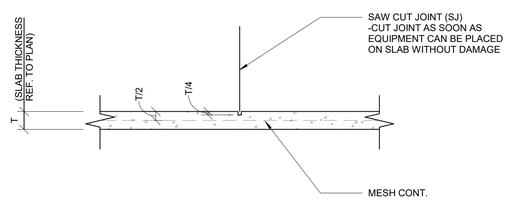
LIGHT GAGE LINTEL SCHEDULE

MARK	SIZE	BRG. STUDS UNDER EA. END U.N.O.	FULL HT. KING STUDS EA. END
L1	6" CSJ 18 GA. BOXED BEAM W/ 6" 18 GA. TRACK TOP & BOTT.	(1) 6" CSJ 18 GA.	(1) 6" CSJ 18 GA.
L2	(3) 6" CSJ 18 GA. BOXED BEAM W/ 6" 18 GA. TRACK TOP & BOTT.	(1) 6" CSJ 18 GA.	(2) 6" CSJ 18 GA.
L3	(3) 8" CSJ 18 GA. BOXED BEAM W/ 8" 18 GA. TRACK TOP & BOTT.	(1) 8" CSJ 12 GA.	(2) 8" CSJ 12 GA.
L4	(3) 12" CSJ 14 GA. BOXED BEAM W/ 6" 18 GA. TRACK TOP & BOTT.	(3) 6" CSJ 18 GA.	(4) 6" CSJ 18 GA.

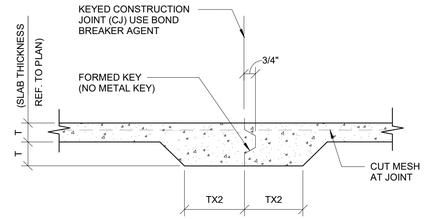
NOTE: REFER TO DETAIL 4/S001 FOR LINTEL CONSTRUCTION.

STRUCTURAL COLUMN SCHEDULE

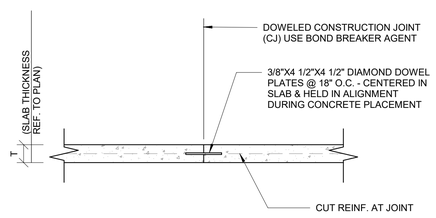
MARK	SIZE	BASE PLATE	A. BOLTS	ADHESIVE ANCHOR OPTION	DIAGRAM
C1	HSS4X4X1/4	10" X 3/4" X 0'-10"	T.O. FTG. (4) 3/4"Ø X 1'-5" TACK WELD BOTT. NUT	(4) 3/4" Ø HILTI HY200 X 10" MIN. CONC. EMBEDMENT	2" TYP. 3" 7" 3" 7" 5" 5" 7" 3" TYP. OFFSET CORNER
C2	HSS6X6X3/8	12" X 1" X 1'-0"	T.O. FTG. (4) 1"Ø X 1'-8" TACK WELD BOTT. NUT	(4) 1" Ø HILTI HY200 X 12" MIN. CONC. EMBEDMENT	2" TYP. 4" 10" 4" 10" 7" 7" 1'-0" 4" TYP. OFFSET CORNER
C3	W10X45	10" X 3/4" X 1'-0"	T.O. FTG. (4) 3/4"Ø X 1'-5" TACK WELD BOTT. NUT	(4) 3/4" Ø HILTI HY200 X 10" MIN. CONC. EMBEDMENT	2" 7" 2" 4" 4" 4" TYP.



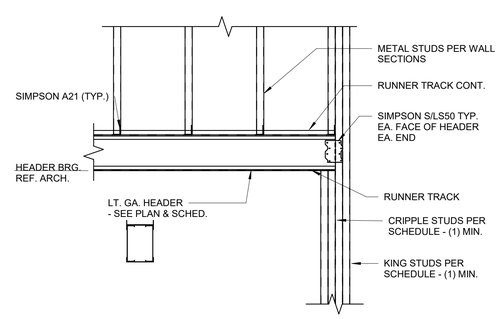
1 S001 TYP. SAW CUT JOINT
SCALE: 3/4" = 1'-0"
0' 1' 2' 3'



2 S001 TYP. KEYED CONST. JOINT @ 4" SLAB
SCALE: 3/4" = 1'-0"
0' 1' 2' 3'



3 S001 TYP. 6" SLAB CONST. JOINT
SCALE: 3/4" = 1'-0"
0' 1' 2' 3'



4 S001 DETAIL @ MTL. STUD LINTEL
SCALE: 3/4" = 1'-0"
0' 1' 2' 3'

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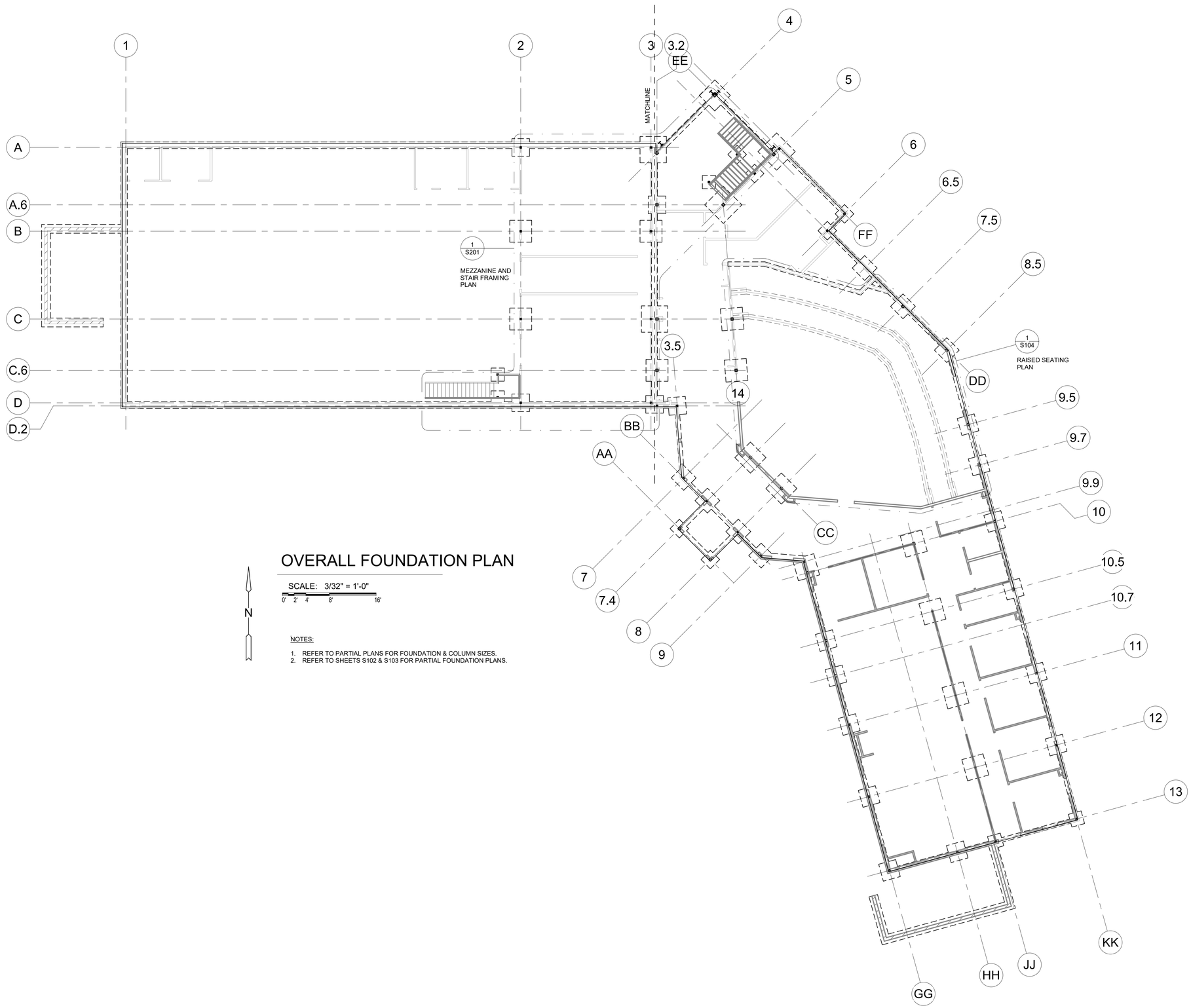
25/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
GENERAL NOTES

Date: 08-25-23
Project Number: 23-014
SHEET NUMBER: **S001**
DRAWN BY:ZZ / MB



OVERALL FOUNDATION PLAN

SCALE: 3/32" = 1'-0"

0' 2' 4' 8' 16'

N

NOTES:

1. REFER TO PARTIAL PLANS FOR FOUNDATION & COLUMN SIZES.
2. REFER TO SHEETS S102 & S103 FOR PARTIAL FOUNDATION PLANS.

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25/Aug/23

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SALINA, KANSAS

Drawing:
OVERALL FOUNDATION PLAN

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S101**

DRAWN BY: Author

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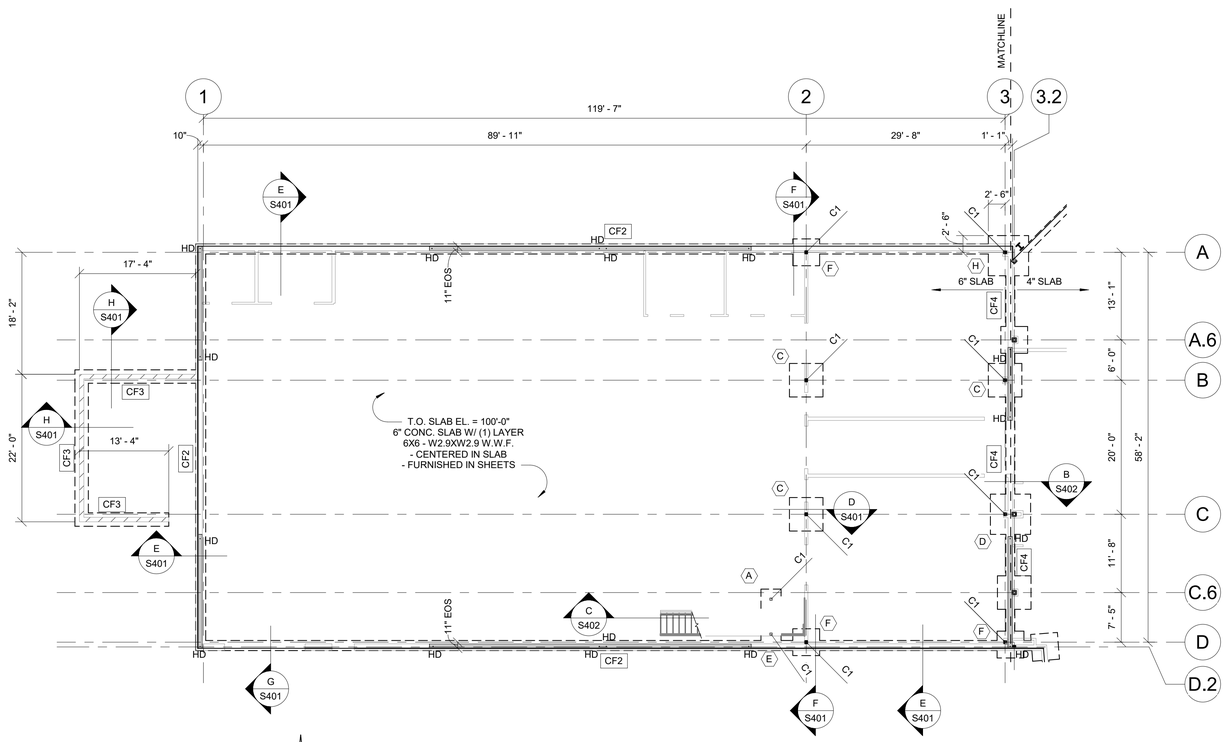


PARTIAL FOUNDATION PLAN - AREA A

SCALE: 3/32" = 1'-0"

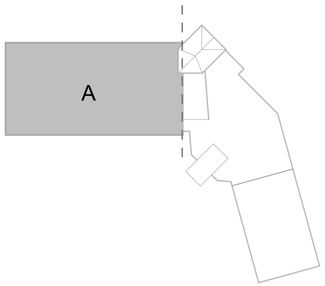
0" 2' 4' 8' 16'

N

NOTES:

1. REFER TO SHEET S101 FOR OVERALL FOUNDATION PLAN.
2. TOP OF FOOTING ELEVATION = 99'-4" UNLESS NOTED OTHERWISE.
3. "X" = PAD FOOTING PER SCHEDULE ON SHEET S001.
4. "CF#" = CONT. FOOTING PER SCHEDULE ON SHEET S001.
5. "C#" = COLUMN PER SCHEDULE ON SHEET S001.
6. "EOS" = EDGE OF SLAB DIMENSION.
7. STEEL FRAMING DIMENSIONS ARE TO CENTERLINE OF GRID OR MEMBER UNLESS NOTED OTHERWISE.
8. WALL DIMENSIONS ARE TO FACE OF CMU UNLESS NOTED OTHERWISE ON PLAN.
9. "BW#" = BRACED WALL PER SCHEDULE ON SHEET S702.
10. "HD" = HOLDDOWN PER SCHEDULE ON SHEET S702.

NOTE:
SAW CUT JOINTS IN SLABS ON GRADE SHALL BE SPACED TO DIVIDE THE SLAB INTO PANELS NOT TO EXCEED 325 SQUARE FEET FOR 6" SLABS. THE LONGER DIMENSION OF EACH PANEL SHALL NOT EXCEED THE SHORTER DIMENSIONS BY MORE THAN 20%. JOINTS SHALL BE LOCATED AT COLUMN CENTERLINES WHERE POSSIBLE. CONTRACTOR SHALL SUBMIT JOINT LAYOUT TO ARCHITECT FOR APPROVAL. REFER TO DETAIL 1/S001 & 3/S001.



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23/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
PARTIAL FOUNDATION PLAN - AREA A

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER:
S102

DRAWN BY:Author

MKEC PROJ. # 23010802.26

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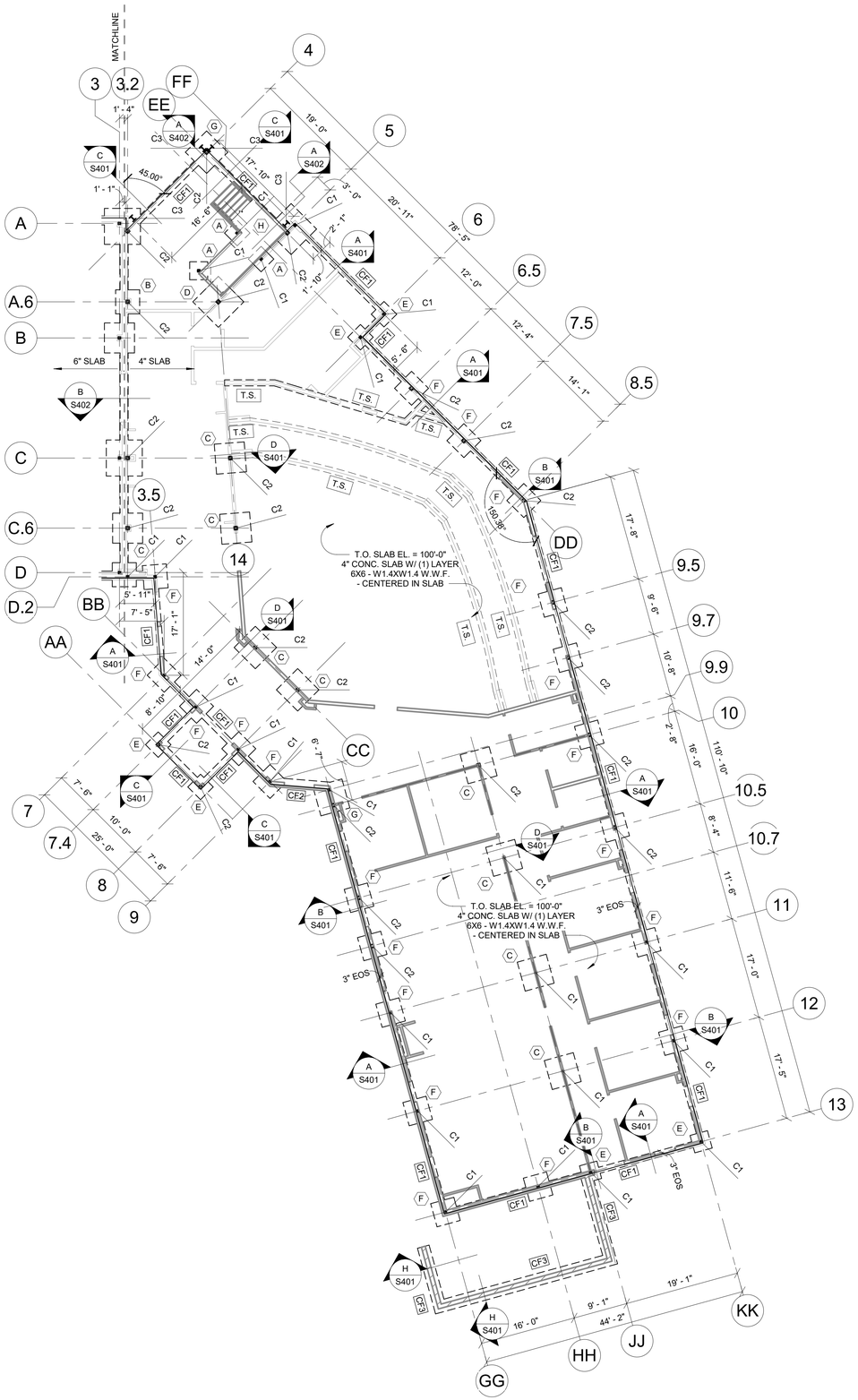

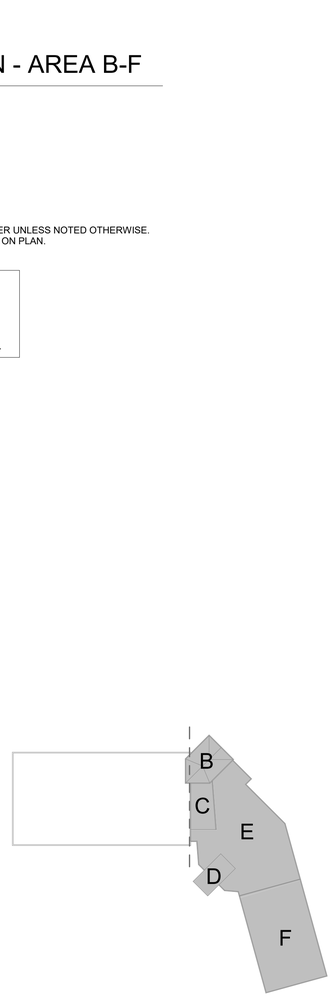

N

PARTIAL FOUNDATION PLAN - AREA B-F

SCALE: 3/32" = 1'-0"

0' 2' 4' 8' 16'

NOTES:

1. REFER TO SHEET S101 FOR OVERALL FOUNDATION PLAN.
2. TOP OF FOOTING ELEVATION = 99'-4" UNLESS NOTED OTHERWISE.
3. "X" = PAD FOOTING PER SCHEDULE ON SHEET S001.
4. "CF#" = CONT. FOOTING PER SCHEDULE ON SHEET S001.
5. "C#" = COLUMN PER SCHEDULE ON SHEET S001.
6. "EOS" = EDGE OF SLAB DIMENSION.
7. STEEL FRAMING DIMENSIONS ARE TO CENTERLINE OF GRID OR MEMBER UNLESS NOTED OTHERWISE.
8. WALL DIMENSIONS ARE TO FACE OF CMU UNLESS NOTED OTHERWISE ON PLAN.

NOTE:
SAW CUT JOINTS IN SLABS ON GRADE SHALL BE SPACED TO DIVIDE THE SLAB INTO PANELS NOT TO EXCEED 325 SQUARE FEET FOR 4" SLABS. THE LONGER DIMENSION OF EACH PANEL SHALL NOT EXCEED THE SHORTER DIMENSIONS BY MORE THAN 20%. JOINTS SHALL BE LOCATED AT COLUMN CENTERLINES WHERE POSSIBLE. CONTRACTOR SHALL SUBMIT JOINT LAYOUT TO ARCHITECT FOR APPROVAL. REFER TO DETAIL 1/S001 & 2/S001.

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25/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
PARTIAL FOUNDATION PLAN - AREA B-F

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S103**

DRAWN BY:Author

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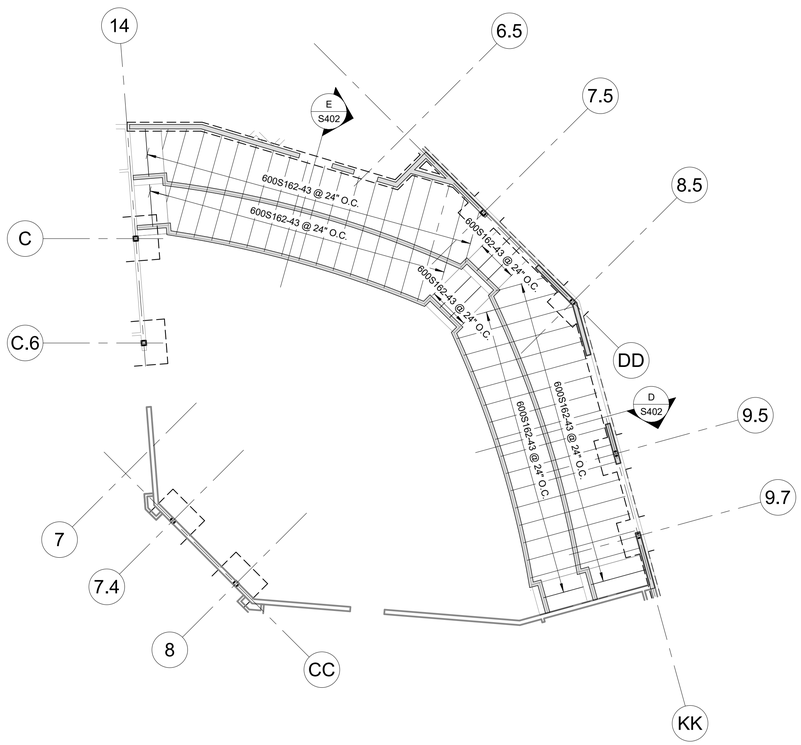

RAISED SEATING FRAMING PLAN

1
S104

SCALE: 1/8" = 1'-0"

0' 2' 4' 8' 16'

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25/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
RAISED SEATING FRAMING PLAN

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER:
S104

DRAWN BY:Author

MKEC PROJ. # 2301080226
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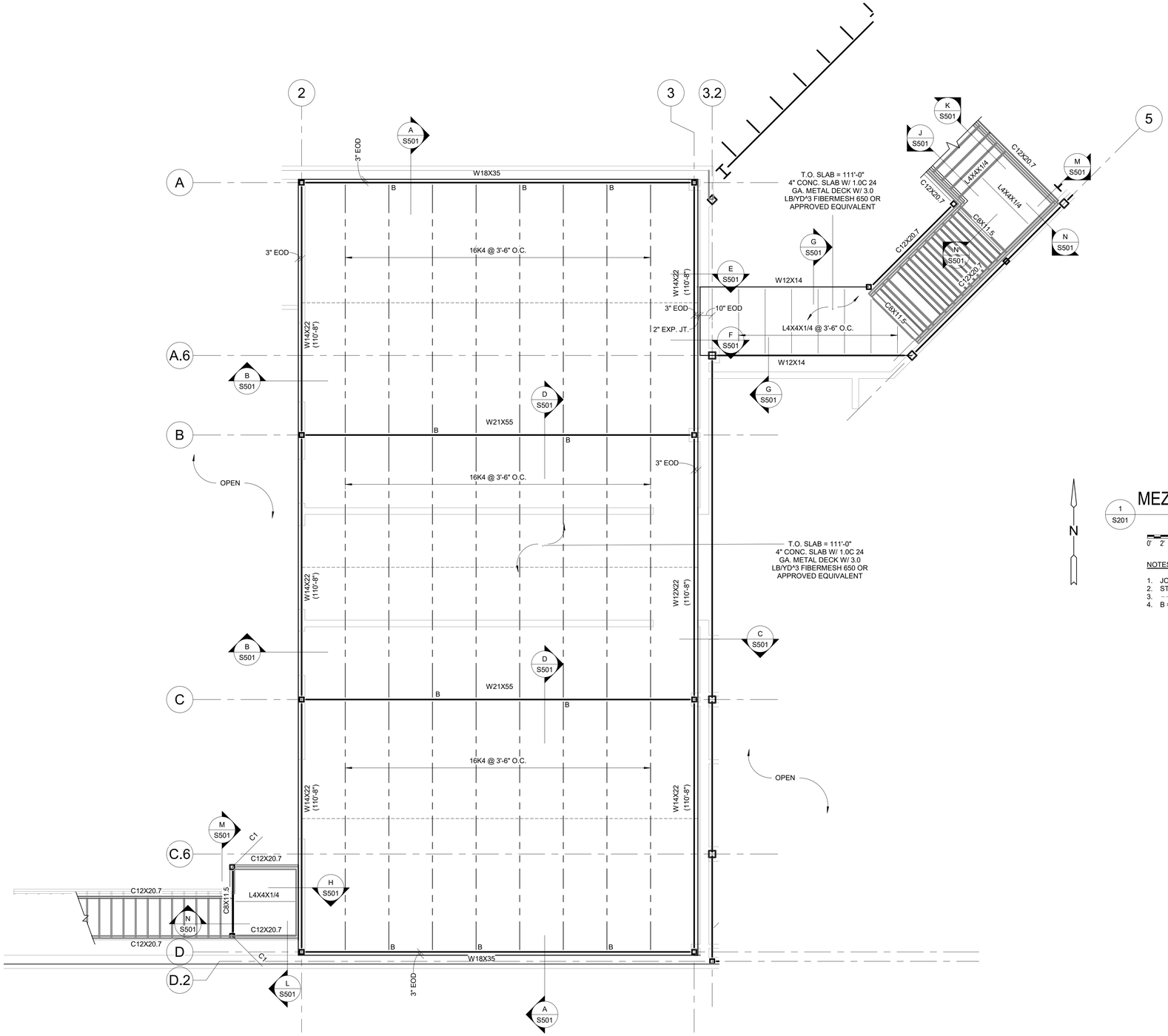

N

1 S201

MEZZANINE FRAMING PLAN

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

0' 2' 4' 8' 16'

NOTES:

1. JOIST BEARING ELEVATION = 110'-5 1/2" UNLESS NOTED OTHER WISE.
2. STEEL FRAMING DIMENSIONS ARE TO CENTERLINE OF GRID OR MEMBER UNLESS NOTED OTHERWISE.
3. - - - - - - - - - - - - = LINE OF CONTINUOUS HORIZONTAL BRIDGING.
4. B = 2X2X3/16 BRACE ANGLE, REFER TO SECTIONS A/S501 & D/S501

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SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
MEZZANINE FRAMING PLAN

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S201**

DRAWN BY: Author

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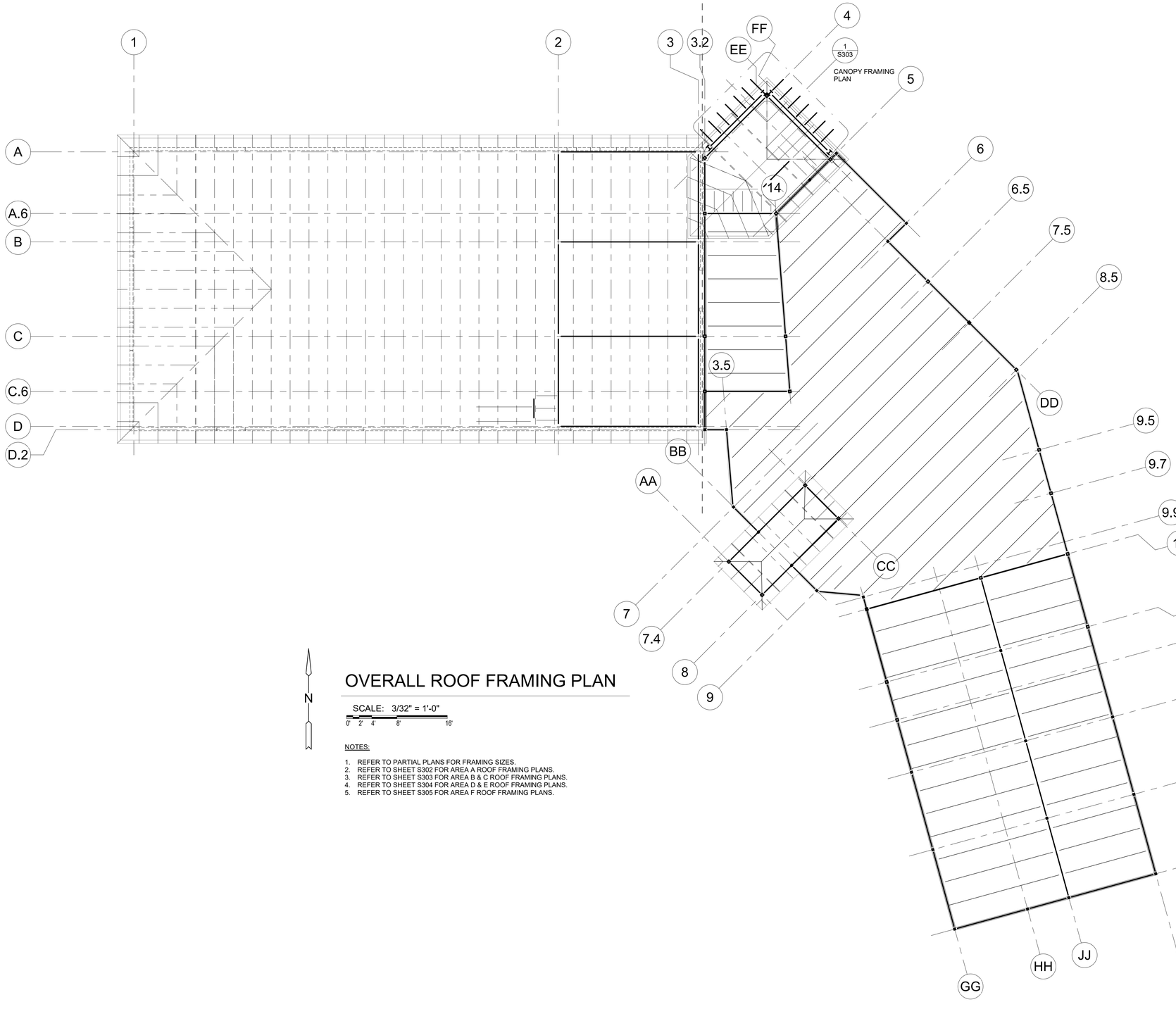

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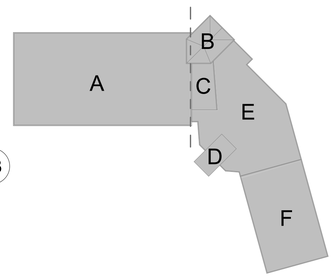
OVERALL ROOF FRAMING PLAN

SCALE: 3/32" = 1'-0"

0" 2" 4" 8" 16"

NOTES:

1. REFER TO PARTIAL PLANS FOR FRAMING SIZES.
2. REFER TO SHEET S302 FOR AREA A ROOF FRAMING PLANS.
3. REFER TO SHEET S303 FOR AREA B & C ROOF FRAMING PLANS.
4. REFER TO SHEET S304 FOR AREA D & E ROOF FRAMING PLANS.
5. REFER TO SHEET S305 FOR AREA F ROOF FRAMING PLANS.



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23/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
OVERALL ROOF FRAMING PLAN W/ KEY PLAN

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER:
S301

DRAWN BY:Author

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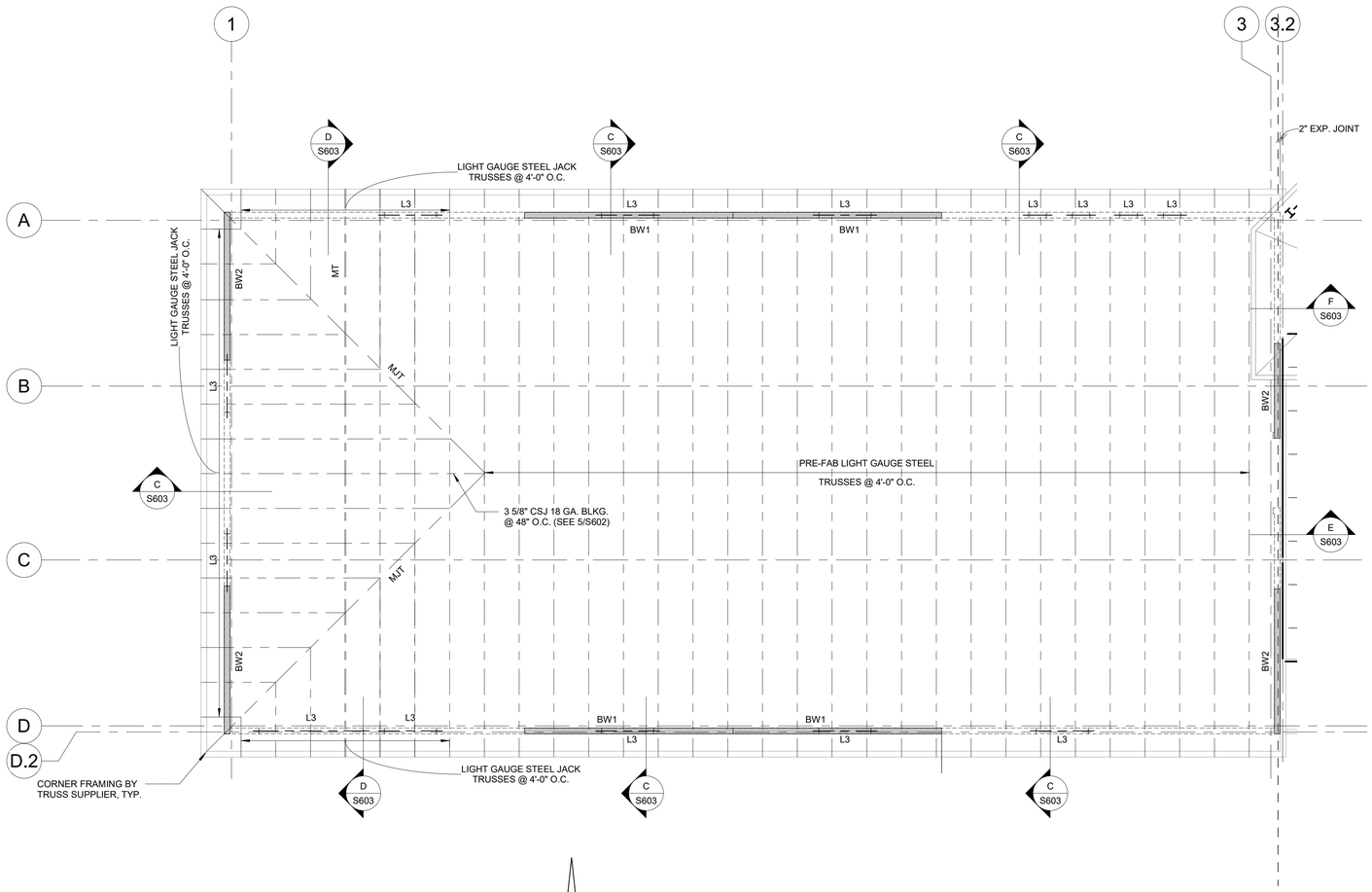


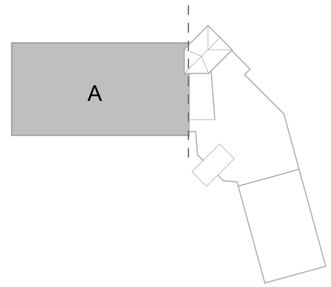
PARTIAL ROOF FRAMING PLAN - AREA A

SCALE: 1/8" = 1'-0"

0' 2' 4' 8' 16'

NOTES:

1. TRUSS BEARING ELEVATION = 121' - 0" U.N.O.
2. MT = MASTER TRUSS
3. MJT = MASTER JACK TRUSS
4. ALL FRAMED OPINGS IN PERIMETER STUD WALLS SHALL INCLUDE AN "L#" LIGHT GAGE HEADER PER SCHEDULE ON SHEET S001 UNLESS NOTED OTHERWISE.
5. "BW#" = BRACED WALL, REFERENCE SCHEDULE & DETAILS ON SHEET S702.
6. ALL NON-BEARING INTERIOR WALLS THAT EXTEND TO THE BOTTOM OF STRUCTURE, ABOVE SHALL UTILIZE A DEFLECTION TRACK PER DETAIL 1/S601.
7. REFER TO 1/S603 & 2/S603 FOR INTERIOR NON-BEARING WALL DETAILS.



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SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
PARTIAL ROOF FRAMING PLAN - AREA A

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S302**

DRAWN BY:Author

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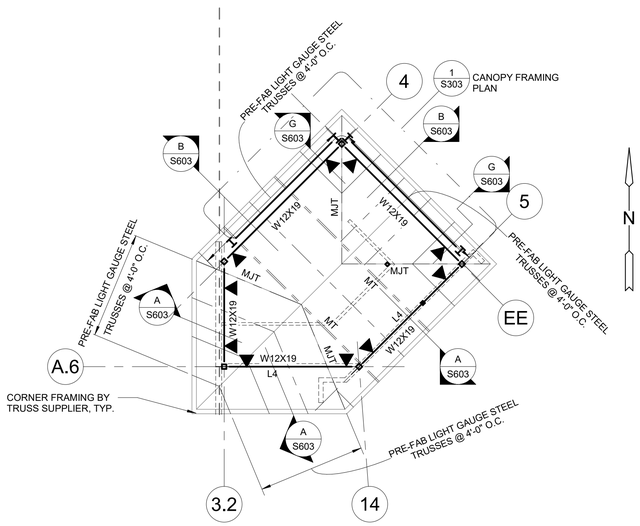


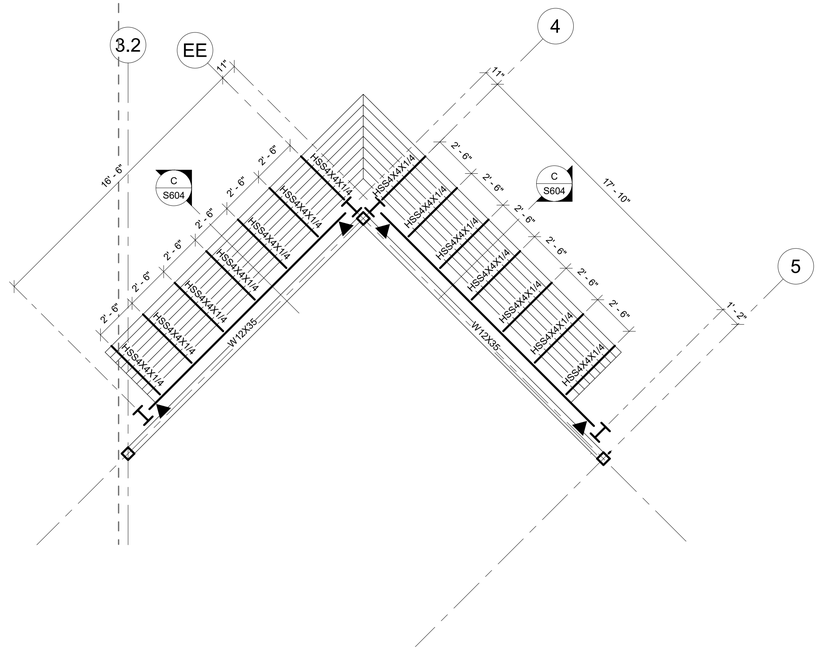
PARTIAL ROOF FRAMING PLAN - AREA B

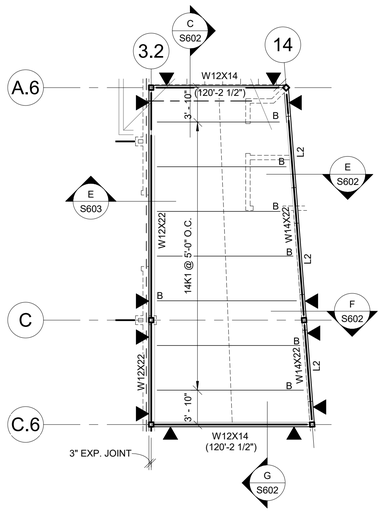
SCALE: 1/8" = 1'-0"

0' 1' 2' 4' 8'

NOTES:

1. TOP OF STEEL ELEVATION = 127' - 0" U.N.O.
2. MT = MASTER TRUSS
3. MJT = MASTER JACK TRUSS
4. ALL FRAMED OPINGS IN PERIMETER STUD WALLS SHALL INCLUDE AN "L#" LIGHT GAGE HEADER PER SCHEDULE ON SHEET S001 UNLESS NOTED OTHERWISE.
5. REFER TO 1/S602, 2/S602, 1/S601 FOR INTERIOR NON-BEARING WALL DETAILS.
6. ▲ = MOMENT CONNECTION. REFER TO DETAIL 6/S701.





PARTIAL ROOF FRAMING PLAN - AREA C

SCALE: 1/8" = 1'-0"

0' 1' 2' 4' 8'

NOTES:

1. TOP OF STEEL ELEVATION = 120'-0".
2. STEEL FRAMING DIMENSIONS ARE TO CENTERLINE OF GRID OR MEMBER UNLESS NOTED OTHERWISE.
3. "EOD" = EDGE OF DECK DIMENSION
4. ALL FRAMED OPENINGS IN PERIMETER STUD WALLS SHALL INCLUDE AN "L#" LIGHT GAGE HEADER PER SCHEDULE ON SHEET S001 UNLESS NOTED OTHERWISE.
5. ALL INTERIOR STUD WALLS EXTENDING TO BOTTOM OF STRUCTURE ABOVE SHALL UTILIZE A VERTICAL DEFLECTION TRACK PER DETAIL 1/S601.
6. – – – – – – – – = LINE OF CONTINUOUS HORIZONTAL BRIDGING.
7. B = 2 X 2 X 3/16 BRACE ANGLE. REFER TO SECTION A/S601.
8. REFER TO 1/S601, 2/S601 & 3/S601 FOR INTERIOR NON-BEARING WALL DETAILS.
9. FOR POINT LOAD JOIST REINFORCEMENT, REFER TO 4/S601.
10. X# = X-BRACE, REFER TO SHEET S701 FOR SCHEDULE & DETAILS.
11. ▲ = MOMENT CONNECTION. REFER TO DETAILS 4/S701, 6/S701, AND 7/S701.

CANOPY FRAMING PLAN

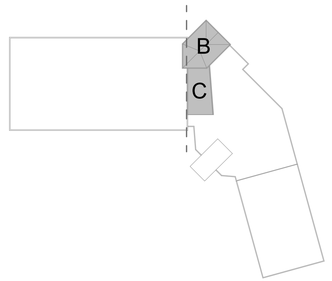
1 S303

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

0' 2' 4' 8' 16'

NOTES:

1. TOP OF STEEL ELEVATION = 109' - 6" U.N.O.
2. ▲ = MOMENT CONNECTION. REFER TO DETAIL 4/S701.



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23/Aug/23

SALINA AREA TECH - INDUSTRIAL
MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

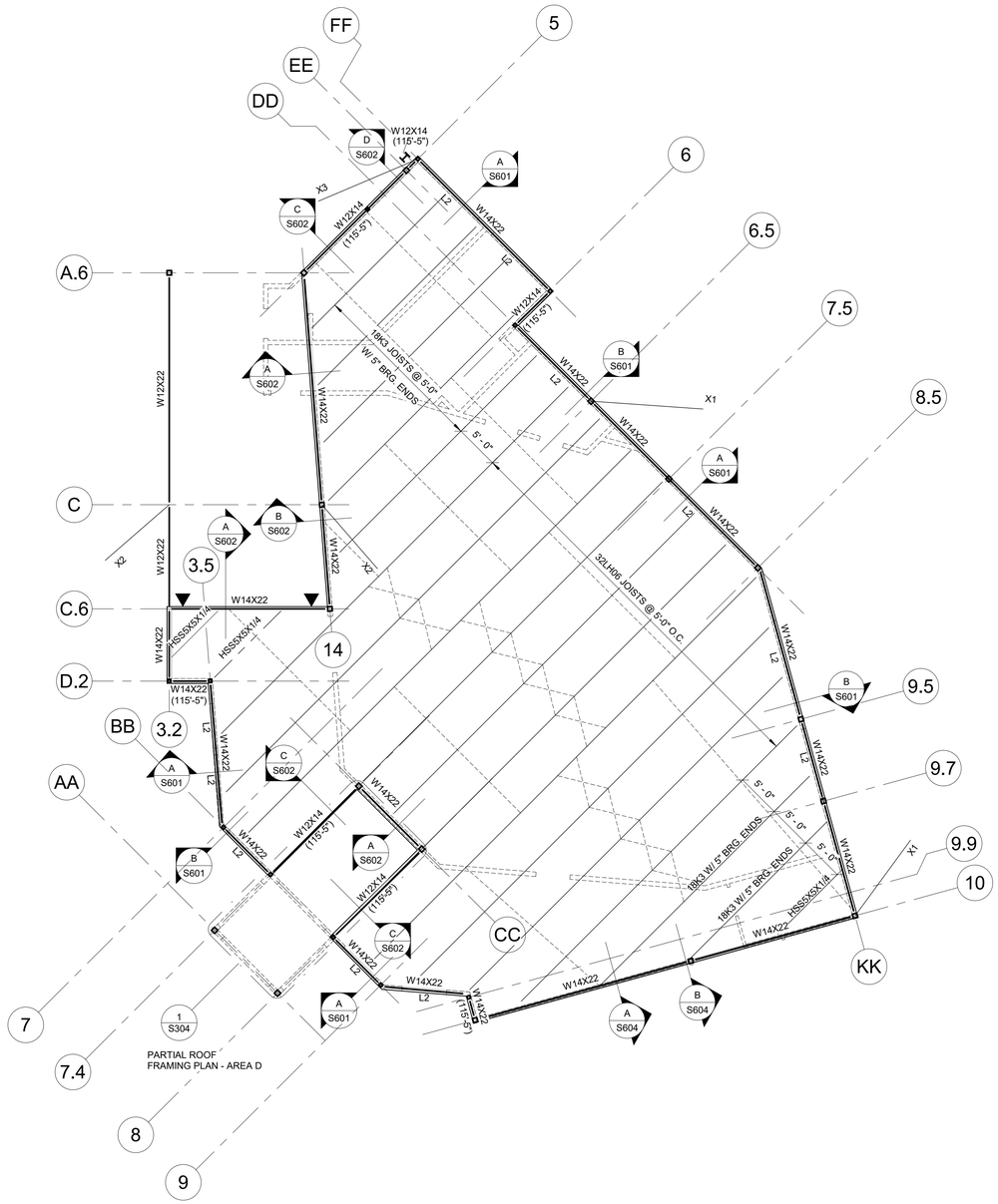
Drawing:
PARTIAL ROOF FRAMING PLAN - AREA B & C

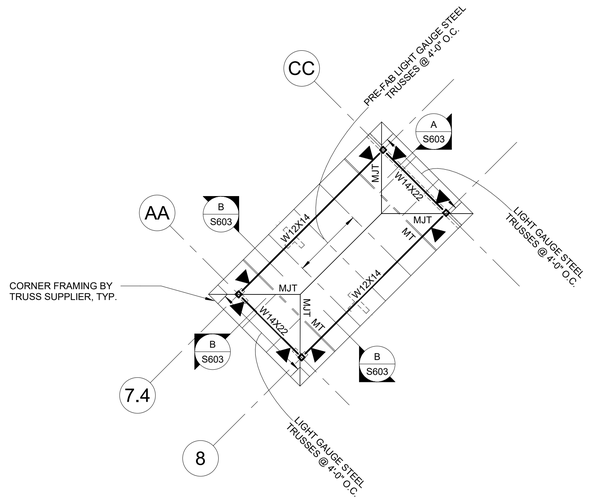
Date: 08-25-23

Project Number: 23-014

SHEET NUMBER:
S303

DRAWN BY:Author





N

1 S304

PARTIAL ROOF FRAMING PLAN - AREA D

SCALE: 1/8" = 1'-0"

0' 2' 4' 8' 16'

NOTES:

1. TOP OF STEEL ELEVATION = 119' - 0" U.N.O.
2. MT = MASTER TRUSS
3. MJT = MASTER JACK TRUSS
4. REFER TO SHEET S001 FOR STRUCTURAL GENERAL NOTES.
5. REFER TO SECTION A/S602 FOR BEAM BRACING.
6. ▲ = MOMENT CONNECTION. REFER TO DETAIL 6/S701.
7. REFER TO 1/S602, 2/S602, 1/S601 FOR INTERIOR NON-BEARING WALL DETAILS.

N

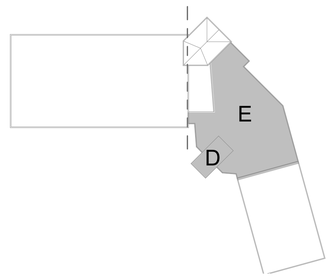
PARTIAL ROOF FRAMING PLAN - AREA E

SCALE: 1/8" = 1'-0"

0' 2' 4' 8' 16'

NOTES:

1. TOP OF STEEL ELEVATION=115'-0".
2. STEEL FRAMING DIMENSIONS ARE TO CENTERLINE OF GRID OR MEMBER UNLESS NOTED OTHERWISE.
3. "EOD" = EDGE OF DECK DIMENSION
4. ALL FRAMED OPENINGS IN PERIMETER STUD WALL SHALL INCLUDE AN "L#" LIGHT GAGE HEADER PER SCHEDULE ON SHEET S001 UNLESS NOTED OTHERWISE.
5. ALL INTERIOR STUD WALLS EXTENDING TO BOTTOM OF STRUCTURE ABOVE SHALL UTILIZE A VERTICAL DEFLECTION TRACK PER DETAIL 1/S601.
6. B = 2 X 2 X 3/16 BRACE ANGLE, REFER TO SECTION A/S601.
7. REFER TO 1/S601, 2/S601 & 3/S601 FOR INTERIOR NON-BEARING WALL DETAILS.
8. FOR POINT LOAD JOIST REINFORCEMENT, REFER TO 4/S601.
9. X# = X-BRACE, REFER TO SHEET S701 FOR SCHEDULE AND DETAILS.
10. - - - - - - - - - - = LINE OF CONTINUOUS HORIZONTAL BRACING.
11. >-<->-<->-< = LINE OF BOLTED DIAGONAL JOIST BRIDGING.
12. ▲ = MOMENT CONNECTION. REFER TO DETAIL 6/S701.



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Website: m2arch.com
Phone: 913-523-3965
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RUSSELL REDFORD 16793 KANSAS PROFESSIONAL ENGINEER
25/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
PARTIAL ROOF FRAMING PLAN - AREA D & E

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S304**

DRAWN BY:Author

MKEC PROJ. # 2301080226

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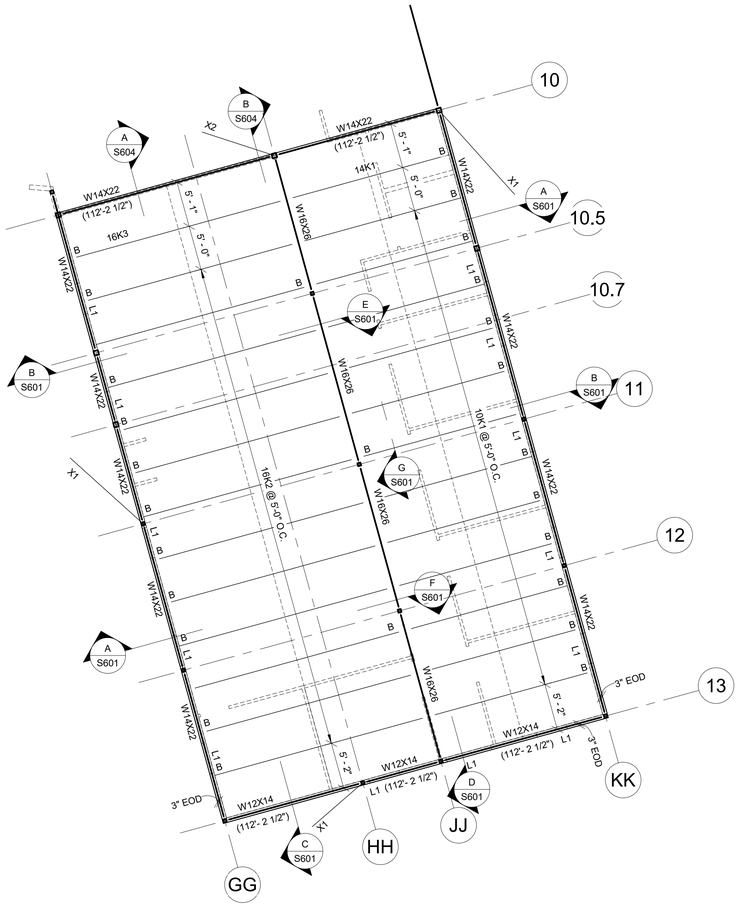


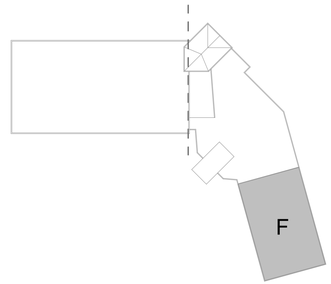
PARTIAL ROOF FRAMING PLAN - AREA F

SCALE: 1/8" = 1'-0"

0' 1' 2' 4' 8'

N

NOTES:
1. TOP OF STEEL ELEVATION=112'-0". (U.N.O.)
2. STEEL FRAMING DIMENSIONS ARE TO CENTERLINE OF GRID OR MEMBER UNLESS NOTED OTHERWISE.
3. "EOD" = EDGE OF DECK DIMENSION
4. ALL FRAMED OPENINGS IN PERIMETER STUD WALLS SHALL INCLUDE AN "L#" LIGHT GAGE HEADER PER SCHEDULE ON SHEET S001 UNLESS NOTED OTHERWISE.
5. ALL INTERIOR STUD WALLS EXTENDING TO BOTTOM OF STRUCTURE ABOVE SHALL UTILIZE A VERTICAL DEFLECTION TRACK PER DETAIL 1/S601.
6. – – – – – – – – – – = LINE OF CONTINUOUS HORIZONTAL BRIDGING.
7. B = 2 X 2 X 3/16 BRACE ANGLE, REFER TO SECTION A/S601.
8. REFER TO 1/S601, 2/S601 & 3/S601 FOR INTERIOR NON-BEARING WALL DETAILS.
9. FOR POINT LOAD JOIST REINFORCEMENT, REFER TO 4/S601.
10. X# = X-BRACE, REFER TO SHEET S701 FOR SCHEDULE AND DETAILS.



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JUSSELL REDFORD ENGINEERING 16793 KANSAS PROFESSIONAL ENGINEER 25/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
PARTIAL ROOF FRAMING PLAN - AREA F

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S305**

DRAWN BY:Author

MKEC PROJ. # 23010802226
MKEC
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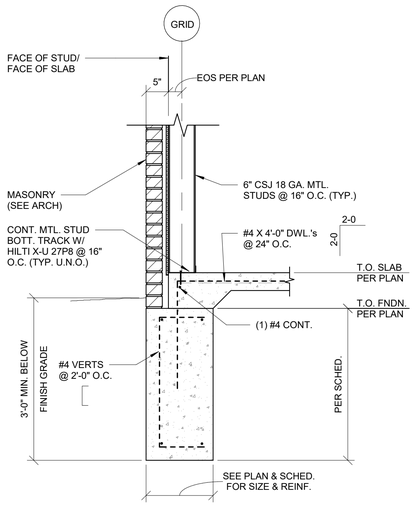
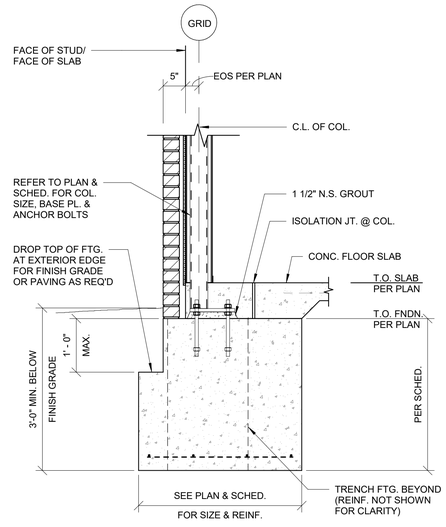


SECTION @ FNDN.

A S401

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

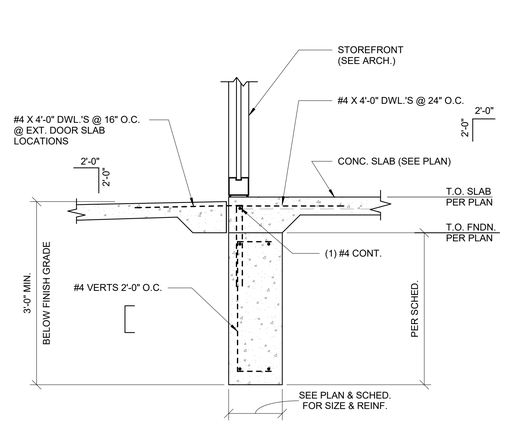


SECTION @ FNDN.

