BUFF ELEMENTARY SCHOOL IMPROVEMENTS

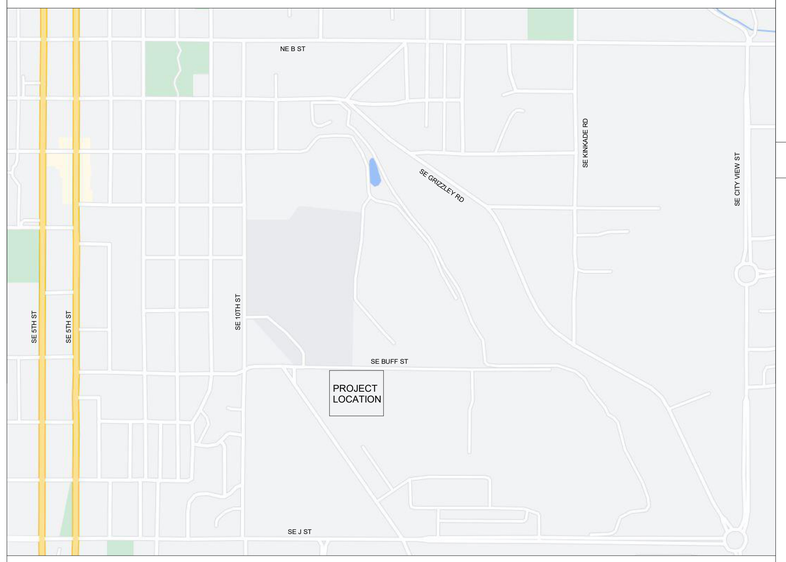
445 SE BUFF STREET, MADRAS, OREGON 97741

JEFFERSON COUNTY SCHOOL DISTRICT (509J)

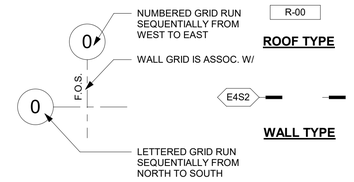
PROJECT DATA

PROJECT ADDRESS:	445 SE BUFF STREET
TAX PARCEL #1:	111312XXXXXXX
PARCEL #1 AREA:	###,### SF (##.## ACRES)
ZONING:	OS
BUILDING USE(S):	ELEMENTARY SCHOOL
BUILDING CODE:	20## OREGON STRUCTURAL SPECIALTY CODE
OCCUPANCY GROUP(S):	EDUCATION (E)
CONSTRUCTION TYPE:	VB
BUILDING AREA:	##,### SF
STORIES:	1
FIRE SPRINKLER:	VERIFY
SEWER DISTRICT:	THE CITY OF MADRAS UTILITIES DEPARTMENT
WATER SOURCE:	THE CITY OF MADRAS UTILITIES DEPARTMENT
POWER SOURCE:	CENTRAL ELECTRIC CO-OP, INC.

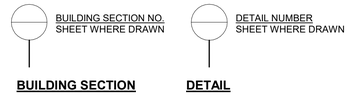
VICINITY MAP



ARCHITECTURAL SYMBOLS



GRID LINES
GRID LINES SHOWS STRUCTURAL BAYS



BUILDING SECTION **DETAIL**

DOOR NO. **WINDOW TYPE** **LOUVER TYPE**

ROOM NUMBER **NORTH ARROW**

ABBREVIATIONS

AB	ANCHOR BOLT	NO	NUMBER
AFF	ABOVE FINISHED FLOOR	NTS	NOT TO SCALE
AL	ALUMINUM	OC	ON CENTER
BD	BOARD	OD	OVERFLOW DRAIN
BFF	BELOW FINISHED FLOOR	OFCI	OWNER FURNISHED / CONTRACTOR INSTALLED
BLDG	BUILDING	OFOI	OWNER FURNISHED / OWNER INSTALLED
BO	BOTTOM OF	OPG	OPENING
CLG	CEILING	OVHD	OVERHEAD
CMU	CONCRETE MASONRY UNIT	PL	PLATE
CONC	CONCRETE	PPM	PRE-PAINTED METAL
CONT	CONTINUOUS	R	RISER
DIA	DIAMETER	RAD	RADIUS
DIM	DIMENSION	RD	ROOF DRAIN
DN	DOWN	REF	REFERENCE
DWG	DRAWING	REINF	REINFORCING
EA	EACH	REQ	REQUIREMENT
ELEV	ELEVATION	SEC	SECTION
EQ	EQUAL	SHTNG	SHEATHING
EXP	EXPANSION	SHT	SHEET
FD	FLOOR DRAIN	SIM	SIMILAR
FE	FIRE EXTINGUISHER	SPEC	SPECIFICATION
FF	FINISHED FLOOR	SQ	SQUARE
FIN	FINISH	STD	STANDARD
FOB	FACE OF BRICK	STL	STEEL
FOC	FACE OF CONCRETE	STRL	STRUCTURAL
FOF	FACE OF FOUNDATION	TEL	TELEPHONE
FOS	FACE OF STUD	TFCI	TENANT FURNISHED / CONTRACTOR INSTALLED
FT	FOOT	TFTI	TENANT FURNISHED / TENANT INSTALLED
GA	GAUGE	TO	TOP OF
GALV	GALVANIZED	TOB	TOP OF BRICK
GYP	GYPSUM	TOC	TOP OF CURB
GWB	GYPSUM WALL BOARD	TOW	TOP OF WALL
HB	HOSE BIB	TYP	TYPICAL
HM	HOLLOW METAL	UNO	UNLESS OTHERWISE NOTED
HR	HOUR	VIF	VERIFY IN FIELD
ID	INSIDE DIAMETER	W/	WITH
INSUL	INSULATION	W/O	WITHOUT
JT	JOINT	WD	WOOD
MAX	MAXIMUM	WP	WATERPROOF
MTL	METAL	WR	WATER RESISTANT
MFR	MANUFACTURER	WT	WEIGHT
MIN	MINIMUM		
MIR	MIRRORED		
NC	NON-COMBUSTIBLE		
NIC	NOT IN CONTRACT		

GENERAL NOTES

1. FIELD VERIFY ALL DIMENSIONS AND LAYOUT PRIOR TO PROCEEDING WITH WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES OR INCONSISTENCIES. FAILURE TO REPORT ANY DISCREPANCIES WITHIN THESE CONSTRUCTION DOCUMENTS TO THE ARCHITECT WILL NOT BE GROUNDS FOR ADDITIONAL COST OR CHANGE ORDERS.
2. "PROVIDE" MEANS "FURNISH AND INSTALL."
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS (UNLESS OTHERWISE NOTED), AND WORKMANSHIP IN ACCORDANCE WITH FEDERAL, STATE, CITY AND LOCAL BUILDING CODES AND THEIR REQUIREMENTS.
4. DO NOT SCALE THE DRAWINGS.

BID ADD-ALTERNATES

1. MECHANICAL WORK AT ROOFS C, D & D AND ASSOCIATED STRUCTURAL AND ELECTRICAL WORK
2. ALL MECHANICAL WORK AT ROOF B AND ASSOCIATED ELECTRICAL WORK

PROJECT TEAM

OWNER:
JEFFERSON COUNTY SCHOOL DISTRICT 509J
1301 BUFF STREET
MADRAS, OR, 97741
CONTACT: SIMON WHITE
541.279.1126

OWNER'S MANAGING CONSULTANT:
TILLER'S SCHOOLHOUSE CONSULTING
21464 HYDE LANE
BEND, OR, 97701
CONTACT: MIKE TILLER
541.550.9431

GENERAL CONTRACTOR / CONSTRUCTION MANAGER:
TBD

ARCHITECT:
BLRB ARCHITECTS
721 SW INDUSTRIAL, SUITE 130
BEND, OR, 97702
CONTACT: HEIDI SLAYBAUGH
541.330.6506

STRUCTURAL ENGINEER:
WALKER STRUCTURAL ENGINEERING P.C.
2863 NW CROSSING DRIVE, SUITE 201
BEND, OR, 97703
CONTACT: FORREST SCHUMATE
541.330.6869

MECHANICAL, ELECTRICAL & PLUMBING ENGINEER:
MORRISON-MAIERLE
1001 SW DISK DRIVE, SUITE 110
BEND, OR, 97702
OFFICE LEADER CONTACT: ERIC J. WEBBER
MECHANICAL CONTACT: DOUG DOWNIE
ELECTRICAL CONTACT: GARTH STEVENS
PLUMBING CONTACT: PATRICK HONSINGER
541.699.5434

SHEET INDEX

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DRAWING REVISIONS

	Description	Date
1		

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

Drawing Title: TITLE SHEET / GENERAL INFORMATION

Drawn By : LCG
Project No. 22140
Date : SEPTEMBER 11, 2023
Revised :

Sheet No.
A0.01

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1 OVERALL SITE PLAN

1/64" = 1'-0" @ FULL SIZE

0' 8' 16' 32'

SITE PLAN GENERAL NOTES

A. SIDEWALKS AND RAMPS SHALL BE CONSTRUCTED TO THE FOLLOWING REQUIREMENTS:
   - MAXIMUM CROSS SLOPE OF SIDEWALKS & LANDINGS: 1:50
   - MAXIMUM SLOPE OF SIDWEALKS 1:20
   - MAXIMUM SLOPE OF RAMPS: 1:12
   - MAXIMUM SLOPE OF DISABLED PARKING STALLS: 2% IN ANY DIRECTION
   - 2% MAXIMUM SLOPE FOR 5'-0" IN DIRECTION OF TRAVEL AT ALL BUILDING ENTRANCES.

B. LIMITS OF WORK: THE CONTRACTOR SHALL CONFINE OPERATIONS AT THE SITE TO AREAS PERMITTED BY LAW, ORDINANCES, PERMITS AND THE CONTRACT DOCUMENTS.

C. STAGING AREA: THE CONTRACTOR AND SUBCONTRACTORS SHALL LIMIT STORAGE OF MATERIALS AND PORTABLE FIELD OFFICES WITHIN THE AREAS APPROVED BY THE AUTHORITY HAVING JURISDICTION.

D. GENERAL CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE OR DISRUPT EXISTING UTILITIES, INCLUDING DRAINS, WHILE EXCAVATING OR GRADING DURING CONSTRUCTION. CONFIRM LOCATION OF EXISTING UTILITIES ON ADJACENT PROPERTIES.

E. PRIOR TO START OF WORK THE CONTRACTOR SHALL COORDINATE WITH EACH RESPECTIVE GOVERNING AUTHORITY IN VERIFYING THE LOCATION (INVERT ELEVATIONS, HORIZONTAL CONTROLS, EASEMENTS) OF EXISTING SANITARY AND STORM SEWER, WATER, NATURAL GAS, ELECTRICAL, FIBER OPTIC, TELEPHONE, OVERHEAD POWER LINES AND OTHER UTILITY SYSTEMS, BOTH ONSITE AND OFFSITE. THE CONTRACTOR SHALL COMPARE UTILITY INFORMATION WITH THE CONTRACT DOCUMENTS. IF A CONSTRUCTION CONFLICT IS DISCOVERED BETWEEN THE UTILITY INFORMATION OBTAINED AND THE CONTRACT DOCUMENTS NOTIFY THE ARCHITECT IMMEDIATELY.

F. EMERGENCY VEHICLE ACCESS: THE CONTRACTOR SHALL MAINTAIN FIRE TRUCK ACCESS TO THE SITE THROUGHOUT THE CONSTRUCTION PROCESS UNLESS AN ALTERNATE PLAN IS APPROVED BY THE FIRE DEPARTMENT.

KEYNOTE LEGEND - SITE PLAN

#	DESCRIPTION

SITE PLAN LEGEND

- PROPERTY BOUNDARY
- BUILDING SETBACK
- UTILITY EASEMENT
- ACCESSIBLE PATH OF TRAVEL TO PUBLIC WAY
- FENCE

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#	Date	Description

BUFF ELEMENTARY SCHOOL IMPROVEMENTS

JEFFERSON COUNTY SCHOOL DISTRICT (509J)

BID SET

Drawing Title: SITE PLAN

Drawn By: LCG

Project No. 22140

Date: SEPTEMBER 11, 2023

Revised :

Sheet No. A1.01

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GENERAL STRUCTURAL NOTES:

THESE DRAWINGS HAVE BEEN PREPARED SOLELY FOR USE IN THE CONSTRUCTION OF BUFF ELEMENTRY TENANT IMPROVEMENT AT THE LOCATION OF MADRAS, OREGON. POSSESSION OF THESE DRAWINGS DOES NOT GRANT A LICENSE TO CONSTRUCT OR FABRICATE THE WHOLE, OR PARTS OF THIS PROJECT IN OTHER LOCATIONS.

STRUCTURAL DRAWINGS ARE A PORTION OF THE CONTRACT DOCUMENTS AND ARE INTENDED TO BE USED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND SITE CIVIL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REQUIREMENTS FROM THESE DRAWINGS INCLUDING BUT NOT LIMITED TO DIMENSIONS, BLOCKOUTS, OPENINGS, SLEEVES, EMBEDDED ITEMS, ETC. INTO THEIR SHOP DRAWINGS AND WORK. NOTIFY THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ANY DISCREPANCIES OR IF ACTUAL CONDITIONS DIFFER FROM THOSE SHOWN OR NOTED.

NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.

THE CONTRACTOR SHALL FURNISH THE PRODUCTS SPECIFIED ON THE DRAWINGS. SUBSTITUTIONS WILL BE CONSIDERED ONLY IF THE CONTRACTOR PROVIDES DOCUMENTATION TO PROVE THE ALTERNATIVE EQUALS OR EXCEEDS THE STRUCTURAL PERFORMANCE CHARACTERISTICS OF THE SPECIFIED PRODUCT.

CODE REQUIREMENTS:
ALL WORK SHALL BE IN STRICT COMPLIANCE WITH:
- A. 2021 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE STATE OF OREGON (2022 OREGON STRUCTURAL SPECIALTY CODE)
- B. ALL OTHER STATE AND LOCAL BUILDING REQUIREMENTS THAT APPLY.

TEMPORARY CONDITIONS:
CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SUPPORT PRIOR TO COMPLETION OF VERTICAL AND LATERAL LOAD SYSTEMS. MORRISON-MAIERLE HAS NOT BEEN RETAINED TO PROVIDE ANY SERVICES RELATED TO JOB SITE SAFETY PRECAUTIONS, OR TO REVIEW THE MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES FOR THE CONTRACTOR TO PERFORM WORK. UNLESS WE ARE SPECIFICALLY RETAINED AND COMPENSATED TO DO OTHERWISE, OUR WORK IS LIMITED TO THE FINAL DESIGN OF THE WORK DESCRIBED ON OUR DRAWINGS FOR THIS PROJECT.

CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.

EXISTING CONDITIONS:
EXISTING BUILDING/SITE DIMENSIONS AND ASSUMED CONDITIONS ARE TO BE VERIFIED IN THE FIELD AND ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ALL DISCREPANCIES WHICH REQUIRE A SIGNIFICANT CHANGE IN THE DESIGN AND/OR CONSTRUCTION FROM THAT SHOWN ON THE DRAWINGS.

ASSUMED FUTURE CONSTRUCTION:
VERTICAL: NONE
HORIZONTAL: NONE

DESIGN CRITERIA:
DESIGN IS BASED ON THE FOLLOWING LOADING FOR THE BASIS OF STRENGTH, PERFORMANCE, AND SERVICEABILITY OF THE STRUCTURE:

DESIGN CRITERIA

ROOF LIVE LOAD CRITERIA (IBC 1603.1.2)

ORDINARY FLAT, PITCHED, CURVED	20 PSF (SEE SNOW LOAD)	N/A

SNOW LOAD CRITERIA (IBC 1603.1.3)

DESIGN ROOF SNOW LOAD	25 PSF MINIMUM
SNOW DRIFT	PER ASCE 7-16 AS SHOWN ON PLANS
GROUND SNOW LOAD	Pg = 15 PSF (REF. 2007 SNOW LOAD ANALYSIS FOR OREGON)
FLAT ROOF SNOW LOAD	Pf = 15 PSF
SNOW EXPOSURE FACTOR	Ce = 1.0
SNOW LOAD IMPORTANCE FACTOR	Is = 1.10
THERMAL FACTOR	Ct = 1.0

WIND LOAD CRITERIA (IBC 1603.1.4)

BASIC DESIGN WIND SPEED	V = 115 MPH
RISK CATEGORY	III
WIND EXPOSURE	C

SEISMIC LOAD CRITERIA (IBC 1603.1.5)

RISK CATEGORY	III	
SEISMIC IMPORTANCE FACTOR	Ie = 1.25	
MAPPED SPECTRAL RESPONSE	Ss = 0.40	S1 = 0.15
SITE CLASS	D	
DESIGN SPECTRAL RESPONSE	Sds = 0.37	Sd1 = 0.28
SEISMIC DESIGN CATEGORY	C	

WOOD AND WOOD PRODUCTS:

SAWN LUMBER:
SAWN LUMBER SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE NATIONAL DESIGN SPECIFICATION (NDS) DESIGN VALUES FOR WOOD CONSTRUCTION AND CONFORMING TO THE WEST COAST LUMBER INSPECTION BUREAU OR WESTERN WOOD PRODUCTS ASSOCIATION GRADING RULES OR APPROVED EQUIVALENT. ALL LUMBER SHALL BE MARKED BY THE GRADING AGENCY EXCEPT FOR ARCHITECTURAL/ EXPOSED MEMBERS. A CERTIFICATE OF COMPLIANCE BY THE MANUFACTURER SHALL BE PROVIDED IN LIEU OF MARKING. LUMBER SHALL BE THE SPECIES, AND GRADE NOTED BELOW UNLESS NOTED OTHERWISE ON DRAWINGS:

SAWN LUMBER

USE	SPECIES AND GRADE
JOISTS, RAFTERS, & STRINGERS (2x THRU 4x)	DOUGLAS FIR-LARCH #2 & BETTER
BEAMS (5x AND GREATER)	DOUGLAS FIR-LARCH #1
BUCKS, BLOCKING, BRIDGING AND MISCELLANEOUS	DOUGLAS FIR-LARCH OR HEM FIR #3
STUDS (2x THRU 4x)	DOUGLAS FIR-LARCH #2 & BETTER
SILLS, LEDGERS, ETC. IN CONTACT WITH CONCRETE	PRESSURE TREATED HEM FIR #2
HORIZONTAL PLATES, AND HEADERS	KILN DRIED DOUGLAS FIR-LARCH #2 & BETTER
POSTS, COLUMNS (5x AND GREATER)	DOUGLAS FIR-LARCH #1
T&G DECKING	DOUGLAS FIR-LARCH COMMERCIAL DEX

DIMENSIONAL LUMBER SHALL BE DELIVERED WITH MOISTURE CONTENT LESS THAN 19% AND SURFACED S4S. TIMBERS SHALL BE DELIVERED WITH MOISTURE CONTENT LESS THAN 15%. ALL LUMBER DELIVERED TO THE SITE SHALL BE STACKED OR STORED OFF THE GROUND AND PROPERLY PROTECTED AGAINST WEATHER.

ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED, UNLESS AN APPROVED MOISTURE BARRIER IS PROVIDED.

WOOD CONNECTIONS:
FRAMING ACCESSORIES SHALL BE MANUFACTURED BY SIMPSON STRONG TIE (OR APPROVED EQUAL) AND OF THE TYPE AND SIZE SHOWN ON THE DRAWINGS. FULLY FASTEN ACCORDING TO MANUFACTURER'S SCHEDULE USING LARGEST SIZE SHOWN AND INSTALL FOLLOWING ALL MANUFACTURES REQUIREMENTS, UNLESS NOTED OTHERWISE.

ALL FRAMING NAILS SHALL BE 'COMMON' NAILS OF THE SIZE AND QUANTITY INDICATED ON THE DRAWINGS. USE OF SMALLER DIAMETER "BOX" NAILS FREQUENTLY USED IN NAIL GUNS REQUIRES USE OF LARGER PENNY WEIGHT TO PROVIDE AN EQUIVALENT DIAMETER/LENGTH NAIL. ALL NAILING SHALL COMPLY WITH IBC FASTENING SCHEDULE PER CHAPTER 23. OBTAIN ENGINEERS APPROVAL OF ALL PROPRIETARY NAILING SYSTEMS.

BOLTS AND LAG SCREWS SHALL BE ASTM A307 AND CONFORM TO ANSI/ASME STANDARD B18.2.1. ALL BOLTS AND LAG SCREWS BEARING ON WOOD SHALL BE INSTALLED WITH STANDARD CUT WASHERS. BOLT HOLES IN WOOD MEMBERS SHALL NOT EXCEED 1/16" LARGER THAN THE BOLT DIAMETER. AT EXPOSED CONNECTIONS CUT OFF EXTENDED BOLT AND 'KNICK' THREADS TO PRECLUDE LOOSENING. LAG SCREWS HOLE CLEARANCE SHALL BE THE SAME DIAMETER AS THE SHANK AND THE SAME DEPTH AS THE UNTHREADED SHANK. THE LEAD HOLE SHALL BE 60 PERCENT OF THE SHANK DIAMETER AND A LENGTH EQUAL TO THE THREADED PORTION.

CONFIRM REQUIRED CORROSION PROTECTION FOR HARDWARE AND FASTENERS WITH SPECIFIC RECOMMENDATIONS FROM PRESSURE TREATING MANUFACTURER OR HANGER MANUFACTURER (USE MOST CONSERVATIVE) FOR SPECIFIC WOOD TREATMENTS USED. MINIMUM CORROSION PROTECTION ON METAL CONNECTORS EXPOSED TO THE ENVIRONMENT OR PRESSURE TREATED LUMBER TO BE PER ASTM A653 CLASS 185 (SIMPSON ZMAX) OR ASTM A123. FINISH FOR EXPOSED CONNECTION HARDWARE SHALL BE EPOXY-BASED CORROSION RESISTANT PAINT WITH COLOR AS CHOSEN BY ARCHITECT.

FASTENERS FOR PRESSURE TREATED LUMBER MUST BE HOT-DIP GALVANIZED, STAINLESS STEEL, SILICON BRONZE OR COPPER. HOT-DIP GALVANIZED HARDWARE AND FASTENERS MUST COMPLY WITH ASTM A153, STAINLESS STEEL FASTENERS TO BE TYPE 304 OR TYPE 316. HARDWARE AND FASTENERS USED TOGETHER MUST BE THE SAME TYPE (E.G. HOT-DIP GALVANIZED NAILS WITH HOT-DIP GALVANIZED HANGERS).

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BEND / PORTLAND

STRUCTURAL
REGISTERED PROFESSIONAL ENGINEER
92727PE
OREGON
MARCH 09, 2001
SHAWN J. EVILSIZOR
Stamp
EXPIRES: 12/31/2023

DRAWING REVISIONS
#	Description	Date

Morrison Maierle
engineers · surveyors · planners · scientists

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

Drawing Title: GENERAL STRUCTURAL NOTES
Drawn By: JRN
Project No. 22140
Date: SEPTEMBER 11, 2023
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SAJ ARCHITECTURE

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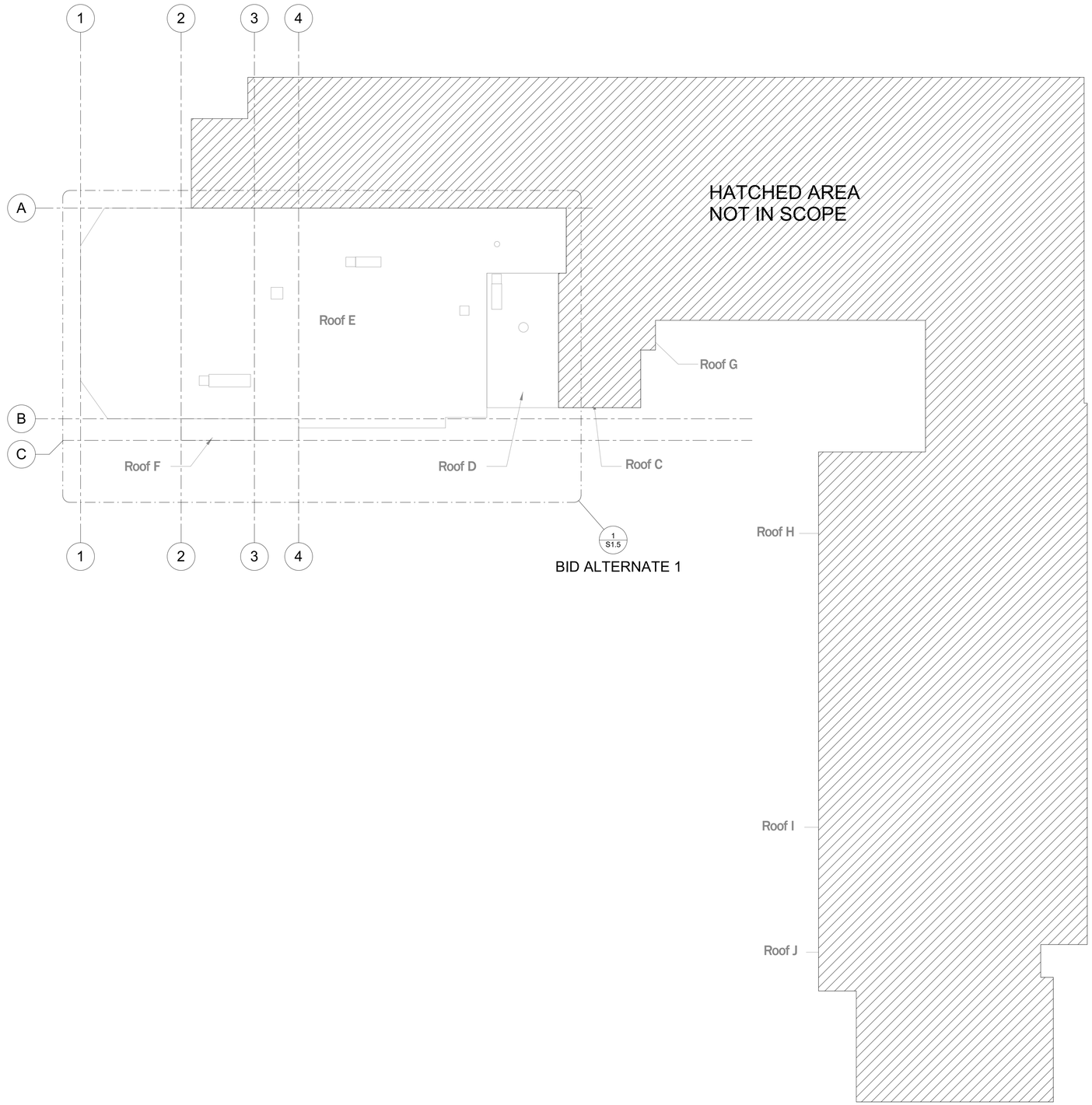

1 OVERALL ROOF PLAN
1" = 20'-0"

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JEFFERSON COUNTY SCHOOL DISTRICT (509J)

BID SET

Drawing Title: ROOF STRUCTURAL PLAN

Drawn By: JRN

Date: SEPTEMBER 11, 2023

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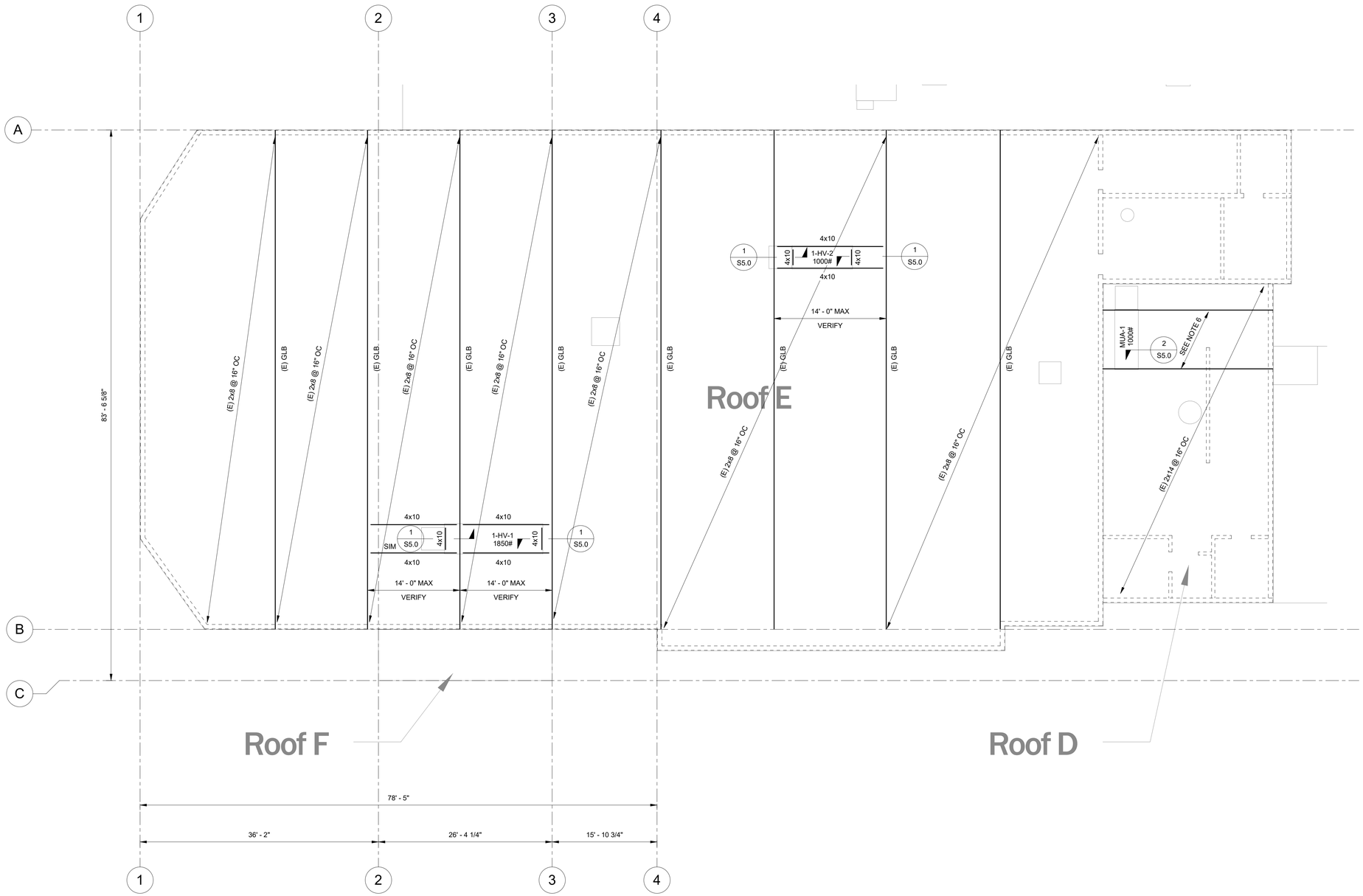
SAJ ARCHITECTURE



1 ROOF STRUCTURAL PLAN - SCOPE OF WORK
NTS

PLAN NOTES

1. EXISTING BUILDING/SITE DIMENSIONS AND ASSUMED CONDITIONS ARE TO BE VERIFIED IN THE FIELD AND ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ALL DISCREPANCIES WHICH REQUIRE A SIGNIFICANT CHANGE IN THE DESIGN AND/OR CONSTRUCTION FROM THAT SHOWN ON THE DRAWINGS.
2. REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
3. REFER TO THE DRAWING ANNOTATIONS & SYMBOLS FOR EXPLANATION OF DRAWING CONVENTIONS.
4. COORDINATE THE FOLLOWING ITEMS WITH DRAWINGS OF OTHER DISCIPLINES:
   - SIZES AND LOCATIONS OF OPENINGS AND PENETRATIONS THROUGH ROOFS; SEE ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING DRAWINGS.
   - LOCATION, SIZE, AND ANCHORAGE OF ELECTRICAL MECHANICAL, AND PLUMBING EQUIPMENT; SEE ELECTRICAL, MECHANICAL, AND PLUMBING DRAWINGS.
   - ROUTING OF DUCTS AND UTILITIES THROUGH WEBS OF TRUSSES OR JOISTS; SEE MECHANICAL AND PLUMBING DRAWINGS.
5. NEW MECHANICAL ROOFTOP UNITS ARE A REPLACEMENT FOR EXISTING UNITS. NEW UNITS WEIGH LESS THAN THE EXISTING UNITS AND COMPLY WITH THE REQUIREMENTS OF OSSC SECTION 3405.2.
6. ROOF JOISTS DIRECTLY UNDER MUA1 SHALL BE REINFORCED WITH AN ADDITIONAL 2x14 AT EACH JOIST. CONNECT NEW MEMBERS TO EXISTING WITH 10d NAILS AT 6" O.C. STAGGERED.

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JEFFERSON COUNTY SCHOOL DISTRICT (509J)
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Drawing Title: ROOF STRUCTURAL PLAN
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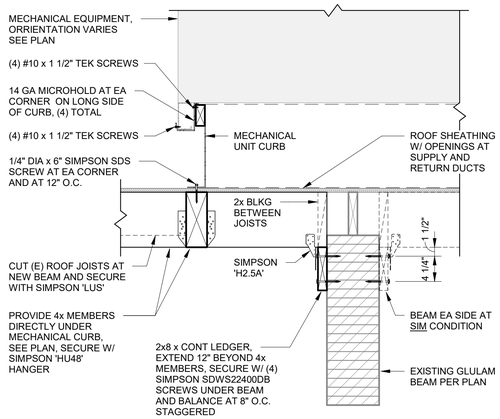
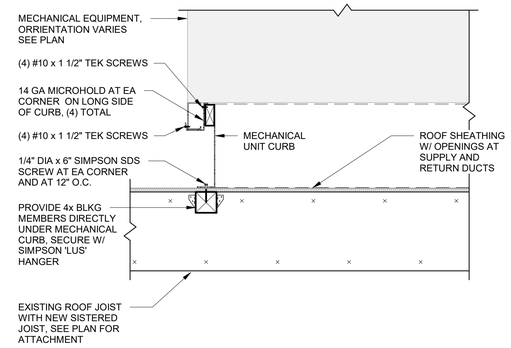


1 HVAC CURB AT GLULAM BEAM
1" = 1'-0"



2 HVAC CURB AT SISTERED ROOF JOISTS
1" = 1'-0"

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BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

Drawing Title: ROOF FRAMING DETAILS
Date: SEPTEMBER 11, 2023
Revised :
Drawn By : JRN
Project No. 22140
Sheet No. S5.0

