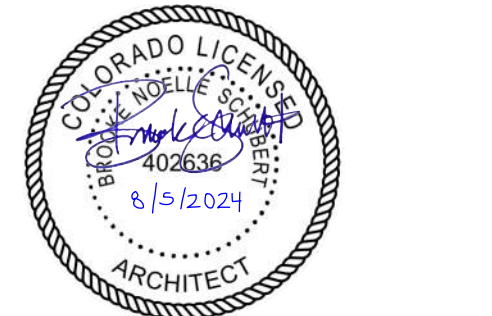


REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

MOFFAT
ADMINISTRATION
BUILDING RENOVATION

PROJECT: 24031 DATE: 8/5/2024
PROJECT STATUS: CONSTRUCTION
DOCUMENTS



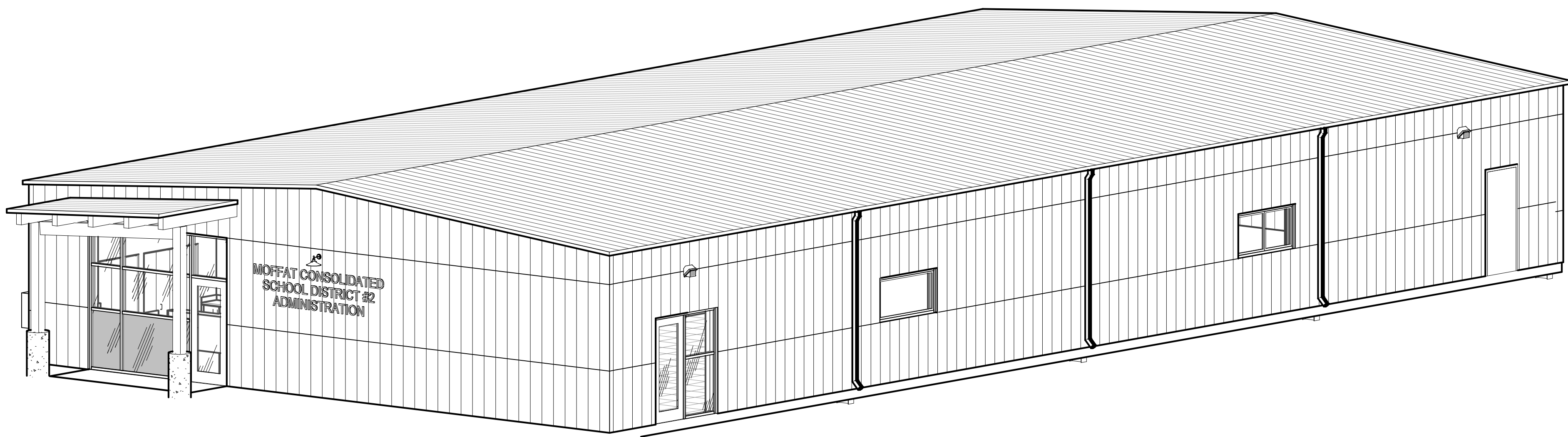
COVER SHEET

MOFFAT ADMINISTRATION BUILDING RENOVATION

501 GARFIELD AVE., MOFFAT, CO 81143

BVH PROJECT NO. 24031

CONSTRUCTION DOCUMENTS



ALTERNATES

ALT-01 ENTRANCE CANOPY
BASE BID - OMIT EXTERIOR ENTRANCE CANOPY AS INDICATED ON ARCHITECTURAL AND STRUCTURAL DRAWINGS.
ADD ALTERNATE - PROVIDE EXTERIOR ENTRANCE CANOPY AS INDICATED ON ARCHITECTURAL AND STRUCTURAL DRAWINGS.

ALT-02 INTERIOR WOOD FINISH PANELS
BASE BID - OMIT INTERIOR WOOD FINISH PANELING WP-1 AT DIVIDER WALL BETWEEN RECEPTION AND THE MEETING ROOM. INSTALL GYP AND PAINT P-1. PROVIDE CORNER GUARDS (CG-1).
ADD ALTERNATE - PROVIDE WOOD FINISH PANELING AS INDICATED ON DRAWINGS AT DIVIDER WALL BETWEEN RECEPTION AND THE MEETING ROOM.

ALT-03 EXISTING WINDOW REPLACEMENT
BASE BID - DO NOT REPLACE ONE 6'-0"W X 3'-0"T, TYPE C WINDOW IN THE AREA OF WORK.
ADD ALTERNATE 3A - REPLACE ONE 6'-0"W X 3'-0"T, TYPE C WINDOW IN THE AREA OF WORK, FIXED, INOPERABLE WINDOWS. INCLUDE UNIT PRICING FOR REPLACING EACH 6'-0"W X 4'-0"T EXISTING WINDOW (QTY:6).
ADD ALTERNATE 3B - REPLACE ONE 6'-0"W X 3'-0"T, TYPE C WINDOW IN THE AREA OF WORK WITH AWNING-TYPE WINDOWS AS INDICATED. INCLUDE UNIT PRICING FOR REPLACING EACH 6'-0"W X 3'-0"T EXISTING WINDOW (QTY:6).

SHEET INDEX

GENERAL

- G1.0 COVER SHEET
- G1.1 LIFE SAFETY AND CODE ANALYSIS

ARCHITECTURAL

- A0.0 WALL TYPES, DRAFTING STANDARDS
- AD1.1 DEMOLITION PLAN, RCP
- AD2.1 DEMOLITION ELEVATIONS
- A1.1 FIRST FLOOR PLAN, RCP
- A1.2 ROOF PLAN
- A1.3 ENLARGED PLANS AND ELEVATIONS
- A3.1 BUILDING ELEVATIONS
- A4.1 SECTIONS
- A6.1 DETAILS
- A7.1 DOOR AND WINDOW FRAME TYPES/DETAILS
- A9.1 FINISH PLAN AND LEGENDS
- A9.2 FURNITURE PLAN
- A10.1 RENDERINGS

STRUCTURAL

- S0.1 GENERAL NOTES AND DETAILS
- S1.1 FLOOR PLAN AND CANOPY FRAMING

MECHANICAL

- MP0.0 MECHANICAL AND PLUMBING LEGEND
- MP0.1 MECHANICAL AND PLUMBING SPECIFICATIONS
- MP0.2 COMCHECK
- MP0.3 MECHANICAL AND PLUMBING SCHEDULES
- MP0.4 MECHANICAL AND PLUMBING DETAILS
- MP1.0 MECHANICAL AND PLUMBING DEMOLITION PLAN
- M1.0 MECHANICAL PLAN

PLUMBING

- P1.0 PLUMBING PLAN - DOMESTIC WATER AND GAS
- P2.0 PLUMBING PLAN - SANITARY WASTE AND VENT

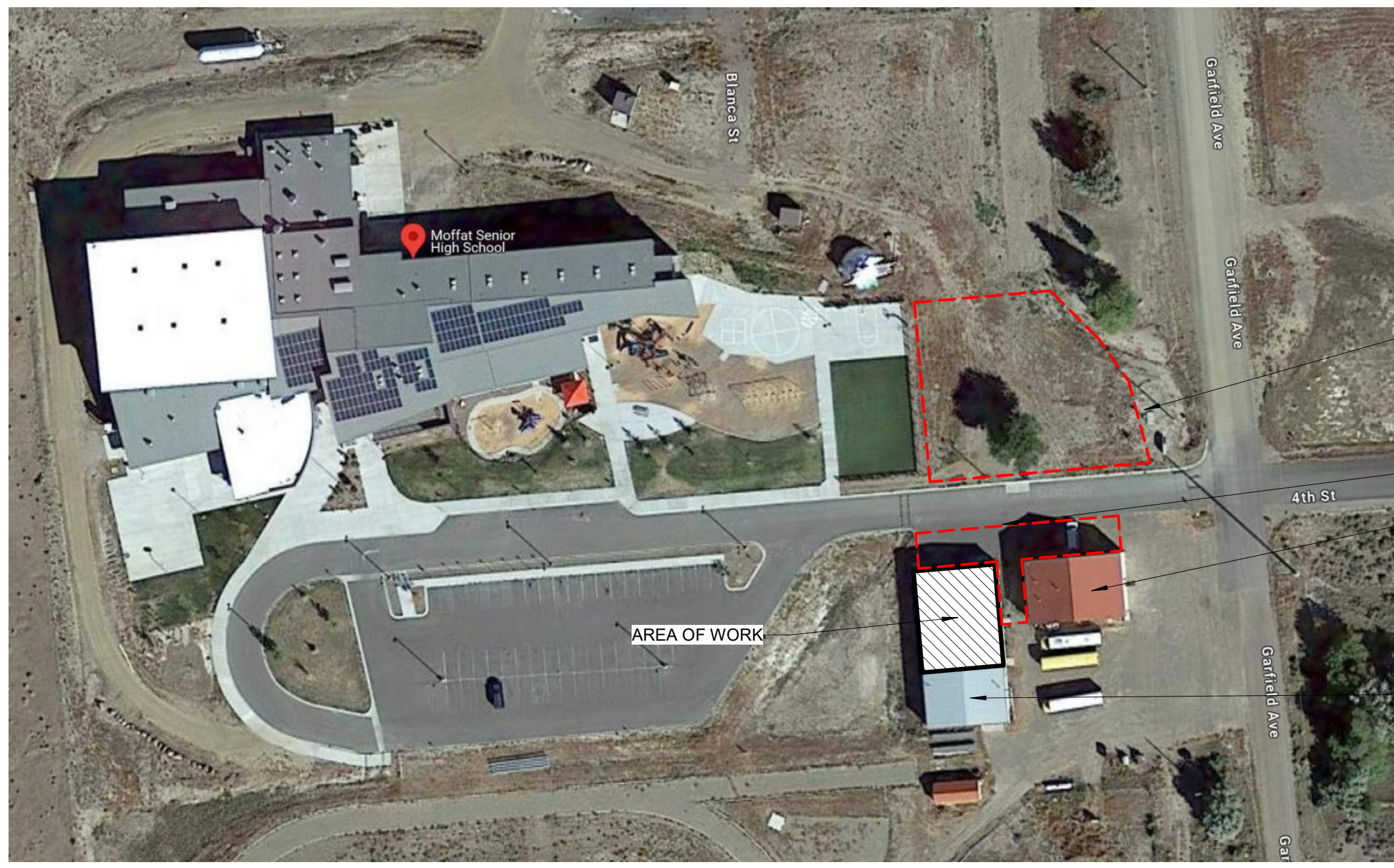
ELECTRICAL

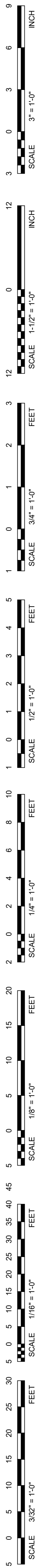
- E000 ELECTRICAL LEGEND
- E002 ELECTRICAL ONE-LINE DIAGRAMS
- E003 ELECTRICAL COMCHECK
- ED101 ELECTRICAL DEMOLITION POWER PLAN
- ED102 ELECTRICAL DEMOLITION LIGHTING PLAN
- E101 LEVEL 1 POWER PLAN
- E201 ELECTRICAL LIGHTING PLAN

VICINITY MAP



SITE LOGISTICS PLAN





LIFE SAFETY AND CODE ANALYSIS

PROJECT DESCRIPTION:
THE PROJECT RENOVATES AN EXISTING PRE ENGINEERED METAL BUILDING CURRENTLY USED AS A GARAGE/ SHOP/ STORAGE/ OFFICE USE TO A BUSINESS USE.

IEBC REPAIR WORK: REPLACEMENT OF DAMAGED ROOF INSULATION IN AREA OF WORK NOTED ON THE REFLECTED CEILING PLANS

LIMITED WORK WILL BE PERFORMED IN THE EXISTING SHOP AREA TO INCLUDE HARDWARE REPLACEMENT AND ADDING A MOP SINK.

THE PROJECT IS LOCATED IN SAGUACHE COUNTY, ZONE 6B

BUILDING IS NON SPRINKLED

APPLICABLE CODES:
2021 (IEBC) INTERNATIONAL EXISTING BUILDING CODE
2021 (IBC) INTERNATIONAL BUILDING CODE
2021 (IFC) INTERNATIONAL FIRE CODE
2021 (IECC) INTERNATIONAL ENERGY CONSERVATION CODE
2021 (IMC) INTERNATIONAL MECHANICAL CODE
2021 (IPC) INTERNATIONAL PLUMBING CODE
2023 (NEC) NATIONAL ELECTRIC CODE
2017 (ICC/ANSI) ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

IEBC CHAPTER 4: REPAIRS
SECTION 401.2 COMPLIANCE
THE WORK SHALL NOT MAKE THE BUILDING LESS COMPLYING THAT IT WAS BEFORE THE REPAIR WAS UNDERTAKEN. WORK ON NONDAMAGED COMPONENTS THAT IS NECESSARY FOR THE REQUIRED REPAIR OF DAMAGED COMPONENTS SHALL BE CONSIDERED PART OF THE REPAIR AND SHALL NOT BE SUBJECT TO THE REQUIREMENTS FOR ALTERATIONS.

IEBC CHAPTER 5: PRESCRIPTIVE COMPLIANCE PATH
SECTION C503.1 - GENERAL (ALTERATIONS)
ALTERATIONS TO ANY BUILDING OR STRUCTURE SHALL COMPLY WITH THE REQUIREMENTS OF THE IBC FOR NEW CONSTRUCTION. ALTERATIONS SHALL BE SUCH THAT THE EXISTING BUILDING IS NOT LESS COMPLYING WITH THE PROVISIONS OF THE IBC THAN THE EXISTING BUILDING OR STRUCTURE WAS PRIOR TO THE ALTERATION.

THE FOLLOWING ALTERATIONS NEED NOT COMPLY WITH THE REQUIREMENTS FOR NEW CONSTRUCTION PROVIDED THAT THE ENERGY USE OF THE BUILDING IS NOT INCREASED:
3. EXISTING CEILING WALL OR FLOOR CAVITIES EXPOSED DURING CONSTRUCTION PROVIDED THAT THESE CAVITIES ARE FILLED WITH INSULATION

NOTE: MEETING THE PRESCRIBED VALUES AND 2 LAYERS OF INSULATION IS TECHNICALLY INFEASIBLE FOR AN INTERIOR REMODEL WITHOUT REMOVING THE EXISTING METAL PANEL ROOF. TO INSTALL AN UPPER LAYER OF INSULATION AND THERMAL SPACERS. INSULATION WILL BE ADDED TO DEPTHS FEASIBLE TO MATCH EXISTING ROOF PURLIN DEPTHS, AND HELD IN PLACE WITH STRAPPING BETWEEN PURLINS.

IBC CHAPTER 3: OCCUPANCY CLASSIFICATION AND USE:
B - BUSINESS
S1 - MODERATE HAZARD STORAGE (SELF STORAGE FACILITY)

IBC CHAPTER 5: GENERAL BUILDING HEIGHT AND AREAS

SECTION 504 - BUILDING HEIGHT AND NUMBER OF STORIES
EXISTING BUILDING IS ONE STORY, APPROXIMATELY 15' TALL
NEW CONSTRUCTION DOES NOT INCREASE BUILDING HEIGHT

SECTION 506 - BUILDING AREA
EXISTING BUILDING IS 5,000 SF GFA
NEW CONSTRUCTION DOES NOT INCREASE BUILDING AREA

SECTION 509 - MIXED OCCUPANCIES

TABLE 508.4 - SEPARATED OCCUPANCIES
BETWEEN B AND S-1 - NO REQUIREMENT

SECTION 509 - INCIDENTAL USE
TABLE 509.1
BUILDING WAS FORMERLY USED AS VOCATIONAL SHOPS FOR AND EDUCATION OCCUPANCY. 1HR SEPARATIONS EXIST AT ALL PARTITION WALLS

1HR SEPARATION WILL BE MAINTAINED BETWEEN SOUTH SHOP AREA AND THE REST OF THE BUILDING. SOUTH SHOP AREA IS NO LONGER USED FOR EDUCATIONAL PURPOSES

IBC TABLE 601 - FIRE RESISTANCE RATING REQUIREMENTS:
FIRE RESISTANCE RATING WILL COMPLY WITH REQUIREMENTS OUTLINED BELOW (IBC TABLE 601):

CONSTRUCTION TYPE V-B		
BUILDING ELEMENT	PRIMARY STRUCTURAL FRAME	0 HR
	BEARING WALLS	EXTERIOR 0 HR INTERIOR 0 HR
	NONBEARING WALLS & PARTITIONS	EXTERIOR 0 HR OR BASED ON TABLE 602 INTERIOR
	FLOOR CONSTRUCTION	0 HR
	ROOF CONSTRUCTION	0 HR
	ROOF COVERING CLASS TABLE 1505.1	REQUIRED: C PROVIDED: EXISTING

ENERGY CODE

BUILDINGS SHALL BE DESIGNED AND CONSTRUCTED TO MEET OR EXCEED THE REQUIREMENT IN THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE.

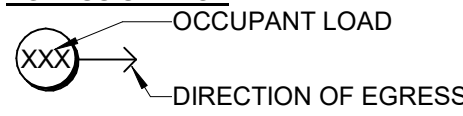
2021 IECC TABLE C402.1.3(4)					
OPAQUE THERMAL ENVELOPE REQUIREMENTS					
CLIMATE ZONE 6			REQUIRED	PROVIDED	
BUILDING ELEMENT	ROOFS	METAL BUILDINGS	R-25 + R-11 LS (R-0.037)	R-25 (IMPROVED FROM EXISTING R-17.4)	
	WALLS, BELOW GRADE		C-0.082	NO CHANGE	
	WALLS	METAL BUILDINGS	U-0.090	R27.5 (U-0.036) + (IMPROVED FROM R-11.6)	
	FLOORS, SLAB ON GRADE	UNHEATED	F-0.51	NO CHANGE	
	OPAQUE DOORS	SWINGING	U-0.37	U-0.37	
		NONSWINGING	U-0.31	U-0.31	
TABLE C402.4 BUILDING ENVELOPE FENESTRATION MAXIMUM U-FACTOR AND SHGC REQUIREMENTS					
FENESTRATION			FIXED	U-0.34	U-0.34
			OPERABLE	U-0.42	U-0.42
			ENTRANCE DOORS	U-0.63	U-0.63
SHGC	PF < 0.2		FIXED 0.38, OPERABLE 0.34	SEW 0.38, N 0.51	
	0.2 ≤ PF < 0.5		FIXED 0.46, OPERABLE 0.41	NA	
	PF ≥ 0.5		FIXED 0.61, OPERABLE 0.54	NA	

LIFE SAFTEY PLAN LEGEND

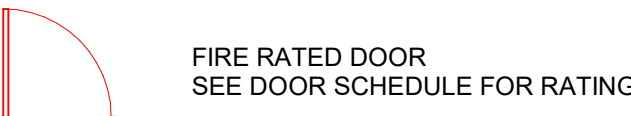
WALL ASSEMBLY LISTINGS

- WALL - 1HR RATED
- WALL FIRE PARTITION

EGRESS SYMBOL

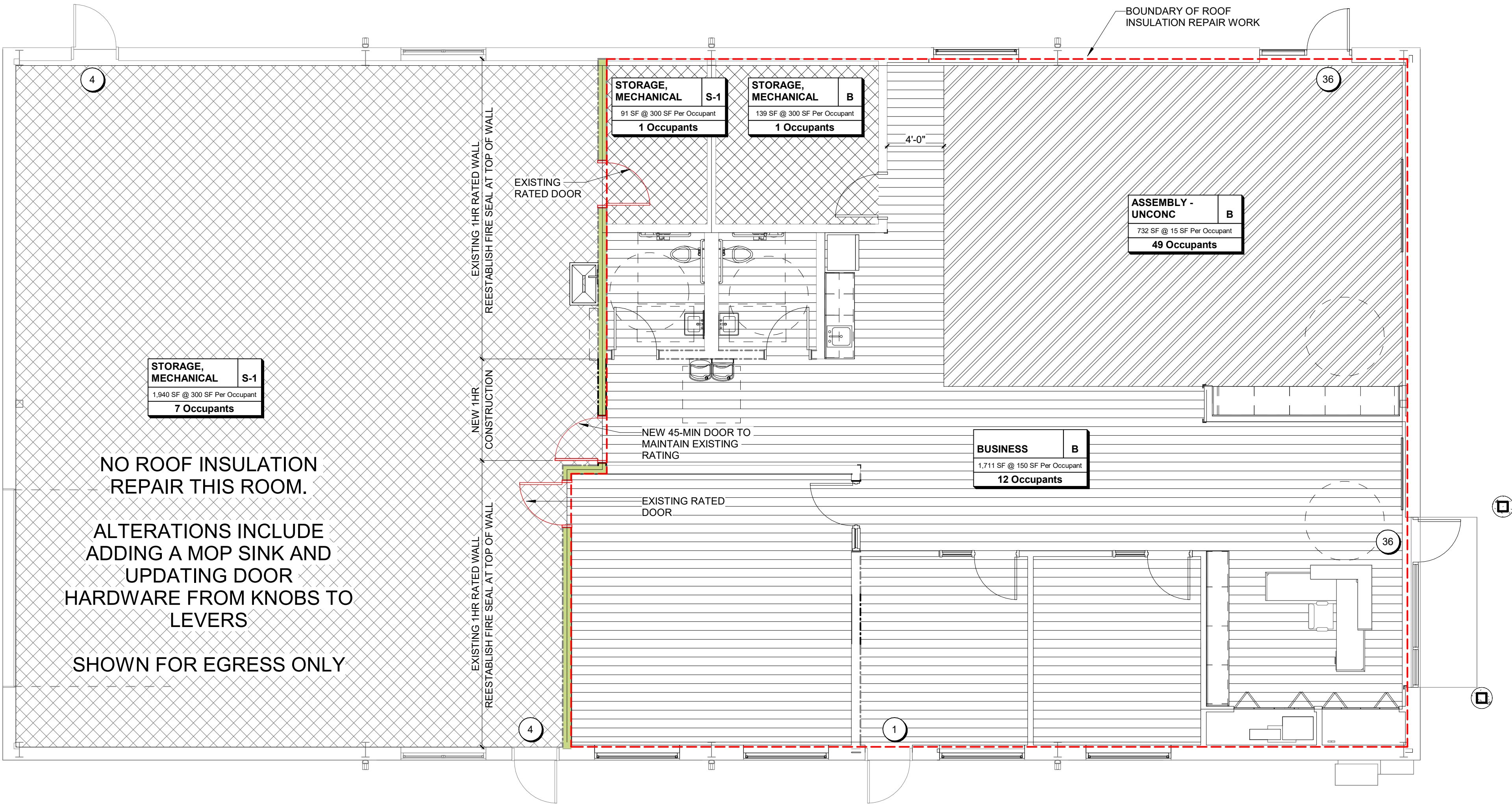


OCC FUNCTION	XXX	IBC FUNCTION OF SPACE
150 SF @ XX SF Per Occupant		OCCUPANCE USE CLASSIFICATION
000 Occupants		SPACE SQUARE FOOTAGE AND OCCUPANCY LOAD FACTOR
		OCCUPANT LOAD



IBC 2009 FUNCTION OF SPACE

- ASSEMBLY - UNCONC
- BUSINESS
- STORAGE, MECHANICAL



1 FIRST FLOOR LIFE SAFETY PLAN



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SMH CONSULTANTS
PROJECT ENGINEER: BRETT LOUK
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SMHCONSULTANTS.COM

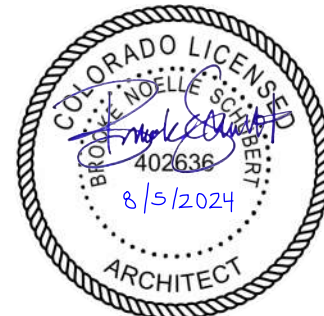
STRUCTURAL
HCDA CONSULTANTS
ENGINEERS: JEFF KOBRINGER AND CHRIS AUNAN
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COLORADO SPRINGS, CO 80903
V 719 633 7784
HCDAENGINEERING.COM

MECHANICAL, ELECTRICAL + PLUMBING
RAMIREZ, JOHNSON, AND ASSOCIATES
ENGINEERS: DARIN RAMIREZ AND JUDAH KATZ
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RJA-ENG.COM

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

MOFFAT ADMINISTRATION BUILDING RENOVATION

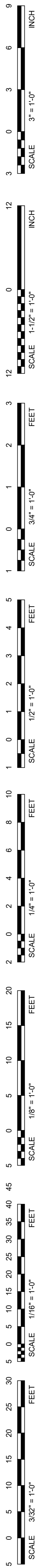
PROJECT: 24031 DATE: 8/5/2024
PROJECT STATUS: CONSTRUCTION DOCUMENTS



LIFE SAFETY AND CODE ANALYSIS

NORTH





ABBREVIATIONS

ACC	ACCESSIBLE/ACCESSIBILITY
ACT	ACUSTICAL CEILING TILE
AFB	ABOVE FINISH FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
ALT	ALTERNATE
ALUM	ALUMINUM
ARCH	ARCHITECTURAL
AWP	ACOUSTICAL WALL PANEL
BCMU	BURNISHED CONCRETE MASONRY UNIT
BGS	BAFFLE CHANGING STATION
BD	BOARD
BLKG	BLOCKING
BO	BOTTOM OF
BRNG	BEARING
CC	CENTER TO CENTER
CCD	COILING COUNTER DOOR
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CPT	CARPET
CT	CERAMIC TILE
DBL	DOUBLE
DEG	DEGREE
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DM	DIMENSION
DN	DOWN
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
EA	EACH
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
ELEV	ELEVATION
ELEC	ELECTRICAL
EQU	EQUAL
EQUIP	EQUIPMENT
EW	ELECTRIC WATER COOLER
EXG	EXISTING
EXT	EXTERIOR
FD	FLOOR DRAIN
FND	FOUNDATION
FE	FIRE EXTINGUISHER
FE	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FLR	FLOOR
FLRG	FLOORING
FT	FEET
FTG	FOOTING
GA	GALVE
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GCMU	GLAZED CONCRETE MASONRY UNIT
GSP	GROSS SQUARE FOOT
GWB	GYPSUM WALLBOARD
HGT	HEIGHT
HOWE	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
IN	INCH
INSUL	INSULATION
INT	INTERIOR
JB	JUNCTION BOX
KIT	KITCHEN
L	LENGTH
LAV	LAVATORY
LAM	LAMINATE
LF	LINEAR FOOT
LCKR	LOCKER
LSC	LIFE SAFETY CODE
MAX	MAXIMUM
MBD	MARKER BOARD
MBH	MOP AND BROOM HOLDER
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MFRG	MANUFACTURING
MIN	MINIMUM
MIR	MIRROR
NA	NOT APPLICABLE
NIC	NOT IN CONTACT
NOM	NOMINAL
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
OCG	OVERHEAD COILING GRILLE
OHD	OVERHEAD DOOR
ORD	OVERFLOW ROOF DRAIN
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
OPNG	OPENING
OSD	OVERHEAD SECTIONAL DOOR
P	PAINT
PC	PRECAST
PCT	PORCELAIN CERAMIC TILE
PERP	PERPENDICULAR
PLR	PLATE
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PORC	PORCELAIN
PTD	PAPER TOWEL DISPENSER
PTDR	COMBINATION TOWEL DISPENSER/RECEPTACLE
QT	QUARRY TILE
RAD	RADIUS
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RECS	RECOMMENDATIONS
RECP	RECEPTACLE
REF	REFERENCE
REQD	REQUIRED
RES	RESILIENT
RF	RUBBER/RESILIENT FLOOR
RM	ROOM
RO	ROUGH OPENING
SCD	TOILET SEAT COVER DISPENSER
SD	SOAP DISPENSER
SF	SQUARE FOOT
SFCMU	SPLIT-FACED CONCRETE MASONRY UNIT
SHWR	SHOWER
SIM	SIMILAR
SND	SANITARY NAPKIN DISPOSAL
SNV	SANITARY NAPKIN VENDOR
SPEC	SPECIFICATIONS
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STRCT	STRUCTURE
TG	TONGUE & GROOVE
TB	TOWEL BAR
TBD	TACK BOARD
TERR	TERRAZZO
TH	TOWEL HOOK
THK	THICKNESS
T	TILE
TO	TOP OF
TTD	TOILET TISSUE DISPENSER
TW	TACK WALL
TYP	TYPICAL
UNEX	UNEXCAVATED
UNO	UNLESS NOTED OTHERWISE
UTS	UTILITY SHELF
UTIL	UTILITY
VAR	VARIABLES
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
WD	WOOD
WDW	WINDOW
WR	WASTE RECEPTACLE

MATERIALS LEGEND

	CIP CONCRETE
	PC CONCRETE
	CMU
	MASONRY VENEER
	STEEL
	ALUMINUM
	METAL STUD
	GLAZING
	CONTINUOUS WOOD BLOCKING
	WOOD SHIM/SPACER
	WOOD FINISH TRIM
	BOARD INSULATION
	ROOF INSULATION
	BATT INSULATION
	PLYWOOD
	GYPSUM BOARD
	EARTH/ GENERIC FILL
	GRAVEL
	SAND

GENERAL NOTES

NOTES APPLY TO ALL TRADES AND ALL DRAWINGS.

SEE GENERAL CONDITIONS OF THE CONTRACT FOR FULL SCOPE OF CONTRACTOR REQUIREMENTS.

DO NOT SCALE DRAWINGS.

THE KEYNOTING SYSTEM IS USED ON THE DRAWINGS TO IDENTIFY CONSTRUCTION MATERIALS AND TO REFERENCE THEM TO THE TECHNICAL SPECIFICATIONS FOUND IN THE PROJECT MANUAL. THE ORGANIZATION OF THE KEYNOTING SYSTEM ON THE DRAWINGS SHALL NOT CONTROL THE CONTRACTOR IN DIVIDING THE WORK AMONG THE SUBCONTRACTORS OR IN ESTABLISHING THE EXTENT OF WORK TO BE PERFORMED BY ANY TRADE.

VERIFY ALL DIMENSIONS AND REQUIRED CLEARANCES BETWEEN EXISTING OR NEW CONDITIONS PRIOR TO FABRICATION AND INSTALLATION.

THE DRAWINGS SHOW EXISTING CONDITIONS AS ACCURATELY AS POSSIBLE BASED ON AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, LOCATIONS, UTILITIES, EQUIPMENT, ETC. PRIOR TO THE START OF DEMOLITION AND/OR CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

CONDUCT OPERATIONS SO AS TO PERMIT PUBLIC ACCESS TO THE ADJACENT SITE. WALKS, DRIVEWAYS, ENTRANCES, ADJACENT PROPERTIES TO BE USED BY THE PUBLIC SHALL BE MAINTAINED IN A SAFE CONDITION AND SHALL BE KEPT FREE AND CLEAR OF THE CONTRACTOR'S EQUIPMENT, MATERIALS, AND DEBRIS.

CONTRACTOR SHALL COOPERATE WITH THE OWNER IN THE SCHEDULING AND EXECUTION OF THE WORK AND USE OF THE SITE. CONTRACTOR SHALL NOTIFY THE OWNER AND MUNICIPALITIES BEFORE COMMENCEMENT OF ANY WORK OR OPERATION WHICH WOULD INTERFERE WITH THE USE OF AN EXISTING BUILDING OR SURROUNDING SITE/BUILDINGS.

CONTRACTOR'S OPERATIONS AND STORAGE OF MATERIALS SHALL BE CONFINED TO THE MINIMUM AREA OF THE SITE NECESSARY TO ACCOMPLISH THE WORK. DESIGNATED BY THE INDICATED STAGING AREA. ANY ADDITIONAL STAGING OR STORAGE AREAS SHALL BE APPROVED BY THE LOCAL BUILDING AUTHORITY AND THE OWNER.

CONTRACTOR SHALL EXERCISE ALL REASONABLE PRECAUTIONS FOR THE PROTECTION OF PERSONS AND PROPERTY ON THE SITE. ALL SAFETY PROVISIONS AND APPLICABLE LAWS FOR BUILDING AND CONSTRUCTION CODES SHALL BE OBSERVED.

CONTRACTOR SHALL PROTECT THEIR WORK, THE WORK OF OTHERS, AND EXISTING WORK AND PROPERTIES SHOWN TO REMAIN. ANY WORK DAMAGED SHALL BE RETURNED TO BETTER OR EQUAL CONDITION.

SECURITY SHALL BE MAINTAINED IN ALL SITUATIONS.

CONTRACTOR SHALL PROVIDE TEMPORARY DUSTPROOF ENCLOSURES, DUST BARRIERS, COVERED WALKWAYS AND/OR BARRICADES AS REQUIRED TO PROTECT THE PUBLIC, OCCUPANTS AND EXISTING FACILITIES DURING DEMOLITION AND CONSTRUCTION.

SYMBOLS LEGEND

	BUILDING SECTION REFERENCE
	WALL SECTION REFERENCE
	DETAIL REFERENCE
	CALL OUT REFERENCE
	BUILDING ELEVATION REFERENCE
	INTERIOR ELEVATION REFERENCE
	GRIDLINE REFERENCE
	ELEVATION REFERENCE
	ROOM TAG
	DOOR TAG
	WINDOW/FRAME TAG
	WALL TAG
	REVISION TAG
	MATERIAL/FLOORING REFERENCE
	SLOPE REFERENCE

PARTITION TYPE SCHEDULE

WALL TYPE	WIDTH	DESCRIPTION	FIRE RATING	UL TEST	STC (MIN)	STC Test
F60	6 1/8"	2X4 WOOD STUDS 16" O.C. 5/8" GYPSUM BOARD FINISHED SIDE	NA		NA	
W40	4 3/4"	2X4 WOOD STUDS 16" O.C. 5/8" GYPSUM BOARD EACH SIDE	NA		32	RAL-TL11-129
W60	6 3/4"	2X6 WOOD STUDS 16" O.C. 5/8" GYPSUM BOARD EACH SIDE	NA			
W61	6 3/4"	2X6 WOOD STUDS 16" O.C. 5/8" GYPSUM BOARD, TYPE X EACH SIDE	1 HR	U305, U314 SHM	33	RAL-TL-172

GENERAL NOTES:

SEE SPECIFICATIONS FOR ADDITIONAL WALL DETAILS, STANDARDS, AND REQUIREMENTS.

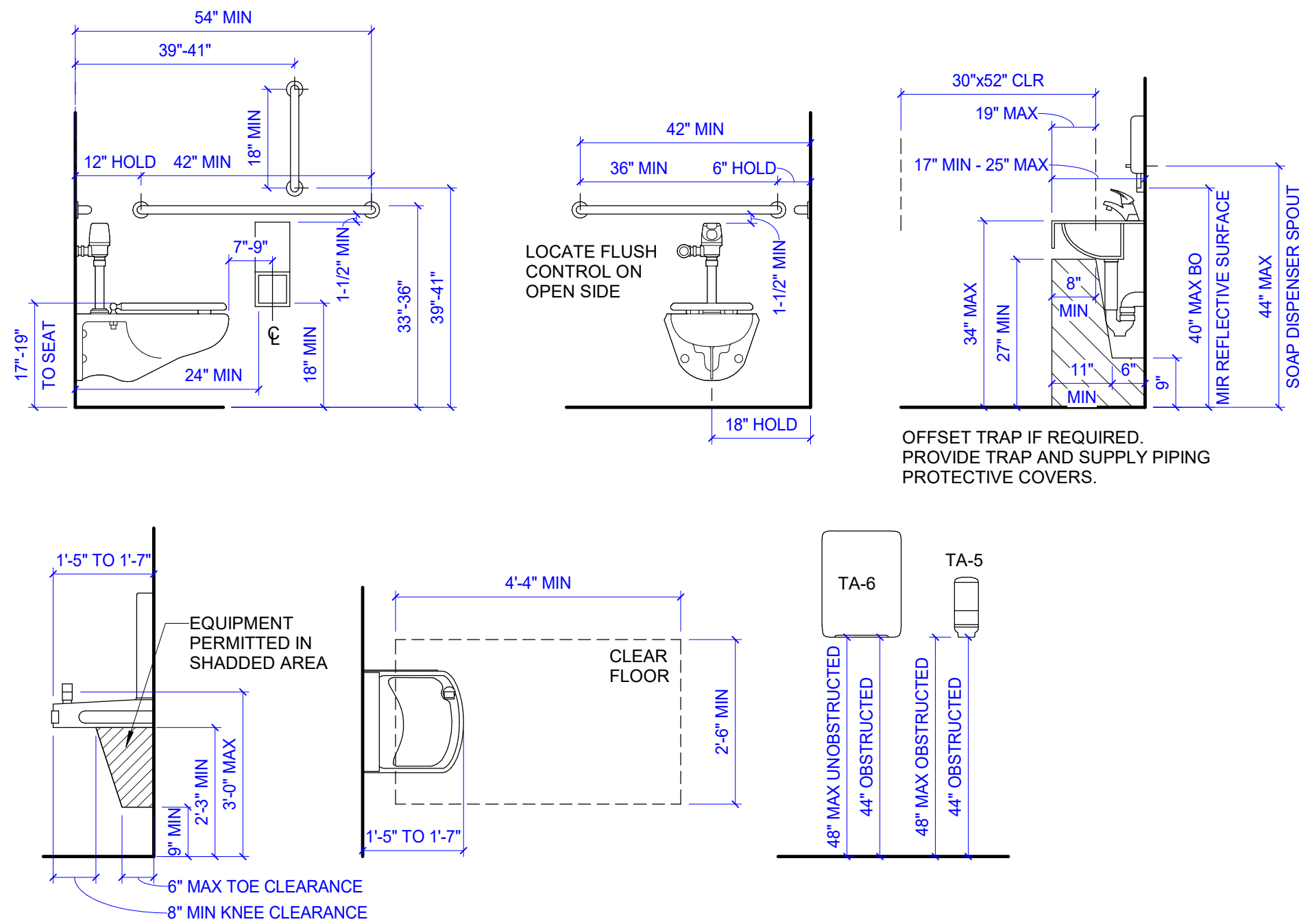
SEE DRAWINGS AND UL RATING LISTED IN THE SCHEDULE FOR ADDITIONAL WALL DETAILS, STANDARDS, AND REQUIREMENTS.

FRAMING DIMENSIONS ARE TAKEN FROM THE FACE OF FRAMING OR CENTERLINE OF FRAMING. INTERIOR DIMENSIONS ARE TAKEN FROM FACE OF FINISHES. TYPICALLY (RESTROOMS IN PARTICULAR) WHERE CLEAR OR HOLD DIMENSIONS ARE STATED, ACCOMMODATE FOR THE THICKNESS OF FINISHES.

SEAL ALL MECH, ELEC, EQUIPMENT, OR DEVICE PENETRATIONS THROUGH UNRATED FLOORS AND WALLS SMOKE TIGHT. METAL TRIM OR ESCUTCHEONS ALONE ARE NOT ACCEPTABLE. SEE 2009 - IBC SECTION 712.3 FOR FULL CODE REQUIREMENTS.

SEAL ALL MECH AND ELEC PENETRATIONS THROUGH RATED FLOORS AND WALLS PER THE DESIGNATED OR EQUIVALENT UL DESIGN NUMBER FOR A COMPLETE RATED ASSEMBLY.