B S401

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

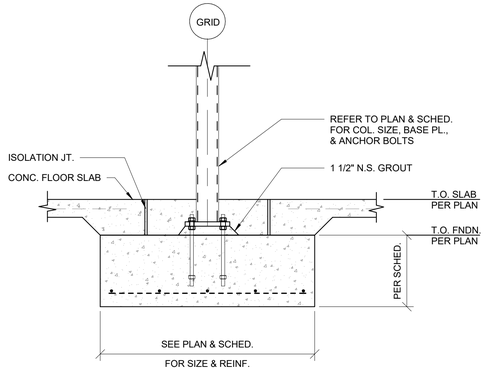


SECTION @ FNDN.

C S401

SCALE: 3/4" = 1'-0"

0' 1' 2'



SECTION @ FNDN.

D S401

SCALE: 3/4" = 1'-0"

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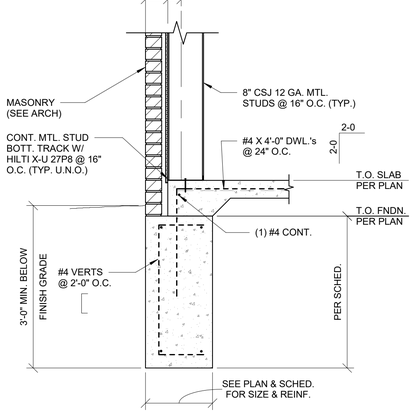
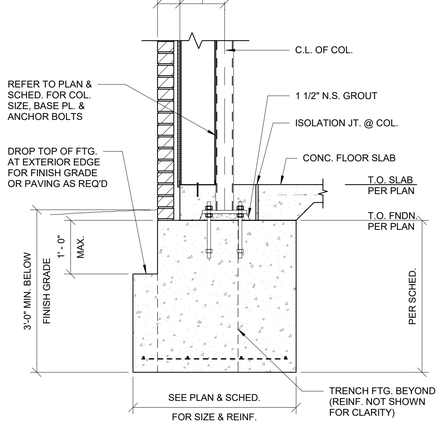


SECTION @ FNDN.

E S401

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

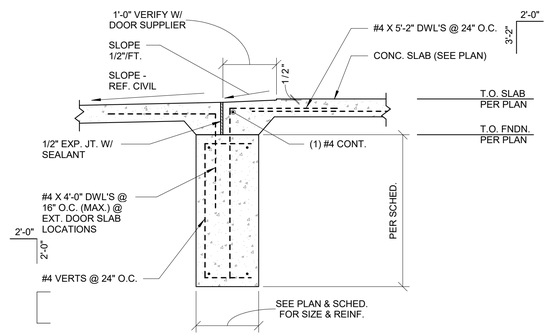


SECTION @ FNDN.

F S401

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'



SECTION @ FNDN.

G S401

SCALE: 3/4" = 1'-0"

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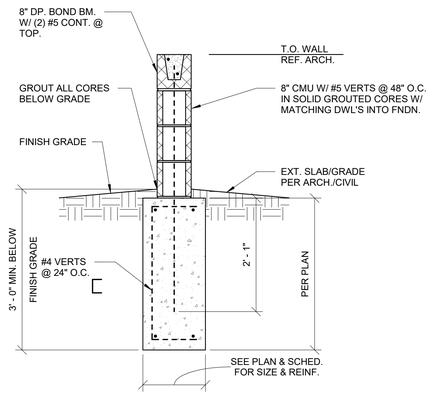

SECTION @ FNDN.

H S401

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

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23/Aug/23

SALINA AREA TECH - INDUSTRIAL
MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
FOUNDATION SECTIONS

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S401**

DRAWN BY:Author

MKEC PROJ. # 23010802226

MKEC
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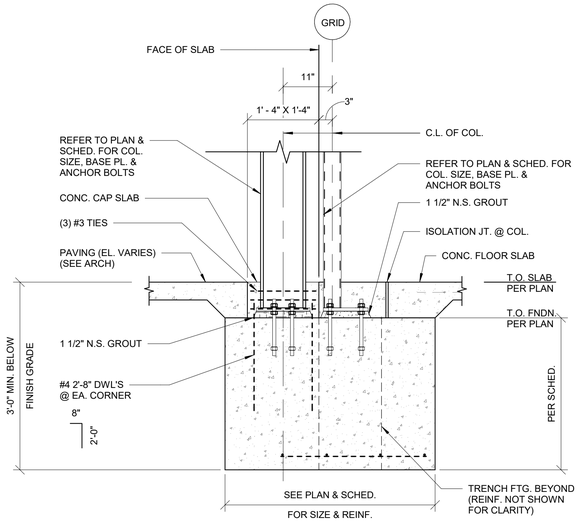

A S402 SECTION @ FNDN.

SCALE: 3/4" = 1'-0"

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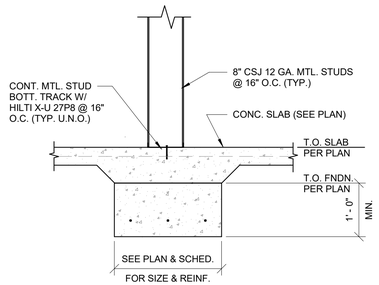
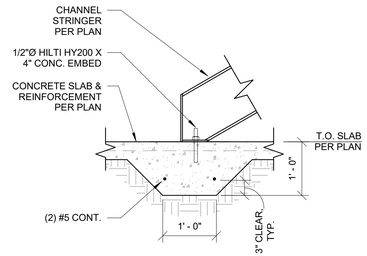


B S402 SECTION @ FNDN.

SCALE: 3/4" = 1'-0"

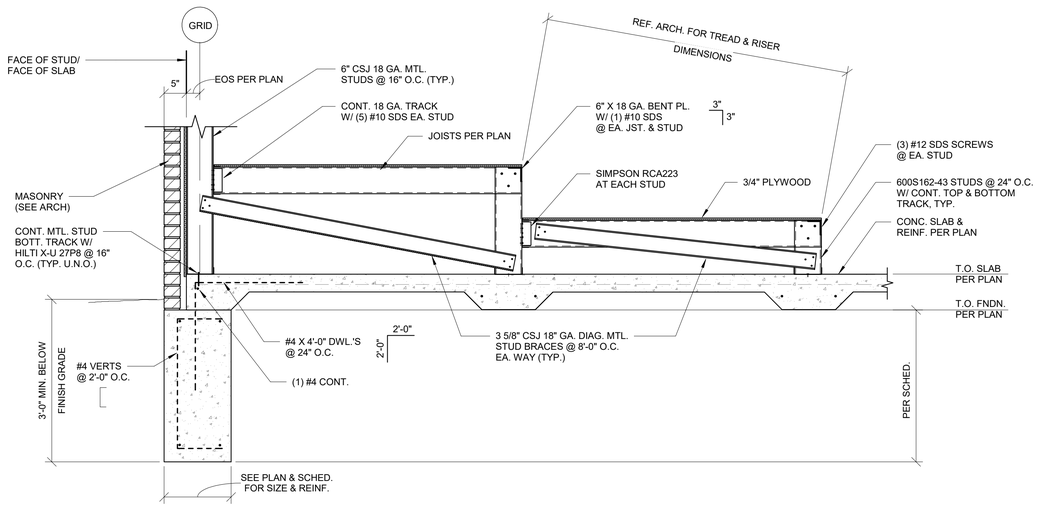
0' 1' 2' 3'



C S402 FOUNDATION SECTION

SCALE: 3/4" = 1'-0"

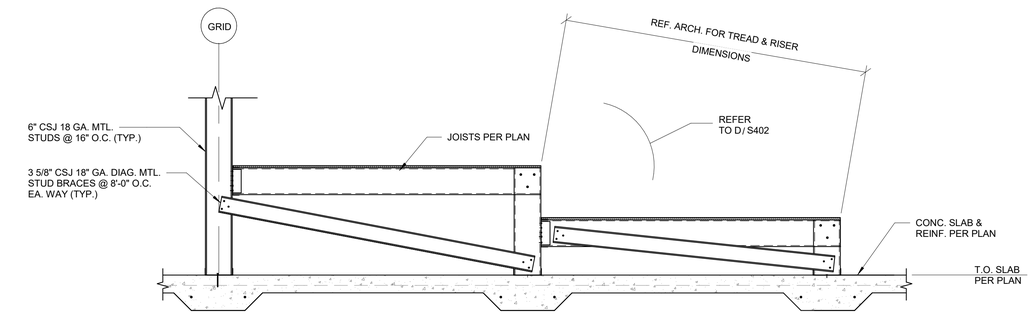
0' 1' 2' 3'



D S402 RAISED SEATING SECTION

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'



E S402 RAISED SEATING SECTION

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

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SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
FOUNDATION SECTIONS

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S402**

DRAWN BY:Author

MKEC PROJ. # 2301080226

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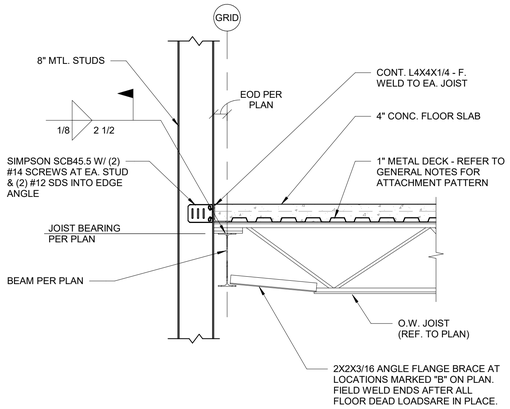
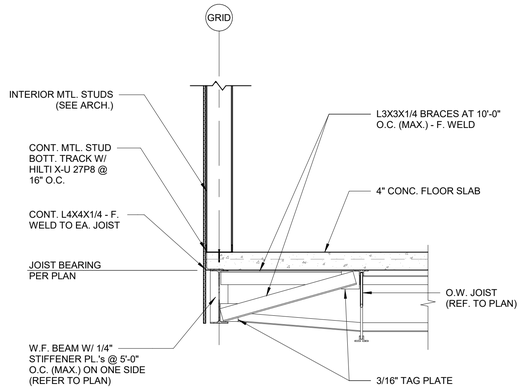


A S501 SECTION @ MEZZANINE

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'



B S501 SECTION @ MEZZANINE

SCALE: 3/4" = 1'-0"

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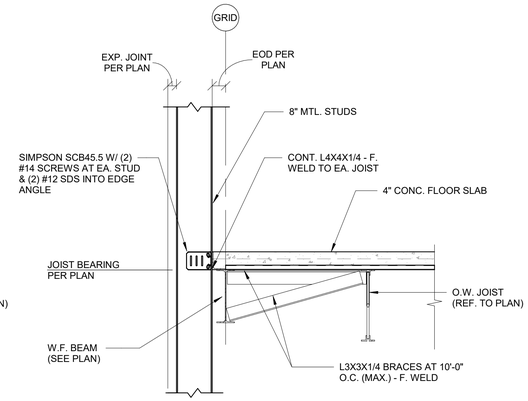
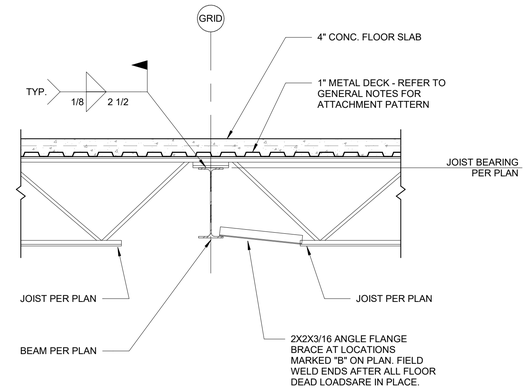


C S501 SECTION @ MEZZANINE

SCALE: 3/4" = 1'-0"

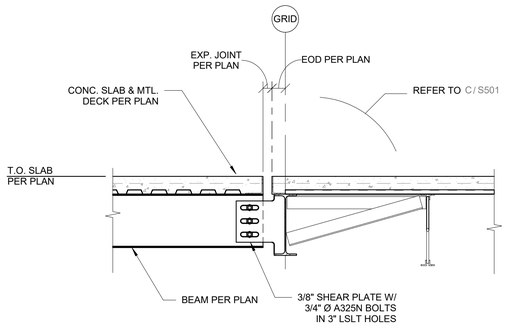
0' 1' 2' 3'



D S501 SECTION @ MEZZANINE

SCALE: 3/4" = 1'-0"

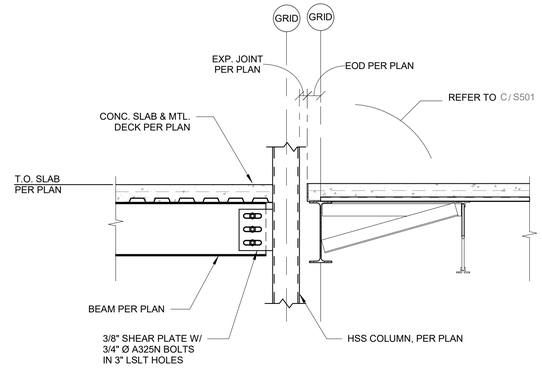
0' 1' 2' 3'



E S501 SECTION @ MEZZANINE

SCALE: 3/4" = 1'-0"

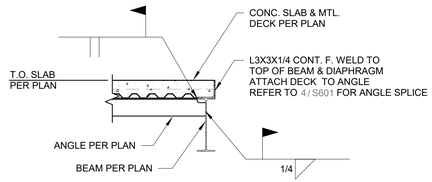
0' 1' 2' 3'



F S501 SECTION @ MEZZANINE

SCALE: 3/4" = 1'-0"

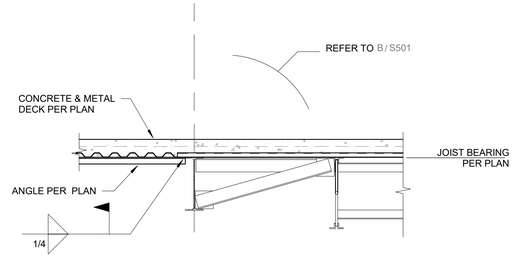
0' 1' 2' 3'



G S501 SECTION @ MEZZANINE

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'



H S501 STAIR FRAMING SECTION

SCALE: 3/4" = 1'-0"

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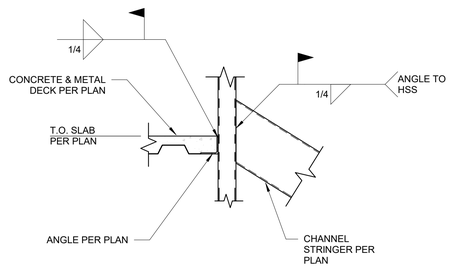
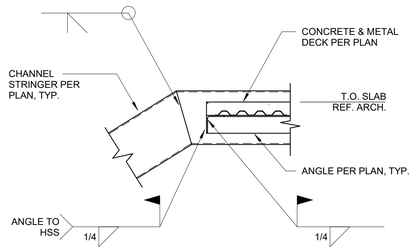


J S501 STAIR FRAMING SECTION

SCALE: 3/4" = 1'-0"

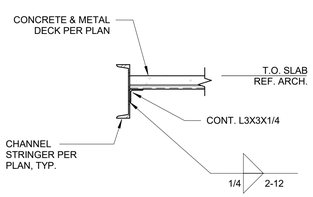
0' 1' 2' 3'



K S501 STAIR FRAMING SECTION

SCALE: 3/4" = 1'-0"

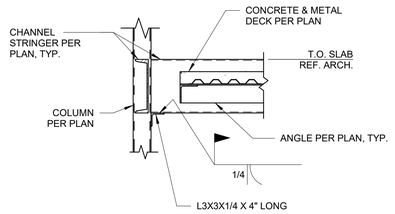
0' 1' 2' 3'



L S501 STAIR FRAMING SECTION

SCALE: 3/4" = 1'-0"

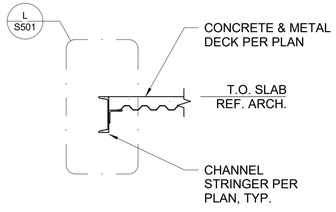
0' 1' 2' 3'



M S501 STAIR FRAMING SECTION

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'



N S501 STAIR FRAMING SECTION

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

Revisions:

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RUSSELL REDFORD LICENSED Registered 16793 KANSAS PROFESSIONAL ENGINEER
23/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
MEZZANINE & STAIR FRAMING SECTIONS

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S501**

DRAWN BY: Author

MKEC PROJ. # 2301080226

MKEC
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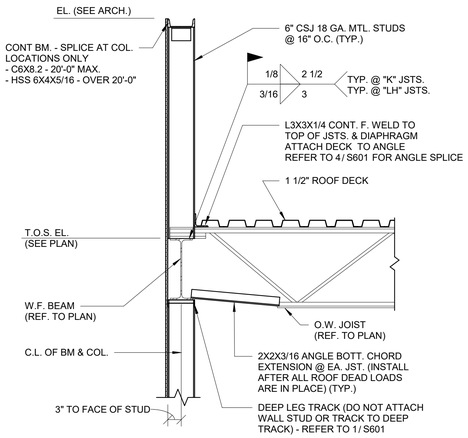

A S601 SECTION @ ROOF

SCALE: 3/4" = 1'-0"

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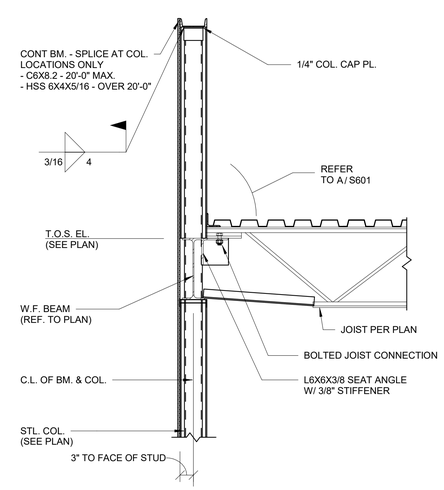
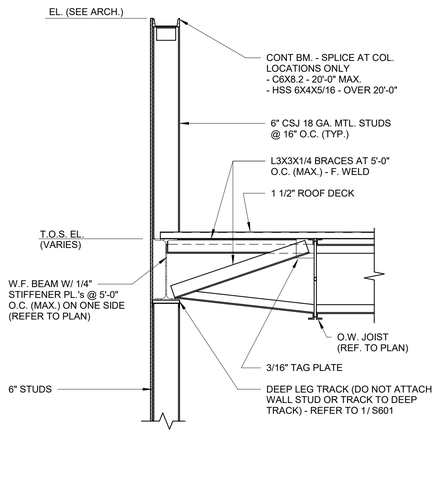


B S601 SECTION @ ROOF

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'



C S601 SECTION @ ROOF

SCALE: 3/4" = 1'-0"

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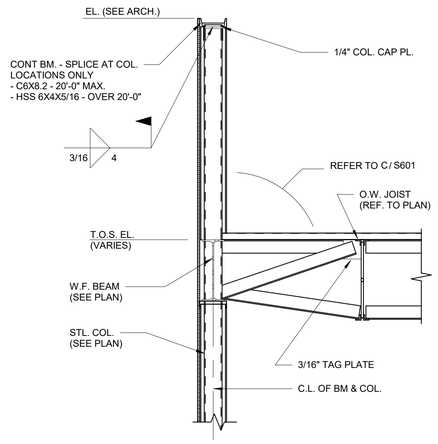

D S601 SECTION @ ROOF

SCALE: 3/4" = 1'-0"

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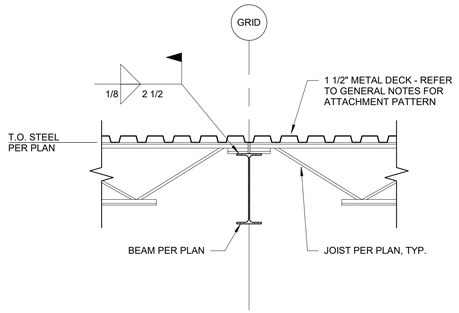

E S601 ROOF FRAMING SECTION

SCALE: 3/4" = 1'-0"

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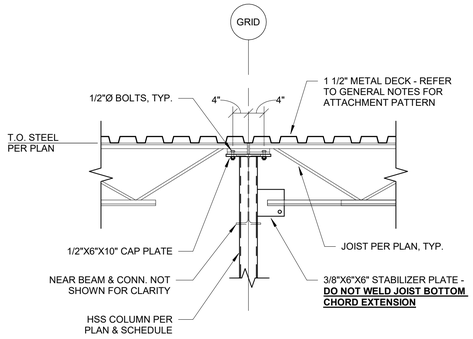

F S601 ROOF FRAMING SECTION

SCALE: 3/4" = 1'-0"

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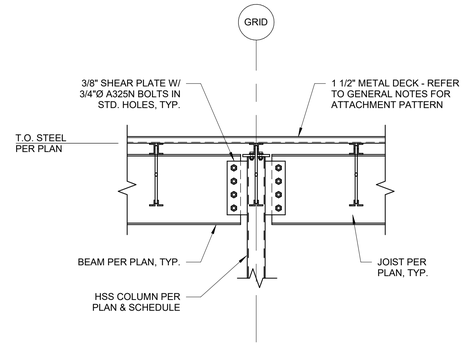
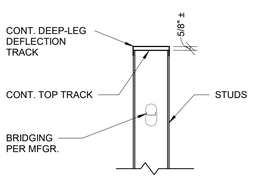


G S601 ROOF FRAMING SECTION

SCALE: 3/4" = 1'-0"

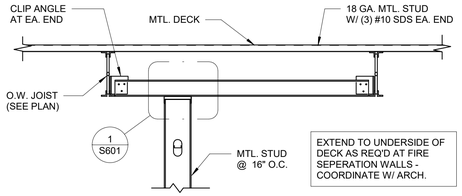
0' 1' 2' 3'



1 S601 SLIP DETAIL

SCALE: 1" = 1'-0"

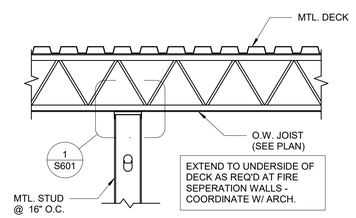
0' 1' 2'



2 S601 SECTION @ ROOF

SCALE: 3/4" = 1'-0"

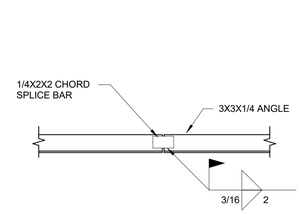
0' 1' 2' 3'



3 S601 SECTION @ ROOF

SCALE: 3/4" = 1'-0"

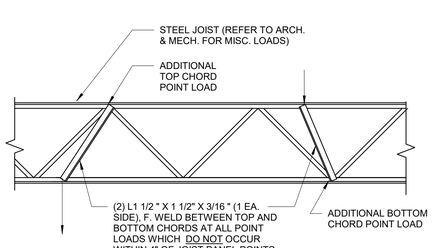
0' 1' 2' 3'



4 S601 SPLICE DETAIL

SCALE: 1" = 1'-0"

0' 1' 2'



5 S601 DTL. @ JST. POINT LOAD

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

Revisions:

M² Architects
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Website: m2arch.com
Phone: 913-523-3965
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RUSSELL REDFORD LICENSED Reviewed 16793 KANSAS PROFESSIONAL ENGINEER
23/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
ROOF FRAMING SECTIONS

Date: 08-25-23

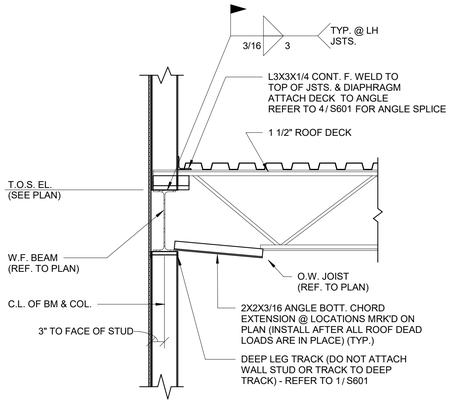
Project Number: 23-014

SHEET NUMBER: **S601**

DRAWN BY:Author

MKEC PROJ. # 2301080226

MKEC
Wichita, KS • 316.684.9600

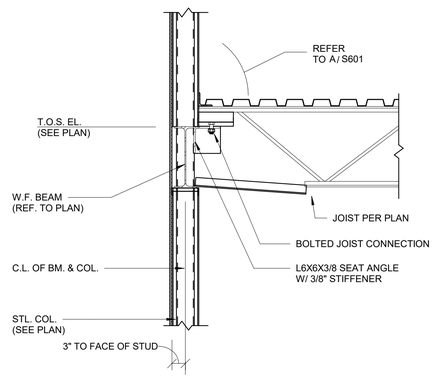


SECTION @ ROOF

A S602

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

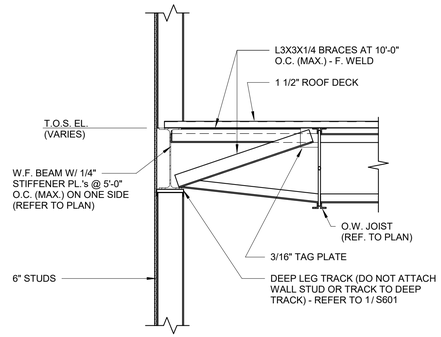


SECTION @ ROOF

B S602

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

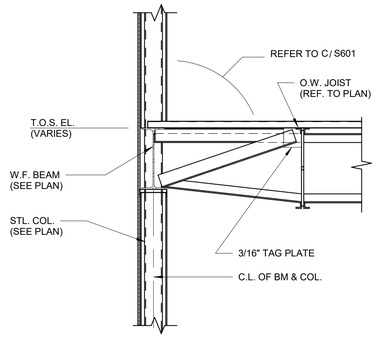


SECTION @ ROOF

C S602

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'



SECTION @ ROOF

D S602

SCALE: 3/4" = 1'-0"

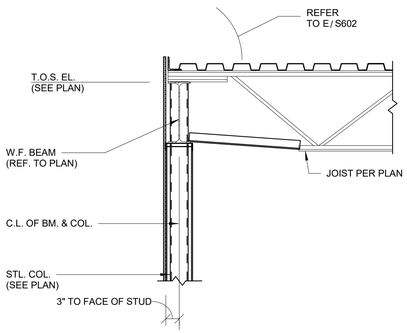
0' 1' 2' 3'

SECTION @ ROOF

E S602

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

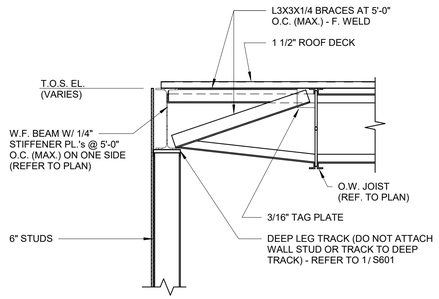


SECTION @ ROOF

F S602

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'



SECTION @ ROOF

G S602

SCALE: 3/4" = 1'-0"

0' 1' 2'

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RUSSELL REDFORD LICENSED Reviewed 16793 KANSAS PROFESSIONAL ENGINEER
23/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
ROOF FRAMING SECTIONS

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S602**

DRAWN BY: Author

MKEC PROJ. # 23010802226

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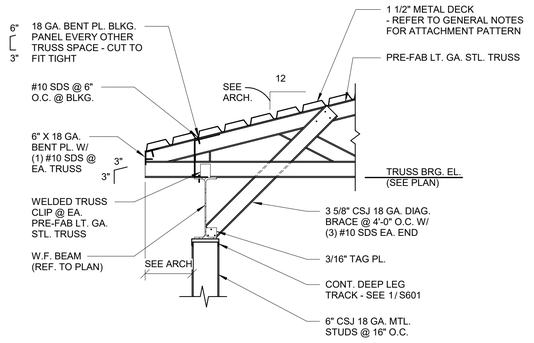
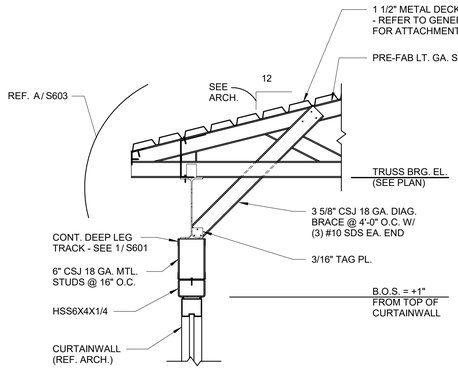


SECTION @ ROOF

A S603

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

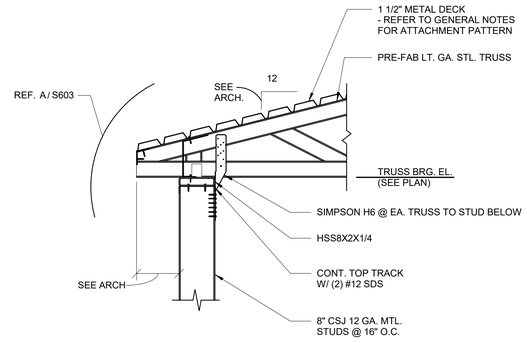


SECTION @ ROOF

B S603

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

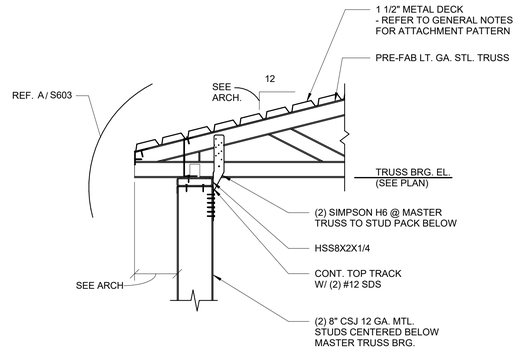


SECTION @ ROOF

C S603

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

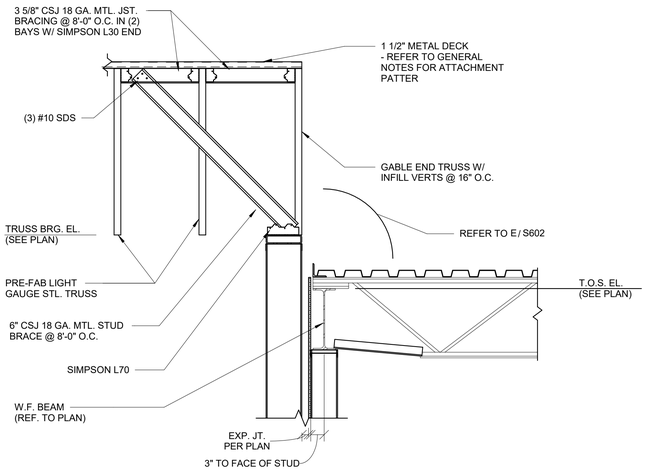


SECTION @ ROOF

D S603

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

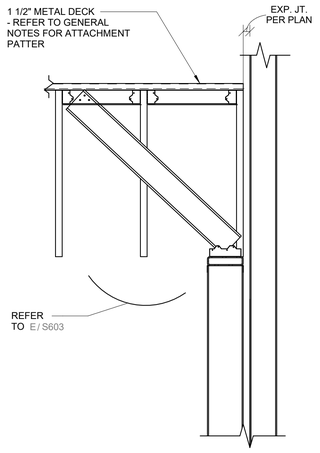


SECTION @ ROOF

E S603

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

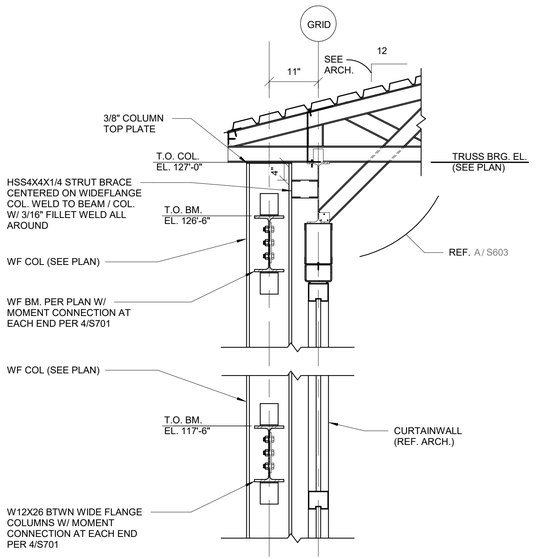


SECTION @ ROOF

F S603

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

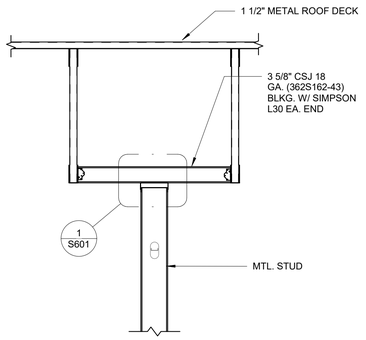


SECTION @ ROOF

G S603

SCALE: 3/4" = 1'-0"

0' 1' 2'



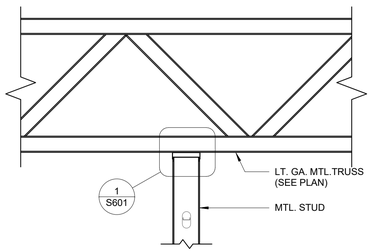
ROOF SECTION

1 S603

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

EXTEND TO UNDERSIDE OF DECK AS REQ'D AT FIRE SEPERATION WALLS - COORDINATE W/ ARCH.



ROOF SECTION

2 S603

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

EXTEND TO UNDERSIDE OF DECK AS REQ'D AT FIRE SEPERATION WALLS - COORDINATE W/ ARCH.

Revisions:

M² Architects

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25/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
ROOF FRAMING SECTIONS

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S603**

DRAWN BY: Author

MKEC PROJ. # 2301080226

MKEC
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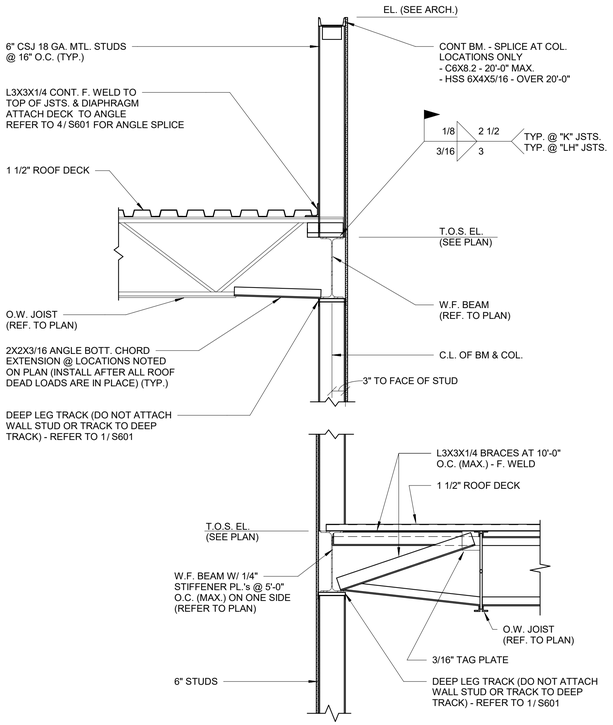
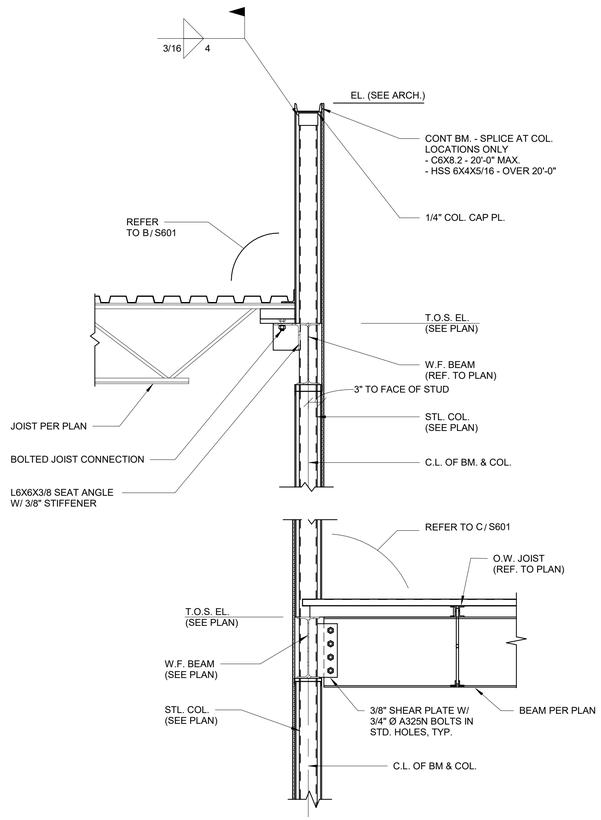


A S604 SECTION @ ROOF

SCALE: 3/4" = 1'-0"

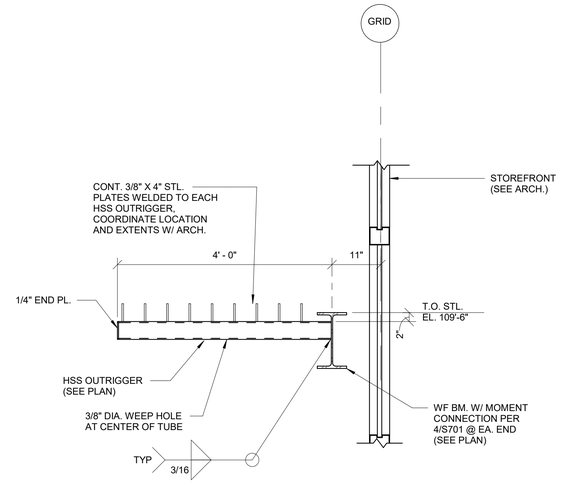
0' 1' 2' 3'



B S604 SECTION @ ROOF

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'



C S604 SECTION @ CANOPY

SCALE: 3/4" = 1'-0"

0' 1' 2'

Revisions:

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RUSSELL REDFORD 16793 KANSAS PROFESSIONAL ENGINEER
23/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
ROOF FRAMING SECTIONS

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S604**

DRAWN BY: Author

MKEC PROJ. # 2301080226

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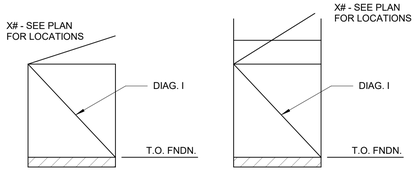
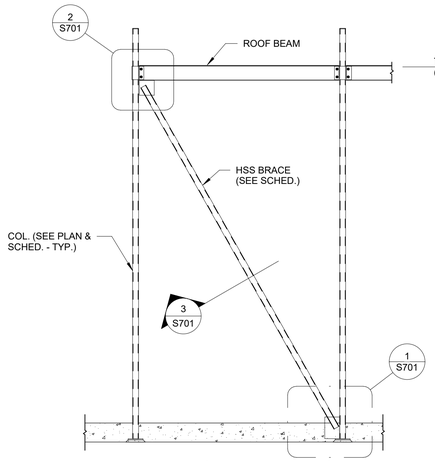
BRACE SCHEDULE

MARK	DIAG. I	WELD (TOTAL)	BRACE DETAIL
"X1"	HSS 4" X 4" X 1/4"	1/4"X 16"	A/S701
"X2"	HSS 5" X 5" X 5/16"	1/4"X 20"	B/S701
"X3"	HSS 5" X 5" X 5/16"	1/4"X 20"	C/S701

NOTE:
1. PROVIDE EQUAL AMOUNTS OF WELD EA. SIDE OF TUBE & GUSSET PL.



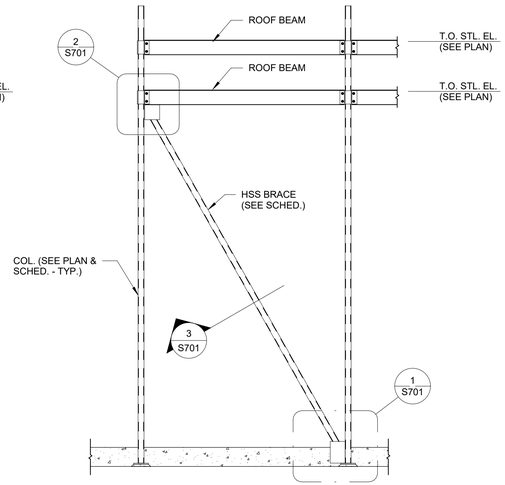


BRACE ELEVATION

A S701

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

0' 1' 2' 4' 8'

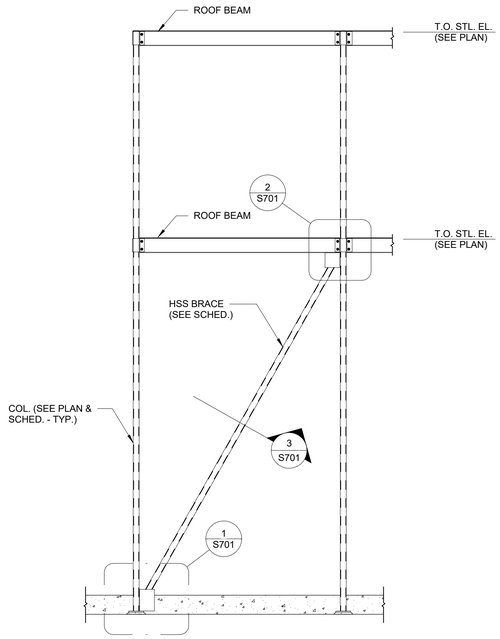


BRACE ELEVATION

B S701

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

0' 1' 2' 4' 8'

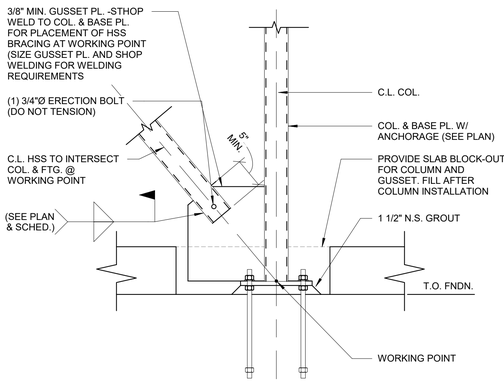


BRACE ELEVATION

C S701

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

0' 1' 2' 4' 8'

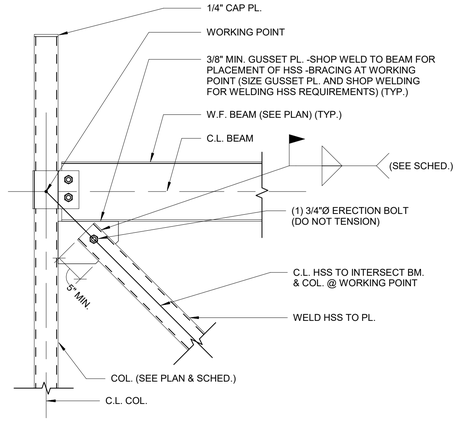


DETAIL @ BRACE

1 S701

SCALE: 1" = 1'-0"

0' 1' 2'

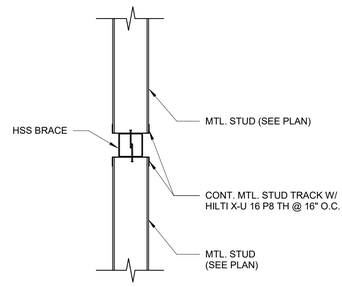


DETAIL @ BRACE

2 S701

SCALE: 1" = 1'-0"

0' 1' 2'

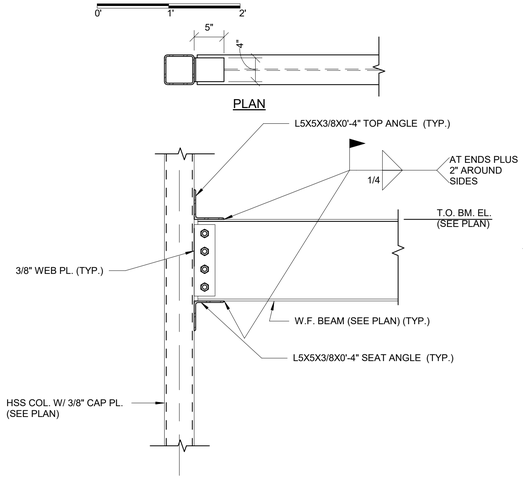


DETAIL @ BRACE

3 S701

SCALE: 1" = 1'-0"

0' 1' 2'



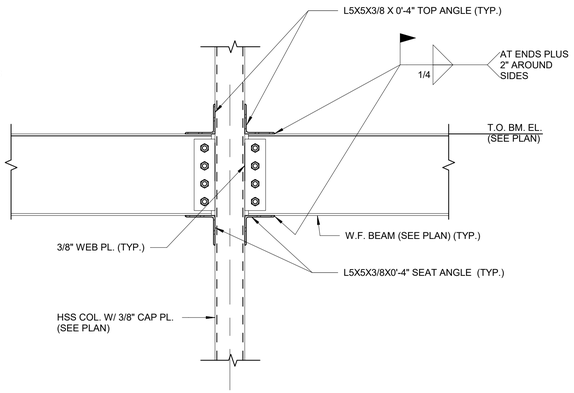
MOMENT CONNECTION DETAIL

4 S701

SCALE: 1" = 1'-0"

0' 1' 2'

NOTE: MARKED ▲ ON PLAN



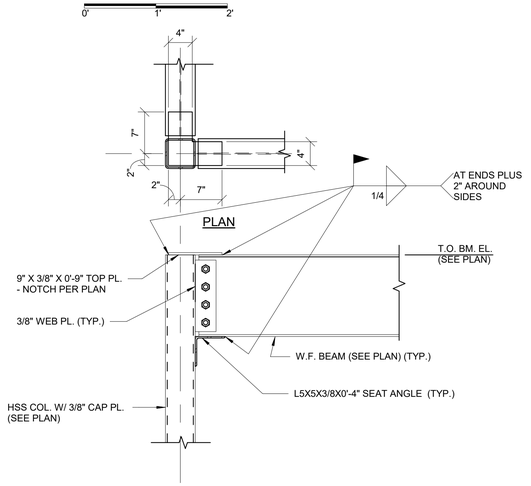
MOMENT CONNECTION DETAIL

5 S701

SCALE: 1" = 1'-0"

0' 1' 2'

NOTE: MARKED ▲ ON PLAN



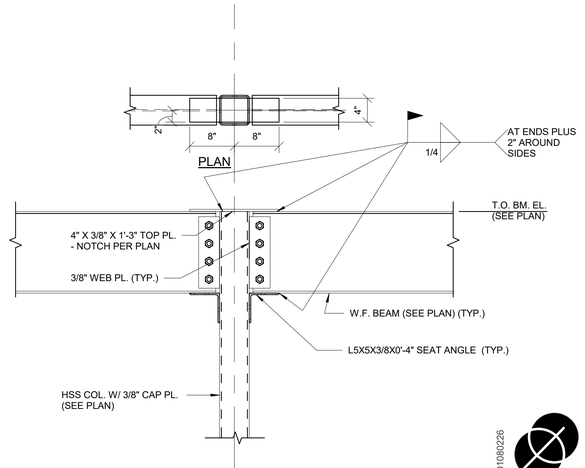
MOMENT CONNECTION DETAIL

6 S701

SCALE: 1" = 1'-0"

0' 1' 2'

NOTE: MARKED ▲ ON PLAN



MOMENT CONNECTION DETAIL

7 S701

SCALE: 1" = 1'-0"

0' 1' 2'

NOTE: MARKED ▲ ON PLAN

Revisions:

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KANSAS
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23/Aug/23

SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
BRACED FRAME ELEVATIONS & DETAILS

Date: 08-25-23

Project Number: 23-014

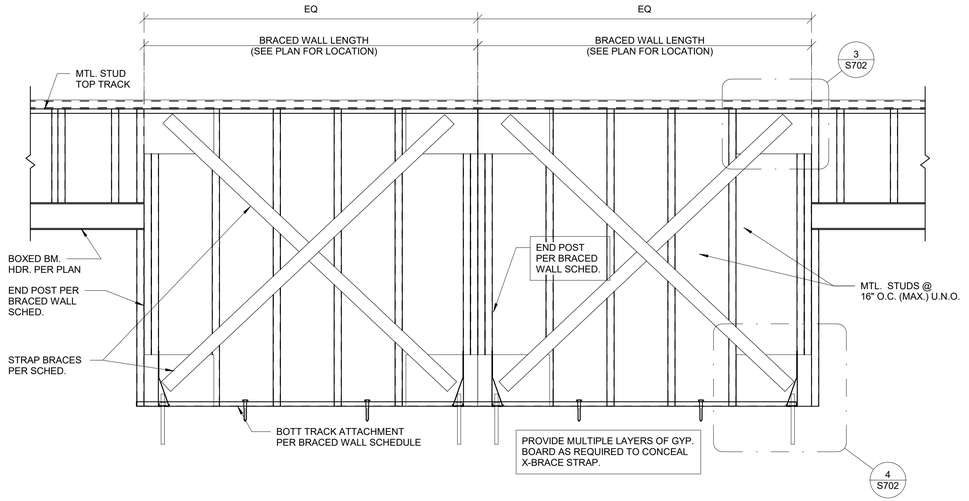
SHEET NUMBER: **S701**

DRAWN BY: Author

MKEC PROJ. # 23010802226
MKEC
Wichita, KS • 316.684.9600

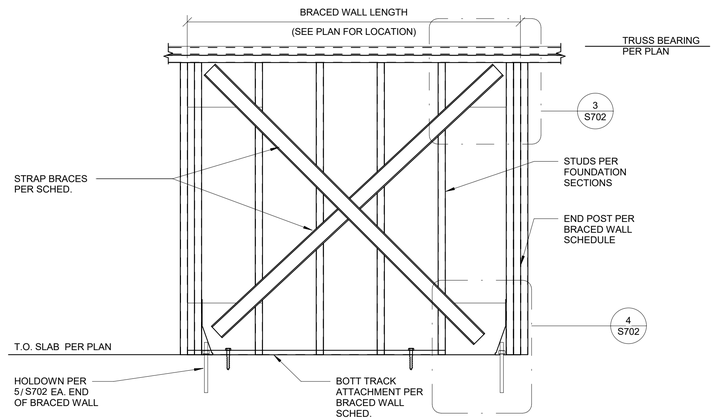
BRACED WALL SCHEDULE

MARKS	BW1	BW2
LT. GA. X-BRACE STRAP	4" X 16 GA.	8" X 16 GA.
ATTACHMENT OF STRAP TO GUSSET & GUSSET TO TOP & BOTT. TRACK (SEE 3/ S702 & 4/ S702)	(18) #14 SDS	(30) #14 SDS
MAX. SPACING OF ANCHORS (TRACK TO FNDN.)	5/8"Ø HILTI KWIK HUS-EZ X 5" EMBED. @ 48" O.C.	5/8"Ø HILTI KWIK HUS-EZ X 5" EMBED. @ 48" O.C.
SIMPSON HOLDOWNS AT EACH END, UNLESS NOTED (SEE 5/ S702)	S/HDU9	S/HD15S
HOLDOWN ANCHORS	ASTM F-1554 - GR 55 5/8" Ø HILTI HY200 X 7 5/8" MIN. CONC. EMBED	ASTM F-1554 - GR 55 1" Ø HILTI HY200 X 12" MIN. CONC. EMBED
END POSTS	(2) 8" CSJ 12 GA.	(3) 8" CSJ 12 GA.
DETAIL	1/ S702	2/ S702



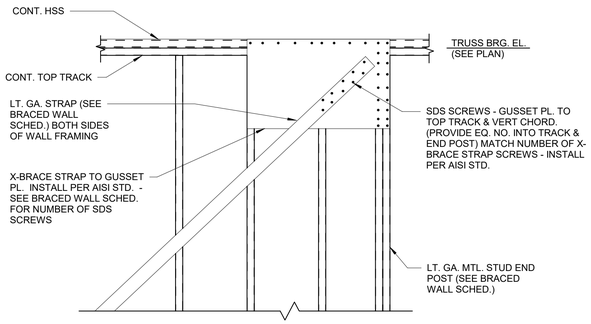
1 S702 ELEVATION @ B.W.

SCALE = N.T.S.



2 S702 ELEVATION @ B.W.

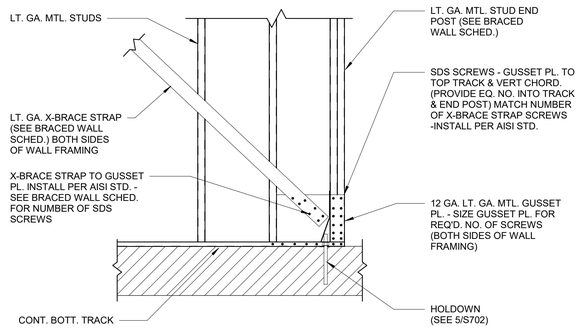
SCALE = N.T.S.



3 S702 STRAP CONN. DETAIL

SCALE: 3/4" = 1'-0"

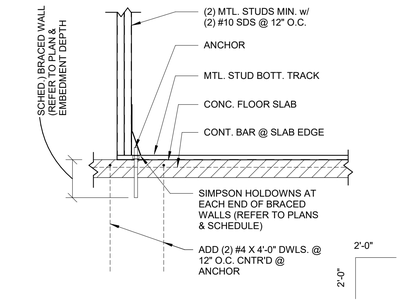
0' 1' 2' 3'



4 S702 STRAP CONN. DETAIL

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'



5 S702 LT. GA. HOLD DOWN DETAIL

SCALE: 3/4" = 1'-0"

0' 1' 2' 3'

Revisions:

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RUSSELL REDFORD
REGISTERED
16793
KANSAS
PROFESSIONAL ENGINEER
25/Aug/23

SALINA AREA TECH - INDUSTRIAL
MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
BRACED WALL ELEVATIONS & DETAILS

Date: 08-25-23

Project Number: 23-014

SHEET NUMBER: **S702**

DRAWN BY: Author

MKEC PROJ. # 23010802226
MKEC
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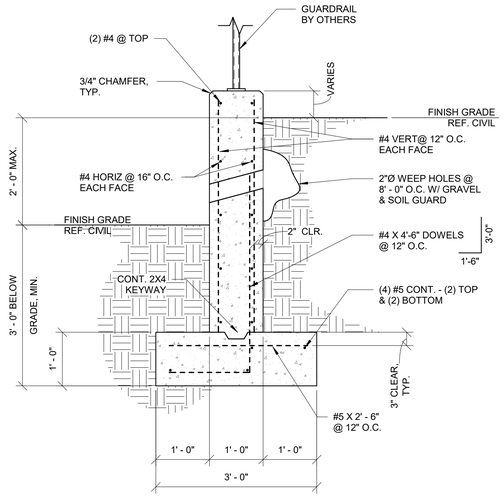
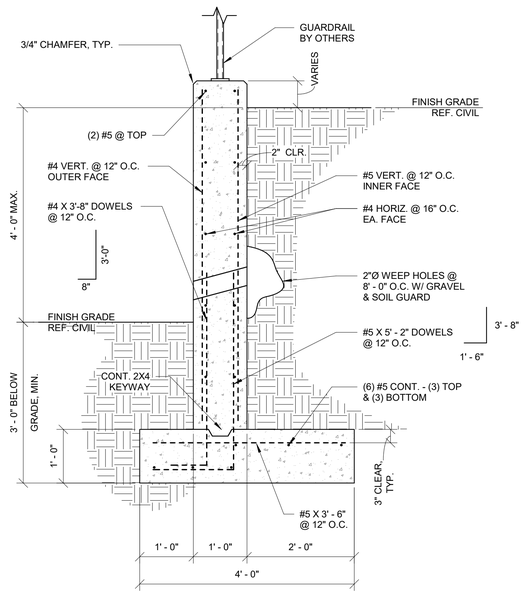


A
S801

2'-0" RETAINING WALL SECTION

SCALE: 3/4" = 1'-0"

0' 1' 2'

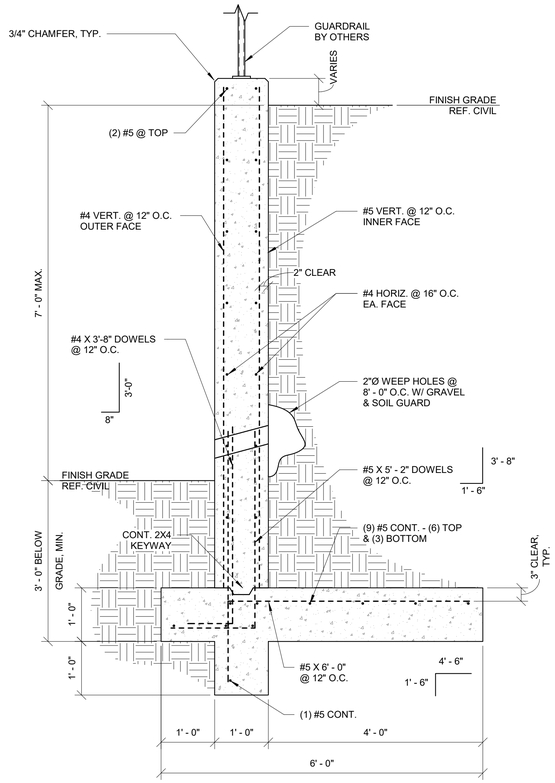


B
S801

4'-0" RETAINING WALL SECTION

SCALE: 3/4" = 1'-0"

0' 1' 2'



C
S801

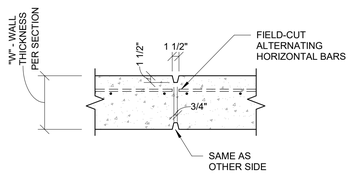
7'-0" RETAINING WALL SECTION

SCALE: 3/4" = 1'-0"

0' 1' 2'

RETAINING WALL NOTES:

1. RETAINING WALLS ARE DESIGNED FOR. EQUIVALENT FLUID PRESSURE (ACTIVE) = 45 PCF AND EQUIVALENT FLUID PRESSURE (PASSIVE) = 200 PCF.
2. THE WALLS WERE DESIGNED FOR A 100 PSF SURCHARGE PRESSURE ON THE HIGH SIDE OF THE WALL.
3. REFER TO DETAIL 1/S801 FOR TYP. CONTROL JOINT DETAIL AT 20'-0" O.C. (MAX.)
4. REFER TO DETAIL 2/S801 FOR TYP. EXPANSION JOINT DETAIL AT 80'-0" O.C. (MAX.)
5. REFER TO 3/S801 FOR TYPICAL STEPPED FOOTING DETAIL.
6. REFER TO SITE PLAN FOR EXACT WALL HEIGHTS AND LOCATIONS.
7. CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
8. IF CONDITIONS DIFFER, CONTACT THE ENGINEER.

