

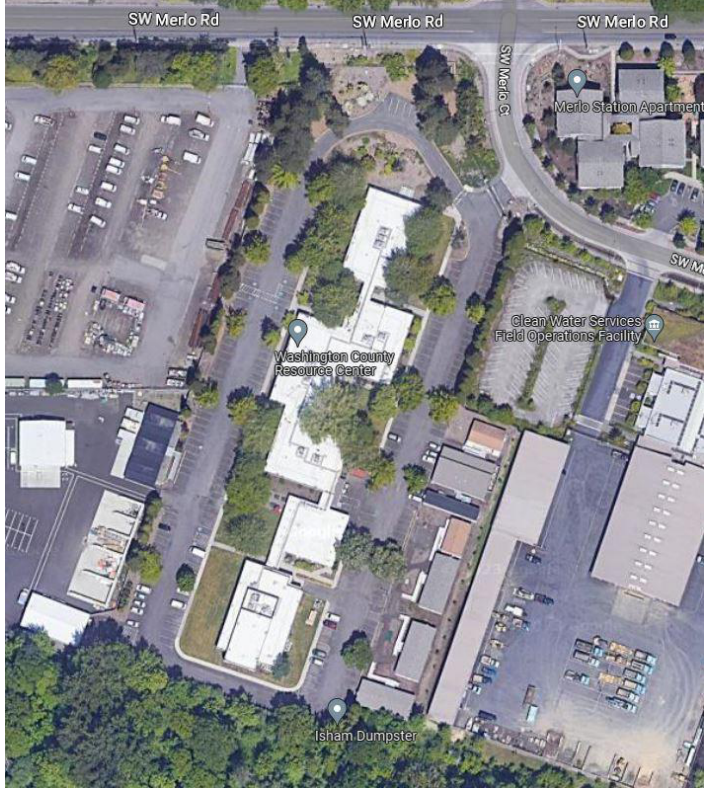
# FACILITY OFFICE TI

## BEAVERTON SCHOOL DISTRICT

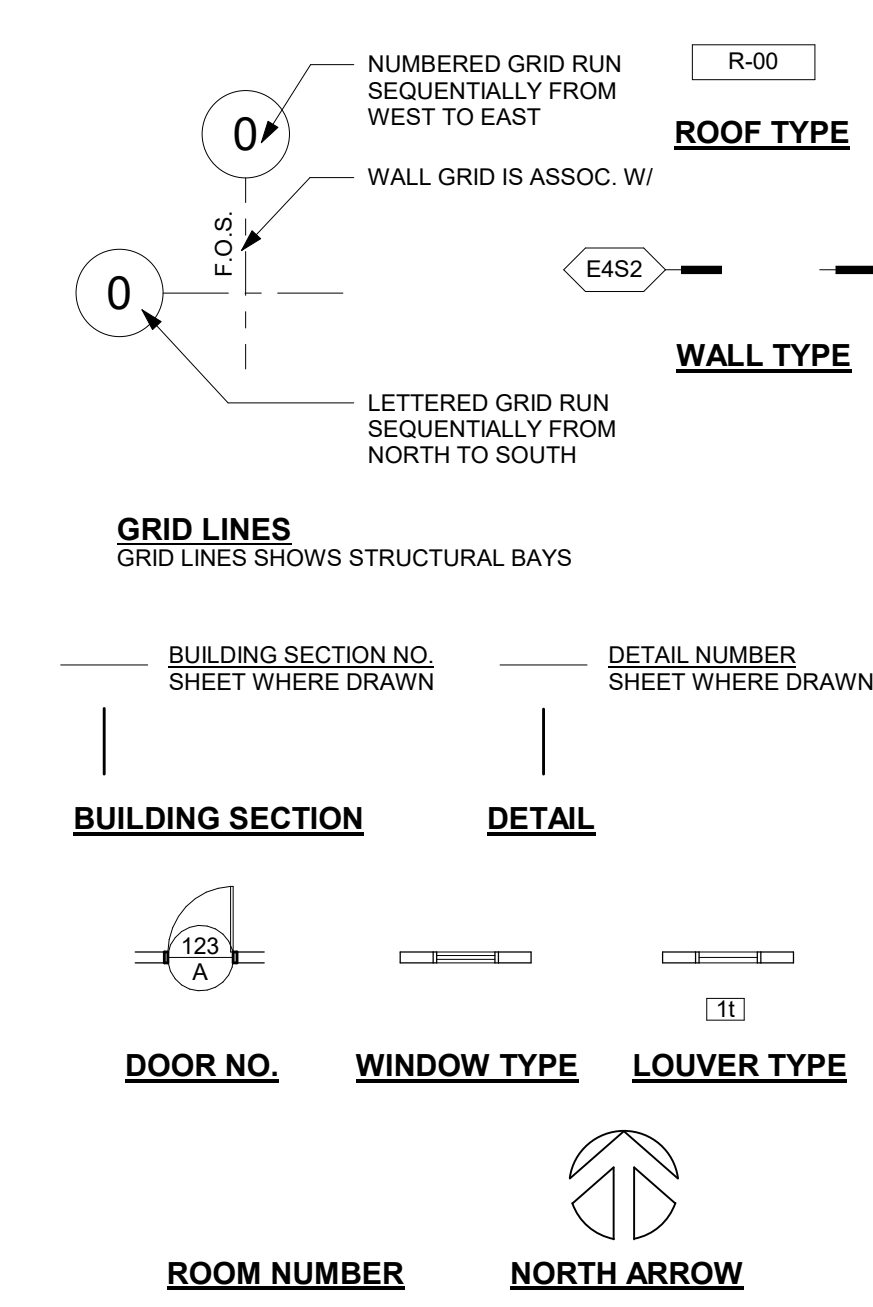
### DRAWING KEYNOTING SYSTEM

A keynoting system is used on the drawings for materials, references and notes. Refer to the keynote legend on the drawing for the information which relates to each keynote on the respective drawing. Each keynote consists of a 6-digit number followed by a period and a letter suffix. The 6-digit number relates to the specifications section which generally covers the item that is referenced, and a letter suffix identifies the specific reference notation used on the drawing. The letter suffix does not relate to any corresponding reference letter in the specifications. The organization of the keynoting system on the drawings, with the keynote reference numbers related to the specification sections numbering system, shall not control the contractor in dividing the work among subcontractors or in establishing the extent of the work to be performed by any trade. The Architect's current Master List, which includes Keynotes not used on this project, is included in the specifications following Section 014200 - References.

### VICINITY MAP



### ARCHITECTURAL SYMBOLS



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### DESCRIPTION OF WORK

THIS PROJECT CONSISTS OF THE REMOVAL OF INTERNAL PARTITIONS, DEMO AND REPLACEMENT OF EXISTING TOILET WITH ADA COMPLIANT GENDER NEUTRAL TOILETS, SHIFTING OF THE SERVER ROOM, REVISIONS TO HVAC TO SERVE NEW OPEN LAYOUT, AND REPLACEMENT OF LIGHT FIXTURES WITH LED FIXTURES, IN BUILDING A OF THE BEAVERTON SCHOOL AUXILIARY DISTRICT FACILITY.

### PROJECT DATA

PROJECT ADDRESS	16550 SW MERLO ROAD BEAVERTON, OR 97003
TAX PARCELS	19107AA61000
GOVERNING CODE	2022 OREGON STRUCTURAL SPECIALTY CODE
EXISTING ZONING	2021 OREGON ELECTRICAL SPECIALTY CODE
CLASSIFICATION	SC-E STATION COMMUNITY - EMPLOYMENT
BUILDING USE	ADMINISTRATION
OCCUPANCY GROUPS	ASSEMBLY
TYPE OF CONSTRUCTION	
SEWER DISTRICT	CITY OF BEAVERTON / CLEAN WATER SERVICES
WATER DISTRICT	TUALATIN VALLEY WATER DISTRICT

### PROJECT TEAM

OWNER  
BEAVERTON SCHOOL DISTRICT  
16550 SW MERLO ROAD  
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PHONE: 503-396-4364

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MECHANICAL ENGINEER  
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ELECTRICAL ENGINEER  
SAZAN GROUP  
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PHONE: 503-416-2400