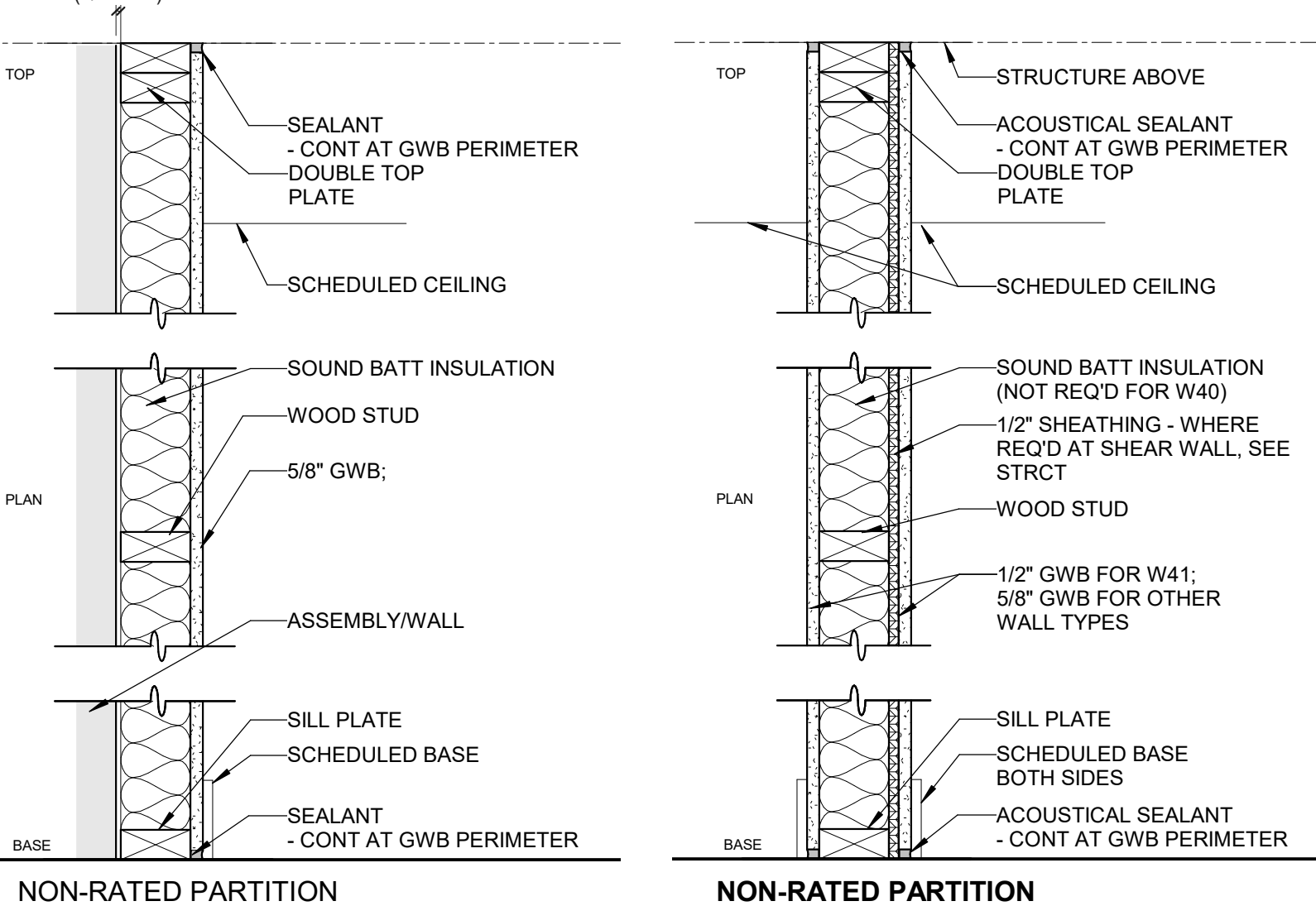
ACCESSIBLE PLUMBING FIXTURE GUIDELINES



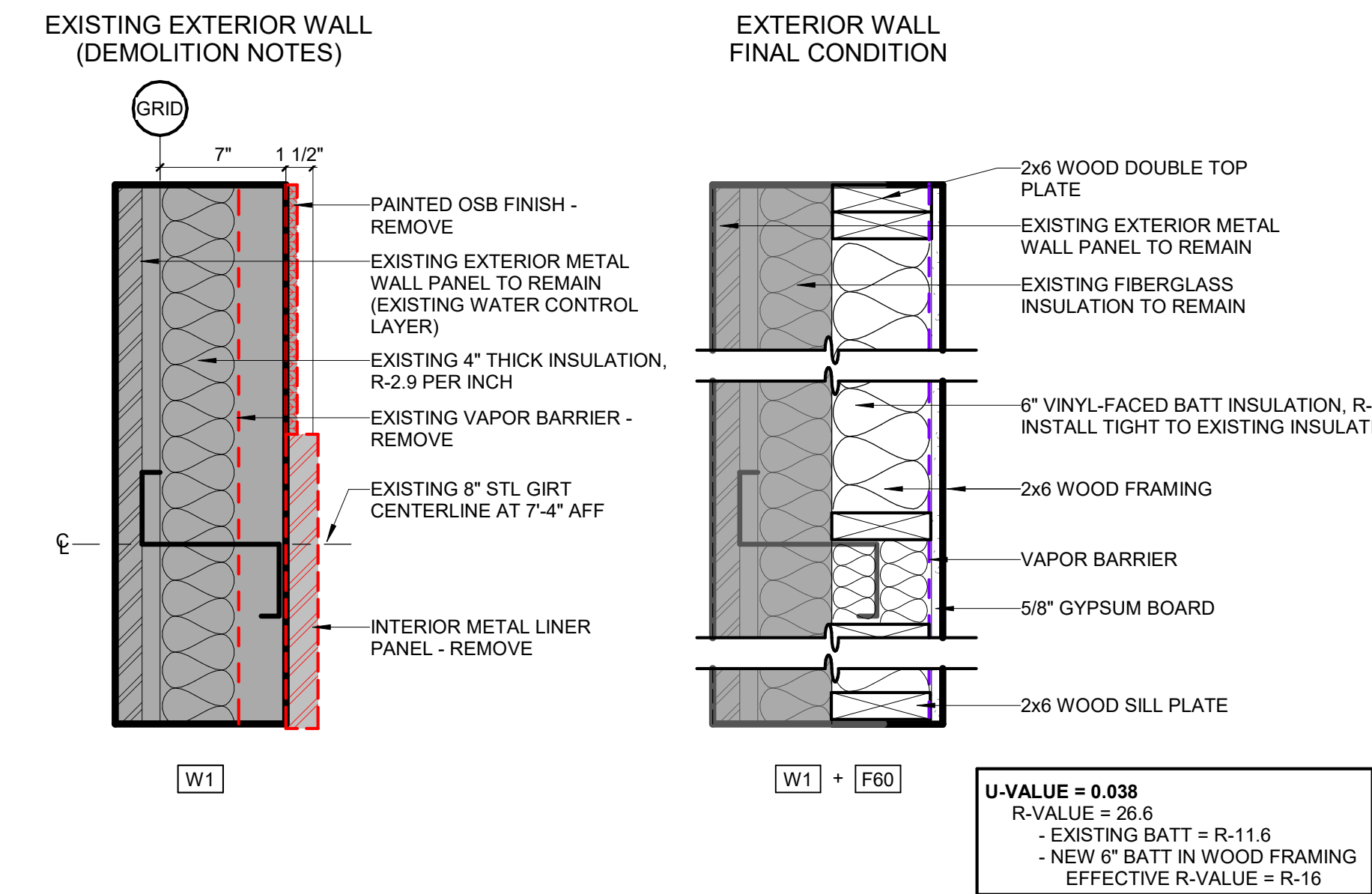
GENERAL NOTE:
ALL MOUNTING HEIGHTS SHALL BE OF CURRENT ACCESSIBILITY GUIDELINES.
FORWARD REACH TO ACCESSIBLE OPERATING MECHANISMS AND EQUIPMENT CONTROLS SHALL BE 15'-48" AFF AND 15'-54" AFF FOR SIDE REACH WHEN NO OBSTRUCTIONS EXIST. FORWARD REACH TO ACCESSIBLE OPERATING MECHANISMS AND EQUIPMENT CONTROLS SHALL BE 48" MAX. AFF WHERE OBSTRUCTIONS WITH REACH DEPTHS OF 20" MAX. OCCUR AND 44" MAX. AFF WHERE OBSTRUCTIONS WITH REACH DEPTHS OF 20" - 25" MAX. OCCUR.
ACCESSIBLE COUNTER OR WORK SURFACE HEIGHT SHALL BE 34" MAX. AFF.

ADA DRINKING FOUNTAIN CLEARANCES:
SPOUT OUTLETS FOR WHEELCHAIR ACCESSIBLE DRINKING FOUNTAINS SHALL BE 36" MAX. AFF. SPOUT OUTLETS FOR STANDING PERSONS SHALL BE 38"-43" AFF.

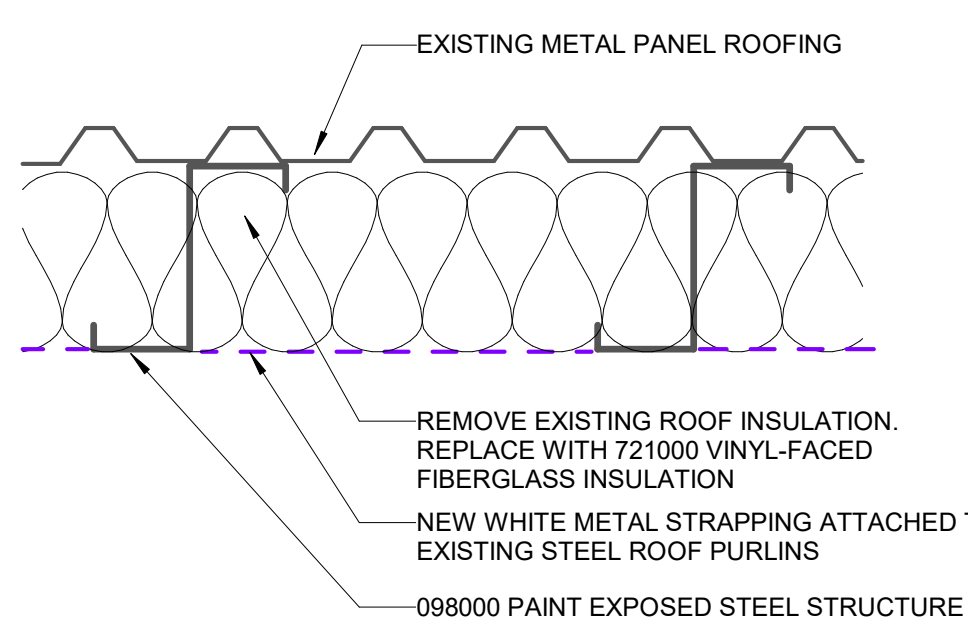
TYPICAL WALL DETAILS



TYPICAL ASSEMBLIES

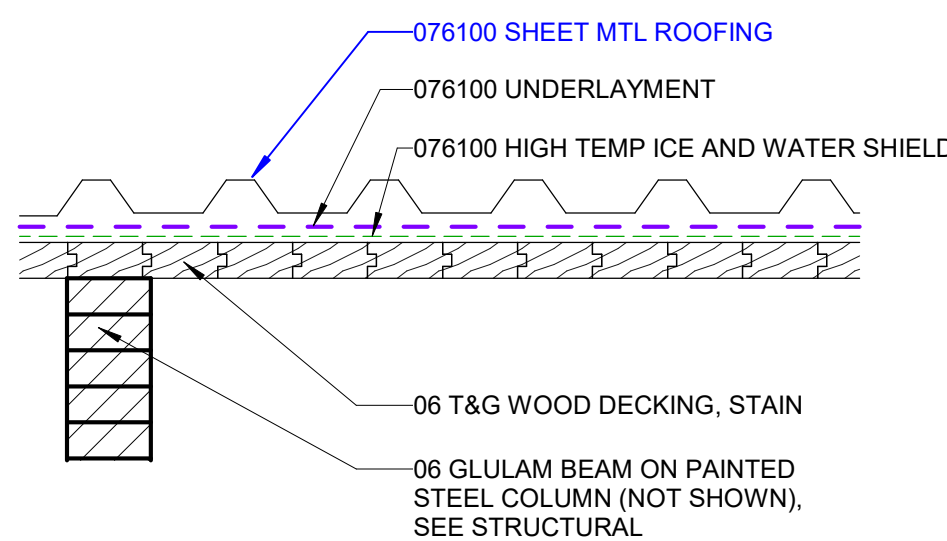


MAIN ROOF REPAIR



U-VALUE = 0.04
R-VALUE = 25
EXISTING BATT WAS 6", R-2.9 INCH, R-17.6. REPLACEMENT BATT IN SAME CAVITY BRINGS THE R-VALUE UP TO R-25. THIS IS A REPLACEMENT IN KIND FOR (E) SAGGING, DELAMINATING VINYL-FACED BATT. IT IS TECHNICALLY INFEASIBLE TO FIT THICKER BATT WITHIN THE EXISTING PURLIN CAVITY, AS STRAPPING BETWEEN PURLINS HOLDS INSULATION IN PLACE.
IN A FUTURE PROJECT, WHEN THE ROOF IS REPLACED, SPACERS CAN BE ADDED WITH AN ADDITIONAL LAYER OF BATT ABOVE TO BRING UP TO FULL ENERGY COMPLIANCE.

EXTERIOR ROOF CANOPY ASSEMBLY



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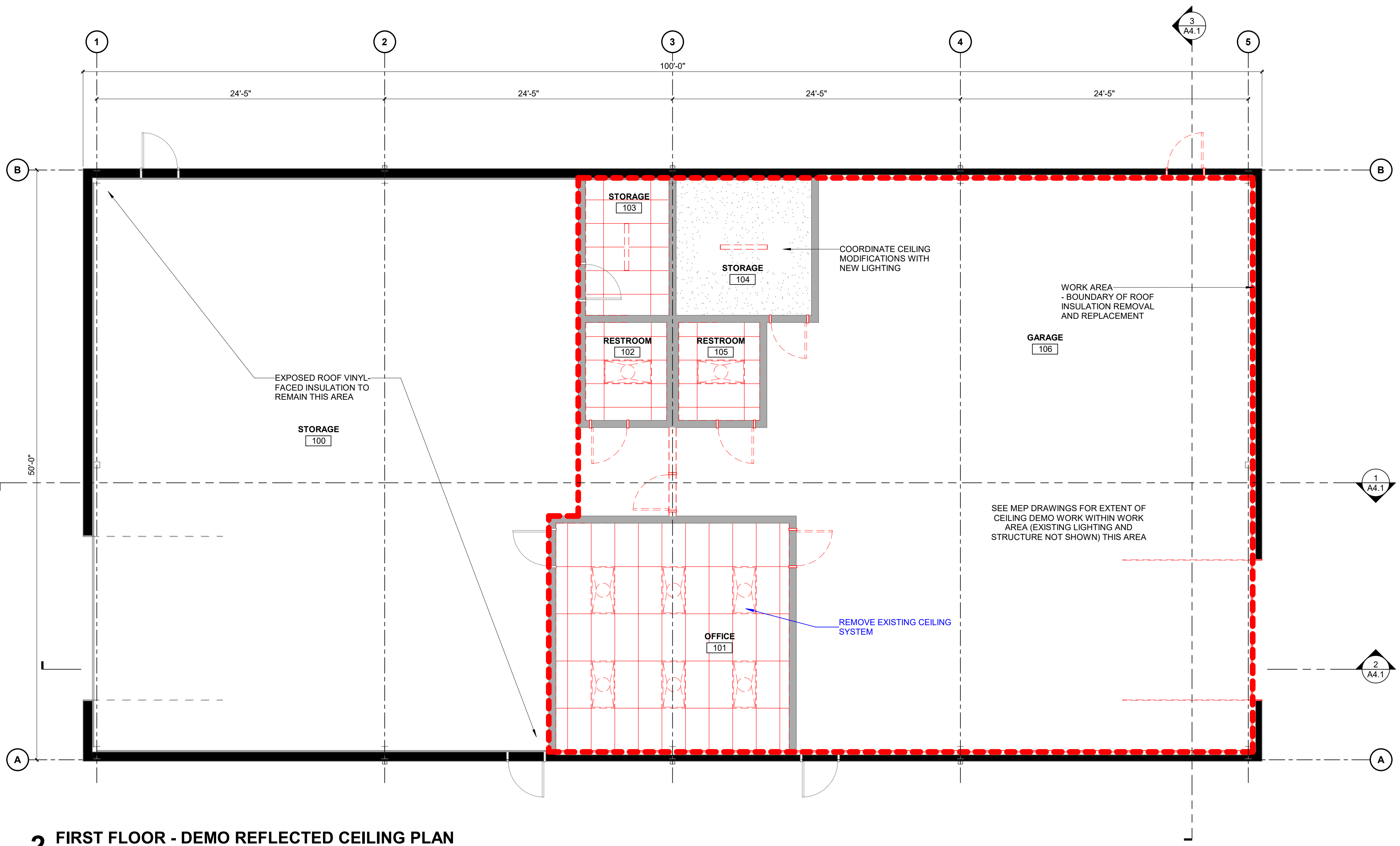
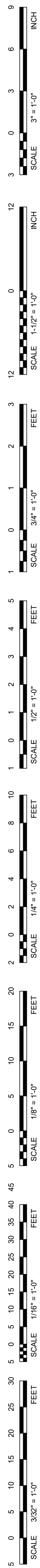
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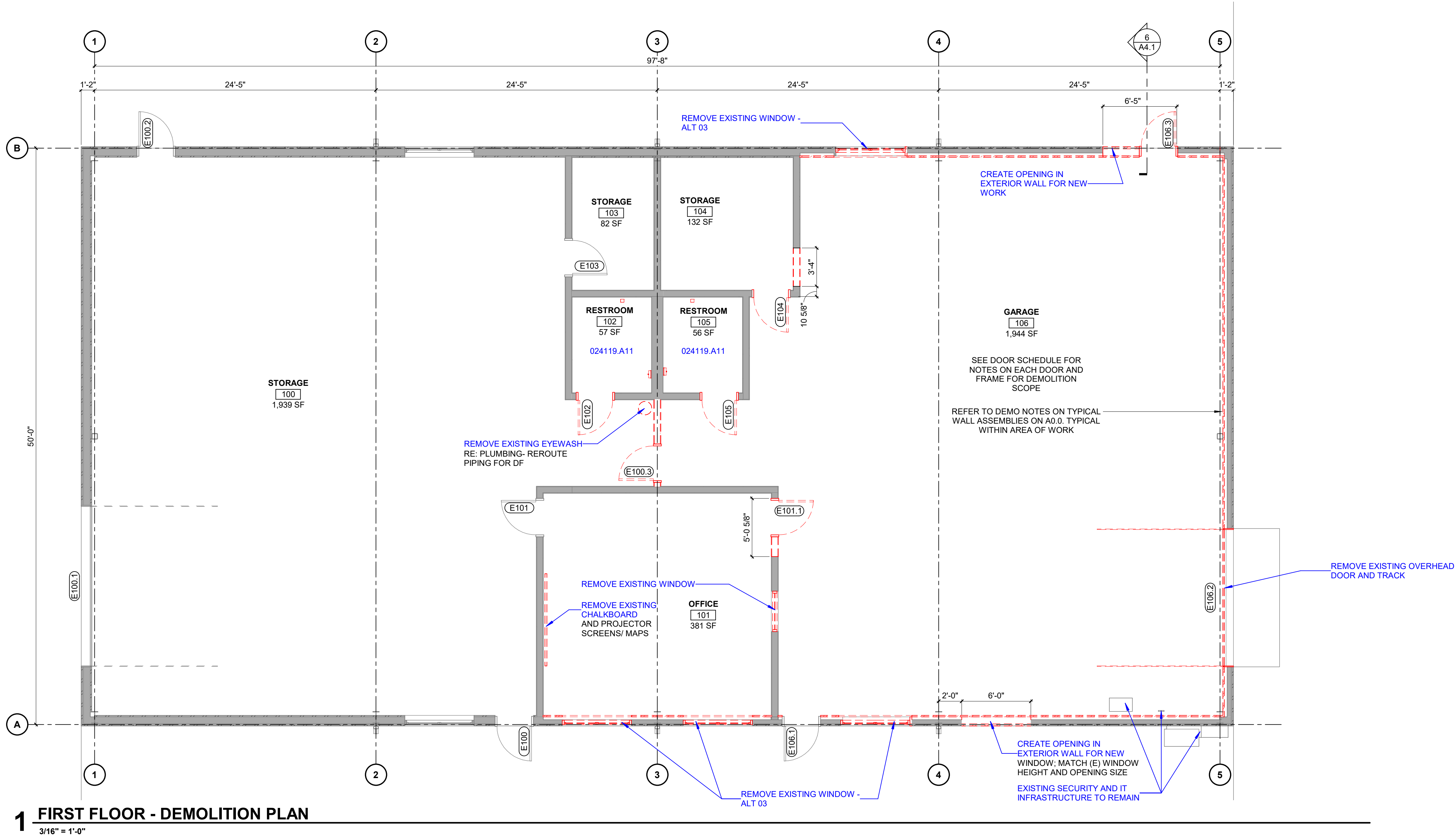
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WALL TYPES,
DRAFTING
STANDARDS

A0.0



2 FIRST FLOOR - DEMO REFLECTED CEILING PLAN
3/16" = 1'-0"



1 FIRST FLOOR - DEMOLITION PLAN
3/16" = 1'-0"

GENERAL DEMOLITION NOTES

1. VERIFY EXISTING FIELD CONDITIONS, REPORT DISCREPANCIES TO ARCHITECT.
2. REFER TO CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR REQUIRED DEMOLITION AND FOR ITEMS TO REMAIN IN AREAS OF DEMOLITION.
3. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS REGARDING DEMOLITION AND ALTERATION PROCEDURES.
4. DEMOLITION WORK AS SHOWN ON THE DRAWINGS IS TO INDICATE, IN A GENERAL MANNER, THE REMOVAL OF EXISTING CONSTRUCTION AND IS NOT INTENDED TO BE INCLUSIVE. PROVIDE ALL DEMOLITION REQUIRED TO ACCOMMODATE OR INSTALL ALL WORK FOR ALL TRADES. VERIFY CONDITIONS AT BUILDING SITE.
5. PROTECT EXISTING CONSTRUCTION TO REMAIN. ALL CONSTRUCTION TO REMAIN WHICH AFFECTED BY DEMOLITION SHALL BE PATCHED, REPAIRED, PROPERLY MEMBERED, AND ALIGNED AS TO LEAVE NO EVIDENCE OF REPAIR.
6. CLEAN AND PREPARE ALL SURFACES SCHEDULED TO RECEIVE NEW FINISHES.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL ITEMS NOT REMOVED BY OWNER. OWNER RESERVES THE RIGHT TO SALVAGE ITEMS REMOVED BY CONTRACTOR.
8. REMOVE ALL FLOORWALL/CEILING MOUNTED ITEMS, DEVICES, CONDUIT, ETC. TO ACCOMMODATE NEW WORK. OWNER RESERVES THE RIGHT TO SALVAGE ITEMS REMOVED BY CONTRACTOR.

DEMOLITION PLAN LEGEND

- EXISTING ITEMS
- EXISTING ITEM TO REMAIN
 - EXISTING WALL TO REMAIN
 - EXISTING DOOR TO REMAIN
- DEMOLITION ITEMS
- EXISTING CONSTRUCTION TO BE REMOVED/DEMOLISHED. SEE NOTES AND FINAL CONSTRUCTION FOR EXTENTS OF REMOVAL.
 - WINDOW TO BE REMOVED
 - DOOR TO BE DEMOLISHED/REMOVED OR MODIFIED PER KEYNOTES OR GENERAL DEMO NOTES

KEYNOTE LEGEND

SECTION	DESCRIPTION
024119.A5	REMOVE EXISTING WINDOW
024119.A6	REMOVE EXISTING OVERHEAD DOOR AND TRACK
024119.A7	CREATE OPENING IN EXTERIOR WALL FOR NEW WORK
024119.A8	REMOVE EXISTING EYEWASH
024119.A9	REMOVE EXISTING CHALKBOARD
024119.A10	REMOVE EXISTING CEILING SYSTEM
024119.A11	SALVAGE EXISTING TOILET ACCESSORIES (SOAP DISPENSER, TOILET PAPER HOLDER, PAPER TOWEL DISPENSER) AND TURN OVER TO OWNER TO BE REINSTALLED
024119.A14	REMOVE EXISTING WINDOW - ALT 03
024119.A58	EXISTING SECURITY AND IT INFRASTRUCTURE TO REMAIN

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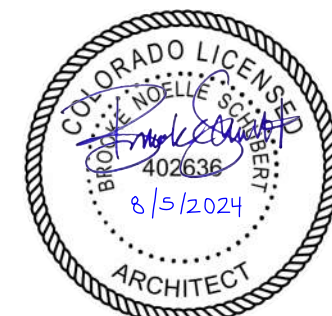
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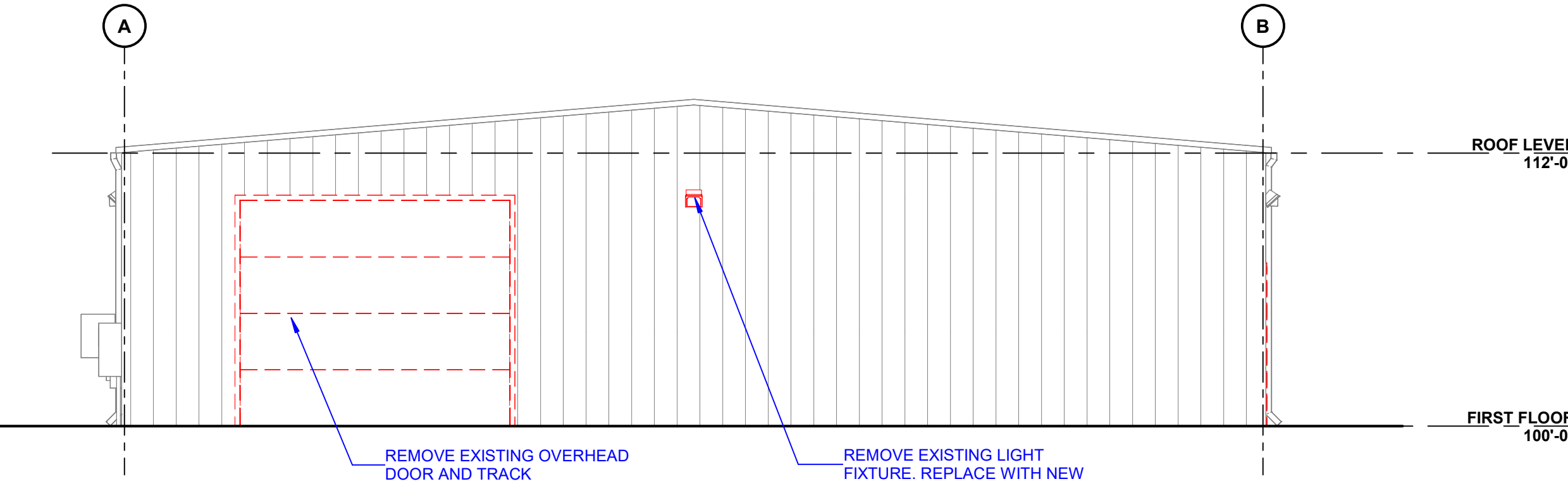
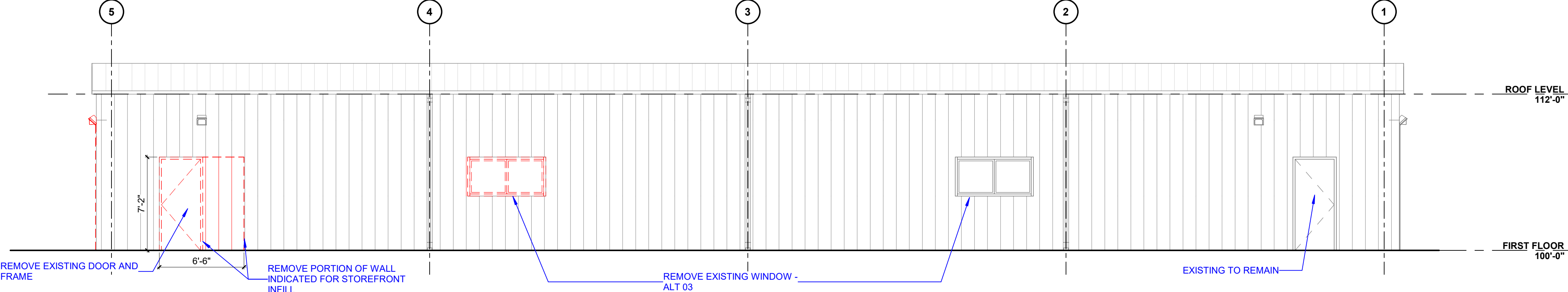
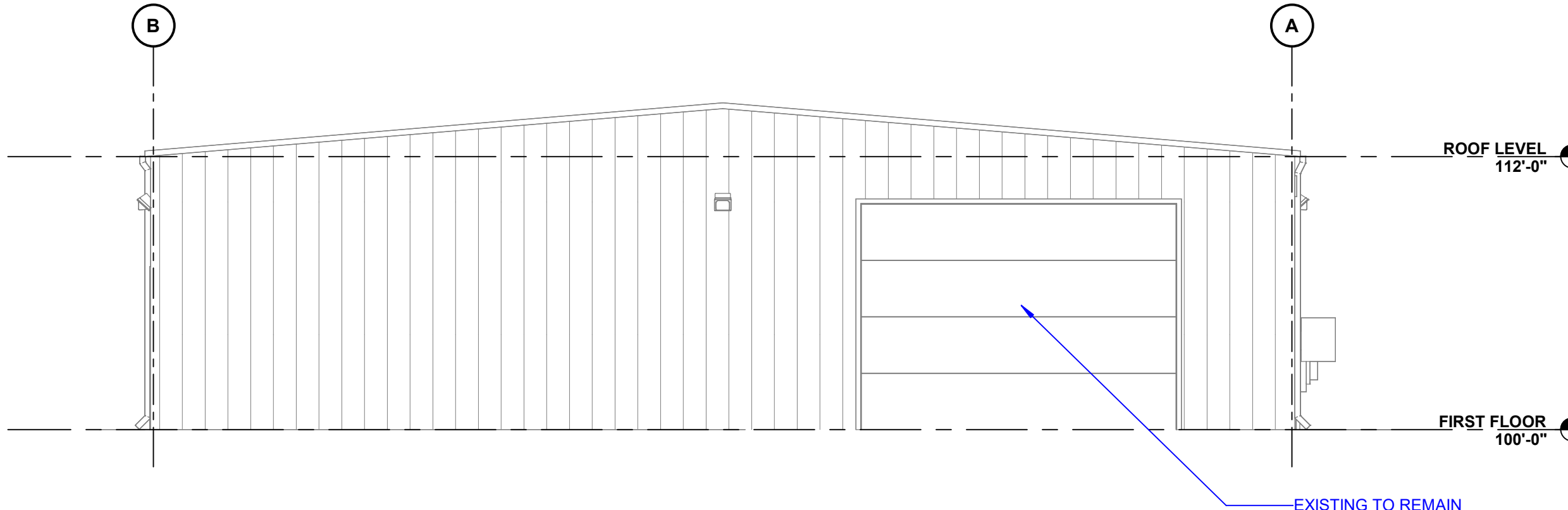
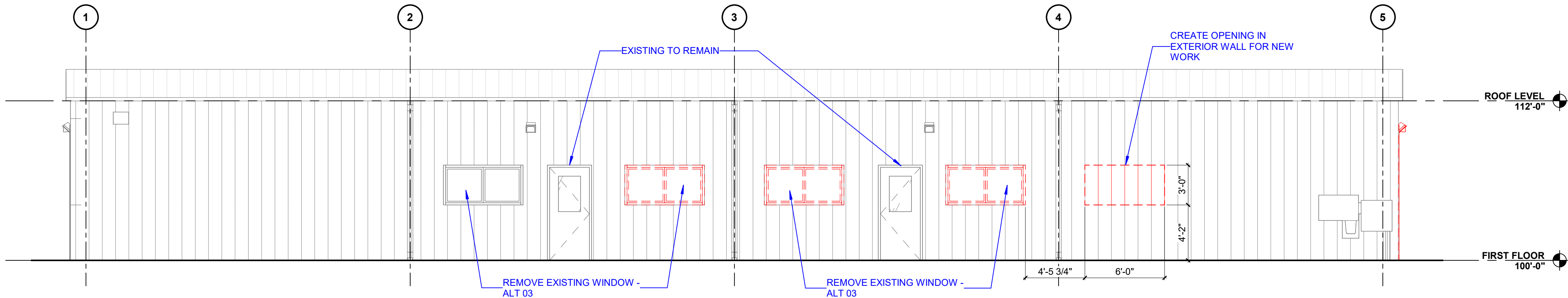
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DEMOLITION PLAN,
RCP

NORTH
AD1.1



GENERAL DEMOLITION NOTES

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8. REMOVE ALL FLOOR/WALL/CEILING MOUNTED ITEMS, DEVICES, CONDUIT, ETC. TO ACCOMMODATE NEW WORK. OWNER RESERVES THE RIGHT TO SALVAGE ITEMS REMOVED BY CONTRACTOR.

DEMOLITION PLAN LEGEND

- EXISTING TO REMAIN
AREAS OF DEMOLITION

KEYNOTE LEGEND

SECTION	DESCRIPTION
024119.A3	REMOVE EXISTING DOOR AND FRAME
024119.A6	REMOVE EXISTING OVERHEAD DOOR AND TRACK
024119.A7	CREATE OPENING IN EXTERIOR WALL FOR NEW WORK
024119.A12	REMOVE EXISTING LIGHT FIXTURE, REPLACE WITH NEW
024119.A13	REMOVE PORTION OF WALL INDICATED FOR STOREFRONT INFILL
024119.A14	REMOVE EXISTING WINDOW - ALT 03
024119.A50	EXISTING TO REMAIN

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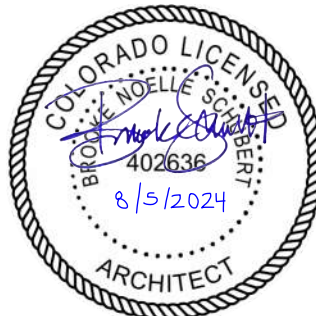
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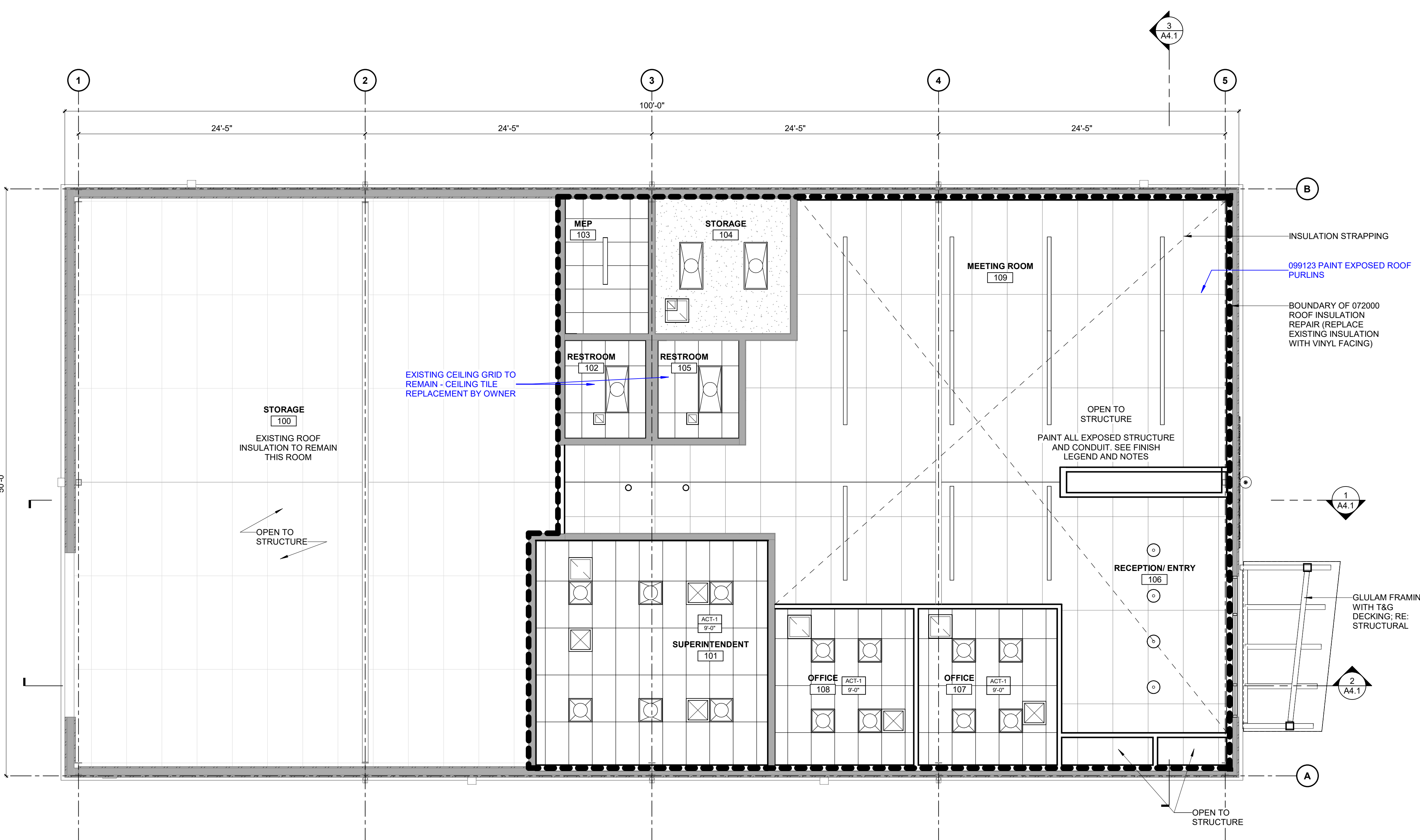
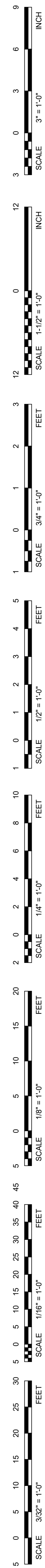
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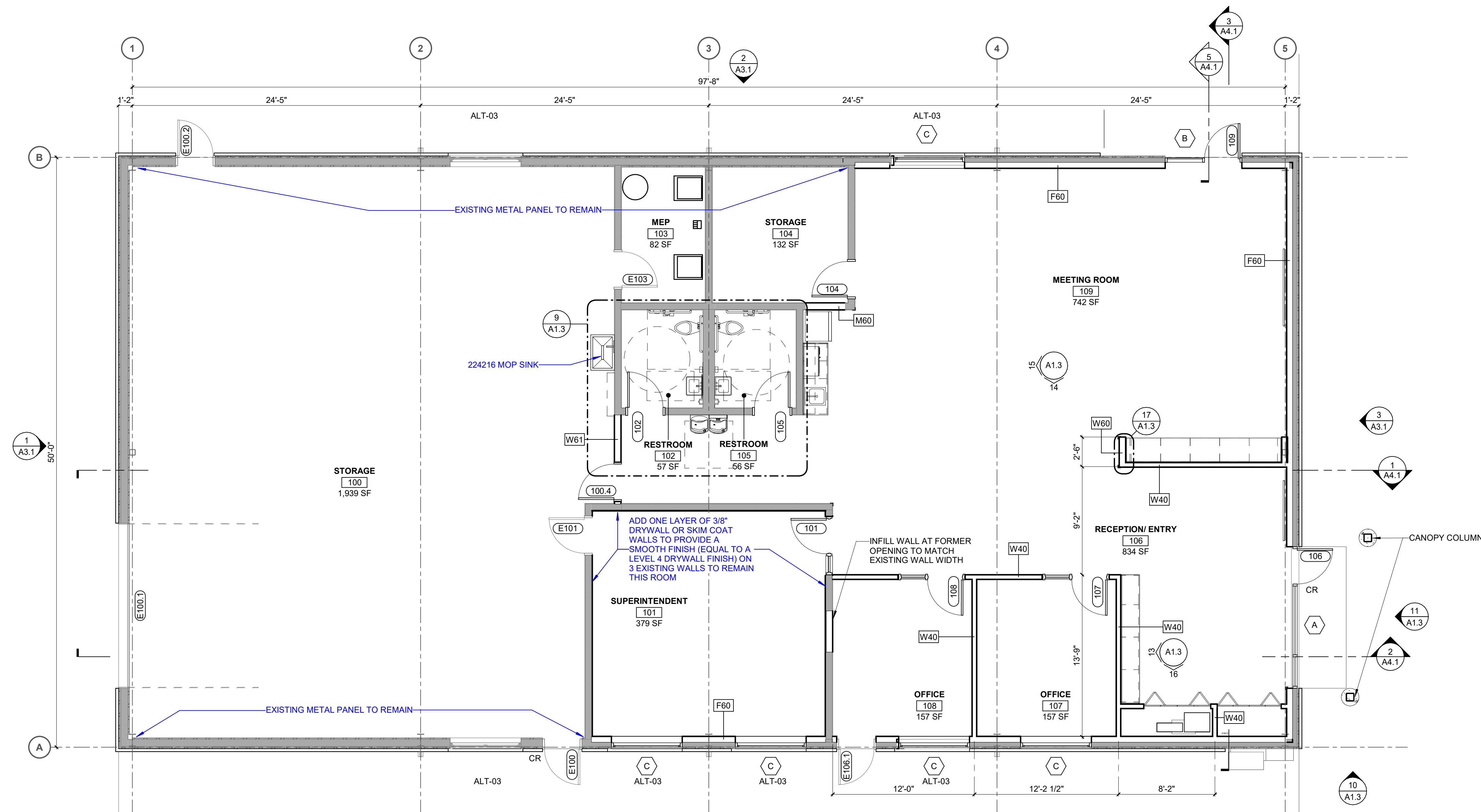


DEMOLITION
ELEVATIONS

AD2.1



2 REFLECTED CEILING PLAN
3/16" = 1'-0"



1 FLOOR PLAN
3/16" = 1'-0" FURNITURE SHOWN FOR REFERENCE ONLY - NIC

- RCP FINISHES NOTES**
1. ALL CEILING GRIDS/PANELS SHALL BE CENTERED IN EACH ROOM UNLESS NOTED OTHERWISE.
 2. ALL EQUIPMENT, DEVICES, AND FIXTURES SHALL BE CENTERED IN THE CEILING TILE UNLESS NOTED OTHERWISE.
 3. IN AREAS WITH AN EXPOSED STRUCTURE, COORDINATE ALL EQUIPMENT, DEVICES, AND FIXTURES FOR A CLEAN AND ORDERED APPEARANCE.
 4. REFER TO MATERIALS LIST FOR CEILING TYPES

GRAPHIC LEGEND

MECHANICAL ITEMS: SEE MECHANICAL

- RETURN GRILLES
- SUPPLY DIFFUSER

LIGHT FIXTURES: SEE ELECTRICAL

- INSULATION STRAPPING
- 099123 PAINT EXPOSED ROOF PURLINS
- BOUNDARY OF 072000 ROOF INSULATION REPAIR (REPLACE EXISTING INSULATION WITH VINYL FACING)
- OPEN TO STRUCTURE
- PAINT ALL EXPOSED STRUCTURE AND CONDUIT. SEE FINISH LEGEND AND NOTES
- RECEPTION/ENTRY [106]
- GLULAM FRAMING WITH T&G DECKING, RE: STRUCTURAL
- OPEN TO STRUCTURE

KEYNOTE LEGEND

SECTION	DESCRIPTION
024119.A52	EXISTING METAL PANEL TO REMAIN
024119.A63	EXISTING CEILING GRID TO REMAIN - CEILING TILE REPLACEMENT BY OWNER
092900.A6	ADD ONE LAYER OF 3/8" DRYWALL OR SKIM COAT WALLS TO PROVIDE A SMOOTH FINISH (EQUAL TO A LEVEL 4 DRYWALL FINISH) ON 3 EXISTING WALLS TO REMAIN THIS ROOM.
099123.A6	099123 PAINT EXPOSED ROOF PURLINS
224216.14	224216 MOP SINK

FLOOR PLAN GENERAL NOTES

1. ALL DIMENSIONS ARE TO CENTERLINE OF WALL U.N.O.
2. PROVIDE JOINT SEALANT AT EXISTING CRACKS IN CONCRETE SLAB, LEVEL WITH ADJACENT SURFACES
3. CLEAN CONCRETE FLOORS PRIOR TO INSTALLING FINISHES
4. FURNITURE IS PROVIDED BY OWNER, NIC

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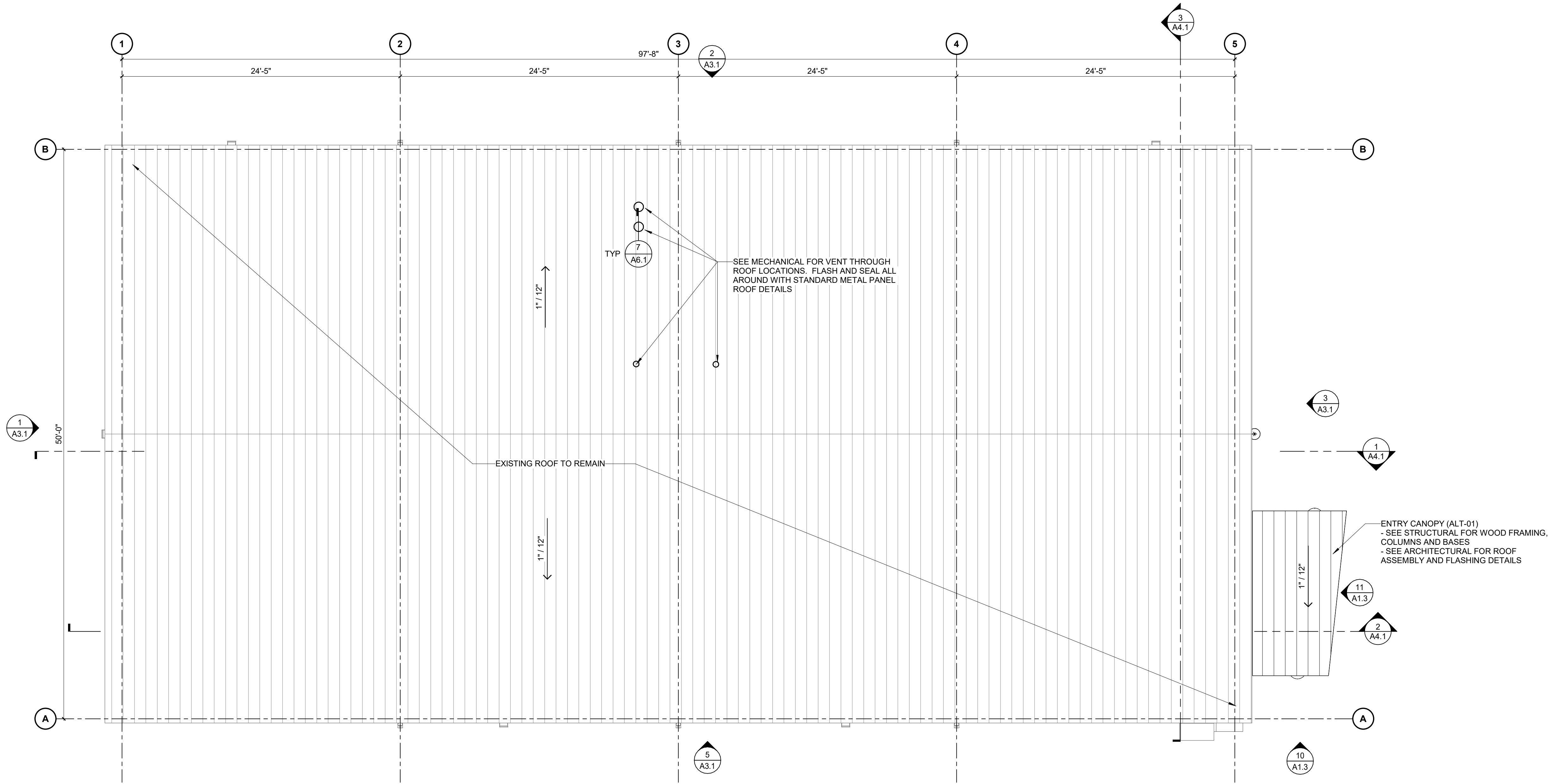
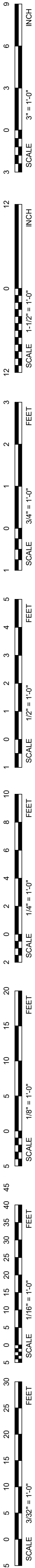
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FIRST FLOOR PLAN, RCP

NORTH
 A1.1



1 ROOF PLAN
3/16" = 1'-0"

ROOF PLAN NOTES

1. PROVIDE 8" MIN CLEARANCE AT ALL CURBS, PARAPETS, AND FLASHINGS ABOVE THE ROOF TO WALL TRANSITION UNO.
2. SEE STROTT FOR FRAMING REQUIREMENTS AROUND ROOF PENETRATIONS AND EQUIPMENT.
3. COORDINATE SIZE AND LOCATIONS OF ALL ROOF PENETRATIONS AND EQUIPMENT. SEE MECH AND ELEC DRAWINGS FOR ANY EQUIPMENT NOT SHOWN. FLASH AND SEAL ALL EQUIPMENT AND TRANSITIONS PER ROOFING MFR'S RECOMMENDATIONS.
4. PROVIDE CRACKETS AT ALL ROOF PENETRATIONS.
5. ROOFING PENETRATIONS ARE NOT ALLOWED WITHIN 48" OF FIRE WALLS. SEE CODE PLAN FOR FIRE WALL LOCATIONS (IF APPLICABLE).