SAJ ARCHITECTURE

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ABBREVIATIONS

ACC	AIR COOLED CONDENSER
ACU	AIR CONDITIONING UNIT
AD	ACCESS DOOR
ADJ	ADJUSTABLE
AF	AIR FOIL
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFR	ABOVE FINISHED ROOF
AFS	AIR FLOW STATION
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
ATC	AUTOMATIC TEMPERATURE CONTROL
ATM	ATMOSPHERE
AWG	AMERICAN WIRE GAUGE
B	BOILER
BB	BASEBOARD
BC	BACKWARD CURVED
BD	BACKDRAFT DAMPER
BF	BOILER FEED
BHP	BRAKE HORSEPOWER
BI	BACKWARD INCLINED
BMS	BUILDING MANAGEMENT SYSTEM
BOD	BOTTOM OF DUCT
BOJ	BOTTOM OF JOIST
BOS	BOTTOM OF STEEL
BTU	BRITISH THERMAL UNIT
C	COMMON
CAV	CONSTANT AIR VOLUME
CC	COOLING COIL
CCW	COUNTER CLOCKWISE
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
C&I	CONTROLS & INSTRUMENTATION
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CND	CONDENSATE
CONT	CONTINUATION
CORR	CORRIDOR
CT	COOLING TOWER
CU	CONDENSING UNIT
CH	CABINET HEATER
CV	CONTROL VALVE
CVS	CONTROL VALVE STATION
CW	CLOCKWISE
dB	DECIBEL
DB	DRY BULB TEMPERATURE (°F)
DDC	DIRECT DIGITAL CONTROL
DH	DUCT HEATER
DP	DEW POINT TEMPERATURE (°F)
DX	DIRECT EXPANSION
E	EXHAUST
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE (°F)
EC	ELECTRICAL CONTRACTOR
EDR	EQUIVALENT DIRECT RADIATION
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EFF	EFFICIENCY
ELEV	ELEVATION
ERV	ENERGY RECOVERY VENTILATOR
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EWT	ENTERING WATER TEMPERATURE (°F)
F&T	FLOAT & THERMOSTATIC
FA	FACE AREA
FC	FORWARD CURVED
FC	FAN COIL
FP	FIRE PROTECTION
FPM	FEET PER MINUTE
FT	FEET
GA	GAUGE OR GAGE
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GH	GRAVITY HOOD
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H	HUMIDIFIER
HC	HEATING COIL
HG	MERCURY
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HR	HOUR
HX	HEAT EXCHANGER
ID	INSIDE DIAMETER
IFB	INTEGRAL FACE & BYPASS
IGV	INLET GUIDE VANES
IPS	IRON PIPE SIZE
IU	INDUCTION UNIT
KW	KILOWATTS
KWH	KILOWATT HOUR
LAT	LEAVING AIR TEMPERATURE (°F)
LF	LINEAR FEET
LWT	LEAVING WATER TEMPERATURE (°F)
M	MOTOR OPERATED
MAU	MAKEUP AIR UNIT
MB	MIXING BOX
MBD	MANUAL BALANCING DAMPER
MBH	1000 BTU/HR
MC	MECHANICAL CONTRACTOR
MFR	MANUFACTURER
MS	MINI-SPLIT
NC	NOISE CRITERIA
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NPS	NOMINAL PIPE SIZE
OA	OUTSIDE AIR
OAD	OUTSIDE AIR DAMPER
OBD	OPPOSED BLADE DAMPER
P	PUMP
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PH	PHASE
PHC	PREHEAT COIL
PPM	PART PER MILLION
PROP	PROPELLER
PRV	PRESSURE REDUCING VALVE
PSIA	PSI, ABSOLUTE
PSIG	PSI, GAUGE
QTY	QUANTITY
R	REGISTER
RA	RETURN AIR
RD	RADIAL DAMPER
RF	RETURN/RELIEF AIR FAN
RH	RELATIVE HUMIDITY
RHC	REHEAT COIL
SA	SUPPLY AIR
SAF	SUPPLY AIR FAN
SC	SENSIBLE COOLER
SCFM	CFM, STANDARD CONDITIONS
SD	SMOKE DETECTOR
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SENS	SENSIBLE
SP	STATIC PRESSURE
SPS	STATIC PRESSURE SENSOR
SS	STAINLESS STEEL
T	THERMOSTAT
TA	TRANSFER AIR
TCC	TEMPERATURE CONTROL CONTRACTOR
TCP	TEMPERATURE CONTROL PANEL
TG	TRANSFER GRILL
TOD	TOP OF DUCT
TOP	TOP OF PIPE
TOS	TOP OF STEEL
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UH	UNIT HEATER
UNC	UNDERCUT
UV	UNIT VENTILATOR
VA	VOLT-AMPERE
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VRF	VARIABLE REFRIGERANT FLOW
WB	WET BULB TEMPERATURE (°F)
WC	WATER COLUMN
WG	WATER GAUGE
WSHP	WATER SOURCE HEAT PUMP
ΔT	TEMPERATURE DIFFERENCE (°F)

MECHANICAL LEGEND

ANNOTATION SYMBOLS

- X / X — 3D VIEW NUMBER / SHEET NUMBER
- X / X — DETAIL NUMBER / SHEET NUMBER
- X / X — SECTION NUMBER / SHEET NUMBER
- X / CFM — AIR DEVICE MARK AND CFM
- X / CFM / OBD — AIR DEVICE MARK AND CFM - PROVIDE OPPOSED BLADE DAMPER
- X / CFM / RD — AIR DEVICE MARK AND CFM - PROVIDE RADIAL DAMPER
- ME-# — MECHANICAL EQUIPMENT MARK
- (E) ME-# — EXISTING MECHANICAL EQUIPMENT
- (D) ME-# — DEMOLISHED MECHANICAL EQUIPMENT
- POINT OF NEW CONNECTION
- POINT OF DISCONNECTION

HVAC CONTROL SYMBOLS

- T — DDC THERMOSTAT
- T# — ZONED THERMOSTAT
- T#M — ZONED THERMOSTAT - MASTER
- T — THERMOSTAT W/ LOCKABLE COVER
- S — WALL SWITCH
- H — HUMIDISTAT
- T — ROOM TEMPERATURE SENSOR
- TA — ADJUSTABLE ROOM TEMPERATURE SENSOR
- TC — COMBO ROOM TEMPERATURE & CO2 SENSOR
- TC/A — ADJUSTABLE COMBO ROOM TEMP & CO2 SENSOR
- H — ROOM HUMIDITY SENSOR
- C — ROOM CO2 SENSOR
- P — BUILDING PRESSURE SENSOR
- SP — STATIC PRESSURE SENSOR
- DP — DIFFERENTIAL PRESSURE SENSOR
- CO/NO — CARBON MONOXIDE / NITRIC OXIDE SENSOR

NOTE: THIS IS A STANDARD LEGEND. NOT ALL PIPE TYPES AND SYMBOLS ARE NECESSARILY UTILIZED IN THE DRAWINGS.

HVAC DUCTWORK

- W"xD" — RECTANGULAR DUCT WIDTH x DEPTH
- X"ø — ROUND DUCT DIAMETER
- W"/D" — OVAL DUCT WIDTH/DEPTH
- X"ø — FLEXIBLE DUCT DIAMETER
- FLOOR/CEILING SUPPLY DIFFUSER
- FLOOR/CEILING RETURN GRILLE
- FLOOR/CEILING EXHAUST GRILLE
- SIDEWALL SUPPLY DIFFUSER
- SIDEWALL RETURN/EXHAUST GRILLE
- SUPPLY DUCT (SECTION VIEW)
- RETURN DUCT (SECTION VIEW)
- EXHAUST DUCT (SECTION VIEW)
- OUTDOOR AIR DUCT (SECTION VIEW)
- DUCT UP (PLAN VIEW)
- DUCT DOWN (PLAN VIEW)
- R — INCLINED RISE - IN DIRECTION OF AIRFLOW
- D — INCLINED DROP - IN DIRECTION OF AIRFLOW
- INTERNAL DUCT LINING
- ELBOW WITH TURNING VANES
- RADIUS ELBOW
- MANUAL VOLUME DAMPER
- R — REMOTE VOLUME DAMPER
- BD — BACKDRAFT DAMPER
- Z — ZONE DAMPER
- B — BYPASS DAMPER
- M — MOTORIZED DAMPER
- F — FIRE DAMPER
- FS — FIRE/SMOKE DAMPER
- S — SMOKE DAMPER

MECH. GENERAL NOTES

INSTALLATION:

A. NEW PIPING, DUCTWORK AND EQUIPMENT TO BE INSTALLED IN ACCORDANCE WITH THE CURRENTLY ADOPTED INTERNATIONAL MECHANICAL AND INTERNATIONAL BUILDING CODES.
B. EQUIPMENT SHALL BE INSTALLED LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS INDICATED ON PLAN. OBSERVE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT PRODUCTS SERVE THEIR INTENDED FUNCTION.
C. INSTALL EQUIPMENT, DUCTWORK, AND PIPING SO AS TO MAINTAIN CODE REQUIRED CLEARANCES FOR ELECTRICAL AND TELECOMMUNICATION EQUIPMENT.
D. ELEMENTS PENETRATING BUILDING COMPONENTS (ROOF ASSEMBLIES, WALL ASSEMBLIES, ETC.) SHALL BE SEALED WEATHER AND WATER TIGHT. COORDINATE PENETRATIONS WITH GENERAL CONTRACTOR TO PATCH TO THE SATISFACTION OF THE ARCHITECT OR ENGINEER.

COORDINATION:

A. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO FIELD COORDINATE THE LOCATION OF EQUIPMENT, ROUTING OF DUCTWORK, AND ROUTING OF PIPING WITH OTHER TRADES.
B. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO REVIEW THE DRAWINGS OF OTHER DISCIPLINES AND PROVIDE THE NECESSARY LABOR AND MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.
C. COORDINATE THE INSTALLATION OF GRILLES, REGISTERS AND DIFFUSERS WITH THE ARCHITECTURAL REFLECTED CEILING PLANS, THE ELECTRICAL LIGHTING PLANS, AND IF RELEVANT, THE TELECOMMUNICATION AND FIRE SPRINKLER PLANS.

ELECTRICAL COORDINATION:

A. SEE THE MEP COORDINATION SCHEDULE FOR ELECTRICAL INFORMATION. COORDINATE WITH OTHER TRADES TO ENSURE THAT ELECTRICAL DISCONNECTS, MOTOR STARTERS, VARIABLE FREQUENCY DRIVES, CONTROLS, AND ELECTRICAL ACCESSORIES ARE FURNISHED AND/OR INSTALLED BY THE APPROPRIATE TRADE.

SITE ELEVATION:

A. EQUIPMENT SHALL BE SELECTED FOR THE PROJECT ELEVATION OF 2,240'.

COMMISSIONING:

A. A COMMISSIONING AGENT IS A PART OF THIS PROJECT. REFER TO SPECIFICATION SECTION 01 91 13. REQUESTS MADE BY THE COMMISSIONING AGENT ARE REQUIRED TO BE FOLLOWED AS PART OF THIS CONTRACT WITHOUT ANY ADDITIONAL CHARGES. CONTRACTOR IS REQUIRED TO GET APPROVAL FROM ENGINEER ON ANY MODIFICATIONS, ALTERATIONS, OR CHANGES TO ANY MECHANICAL OR ELECTRICAL SYSTEM ON THIS PROJECT PRIOR TO MAKING ANY CHANGES.

HVAC SHEET INDEX

/saj/ Architecture
BEND / PORTLAND

REGISTERED PROFESSIONAL ENGINEER
93757PE
OREGON
JULY 01, 2022
ERIC J. WEBBER
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EXPIRES: JUNE 30, 2024

DRAWING REVISIONS

#	Description	Date
1		

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

Drawing Title: MECHANICAL SYMBOLS AND ABBREVIATIONS
Drawn By : DPD
Project No. 22140
Date : SEPTEMBER 11, 2023
Revised :
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SAJ ARCHITECTS

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CONTROLS

THE SCHOOL DISTRICT HAS HIRED ALLIANT MECHANICAL AS A THIRD-PARTY CONTROLS CONTRACTOR TO SPECIFY, INSTALL AND PROGRAM ALL NEW CONTROLS SYTSEMS WITHIN THE SCHOOL. THE CONTRACTORS SHALL COORDINATE MECHANICAL AND PLUMBING EQUIPMENT INSTALLATION WITH THE CONTROLS CONTRACTOR AS NECESSARY FOR A FULLY FUNCTIONING SYSTEM. SEE SPECIFICATION SECTIONS FROM CONTROLS CONTRACTOR FOR ADDITIONAL INFORMATION. THE CONTROLS CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS SPECIFIED IN 230900 SECTION 1.2 TO THE ENGINEER AND OWNER FOR REVIEW PRIOR TO PROCUREMENT OR INSTALLATION OF ANY CONTROL COMPONENTS.

PACKAGED ROOFTOP UNIT SCHEDULE

MARK	MFGR	SERIES	MINIMUM OUTSIDE AIR (CFM)	SUPPLY FAN				DX COOLING PERFORMANCE (HFC 410A)		NATURAL GAS HEATING PERFORMANCE (AT SEA LEVEL)				FILTER TYPE	BASIS OF DESIGN WEIGHT (LB.)	ACTION NEW (N), EXISTING (E), DEMOLISH (D)	REMARKS
				CFM	ESP (IN. WG)	DRIVE	HP	NOMINAL TONS	SEER	INPUT (MBH)	OUTPUT (MBH)	STAGES	EFFICIENCY (%)				
AC-1	CARRIER	48GCE	200	1975	0.75	DIRECT	2	6	16.1	110	88	2	80	MERV 13	1485	N	1,2,3,4,6,8,9,10,11
AC-2	CARRIER	48GCE	120	1200	0.75	DIRECT	1	4	16.1 SEER 2	110	88	2	80	MERV 13	775	N	1,2,3,4,6,7,10,11
AC-3	CARRIER	48GCE	380	1400	0.75	DIRECT	1.5	5	16.1 SEER 2	110	88	2	80	MERV 13	820	N	1,2,3,4,6,8,10,11
AC-4	CARRIER	48GCE	450	1200	0.75	DIRECT	1	4	16.1 SEER 2	110	88	2	80	MERV 13	775	N	1,2,3,4,6,7,10,11
AC-5	CARRIER	48GCE	450	1200	0.75	DIRECT	1	4	16.1 SEER 2	110	88	2	80	MERV 13	775	N	1,2,3,4,6,7,10,11
AC-6	CARRIER	48GCE	450	1200	0.75	DIRECT	1	4	16.1 SEER 2	110	88	2	80	MERV 13	775	N	1,2,3,4,6,7,10,11
AC-7	CARRIER	48GCE	600	1200	0.75	DIRECT	1	4	16.1 SEER 2	110	88	2	80	MERV 13	775	N	1,2,3,4,6,7,10,11
AC-8	CARRIER	48GCE	450	1200	0.75	DIRECT	1	4	16.1 SEER 2	110	88	2	80	MERV 13	775	N	1,2,3,4,6,7,10,11
AC-9	CARRIER	48GCE	450	1200	0.75	DIRECT	1	4	16.1 SEER 2	110	88	2	80	MERV 13	775	N	1,2,3,4,6,7,10,11
AC-10	CARRIER	48GCE	450	1200	0.75	DIRECT	1	4	16.1 SEER 2	110	88	2	80	MERV 13	775	N	1,2,3,4,6,7,10,11
AC-11	CARRIER	48GCE	450	2400	0.75	DIRECT	2	6	16.1	110	88	2	80	MERV 13	1485	N	1,2,3,4,5,6,8,9,10,11
AC-12	CARRIER	48GCE	450	1975	0.75	DIRECT	2	6	16.1	110	88	2	80	MERV 13	1485	N	1,2,3,4,6,8,9,10,11
AC-13	CARRIER	48GCE	450	1400	0.75	DIRECT	1.5	5	16.1 SEER 2	110	88	2	80	MERV 13	820	N	1,2,3,4,6,8,10,11
AC-14	CARRIER	48GCE	300	800	0.75	DIRECT	0.7	3	16.1 SEER 2	110	88	2	80	MERV 13	727	N	1,2,3,4,6,7,10,11
AC-15	CARRIER	48GCE	300	1975	0.75	DIRECT	2	6	16.1	110	88	2	80	MERV 13	1485	N	1,2,3,4,6,8,9,10,11
AC-16	CARRIER	48GCE	450	1600	0.75	DIRECT	1.5	5	16.1 SEER 2	110	88	2	80	MERV 13	820	N	1,2,3,4,6,8,10,11
AC-17	CARRIER	48GCE	450	1200	0.75	DIRECT	1	4	16.1 SEER 2	110	88	2	80	MERV 13	775	N	1,2,3,4,6,7,10,11
AC-18	CARRIER	48GCE	450	1600	0.75	DIRECT	1.5	5	16.1 SEER 2	110	88	2	80	MERV 13	820	N	1,2,3,4,6,8,10,11
AC-19	CARRIER	48GCE	450	1600	0.75	DIRECT	1.5	5	16.1 SEER 2	110	88	2	80	MERV 13	820	N	1,2,3,4,6,8,10,11
AC-20	CARRIER	48GCE	450	1400	0.75	DIRECT	1.5	5	16.1 SEER 2	110	88	2	80	MERV 13	820	N	1,2,3,4,6,8,10,11
AC-21	CARRIER	48GCE	450	1600	0.75	DIRECT	1.5	5	16.1 SEER 2	110	88	2	80	MERV 13	820	N	1,2,3,4,6,8,10,11
AC-22	CARRIER	48GCE	450	1800	0.75	DIRECT	2	6	16.1	110	88	2	80	MERV 13	1485	N	1,2,3,4,6,8,9,10,11
AC-23	CARRIER	48GCE	450	1200	0.75	DIRECT	1	4	16.1 SEER 2	110	88	2	80	MERV 13	775	N	1,2,3,4,6,7,10,11
AC-24	CARRIER	48GCE	450	1400	0.75	DIRECT	1.5	5	16.1 SEER 2	110	88	2	80	MERV 13	820	N	1,2,3,4,6,8,10,11
AC-25	CARRIER	48GCE	450	1200	0.75	DIRECT	1	4	16.1 SEER 2	110	88	2	80	MERV 13	775	N	1,2,3,4,6,7,10,11
AC-26	CARRIER	48GCE	450	1200	0.75	DIRECT	1	4	16.1 SEER 2	110	88	2	80	MERV 13	775	N	1,2,3,4,6,7,10,11
AC-27	CARRIER	48GCE	450	1800	0.75	DIRECT	2	6	16.1	110	88	2	80	MERV 13	820	N	1,2,3,4,6,8,9,10,11

NOTES:
1.) ALL INFORMATION TAKEN FROM AVAILABLE RECORD DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR TO VERIFY EXACT CONDITIONS IN THE FIELD AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES, PRIOR TO PLACING EQUIPMENT ORDERS.
2.) PROVIDE UNIT COMPLETE WITH TERMINAL STRIP FOR CONNECTION TO NEW DDC CONTROLS SYSTEM. PROVIDE 7-DAY SCHEDULE, NIGHT SET BACK AND OPTIMUM START FUNCTIONS. PROVIDE 5° F DEADBAND BETWEEN HEATING AND COOLING MODES.
3.) PROVIDE PREMIUM EFFICIENCY OR ECM MOTORS, ECONOMIZER WITH FIELD INSTALLED SENSORS, POWER EXHAUST, LOW LEAK DAMPERS, FACTORY MOUNTED DISCONNECT WITH CONVENIENCE OUTLET, SINGLE POINT ELECTRICAL CONNECTION. 1, AND REPLACEMENT NATURAL GAS PRESSURE REGULATOR.
4.) PROVIDE ECONOMIZER FAULT DETECTION AND DIAGNOSTICS PER OREGON STATE ENERGY CODE. REPORT TO DDC SYSTEM.
5.) PROVIDE SMOKE DETECTOR AT RETURN AIR DUCT CONNECTION. SHUT DOWN RTU ON SMOKE DETECTION. PROVIDE MANUAL RESET CONTROLS.
6.) EQUIPMENT WEIGHTS INCLUDE MANUFACTURER'S 14" HIGH ROOF CURB, AND AIRSIDE ECONOMIZER.
7.) POWER EXHAUST TO HAVE PROPELLER FAN TO MATCH EXISTING.
8.) POWER EXHAUST TO HAVE CENTRIFUGAL FAN TO MATCH EXISTING.
9.) PROVIDE SEISMICALLY RESTRAINED VIBRATION ISOLATION CURB.
10.) COORDINATE ALL CONTROL FUNCTION REQUIREMENTS WITH THE CONTROLS CONTRACTOR PRIOR TO PLACING ORDER.
11.) SEE FLOOR PLANS FOR BASE AND BID ALERNATE SCOPE OF WORK.
12.) PROVIDE NEW 14" HIGH FACTORY ROOF CURB (VIBRATION ISOLATION CURB WHERE NOTED), ONLY WHEN EXISTING ROOF CURB DOES NOT EXACTLY MATCH NEW EQUIPMENT, OR IS NOT IN EXCELLENT CONDITION....