### DRAWING REVISIONS

#	Date	Description
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### PERMIT SET

#### FACILITY OFFICE TI BEAVERTON SCHOOL DISTRICT

16550 SW MERLO RD BEAVERTON, OR 97003

### BLRB architects

TACOMA | SPOKANE | PORTLAND | BEND

1201 Pacific Ave. Suite 700 WA 98402 503.627.5599	421 W Riverside Ave. Suite 511 WA 98001 509.262.0080	621 SW Morrison St. Suite 950 OR 97205 503.595.0270	721 SW Industrial Suite 100 OR 97202 541.330.0506
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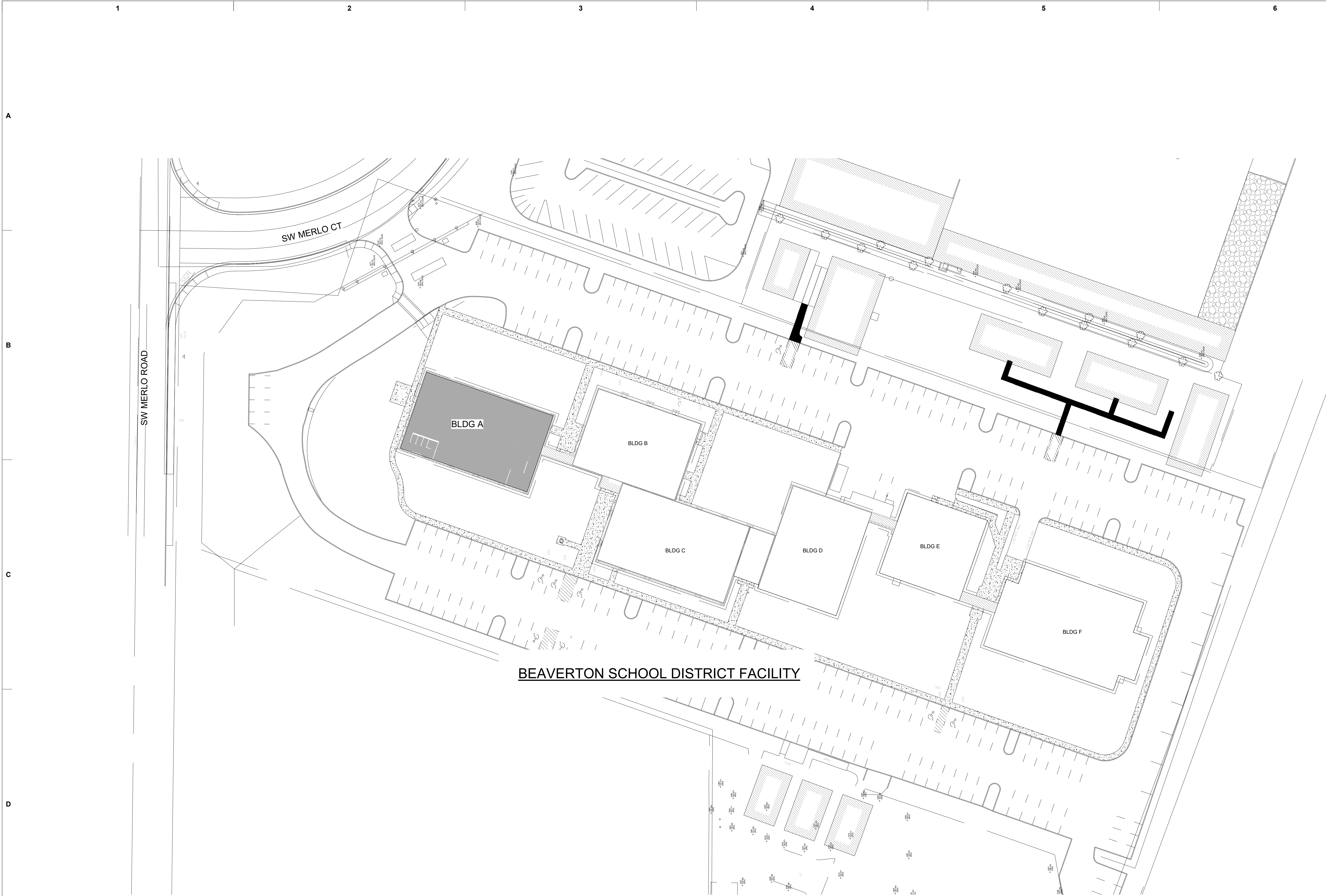
Drawing Title:

DATA SHEET

Date:	04/21/23	Drawn By:	ALB
Revised:		Project No.	023030
Stamp		Sheet No.	

A0.1





E1 SITE PLAN  
1" = 30'-0" @ FULL SIZE



#### DRAWING REVISIONS

#	Date	Description
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Drawing Title:

SITE PLAN

Date : 04/21/23

Drawn By : Author

Revised :

Project No. 023030

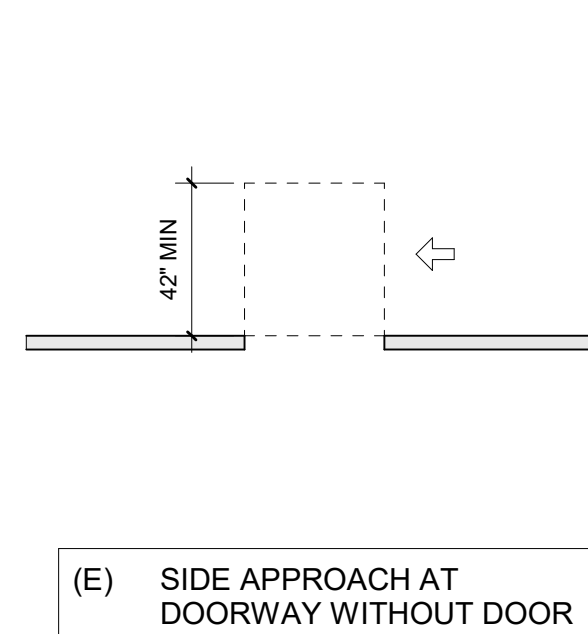
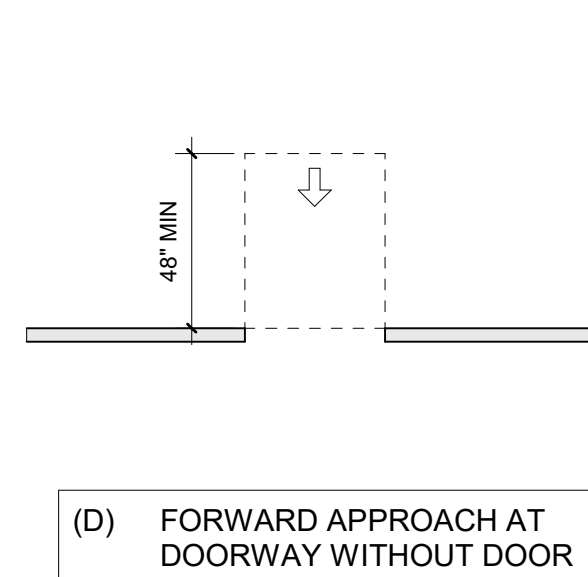
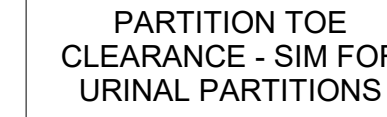
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Sheet No.

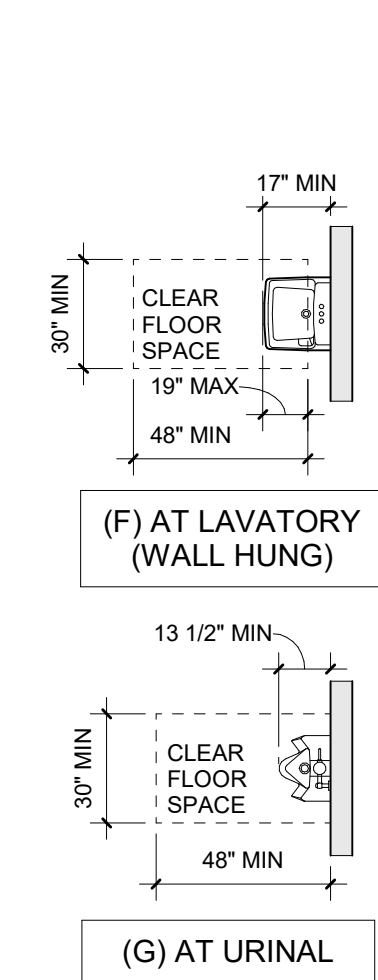
A1.0

BLRB ARCHITECTS, P.S.

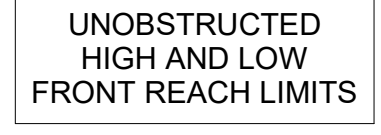
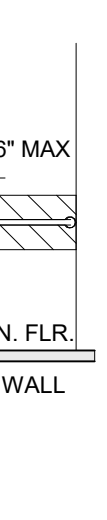
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NOTE: ALL DOORS IN ALCOVES SHALL COMPLY WITH THE CLEARANCES FOR FRONT APPROACHES