KEYNOTE LEGEND

SECTION	DESCRIPTION
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**MOFFAT
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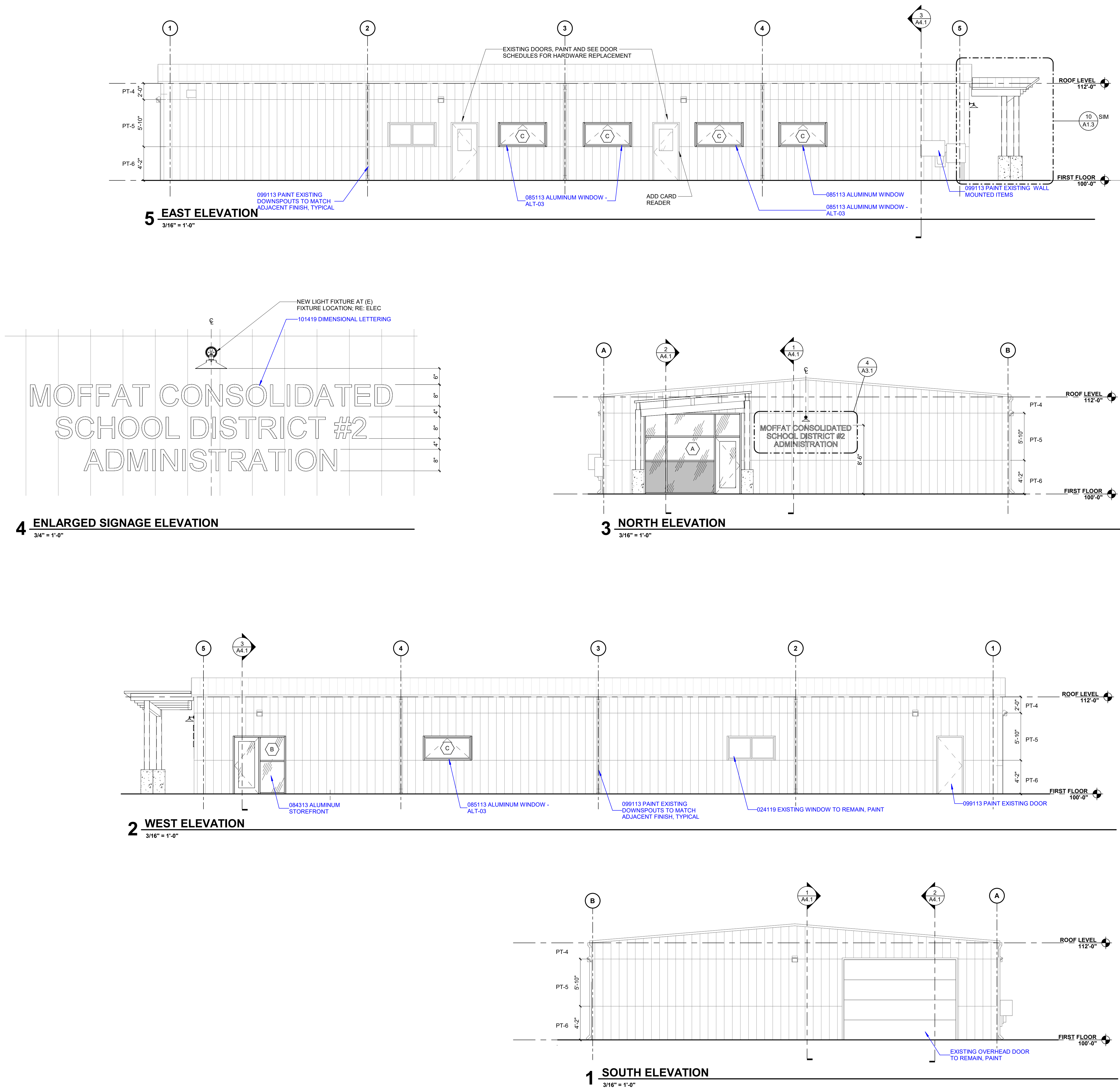
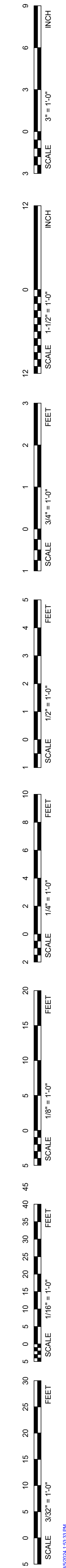
ROOF PLAN

NORTH



A1.2





GRAPHIC LEGEND

- EXISTING CONSTRUCTION
- NEW ITEMS

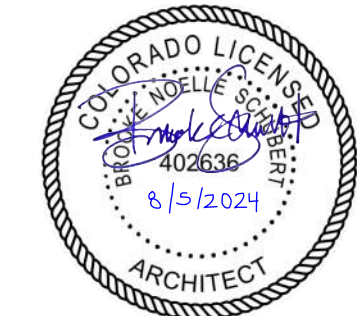
KEYNOTE LEGEND

SECTION	DESCRIPTION
024119.A65	024119 EXISTING WINDOW TO REMAIN, PAINT
024119.A66	EXISTING OVERHEAD DOOR TO REMAIN, PAINT
084313.A1	084313 ALUMINUM STOREFRONT
085113.A1	085113 ALUMINUM WINDOW
085113.A2	085113 ALUMINUM WINDOW - ALT-03
099113.A2	099113 PAINT EXISTING DOOR
099113.A3	099113 PAINT EXISTING WALL MOUNTED ITEMS
099113.A4	099113 PAINT EXISTING DOWNSPOUTS TO MATCH ADJACENT FINISH, TYPICAL
101419.A1	101419 DIMENSIONAL LETTERING

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BUILDING ELEVATIONS

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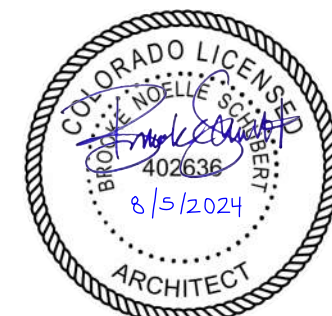
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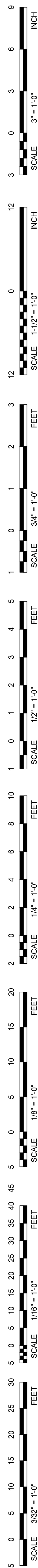
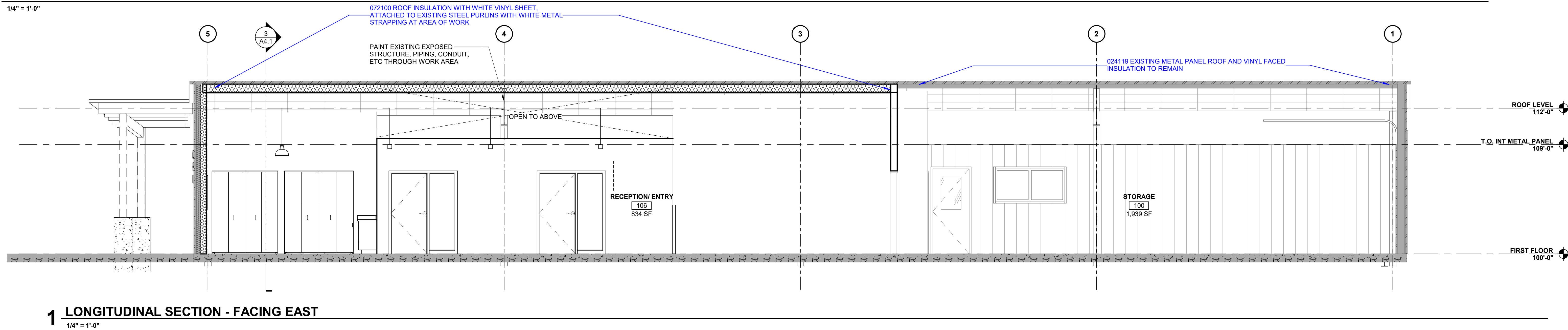
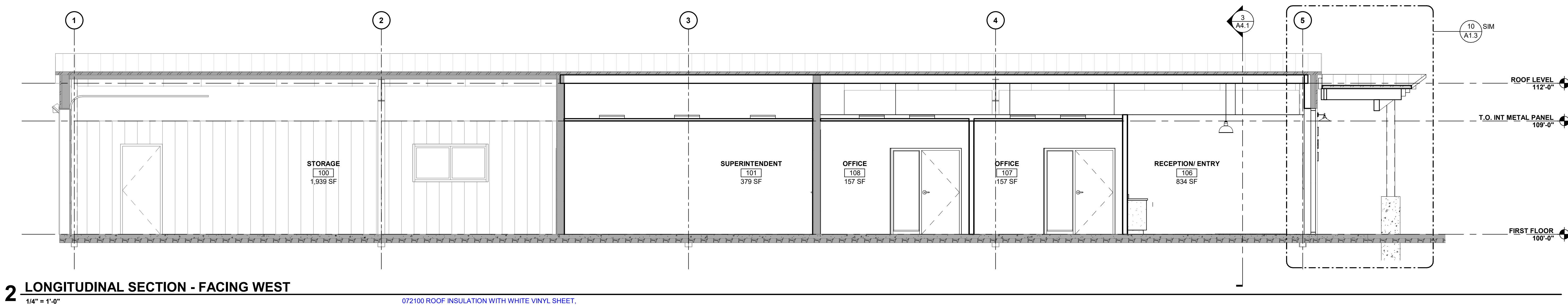
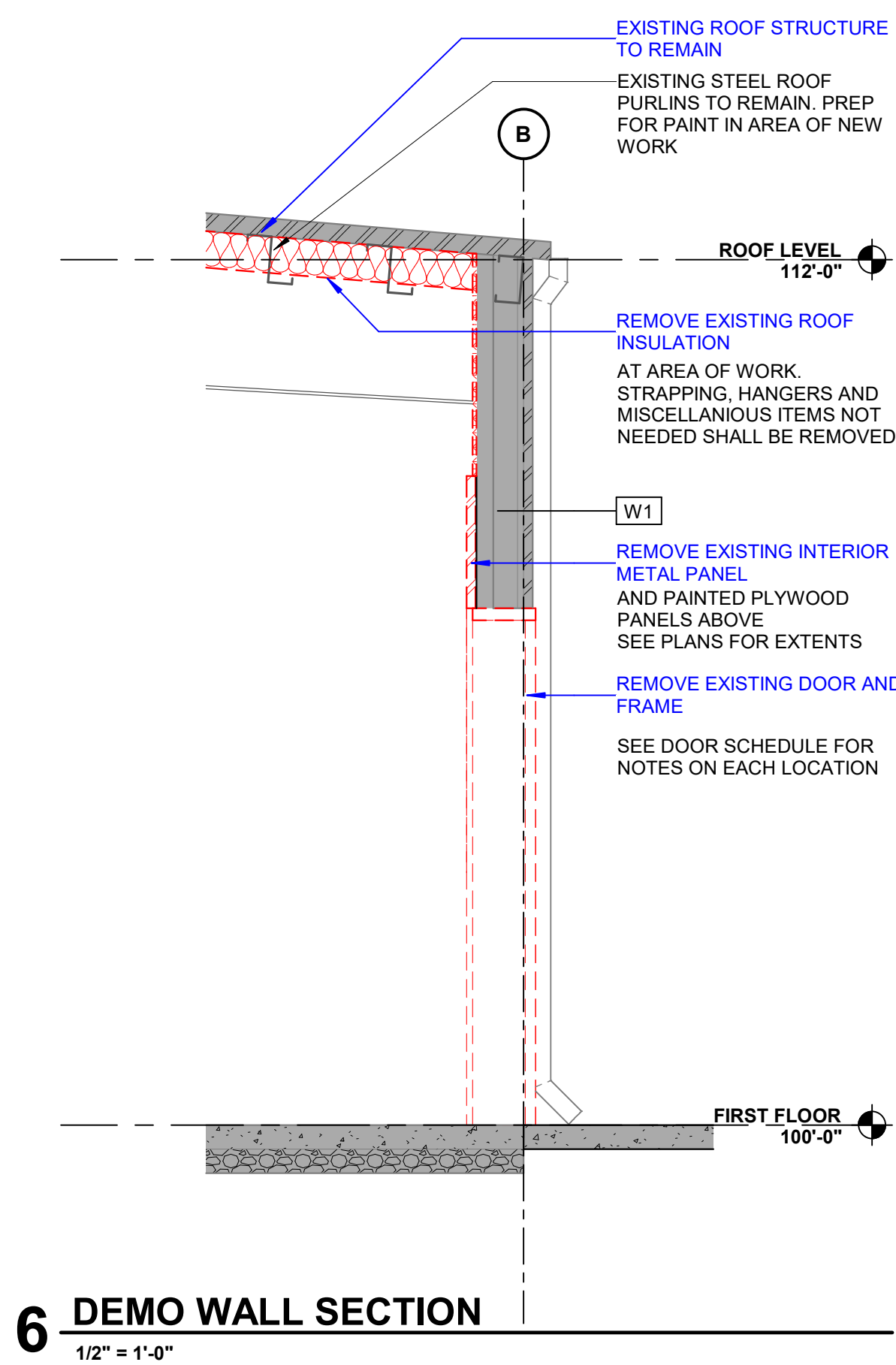
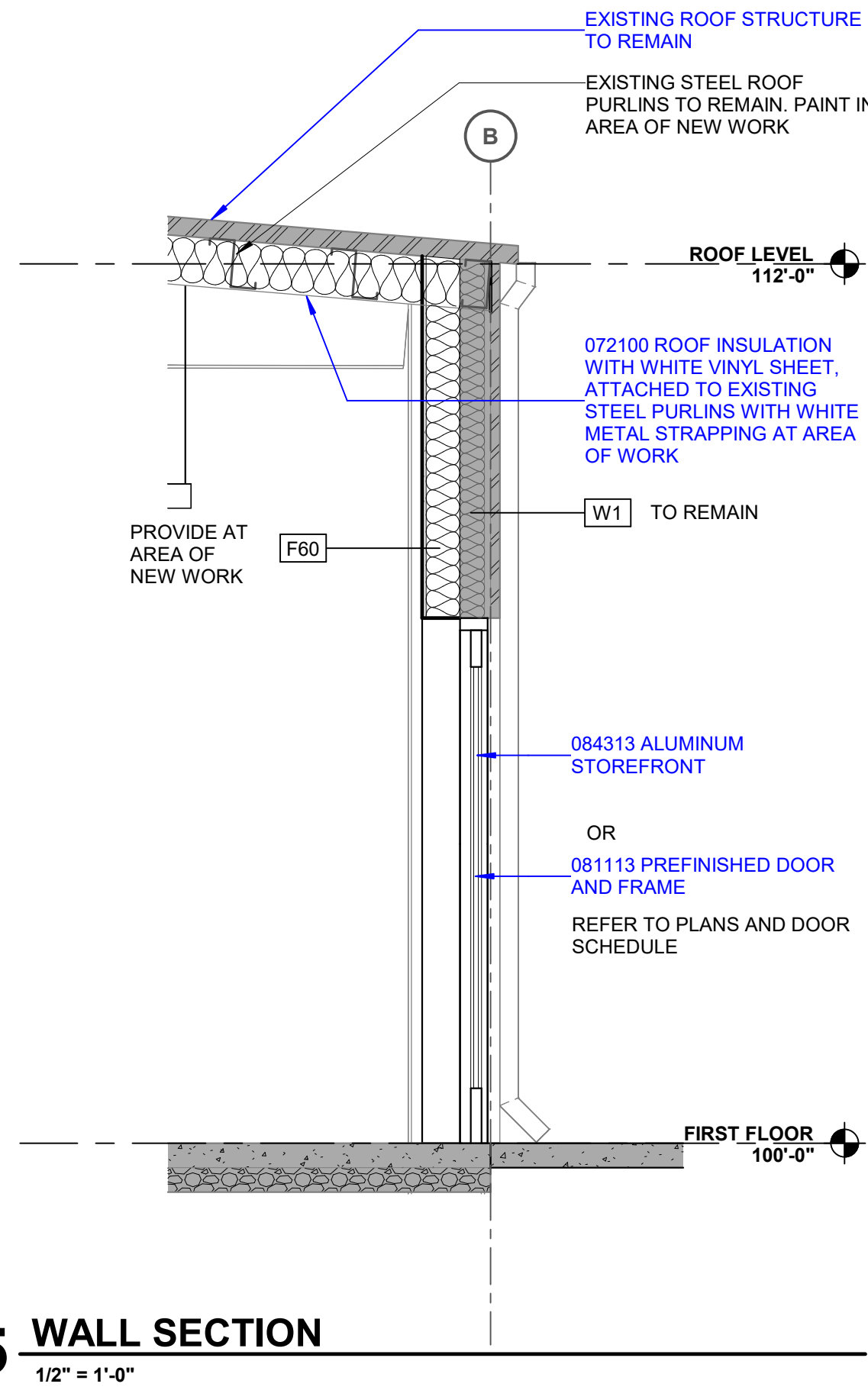
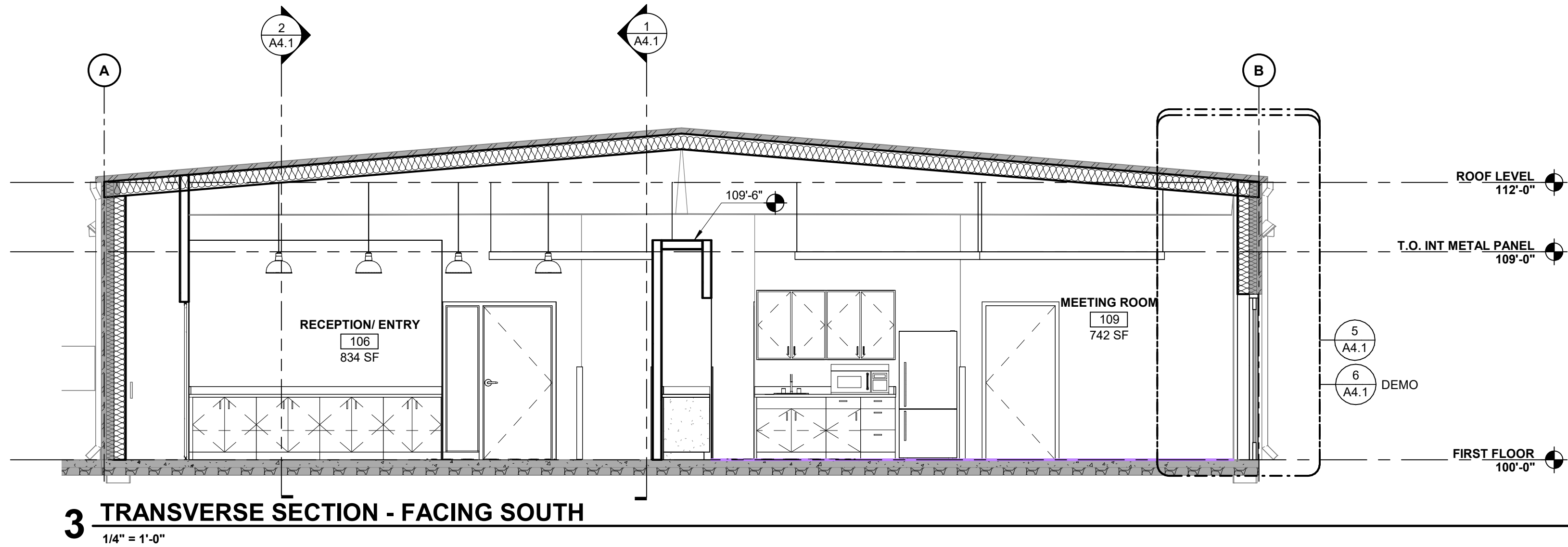
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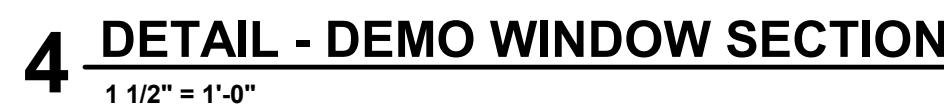
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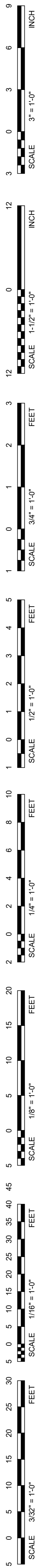
SECTIONS

KEYNOTE LEGEND	
SECTION	DESCRIPTION
024119.A1	REMOVE EXISTING ROOF INSULATION
024119.A2	REMOVE EXISTING INTERIOR METAL PANEL
024119.A3	REMOVE EXISTING DOOR AND FRAME
024119.A57	EXISTING ROOF STRUCTURE TO REMAIN
024119.A64	024119 EXISTING METAL PANEL ROOF AND VINYL FACED INSULATION TO REMAIN
072100.A7	072100 ROOF INSULATION WITH WHITE VINYL SHEET, ATTACHED TO EXISTING STEEL PURLINS WITH WHITE METAL STRAPPING AT AREA OF WORK
081113.A3	081113 PREFINISHED DOOR AND FRAME
084313.A1	084313 ALUMINUM STOREFRONT





DETAILS



EXISTING/ DEMOLITION DOOR SCHEDULE															
NUMBER	ROOM NAME	ROOM #	DOOR				FRAME				HARDWARE			COMMENTS	REVISIONS
			LEAFS	WIDTH	HEIGHT	TYPE	MATERIAL	TYPE	FIRE RATING	CARD READER	SET				
E100	STORAGE	100	1	3'-0"	7'-0"	HG	HM	HM1				Y	08	PAINT EXISTING DOOR. ADD CARD READER TO MATCH EXISTING CAMPUS STANDARD	
E100.1	STORAGE	100											OH-01	EXISTING OVERHEAD DOOR TO REMAIN	
E100.2	STORAGE	100	1	3'-0"	7'-0"	F	HM	HM1	-				09	EXISTING DOOR TO REMAIN	
E100.3	RECEPTION/ ENTRY	106	1	3'-0"	6'-8"	F	WD	HM1	45M				011	REMOVE EXISTING DOOR AND FRAME	
E101	SUPERINTENDENT	101	1	3'-0"	6'-8"	HG	WD	HM1	45M				05	EXISTING DOOR AND FRAME TO REMAIN. PAINT AND PROVIDE NEW HARDWARE	
E101.1	SUPERINTENDENT	101	1	3'-0"	6'-8"	HG	WD	HM1	45M				011	REMOVE EXISTING DOOR AND FRAME	
E102	RESTROOM	102	1	3'-0"	6'-8"	F	WD	HM1	45M				010	REMOVE EXISTING DOOR. HM FRAME TO REMAIN	
E103	MEP	103	1	3'-0"	6'-8"	F	WD	HM1	45M				06	EXISTING DOOR AND FRAME TO REMAIN. PROVIDE NEW HARDWARE SET	
E104	RECEPTION/ ENTRY	106	1	3'-0"	6'-8"	F	WD	HM1	45M				011	REMOVE EXISTING DOOR AND FRAME	
E105	RECEPTION/ ENTRY	106	1	3'-0"	6'-8"	F	WD	HM1	45M				010	REMOVE EXISTING DOOR. HM FRAME TO REMAIN	
E106.1	OFFICE	108	1	3'-0"	7'-0"	HG	HM	HM1					07	PAINT EXISTING DOOR AND PROVIDE NEW HARDWARE	
E106.2	RECEPTION/ ENTRY	106											OH-02	REMOVE EXISTING OVERHEAD DOOR, TRACK AND ALL ASSOCIATED COMPONENTS	
E106.3	MEETING ROOM	109	1	3'-0"	7'-0"	F	HM	HM1	-				011	REMOVE EXISTING DOOR AND FRAME	

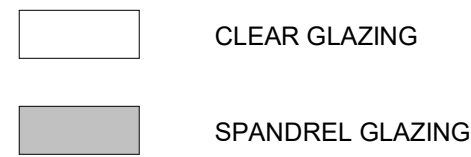
NEW DOOR SCHEDULE													
NUMBER	ROOM NAME	ROOM #	DOOR				FRAME		HARDWARE		COMMENTS	REVISIONS	
			LEAFS	WIDTH	HEIGHT	TYPE	MATERIAL	TYPE	FIRE RATING	CARD READER			SET
100.4	STORAGE	100	1	3'-0"	6'-8"	F	HM	HM1	45M		04		
101	SUPERINTENDENT	101	1	3'-0"	6'-8"	F	HM	HM1			02		
102	RESTROOM	102	1	3'-0"	6'-8"	F	WD	HM1			01	NEW DOOR IN EXISTING FRAME	
104	STORAGE	104	1	3'-0"	6'-8"	F	WD	HM1			03		
105	RESTROOM	105	1	3'-0"	6'-8"	F	WD	HM1			01	NEW DOOR IN EXISTING FRAME	
106	RECEPTION/ ENTRY	106	1	3'-0"	7'-0"	A1	AL	A		Y	AL-02		
107	OFFICE	107	1	3'-0"	6'-8"	F	WD	HM1			02		
108	OFFICE	108	1	3'-0"	6'-8"	F	WD	HM1			02		
109	MEETING ROOM	109	1	3'-0"	7'-0"	A1	AL	A			AL-01		

* VERIFY TYPICAL DOOR SIZES IN FIELD - EXTERIOR DOORS 3'-0" x 7'-0", AND INTERIOR DOORS ARE 3'-0" x 6'-8"

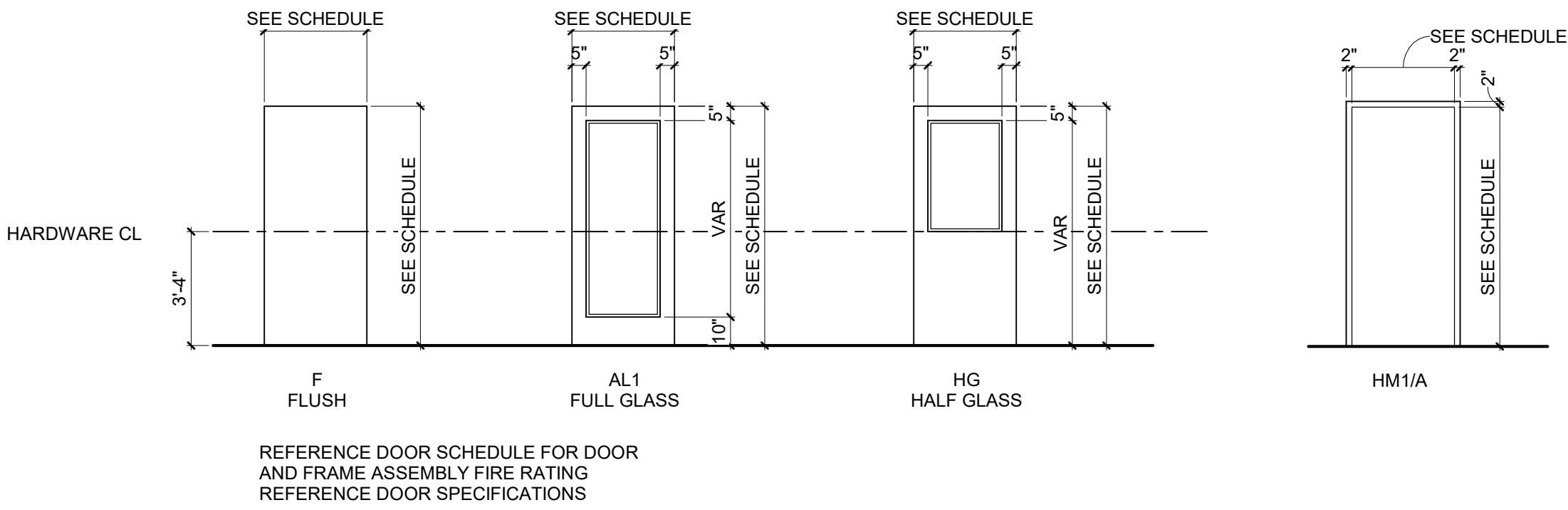
DOOR AND FRAME NOTES

GENERAL NOTES:
SEE SPECIFICATIONS FOR RATED, TEMPERED, AND/OR LAMINATED
SAFETY GLAZING REQUIREMENTS.

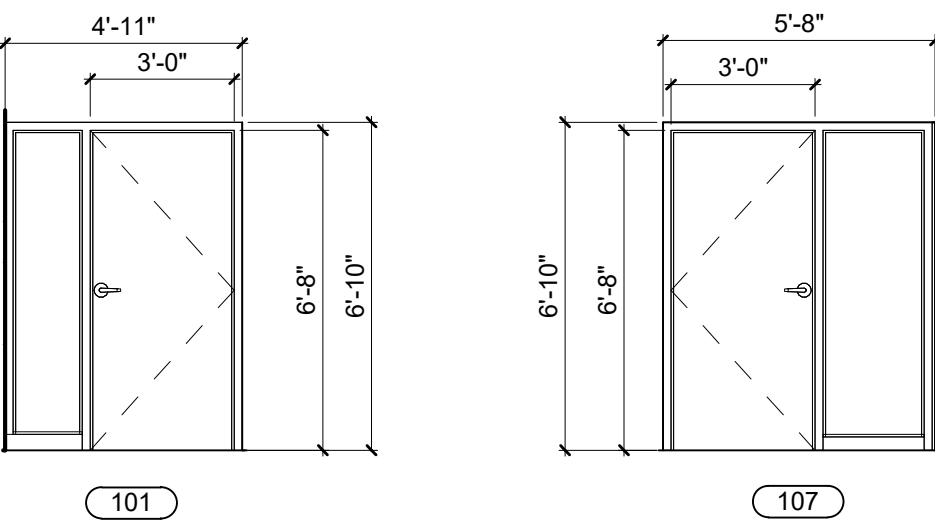
GLAZING LEGEND



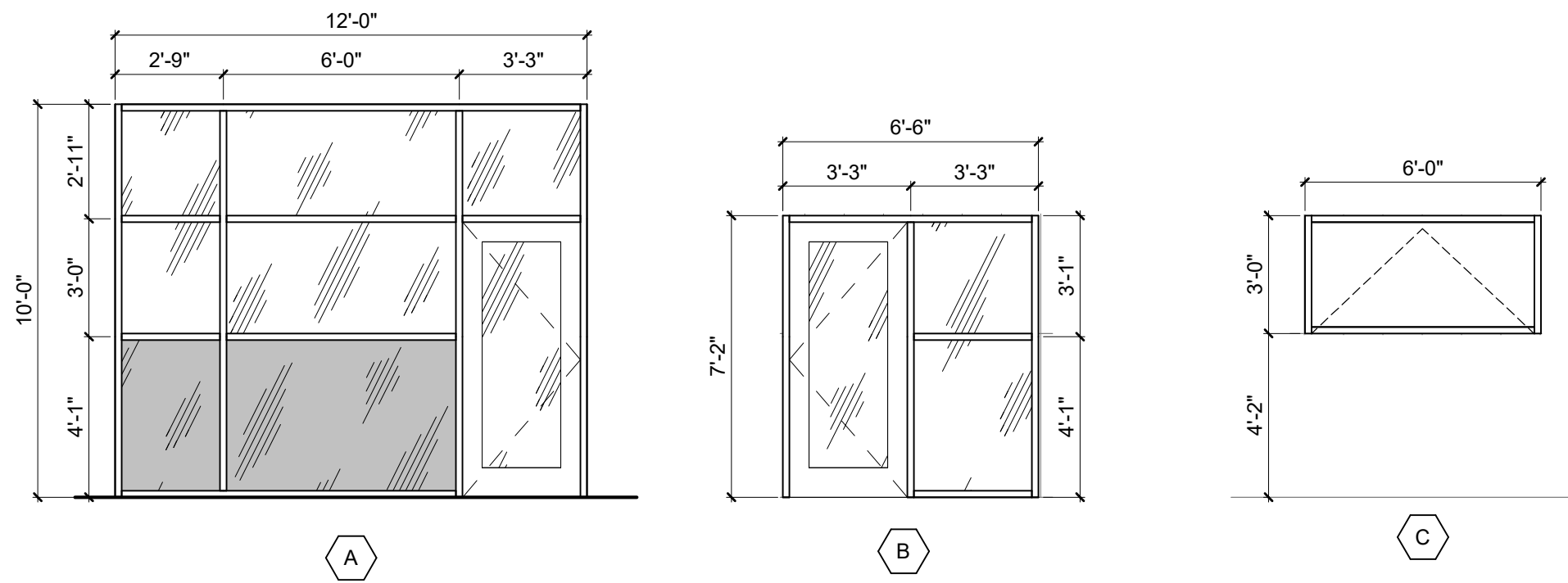
DOOR AND FRAME ELEVATIONS



INTERIOR STOREFRONT ELEVATIONS



EXTERIOR STOREFRONT ELEVATIONS



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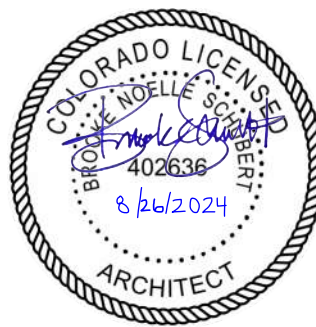
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REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

MOFFAT
ADMINISTRATION
BUILDING RENOVATION

PROJECT: 24031 DATE: 8/28/2024
PROJECT STATUS: CONSTRUCTION DOCUMENTS



DOOR AND WINDOW
FRAME
TYPES/DETAILS



8/25/24 12:17 PM



1 FIRST FLOOR FURNITURE PLAN
3/16" = 1'-0" FOR REFERENCE ONLY

2 STAFF MEETING FURNITURE LAYOUT
3/16" = 1'-0" FOR REFERENCE ONLY

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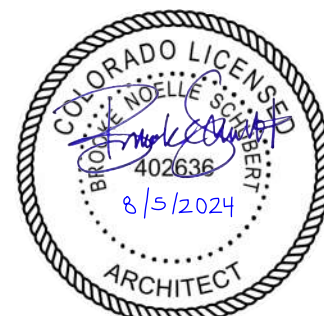
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REVISIONS SCHEDULE		
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**MOFFAT
ADMINISTRATION
BUILDING RENOVATION**

PROJECT: 24031 DATE: 8/5/2024
PROJECT STATUS: CONSTRUCTION
DOCUMENTS

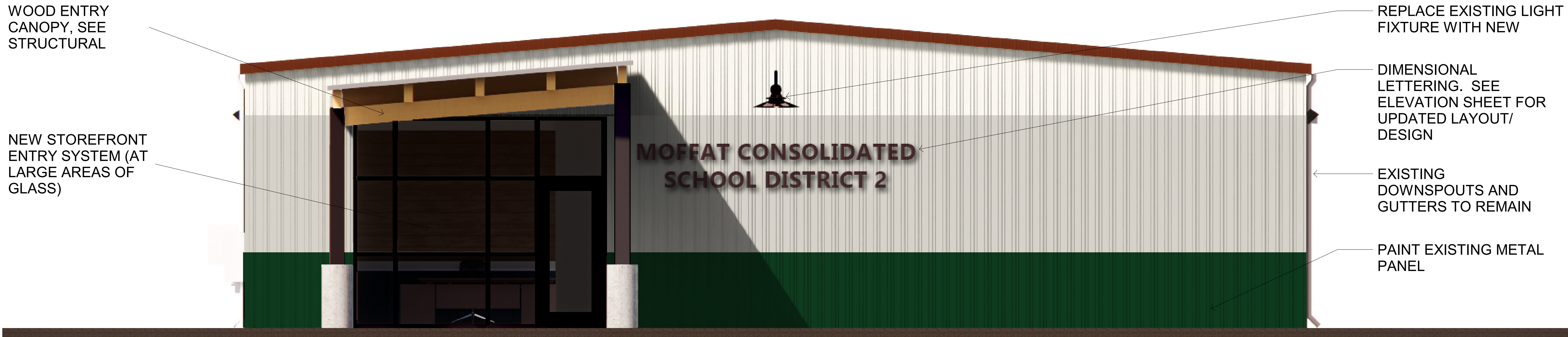
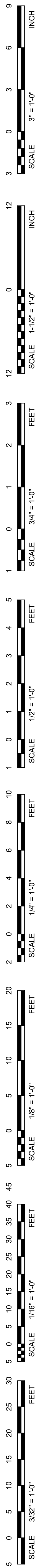
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FURNITURE PLAN



A9.2



REPLACE EXISTING LIGHT
FIXTURE WITH NEW

DIMENSIONAL
LETTERING. SEE
ELEVATION SHEET FOR
UPDATED LAYOUT/
DESIGN

EXISTING
DOWNSPOUTS AND
GUTTERS TO REMAIN

PAINT EXISTING METAL
PANEL

LIGHT FIXTURES, SEE ELECTRICAL

PAINT WALLS, SEE FINISH
SCHEDULE

CASEWORK AND COUNTERTOP,
SEE FINISH SCHEDULE

CARPET TILES, SEE FINISH SCHEDULE

PAINTED EXPOSED STEEL
STRUCTURE, SEE FINISH SCHEDULE

LIGHT FIXTURES, SEE ELECTRICAL

WOOD BOARD WALL FINISH

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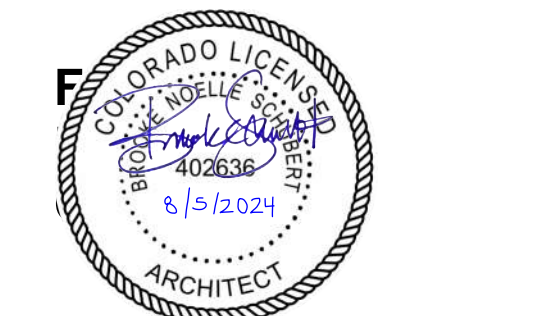
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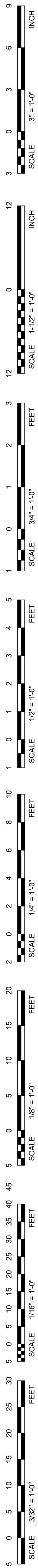
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RENDERINGS



SPECIAL INSPECTION GENERAL NOTES

- A statement of special inspections for structural items has been prepared by HCDA Engineering, Inc. for submittal to the Building Official. This is submitted as a condition for permit issuance in accordance with the Structural Testing and Special Inspection requirements of the International Building Code, 2021 edition.
- The Structural Engineer will perform periodic observations of construction. These observations shall not replace required inspections by the Building Official. These observations also do not serve as "Special Inspections" as required by section 1704 of the International Building Code.
- Steel Fabricators shall be approved in accordance with IBC section 1704.2.5.1 of the International Building Code, 2021 Edition, or are required to have shop inspections of the fabricated items for the project by the special inspector hired by the Owner as required by section 1704.2.5.
- Special Inspectors (not third party inspectors) shall be approved individually by the Building Official prior to the issuance of a permit. Please provide the list of specific special inspectors to determine if they have already been approved. Each Special Inspector not already approved by the Building Official must provide a resume and all supporting information related to their qualifications for the specific type of special inspections in accordance with IBC 1704.2.1.