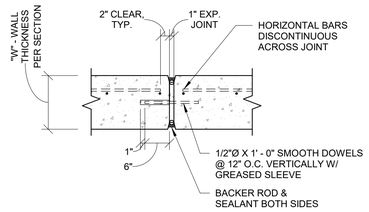


1
S801

TYP. CONTROL JOINT DETAIL

SCALE: 3/4" = 1'-0"

0' 1' 2'

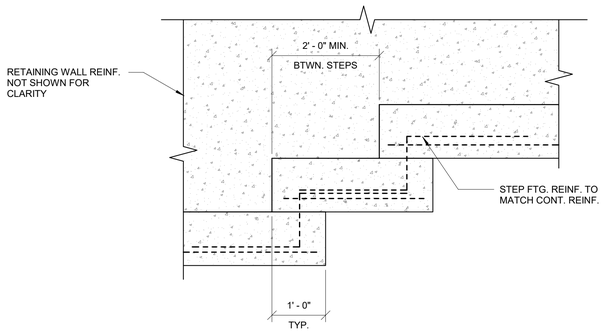


2
S801

TYP. EXPANSION JOINT DETAIL

SCALE: 3/4" = 1'-0"

0' 1' 2'



3
S801

TYP. STEP FTG. DETAIL

SCALE: 3/4" = 1'-0"

0' 1' 2'

Revisions:

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SALINA AREA TECH - INDUSTRIAL MAINTENANCE & AUTOMATION BUILDING
SALINA, KANSAS

Drawing:
RETAINING WALL DETAILS

Date: 08-25-23

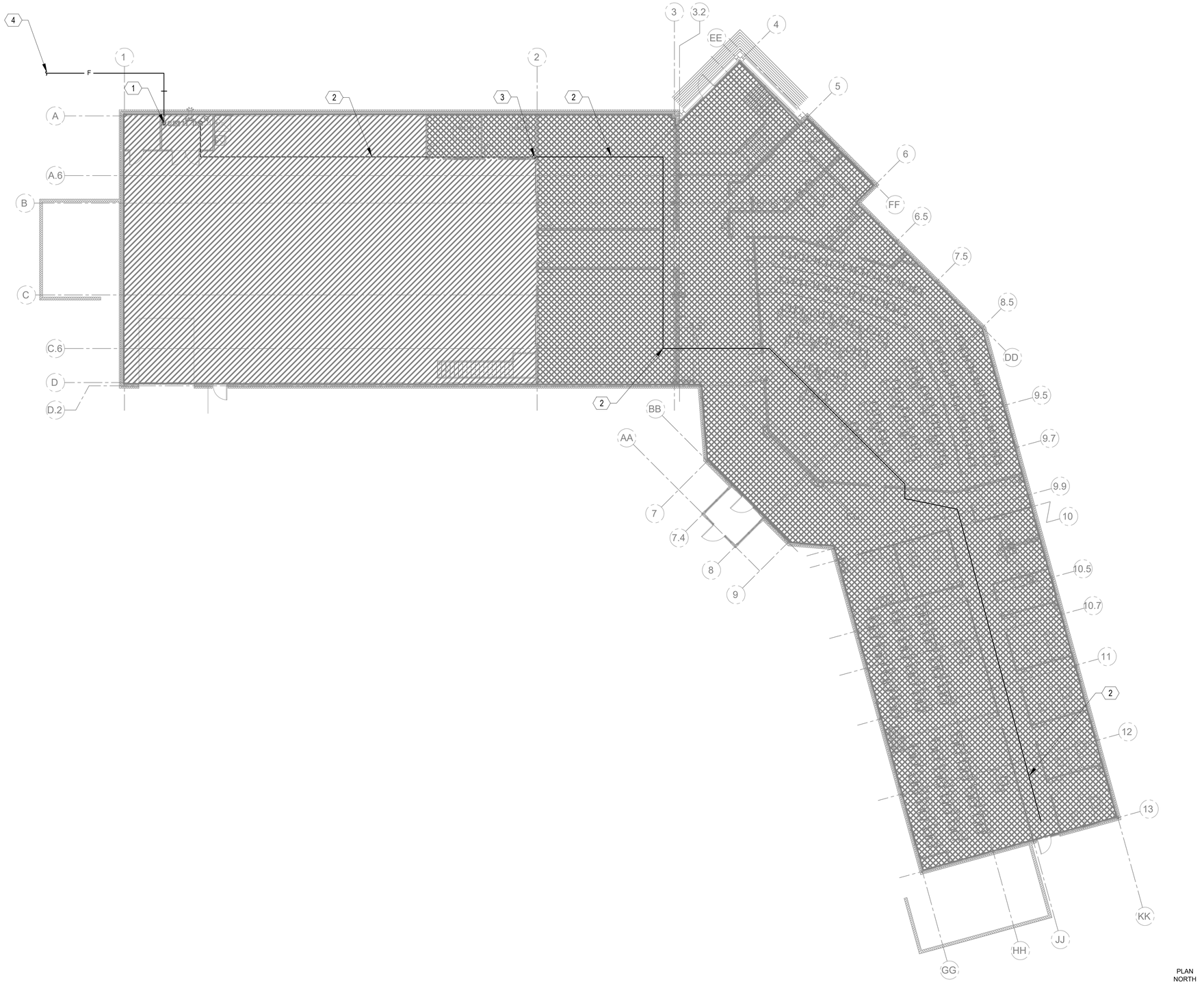
Project Number: 23-014

SHEET NUMBER: **S801**

DRAWN BY:Author

MKEC PROJ. # 2301080226

MKEC
Wichita, KS • 316.684.9600



1ST FLOOR FIRE PROTECTION PLAN

SCALE: 3/32" = 1' -0"

GENERAL SHEET NOTES

AUTOMATIC SPRINKLER FIRE PROTECTION SYSTEM CONTRACTOR SHALL DESIGN, PROVIDE, AND INSTALL A COMPLETE AUTOMATIC SPRINKLER SYSTEM FOR ALL NEW CONSTRUCTION, INCLUDING OVERHANGS, CANOPIES, ELECTRICAL ROOMS, ETC. SYSTEMS SHALL BE HYDRAULICALLY CALCULATED USING THE FOLLOWING CRITERIA:

1. PIPING AND PIPE ROUTING SHOWN IS FOR CONTRACTORS REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE HYDRAULIC DESIGN AND LAYOUT PER NFPA 13 FOR ALL SPRINKLERS AND CONTRACT REQUIREMENTS.
2. THE FIRE PROTECTION CONTRACTOR SHALL COORDINATE SPRINKLER HEAD HEIGHT AND PLACEMENT AT LOCATIONS OF SUSPENDED ACOUSTIC BAFFLES AND PENDANT LIGHTING.
3. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
4. ROUTE ALL BRANCH PIPING FROM CENTRAL PIPE UP TO BOTTOM OF STRUCTURE AND ALONG STRUCTURE THROUGH EACH SPACE.

SHEET KEYNOTES

1. NEW 6" RPBP FIRE RISER. CONTRACTOR TO VERIFY SIZE PRIOR TO ORDERING EQUIPMENT. SEE FIRE PROTECTION RISER DETAIL.
2. LOCATION SHOWN FOR FIRE MAIN IS FOR COORDINATION ONLY. FIRE PROTECTION ENGINEER SHALL DESIGN. NFPA REQUIREMENTS AND PERFORMANCE SPECIFICATIONS.
3. FIRE LINE ROUTED UP TO SECOND FLOOR TO SERVE OFFICE AREA.
4. SEE SITE CIVIL PLAN FOR CONTINUATION.

WET PIPE FIRE PROTECTION SYSTEM. LIGHT HAZARD OCCUPANCY IN THIS AREA.
DESIGN SHALL BE 0.10 GPM/SQ.FT.\
EXCEPT IN SPECIFIC AREAS DESCRIBED IN GENERAL NOTES AND SPECIFICATIONS.
OVER 1500 SQ. FT. HOSE ALLOWANCE SHALL BE 500 GPM. SPRINKLER HEAD
TEMPERATURE RATING SHALL BE 155 DEGREE F. SEE SPECIFICATIONS FOR
ADDITIONAL REQUIREMENTS.

WET PIPE FIRE PROTECTION SYSTEM. ORDINARY HAZARD - GROUP 1 OCCUPANCY IN THIS AREA.
DESIGN SHALL BE 0.15 GPM/SQ.FT.\
EXCEPT IN SPECIFIC AREAS DESCRIBED IN GENERAL NOTES AND SPECIFICATIONS.
OVER 1500 SQ. FT. HOSE ALLOWANCE SHALL BE 500 GPM. SPRINKLER HEAD
TEMPERATURE RATING SHALL BE 155 DEGREE F. SEE SPECIFICATIONS FOR
ADDITIONAL REQUIREMENTS.

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Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

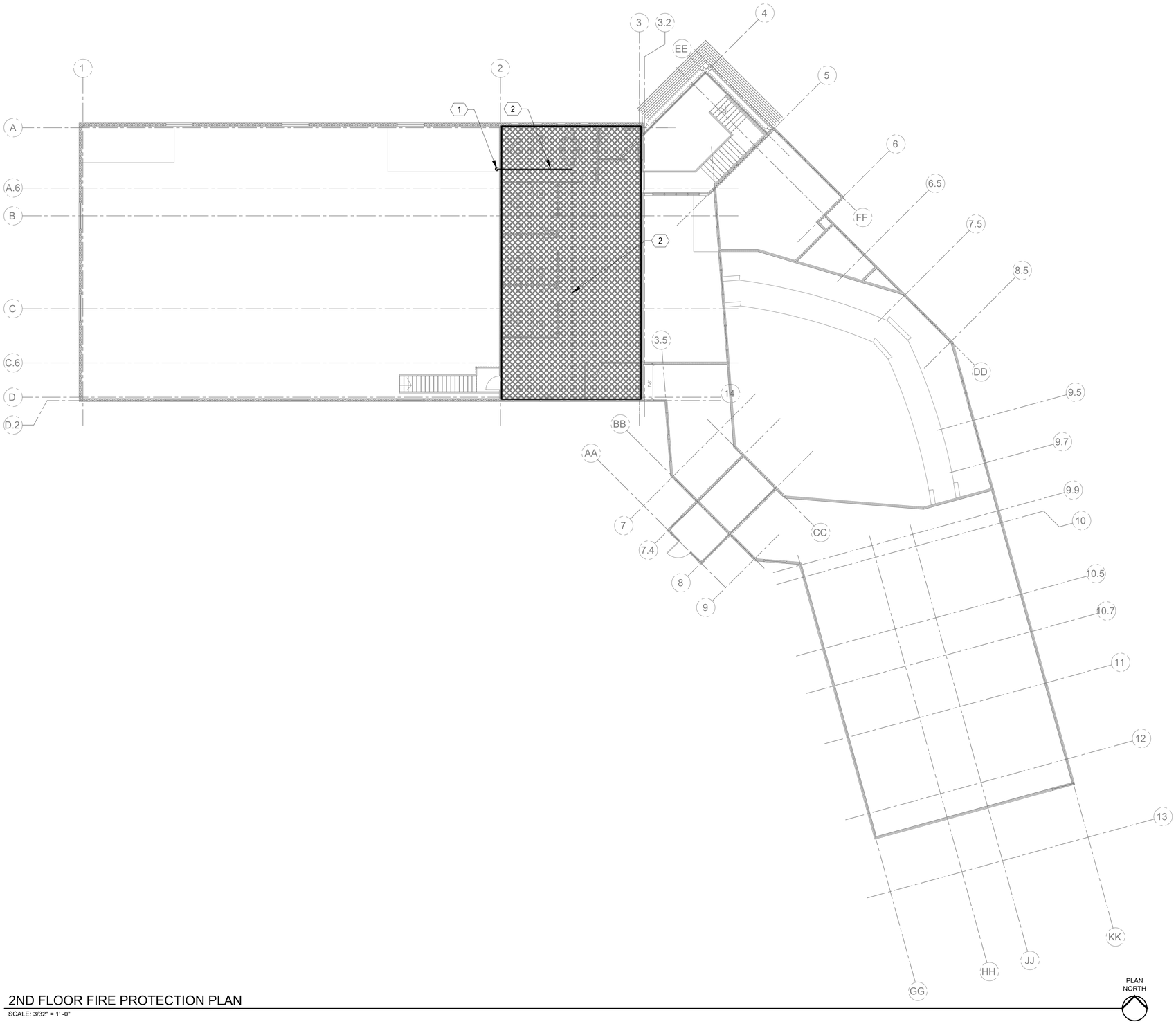
Drawing:
1ST FLOOR
FIRE PROTECTION
PLAN

Date:
09-08-23

Project Number:
23-014

SHEET NUMBER:
FP-101

DRAWN BY: AAB



2ND FLOOR FIRE PROTECTION PLAN

SCALE: 3/32" = 1' -0"

GENERAL SHEET NOTES

AUTOMATIC SPRINKLER FIRE PROTECTION SYSTEM CONTRACTOR SHALL DESIGN, PROVIDE, AND INSTALL A COMPLETE AUTOMATIC SPRINKLER SYSTEM FOR ALL NEW CONSTRUCTION, INCLUDING OVERHANGS, CANOPIES, ELECTRICAL ROOMS, ETC. SYSTEMS SHALL BE HYDRAULICALLY CALCULATED USING THE FOLLOWING CRITERIA:

1. PIPING AND PIPE ROUTING SHOWN IS FOR CONTRACTORS REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE HYDRAULIC DESIGN AND LAYOUT PER NFPA 13 FOR ALL SPRINKLERS AND CONTRACT REQUIREMENTS.
2. THE FIRE PROTECTION CONTRACTOR SHALL COORDINATE SPRINKLER HEAD HEIGHT AND PLACEMENT AT LOCATIONS OF SUSPENDED ACOUSTIC BAFFLES AND PENDANT LIGHTING.
3. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
4. ROUTE ALL BRANCH PIPING FROM CENTRAL PIPE UP TO BOTTOM OF STRUCTURE AND ALONG STRUCTURE THROUGH EACH SPACE.

SHEET KEYNOTES

1. FIRE LINE ROUTED ON WALL, PENETRATING IN CEILING SPACE OF SECOND FLOOR OFFICE.
2. LOCATION SHOWN FOR FIRE MAIN IS FOR COORDINATION ONLY. FIRE PROTECTION ENGINEER SHALL DESIGN, NFPA REQUIREMENTS AND PERFORMANCE SPECIFICATIONS.

WET PIPE FIRE PROTECTION SYSTEM. LIGHT HAZARD OCCUPANCY IN THIS AREA. DESIGN SHALL BE 0.10 GPM/SQ.FT.\
EXCEPT IN SPECIFIC AREAS DESCRIBED IN GENERAL NOTES AND SPECIFICATIONS. OVER 1500 SQ. FT. HOSE ALLOWANCE SHALL BE 500 GPM. SPRINKLER HEAD TEMPERATURE RATING SHALL BE 155 DEGREE F. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

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09-08-2023
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PROFESSIONAL ENGINEER

Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing: 2ND FLOOR FIRE PROTECTION PLAN

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: FP-102

DRAWN BY: AAB

PLUMBING LEGEND

MARK	DEFINITION
CW	DOMESTIC COLD WATER TAG
	DOMESTIC COLD WATER LINE
HW	DOMESTIC HOT WATER TAG (110°F)
	DOMESTIC HOT WATER LINE (110°F)
HWR	HOT WATER RETURN TAG
	HOT WATER RETURN LINE
GA	NATURAL GAS LINE
SS	SANITARY SEWER LINE
GT	GREASE TRAP LINE
V	SANITARY VENT LINE
CD	CONDENSATE DRAIN LINE
	PIPE DROP
	PIPE RISER
	PIPE HEADER
	END-OF LINE CLEANOUT
	FLOW DIRECTION
	RAG; LINE IS EXTENDED ELSEWHERE
	PLUMBING OFFSET (SCHEMATIC ONLY)
	FREEZE PROOF WALL HYDRANT
	BALANCING VALVE WITH PRESSURE PORTS (CIRCUIT SETTER)
	ISOLATION VALVE
	CONNECT TO EXISTING AT THIS POINT
	REMOVE PORTION OF WORK AND PROPERLY CAP AND SEAL
	SANITARY SEWER 90° TURN UTILIZING TWO 1/4 BENDS - THIS PREVENTS THE REQUIREMENT FOR A C.O.
	PIPING TO BE PART OF DEMOLITION
RS/RL	REFRIGERANT PIPING - SUCTION AND LIQUID

PLUMBING ABBREVIATIONS

ABBREVIATION	DEFINITION	ABBREVIATION	DEFINITION
AFF	ABOVE FINISHED FLOOR	LDBT	LEAVING DRY BULB TEMPERATURE
AFG	ABOVE FINISHED GRADE	LWBT	LEAVING WET BULB TEMPERATURE
AHJ	AUTHORITY HAVING JURISDICTION	LWT	LEAVING WATER TEMPERATURE
ARCH	ARCHITECT	MAT	MIXED AIR TEMPERATURE
C/C	COOLING COIL	MBH	THOUSAND BTU PER HOUR
CFH	CUBIC FEET PER HOUR	MCA	MINIMUM CIRCUIT AMPACITY
CFM	CUBIC FEET PER MINUTE	MH	MANHOLE
CL	CENTERLINE	MISC	MISCELLANEOUS
CLG	CEILING	MOCP	MAXIMUM OVERCURRENT PROTECTION
CO	CARBON MONOXIDE	NC	NOISE CRITERIA
CO	CLEANOUT	NEC	NATIONAL ELECTRICAL CODE
COTG	CLEANOUT TO GRADE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CO2	CARBON DIOXIDE	NTS	NOT TO SCALE
CU	CONDENSING UNIT	OA	OUTSIDE AIR
CW	COLD WATER	OFD	OVERFLOW DRAIN
DB	DRY BULB	PC	PLUMBING CONTRACTOR
DDC	DIRECT DIGITAL CONTROLS	PPM	PARTS PER MILLION
DEG F	DEGREES FAHRENHEIT	PRV	PRESSURE REDUCING VALVE
DS	DOWNSPOUT	PSI	POUNDS PER SQUARE INCH
DWH	DOMESTIC WATER HEATER	QA	QUALITY ASSURANCE
EC	ELECTRICAL CONTRACTOR	QC	QUALITY CONTROL
EDBT	ENTERING DRY BULB TEMPERATURE	R	RADIUS
EF	EXHAUST FAN	RA	RETURN AIR
EL	ELEVATION	RAT	RETURN AIR TEMPERATURE
ETC	ET CETERA	RD	ROOF DRAIN
EWBT	ENTERING WET BULB TEMPERATURE	RH	RELATIVE HUMIDITY
EWT	ENTERING WATER TEMPERATURE	RM	ROOM
FCO	FLOOR CLEAN-OUT	RPM	REVOLUTIONS PER MINUTE
FD	FLOOR DRAIN	RTU	ROOF TOP UNIT
FDC	FIRE DEPARTMENT CONNECTION	RV	RELIEF VALVE
FIN FLR	FINISHED FLOOR	SA	SUPPLY AIR
FH	FIRE HYDRANT	SD	STORM DRAIN
FPHB	FREEZE-PROOF HOSE BIBB	SF	SQUARE FOOT
FPM	FEET PER MINUTE	SHR	SHOWER
FPWH	FREEZE-PROOF WALL HYDRANT	SS	SANITARY SEWER
FS	FLOOR SINK	SS	SERVICE SINK
GALV	GALVANIZED	SUB	SUBSTITUTE
GAS	NATURAL GAS	TG	TRAP GUARD
GC	GENERAL CONTRACTOR	TP	TRAP PRIMER
GCO	GRADE CLEANOUT	TSTAT	THERMOSTAT
GPD	GALLONS PER DAY	TYP	TYPICAL
GPM	GALLONS PER MINUTE	UNO	UNLESS NOTED OTHERWISE
GT	GREASE TRAP	UR	URINAL
HB	HOSE BIBB	V	VENT
HC	HEATING COIL	VIF	VERIFY IN FIELD
HD	HEAVY DUTY	VOLT	VOLTAGE
HT	HEIGHT	W/	WITH
HW	HOT WATER	W/O	WITHOUT
HWR	HOT WATER RETURN	WB	WET BULB
HWS	HOT WATER SUPPLY	WC	WATER CLOSET
IBC	INTERNATIONAL BUILDING CODE	WCO	WALL CLEANOUT
I/O	INPUT/OUTPUT	WH	WALL HYDRANT
LAT	LEAVING AIR TEMPERATURE	WHA	WATER HAMMER ARRESTOR

GENERAL PLUMBING REQUIREMENTS:

1. ALL CAPACITIES ARE SCHEDULED AT JOBSITE ALTITUDE OF 1,200 FT.
2. SUSPEND EACH TRADE'S WORK SEPARATELY FROM THE STRUCTURE. DUCTWORK SHALL BE HELD TIGHT TO STRUCTURE EXCEPT WHERE SHOWN.
3. INSTALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
4. PROVIDE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCE AROUND EQUIPMENT.
5. PROVIDE FOR SAFE CONDUCT OF THE WORK, CAREFUL REMOVAL AND DISPOSITION OF MATERIALS AND PROTECTION OF PROPERTY WHICH IS TO REMAIN UNDISTURBED.
6. PROVIDE ACCESS DOORS FOR EQUIPMENT, VALVES, CLEANOUTS, ACTUATORS AND CONTROLS WHICH REQUIRE ACCESS FOR ADJUSTMENT OR SERVICING AND WHICH ARE LOCATED IN OTHERWISE UNACCESSIBLE LOCATIONS. FOR EQUIPMENT LOCATED IN "ACCESSIBLE LOCATIONS" SUCH AS LAY-IN CEILINGS: LOCATE EQUIPMENT TO PROVIDE ADEQUATE SERVICE CLEARANCE FOR NORMAL MAINTENANCE WITHOUT REMOVING ARCHITECTURAL, ELECTRICAL OR STRUCTURAL ELEMENTS SUCH AS THE CEILING SUPPORT SYSTEM, ELECTRICAL FIXTURES, ETC. "NORMAL MAINTENANCE" INCLUDES, BUT IS NOT LIMITED TO: FILTER CHANGING; GREASING OF BEARINGS; USING P/T PORTS FOR PRESSURE OR TEMPERATURE MEASUREMENTS; SERVICING CONTROL VALVES AND SERVICING CONTROL PANELS.
7. DOMESTIC WATER, HEATING WATER OR CONDENSER WATER LINES SHALL NOT BE EXPOSED IN FINISHED SPACES OR BELOW THE BUILDING SLAB UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
8. GAS LINES SHALL NOT BE LOCATED BELOW BUILDING SLAB.
9. CURBS, ROOF JACKS, ROOF THIMBLES, SANITARY VENTS, ROOF DRAINS, ETC. SHALL BE COMPATIBLE WITH ROOFING SYSTEM TO BE PROVIDED. REFERENCE ARCHITECTURAL DIVISION FOR REQUIRED FLASHING DETAILS.
10. THE ELECTRICAL POWER FOR CERTAIN EQUIPMENT PROVIDED UNDER MECHANICAL SPECIFICATIONS, HAS NOT BEEN SPECIFICALLY INDICATED ON THE ELECTRICAL DRAWINGS AND MUST BE FIELD COORDINATED BY THE DIVISION REQUIRING SUCH POWER. SUCH EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO:
    A. TEMPERATURE CONTROL PANELS, AND JUNCTION BOXES FOR 24V CONTROL TRANSFORMERS. REQUIRED CONNECTION ARE INCLUDED IN MECHANICAL SPECIFICATIONS AND WILL BE SHOWN BY THAT CONTRACTOR'S CONTROL SUBMITTAL DRAWINGS.
    B. CONTRACTOR SHALL PROVIDE POWER TO THESE DEVICES.
11. PROVIDE REQUIRED PERMITS, INSPECTIONS AND COORDINATION WITH GOVERNING AUTHORITIES.
12. QUALITY CONTROL:
    A. QUALIFICATION OF PRODUCTS: WHEN PRODUCTS ARE SPECIFIED BY MANUFACTURER AND MODEL NUMBER, EQUIVALENT PRODUCTS BY OTHER MANUFACTURERS LISTED MAY BE PROVIDED. PRODUCT EQUIVALENCY SHALL BE DETERMINED BY ENGINEER.
    B. SUBMITTALS SHALL INCLUDE REVISED AND SUPPLEMENTED CONTROL DIAGRAMS.
    C. SUBMIT CUT-SHEETS ON SPECIFIED EQUIPMENT.
13. CONTRACTOR SHALL CREATE A LOG SHEET FOR REQUIRED TESTS. THE LOG SHEET WILL HAVE A COLUMN FOR REQUIRED TESTS, A COLUMN FOR ACCEPTANCE OF TEST, A COLUMN FOR REMARKS, AND A COLUMN FOR APPROVAL SIGNATURE.
14. CONTRACTOR SHALL CREATE A LOG SHEET OF REQUIRED TRAINING. THE LOG SHEET WILL HAVE A COLUMN FOR THE TRAINED ITEM, A COLUMN FOR THE TIME, DATE AND DURATION OF THE TRAINING, AND A COLUMN FOR ACCEPTANCE OF TRAINING BY OWNER, ARCHITECT, OR ENGINEER.
15. AFTER INSTALLATION OF SYSTEM, PERFORM AN OPERATIONAL TEST IN THE PRESENCE OF THE OWNER, ARCHITECT, OR ENGINEER. THIS TEST WILL CONSIST OF SUCCESSFULLY DEMONSTRATING:
    A. APPEARANCE OF INSTALLATION.
    B. FUNCTION OF ALL CONTROLS.
    C. THE CONTROLS SHALL BE OPERATED IN THE FOLLOWING MODES IN EACH ZONE: OCCUPIED/UNOCCUPIED.
    D. IF THE TEST IS NOT SUCCESSFUL IN THE OPINION OF THE ARCHITECT OR ENGINEER, DEFICIENCIES WILL BE REMEDIED AND THE SYSTEM WILL BE RE-TESTED UNTIL THE TEST IS SUCCESSFUL.
16. WHERE NEW MECHANICAL SYSTEMS ARE USED FOR TEMPORARY VENTILATION OR CLIMATE CONTROL, MECHANICAL EQUIPMENT INSTALLER SHALL PROVIDE CONSTRUCTION FILTERS, MAINTAIN EQUIPMENT, AND CLEAN, ADJUST AND PUT IN NEW CONDITION BEFORE BUILDING OCCUPANCY. PARTS AND LABOR WARRANTY SHALL NOT BE CONSIDERED TO START UNTIL ACCEPTANCE OF THE SYSTEM BY OWNER.
17. PIPING:
    A. PIPE INSTALLATION:
        a. PIPING SHALL BE ADEQUATELY SUPPORTED FROM THE BUILDING STRUCTURE TO PREVENT SAGGING, POCKETING, SWAYING OR DISPLACEMENT BY MEANS OF HANGERS AND SUPPORTS. PIPING IS NOT TO BE SUPPORTED BY EQUIPMENT.
        b. PROVIDE DIELECTRIC UNIONS BETWEEN DISSIMILAR MATERIALS.
        c. PROVIDE MANUAL AIR VENTS AND CAPPED HOSE-END DRAINS WITH ISOLATION VALVE AT PIPING HIGH AND LOW POINTS.
        d. WELD PIPE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS. WELDERS SHALL BE CERTIFIED FOR TYPE OF WELD BEING PERFORMED.
        e. FLUSH OUT PIPING AND REMOVE CONTROL DEVICES BEFORE PERFORMING PRESSURE TEST. DO NOT USE PIPING SYSTEM VALVES TO ISOLATE SECTIONS WHERE TEST PRESSURE EXCEEDS VALVE PRESSURE RATING. PRESSURIZE PIPING AT 100 PSIG. IF LEAKAGE IS OBSERVED OR IF TEMPERATURE COMPENSATED PRESSURE DROP EXCEEDS 1% OF TEST PRESSURE, REPAIR LEAKS AND RETEST. DO NOT USE AIR PRESSURE TO TEST PLASTIC PIPE.
        f. PROVIDE SUPPORT UNDER ELBOWS ON PUMP SUCTION AND DISCHARGE LINES.
        g. STRAINERS SHALL BE FURNISHED WITH A "ROUGHING" SCREEN AND TWO (2) SCREENS FOR NORMAL OPERATION. INSTALL STRAINER WITH ROUGHING SCREEN AND OPERATE SYSTEM FOR 24 HOURS MINIMUM (RUN DOMESTIC WATER SYSTEMS AT MAX FLOW FOR A MINIMUM OF ONE HALF (1/2) HOUR. REMOVE ROUGHING SCREEN AND INSTALL NORMAL SCREEN, AFTER TWO WEEKS OF NORMAL OPERATION INSTALL NEW NORMAL SCREEN.
18. MATERIALS ABOVE THE CEILINGS WHERE THIS SPACE IS USED AS A RETURN AIR PLENUM MUST BE NON-COMBUSTIBLE. COMMUNICATIONS CABLE MUST BE PLENUM RATED AND ELECTRICAL WIRING MUST BE IN A PLENUM RATED SHEATH OR CONDUIT. PVC PIPING MUST BE ENCASED IN AN APPROVED INSULATION WITH A FLAME AND SMOKE SPREAD RATING OF 25/50.

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MARK WILLIAM WENTZ 15999 09-08-2023 KANSAS PROFESSIONAL ENGINEER

Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

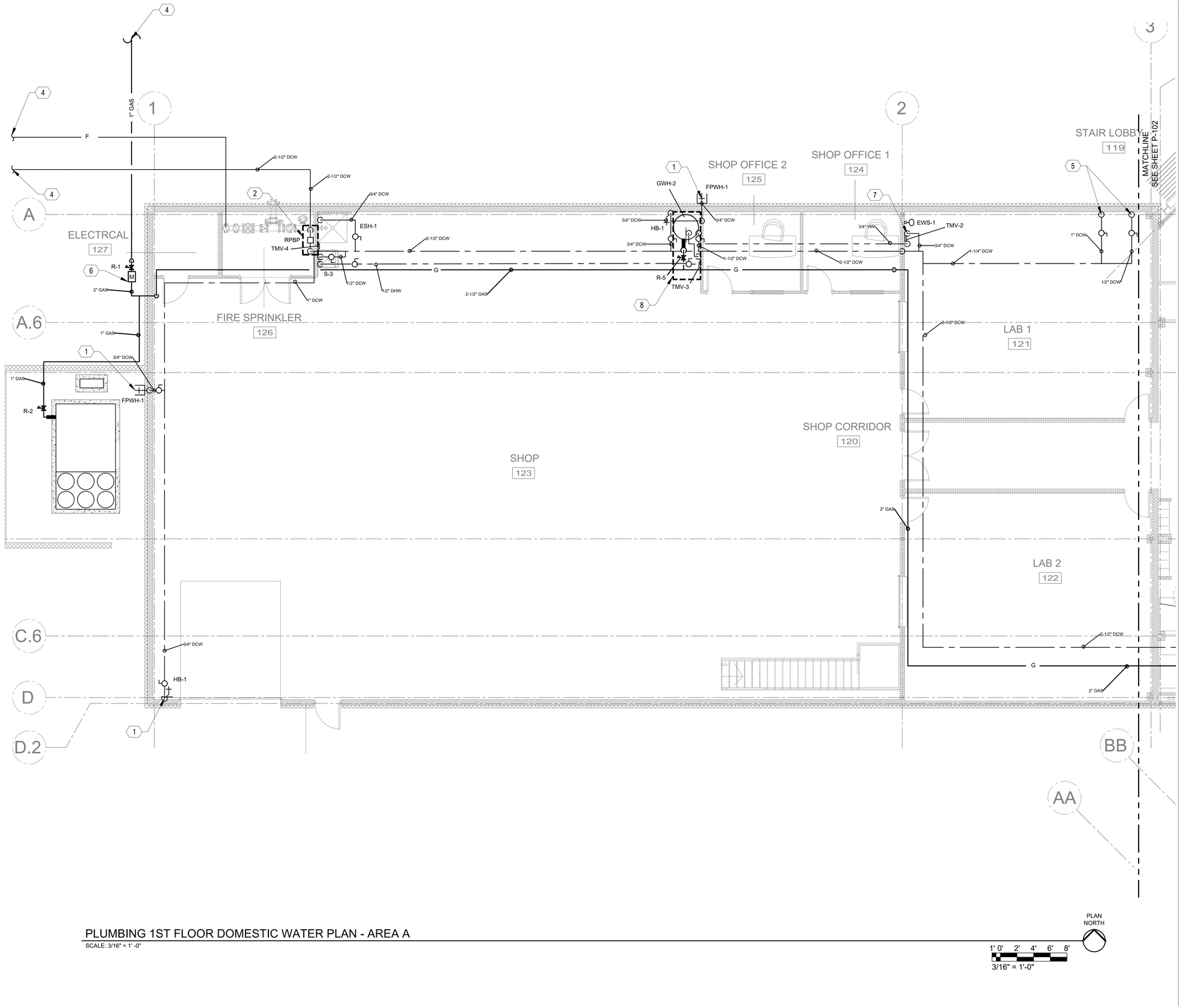
Drawing:
PLUMBING SYMBOL LEGEND & GENERAL NOTES

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
P-001

DRAWN BY: AAB



PLUMBING 1ST FLOOR DOMESTIC WATER PLAN - AREA A

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. COORDINATE EXACT LOCATION OF ROOF PENETRATIONS WITH ROOF STRUCTURE LOCATIONS. ALL PENETRATIONS TO BE A MIN. OF 18" FROM WALLS, CURBS, PIPES, VENT STACKS, AND OTHER ROOF PENETRATIONS.

B. COORDINATE ALL PLUMBING AND PIPING WITH OTHER EQUIPMENT.

C. INSTALL ALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

D. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND INSTALLATION HEIGHT OF ALL PLUMBING FIXTURES & EXACT BUILDING DIMENSIONS.

E. INSULATE ALL HOT WATER, COLD WATER AND P-TRAPS WITH TRAP WRAP TO ADA REQUIREMENTS.

F. SEE SHEET P-601 FOR PLUMBING FIXTURE SCHEDULE. ALL PLUMBING FIXTURE SUBSTITUTION SHALL BE BY ENGINEER APPROVAL.

G. MANIFOLD ALL PLUMBING VENTS ABOVE FLOOD LEVEL OF PLUMBING FIXTURES.

H. PROVIDE CHROME-PLATE STEEL ESCUTCHEONS FOR PIPES AT WALL PENETRATIONS.

I. HOT AND COLD WATER RUNS ARE 1/2" UNLESS OTHERWISE SPECIFIED.

J. ALL WATER RUNS ARE OVERHEAD AND SHALL BE CONCEALED WHEREVER POSSIBLE. ANY EXPOSED PIPING SHALL BE COORDINATED WITH A ARCHITECT PRIOR TO INSTALLATION. SLOPE TO DRAIN.

K. PIPE MATERIAL: TYPE L COPPER PIPE FOR DOMESTIC WATER.

L. PROVIDE MECHANICAL WATER HAMMER ARRESTORS AT ALL WATER CLOSETS.

M. CONTRACTOR RESPONSIBLE FOR LOCATING ALL UTILITY LINES.

N. ALL AIR VENTS, GAUGES, THERMOMETERS, AND TRAP PRIMERS SHALL BE MOUNTED IN AN ACCESSIBLE LOCATION, OR BEHIND AN ACCESS PANEL, PROVIDED BY PLUMBING CONTRACTOR.

SHEET KEYNOTES

1. 3/4" COLD WATER TO WALL HYDRANT.
2. SEE DETAIL 2 /P-501 FOR PIPING IN SPACE.
3. 3/4" DCW UP TO ROOF HYDRANT.
4. FOR CONTINUATION SEE CIVIL.
5. DOMESTIC WATER ROUTED UP TO SECOND FLOOR FROM LAB 1 CEILING SPACE.
6. SIZED FOR 896 CFH.
7. 3/4" CW AND HW DOWN TO MIXING VALVE. 3/4" TW ROUTED TO EYE WASH STATION EWS-1.
8. SEE DETAIL 1/P-501 FOR PIPING IN SPACE.

Revisions:

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MARSHALL L. WILLIAM WEIMER 15999 09-08-2023 KANSAS PROFESSIONAL ENGINEER

Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing:
PLUMBING
1ST FLOOR
DOMESTIC WATER
PLAN - AREA A

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: P-101

DRAWN BY: AAB

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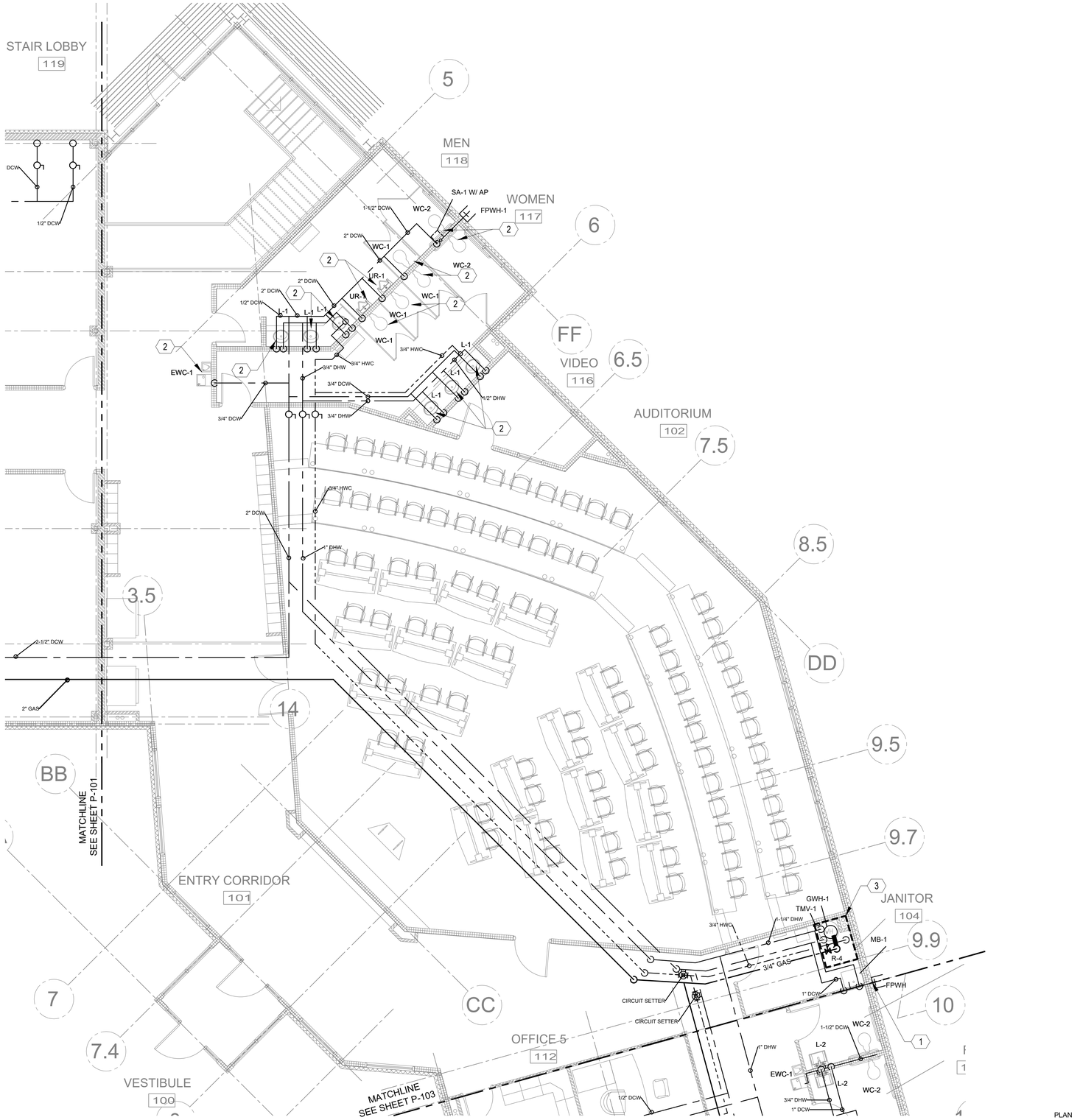

PLUMBING 1ST FLOOR DOMESTIC WATER PLAN - AREA B

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. COORDINATE EXACT LOCATION OF ROOF PENETRATIONS WITH ROOF STRUCTURE LOCATIONS. ALL PENETRATIONS TO BE A MIN. OF 18" FROM WALLS, CURBS, PIPES, VENT STACKS, AND OTHER ROOF PENETRATIONS.

B. COORDINATE ALL PLUMBING AND PIPING WITH OTHER EQUIPMENT.

C. INSTALL ALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

D. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND INSTALLATION HEIGHT OF ALL PLUMBING FIXTURES & EXACT BUILDING DIMENSIONS.

E. INSULATE ALL HOT WATER, COLD WATER AND P-TRAPS WITH TRAP WRAP TO ADA REQUIREMENTS.

F. SEE SHEET P-601 FOR PLUMBING FIXTURE SCHEDULE. ALL PLUMBING FIXTURE SUBSTITUTION SHALL BE BY ENGINEER APPROVAL.

G. MANIFOLD ALL PLUMBING VENTS ABOVE FLOOD LEVEL OF PLUMBING FIXTURES.

H. PROVIDE CHROME-PLATE STEEL ESCUTCHEONS FOR PIPES AT WALL PENETRATIONS.

I. HOT AND COLD WATER RUNS ARE 1/2" UNLESS OTHERWISE SPECIFIED.

J. ALL WATER RUNS ARE OVERHEAD AND SHALL BE CONCEALED WHEREVER POSSIBLE. ANY EXPOSED PIPING SHALL BE COORDINATED WITH A ARCHITECT PRIOR TO INSTALLATION. SLOPE TO DRAIN.

K. PIPE MATERIAL: TYPE L COPPER PIPE FOR DOMESTIC WATER.

L. PROVIDE MECHANICAL WATER HAMMER ARRESTORS AT ALL WATER CLOSETS.

M. CONTRACTOR RESPONSIBLE FOR LOCATING ALL UTILITY LINES.

N. ALL AIR VENTS, GAUGES, THERMOMETERS, AND TRAP PRIMERS SHALL BE MOUNTED IN AN ACCESSIBLE LOCATION, OR BEHIND AN ACCESS PANEL, PROVIDED BY PLUMBING CONTRACTOR.

SHEET KEYNOTES

1. 3/4" COLD WATER TO WALL HYDRANT.
2. FOR DOMESTIC CW/HW TO PLUMBING FIXTURE CONNECTION SIZE REFER TO PLUMBING SCHEDULE.
3. SEE DETAIL 1/P-501 FOR PIPING IN SPACE.

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Revisions:

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Salina Area Tech - Industrial
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Salina, Kansas

Drawing: PLUMBING 1ST FLOOR DOMESTIC WATER PLAN AREA B

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: P-102

DRAWN BY: AAB

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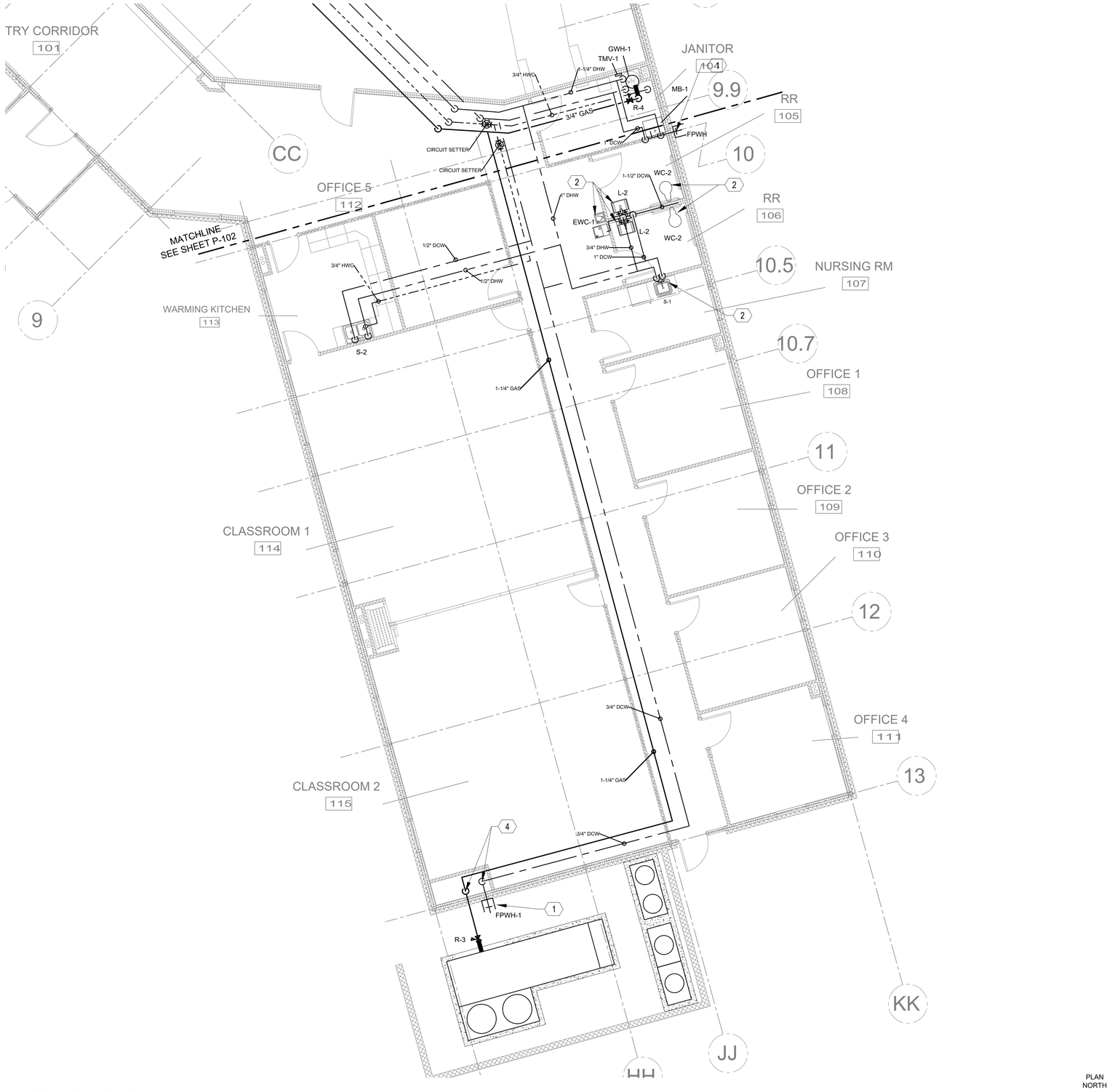

PLUMBING 1ST FLOOR DOMESTIC WATER PLAN - AREA C

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. COORDINATE EXACT LOCATION OF ROOF PENETRATIONS WITH ROOF STRUCTURE LOCATIONS. ALL PENETRATIONS TO BE A MIN. OF 18" FROM WALLS, CURBS, PIPES, VENT STACKS, AND OTHER ROOF PENETRATIONS.

B. COORDINATE ALL PLUMBING AND PIPING WITH OTHER EQUIPMENT.

C. INSTALL ALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

D. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND INSTALLATION HEIGHT OF ALL PLUMBING FIXTURES & EXACT BUILDING DIMENSIONS.

E. INSULATE ALL HOT WATER, COLD WATER AND P-TRAPS WITH TRAP WRAP TO ADA REQUIREMENTS.

F. SEE SHEET P-601 FOR PLUMBING FIXTURE SCHEDULE. ALL PLUMBING FIXTURE SUBSTITUTION SHALL BE BY ENGINEER APPROVAL.

G. MANIFOLD ALL PLUMBING VENTS ABOVE FLOOD LEVEL OF PLUMBING FIXTURES.

H. PROVIDE CHROME-PLATE STEEL ESCUTCHEONS FOR PIPES AT WALL PENETRATIONS.

I. HOT AND COLD WATER RUNS ARE 1/2" UNLESS OTHERWISE SPECIFIED.

J. ALL WATER RUNS ARE OVERHEAD AND SHALL BE CONCEALED WHEREVER POSSIBLE. ANY EXPOSED PIPING SHALL BE COORDINATED WITH A ARCHITECT PRIOR TO INSTALLATION. SLOPE TO DRAIN.

K. PIPE MATERIAL: TYPE L COPPER PIPE FOR DOMESTIC WATER.

L. PROVIDE MECHANICAL WATER HAMMER ARRESTORS AT ALL WATER CLOSETS.

M. CONTRACTOR RESPONSIBLE FOR LOCATING ALL UTILITY LINES.

N. ALL AIR VENTS, GAUGES, THERMOMETERS, AND TRAP PRIMERS SHALL BE MOUNTED IN AN ACCESSIBLE LOCATION, OR BEHIND AN ACCESS PANEL, PROVIDED BY PLUMBING CONTRACTOR.

SHEET KEYNOTES

1. 3/4" COLD WATER TO WALL HYDRANT.
2. FOR DOMESTIC CW/HW TO PLUMBING FIXTURE CONNECTION SIZE REFER TO PLUMBING SCHEDULE.
3. 3/4" DCW UP TO ROOF HYDRANT.
4. COORDINATE ROUTING WITH DUCTWORK IN CHASE.

Revisions:

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Salina Area Tech - Industrial
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Salina, Kansas

Drawing: PLUMBING 1ST FLOOR DOMESTIC WATER PLAN AREA-C

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: P-103

DRAWN BY: AAB

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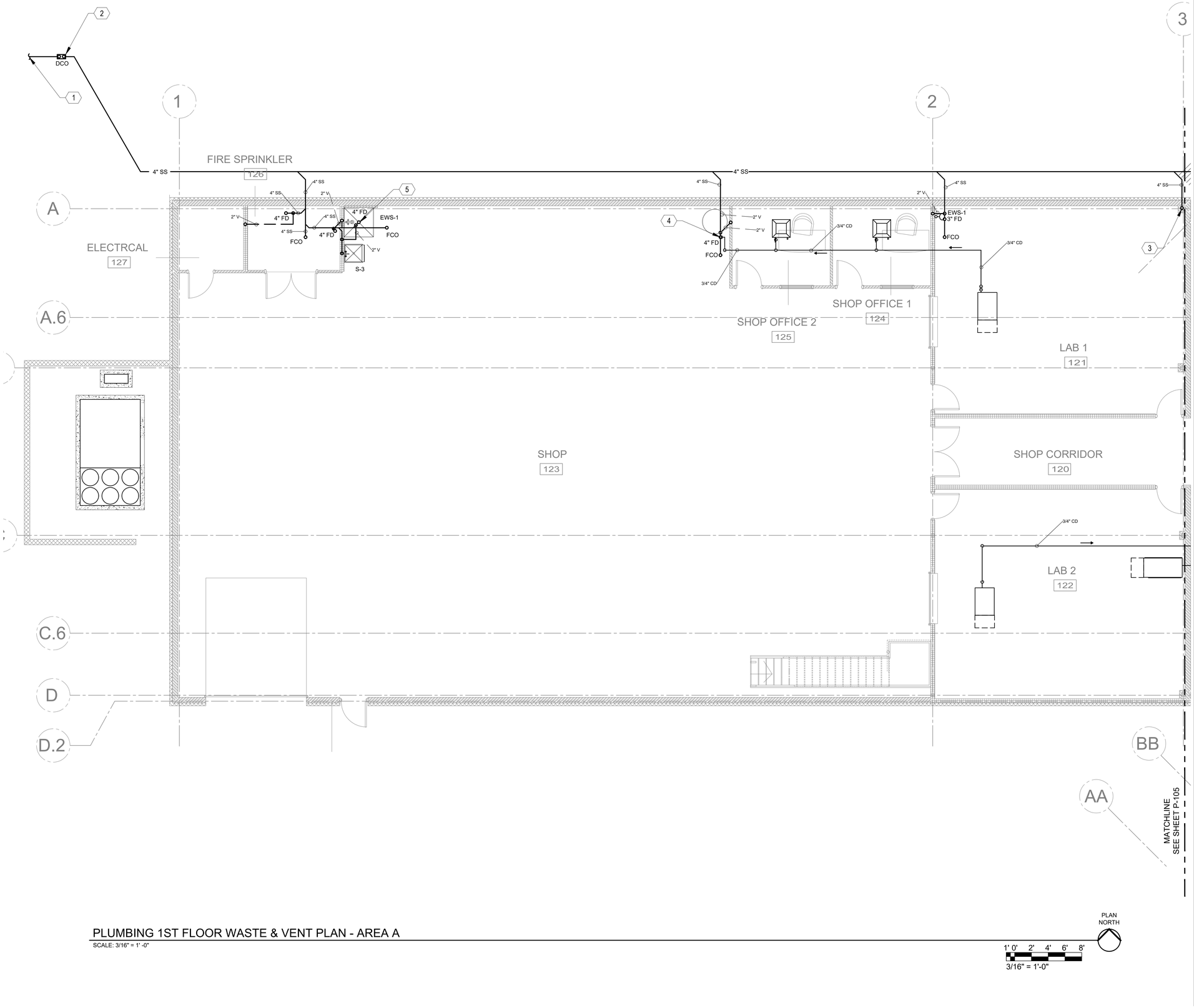

PLUMBING 1ST FLOOR WASTE & VENT PLAN - AREA A

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. COORDINATE EXACT LOCATION OF ROOF PENETRATIONS WITH ROOF STRUCTURE LOCATIONS. ALL PENETRATIONS TO BE A MIN. OF 18" FROM WALLS, CURBS, PIPES, VENT STACKS, AND OTHER ROOF PENETRATIONS.

B. COORDINATE ALL PLUMBING AND PIPING WITH OTHER EQUIPMENT.

C. INSTALL ALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

D. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND INSTALLATION HEIGHT OF ALL PLUMBING FIXTURES & EXACT BUILDING DIMENSIONS.

E. INSULATE ALL HOT WATER, COLD WATER AND P-TRAPS WITH TRAP WRAP TO ADA REQUIREMENTS.

F. SEE SHEET P-601 FOR PLUMBING FIXTURE SCHEDULE. ALL PLUMBING FIXTURE SUBSTITUTION SHALL BE BY ENGINEER APPROVAL.

G. MANIFOLD ALL PLUMBING VENTS ABOVE FLOOD LEVEL OF PLUMBING FIXTURES.

H. PROVIDE CHROME-PLATE STEEL ESCUTCHEONS FOR PIPES AT WALL PENETRATIONS.

I. HOT AND COLD WATER RUNS ARE 1/2" UNLESS OTHERWISE SPECIFIED.

J. ALL WATER RUNS ARE OVERHEAD AND SHALL BE CONCEALED WHEREVER POSSIBLE. ANY EXPOSED PIPING SHALL BE COORDINATED WITH A ARCHITECT PRIOR TO INSTALLATION. SLOPE TO DRAIN.

K. HOT AND COLD WATER PIPING IS TO BE INSTALLED ACCORDING TO UP0C. INSULATE HOT WATER AND COLD WATER SUPPLY PIPING WITH 1-1/2" FIBERGLASS INSULATION.

L. PIPE MATERIAL: TYPE L COPPER PIPE FOR DOMESTIC WATER.

M. PROVIDE MECHANICAL WATER HAMMER ARRESTORS AT ALL WATER CLOSETS.

N. CONTRACTOR RESPONSIBLE FOR LOCATING ALL UTILITY LINES.

O. ALL AIR VENTS, GAUGES, THERMOMETERS, AND TRAP PRIMERS SHALL BE MOUNTED IN AN ACCESSIBLE LOCATION, OR BEHIND AN ACCESS PANEL, PROVIDED BY PLUMBING CONTRACTOR.

P. UNLESS OTHERWISE CALLED OUT, ALL CONDENSATE DRAIN PIPING WILL BE 3/4".

SHEET KEYNOTES

1. FOR CONTINUATION SEE CIVIL DRAWINGS.
2. TWO WAY CLEANOUT TO GRADE, SEE P-501 FOR DETAIL.
3. 4" SS ROUTED DOWN FROM SECOND FLOOR RESTROOM AREA.
4. ROUTE CONDENSATE TO DRAIN LOCATION SHOWN. PIPING SHALL BE SLOPED TO DRAIN A MINIMUM OF 1/8" PER FOOT AND TERMINATE AT DRAIN WITH A MINIMUM 1" AIR GAP.
5. 4" FLOOR DRAIN FOR EMERGENCY SHOWER.