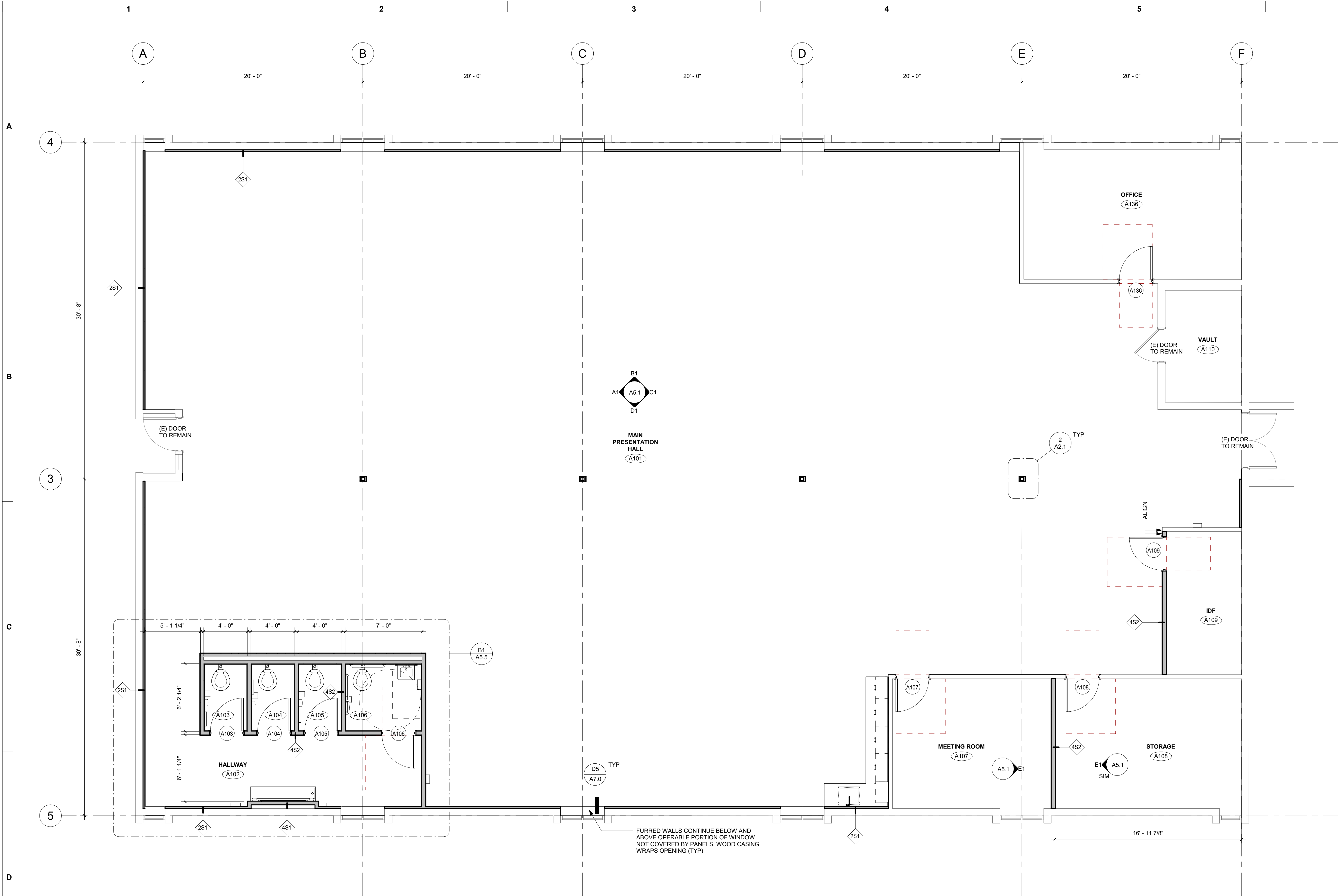
## MANEUVER CLEARANCES AT MANUAL SWING DOORS AND DOORWAYS WITHOUT DOORS



	PROVIDE BLOCKING IN FRAMED WALLS TO 6" MIN. BEYOND EDGES OF ITEM MOUNTED (TYP)
	DIRECTION OF TRAVEL OR APPROACH
	BOUNDARY OF CLEAR FLOOR SPACE OR MANEUVERING CLEARANCE
	WALL, FLOOR, CEILING, OR OTHER ELEMENT CUT IN SECTION OR PLAN
	CENTERLINE

# AC0.1





D1 FLOOR PLAN - BLDG A  
1/4" = 1'-0" @ FULL SIZE

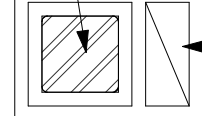
WALL TYPES

WALL TYPES	ASSEMBLY	KEYNOTES	DESCRIPTION
		051200.CH	STEEL CHANNEL (2", 3 5/8")
		072100.BI	BATT INSULATION
		092900.GWB	GYPSUM WALL BOARD TYPE X (5/8")
			DIM. REFERENCE
		051200.CH	STEEL CHANNEL (2")
		072100.BI	BATT INSULATION
		092900.GWB	GYPSUM WALL BOARD TYPE X (5/8")
			DIM. REFERENCE

WALL TYPE IDENTIFIER LEGEND

- END NUMBER REFERS TO SEQUENTIAL VARIATIONS OF THE SAME BASIC TYPE
- "R" REFERS TO RATED CONSTRUCTION
- "S" REFERS TO STEEL STUD WALL
- "W" REFERS TO WOOD STUD WALL
- "M" REFERS TO THE WIDTH OF THE WALL STRUCTURE FOR EXAMPLE "R" REFERS TO A 6" WIDE MEMBER
- "E" REFERS TO EXTERIOR WALL
- "O" REFERS TO OTHER IDENTIFIERS
- "M" PRECEDED BY NUMBER REFERS TO MASONRY WALL. NUMBER REFERS TO MASONRY THICKNESS
- "C" REFERS TO CONCRETE WALL

EXISTING STRUCTURAL COLUMN AND GWB WRAP TO REMAIN. PATCH AS NEEDED



ADD WALL TYPE 2S1 AT SIDE OF COLUMN FOR ELEC

2 COLUMN DETAIL  
1/12" = 1'-0" @ FULL SIZE

ROOM LEGEND - BLDG A

A101	MAIN PRESENTATION HALL
A102	HALLWAY
A103	RR
A104	RR
A105	RR
A106	RR
A107	MEETING ROOM
A108	STORAGE
A109	IDF
A110	VAULT
A136	OFFICE

FLOOR PLAN NOTES

- UNLESS NOTED OTHERWISE, DIMENSIONS ON PLANS ARE:
  - EXISTING WALLS - FACE OF FINISH (F.O.F.)
  - NEW WALLS - FACE OF STUD (F.O.S.)
- FOR BUILDING CODE ANALYSIS SEE CODE COMPLIANCE SHEETS, AC SERIES
- PROVIDE 4" FROM FACE OF STUD AT WALL TO ROUGH OPENING OF DOOR AT ADJACENT DOOR OPENINGS UNLESS OTHERWISE NOTED
- WHERE TWO WALL TYPES ARE NOTED TOGETHER SEE ELEVATIONS AND SECTIONS TO SEE AT WHAT WALL HEIGHT THE CHANGE OF TYPE OCCURS
- 4" RUBBER BASE THROUGHOUT, U.O.N.
- DRAWINGS ARE SHOWN TO SCALE AS NOTED. TO AID IN DETERMINING SIZE AND PROPORTION - CONTRACTOR TO VERIFY ALL CONDITIONS PRIOR TO CONSTRUCTION
- FIXTURES AND EQUIPMENT SHOWN ARE FOR COORDINATION PURPOSES ONLY. REFER TO THE MANUFACTURER'S PRODUCT DATA, ENGINEERING DRAWINGS, AND SPECIFICATIONS FOR FIXTURE AND EQUIPMENT DESCRIPTIONS AND LOCATIONS
- PRESERVATION OF ADJACENT OR EXISTING CONSTRUCTION
  - AVOID DAMAGE TO EXISTING STRUCTURES, SIDEWALKS, CURBS, PAVING AND LANDSCAPING.
  - PATCH, REPAIR, OR REPLACE ANY ITEMS DAMAGED, OR AS DIRECTED BY THE PROPERTY OWNER.
- AVOID UNNECESSARY DISRUPTIONS TO THE FUNCTIONS AND ACTIVITIES OF ADJACENT BUILDINGS
- CAREFULLY REVIEW ALL CONTRACT DOCUMENTS PRIOR TO CONSTRUCTION. BRING DISCREPANCIES OR CONFLICTING DATA TO THE ATTENTION OF THE ARCHITECT PRIOR TO COMMENCING WORK
- INSTALL DOORS WITH 4" FROM HINGE SIDE OF DOOR TO ADJACENT WALL FRAMING, U.O.N.
- CONTRACTOR TO VERIFY SIZES OF ROUGH DOOR AND WINDOW OPENINGS PRIOR TO ORDERING DOORS AND WINDOWS
- SALVAGE DEMOLISHED ELEMENTS AS DIRECTED BY THE BUILDING OWNER/TENANT
- PROVIDE BLOCKING AT ALL FIXTURE MOUNTING LOCATIONS AT (E) WALLS. TOILET ROOMS SHALL HAVE TILE BACKER BOARD (03000) BEHIND CERAMIC WALL TILE & MOISTURE RESISTANT GWB AT ALL OTHER SURFACES
- PROVIDE TYPE 'X' MOISTURE-RESISTANT GWB AT THE FOLLOWING LOCATIONS: WALLS ADJACENT TO FLOOR SINKS, WALLS ADJACENT TO DRINKING FOUNTAINS, ANY WET/EXTREME COLD AREAS
- SEE FINISH SCHEDULE & INTERIOR ELEVATIONS (A5.0 SERIES) FOR FINISHES, SUBSTRATES AND ADDITIONAL NOTES ON SPECIFIC TYPES OF GWB
- PROVIDE SOLID BLOCKING FOR ALL WALL-MOUNTED CABINETS, EQUIPMENT, WAINSCOTTING & ACCESSORIES
- PROVIDE ALL NECESSARY FRAMING TO EXTEND FINISHES TO DECK WHERE REQUIRED, INCLUDING AROUND INTERSECTING STRUCTURE
- PROVIDE ACOUSTICAL CAULK AT ALL GWB-TO-FLOOR & GWB-TO-DECK INTERSECTIONS
- SEAL ALL WALLS, ROOF & SLAB PENETRATIONS WITH SEALANT. TAPE ALL PENETRATIONS THROUGH VAPOR RETARDERS AND AIR BARRIERS w/ MANUFACTURER'S TAPE, TYPICAL AT WALLS, ROOFS & SLABS
- FILL ALL VOIDS WITHIN STUD CAVITY WITH 072100.SAB, U.O.N.
- INSULATION IDENTIFICATION MARK SHALL BE APPLIED TO ALL INSULATION MATERIALS AND INSULATION INSTALLED SUCH THAT THE MARK IS READILY OBSERVABLE DURING INSPECTION
- WHERE TWO OR MORE LAYERS OF RIGID INSULATION WILL BE USED, EDGE JOINTS BETWEEN LAYERS ARE TO BE STAGGERED

GENERAL WALL NOTES

- ALL INTERIOR WALL TYPES HAVE 092900.GWB GYPSUM WALLBOARD (5/8") TYPE 'X' ON BOTH SIDES, WHICH GO UP TO CEILING, UNLESS NOTED OTHERWISE
- ALL INTERIOR WALLS TO HAVE THE FOLLOWING MIN. ACOUSTICAL WALL ASSEMBLY - U.N.O.:
  - ONE (1) LAYER OF 092900.GWB (INT. GWB) ON EACH SIDE
  - 072100.SB (SOUND BATT)
  - 072900.AJS (ACOUSTICAL SEALANT) CONTROL SYSTEM AT TOP & BOTTOM OF GWB & WHERE AGAINST DECKING AND BEAMS AND AROUND ALL PENETRATIONS
  - INTERIOR WALLS CONNECT AT DECK STRUCTURE ABOVE WITH 05400.DT (DEFLECTION TRACK)

WALL BID ALTERNATES

ADD ALTERNATE #2: FUR AND FINISH REMAINING PERIMETER WALLS: 2S1

DRAWING REVISIONS

#	Date	Description
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PERMIT SET

FACILITY OFFICE T1  
BEAVERTON SCHOOL DISTRICT

16550 SW MERLO RD BEAVERTON, OR 97003

BLRB architects

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Drawing Title:  
FLOOR PLAN - BLDG A

Date:	04/21/23	Drawn By:	Author
Revised:		Project No.	023030
Stamp		Sheet No.	