MAKE-UP AIR HANDLING UNIT SCHEDULE

MARK	MFGR	MODEL	DESCRIPTION	MINIMUM OUTSIDE AIR FLOW (CFM)	SUPPLY FAN			NATURAL GAS HEATING PERFORMANCE (AT SEA LEVE)					FILTER			ACTION NEW (N), EXISTING (E), DEMOLISH (D)	REMARKS
					AIR FLOW (CFM)	ESP (in W.C.)	HP	GAS INPUT (MBH)	GAS OUTPUT (MBH)	EFFICIENCY(%)	STAGES HEAT	EAT/LAT (°F)	SIZE	QTY	TYPE		
1-HV-1	MODINE	HDP700	MAKE-UP AIR	5815	8500	0.75	7.5	700	567	81	MODULATING	19/80	20"x16"x2"	12	MERV 13	N	1,2,3,4,5
1-HV-2	MODINE	HDP250	MAKE-UP AIR	1260	4500	0.75	3	250	202.5	81	MODULATING	49/91	20"x16"x2"	8	MERV 13	N	1,2,3,4,5
MAU-1	MODINE	HDP250	MAKE-UP AIR	2000	3600	1.0	3	250	205.5	81	MODULATING	28/80	20"x16"x2"	8	MERV 13	N	1,2,3,4,5

NOTES:
1.) PROVIDE MANUFACTURER'S 14" HIGH INSULATED ROOF CURB AND REPLACEMENT GAS PRESSURE REGULATOR.
2.) PROVIDE BOTTOM INLET AND OUTLET. MODULATING OUTSIDE AIR/RETURN AIR DAMPERS, PROVIDE RETURN AIR SMOKE DETECTOR AT UNIT INLET.
3.) ALL INFORMATION TAKEN FROM AVAILABLE RECORD DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR TO VERIFY EXACT CONDITIONS IN THE FIELD AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES, PRIOR TO PLACING EQUIPMENT ORDERS.
4.) COORDINATE ALL CONTROL FUNCTION REQUIREMENTS WITH THE CONTROLS CONTRACTOR PRIOR TO PLACING EQUIPMENT ORDER.
5.) SEE ROOF PLAN FOR BASE AND BID ALTERNATE SCOPE OF WORK.

EXISTING EXHAUST FAN AND HOOD SCHEDULE

MARK	MANUFACTURER	MODEL #	TYPE	LOCATION	DRIVE	CFM	ESP (IN.WG)	DAMPER	ACTION NEW (N), EXISTING (E), DEMOLISH (D)	REMARKS
EF-1	GREENHECK	GB-071-6-X	SPUN DOWNBLAST	ROOF B	BELT	150	0.4	BACKDRAFT	E	1,2,3,4,5
EF-2	GREENHECK	GB-101-3-X	SPUN DOWNBLAST	ROOF B	BELT	1000	0.5	MOTORIZED	E	1,2,3,4,5
EF-3	GREENHECK	GB-071-6-X	SPUN DOWNBLAST	ROOF A	BELT	100	0.4	BACKDRAFT	E	1,2,3,4,5
EF-4	GREENHECK	GB-091-4-X	SPUN DOWNBLAST	ROOF A	BELT	500	0.5	MOTORIZED	E	1,2,3,4,5
EF-5	GREENHECK	GB-071-6-X	SPUN DOWNBLAST	ROOF A	BELT	100	0.4	BACKDRAFT	E	1,2,3,4,5
EF-6	GREENHECK	GB-091-4-X	SPUN DOWNBLAST	ROOF B	BELT	400	0.4	MOTORIZED	E	1,2,3,4,5
EF-7	GREENHECK	CUBE-240XP-1...	SPUN UPBLAST	ROOF E	BELT	2000	0.75	MOTORIZED	E	1,2,3,4,5
EF-8	GREENHECK	CUBE-098-4-X	SPUN UPBLAST	ROOF E	BELT	615	0.5	MOTORIZED	E	1,2,3,4,5
PENN EF	PENN	DOMEX CB-051	SPUN DOWNBLAST	ROOF C	N/A				E	1,2,3,4,5
RH-1	- -	- -	PENTHOUSE	ROOF E	- -	- -	- -	MODULATING	E	1,2,3,4,5
RH-2	- -	- -	PENTHOUSE	ROOF E	- -	- -	- -	MODULATING	E	1,2,3,4,5
LOUVERED RH	- -	- -	PENTHOUSE	ROOF B	- -	- -	- -	MOTORIZED	E	1,2,3,4,5
STEEL RH	GREENHECK	FHR	GRAVITY VENT	ROOF A	- -	- -	- -	VERFIY EXISTING...	N	1,2,3,4,5

NOTES:
1.) VERIFY DAMPER SIZE AND TYPE IN THE FIELD. REPLACEMENT MOTORIZED AND MODULATING DAMPERS SHALL BE LOW LEAKAGE. MOTOR ACTUATOR BY CONTROLS CONTRACTOR TO INTERFACE WITH BMS.
2.) REUSE EXISTING ROOF CURB.
3.) ALL INFORMATION TAKEN FROM AVAILABLE RECORD DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR TO VERIFY EXACT CONDITIONS IN THE FIELD AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES, PRIOR TO PLACING EQUIPMENT ORDERS.
4.) COORDINATE ALL CONTROL FUNCTION REQUIREMENTS WITH THE CONTROLS CONTRACTOR PRIOR TO PLACING EQUIPMENT ORDERS.
5.) SEE ROOF PLAN FOR BASE AND BID ALTERNATE SCOPE OF WORK.

/saj/ Architecture
BEND / PORTLAND

REGISTERED PROFESSIONAL ENGINEER
93757PE
OREGON
JULY 01, 2022
ERIC J. WEBBER
Stamp
EXPIRES: JUNE 30, 2024

DRAWING REVISIONS

#	Description	Date

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

Drawing Title: MECHANICAL SCHEDULES
Drawn By : DPD
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SAJ ARCHITECTS

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MEP COORDINATION SCHEDULE 1

MARK	DESCRIPTION	ELECTRICAL DATA		CONTROL		NOTES	DISCONNECT / STARTER		DISCONNECT			FEEDER		CIRCUIT	
		LOAD	VOLT-PHASE	TYPE	DIV		TYPE	DIV	SWITCH (AMPS)	FUSE (AMPS)	ENCL (NEMA)	COPPER WIRE (AWG)	CONDUIT (INCHES)	EXISTING BREAKER	EXISTING CKT DESCRIPTION
MECHANICAL EQUIPMENT															
AC-1	PACKAGED ROOFTOP UNIT	39 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2D1-1,3,5
AC-2	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1, 3	FD	26/26	30	NOTE 1	3R	#10	3/4"	20A-3P	2D1-7,9,11
AC-3	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2D1-13,15,17
AC-4	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-19,21,23
AC-5	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-25,27,29
AC-6	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-31,33,35
AC-7	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-37,39,41
AC-8	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-2,4,6
AC-9	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-8,10,12
AC-10	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-14,16,18
AC-11	PACKAGED ROOFTOP UNIT	39 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	50A-3P	2D1-20,22,24
AC-12	PACKAGED ROOFTOP UNIT	39 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-1,3,5
AC-13	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-7,9,11
AC-14	PACKAGED ROOFTOP UNIT	25 A	208/1	BAS	23/23	1, 5	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-2P	2F1-13,15
AC-15	PACKAGED ROOFTOP UNIT	39 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-19,21,23
AC-16	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-25,27,29
AC-17	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2F1-31,33,35
AC-18	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-37,39,41
AC-19	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1, 4	FD	26/26	60	NOTE 1	3R	#8	3/4"	30A-3P	2F1-2,4,6
AC-20	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1, 4	FD	26/26	60	NOTE 1	3R	#8	3/4"	30A-3P	2F1-8,10,12
AC-21	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-14,16,18
AC-22	PACKAGED ROOFTOP UNIT	39 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-20,22,24
AC-23	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2F1-26,28,30
AC-24	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1, 4	FD	26/26	60	NOTE 1	3R	#8	3/4"	30A-3P	2F1-32,34,36
AC-25	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1, 5	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-38,40,42
AC-26	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2F2-1,3,5
AC-27	PACKAGED ROOFTOP UNIT	39 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F2-7,9,11
1-HV1-1	MAKE UP AIR UNIT	33.1 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	60A-3P	V1-25,27,29
1-HV-2	MAKE UP AIR UNIT	14.7 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-38,40,42
MUA-1	MAKE UP AIR UNIT	14.7 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-26,28,30
EF-1	EXISTING EXHAUST FAN	1/6 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2D2-2
EF-2	EXISTING EXHAUST FAN	1/3 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2D2-4
EF-3	EXISTING EXHAUST FAN	1/6 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2D2-6
EF-4	EXISTING EXHAUST FAN	1/4 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2F2-8
EF-5	EXISTING EXHAUST FAN	1/6 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2F2-10
EF-6	EXISTING EXHAUST FAN	1/4 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2F2-6
EF-7	EXISTING EXHAUST FAN	1-1/2 HP	EXISTING	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	20A-3P	2D2-26,28,30
EF-8	EXISTING EXHAUST FAN	1/4 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2D2-32
PENN EF	EXISTING EXHAUST FAN	UNKNOWN	EXISTING	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	NOTE 2	NOTE 2

BAS	BUILDING AUTOMATION SYSTEM
CO	CARBON MONOXIDE DETECTOR
CONT	CONTINUOUS OPERATION
EF	INTERLOCK WITH EXHAUST FAN
HCP	HOOD CONTROL PANEL
INT	INTEGRAL
L	LIGHT SWITCH
MS	MANUAL SWITCH
OS	OCCUPANCY SENSOR
PS	PRESSURE SWITCH
T	THERMOSTAT
TC	TIME CLOCK
UC	UNIT CONTROLLER
VE	VEHICLE EXHAUST DETECTION SYSTEM
N/A	NOT APPLICABLE

DISCONNECT/STARTER TYPE:

CB	PANELBOARD CIRCUIT BREAKER WITHIN SIGHT OF EQUIPMENT
CSFD	COMBINATION STARTER/DISCONNECT - HOA
FD	FUSED DISCONNECT
FST	FUSTAT
FW	FACTORY-WIRED SINGLE POINT CONNECTION
MOCP	MOTOR OVER-CURRENT PROTECTION
MSS	MANUAL STARTER SWITCH WITH THERMAL OVERLOADS (1-, 2- OR 3-POLE AS REQUIRED)
NFD	NON-FUSED DISCONNECT
RCPT	20A DUPLEX RECEPTACLE (GFCI PROTECTED AS REQUIRED), CORD AND PLUG
RVSS	REDUCED VOLTAGE SOLID-STATE
VFD	VARIABLE FREQUENCY DRIVE - HOA
N/A	NOT APPLICABLE

DIVISION OF RESPONSIBILITIES:

22/22	FURNISHED AND INSTALLED BY DIV. 22, WIRED BY DIV. 22
22/26	FURNISHED AND INSTALLED BY DIV. 22, WIRED BY DIV. 26
23/23	FURNISHED AND INSTALLED BY DIV. 23, WIRED BY DIV. 23
23/26	FURNISHED AND INSTALLED BY DIV. 23, WIRED BY DIV. 26
26/26	FURNISHED AND INSTALLED BY DIV. 26, WIRED BY DIV. 26

NOTES:

1. SIZE FUSES IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES FOR INSTALLED EQUIPMENT.
2. IT WAS NOT POSSIBLE TO FIELD VERIFY MOTOR SIZE OR EXISTING CIRCUIT FOR THIS FAN. DISCONNECT SHOWN IS CONSIDERED A WORST CASE.
3. EXISTING BREAKER WILL BE UNDERSIZED FOR THE NEW UNIT. PROVIDE 30A. 3-POLE BREAKER AND REPLACE WIRING AS REQUIRED.
4. EXISTING BREAKER WILL BE UNDERSIZED FOR THE NEW UNIT. PROVIDE 40A. 3-POLE BREAKER AND REPLACE WIRING AS REQUIRED.
5. EXISTING BREAKER WILL BE OVERSIZED FOR THE NEW UNIT. FUSE IT DOWN AT THE DISCONNECT SWITCH.

GENERAL NOTES:

A. CONTROL WIRING SHALL BE CONCEALED WITHIN WALL CONSTRUCTION, ABOVE CEILING, OR RUN IN CONDUIT. EXPOSED CONTROL WIRING IS UNACCEPTABLE.
B. UNLESS SPECIFICALLY NOTED, ALL FEEDERS SHALL INCLUDE A FULL SIZE NEUTRAL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY WITH THE MANUFACTURER OF THE ACTUAL EQUIPMENT BEING SUPPLIED WHETHER A NEUTRAL IS REQUIRED PRIOR TO ROUGH IN.

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EXPIRES: JUNE 30, 2024

DRAWING REVISIONS

#	Description	Date

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

Drawing Title: MEP COORDINATION
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SAJ ARCHITECTS

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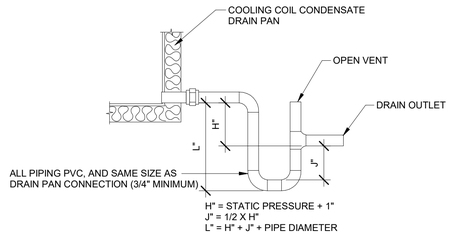

1 CONDENSATE DETAIL
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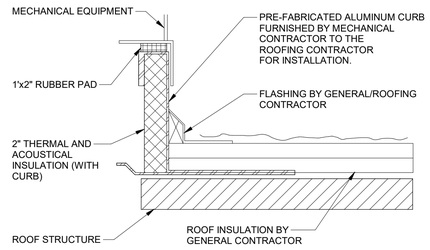

2 MECHANICAL EQUIPMENT CURB DETAIL
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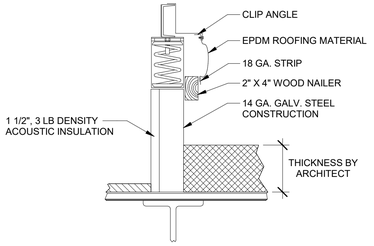

3 ROOFTOP UNIT NOISE DAMPENING CURB DETAIL
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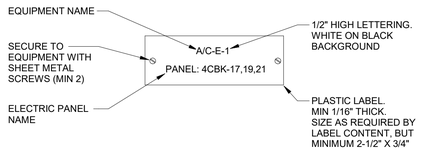

4 EQUIPMENT NAMEPLATE DETAIL
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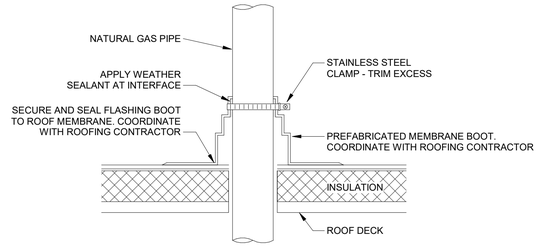

5 NATURAL GAS PIPE THRU ROOF DETAIL
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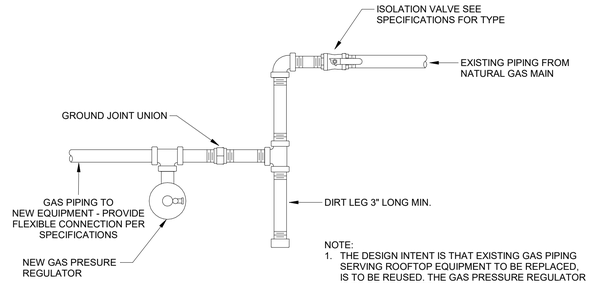

6 GAS CONNECTION DETAIL
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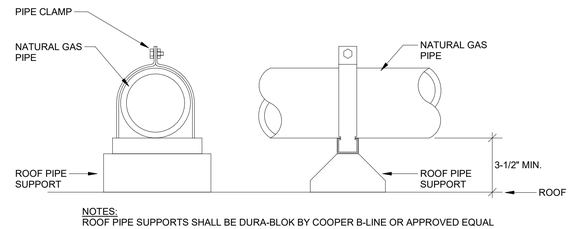
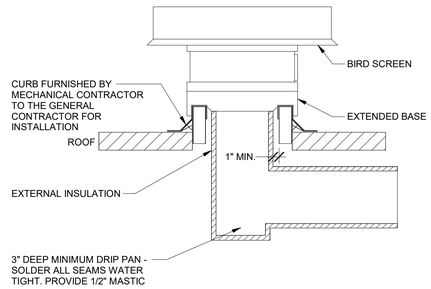


7 GAS PIPE SUPPORT DETAIL
N.T.S.



8 GRAVITY VENT DETAIL
N.T.S.

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EXPIRES: JUNE 30, 2024

DRAWING REVISIONS

#	Description	Date
4		

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

Drawing Title: MECHANICAL DETAILS
Drawn By : DPD
Project No. 22140
Date : SEPTEMBER 11, 2023
Revised :