Revisions:

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Salina Area Tech - Industrial
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Salina, Kansas

Drawing:
PLUMBING
1ST FLOOR
WASTE & VENT
PLAN - AREA A

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: P-104

DRAWN BY: AAB

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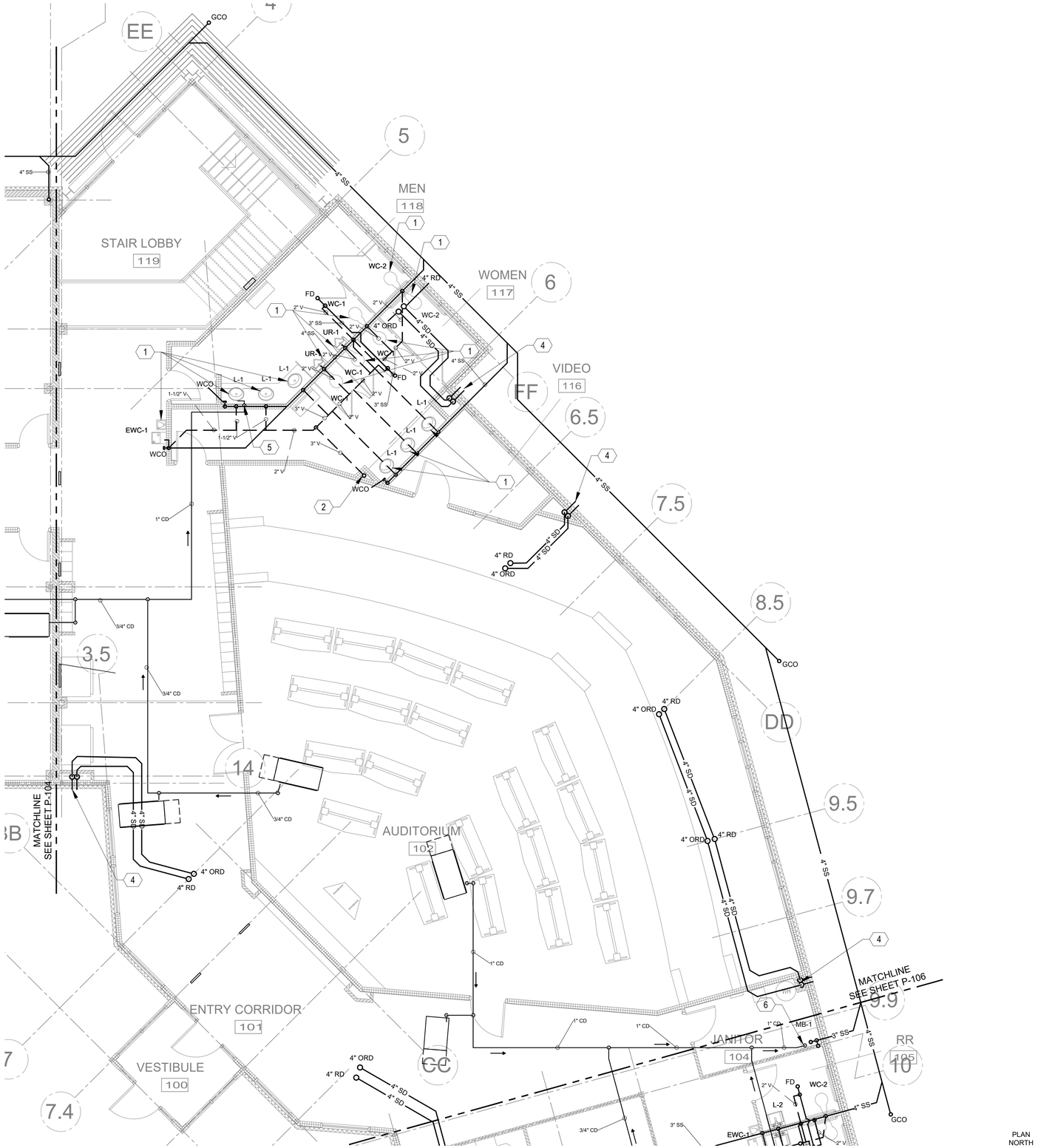

PLUMBING 1ST FLOOR WASTE & VENT PLAN - AREA B

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. COORDINATE EXACT LOCATION OF ROOF PENETRATIONS WITH ROOF STRUCTURE LOCATIONS. ALL PENETRATIONS TO BE A MIN. OF 18" FROM WALLS, CURBS, PIPES, VENT STACKS, AND OTHER ROOF PENETRATIONS.

B. COORDINATE ALL PLUMBING AND PIPING WITH OTHER EQUIPMENT.

C. INSTALL ALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

D. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND INSTALLATION HEIGHT OF ALL PLUMBING FIXTURES & EXACT BUILDING DIMENSIONS.

E. INSULATE ALL HOT WATER, COLD WATER AND P-TRAPS WITH TRAP WRAP TO ADA REQUIREMENTS.

F. SEE SHEET P-601 FOR PLUMBING FIXTURE SCHEDULE. ALL PLUMBING FIXTURE SUBSTITUTION SHALL BE BY ENGINEER APPROVAL.

G. MANIFOLD ALL PLUMBING VENTS ABOVE FLOOD LEVEL OF PLUMBING FIXTURES.

H. PROVIDE CHROME-PLATE STEEL ESCUTCHEONS FOR PIPES AT WALL PENETRATIONS.

I. HOT AND COLD WATER RUNS ARE 1/2" UNLESS OTHERWISE SPECIFIED.

J. ALL WATER RUNS ARE OVERHEAD AND SHALL BE CONCEALED WHEREVER POSSIBLE. ANY EXPOSED PIPING SHALL BE COORDINATED WITH A ARCHITECT PRIOR TO INSTALLATION. SLOPE TO DRAIN.

K. PIPE MATERIAL: TYPE L COPPER PIPE FOR DOMESTIC WATER.

L. PROVIDE MECHANICAL WATER HAMMER ARRESTORS AT ALL WATER CLOSETS.

M. CONTRACTOR RESPONSIBLE FOR LOCATING ALL UTILITY LINES.

N. ALL AIR VENTS, GAUGES, THERMOMETERS, AND TRAP PRIMERS SHALL BE MOUNTED IN AN ACCESSIBLE LOCATION, OR BEHIND AN ACCESS PANEL, PROVIDED BY PLUMBING CONTRACTOR.

P. UNLESS OTHERWISE CALLED OUT, ALL CONDENSATE DRAIN PIPING WILL BE 3/4".

SHEET KEYNOTES

1. FOR WASTE & VENT TO PLUMBING FIXTURE CONNECTION SIZE REFER TO PLUMBING SCHEDULE.
2. VENT TO ROOF.
3. 2" WASTE UP, 1-1/2" VENT DOWN TO SINK.
4. 4" RD DSN-1 & 4" ORD DSN-1 (TYP), 12" ABOVE FINISHED FLOOR.
5. ROUTE CONDENSATE TO DRAIN LOCATION SHOWN. PIPING SHALL BE SLOPED TO DRAIN A MINIMUM OF $\frac{1}{8}$" PER FOOT AND TERMINATE AT DRAIN AT LAVATORY WASTE LINE, SEE DETAIL 11/P-501.
6. ROUTE CONDENSATE TO DRAIN LOCATION SHOWN. PIPING SHALL BE SLOPED TO DRAIN A MINIMUM OF $\frac{1}{8}$" PER FOOT AND TERMINATE AT DRAIN WITH A MINIMUM 1" AIR GAP.

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09-08-2023
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Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

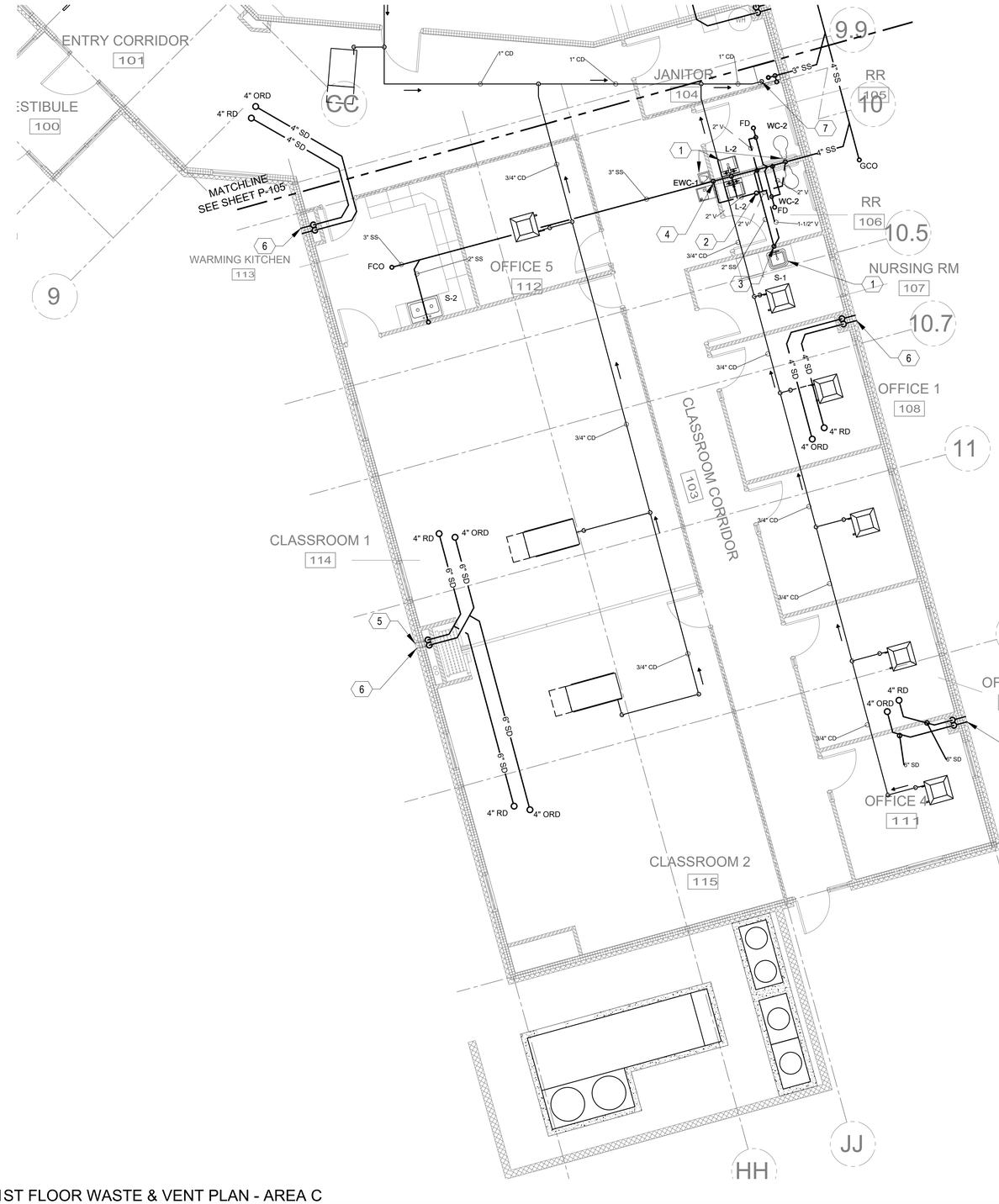
Drawing:
PLUMBING 1ST FLOOR WASTE & VENT PLAN AREA B

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: P-105

DRAWN BY: AAB



PLUMBING 1ST FLOOR WASTE & VENT PLAN - AREA C

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. COORDINATE EXACT LOCATION OF ROOF PENETRATIONS WITH ROOF STRUCTURE LOCATIONS. ALL PENETRATIONS TO BE A MIN. OF 18" FROM WALLS, CURBS, PIPES, VENT STACKS, AND OTHER ROOF PENETRATIONS.

B. COORDINATE ALL PLUMBING AND PIPING WITH OTHER EQUIPMENT.

C. INSTALL ALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

D. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND INSTALLATION HEIGHT OF ALL PLUMBING FIXTURES & EXACT BUILDING DIMENSIONS.

E. INSULATE ALL HOT WATER, COLD WATER AND P-TRAPS WITH TRAP WRAP TO ADA REQUIREMENTS.

F. SEE SHEET P-601 FOR PLUMBING FIXTURE SCHEDULE. ALL PLUMBING FIXTURE SUBSTITUTION SHALL BE BY ENGINEER APPROVAL.

G. MANIFOLD ALL PLUMBING VENTS ABOVE FLOOD LEVEL OF PLUMBING FIXTURES.

H. PROVIDE CHROME-PLATE STEEL ESCUTCHEONS FOR PIPES AT WALL PENETRATIONS.

I. HOT AND COLD WATER RUNS ARE 1/2" UNLESS OTHERWISE SPECIFIED.

J. ALL WATER RUNS ARE OVERHEAD AND SHALL BE CONCEALED WHEREVER POSSIBLE. ANY EXPOSED PIPING SHALL BE COORDINATED WITH A ARCHITECT PRIOR TO INSTALLATION. SLOPE TO DRAIN.

K. HOT AND COLD WATER PIPING IS TO BE INSTALLED ACCORDING TO UP0C. INSULATE HOT WATER AND COLD WATER SUPPLY PIPING WITH 1-1/2" FIBERGLASS INSULATION.

L. PIPE MATERIAL: TYPE L COPPER PIPE FOR DOMESTIC WATER.

M. PROVIDE MECHANICAL WATER HAMMER ARRESTORS AT ALL WATER CLOSETS.

N. CONTRACTOR RESPONSIBLE FOR LOCATING ALL UTILITY LINES.

O. ALL AIR VENTS, GAUGES, THERMOMETERS, AND TRAP PRIMERS SHALL BE MOUNTED IN AN ACCESSIBLE LOCATION, OR BEHIND AN ACCESS PANEL, PROVIDED BY PLUMBING CONTRACTOR.

P. UNLESS OTHERWISE CALLED OUT, ALL CONDENSATE DRAIN PIPING WILL BE 3/4".

SHEET KEYNOTES

1. FOR WASTE & VENT TO PLUMBING FIXTURE CONNECTION SIZE REFER TO PLUMBING SCHEDULE.
2. VENT TO ROOF.
3. 2" WASTE UP, 1-1/2" VENT DOWN TO SINK.
4. 2" WASTE UP, 1-1/2" VENT DOWN TO WATER COOLER.
5. ROUTED 6" STORM DRAIN DOWN FURR OUT IN WALL TO 6" DSN-1.
6. 4" RD DSM-1 & 4" PRD DSM-1 (TYP.) 12" ABOVE FINISHED FLOOR.
7. ROUTE CONDENSATE TO DRAIN LOCATION SHOWN. PIPING SHALL BE SLOPED TO DRAIN A MINIMUM OF $\frac{1}{8}$" PER FOOT AND TERMINATE AT DRAIN WITH A MINIMUM 1" AIR GAP.

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Revisions:

Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing: PLUMBING 1ST FLOOR WASTE & VENT PLAN AREA-C

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: P-106

DRAWN BY: AAB

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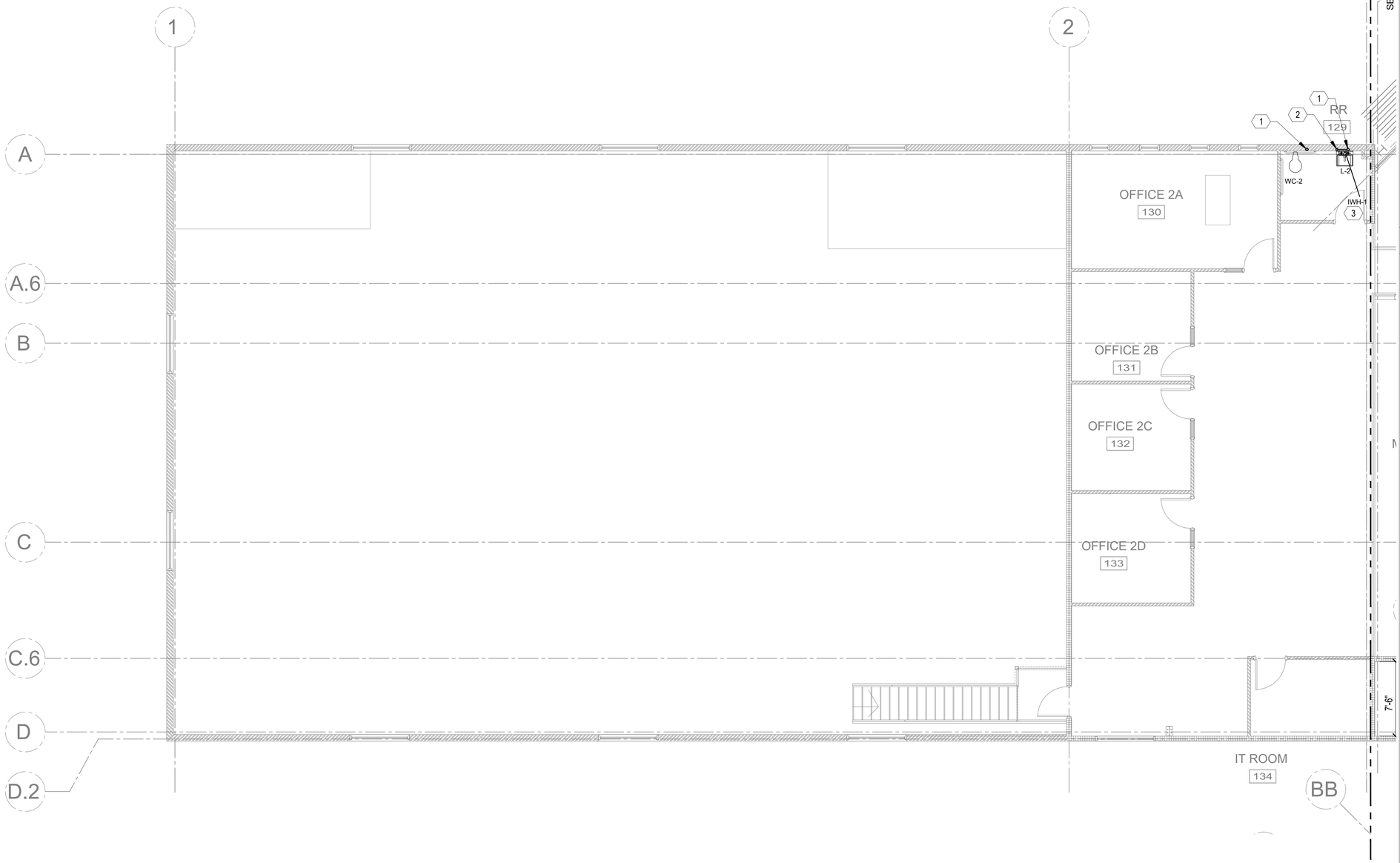

PLUMBING 2ND FLOOR DOMESTIC WATER PLAN - AREA A

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. COORDINATE EXACT LOCATION OF ROOF PENETRATIONS WITH ROOF STRUCTURE LOCATIONS. ALL PENETRATIONS TO BE A MIN. OF 18" FROM WALLS, CURBS, PIPES, VENT STACKS, AND OTHER ROOF PENETRATIONS.

B. COORDINATE ALL PLUMBING AND PIPING WITH OTHER EQUIPMENT.

C. INSTALL ALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

D. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND INSTALLATION HEIGHT OF ALL PLUMBING FIXTURES & EXACT BUILDING DIMENSIONS.

E. INSULATE ALL HOT WATER, COLD WATER AND P-TRAPS WITH TRAP WRAP TO ADA REQUIREMENTS.

F. SEE SHEET P-601 FOR PLUMBING FIXTURE SCHEDULE. ALL PLUMBING FIXTURE SUBSTITUTION SHALL BE BY ENGINEER APPROVAL.

G. MANIFOLD ALL PLUMBING VENTS ABOVE FLOOD LEVEL OF PLUMBING FIXTURES.

H. PROVIDE CHROME-PLATE STEEL ESCUTCHEONS FOR PIPES AT WALL PENETRATIONS.

I. HOT AND COLD WATER RUNS ARE 1/2" UNLESS OTHERWISE SPECIFIED.

J. ALL WATER RUNS ARE OVERHEAD AND SHALL BE CONCEALED WHEREVER POSSIBLE. ANY EXPOSED PIPING SHALL BE COORDINATED WITH A ARCHITECT PRIOR TO INSTALLATION. SLOPE TO DRAIN.

K. HOT AND COLD WATER PIPING IS TO BE INSTALLED ACCORDING TO UP0C. INSULATE HOT WATER AND COLD WATER SUPPLY PIPING WITH 1-1/2" FIBERGLASS INSULATION.

L. PIPE MATERIAL: TYPE L COPPER PIPE FOR DOMESTIC WATER.

M. PROVIDE MECHANICAL WATER HAMMER ARRESTORS AT ALL WATER CLOSETS.

N. CONTRACTOR RESPONSIBLE FOR LOCATING ALL UTILITY LINES.

O. ALL AIR VENTS, GAUGES, THERMOMETERS, AND TRAP PRIMERS SHALL BE MOUNTED IN AN ACCESSIBLE LOCATION, OR BEHIND AN ACCESS PANEL, PROVIDED BY PLUMBING CONTRACTOR.

P. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS OF EXISTING CONSTRUCTION AND REPORT ANY INCONSISTENCIES TO THE ENGINEER BEFORE PROCEEDING WITH WORK AFFECTED BY SUCH INCONSISTENCIES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE INTENT OF THE DESIGN AS SHOWN ON THE PLANS. ACTUAL CONDITIONS SHALL GOVERN OVER WRITTEN DIMENSIONS, WRITTEN DIMENSIONS SHALL GOVERN OVER ACTUAL DRAWING REPRESENTATION. ATTEMPTS TO UTILIZE SCALING OR ELECTRONIC MEANS TO DETERMINE QUANTITY TAKE-OFF MAY BE AFFECTED BY NOT-TO-SCALE ITEMS. THE ENGINEER IS NOT RESPONSIBLE FOR, AND SHALL NOT BE HELD LIABLE FOR THE ACCURACY OF RESULTS OF SUCH TAKE OFFS.

SHEET KEYNOTES

1. FOR CONTINUATION OF WATER SEE SHEET P-108.
2. FOR DOMESTIC WATER TO PLUMBING FIXTURE CONNECTION SIZE REFER TO PLUMBING SCHEDULE.
3. SEE DETAIL 8/P-601 FOR CONNECTION DETAIL ON POINT OF USE WATER HEATER.

Revisions:

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Salina Area Tech - Industrial
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Salina, Kansas

Drawing: PLUMBING 2ND FLOOR DOMESTIC WATER PLAN - AREA A

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: P-107

DRAWN BY: AAB

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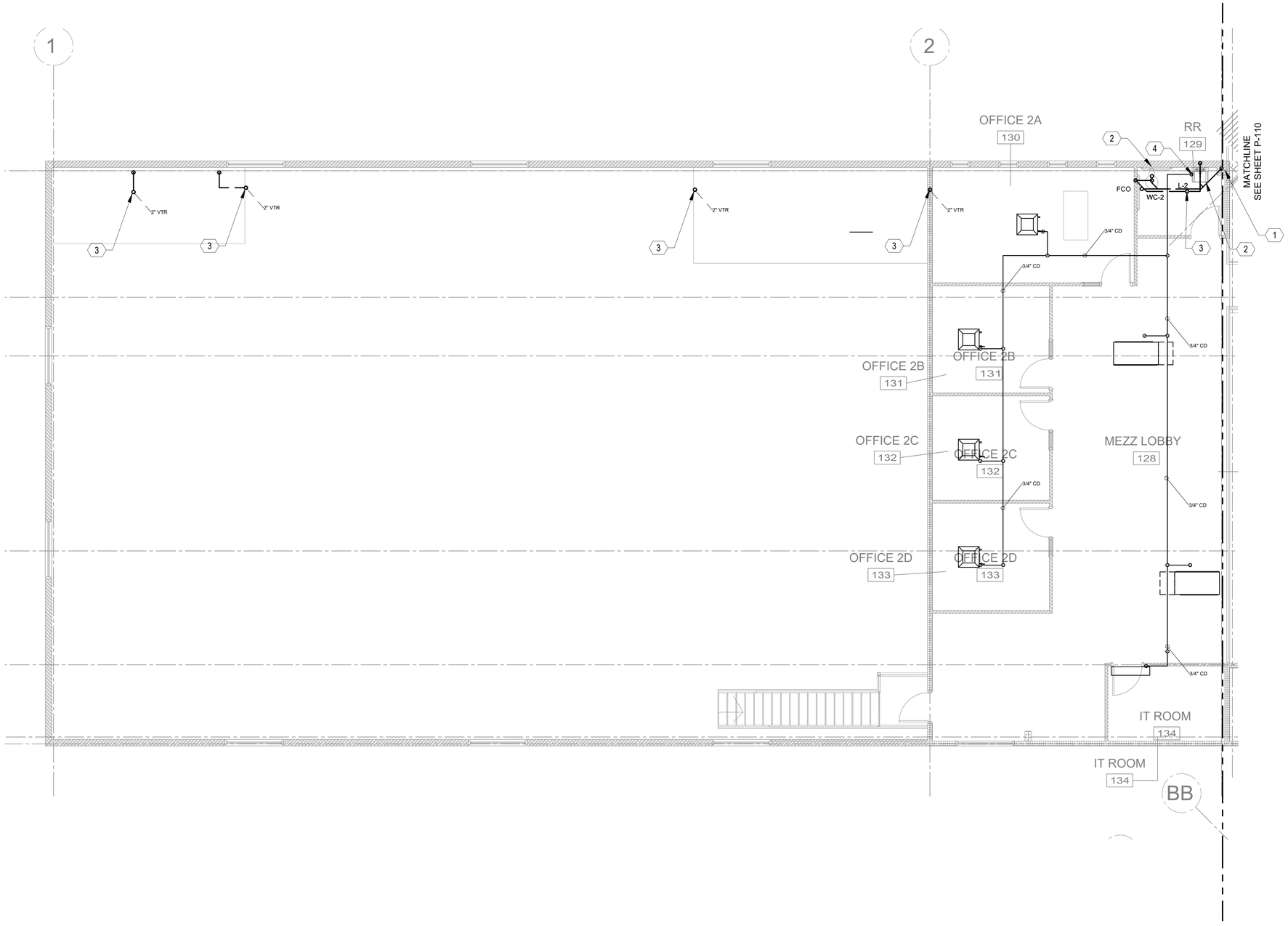

PLUMBING 2ND FLOOR WASTE & VENT PLAN - AREA A

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. COORDINATE EXACT LOCATION OF ROOF PENETRATIONS WITH ROOF STRUCTURE LOCATIONS. ALL PENETRATIONS TO BE A MIN. OF 18" FROM WALLS, CURBS, PIPES, VENT STACKS, AND OTHER ROOF PENETRATIONS.

B. COORDINATE ALL PLUMBING AND PIPING WITH OTHER EQUIPMENT.

C. INSTALL ALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

D. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND INSTALLATION HEIGHT OF ALL PLUMBING FIXTURES & EXACT BUILDING DIMENSIONS.

E. INSULATE ALL HOT WATER, COLD WATER AND P-TRAPS WITH TRAP WRAP TO ADA REQUIREMENTS.

F. SEE SHEET P-601 FOR PLUMBING FIXTURE SCHEDULE. ALL PLUMBING FIXTURE SUBSTITUTION SHALL BE BY ENGINEER APPROVAL.

G. MANIFOLD ALL PLUMBING VENTS ABOVE FLOOD LEVEL OF PLUMBING FIXTURES.

H. PROVIDE CHROME-PLATE STEEL ESCUTCHEONS FOR PIPES AT WALL PENETRATIONS.

I. HOT AND COLD WATER RUNS ARE 1/2" UNLESS OTHERWISE SPECIFIED.

J. ALL WATER RUNS ARE OVERHEAD AND SHALL BE CONCEALED WHEREVER POSSIBLE. ANY EXPOSED PIPING SHALL BE COORDINATED WITH A ARCHITECT PRIOR TO INSTALLATION. SLOPE TO DRAIN.

K. HOT AND COLD WATER PIPING IS TO BE INSTALLED ACCORDING TO UP0C. INSULATE HOT WATER AND COLD WATER SUPPLY PIPING WITH 1-1/2" FIBERGLASS INSULATION.

L. PIPE MATERIAL: TYPE L COPPER PIPE FOR DOMESTIC WATER.

M. PROVIDE MECHANICAL WATER HAMMER ARRESTORS AT ALL WATER CLOSETS.

N. CONTRACTOR RESPONSIBLE FOR LOCATING ALL UTILITY LINES.

O. ALL AIR VENTS, GAUGES, THERMOMETERS, AND TRAP PRIMERS SHALL BE MOUNTED IN AN ACCESSIBLE LOCATION, OR BEHIND AN ACCESS PANEL, PROVIDED BY PLUMBING CONTRACTOR.

P. UNLESSED OTHERWISED CALLED OUT, ALL CONDENSATE DRAIN PIPING WILL BE 3/4".

SHEET KEYNOTES

1. FOR CONTINUATION SEE P-104.
2. FOR WASTE AND VENT CONNECTION SIZES SEE FIXTURE SCHEDULE.
3. 2" VENT TO ROOF.
4. ROUTE CONDENSATE TO DRAIN LOCATION SHOWN. PIPING SHALL BE SLOPED TO DRAIN A MINIMUM OF ¼" PER FOOT AND TERMINATE AT DRAIN AT LAVATORY WASTE LINE, SEE DETAIL 11/P-501.

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Revisions:

Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing:
PLUMBING
2ND FLOOR
WASTE & VENT
PLAN - AREA A

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: P-108

DRAWN BY: AAB

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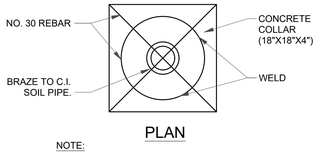
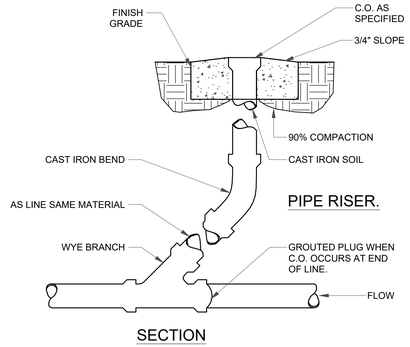


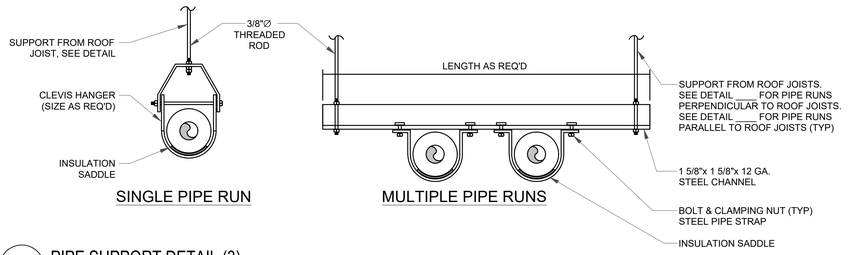
NOTE:

SEE MISCELLANEOUS PLUMBING EQUIPMENT SCHEDULE FOR DESCRIPTION.



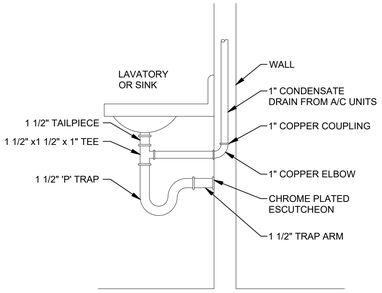
9 CLEANOUT TO GRADE

NTS



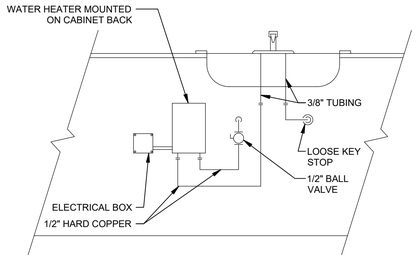
10 PIPE SUPPORT DETAIL (3)

NTS



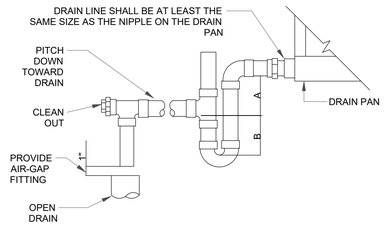
11 CONDENSATE DRAIN AHEAD OF LAV P-TRAP

NTS



8 TANKLESS POU WATER HEATER DETAIL

NTS

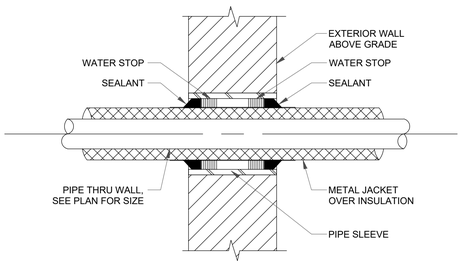


UNIT TYPE	A	B
DRAW THRU	2" [51mm] PLUS X	X
BLOW THRU	1" [25mm] MINIMUM	2X

WHERE X = STATIC PRESSURE IN PAN

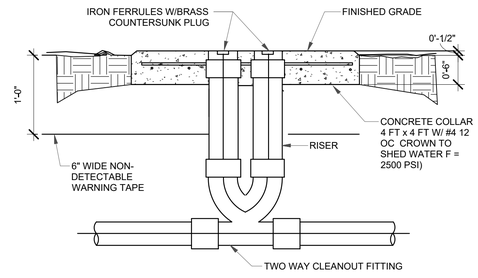
5 CONDENSATE TRAP DETAIL

NTS



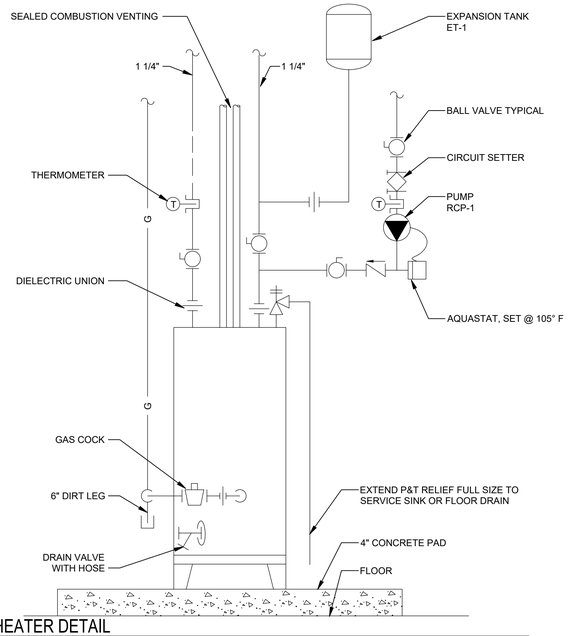
6 PIPE THRU WALL PENETRATION

NTS



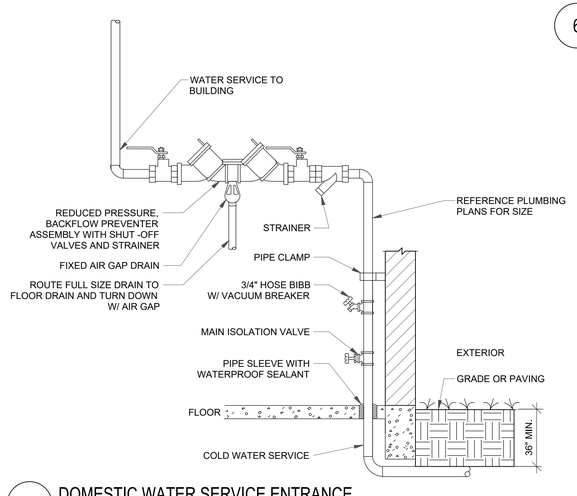
7 DOUBLE CLEANOUT TO GRADE

NTS



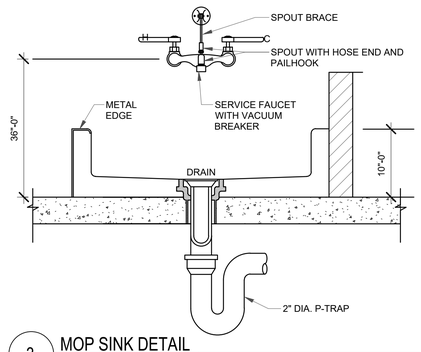
1 WATER HEATER DETAIL

NTS



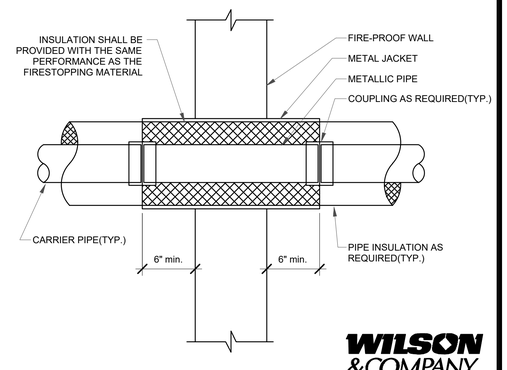
2 DOMESTIC WATER SERVICE ENTRANCE

NTS



3 MOP SINK DETAIL

NTS



4 FIRE-PROOF, FRAMED WALL PENETRATION

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Revisions:

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MARYANN L. WILLIAM WEIMER 15999 09-08-2023 KANSAS REGISTERED PROFESSIONAL ENGINEER

Salina Area Tech - Industrial Maintenance & Automation Building Salina, Kansas

Drawing: PLUMBING DETAILS

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: P-501

DRAWN BY: AAB

PIPE INSULATION SCHEDULE

PIPING SYSTEM	INSULATION TYPE	JACKET TYPE	VAPOR BARRIER MASTIC	PIPE INSULATION THICKNESS (INCHES) NOMINAL PIPE DIAMETERS (INCHES)					REMARKS
				< 1"	1" TO < 1-1/2"	1-1/2" TO < 4"	4" TO < 8"	> 8"	
CONDENSATE (INTERIOR)	NONE	-	-	-	-	-	-	-	-
DOMESTIC COLD WATER	FIBERGLASS	ALL SERVICE	YES	1"	1"	1"	1"	1"	A
DOMESTIC HOT WATER	FIBERGLASS	ALL SERVICE	YES	1"	1"	1"	1"	1"	A
DOMESTIC HOT WATER RETURN	FIBERGLASS	ALL SERVICE	YES	1"	1"	1"	1"	1"	A

GENERAL NOTES:

1. REFER TO SPECIFICATIONS FOR FURTHER DETAILS ON PIPE MATERIAL, JACKETS AND INSULATION.
2. ALL EXTERIOR PIPING AND PIPING EXPOSED WITHIN INTERIOR SPACES SHALL BE INSTALLED WITH EMBOSSED ALUMINUM JACKET.

REMARKS:

A. PIPING SHALL BE INSULATED IN ACCORDANCE WITH IECC SECTION C403.11.3.

GAS REGULATOR SCHEDULE

MARK	MANUFACTURER / MODEL NO.	EQUIPMENT SERVED	BODY CONSTRUCTION	INLET PRESSURE	OUTLET PRESSURE	CAPACITY (CFH)	INTERNAL RELIEF	VENTED	COMMENTS
R-1	FISHER / CS200	BUILDING	IRON	CITY PRESSURE	2 PSI	926	-	-	"
R-2	FISHER / CS200	AC-01	IRON	2 PSI	14 WC	250	-	-	"
R-3	FISHER / CS200	DOAS-1	IRON	2 PSI	14 WC	200	-	-	"
R-4	FISHER / CS200	GWH-1	IRON	2 PSI	14 WC	76	-	YES	"
R-5	FISHER / CS200	GWH-2	IRON	2 PSI	14 WC	400	-	YES	"

DOMESTIC WATER HEATER SCHEDULE (ELECTRIC)

MARK	MANUFACTURER / MODEL NO.	LOCATION	kW	TEMP RISE AT 0.5 GPM	COMMENTS
IWH-1	EEMAX / SPEX 1812	RR 129	1.8	25°F	115V 15A MAX. 0.2 GPM TURN ON, MOUNT TO BEST CONNECT TO WATER CONNECTIONS.

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE TYPE	MANUFACTURER / MODEL NO.	MOUNTING HEIGHT	ROUGH-IN SCHEDULE				FLUSH / FLOW RATES			DESCRIPTION
				CW	HW	W	V	GALLONS PER FLUSH (GPF)	FLOWRATE (GPM)	GALLONS PER CYCLE (GPC)	
WC-1	WATER CLOSET	ZURN / Z5655-BWL	15" TO RIM	1"	-	4"	2"	1.28	-	-	FLOOR MOUNTED HARD WIRED AUTO FLUSH VALVE Z6000AV-ONE STANDARD HEIGHT WATER CLOSET, 1.28 GPF. Z5958SS-EL ELONGATED, WHITE, CLOSED FORONT TOILET SEAT, WITH COVER AND STAINLESS STEEL CHECK HINGE.
WC-2	WATER CLOSET (ADA COMPLIANT)	ZURN / Z5665-BWL	17" TO RIM	1"	-	4"	2"	1.28	-	-	FLOOR MOUNTED HARD WIRED AUTO FLUSH VALVE Z6000AV-ONE, ADA HEIGHT WATER CLOSET, 1.28 GPF. Z5958SS-EL ELONGATED, WHITE, CLOSED FRONT TOILET SEAT, WITH COVER AND STAINLESS STEEL CHECK HINGE.
UR-1	URINAL	ZURN / Z5755-U	24" TO RIM	3/4"	-	2"	1-1/2"	-	-	-	WALL HUNG TOP SPUD. 0.125 GPF EXPOSED SENSOR HARD WIRED WITH MANUAL OVERRIDE BUTTON ZEMS6003AV-ULF-MOB. Z1222PLATE TYPE SYSTEM WITH BEARING PLATE CARRIER.
L-1	LAVATORY	ZURN / Z5110	COUNTERTOP	1/2"	1/2"	2"	1-1/2"	-	-	-	20" X 17" SELF RIMMING, 4" FAUCET CENTERS. COUNTERTOP LAVATORY WITH SENSOR FAUCET Z6955-XL-S-W1, TEMPERATURE MIXING VALVE, CONNECTOR WIRE FOR HARDWIRE INSTALL, SINGLE SUPPLY PROTECTORS, WITH 3/8" NOMINAL WALL AND VANDAL-RESISTANT CLIP FEATURE Z8946-NT.
L-2	LAVATORY	ZURN / Z5344	34" TO RIM	1/2"	1/2"	2"	1-1/2"	-	-	-	19" X 17" WALL HUNG 4" FAUCET CENTERS, 10" P-TRAP WITH WALL BEND. Z6918-XL-CWB POWERED FAUCET PLUG-IN. 0.5 GPM AERATOR, WITH 10 SECOND TIME OUT FEATURE. PROVIDE WITH TEMPERATURE MIXING VALVE.
S-1	SINK	ELKAY / LRAD1918553	COUNTERTOP	1/2"	1/2"	2"	1-1/2"	-	-	-	19" X 18" COUNTER TOP LAY-IN SINK, 10" P-TRAP WITH WALL BEND. LK1500CR CHROME FAUCET.
S-2	SINK	ELKAY / DLR3322103	COUNTERTOP	1/2"	1/2"	2"	1-1/2"	-	-	-	33" X 22" COUNTER TOP LAY-IN SINK, 10" P-TRAP WITH WALL BEND. LK1500CR CHROME FAUCET.
S-3	SINK	ELKAY / B1C24X24X	FLOOR MOUNTED	1/2"	1/2"	2"	1-1/2"	-	-	-	25" X 22" 20 GAUGE STAINLESS STEEL. PROVIDE WITH GOOSENECK FAUCET AND WRISTBLADE HANDLES
ESH-1	EMERGENCY SHOWER	HAWS / MODEL 8100	FLOOR MOUNTED	3/4"	3/4"	-	-	-	-	-	EMERGENCY SHOWER WITH DUST COVER. WITH TMV-3 FOR 1" TEMPERED WATER CONNECTION TO SHOWER. SCALD PROTECTION BLEED VALVE. THERMOSTATIC MIXIING VALVE. AXION MSR SHOWERHEAD.
EWS-1	EMERGENCY EYEWASH	HAWS / 7777	FLOOR MOUNTED	-	-	2"	1 -1/2"	-	-	-	HAWS MODEL 7777 EMERGENCY EYEWASH STATION 1-1/4" TYPE 304 STAINLESS STEEL PIPE WIHT CAST STAINLESS STEEL 9" DIAMETER. TYPE 304 STAINLESS STEEL IN-LINE 50 X 50 MESH WATER STRATIONER
MB-1	MOP SINK	STERN WILLIAMS / MTB-2424	FLOOR MOUNTED	3/4"	3/4"	3"	1 -1/2"	-	-	-	MOP SERVICE SINK 24" x 24". T-10-VB SERVICE FITTING. 2.5 GPM
EWC-1	ELECTRIC WATER COOLER	ELKAY / EZSTL8WSLK	WALL MOUNT	1/2"	-	2"	1-1/2"	-	0.13	-	EZS EZH2O BOTTLE FILLING STATION FOUNTAIN. FILLER SENSOR WITH MECHANICAL FRONT BUBBLER BUTTON. WALL MOUNTED BI-LEVEL.

DOMESTIC WATER HEATER SCHEDULE (GAS)

MARK	MANUFACTURER / MODEL NO.	STORAGE (GAL)	LOCATION	INPUT (MBH)	RECOVERY GPH (90°F RISE)	FLUE SIZE (IN.)	COMMENTS
GWH-1	BRADFORD WHITE / LC2PV50H763N	50	MECH ROOM	76	82	3	INSTALLED T&P RELIEV VALVE. PROVIDE WITH CONCENTRIC VENT KIT.
GWH-2	AO SMITH / BTH-250A	119	SHOP	400	576	4	INSTALLED T&P RELIEV VALVE. PROVIDE WITH CONCENTRIC VENT KIT.

DOMESTIC WATER EXPANSION TANK SCHEDULE

MARK	MANUFACTURER / MODEL NO.	LOCATION	SERVICE	TANK VOLUME (GAL)	ACCEPTANCE VOLUME (GAL)	COMMENTS
ET-1	AMTROL / ST-5	MECH ROOM	DOMESTIC HOT WATER	2	1	STEEL SHELL STAINLESS STEEL SYSTEM CONNECTION, PRECHARGED TO 55 PSIG, 250 WORKING PRESSURE.

RECIRCULATION PUMP SCHEDULE

MARK	MANUFACTURER / MODEL NO.	SERVICE	PUMP TYPE	GPM	HEAD (FT)	ELECTRICAL			COMMENTS
						VOLT	PH	HP	
RCP-1	BELL & GOSSETT / ECOCIRC 20-18	FIRST FLOOR	ECM	2	8	115	1	1/12	LUBRICATED RECIRCULATING PUMP. BRONZE BODY SYSTEM.

ROOF DRAIN / DOWNSPOUT SCHEDULE

MARK	MANUFACTURER / MODEL NO.	DRAIN LEADER SIZE (IN.)	DRAIN DOME SIZE (IN.)	COMMENTS
RD-1	ZURN / ZC100	SEE DWGS	4"	ROOF DRAIN DURA-COATED CAST IRON BODY WITH COMBINATION MEMBRANE FLASHING CLAMP/ GRAVEL GUARD.
ORD-1	ZURN / ZC100	SEE DWGS	4"	ROOF DRAIN DURA-COATED CAST IRON BODY WITH COMBINATION MEMBRANE FLASHING CLAMP/ GRAVEL GUARD.
DSN-1	ZURN / ZANB199	SEE DWGS	—	DOWNSPOUT NOZZLE. NICKEL BRONZE BODY, OPTIONAL THREADED, PVC SLIP-ON, OR NO-HUB INLET AND DECORATIVE FACE OF WALL FLANGE AND OUTLET NOZZLE.

MISCELLANEOUS PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE DESCRIPTION	MANUFACTURER & MODEL NO.	CONNECTIONS				REMARKS
			CW	HW	W	V	
FCO	FLOOR CLEANOUT (INSIDE BUILDING FOR APPLICABLE FINISH), CONCRETE, CERAMIC OR QUARRY TILE	ZURN / ZN-1400 NH VINYL TILE/ CONCRETE	-	-	SEE DWGS	-	ZURN NO. ZN-1400-X NH, RECESSED FOR TILE. CARPET ZURN NO. ZN-1400-CF NH FOR CARPET, WITH MARKER.
DCO	DOUBLE CLEANOUT (OUTSIDE OR UNFINISHED AREA)	ZURN / Z-1400-HD NH CAST IRON TAP	-	-	SEE DWGS	-	P.B.TOP IN OUTSIDE AREAS, CAST IRON TOP, VANDALPROOF SCREWS, GALVANIZED.
GCO	GROUND CLEANOUT (OUTSIDE OR UNFINISHED AREA)	ZURN / Z-1400-HD NH CAST IRON TAP	-	-	SEE DWGS	-	P.B.TOP IN OUTSIDE AREAS, CAST IRON TOP, VANDALPROOF SCREWS, GALVANIZED.
WCO	WALL CLEANOUT BRONZE PLUG W/ STAINLESS STEEL FACE WALL COVER & VANDALPROOF SCREWS	ZURN / Z-1468 ZS	-	-	SEE DWGS	-	INSTALL WHERE C.O. BELOW FIXTURE CONNECTION IS REQUIRED BY CODE AND WHERE SHOWN ON PLANS. STAINLESS STEEL FACE WALL COVER W/ VANDALPROOF SCREWS.
FD	FLOOR DRAIN	ZURN / ZN-415	-	-	3"	1-1/2"	DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, AND COMBINATION MEMBRANE FLASHING CLAMP AND FRAME FROM EXTRA-HEAVY-DUTY CAST IRON DEEP FLANGE SLOTTED GRATE. WITH TRAP GUARD.
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER	WATTS / LF009S	2-1/2"	-	-	-	MODULAR CHACK CONSTRUCTION WITH STRAINER, LEAD FREE.
TMV-1	THERMOSTATIC MIXING VALVE	LEONARD / LV-984-LF	1-1/4"	1-1/2"	-	-	1-1/2" THERMOSTATIC VALVE.
TMV-2	THERMOSTATIC MIXING VALVE	LEONARD / TM-420B-LF-D T-IT	1"	1"	-	-	1-1/4" TEMPERED WATER THERMOSTATIC VALVE.
TMV-3	THERMOSTATIC MIXING VALVE	LEONARD / LV-984-LF	1-1/4"	1-1/2"	-	-	1-1/2" THERMOSTATIC MIXING VALVE
TMV-4	THERMOSTATIC MIXING VALVE	LEONARD / TM-420B-LF-D T-IT	1"	1"	-	-	1-1/4" TEMPERED WATER THERMOSTATIC VALVE.
SA-1 W/AP-1	SHOCK ABSORBER WITH ACCESS PANEL	WATTS / LF15M2	1"	-	-	-	MAINTENANCE-FREE, PRE-CHARGED, AND PREVENT BANGING NOISE.

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Revisions:

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Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing: PLUMBING SCHEDULES

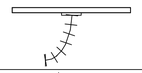
Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: P-601

DRAWN BY: AAB

MECHANICAL LEGEND

MARK	DEFINITION
16 x 14	AIRFLOW DIMENSIONS (WIDTH x HEIGHT)
	HIGH-EFFICIENCY RECTANGULAR TO ROUND DUCT TAKE-OFF
	RECTANGULAR TAKE-OFF FROM RECTANGULAR DUCT (BEVELED TYPE)
	SUPPLY AIR DIFFUSER WITH FLEXIBLE DUCT RUN-OUT (KEEP FLEX RUN UNDER FIVE FEET)
B 8" Ø 205 CFM	AIR DEVICE TAG - MARK - NECK SIZE - AIRFLOW
	ROOF-MOUNTED EXHAUST FAN
	AIR DIFFUSER
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
	SLOT DIFFUSER WITH FLEX DUCT RUN-OUT
	AIRFLOW ARROW
	THREE-WAY DIFFUSER - HATCH PATTERN DEPICTS BLOCKED DIRECTION(S)
XXX 1	EQUIPMENT TAG (EQUIPMENT ABBREVIATION - NUMBER)
FD	AN ACCESSIBLE FIRE/SMOKE DAMPER EQUAL TO THE RATING OF THE ASSEMBLY IT PROTECTS
	BALANCING VOLUME DAMPER

HVAC CONTROLS LEGEND

MARK	DEFINITION
(T)	THERMOSTAT
(OS)	OPERATOR STATION - VRF CONTROLLER

MECHANICAL ABBREVIATIONS

ABBREVIATION	DEFINITION
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
CC	COOLING COIL
CFH	CUBIC FEET PER HOUR
CL	CENTERLINE
CLG	CEILING
CRAH	COMPUTER ROOM AIR HANDLER
CRCU	COMPUTER ROOM CONDENSING UNIT
CU	CONDENSING UNIT
CW	COLD WATER
DN	DOWN
DS	DOWNSPOUT
EA	EXHAUST AIR
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
ELEV	ELEVATION
ERV	ENERGY RECOVERY VENTILATOR
F	FURNACE
FCO	FLOOR CLEAN-OUT
FD	FLOOR DRAIN
FD	FIRE DAMPER
FF	FINISHED FLOOR
FPHB	FREEZE-PROOF HOSE BIBB
FPWH	FREEZE-PROOF WALL HYDRANT
FS	FLOOR SINK
FS	COMBINATION FIRE/SMOKE DAMPER
GAS	NATURAL GAS
GC	GENERAL CONTRACTOR
GCO	GRADE CLEANOUT
HLAV	LAVATORY (ADA COMPLIANT)
HT	HEIGHT
HUR	URINAL (ADA COMPLIANT)
HW	HOT WATER (110°F UNO)
HWC	WATER CLOSET (ADA COMPLIANT)
HWR	HOT WATER RETURN (110°F UNO)
JB	JOIST BEARING
KF	KITCHEN FAN
L	LOUVER
LAV	LAVATORY
MC	MECHANICAL CONTRACTOR
OA	OUTSIDE AIR
OF	OVERFLOW DRAIN
PC	PLUMBING CONTRACTOR
RA	RETURN AIR
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SD	SMOKE DAMPER
SS	SANITARY SEWER
ST	STORM DRAIN
T	THERMOSTAT
TDL	TOTAL DEVELOPED LENGTH
TWHP	THRU-WALL HEAT PUMP
TMV	THERMOSTATIC MIXING VALVE
TS	TEMPERATURE SENSOR
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
V	VENT
WC	WATER CLOSET
WCO	WALL CLEAN-OUT
WH	DOMESTIC WATER HEATER
WHA	WATER HAMMER ARRESTOR

GENERAL MECHANICAL REQUIREMENTS:

1. CAPACITIES ARE SCHEDULED AT JOBSITE ALTITUDE OF 1,200 FT.
2. SUSPEND EACH TRADE'S WORK SEPARATELY FROM THE STRUCTURE. DUCTWORK SHALL BE HELD TIGHT TO STRUCTURE EXCEPT WHERE SHOWN.
3. PROVIDE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCE AROUND EQUIPMENT.
4. PROVIDE ACCESS DOORS FOR EQUIPMENT, VALVES, CLEANOUTS, ACTUATORS AND CONTROLS WHICH REQUIRE ACCESS FOR ADJUSTMENT OR SERVICING AND WHICH ARE LOCATED IN OTHERWISE INACCESSIBLE LOCATIONS. FOR EQUIPMENT LOCATED IN "ACCESSIBLE LOCATIONS" SUCH AS LAY-IN CEILINGS: LOCATE EQUIPMENT TO PROVIDE ADEQUATE SERVICE CLEARANCE FOR NORMAL MAINTENANCE WITHOUT REMOVING ARCHITECTURAL, ELECTRICAL OR STRUCTURAL ELEMENTS SUCH AS THE CEILING SUPPORT SYSTEM, ELECTRICAL FIXTURES, ETC. "NORMAL MAINTENANCE" INCLUDES, BUT IS NOT LIMITED TO: FILTER CHANGING; GREASING OF BEARINGS; USING P/T PORTS FOR PRESSURE OR TEMPERATURE MEASUREMENTS; SERVICING CONTROL VALVES AND SERVICING CONTROL PANELS. REFER TO SPECIFICATION SECTION 08 3100.
5. DOMESTIC WATER, HEATING WATER OR CONDENSER WATER LINES SHALL NOT BE EXPOSED IN FINISHED SPACES OR BELOW THE BUILDING SLAB UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
6. SANITARY VENTS SHALL BE COMPATIBLE WITH ROOFING SYSTEM TO BE PROVIDED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
7. THE ELECTRICAL POWER FOR CERTAIN EQUIPMENT PROVIDED UNDER DIVISIONS 21, 22 AND 23 HAVE NOT BEEN SPECIFICALLY INDICATED ON THE ELECTRICAL DRAWINGS AND MUST BE FIELD COORDINATED BY THE DIVISION REQUIRING SUCH POWER. SUCH EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO:
   A. TEMPERATURE CONTROL PANELS, AND JUNCTION BOXES FOR 24V CONTROL TRANSFORMERS. REQUIRED CONNECTION ARE INCLUDED IN DIVISIONS 21, 22 AND 23 AND WILL BE SHOWN BY THAT CONTRACTOR'S CONTROL SUBMITTAL DRAWINGS.
   B. CONTRACTOR SHALL PROVIDE POWER TO THESE DEVICES.
8. QUALITY CONTROL:
   A. QUALIFICATION OF PRODUCTS: WHEN PRODUCTS ARE SPECIFIED BY MANUFACTURER AND MODEL NUMBER, EQUIVALENT PRODUCTS BY OTHER MANUFACTURERS LISTED MAY BE PROVIDED. PRODUCT EQUIVALENCY SHALL BE DETERMINED BY ENGINEER.
   B. SUBMITTALS SHALL INCLUDE REVISED AND SUPPLEMENTED CONTROL DIAGRAMS.
   C. SUBMIT CUT-SHEETS ON THE SPECIFIED EQUIPMENT.
9. CONTRACTOR SHALL CREATE A LOG SHEET FOR REQUIRED TESTS. THE LOG SHEET WILL HAVE A COLUMN FOR REQUIRED TESTS, A COLUMN FOR ACCEPTANCE OF TEST, A COLUMN FOR REMARKS, AND A COLUMN FOR APPROVAL SIGNATURE.
10. CONTRACTOR SHALL CREATE A LOG SHEET OF REQUIRED TRAINING. THE LOG SHEET WILL HAVE A COLUMN FOR THE TRAINED ITEM, A COLUMN FOR THE TIME, DATE AND DURATION OF THE TRAINING, AND A COLUMN FOR ACCEPTANCE OF TRAINING BY OWNER, ARCHITECT, OR ENGINEER.
11. AFTER INSTALLATION OF SYSTEM, PERFORM AN OPERATIONAL TEST IN THE PRESENCE OF THE OWNER, ARCHITECT, OR ENGINEER. THIS TEST WILL CONSIST OF SUCCESSFULLY DEMONSTRATING:
   A. APPEARANCE OF INSTALLATION.
   B. FUNCTION OF CONTROLS.
   C. THE CONTROLS SHALL BE OPERATED IN THE FOLLOWING MODES IN EACH ZONE: OCCUPIED/UNOCCUPIED.
   D. IF THE TEST IS NOT SUCCESSFUL IN THE OPINION OF THE ARCHITECT OR ENGINEER, DEFICIENCIES WILL BE REMEDIED AND THE SYSTEM WILL BE RE-TESTED UNTIL THE TEST IS SUCCESSFUL.
12. WHERE NEW MECHANICAL SYSTEMS ARE USED FOR TEMPORARY VENTILATION OR CLIMATE CONTROL, MECHANICAL EQUIPMENT INSTALLER SHALL PROVIDE CONSTRUCTION FILTERS, MAINTAIN EQUIPMENT, AND CLEAN, ADJUST AND PUT IN NEW CONDITION BEFORE BUILDING OCCUPANCY. PARTS AND LABOR WARRANTY SHALL NOT BE CONSIDERED TO START UNTIL ACCEPTANCE OF THE SYSTEM BY OWNER.
13. PIPING:
   A. PIPE INSTALLATION:
      a.a. PIPING SHALL BE ADEQUATELY SUPPORTED FROM THE BUILDING STRUCTURE TO PREVENT SAGGING, POCKETING, SWAYING OR DISPLACEMENT BY MEANS OF HANGERS AND SUPPORTS. PIPING IS NOT TO BE SUPPORTED BY EQUIPMENT.
      a.b. PROVIDE DIELECTRIC UNIONS BETWEEN DISSIMILAR MATERIALS.
      a.c. PROVIDE MANUAL AIR VENTS AND CAPPED HOSE-END DRAINS WITH ISOLATION VALVE AT PIPING HIGH AND LOW POINTS.
      a.d. WELD PIPE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS. WELDERS SHALL BE CERTIFIED FOR TYPE OF WELD BEING PERFORMED.
      a.e. FLUSH OUT PIPING AND REMOVE CONTROL DEVICES BEFORE PERFORMING PRESSURE TEST. DO NOT USE PIPING SYSTEM VALVES TO ISOLATE SECTIONS WHERE TEST PRESSURE EXCEEDS VALVE PRESSURE RATING. PRESSURIZE PIPING AT 100 PSIG. IF LEAKAGE IS OBSERVED OR IF TEMPERATURE COMPENSATED PRESSURE DROP EXCEEDS 1% OF TEST PRESSURE, REPAIR LEAKS AND RETEST. DO NOT USE AIR PRESSURE TO TEST PLASTIC PIPE.
      a.f. PROVIDE SUPPORT UNDER ELBOWS ON PUMP SUCTION AND DISCHARGE LINES.
      a.g. STRAINERS SHALL BE FURNISHED WITH A "ROUGHING" SCREEN AND TWO (2) SCREENS FOR NORMAL OPERATION. INSTALL STRAINER WITH ROUGHING SCREEN AND OPERATE SYSTEM FOR 24 HOURS MINIMUM (RUN DOMESTIC WATER SYSTEMS AT MAX FLOW FOR A MINIMUM OF ONE HALF (1/2) HOUR. REMOVE ROUGHING SCREEN AND INSTALL NORMAL SCREEN, AFTER TWO WEEKS OF NORMAL OPERATION INSTALL NEW NORMAL SCREEN.
14. MATERIALS ABOVE THE CEILINGS WHERE THIS SPACE IS USED AS A RETURN AIR PLENUM MUST BE NON-COMBUSTIBLE. COMMUNICATIONS CABLE MUST BE PLENUM RATED AND ELECTRICAL WIRING MUST BE IN A PLENUM RATED SHEATH OR CONDUIT. PVC PIPING MUST BE ENCASED IN AN APPROVED INSULATION WITH A FLAME AND SMOKE SPREAD RATING OF 25/50.
15. FOLLOW SMACNA GUIDELINES AND ABIDE BY UPC 2015 AND UMC 2015 CODES, WITH MODIFICATIONS AS DICTATED BY NM CID AND THE AUTHORITY HAVING JURISDICTION.
16. MATERIAL PROVIDED BY CONTRACTOR SHALL BE NEW (UNLESS OTHERWISE NOTED) AND NOT DAMAGED. CONTRACTOR SHALL NOT INSTALL MATERIAL DAMAGED DURING CONSTRUCTION.
17. OWNER HAS FIRST RIGHT OF REFUSAL ON EXISTING EQUIPMENT, FIXTURES, MATERIALS, ETC. BEING REMOVED AS PART OF THIS PROJECT.