A2.1

BLRB ARCHITECTS, P.S.



1. 122413 RWS ROLLER WINDOW SHADE. OPENNESS FACTOR IDENTIFIED IN SPECIFICATION.
2. SPECIFICATIONS FOR ALL TYPES OF WALL FINISH FOR GYPSUM BOARD. 09 20 00
3. PROVIDE ALL WALL FINISHES WITH COORDINATED AND ACCENT COLORS WITH ARCHITECTURE.
4. ALL TILE PATTERNS TO BE APPROVED BY ARCHITECT.
5. MECHANICAL GRILLS TO BE COORDINATED TO MATCH SURROUNDING WALL COLOR.
6. ALL MECHANICAL GRILLS AND PANELS BE TRIMMED IN ALL CASEWORK REFERS TO SPECIFICATION SECTION 09 20 00 MANUFACTURER'S VERY SIZE AND TYPE.
7. APPROVED APPLIANCES & COORDINATE CABINETS. PRIOR TO SUBMITTAL OF SHOP DRAWINGS & NOTE APPLIANCE TYPE AND MODEL.
8. PROVIDE LOOKS AT ALL CASEWORK IN ADMINISTRATION BUILDING.
9. COORDINATE ALL CASEWORK TO MATCH CASEWORK FOR FORMAL CLOCKS/PEAKER LOCATIONS. SEE ELECTRICAL DRAWINGS.
10. ALL MECHANICAL/TELECOM ROOMS NOT ELEVATED SHALL HAVE P11 WALLS AND R81 BASE. SEE A0 CASEWORK FOR FLOOR FINISHES. COORDINATE WITH R81 CEILING FINISHES.
11. PROVIDE WINDOW TO FULLY FINISH GWB AND PROVIDE PANT BOARDING TO MATCH FINISHES TO MATCH FINISHES OR VMC, AS INDICATED ON ELEVATIONS. BEHIND ALL LFS TACKBOARDS AND MESSAGE/WHYE BOARDS.
12. MAKE SURE TAGS IF ANY, ARE COORDINATED TO LFNH SCHEDULE FOR MATERIAL INFORMATION.
13. PROVIDE FINISHES TO ALL INTERIOR DOOR AND WINDOW OPENINGS AND TERMINATE AT FRAME.
14. DRAWING SERIES 199.7 FOR ALL TOILET ROOM INTERIOR ELEVATIONS.
15. FOR ALL DIMENSIONAL FINISHES FOR TOILET ROOM HANGING FIXTURES AND ACCESSORIES, COORDINATE WITH A62 & A67 SHEETS PROVIDE FINISHES TO ALL INTERIOR DOOR AND WINDOW MOUNTED EQUIP. & ACCESSORIES.
16. PROVIDE FINISHES SHOWN ON ELEVATIONS ARE TO FINISH FACE, U.N.O.
17. AT EXTERIOR FACING WALLS OF GYB (VINYL WALL COVERING) APPLIED TO ALL EXTERIOR FINISHED VINYL WALL COVERING) INSIDE.
18. TEST AND MEASURE ALL FINISHES AS SHOWN IN ELEVATIONS AT WET AREAS.



- |            |   |
|------------|---|
| 062023.WC  | WINDOW CASINGS (JAMB & HEAD)              |
| 081416.SCD | SOLID CORE DOOR                           |
| 092900.GWB | GYPSUM WALL BOARD TYPE X                  |
| 096513.RB  | RESILIENT BASE                            |
| 099123.PT  | PAINT SYSTEM                              |
| 104416.FEC | FIRE EXTINGUISHER CABINET - SEMI-RECESSED |
| 123200.PL  | PLASTIC LAMINATE                          |
| 123200.SSM | SOLID SURFACING MATERIAL                  |



#	Date	Description
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**FACILITY OFFICE TI  
BEAVERTON SCHOOL DISTRICT**

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BLRB architects

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Drawing Title:  
**INTERIOR ELEVATIONS – BLDG A**

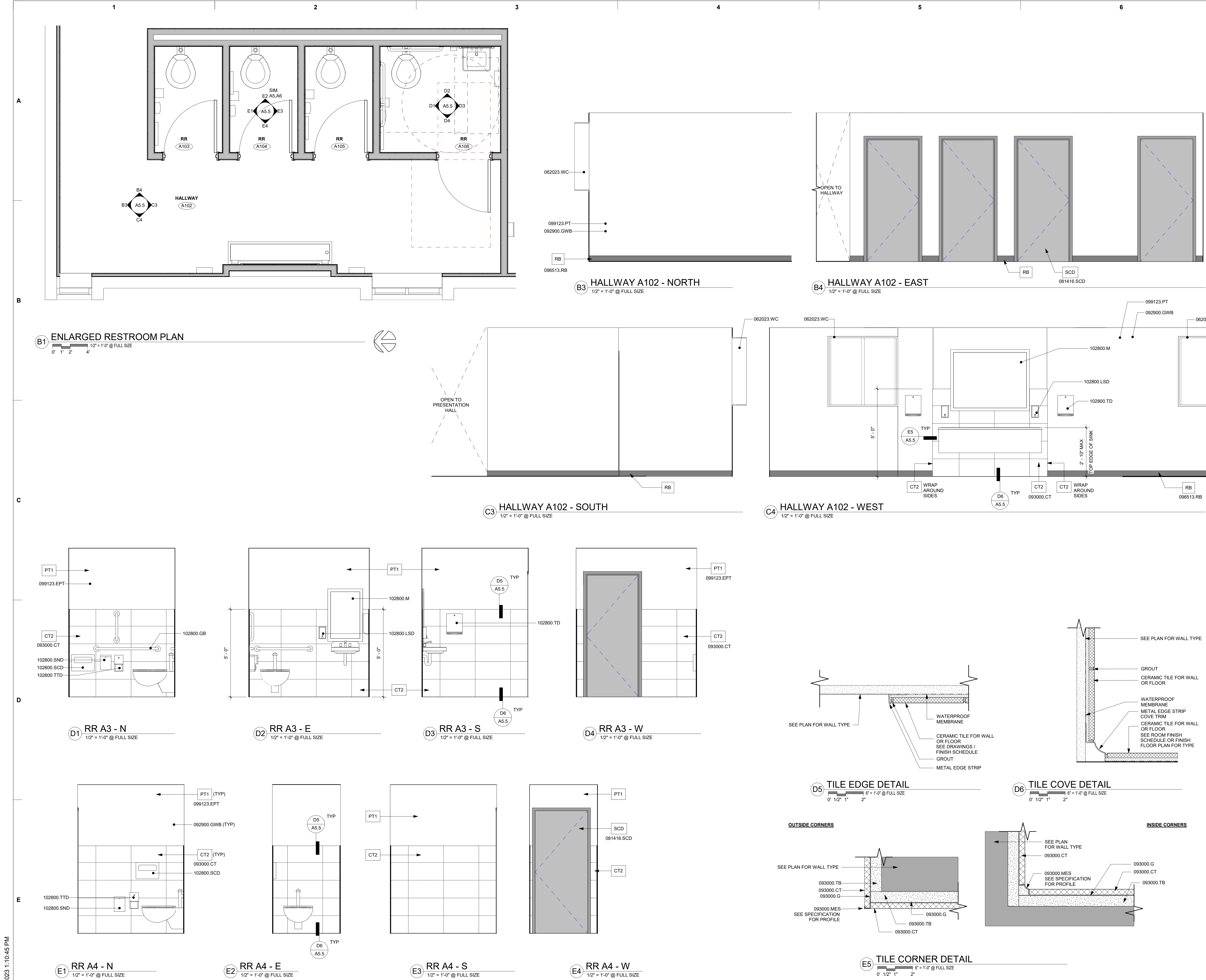
Date : 04/21/23 Drawn By : Author

Revised :	Project No. 023030
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## A5.1