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SAJ ARCHITECTS

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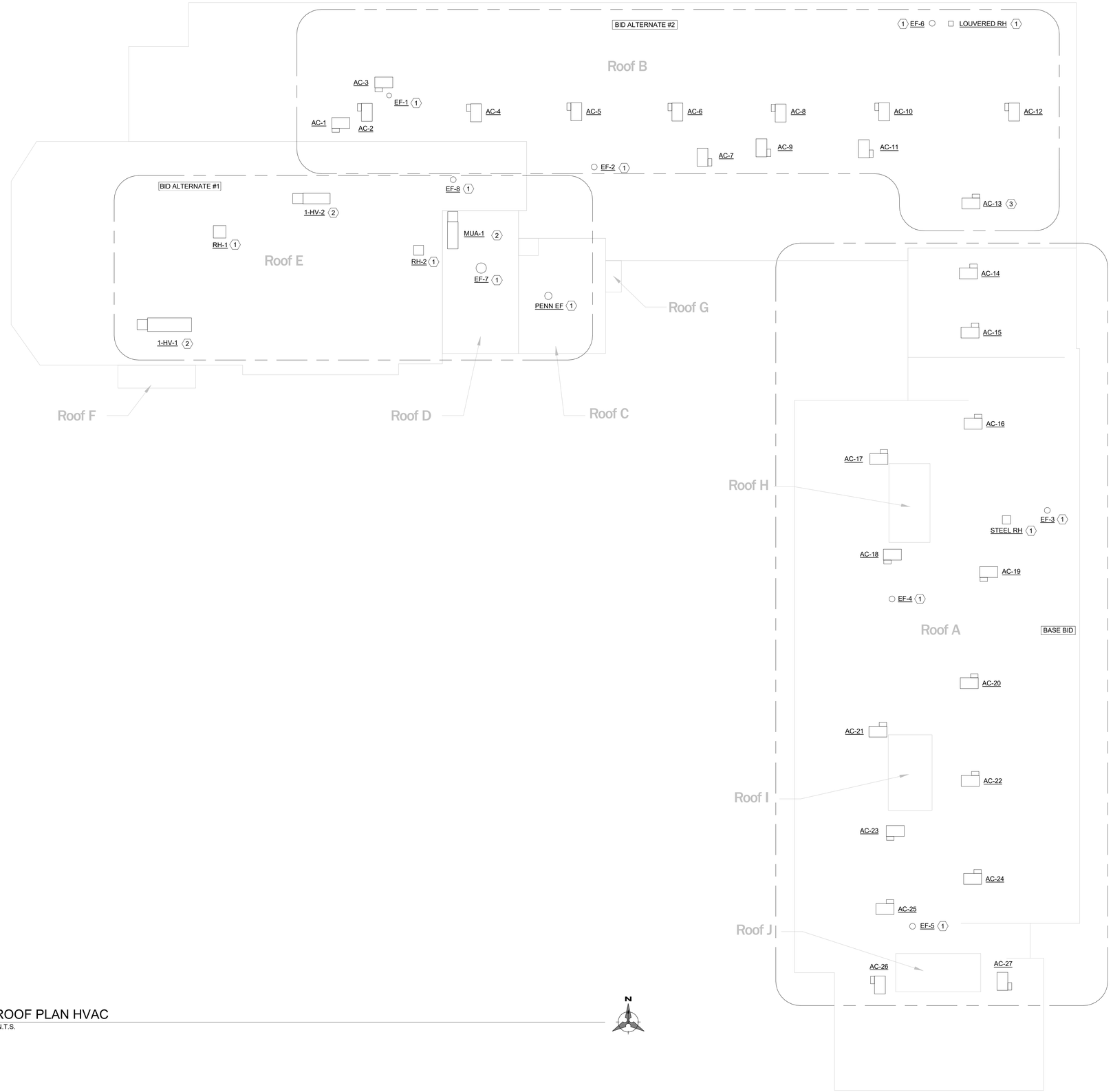

KEY NOTES:

1. EXISTING EXHAUST FANS AND ROOF VENTS (EQUIPMENT) TO BE REMOVED FROM ROOF, RETAINING EXISTING ROOF CURB. STORE EQUIPMENT IN A CLEAN, DRY, SECURE LOCATION. REINSTALL EQUIPMENT ON EXISTING ROOF CURB FOLLOWING REROOF. CONTRACTOR TO VERIFY CORRECT OPERATION OF ALL EQUIPMENT AND ASSOCIATED ACCESSORIES PRIOR TO REMOVAL FROM ROOF. ANY EQUIPMENT NOT IN FULL OPERATIONAL CONDITION SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER. ALL EQUIPMENT SHALL BE RETURNED TO FULL OPERATIONAL CONDITION.
2. LINE UP NEW EQUIPMENT SO SUPPLY AIR DUCT CONNECTION DROPS DIRECTLY ONTO EXISTING. COORDINATE ACTUAL LOCATION OF EQUIPMENT WITH THE GC.
3. EXISTING AC UNITS TO BE REMOVED. EXISTING AC UNIT CURB TO REMAIN - TYPICAL OF 27. EXISTING HV UNITS TO BE REMOVED COMPLETE WITH ROOF CURB - TYPICAL OF 3. DISCONNECT AND RECONNECT EXISTING GAS PIPING AND DUCTWORK. PROVIDE SHEET METAL DUCTWORK OFFSETS AS REQUIRED TO CONNECT TO MAINS SUPPLY AND RETURN DUCTWORK BELOW ROOF LEVEL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXACT ROUTING. DUCTWORK SHALL BE INSTALLED PER SMACNA RECOMENDATIONS. SEE DETAILS 1/M0.06 THROUGH 7/M0.06. TYPICAL FOR ALL AC AND HV UNITS.

NOTE:
1. CARRIER IS THE BASIS OF DESIGN MANUFACTURER FOR ALL RTU UNITS. ALTERNATE APPROVED MANUFACTURERS ARE LISTED IN SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR ANY DUCTWORK, PIPING, ELECTRICAL OR STRUCTURAL MODIFICATIONS REQUIRED IF THE BASIS OF DESIGN EQUIPMENT IS NOT PROVIDED.
2. MODINE IS THE BASIS OF DESIGN MANUFACTURER FOR ALL MUA UNITS. ALTERNATE APPROVED MANUFACTURERS ARE LISTED IN SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR ANY DUCTWORK AND PIPING MODIFICATIONS REQUIRED IF THE BASIS OF DESIGN EQUIPMENT IS NOT PROVIDED.
3. ALL EQUIPMENT SHOWN IN APPROXIMATE LOCATIONS BASED ON OBSERVATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY EXACT CONDITIONS ON SITE.

1 ROOF PLAN HVAC
N.T.S.

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EXPIRES: JUNE 30, 2024

DRAWING REVISIONS

#	Description	Date

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
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Drawn By : DPD
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SAJ ARCHITECTS

ELECTRICAL ABBREVIATIONS LEGEND

A, AMP	AMPERES
AC	ALTERNATING CURRENT
A/C	AIR CONDITIONING
AF	AMP FUSE
AFC	AVAILABLE FAULT CURRENT
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AL	ALUMINUM
AS	AMP SWITCH
ATS	AUTOMATIC TRANSFER SWITCH
BAS	BUILDING AUTOMATION SYSTEM
BKR	BREAKER
BOF	BOTTOM OF FIXTURE
C	RACEWAY/CONDUIT
CB	CIRCUIT BREAKER
CCT	COLOR RENDERING TEMPERATURE
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CLG	CEILING
C.O.	RACEWAY/CONDUIT ONLY, WITH PULL STRING
COD	CENTER OF DEVICE
CNTRL	CONTROL
CU	COPPER
(D)	EXISTING TO BE DEMOLISHED
DISC	DISCONNECT
DIST	DISTRIBUTION
DPDT	DOUBLE POLE DOUBLE THROW
DWG	DRAWING
EA	EACH
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
ELEC	ELECTRIC
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
EX, EXIST	EXISTING
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FD	FUSED DISCONNECT
FLR	FLOOR
FO	FIBER OPTIC
FSD	FIRE SMOKE DAMPER RELAY, CONTROLLED BY ASSOCIATED SMOKE DETECTOR AND CIRCUITED BACK TO FACP
FVNR	FULL VOLTAGE NON-REVERSING
FVR	FULL VOLTAGE REVERSING
GEC	GROUNDED ELECTRODE CONDUCTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTION
GND	GROUND
GRC	GALVANIZED RIGID CONDUIT
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HTR	HEATER
HVAC	HEATING, VENTILATION & AIR CONDITIONING
HZ	HERTZ
J-BOX	JUNCTION BOX
KVA	KILOVOLT-AMPERES
KW	KILOWATTS
LCP	LIGHTING CONTROL PANEL
LPW	LUMENS PER WATT
LTG	LIGHTING
LM	LUMENS
LV	LOW VOLTAGE
MAG	MAGNETIC STARTER
MAN	MANUAL
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCC	MOTOR CONTROL CENTER
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MH	METAL HALIDE
MIN	MINIMUM
MSS	MOTOR STARTER SWITCH WITH THERMAL OVERLOADS
N	NEUTRAL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFD	NON-FUSED DISCONNECT
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
#	NUMBER
OAE	OR APPROVED EQUAL
OC	ON CENTER
OCPD	OVERCURRENT PROTECTIVE DEVICE
OH	OVERHEAD
P	POLE
PB	PUSHBUTTON
PC	PLUMBING CONTRACTOR
PH	PHASE
PNL	PANEL
PVC	POLYVINYL CHLORIDE CONDUIT
PWR	POWER
(R)	EXISTING TO REMAIN
RCPT	RECEPTACLE
RECEPT	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
RM	ROOM
RVNR	REDUCED VOLTAGE NON-REVERSING
RVR	REDUCED VOLTAGE REVERSING
SP	SINGLE POLE TOGGLE SWITCH
SPD	SURGE PROTECTIVE DEVICE (TVSS)
SPEC	SPECIFICATION
SPST	SINGLE POLE SINGLE THROW
SSPB	START-STOP PUSHBUTTON
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TB	TELEPHONE BOARD
TC	TIME CLOCK
TD	TIME DELAY
TEL	TELEPHONE
TR	TAMPER RESISTANT
TSP	TWISTED SHIELDED PAIR
TTB	TELEPHONE TERMINAL BOARD
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
V	VOLT
VA	VOLT-AMPERES
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS
WAO	WORK AREA OUTLET
WP	WEATHERPROOF
W/O	WITHOUT
XFMR	TRANSFORMER
Y	WYE-CONNECTED
Δ	DELTA-CONNECTED
ø	PHASE

ELECTRICAL ONE-LINE LEGEND

- CT AND CUSTOMER POWER METER
- MOTOR
- UTILITY ELECTRIC METER AND BASE (BASE BY CUSTOMER)
- SURGE PROTECTION DEVICE
- LIGHTNING ARRESTER, TYPE 1 SPD, MOUNTED ON EXTERIOR OF MAIN SWITCHGEAR (SQUARE D. SDSA SERIES, OAE)
- STRESS RELIEF CONE
- POWER FACTOR CORRECTION CAPACITOR
- EQUIPMENT TOGGLE DISCONNECT SWITCH
  "X" INDICATES TYPE:
  F - FUSTAT
  M - MOTOR STARTER SWITCH W/ THERMAL OVERLOADS
- CONTACTOR NORMALLY OPEN, NORMALLY CLOSED
- TRANSFORMER, 3-PH, 3-WIRE DELTA CONNECTION
- TRANSFORMER, 3-PH, 4-WIRE GROUNDED WYE CONNECTION
- AUTOMATIC TRANSFER SWITCH
- VARIABLE FREQUENCY DRIVE
- FIXED MOUNT LV BREAKER
- FUSED SWITCH ("XXAS/XXAF" - SW AND FUSE AMP RATING)
- GENERATOR
- WALL MOUNTED BREAKER
- THERMAL OVERLOAD ELEMENT
- DISCONNECT SWITCH ("XXAS" = SWITCH AMP RATING)
- FUSED DISCONNECT SWITCH ("XXAS/XXAF" = SW AND FUSE AMP RATING)
- COMBINATION MOTOR STARTER (STR SIZE, TYP, AS, AF, SEE MEP COORDINATION SCHEDULE)
- SWITCHBOARD OR PANELBOARD; NAME, VOLTAGE, PHASE, NUMBER OF WIRES WHEN INDICATED

ELECTRICAL POWER LEGEND

- D-1 X — PANEL AND CIRCUIT DESIGNATION ARE SHOWN NEXT TO EACH DEVICE (PANEL NAME - CIRCUIT NUMBER). BRANCH CIRCUIT WIRE SIZE IS #12, UNO. A SINGLE INSULATED GREEN GROUND CONDUCTOR SHALL BE PROVIDED WITH EACH HOME RUN. PROVIDE A SEPARATE NEUTRAL FOR EACH CIRCUIT. HOME RUNS SHALL HAVE NO MORE THAN THREE CIRCUITS. LINE VOLTAGE AND LOW VOLTAGE WIRING IS NOT SHOWN ON PLANS. FOR EQUIPMENT CIRCUITING, SEE MEP COORDINATION SCHEDULE.
  "X" INDICATES TYPE:
  GFI - GROUND FAULT INTERRUPTER
  WP - WEATHERPROOF WHILE-IN-USE COVER
  U - PROVIDE WITH (2) USB PORTS
  TR - TAMPER RESISTANT
- SIMPLEX RECEPTACLE - CEILING MOUNT, WALL MOUNT (+18", UNO)
- DUPLEX RECEPTACLE - CEILING MOUNT, WALL MOUNT (+18", UNO)
- QUADRUPLEX RECEPTACLE - CEILING MOUNT, WALL MOUNT (+18", UNO)
- ABOVE COUNTER RECEPTACLE - MOUNT AT +4" ABOVE BACKSPLASH
- X — FLOOR BOX WITH (2) DUPLEX RECEPTACLES - FURNISH WITH (1) 3/4" MIN. CONDUIT FOR POWER FROM BOX.
  "X" INDICATES TYPE:
  A - 4-GANG FLOOR BOX, CORROSION RESISTANT COATING FOR CONCRETE* FLOORS (3" MIN. POUR DEPTH), (HUBBELL NO. CFB4G30CR, OAE)
  B - 4-GANG FLOOR BOX FOR RAISED ACCESS FLOORS, (HUBBELL NO. AFB4G50, OAE)
  C - FIRE RATED POKE-THROUGH FLOOR BOX FOR ELEVATED CONCRETE* SLABS, 3" DIA. CORE (HUBBELL NO. PT7FSD, OAE)
  D - 8" DIA., FIRE RATED POKE-THROUGH FLOOR BOX FOR ELEVATED CONCRETE* SLABS, (HUBBELL NO. S1R8PTFIT3, OAE)
  E - FLUSH, ROUND SINGLE SERVICE FLOOR BOX FOR CONCRETE* FLOORS, UP TO 1" CONDUIT FEED (HUBBELL NO. B2506, OAE)
  F - TOMBSTONE PEDESTAL FLOOR BOX, 1" CONDUIT FEED (HUBBELL NO. 6301, OAE)

  * NOTE: INCLUDE ALL HARDWARE/ACCESSORIES AS REQUIRED FOR COMPLETE INSTALLATION. PROVIDE COVER (COORDINATE WITH ARCHITECT FOR FLOORING TYPE AND FINISH). POKE-THROUGH FLOOR BOXES CAN ALSO BE USED FOR TILE, CARPET, OR WOOD FLOORS.
- FLOOR BOX WITH ROUGHED-IN DATA CONDUIT AS WELL AS TYPICAL CONDUIT FOR POWER - FURNISH (1) 1-1/4" DEDICATED CONDUIT FROM EACH DATA COMPARMENT, COMPLETE WITH PULL STRINGS OVER TO AND UP WALL INTO ACCESSIBLE CEILING SPACE, UNO.
- PANELBOARD OR LOAD CENTER
- SPECIAL PURPOSE RECEPTACLE (MOUNT AT +18", UNO)
  "X" INDICATES TYPE:
  A - NEMA 5-20R, #12 CU; B - NEMA 5-30R, #10 CU;
  C - NEMA 5-50R, #6 CU; D - NEMA 6-20R, #12 CU;
  E - NEMA 6-30R, #10 CU; F - NEMA 6-50R, #6 CU;
  G - NEMA 14-20R, #12 CU; H - NEMA 14-30R, #10 CU;
  I - NEMA 14-50R, #6 CU*
  * +4" AFF FOR RANGE
- PUSHBUTTON (MOUNT AT +48", UNO)
  "X" INDICATES TYPE:
  EPO - EMERGENCY POWER OFF
  ADA - HANDICAPPED ACCESSIBLE DOOR (DEVICE BY OTHERS)
  ODO - OVERHEAD DOOR OPERATOR (DEVICE BY OTHERS)
- FLATSCREEN TV BOX: 3-GANG, FLUSH IN WALL, PASS & SEYMOUR TV3WMTVSSW. DUPLEX RECEPTACLE & 2-SINGLE GANG DATA/ LOW VOLTAGE OPENINGS. PROVIDE BLANK COVERS FOR LOW VOLTAGE OPENINGS AND ROUTE AN 1-1 1/4" EMPTY C. TO CENTER OPENING AND 1-1" EMPTY C. TO SIDE OPENING. CONDUITS START AT THE TOP OF GANG OPENING IN WALL AND ROUTE INTO ACCESSIBLE CEILING SPACE. MOUNT BOX AT +72", UNO
- JUNCTION BOX
- DROP-DOWN RECEPTACLE
- PS-X — SURFACE MOUNTED PLUGSTRIP
  "X" INDICATES TYPE:
  A - PLUGSTRIP, POWER ONLY, OUTLET EVERY 3' OC
  B - WIREMOLD SERIES 4000 POWER AND DATA
  C - WIREMOLD SERIES 5000 POWER AND DATA
- SURFACE MOUNTED RACEWAY
- RACEWAY CONCEALED IN WALL, FLOOR, OR CEILING IN FINISHED SPACES, EXPOSED IN UNFINISHED SPACES
- RACEWAY BELOW FLOOR OR BELOW GRADE
- RACEWAY STUB-OUT WITH CAPPED END
- RACEWAY STUB-OUT WITH BRUSHED END
- GROUNDING BUS

ABBREVIATIONS AND SYMBOLS GENERAL NOTES

A. THE ABBREVIATIONS ON THIS SHEET COMPRISE A STANDARD LIST; NOT ALL ABBREVIATIONS APPEAR ON THIS PROJECT.
B. THE SYMBOLS ON THIS SHEET COMPRISE A STANDARD LIST; NOT ALL SYMBOLS APPEAR ON THIS PROJECT.
C. ALL MOUNTING HEIGHTS ARE TO CENTER OF DEVICE ABOVE FINISHED FLOOR, UNLESS NOTED OTHERWISE. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OTHER CONTRACTORS, MAKING ADJUSTMENTS AS REQUIRED TO AVOID INTERFERENCE WITH EQUIPMENT SUCH AS BASEBOARD FIN-TUBE, CABINET UNIT HEATERS, ETC. ARCHITECT/ENGINEER SHALL BE NOTIFIED OF ALL SUCH HEIGHT ADJUSTMENTS. MOUNTING HEIGHTS INDICATED ON ARCHITECTURAL WALL ELEVATIONS OR AS NOTED SPECIFICALLY ON THE DRAWINGS OR IN THE SPECIFICATIONS SHALL TAKE PRECEDENCE OVER MOUNTING HEIGHTS LISTED.