GENERAL MECHANICAL NOTES:

A. CONTRACTOR TO VERIFY AND COORDINATE W/ ELECTRICAL ENGINEER AND CONTRACTOR FOR WIRING AND POWER REQUIRED.

B. RECTANGULAR DUCT TO BE INSTALLED PER DETAIL A1/M-501. ROUND DUCT SHALL BE SUPPORTED WITH DUCT STRAPS AND INSTALLED PER DETAIL A7/M-501.

C. COORDINATE EXACT LOCATION OF THERMOSTATS WITH MECHANICAL ENGINEER, ARCHITECT & OWNER.

D. ROUND DUCT JUNCTIONS, TEES, AND ELBOWS SHALL BE CONSTRUCTED AND CONNECTED PER DETAIL C6/M-501. RECTANGULAR DUCT JUNCTIONS, ELBOWS AND TEES TO BE INSTALLED PER DETAIL A9/M-501.

E. DUCT TRANSITIONS TO USE 30°/60° TRANSITIONS.

F. ROUND AND RECTANGULAR DUCT SHALL HAVE 1-1/2" EXTERNAL HIGH-DENSITY DUCT WRAP INSULATION, EXCEPT WHERE EXPOSED IN SPACE. INSULATION LOCATED IN BUILDING SHALL HAVE A FLAMESPREAD INDEX NOT GREATER THAN TWENTY-FIVE (25) AND A SMOKE DEVELOPED INDEX NOT GREATER THAN FIFTY (50), WHEN TESTED IN ACCORDANCE WITH NFPA 255, METHOD OF TEST OF BURNING CHARACTERISTICS OF BUILDING MATERIALS, OR IN ACCORDANCE WITH ASTM E 84, SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS, OR IN ACCORDANCE WITH THE PROVISIONS OF UL 723, TEST FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS.

G. PRIME AND PREP EXPOSED DUCTWORK, FINAL FINISH SHALL BE DETERMINED BY ARCHITECT. DUCTWORK INSTALLED ON THE BUILDING EXTERIOR SHALL HAVE 2", HIGH-DENSITY WEATHER-PROOF INSULATION, SEALED AND TAPED. ACOUSTICALLY LINE FIRST 6' OF SUPPLY AN RETURN DUCT FROM ROOFTOP UNITS. SEE SHEET M-601 FOR DUCT LINER INFORMATION. DUCT DIMENSIONS SHOWN ON DRAWINGS ARE AIR FLOW SIZES.

H. JOINTS AND SEAMS ON SUPPLY AND RETURN AIR DUCTS SHALL BE SEALED AIRTIGHT WITH HEAVY MASTIC DUCT SEALANT, LISTED AND LABELED IN ACCORDANCE WITH UL 181A AND UL 181B. MASTICS USED TO SEAL GALVANIZED AND METAL DUCTWORK SHALL BE MARKED "181A-M". MASTICS USED TO SEAL FLEXIBLE DUCTS SHALL BE MARKED "181B-FX". MASTICS USED TO SEAL FLEXIBLE NON-METALLIC DUCTS SHALL BE MARKED "181B-C". UNLISTED DUCT TAPE IS NOT ACCEPTABLE.

I. INSIDE RADIUS OF BENDS, USING FLEXIBLE DUCT, IS EQUAL TO OR GREATER THAN THE DUCT DIAMETER. ATTACH FLEXIBLE DUCT TO HARD DUCT OR AIR TERMINAL DEVICE USING MINIMUM OF THREE (3) SCREWS TO SECURE WIRE AND MECHANICAL BAND (PANDUIT STRAP) TO SECURE INSIDE HOUSING. MECHANICAL TAPE MAY BE USED TO SEAL OUTER JACKETING FOR FINISH, DUCT TAPE IS NOT ACCEPTABLE.

J. COORDINATE INSTALLATION OF THE DUCTWORK TO ALLOW ADEQUATE CLEARANCE OF THE LIGHTING FIXTURES AND TO AVOID STRUCTURAL MEMBERS OR OTHER CEILING EQUIPMENT. COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS IN THE CEILING SPACE.

K. INSTALL THERMOSTATS AT SWITCH HEIGHTS. WHERE THERMOSTATS ARE INSTALLED ON EXTERIOR OR COLD/HOT WALLS, THERMOSTATS SHALL BE INSTALLED ON INSULATED BASES TO ENSURE PROPER OPERATION.

L. WHERE THERMOSTAT GUARD OR LOCK BOX IS REQUIRED, CONTRACTOR SHALL USE MODEL BTG-54VL BY BEKO (UNLESS NOTED OTHERWISE), OR APPROVED EQUAL. LOCK BOX SHALL BE METAL WITH HINGED COVER. COORDINATE WHERE COVERS ARE REQUIRED WITH OWNER.

M. AIRFLOW PER THE FLOOR PLAN DIFFUSER CALL-OUTS WITHOUT CREATING EXCESSIVE NOISE. KEEP AIR NOISE AT A NORMAL RTU LEVEL.

N. DUCTS TO BE HELD TIGHT TO BOTTOM OF JOISTS. WHERE CROSS-OVERS OCCUR DUCT RUNNING PARALLEL WITH JOISTS SHALL BE INSTALLED ABOVE OTHER, IN JOIST SPACE. CEILING HEIGHTS DETERMINED MUST BE MAINTAINED.

O. EQUIPMENT SHALL BE INSTALLED PLUMB AND LEVEL.

P. COORDINATE MECHANICAL EQUIPMENT, WITH OTHER TRADES, TO AVOID CONFLICTS. CONTRACTOR SHALL INSTALL MAINTAIN ADEQUATE EQUIPMENT ACCESS AND SERVICEABILITY TO VALVES AND EQUIPMENT.

Q. EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. INSTALLATIONS SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS AND STRUCTURAL.

R. COORDINATE WALL DUCT PENETRATIONS PER DETAILS C3/M-501. UNLESS OTHERWISE SPECIFIED.

S. SEE M-500 SHEETS FOR HVAC DETAILS. SEE M-600 SHEETS FOR MECHANICAL DIAGRAMS, SCHEDULES AND SEQUENCES OF OPERATIONS.

T. COORDINATE LOCATION OF CEILING MOUNTED EQUIPMENT WITH ACTUAL CONDITIONS.

U. SEE DETAIL E3/M-501 FOR DUCT ACCESS DOOR INSTALLATIONS. REFER TO SPECIFICATIONS FOR REQUIREMENTS.

V. CONTRACTOR TO INSTALL WEATHERPROOF, FLEXIBLE CONNECTIONS AT DUCT CONNECTIONS TO AIR-MOVING EQUIPMENT. SEE C5/M-501 FOR FLEXIBLE CONNECTION DETAIL. REFER TO SPECIFICATIONS FOR REQUIREMENTS.

W. PIPING AND PIPING WALL PENETRATIONS SHALL BE INSTALLED PER DETAILS E5, E7 & E9/M-501.

X. UNIT HEATERS SHALL BE INSTALLED PER DETAIL ??/M-501.

Y. CONTRACTOR SHALL INSTALL 1" INSULATION/ACOUSTICAL PIPE WRAP FOR BOTH SUPPLY AND RETURN PIPING. SUGGESTED SUPPLIER: OSHEX B-10A LAG OR EQUIVALENT.

Z. COORDINATE LOCATION OF DIFFUSERS, REGISTERS AND GRILLES WITH ARCHITECTURAL REFLECTED CEILING PLAN.

AA. ROUND BRANCH DUCT TO DIFFUSER/GRILLES SHALL BE THE SAME SIZE AS THE DIFFUSER/GRILLE NECK, UNLESS NOTED OTHERWISE.

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WILLIAM K. WENTZ — 15999 — 09-08-2023 — KANSAS — PROFESSIONAL ENGINEER

Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

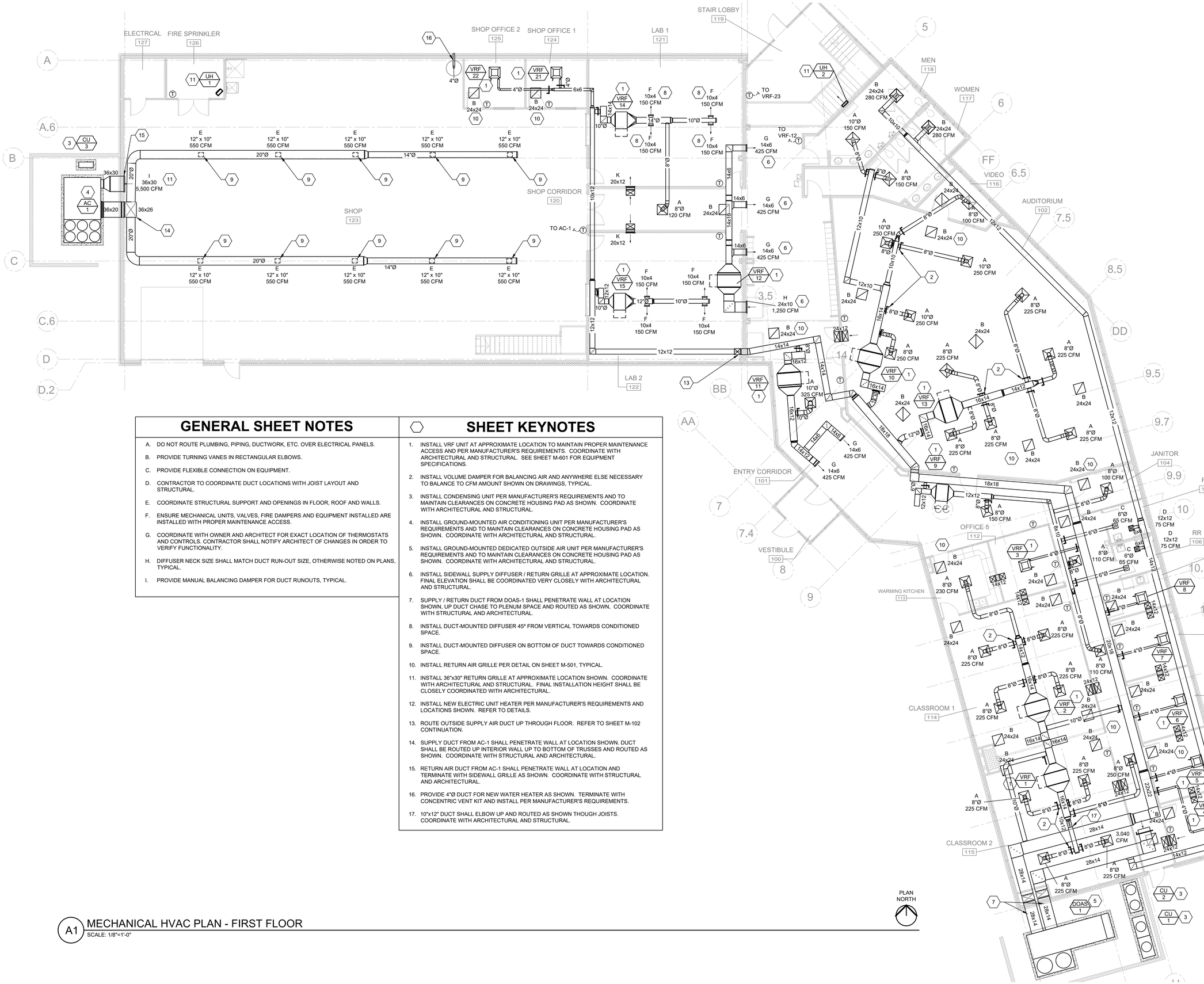
Drawing:
MECHANICAL GENERAL NOTES & LEGENDS

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: M-001

DRAWN BY: MBE / KRF



GENERAL SHEET NOTES

A. DO NOT ROUTE PLUMBING, PIPING, DUCTWORK, ETC. OVER ELECTRICAL PANELS.

B. PROVIDE TURNING VANES IN RECTANGULAR ELBOWS.

C. PROVIDE FLEXIBLE CONNECTION ON EQUIPMENT.

D. CONTRACTOR TO COORDINATE DUCT LOCATIONS WITH JOIST LAYOUT AND STRUCTURAL.

E. COORDINATE STRUCTURAL SUPPORT AND OPENINGS IN FLOOR, ROOF AND WALLS.

F. ENSURE MECHANICAL UNITS, VALVES, FIRE DAMPERS AND EQUIPMENT INSTALLED ARE INSTALLED WITH PROPER MAINTENANCE ACCESS.

G. COORDINATE WITH OWNER AND ARCHITECT FOR EXACT LOCATION OF THERMOSTATS AND CONTROLS. CONTRACTOR SHALL NOTIFY ARCHITECT OF CHANGES IN ORDER TO VERIFY FUNCTIONALITY.

H. DIFFUSER NECK SIZE SHALL MATCH DUCT RUN-OUT SIZE, OTHERWISE NOTED ON PLANS, TYPICAL.

I. PROVIDE MANUAL BALANCING DAMPER FOR DUCT RUNOUTS, TYPICAL.

SHEET KEYNOTES

1. INSTALL VRF UNIT AT APPROXIMATE LOCATION TO MAINTAIN PROPER MAINTENANCE ACCESS AND PER MANUFACTURER'S REQUIREMENTS. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL. SEE SHEET M-601 FOR EQUIPMENT SPECIFICATIONS.
2. INSTALL VOLUME DAMPER FOR BALANCING AIR AND ANYWHERE ELSE NECESSARY TO BALANCE TO CFM AMOUNT SHOWN ON DRAWINGS, TYPICAL.
3. INSTALL CONDENSING UNIT PER MANUFACTURER'S REQUIREMENTS AND TO MAINTAIN CLEARANCES ON CONCRETE HOUSING PAD AS SHOWN. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL.
4. INSTALL GROUND-MOUNTED AIR CONDITIONING UNIT PER MANUFACTURER'S REQUIREMENTS AND TO MAINTAIN CLEARANCES ON CONCRETE HOUSING PAD AS SHOWN. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL.
5. INSTALL GROUND-MOUNTED DEDICATED OUTSIDE AIR UNIT PER MANUFACTURER'S REQUIREMENTS AND TO MAINTAIN CLEARANCES ON CONCRETE HOUSING PAD AS SHOWN. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL.
6. INSTALL SIDEWALL SUPPLY DIFFUSER / RETURN GRILLE AT APPROXIMATE LOCATION. FINAL ELEVATION SHALL BE COORDINATED VERY CLOSELY WITH ARCHITECTURAL AND STRUCTURAL.
7. SUPPLY / RETURN DUCT FROM DOAS-1 SHALL PENETRATE WALL AT LOCATION SHOWN, UP DUCT CHASE TO PLENUM SPACE AND ROUTED AS SHOWN. COORDINATE WITH STRUCTURAL AND ARCHITECTURAL.
8. INSTALL DUCT-MOUNTED DIFFUSER 45º FROM VERTICAL TOWARDS CONDITIONED SPACE.
9. INSTALL DUCT-MOUNTED DIFFUSER ON BOTTOM OF DUCT TOWARDS CONDITIONED SPACE.
10. INSTALL RETURN AIR GRILLE PER DETAIL ON SHEET M-501, TYPICAL.
11. INSTALL 36"x30" RETURN GRILLE AT APPROXIMATE LOCATION SHOWN. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL. FINAL INSTALLATION HEIGHT SHALL BE CLOSELY COORDINATED WITH ARCHITECTURAL.
12. INSTALL NEW ELECTRIC UNIT HEATER PER MANUFACTURER'S REQUIREMENTS AND LOCATIONS SHOWN. REFER TO DETAILS.
13. ROUTE OUTSIDE SUPPLY AIR DUCT UP THROUGH FLOOR. REFER TO SHEET M-102 CONTINUATION.
14. SUPPLY DUCT FROM AC-1 SHALL PENETRATE WALL AT LOCATION SHOWN. DUCT SHALL BE ROUTED UP INTERIOR WALL UP TO BOTTOM OF TRUSSES AND ROUTED AS SHOWN. COORDINATE WITH STRUCTURAL AND ARCHITECTURAL.
15. RETURN AIR DUCT FROM AC-1 SHALL PENETRATE WALL AT LOCATION AND TERMINATE WITH SIDEWALL GRILLE AS SHOWN. COORDINATE WITH STRUCTURAL AND ARCHITECTURAL.
16. PROVIDE 4"Ø DUCT FOR NEW WATER HEATER AS SHOWN. TERMINATE WITH CONCENTRIC VENT KIT AND INSTALL PER MANUFACTURER'S REQUIREMENTS.
17. 10"x12" DUCT SHALL ELBOW UP AND ROUTED AS SHOWN THOUGH JOISTS. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL.

A1 MECHANICAL HVAC PLAN - FIRST FLOOR
SCALE: 1/8"=1'-0"

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Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

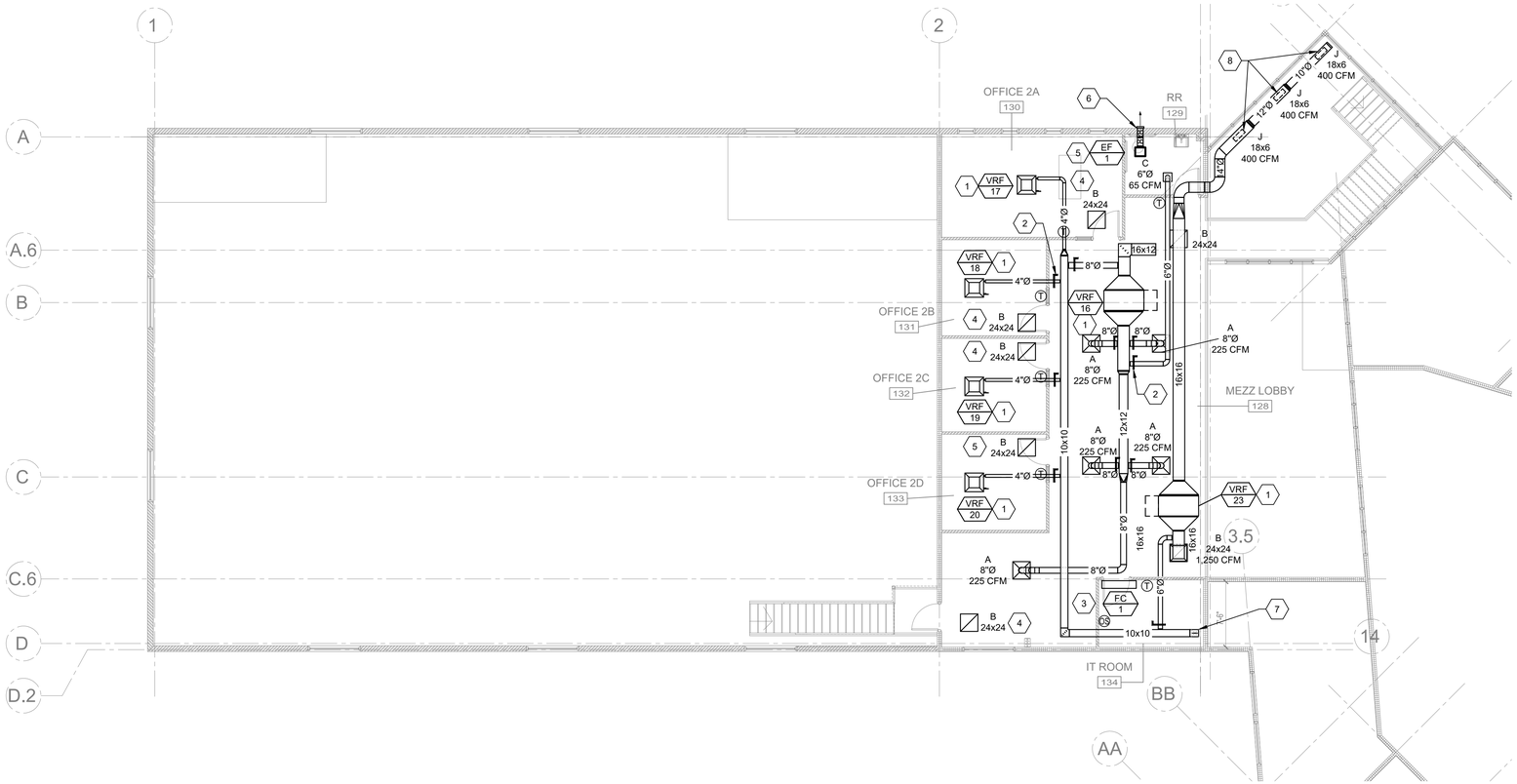
Drawing: MECHANICAL HVAC PLAN - FIRST FLOOR

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: M-101

DRAWN BY: CDC/ KRF



PLAN NORTH

1 MECHANICAL HVAC PLAN - MEZZANINE LEVEL
SCALE: 1/8"=1'-0"

GENERAL SHEET NOTES

A. DO NOT ROUTE PLUMBING, PIPING, DUCTWORK, ETC. OVER ELECTRICAL PANELS.

B. PROVIDE TURNING VANES IN RECTANGULAR ELBOWS.

C. PROVIDE FLEXIBLE CONNECTION ON EQUIPMENT.

D. CONTRACTOR TO COORDINATE DUCT LOCATIONS WITH JOIST LAYOUT AND STRUCTURAL.

E. COORDINATE STRUCTURAL SUPPORT AND OPENINGS IN FLOOR, ROOF AND WALLS.

F. ENSURE MECHANICAL UNITS, VALVES, FIRE DAMPERS AND EQUIPMENT INSTALLED ARE INSTALLED WITH PROPER MAINTENANCE ACCESS.

G. COORDINATE WITH OWNER AND ARCHITECT FOR EXACT LOCATION OF THERMOSTATS AND CONTROLS. CONTRACTOR SHALL NOTIFY ARCHITECT OF CHANGES IN ORDER TO VERIFY FUNCTIONALITY.

H. DIFFUSER NECK SIZE SHALL MATCH DUCT RUN-OUT SIZE, OTHERWISE NOTED ON PLANS, TYPICAL.

I. PROVIDE MANUAL BALANCING DAMPER FOR DUCT RUNOUTS, TYPICAL.

SHEET KEYNOTES

1. INSTALL VRF UNIT AT APPROXIMATE LOCATION TO MAINTAIN PROPER MAINTENANCE ACCESS AND PER MANUFACTURER'S REQUIREMENTS. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL. SEE SHEET M-601 FOR EQUIPMENT SPECIFICATIONS.
2. INSTALL VOLUME DAMPER FOR BALANCING AIR AND ANYWHERE ELSE NECESSARY TO BALANCE TO CFM AMOUNT SHOWN ON DRAWINGS, TYPICAL.
3. INSTALL WALL-MOUNTED AIR CONDITIONING UNIT ABOVE DOOR AS SHOWN AND PER MANUFACTURER'S REQUIREMENTS. REFER TO M-103 MECHANICAL PLAN FOR LOCATION OF ASSOCIATED CONDENSING UNIT.
4. INSTALL RETURN AIR GRILLE PER DETAIL ON SHEET M-501, TYPICAL.
5. INSTALL NEW CABINET EXHAUST PER MANUFACTURER'S REQUIREMENTS.
6. EXHAUST DUCT SHALL BE ROUTED TO EXTERIOR WALL AND TERMINATE WITH WALL CAP. COORDINATE WITH STRUCTURAL AND ARCHITECTURAL.
7. OUTSIDE AIR SUPPLY DUCT FROM BELOW. REFER TO SHEET M-101 FOR CONTINUATION.
8. INSTALL DUCT-MOUNTED DIFFUSER ON BOTTOM OF DUCT TOWARDS CONDITIONED SPACE.

Revisions:

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Salina Area Tech - Industrial
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Drawing: MECHANICAL HVAC PLAN- MEZZANINE LEVEL

Date: 09-08-23

Project Number: 23-014

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DRAWN BY: CDC / KRF

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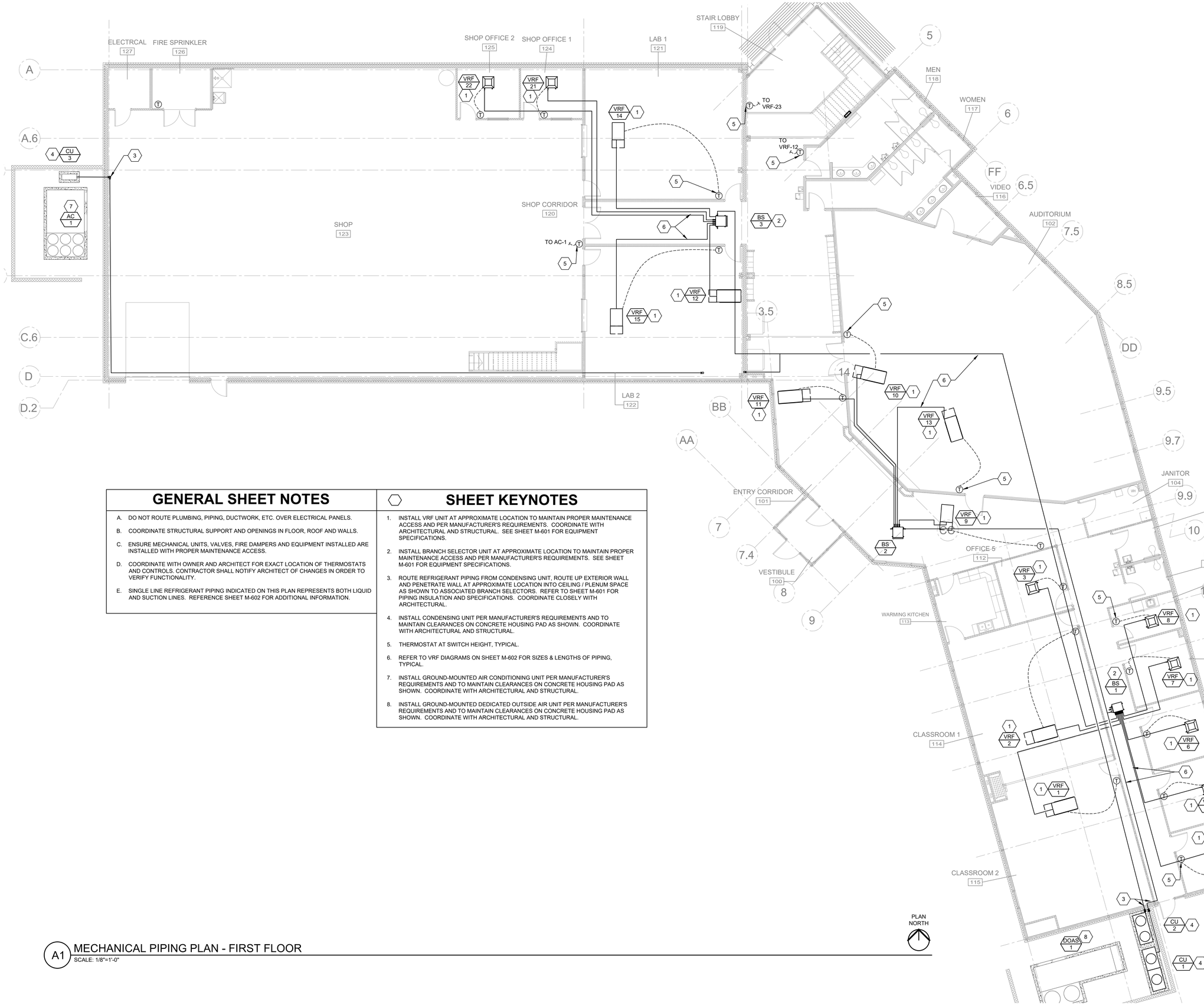

GENERAL SHEET NOTES

A. DO NOT ROUTE PLUMBING, PIPING, DUCTWORK, ETC. OVER ELECTRICAL PANELS.

B. COORDINATE STRUCTURAL SUPPORT AND OPENINGS IN FLOOR, ROOF AND WALLS.

C. ENSURE MECHANICAL UNITS, VALVES, FIRE DAMPERS AND EQUIPMENT INSTALLED ARE INSTALLED WITH PROPER MAINTENANCE ACCESS.

D. COORDINATE WITH OWNER AND ARCHITECT FOR EXACT LOCATION OF THERMOSTATS AND CONTROLS. CONTRACTOR SHALL NOTIFY ARCHITECT OF CHANGES IN ORDER TO VERIFY FUNCTIONALITY.

E. SINGLE LINE REFRIGERANT PIPING INDICATED ON THIS PLAN REPRESENTS BOTH LIQUID AND SUCTION LINES. REFERENCE SHEET M-602 FOR ADDITIONAL INFORMATION.

SHEET KEYNOTES

1. INSTALL VRF UNIT AT APPROXIMATE LOCATION TO MAINTAIN PROPER MAINTENANCE ACCESS AND PER MANUFACTURER'S REQUIREMENTS. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL. SEE SHEET M-601 FOR EQUIPMENT SPECIFICATIONS.
2. INSTALL BRANCH SELECTOR UNIT AT APPROXIMATE LOCATION TO MAINTAIN PROPER MAINTENANCE ACCESS AND PER MANUFACTURER'S REQUIREMENTS. SEE SHEET M-601 FOR EQUIPMENT SPECIFICATIONS.
3. ROUTE REFRIGERANT PIPING FROM CONDENSING UNIT, ROUTE UP EXTERIOR WALL AND PENETRATE WALL AT APPROXIMATE LOCATION INTO CEILING / PLENUM SPACE AS SHOWN TO ASSOCIATED BRANCH SELECTORS. REFER TO SHEET M-601 FOR PIPING INSULATION AND SPECIFICATIONS. COORDINATE CLOSELY WITH ARCHITECTURAL.
4. INSTALL CONDENSING UNIT PER MANUFACTURER'S REQUIREMENTS AND TO MAINTAIN CLEARANCES ON CONCRETE HOUSING PAD AS SHOWN. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL.
5. THERMOSTAT AT SWITCH HEIGHT, TYPICAL.
6. REFER TO VRF DIAGRAMS ON SHEET M-602 FOR SIZES & LENGTHS OF PIPING, TYPICAL.
7. INSTALL GROUND-MOUNTED AIR CONDITIONING UNIT PER MANUFACTURER'S REQUIREMENTS AND TO MAINTAIN CLEARANCES ON CONCRETE HOUSING PAD AS SHOWN. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL.
8. INSTALL GROUND-MOUNTED DEDICATED OUTSIDE AIR UNIT PER MANUFACTURER'S REQUIREMENTS AND TO MAINTAIN CLEARANCES ON CONCRETE HOUSING PAD AS SHOWN. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL.

PLAN NORTH

A1 MECHANICAL PIPING PLAN - FIRST FLOOR
SCALE: 1/8"=1'-0"

Revisions:

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Salina Area Tech - Industrial
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Salina, Kansas

Drawing: MECHANICAL PIPING PLAN - FIRST FLOOR

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: M-103

DRAWN BY: CDC / KBF

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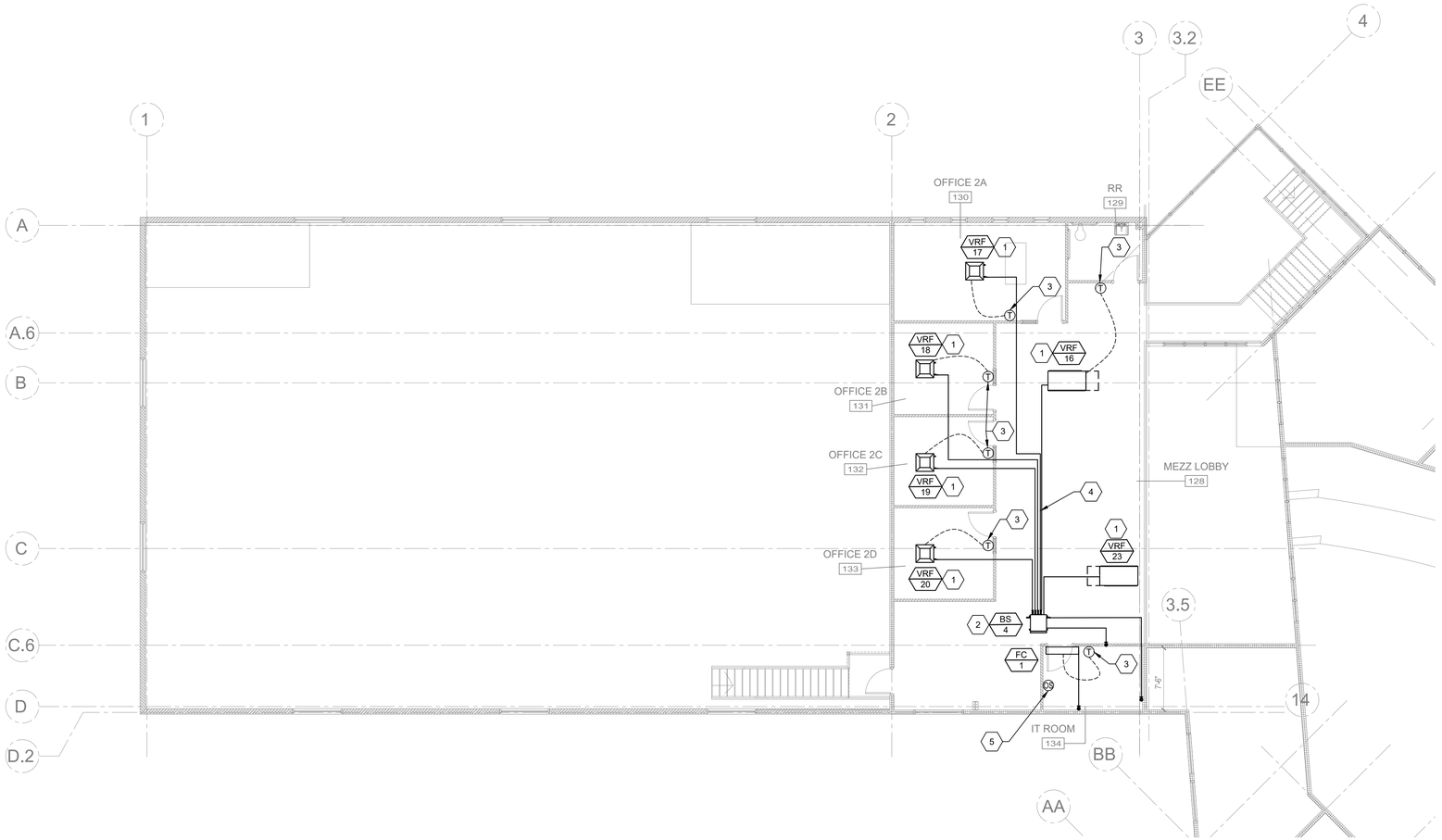

PLAN NORTH

1 MECHANICAL PIPING PLAN - MEZZANINE LEVEL
SCALE: 1/8"=1'-0"

GENERAL SHEET NOTES

A. DO NOT ROUTE PLUMBING, PIPING, DUCTWORK, ETC. OVER ELECTRICAL PANELS.

B. COORDINATE STRUCTURAL SUPPORT AND OPENINGS IN FLOOR, ROOF AND WALLS.

C. ENSURE MECHANICAL UNITS, VALVES, FIRE DAMPERS AND EQUIPMENT INSTALLED ARE INSTALLED WITH PROPER MAINTENANCE ACCESS.

D. COORDINATE WITH OWNER AND ARCHITECT FOR EXACT LOCATION OF THERMOSTATS AND CONTROLS. CONTRACTOR SHALL NOTIFY ARCHITECT OF CHANGES IN ORDER TO VERIFY FUNCTIONALITY.

E. SINGLE LINE REFRIGERANT PIPING INDICATED ON THIS PLAN REPRESENTS BOTH LIQUID AND SUCTION LINES. REFERENCE SHEET M-602 FOR ADDITIONAL INFORMATION.

SHEET KEYNOTES

1. INSTALL VRF UNIT AT APPROXIMATE LOCATION TO MAINTAIN PROPER MAINTENANCE ACCESS AND PER MANUFACTURER'S REQUIREMENTS. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL. SEE SHEET M-601 FOR EQUIPMENT SPECIFICATIONS.
2. INSTALL BRANCH SELECTOR UNIT AT APPROXIMATE LOCATION TO MAINTAIN PROPER MAINTENANCE ACCESS AND PER MANUFACTURER'S REQUIREMENTS. SEE SHEET M-601 FOR EQUIPMENT SPECIFICATIONS.
3. THERMOSTAT AT SWITCH HEIGHT, TYPICAL.
4. REFER TO VRF DIAGRAMS ON SHEET M-602 FOR SIZES & LENGTHS OF PIPING, TYPICAL.
5. VRF SYSTEM CONTROLLER LOCATION. COORDINATE FINAL LOCATION WITH OWNER.

Revisions:

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MARK WILLIAM WENTZ 15999 09-08-2023 KANSAS PROFESSIONAL ENGINEER

Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing: MECHANICAL PIPING PLAN -MEZZANINE LEVEL

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: M-104

DRAWN BY: CDC/ KBF

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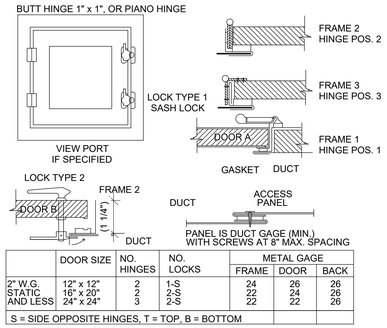
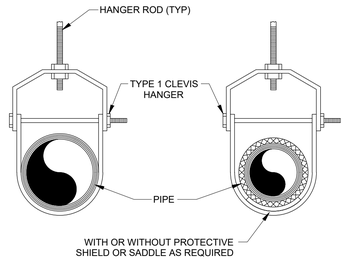
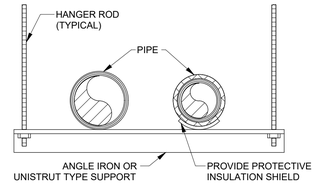


	DOOR SIZE	NO. HINGES	NO. LOCKS	METAL GAGE		
				FRAME	DOOR	BACK
2" W.G. STATIC AND LESS	12" x 12"	2	1-S	24	26	26
	16" x 20"	2	2-S	22	24	26
	24" x 24"	3	2-S	22	22	26
S = SIDE OPPOSITE HINGES, T = TOP, B = BOTTOM						

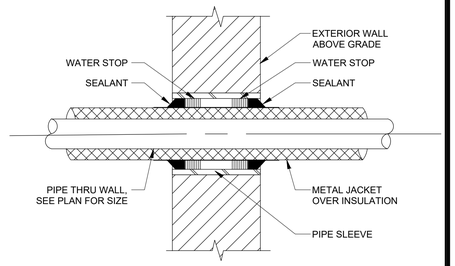
10 DUCT ACCESS DOOR DETAIL
NTS



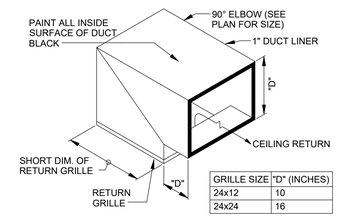
11 SINGLE PIPE HANGER DETAIL
NTS



12 TRAPEZE PIPE HANGER DETAIL
NTS

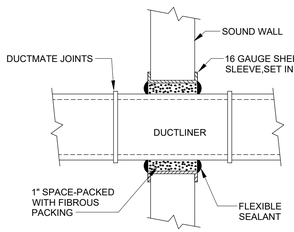


13 PIPE THRU WALL PENETRATION
NTS

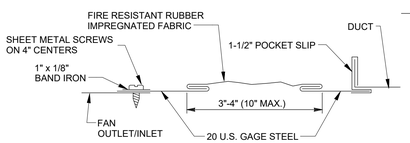


GRILLE SIZE	"D" (INCHES)
24x12	10
24x24	16

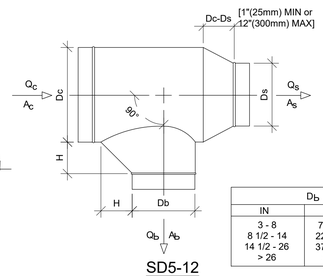
6 RETURN AIR GRILLE WITH SOUND BOOT
NTS



7 DUCT THRU WALL DETAIL
NTS

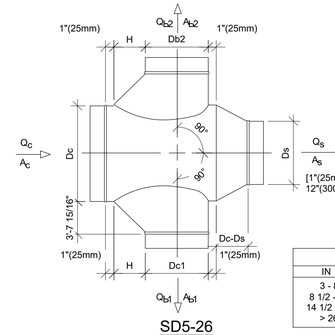


8 FLEX DUCT CONNECTION DETAIL
NTS



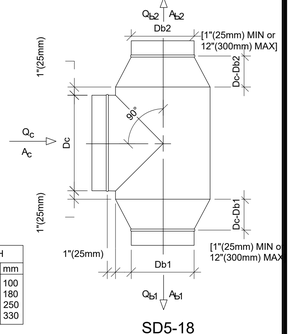
SD5-12

D_b		H	
IN	mm	IN	mm
3 - 8	75 - 200	4	100
8 1/2 - 14	220 - 350	7	180
14 1/2 - 26	370 - 660	10	250
> 26	> 660	13	330



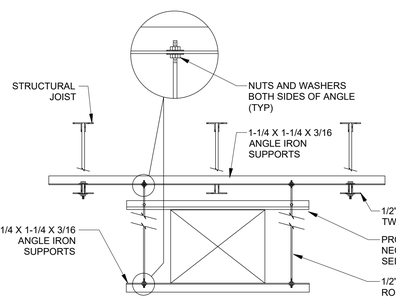
SD5-26

D_{b1} & D_{b2}		H	
IN	mm	IN	mm
3 - 8	75 - 200	4	100
8 1/2 - 14	220 - 350	7	180
14 1/2 - 26	370 - 660	10	250
> 26	> 660	13	330

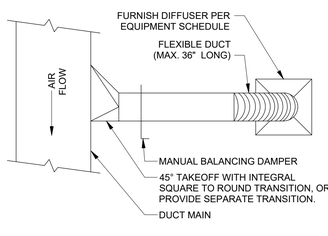


SD5-18

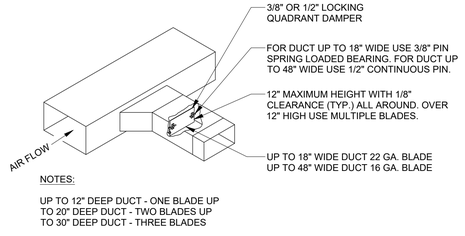
9 ROUND JUNCTION FITTINGS DETAILS
NTS



1 RECTANGULAR DUCT HANGER DETAIL
NTS



2 ROUND TAKE-OFF
NTS

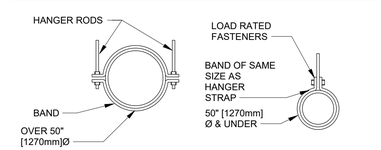


NOTES:

UP TO 12" DEEP DUCT - ONE BLADE UP
TO 20" DEEP DUCT - TWO BLADES UP
TO 30" DEEP DUCT - THREE BLADES

3 RECTANGULAR TAKE-OFF
NTS

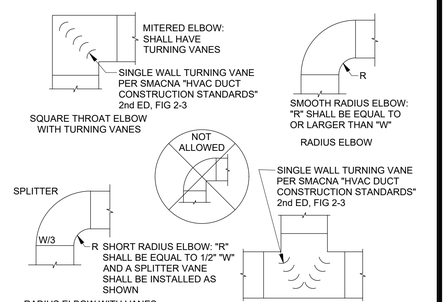
HANGER STRAPS OR RODS			
MAX. DUCT Ø IN. [mm]	QUANTITY/SIZE IN. [mm]	MAX. LOAD LBS. [kg]	MAX. SPACING IN. [mm]
26 [650]	ONE 1 [25] x 22 GA STRAP	260 [119]	144 [3658]
36 [900]	ONE 1 [25] x 18 GA STRAP	420 [190]	144 [3658]
50 [1250]	ONE 1 [25] x 16 GA STRAP	700 [317]	144 [3658]
60 [1500]	TWO 3/8 [10]Ø RODS	1320 [598]	144 [3658]
84 [2100]	TWO 1/2 [13]Ø RODS	2500 [1133]	144 [3658]



NOTE:

TABULATED DATA FROM SMACNA ALLOWS FOR DUCT REINFORCING AND INSULATION, BUT NO EXTERNAL LOAD.

4 ROUND DUCT HANGER DETAIL
NTS



5 RECT ELBOW AND TEE DETAILS
NTS

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Revisions:

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Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing: MECHANICAL DETAILS

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: M-501

DRAWN BY: CDC / KRF

DUCTWORK MATERIAL AND INSULATION SCHEDULE

DUCT SYSTEM	DUCT MATERIAL	DUCT INSULATION TYPE	DUCT INSULATION THICKNESS	REMARKS
EXHAUST	GALVANIZED STEEL	NONE	NONE	A,B
RETURN	GALVANIZED STEEL	DUCT LINER	1"	A,B,C
RETURN - RECTANGULAR - OUTSIDE AIR	GALVANIZED STEEL	DUCT WRAP	2"	A,B,C
SUPPLY - RECTANGULAR - EXTERIOR	GALVANIZED STEEL	DUCT WRAP	2"	A,B,C
SUPPLY - RECTANGULAR - INTERIOR	GALVANIZED STEEL	DUCT LINER	1"	A,B,C
SUPPLY - ROUND	GALVANIZED STEEL	DUCT WRAP	1-1/2"	A,B,C
SUPPLY - RUNOUTS	FLEXIBLE DUCT	FLEXIBLE GLASS FIBER	1-1/2"	A,B,C
SUPPLY - SPIRAL EXPOSED	GALVANIZED STEEL	DUCT LINER	1"	A,B,C,D
TRANSFER AIR	GALVANIZED STEEL	DUCT LINER	1"	A,B,C

GENERAL NOTES:

1. REFER TO SPECIFICATIONS FOR FURTHER REQUIREMENTS ON DUCT MATERIAL AND INSULATION.

REMARKS:

A. DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE AND SMACNA STANDARDS.
B. JOINTS, SEAMS AND AND CONNECTIONS SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS, OR TAPES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
C. DUCTS AND PLENUMS SHALL BE INSULATED IN ACCORDANCE WITH IECC SECTION C403.11.1.
D. PROVIDE WITH PERFORATED INTERIOR LINER AND PAINT GRIP FINISH FOR FIELD PAINTING.

PIPE INSULATION SCHEDULE

PIPING SYSTEM	INSULATION TYPE	JACKET TYPE	VAPOR BARRIER MASTIC	PIPE INSULATION THICKNESS (INCHES) NOMINAL PIPE DIAMETERS (INCHES)					REMARKS
				< 1"	1" TO < 1-1/2"	1-1/2" TO < 4"	4" TO < 8"	> 8"	
CONDENSATE (INTERIOR)	NONE	-	-	-	-	-	-	-	-
REFRIGERANT LIQUID	CELLULAR FOAM	ALL SERVICE	YES	1/2"	1"	1"	1"	1"	A
REFRIGERANT SUCTION	CELLULAR FOAM	ALL SERVICE	YES	1/2"	1/2"	1"	1"	1-1/2"	A

GENERAL NOTES:

1. REFER TO SPECIFICATIONS FOR FURTHER DETAILS ON PIPE MATERIAL, JACKETS AND INSULATION.
2. ALL EXTERIOR PIPING AND PIPING EXPOSED WITHIN INTERIOR SPACES SHALL BE INSTALLED WITH EMBOSSED ALUMINUM JACKET.

REMARKS:

A. PIPING SHALL BE INSUALTED IN ACCORDANCE WITH IECC SECTION C403.11.3.

AIR DEVICE SCHEDULE

MARK	MANUFACTURER / MODEL NO.	SERVICE	FACE SIZE	TYPE	MATERIAL	REMARKS
A	KRUEGER / 51450	SUPPLY	24x24	CEILING	ALUMINUM	-
B	KRUEGER / EGC5	RETURN / EXHAUST	24x24	CEILING	ALUMINUM	-
C	KRUEGER / 51450	SUPPLY	12x12	CEILING	ALUMINUM	-
D	KRUEGER / EGC5	RETURN / EXHAUST	12x12	CEILING	ALUMINUM	-
E	KRUEGER / 5800	SUPPLY	12x10	DUCT MOUNTED	ALUMINUM	-
F	KRUEGER / DMGDR	SUPPLY	10x4	DRUM LOUVER	ALUMINUM	-
G	KRUEGER / 5880	SUPPLY	14x6	SIDEWALL	ALUMINUM	-
H	KRUEGER / EGC5	RETURN	24x10	SIDEWALL	ALUMINUM	-
I	KRUEGER / 6880	RETURN	36x30	SIDEWALL	STEEL	-
J	KRUEGER / DMD	SUPPLY	18x6	DRUM LOUVER	ALUMINUM	-
K	KRUEGER / 5600	TRANSFER	22x14	SIDEWALL	ALUMINUM	-

GENERAL NOTES:

1. SEE HVAC PLANS FOR LOCATIONS AND QUANTITIES OF EACH AIR DEVICE.
2. ALL AIR DEVICES SHALL BE TESTED IN ACCORDANCE WITH ASHRAE STANDARD 70-91.
3. ALL DIFFUSERS SHALL BE TESTED IN ACCORDANCE WITH AIR DIFFUSION COUNCIL (ADC) CODE 1062R4. SOUND DATA FOR DIFFUSERS SHALL BE CALCULATED IN ACCORDANCE WITH INTERNATIONAL STANDARD ISO 3741 FOR COMPARISON.
4. MAXIMUM NOISE CRITERIA (NC) SHALL BE 35 OR LESS UNLESS OTHERWISE NOTED.
5. ALL GRILLES THAT ARE NOT PLENUM RETURN/TRANSFER DEVICES SHALL BE INSTALLED WITH OPPOSED BLADE DAMPERS REGARDLESS IF THE DUCTS INCLUDE VOLUME DAMPERS.
6. CONTRACTOR SHALL VERIFY THE SURFACE TYPE AND SUBSTITUTE APPROPRIATE DIFFUSER/FRAME WHERE NECESSARY.
7. PLENUMS AND NECKS SHALL BE CONSTRUCTED OF ALUMINUM IN ROUND NECK SIZES. ALL DIFFUSERS SHALL BE INSTALLED WITH GALVANIZED STEEL ELBOWS AT CONNECTION TO DIFFUSER AND BRANCH DUCT BALANCING DAMPERS.
8. COORDINATE FINAL FINISH WITH ARCHITECT.
9. REGISTERS SHALL INCLUDE SQUARE TO ROUND ADAPTER ACCESSORIES FOR ROUND CONNECTIONS WHERE NECESSARY.

REMARKS:

A. -

EXHAUST FAN UNIT SCHEDULE

MARK	MANUFACTURER / MODEL NO.	LOCATION	TYPE	CFM	DRIVE	SONES	ELECTRICAL				REMARKS
							VOLT	PH	MCA	MOCP	
EF-1	GREENHECK / SP-A90	MEZZANINE RESTROOM	CABINET	75	DIRECT	0.4	115	1	0.2	15.0	A,B,C,D,E

GENERAL NOTES:

1. INSTALL FAN PER MANUFACTURER'S REQUIREMENTS.
2. PROVIDE MANUFACTURERS RECOMMENDED SERVICE CLEARANCE AROUND ENTIRE UNIT.

REMARK NOTES:

A. PROVIDE WITH BACKDRAFT DAMPER.
B. PROVIDE WITH PEST SCREEN.
C. PROVIDE WITH SPEED CONTROLLER.
D. EXHAUST FAN SHALL BE INTERLOCKED TO TURN ON/OFF WITH LIGHT SWITCH / OCCUPANCY SENSOR. COORDINATE WITH ELECTRICAL.
E. PROVIDE AND TERMINATE EXHAUST DUCT WITH WALL EXHAUST CAP.

UNIT HEATER SCHEDULE (ELECTRIC)

MARK	MANUFACTURER / MODEL #	AREA SERVED	CFM	WEIGHT LBS.	ELECTRICAL				REMARKS
					VOLT	PH	KW	AMPS	
UH-1	REZNOR / EGW 3	FIRE RISER	300	20	208	1	3.0	14.43	A
UH-2	REZNOR / EHA 3	STAIRWELL	300	10.9	208	1	3.0	14.43	B

GENERAL NOTES:

1. INSTALL FAN PER MANUFACTURER'S REQUIREMENTS.
2. COORDINATE MOUNTING HEIGHT PER MANUFACTURER.

REMARKS:

A. PROVIDE WITH WALL THERMOSTAT.
B. PROVIDE WITH INTEGRAL THERMOSTAT.

FAN COIL UNIT SCHEDULE (SPLIT SYSTEM)

MARK	MANUFACTURER / MODEL NO.	TYPE	CFM	TOTAL COOLING CAPACITY (MBH)	TOTAL HEATING CAPACITY (MBH)	ELECTRICAL				REMARKS
						VOLT	PH	MCA	MOCP	
FC-1	DAIKIN / FTX36NVJU	WALL MOUNTED	915	34.4	-	208	1	SEE REMARKS	SEE REMARKS	A,B

GENERAL NOTES:

1. JOBSITE ELEVATION = 1,300 FT. PROVIDE NECESSARY ADJUSTMENTS FOR ALTITUDE.
2. CAPACITIES BASED ON OUTDOOR TEMPERATURES OF 95°F SUMMER & 0°F WINTER.
3. PROVIDE MANUFACTURERS RECOMMENDED SERVICE CLEARANCE AROUND ENTIRE UNIT.