### INTERIOR ELEVATION NOTES

- 122413 RWS ROLLER WINDOW SHADE OPENNESS FACTOR IDENTIFIED IN SPECIFICATION.
- SEE SPECIFICATIONS FOR LEVEL OF WALL FINISH FOR GYPSUM BOARD, 09 29 00.
- COORDINATE ALL WALL FINISHES WITH AND ACCENT PAINT COLORS WITH ARCHITECT/OWNER.
- ALL TILE PATTERNS TO BE APPROVED BY ARCHITECT.
- ALL MECHANICAL GRILLS TO BE PAINTED TO MATCH SURROUNDING WALL COLOR.
- ALL MECHANICAL EQUIPMENT AND PANELS BE TRIMMED IN.
- ALL CASEWORK REFERS TO SPECIFICATION SECTION 123200, MANUFACTURE TO VERIFY SIZE OF ALL APPROVED APPLIANCES & COORDINATE CABINETS, PRIOR TO SUBMITTAL OF SHOP DRAWINGS & NOTE APPLIANCE REQ'D DIMS.
- PROVIDE LOCKS AT ALL CASEWORK IN ADMINISTRATION AREAS, COORDINATED WITH OWNER.
- FOR FORMAL CLOCKS/SPEAKER LOCATIONS, SEE ELECTRICAL DRAWINGS.
- ELECTRICAL/MECHANICAL/TELECOM ROOMS NOT ELEVATED SHALL HAVE PT1 WALLS AND RB1 BASE. SEE A9 SERIES FOR FLOOR FINISHES AND A6 SERIES FOR CEILING FINISHES.
- CONTRACTOR TO FULLY FINISH GWB AND PROVIDE PAINT OR VWC, AS INDICATED ON ELEVATIONS, BEHIND ALL LFDs, JACKBOARDS AND MESSAGE/WHITE BOARDS.
- MATERIAL TAGS (I.E. PT1) REFER TO THE INTERIOR FINISH SCHEDULE FOR MATERIAL INFORMATION.
- WALL FINISHES TO WRAP TO INTERIOR OF DOOR AND WINDOW OPENINGS AND TERMINATE AT FRAME.
- SEE DRAWING SERIES (A9.7) FOR ALL TOILET ROOM INTERIOR ELEVATIONS.
- FOR ALL DIMENSIONAL HEIGHTS FOR TOILET ROOM PLUMBING FIXTURES AND OTHER WALL MOUNTED ACCESSORIES, COORDINATE WITH A20.0 & A6.7 SHEETS.
- PROVIDE BLOCKING IN WALL BEHIND ALL WALL-MOUNTED EQUIP. & ACCESSORIES.
- ALL DIMENSIONS SHOWN ON ELEVATIONS ARE TO FINISH FACE, U.N.O.
- AT EXTERIOR FACING WALLS WITH VWC (VINYL WALL COVERING) APPLIED, USE P/VV (PERFORATED VINYL WALL COVERING) INSTEAD.
- TBB AND MRGWB AT TILE LOCATIONS AS SHOWN IN ELEVATIONS AT WET AREAS.

### KEYNOTES

- |            |                                |
|------------|--------------------------------|
| 062023.WC  | WINDOW CASINGS (JAMB & HEAD)   |
| 081416.SCD | SOLID CORE DOOR                |
| 092900.GWB | GYPSUM WALL BOARD TYPE X       |
| 093000.CT  | CERAMIC TILE FOR WALL OR FLOOR |
| 093000.G   | GROUT                          |
| 093000.MES | METAL EDGE STRIP               |
| 093000.TB  | TILE BASE                      |
| 093000.WM  | WATERPROOF MEMBRANE            |
| 096513.RB  | RESILIENT BASE                 |
| 099123.EPT | EPOXY PAINT                    |
| 099123.PT  | PAINT SYSTEM                   |
| 102800.GB  | GRAB BAR                       |
| 102800.LSD | LIQUID SOAP DISPENSER          |
| 102800.M   | MIRROR                         |
| 102800.SCD | SEAT COVER DISPENSER           |
| 102800.SND | SANITARY NAPKIN DISPOSAL UNIT  |
| 102800.TD  | TONEL DISPENSER (TYPE)         |
| 102800.TTD | TOILET TISSUE DISPENSER        |

### DRAWING REVISIONS

#	Date	Description
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### PERMIT SET

#### FACILITY OFFICE T1 BEAVERTON SCHOOL DISTRICT

16550 SW MERLO RD BEAVERTON, OR 97003

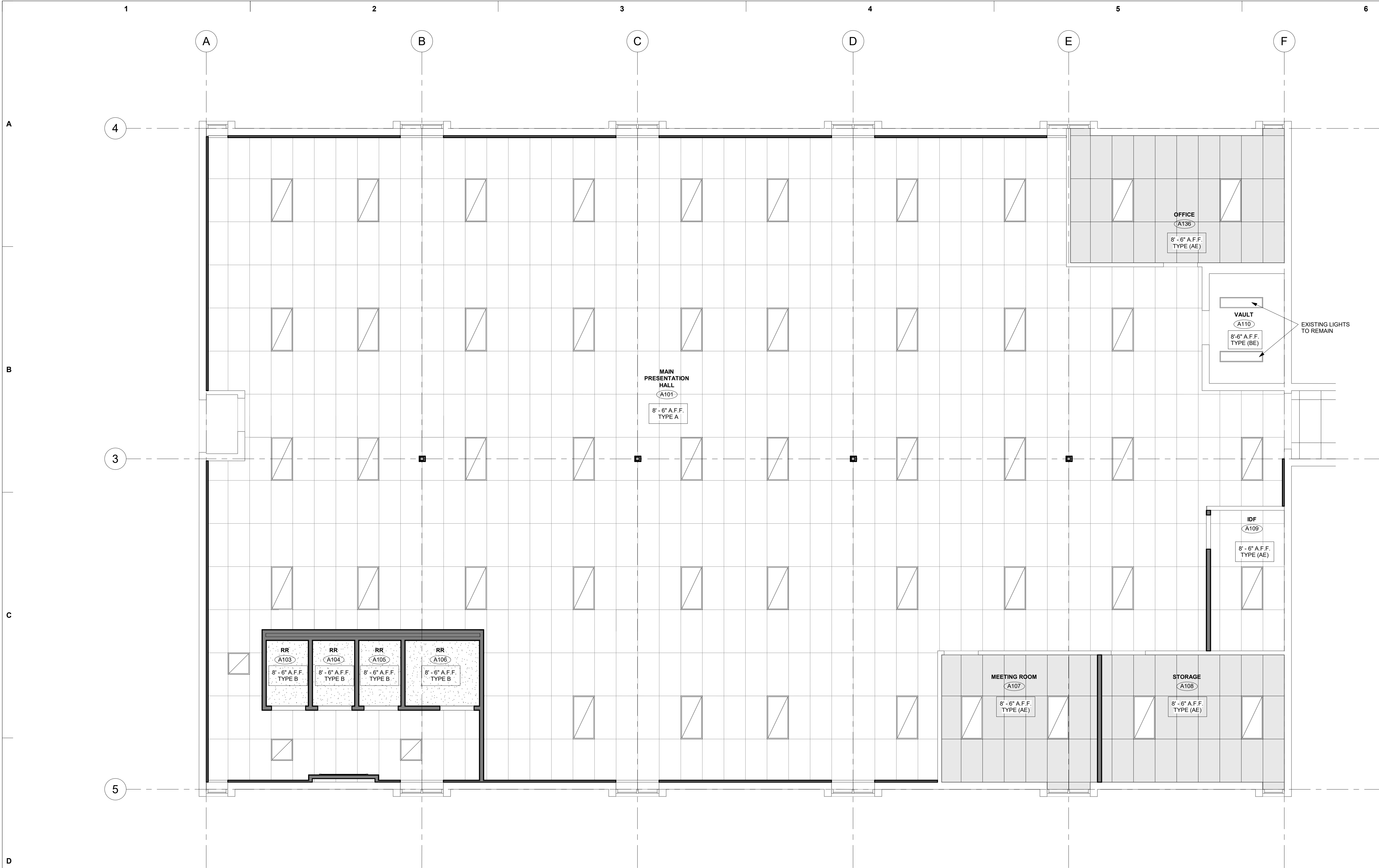
### BLRB architects

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### RESTROOM PLANS AND ELEVATIONS

Date :	04/21/23	Drawn By :	Author
Revised :		Project No.	023030
Stamp		Sheet No.	

A5.5



REFLECTED CEILING PLAN NOTES

- ALL DOOR AND WINDOW HEADERS AND DOOR AND WINDOW JAMBS TO BE PAINTED U.N.O.
- ALL CEILING HEADERS TO BE PAINTED PT1 U.N.O.
- REFER TO ELECTRICAL DRAWINGS FOR ALL DEVICE LOCATIONS AND DIMENSIONS. DEVICE AND LIGHT FIXTURE LOCATIONS SHOWN IN ARCHITECTURAL SET ARE FOR REFERENCE ONLY. WHEN IN CONFLICT, THE ELECTRICAL AND MECHANICAL DRAWINGS SUPERCEDE THE ARCHITECTURAL DRAWINGS.
- ACCESS PANELS BASED ON CURRENT LOCATION OF MEP EQUIPMENT. COORDINATE FINAL LOCATION WITH EQUIPMENT REQUIREMENTS.
- MATCH EXISTING CEILING TYPE, FINISH, AND HEIGHT.
- ALIGN FLOORING EDGES TO ALIGN WITH WALL EDGES.
- SEE A5.0A FOR MATERIAL/FINISH INFORMATION.
- GC TO VERIFY ALL SITE CONDITIONS BEFORE PROCEEDING WITH CONSTRUCTION.