Statement of Special Inspections

Project: Moffat Senior High School
Location: 501 Garfield Ave, Moffat, CO 81143
Owner: Moffat School District

This Statement of Special Inspections is submitted as a condition for permit issuance in accordance with the Structural Testing and Special Inspection requirements of the Building Code. It includes a schedule of Special Inspection services applicable to this project. This Statement of Special Inspections encompasses the Structural components of the building.

The Special Inspection Coordinator, Special Inspector and Testing Agency shall be approved by the owner and qualified to perform the services indicated. The Special Inspection Coordinator shall keep records of all inspections and shall furnish interim inspection reports to the Building Official (if requested) and the Project Structural Engineer. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Project Structural Engineer. The Special Inspection program does not relieve the Contractor of their responsibilities.

A Final Report of Special Inspections documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the contractor.
Interim Report Frequency: Weekly or as warranted based on construction performed.

Soils

C = Continuous P = Periodic		Frequency	
Item	Scope	C	P
1. Shallow Foundations	Inspect materials below shallow foundations to verify they are adequate to achieve the design bearing capacity.		X
2. Controlled Structural Fill	Perform classification and testing of compacted fill material Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.	X	
3. Excavations	Verify excavations are extended to proper depth and have reached proper material.		X

Cast-in-Place Concrete

C = Continuous P = Periodic		Frequency	
Item	Scope	C	P
1. Mix Design	Review concrete batch tickets and verify compliance with approved mix design. Verify that water added at the site does not exceed that allowed by the mix design.		X
2. Reinforcement Installation	Inspect size, spacing, cover, positioning and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters.		X
3. Cast in Anchors	Inspect size, positioning and embedment of anchor rods and embedded plates. Inspect concrete placement and consolidation around anchors.		X
4. Concrete Placement	Inspect placement of concrete. Verify proper application techniques, concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.	X	
5. Sampling and Testing	Test concrete compressive strength (ASTM C13 & C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064). Fabricate specimens for strength tests.	X	
6. Curing and Protection	Inspect curing, cold weather protection and hot weather protection procedures. Verify maintenance of specified curing temperature and techniques.		X
7. Formwork	Inspect formwork for shape, location and dimensions of the concrete member being formed.		X

Structural Steel

C = Continuous P = Periodic		Frequency	
Item	Scope	C	P
1. Fabricator Certification / Quality Control Procedures <input type="checkbox"/> Fabricator Exempt	Review shop fabrication and quality control procedures. To be paid by Fabricator if plant not certified.		X
2. Material Certification	Review certified mill test reports and identification markings on wide-flange shapes, high-strength bolts, nuts and welding electrodes.		X
3. Bolting	Inspect installation and tightening of high-strength bolts. Verify that splices have separated from tension control bolts.		X
4. Welding - Single pass fillet welds \pm 5/16"	Visually inspect welds. Verify size and length of fillet welds.		X
5. Structural Details	Inspect steel frame for compliance with structural drawings, including bracing, member configuration and connection details.		X
6. Quality Assurance	In addition to items listed above, inspection of structural steel shall be in accordance with requirements indicated in Chapter N of the AISC 360.		X

Cold-Formed Steel Framing

C = Continuous P = Periodic		Frequency	
Item	Scope	C	P
1. Member Sizes	Verify compliance with construction documents and specifications.		X
2. Material Thickness	Verify compliance with construction documents and specifications.		X
3. Material Properties	Verify compliance with construction documents and specifications.		X
4. Mechanical Connections	Verify compliance with construction documents and specifications.		X
5. Welding	Verify compliance with construction documents and specifications.		X
6. Framing Details	Verify compliance with construction documents and specifications.		X

Wood Construction

C = Continuous P = Periodic		Frequency	
Item	Scope	C	P
1. Fabricator Certification / Quality Control Procedures <input type="checkbox"/> Fabricator Exempt	Inspect shop fabrication and quality control procedures for wood truss plant.		X
2. Material Grading	Verify compliance with construction documents and specifications.		X
3. Connections	Verify compliance with construction documents and specifications.		X
4. Framing and Details	Verify compliance with construction documents and specifications.		X

GENERAL NOTES

- Materials and workmanship shall be in accordance with the requirements of "The International Building Code", 2021 Edition.
- Contractor shall check and verify all dimensions shown on structural drawings with those shown on architectural.
- Contractor shall notify Architect of any discrepancies between architectural and structural drawings and receive written clarification of discrepancies before proceeding with construction.
- Contractor shall field measure and verify all existing conditions and dimensions at job site.
- In case existing conditions or dimensions vary from those shown on drawing, Contractor shall notify the Architect so proper adjustments can be made.
- Special inspections shall be performed in accordance with I.B.C. Section 1704 when such inspections are required by the Building Official. Contractor shall coordinate the work schedule with the special inspectors who are selected and paid by the Owner.
- During construction, the contractor shall be responsible for temporary bracing and shoring to withstand all loads to which the structure may be subjected, including lateral loads, stockpiles of materials and equipment. Temporary bracing shall remain in place until all structural framing and diaphragms are in place with connections completed.
- Where the Structural Drawings appear to conflict with OSHA requirements, the Structural Drawings represent final conditions only; the contractor shall add all erection framing, bolts, stabilizer plates, etc. as may be necessary to comply with OSHA.
- If discrepancy discovered in documents, more stringent criteria governs. Notify Engineer prior to installation.

FOUNDATION GENERAL NOTES

- Foundation type and design criteria, including bearing pressure, is based on IBC Table 1805.2. Additional geotechnical investigation is not planned unless deemed necessary by the building official.
- Maximum bearing pressure used in footing design: 1,500 psf.
- A professional geotechnical engineer registered in the state of Colorado shall perform open excavation inspection prior to placing foundations to ensure bearing capacity is satisfactory.
- In case conditions found at the site vary from those indicated on the drawings, the Architect is to be notified so that adjustments to the foundation can be made to meet actual field conditions.
- No footings or foundation walls shall be placed without adequate notification to allow Engineer to observe reinforcing if they deem necessary.
- No concrete shall be placed in excavation containing water or on frozen ground.

CONCRETE GENERAL NOTES

- Material and workmanship shall be in accordance with the requirements of "Building Code Requirements for Structural Concrete" (ACI 318-19).
- See specification for minimum compressive strength required at age of 28 days.
- All cement used in concrete shall be Type I-L.
- All concrete shall have a minimum cementitious materials content of 470 lbs. per cubic yard unless otherwise specified.
- Calcium Chloride shall not be added to concrete.
- Reinforcing bars shall conform to ASTM A-615, Grade 60 or ASTM A-706.
- Bar bending details and placing drawings shall be in accordance with the "Manual of Standard Practice for Detailing Reinforced Concrete Structures" (ACI 315, latest edition).
- Fly ash may be added for up to 20% of cementitious materials by weight where indicated in the mix design.
- Provide bar supports and spacers to place all bars in proper location, and wire adequately at intersections to hold bars firmly in position while concrete is placed. Vertical dowels shall be supported in place prior to placing concrete.
- Bar supports and spacers which rest on or against exposed surface shall be hot dipped galvanized or plastic coated.
- Reinforcing bar sizes shown are English designation. The bars may be furnished with the equivalent metric markings.

English	#3	#4	#5	#6	#7	#8	#9	#10	#11
Metric	#10	#13	#16	#19	#22	#25	#29	#32	#36

STRUCTURAL STEEL GENERAL NOTES

- All steel shall conform to the "Standard Specification for Structural Steel" ASTM Designation A572, Grade 50, or ASTM A992, latest edition, except where noted otherwise. Angles, channels, and plates shall conform to ASTM A36. Round hollow structural steel sections shall conform to ASTM A500, Fy = 42 ksi. Square or rectangular hollow structural sections shall conform to ASTM A500, Grade B, Fy = 46 ksi. Pipe shall conform to ASTM A53, Grade B, Fy = 35 ksi. Threaded rod and anchor rods shall conform to ASTM F1554 Gr. 36.
- All detailing, fabrication and erection shall conform to AISC "Specification for Structural Steel Buildings", and the AISC "Code of Standard Practice for Steel Buildings and Bridges", latest edition, and "Load and Resistance Factor Design Specification for Structural Steel Buildings" when applicable.
- This structure contains "non-self-supporting steel frames" per AISC definition. The contractor shall coordinate the installation of all necessary temporary bracing which shall remain in place until the lateral support system is constructed and connected to the framing.
- Beam connections not shown on the details shall be designed by the steel fabricator in accordance with Tables 10-1, 10-2, 10-3, and 10-4 of the AISC "Manual of Steel Construction", Fourteenth Edition. Beam reactions not shown on plans or details shall be computed from the design loads shown on the drawings.
- Shop connections shall be welded unless noted otherwise.
- Field connections shall be made with 3/4" diameter ASTM A325 High Strength Bolts. Connections shall be bearing-type tightened to a "snug-tight" condition unless noted as "Tension Controlled". Connections utilizing "Tension Controlled" bolts shall be pretensioned but do not require laying surface preparation unless noted otherwise.
- High strength bolted connections shall conform to the "Specification for Structural Joints Using ASTM A325 or A490 Bolts", approved by Research Council on Riveted and Bolted Structural Joints of the Engineering Foundation, latest edition, endorsed by AISC. Fasteners, noted as "Tension Controlled", shall be "Load Indicator Bolts" as manufactured by Lohr, Le Jeune, or approved equal and lightened per manufacturer's specification.
- All welding shall be done by certified welding operators and shall conform to "AWS Structural Welding Code" (AWS D1.1), latest edition.
- Welding sizes not otherwise shown shall be minimum continuous 1/4 inch fillet welds, or equal to the thickness of the thinner material minimum 1/16th inch, whichever is less.
- All welding shall be done with AWS A5.1 or A5.5 E70 X8 electrodes except for welding of ASTM A706 rebar, which shall be welded using E80 electrodes.
- Areas within 2 inches of field welds shall not be painted until after welding. Field welds, bolt heads, nuts and other surfaces not shop painted and surfaces abraded during shipping and erection shall be field painted after erection.
- All structural steel exposed to view shall conform to the provisions for "Architecturally Exposed Structural Steel" in the AISC Code of Standard Practice.
- All steel (except that to receive spray-on fireproofing) shall receive one shop coat of metal primer or equal conforming to Steel Structures Painting Council Specification (SSPC No. 15).

TIMBER GENERAL NOTES

- All wood framing shall conform to the "National Design Specification for Wood Construction", latest edition, recommended by the "National Forest Products Association".
- Sawn lumber framing members shall conform to the following species and grades: Hem-Fir #2 or better.
- Lumber for all glue laminated bending members ("Glu-Lam Beams") shall be combination 24F-V8 or better, and for all glue laminations compression members ("Glu-Lam Columns") shall be combination A- or better, meeting the allowable stress values given in "Design Values for Wood Construction" published by the American Forest and Paper Association. Glu-lam members are to be free of wane.
- Sheathing panels shall be identified with the appropriate trademark of the American Plywood Association, and shall meet the requirements of U.S. Product Standard PS1 or PS2, Performance Standards, latest edition.
- All roof sheathing shall be 19/32" APA rated sheathing (Exposure 1). Minimum panel identification shall be 40/20. Roof sheathing nailing shall be 10d common nails at 6" on center maximum at all edges and boundaries, unless noted otherwise. Nailing along intermediate members shall be 12" on center maximum. Confirm sheathing material is compatible with roofing material requirements.
- Roof sheathing shall be placed with 8'-0" dimension perpendicular to joist framing, stagger joints. Panels to be continuous over two or more spans. Panel and joints shall occur over framing. Allow 1/8 inch spacing at panel ends and 1/8 inch at panel edges unless otherwise recommended by the panel manufacturer.
- All bolts shall be ASTM A-307.
- Ends of glu-lam members shall be accurately cut to provide uniform bearing. Nails for wood sheathing shall be common nails.
- Boat holes in glu-lam members shall be field drilled after members are in place to ensure positive uniform bearing.
- Minimum nailing for all wood framing shall conform to Table No. 2304.10.2, International Building Code, 2021 Edition, unless noted otherwise.
- 16d nails shall be common or sinker (0.146" minimum diameter).

LIGHTGAGE STRUCTURAL FRAMING GENERAL NOTES

- All lightgauge structural framing shall conform to the AISI Specification, "Lightgauge Cold-Formed Steel Design Manual", latest edition.
- All welding shall conform to the "AWS Structural Welding Code", latest edition.
- All separate wall elements shall be field welded together at all joints with fillet, butt, or seam welds.
- All field welds and surfaces abraded during shipping or erection shall be painted immediately after erection.
- All joints at framing members shall be welded.
- All welding shall be done with AWS A5.1 or A5.5 E80 XX electrodes.
- Stud track shall be fastened to concrete with powder driven fasteners. Fasteners shall be HILTI X-U 32 (1 1/4" embed) or equal at 16" on center unless noted otherwise. At cantilevered parapets, plug weld or fillet weld to steel beam.
- Studs, Joists, and Track studs and joists widths as called for on drawings. Head and sill track and header members to be unpunched track, same gauge as studs or one gauge heavier.
- Multiple Studs: provide multiple studs full-height from floor to roof structure at all door and window jambs in framed walls as follows:
 - Double studs at walls where roof structure is 14'-0" or less above finish floor.
 - Triple studs at walls where roof structure is between 14'-0" to 17'-0" above finish floor.
 - Quadruple studs at walls where roof structure is 17'-0" or higher above finish floor.
- Typical stud to track connection shall be a minimum (1) No.10 screw each side of track to stud flange.
- Welded stud to track connections (1/8" fillet weld, 1" long, each flange are required at the following locations:
 - Base of cantilevered parapets.
 - Studs suspended by their top track above window / door openings.
 - Other locations as shown on plan.
- Members 16 gauge or thicker are to be 50ksi steel.

DESIGN LOADS:

Building Risk Category	III
Site Elevation	\pm 7,600 ft
Roof Loads	
Dead Load (Existing) (Canopy)	15 psf (Assumed) 10 psf
Snow Loads	
Flat Roof	P _f = 30 psf
Ground	P _g = 43 psf
Importance Factor	I _s = 1.1
Exposure Factor	C _e = 1.0
Thermal Factor	C _t = 1.0
Slope Factor	C _s = 1.0
Rain Intensity	I = 3 in/hr
Wind Loads	
Basic Design Wind Speed	V = 120 mph
Allowable Stress Design Wind Speed	Vad = 93 mph
Exposure Category	C
Internal Pressure Coefficient	GCF = \pm 0.18

Seismic Information	
Importance Factor	I _s = 1.25
Mapped Spectral Response Acceleration Parameters	S _{DS} = 0.389g S ₁ = 0.122g
Site Class	D
Design Spectral Response Acceleration Parameters	S _{DS} = 0.389g S ₁ = 0.102g

Seismic Design Category	
Basic Seismic-Force-Resisting System consists of:	Steel systems not specifically detailed for seismic resistance.
Seismic Response Coefficients	C _s = 0.161
Response Modification Coefficients: R	= 3.0

WALL COMPONENTS AND CLADDING WIND PRESSURES (LRFD : 1.0WL)		
EFFECTIVE AREA	ZONES	
	4	5
sf	psf	psf
10 OR LESS	34.1	42.1
20	32.8	39.4
50	30.9	35.4
100	29.3	33.3
200	28.2	30.1
500 OR ABOVE	26.1	26.1

- ZONES PER ASCE 7-16 FIGURE 30-3-1
- VALUES ABOVE INDICATE MINIMUM DESIGN WIND PRESSURES ONLY. COMPONENTS AND CLADDING DESIGN SHALL BE BASED ON MINIMUM DESIGN PRESSURES FROM ALL APPLICABLE CODE SECTIONS.

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V 720 588 0774
RAJ-ENG.COM

REVISIONS SCHEDULE		
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MOFFAT ADMINISTRATION BUILDING RENOVATION

PROJECT: 24031 DATE: 8/5/2024
PROJECT STATUS: CONSTRUCTION DOCUMENTS

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GENERAL NOTES AND DETAILS

S0.1

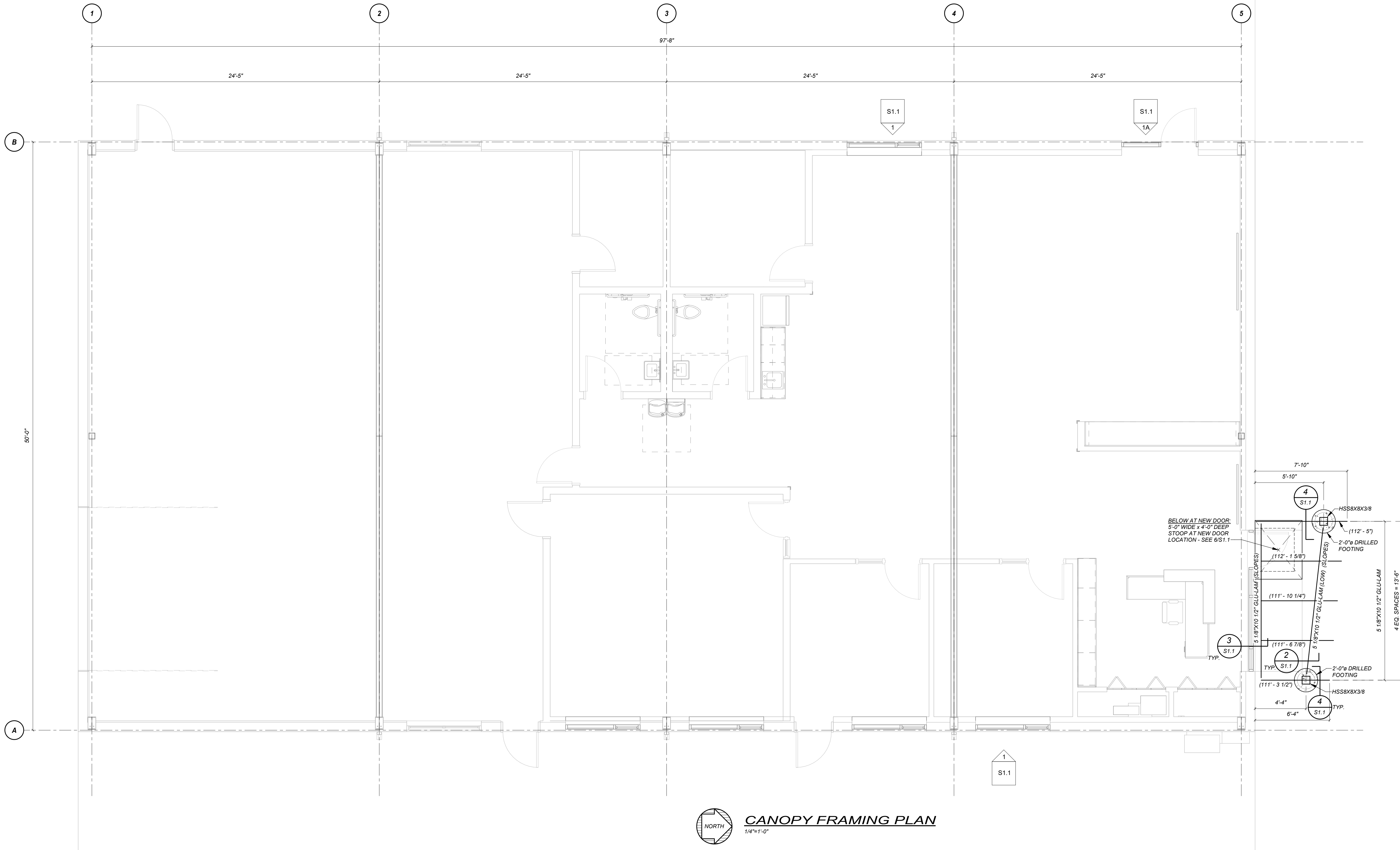
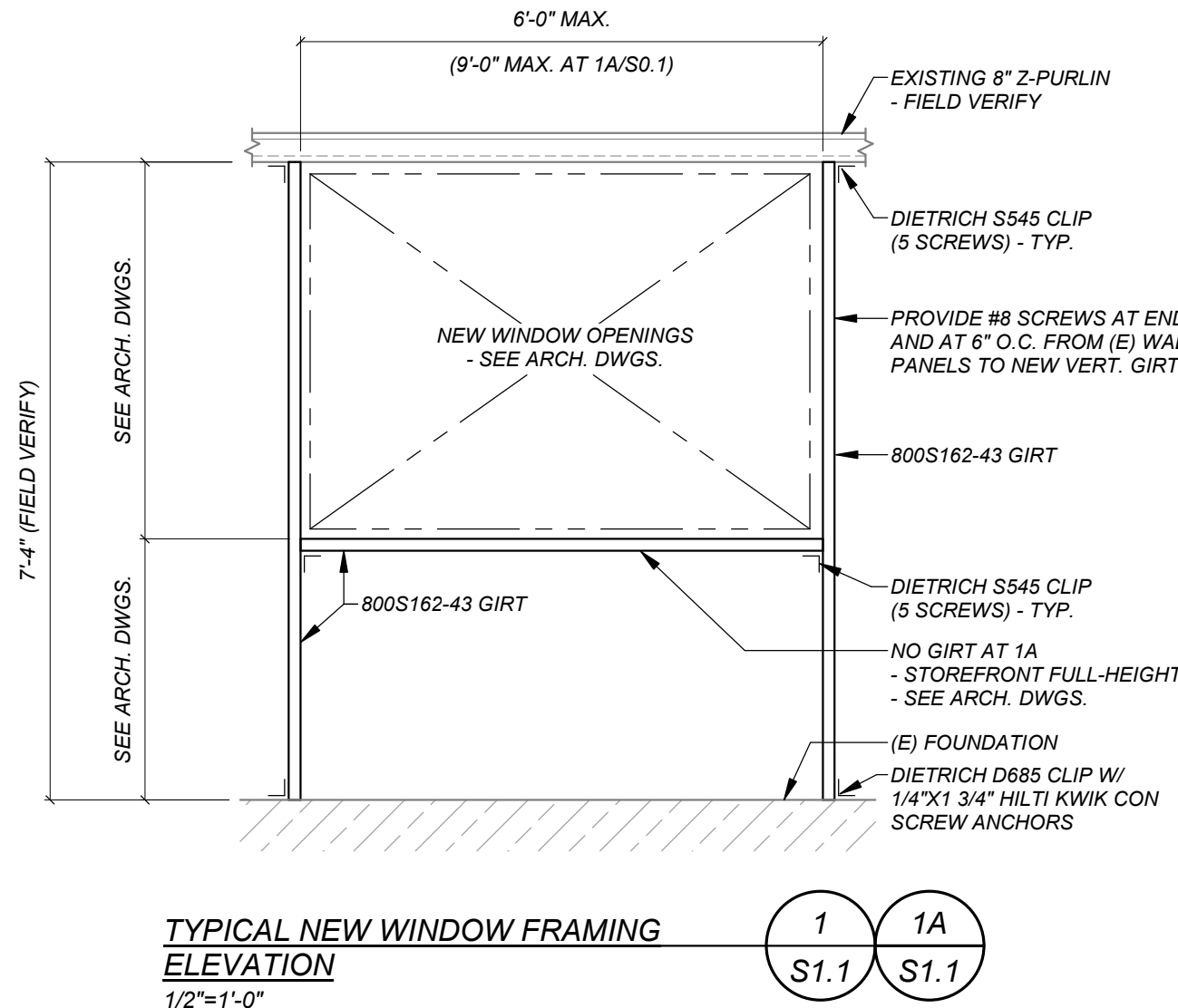
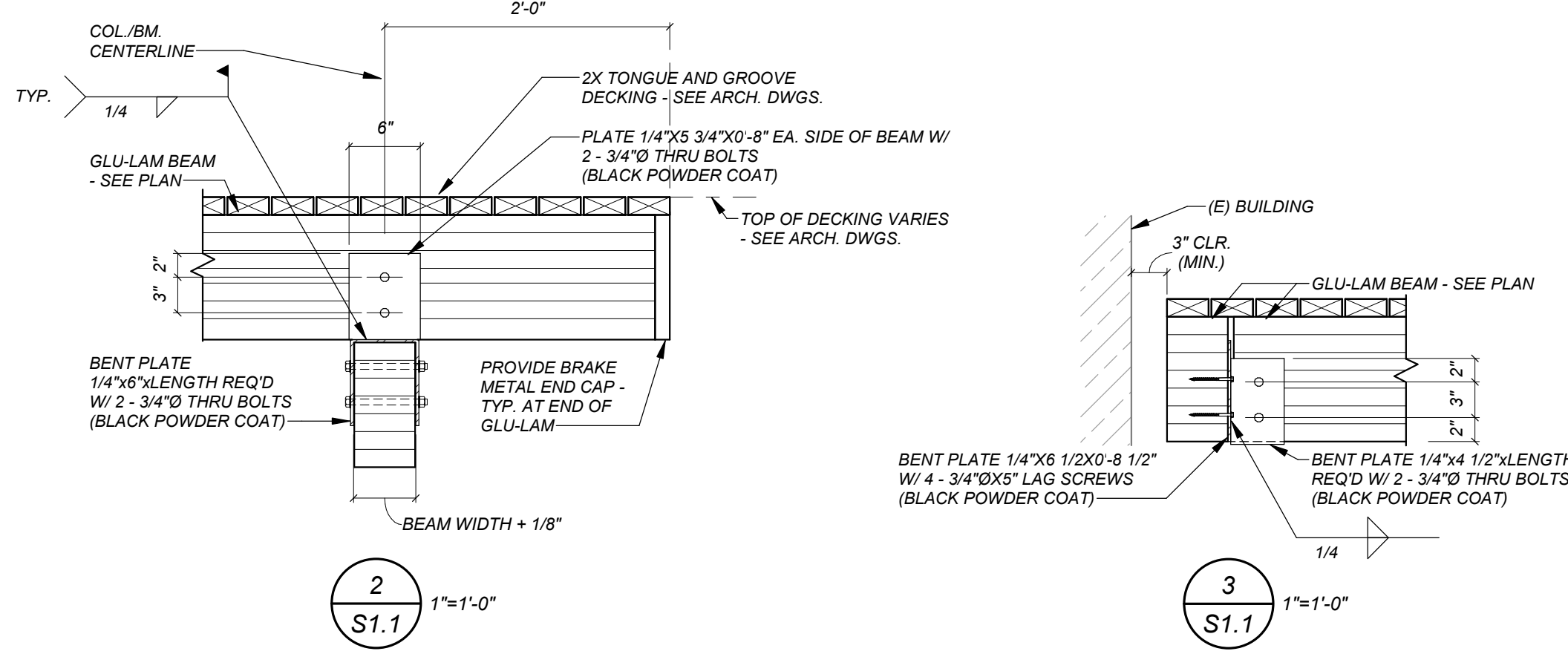
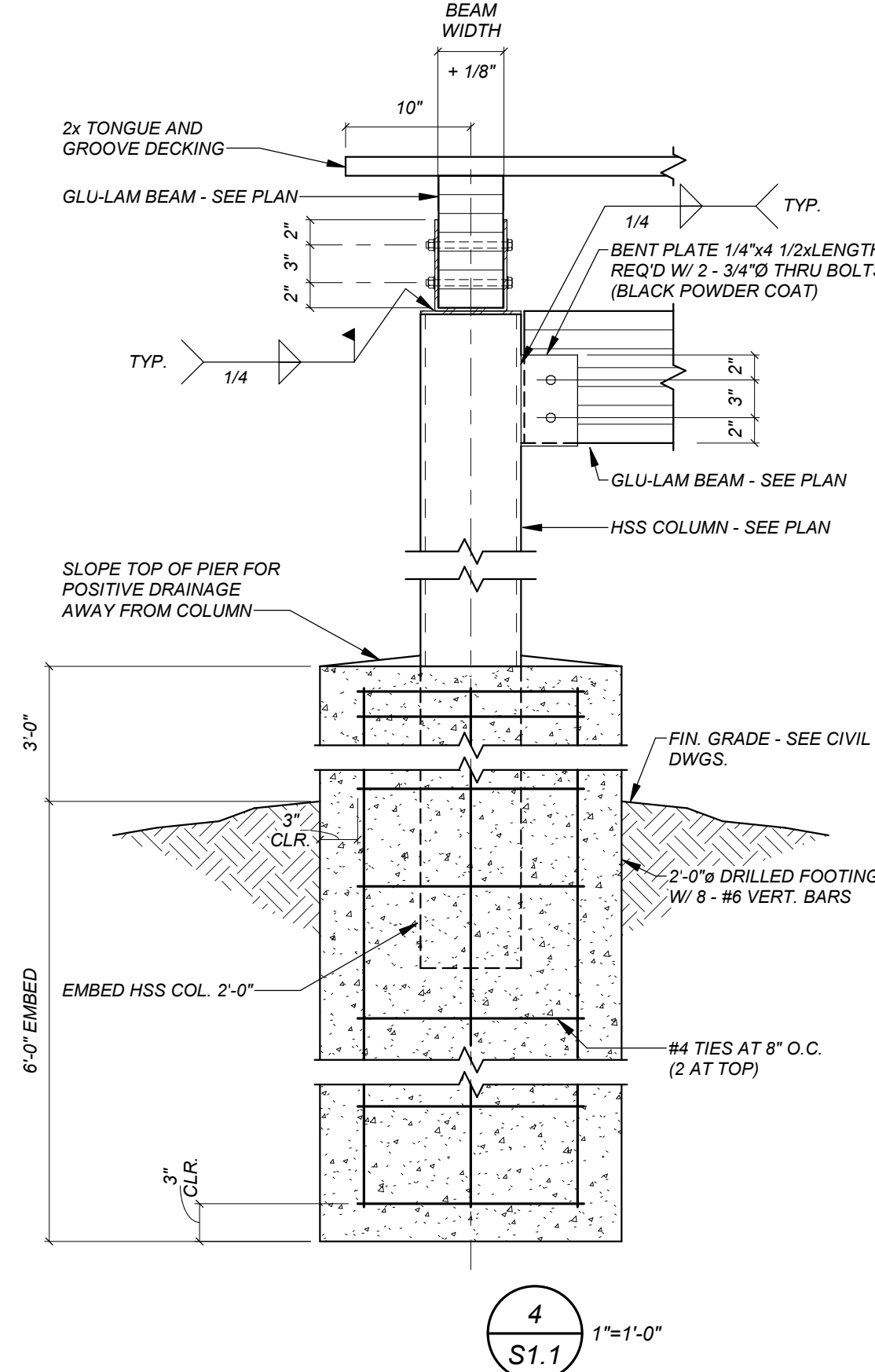
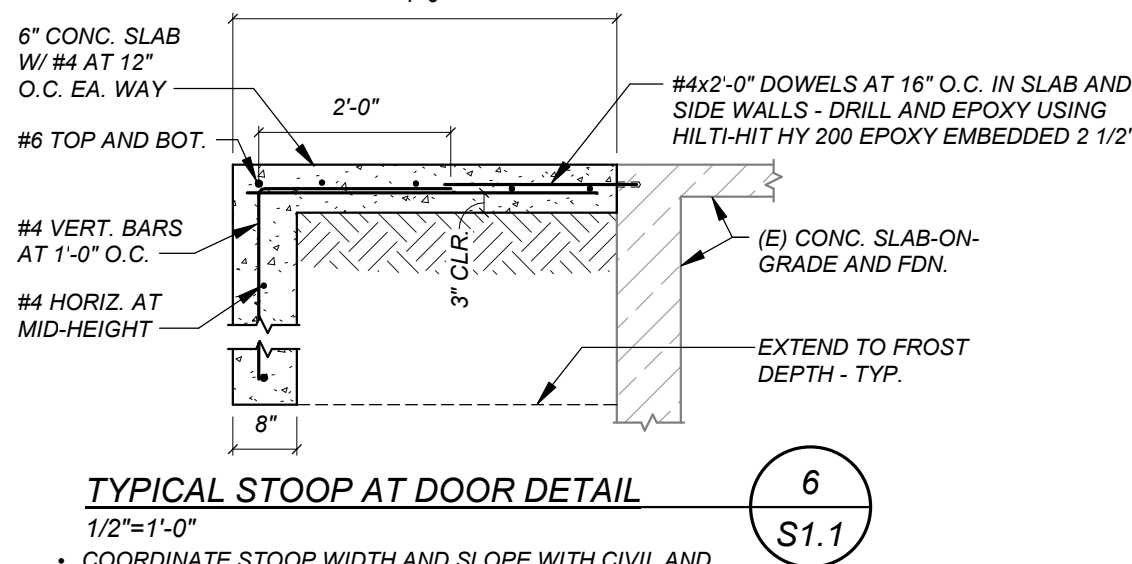
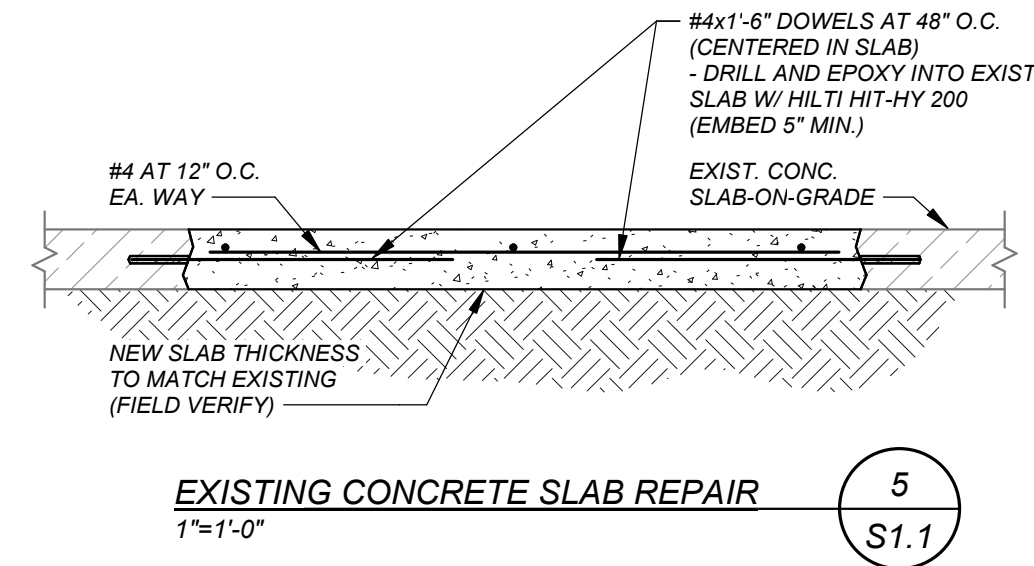
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PROJECT: 24031 DATE: 8/5/2024
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FLOOR PLAN AND
CANOPY FRAMING



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MARK	DATE	DESCRIPTION



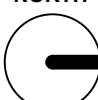
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PROJECT: 24031 DATE: 8/5/2024
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MECHANICAL AND
PLUMBING LEGEND

NORTH



MP0.0

MECHANICAL SYMBOLS

PIPING / PLUMBING

	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER PIPING
	DOMESTIC HOT WATER RECIRC. PIPING
	SANITARY PIPING
	VENT PIPING
	LIQUEFIED PETROLEUM GAS PIPING
	NATURAL GAS PIPING
	COMPRESSED AIR PIPING
	PIPING ELBOW UP
	PIPING ELBOW DOWN
	PIPING TEE UP
	PIPING TEE DOWN
	HOSE BIBB / WALL HYDRANT
	SHUTOFF VALVE
	GAS COCK
	BALL VALVE
	LINE CLEANOUT / WALL CLEANOUT
	FLOOR CLEANOUT
	FLOOR SINK
	FLOOR DRAIN
	VENT THRU ROOF

HVAC EQUIP. AND DUCTWORK

NOTE: ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE INSIDE DIMENSIONS.

	INSULATED FLEXIBLE DUCT (MAXIMUM 5'-0" LONG)
	BRANCH DUCT WITH CONICAL FITTING AND MANUAL VCD
	TYPE, NECK SIZE, CFM AT SUPPLY DIFFUSER OR REGISTER
	TYPE, SIZE AT EXHAUST OR RETURN GRILLE
	MANUAL VOLUME CONTROL DAMPER (VCD)
	SQUARE TO ROUND TRANSITION
	RECTANGULAR DUCT (1ST FIGURE = SIDE SHOWN)
	ROUND DUCT (1ST FIGURE = DIAMETER)
	THERMOSTAT

MISCELLANEOUS

	CONNECTION POINT OF NEW WORK TO EXISTING
	DETAIL REFERENCE: UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER
	NOTE REFERENCE SYMBOL

NOTE:

THIS IS A MASTER SYMBOLS LIST. ALL SYMBOLS, ABBREVIATIONS, ETC. MAY NOT NECESSARILY BE USED ON ALL DRAWINGS.