REMARKS:

A. PROVIDE WITH CONDENSATE PUMP CAPABLE OF 18" OF LIFT.
B. UNIT SHALL HAVE A SINGLE POINT POWER CONNECTION WITH ASSOCIATED INDOOR UNIT FROM OUTDOOR UNIT. REFER TO CONDENSING UNIT SCHEDULE.

VARIABLE REFRIGERANT FLOW UNIT SCHEDULE (VRF)

MARK	MANUFACTURER / MODEL NO.	TYPE	SUPPLY AIR (CFM)	DOAS FRESH AIR (CFM)	MATCHING BRANCH SELECTOR (BS)	COOLING DESIGN		HEATING DESIGN	ELECTRICAL				REMARKS
						TOTAL MBH	SENS MBH	TOTAL HEATING CAPACITY (MBH)	VOLT	PH	MCA	MOCP	
VRF-1	DAIKIN / FXSQ36TAVJU	CEILING	1,130	300	BS-1	29.29	24.28	41.29	208	1	2.5	15.0	A
VRF-2	DAIKIN / FXSQ36TAVJU	CEILING	1,130	300	BS-1	29.29	24.28	39.92	208	1	2.5	15.0	A
VRF-3	DAIKIN / FXZQ07TAVJU	CASSETTE	307	22	BS-1	6.17	5.45	8.53	208	1	0.3	15.0	A
VRF-4	DAIKIN / FXZQ09TAVJU	CASSETTE	317	22	BS-1	7.55	6.14	10.57	208	1	0.3	15.0	A
VRF-5	DAIKIN / FXZQ07TAVJU	CASSETTE	307	22	BS-1	6.17	5.45	8.53	208	1	0.3	15.0	A
VRF-6	DAIKIN / FXZQ07TAVJU	CASSETTE	307	22	BS-1	6.17	5.45	8.53	208	1	0.3	15.0	A
VRF-7	DAIKIN / FXZQ07TAVJU	CASSETTE	307	22	BS-1	6.17	5.45	8.53	208	1	0.3	15.0	A
VRF-8	DAIKIN / FXZQ05TAVJU	CASSETTE	300	10	BS-1	4.79	4.74	6.48	208	1	0.3	15.0	A
VRF-9	DAIKIN / FXSQ18TAVJU	CEILING	600	180	BS-2	14.58	12.91	20.13	208	1	1.6	15.0	A
VRF-10	DAIKIN / FXSQ54TBVJU	CEILING	1,377	727	BS-2	43.92	36.11	60.00	208	1	3.3	15.0	A
VRF-11	DAIKIN / FXSQ48TAVJU	CEILING	1,307	41	BS-2	39.04	32.1	53.91	208	1	2.8	15.0	A
VRF-12	DAIKIN / FXSQ48TAVJU	CEILING	1,307	15	BS-3	39.04	32.1	53.91	208	1	2.8	15.0	A
VRF-13	DAIKIN / FXSQ54TBVJU	CEILING	1,377	727	BS-2	43.92	36.11	60.00	208	1	3.3	15.0	A
VRF-14	DAIKIN / FXSQ24TBVJU	CEILING	724	377	BS-3	19.38	16.12	27.00	208	1	1.8	15.0	A
VRF-15	DAIKIN / FXSQ18TBVJU	CEILING	600	362	BS-3	14.58	12.91	20.00	208	1	1.6	15.0	A
VRF-16	DAIKIN / FXSQ36TBVJU	CEILING	1,130	197	BS-4	29.29	24.24	40.00	208	1	2.5	15.0	A
VRF-17	DAIKIN / FXZQ09TAVJU	CASSETTE	317	22	BS-4	7.55	6.14	10.57	208	1	0.3	15.0	A
VRF-18	DAIKIN / FXZQ05TAVJU	CASSETTE	300	22	BS-4	4.79	4.74	6.48	208	1	0.3	15.0	A
VRF-19	DAIKIN / FXZQ05TAVJU	CASSETTE	300	22	BS-4	4.79	4.74	6.48	208	1	0.3	15.0	A
VRF-20	DAIKIN / FXZQ05TAVJU	CASSETTE	300	22	BS-4	4.79	4.74	6.48	208	1	0.3	15.0	A
VRF-21	DAIKIN / FXZQ09TAVJU	CASSETTE	317	22	BS-3	7.55	6.14	10.57	208	1	0.3	15.0	A
VRF-22	DAIKIN / FXZQ09TAVJU	CASSETTE	317	22	BS-3	7.55	6.14	10.57	208	1	0.3	15.0	A
VRF-23	DAIKIN / FXSQ48TAVJU	CEILING	1,307	15	BS-4	39.04	32.1	53.91	208	1	2.8	15.0	A

GENERAL NOTES:

1. JOBSITE ELEVATION = 1,300 FT. PROVIDE NECESSARY ADJUSTMENTS FOR ALTITUDE.
2. CAPACITIES BASED ON OUTDOOR TEMPERATURES OF 95°F SUMMER & 0°F WINTER.
3. PROVIDE MANUFACTURERS RECOMMENDED SERVICE CLEARANCE AROUND ENTIRE UNIT.
4. CONTRACTOR SHALL COORDINATE VRF UNIT WITH PROPOSED LOCATIONS TO BEST DETERMINE CONFIGURATION TO ENSURE ADEQUATE MAINTENANCE ACCESSIBILITY AND CLEARANCE.
5. PROVIDE WITH ISOLATION VALVES WITH TEST PORTS AND INSULATION AT EACH PORT OFF THE BRANCH CONTROLLER.
6. ALL UNITS SHALL BE FULLY INTEGRATED INTO VRF CONTROL SYSTEM. LOCATE SYSTEM CONTROLLER IN IT ROOM.

REMARKS:

A. PROVIDE WITH CONDENSATE PUMP CAPABLE OF 18" OF LIFT.

CONDENSING UNIT SCHEDULE

MARK	MANUFACTURER / MODEL NO.	MATCHING INDOOR UNIT	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	EER / SEER	WEIGHT (LBS)	ELECTRICAL				REMARKS
							VOLT	PH	MCA	MOCP	
CU-1	DAIKIN / REYQ264AAYDA	VRF-1 THRU 11, 13	215.51	268.50	-	956.8	460	3	21.3 / 16.6	25.0 / 20.0	A,B,C
CU-2	DAIKIN / REYQ216AAYDA	VRF-12, 14 THRU 23	155.18	192.25	-	972.2	460	3	29.9	30.0	A,B,C
CU-3	DAIKIN / RK36NMVJUA	FC-1	34.40	-	9.10 / 15.90	133	208	1	17.0	20.0	A,B,C

GENERAL NOTES:

1. CAPACITIES BASED ON OUTDOOR TEMPERATURES OF 95°F SUMMER & 0°F WINTER.
2. REFRIGERANT TYPE R-410A.

REMARKS:

A. PROVIDE WITH LOW AMBIENT TEMPERATURE STARTUP KIT.
B. PROVIDE HAIL GUARDS.
C. PROVIDE WITH SNOW HEIGHT GROUND SUPPORTS.

BRANCH SELECTOR UNIT SCHEDULE

MARK	MANUFACTURER / MODEL NO.	NUMBER OF BRANCHES	MATCHING CONDENSING UNIT	ELECTRICAL				REMARKS
				VOLT	PH	MCA	MOCP	
BS-1	DAIKIN / BSF8Q54TVJ	8	CU-1	208	1	0.8	15	-
BS-2	DAIKIN / BSF6Q54TVJ	4	CU-1	208	1	0.6	15	-
BS-3	DAIKIN / BSF6Q54TVJ	5	CU-2	208	1	0.6	15	-
BS-4	DAIKIN / BSF6Q54TVJ	5	CU-2	208	1	0.6	15	-

GENERAL NOTES:

1. PROVIDE EACH BRANCH TO INDOOR UNITS WITH ISOLATION VALVES WITH SERVICE PORTS.
2. A MINIMUM OF (2) EXTRA PORTS SHALL BE PROVIDED WITH EACH BRANCH CONTROLLER WITH ISOLATION VALVES FOR FUTURE USE.

REMARKS:

A. -

DEDICATED OUTDOOR AIR SYSTEM SCHEDULE

MARK	MANUFACTURER / MODEL NO.	SUPPLY FAN			EXHAUST FAN			COOLING DESIGN				HEATING DESIGN			WEIGHT (LBS)	ELECTRICAL				REMARKS
		CFM	ESP (IN. WC)	HP	CFM	ESP (IN. WC)	HP	LAT DB (°F)	LAT WB (°F)	TOTAL CAPACITY (MBH)	TOTAL SENSIBLE (MBH)	LAT (°F)	INPUT (MBH)	OUTPUT (MBH)		VOLT	PH	MCA	MOCP	
DOAS-1	DAIKIN / DPS015A	3,600	1.5	8	3600	1.5	4	54.40	54.40	175.40	116.40	101.0	200.0	160.0	4,051	460	3	37.2	50.0	A

GENERAL NOTES:

1. JOBSITE ELEVATION = 1,300 FT. PROVIDE NECESSARY ADJUSTMENTS FOR ALTITUDE.
2. CAPACITY BASED ON 95°F SUMMER AND 0°F WINTER AMBIENT TEMPERATURES.
3. PROVIDE SINGLE POINT ELECTRICAL CONNECTION (FACTORY MOUNTED DISCONNECT SWITCH).
4. PROVIDE MANUFACTURERS RECOMMENDED SERVICE CLEARANCE AROUND ENTIRE UNIT.
5. PROVIDE VFD CONTROL FOR SUPPLY AND EXHAUST FAN.
6. PROVIDE HUMIDITY CONTROL WITH HOT GAS REHEAT.

REMARKS:

A. FURNISH WITH SMOKE DETECTORS IN RETURN AND SUPPLY.

AIR CONDITIONING UNIT SCHEDULE (GAS / DX COOLING - GROUND MOUNTED)

MARK	MANUFACTURER / MODEL NO.	TYPE	AREA SERVED	SUPPLY FAN			MIN. OSA (CFM)	COOLING DESIGN				HEATING DESIGN				ELECTRICAL				REMARKS
				CFM	ESP (IN.)	HP		EAT (°F)		TOTAL MBH	SENSIBLE MBH	EAT (°F)	LAT (°F)	INPUT MBH	OUTPUT MBH	VOLT	PH	MCA	MOCP	
								DB	WB											
AC-01	DAIKIN / MPS015B	GROUND MOUNTED	SHOP	5500	1.50	3	500	76.8	64.3	178.04	137.11	60.0	94.0	250.0	203.0	460	3	38.0	45.0	-

GENERAL NOTES:

1. JOB SITE ELEVATION = 1,300 FT.
2. COOLING LOADS INCLUDE SUPPLY FAN MOTOR HEAT.
3. PROVIDE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCE AROUND ENTIRE UNIT.
4. PROVIDE WITH HINGED ACCESS DOORS.
5. DUCT MOUNTED SMOKE DETECTORS SHALL BE LOCATED IN SUPPLY AND RETURN. COORDINATE WITH FIRE ALARM CONTRACTOR & ELECTRICAL.
6. FURNISH STANDARD COIL WITH HAIL GUARDS, UNIT MOUNTED NON-FUSED DISCONNECT AND POWERED CONVENIENCE OUTLET.
7. PROVIDE WITH FULL HUMIDITY CONTROL.
8. PROVIDE WITH ENTHALPY CONTROLLED ECONOMIZER.
9. PROVIDE WITH POWERED EXHAUST FAN AND BUILDING STATIC PRESSURE CONTROL.
10. PROVIDE WITH 6" THICK REINFORCED CONCRETE PAD.

REMARKS:

A. -

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WILLIAM MARK WENTZ 15999 09-08-2023 KANSAS PROFESSIONAL ENGINEER

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

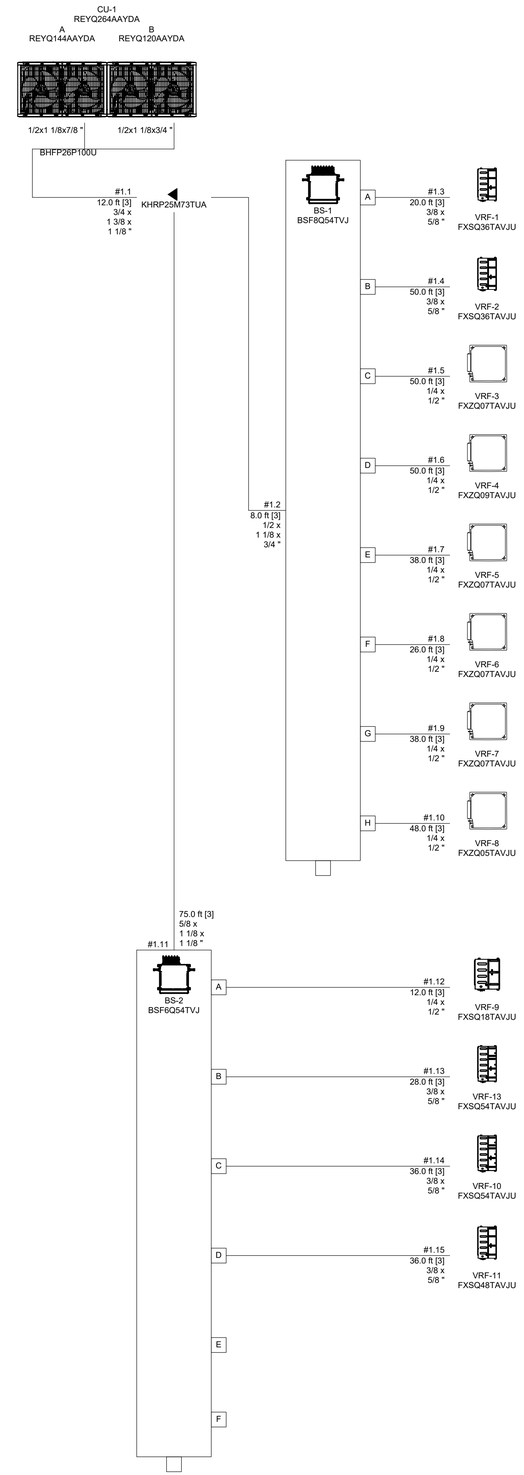
Drawing:
MECHANICAL SCHEDULES

Date: 09-08-23

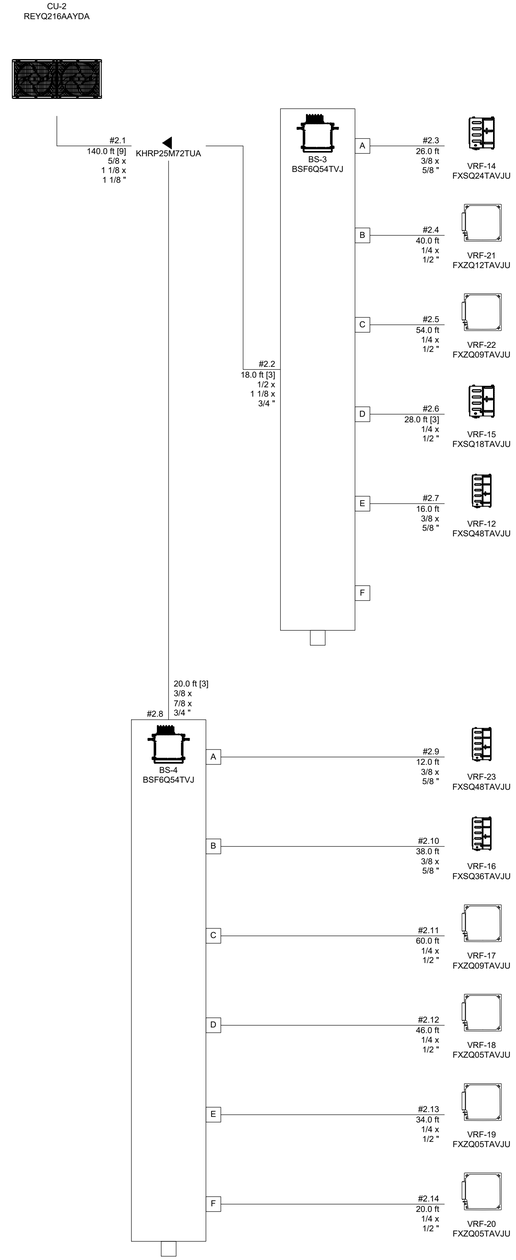
Project Number: 23-014

SHEET NUMBER:
M-601

DRAWN BY: CDC / KRF



1 VRF PIPING DIAGRAM - CU-1
SCALE: NTS



2 VRF PIPING DIAGRAM - CU-2
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Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing:
MECHANICAL
VRF PIPING
DIAGRAMS

Date:
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Project Number:
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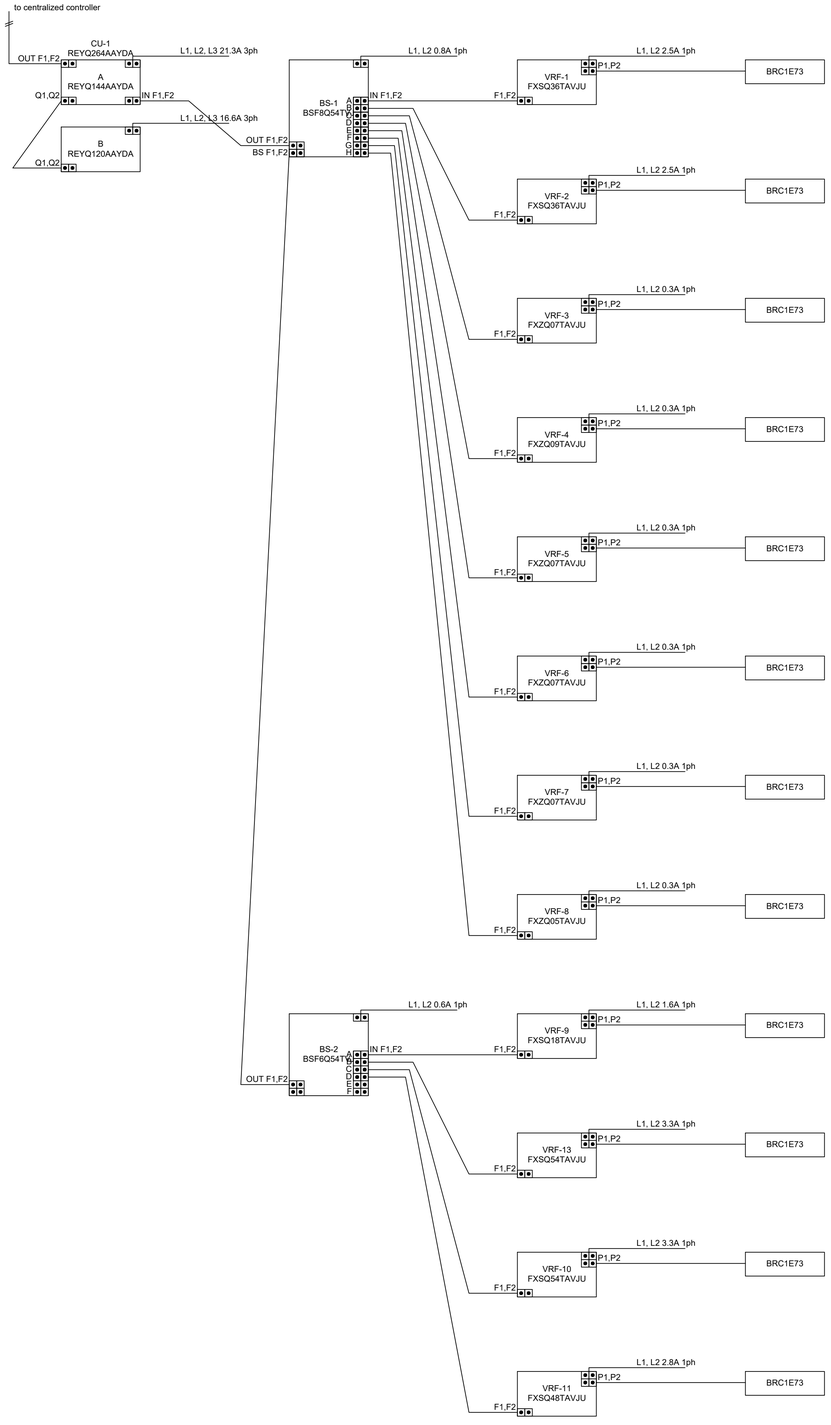
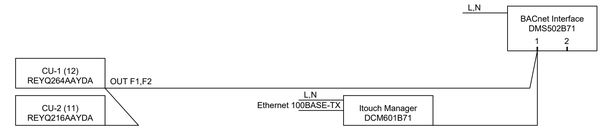
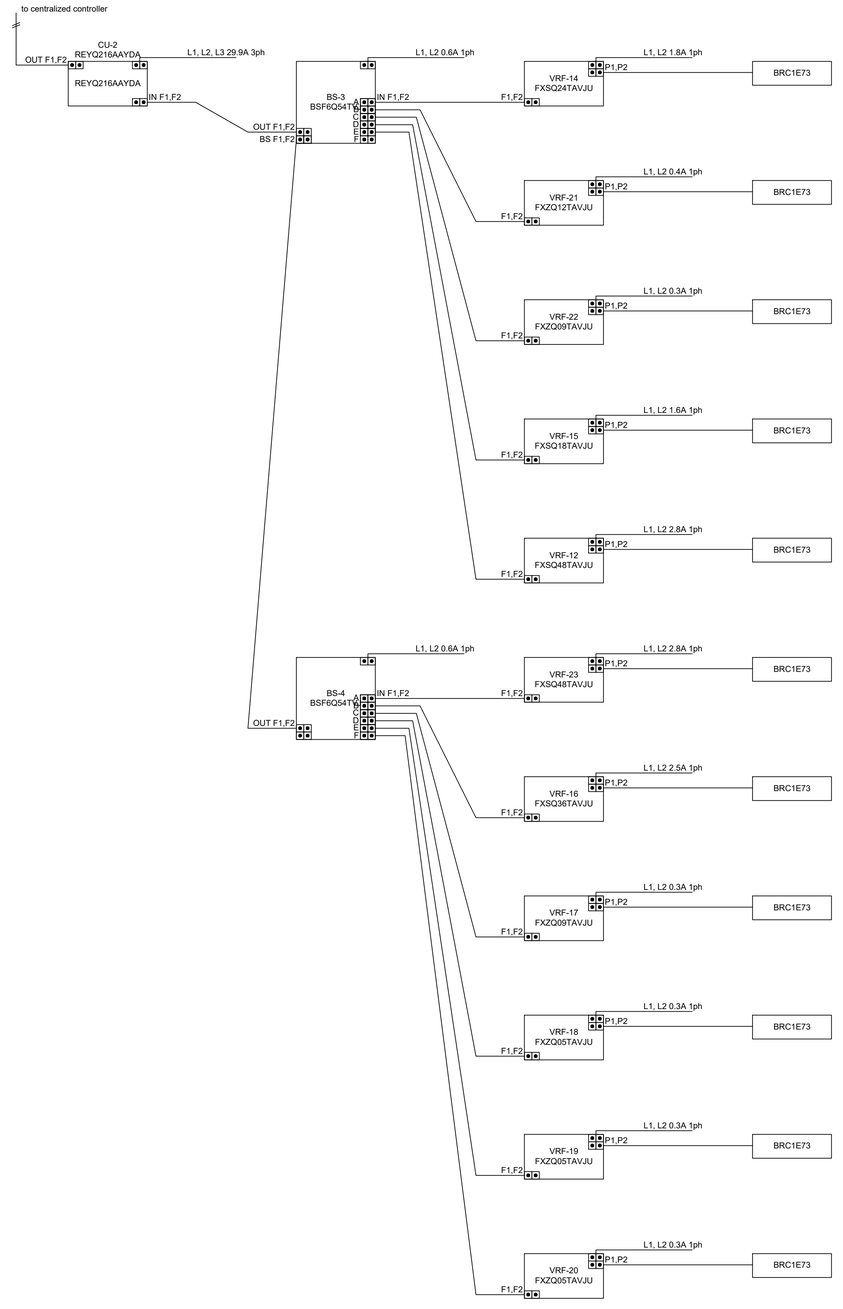


1 VRF WIRING DIAGRAM - CU-1
SCALE: NTS



3 VRF CONTROL DIAGRAM
SCALE: NTS



2 VRF WIRING DIAGRAM - CU-2
SCALE: NTS

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Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing:
MECHANICAL
VRF WIRING
DIAGRAMS

Date:
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BUILDING AUTOMATION SYSTEM (VRF CONTROLLER)

FURNISH A DEDICATED VRF CONTROL PANEL.

EACH UNIT SHALL BE STARTED/STOPPED BY THE FMS CONTROLLER BASED ON AN OCCUPANCY SCHEDULE FOR THE GIVEN SPACE. THE FAN SHALL OPERATE CONTINUOUSLY IN OCCUPIED PERIODS AND OFF DURING UNOCCUPIED PERIODS. IF DURING NIGHT SETBACK AND UNOCCUPIED PERIOD, THE SPACE TEMPERATURE RISES ABOVE THE UNOCCUPIED COOLING SETPOINT OF 85°F (ADJUSTABLE) OR FALLS BELOW THE UNOCCUPIED HEATING SETPOINT OF 55°F (ADJUSTABLE); THE FMS SHALL START AND OPERATE THE UNITS TO CHANGE THE SPACE TEMPERATURE 2°F (ADJUSTABLE) BEFORE STOPPING. THE FMS SHALL CONTAIN A MORNING WARM-UP / COOL DOWN CYCLE WHICH SHALL OPTIMIZE THE START TIME OF THE SYSTEM TO REACH THE OCCUPIED SPACE TEMPERATURE SETPOINT BY THE TIME THE SPACE IS SCHEDULED TO BE OCCUPIED.

THE FMS OPERATOR SHALL HAVE THE ABILITY TO OVERRIDE LOCAL SETPOINTS FROM THE OPERATOR WORKSTATION. SYSTEM ON/OFF CONTROL AND SCHEDULING SHALL BE ENABLED BY THE SYSTEM OPERATOR THRU THE OPERATOR WORKSTATION. LOCAL CONTROLLERS SHALL BE PERMITTED TO OVERRIDE THE SYSTEM ON/OFF SCHEDULE FOR 2 HOUR DURATIONS (ADJUSTABLE) AS REQUIRED FOR SPECIAL EVENTS.

FMS CONTROLLER AND ALL EQUIPMENT:

1. SHALL BE ABLE TO COMMUNICATE WITH EACH ZONE CONTROLLER AND WITH THE ASSOCIATED DIRECT OUTSIDE AIR SUPPLY (DOAS) UNIT.
2. FMS SHALL ENABE/DISABLE DOAS UNIT.

USER-INTERFACE:

1. SHALL BE ABLE TO REVIEW EXISTING SPACE CONDITIONS AND SETTINGS.
2. SHALL BE ABLE TO REVIEW AND REVISE THE OCCUPANCY SCHEDULE FOR THE ENTIRE SYSTEM.
3. DOAS MONITORING: OUTSIDE AIR TEMPERATURE; RETURN AIR TEMPERATURE; DISCHARGE AIR TEMPERATURE; SUPPLY AIR TEMPERATURE, STATUS, START, STOP, FILTER STATUS, DAMPER POSITION, WARNINGS AND ALARMS.
4. FMS SHALL BE ABLE TO CONTROL AND RESET START, STOP, ALARMS AND WARNINGS.
5. SHALL HAVE SPARE CAPACITY TO ADD ON ANALOG/DIGITAL INPUTS/OUTPUTS.
6. SHALL NOT BE ACCESSIBLE FROM A WEB-BROWSER.

VARIABLE REFRIGERANT FLOW SYSTEMS

THE VARIABLE CAPACITY, HEAT RECOVERY AIR CONDITIONING SYSTEM SHALL BE DAIKIN (OR APPROVED EQUAL) VARIABLE REFRIGERANT FLOW SERIES (HEAT AND COOL MODEL) SPLIT SYSTEM AS SPECIFIED. THE SYSTEM SHALL CONSIST OF MULTIPLE EVAPORATORS, HEAT REOVERY BOXES, REFNET JOINTS AND HEADERS, A TWO PIPE REFRIGERATION SYSTEM, DISTRIBUTION SYSTEM USING PID CONTROL. THE CONDENSER UNIT SHALL BE A DIRECT EXPANSION (DX), AIR-COOLED HEAT RECOVERY, MULTI- ZONE AIR-CONDITIONING SYSTEM WITH VARIABLE SPEED DRIVEN COMPRESSORS USING R-410A REFRIGERANT. THE OUTDOOR UNIT MAY CONNECT AN INDOOR EVAPORATOR CAPACITY UP TO 130% OF THE OUTDOOR CONDENSING UNIT CAPACITY. ALL ZONES ARE EACH CAPABLE OF OPERATING SEPARATELY WITH INDIVIDUAL TEMPERATURE CONTROL.

THE OUTDOOR UNIT SHALL BE INTERCONNECTED TO INDOOR UNIT MODELS THAT SHALL RANGE IN CAPACITY FROM 4,500 BTU/H TO 36,000 BTU/H IN ACCORDANCE WITH ENGINEERING DATA BOOK DETAILING EACH AVAILABLE INDOOR UNIT. THE INDOOR UNITS SHALL BE CONNECTED TO THE OUTDOOR UTILIZING MITSUBISHI SPECIFIED PIPING JOINTS AND HEADERS.

OPERATION OF THE SYSTEM SHALL PERMIT EITHER INDIVIDUAL COOLING OR HEATING OF EACH FAN COIL SIMULTANEOUSLY OR ALL OF THE FAN COIL UNITS ASSOCIATED WITH ONE BRANCH COOL/HEAT HEAT RECOVERY BOX. EACH FAN COIL OR GROUP OF FAN COILS SHALL BE ABLE TO PROVIDE SET TEMPERATURE INDEPENDENTLY VIA A LOCAL REMOTE CONTROLLER, AN INTELLIGENT CONTROLLER, AN INTELLIGENT MANAGER OR A BMS INTERFACE.

HEAT RECOVERY BOXES SHALL BE LOCATED AS SHOWN ON THE DRAWINGS. THE HEAT REOVERY BOXES SHALL HAVE THE CAPACITY TO CONTROL UP TO 60 MBH (COOLING) DOWN STREAM OF THE HR BOX. THE HR BOX SHALL CONSIST OF A 3-WAY VALVE, REFRIGERANT CONTROL PIPING AND ELECTRONICS TO FACILITATE COMMUNICATIONS BETWEEN THE HR BOX AND MAIN PROCESSOR AND THE HR BOX AND FAN COILS. THE HR BOX SHALL CONTROL THE OPERATIONAL MODE OF THE SUBORDINATE FAN COILS.

EACH INDOOR UNIT OR GROUP OF INDOOR UNITS SHALL BE INDEPENDENTLY CONTROLLED.

PACKAGED RTU SEQUENCE OF OPERATIONS

OCCUPIED COOLING MODE/PRE-OCCUPANCY VENTILATION MODE:

1. WHEN THE RTU IS IN THE OCCUPIED MODE, THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY, DX COOLING SHALL CYCLE, AND THE OUTSIDE AIR DAMPERS SHALL BE SET AT THE MINIMUM OUTSIDE AIR POSITION. THE DX COOLING SHALL CYCLE TO MEET THE COOLING REQUIREMENTS OF THE THERMOSTAT.

OCCUPIED HEATING MODE/PRE-OCCUPANCY VENTILATION MODE:

1. WHEN THE RTU IS IN THE OCCUPIED MODE, THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY, DX COOLING SHALL BE OFF, AND THE OUTSIDE AIR DAMPERS SHALL BE SET AT THE MINIMUM SETTING (BALANCE PER SCHEDULED MINIMUM O/A). THE GAS HEAT SHALL CYCLE TO MEET THE HEATING REQUIREMENTS OF THE THERMOSTAT.

UNOCCUPIED MODE:

1. WHEN THE RTU IS IN THE UNOCCUPIED MODE, THE SUPPLY FAN SHALL BE OFF, COOLING AND HEATING BE OFF, AND THE OUTDOOR AIR DAMPER SHALL BE CLOSED.

NIGHT SETBACK/MORNING WARM-UP HEATING MODE:

1. WHEN THE RTU IS IN THE NIGHT SETBACK/MORNING WARM-UP HEATING MODE, THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY, THE OUTDOOR AIR DAMPER SHALL BE CLOSED, THE DX COOLING SHALL BE OFF, THE RETURN AIR DAMPER SHALL BE FULLY OPEN. THE GAS HEAT SHALL CYCLE TO MEET THE HEATING REQUIREMENTS OF THE THERMOSTAT.
2. WHEN IN UNOCCUPIED MODE, THE UNIT WILL CYCLE AS NECESSARY TO MAINTAIN THE SHARED NIGHT SETBACK ZONE TEMPERATURE AT SET-POINT. A TEMPERATURE DIFFERENTIAL PREVENTS THE UNIT FROM CYCLING EXCESSIVELY.

SUPPLY FAN CONTROL:

1. THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY WHENEVER THE RTU IS IN EITHER IN THE OCCUPIED MODE OR THE NIGHT SETBACK/MORNING WARM-UP HEATING MODE. THE SUPPLY FAN SHALL BE OFF WHENEVER THE RTU IS IN THE UNOCCUPIED MODE AND THERE IS NO CALL FOR HEATING OR COOLING.

ECONOMIZER CONTROL:

1. WHEN THE OUTSIDE AIR ENTHALPY LEVELS COMPARE FAVORABLY TO THE INDOOR ENTHALPY LEVELS, THE ECONOMIZER WILL BE ENABLED. WHEN THE OUTSIDE AIR ENTHALPY RISES ABOVE A FAVORABLE SETTING PLUS A DIFFERENTIAL, THE ECONOMIZER WILL BE DISABLED.

HUMIDITY CONTROL:

1. WHEN THE RTU SYSTEM SENSES HIGH HUMIDITY IN THE SPACE, 60% RH(ADJUSTABLE), THE RTU SHALL UTILIZE ITS INTEGRAL HUMIDITY CONTROL SYSTEM TO CYCLE THE DX COOL AND HOT GAS REHEAT COOL TO DEHUMIDIFY THE AIR.

VRF UNIT SEQUENCE OF OPERATIONS

OCCUPIED COOLING MODE/PRE-OCCUPANCY VENTILATION MODE:

1. WHEN THE BUILDING IS IN THE OCCUPIED MODE, THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY, DX COOLING SHALL CYCLE, AND THE VENTILATION AIR SHALL BE PROVIDED BY THE DEDICATED OUTDOOR AIR SYSTEM (DOAS). THE DX COOLING SHALL MODULATE TO MEET THE COOLING REQUIREMENTS OF THE THERMOSTAT.

OCCUPIED HEATING MODE/PRE-OCCUPANCY VENTILATION MODE:

1. WHEN THE BUILDING IS IN THE OCCUPIED MODE, THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY, DX COOLING SHALL BE OFF, AND THE VENTILATION AIR SHALL BE PROVIDED BY DEDICATED OUTDOOR AIR SYSTEM (DOAS). THE HEAT PUMP HEATING MODE SHALL CYCLE TO MEET THE HEATING REQUIREMENTS OF THE THERMOSTAT.

UNOCCUPIED MODE:

1. WHEN THE BUILDING IS IN THE UNOCCUPIED MODE, THE SUPPLY FAN SHALL BE OFF, COOLING AND HEATING BE OFF, AND DOAS SHALL BE "OFF".

NIGHT SETBACK/MORNING WARM-UP HEATING MODE:

1. WHEN THE BUILDING IS IN THE NIGHT SETBACK/MORNING WARM-UP HEATING MODE, THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY, DOAS SHALL BE "OFF". THE HEAT PUMP SHALL MODULATE TO MEET THE HEATING REQUIREMENTS OF THE THERMOSTAT.
2. WHEN IN UNOCCUPIED MODE, THE UNITS WILL CYCLE AS NECESSARY TO MAINTAIN THE NIGHT SETBACK ZONE TEMPERATURE AT SET-POINT. A TEMPERATURE DIFFERENTIAL PREVENTS THE UNIT FROM CYCLING EXCESSIVELY.

SUPPLY FAN CONTROL:

1. THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY WHENEVER THE BUILDING IS IN EITHER THE OCCUPIED MODE OR THE NIGHT SETBACK/MORNING WARM-UP HEATING MODE. THE SUPPLY FAN SHALL BE OFF WHENEVER THE BUILDING IS IN THE UNOCCUPIED MODE AND THERE IS NO CALL FOR HEATING OR COOLING.

OCCUPIED/UNOCCUPIED OVER-RIDE:

1. ONE ZONE SHALL ACT AS AN OVER-RIDE FOR THE ENTIRE SYSTEM'S OCCUPIED/UNOCCUPIED SETTINGS.
2. THIS OVER-RIDE SHALL BE LIMITED TO TWO HOURS AT A TIME AND ALLOW ACTIVATION OF DOAS.

DOAS SEQUENCE OF OPERATIONS

RUN CONDITIONS - SCHEDULED:
THE UNIT SHALL RUN BASED UPON AN OPERATOR ADJUSTABLE SCHEDULE.
DOAS SHALL BE ENERGIZED WITH THE VRF CONTROLLER.

EMERGENCY SHUTDOWN:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING AN EMERGENCY SHUTDOWN SIGNAL.

SMOKE DETECTION:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A SMOKE DETECTOR STATUS.

SUPPLY FAN:
THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN. TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME, UNLESS SHUTDOWN ON SAFETIES.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- SUPPLY FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- SUPPLY FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- SUPPLY FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

EXHAUST FAN:
THE EXHAUST FAN SHALL RUN WHENEVER THE SUPPLY FAN RUNS, UNLESS SHUTDOWN ON SAFETIES.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- EXHAUST FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- EXHAUST FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- EXHAUST FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

SUPPLY AIR TEMPERATURE SETPOINT:
THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE AND SHALL MAINTAIN SUPPLY AIR TEMPERATURE SETPOINT. DX COOLING SHALL BE ENABLED AS REQUIRED TO MAINTAINING THE SUPPLY AIR TEMPERATURE:

AS OUTSIDE AIR TEMPERATURE DROPS FROM 60°F (ADJ.) TO 0°F (ADJ.)
THE SUPPLY AIR TEMPERATURE SETPOINT SHALL RESET UPWARDS FROM 65°F (ADJ.) TO 95°F (ADJ.). LIKEWISE THE SUPPLY AIR TEMP WILL RESET FROM 65°F TO 55°F(ADJ.) IN COOLING MODE.

GAS HEATING COIL
THE CONTROLLER SHALL MEASURE THE SUPPLY AIR TEMPERATURE AND MODULATE THE HEATING COIL TO MAINTAIN THE HEATING SETPOINT.

THE HEATING SHALL BE ENABLED WHENEVER:
OUTSIDE AIR TEMPERATURE IS LESS THAN 65°F (ADJ.).
1) AND THE SUPPLY AIR TEMPERATURE IS BELOW HEATING SETPOINT.
2) AND THE FAN STATUS IS ON.

FINAL FILTER DIFFERENTIAL PRESSURE MONITOR:
THE CONTROLLER SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FINAL FILTER.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
FINAL FILTER CHANGE REQUIRED: FINAL FILTER DIFFERENTIAL PRESSURE EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

SUPPLY AIR TEMPERATURE:
THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
1) HIGH SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS GREATER THAN 120°F (ADJ.).
2) LOW SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS LESS THAN 45°F (ADJ.).

SMOKE DETECTORS SHALL BE INSTALLED IN THE MAIN SUPPLY AND RETURN (EXHAUST) DUCTS AND SHALL BE TIED INTO THE EXISTING ETS QUICKSTART FIRE ALARM CONTROL PANEL. UNIT SHALL BE MADE TO SHUTDOWN UPON DETECTION OF SMOKE. COORDINATE WITH ELECTRICAL.

HUMIDITY CONTROL:

1. WHEN THE DOAS SYSTEM SENSES HIGH HUMIDITY IN THE SUPPLY AIR, 60% RH(ADJUSTABLE), THE DOAS SHALL UTILIZE ITS INTEGRAL HUMIDITY CONTROL SYSTEM TO CYCLE THE DX COOL AND HOT GAS REHEAT COOL TO DEHUMIDIFY THE AIR.

GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR PROVIDING, INSTALLING AND CONFIGURING ALL DEVICES AND CONTROLS SHOWN ON THESE DIAGRAMS.
2. CONTROLS/MECHANICAL CONTRACTOR SHALL COORDINATE ALL DEVICES SHOWN IN CONTROL DIAGRAMS WITH THE ELECTRICAL CONTRACTOR FOR POWER/WIRING REQUIREMENTS.
3. CONTROLS CONTRACTOR IS RESPONSIBLE FOR SUPPLYING AND INSTALLING ALL 24V/120V TRANSFORMERS AS NEEDED TO CONTROL HVAC AND MECHANICAL EQUIPMENT. COORDINATE WITH ELECTRICAL.
4. THE PACKAGED RTU SYSTEM SHALL BE STAND - ALONE CONTROL WITH A PROGRAMMABLE T-STAT/ HUMIDISTAT TO CONTROL UNIT'S, DX COOLING, GAS HEATING, ECONOMIZER AND HUMIDITY CONTROL.
5. THE VRF SYSTEM SHALL BE PROVIDED WITH A CONTROL SYSTEM CAPABLE OF CONTROLLING THE COOLING, HEATING AND DOAS SYSTEM.

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Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing:
MECHANICAL SEQUENCE OF OPERATIONS

Date:
09-08-23

Project Number:
23-014

SHEET NUMBER:
M-604

DRAWN BY: CDC / KRF

ELECTRICAL SYMBOL LEGEND

(NOT ALL SYMBOLS AND/OR ABBREVIATIONS SHOWN IN THIS LEGEND WILL BE USED IN THIS CONTRACT)

GENERAL

- 1 — KEYED NOTE DESIGNATION
- E-1 — ELECTRICAL EQUIPMENT DESIGNATION
- CU-1 — MECHANICAL EQUIPMENT DESIGNATION
- 1 / E-100 — DETAIL DESIGNATION: DETAIL NUMBER, SHEET DETAIL IS LOCATED
- 2* — REVISION DESIGNATION, (*) INDICATES NUMBER OF REVISION

CIRCUITING / DESIGNATIONS

- CIRCUIT HOMERUNS: GROUND CONDUCTOR, SWITCHED CONDUCTOR, PHASE CONDUCTOR(S), NEUTRAL CONDUCTOR
- PP1-2 — CIRCUIT DESIGNATION: CIRCUIT NUMBER(S), PANELBOARD NUMBER

PANELBOARDS / EQUIPMENT

- T — PAD MOUNTED TRANSFORMER, REFER PLANS TO IDENTIFY IF UTILITY, SECONDARY AND SIZE
- MDP — MAIN DISTRIBUTION PANELBOARD, REFER TO PLANS FOR SIZE AND VOLTAGE
- POWER / LIGHTING PANELBOARD, REFER TO PLANS FOR SIZE AND VOLTAGE
- TVSS — TRANSIENT VOLTAGE SURGE SUPPRESSOR
- DISCONNECT / SAFETY SWITCH, REFER TO PLANS FOR FUSED OR NON-FUSED TYPE AND SIZE
- 1 — MOTOR, NUMBER INDICATES HORSEPOWER RATING
- SPD — SURGE PROTECTION DEVICE
- VFD — VARIABLE FREQUENCY DRIVE

RECEPTACLES / JUNCTION BOXES

- 20A DUPLEX RECEPTACLE, WALL MOUNTED
- 20A DUPLEX RECEPTACLE, CEILING MOUNTED
- 20A DUPLEX RECEPTACLE, IN FLOOR BOX
- 20A FOURPLEX RECEPTACLE, WALL MOUNTED
- 20A FOURPLEX RECEPTACLE, CEILING MOUNTED
- 20A DUPLEX RECEPTACLE, IN FLOOR BOX
- GFCI — 20A DUPLEX RECEPTACLE, GFCI PROTECTED
- EWC — 20A DUPLEX RECEPTACLE, ELECTRIC WATER COOLER (GFCI PROTECTED RECEPTACLE)
- ELECTRIC RANGE RECEPTACLE, WALL MOUNTED (AMP RATING AS INDICATED)
- ELECTRIC DRYER RECEPTACLE, WALL MOUNTED (AMP RATING AS INDICATED)
- WP/GFCI — GFCI RECEPTACLE (20A DUPLEX), INSTALLED IN A WEATHERPROOF OUTLET BOX WITH A WEATHERPROOF, IN-USE COVER PLATE
- SPECIAL PURPOSE OUTLET, WALL MOUNTED (AMP RATING AS INDICATED)
- J — JUNCTION BOX, RECESSED / CEILING MOUNTED
- J — JUNCTION BOX, WALL MOUNTED
- J — JUNCTION BOX, FLUSH IN FLOOR
- MULTI-OUTLET RECEPTACLE STRIP, REFER TO PLANS FOR OUTLET SPACING AND MOUNTING HEIGHT

GROUNDING / LIGHTNING PROTECTION

- AIR TERMINAL
- CONNECTION POINT
- EXOTHERMIC WELD
- GROUND CONNECTION
- G — ESD FLOOR GROUND BOX
- GROUND ROD, 3/4" X 10' COPPER CLAD STEEL
- GROUNDING BUS BAR
- LP — LIGHTNING PROTECTION CONDUCTOR

LIGHTING

- A / 1, a — 2'X4' LIGHT FIXTURE: A = FIXTURE TYPE, 1 = CIRCUIT NUMBER, a = SWITCH CONTROLLING FIXTURE
- A / 1, a — 1'X4' LIGHT FIXTURE: A = FIXTURE TYPE, 1 = CIRCUIT NUMBER, a = SWITCH CONTROLLING FIXTURE
- A / 1, a — 2"X72" LIGHT FIXTURE: A = FIXTURE TYPE, 1 = CIRCUIT NUMBER, a = SWITCH CONTROLLING FIXTURE
- A / 1,a — 2'X2' LIGHT FIXTURE: A = FIXTURE TYPE, 1 = CIRCUIT NUMBER, a = SWITCH CONTROLLING FIXTURE
- 2'X4' LIGHT FIXTURE WITH EMERGENCY BALLAST OR EMERGENCY BATTERY PACK
- 1'X4' LIGHT FIXTURE WITH EMERGENCY BALLAST OR EMERGENCY BATTERY PACK
- A / A — RECESSED OR CEILING MOUNTED LIGHT FIXTURE, LETTER DENOTES FIXTURE TYPE
- A — WALL MOUNTED LIGHT, LETTER DENOTES TYPE
- A — CEILING OR PENDANT MOUNTED LIGHT, LETTER DENOTES TYPE
- A — EXTERIOR LIGHT POLE WITH FIXTURE, LETTER DENOTES TYPE
- A — GROUND MOUNTED FLOOD LIGHT FIXTURE, LETTER DENOTES TYPE
- X — CEILING MOUNTED DOUBLE FACE EXIT LIGHT, LETTER DENOTES TYPE, ARROWS INDICATE DIRECTIONAL ARROWS
- X — CEILING MOUNTED SINGLE FACE EXIT LIGHT, LETTER DENOTES TYPE
- X — WALL MOUNTED EXIT LIGHT, LETTER DENOTES TYPE, ARROW INDICATES DIRECTIONAL ARROW
- A — RECHARGEABLE TYPE EMERGENCY LIGHT FIXTURE, LETTER DENOTES TYPE

SWITCHES

- $_a — SINGLE POLE SWITCH
- $_2 — DOUBLE POLE SWITCH
- $_3 — THREE-WAY POLE SWITCH
- $_4 — FOUR-WAY POLE SWITCH, LETTER INDICATES SWITCHING CONTROL AREA / ZONE
- $_D — DIMMING WALL SWITCH
- $_OC — WALL SWITCH WITH OCCUPANCY SENSOR
- $_T — MOTOR RATED SWITCH WITH THERMAL OVERLOAD PROTECTION
- $_K — KEY OPERATED WALL SWITCH
- $_WP — WEATHERPROOF SWITCH
- MD — MOTION DETECTOR, WALL MOUNTED
- MD — MOTION DETECTOR, CEILING MOUNTED
- OS — OCCUPANCY SENSOR WITH OVERRIDE SWITCH, WALL MOUNTED
- OS — OCCUPANCY SENSOR WITH OVERRIDE SWITCH, CEILING MOUNTED
- RC — ROOM CONTROLLER LIGHT SWITCHING DEVICE
- DS — DOOR STRIKE DEVICE
- PUSH BUTTON OR EMERGENCY OFF BUTTON (EPO OR EMO TYPE)
- T — THERMOSTAT, WALL MOUNTED

FIRE ALARM SYSTEM

- FACP — FIRE ALARM CONTROL PANEL
- FAAN — FIRE ALARM ANNUNCIATOR PANEL
- F — FIRE ALARM MANUAL PULL STATION, WALL MOUNTED
- F — FIRE ALARM HORN / STROBE, WALL MOUNTED
- F — FIRE ALARM HORN / STROBE, WALL MOUNTED

FIRE ALARM SYSTEM (CONT'D)

- F — FIRE ALARM FLASHING STROBE LIGHT, WALL MOUNTED
- F — FIRE ALARM BELL, WALL MOUNTED
- SD* OR 2 — SMOKE DETECTOR, (*) INDICATES TYPE: P = PHOTOELECTRIC SMOKE DETECTOR, I = IONIZATION SMOKE DETECTOR
- HD — HEAT DETECTOR
- D — DUCT DETECTOR
- TS — TAMPER SWITCH
- FS — FLOW SWITCH
- PS — PRESSURE SWITCH

COMMUNICATIONS / SPECIAL SYSTEMS

- COMBINATION TELEPHONE / DATA, WALL MOUNTED
- COMBINATION TELEPHONE / DATA, CEILING MOUNTED
- COMBINATION TELEPHONE / DATA, IN FLOOR BOX
- COMPUTER/DATA, WALL MOUNTED
- COMPUTER/DATA, CEILING MOUNTED
- COMPUTER/DATA, IN FLOOR BOX
- TELEPHONE, WALL MOUNTED
- CCTV CAMERA, WALL MOUNTED
- S — WALL MOUNTED SPEAKER
- S — CEILING SPEAKER, FLUSH MOUNTED
- IC — INTERCOM, WALL MOUNTED
- TV — CABLE TV, WALL MOUNTED

DISTRIBUTION

- CONDUIT ROUTING DOWNWARD
- CONDUIT ROUTING UPWARD
- CONDUIT CAPPED END
- CONCEALED CONDUIT / RACEWAY (** INDICATES SYSTEM: E-ELECTRICAL, T-TELECOM, ETC.)
- EXPOSED CONDUIT / RACEWAY (** INDICATES SYSTEM: E-ELECTRICAL, T-TELECOM, ETC.)
- UTIL — EXISTING UTILITY CIRCUIT
- UGE — UNDERGROUND SECONDARY (ELECTRICAL)
- OHE — OVERHEAD CIRCUIT
- FO — UNDERGROUND COMMUNICATIONS
- COM — UNDERGROUND COMMUNICATIONS AND FIRE ALARM
- M OR M — UTILITY METER / METER CABINET
- MH* — MANHOLE, (*) INDICATES TYPE - AS REQUIRED: E = ELECTRICAL, T = TELECOMMUNICATIONS
- PB — PULLBOX
- CABLE TRAY / WIREWAY, REFER TO PLANS FOR SIZE AND TYPE

ONE-LINE DIAGRAM

- 480 / 208Y/120 — 45 KVA TRANSFORMER, DELTA-WYE CONNECTION
- MANUAL OR AUTOMATIC TRANSFER SWITCH
- 100AF / 100AT — CIRCUIT BREAKER: AF = FRAME RATING IN AMPERES, AT = TRIP RATING IN AMPERES
- 7 / MCP — MOTOR CIRCUIT PROTECTOR
- 1000 / 1200 — DRAWOUT CIRCUIT BREAKER (TRIP/FRAME)
- OR G — EMERGENCY / BACKUP GENERATOR

ONE-LINE DIAGRAM (CONT'D)

- 1 / 30A — COMBINATION MAGNETIC STARTER: 1 = INDICATES NEMA STARTER SIZE, 30A = INDICATES DISCONNECT RATING
- 1 — MAGNETIC STARTER: 1 = INDICATES NEMA STARTER SIZE
- 5A — FUSE, RATING AS NOTED
- 5A — FUSED DISCONNECT, RATING AS NOTED
- CONNECTION POINT
- R1 — RELAY
- CR — CONTROL RELAY
- NOMALLY CLOSED CONTACT
- NOMALLY OPEN CONTACT
- OVERLOAD RELAY

ABBREVIATIONS

A, AMP	AMPERE
AC	ALTERNATING CURRENT
A.C.	ABOVE COUNTER
ADA	AMERICANS WITH DISABILITIES ACT
A.F.F.	ABOVE FINISH FLOOR
A.F.G.	ABOVE FINISH GRADE
AHJ	AUTHORITY HAVEING JURISDICTION
AIC	AMPERES INTERRUPTING CURRENT
APPROX.	APPROXIMATELY
ATS	AUTOMATIC TRANSFER SWITCH
AWG.	AMERICAN WIRE GUAGE
BC	BARE COPPER
BFG	BELOW FINISHED GRADE
BLDG	BUILDING
C	CONDUIT
CAT	CATEGORY
CATV	COMMUNITY ANTENNA TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
CKT	CIRCUIT
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
COM	COMMUNICATIONS
COMM	COMMUNICATIONS
CONC	CONCRETE
CONT.	CONTINUOUS
CU	COPPER
DC	DIRECT CURRENT
DEMO	DEMOLITION
DIM	DIMENSION
DISC.	DISCONNECT
DIV.	DIVISION
DN	DOWN
DPDT	DOUBLE-POLE, DOUBLE THROW
DPST	DOUPLE-POLE, SINGLE THROW
DS	DOOR STRIKE
DWG	DRAWING
(E), (EX)	EXISTING
EF	EXHAUST FAN
ELEC	ELECTRICAL
EMH	ELECTRICAL MANHOLE
EMI	ELECTROMAGNETIC INTERFERENCE
EMO	EMERGENCY MANUAL OFF
EMT	ELECTRICAL METALLIC TUBING
EOLD	END OF LINE DEVICE
EPO	EMERGENCY POWER OFF
EQPM	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXT.	EXTERIOR
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPERES
FLEX	FLEXIBLE METAL CONDUIT
FLR	FLOOR
FO	FIBER OPTICS
FSD	FIRE SMOKE DAMPER
FT	FEET
G, GND.	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HH	HAND HOLE
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HV	HIGH VOLTAGE
HVAC	HEATING, VENTILATION, AIR CONDITIONING
IBC	INTERNATIONAL BUILDING CODE
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
IN	INCHES
INC	INCANDESCENT
INT.	INTERIOR

ABBREVIATIONS (CONT'D)

JB	JUNCTION BOX
KA, KAIC	KILO-AMPERE INTERRUPTING CAPACITY
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KW	KILOWATT
KWH	KILOWATT HOUR
LAN	LOCAL AREA NETWORK
LED	LIGHT EMITTING DIODE
LF	LINEAR FEET
LFMC	LIQUID-TIGHT FLEXIBLE METAL CONDUIT
LP	LIGHTING PANEL
LT	LIQUID TIGHT
LTG	LIGHTING
LV	LOW VOLTAGE
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTION
MDP	MAIN DISTRIBUTION PANELBOARD
M	METER
MH	MANHOLE OR METAL HALIDE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MTD	MOUNTED
MTS	MANUAL TRANSFER SWITCH
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OCPD	OVERCURRENT PROTECTIVE DEVICE
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OHE	OVERHEAD ELECTRICAL
O/P	OUTPUT
PA	PUBLIC ADDRESS
PB	PULL BOX
PNL	PANELBOARD
PP	POWER PANEL
PSI	POUNDS PER SQUARE INCH
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PWR	POWER
QTY	QUANTITY
RCP	REFLECTED CEILING PLAN
RCPT	RECEPTACLE
REV	REVISION
RGS	RIGID GALVANIZED STEEL
RM	ROOM
RMC	RIGID METAL CONDUIT
RMS	ROOT MEAN SQUARE
SCR	SHORT CIRCUIT RATING
SD	SMOKE DETECTOR
SF	SQUARE FEET
SHLD	SHIELDED
SPD	SURGE PROTECTIVE DEVICE
SPDT	SINGLE POLE, DOUBLE THROW
SPEC	SPECIFICATION(S)
SPST	SINGLE POLE, SINGLE THROW
SQ	SQUARE
SW	SWITCH
SWB	SWITCHBOARD
SWGR	SWITCHGEAR
SYM	SYMMETRICAL
T	TRANSFORMER
TC	TERMINAL CABINET
TEB	TELEPHONE EQUIPMENT BOARD
TELE	TELEPHONE
TTB	TELEPHONE TERMINAL BOARD
TV	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
TYP.	TYPICAL
UH	UNIT HEATER
UG	UNDERGROUND
UGE	UNDERGROUND ELECTRICAL
UL	UNDERWRITER'S LABORATORIES
UON	UNLESS OTHERWISE NOTED
UPS	UNTERRUPTIBLE POWER SUPPLY
UTIL	UTILITY
V	VOLT
VA	VOLT AMPERE
VOIP	VOICE OVER INTERNET PROTOCAL
W	WATT OR WIRE
W/	WITH
W/O	WITHOUT
WAP	WIRELESS ACCESS POINT
WP	WEATHERPROOF
XFMR	TRANSFORMER

GENERAL SHEET NOTES

A. ALL ELECTRICAL PLANS, SCHEDULES, DRAWINGS AND SPECIFICATIONS SHALL BE EQUALLY CONSIDERED TO BE PART OF THE CONTRACT DOCUMENTS, WITH NO EXCEPTIONS, EXEMPTIONS OR EXCLUSIONS. THERE SHALL BE NO CONSIDERATION OF PRECEDENCE OR PREFERENCE FOR ANY OF THESE COMPONENTS AS BEING EXCLUSIVE OF THE OTHER AND ALL OF THEM SHALL COMPRISE A COMPLETE SET OF CONTRACT DOCUMENTS. EACH OF THESE COMPONENTS OF THE CONTRACT DOCUMENTS SHALL BEAR EQUAL WEIGHT, INFLUENCE AND CONSIDERATION. IF THERE ARE CONFLICTS BETWEEN ANY OF THESE COMPONENTS OF THE CONTRACT DOCUMENTS, THE MOST STRINGENT SHALL APPLY. THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.