ELECTRICAL PROJECT GENERAL NOTES

A. PRIOR TO BID CONTRACTOR SHALL VISIT THE SITE. NOT ALL WORK REQUIRED TO COMPLETE THE PROJECT IS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH ALL THE WORK REQUIRED TO COMPLETE THE PROJECT IN ADDITION TO THE LOCAL CONDITIONS AND INCLUDE SAID WORK IN THE BID.
B. GENERAL WORK PRACTICES FOR ELECTRICAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NECA 1, "STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING." THIS PUBLICATION IS AVAILABLE FROM NECA BY TELEPHONE AT 301-657-3110 OR ON-LINE AT WWW.NECANET.ORG.
C. IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE WITH MECHANICAL FOR PLENUM SPACES AND PROVIDE PLENUM RATED CABLES WHERE REQUIRED FOR LIGHTING CONTROL, DATA, FIRE ALARM AND ALL OTHER L.V. SYSTEMS NOT INSTALLED IN CONDUIT. VERIFY CONDUIT REQUIREMENTS ON DRAWINGS AND SPECIFICATIONS.
D. FIRE-RESISTANCE: PROVIDE A MINIMUM HORIZONTAL DISTANCE OF 24" BETWEEN OUTLET BOXES LOCATED ON OPPOSITE SIDES OF FIRE-RESISTANCE RATED WALLS. WHERE THIS IS NOT POSSIBLE INSTALL UL LISTED PUTTY PADS ON ALL OUTLET BOXES NOT MEETING THE 24" SEPARATION. PROVIDE A UL LISTED THROUGH -PENETRATION FIRESTOP FOR PENETRATIONS OF FIRE-RESISTANCE RATED ASSEMBLIES.
E. CONDUCTORS ARE SIZED PER THE 75 DEGREE C RATING COLUMN OF NEC TABLE 310.16. IF THE TERMINAL USED FOR A TERMINATION OF A PARTICULAR CONDUCTOR IS NOT MARKED, OR THE TERMINAL IS MARKED FOR 60 DEGREE C CONDUCTORS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EITHER ADJUST THE AMPACITY OF THE CONDUCTOR TO MATCH THE 60 DEGREE COLUMN OF TABLE 310.16, OR REPLACE THE TERMINAL WITH ONE RATED FOR AT LEAST 75 DEGREES C.
F. BASED ON ACTUAL HOMERUN LENGTHS REQUIRED IN THE FIELD, THE CONTRACTOR SHALL CALCULATE AND INCREASE THE WIRE SIZES AS REQUIRED TO LIMIT BRANCH CIRCUIT VOLTAGE DROP TO 3%. FOR 20A BRANCH CIRCUITS THE MINIMUM CONDUCTOR SIZES SHALL BE AS FOLLOWS: #10 AWG CU FOR RUNS BETWEEN 100 AND 200 LINEAR FEET, #8 AWG CU FOR RUNS BETWEEN 200 AND 325 LINEAR FEET, AND AS CALCULATED BY THE CONTRACTOR FOR CIRCUITS EXTENDING BEYOND 325 LINEAR FEET. IN ALL CASES WHERE WIRE SIZES INCREASE, THE CONTRACTOR SHALL PROVIDE LARGER CONDUITS AS REQUIRED.
G. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH 120V BRANCH CIRCUIT.

ELECTRICAL PROJECT DEMO NOTES

A. DURING DEMOLITION, THE CONTRACTOR SHALL NOTE ALL EXISTING RACEWAY (BOTH SURFACE AND CONCEALED) TO THE EXTENT POSSIBLE. THESE RACEWAYS SHALL BE REUSED TO THE GREATEST EXTENT POSSIBLE TO INSURE A CLEAN FINISHED PRODUCT. WHERE PRACTICAL, AND ALLOWED PER CODE, FISHING THROUGH WALLS WITH MC CABLE IS PREFERRED TO SURFACE-MOUNTED CONDUIT.
B. ALL POWER INTERRUPTIONS SHALL BE COORDINATED WITH OWNER. ANY DISRUPTION OF WORKERS IN THE SPACE SHALL BE KEPT TO A MINIMUM AND BE COORDINATED WITH THE OWNER PRIOR TO WORK COMMENCING IN THAT SPACE.
C. CONTRACTOR SHALL EXTEND UNSWITCHED HOT LEG FROM EXISTING EMERGENCY FIXTURE LOCATION TO NEW EMERGENCY FIXTURES, AS NEEDED. SEE DEMO PLANS FOR AN APPROXIMATION OF EXISTING EMERGENCY FIXTURE LOCATIONS. FIELD VERIFY EXACT LOCATION PRIOR TO BID.
D. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ANY EXISTING CONDUIT OR FEEDER CIRCUITS THAT ARE INTENDED TO REMAIN THAT ARE SAW-CUT, OR OTHERWISE DAMAGED, AS PART OF THE DEMOLITION PROCESS. PROVISION FOR THIS WORK SHALL INCLUDE, BUT NOT BE LIMITED TO: ALL NECESSARY CONDUIT AND CONDUCTORS, MOUNTING ACCESSORIES AND LABOR, TO RESTORE THE SYSTEM TO ITS INTENDED FUNCTION.
E. ELECTRICAL DRAWINGS SHOWING EXISTING BUILDING CONDITIONS, SUCH AS DEMOLITION DRAWINGS, EXISTING PANEL SCHEDULES, ETC ARE BASED ON RECORD DRAWINGS AND SITE VISITS. IF ACTUAL EXISTING CONDITIONS DIFFER FROM THOSE SHOWN ON DRAWINGS, PLEASE NOTIFY ENGINEER.

ELECTRICAL SHEET INDEX

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BEND / PORTLAND

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NOV 19, 2018
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EXPIRES: JUNE 30, 2024

DRAWING REVISIONS

#	Description	Date

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

Drawing Title: ELECTRICAL SYMBOLS AND ABBREVIATIONS
Drawn By : PMH
Project No. 22140
Date : SEPTEMBER 11, 2023
Revised :

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SAJ ARCHITECTS

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MEP COORDINATION SCHEDULE 1

MARK	DESCRIPTION	ELECTRICAL DATA		CONTROL		NOTES	DISCONNECT / STARTER		DISCONNECT			FEEDER		CIRCUIT	
		LOAD	VOLT-PHASE	TYPE	DIV		TYPE	DIV	SWITCH (AMPS)	FUSE (AMPS)	ENCL (NEMA)	COPPER WIRE (AWG)	CONDUIT (INCHES)	EXISTING BREAKER	EXISTING CKT DESCRIPTION
MECHANICAL EQUIPMENT															
AC-1	PACKAGED ROOFTOP UNIT	39 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2D1-1,3,5
AC-2	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1, 3	FD	26/26	30	NOTE 1	3R	#10	3/4"	20A-3P	2D1-7,9,11
AC-3	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2D1-13,15,17
AC-4	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-19,21,23
AC-5	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-25,27,29
AC-6	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-31,33,35
AC-7	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-37,39,41
AC-8	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-2,4,6
AC-9	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-8,10,12
AC-10	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-14,16,18
AC-11	PACKAGED ROOFTOP UNIT	39 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	50A-3P	2D1-20,22,24
AC-12	PACKAGED ROOFTOP UNIT	39 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-1,3,5
AC-13	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-7,9,11
AC-14	PACKAGED ROOFTOP UNIT	25 A	208/1	BAS	23/23	1, 5	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-2P	2F1-13,15
AC-15	PACKAGED ROOFTOP UNIT	39 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-19,21,23
AC-16	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-25,27,29
AC-17	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2F1-31,33,35
AC-18	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-37,39,41
AC-19	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1, 4	FD	26/26	60	NOTE 1	3R	#8	3/4"	30A-3P	2F1-2,4,6
AC-20	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1, 4	FD	26/26	60	NOTE 1	3R	#8	3/4"	30A-3P	2F1-8,10,12
AC-21	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-14,16,18
AC-22	PACKAGED ROOFTOP UNIT	39 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-20,22,24
AC-23	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2F1-26,28,30
AC-24	PACKAGED ROOFTOP UNIT	36 A	208/3	BAS	23/23	1, 4	FD	26/26	60	NOTE 1	3R	#8	3/4"	30A-3P	2F1-32,34,36
AC-25	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1, 5	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F1-38,40,42
AC-26	PACKAGED ROOFTOP UNIT	30 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2F2-1,3,5
AC-27	PACKAGED ROOFTOP UNIT	39 A	208/3	BAS	23/23	1	FD	26/26	60	NOTE 1	3R	EXISTING	EXISTING	40A-3P	2F2-7,9,11
1-HV1-1	MAKE UP AIR UNIT	33.1 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	60A-3P	V1-25,27,29
1-HV-2	MAKE UP AIR UNIT	14.7 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-38,40,42
MUA-1	MAKE UP AIR UNIT	14.7 A	208/3	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	30A-3P	2D1-26,28,30
EF-1	EXISTING EXHAUST FAN	1/6 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2D2-2
EF-2	EXISTING EXHAUST FAN	1/3 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2D2-4
EF-3	EXISTING EXHAUST FAN	1/6 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2D2-6
EF-4	EXISTING EXHAUST FAN	1/4 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2F2-8
EF-5	EXISTING EXHAUST FAN	1/6 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2F2-10
EF-6	EXISTING EXHAUST FAN	1/4 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2F2-6
EF-7	EXISTING EXHAUST FAN	1-1/2 HP	EXISTING	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	20A-3P	2D2-26,28,30
EF-8	EXISTING EXHAUST FAN	1/4 HP	EXISTING	BAS	23/23	1	MSS	26/26	--	--	3R	EXISTING	EXISTING	20A-1P	2D2-32
PENN EF	EXISTING EXHAUST FAN	UNKNOWN	EXISTING	BAS	23/23	1	FD	26/26	30	NOTE 1	3R	EXISTING	EXISTING	NOTE 2	NOTE 2

BAS	BUILDING AUTOMATION SYSTEM
CO	CARBON MONOXIDE DETECTOR
CONT	CONTINUOUS OPERATION
EF	INTERLOCK WITH EXHAUST FAN
HCP	HOOD CONTROL PANEL
INT	INTEGRAL
L	LIGHT SWITCH
MS	MANUAL SWITCH
OS	OCCUPANCY SENSOR
PS	PRESSURE SWITCH
T	THERMOSTAT
TC	TIME CLOCK
UC	UNIT CONTROLLER
VE	VEHICLE EXHAUST DETECTION SYSTEM
N/A	NOT APPLICABLE

DISCONNECT/STARTER TYPE:

CB	PANELBOARD CIRCUIT BREAKER WITHIN SIGHT OF EQUIPMENT
CSFD	COMBINATION STARTER/DISCONNECT - HOA
FD	FUSED DISCONNECT
FST	FUSTAT
FW	FACTORY-WIRED SINGLE POINT CONNECTION
MOCP	MOTOR OVER-CURRENT PROTECTION
MSS	MANUAL STARTER SWITCH WITH THERMAL OVERLOADS (1-, 2- OR 3-POLE AS REQUIRED)
NFD	NON-FUSED DISCONNECT
RCPT	20A DUPLEX RECEPTACLE (GFCI PROTECTED AS REQUIRED), CORD AND PLUG
RVSS	REDUCED VOLTAGE SOLID-STATE
VFD	VARIABLE FREQUENCY DRIVE - HOA
N/A	NOT APPLICABLE

DIVISION OF RESPONSIBILITIES:

22/22	FURNISHED AND INSTALLED BY DIV. 22, WIRED BY DIV. 22
22/26	FURNISHED AND INSTALLED BY DIV. 22, WIRED BY DIV. 26
23/23	FURNISHED AND INSTALLED BY DIV. 23, WIRED BY DIV. 23
23/26	FURNISHED AND INSTALLED BY DIV. 23, WIRED BY DIV. 26
26/26	FURNISHED AND INSTALLED BY DIV. 26, WIRED BY DIV. 26

NOTES:

1. SIZE FUSES IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES FOR INSTALLED EQUIPMENT.
2. IT WAS NOT POSSIBLE TO FIELD VERIFY MOTOR SIZE OR EXISTING CIRCUIT FOR THIS FAN. DISCONNECT SHOWN IS CONSIDERED A WORST CASE.
3. EXISTING BREAKER WILL BE UNDERSIZED FOR THE NEW UNIT. PROVIDE 30A. 3-POLE BREAKER AND REPLACE WIRING AS REQUIRED.
4. EXISTING BREAKER WILL BE UNDERSIZED FOR THE NEW UNIT. PROVIDE 40A. 3-POLE BREAKER AND REPLACE WIRING AS REQUIRED.
5. EXISTING BREAKER WILL BE OVERSIZED FOR THE NEW UNIT. FUSE IT DOWN AT THE DISCONNECT SWITCH.

GENERAL NOTES:

A. CONTROL WIRING SHALL BE CONCEALED WITHIN WALL CONSTRUCTION, ABOVE CEILING, OR RUN IN CONDUIT. EXPOSED CONTROL WIRING IS UNACCEPTABLE.
B. UNLESS SPECIFICALLY NOTED, ALL FEEDERS SHALL INCLUDE A FULL SIZE NEUTRAL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY WITH THE MANUFACTURER OF THE ACTUAL EQUIPMENT BEING SUPPLIED WHETHER A NEUTRAL IS REQUIRED PRIOR TO ROUGH IN.

/saj/ Architecture
BEND / PORTLAND

Stamp
REGISTERED PROFESSIONAL ENGINEER
93955PE
OREGON
NOV 19, 2018
GARTH L. STEVENS
EXPIRES: JUNE 30, 2024

DRAWING REVISIONS

#	Description	Date

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

Drawing Title: ELECTRICAL SCHEDULES
Drawn By : PMH
Project No. 22140
Date : SEPTEMBER 11, 2023
Revised :

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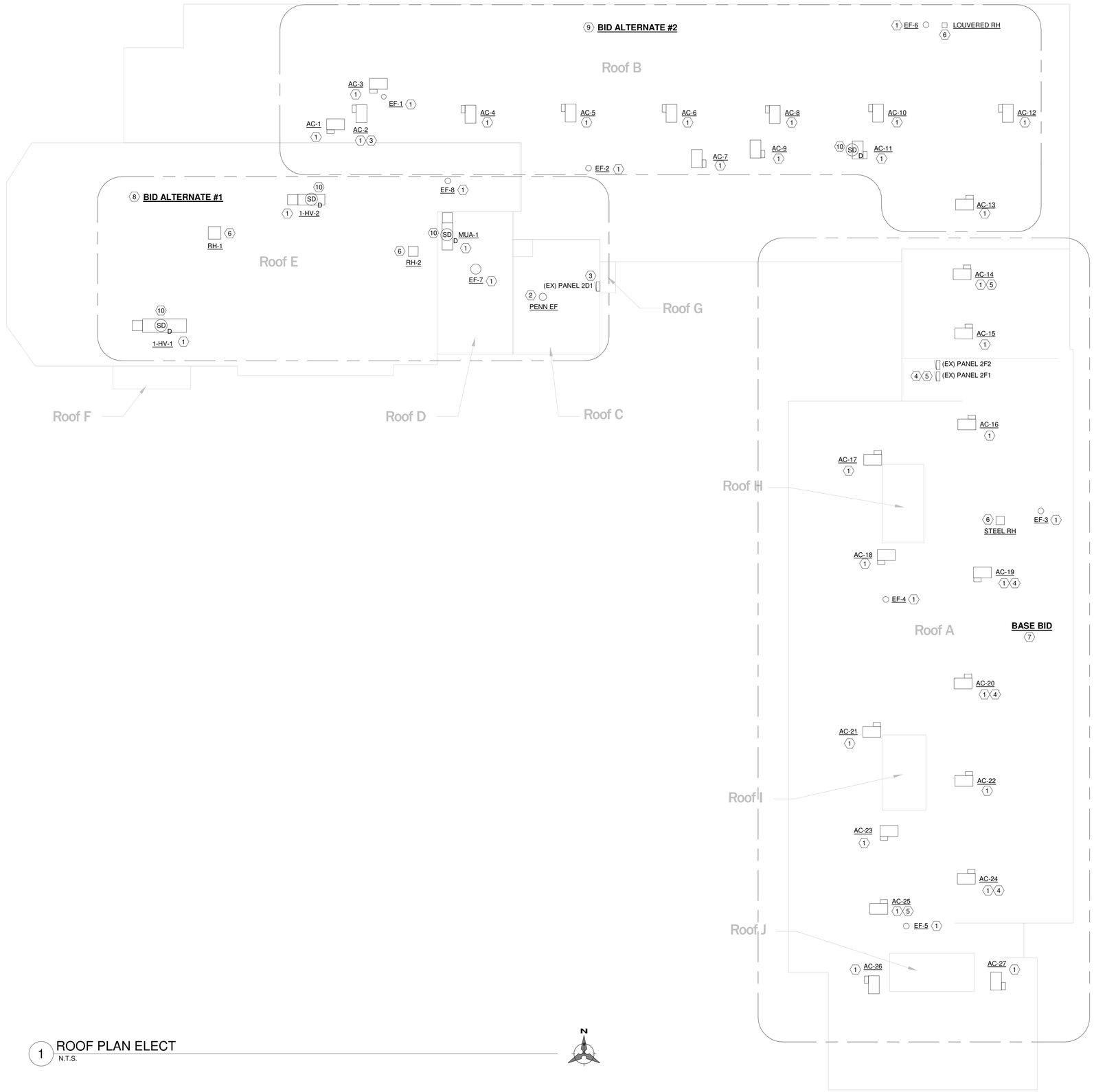

KEY NOTES:

1. ELECTRICAL CIRCUITS FOR ROOFTOP EQUIPMENT ARE SHOWN ON THE MEP COORDINATION SCHEDULES. DISCONNECT POWER FROM ALL EXISTING ROOFTOP EQUIPMENT AND RETAIN THE CIRCUIT FOR REUSE. REUSE EXISTING CONDUIT AND WIRES MODIFYING/EXTENDING CONDUIT AND WIRES AS REQUIRED TO ACCOMMODATE NEW EQUIPMENT. PROVIDE ANY/ALL NEMA 3R JUNCTION BOXES, RACEWAYS, ELBOWS, WIRES, ETC. REQUIRED. COORDINATE WITH MC AND PROVIDE ALL RACEWAYS, PULL BOXES, WIRING, ETC. AS REQUIRED TO EXTEND THE ASSOCIATED CONTROL WIRING FOR EACH UNIT. WHERE A DISCONNECT OR MOTOR STARTER IS CALLED OUT, MOUNT IT IN A CONVENIENT LOCATION UNDER THE EQUIPMENT HOOD, OR MOUNT IT NEATLY ON OR NEXT TO THE UNIT.
2. IT WAS NOT POSSIBLE TO FIELD VERIFY MOTOR SIZE OR EXISTING CIRCUIT FOR THIS FAN. CONTRACTOR SHALL VERIFY APPROPRIATE BREAKER AND CIRCUIT SIZING FOR THE NEW UNIT AND PROVIDE THE APPROPRIATE DISCONNECT AT THE ROOF.
3. IN EXISTING SQUARE D, SERIES NQOD PANEL 2D1, REPLACE THE EXISTING 20A BREAKER AT CIRCUIT LOCATIONS 7,9,11 WITH A 30A, 3-POLE BREAKER. REPLACE WIRING TO AC-2 ON ROOF WITH #10 COPPER CONDUCTORS. REFER TO MEP COORDINATION SCHEDULE.
4. IN EXISTING SQUARE D, SERIES NQOD PANEL 2F1, REPLACE THE EXISTING 30A BREAKERS AT CIRCUIT LOCATIONS 2,4,6; 8,10,12; AND 32,34,36 WITH 40A, 3-POLE BREAKERS. REPLACE WIRING TO AC-19, AC-20, AND AC-24 ON ROOF WITH #8 COPPER CONDUCTORS REPLACING EXISTING CONDUIT WITH LARGER AS REQUIRED. REFER TO MEP COORDINATION SCHEDULE.
5. IN EXISTING SQUARE D, SERIES NQOD PANEL 2F1, BREAKERS AT CIRCUIT LOCATIONS 13,15 AND 38,40,42 ARE 40A BREAKERS AND WILL BE LARGER THAN WHAT IS REQUIRED FOR THE NEW AC-14 AND AC-25 UNITS. THESE BREAKERS CAN EITHER BE REPLACED WITH 30A BREAKERS, OR THEY CAN REMAIN WITH THE POWER FUSED DOWN IN THE NEW DISCONNECTS AT THE UNITS. REFER TO MEP COORDINATION SCHEDULE.
6. ELECTRICAL WORK ASSOCIATED WITH EXHAUST HOOD CONSISTS OF DISCONNECTING THE MOTORIZED DAMPER TO ALLOW FOR HOOD REMOVAL AND THEN RECONNECTING THE DAMPER AFTER THE HOOD IS REINSTALLED.
7. BID ALL WORK ASSOCIATED WITH EQUIPMENT IN THIS AREA AS BASE BID.
8. BID ALL WORK ASSOCIATED WITH EQUIPMENT IN THIS AREA AS BID ALTERNATE #1.
9. BID ALL WORK ASSOCIATED WITH EQUIPMENT IN THIS AREA AS BID ALTERNATE #2.
10. COORDINATE WITH FIRE ALARM CONTRACTOR TO DISCONNECT, RECONNECT, TEST AND RECERTIFY DUCT-TYPE SMOKE DETECTOR. ENSURE THAT IT PROPERLY SHUTS DOWN THE UNIT AND IS TIED INTO FIRE ALARM SYSTEM.

GENERAL ELECTRICAL NOTES

A. IT IS ABSOLUTELY NECESSARY FOR ALL TRADES INVOLVED TO COORDINATE WITH EACH OTHER AND VERIFY THAT THERE ARE NO CONFLICTS IN LOCATION OF DUCTS, CONDUITS, DIFFUSERS, BOXES, AND OTHER ITEMS THROUGHOUT THIS PROJECT BEFORE FINAL PLACEMENT OF MATERIALS. PROTECT EXISTING BUILDING ELEMENTS DURING DEMOLITION WORK AND COORDINATE WITH OTHER TRADES TO ENSURE NO EXISTING EQUIPMENT/PIPING TO REMAIN IS DAMAGED DURING THE DEMOLITION WORK.
B. THE ELECTRICAL CONTRACTOR (EC) IS RESPONSIBLE FOR ALL CUTTING OF FLOORS, WALLS, CEILINGS, AND ROOFS TO PERFORM THE REQUIRED WORK DEPICTED IN THESE DOCUMENTS. EC IS RESPONSIBLE FOR ALL PATCHING OF HOLES TO THE SATISFACTION OF THE ARCHITECT/ENGINEER. COORDINATE WITH GENERAL CONTRACTOR.
C. ELECTRICAL DRAWINGS SHOWING EXISTING BUILDING CONDITIONS, SUCH AS DEMOLITION/REMODEL DRAWINGS, EXISTING PANEL SCHEDULES, ETC. ARE BASED ON RECORD DRAWINGS AND SITE INVESTIGATION. EC SHALL FIELD-VERIFY EXISTING CONDITIONS, PRIOR TO BID. IF ACTUAL EXISTING CONDITIONS DIFFER FROM THOSE SHOWN ON DRAWINGS, PLEASE NOTIFY ENGINEER. PROVIDE ALL DEMOLITION WORK AS REQUIRED FOR A COMPLETE AND FUNCTIONAL INSTALLATION OF NEW SYSTEMS AT NO ADDITIONAL COST TO THE OWNER.
D. EC SHALL ENSURE THAT ANY EXISTING DEVICES THAT ARE TO REMAIN, WHOSE CIRCUITING MAY HAVE BEEN DISRUPTED DURING DEMOLITION, HAVE POWER AND FUNCTION PROPERLY AT THE COMPLETION OF THIS PROJECT. EC SHALL BE RESPONSIBLE FOR REPAIR OF ANY EXISTING CONDUIT OR FEEDER CIRCUITS THAT ARE INTENDED TO REMAIN THAT ARE INADVERTENTLY SAW-CUT, OR OTHERWISE DAMAGED, AS PART OF THE DEMOLITION PROCESS. PROVISION FOR THIS WORK SHALL INCLUDE, BUT NOT BE LIMITED TO ALL NECESSARY CONDUIT AND CONDUCTORS, MOUNTING ACCESSORIES AND LABOR, TO RESTORE THE SYSTEM TO ITS INTENDED FUNCTION.
E. ALL POWER INTERRUPTIONS SHALL BE COORDINATED WITH OWNER. ANY DISRUPTION OF WORKERS IN THE SPACE SHALL BE KEPT TO A MINIMUM AND BE COORDINATED WITH THE OWNER PRIOR TO WORK COMMENCING IN THAT SPACE.
F. NOTE THAT ELECTRICAL CIRCUITS FOR ROOFTOP EQUIPMENT ARE SHOWN ON THE MEP COORDINATION SCHEDULES. THESE CIRCUITS ARE FROM ORIGINAL DESIGN DRAWINGS AND EC SHALL VERIFY ALL CIRCUITS PRIOR TO DISCONNECTING OR WORKING ON THE EQUIPMENT. MAKE NOTE OF ANYWHERE THE CIRCUIT DIFFERS FROM THE MEP COORDINATION SCHEDULE AND MAKE REVISIONS ON THE RESPECTIVE PANEL SCHEDULE DIRECTORIES. WHEN THE NEW EQUIPMENT IS INSTALLED, PROVIDE AN ENGRAVED PLASTIC LABEL TO IDENTIFY THE EQUIPMENT THAT ALSO INCLUDES THE CIRCUIT DESIGNATION FOR EACH.
G. DISCONNECT POWER FROM EXISTING ROOFTOP EQUIPMENT AND RETAIN THE CIRCUIT FOR REUSE. EC SHALL COORDINATE SALVAGE OF ALL REMOVED EQUIPMENT IN GOOD CONDITION WITH THE OWNER. EC SHALL REMOVE FROM SITE AND DISPOSE OF ALL UNWANTED EQUIPMENT IN AN ENVIRONMENTALLY COMPLAINANT MANOR.
H. IN GENERAL, EXISTING CONDUIT AND WIRES WILL BE REUSED. WHERE ADDITIONAL OR UPGRADED BRANCH CIRCUIT IS NEEDED, EC SHALL PULL A NEUTRAL CONDUCTOR WITH ALL 3-PHASE AND 208V SINGLE-PHASE ELECTRICAL CIRCUITS SERVING EQUIPMENT ON PLAN. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH NEW 120V BRANCH CIRCUIT.
I. EC SHALL COORDINATE WITH THE NEW EQUIPMENT BEING INSTALLED AND PROVIDE ANY/ALL NEMA 3R JUNCTION BOXES, RACEWAYS, ELBOWS, WIRES, ETC. REQUIRED TO REACH THE POWER ENTRANCE OF THE NEW EQUIPMENT. AVOID ADDITIONAL ROOF PENETRATIONS BY ROUTING RACEWAYS WITHIN THE EQUIPMENT CURB WHEREVER POSSIBLE. WHERE ROOF PENETRATIONS ARE REQUIRED, THEY SHALL BE INSTALLED IN STRICT COMPLIANCE WITH ROOFING MANUFACTURER'S STANDARDS.
J. IN ADDITION TO PROVIDING POWER TO THE NEW MECHANICAL UNITS ON THE ROOF, EC SHALL COORDINATE WITH MC AND PROVIDE ALL RACEWAYS, PULL BOXES, WIRING, ETC. AS REQUIRED TO EXTEND THE ASSOCIATED CONTROL WIRING FOR EACH UNIT.
K. MOST NEW ROOFTOP EQUIPMENT WILL COME WITH INTEGRAL DISCONNECT SWITCH AND ONLY REQUIRE AN ELECTRICAL CONNECTION TO THE MAIN TERMINAL BLOCK. WHERE A DISCONNECT OR MOTOR STARTER IS CALLED OUT ON THIS PLAN OR IN THE MEP COORDINATION SCHEDULE, EC SHALL EITHER MOUNT IT IN A CONVENIENT LOCATION UNDER THE EQUIPMENT HOOD, OR MOUNT IT NEATLY ON OR NEXT TO THE UNIT.
L. ALL NEW BUILDING EXTERIOR RECEPTACLES SHALL BE GFCI-STYLE, WEATHER-RESISTANT, SELF-TESTING AND SHALL HAVE A WEATHERPROOF RATED ENCLOSURE/COVER. ENCLOSURES FOR RECEPTACLES ON ROOF (FOR EQUIPMENT REQUIRING SERVICING) SHALL BE WEATHERPROOF RATED WHEN THE RECEPTACLE IS COVERED (NOTHING PLUGGED IN AND RECEPTACLE COVERS CLOSED). ALL OTHER OUTDOOR RECEPTACLES (INCLUDING THOSE ON THE ROOF WHERE A LOAD MAY NOT BE ATTENDED WHILE IN USE) SHALL FEATURE A METALLIC WEATHERPROOF-IN-USE COVER (WITH LOAD PLUGGED IN OR REMOVED) THAT IS CAPABLE OF ACCEPTING A STANDARD HASP STYLE PADLOCK, AS WELL AS ANY ADDITIONAL FEATURES CALLED FOR ON THE PLANS.
M. NEW ROOFTOP UNITS WILL INCLUDE AN INTEGRAL GFI RECEPTACLE POWERED FROM THE UNIT CIRCUIT. EC SHALL PROVIDE ADDITIONAL GFCI RECEPTACLES WHERE SHOWN ON PLANS, OR ANYWHERE THERE IS MECHANICAL EQUIPMENT ON A DIFFERENT LEVEL, OR MORE THAN 25FT FROM A RECEPTACLE. CIRCUIT TO NEAREST 120V SERVICE RECEPTACLE CIRCUIT THAT HAS CAPACITY.

1 ROOF PLAN ELECT
N.T.S.

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9/8/2023 10:18:33

/saj/ Architecture
BEND / PORTLAND

Stamp
REGISTERED PROFESSIONAL ENGINEER
93955PE
OREGON
NOV 19, 2018
GARTH L. STEVENS
EXPIRES: JUNE 30, 2024

DRAWING REVISIONS

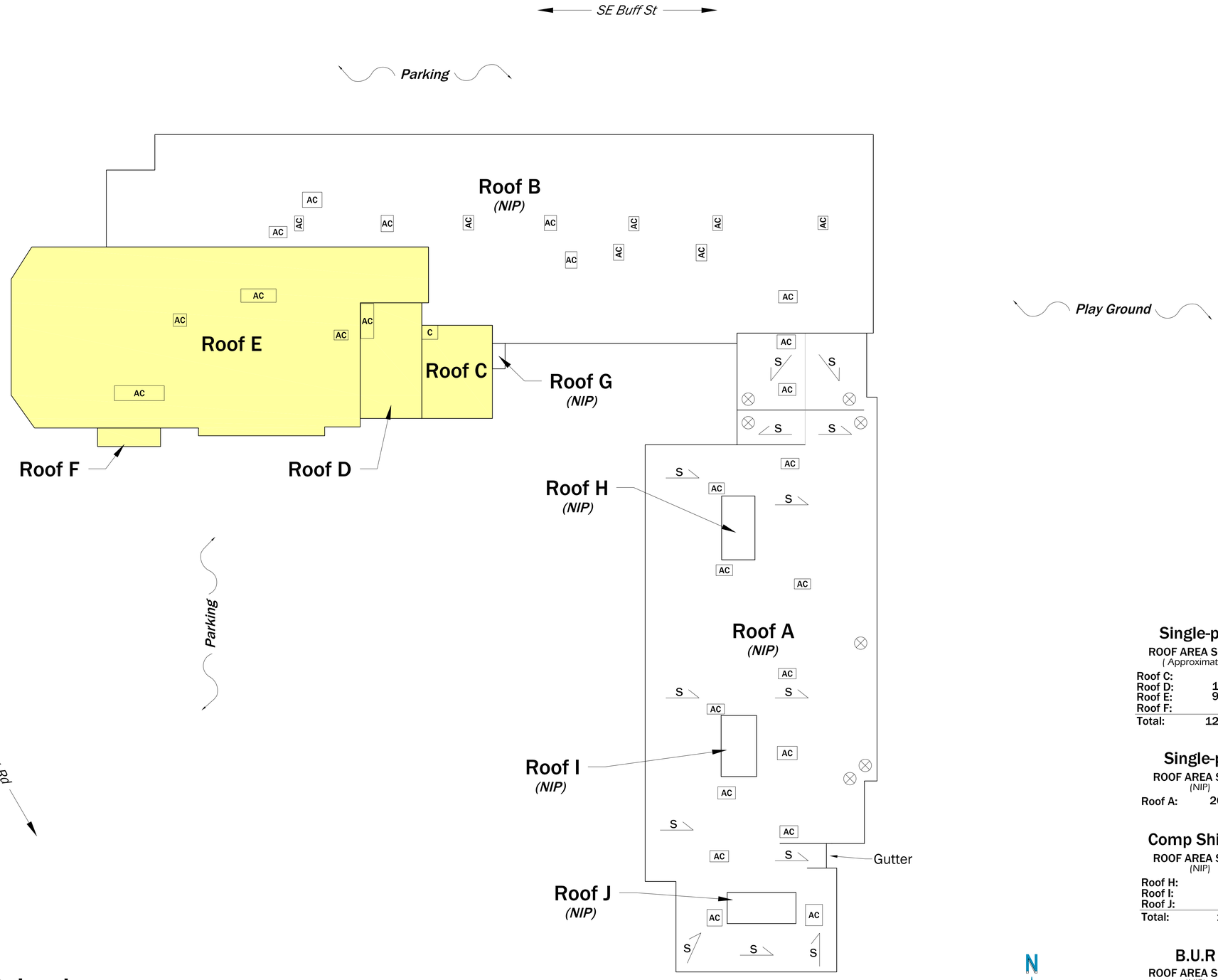
#	Description	Date

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

Drawing Title: ELECTRICAL ROOF PLAN
Drawn By : PMH
Project No. 22140
Date : SEPTEMBER 11, 2023
Revised :

Sheet No.
E2.01

SAJ ARCHITECTS



- Project Area

Buff Elementary School
375 SE Buff St
Madras, Oregon

Single-ply
ROOF AREA SQ.FT.
(Approximate)

Roof C:	869 sf
Roof D:	1,244 sf
Roof E:	9,985 sf
Roof F:	227 sf
Total:	12,325 sf

Single-ply
ROOF AREA SQ.FT.
(NIP)

Roof A:	20,456 sf

Comp Shingle
ROOF AREA SQ.FT.
(NIP)

Roof H:	344 sf
Roof I:	352 sf
Roof J:	347 sf
Total:	1,043 sf

B.U.R
ROOF AREA SQ.FT.
(NIP)

Roof B:	19,314 sf
Roof G:	50 sf
Total:	19,364 sf

Roof Total:	53,188 sf

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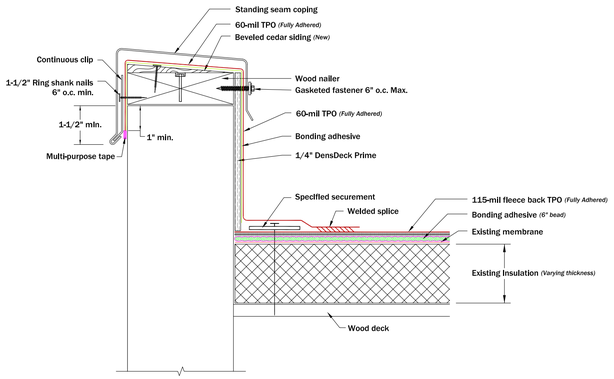
Stamp