STANDARD MOUNTING HEIGHTS

MECHANICAL	
THERMOSTAT	48" (ADA) / 60"
CONTROLS	48" (ADA) / 60"
PLUMBING	
DRINKING FOUNTAINS (SPOUTS)	36"
WATER CLOSETS	17"-19"
URINALS	17"
LAVATORIES	34"
BATHTUBS (RIM)	9"
SPRAY HOSE (SHOWER)	60"
SHOWER CONTROLS	48"

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
BD	BACKDRAFT DAMPER, BLOWDOWN
BFF	BELOW FINISHED FLOOR
BOD	BOTTOM OF DUCT
BOS	BOTTOM OF STRUCTURE
BTU	BRITISH THERMAL UNIT
CA	COMPRESSED AIR
CFM	CUBIC FEET PER MINUTE
CO	CLEANOUT
D	DEMOLISH
DN	DOWN
E	EXISTING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
EDB	ENTERING DRY BULB
EF	EXHAUST FAN
EPO	EMERGENCY POWER OFF
ETR	EXISTING TO REMAIN
EWB	ENTERING WET BULB
FACP	FIRE ALARM CONTROL PANEL
FCO	FLOOR CLEANOUT
FD	FIRE DAMPER, FLOOR DRAIN
FF	FINISHED FLOOR
FSD	FIRE/SMOKE DAMPER
GCO	GRADE CLEANOUT
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HOA	HANDS OFF AUTOMATIC
HTG	HEATING
IE	INVERT ELEVATION
IN WC	INCHES OF WATER COLUMN
LAT	LEAVING AIR TEMPERATURE
LDB	LEAVING DRY BULB
LP	LOW PRESSURE
LRA	LOCKED ROTOR AMPS
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MBH	1000 BTU PER HOUR
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MD	MOTORIZED DAMPER
MFR	MANUFACTURER
MTD	MOUNTED
NA	NOT APPLICABLE
NC	NOISE CRITERIA
NIC	NOT IN CONTRACT
NO, NC	NORMALLY OPEN, NORMALLY CLOSED
OA	OUTSIDE AIR
PHØ	PHASE
QTY	QUANTITY
RA	RETURN AIR
RH	RELATIVE HUMIDITY
RL	RELOCATE
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SD	SMOKE DETECTOR
SF	SQUARE FEET
SP	STATIC PRESSURE
TA	TRANSFER AIR
TSTAT	THERMOSTAT
UC	UNDERCUT
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES, INC.
VCD	VOLUME CONTROL DAMPER
W, W/O	WITH, WITHOUT
WB	WET BULB
WCO	WALL CLEANOUT
WC	WATER COLUMN

MECHANICAL/PLUMBING GENERAL NOTES

- REFER TO PLANS FOR ADDITIONAL NOTES.
- THE PLANS ARE, TO A GREAT EXTENT, DIAGRAMMATIC IN NATURE. DRAWING SCALES SHOULD BE VERIFIED FROM DIMENSIONS ON ARCH. PLANS. THE INFORMATION PRESENTED IS AS EXACT AS COULD BE SECURED. THE CONTRACTOR SHALL OBTAIN EXACT LOCATION, MEASUREMENTS LEVELS, ETC. AT THE SITE AND SHALL SATISFACTORILY ADAPT THE WORK TO THE ACTUAL CONDITIONS AT THE PROJECT SITE.
- CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO SUBMITTING A BID TO COVER THE CONDITIONS AT THE SITE, INFORMING THEMSELVES OF ALL DETAILS.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, LAWS, ACTS, AND ORDINANCES, AND ALL AUTHORITIES HAVING JURISDICTION.
- THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL ENGINEERING REQUIREMENTS, THE OWNER'S DESIGN CRITERIA, UTILITY COMPANY REQUIREMENTS, APPLICABLE INDUSTRY STANDARDS OF GOOD PRACTICE AND SAFETY, AND THE MANUFACTURER'S STRICTEST RECOMMENDATIONS FOR EQUIPMENT, PRODUCT APPLICATION, AND INSTALLATION.
- MANUFACTURERS' NAMES ON WHICH THIS SPECIFICATION IS BASED INDICATE THE MINIMUM QUALITY OF PRODUCT REQUIRED BY ARCHITECT/ENGINEER. SUBSTITUTIONS MAY BE MADE TO THOSE SPECIFIED IF DEEMED EQUIVALENT BY THE ARCHITECT/ENGINEER DURING SUBMITTAL REVIEW.
- RECORD DRAWINGS - PREPARE AND SUBMIT TO THE OWNER RECORD DRAWINGS INDICATING THE EXACT LOCATION OF ALL EQUIPMENT INCLUDING THE EQUIPMENTS "AS INSTALLED" SIZE(S), MANUFACTURER, MODEL NUMBERS, AND PERFORMANCE RATINGS.
- SUPPORTS - EQUIPMENT, PIPING, DUCTWORK, OR ANY OTHER ACCESSORY SHALL NOT BE SUPPORTED FROM OTHER PIPING, DUCTWORK, METAL ROOF DECK, LATERAL BRACING BRIDGING, OR CONDUIT. ITEMS SHALL ONLY BE SUPPORTED FROM BUILDING STRUCTURE.
- COORDINATE EXACT LOCATION OF ALL DUCTWORK, AIR TERMINAL UNITS, PIPING, ETC., WITH STRUCTURAL, ARCHITECTURAL, ELECTRICAL, AND OTHER MECHANICAL SYSTEMS.
- WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, INSTALL MECHANICAL SERVICES AND OVERHEAD EQUIPMENT TO PROVIDE THE MAXIMUM HEADROOM POSSIBLE.
- ALL DUCTWORK, PIPING, AND TEMPERATURE CONTROL CONDUIT TO VIBRATING EQUIPMENT SHALL HAVE FLEXIBLE CONNECTORS.
- IF ASBESTOS IS ENCOUNTERED OR SUSPECTED, HALT WORK IMMEDIATELY IN THESE AREAS AND NOTIFY CONTRACTING OFFICERS REPRESENTATIVE BEFORE PROCEEDING. DO NOT DAMAGE OR DISTURB SUSPECTED ASBESTOS CONTAINING MATERIAL. COORDINATE ALL REMOVAL WITH THE CONSTRUCTION MANAGER AND OWNER.
- COORDINATE ALL ROOF AND CHASE PENETRATIONS WITH STRUCTURAL DRAWINGS AND ROOF INSTALLER.
- CONTRACTOR TO BE RESPONSIBLE FOR PROTECTION OF THEIR EMPLOYEES FROM ANY LEAD DUST THAT MAY BE ENCOUNTERED.
- THE LOCATION OF UNDERGROUND UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.
- ALL TESTS SHALL BE COMPLETED BEFORE ANY MECHANICAL EQUIPMENT OR PIPING INSULATION IS APPLIED.
- CONTRACTOR TO COORDINATE DUCTWORK WITH FIRE RATED WALLS AND FLOORS SHOWN ON ARCHITECTURAL DRAWINGS, MAINTAINING NECESSARY RATING OF WALLS. CONTRACTOR IS RESPONSIBLE FOR ALL CONNECTIONS TO SMOKE-FIRE DAMPERS.
- ALL DUCTWORK DIMENSIONS, AS SHOWN ON THE DRAWINGS, ARE INTERNAL CLEAR DIMENSIONS AND DUCT SIZE SHALL BE INCREASED TO COMPENSATE FOR DUCT LINING THICKNESS.
- MECHANICAL CONTRACTOR IS COMPLETELY RESPONSIBLE FOR PROVIDING ALL PRESSURE AND/OR TEMPERATURE TAPS IN PIPING AS REQUIRED FOR PROPER BALANCING OF ALL SYSTEMS.
- BEFORE INSTALLATION, EQUIPMENT CONTRACTOR SHALL VERIFY THAT COILS CAN BE REMOVED WITHOUT INTERFERENCE. CONTRACTOR SHALL PROVIDE ADEQUATE ACCESS AND COIL REMOVAL SPACE FOR ALL EQUIPMENT.
- ACCESS PANELS ARE REQUIRED (MIN. 18"x18") FOR ACCESS TO EVERY VALVE, DAMPER, AIR TERMINAL UNIT, AND CONTROL SENSOR IF NOT OTHERWISE ACCESSIBLE. ACCESS PANEL SHALL BE APPROVED BY ARCHITECT/ENGINEER.
- SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY THE ELECTRICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MOUNTING THE SMOKE DETECTOR IN DUCTWORK AS SHOWN ON THE ELECTRICAL DRAWINGS AND IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.

SCOPE OF WORK

MECHANICAL

- ALTERATION OF EXISTING VOCATIONAL TECHNOLOGY BUILDING FOR SCHOOL DEPARTMENT ADMINISTRATION USE. REMOVAL OF EXISTING GAS FIRED UNIT HEATERS. (2) NEW HIGH EFFICIENCY GAS-FIRED, DX, SPLIT SYSTEMS TO PROVIDE HEATING, COOLING, AND VENTILATION FOR RENOVATED SPACES. EXISTING VEHICLE STORAGE IN REAR OF BUILDING TO REMAIN AS-IS.

PLUMBING

- REPLACEMENT OF EXISTING ELECTRIC WATER HEATER, REPLACEMENT OF EXISTING RESTROOM LAVATORIES AND WATER CLOSETS, ADDITION OF NEW REDUCED PRESSURE ZONE VALVE AT EXISTING CW ENTRY, NEW DRINKING FOUNTAIN.

IMC VENTILATION RATE PROCEDURE CALCULATIONS

SYSTEM	Space	Class	A _v	Density	P _a	R _a	R _L	Ex. Rate	Exhaust	V _{ea}	E _a	V _{ea}	V _{ea}	Z
RTU-1	Lobby 1	Main Entry Lobbies	301	0.01	4	5	0.06	0	0	38	0.8	48	240	0.20
RTU-1	Office 1	Office Spaces	166	0.005	1	5	0.06	0	0	15	0.8	19	130	0.14
RTU-1	Office 2	Office Spaces	168	0.005	1	5	0.06	0	0	15	0.8	19	130	0.15
RTU-2	Break Room	Break Room	346	0.025	9	5	0.06	0	0	66	0.8	82	450	0.18
RTU-1	Super Int. Office	Office Spaces	192	0.005	1	5	0.06	0	0	17	0.8	21	150	0.14
RTU-1	Super Int. Conf	Conference Rooms	205	0.05	11	5	0.06	0	0	67	0.8	84	350	0.24
RTU-2	Hall 151	Corridors	371.83	-	-	-	0.06	0	0	22	0.8	28	150	0.19
RTU-1	Restroom	Rest Rooms and Bathrooms	197	-	-	-	-	20/50	150	0	0.8	0	100	0.00
RTU-2	Conference Room	Conference Rooms	509	0.05	26	5	0.06	0	0	161	0.8	201	1000	0.20
RTU-1	Closet	Storage Rooms	145	-	-	-	0.12	0	0	17	0.8	22	100	0.22

GENERAL NOTES:

1. REFER TO EQUIPMENT SCHEDULES FOR EQUIPMENT SIZING.

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Project Information

Energy Code: 2018 IECC
Project Title: MOFFAT SCHOOLS
Location: Moffat, Colorado
Climate Zone: 6b
Project Type: Alteration

Construction Site: 501 GARFIELD AVE, MOFFAT, Colorado 81143
Owner/Agent: Designer/Contractor:

Mechanical Systems List

QuantitySystem Type & Description

1 HVAC System - 1 (Single Zone):
Heating: 1 each - Central Furnace (F-1), Propane, Capacity = 80 kBtu/h
No minimum efficiency requirement applies
Cooling: 1 each - Split System (C31.1), Capacity = 36 kBtu/h, Air-Cooled Condenser, Unknown Economizer
Proposed Efficiency = 10.00 SEER, Required Efficiency = 13.00 SEER
Proposed Part Load Efficiency = 0.00, Required Part Load Efficiency = 0.00
Fan System: FAN SYSTEM 1 | CONFERENCE -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 1 Supply, Constant Volume, 1200 CFM, 1.0 motor nameplate hp, 67.0 fan efficiency grade, 96.0 total fan efficiency, 96.0 design fan efficiency, fan exception: Single fan <= 3hp

1 HVAC System - 2 (Single Zone):
Heating: 1 each - Central Furnace (F-2), Propane, Capacity = 80 kBtu/h
No minimum efficiency requirement applies
Cooling: 1 each - Split System (C31.2), Capacity = 48 kBtu/h, Air-Cooled Condenser, Unknown Economizer
Proposed Efficiency = 10.00 SEER, Required Efficiency = 13.00 SEER
Proposed Part Load Efficiency = 0.00, Required Part Load Efficiency = 0.00
Fan System: FAN SYSTEM 2 | OFFICES -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 2 Supply, Constant Volume, 1600 CFM, 1.0 motor nameplate hp, 67.0 fan efficiency grade, 96.0 total fan efficiency, 96.0 design fan efficiency, fan exception: Single fan <= 3hp

1 HVAC System (Unknown w/ Perimeter System):
Heating: 2 each - Unit Heater, Electric, Capacity = 10 kBtu/h
No minimum efficiency requirement applies

1 Water Heater:
Electric Storage Water Heater, Capacity: 40 gallons w/ Circulation Pump
No minimum efficiency requirement applies

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title Signature Date

Project Title: MOFFAT SCHOOLS Report date: 08/02/24
Data filename: Page 1 of 9

Section # & Req. ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C404.6.1, C404.6.2 [PL3]	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C404.6.3 [PL7]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C404.7 [PL8]	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
Additional Comments/Assumptions:			
1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)			
Project Title: MOFFAT SCHOOLS Report date: 08/02/24 Data filename: Page 4 of 9			

COMcheck Software Version COMcheckWeb
Inspection Checklist
Energy Code: 2018 IECC

Requirements: 0.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req. ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR2]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C103.2 [PR3]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: MOFFAT SCHOOLS Report date: 08/02/24
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Section # & Req. ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41]	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input checked="" type="checkbox"/> Not Applicable	
C403.11.3 [ME51]	HVAC piping insulation insulated in accordance with Table C403.11.3. Insulation exposed to weather is protected from damage and is provided with shielding from solar radiation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.9.1 [ME5]	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Mechanical Systems list for values.
C403.8.3 [ME11]	Fans have efficiency grade (FEG) >= 67. The total efficiency of the fan at the design point of operation <= 15% of maximum total efficiency of the fan.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.8.4 [ME142]	Motors for fans that are not less than 1/12 hp and less than 1 hp are electronically commutated motors or have a minimum motor efficiency of 70 percent. These motors have the means to adjust motor speed.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.8.5 [ME143]	Each DX cooling system > 65 kbtu and chiller water/evaporative cooling system with fans > 1/4 hp are designed to vary the indoor fan airflow as a function of load and comply with detailed requirements of this section.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.12.1 [ME71]	Systems that heat outside the building envelope are radiant heat systems controlled by an occupancy sensing device or timer switch.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input checked="" type="checkbox"/> Not Applicable	
C403.2.2 [ME30]	Natural or mechanical ventilation is provided in accordance with International Mechanical Code Chapter 4. Mechanical ventilation has capability to reduce outdoor air supply to minimum per IMC Chapter 4.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.7.1 [ME59]	Demand control ventilation provided for spaces >500 ft2 and >25 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input checked="" type="checkbox"/> Not Applicable	
C403.7.2 [ME115]	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input checked="" type="checkbox"/> Not Applicable	
C403.7.6 [ME141]	HVAC systems serving guestrooms in Group R-1 buildings with > 50 guestrooms. Each guestroom is provided with controls that automatically manage temperature setpoint and ventilation (see sections C403.7.6.1 and C403.7.6.2).	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input checked="" type="checkbox"/> Not Applicable	
Additional Comments/Assumptions:			
1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)			
Project Title: MOFFAT SCHOOLS Report date: 08/02/24 Data filename: Page 5 of 9			

Section # & Req. ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C403.12.2 [F03]	Snow/ice melting system and freeze protection systems have sensors and controls configured to limit service for pavement temperature and outdoor temperature, future connection to controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input checked="" type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Section # & Req. ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.7.4 [ME57]	Exhaust air energy recovery on systems meeting Table C403.7.4(1) and C403.7.4(2).	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input checked="" type="checkbox"/> Not Applicable	
C403.7.5 [ME116]	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input checked="" type="checkbox"/> Not Applicable	
C403.11.1 [ME60]	HVAC ducts and plenums insulated in accordance with C403.11.1 and constructed in accordance with C403.11.2, verification may need to occur during Foundation Inspection.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.4.1 [ME63]	Heating for vestibules and air curtains with integral heating include automatic controls that shut off the heating system when outdoor air temperatures > 45°F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint <= 60°F and cooling setpoint >= 80°F.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input checked="" type="checkbox"/> Not Applicable	
C403.3.3 [ME35]	Hot gas bypass limited to: <=240 kbtu/h - 50% >240 kbtu/h - 25%	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input checked="" type="checkbox"/> Not Applicable	
C408.2.2.1 [ME53]	Air outlets and zone terminal devices have means for air balancing.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.5, C403.5.1, C403.5.2 [ME123]	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Section C403.5.1, and refrigeration compressor systems that comply with C403.5.2.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input checked="" type="checkbox"/> Not Applicable	
Additional Comments/Assumptions:			
1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)			
Project Title: MOFFAT SCHOOLS Report date: 08/02/24 Data filename: Page 6 of 9			

REVISIONS SCHEDULE		
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MP0.2

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.6 [EL26] ²	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input checked="" type="checkbox"/> Not Applicable	
C405.7 [EL27] ²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.8.2.1 [EL28] ²	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.9 [EL29] ²	Total voltage drop across the combination of feeders and branch circuits <= 5%.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1 | High Impact (Tier 1) 2 | Medium Impact (Tier 2) 3 | Low Impact (Tier 3)

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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5 [F18] ¹	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.2.2 [F127] ¹	HVAC systems and equipment capacity does not exceed calculated loads.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.2.4.1 [F147] ¹	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.4.1.2 [F138] ¹	Thermostatic controls have a 5 °F deadband.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.2.4.1.3 [F120] ¹	Temperature controls have setpoint overlap restrictions.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.2.4.2 [F139] ¹	Each zone equipped with setback controls using automatic time clock or programmable control system.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.2.4.2.1, C403.2.4.2.2 [F140] ¹	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.2.4.2.3 [F141] ¹	Systems include optimum start controls.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C404.3 [F111] ²	Heat traps installed on supply and discharge piping of non-circulating systems.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C404.4 [F125] ²	All piping insulated in accordance with section details and Table C403.11.3.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C404.6.1 [F112] ¹	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply pipe.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

1 | High Impact (Tier 1) 2 | Medium Impact (Tier 2) 3 | Low Impact (Tier 3)

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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.1.1 [F157] ¹	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C408.2.1 [F128] ¹	Commissioning plan developed by registered design professional or approved agency.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C408.2.3.1 [F131] ¹	HVAC equipment has been tested to ensure proper operation.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C408.2.3.2 [F110] ¹	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C408.2.4 [F129] ¹	Preliminary commissioning report completed and certified by registered design professional or approved agency.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C408.2.5.1 [F17] ¹	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C408.2.5.3 [F143] ¹	An air and/or hydronic system balancing report is provided for HVAC systems.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C408.2.5.4 [F130] ¹	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	<input checked="" type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1 | High Impact (Tier 1) 2 | Medium Impact (Tier 2) 3 | Low Impact (Tier 3)

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REVISIONS SCHEDULE		
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PROJECT: 24031 DATE: 8/5/2024
PROJECT STATUS: CONSTRUCTION
DOCUMENTS

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MECHANICAL AND
PLUMBING SCHEDULES

NORTH



MP0.3

FURNACE SCHEDULE (GAS)

ITEM	MANUFACTURER & MODEL NO.	SERVES	SUPPLY FAN INFORMATION				HEATING SECTION					COOLING SECTION				ELECTRICAL			WEIGHT (LBS)	NOTES
			AIRFLOW (CFM)	OSA (CFM)	ESP (IN. W.C)	HP	DRIVE	FUEL	EFF. (%)	INPUT (MBH) ₁	OUTPUT (MBH) ₂	TYPE	REFR.	MBH (TOT.)	MBH (SENS)	MCA	MOCP	V/PH/Hz		
F-1	TRANE S9X1C080U5PSBA	CONFERENCE	1200	235	0.5	1.0	DIRECT	LPG	96	80	77.6	DX	410(A)	36	28	14.1	15	115/160	150	ALL
F-2	TRANE S9X1C100U5PSBA	OFFICES	1600	330	0.5	1.0	DIRECT	LPG	96	100	96	DX	410(A)	48	38	14.1	15	115/160	150	ALL
NOTES:																				
1. CONDENSATE OVERFLOW SWITCH																				
2. STAINLESS STEEL HEAT EXCHANGER.																				
3. LPG CONVERSION KIT																				
4. HIGH ALTITUDE KIT																				
5. 7-DAY PROGRAMMABLE THERMOSTAT.																				
6. F-1 TO BE PROVIDED WITH MANUFACTURER MATCHED AC COIL. BASIS OF DESIGN: 4TXCC007DS2HCA CASED AC COIL.																				
7. F-2 TO BE PROVIDED WITH MANUFACTURER MATCHED AC COIL. BASIS OF DESIGN: 4TXCD010DS3HCA CASED AC COIL.																				
8. PROVIDE WITH CONDENSATE NEUTRALIZER, AXIOM NC-1 OR SIMILAR.																				

FAN SCHEDULE

MARK	MANUFACTURER & MODEL OR EQUAL	SERVES	FAN INFORMATION		MOTOR	VOLTS/PH/Hz	DRIVE	NOTES:
			CFM	E.S.P ("wg)				
EF-1	GREENHECK SP-A80	RESTROOM	75	.25	17W	120/1/60	DIRECT	1,2
EF-2	GREENHECK SP-A80	RESTROOM	75	.25	17W	120/1/60	DIRECT	1,2

- NOTES:
1. PROVIDE WITH WALL MOUNTED SWITCH, RE ELECTRICAL PLANS FOR COORDINATION.
2. PROVIDE WITH INTEGRAL BACKDRAFT DAMPER, AND WALL CAP WITH BIRD SCREEN.

DIFFUSER, REGISTER, AND GRILLE SCHEDULE

MARK	MANUFACTURER & MODEL OR EQUAL	TYPE	MODULE	PERFORMANCE		NOTES
			SIZE	MAX. NC	MAX. APD	
D-1	PRICE / SCDA	ADJ SQUARE CONE	24 x 24	30	0.1" WC	1,2,3,4,5
D-2	PRICE / SCDA	ADJ SQUARE CONE	12 x 12	30	0.1" WC	1,2,3,4,5
D-3	PRICE / SDGE	SPIRAL DUCT DIFFUSER	14 x 6	30	0.1" WC	1,2,3,4,5
D-4	PRICE / 500	LOUVERED FACE SUPPLY	14 x 6	30	0.1" WC	1,2,3,4,5
RG-1	PRICE / 80	EGGCRATE	24 x 24	30	0.1" WC	1,2,3,4,5
RG-2	PRICE / 80	EGGCRATE	12 x 12	30	0.1" WC	1,2,3,4,5
RG-3	PRICE / 500	LOUVERED FACE RETURN	34 x16	30	0.1" WC	1,2,3,4,5
RG-4	PRICE / 500	LOUVERED FACE RETURN	30 x 16	30	0.1" WC	1,2,3,4,5
TG-1	PRICE / 500	LOUVERED FACE RETURN	14 x 8	30	0.1" WC	1,2,3,4,5

- NOTES:
1. SEE PLANS FOR CFM AND NECK SIZE.
2. MAXIMUM NOISE CRITERIA (NC) SHALL BE 30 UNLESS OTHERWISE NOTED.
3. COLOR AND FINISH TO BE COORDINATED WITH ARCHITECT.
4. MATERIAL IS STEEL UNLESS OTHERWISE NOTED.
5. PROVIDE BALANCING DEVICE FOR ALL GRD'S UNLESS OTHERWISE NOTED.

CONDENSING UNIT SCHEDULE

ITEM	MANUFACTURER & MODEL NO.	SERVES	COOLING SECTION				ELECTRICAL					WEIGHT (LBS)	NOTES
			TYPE	REFR.	MBH (TOT.)	MBH (SENS)	RLA	LRA	MCA	MOCP	V/PH/Hz		
CU-1	TRANE 4TTR6036	F-1	DX	410(A)	36	30	14.2	78.1	18.4	30	208/1/60	270	ALL
CU-2	TRANE 4TTR6048	F-2	DX	410(A)	48	40	20.4	122.1	28	45	208/1/60	270	ALL
NOTES:													
1. PROVIDE WITH UV, CHEMICAL, FREEZE AND THAW RESISTANT 4" EQUIPMENT PAD.													
2. MANUFACTURER PROVIDED REFRIGERANT LINE SET KIT.													
3. HAIL GUARDS.													
4. ANTI-SHORT CYCLE TIMER.													
5. HARD START KIT													

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER & MODEL OR EQUAL	DESCRIPTION	CW	HW	W	V
EW-1	AO SMITH DEL-40	ELECTRIC LOWBOY WATER HEATER, 40 GAL CAPACITY, DUAL 3KW ELEMENTS, MAX 6KW CAPACITY, 24 GPH RECOVERY AT 100°F RISE, 208V/1PHASE, 28.8A. PROVIDE HEAT TRAPS AND T&P RELIEF VALVE.	3/4"	3/4"	-	-
ET-1	AMTROL ST-8C	INLINE THERMAL EXPANSION TANK, TANK VOLUME 3.4 GAL WITH 0.59 GAL ACCEPTANCE FACTOR.	3/4"	-	-	-
HWCP-1	BELL & GOSSETT E3	HOT WATER RECIRCULATION PUMP WITH INTEGRAL TIMER/THERMOSTAT CONTROL, 2 GPM AT 2.5FT H2O, 120V/1, 10W.	-	1/2"	-	-
RPZ-1	WATTS LF009	REDUCED PRESSURE ZONE ASSEMBLY WITH ISOLATION VALVES AND AIR GAP FITTING.	3/4"	-	-	-
TMV-1	WATTS LUSGB	THERMOSTATIC MIXING VALVE FOR POINT OF USE, ASSE 1070 LISTED.	3/8"	3/8"	-	-
WC-1	TOTO CST744EFN	ADA, VITREOUS CHINA FLOOR MOUNTED FLUSH TANK WATER CLOSET, 1.28 GPF.	1/2"	-	3"	2"
LAV-1	KOHLER K-2064	KOHLER S&H WHITE VITREOUS CHINA WALL MOUNTED LAVATORY WITH GRID STRAINER AND CONCEALED WALL CARRIER. PROVIDE TMV-1 AND TRUEBRO LAV GUARDS. POLISHED CHROME SINGLE CONTROL, MANUAL FAUCET.	1/2"	1/2"	1-1/2"	1-1/4"
	KOHLER, 14402					
DF-1	ELKAY LZSL8WVSLP	WALL MOUNTED BI LEVEL ADA DRINKING FOUNTAIN WITH BOTTLE FILLER, CHILLER AND FILTER. PROVIDE WALL BRACKET.	1/2"	-	1-1/2"	1-1/4"
KS-1	JUST US-ADA-1618-ASS-DCR	ADA UNDERMOUNT SINGLE BOWL KITCHEN SINK, 18GA STAINLESS STEEL BOWL, WITH COATING ON UNDERSIDE. PROVIDE WITH BASKET STRAINER, SINGLE HANDLE, THREE HOLE FAUCET WITH DECK PLATE AND 0.5 GPM AERATOR. PROVIDE TMV-1 WITH FAUCET. PROVIDE WITH INSINKERATOR BADGER 5 GARBAGE DISPOSAL, 0.5 HP, 120V.	1/2"	1/2"	1-1/2"	1-1/4"
AAV-1	DELTA 100LF-JDF		-	-	-	SEE PLANS
STUDOR MINNVENT		AIR ADMITTANCE VALVE WITH RECESSED ROUGH-IN BOX AND GRILLE	1/2"	-	-	-
IMB-1	GRAY GREY MIB 148	WHITE POWDER COATED STEEL RECESSED ICE MAKER BOX WITH LEAD FREE QUARTER-TURN STOP VALVE	-	-	-	-
MS-1	MUSTEE 65M	36"X24"X10" MOLDED FIBERGLASS MOP SINK WITH 63.600A FAUCET W/ VACUUM BREAKER, STAINLESS STEEL WALL GUARDS AND MOP HOOKS	3/4"	3/4"	3"	2"
DSN-1	ZURN Z199-DC	STAINLESS STEEL DOWNSPOUT WITH PERFORATED AND HINGED COVER	-	-	3"	-
NOTES: SIZES SHOWN ARE MINIMUM PIPE SIZES TO A SINGLE FIXTURE. MINIMUM PIPE SIZE TO 2 OR MORE FIXTURES IS 3/4". ALL FIXTURES LISTED ARE NOT NECESSARILY USED ON THIS PROJECT. * WASTE PIPES BELOW SLABS OR GRADE ARE A MINIMUM OF 3".						

ELECTRIC HEATER SCHEDULE

ITEM	MANUFACTURER & MODEL NO.	AIRFLOW (CFM)	AMPS	WATTS	V/PH/Hz	NOTES
EUH-1	MARLEY MUH-0321	350	12.5	3000	208/240/1/60	ALL
EUH-2	MARLEY MUH-0321	350	12.5	3000	208/240/1/60	ALL
EUH-3	MARLEY MUH-0321	350	12.5	3000	208/240/1/60	ALL
NOTES: 1. PROVIDE ELECTRICAL DISCONNECT. 2. PROVIDE WITH INTEGRAL THERMOSTAT. 3. APPROVED MANUFACTURERS: MARLEY, QMARK & BERKO.						

PIPING INSULATION SCHEDULE

SERVICE	NOMINAL PIPE SIZE	
	< 1-1/2"	1-1/2" < 4"
INSULATION THICKNESS		
REFRIGERANT SUCTION	1"	1-1/2"
DOMESTIC HOT WATER / HW RECIRC	1"	1-1/2"
DOMESTIC COLD WATER	1/2"	1"
NOTES: 1. ALL PIPING SHALL BE INSULATED AS REQUIRED BY APPLICABLE IECC. 2. INSULATION NOT REQUIRED FOR PIPING CONVEYING FLUIDS WITH A DESIGN OPERATING TEMPERATURE BETWEEN 80°F AND 105°F. 3. INSULATION THICKNESS BASED ON CONDUCTIVITY (K-VALUE) NOT EXCEEDING 0.27. 4. INSULATION EXPOSED TO WEATHER SHALL BE JACKETED WITH 0.010" ALUMINUM.		

MECHANICAL AND PLUMBING NOTES

- A. GENERAL:
- WHILE ALL WORK IS IN PROGRESS, EXCEPT FOR SHORT DESIGNATED INTERVALS DURING WHICH CONNECTIONS ARE TO BE MADE, CONTINUITY OF SERVICE TO ALL EXISTING SYSTEMS SERVING OCCUPIED SPACES SHALL BE MAINTAINED. PROVIDE TEMPORARY PIPING SERVICES WHERE REQUIRED TO MAINTAIN EXISTING AREAS OPERABLE.
 - ANY WORK WHICH WILL AFFECT THE BUILDING OCCUPANTS, INCLUDING, BUT NOT LIMITED TO, WORK WHICH GENERATES EXCESSIVE NOISE, DUST, SMOKE, OR INCONVENIENCE TO BUILDING OCCUPANTS, SHALL BE PERFORMED AFTER BUSINESS HOURS, UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE BUILDING MANAGER.
 - THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH ARCHITECT AND OWNER AT ALL TIMES FOR ALL NEW-TO-EXISTING CONNECTIONS, SYSTEM SHUTDOWNS, RESTART-UP, AND FLUSHING AND FILLING OF BOTH NEW AND EXISTING AFFECTED SYSTEMS.
 - THE CONTRACTOR SHALL VISIT AND EXAMINE THE PREMISES AND/OR JOB SITE SO AS TO ASCERTAIN, PRIOR TO BIDDING, THE EXISTING CONDITIONS IN WHICH THEY WILL BE OBLIGED TO OPERATE IN PERFORMING THEIR PART OF THE CONTRACT. NO EXTRAS WILL BE ALLOWED DUE TO LACK OF KNOWLEDGE OF THESE CONDITIONS.
 - REPORT ANY EXISTING DAMAGED EQUIPMENT OR SYSTEMS TO THE OWNER PRIOR TO ANY WORK.
 - INSTALL ALL EQUIPMENT AND MATERIALS IN SUCH A MANNER AS TO PROVIDE REQUIRED ACCESS FOR SERVICING AND MAINTENANCE. ALLOW AMPLE SPACE FOR REMOVAL OF ALL PARTS THAT REQUIRE REPLACEMENT OR SERVICING.
 - FURNISH HINGED STEEL ACCESS DOORS WITH CONCEALED LATCH, WHETHER SHOWN ON DRAWINGS OR NOT, WHERE REQUIRED FOR ACCESS TO ALL CONCEALED VALVES, SHOCK ABSORBERS, MOTORS, PANS, BALANCING COCKS, AND OTHER OPERATING DEVICES REQUIRING ADJUSTMENT OR SERVICING. ACCESS DOORS IN FIRE-RATED WALLS AND CEILINGS SHALL HAVE EQUIVALENT UL LABEL AND FIRE RATING.
 - IT IS THE INTENTION OF THESE SPECIFICATIONS AND DRAWINGS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION, WHEREVER THE WORD "PROVIDE" IS USED, IT SHALL MEAN "FURNISH AND INSTALL COMPLETE AND READY FOR USE".
 - SECURE AND PAY FOR ALL PERMITS, TAP FEES, TAXES, ROYALTIES, LICENSES, AND INSPECTIONS IN CONNECTION WITH THE WORK SPECIFIED UNDER DIVISION 23.
 - ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS.
- B. MECHANICAL/ELECTRICAL REQUIREMENTS FOR MECHANICAL EQUIPMENT:
- CONTRACTOR SHALL REVIEW ELECTRICAL POWER REQUIREMENTS FOR MECHANICAL EQUIPMENT THAT ARE SCHEDULED ON THE ELECTRICAL DRAWINGS PRIOR TO ORDERING EQUIPMENT. DO NOT PURCHASE MOTORS OR ELECTRICAL EQUIPMENT UNTIL POWER CHARACTERISTICS AVAILABLE AT BUILDING SITE LOCATION HAVE BEEN CONFIRMED BY CONTRACTOR.
 - PROVIDE SAFETY DISCONNECT SWITCHES FOR ALL MECHANICAL EQUIPMENT, UNLESS SPECIFICALLY SHOWN ON DIVISION 16 REQUIREMENTS.
 - FURNISH COMBINATION TYPE FULL NEMA RATED STARTERS WITH FUSED DISCONNECT SWITCH FOR ALL MOTORS PROVIDED.
 - ELECTRICAL WIRING IN CONNECTION WITH THE AUTOMATIC TEMPERATURE CONTROL SYSTEM, INCLUDING INTERLOCK WIRING, WHERE SHOWN ON THE DIVISION 16 DRAWINGS, SHALL BE PERFORMED BY THE ELECTRICAL CONTRACTOR. ALL OTHER WIRING, INCLUDING 120V REQUIRED FOR PROPER OPERATION OF THE AUTOMATIC TEMPERATURE CONTROL SYSTEM, SHALL BE PERFORMED BY THE MECHANICAL CONTRACTOR.
- C. CONTROLS:
- TEMPERATURE CONTROLS CONTRACTOR SHALL PROVIDE A COMPLETE NEW/MODIFIED CONTROL SYSTEM USING NEW CONTROL DEVICES AS REQUIRED OR TO REPLACEABLE EXISTING DEVICES FOR THE MECHANICAL SYSTEMS TO OPERATE AS REQUIRED. THE CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING A PROPOSAL.
 - THE EXISTING TEMPERATURE CONTROL SYSTEM CONTROL DEVICES, DAMPERS, OPERATORS, WIRING, CONDUIT, AIR PIPING, VALVES, ETC, NOT BEING MODIFIED, AND WHICH ARE NO LONGER UTILIZED, SHALL BE REMOVED, AND NOT ABANDONED IN PLACE.
 - CHECK AND MAKE OPERABLE ALL WIRING AND PNEUMATIC CONTROL TUBING FOR ALL THE SYSTEMS ASSOCIATED WITH THE PROJECT AREA.
 - THE CONTROL CONTRACTOR WILL BE RESPONSIBLE FOR ALL INSTALLATION, PROGRAMMING, COMMISSIONING, TESTING AND PERFORMANCE VERIFICATION.
 - THE CONTROLS CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING ALL DEVICES REQUIRED FOR A COMPLETE OPERATING CONTROL SYSTEM.
 - PROVIDE 120V WIRING AS REQUIRED FOR THE TEMPERATURE CONTROL SYSTEMS, UNLESS SPECIFICALLY INDICATED ON ELECTRICAL DRAWINGS.
 - ALL THERMOSTAT CONTROLS SHALL HAVE A 5" DEADBAND.
 - ALL THERMOSTATIC CONTROLS SHALL BE PROGRAMMED TO MIN 55°F (HEATING) AND 85°F (COOLING) SETBACK DURING THE UNOCCUPIED MODE.
 - AUTOMATIC START CONTROLS SHALL BE PROVIDED FOR EACH HVAC SYSTEM. CONTROLS SHALL BE CAPABLE OF AUTOMATICALLY ADJUSTING THE DAILY START TIME AS REQUIRED TO REACH THE OCCUPIED SETPOINT JUST PRIOR TO ENTERING THE SCHEDULED OCCUPIED TIME.
- D. DEMOLITION:
- DURING THE DEMOLITION PHASE REMOVE EXISTING EQUIPMENT, PIPING, DUCTWORK, AND RELATED ITEMS, EITHER AS SHOWN ON THE DEMOLITION DRAWINGS AS BEING REMOVED, OR AS REQUIRED FOR THE WORK.
 - PROPERLY CAP AND SEAL ALL DUCTWORK AND PIPING NOT USED.
 - EXISTING THERMOSTATS, DIFFUSERS, DUCTWORK, ETC. NOTED ON DRAWINGS TO BE RE-USED SHALL BE THOROUGHLY CLEANED AND/OR REFINISHED TO MATCH NEW.
 - THE LOCATION OF EXISTING EQUIPMENT, PIPING, DUCTWORK, ETC., SHOWN ON THE DRAWINGS HAS BEEN TAKEN FROM EXISTING DRAWINGS AND IS, THEREFORE, ONLY AS ACCURATE AS THAT INFORMATION.
- E. WARRANTIES:
- PROVIDE COMPLETE WARRANTY INFORMATION FOR EACH ITEM, INCLUDING, NAME OF PRODUCT OR EQUIPMENT, DATE OF BEGINNING OF WARRANTY OR BOND, DURATION OF WARRANTY OR BOND, AND NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF MANUFACTURING/SERVICING PERSONNEL, AS WELL AS PROCEDURES FOR FILING A CLAIM AND OBTAINING WARRANTY SERVICES.
 - THE CONTRACTOR SHALL WARRANT ALL MATERIALS,