CEILING TYPES LEGEND

- |  |  |
|--|--|
|  | <b>TYPE A (NEW)</b><br>095113.ACT<br>ACOUSTICAL CEILING PANEL  |
|  | <b>TYPE (AE)</b><br>EXISTING<br>ACOUSTICAL CEILING PANEL       |
|  | <b>TYPE (BE)</b><br>EXISTING<br>GWB CEILING                    |
|  | <b>TYPE B (NEW)</b><br>092900.MRX<br>GYPSUM WALLBOARD, PT1 UNO |

CEILING BID ALTERNATES

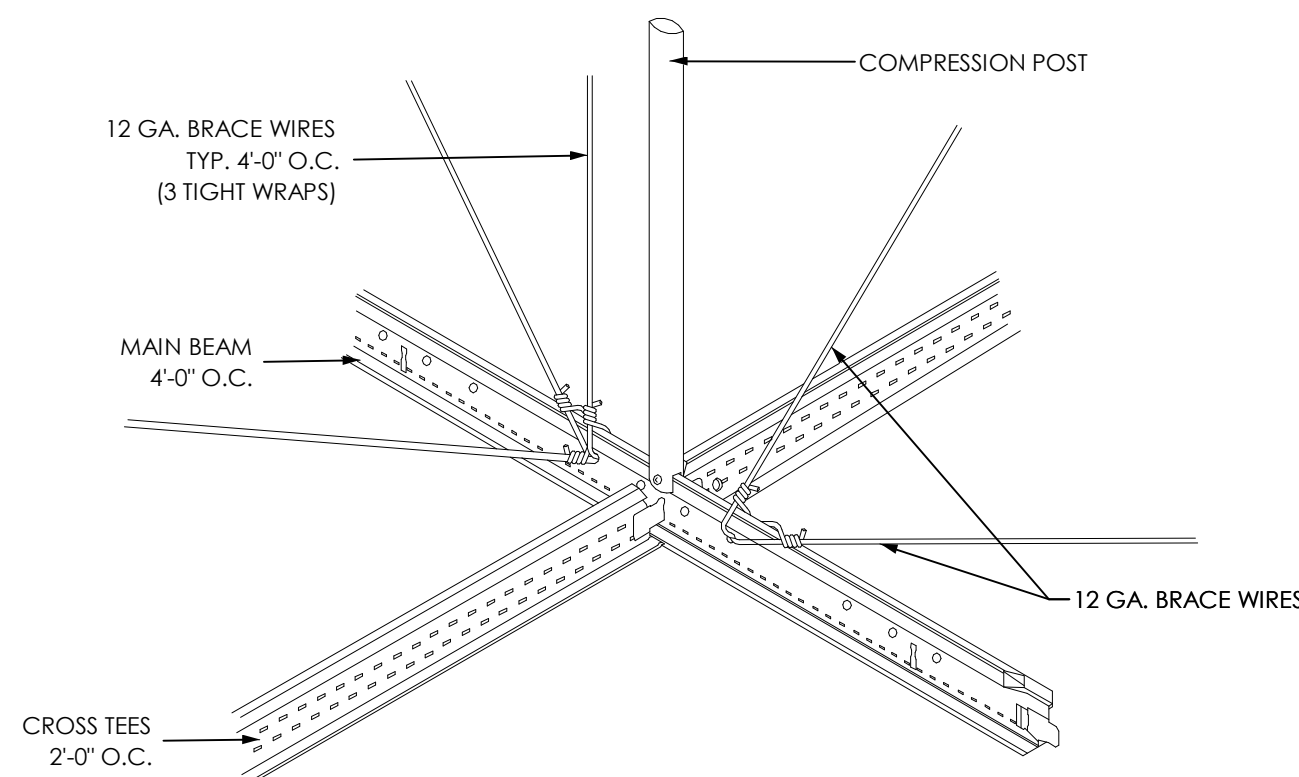
**ADD ALTERNATE #1:** DEMO REMAINING ACT CEILING & GRID. REPLACE WITH NEW 15/15 GRID, ARMSTRONG SCHOOL ZONE FINE FISSED 1714 CEILING TILE 2 X 4.

DRAWING REVISIONS

#	Date	Description
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D1 REFLECTED CEILING PLAN - BLDG A

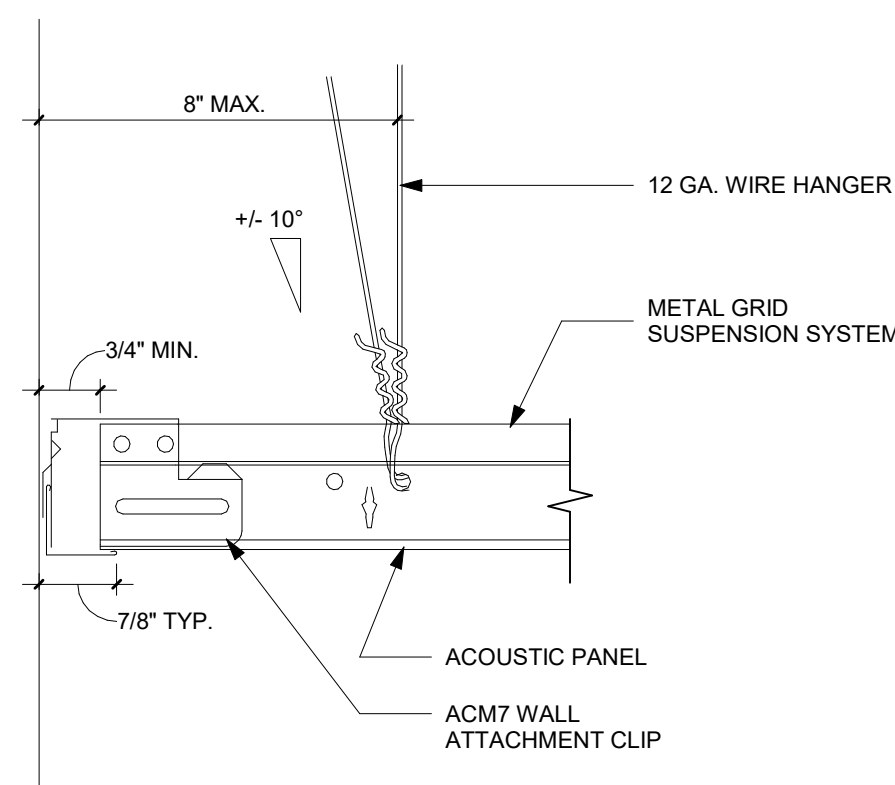
1/4" = 1'-0" @ FULL SIZE



NOTE: PER ASTM E580 SECTION 1.4, CEILINGS LESS THAN OR EQUAL TO 144 SQUARE FEET AND SURROUNDED BY WALLS CONNECTED TO THE STRUCTURE ABOVE ARE EXEMPT FROM THE SEISMIC DESIGN REQUIREMENTS.

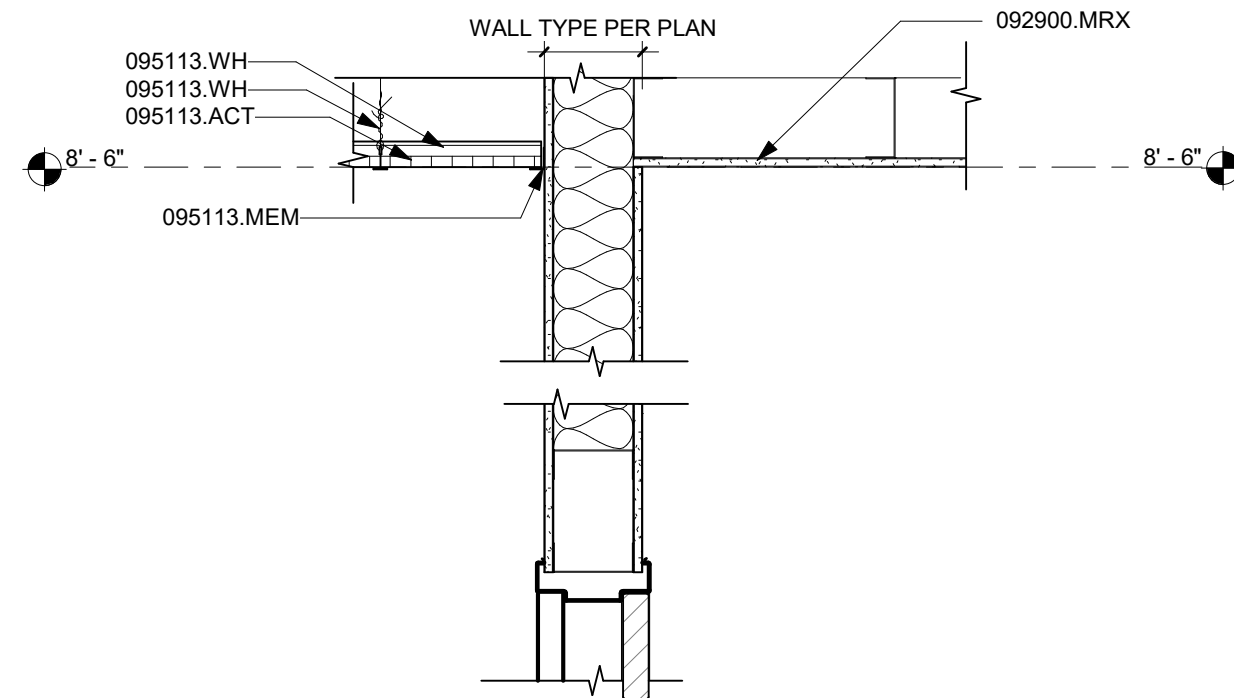
E1 ACOUSTIC CEILING BRACING

3" = 1'-0" @ FULL SIZE



E3 ACOUSTIC CEILING PERIMETER EDGE

3" = 1'-0" @ FULL SIZE



E4 CEILING CONDITION AT RESTROOMS

1" = 1'-0" @ FULL SIZE

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BLRB architects

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721 SW Industrial Suite 100 OR 97202 541.330.0506

REFLECTED CEILING PLAN -  
BLDG A

Date : 04/21/23	Drawn By : Author
Revised :	Project No. 023030
Stamp	Sheet No.