DRAWING REVISIONS

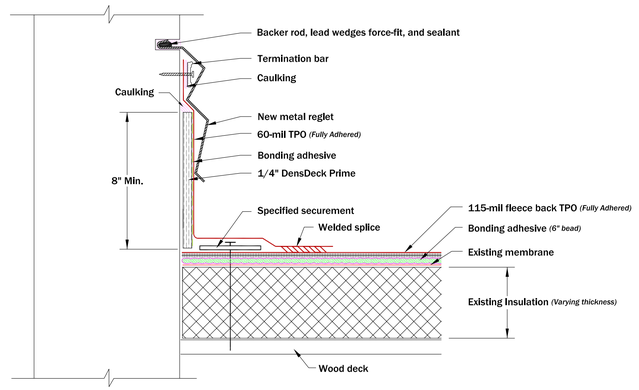
#	Date	Description

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

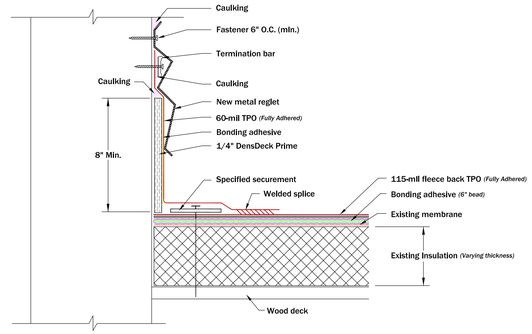
Drawing Title: Roof Plan
Drawn By : D.V.G.
Project No. 22140
Date : SEPTEMBER 11, 2023
Revised :
Sheet No. R1.01



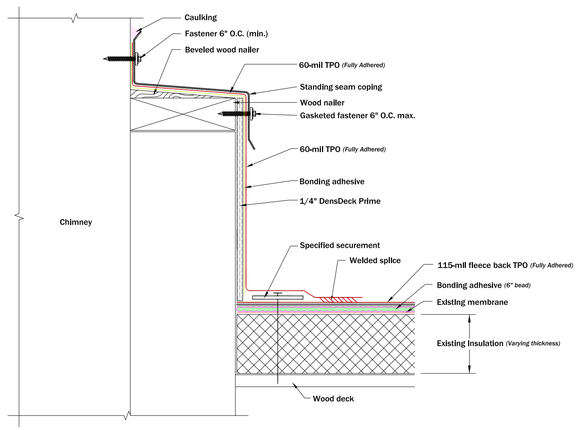
1 R-BES Perimeter - Parapet & Coping NTS



2 R-BES Perimeter - Saw Cut Reglet NTS

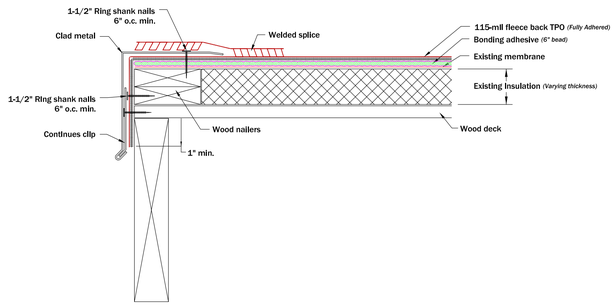


3 R-BES Perimeter - Surface Mounted Reglet NTS

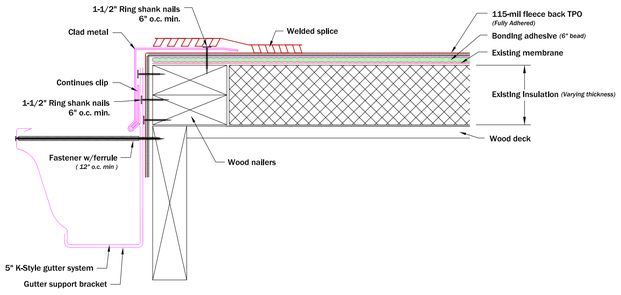


4 R-BES Perimeter - Chimney & Coping NTS

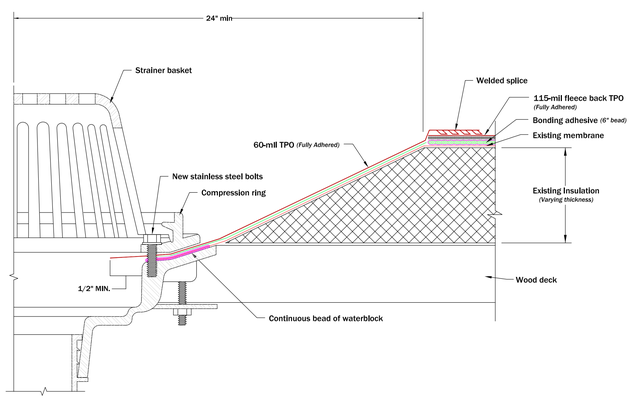
Note: must meet manufactures requirements



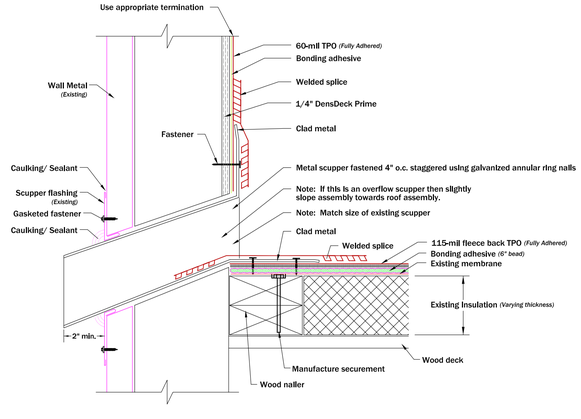
5 R-BES Drainage - Drip edge NTS



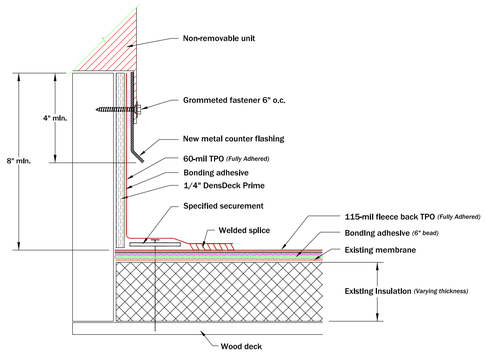
6 R-BES Drainage - Drip edge w/ Gutter NTS



7 R-BES Drainage - Roof Drain - Sumped NTS



8 R-BES Drainage - Thru-wall Scupper - Primary NTS



9 R-BES Equipment - Non-Removable Unit Curb NTS

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Roofing details

Drawing Title:

Drawn By : D.V.G.

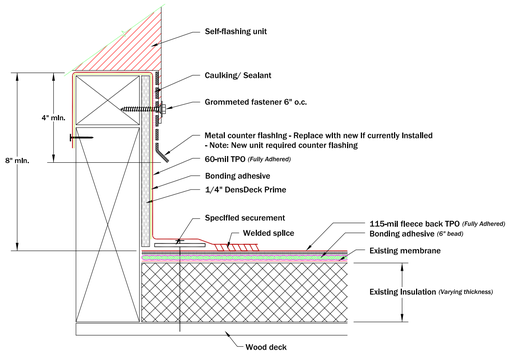
Project No. 22140

Date : SEPTEMBER 11, 2023

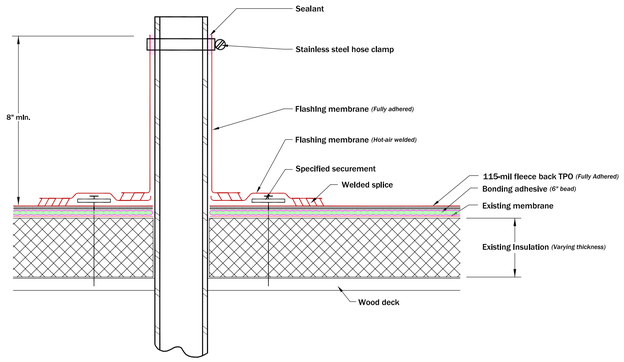
Revised :

Sheet No.

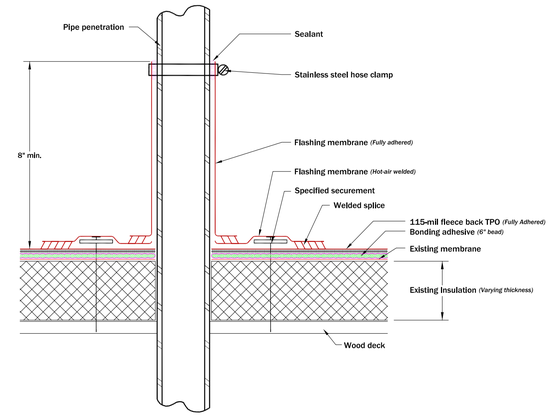
R1.02



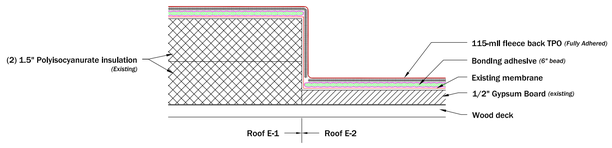
10 R-BES Equipment - Removable Unit Curb NTS



11 R-BES Penetration - Vent Stack NTS



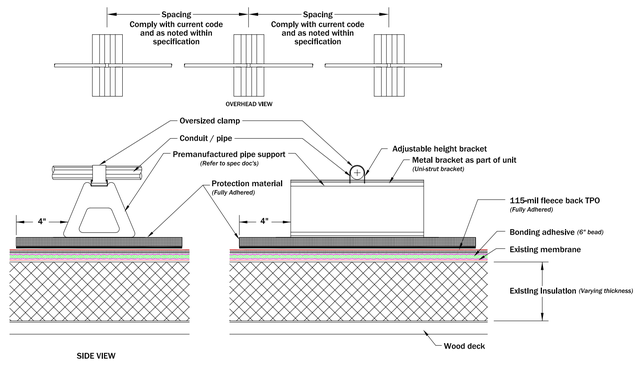
12 R-BES Penetration - Pipe Penetration NTS



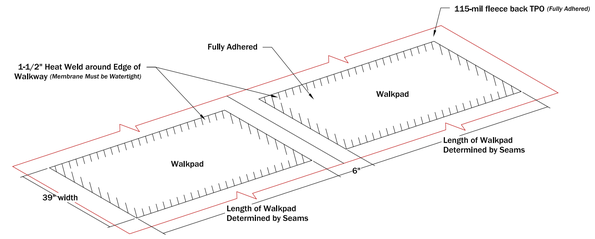
13 R-BES Perimeter - Roof E-1 to Roof E-2 Transition NTS

NOTES:

1) The brackets should retain the pipe in a manner to allow for movement without binding.
2) The supports should be placed at intervals to maintain a straight continuity of the pipe line - 10' max. spacing.
3) Protection material should be applied in a full bed of plastic cement.



14 R-BES Misc - Conduit / Pipe Support NTS



15 R-BES Misc - Walk Pad - Fully Adhered NTS

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Drawing Title: Roofing details

Drawn By : D.V.G.

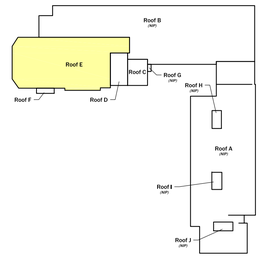
Project No. 22140

Date : SEPTEMBER 11, 2023

Revised :

Sheet No. R1.03

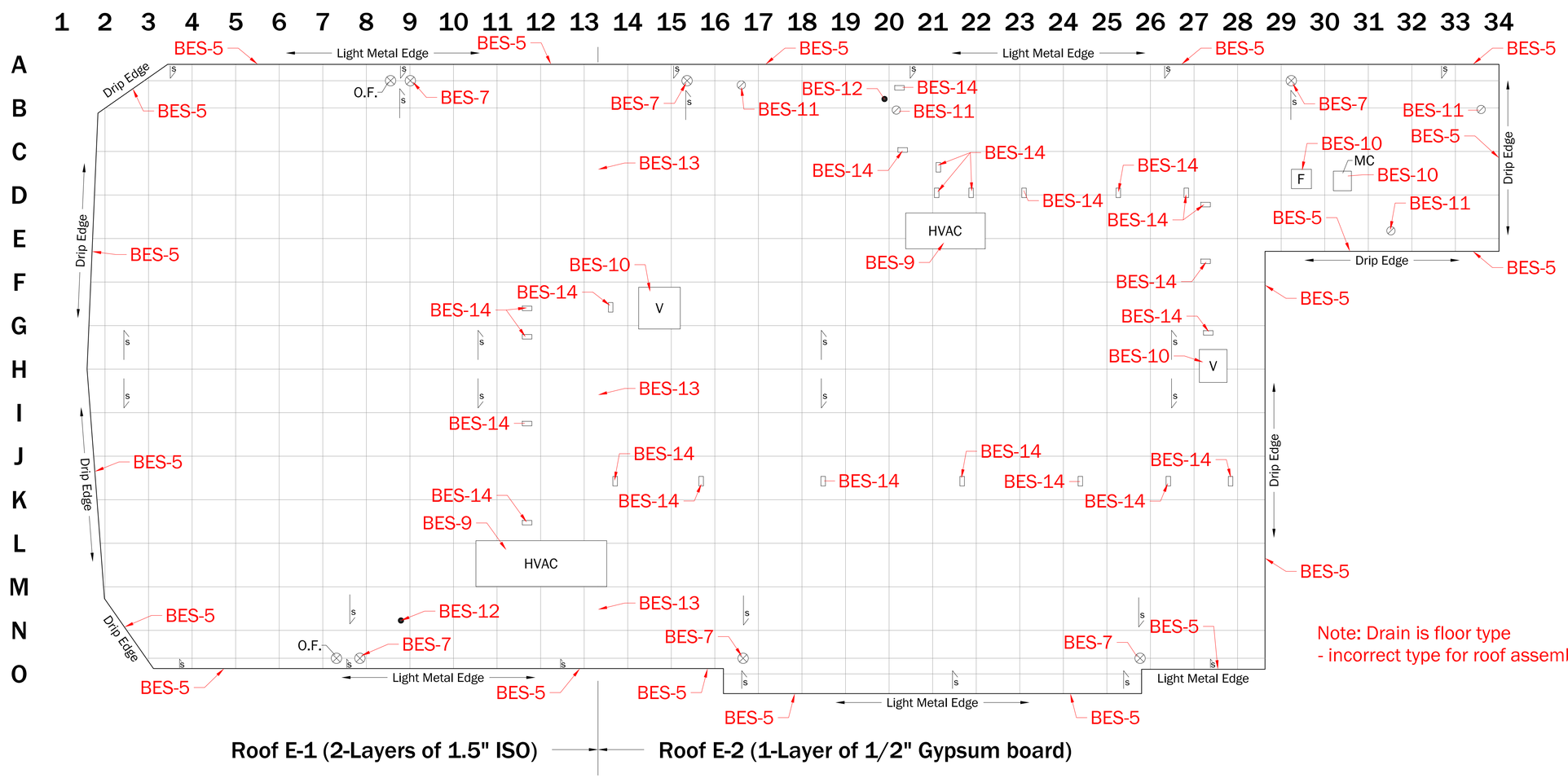
JCSD – JEFFERSON COUNTY SD
Buff Elementary School - MADRAS, OR
ROOF LAYOUT



- Project Area

Roof E

5'



Note: Drain is floor type
- incorrect type for roof assembly

Roof E-1 (2-Layers of 1.5" ISO) — **Roof E-2 (1-Layer of 1/2" Gypsum board)**

N

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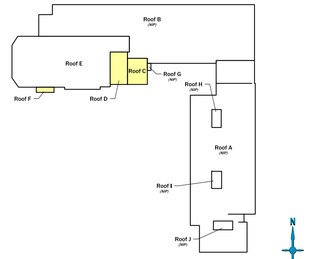
DRAWING REVISIONS

#	Date	Description

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

Drawing Title: Detail Callout Maps
Drawn By: D.V.G.
Project No. 22140
Date: SEPTEMBER 11, 2023
Revised:
Sheet No. R1.04

JCSD – JEFFERSON COUNTY SD
Buff Elementary School - MADRAS, OR
ROOF LAYOUT



- Project Area

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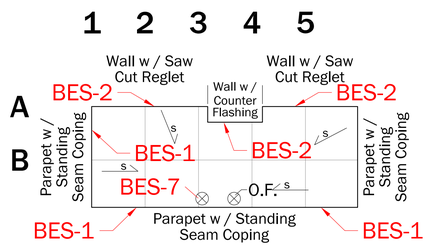
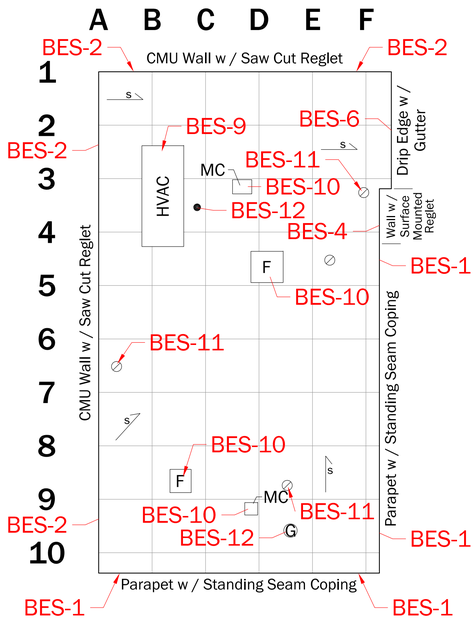
Roof F

5'



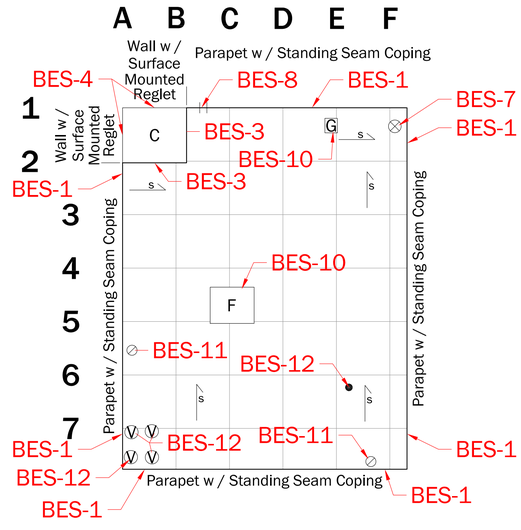
Roof D

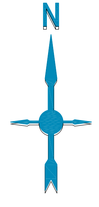
5'



Roof C

5'





DRAWING REVISIONS

#	Date	Description

Stamp

BUFF ELEMENTARY SCHOOL IMPROVEMENTS
JEFFERSON COUNTY SCHOOL DISTRICT (509J)
BID SET

Drawing Title: Detail Callout Maps
Drawn By : D.V.G.
Project No. 22140
Date : SEPTEMBER 11, 2023
Revised :

Sheet No.
R1.05