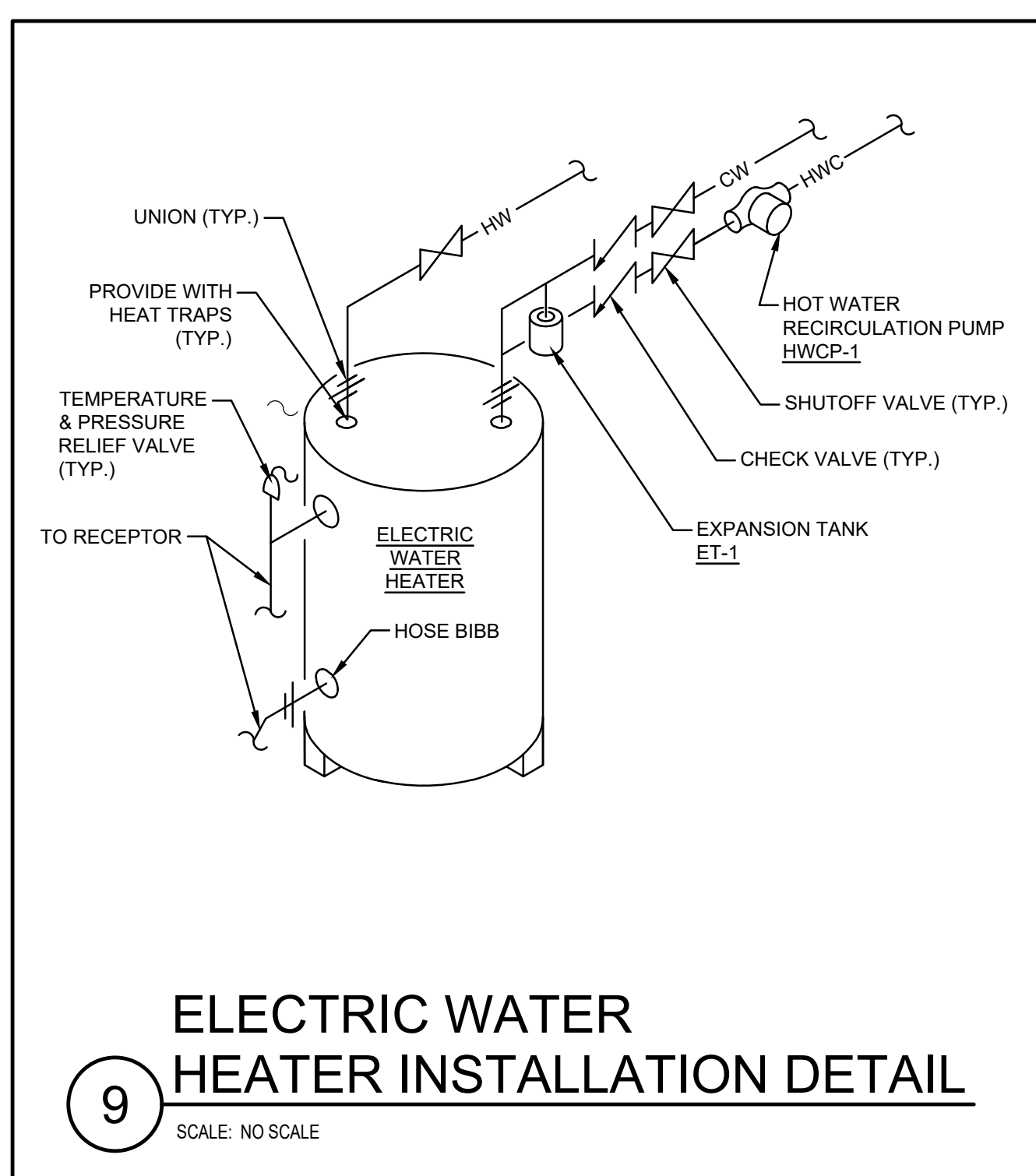
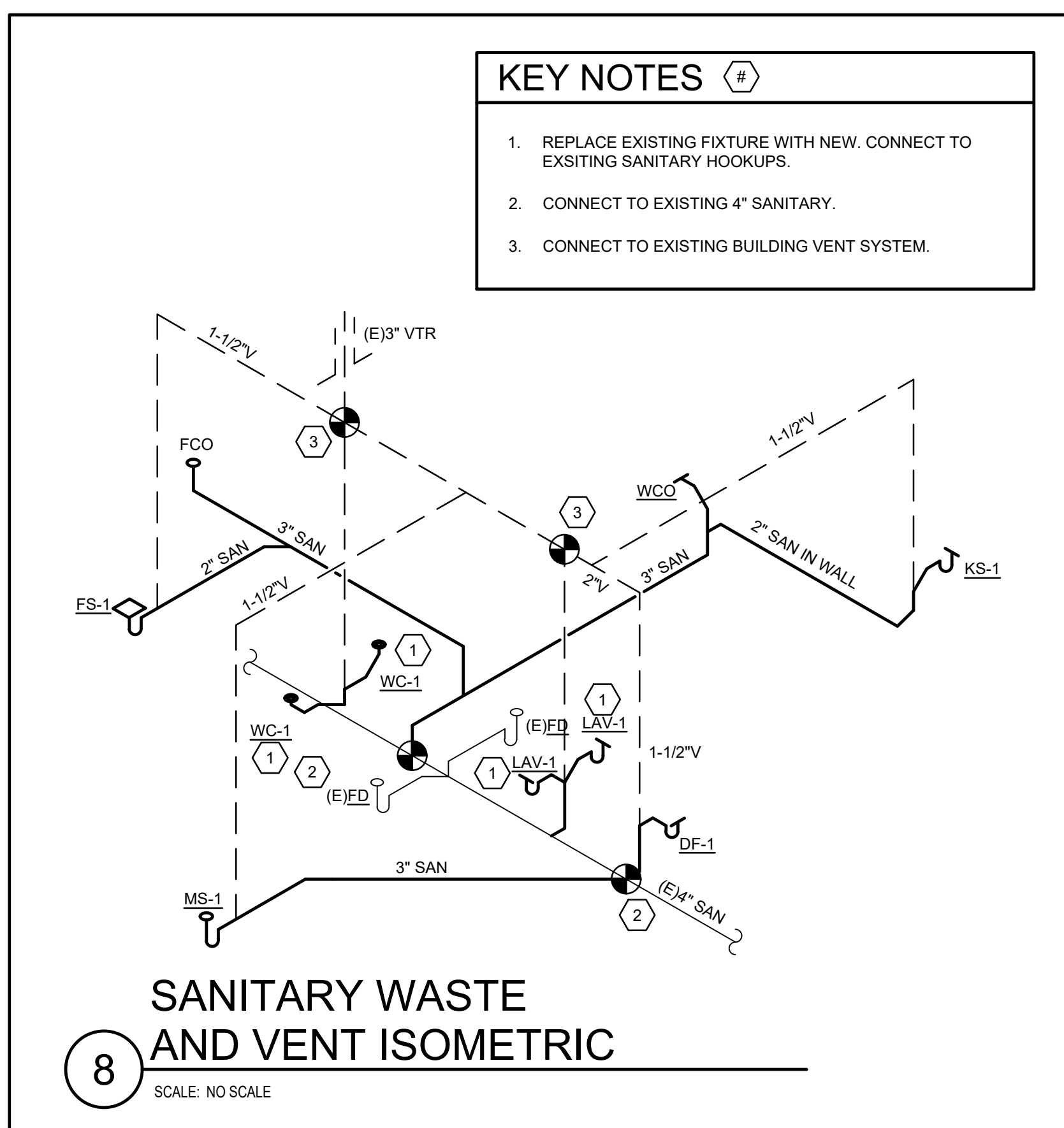
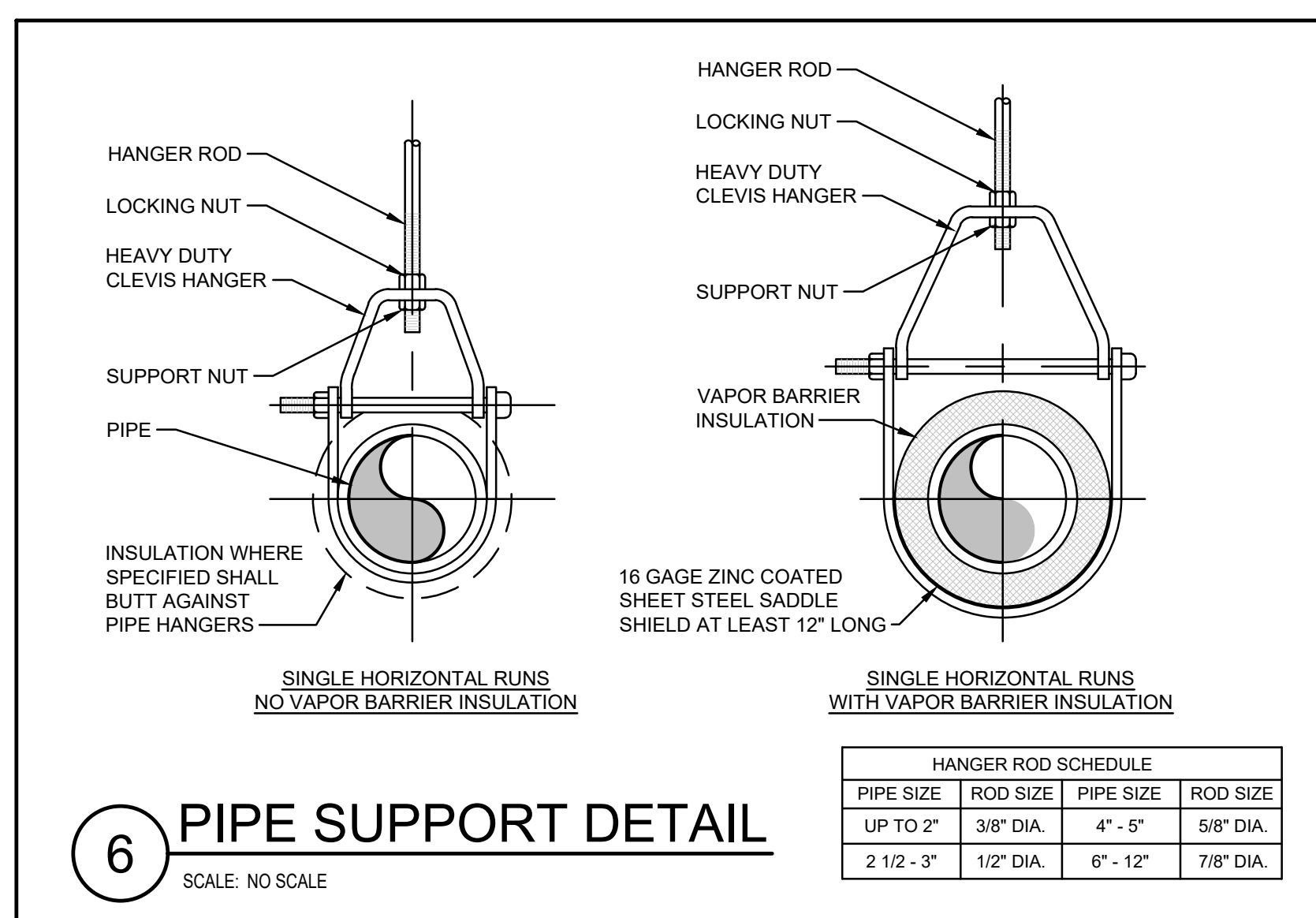
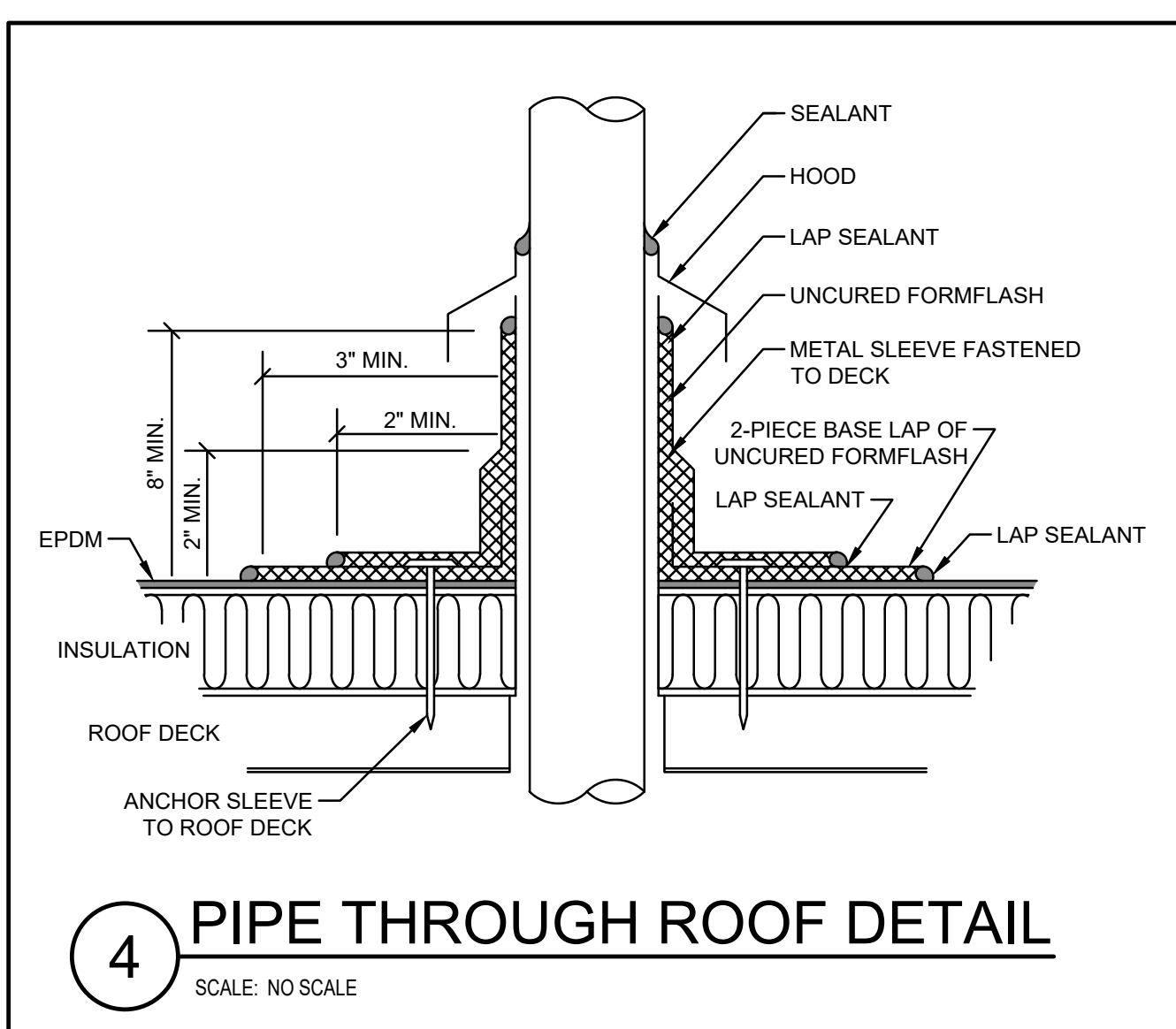
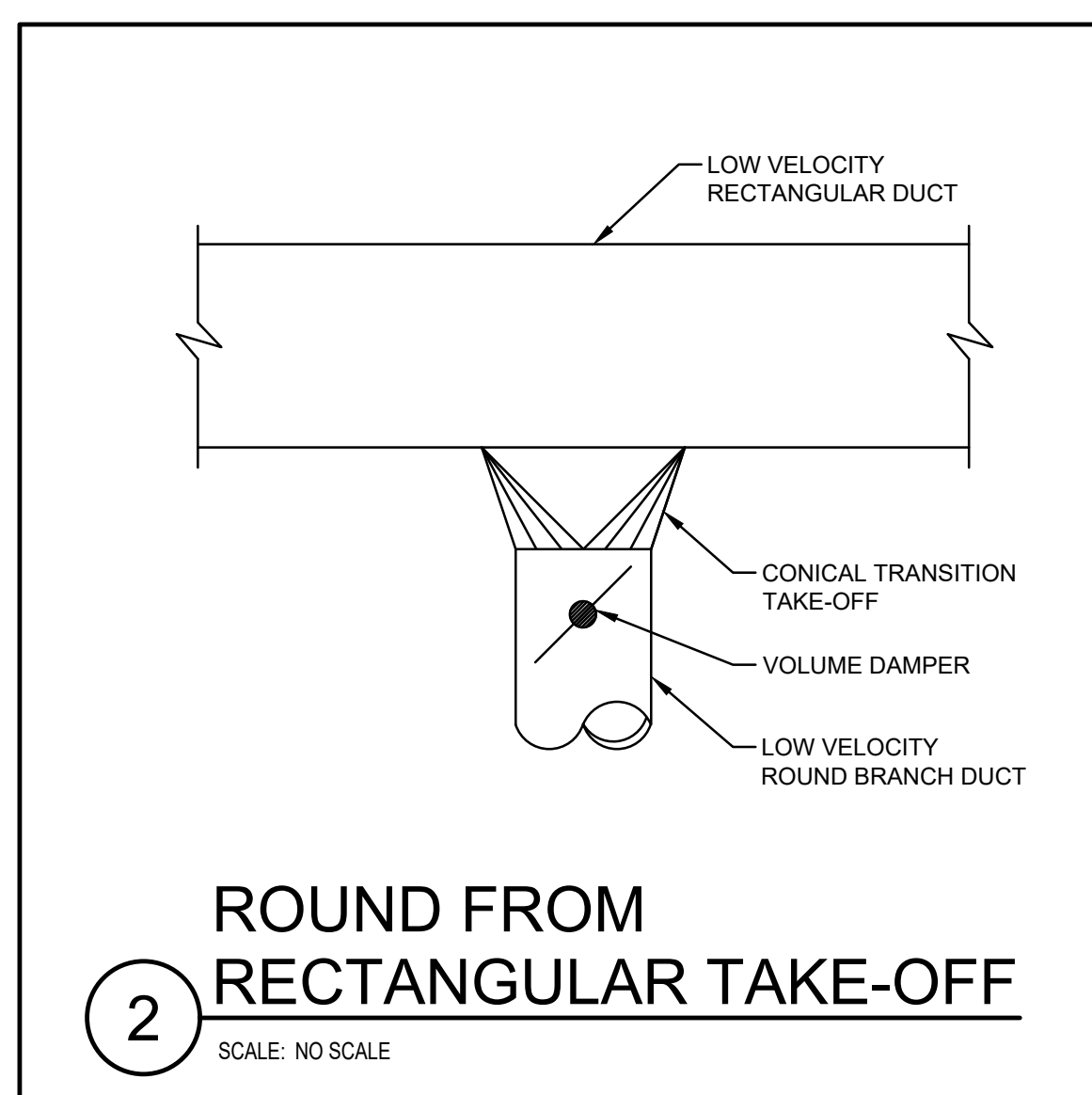
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MP0.3



STRUCTURAL ENGINEER
HCDA
9 S WEBER STREET
COLORADO SPRINGS, CO 80903
V 719 633 7784
HCDAENGINEERING.COM



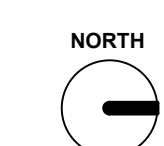
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MOFFAT
ADMINISTRATION
BUILDING RENOVATION

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MECHANICAL AND PLUMBING DETAILS



MP0.4

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MECHANICAL AND
PLUMBING DEMOLITION
PLAN

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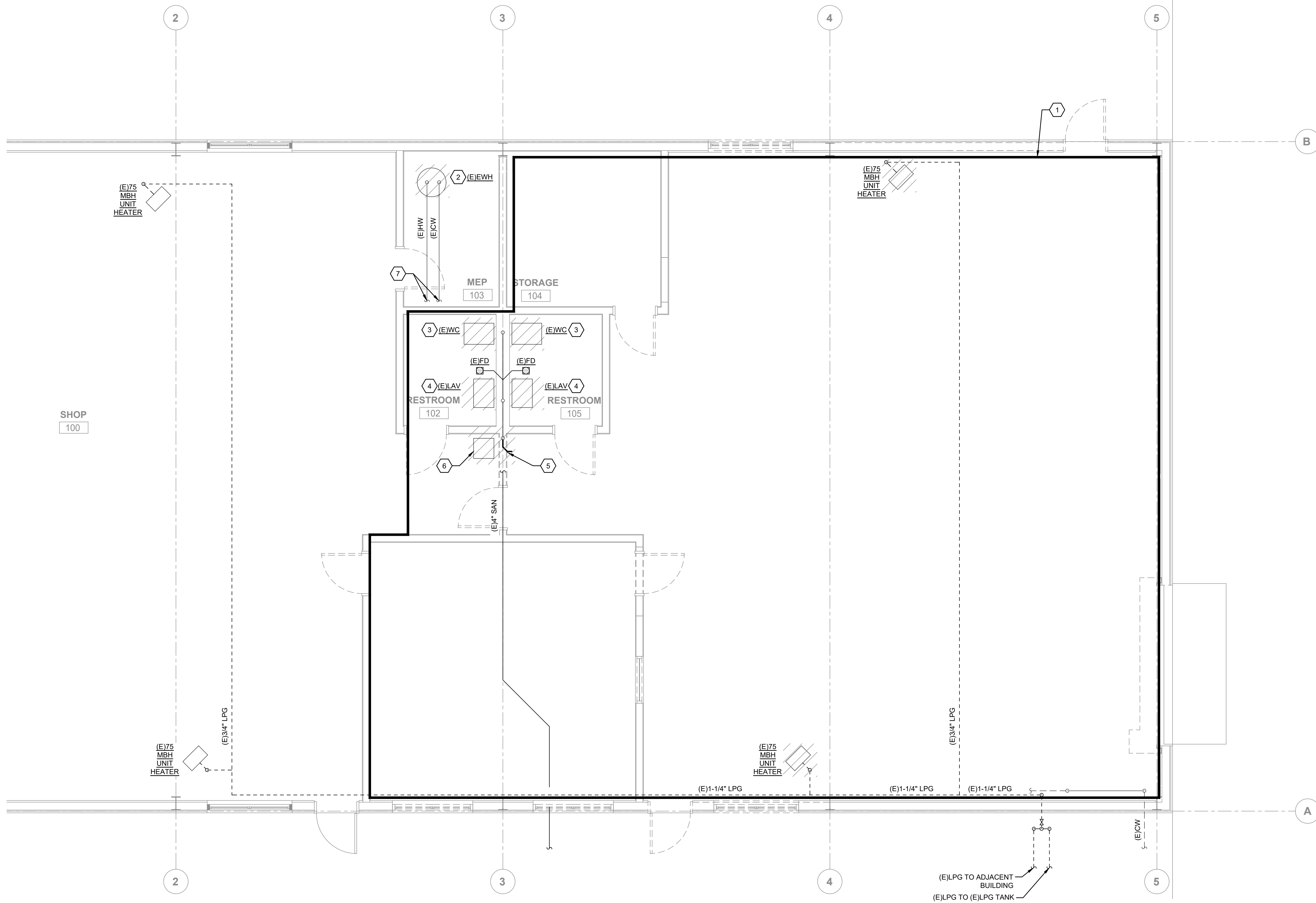
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GENERAL NOTES

- A. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES AND ORDINANCES.
B. REFERENCE ALL OTHER DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK OR CLARIFICATION OF NECESSARY WORK.

KEY NOTES

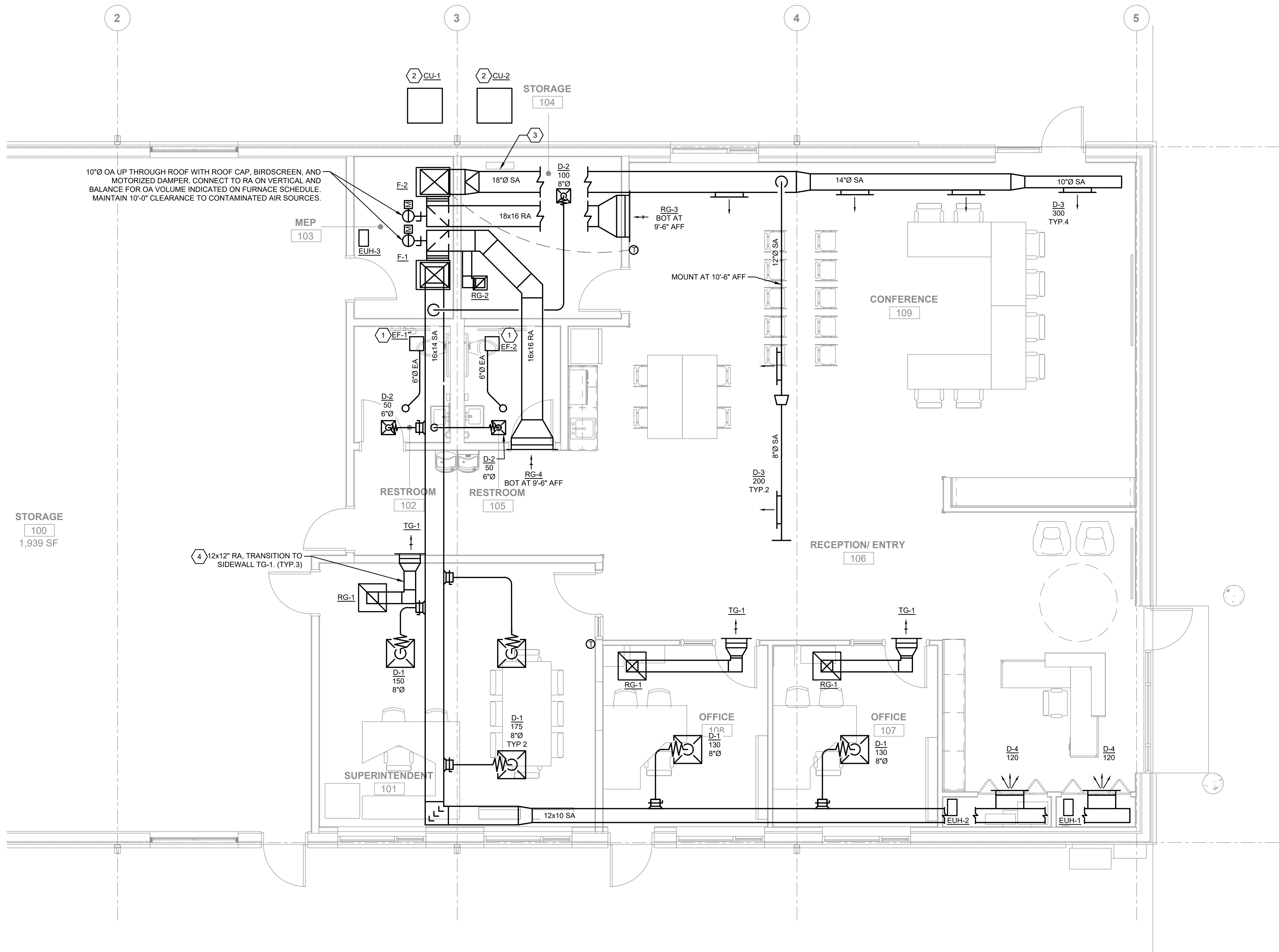
1. REMOVE ALL MECHANICAL EQUIPMENT IN THIS SPACE. CAP GAS PIPING AT NEAREST GAS MAIN.
2. REMOVE EXISTING ELECTRIC WATER HEATER FROM ABOVE CEILING. CAP EXISTING CWHHW FOR RECONNECTION TO NEW WATER HEATER.
3. REMOVE EXISTING WATER CLOSET. EXISTING SANITARY AND CW SUPPLY TO REMAIN FOR RECONNECTION TO NEW WATER CLOSET.
4. REMOVE EXISTING LAVATORY. SANITARY, CW, AND HW TO REMAIN FOR RECONNECTION TO NEW LAVATORY.
5. REMOVE EXISTING SANITARY AND CW AT PREVIOUSLY REMOVED DRINKING FOUNTAIN. EXISTING SANITARY AND EXISTING CW TO BE RECONFIGURED FOR RECONNECTION TO NEW DRINKING FOUNTAIN.
6. REMOVE EXISTING DRENCH SHOWER AND EYE WASH STATION. REMOVE EXISTING CW SUPPLY AND CAP AT NEAREST MAIN.
7. (E)C/W(E)HW TO EXISTING RESTROOMS TO REMAIN.



DEMOLITION PLAN
MECHANICAL AND PLUMBING

1

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



1 FIRST FLOOR MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

- ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES AND ORDINANCES.
- REFERENCE ALL OTHER DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK OR CLARIFICATION OF NECESSARY WORK.

KEY NOTES

- 6"0" EA UP THROUGH ROOF WITH ROOF CAP, BIRDSCREEN, AND BACKDRAFT DAMPER. MAINTAIN 10'-0" CLEARANCE TO OUTSIDE AIR INTAKES.
- MOUNT CONDENSING UNIT ON 4" HOUSEKEEPING PAD. ROUTE RS/RL LINESET TO INDOOR COIL PER MANUFACTURER INSTRUCTIONS. SEAL EXTERIOR PENETRATIONS. PROVIDE PENETRATION WITH AIREX PROSYSTEM KIT OR SIMILAR.
- COORDINATE DUCT ROUTE TO AVOID CROSSING OVER EXISTING ELECTRICAL PANEL.
- PROVIDE TRANSFER DUCT WITH MINIMUM 1" ACOUSTIC LINER.

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REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
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MOFFAT
ADMINISTRATION
BUILDING RENOVATION

PROJECT: 24031 DATE: 8/5/2024
PROJECT STATUS: CONSTRUCTION DOCUMENTS

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MECHANICAL PLAN

NORTH



M1.0

GENERAL NOTES

- A. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES AND ORDINANCES.
- B. REFERENCE ALL OTHER DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK OR CLARIFICATION OF NECESSARY WORK.

KEY NOTES

1. PROVIDE NEW RPZ AT EXISTING CW ENTRY. ENLARGE TO 1" DISTRIBUTION DIRECTLY AFTER NEW RPZ. CONNECT (E)3/4" CW AT PENETRATION THROUGH FLOOR. NEW 3/4" CW TO CONTINUE ABOVE CEILING TO NEW PLUMBING FIXTURES.
2. PROVIDE 1/2" CW CONNECTION TO OWNER PROVIDED KEURIG, PER MANUFACTURER'S INSTRUCTIONS. COORDINATE LOCATION WITH OWNER.
3. CONNECT NEW LAVATORY/WATER CLOSET TO EXISTING DOMESTIC HW/CW FROM REMOVED PLUMBING FIXTURE.
4. CONNECT NEW DRINKING FOUNTAIN TO RECONFIGURED (E)CW.
5. COORDINATE CW PIPE ROUTING TO AVOID CROSSING OVER IT EQUIPMENT.
6. CONTRACTOR TO VERIFY EXISTING PRESSURE REGULATOR IS CONFIGURED FOR 11" W.C. OUTLET PRESSURE AND ADJUST/REPLACE AS NECESSARY.
7. CONTRACTOR TO PROVIDE FINAL CONNECTION TO EQUIPMENT.

REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
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MOFFAT
ADMINISTRATION
BUILDING RENOVATION

PROJECT: 24031 DATE: 8/5/2024
PROJECT STATUS: CONSTRUCTION DOCUMENTS

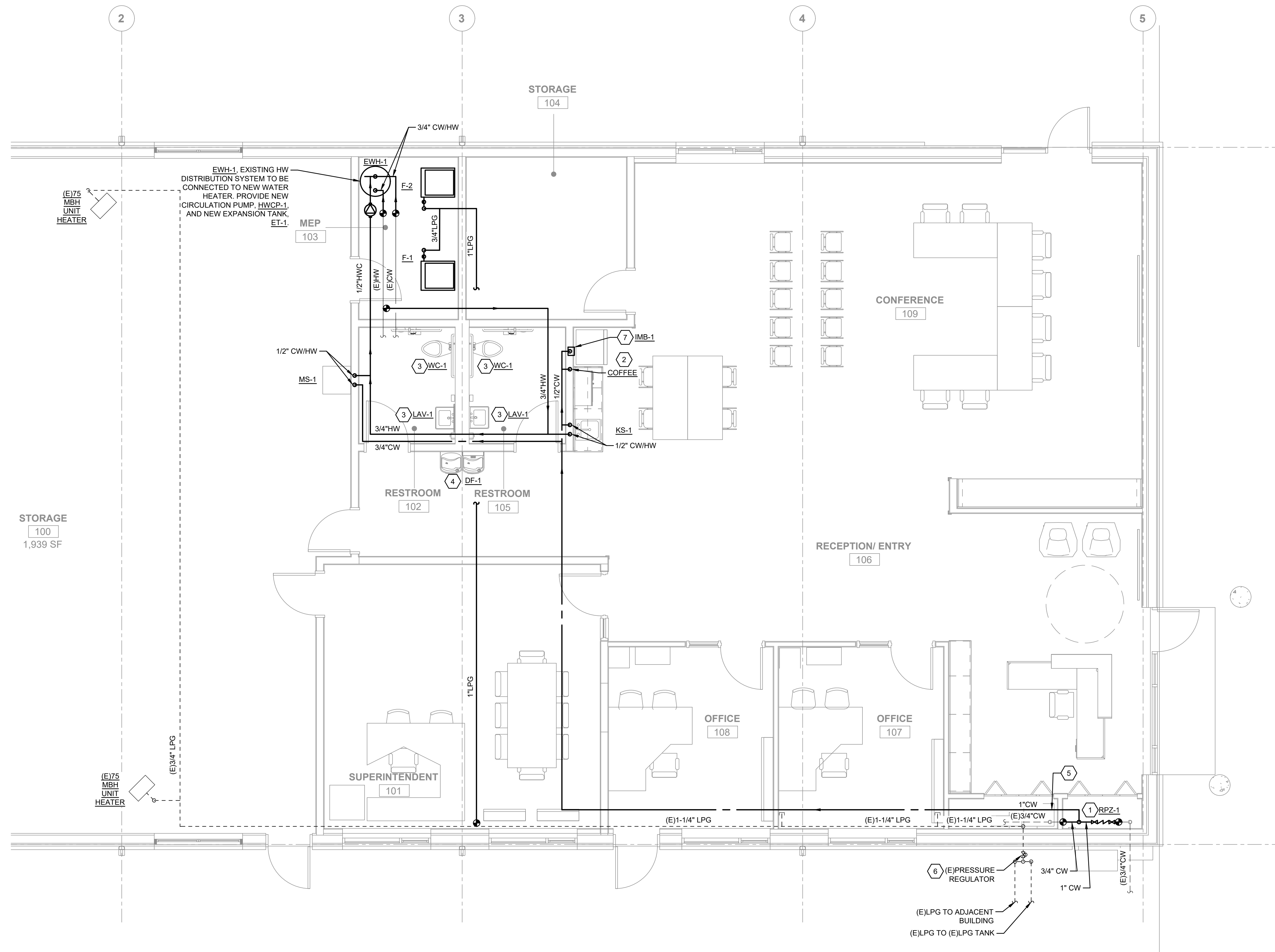
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PLUMBING PLAN -
DOMESTIC WATER AND
GAS

NORTH



P1.0



PLUMBING PLAN
DOMESTIC WATER AND GAS

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

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION



MOFFAT
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PROJECT: 24031 DATE: 8/5/2024
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PLUMBING PLAN -
SANITARY WASTE AND
VENT

NORTH
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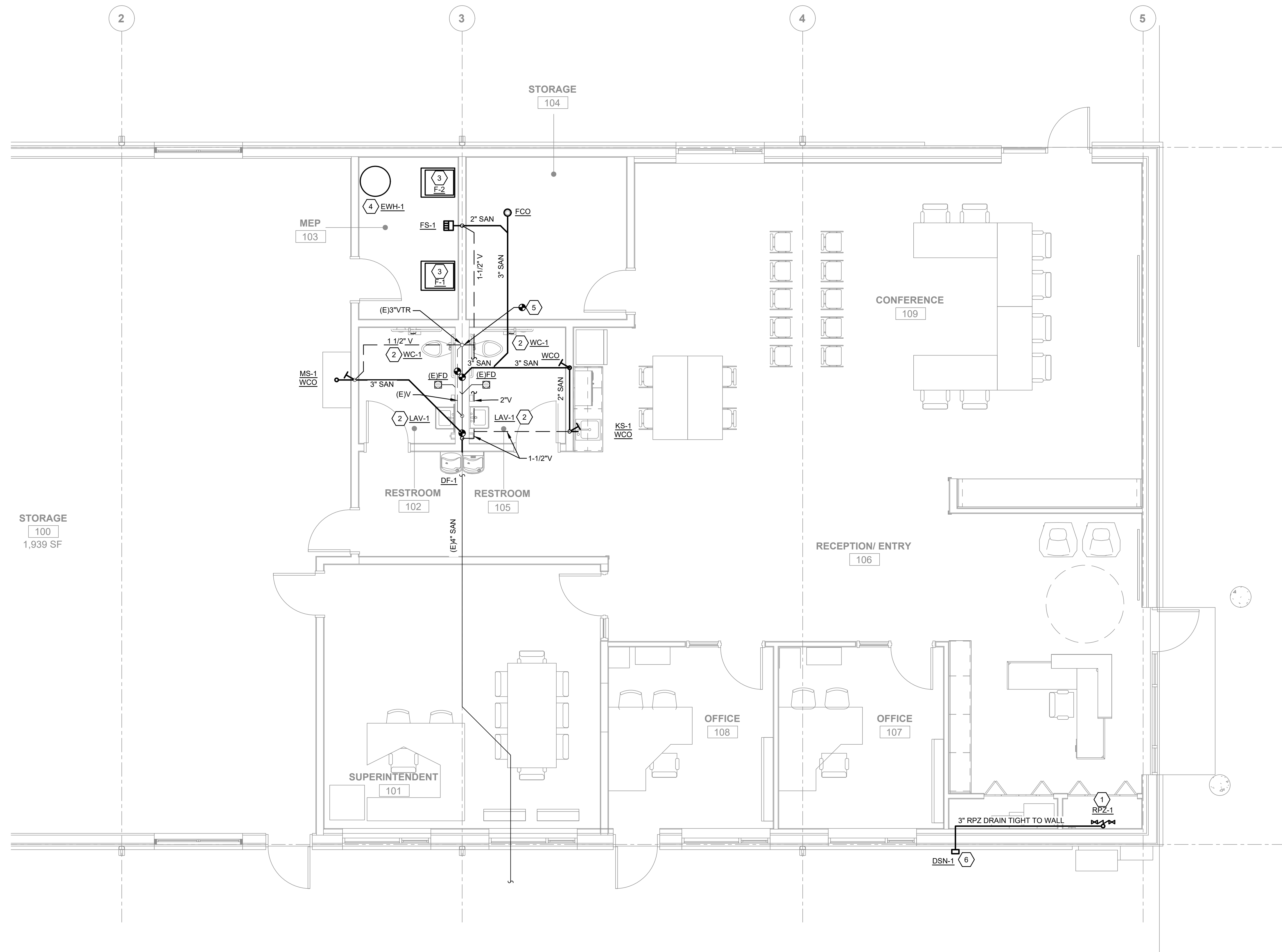
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GENERAL NOTES

- A. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES AND ORDINANCES.
- B. REFERENCE ALL OTHER DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK OR CLARIFICATION OF NECESSARY WORK.

KEY NOTES

1. PROVIDE NEW RPZ AT EXISTING CW ENTRY. ROUTE RPZ DRAIN THROUGH WALL AND DISCHARGE TO EXTERIOR, COORDINATE PENETRATION THROUGH WALL TO AVOID BUILDING ELECTRICAL SERVICE GEAR AND ENTRY.
2. CONNECT NEW FIXTURE TO EXISTING SANITARY.
3. ROUTE FURNACE FLUE CONDENSATE THROUGH CONDENSATE NEUTRALIZER AND DISCHARGE TO FLOOR SINK WITH AIR BREAK.
4. ROUTE EWH-1 T&P VALVE TO FLOOR SINK WITH AIR BREAK.
5. CONNECT NEW 2"V TO EXISTING SANITARY VENT SYSTEM ABOVE RESTROOM CEILING.
6. TERMINATE RPZ DISCHARGE WITH DSN-1.



PLUMBING PLAN SANITARY WASTE AND VENT

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

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION



MOFFAT
ADMINISTRATION
BUILDING RENOVATION

PROJECT: 24031 DATE: 08/05/2024
PROJECT STATUS: CONSTRUCTION DOCUMENTS

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ELECTRICAL GENERAL NOTES	
1. DO NOT SCALE DRAWINGS. VERIFY DIMENSIONS ON ARCHITECTURAL DRAWINGS AND IN FIELD PRIOR TO COMMENCEMENT OF WORK.	
2. PROVIDE ELECTRICAL DEMOLITION REQUIRED. REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR LOCATION AND EXTENT OF DEMOLITION REQUIRED. CONTRACTOR SHALL VISIT SITE PRIOR TO BID TO DETERMINE EXTENT OF WORK INVOLVED. PROVIDE LABOR AND MATERIALS AS REQUIRED TO MAINTAIN AND/OR RESTORE CONTINUITY OF SERVICE TO EXISTING CIRCUITS.	
3. FIELD VERIFY EXISTING EQUIPMENT OR CIRCUITS THAT ARE REMAINING TO BE RECONNECTED TO NEW OR EXISTING SWITCHBOARDS/PANELBOARDS. PROVIDE SWITCHES, RECEPTACLES, CONDUIT, WIRE, ETC. AS REQUIRED TO RESTORE CONTINUITY OF CIRCUIT(S).	
4. PROVIDE ALL NECESSARY DEMOLITION TO REMOVE EXISTING UNUSED CONDUIT, WIRE, CABLE, J-BOXES, RECEPTACLES, SWITCHES, LIGHTS, FIRE ALARM DEVICES, ETC. COMPLETE WITH ASSOCIATED CIRCUITING TO SOURCE. WHERE IT IS NOT FEASIBLE TO REMOVE THE ABOVE, OUTLET SHALL BE ABANDONED, WIRE REMOVED AND BLANK COVER PLATES PROVIDED.	
5. FINAL CONNECTIONS TO EQUIPMENT SHALL BE IN ACCORDANCE WITH MANUFACTURERS APPROVED WIRING DIAGRAMS, DETAILS, AND INSTRUCTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.	
6. EXISTING SYSTEMS AND CONDITIONS SHOWN ON DRAWINGS FOR EXISTING BUILDINGS ARE TO BE NOTED "FOR GUIDANCE ONLY". THE ELECTRICAL CONTRACTOR TO FIELD CHECK ALL EXISTING CONDITIONS PRIOR TO BIDDING AND TO INCLUDE IN HIS BID AN ALLOWANCE FOR REMOVAL AND/OR RELOCATION OF EXISTING CONDUITS, WIRES, DEVICES, FIXTURES, OR OTHER EQUIPMENT AS INDICATED ON THE PLANS OR AS REQUIRED TO COORDINATE AND ADAPT NEW AND EXISTING ELECTRICAL SYSTEM TO ALL OTHER WORK AS REQUIRED.	
7. PRIOR TO COMMENCEMENT OF DEMOLITION, THE CONTRACTOR SHALL SUBMIT A SYSTEM SHUTDOWN REQUEST FOR ALL SYSTEMS, I.E. HVAC, ELECTRICAL, FIRE ALARM, ECS, ETC	
8. REVIEW ARCHITECTURAL, STRUCTURAL, MECHANICAL AND OTHER DRAWINGS PRIOR TO BID.	
9. WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.	
10. WORK, MATERIALS, AND EQUIPMENT SHALL CONFORM TO THE LATEST EDITIONS OF LOCAL, STATE, AND NATIONAL CODES AND ORDINANCES.	
11. PROVIDE PERMITS AND INSPECTIONS REQUIRED.	
12. SYSTEMS SHALL BE TESTED FOR PROPER OPERATION. IF TESTS SHOW THAT WORK IS DEFECTIVE, CONTRACTOR SHALL MAKE CORRECTIONS NECESSARY AT NO COST TO OWNER.	
13. FIRE ALARM SYSTEM SHALL BE DESIGNED AND SUBMITTED AS DELEGATED DESIGN SUBMITTAL. MATERIALS, EQUIPMENT, AND WORKMANSHIP SHALL MEET PREVAILING CODES. THE SYSTEM SHALL BE COMPLETE AND OPERABLE IN EVERY RESPECT. SUBMIT SHOP DRAWINGS ACCORDING TO SPECIFICATIONS. SHOP DRAWINGS SHALL INCLUDE A SINGLE LINE DIAGRAM THAT SHOWS DEVICES, CONDUIT, WIRE, CABLE SIZES AND EQUIPMENT TO BE USED. SHOP DRAWINGS SHALL BE STAMPED AND SIGNED BY A REGISTERED ENGINEER. SYSTEM CALIBRATION AND TESTING SHALL BE BY FACTORY CERTIFIED TECHNICIAN.	
14. WIRE SHALL BE COPPER, 60 DEGREES C RATED FOR ALL CIRCUITS/FEEDERS 30 AMPS OR LESS, 75 DEGREES C RATED FOR ALL CIRCUITS/FEEDERS OVER 30 AMPS. SIZES INDICATED ARE FOR INSTALLATION IN A MAXIMUM 30 DEGREES C AMBIENT. CONDUCTOR AMPACITY SHALL BE DE-RATED FOR HIGHER AMBIENT INSTALLATIONS.	
15. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING EQUIPMENT WHICH IS DAMAGED DUE TO INCORRECT FIELD WIRING PROVIDED UNDER THIS SECTION, OR FACTORY WIRING IN EQUIPMENT PROVIDED UNDER THIS SECTION.	
16. CONTRACTOR'S FAILURE TO ORDER OR RELEASE ORDER FOR MATERIALS AND/OR EQUIPMENT WILL NOT BE ACCEPTED AS A REASON TO SUBSTITUTE ALTERNATE MATERIALS, EQUIPMENT, OR INSTALLATION METHODS.	
17. SYSTEMS SHALL BE COMPLETE, OPERABLE, AND READY FOR CONTINUOUS OPERATION. LIGHTS, SWITCHES, RECEPTACLES, MOTORS, ETC. SHALL BE CONNECTED AND OPERABLE.	
18. RECEPTACLES WHICH ARE SHOWN WALL MOUNTED ON THE ELECTRICAL DRAWINGS ON WALLS WHICH, ON THE ARCHITECTURAL DRAWINGS AND ELEVATIONS, ARE SHOWN AS GLASS OR PARTITIONS SHALL BE FLUSH FLOOR DUPLEX RECEPTACLES MOUNTED ADJACENT TO BASE OR WALLS.	
19. BOXES FOR TELEPHONE, TV, COMPUTER, WIRING DEVICES, ETC. SHALL BE MINIMUM 4" SQUARE.	
20. RECESSED FIXTURES INSTALLED INDOORS SHALL BE THERMALLY PROTECTED.	
21. SEE DIVISION 22 AND 23 DRAWINGS FOR LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT. PROVIDE SERVICE TO, AND CONNECT EQUIPMENT AS REQUIRED.	
22. CONDUITS PENETRATING THROUGH ROOF SHALL HAVE ROOF FLASHING WITH CAULK TYPE COUNTER FLASHING SLEEVE. INSTALLATION SHALL BE WATERTIGHT.	
23. FINAL CONNECTIONS TO MOTORS, TRANSFORMERS AND OTHER VIBRATING EQUIPMENT SHALL BE WITH SEAL TIGHT FLEX AND APPROVED FITTINGS. DO NOT SECURE CONDUITS, DISCONNECTS, OR DEVICES TO DUCTWORK OR MECHANICAL EQUIPMENT.	
24. WHERE PANELS ARE INSTALLED FLUSH WITH WALLS, EMPTY CONDUITS SHALL BE EXTENDED FROM THE PANEL TO AN ACCESSIBLE SPACE ABOVE OR BELOW. A MINIMUM OF ONE 3/4" CONDUIT SHALL BE INSTALLED FOR EVERY THREE SINGLE POLE SPARE CIRCUIT BREAKERS OR SPACES, OR FRACTION THEREOF, BUT NOT LESS THAN TWO CONDUITS.	
25. ALL ELECTRICAL SYSTEMS COMPONENTS SHALL BE LISTED OR LABELED BY UL OR OTHER RECOGNIZED TESTING FACILITY.	
26. PROVIDE CARBON MONOXIDE DETECTORS AS REQUIRED PER NFPA 72, 17.12. LOCATIONS INCLUDE BUT NOT LIMITED TO: 26.1. ADJACENT TO PERMANENTLY INSTALLED FUEL-BURNING APPLIANCES. 26.2. CENTRALLY LOCATED ON EVERY HABITABLE LEVEL AND IN EVERY HVAC ZONE OF THE BUILDING. 26.3. OUTSIDE OF EACH SEPARATE DWELLING UNIT, GUEST ROOM, AND GUEST SUITE SLEEPING AREA WITHIN 21 FT OF ANY DOOR TO A SLEEPING ROOM.	
SCOPE OF WORK	
PROVIDE LIGHTING AND POWER FOR THE RENOVATION OF THE EXISTING STORAGE AND SHOP BUILDING OWNED BY MOFFAT SCHOOLS. APPROXIMATELY 2,500SF OF SPACE WILL BE CONVERTED INTO NEW ADMINISTRATIVE OFFICES AND MEETING AREAS. EXISTING RESTROOMS WILL REMAIN.	