B. CONTRACTOR SHALL COORDINATE LOCATIONS FOR ALL DEVICES, GEAR AND EQUIPMENT SHOWN WITH ARCHITECTURAL, PLUMBING AND MECHANICAL PLANS PRIOR TO BEGINNING ELECTRICAL WORK. FINAL LOCATIONS OF ALL DEVICES, GEAR AND EQUIPMENT MAY BE RELOCATED OR MOVED UP TO TEN (10) FEET IN ANY DIRECTION WITH NO ADDITIONAL COST TO THE OWNER. WHERE THERE ARE ANY CONCERNS OR QUESTIONS ABOUT COORDINATION OR CLEARANCE PROBLEMS, CONTRACTOR SHALL PREPARE A WRITTEN RECOMMENDATION AND SUBMIT FOR REVIEW AND APPROVAL.

C. THE CONTRACTOR SHALL PERFORM ALL WORK IN A NEAT AND WORKMAN-LIKE MANNER IN FULL COMPLIANCE WITH ALL PERTINENT CODES, SUCH AS THE NFPA, NEC, ADA AND ALL OTHER APPLICABLE LOCAL, STATE AND NATIONAL CODES CURRENTLY IN EFFECT AS OF THE DATE SHOWN ON THESE PLANS.

D. IF THE CONTRACTOR DETECTS ANY DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND ANY ASSOCIATED LEGAL, CODE OR SAFETY REQUIREMENTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONTRACT DOCUMENTS CAN BE MODIFIED ACCORDINGLY. IF THE CONTRACTOR PROCEEDS WITH ANY WORK WHICH IS AT VARIANCE WITH ANY KNOWN LEGAL, CODE OR SAFETY REQUIREMENT, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR SUCH WORK AND SHALL CORRECT THE WORK WITHOUT ADDITIONAL COST TO THE OWNER.

E. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING. NO CLAIM FOR ADDITIONAL COSTS, CHANGES OR EXTENSIONS OF TIME SHALL BE ALLOWED OR ACCEPTED WITHOUT HAVING OWNER APPROVAL.

F. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL WORK AREAS AND SPACES AND REMOVE ALL FOREIGN MATTER, PAINT, DIRT, GREASE AND UN-USED EQUIPMENT, TOOLS, PARTS AND MATERIAL. CONTRACTOR SHALL ALSO REMOVE ALL LABELS, STICKERS AND PROTECTIVE COVERS FROM ALL LUMINAIRES, EQUIPMENT AND ELECTRICAL GEAR AND REMOVE ALL RUBBISH, DEBRIS, TRASH AND ALL OTHER WASTE MATERIALS ACCUMULATED DURING THE PROCESS OF COMPLETING THE WORK.

G. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND PROVIDE ALL WORK INDICATED ON THE DRAWINGS. THIS CONSISTS OF FURNISHING ALL LABOR, EQUIPMENT, SUPPLIES AND MATERIALS AND ALSO PERFORMING ALL OPERATIONS INCLUDING CUTTING, CHANNELING, UNDERGROUND TRENCHING, BACKFILL AND TAMPING THAT IS NECESSARY FOR A COMPLETE INSTALLATION OF ALL SYSTEMS INDICATED ON THE DRAWINGS.

H. MINIMUM RACEWAY TRADE SIZE SHALL BE 0.5" (16 MM) AND MINIMUM CONDUIT TRADE SIZE SHALL BE 0.75" (21 MM), UNLESS OTHERWISE INDICATED. EXCEPT WHERE SURFACE MOUNTED RACEWAY IS INDICATED, ALL RACEWAY SHALL BE CONCEALED WHEN INSTALLED BELOW 8' AFF. ALL EXPOSED CONDUIT SHALL BE EMT, EXCEPT WHERE EXPOSED TO PHYSICAL DAMAGE RMC OR IMC SHALL BE INSTALLED. ALL UNDERGROUND RACEWAYS SHALL BE SCHEDULE 40 PVC CONDUIT, EXCEPT WHERE EXPOSED TO PHYSICAL DAMAGE SCHEDULE 80 PVC CONDUIT SHALL BE INSTALLED. RMC ELBOWS SHALL BE PROVIDED AT ANY POINT WHERE AN UNDERGROUND RACEWAY PENETRATES THE CONCRETE FLOOR TO PREVENT DAMAGE DURING INSTALLATION. PROVIDE EXPANSION FITTINGS FOR ALL RACEWAYS CROSSING EXPANSION JOINTS.

I. TYPES NM, NMC OR NMS (ROMEX CABLE) SHALL NOT BE USED OR PERMITTED WITHOUT HAVING SPECIFIC WRITTEN APPROVAL TO DO SO. TYPE MC MAY BE PERMITTED TO BE INSTALLED FROM THE LAST JUNCTION BOX TO EACH BRANCH OUTLET UPON, APPROVAL FROM THE ENGINEER.

J. ALL CONDUIT CONNECTIONS SHALL BE MADE USING SLEEVES, UNIONS, COUPLINGS OR CONNECTORS. EMT COUPLINGS AND CONNECTORS SHALL BE STEEL, SET-SCREW OR COMPRESSION TYPE. DIE CAST SHALL NOT BE USED. COMPRESSION GLAND- TYPE CONNECTORS AND COUIPLINGS SHALL BE USED FOR EMT INSTALLED IN DAMP OR WET LOCATIONS.

K. PROPERLY IDENTIFY ALL NEW PANELBOARDS, DISTRIBUTION BOARDS, DISCONNECT SWITCHES, TRANSFER SWITCHES, SWITCHBOARDS AND OTHER DEVICES, GEAR AND EQUIPMENT WITH LAMINATED LABELS, AS REQUIRED BY SPECIFICATIONS. PROVIDE TYPEWRITTEN SCHEDULES FOR ALL NEW PANELBOARDS, DISTRIBUTION BOARDS AND SWITCHBOARDS AND UPDATE SCHEDULES IN EXISTING GEAR WITH NEW TYPEWRITTEN SCHEDULES.

L. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR ANY WALLS, CEILINGS, ETC. THAT HAS BEEN DAMAGED DURING THE CONSTRUCTION. REPAIR UTILIZING MATCHING MATERIALS, AND WORK SHALL BE DONE IN A PROFESSIONAL MANNER. SEAL ALL CONDUIT PENETRATIONS WITH APPROVED FIRE RATED MATERIALS AS TO MAINTAIN FIREWALL RATING. REFER TO ARCHITECTURAL DRAWINGS FOR THE LOCATIONS OF ALL FIRE RATED WALLS.

M. CONTRACTOR SHALL COORDINATE AND VERIFY WIRING REQUIREMENTS FOR ALL EQUIPMENT PRIOT TO ROUGH-IN USING WIRING DIAGRAMS SUPPLIED BY EQUIPMENT VENDOR AND SUPPLIERS. ANY ROUGH-IN OR WIRING WORK THAT IS NOT INSTALLED PER THE MANUFACTURERS INSTRUCTIONS, SHALL BE CORRECTED AT NO EXPENSE TO THE OWNER. CONTRACTOR SHALL FOLLOW MANUFACTURES DIRECTIONS FOR INSTALLATION.

N. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS DOCUMENTING ANY AND ALL CHANGES THAT HAVE BEEN MADE AS PART OF THIS CONTRACT. PROVIDE UPDATED TYPEWRITTEN SCHEDULES FOR ALL PANELS AND LABEL ALL PANELS AND EQUIPMENT AS REQUIRED.

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WILLIAM WENTZ — 15999 — 09-08-2023 — KANSAS — PROFESSIONAL ENGINEER

Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

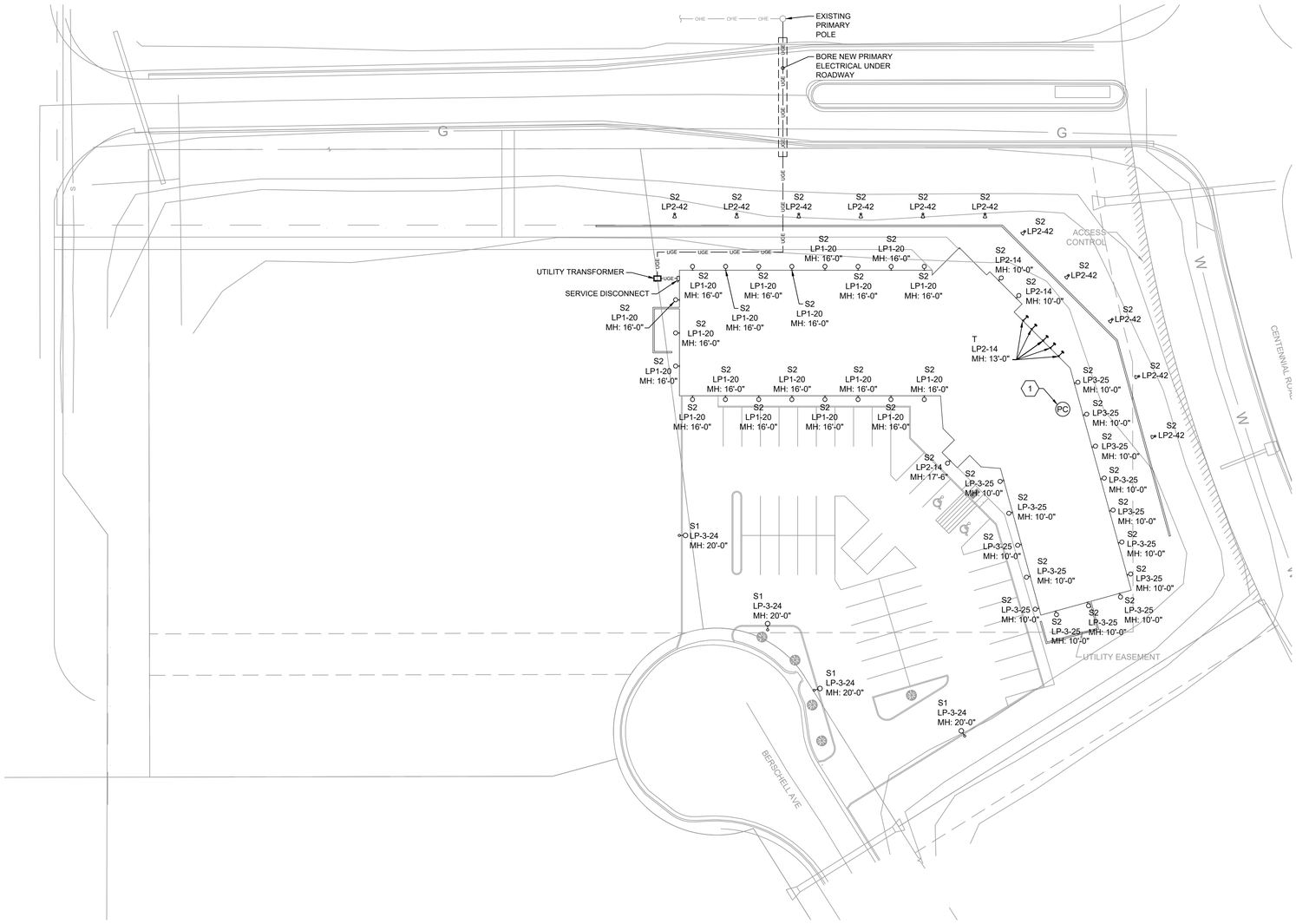
Drawing: ELECTRICAL SYMBOL LEGEND & GENERAL NOTES

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: E-001

DRAWN BY: Mike



ELECTRICAL SITE PLAN

SCALE: 1" = 30' -0"

PLAN NORTH

0' 5' 15' 30' 60'

1" = 30'-0"

GENERAL SHEET NOTES

A. SEE LIGHTING FIXTURE SCHEDULE, SHEET E-701 FOR MORE INFORMATION.

B. SEE ELECTRICAL ONE-LINE DIAGRAM, SHEET E-601 FOR MORE INFORMATION.

SHEET KEYNOTES

1. PROVIDE A ROOF MOUNTED PHOTOCELL FOR CONTROL OF BUILDING EXTERIOR LIGHTING AND PARKING LOT LIGHTS.

Revisions:

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Drawing:

ELECTRICAL SITE PLAN

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:

ES-101

DRAWN BY: Mike

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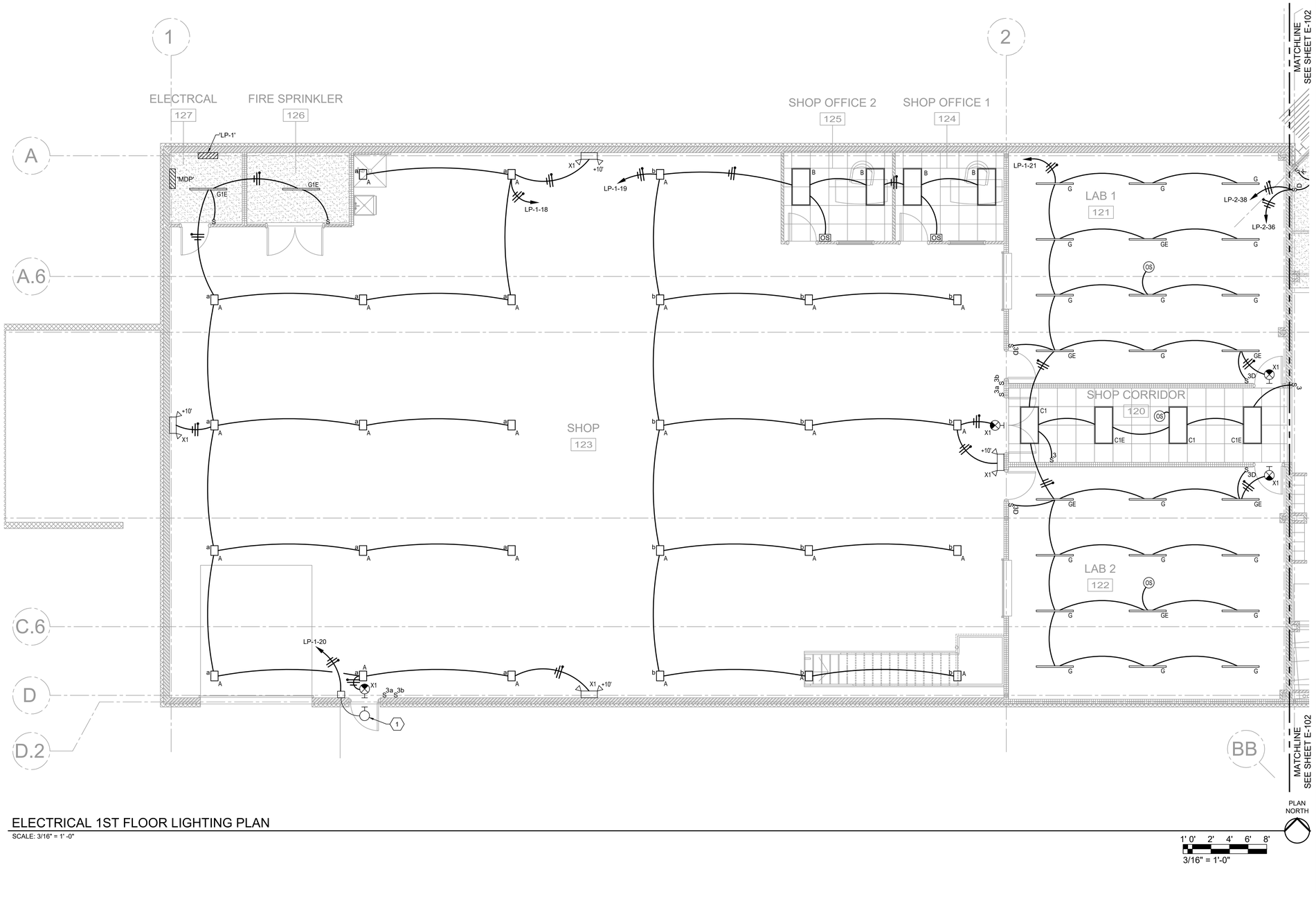

ELECTRICAL 1ST FLOOR LIGHTING PLAN

SCALE: 3/16" = 1' -0"

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET E-001 FOR ELECTRICAL GENERAL NOTES, SYMBOL LEGEND AND ABBREVIATIONS.

B. REFER TO SHEETS E-701 AND E-702 FOR LIGHT FIXTURE & PANEL SCHEDULES.

C. REFER TO ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLAN INFORMATION.

D. ALL CONDUIT ROUTED ON THE INTERIOR OF THE BUILDING SHALL BE EMT CONDUIT WITH #12 THHN CU. WIRE (MIN), UNLESS NOTED OTHERWISE.

E. CONTRACTOR SHALL PROPERLY LABEL ALL WIRE, JUNCTION BOXES AND DEVICES TO IDENTIFY PANEL AND CIRCUIT INFORMATION.

SHEET KEYNOTES

1. PROVIDE BATTERY PACK WITH REMOTE HEAD FOR EMERGENCY LIGHTING AT EXTERIOR EXIT PATH. TIE BATTERY PACK TO CIRCUIT SERVING EXTERIOR WALLPACK, REFER TO SHEET ES101 FOR MORE INFORMATION.

Revisions:

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Salina Area Tech - Industrial
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Salina, Kansas

Drawing:
ELECTRICAL
1ST FLOOR
LIGHTING PLAN

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
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DRAWN BY: Mike

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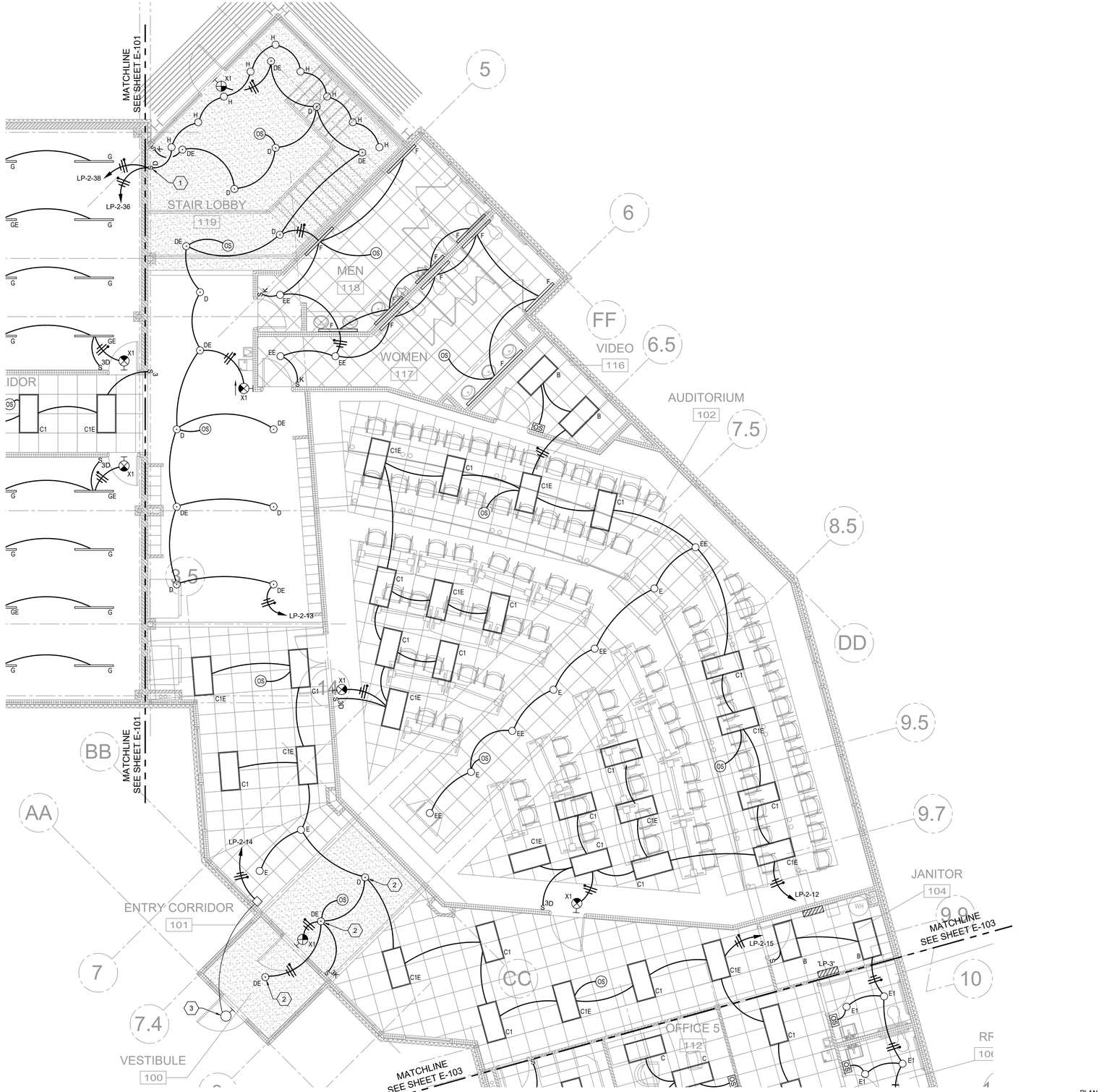

ELECTRICAL 1ST FLOOR LIGHTING PLAN

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET E-001 FOR ELECTRICAL GENERAL NOTES, SYMBOL LEGEND AND ABBREVIATIONS.

B. REFER TO SHEETS E-701 AND E-702 FOR LIGHT FIXTURE & PANEL SCHEDULES.

C. REFER TO ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLAN INFORMATION.

D. ALL CONDUIT ROUTED ON THE INTERIOR OF THE BUILDING SHALL BE EMT CONDUIT WITH #12 THHN CU. WIRE (MIN), UNLESS NOTED OTHERWISE.

E. CONTRACTOR SHALL PROPERLY LABEL ALL WIRE, JUNCTION BOXES AND DEVICES TO IDENTIFY PANEL AND CIRCUIT INFORMATION.

SHEET KEYNOTES

1. STAIR LOBBY LIGHTING DIMMER CONTROL SWITCH FOR RGB CONTROL AND DIMMING. PROVIDE STICK 2 (STICK-GU2) SUNLITE TOUCH-SENSITIVE INTELLIGENT CONTROL KEYPAD OR APPROVED EQUAL. PROVIDE TWO CIRCUITS PER FIXTURE REQUIREMENTS, ONE FOR DIMMING AND ONE FOR DMX COLOR CONTROL. PROVIDE WITH LOCKABLE COVER. COORDINATE FINAL LOCATION PRIOR TO INSTALLATION.
2. MOUNT FIXTURE TO PENDANT HANG 10'-0" AFF.
3. PROVIDE BATTERY PACK WITH REMOTE HEAD FOR EMERGENCY LIGHTING AT EXTERIOR EXIT PATH. TIE BATTERY PACK TO CIRCUIT SERVING EXTERIOR WALLPACK, REFER TO SHEET ES101 FOR MORE INFORMATION.

Revisions:

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ELECTRICAL
1ST FLOOR
LIGHTING PLAN

Date:
09-08-23

Project Number:
23-014

SHEET NUMBER:
E-102

DRAWN BY: Mike

WILSON & COMPANY
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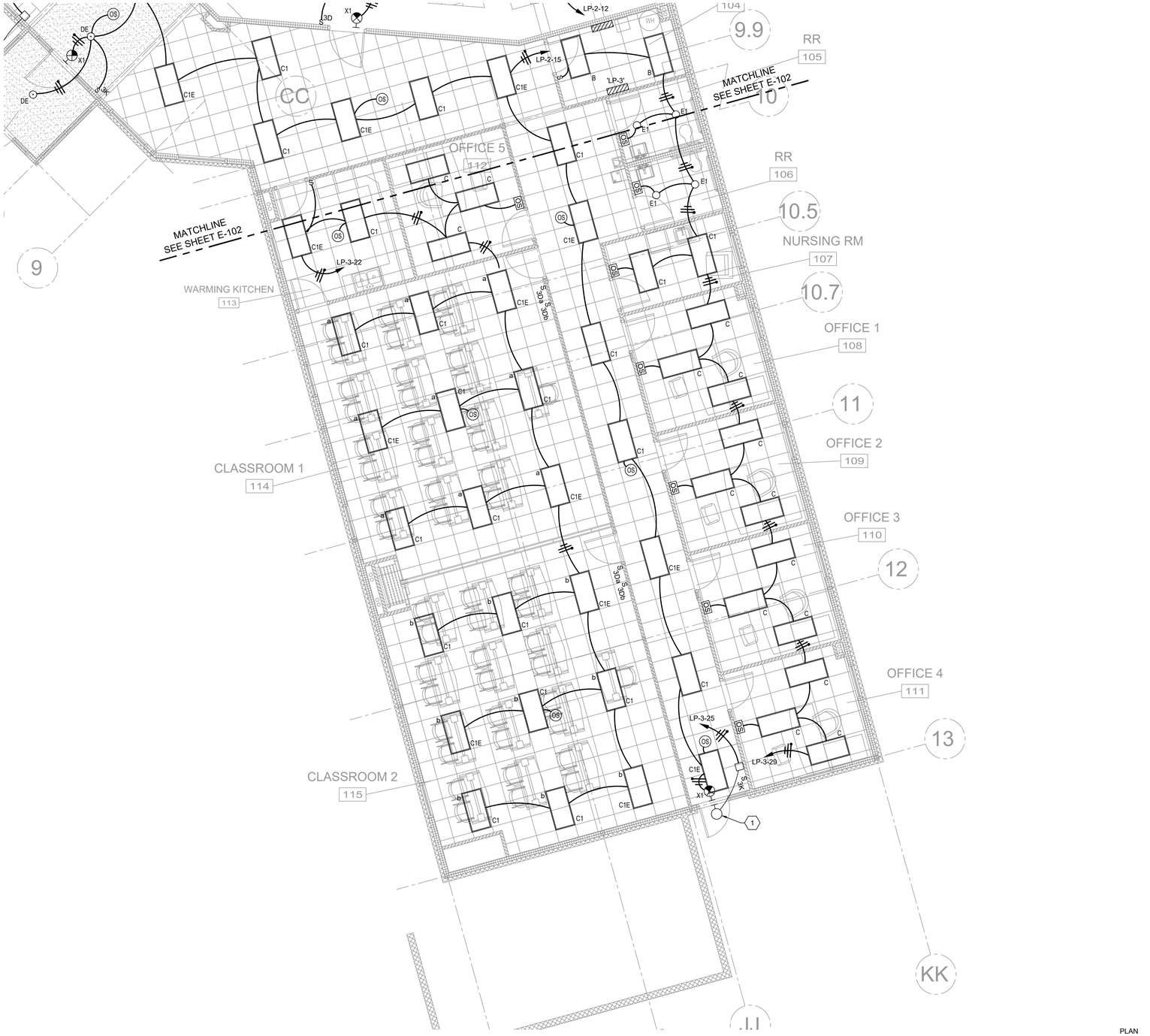

ELECTRICAL 1ST FLOOR LIGHTING PLAN

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET E-001 FOR ELECTRICAL GENERAL NOTES, SYMBOL LEGEND AND ABBREVIATIONS.

B. REFER TO SHEETS E-701 AND E-702 FOR LIGHT FIXTURE & PANEL SCHEDULES.

C. REFER TO ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLAN INFORMATION.

D. ALL CONDUIT ROUTED ON THE INTERIOR OF THE BUILDING SHALL BE EMT CONDUIT WITH #12 THHN CU. WIRE (MIN), UNLESS NOTED OTHERWISE.

E. CONTRACTOR SHALL PROPERLY LABEL ALL WIRE, JUNCTION BOXES AND DEVICES TO IDENTIFY PANEL AND CIRCUIT INFORMATION.

SHEET KEYNOTES

1. PROVIDE BATTERY PACK WITH REMOTE HEAD FOR EMERGENCY LIGHTING AT EXTERIOR EXIT PATH. TIE BATTERY PACK TO CIRCUIT SERVING EXTERIOR WALLPACK, REFER TO SHEET ES101 FOR MORE INFORMATION.

Revisions:

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WILLIAM WENTZ 15999 09-08-2023 KANSAS PROFESSIONAL ENGINEER

Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing:
ELECTRICAL
1ST FLOOR
LIGHTING PLAN

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
E-103

DRAWN BY: Mike

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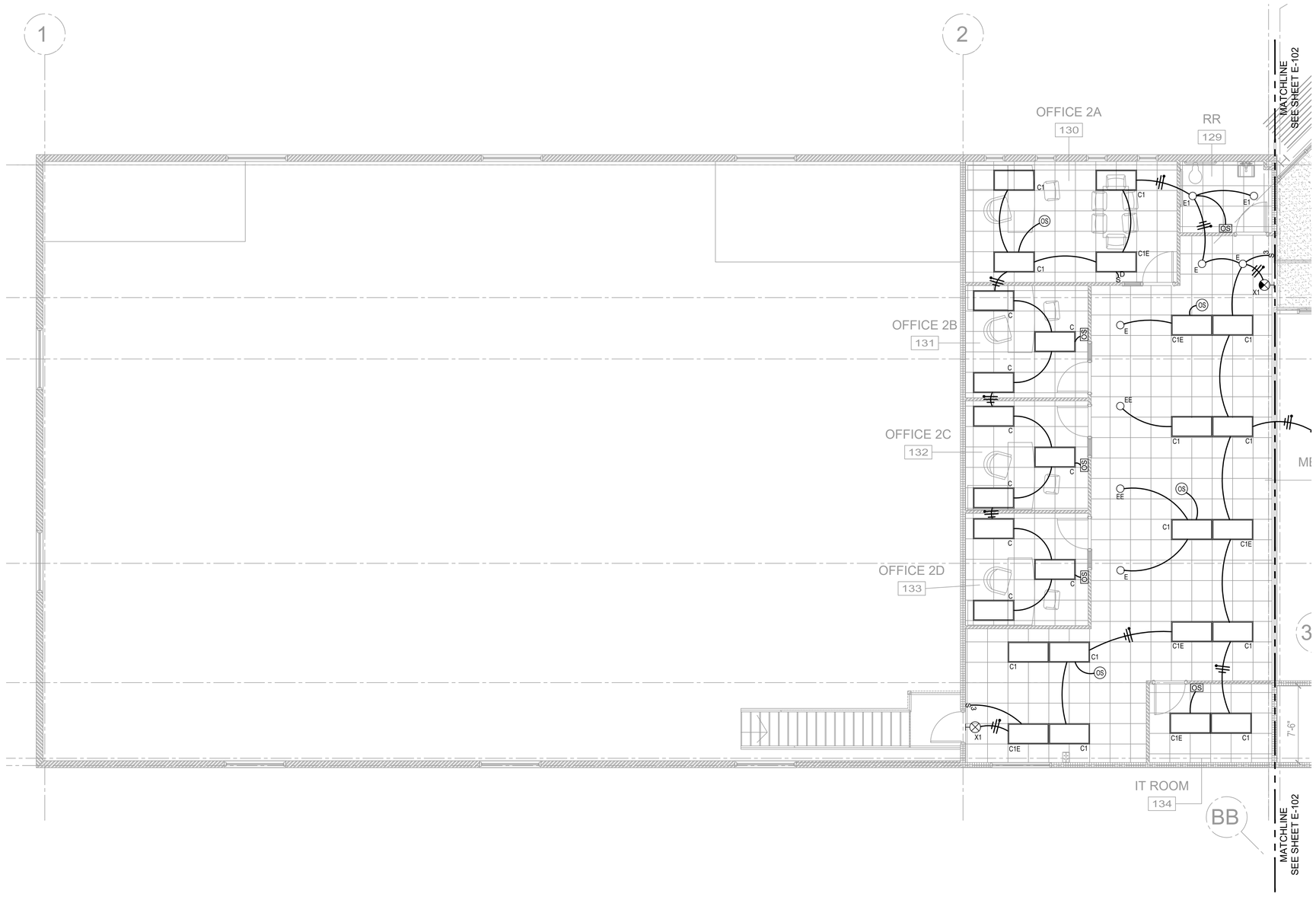

ELECTRICAL 2ND FLOOR LIGHTING PLAN

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET E-001 FOR ELECTRICAL GENERAL NOTES, SYMBOL LEGEND AND ABBREVIATIONS.

B. REFER TO SHEET E-701 FOR LIGHT FIXTURE & PANEL SCHEDULES.

C. REFER TO ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLAN INFORMATION.

D. ALL CONDUIT ROUTED ON THE INTERIOR OF THE BUILDING SHALL BE EMT CONDUIT WITH #12 THHN CU. WIRE (MIN), UNLESS NOTED OTHERWISE.

E. CONTRACTOR SHALL PROPERLY LABEL ALL WIRE, JUNCTION BOXES AND DEVICES TO IDENTIFY PANEL AND CIRCUIT INFORMATION.

SHEET KEYNOTES

1. N/A.

Revisions:

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Salina, Kansas

Drawing:

ELECTRICAL
2ND FLOOR
LIGHTING PLAN

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:

E-104

DRAWN BY: Mike

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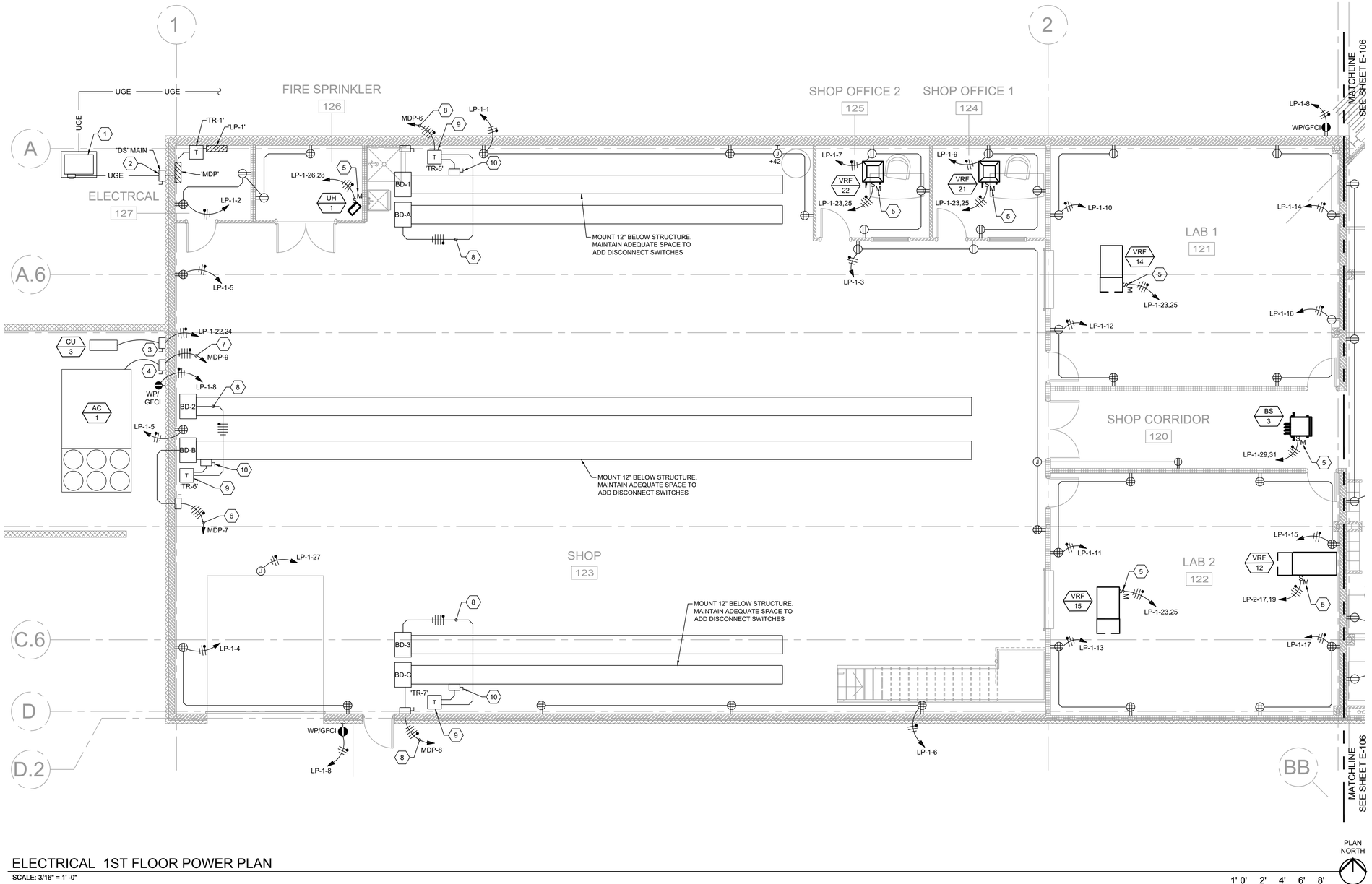

ELECTRICAL 1ST FLOOR POWER PLAN

SCALE: 3/16" = 1'-0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET E-001 FOR ELECTRICAL GENERAL NOTES, SYMBOL LEGEND AND ABBREVIATIONS.

B. REFER TO SHEETS E-701 AND E-702 FOR PANEL SCHEDULES.

C. REFER TO SHEET E-601 FOR ONE-LINE DIAGRAM.

D. ALL CONDUIT ROUTED ON THE INTERIOR OF THE BUILDING SHALL BE EMT CONDUIT WITH #12 THHN CU. (MIN.), UNLESS OTHERWISE NOTED.

E. LOCATIONS OF ELECTRICAL EQUIPMENT AND ALL OTHER DEVICES SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY EXACT LOCATIONS OF ALL EQUIPMENT.

F. CONTRACTOR SHALL PROPERLY LABEL ALL CONDUIT, WIRE, JUNCTION BOXES, DEVICES, ALL EQUIPMENT INSTALLED. LABELS SHALL BE LOCATED AT ALL TERMINATION POINTS TO IDENTIFY PANEL AND CIRCUIT INFORMATION.

G. ALL RECEPTACLE LOCATIONS SHOWN ON PLAN ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF RECEPTACLE BASED ON CURRENT FIELD CONDITIONS AT TIME OF CONSTRUCTION.

H. CONTRACTOR SHALL COORDINATE WITH ALL TRADES PRIOR TO ANY CONSTRUCTION.

I. THE ELECTRICAL CONTRACTOR SHALL INFORM THE OWNER AND THE ELECTRICAL ENGINEER OF ANY PANEL OR CIRCUIT CHANGES/CORRECTIONS MADE DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE THAT INFORMATION AND COORDINATE AS NEEDED.

J. ALL RECEPTACLES SHALL BE 20A DUPLEX (NEMA 5-20), UNLESS OTHERWISE INDICATED ON PLANS.

K. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND PLACE A COPY OF THE NEW PANEL SCHEDULE IN EACH PANEL THAT ARE BEING UTILIZED AND INSTALLED. INFORMATION SHOULD BE TYPED, LEGIBLE AND MATCH WHAT HAS BEEN INSTALLED IN THE FIELD.

SHEET KEYNOTES

1. UTILITY PAD-MOUNTED TRANSFORMER AND METER. COORDINATE EXACT LOCATION WITH UTILITY COMPANY HAVING JURISDICTION FOR SIZE AND LOCATION.
2. 600A, 3-POLE MAIN DISCONNECT SWITCH.
3. 240V, 30A, NEMA 3R, 2-POLE DISCONNECT SWITCH FOR LOCAL DISCONNECTING MEANS OF MECHANICAL UNIT. COORDINATE EXACT LOCATION WITH MECHANICAL PRIOR TO INSTALLATION.
4. 600V, 60A, NEMA 3R, 3-POLE DISCONNECT SWITCH FOR LOCAL DISCONNECTING MEANS OF MECHANICAL UNIT. COORDINATE EXACT LOCATION WITH MECHANICAL PRIOR TO INSTALLATION.
5. 2-POLE MOTOR RATED SNAP SWITCH FOR LOCAL DISCONNECTING MEANS OF MECHANICAL UNIT. COORDINATE EXACT LOCATION WITH MECHANICAL PRIOR TO INSTALLATION.
6. 4#3/0 AND 1#6 GROUND IN 2" C.
7. 4#6 AND 1#10 GROUND IN 3/4" C.
8. 4#1 AND 1#8 GROUND IN 1-1/4" C.
9. MOUNT TRANSFORMER AT 10'-0" AFF. PROVIDE STRUCTURAL SHELF.
10. 70A BUSS DUCT DISCONNECT SWITCH.

Revisions:

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Salina Area Tech - Industrial
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Salina, Kansas

Drawing:
ELECTRICAL
1ST FLOOR
POWER PLAN

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
E-105

DRAWN BY: Mike

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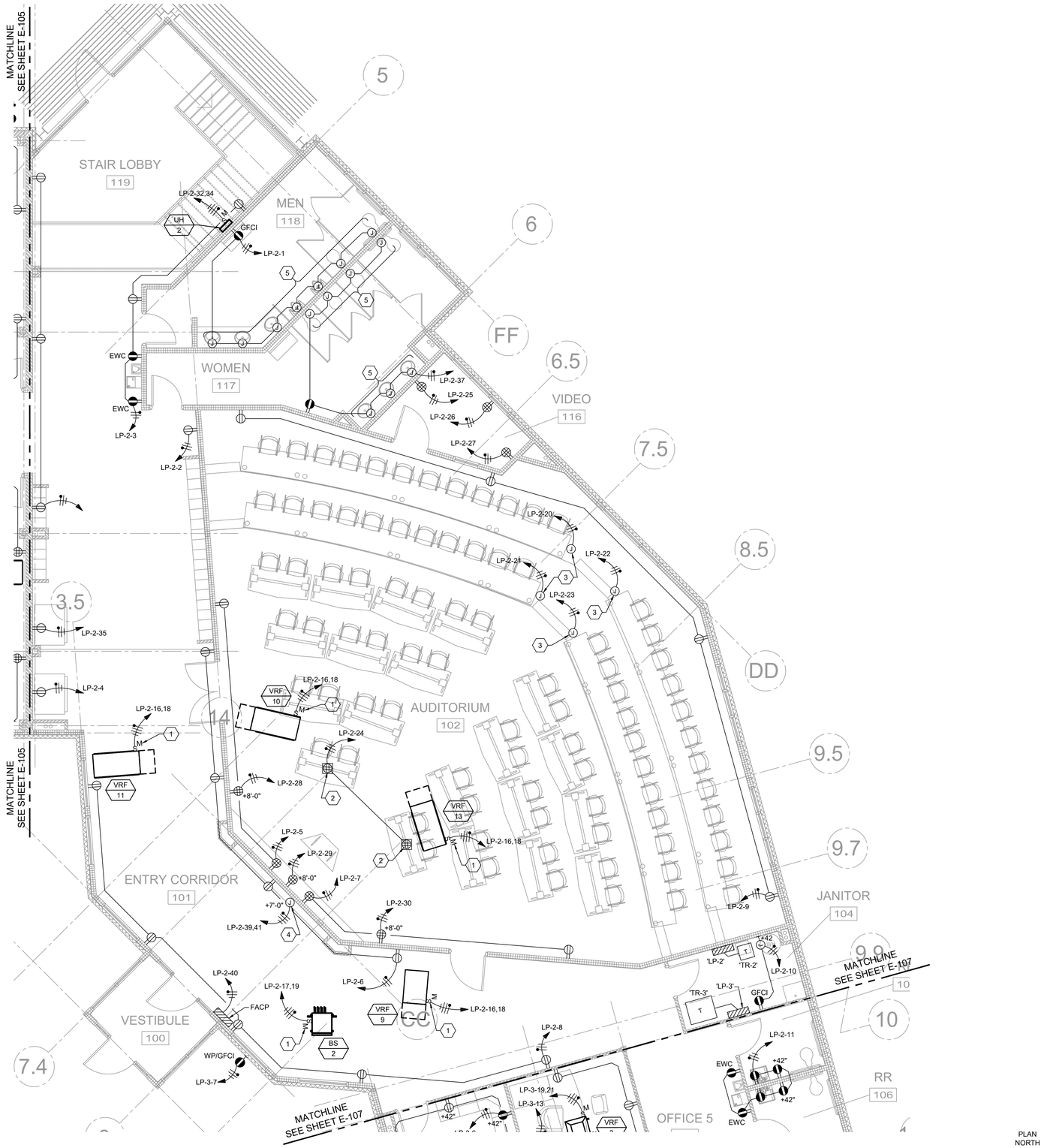

ELECTRICAL 1ST FLOOR POWER PLAN

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET E-001 FOR ELECTRICAL GENERAL NOTES, SYMBOL LEGEND AND ABBREVIATIONS.

B. REFER TO SHEETS E-701 AND E-702 FOR PANEL SCHEDULES.

C. REFER TO SHEET E-601 FOR ONE-LINE DIAGRAM.

D. ALL CONDUIT ROUTED ON THE INTERIOR OF THE BUILDING SHALL BE EMT CONDUIT WITH #12 THHN CU. (MIN.), UNLESS OTHERWISE NOTED.

E. LOCATIONS OF ELECTRICAL EQUIPMENT AND ALL OTHER DEVICES SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY EXACT LOCATIONS OF ALL EQUIPMENT.

F. CONTRACTOR SHALL PROPERLY LABEL ALL CONDUIT, WIRE, JUNCTION BOXES, DEVICES, ALL EQUIPMENT INSTALLED. LABELS SHALL BE LOCATED AT ALL TERMINATION POINTS TO IDENTIFY PANEL AND CIRCUIT INFORMATION.

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SHEET KEYNOTES

1. 2-POLE MOTOR RATED SNAP SWITCH FOR LOCAL DISCONNECTING MEANS OF MECHANICAL UNIT. COORDINATE EXACT LOCATION WITH MECHANICAL PRIOR TO INSTALLATION.
2. IN-FLOOR QUADRAPLEX RECEPTACLE FOR POWERED FURNITURE, COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
3. IN-FLOOR JUNCTION BOX FOR CONNECTION TO POWERED FURNITURE, COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
4. JUNCTION BOX FOR TELEVISION. COORDINATE WITH A/V INSTALLER AND OWNER FOR POWER PROVISIONS OF TELEVISION. 2700W, 120-240V. REFER TO SHEET E-602 FOR PANEL SCHEDULE; 2-POLE SPACE IS CURRENTLY PROVIDED SHOULD 208V, 1PH BE AVAILABLE.
5. JUNCTION BOX FOR PLUMBING FIXTURE AUTO FLUSH/FAUCET POWER.

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Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing:
ELECTRICAL
1ST FLOOR
POWER PLAN

Date:
09-08-23

Project Number:
23-014

SHEET NUMBER:
E-106

DRAWN BY: Mike

ELECTRICAL 1ST FLOOR POWER PLAN

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET E-001 FOR ELECTRICAL GENERAL NOTES, SYMBOL LEGEND AND ABBREVIATIONS.

B. REFER TO SHEETS E-701 AND E-702 FOR PANEL SCHEDULES.

C. REFER TO SHEET E-601 FOR ONE-LINE DIAGRAM.

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SHEET KEYNOTES

1. 2-POLE MOTOR RATED SNAP SWITCH FOR LOCAL DISCONNECTING MEANS OF MECHANICAL UNIT. COORDINATE EXACT LOCATION WITH MECHANICAL PRIOR TO INSTALLATION.
2. 4#10 AND 1#10 GROUND IN 3/4" C.
3. 4#6 AND 1#10 GROUND IN 1-1/4" C.

Revisions:

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Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

Drawing:
ELECTRICAL 1ST FLOOR POWER PLAN

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
E-107

DRAWN BY: Mike

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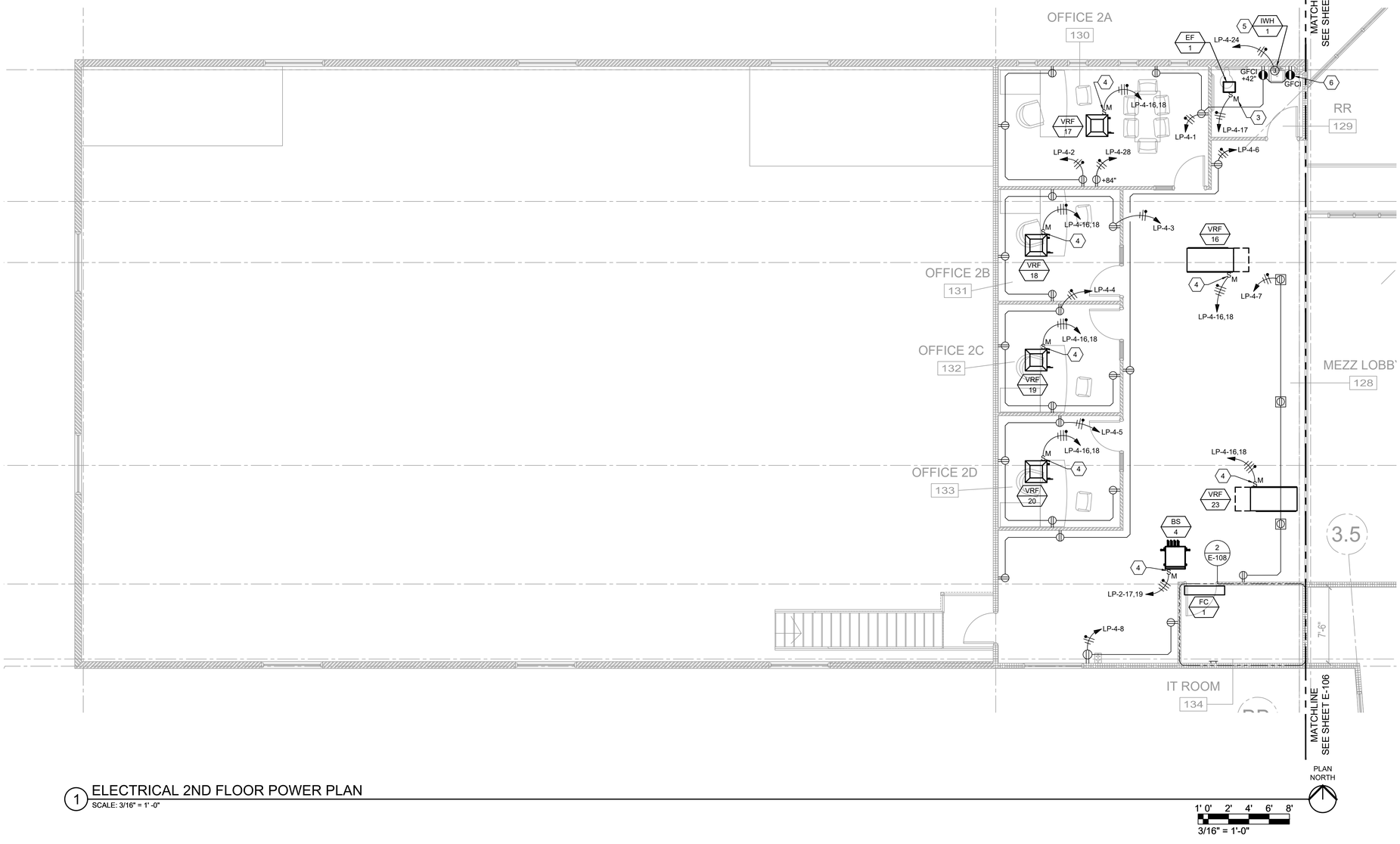
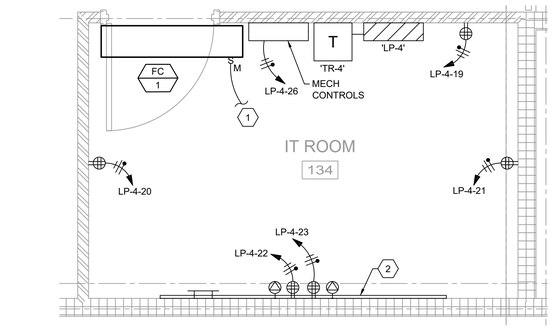


1 ELECTRICAL 2ND FLOOR POWER PLAN
SCALE: 3/16" = 1' -0"

1' 0' 2' 4' 6' 8'
3/16" = 1'-0"



2 ENLARGED IT ROOM POWER PLAN
SCALE: 1/2" = 1' -0"

0' 6" 1' 2' 4'
1/2 = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET E-001 FOR ELECTRICAL GENERAL NOTES, SYMBOL LEGEND AND ABBREVIATIONS.

B. REFER TO SHEET E-701 FOR PANEL SCHEDULE(S).

C. REFER TO SHEET E-601 FOR ONE-LINE DIAGRAM.

D. ALL CONDUIT ROUTED ON THE INTERIOR OF THE BUILDING SHALL BE EMT CONDUIT WITH #12 THHN CU. (MIN.), UNLESS OTHERWISE NOTED.

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SHEET KEYNOTES

1. UNIT FC-1 IS POWERED BY CONDENSING UNIT CU-3, REFER TO M-601 FOR MORE INFORMATION.
2. NEW TELECOMMUNICATIONS BACKBOARD, 4'X8', 3/4" PLYBOARD PAINTED WHITE. VERIFY AND COORDINATE THE FINAL LOCATION OF THE BACKBOARD PRIOR TO INSTALLATION.
3. MOTOR RATED SNAP SWITCH FOR LOCAL DISCONNECTING MEANS OF MECHANICAL UNIT. COORDINATE EXACT LOCATION OF SWITCH WITH MECHANICAL PRIOR TO INSTALLATION.
4. 2-POLE MOTOR RATED SNAP SWITCH FOR LOCAL DISCONNECTING MEANS OF MECHANICAL UNIT. COORDINATE EXACT LOCATION OF SWITCH WITH MECHANICAL PRIOR TO INSTALLATION.
5. JUNCTION BOX FOR DEDICATED CIRCUIT TO INSTANTANEOUS WATER HEATER, COORDINATE LOCATION WITH PLUMBING PRIOR TO INSTALLATION.
6. RECEPTACLE FOR FAUCET SENSOR, COORDINATE LOCATION WITH PLUMBING PRIOR TO INSTALLATION.

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Revisions:

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09-08-2023
KANSAS
PROFESSIONAL ENGINEER

Salina Area Tech - Industrial
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Salina, Kansas

Drawing:
ELECTRICAL
2ND FLOOR
POWER PLAN

Date:
09-08-23

Project Number:
23-014

SHEET NUMBER:
E-108

DRAWN BY: Mike

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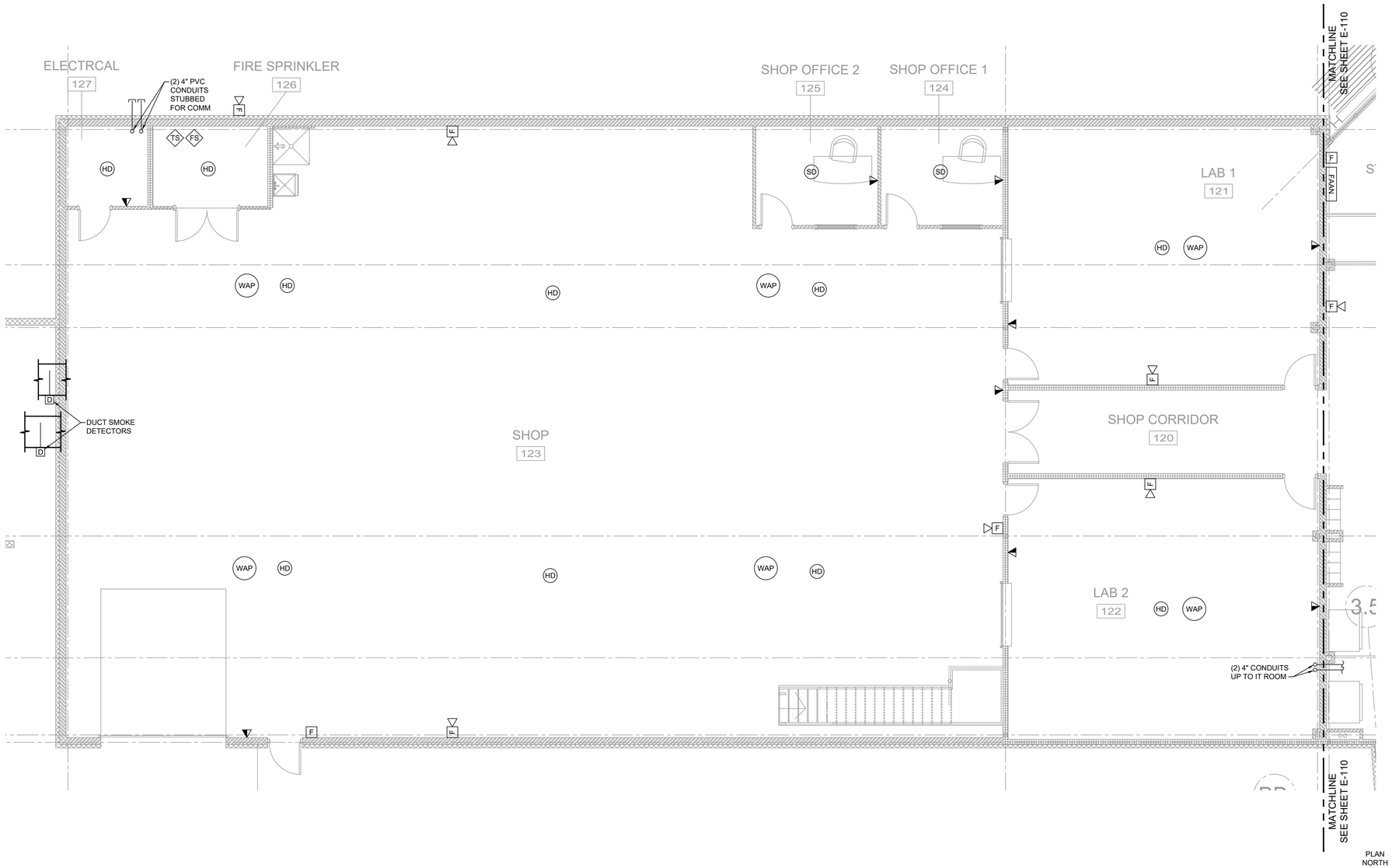

ELECTRICAL 1ST FLOOR SPECIAL SYSTEM PLAN

SCALE: 3/16" = 1' -0"

GENERAL SHEET NOTES

A. REFER TO SHEET E-001 FOR ELECTRICAL GENERAL NOTES, SYMBOL LEGEND AND ABBREVIATIONS.

B. FIRE ALARM SYSTEM RACEWAY SHALL BE 1 1/4" CONDUIT, UNLESS NOTED OTHERWISE.

C. ALL FIRE ALARM DEVICES ARE TO BE FURNISHED AND INSTALLED BY CONTRACTOR. EXACT LOCATIONS OF DEVICES SHALL BE VERIFIED PRIOR TO INSTALLATION AND COORDINATED WITH THE OTHER TRADES AS NEEDED.