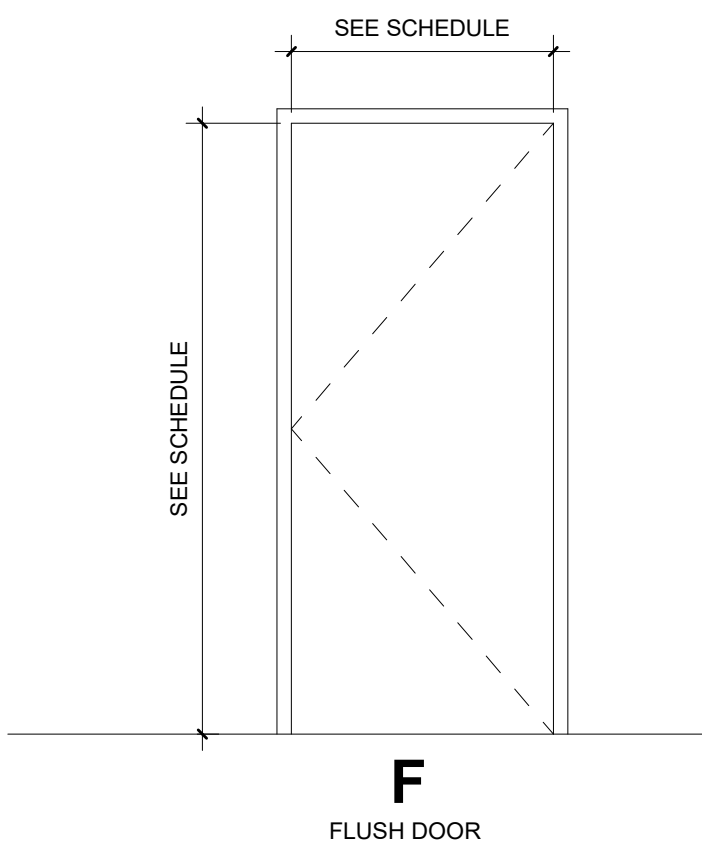
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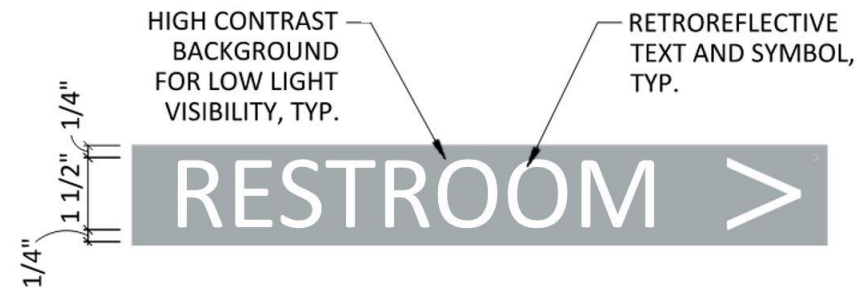


DOOR SCHEDULE - BLDG A												
DOOR					DOOR PANEL			DOOR FRAME			HARDWARE	COMMENTS
MARK	WIDTH	HEIGHT	THICKNESS	FIRE RATING	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH		
LEVEL 1												
A103	3'-0"	7'-0"	0'-1 3/4"		F	081416.SCD	FF		HM	PT	2	UNDERCUT DOOR 3/4" FOR RETURN AIR
A104	3'-0"	7'-0"	0'-1 3/4"		F	081416.SCD	FF		HM	PT	2	UNDERCUT DOOR 3/4" FOR RETURN AIR
A105	3'-0"	7'-0"	0'-1 3/4"		F	081416.SCD	FF		HM	PT	2	UNDERCUT DOOR 3/4" FOR RETURN AIR
A106	3'-0"	7'-0"	0'-1 3/4"		F	081416.SCD	FF		HM	PT	2	UNDERCUT DOOR 3/4" FOR RETURN AIR
A107	3'-0"	7'-0"	0'-1 3/4"		F	081416.SCD	FF		EXISTING	PT	1	REPAINT EXISTING DOOR FRAME
A108	3'-0"	7'-0"	0'-1 3/4"		F	081416.SCD	FF		EXISTING	PT	1	REPAINT EXISTING DOOR FRAME
A109	3'-0"	7'-0"	0'-1 3/4"		F	081416.SCD	FF		HM	PT	1	
A136	3'-0"	7'-0"	0'-1 3/4"		F	081416.SCD	FF		EXISTING	PT	1	REPAINT EXISTING DOOR FRAME