ELECTRICAL SYMBOLS		POWER		LIGHTING		ABBREVIATIONS	
NOTE: THIS IS A MASTER SYMBOLS LIST. ALL SYMBOLS, ABBREVIATIONS, ETC. MAY NOT NECESSARILY BE USED ON ALL DRAWINGS				NOTE: UPPER CASE LETTER DENOTES LUMINAIRES TYPE. LOWER CASE LETTER ADJACENT TO LUMINAIRE INDICATES SWITCH THAT CONTROLS LUMINAIRES. HATCHING DENOTES FIXTURE SHALL BE PROVIDED WITH EMERGENCY BATTERY BACKUP.			
ONE LINE AND RISER							
<div><div><div><div><div><div></div><div>PANEL XXX</div></div></div><div></div><div>PANEL</div></div><div><div><div><div><div></div><div></div></div><div>CURRENT TRANSFORMER, RATED AS SPECIFIED OR REQUIRED</div></div></div><div><div><div><div><div></div><div></div></div><div>MOTOR</div></div></div><div><div><div><div><div></div><div></div></div><div>SURGE PROTECTION DEVICE</div></div></div><div><div><div><div><div></div><div></div></div><div>GROUND CONNECTION</div></div></div><div><div><div><div><div></div><div></div></div><div>SWITCH, RATING AS SHOWN</div></div></div><div><div><div><div><div></div><div></div></div><div>FUSE, FUSE AMPACITY AND TYPE AS SHOWN</div></div></div><div><div><div><div><div></div><div></div></div><div>CIRCUIT BREAKER, RATING AS SHOWN</div></div></div><div><div><div><div><div></div><div></div></div><div>UTILITY METER (AS REQUIRED BY UTILITY)</div></div></div><div><div><div><div><div></div><div></div></div><div>DIGITAL METER</div></div></div><div><div><div><div><div></div><div></div></div><div>SAFETY SWITCH, NON-FUSED, 240V, U.N.O.</div></div></div><div><div><div><div><div></div><div></div></div><div>FUSED DISCONNECT</div></div></div><div><div><div><div><div></div><div></div></div><div>COMBINATION STARTER/DISCONNECT (SIZE AS INDICATED)</div></div></div><div><div><div><div><div></div><div></div></div><div>TRANSFORMER, TYPE AND RATING AS SHOWN</div></div></div><div><div><div><div><div></div><div></div></div><div>CONDUIT CONNECTION</div></div></div><div><div><div><div><div></div><div></div></div><div>CIRCUIT BREAKER WITH GROUND FAULT PROTECTION</div></div></div><div><div><div><div><div></div><div></div></div><div>FUSE WITH GROUND FAULT PROTECTION</div></div></div><div><div><div><div><div></div><div></div></div><div>AUTOMATIC TRANSFER SWITCH</div></div></div><div><div><div><div><div></div><div></div></div><div>GROUND CONNECTION WITH TEST WELL</div></div></div><div><div><div><div><div></div><div></div></div><div>GROUND ROD</div></div></div></div></div><div>MISCELLANEOUS</div><div><div><div><div><div></div><div>KEY NOTE DESIGNATION</div></div></div><div><div><div><div><div></div><div>SHORT CIRCUIT TAG DESIGNATION</div></div></div><div><div><div><div><div></div><div>FEEDER TAG DESIGNATION</div></div></div><div><div><div><div><div></div><div>REVISION NUMBER DESIGNATION</div></div></div><div><div><div><div><div></div><div>NEW TO EXISTING CONNECTION</div></div></div><div><div><div><div><div></div><div>EXISTING LINEWORK</div></div></div><div><div><div><div><div></div><div>DEMOLITION LINEWORK</div></div></div><div><div><div><div><div></div><div>NEW LINEWORK</div></div></div></div></div><div>COMMUNICATIONS</div><div><div><div><div><div></div><div>JUNCTION BOX FOR INSTALLATION OF COMMUNICATION OR DATA OUTLET, MOUNTED 18" AFF, UNLESS OTHERWISE NOTED. INSTALL 1" CONDUIT FROM BOX TO 3" INTO ACCESSIBLE LOCATION ABOVE FINISHED CEILING. PROVIDE (2) RJ-45 JACKS UNLESS NOTED OTHERWISE.</div></div></div><div><div><div><div><div></div><div>FLOOR JUNCTION BOX FOR INSTALLATION OF COMMUNICATION OR DATA OUTLET. INSTALL 1" CONDUIT FROM BOX CONCEALED IN FLOOR SLAB TO WALL AND TO 3" INTO ACCESSIBLE LOCATION ABOVE FINISHED CEILING. PROVIDE (2) RJ-45 JACKS UNLESS NOTED OTHERWISE.</div></div></div><div><div><div><div><div></div><div>JUNCTION BOX FOR INSTALLATION OF TV OUTLET. MOUNTED 18" AFF, UNLESS OTHERWISE NOTED. INSTALL 1" CONDUIT FROM BOX TO 3" INTO ACCESSIBLE LOCATION ABOVE FINISHED CEILING. COORDINATE MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.</div></div></div><div><div><div><div><div></div><div>CEILING MOUNTED JUNCTION BOX FOR INSTALLATION OF WIRELESS ACCESS POINT. PROVIDE (1) RJ-45 JACKS UNLESS NOTED OTHERWISE.</div></div></div><div><div><div><div><div></div><div>EMERGENCY COMMUNICATIONS SYSTEM (ECS) SPEAKER</div></div></div></div></div><div>POWER</div><div><div><div><div><div></div><div>PANELBOARD, ELECTRICAL DISTRIBUTION PANEL, OR LOAD CENTER SURFACE MOUNTED</div></div></div><div><div><div><div><div></div><div>PANELBOARD, ELECTRICAL DISTRIBUTION PANEL, OR LOAD CENTER RECESS MOUNTED</div></div></div><div><div><div><div><div></div><div>20 AMP, 125V, NEMA 5-20R DUPLEX RECEPTACLE</div></div></div><div><div><div><div><div></div><div>20 AMP, 125V, NEMA 5-20R QUAD RECEPTACLE</div></div></div><div><div><div><div><div></div><div>20 AMP, 125V, NEMA 5-20R GFCI DUPLEX RECEPTACLE</div></div></div><div><div><div><div><div></div><div>20 AMP, 125V, NEMA 5-20R GFCI DUPLEX RECEPTACLE, MOUNTED 6" ABOVE COUNTER AND/OR ABOVE BACKSPASH, UNLESS OTHERWISE NOTED</div></div></div><div><div><div><div><div></div><div>20 AMP, 125V, NEMA 5-20R DUPLEX RECEPTACLE, MOUNTED 6" ABOVE COUNTER AND/OR ABOVE BACKSPASH, UNLESS OTHERWISE NOTED</div></div></div><div><div><div><div><div></div><div>20 AMP, 125V, NEMA 5-20R QUAD RECEPTACLE, MOUNTED 6" ABOVE COUNTER AND/OR ABOVE BACKSPASH, UNLESS OTHERWISE NOTED</div></div></div><div><div><div><div><div></div><div>20 AMP, 125V, NEMA 5-20R SWITCHED DUPLEX RECEPTACLE</div></div></div><div><div><div><div><div></div><div>20 AMP, 125V, NEMA 5-20R DUPLEX FLOOR RECEPTACLE, 3/4" CONDUIT RUN CONCEALED IN FLOOR SLAB</div></div></div><div><div><div><div><div></div><div>20 AMP, 125V, NEMA 5-20R CEILING FLOOR RECEPTACLE, 3/4" CONDUIT</div></div></div><div><div><div><div><div></div><div>20 AMP, 125V, NEMA 5-20R QUAD FLOOR RECEPTACLE, 3/4" CONDUIT RUN CONCEALED IN FLOOR SLAB</div></div></div><div><div><div><div><div></div><div>20 AMP, 125V, NEMA 5-20R QUAD CEILING RECEPTACLE, 3/4" CONDUIT</div></div></div><div><div><div><div><div></div><div>JUNCTION BOX, WALL MOUNTED</div></div></div><div><div><div><div><div></div><div>JUNCTION BOX, FLOOR MOUNTED</div></div></div><div><div><div><div><div></div><div>JUNCTION BOX, CEILING MOUNTED</div></div></div><div><div><div><div><div></div><div>SPECIAL RECEPTACLE, FLOOR MOUNTED, CONFIGURATION AS NOTED ON PLAN</div></div></div><div><div><div><div><div></div><div>SPECIAL RECEPTACLE, WALL MOUNTED, CONFIGURATION AS NOTED ON PLAN</div></div></div><div><div><div><div><div></div><div>SPECIAL RECEPTACLE, CEILING MOUNTED, CONFIGURATION AS NOTED ON PLAN</div></div></div><div><div><div><div><div></div><div>FURNITURE FEED RECEPTACLE, WALL MOUNTED, CONFIGURATION AS NOTED ON PLAN</div></div></div><div><div><div><div><div></div><div>MOTOR: HORSEPOWER AS INDICATED ON PLANS OR DIAGRAMS</div></div></div><div><div><div><div><div></div><div>PLUGMOLD, REFER TO DRAWING FOR LENGTHS</div></div></div><div><div><div><div><div></div><div>SAFETY SWITCH, NON-FUSED, 240V, U.N.O.</div></div></div><div><div><div><div><div></div><div>FUSED DISCONNECT</div></div></div><div><div><div><div><div></div><div>COMBINATION STARTER/DISCONNECT (SIZE AS INDICATED)</div></div></div><div><div><div><div><div></div><div>PHOTOCELL</div></div></div><div><div><div><div><div></div><div>EMERGENCY POWER OFF (EPO) BUTTON</div></div></div><div><div><div><div><div></div><div>ELECTRIC VEHICLE CHARGER, WALL MOUNTED</div></div></div><div><div><div><div><div></div><div>ELECTRIC VEHICLE CHARGER</div></div></div></div></div><div>FIRE ALARM</div><div><div><div><div><div></div><div>FACP FIRE ALARM CONTROL PANEL</div></div></div><div><div><div><div><div></div><div>FARA FIRE ALARM REMOTE ANNUNCIATOR PANEL</div></div></div><div><div><div><div><div></div><div>SMOKE DETECTOR, ADDRESSABLE PHOTO ELECTRIC</div></div></div><div><div><div><div><div></div><div>CO COMBINATION SMOKE AND CARBON MONOXIDE DETECTOR, ADDRESSABLE PHOTO ELECTRIC</div></div></div><div><div><div><div><div></div><div>HD HEAT DETECTOR</div></div></div><div><div><div><div><div></div><div>DUCT SMOKE DETECTOR, ADDRESSABLE PHOTO ELECTRIC</div></div></div><div><div><div><div><div></div><div>FIRE ADA ALARM STROBE MOUNTED AT 90" AFF OR 6" BELOW CEILING WHICHEVER IS LOWER</div></div></div><div><div><div><div><div></div><div>FIRE ADA ALARM HORN MOUNTED AT 90" AFF OR 6" BELOW CEILING WHICHEVER IS LOWER</div></div></div><div><div><div><div><div></div><div>FIRE ALARM AUDIBLE AND ADA STROBE LIGHT MOUNTED AT 90" AFF OR 6" BELOW CEILING, WHICHEVER IS LOWER</div></div></div><div><div><div><div><div></div><div>FIRE ALARM MANUAL PULL STATION, ADDRESSABLE DOUBLE ACTION</div></div></div><div><div><div><div><div></div><div>MAGNETIC DOOR HOLDER</div></div></div></div></div><div>CONDUIT DESIGNATIONS</div><div><div><div><div><div></div><div>XX/XXX PANEL NAME / CIRCUIT NUMBER - BRANCH CIRCUITS HOMERUN USE NUMBER 12 AWG WIRE, UNLESS OTHERWISE NOTED. ALL CIRCUITS SHALL CONTAIN A GROUND AND NEUTRAL CONDUCTOR, UNLESS NOTED OTHERWISE. CONTRACTOR SHALL PROVIDE MULTI-WIRE CIRCUIT HANDLE TIES AS FINAL FIELD INSTALLED WIRINGS REQUIRES.</div></div></div><div><div><div><div><div></div><div>CONDUIT AND WIRE CONCEALED, 3/4" UNLESS OTHERWISE NOTED, CONDUIT USED FOR SWITCH LEGS, AND CONDUIT USED FOR CONTROL WIRING</div></div></div><div><div><div><div><div></div><div>CONDUIT AND WIRE EMBEDDED IN CONCRETE OR BELOW GRADE</div></div></div></div></div><div>LIGHTING</div><div><div><div><div><div></div><div>2' X 4' RECESSED LUMINAIRE, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>2' X 4' SURFACE LUMINAIRE, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>2' X 2' RECESSED LUMINAIRE, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>2' X 2' SURFACE MOUNTED LUMINAIRE, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>1' X 4' RECESSED LUMINAIRE, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>1' X 4' SURFACE MOUNTED LUMINAIRE, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>1' X 4' WALL MOUNTED LUMINAIRE, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>PENDANT LUMINAIRE, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>FLUORESCENT STRIP TYPE LUMINAIRE, LENGTHS AS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>SURFACE MOUNTED DOWNLIGHT, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>RECESSED MOUNTED DOWNLIGHT, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>WALL MOUNTED LUMINAIRE, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>WALL WASH LUMINAIRE, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>TRACK LUMINAIRE, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>CEILING FAN, MOUNTING IS NOTED ON LUMINAIRE SCHEDULE</div></div></div><div><div><div><div><div></div><div>CEILING MOUNTED EXIT SIGN. PROVIDE DIRECTIONAL ARROWS AS REQUIRED</div></div></div><div><div><div><div><div></div><div>EMERGENCY BATTERY LUMINAIRE (2 HEAD) 84" AFF, UNLESS OTHERWISE NOTED</div></div></div><div><div><div><div><div></div><div>EMERGENCY BATTERY LUMINAIRE (2 HEAD) WITH MOUNTED EXIT SIGN. PROVIDE DIRECTIONAL ARROWS AS REQUIRED MOUNT AT 84" AFF, UNLESS OTHERWISE NOTED</div></div></div><div><div><div><div><div></div><div>WALL MOUNTED EXIT SIGN. PROVIDE DIRECTIONAL ARROWS AS REQUIRED</div></div></div><div><div><div><div><div></div><div>SINGLE POLE MOUNTED, EXTERIOR LUMINAIRE</div></div></div><div><div><div><div><div></div><div>BOLLARD LUMINAIRE</div></div></div><div><div><div><div><div></div><div>S SINGLE POLE SWITCH; 3= THREE WAY SWITCH, 4= FOUR WAY SWITCH, K= KEY SWITCH, D= DIMMER SWITCH, T0= MOTOR RATED SWITCH, T= TIMER, HOA=HAND-OFF-AUTOMATIC, P= PILOT LIGHT, OS= OCCUPANCY SENSOR, LVD= LOW VOLTAGE DIMMER (LOWER SWITCH CASE LETTER INDICATES LUMINAIRES CONTROLLED)</div></div></div><div><div><div><div><div></div><div>VS CEILING MOUNTED VACANCY SENSOR</div></div></div><div><div><div><div><div></div><div>OS CEILING MOUNTED OCCUPANCY SENSOR</div></div></div></div></div><div>SECURITY DEVICES</div><div><div><div><div><div></div><div>CR JUNCTION BOX FOR INSTALLATION OF CARD READER, MOUNTED 48" AFF, UNLESS OTHERWISE NOTED. INSTALL 1" CONDUIT FROM BOX TO 3" INTO ACCESSIBLE LOCATION ABOVE FINISHED CEILING, U.N.O.</div></div></div><div><div><div><div><div></div><div>JUNCTION BOX FOR INSTALLATION OF SECURITY CAMERA, MOUNTED 96" AFF, UNLESS OTHERWISE NOTED. INSTALL 1" CONDUIT FROM BOX TO 3" INTO ACCESSIBLE LOCATION ABOVE FINISHED CEILING, U.N.O. REFER TO SECURITY CONSULTANT DRAWINGS FOR FINAL REQUIREMENTS.</div></div></div></div></div><div>STD. MOUNTING HEIGHTS U.N.O.</div><div><div><div><div><div></div><div>ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER MOUNTING HEIGHTS INDICATED ON ELECTRICAL DRAWINGS.</div></div></div><div><div><div><div><div></div><div>RECEPTACLES (CENTERLINE) 18"</div></div><div><div><div><div><div></div><div>RECEPTACLES IN EQUIP. RMS. 48"</div></div></div><div><div><div><div><div></div><div>RECEPTACLES (EXTERIOR) 24"</div></div></div><div><div><div><div><div></div><div>RECEPTACLES (GARAGES) 24"</div></div></div><div><div><div><div><div></div><div>ALARMS, SWITCHES AND CONTROLS (CENTERLINE) 48"</div></div></div><div><div><div><div><div></div><div>SAFETY SWITCHES 48"</div></div></div><div><div><div><div><div></div><div>PANELS (TOP) 72"</div></div></div><div><div><div><div><div></div><div>FIRE ALARM PULL STATIONS (HANDLE) 44"</div></div></div><div><div><div><div><div></div><div>STROBES (CENTERLINE) 80"</div></div></div><div><div><div><div><div></div><div>FIRE ALARM BELLS (EXTERIOR) 12'-0"</div></div></div><div><div><div><div><div></div><div>CONTROLS (FIRE ALARM CONTROL PANEL) 48"</div></div></div><div><div><div><div><div></div><div>ANNUNCIATION PANELS 48"</div></div></div><div><div><div><div><div></div><div>INTERCOM (AFEA ONLY) 36"</div></div></div><div><div><div><div><div></div><div>EXIT SIGNS (WALL MOUNTED BTM.) 80"</div></div></div><div><div><div><div><div></div><div>INTERCOMS 48"</div></div></div><div><div><div><div><div></div><div>PHOTOCELLS 12'-0"</div></div></div></div></div><div>ABBREVIATIONS</div><div><div><div><div><div></div><div>A AMPS, AIR (COMPRESSED)</div></div><div><div><div><div><div></div><div>AC ABOVE COUNTER</div></div></div><div><div><div><div><div></div><div>AFC ABOVE FINISHED CEILING</div></div></div><div><div><div><div><div></div><div>AFEA AREA FOR EVACUATION ASSISTANCE</div></div></div><div><div><div><div><div></div><div>AFF ABOVE FINISHED FLOOR</div></div></div><div><div><div><div><div></div><div>AFG ABOVE FINISHED GRADE</div></div></div><div><div><div><div><div></div><div>AHU AIR HANDLING UNIT</div></div></div><div><div><div><div><div></div><div>AIC AMPERE INTERRUPTING CURRENT</div></div></div><div><div><div><div><div></div><div>AL ALUMINUM</div></div></div><div><div><div><div><div></div><div>ATS AUTOMATIC TRANSFER SWITCH</div></div></div><div><div><div><div><div></div><div>AWG AMERICAN WIRE GAUGE</div></div></div><div><div><div><div><div></div><div>AV FOR AUDIO VISUAL MEDIA CABINET</div></div></div><div><div><div><div><div></div><div>BFF BELOW FINISHED FLOOR</div></div></div><div><div><div><div><div></div><div>BKR BREAKER</div></div></div><div><div><div><div><div></div><div>BOS BOTTOM OF STRUCTURE</div></div></div><div><div><div><div><div></div><div>BTU BRITISH THERMAL UNIT</div></div></div><div><div><div><div><div></div><div>C CONDUIT</div></div></div><div><div><div><div><div></div><div>CATV CABLE TELEVISION SYSTEM</div></div></div><div><div><div><div><div></div><div>CCTV CLOSED CIRCUIT TELEVISION</div></div></div><div><div><div><div><div></div><div>CFM CUBIC FEET PER MINUTE</div></div></div><div><div><div><div><div></div><div>CKT CIRCUIT</div></div></div><div><div><div><div><div></div><div>CLG CEILING</div></div></div><div><div><div><div><div></div><div>CM COFFEE MAKER</div></div></div><div><div><div><div><div></div><div>CU COPPER, CONDENSING UNIT</div></div></div><div><div><div><div><div></div><div>DDC DIRECT DIGITAL CONTROL</div></div></div><div><div><div><div><div></div><div>DN DOWN</div></div></div><div><div><div><div><div></div><div>DPDT DOUBLE POLE, DOUBLE THROW</div></div></div><div><div><div><div><div></div><div>DPST DOUBLE POLE, SINGLE THROW</div></div></div><div><div><div><div><div></div><div>DW DISHWASHER</div></div></div><div><div><div><div><div></div><div>(E) EXISTING</div></div></div><div><div><div><div><div></div><div>EPO EMERGENCY POWER OFF</div></div></div><div><div><div><div><div></div><div>ETR EXISTING TO REMAIN</div></div></div><div><div><div><div><div></div><div>FBO FURNISHED BY OTHERS</div></div></div><div><div><div><div><div></div><div>FF FINISHED FLOOR</div></div></div><div><div><div><div><div></div><div>FHC FIRE HOSE CABINET</div></div></div><div><div><div><div><div></div><div>FLA FULL LOAD AMPS</div></div></div><div><div><div><div><div></div><div>FLR FLOOR</div></div></div><div><div><div><div><div></div><div>GD GARBAGE DISPOSAL</div></div></div><div><div><div><div><div></div><div>GFI GROUND FAULT CIRCUIT INTERRUPTER</div></div></div><div><div><div><div><div></div><div>GFI RECEPTACLE OR CIRCUIT BREAKER</div></div></div><div><div><div><div><div></div><div>GFR GROUND FAULT RELAY</div></div></div><div><div><div><div><div></div><div>GND GROUND</div></div></div><div><div><div><div><div></div><div>HSTAT HUMIDISTAT</div></div></div><div><div><div><div><div></div><div>HTG HEATING</div></div></div><div><div><div><div><div></div><div>HTR HEATER</div></div></div><div><div><div><div><div></div><div>IG ISOLATED GROUND</div></div></div><div><div><div><div><div></div><div>KCMIL 1000 CIRCULAR MILS</div></div></div><div><div><div><div><div></div><div>KV KILOVOLT</div></div></div><div><div><div><div><div></div><div>KVA KILOVOLT AMPS</div></div></div><div><div><div><div><div></div><div>KVAR KILOVOLT AMPS REACTIVE</div></div></div><div><div><div><div><div></div><div>KW KILOWATT</div></div></div><div><div><div><div><div></div><div>KWH KILOWATT HOUR</div></div></div><div><div><div><div><div></div><div>LED LIGHT EMITTING DIODE</div></div></div><div><div><div><div><div></div><div>LF LINEAR FEET</div></div></div><div><div><div><div><div></div><div>LRA LOCKED ROTOR AMPS</div></div></div><div><div><div><div><div></div><div>MCA MINIMUM CIRCUIT AMPACITY</div></div></div><div><div><div><div><div></div><div>MCB MAIN CIRCUIT BREAKER</div></div></div><div><div><div><div><div></div><div>MCC MOTOR CONTROL CENTER</div></div></div><div><div><div><div><div></div><div>MD MOTORIZED DAMPER</div></div></div><div><div><div><div><div></div><div>MDP MAIN DISTRIBUTION PANEL</div></div></div><div><div><div><div><div></div><div>MFR MANUFACTURER</div></div></div><div><div><div><div><div></div><div>MH MANHOLE</div></div></div><div><div><div><div><div></div><div>MSB MAIN SWITCHBOARD</div></div></div><div><div><div><div><div></div><div>MTD MOUNTED</div></div></div><div><div><div><div><div></div><div>MW MICROWAVE</div></div></div><div><div><div><div><div></div><div>N/A NOT APPLICABLE</div></div></div><div><div><div><div><div></div><div>NIC NOT IN CONTRACT</div></div></div><div><div><div><div><div></div><div>N/O,N/C NORMALLY OPEN, NORMALLY CLOSED</div></div></div><div><div><div><div><div></div><div>NIL NIGHT LIGHT</div></div></div><div><div><div><div><div></div><div>OC ON CENTER</div></div></div><div><div><div><div><div></div><div>OV OVEN</div></div></div><div><div><div><div><div></div><div>PH. PHASE</div></div></div><div><div><div><div><div></div><div>PNL PANEL</div></div></div><div><div><div><div><div></div><div>QTY QUANTITY</div></div></div><div><div><div><div><div></div><div>(R) REMOVE</div></div></div><div><div><div><div><div></div><div>(RL) RELOCATE</div></div></div><div><div><div><div><div></div><div>RCP REFLECTED CEILING PLAN</div></div></div><div><div><div><div><div></div><div>REF REFRIGERATOR</div></div></div><div><div><div><div><div></div><div>REV REVISION</div></div></div><div><div><div><div><div></div><div>RLA RUNNING LOAD AMPS</div></div></div><div><div><div><div><div></div><div>RPM REVOLUTIONS PER MINUTE</div></div></div><div><div><div><div><div></div><div>SA SUPPLY AIR</div></div></div><div><div><div><div><div></div><div>SD SMOKE DETECTOR</div></div></div><div><div><div><div><div></div><div>SF SQUARE FEET</div></div></div><div><div><div><div><div></div><div>SPDT SINGLE POLE, DOUBLE THROW</div></div></div><div><div><div><div><div></div><div>SPST SINGLE POLE, SINGLE THROW</div></div></div><div><div><div><div><div></div><div>SP STATIC PRESSURE</div></div></div><div><div><div><div><div></div><div>STO SWITCH W/ THERMAL OVERLOAD</div></div></div><div><div><div><div><div></div><div>SWBD SWITCHBOARD</div></div></div><div><div><div><div><div></div><div>TSTAT THERMOSTAT</div></div></div><div><div><div><div><div></div><div>TL TWISTLOCK</div></div></div><div><div><div><div><div></div><div>TV TELEVISION</div></div></div><div><div><div><div><div></div><div>TYP TYPICAL</div></div></div><div><div><div><div><div></div><div>U/F UNDERFLOOR</div></div></div><div><div><div><div><div></div><div>U/G UNDERGROUND</div></div></div><div><div><div><div><div></div><div>UIS UNDER SLAB</div></div></div><div><div><div><div><div></div><div>UL UNDERWRITERS LABORATORIES, INC.</div></div></div><div><div><div><div><div></div><div>UNO UNLESS NOTED OTHERWISE</div></div></div><div><div><div><div><div></div><div>UPS UNINTERRUPTIBLE POWER SUPPLY</div></div></div><div><div><div><div><div></div><div>VAV VARIABLE AIR VOLUME</div></div></div><div><div><div><div><div></div><div>VM VENDING MACHINE</div></div></div><div><div><div><div><div></div><div>W/ WITH</div></div></div><div><div><div><div><div></div><div>W/O WITHOUT</div></div></div><div><div><div><div><div></div><div>WP WEATHERPROOF</div></div></div><div><div><div><div><div></div><div>WT WATERTIGHT, WEIGHT</div></div></div><div><div><div><div><div></div><div>XFMR TRANSFORMER</div></div></div><div><div><div><div><div></div><div>XP EXPLOSION PROOF</div></div></div></div></div><div>CODE SUMMARY</div><div><div><div><div><div></div><div>BUILDING CODE 2018 IBC</div></div><div><div><div><div><div></div><div>EXISTING BUILDING 2018 IBC</div></div></div><div><div><div><div><div></div><div>FIRE 2018 IFC</div></div></div><div><div><div><div><div></div><div>MECHANICAL 2018 IMC</div></div></div><div><div><div><div><div></div><div>FUEL 2018 IFCC</div></div></div><div><div><div><div><div></div><div>PLUMBING 2018 IPC</div></div></div><div><div><div><div><div></div><div>ENERGY CONSERVATION 2018 IECC</div></div></div><div><div><div><div><div></div><div>ELECTRICAL 2020 NEC</div></div></div><div><div><div><div><div></div><div>FIRE ALARM 2022 NFPA 72</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>							

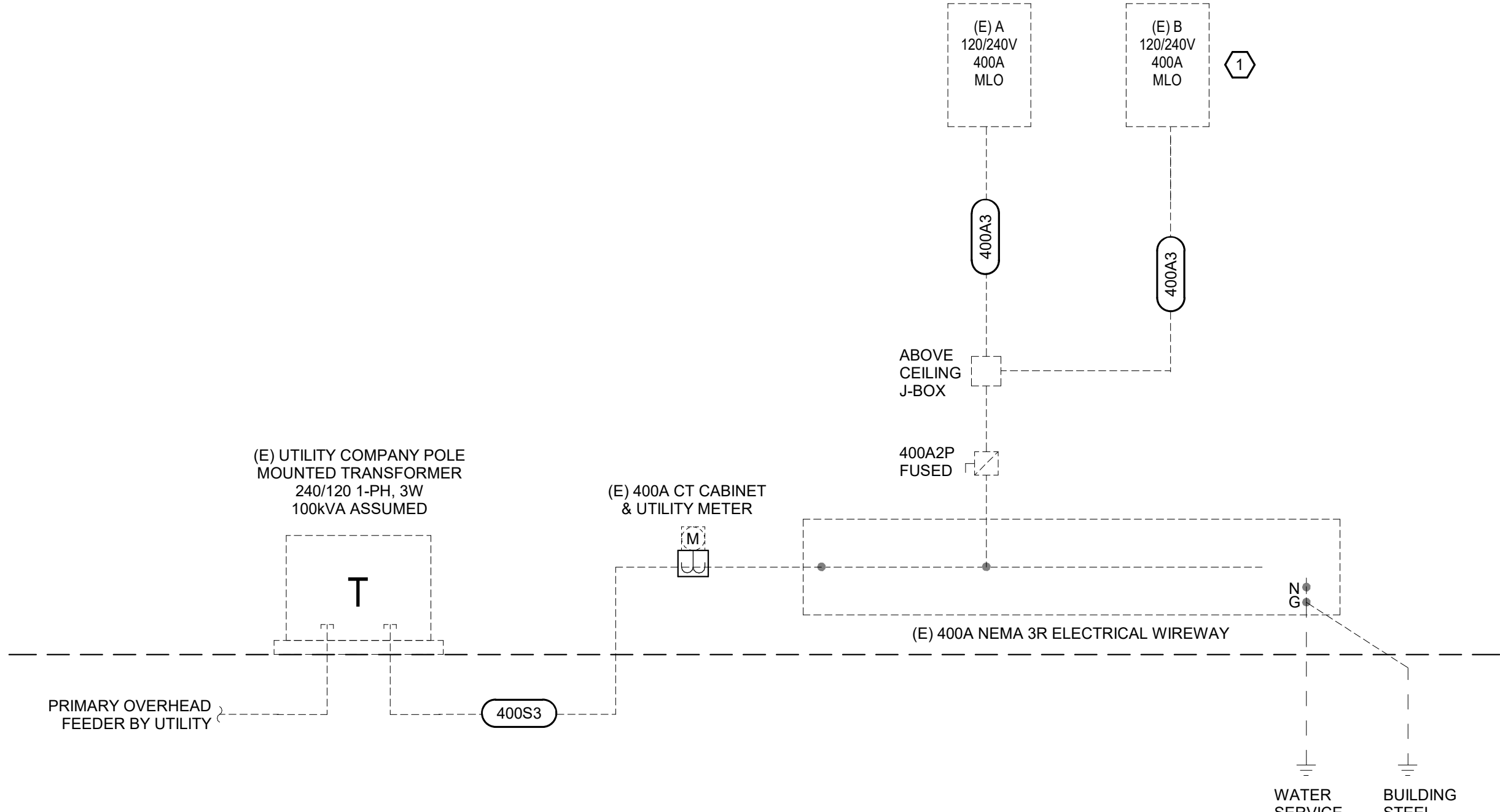
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X0	UTIL XFMR - 100KVA	29600	240	WIREWAY	400	X	75	2	3/0	CU	NMAG	27846	335600									0.33218	0.750647	22219	2.3	FALSE	2.3	FALSE	X0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						</

MECHANICAL EQUIPMENT SCHEDULE																						
TAG	NUMBER	Equipment Description	PANEL	CIRCUIT	MCA	TOTAL POWER LOAD	MOTOR HP	VOLT	PH	MOTOR RATED SWITCH	DISC SW	AMPS	POLES	FEEDER	COMMENTS							
CU	1	CONDENSING UNIT	A	35,37	18 A	4232 VA		240 V	1	No	Yes	30 A	2	2 # 10, 1 # 10 G								
CU	2	CONDENSING UNIT	A	39,41	28 A	6440 VA		240 V	1	No	Yes	60 A	2	2 # 8, 1 # 10 G								
EF	1	EXHAUST FAN	A	16	0 A	17 VA		120 V	1	Yes	No			2 # 12, 1 # 12 G								
EF	2	EXHAUST FAN	A	16	0 A	17 VA		120 V	1	Yes	No			2 # 12, 1 # 12 G								
EUH	1	ELECTRIC UNIT HEATER	A	9,11	0 A	3000 VA		240 V	1	No	Yes	30 A	2	2 # 12, 1 # 12 G								
EUH	2	ELECTRIC UNIT HEATER	A	13,15	0 A	3000 VA		240 V	1	No	Yes	30 A	2	2 # 12, 1 # 12 G								
EUH	3	ELECTRIC UNIT HEATER	A	32,34	0 A	3000 VA		240 V	1	No	Yes	30 A	2	2 # 12, 1 # 12 G								
EWB	1	ELECTRIC WATER HEATER	A	28,30	0 A	6000 VA		240 V	1	No	Yes	60 A	2	2 # 8, 1 # 10 G								
F	2	GAS FURNACE	A	7	14 A	1622 VA		120 V	1	Yes	No			2 # 12, 1 # 12 G								
F	1	GAS FURNACE	A	5	14 A	1622 VA		120 V	1	Yes	No			2 # 12, 1 # 12 G								

GENERAL NOTES:
A. REFER TO MECHANICAL DRAWINGS FOR MECHANICAL EQUIPMENT LOCATIONS.
B. DIVISION 26 CONTRACTOR TO VERIFY EXACT POWER REQUIREMENTS WITH DIVISION 23 CONTRACTOR PRIOR TO ROUGH-IN.
NOTES:
1. PROVIDE SINGLE-POLE, FRACTIONAL HORSEPOWER MANUAL STARTER WITH OVERLOAD PROTECTION. SIZE PER NAMEPLATE RATING OF UNIT.
2. DISCONNECT FURNISHED BY DIVISION 23 CONTRACTOR. REFER TO MECHANICAL SCHEDULES FOR ADDITIONAL INFORMATION.
3. REFER TO MECHANICAL SCHEDULES FOR ADDITIONAL INFORMATION. PROVIDE SEPARATE 120V CONNECTION TO ANSUL SYSTEM GAS VALVE. COORDINATE INTERCONNECTION WITH MAKE UP AIR UNIT.
4. UNIT PLUGS INTO NEMA 5-20R RECEPTACLE. PROVIDE RECEPTACLE IN AN ACCESSIBLE LOCATION TO POWER PUMP.
5. UNIT OBTAINS POWER FROM CORRESPONDING CONDENSING UNIT. EXTEND FEEDING CIRCUIT FROM CONDENSING UNIT TO INDOOR UNIT.
6. PROVIDE TIMECLOCK FOR EXHAUST FAN. COORDINATE LOCATION AND ON/OFF TIMES WITH OWNER.

LUMINAIRE SCHEDULE								
TYPE	DESCRIPTION	MANUFACTURER	MODEL	INPUT VA	LAMPS	VOLTAGE	MOUNTING	NOTES
D	LED PENDANT MOUNTED ARCHITECTURAL LUMINAIRE	TMS	GAV-I-15-17LED-C36-WC-35K-120-°-DMIL	17 VA	LED	120 V	PENDANT	
E	LED PENDANT MOUNTED CYLINDER	ALPHABET LIGHTING	BETA-4R-SW-15LM-35K-80-35D-DL-°-RP-UN V-DIM10	12 VA	LED	120 V	PENDANT	
L1	LED TAPE LIGHT, ALUMINUM CHANNEL, FROSTED LENS	BEULUX	V-L270-IP00-CT30-X-DTRX-AA02-SL	9 VA	LED	120 V	RECESSED	
L8	LINEAR DIRECT/INDIRECT	FINELITE	HP4-P-ID-8°-S-B-835-F-F-96LG-120/277V-SC-FC-10%-FA50-CX-FE-SW	65 VA	LED	120 V	PENDANT	
R2	2X2 RECESSED INDIRECT LED TROFFER	LITECONTROL	55L-G-D-22-AHE-WHS-35K-D30-D01-UNV	24 VA	LED	120 V	RECESSED	
R4	2X4 RECESSED INDIRECT LED TROFFER	LITECONTROL	55L-G-D-24-AHE-WHS-35K-D45-D01-UNV	38 VA	LED	120 V	RECESSED	
S4	4' LED STRIP WITH LENS	COLUMBIA	MPS-4-35-LW-CW-EU	42 VA	LED	120 V	SURFACE	
W1E	LED WALL PACK FIXTURE	DUAL-LITE	PG-Z-HTR	15 VA	LED	120 V	WALL MOUNTED	
W2	DECORATIVE GOOSE NECK WALL SCONCE	PRESCOLITE	2W-O-19LED-30K-120-WM-F15-DIML-G2	19 VA	led	120 V	WALL MOUNTED	
X1	THERMOPLASTIC COMBO EXIT/EM	DUAL-LITE	EVC-U-G-W-I	5 VA	LED	120 V	WALL MOUNTED	
X2	EMERGENCY LIGHTING UNIT	DUAL-LITE	LZ-2-03L	6 VA	LED	120 V	WALL MOUNTED	

ABBREVIATIONS: BF - BOTTOM OF FIXTURE; OH - OVERALL FIXTURE HEIGHT; RD - RECESSED FIXTURE DEPTH; AFF - ABOVE FINISHED FLOOR
GENERAL NOTES:
A. LUMINAIRE SHOWN WITH CATALOG NUMBERS ARE THE BASIS OF DESIGN. SIMILAR BY OTHER LISTED MANUFACTURERS ARE ACCEPTABLE WITH PRIOR APPROVAL BY OWNER AND ENGINEER.
B. CONTRACTOR TO VERIFY LIGHT FIXTURE CATALOG NUMBER AND INSTALLATION REQUIREMENTS PRIOR TO ORDERING.
C. VERIFY TRIM COMPATIBILITY WITH CEILING TYPE PRIOR TO SUBMITTALS.
SCHEDULED NOTES:
1. PROVIDE WITH 90 MINUTE BATTERY BACKUP. INTEGRAL SELF DIAGNOSTICS. ARROWS AS SHOWN ON PLANS AND MOUNTING TYPE AS SHOWN ON PLAN.
2. ELECTRICIAN TO PROVIDE COMPONENTS FOR COMPLETE TAPELIGHT SYSTEM. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN.



1 ELECTRICAL ONE LINE/RISER DIAGRAM

SCALE: NO SCALE

GENERAL NOTES

- REFER TO ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
- CONTRACTOR IS RESPONSIBLE FOR SUBMITTING UTILITY APPLICATION TO UTILITY COMPANY.
- ALL EQUIPMENT IS EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
- INFORMATION ON THIS SHEET WAS OBTAINED FROM FIELD SURVEY OBSERVATIONS AND RECORD DRAWINGS. THE DRAWINGS REPRESENT INFORMATION AS ACCURATE AS POSSIBLE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BID. NOTIFY ENGINEER IMMEDIATELY IF ACTUAL FIELD CONDITIONS DIFFER FROM INFORMATION INDICATED ON THE DRAWINGS.
- ALL NEW DEVICES IN EXISTING GEAR SHALL BE UL LISTED FOR THE EQUIPMENT, BE OF THE SAME MANUFACTURER AND WITHSTAND RATING.
- ITEMS SHOWN IN THIN DASHED LIGHT LINEWEIGHT ARE EXISTING TO REMAIN. ITEMS SHOWN IN THICK BLACK LINEWEIGHT ARE NEW.
- CONTRACTOR SHALL CONTACT UTILITY COMPANY TO COORDINATE ELECTRICAL WORK. COORDINATE AND VERIFY EXISTING ELECTRICAL SERVICE AND TRANSFORMER ARE OF ADEQUATE CAPACITY TO ACCOMMODATE NEW WORK. COORDINATE WITH OWNER/GC PRIOR TO BID.