D. CONTRACTOR SHALL COORDINATE WITH THE LOCAL TELEPHONE COMPANY FOR ALL REQUIREMENTS.

E. CONTRACTOR SHALL FIELD VERIFY ALL AREAS INDICATED ON PLAN DRAWINGS PRIOR TO ANY CONSTRUCTION.

F. CONTRACTOR SHALL COORDINATE AND VERIFY ALL REQUIREMENTS REGARDING THE FIRE ALARM SYSTEM WITH OWNER'S FIRE ALARM SYSTEMS REPRESENTATIVES PRIOR TO ANY ROUGH-INS.

G. ALL TELEPHONE SYSTEM RACEWAYS SHALL BE 1 1/4" CONDUIT WITH PULL-STRING FROM OUTLET TO CEILING SPACE.

H. CONTRACTOR SHALL PROPERLY LABEL ALL WIRE, JUNCTION BOXES AND DEVICES TO IDENTIFY PERTINENT INFORMATION.

SHEET KEYNOTES

1. N/A.

Revisions:

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Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing: ELECTRICAL 1ST FLOOR SPECIAL SYSTEM PLAN

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: E-109

DRAWN BY: Mike

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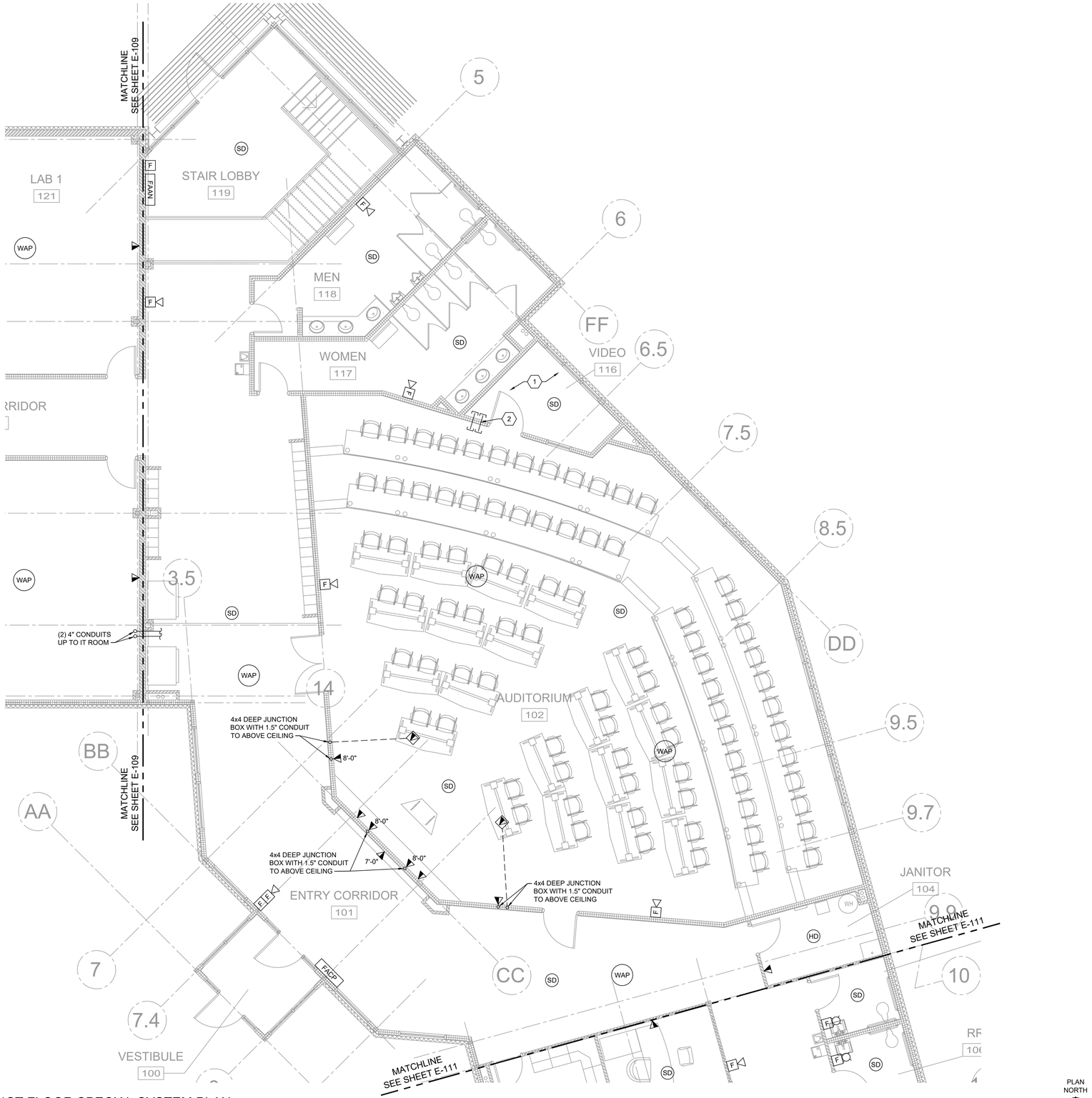

ELECTRICAL 1ST FLOOR SPECIAL SYSTEM PLAN

SCALE: 3/16" = 1' -0"

GENERAL SHEET NOTES

A. REFER TO SHEET E-001 FOR ELECTRICAL GENERAL NOTES, SYMBOL LEGEND AND ABBREVIATIONS.

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G. ALL TELEPHONE SYSTEM RACEWAYS SHALL BE 1 1/4" CONDUIT WITH PULL-STRING FROM OUTLET TO CEILING SPACE.

H. CONTRACTOR SHALL PROPERLY LABEL ALL WIRE, JUNCTION BOXES AND DEVICES TO IDENTIFY PERTINENT INFORMATION.

SHEET KEYNOTES

1. FOR AUDITORIUM PROVIDE CONDUIT PATHWAYS FOR ALL DATA/COMM OUTLETS TO ACCESSIBLE CEILINGS AND OPEN PATHWAYS TO VIDEO ROOM. PROVIDE J-HOOKS FOR CABLING.
2. (2) 4" CONDUITS THRU WALL ABOVE CEILING FOR CABLING.

Revisions:

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09-08-2023
KANSAS
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Salina Area Tech - Industrial
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Salina, Kansas

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ELECTRICAL
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SPECIAL
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Date:
09-08-23

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23-014

SHEET NUMBER:
E-110

DRAWN BY: Mike

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ELECTRICAL 1ST FLOOR SPECIAL SYSTEM PLAN

SCALE: 3/16" = 1' -0"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET E-001 FOR ELECTRICAL GENERAL NOTES, SYMBOL LEGEND AND ABBREVIATIONS.

B. FIRE ALARM SYSTEM RACEWAY SHALL BE 1 1/4" CONDUIT, UNLESS NOTED OTHERWISE.

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D. CONTRACTOR SHALL COORDINATE WITH THE LOCAL TELEPHONE COMPANY FOR ALL REQUIREMENTS.

E. CONTRACTOR SHALL FIELD VERIFY ALL AREAS INDICATED ON PLAN DRAWINGS PRIOR TO ANY CONSTRUCTION.

F. CONTRACTOR SHALL COORDINATE AND VERIFY ALL REQUIREMENTS REGARDING THE FIRE ALARM SYSTEM WITH OWNER'S FIRE ALARM SYSTEMS REPRESENTATIVES PRIOR TO ANY ROUGH-INS.

G. ALL TELEPHONE SYSTEM RACEWAYS SHALL BE 1 1/4" CONDUIT WITH PULL-STRING FROM OUTLET TO CEILING SPACE.

H. CONTRACTOR SHALL PROPERLY LABEL ALL WIRE, JUNCTION BOXES AND DEVICES TO IDENTIFY PERTINENT INFORMATION.

SHEET KEYNOTES

1. N/A.

Revisions:

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WILLIAM MATTHEW WENTZ 15999 09-08-2023 KANSAS PROFESSIONAL ENGINEER

Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing:
ELECTRICAL 1ST FLOOR SPECIAL SYSTEM PLAN

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
E-111

DRAWN BY: Mike

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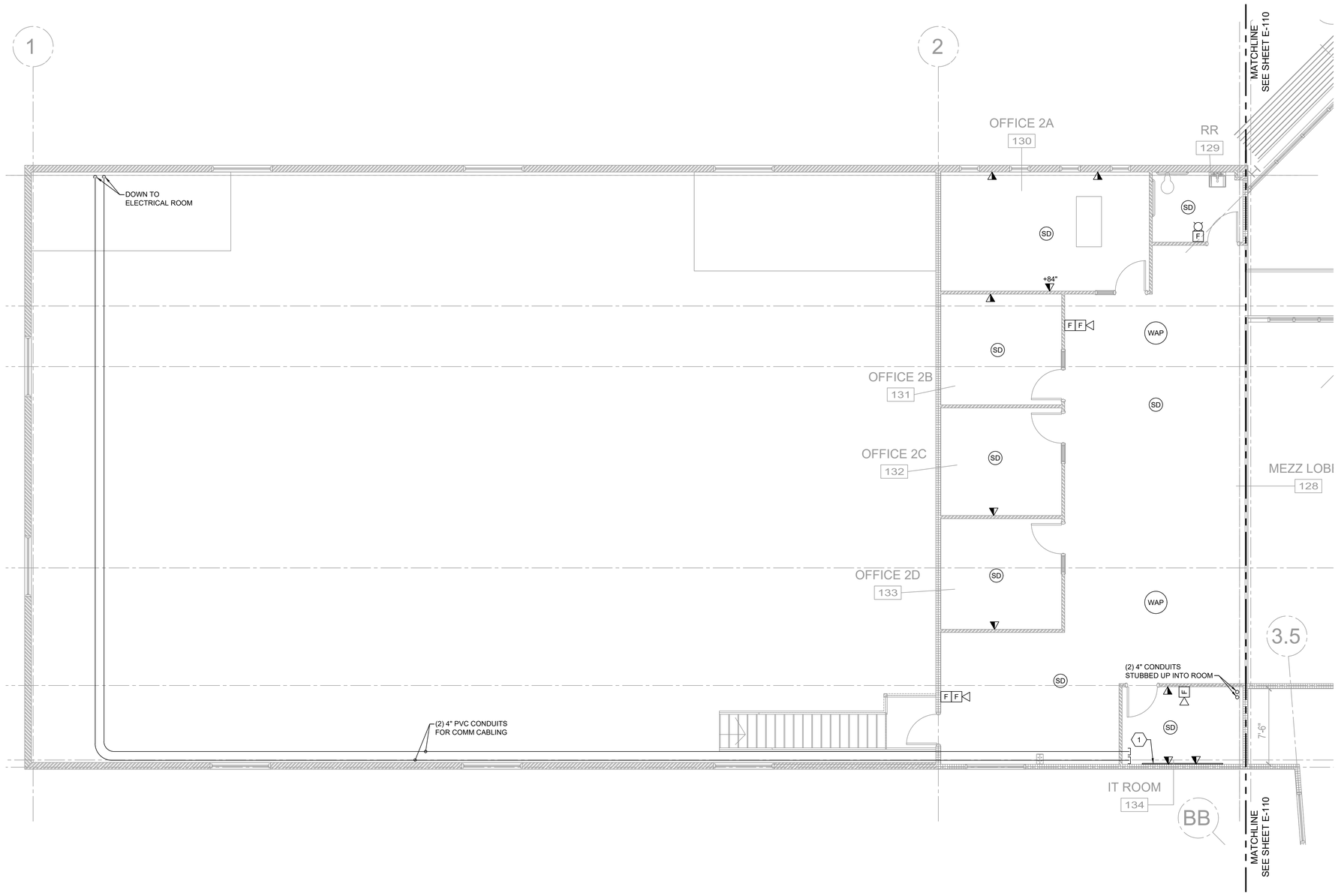

ELECTRICAL 2ND FLOOR SPECIAL SYSTEM PLAN

SCALE: 3/85"=1'-00"

PLAN NORTH

1' 0' 2' 4' 6' 8'

3/16" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET E-001 FOR ELECTRICAL GENERAL NOTES, SYMBOL LEGEND AND ABBREVIATIONS.

B. FIRE ALARM SYSTEM RACEWAY SHALL BE 1 1/4" CONDUIT, UNLESS NOTED OTHERWISE.

C. ALL FIRE ALARM DEVICES ARE TO BE FURNISHED AND INSTALLED BY CONTRACTOR. EXACT LOCATIONS OF DEVICES SHALL BE VERIFIED PRIOR TO INSTALLATION AND COORDINATED WITH THE OTHER TRADES AS NEEDED.

D. CONTRACTOR SHALL COORDINATE WITH THE LOCAL TELEPHONE COMPANY FOR ALL REQUIREMENTS.

E. CONTRACTOR SHALL FIELD VERIFY ALL AREAS INDICATED ON PLAN DRAWINGS PRIOR TO ANY CONSTRUCTION.

F. CONTRACTOR SHALL COORDINATE AND VERIFY ALL REQUIREMENTS REGARDING THE FIRE ALARM SYSTEM WITH OWNER'S FIRE ALARM SYSTEMS REPRESENTATIVES PRIOR TO ANY ROUGH-INS.

G. ALL TELEPHONE SYSTEM RACEWAYS SHALL BE 1 1/4" CONDUIT WITH PULL-STRING FROM OUTLET TO CEILING SPACE.

H. CONTRACTOR SHALL PROPERLY LABEL ALL WIRE, JUNCTION BOXES AND DEVICES TO IDENTIFY PERTINENT INFORMATION.

SHEET KEYNOTES

1. 4' x 4' x 3/4" PLYWOOD TELEPHONE BOARD. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.

Revisions:

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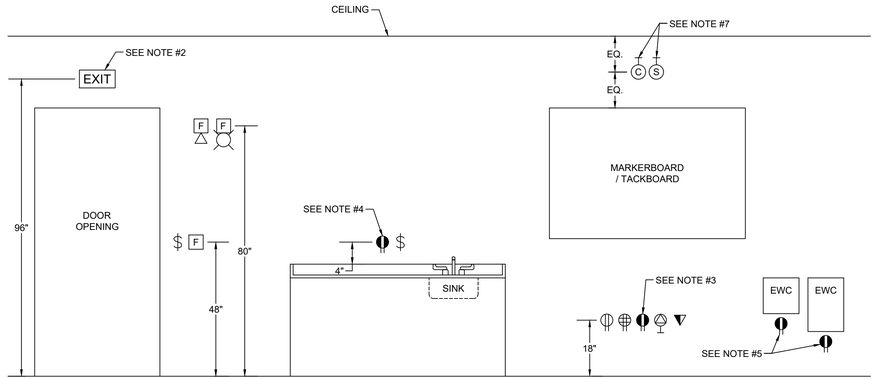


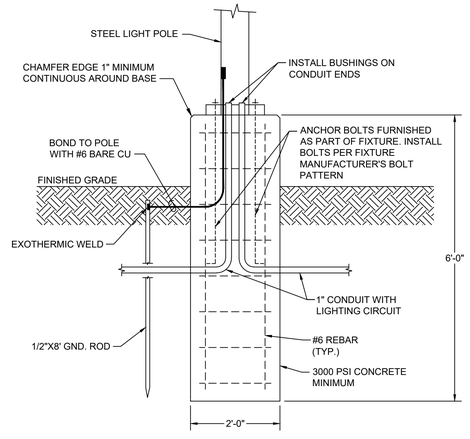
NOTES:

(THIS INFORMATION IS FOR CONTRACTOR ASSISTANCE ONLY. IT IS STILL THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY AND COORDINATE ALL THE MOUNTING HEIGHTS AND LOCATIONS USING ARCHITECTURAL DRAWINGS, MILLWORK AND CASEWORK DETAILS PRIOR TO ANY ROUGH-IN.)

1. THE VERTICAL DIMENSIONS SHALL BE TO CENTER OF DEVICE (TYPICAL) UNLESS NOTED OTHERWISE ON PLANS. (COORDINATE INSTALLATION IN MASONRY WALLS WITH STANDARD BLOCK HEIGHTS).
2. ONLY IN AREAS WHERE CEILING HEIGHT IS 8'-0" OR WHEN A WINDOW IS LOCATED ABOVE THE DOOR, THE EXIT SIGN SHALL BE CEILING MOUNTED. OTHERWISE, WALL MOUNT SIGN ABOVE DOOR AT +96" A.F.F.
3. ALL WALL MOUNTED 125V SINGLE PHASE RECEPTACLES INSTALLED WITHIN 6'-0" OF ANY SINK OR BASIN SHALL HAVE GFCI PROTECTION.
4. ALL 125V SINGLE PHASE RECEPTACLES INSTALLED ABOVE COUNTERTOPS THAT ARE WITHIN 6'-0" OF ANY SINK OR BASIN SHALL HAVE GFCI PROTECTION.
5. DRINKING FOUNTAINS: MOUNT DUPLEX RECEPTACLE CENTERED TO THE FOUNTAIN AND INSTALL SO THAT THE TOP OF THE COVER PLATE IS NO MORE THAN 1/2" BELOW THE FOUNTAIN. (COORDINATE MOUNTING HEIGHT WITH APPROVED SHOP DRAWINGS).
6. FIRE ALARM COMBINATION AUDIO/VISUAL SIGNAL SHALL BE INSTALLED SO THAT THE VISUAL APPLIANCE IS AT +80" A.F.F. OR 6" BELOW CEILING, WHICHEVER IS LOWER. IF A HORN ONLY DEVICE IS INSTALLED, MOUNT THE HORN AT +96" A.F.F.
7. CLOCK/SPEAKER IN LOCATIONS OTHER THAN ABOVE THE MARKER BOARDS AND/OR TACK BOARDS SHALL BE MOUNTED AT +96" A.F.F. UNLESS NOTED OTHERWISE.
8. ALL SWITCHES, PULL STATIONS, DOOR OPENERS, ETC. SHALL BE MOUNTED AT 42" A.F.F. (TO CENTER OF DEVICE) WHEN ADA REQUIREMENTS NEED TO BE MET.

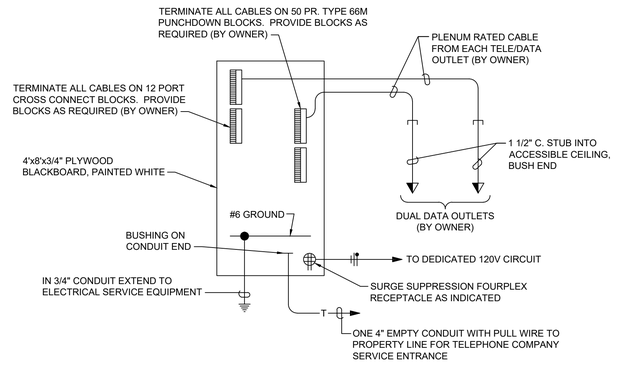
1 TYPICAL DEVICE MOUNTING DETAIL

SCALE: NONE



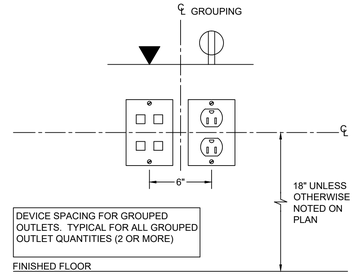
2 LIGHT POLE BASE DETAIL

SCALE: NONE



3 GENERAL DATA/COMM DETAIL

SCALE: NONE



4 GROUPED WALL OUTLETS - TYP. SPACING

SCALE: NONE

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WILLIAM MATTHEW WENTZ 15999 09-08-2023 KANSAS PROFESSIONAL ENGINEER

Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing:

ELECTRICAL
DETAIL
PLAN

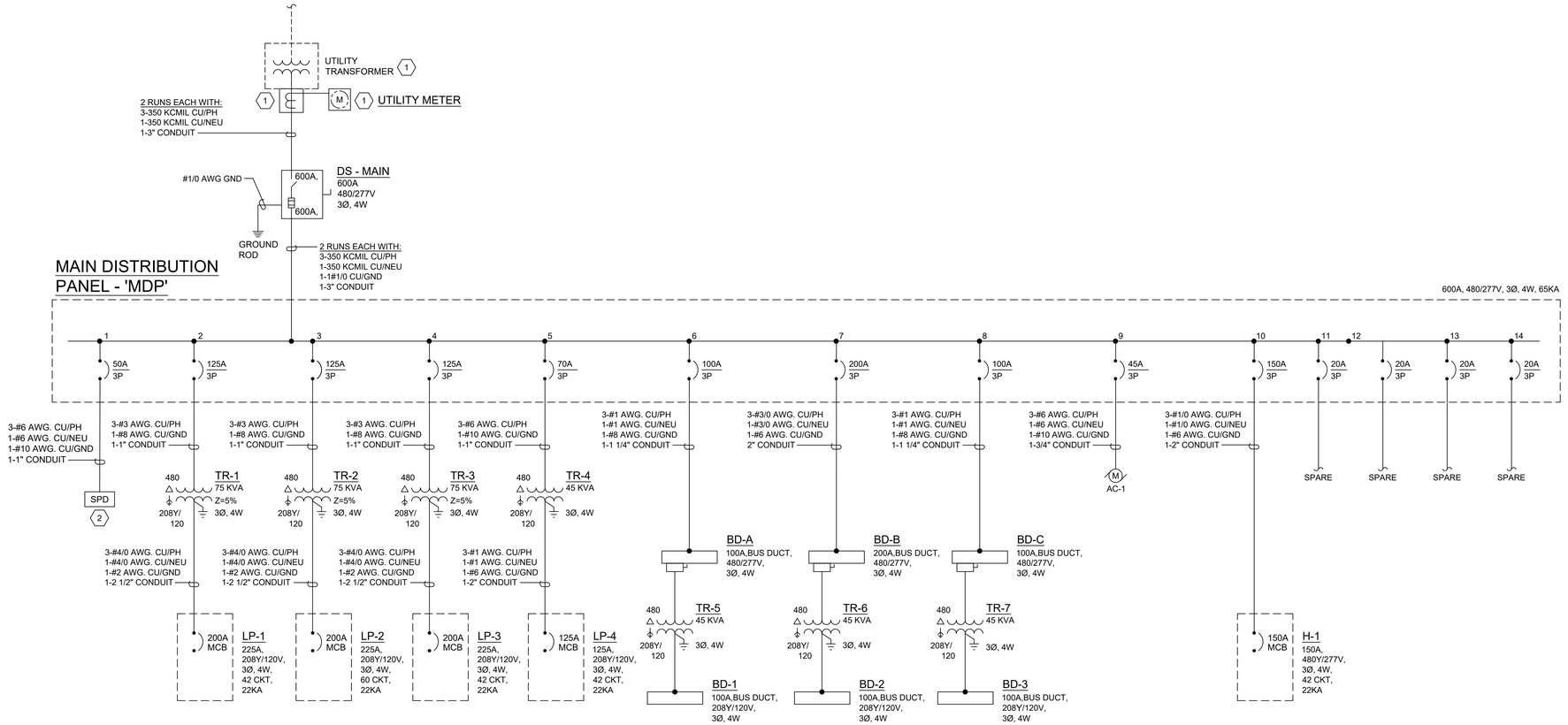
Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:

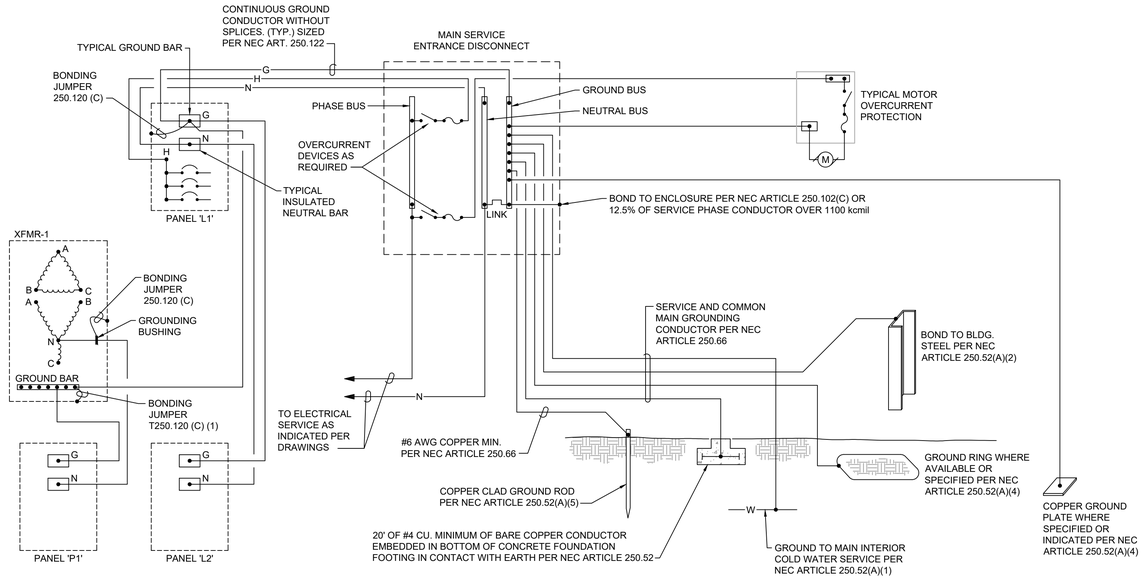
E-501

DRAWN BY: Mike



ELECTRICAL ONE-LINE DIAGRAM

SCALE: NONE



GENERAL GROUNDING DIAGRAM - METHODS OF GROUNDING AND BONDING PER NEC ARTICLE 250

SCALE: NONE

GENERAL SHEET NOTES

A. REFER TO ELECTRICAL PANEL SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

B. ALL OCPD, WIRE AND CONDUIT SIZING SHOWN IS BASED ON PRELIMINARY DESIGN INFORMATION. COORDINATE FINAL SIZING OF ALL EQUIPMENT OCPD, WIRE AND CONDUIT SIZING WITH ALL DISCIPLINES AND ADJUST TO FINAL FIELD EQUIPMENT OCPD SIZE PER MANUFACTURE RECOMMENDATIONS. IF ANY DEVIATIONS ARE DISCOVERED CONTRACTOR SHALL ADJUST OCPD, WIRE AND CONDUIT SIZING AS NEEDED PER NEC REQUIREMENTS WITHOUT ANY ADDITIONAL COST TO OWNER.

C. ALL CONDUITS SHALL BE INSTALLED WITH PLASTIC BUSHINGS UNLESS OTHERWISE REQUIRED BY NEC.

D. ALL WIRING SHALL BE THW COPPER WIRING UNLESS OTHERWISE NOTED. ALL WIRING AMPACITY IS BASED ON 75 DEG C PER NEC.

E. MAXIMUM VOLTAGE DROP SHALL NOT EXCEED 5% FROM SERVICE TO END LOAD. MAXIMUM VOLTAGE DROP FOR ANY FEEDER OR BRANCH CIRCUITS SHALL NOT EXCEED 3%. IF FINAL INSTALLATION OF WIRING EXCEEDS ALLOWABLE VOLTAGE DROP REQUIREMENTS, CONTRACTOR SHALL INCREASE CONDUCTOR SIZE AND CONDUIT TO MEET NEC FILL REQUIREMENTS.

F. PROVIDE ALL ARC FLASH LABELING AS REQUIRED BY NFPA 70 AND 70E FOR ALL EQUIPMENT.

G. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS TO ENGINEER AND OWNER AT COMPLETION OF PROJECT INSTALLATION.

SHEET KEYNOTES

1. CONTRACTOR SHALL INSTALL ALL WIRING AND SERVICE EQUIPMENT. ALL SERVICE EQUIPMENT SHALL BE PRE-APPROVED BY LOCAL UTILITY. FINAL CONNECTIONS SHALL BE MADE BY UTILITY. INSTALL NEW ELECTRICAL SERVICE PER NEC REQUIREMENTS. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY FOR ALL WORK. CONTRACTOR SHALL INCLUDE ALL UTILITY FEES (INCLUDING COST OF TRANSFORMER) AS PART OF COST TO OWNER IN ORIGINAL BID. NO ADDITIONAL COST WILL BE INCURRED BY OWNER.

2. INSTALL EXTERNAL MOUNTED SPD, NEXT TO THE NEW MDP. REFER TO SPECIFICATIONS FOR REQUIREMENTS.

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09-08-2023
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Salina Area Tech - Industrial Maintenance & Automation Building
Salina, Kansas

Drawing: ELECTRICAL ONE-LINE DIAGRAM

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: E-601

DRAWN BY: Mike

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LIGHT FIXTURE SCHEDULE

TYPE	CATALOG NUMBER	DESCRIPTION	MOUNTING	VOLTAGE	LAMP	WATTAGE
A	EATON-METALUX LHBS-1218-UNV-L84050-EL20W-REM (OR APPROVED EQUAL)	METALUX LHBS LUMEN SELECT LENSED HIGH BAY AT 12000 LUMENS AND 4000K CCT, WITH 20W EMERGENCY BATTERY PACK	PENDANT/ SUSPENDED	120-277	LED	85.4
B	COOPER LIGHTING 24GR4240D (OR APPROVED EQUAL)	METALUX GR 2X4 LED TROFFER, 4200 LUMENS, 4000K, 0-10V DIMMABLE, .095 #12 ACRYLIC LENS	RECESSED (CLG GRID)	120-277	LED	30.1
C	COOPER LIGHTING 24CZ2-35-UNV-L840-CD1-UNV (OR APPROVED EQUAL)	METALUX 2X4 CRUZE ST LED TROFFER, RIBBED LENS, 3500 LUMENS, 4000K, 0-10V DIMMABLE	RECESSED (CLG GRID)	120-277	LED	27.6
C1	COOPER LIGHTING 24CZ2-40HE-UNV-L840-CD1-UNV (OR APPROVED EQUAL)	METALUX 2X4 CRUZE ST LED TROFFER, RIBBED LENS, 4000 LUMENS, HIGH EFFICIENCY, 4000K, 0-10V DIMMABLE	RECESSED (CLG GRID)	120-277	LED	30.7
C1E	COOPER LIGHTING 24CZ2-40HE-UNV-L840-CD1-UNV-EL14W (OR APPROVED EQUAL)	METALUX 2X4 CRUZE ST LED TROFFER, RIBBED LENS, 4000 LUMENS, HIGH EFFICIENCY, 4000K, 0-10V DIMMABLE. WITH 14W EMERGENCY BATTERY PACK	RECESSED (CLG GRID)	120-277	LED	30.7
D	COOPER LIGHTING LSR8B20D010-EC8B10208035-8LBM3LI (OR APPROVED EQUAL)	PORTFOLIO 8" ROUND CYLINDER, PENDANT MOUNT, MEDIUM DISTRIBUTION, 55 DEG CUTOFF, 4000K WITH SPECULAR CLEAR TRIM	PENDANT/ SUSPENDED	120-277	LED	21.3
DE	COOPER LIGHTING LSR8B20D010-EC8B10208035-8LBM3LI-EM14 (OR APPROVED EQUAL)	PORTFOLIO 8" ROUND CYLINDER, PENDANT MOUNT, MEDIUM DISTRIBUTION, 55 DEG CUTOFF, 4000K WITH SPECULAR CLEAR TRIM, WITH 14W EMERGENCY BATTERY PACK	PENDANT/ SUSPENDED	120-277	LED	21.3
E	FLUXWERX TC-05-G-K1-W-S-W1-8-40-A-F2-M (OR APPROVED EQUAL)	PORTAL RECESSED 5.5" DOWNLIGHT, WIDE BEAM, 4000K, 9W, 0-10V DIMMABLE 3%	RECESSED (CLG GRID)	120-277	LED	9.6
EE	FLUXWERX TC-05-G-K1-W-S-W1-8-40-A-F2-M-B (OR APPROVED EQUAL)	PORTAL RECESSED 5.5" DOWNLIGHT, WIDE BEAM, 4000K, 9W, 0-10V DIMMABLE 3%, WITH EMERGENCY BATTERY PACK	RECESSED (CLG GRID)	120-277	LED	9.6
E1	FLUXWERX TC-05-G-K1-W-S-W1-8-40-B-F2-M (OR APPROVED EQUAL)	PORTAL RECESSED 5.5" DOWNLIGHT, WIDE BEAM, 4000K, 12W, 0-10V DIMMABLE 3%	RECESSED (CLG GRID)	120-277	LED	12.6
E1E	FLUXWERX TC-05-G-K1-W-S-W1-8-40-B-F2-M-B (OR APPROVED EQUAL)	PORTAL RECESSED 5.5" DOWNLIGHT, WIDE BEAM, 4000K, 12W, 0-10V DIMMABLE 3%, WITH EMERGENCY BATTERY PACK	RECESSED (CLG GRID)	120-277	LED	12.6
F	COOPER LIGHTING S123DIW-S340D755U840-4F0-1E-UDD-FI (OR APPROVED EQUAL)	NEO-RAY DEFINE 3, DIRECT-INDIRECT, WALL MOUNT LUMINAIRE, 340 LUMENS PER FOOT, FLUSH SATIN DIFFUSER, 755 LUMENS PER FOOT UPLIGHT	SURFACE MTD (WALL)	120-277	LED	30.4
G	COOPER LIGHTING 4LBLED-LD4-6-SYMF-UNV-L840-CD1-UNV (OR APPROVED EQUAL)	METALUX LOW BAY LINEAR, 4FT 6000 LUMENS, SYMMETRIC DISTRIBUTION FROSTED LENS, 4000K, 0-10V DIMMABLE	PENDANT/ SUSPENDED	120-277	LED	42.8
GE	COOPER LIGHTING 4LBLED-LD4-6-SYMF-UNV-L840-CD1-UNV-EM (OR APPROVED EQUAL)	METALUX LOW BAY LINEAR, 4FT 6000 LUMENS, SYMMETRIC DISTRIBUTION FROSTED LENS, 4000K, 0-10V DIMMABLE, WITH EMERGENCY BATTERY PACK	PENDANT/ SUSPENDED	120-277	LED	42.8
G1E	COOPER LIGHTING 4LBLED-LD4-6-SYMF-UNV-L840-CD1-UNV-EM (OR APPROVED EQUAL)	METALUX LOW BAY LINEAR, 4FT 6000 LUMENS, SYMMETRIC DISTRIBUTION FROSTED LENS, 4000K, 0-10V DIMMABLE, WITH EMERGENCY BATTERY PACK	SURFACE MTD (CEILING)	120-277	LED	42.8
H	H.E. WILLIAMS 8DR-L16/9TC-DIM-120-OM-CS-MWT-N-F1 (OR APPROVED EQUAL)	H.E. WILLIAMS 8" COLOR TUNABLE ARCHITECTURAL DOWNLIGHT, 1600 LUMENS, 0-10V DIMMABLE	RECESSED (GYPBOARD)	120V	LED	8.8 - 35.1
X1	DUAL LITE LES-W-S-R-W-E-I-W	LES SERIES SURFACE MOUNT EDGE-LIT LED EXIT SIGN WITH EMERGENCY BATTERY	SURFACE MTD (WALL)	120-277	LED	3.3
S1	McGRAW-EDISON GLEON-SA4C-740-U-T4FT-BZ-BPC (OR APPROVED EQUAL)	GALLEON POLE MOUNTED SITE FIXTURE, 28,703 LUMENS AND 4000K CCT. PROVIDE COOPER SSS4A20SFN12 POLE	POLE-MOUNTED	120V	LED	225
S2	COOPER LIGHTING 9003-W2-RW-LED4080-W-W-BZ-L2-UNV-RSM (OR APPROVED EQUAL)	WALL MOUNTED UP/DOWN CYLINDRICAL ARCHITECTURAL LIGHT FIXTURE, 1368 LUMENS, 4000K	SURFACE MTD (WALL)	120V	LED	20
T	COOPER LIGHTING 1003-SU2-RCS-RW-LED 4080-M-WT-24-L1-UNV-RSM-WIS (OR APPROVED EQUAL)	WALL MOUNTED SIGN LIGHTING FIXTURE, 1442 LUMENS, 4000K, DUAL-HEAD ADJUSTABLE	SURFACE MTD (WALL)	120V	LED	20
W	COOPER LIGHTING HALO GFLS15FSUNVDBZK (OR APPROVED EQUAL)	GROUND MOUNTED SIGN LIGHTING FIXTURE, 1834 LUMENS, 4000K, INTEGRATED PHOTOCELL	GROUND MTD (SPOT)	120V	LED	20

PANEL 'MDP' — LOCATION: ELECTRICAL ROOM — FED FROM: UTILITY XFMR
480/277 VOLT, 3-PHASE, 4-WIRE — 600 AMP BUS, MAIN LUGS ONLY — 65,000 AIC

CT. #	DESCRIPTION	BKR (AMPS)	POLES	LOAD (VA)	TOTAL VA A	TOTAL VA B	TOTAL VA C	LOAD (VA)	POLES	BKR (AMPS)	DESCRIPTION	CT. #
				4430	12814			8384				
1	SPD	50	3	4430		13835		9405	3	125	TR-1 / PANEL LP-1	2
				4430			12031	7601				
				10725	16055			5330				
3	TR-2 / PANEL LP-2	125	3	10768		16131		5363	3	150	TR-3 / PANEL LP-3	4
				10691			15327	4636				
				5422	19278			13856				
5	TR-4 / PANEL LP-4	70	3	7294		21150		13856	3	100	BD-A (BUS DUCT)	6
				6976			20832	13856				
				27712	41568			13856				
7	BD-B (BUS DUCT)	200	3	27712		41568		13856	3	100	BD-C (BUS DUCT)	8
				27712			41568	13856				
				10531	39629			29098				
9	UNIT AC-1	45	3	10531		39629		29098	3	150	PANEL H-1	10
				10531			39629	29098				
11	SPARE	20	3		0							
						0			3	20	SPARE	12
							0					
13	SPARE	20	3		0							
						0			3	20	SPARE	14
							0					
					129344	132313	129387					

TOTAL CONNECTED LOAD (VA): 391043.7

CONNECTED LOAD SUMMARY	
LIGHTING CONNECTED LOAD (VA)	0
RECEPTACLE CONNECTED LOAD (VA)	0
NON-CONTINUOUS CONNECTED LOAD (VA)	391044
KITCHEN CONNECTED LOAD (VA)	0
TOTAL CONNECTED LOAD (kVA)	**391.0**
TOTAL CONNECTED AMPS	**470.4**

DEMAND LOAD SUMMARY	
LIGHTING DEMAND LOAD (VA)	0
RECEPTACLE DEMAND LOAD (VA)	0
NON-CONTINUOUS DEMAND LOAD (VA)	391044
KITCHEN DEMAND LOAD (VA)	0
TOTAL DEMAND LOAD (kVA)	**391.0**
TOTAL DEMAND AMPS	**470.4**

PANEL LP-1 — LOCATION: ELECTRICAL ROOM — FED FROM: MDP VIA TR-1
208/120 VOLT, 3-PHASE, 4-WIRE — 225 AMP BUS, 200 AMP MAIN CKT. BKR. — 22,000 AIC

SECTION 1

CT. #	DESCRIPTION	BKR (AMPS)	POLES	LOAD (VA)	TOTAL VA A	TOTAL VA B	TOTAL VA C	LOAD (VA)	POLES	BKR (AMPS)	DESCRIPTION	CT. #
1	RECEPTS., HIGH BAY	20	1	1260	2340			1080	1	20	RECEPTS., HIGH BAY	2
3	RECEPTS., HIGH BAY	20	1	900		1620		720	1	20	RECEPTS., HIGH BAY	4
5	RECEPT., HIGH BAY	20	1	720			1800	1080	1	20	RECEPTS., HIGH BAY	6
7	RECEPTS., HIGH BAY OFFICE	20	1	540	1080			540	1	20	EXTERIOR RECEPTACLES (GFCI)	8
9	RECEPTS., HIGH BAY OFFICE	20	1	540		900		360	1	20	RECEPTS., LAB #1	10
11	RECEPTS., LAB #2	20	1	720			1260	540	1	20	RECEPTS., LAB #1	12
13	RECEPTS., LAB #2	20	1	720	1080			360	1	20	RECEPTS., LAB #1	14
15	RECEPTS., LAB #2	20	1	720		1260		540	1	20	RECEPTS., LAB #1	16
17	RECEPTS., LAB #2	20	1	720			2004	1284	1	20	LIGHTING - HIGH BAY WEST	18
19	LIGHTING - HIGH BAY EAST	20	1	1235	1615			380	1	20	LIGHTING - HIGH BAY EXTERIOR LIGHTING	20
21	LIGHTING - LABS, HALLWAY	20	1	1157		2925		1768	2	20	CONDENSING UNIT CU-3	22
23	VRF UNITS 12, 14, 15, 21, 22	15	2	707			2475	1768				24
25				707	2207			1500	2	20	UNIT HEATER UH-1	26
27	MOTORIZED OVERHEAD DOOR	20	1	1200		2700		1500				28
29	BRANCH SELECTOR BS-3	15	2	62			62		1	20	SPARE	30
31				62	62				1	20	SPARE	32
33	SPARE	20	1			0			1	20	SPARE	34
35	SPARE	20	1				0		1	20	SPARE	36
37	SPARE	20	1		0				1	20	SPARE	38
39	SPARE	20	1			0			1	20	SPARE	40
41	SPARE	20	1				0		1	20	SPARE	42
					8384	9405	7601					

TOTAL CONNECTED LOAD (VA): 25390.0

CONNECTED LOAD SUMMARY	
LIGHTING CONNECTED LOAD (VA)	4056
RECEPTACLE CONNECTED LOAD (VA)	12060
NON-CONTINUOUS CONNECTED LOAD (VA)	9274
KITCHEN CONNECTED LOAD (VA)	0
TOTAL CONNECTED LOAD (kVA)	**25.4**
TOTAL CONNECTED AMPS	**70.5**

DEMAND LOAD SUMMARY	
LIGHTING DEMAND LOAD (VA)	5070
RECEPTACLE DEMAND LOAD (VA)	11030
NON-CONTINUOUS DEMAND LOAD (VA)	9274
KITCHEN DEMAND LOAD (VA)	0
TOTAL DEMAND LOAD (kVA)	**25.4**
TOTAL DEMAND AMPS	**70.4**

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Revisions:

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WILLIAM WENTZ 15999 09-08-2023 KANSAS PROFESSIONAL ENGINEER

Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing:
ELECTRICAL SCHEDULES

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER:
E-701

DRAWN BY: Mike

PANEL LP-2

LOCATION: MECHANICAL ROOM

FED FROM: MDP VIA TR-2

208/120 VOLT, 3-PHASE, 4-WIRE

225 AMP BUS, 200 AMP MAIN CKT. BKR.

22,000 AIC

SECTION 1

CT. #	DESCRIPTION	BKR (AMPS)	POLES	LOAD (VA)	TOTAL VA A	TOTAL VA B	TOTAL VA C	LOAD (VA)	POLES	BKR (AMPS)	DESCRIPTION	CT. #
1	MENS RR RECEPTS., SENSOR POWER	20	1	780	1320			540	1	20	RECEPTS., N HALLWAY	2
3	EWC, N HALLWAY	20	1	720		1220		500	1	20	RECEPT., VENDING MACHINE	4
5	RECEPTS., AUDITORIUM	20	1	540			1260	720	1	20	RECEPTS., MAIN HALLWAY	6
7	RECEPTS., AUDITORIUM	20	1	540	1440			900	1	20	RECEPTS., MAIN HALLWAY	8
9	RECEPTS., AUDITORIUM, STORAGE	20	1	900		1260		360	1	20	RECEPT. & WATER HEATER	10
11	RECEPTS, RESTROOM SENSORS, EWC	20	1	1080			1831	751	1	20	LIGHTING - AUDITORIUM	12
13	LIGHTING - MAIN HALL WEST, RESTROOMS	20	1	1593	1753			160	1	20	LIGHTING - AUDITORIUM EXTERIOR LTG	14
15	LIGHTING - FOYER AND MAIN HALL	20	1	612		1756		1144	2	15	VRF UNITS 9, 10, 11, 13	16
17	VRF UNIT 12	15	2	1050			2194	1144				18
19				1050	2250			1200	1	20	FLOOR JUNCTION BOX	20
21	FLOOR JUNCTION BOX	20	1	1200		2400		1200	1	20	FLOOR JUNCTION BOX	22
23	FLOOR JUNCTION BOX	20	1	1200			1920	720	1	20	RECEPTACLES - IN-FLOOR	24
25	RECEPTACLE - AV EQUIP	20	1	360	720			360	1	20	RECEPTACLE - AV EQUIP	26
27	RECEPTACLE - AV EQUIP	20	1	360		720		360	1	20	RECEPTACLE - TELEVISION	28
29	RECEPTACLE - TELEVISION	20	1	360			720	360	1	20	RECEPTACLE - TELEVISION	30
31	BRANCH SELECTOR BS-2	15	2	62	1562			1500	2	15	UNIT HEATER UH-2	32
33				62		1562		1500				34
35	RECEPT., VENDING MACHINE	20	1	500			1300	800	1	20	STAIRWELL COLOR LIGHTING CONTROL	36
37	WOMENS RR RECEPTS, SENSOR POWER	20	1	880	1680			800	1	20	STAIRWELL COLOR DIMMING CONTROL	38
39	RECEPTACLE - TELEVISION	20	2	1350		1850		500	1	20	FIRE ALARM CONTROL PANEL	40
41				1350			1466	116	1	20	ACCENT WALL LIGHTING	42
43	SPARE	20	1		0				1	20	SPARE	44
45	SPARE	20	1			0			1	20	SPARE	46
47	SPARE	20	1				0		1	20	SPARE	48
49	SPARE	20	1		0				1	20	SPARE	50
51	SPARE	20	1			0			1	20	SPARE	52
53	SPARE	20	1				0		1	20	SPARE	54
55	SPARE	20	1		0				1	20	SPARE	56
57	SPARE	20	1			0			1	20	SPARE	58
59	SPARE	20	1				0		1	20	SPARE	60
					10725	10768	10691					

TOTAL CONNECTED LOAD (VA) 32184.0

CONNECTED LOAD SUMMARY	
LIGHTING CONNECTED LOAD (VA)	4832
RECEPTACLE CONNECTED LOAD (VA)	14540
NON-CONTINUOUS CONNECTED LOAD (VA)	12812
KITCHEN CONNECTED LOAD (VA)	0
TOTAL CONNECTED LOAD (kVA)	**32.2**
TOTAL CONNECTED AMPS	**89.3**

DEMAND LOAD SUMMARY	
LIGHTING DEMAND LOAD (VA)	6040
RECEPTACLE DEMAND LOAD (VA)	12270
NON-CONTINUOUS DEMAND LOAD (VA)	12812
KITCHEN DEMAND LOAD (VA)	0
TOTAL DEMAND LOAD (kVA)	**31.1**
TOTAL DEMAND AMPS	**86.4**

PANEL LP-3

LOCATION: MECHANICAL ROOM

FED FROM: MDP VIA TR-3

208/120 VOLT, 3-PHASE, 4-WIRE

225 AMP BUS, 200 AMP MAIN CKT. BKR.

22,000 AIC

SECTION 1

CT. #	DESCRIPTION	BKR (AMPS)	POLES	LOAD (VA)	TOTAL VA A	TOTAL VA B	TOTAL VA C	LOAD (VA)	POLES	BKR (AMPS)	DESCRIPTION	CT. #
1	RECEPTS., NURSING ROOM	20	1	360	1080			720	1	20	RECEPTS., CLASSROOMS	2
3	RECEPT., WARMING KITCHEN	20	1	540		1260		720	1	20	RECEPTS., CLASSROOMS	4
5	RECEPT., GARBAGE DISPOSAL	20	1	360			1360	1000	1	20	RECEPT., COFFEE MAKER	6
7	EXTERIOR RECEPTS.	20	1	540	1540			1000	1	20	RECEPT., MICROWAVE	8
9	RECEPTS., OFFICE	20	1	720		1440		720	1	20	RECEPTS., OFFICE	10
11	RECEPTS., OFFICE	20	1	720			1440	720	1	20	RECEPTS., OFFICE	12
13	RECEPTS., OFFICE	20	1	720	1620			900	1	20	RECEPTS., CLASSROOM	14
15	RECEPTACLE - TELEVISION	20	1	360		1260		900	1	20	RECEPTS., CLASSROOM	16
17	RECEPTACLE - TELEVISION	20	1	360			443	83	2	15	BRANCH SELECTOR BS-1	18
19	VRF UNITS 1, 2, 3, 4, 5, 6, 7, 8	15	2	707	790			83				20
21				707		1403		696	1	20	LIGHTING - CLASSROOMS/OFFICE/KITCHEN	22
23	LIGHTING - OFFICES	20	1	493			1393	900	1	20	LIGHTING - PARKING LOT	24
25	LIGHTING - CLASSROOM/OFFICE EXT LTG	20	1	300	300				1	20	SPARE	26
27	SPARE	20	1			0			1	20	SPARE	28
29	SPARE	20	1				0		1	20	SPARE	30
31	SPARE	20	1		0				1	20	SPARE	32
33	SPARE	20	1			0			1	20	SPARE	34
35	SPARE	20	1				0		1	20	SPARE	36
37	SPARE	20	1		0				1	20	SPARE	38
39	SPARE	20	1			0			1	20	SPARE	40
41	SPARE	20	1				0		1	20	SPARE	42
					5330	5363	4636					

TOTAL CONNECTED LOAD (VA) 15329.0

CONNECTED LOAD SUMMARY	
LIGHTING CONNECTED LOAD (VA)	2389
RECEPTACLE CONNECTED LOAD (VA)	11360
NON-CONTINUOUS CONNECTED LOAD (VA)	1580
KITCHEN CONNECTED LOAD (VA)	0
TOTAL CONNECTED LOAD (kVA)	**15.3**
TOTAL CONNECTED AMPS	**42.5**

DEMAND LOAD SUMMARY	
LIGHTING DEMAND LOAD (VA)	2986
RECEPTACLE DEMAND LOAD (VA)	10680
NON-CONTINUOUS DEMAND LOAD (VA)	1580
KITCHEN DEMAND LOAD (VA)	0
TOTAL DEMAND LOAD (kVA)	**15.2**
TOTAL DEMAND AMPS	**42.3**

PANEL LP-4

LOCATION: IT RM, 2ND FLR

FED FROM: MDP VIA XFMR TR-4

208/120 VOLT, 3-PHASE, 4-WIRE

125 AMP BUS, 125 AMP MAIN CKT. BKR.

22,000 AIC

SECTION 1

CT. #	DESCRIPTION	BKR (AMPS)	POLES	LOAD (VA)	TOTAL VA A	TOTAL VA B	TOTAL VA C	LOAD (VA)	POLES	BKR (AMPS)	DESCRIPTION	CT. #
1	RECEPTS., OFFICE/ TOILET, SENSOR PWR	20	1	720	1260			540	1	20	RECEPTS., OFFICE	2
3	RECEPTS., OFFICE	20	1	720		1440		720	1	20	RECEPTS., OFFICE	4
5	RECEPTS., OFFICE	20	1	540			1260	720	1	20	RECEPTS., OPEN AREA	6
7	RECEPTS., OPEN AREA	20	1	720	1080			360	1	20	RECEPTS., OPEN AREA	8
9	RECEPT., IT ROOM (L6-30)	30	2	2496		3036		540	1	20	RECEPTS., IT ROOM	10
11				2496			2856	360	1	20	RECEPT., IT ROOM (QUAD)	12
13	RECEPT., IT ROOM (L5-20)	20	1	1440	1800			360	1	20	RECEPT., IT ROOM (QUAD)	14
15	LIGHTING	20	1	859.7		1536		676	2	15	VRF UNITS 16, 17, 18,19, 20, 23	16
17	EXHAUST FAN EF-1	20	1	24			700	676				18
19	RECEPTACLE - IT ROOM	20	1	360	720			360	1	20	RECEPTACLE - IT ROOM	20
21	RECEPTACLE - IT ROOM	20	1	360		720		360	1	20	RECEPTACLE - IT ROOM	22
23	RECEPTACLE - IT ROOM	20	1	360			2160	1800	1	20	INSTANTANEOUS WATER HEATER IWH-1	24
25	BRANCH SELECTOR BS-4	15	2	62	562			500	1	20	HVAC CONTROL PANEL	26
27				62		562		500	1	20	OFFICE TELEVISION	28
29	SPARE	20	1				0		1	20	SPARE	30
31	SPARE	20	1		0				1	20	SPARE	32
33	SPARE	20	1			0			1	20	SPARE	34
35	SPARE	20	1				0		1	20	SPARE	36
37	SPARE	20	1		0				1	20	SPARE	38
39	SPARE	20	1			0			1	20	SPARE	40
41	SPARE	20	1				0		1	20	SPARE	42
					5422	7294	6976					

TOTAL CONNECTED LOAD (VA) 19691.7

CONNECTED LOAD SUMMARY	
LIGHTING CONNECTED LOAD (VA)	860
RECEPTACLE CONNECTED LOAD (VA)	15032
NON-CONTINUOUS CONNECTED LOAD (VA)	3800
KITCHEN CONNECTED LOAD (VA)	0
TOTAL CONNECTED LOAD (kVA)	**19.7**
TOTAL CONNECTED AMPS	**54.7**

DEMAND LOAD SUMMARY	
LIGHTING DEMAND LOAD (VA)	1075
RECEPTACLE DEMAND LOAD (VA)	12516
NON-CONTINUOUS DEMAND LOAD (VA)	3800
KITCHEN DEMAND LOAD (VA)	0
TOTAL DEMAND LOAD (kVA)	**17.4**
TOTAL DEMAND AMPS	**48.3**

PANEL H-1

LOCATION: MECHANICAL YARD

FED FROM: MDP

480/277 VOLT, 3-PHASE, 4-WIRE

150 AMP BUS, 150 AMP MAIN CKT. BKR.

22,000 AIC

SECTION 1

CT. #	DESCRIPTION	BKR (AMPS)	POLES	LOAD (VA)	TOTAL VA A	TOTAL VA B	TOTAL VA C	LOAD (VA)	POLES	BKR (AMPS)	DESCRIPTION	CT. #
1				10309	14909			4600				2
3	UNIT DOAS-1	50	3	10309		14909		4600	3	20	CONDENSING UNIT CU-1	4
5				10309			14909	4600				6
7				5903	14189			8286				8
9	CONDENSING UNIT CU-1	25	3	5903		14189		8286	3	30	CONDENSING UNIT CU-2	10
11				5903			14189	8286				12
13	SPARE	20	1		0				1	20	SPARE	14
15	SPARE	20	1			0			1	20	SPARE	16
17	SPARE	20	1				0		1	20	SPARE	18
					29098	29098	29098					

TOTAL CONNECTED LOAD (VA) 87294.0

CONNECTED LOAD SUMMARY	
LIGHTING CONNECTED LOAD (VA)	0
RECEPTACLE CONNECTED LOAD (VA)	0
NON-CONTINUOUS CONNECTED LOAD (VA)	87294
KITCHEN CONNECTED LOAD (VA)	0
TOTAL CONNECTED LOAD (kVA)	**87.3**
TOTAL CONNECTED AMPS	**105.0**

DEMAND LOAD SUMMARY	
LIGHTING DEMAND LOAD (VA)	0
RECEPTACLE DEMAND LOAD (VA)	0
NON-CONTINUOUS DEMAND LOAD (VA)	87294
KITCHEN DEMAND LOAD (VA)	0
TOTAL DEMAND LOAD (kVA)	**87.3**
TOTAL DEMAND AMPS	**105.0**

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WILLIAM W. WENTZ 15999 09-08-2023 KANSAS PROFESSIONAL ENGINEER

Salina Area Tech - Industrial
Maintenance & Automation Building
Salina, Kansas

Drawing:

ELECTRICAL SCHEDULES

Date: 09-08-23

Project Number: 23-014

SHEET NUMBER: E-702

DRAWN BY: Mike