KEY NOTES

(THIS SHEET)

- PROVIDE THREE PHASE DIGITAL RECORDING CIRCUIT ANALYZER ON INDICATED PANEL FEEDERS FOR A PERIOD OF THIRTY DAYS PRIOR TO THE START OF CONSTRUCTION TO VERIFY EXISTING LOAD. CIRCUIT ANALYZER SHALL RECORD VOLTAGE, AMPERAGE, KVA AND POWER FACTOR FOR EACH PHASE AND AVERAGE FOR ALL PHASES. ANALYZER SHALL ALSO RECORD A PER DAY MAXIMUM DEMAND. THE CONTRACTOR SHALL COMPILE A SUMMARY REPORT LISTING MAXIMUM READINGS AND SUBMIT THE REPORT TO THE ENGINEER FOR THE FIRST SEVEN DAYS OF METERING AND FOR A COMPLETE THIRTY DAYS OF METERING.

(E) Branch Panel: A

Location: See Plans						Volts: 120/240 Single						A.I.C. Rating: 10,000									
Supply From:						Phases: 1						Mains Type: MLO									
Mounting: Recessed						Wires: 3						Bus Rating: 400 A									
Enclosure: Type 1																					
CKT	Circuit Description				OPT	Load Class	Trip	Poles	A (VA)		B (VA)		Poles	Trip	Load Class	OPT	Circuit Description				CKT
1	SPARE					--	100 A	2	0	1620	0	1440	1	20 A	R			REC - SW. SIDE		2	
3													1	20 A	R			REC - NW. SIDE		4	
5	F-1					E	20 A	1	1622	720	1622	2880	1	20 A	R			REC - N. SIDE		6	
7	F-2					E	20 A	1					1	20 A	--			METALS SHOP HEATERS		8	
9	EUH-1					E	20 A	2	1500	720	1500	1200	1	20 A	A	GFCI		REC - REF		10	
11													1	20 A	A			REC - MICROWAVE		12	
13	EUH-2					E	20 A	2	1500	386	1500	394	1	20 A	L			LTS - WEST SIDE		14	
15													1	20 A	R, E			REC - RR, EF-1 & EF-2		16	
17	REC - METAL SHOP #1					--	20 A	1	1920	997			1	20 A	L			LTS - EAST SIDE		18	
19	REC - METAL SHOP #2					--	20 A	1			1920	360	1	20 A	R			REC - SUPERINTENDENT OFFICE		20	
21	GARBAGE/DISPOSAL				GFCI	A	20 A	1	756	180			1	20 A	R			REC - SUPERINTENDENT OFFICE		22	
23	LTS - EXTERIOR LIGHTS					L	20 A	1			60	180	1	20 A	R			REC - SUPERINTENDENT OFFICE		24	
25	REC - OFFICE 1					R	20 A	1	540	100			1	20 A	E			MOTORIZED DAMPER		26	
27	REC - OFFICE 2					R	20 A	1			540	3000	2	60 A	E			EUH-1		28	
29	WATER FOUNTAIN				GFCI	R	20 A	1	500	3000										30	
31	LTS - WOOD SHOP #1					--	20 A	1			0	1500	2	20 A	E			EUH-1		32	
33	LTS - WOOD SHOP #2					--	20 A	1	0	1500										34	
35	CU-1					E	30 A	2			2116	512	1	20 A	--			LTS - METAL SHOP #1		36	
37													1	20 A	--			LTS - METAL SHOP #2		38	
39	CU-2					E	40 A	2			3220	0	1	20 A	--			SPARE		40	
41													1	20 A	--			SPARE		42	
Total Load:									23408 VA		23932 VA										
Total Amps:									195 A		199 A										
Phase Balance									98 % A-B		0 % B-C										
Load Classification							Connected Load		Demand Factor		Estimated Demand		Panel Totals								
L	Lighting						1432 VA		125.00%		1790 VA										
C	Continuous												Total Conn. Load: 47340 VA								
R	Receptacle						6440 VA		100.00%		6440 VA		Total Est. Demand: 47430 VA								
M	Motor												Total Conn.: 197 A								
LM	Largest Motor												Total Est. Demand: 198 A								
E	Equipment						29049 VA		100.00%		29049 VA		Spare Capacity: 202 A								
A	Appliance						2676 VA		90.00%		2408 VA										
OPTIONS:																					
'ST' - PROVIDE SHUNT TRIP BREAKER / 'GFCI' - PROVIDE CIRCUIT BREAKER / 'GFP' - PROVIDE GFP CIRCUIT BREAKER / 'ERMS' - ENERGY REDUCING MAINTENANCE SWITCH / 'ZSI' - ZONE SELECTIVE INTERLOCKING / 'L' - PROVIDE CIRCUIT BREAKER WITH LOCKING PROVISIONS / 'R' - PROVIDE CIRCUIT BREAKER WITH RED MARKING / 'NEW' PROVIDE CIRCUIT...																					
Notes:																					
1. LIGHT LINEWEIGHT INDICATES EXISTING BREAKER/CIRCUITING. BOLD LINEWEIGHT INDICATES NEW BREAKERS/CIRCUITING. PROVIDE NEW CIRCUIT BREAKERS WHERE INDICATED, AIC RATING AND MANUFACTURER TO MATCH EXISTING.																					

COPPER FEEDER SCHEDULE

MARK	CONDUCTOR AND CONDUIT
400A3	2 SETS OF 3 #3/0, 1 #3 GND-2" C
400S3	2 SETS OF 3 #3/0 - 1 1/2" C

- GENERAL NOTES:
- IF EXACT SERVICE SIZE IS NOT LISTED, USE NEXT AMPERAGE SIZE UP.
 - NEC REFERENCES ARE FROM NEC 2023.
 - BONDS SHALL BE MECHANICAL TYPE. INTERIOR BONDS MAY BE EXOTHERMIC.
 - BOND SIZE SHALL MATCH CONDUCTORS SHOWN ON FEEDER SCHEDULE.
 - GROUND CONDUCTORS SHALL BE STRANDED COPPER INSULATED CABLE, UON.
 - IF SINGLE ROD, PIPE, OR PLATE ELECTRODE RESISTANCE IS OVER 25 OHMS, PROVIDE SUPPLEMENTAL ELECTRODE PER NEC 250.53 A.
 - PROVIDE GROUNDING ELECTRODE CONNECTIONS IN ACCORDANCE WITH NEC 250.64(D).

BVH

ARCHITECT
BVH ARCHITECTURE
1415 PARK AVE W
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Ramirez, Johnson, & Associates

3301 Lawrence St. Ste 2
Denver, CO 80205
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REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
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MOFFAT
ADMINISTRATION
BUILDING RENOVATION

PROJECT: 24031
PROJECT STATUS: CONSTRUCTION
DATE: 08/05/2024
DOCUMENTS

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ELECTRICAL
ONE-LINE DIAGRAMS

E002



COMcheck Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: 2024-069 Moffat Schools Remodel
Project Type: Alteration

Construction Site: Owner/Agent: Designer/Contractor:

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Office	2500	0.79	1975
Total Allowed Watts =			1975

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Office (2500 sq.ft.)				
LED: D: LED PENDANT MOUNTED ARCHITECTU: LED Other Fixture Unit 16W:	1	1	17	17
LED: E: LED PENDANT MOUNTED CYLINDER: LED Other Fixture Unit 13W:	1	2	12	24
LED: L1: LED TAPE LIGHT, ALUMINUM CHANNE: LED Undercabinet Unit 9W:	1	1	9	9
LED: L8: LINEAR DIRECT/INDIRECT: LED Other Fixture Unit 60W:	2	11	65	715
LED: R2: 2X2 RECESSED INDIRECT LED TROFF: LED Other Fixture Unit 25W:	1	14	24	336
LED: R4: 2X4 RECESSED INDIRECT LED TROFF: LED Other Fixture Unit 40W:	2	4	38	152
LED: S4: 4' LED STRIP WITH LENS: LED Other Fixture Unit 40W:	4	1	42	42
Total Proposed Watts =			1295	

Interior Lighting PASSES

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Darin Ramirez
Name - Title Signature Date 08/02/2024



COMcheck Software Version COMcheckWeb

Inspection Checklist

Energy Code: 2018 IECC

Requirements: 100.0% were addressed directly in the COMcheck software
Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4]1	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: 2024-069 Moffat Schools Remodel Report date: 07/09/24
Data filename: Page 2 of 5

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3.1, C405.2.3.2 [EL23]1	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.4 [EL26]1	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.4 [EL27]1	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.3 [EL6]1	Exit signs do not exceed 5 watts per face.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.6 [EL26]1	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.7 [EL27]1	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.8.2, C405.8.2.1 [EL28]1	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.9 [EL29]1	Total voltage drop across the combination of feeders and branch circuits <= 5%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: 2024-069 Moffat Schools Remodel Report date: 07/09/24
Data filename: Page 4 of 5

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2.2 [EL22]1	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.1, C405.2.1.1 [EL18]1	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.1.2 [EL19]1	Occupancy sensors control function in warehouses: In warehouses, the lighting in aiseways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aiseway independently and do not control lighting beyond the aiseway being controlled by the sensor.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.1.3 [EL20]1	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.2.2 [EL21]1	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: 2024-069 Moffat Schools Remodel Report date: 07/09/24
Data filename: Page 3 of 5

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C403.3, C408.2.5.2 [F117]1	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.4.1 [F118]1	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Interior Lighting fixture schedule for values.
C408.1.1 [F157]1	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.2.5.1 [F116]1	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.3 [F133]1	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: 2024-069 Moffat Schools Remodel Report date: 07/09/24
Data filename: Page 5 of 5

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REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
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MOFFAT
ADMINISTRATION
BUILDING RENOVATION

PROJECT:24031 DATE: 08/05/2024
PROJECT STATUS: CONSTRUCTION DOCUMENTS

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ELECTRICAL
COMCHECK

E003

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**MOFFAT
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BUILDING RENOVATION**

PROJECT: 24031 DATE: 08/05/2024
PROJECT STATUS: CONSTRUCTION
DOCUMENTS

ELECTRICAL DEMOLITION POWER PLAN

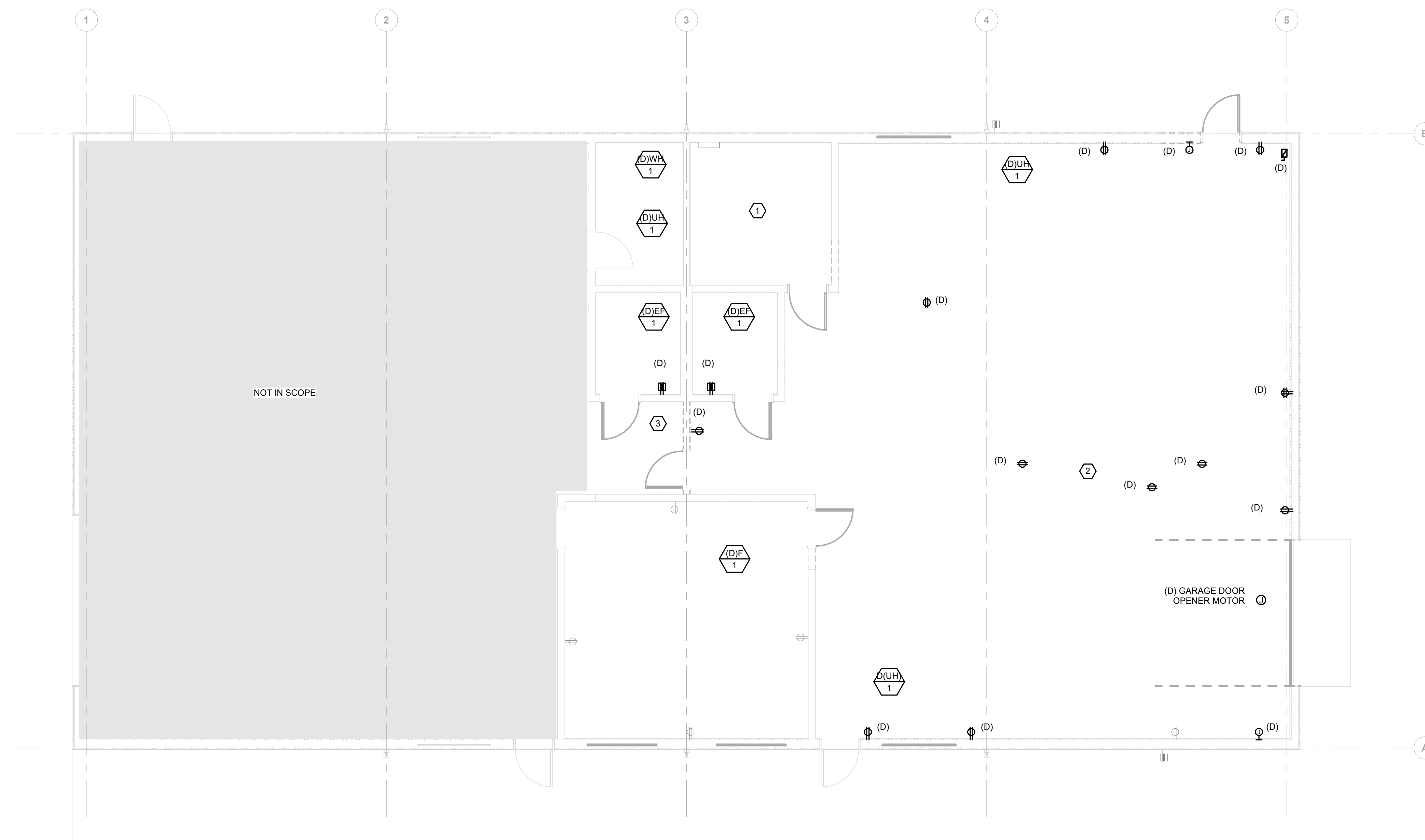


ED101

1. INFORMATION ON THIS SHEET WAS OBTAINED FROM FIELD SURVEY OBSERVATIONS AND RECORD DRAWINGS. THE DRAWINGS REPRESENT INFORMATION AS ACCURATE AS POSSIBLE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO THE START OF WORK. ENGINEER IMMEDIATELY IF ACTUAL FIELD CONDITIONS DIFFER FROM INFORMATION INDICATED ON THE DRAWINGS.
2. COORDINATE SEQUENCE OF DEMOLITION WITH OWNER AND ARCHITECT PRIOR TO BEGINNING WORK.
3. ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND FAMILIARIZE THEMSELVES WITH THE PROJECT AND INCLUDE IN THEIR BID ALL COSTS ASSOCIATED WITH NEW WORK.
4. REMOVE AND OFFER TO OWNER ALL LIGHTING AND LIGHTING CONTROLS FROM AREAS WHERE CEILINGS ARE BEING DEMOLISHED. REFER TO ARCHITECTURAL DRAWINGS TO CONFIRM WHICH CEILINGS ARE BEING REMOVED. ALL FIXTURES REFUSED BY OWNER SHALL BE PROPERLY DISPOSED.
5. REMOVE AND OFFER TO OWNER ALL ELECTRICAL DEVICES FROM WALLS THAT ARE TO BE DEMOLISHED. REMOVE BRANCH CIRCUITING INCLUDING BACK BOXES, CONDUCTOR AND CONDUIT FROM DEVICE LOCATION TO PANELBOARD. ALL DEVICES REFUSED BY OWNER SHALL BE PROPERLY DISPOSED.
6. DEVICES SHOWN IN THIN LINEWEIGHT AND/OR LABELED WITH AN (E) ARE EXISTING TO REMAIN. DEVICES SHOWN IN THICK DASHED LINEWEIGHT AND/OR LABELED WITH A (D) ARE TO BE DEMOLISHED. DEVICES SHOWN IN THICK DASHED LINEWEIGHT AND LABELED WITH AN (R) ARE TO BE RELOCATED. SEE NEW FLOORPLANS FOR LOCATIONS.

(THIS SHEET

1. PROVIDE THREE PHASE DIGITAL RECORDING CIRCUIT ANALYZER ON INDICATED PANEL FEEDERS FOR A PERIOD OF THIRTY DAYS PRIOR TO THE START OF CONSTRUCTION TO VERIFY EXISTING LOAD. CIRCUIT ANALYZER SHALL RECORD VOLTAGE, AMPERAGE, KVA AND POWER FACTOR FOR EACH PHASE AND AVERAGE FOR ALL PHASES. ANALYZER SHALL ALSO RECORD A PER DAY MAXIMUM DEMAND. THE CONTRACTOR SHALL COMPLETE A SUMMARY REPORT LISTING MAXIMUM READINGS AND SUBMIT THE REPORT TO THE ENGINEER FOR THE FIRST SEVEN DAYS OF METERING AND FOR A COMPLETE THIRTY DAYS OF METERING.



1 DEMO POWER PLAN

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION



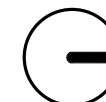
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PROJECT: 24031 DATE: 08/05/2024
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DOCUMENTS

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ELECTRICAL
DEMOLITION
LIGHTING PLAN

NORTH



ED102

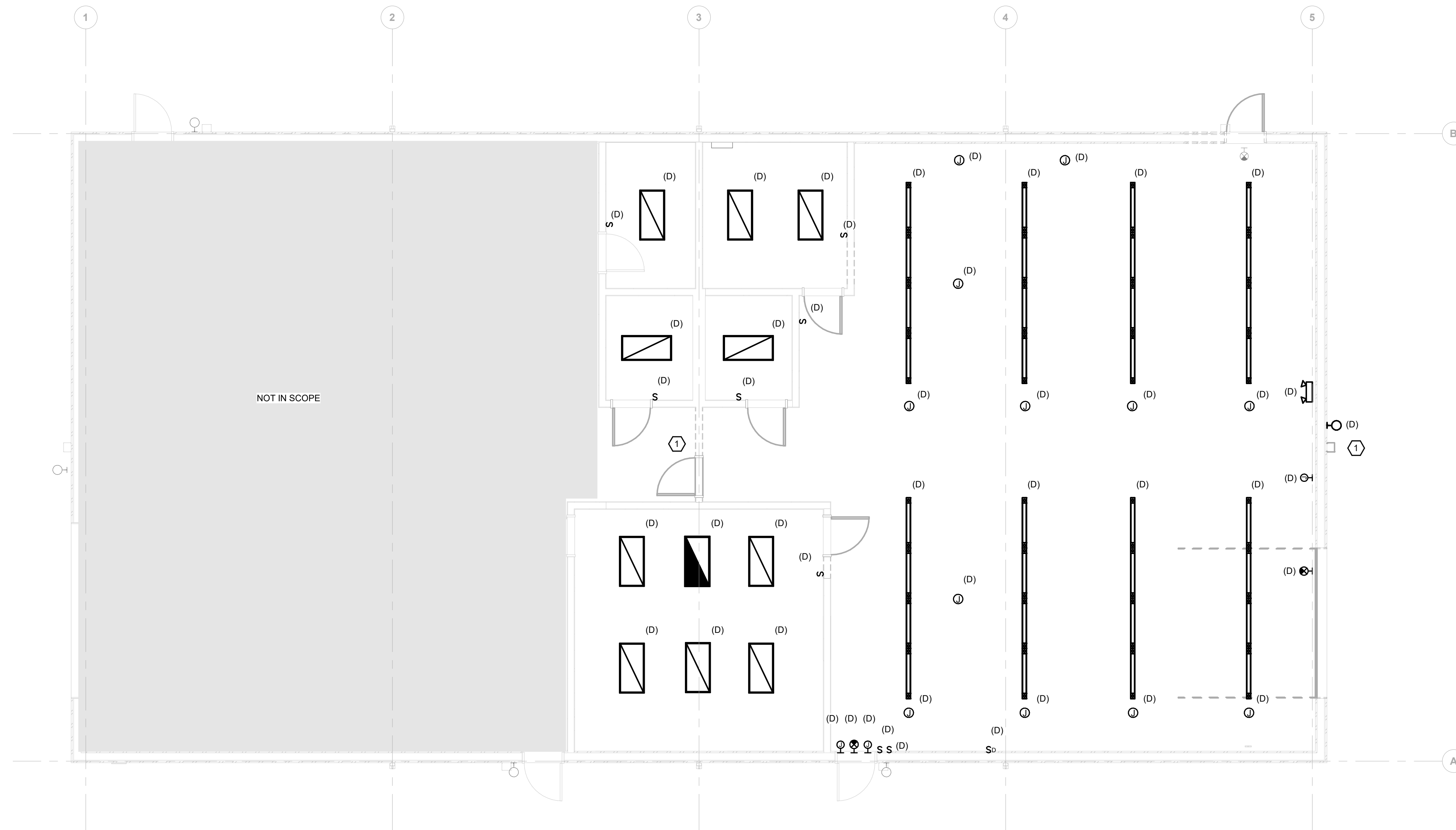
GENERAL NOTES

1. INFORMATION ON THIS SHEET WAS OBTAINED FROM FIELD SURVEY OBSERVATIONS AND RECORD DRAWINGS. THE DRAWINGS REPRESENT INFORMATION AS ACCURATE AS POSSIBLE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BID. NOTIFY ENGINEER IMMEDIATELY IF ACTUAL FIELD CONDITIONS DIFFER FROM INFORMATION INDICATED ON THE DRAWINGS.
2. COORDINATE SEQUENCE OF DEMOLITION WITH OWNER AND ARCHITECT PRIOR TO BEGINNING WORK.
3. ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND FAMILIARIZE THEMSELVES WITH THE PROJECT AND INCLUDE IN THEIR BID ALL COSTS ASSOCIATED WITH NEW WORK.
4. REMOVE AND OFFER TO OWNER ALL LIGHTING AND LIGHTING CONTROLS FROM AREAS WHERE CEILINGS ARE BEING DEMOLISHED. REFER TO ARCHITECTURAL DRAWINGS TO CONFIRM WHICH CEILINGS ARE BEING DEMOLISHED. ALL FIXTURES REFUSED BY OWNER SHALL BE PROPERLY DISPOSED.
5. REMOVE AND OFFER TO OWNER ALL ELECTRICAL DEVICES FROM WALLS THAT ARE TO BE DEMOLISHED. REMOVE BRANCH CIRCUITING INCLUDING BACK BOXES, CONDUCTOR AND CONDUIT FROM DEVICE LOCATION TO PANELBOARD. ALL DEVICES REFUSED BY OWNER SHALL BE PROPERLY DISPOSED.
6. DEVICES SHOWN IN THIN LINEWEIGHT AND/OR LABELED WITH AN (E) ARE EXISTING TO REMAIN. DEVICES SHOWN IN THICK BOLD DASHED LINEWEIGHT AND/OR LABELED WITH A (D) ARE TO BE DEMOLISHED. DEVICES SHOWN IN THICK BOLD LINEWEIGHT AND LABELED WITH AN (RL) ARE TO BE RELOCATED, SEE NEW FLOORPLANS FOR LOCATIONS.

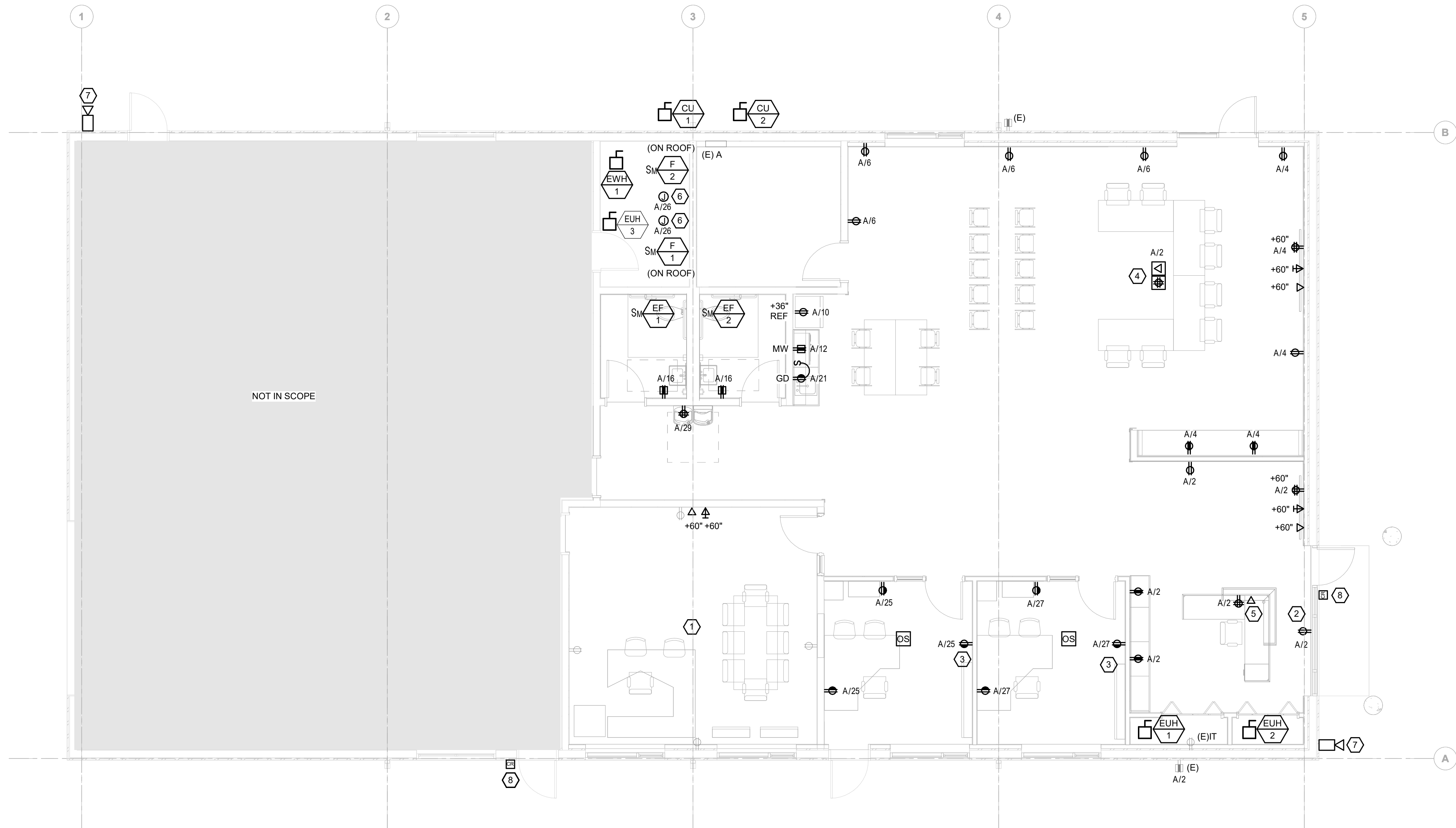
KEY NOTES

(THIS SHEET)

1. REFER TO ARCHITECT DRAWINGS FOR DEMOLISHED WALLS.



1 DEMO CEILING PLAN
SCALE: 3/16" = 1'-0"



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

GENERAL NOTES

- SEE SHEET E0.0 FOR LEGEND AND ADDITIONAL GENERAL NOTES.
- INFORMATION ON THIS SHEET WAS OBTAINED FROM FIELD SURVEY INFORMATION AND RECORD DRAWINGS. THE DRAWINGS REPRESENT INFORMATION AS ACCURATE AS POSSIBLE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BID. NOTIFY ENGINEER IMMEDIATELY IF ACTUAL FIELD CONDITIONS DIFFER FROM INFORMATION INDICATED ON THE DRAWINGS.
- ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND FAMILIARIZE THEMSELVES WITH THE PROJECT AND INCLUDE IN THEIR BID ALL COSTS ASSOCIATED WITH NEW WORK.

KEY NOTES

(THIS SHEET)

- EXISTING ELECTRICAL DEVICES WITHIN THIS AREA ARE EXISTING TO REMAIN. DEVICES ON WALLS THAT ARE TO BE DEMOLISHED SHALL BE REMOVED. DEMO CONDUIT, BACK BOXES AND CONDUCTORS BACK TO NEAREST DEVICE ON CIRCUIT. REFER TO ARCHITECTURAL DRAWINGS FOR EXTENT OF DEMOLITION.
- CEILING MOUNTED DISPLAY WINDOW RECEPTACLE PER NEC 210.52
- PROVIDE AUTOMATIC RECEPTACLE CONTROL FOR A MINIMUM OF 50% OF RECEPTACLES IN THIS ROOM. AUTOMATIC RECEPTACLES SHALL BE SPLIT CONTROLLED. PROVIDE CEILING MOUNTED OCCUPANCY SENSOR FOR CONTROL WITH AUTO-OFF 20 MINUTES AFTER OCCUPANTS HAVE LEFT THE SPACE. LABEL CONTROLLED RECEPTACLES PER NEC 406.3(E). CEILING MOUNT SENSOR SHALL ALSO CONTROL LIGHTING IN AREA.
- PROVIDE IN-SLAB RECESSED FLOORBOX WITH (1) DUPLEX RECEPTACLE AND (1) DATA OUTLET, LEGRAND RPSFB-OG WITH RPAV3CTCBK COVER, OR APPROVED EQUAL. FINISH SELECTION BY ARCHITECT. PROVIDE 1-1/4" CONDUIT FROM DATA OUTLET IN FLOORBOX TO TV COAX/DATA OUTLET. FIELD COORDINATE TRENCHING AND PATCHING WITH GENERAL CONTRACTOR. COORDINATE EXACT FLOORBOX LOCATION WITH OWNER AND ARCHITECT. ALTERNATE #1 PROVIDE UNDERCARPET WIREWAY CONNECTRAC CT.XP.1-06-25.1c OR APPROVED EQUAL.
- MOUNT DEVICE(S) WITHIN CASEWORK. COORDINATE FINAL LOCATION WITH CASEWORK MANUFACTURER/CASEWORKER PRIOR TO ROUGH-IN. SAWCUT EXISTING CONCRETE FLOOR TO NEAREST FULL HEIGHT WALL AND RUN CONDUIT IN CASEWORK AS NECESSARY.
- PROVIDE 120V CONNECTION TO MOTORIZED DAMPER AT THIS LOCATION. REFER TO MECHANICAL AND MANUFACTURER'S DOCUMENTATION FOR EXACT LOCATION AND CONNECTION REQUIREMENTS.
- FUTURE CAMERA LOCATION. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO BID.
- CARD READER LOCATION. COORDINATE ROUGH-IN REQUIREMENTS WITH OWNER AND DOOR HARDWARE SPECIFICATIONS.

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LEVEL 1 POWER PLAN

NORTH



E101

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ELECTRICAL
LIGHTING PLAN

NORTH



E201

GENERAL NOTES

- SEE SHEET E0.0 FOR LEGEND AND ADDITIONAL GENERAL NOTES.
- CONFIRM MOUNTING HEIGHT AND LOCATION OF ALL LUMINAIRES AND DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLANS.
- CONNECT ALL EXIT SIGNS AHEAD OF LOCAL SWITCHING.
- ALL CEILING MOUNTED OCCUPANCY SENSORS AND VACANCY SENSORS SHALL BE DUAL TECHNOLOGY TYPE.
- COORDINATE LUMINAIRE LOCATIONS WITH MECHANICAL PIPING, DUCTWORK, ETC. TO AVOID CONFLICTS. SEE SPECIFICATIONS FOR COORDINATION REQUIREMENTS.
- FIELD COORDINATE EXACT LOCATIONS OF CEILING MOUNTED OCCUPANCY SENSORS AND VACANCY SENSORS PER MANUFACTURER'S INSTRUCTIONS. THE LOCATIONS OF THE SENSORS ON DRAWINGS ARE DIAGRAMMATIC. DO NOT LOCATE OCCUPANCY SENSORS WITHIN THREE FEET OF AN HVAC SUPPLY DEVICE. IF ADDITIONAL SENSORS ARE NEEDED FOR COMPLETE COVERAGE OF SPACE THEY SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AS REQUIRED TO PROVIDE COMPLETE SPACE COVERAGE.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY SWITCH PACKS FOR OCCUPANCY SENSORS TO PROVIDE FUNCTION INDICATED.
- ALL EXIT SIGNS SHALL BE CIRCUITED TO LIGHTING CIRCUIT SERVING OTHER LUMINAIRES IN THE SAME SPACE AS THE EXIT SIGNS.
- LOSS OF UTILITY POWER SHALL ENERGIZE ALL EGRESS LIGHTING. THE DESIGN SHALL MEET ALL UL STANDARDS FOR LIFE SAFETY REQUIREMENTS.
- VACANCY/OCCUPANCY SENSORS SHALL BE SET AT A MAXIMUM 15 MINUTE TIMEOUT.
- CONTRACTOR SHALL VERIFY DIMMER SWITCHES ORDERED ARE COMPATIBLE WITH THE LUMINAIRES THEY CONTROL.

KEY NOTES

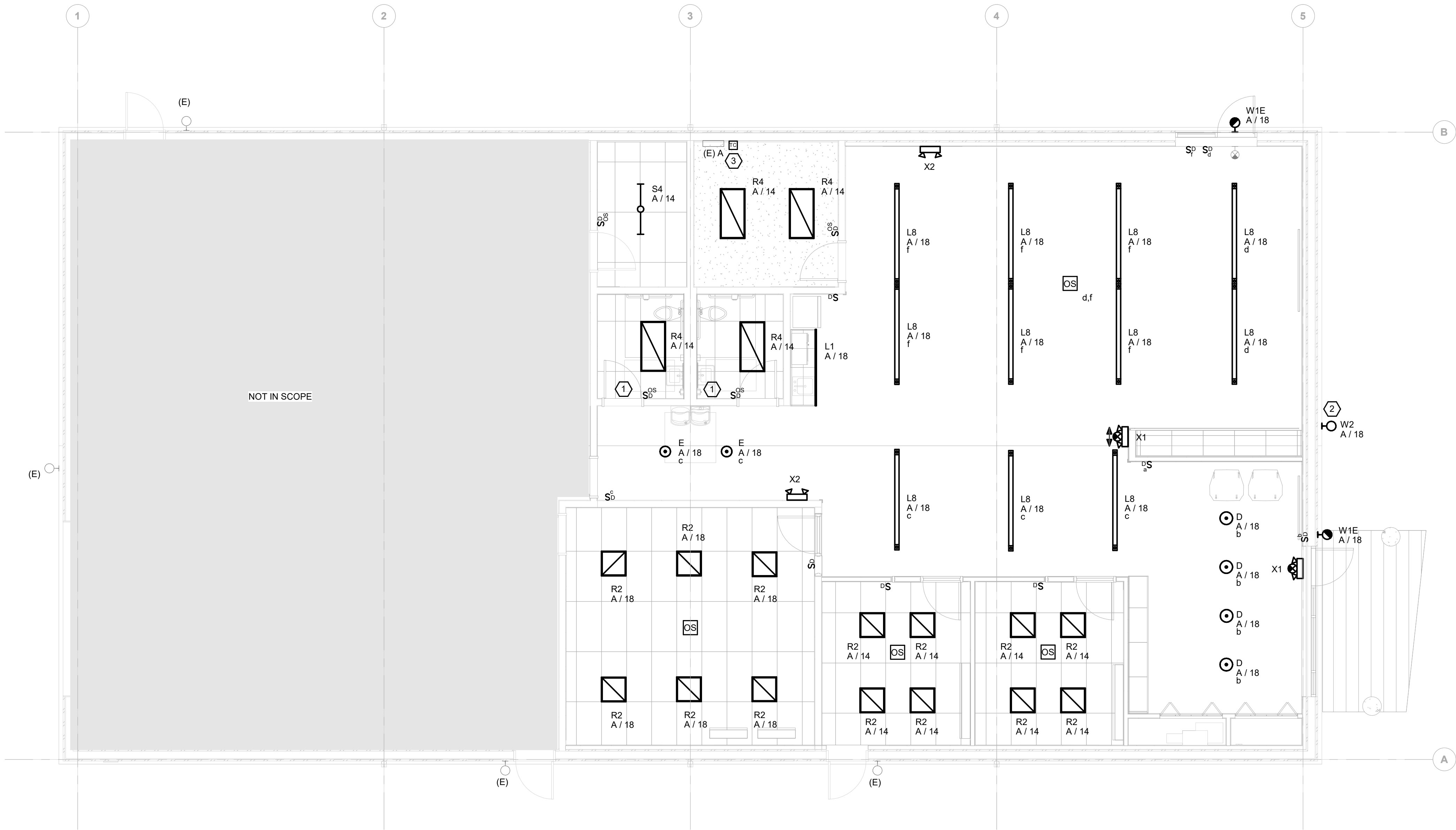
(THIS SHEET)

- LIGHT SWITCH SHALL ALSO CONTROL EXHAUST FAN WITHIN ROOM.
- COORDINATE EXACT LOCATION OF REPLACEMENT LUMINAIRE WITH OWNER AND ARCHITECT PRIOR TO ROUGH-IN.
- PROVIDE INTERMATIC MODEL ET2825C TIME CLOCK OR APPROVED EQUAL FOR CONTROL OF EXTERIOR AND INTERIOR LUMINAIRES NOT CONTROLLED VIA OCCUPANCY SENSOR. FOR EXTERIOR LIGHTING, PROVIDE PHOTOCELL ON NORTH SIDE OF BUILDING. EXTERIOR LUMINAIRES SHALL BE PHOTOCELL ON TIMECLOCK OFF IN THE EVENING AND TIMECLOCK ON PHOTOCELL OFF IN THE MORNING. COORDINATE ON/OFF TIMES WITH OWNER. SEE FLOORPLANS FOR MANUAL OVERRIDE SWITCHES DURING NIGHTTIME OPERATION.

LIGHTING CONTROLS NOTES

(ALL SHEETS)

- ALL LIGHTING CONTROLS TO COMPLY WITH IECC 2018 AND LOCAL CODES.
- BASIS OF DESIGN IS WATT STOPPER.
- MANUFACTURER TO PROVIDE SHOP DRAWINGS INDICATING ALL LIGHTING DEVICES, ZONING, ETC. FOR REVIEW BY ENGINEER AND OWNER.
- OCCUPANCY SENSOR CONTROL SHALL BE PROVIDED IN ALL CONFERENCE/MEETING ROOMS, COPY/PRINT ROOMS, LOUNGES/BREAKROOMS, ENCLOSED OFFICES, OPEN OFFICES, RESTROOMS, STORAGE ROOMS, AND ANY ENCLOSED SPACES 300SF OR LESS.
- ALL DAYLIGHT ZONES WITH GREATER THAN 150W OF LIGHTING TO HAVE AUTOMATIC DAYLIGHT RESPONSIVE CONTROLS (PHOTOCELL). PROVIDE SECONDARY DAYLIGHT ZONE WHERE INDICATED.
- ALL REGULARLY OCCUPIED SPACES TO HAVE DIMMING CONTROL, 0-10V PROTOCOL, UON.
- PROVIDE TIMECLOCK SYSTEM TO CONTROL INTERIOR LIGHTING IN CORRIDORS, LOBBIES, AND EXTERIOR LIGHTING.
- LIGHTING IN CORRIDORS, LOBBIES, AND PUBLIC SPACES TO BE CONTROLLED VIA TIMECLOCK WITH LOW-VOLTAGE SWITCHES FOR MANUAL 2-HOUR OVERRIDE AND DIMMING CAPABILITY. PROGRAM TO AUTOMATIC ON/OFF CORRESPONDING TO OFFICE HOURS.
- LIGHTING IN OPEN OFFICES TO BE CONTROLLED VIA OCCUPANCY SENSORS, MANUAL-ON. GENERAL LIGHTING TO TURN OFF 20-MINUTES AFTER OCCUPANTS HAVE LEFT THE SPACE. PROVIDE MULTIPLE ZONES WHERE INDICATED, 600SF MAXIMUM. PROVIDE LOW-VOLTAGE SWITCHES FOR EACH OPEN OFFICE AREA, ONE SWITCH PER ZONE, WITH DIMMING OVERRIDE CAPABILITY.
- LIGHTING IN PRIVATE OFFICES, SMALL CONFERENCE ROOMS, AND ANY SMALLER, REGULARLY OCCUPIED ROOMS SHALL BE CONTROLLED VIA WALL-SWITCH OCCUPANCY SENSOR WITH DIMMING CAPABILITY. PROGRAM TO MANUAL-ON, 15-MINUTE AUTO-OFF.
- LIGHTING IN STORAGE ROOMS, FILE ROOMS, AND ANY NON-REGULARLY OCCUPIED SPACES SHALL BE CONTROLLED VIA DUAL-TECHNOLOGY WALL-SWITCH OCCUPANCY SENSOR. PROGRAM TO MANUAL-ON, 5-MINUTE AUTO-OFF.
- LIGHTING IN RESTROOMS SHALL BE CONTROLLED VIA PIR WALL SWITCH OCCUPANCY SENSOR SWITCH. PROGRAM TO MANUAL-ON, 20-MINUTE AUTO-OFF. PROVIDE MINIMAL UNSWITCHED NIGHTLIGHTS AS INDICATED.
- MEDIUM/LARGE CONFERENCE ROOMS TO BE CONTROLLED VIA DUAL-TECHNOLOGY CEILING MOUNT OCCUPANCY SENSOR, ZONING AS INDICATED, WITH LOW-VOLTAGE SWITCHES FOR DIMMING AND MANUAL-ON/OFF CONTROL.



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