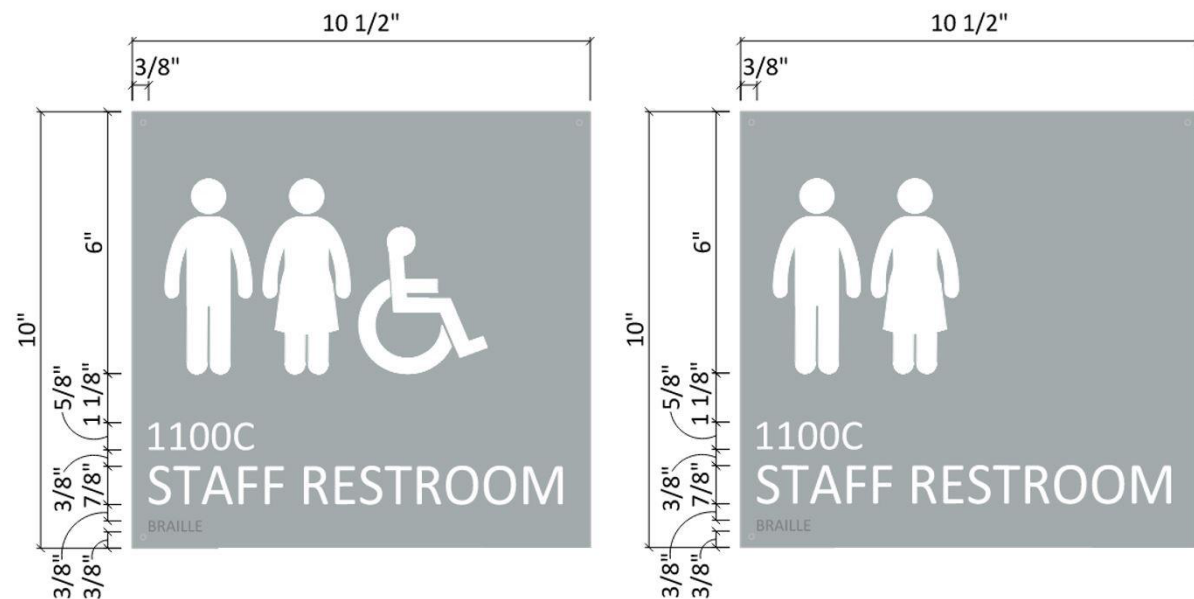


A5 DOOR TYPE  
1/2" = 1'-0" @ FULL SIZE

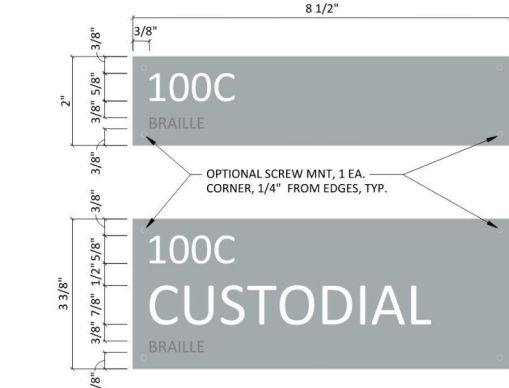
### INTERIOR SIGNAGE - WAYFINDING



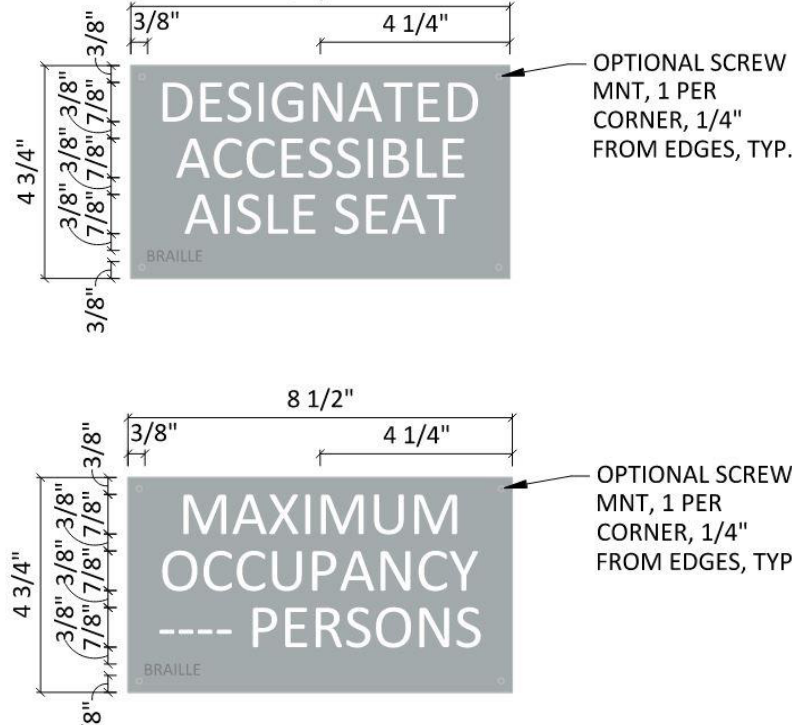
### INTERIOR SIGNAGE - STAFF RESTROOMS



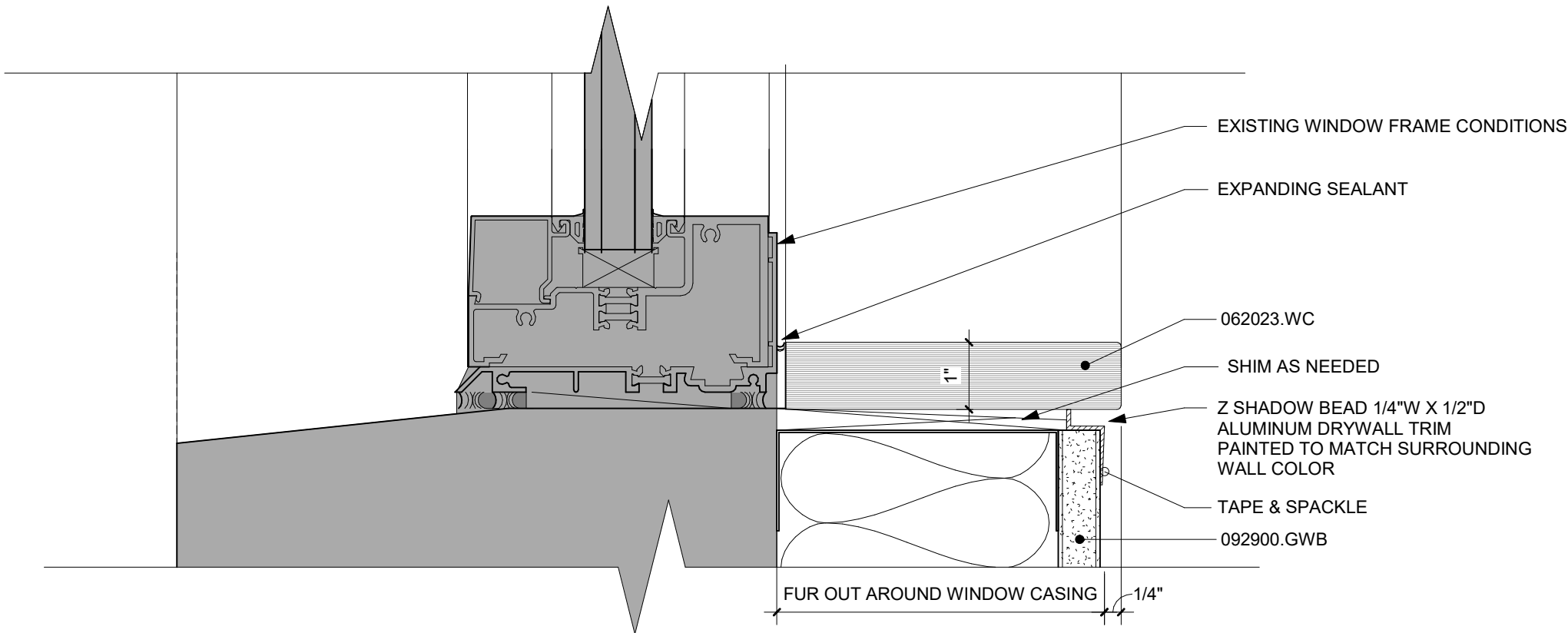
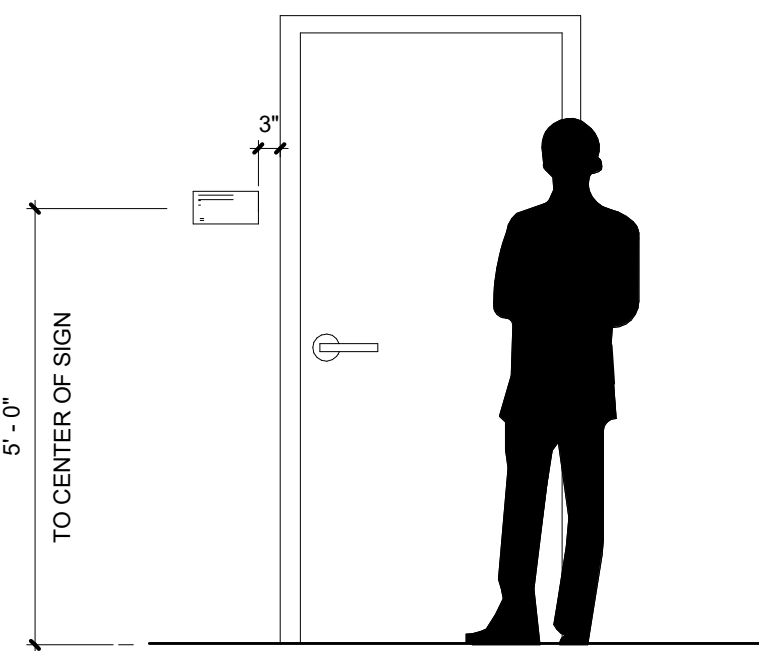
### INTERIOR SIGNAGE - PERMANENT ROOM SIGNS



### INTERIOR SIGNAGE - CODE REQUIRED



### INTERIOR SIGNAGE



D5 WINDOW CASING DETAIL  
6" = 1'-0" @ FULL SIZE

### DOOR GENERAL NOTES

- ALL DOORS TO HAVE LEVERS FOR ACCESSIBILITY
- ALL LABELED DOORS SHALL BE GOVERNED BY UL REQUIREMENTS AND SHALL BEAR PHYSICAL UL LABEL OF FIRE RATING SPECIFIED.
- INTERIOR DOORS TO HAVE MAXIMUM EFFORT OF 15 LBS TO OPERATE. EXTERIOR DOORS: 8 1/2 LBS. FIRE RATED DOORS: 15 LBS. NON FIRE RATED DOORS: 5 LBS. (NOT APPLICABLE FOR SUITE DOORS)
- ALL NEW HARDWARE SHOULD MATCH OR COMPLEMENT EXISTING HARDWARE. TO BE APPROVED BY OWNER
- ALL DOOR TYPES TO MATCH EXISTING TYPE FOR CONSISTENCY
- VERIFY ALL PARTITION THICKNESSES PRIOR TO DETERMINING FRAME THROAT SIZES.
- DOUBLE DOORS SHALL HAVE METAL ASTRAGAL
- DOOR JAMBS AND WINDOW JAMBS TO RECEIVE WOOD TRIM
- ALL HAND-ACTIVATED DOOR OPENING HARDWARE SHALL MEET THE FOLLOWING REQUIREMENTS:
  - CENTERED AT LEAST 34" BUT NO MORE THAN 48" A.F.F.
  - LATCHING OR LOCKING DOORS IN A PATH OF TRAVEL SHALL BE OPERATED WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE WITHOUT NEED TO GRASP HARDWARE
  - MAXIMUM EFFORT TO OPERATE DOORS SHALL BE EQUAL TO 8 1/2 LBS AT EXTERIOR DOORS AND LESS THAN OR EQUAL TO 5 LBS AT INTERIOR DOORS
  - RESTROOM DOORS SHALL BE PROVIDED WITH OCCUPANCY INDICATOR
  - CONTRACTOR TO VERIFY SIZES OF ROUGH DOOR OPENINGS PRIOR TO ORDERING DOORS.

### DOOR HARDWARE SETS

- FULL-MORTISE HINGES, OFFICE LOCK, SURFACE CLOSER, SET OF SEALS, WALL STOP
- FULL MORTISE HINGES, LOCK WITH OCCUPANCY INDICATOR, SURFACE CLOSER, SET OF SEALS, WALL STOP

### ABBREVIATIONS

- F FLUSH DOOR  
SCD SOLID CORE DOOR  
FF FACTORY FINISH  
HM HOLLOW METAL  
PT PAINT

### DOOR HARDWARE GENERAL NOTES

DOOR HARDWARE TO COMPLY WITH DISTRICT STANDARDS AND GUIDELINES. DOOR HARDWARE FINISH TO BE SATIN CHROME US260

- KEYING SYSTEM TO BE EVEREST KEYING SYSTEM
- LOCKSETS TO BE PROVIDED WITH GREAT-GRAND MASTER KEY, REMOVABLE CORES, CONSTRUCTION CORES W/10 CONSTRUCTION KEYS PROVIDED TO OWNER DURING CONSTRUCTION. INSTALLATION OF FINAL POST-CONSTRUCTION KEYING TO BE DONE BY OWNER. CONTRACTOR TO PROVIDE DOOR SCHEDULE SUBMITTAL REFERENCING ROOM NUMBERS WITH ASSOCIATED KEY NUMBERS TO BE USED FOR FINAL KEYING. PROVIDE TWO CONSTRUCTION REMOVABLE KEYS.

LOCKSETS SHALL BE SCHLAGE VANDLGARD, INTERCHANGEABLE CORE

3. INTERIOR HINGES: IVES HW 4.5" x 4.5" NRP OR EQ

4. CLOSURES: SURFACE MOUNT HEAVY DUTY RACK AND PINION, INDEPENDENTLY ADJUSTABLE CLOSING SPEED AND LATCHING POSITION.

INWARD: LCN 4010  
OUTWARD: LCN 4111

5. DOOR SMOKE SEALS: ANSIBHMA A156.22 NGP, PEMKO OR EQ

6. WALL STOPS: BHMA 626 FINISH, IVES OR EQ

7. DOOR SILENCERS: IVES OR EQ

### SIGNAGE GENERAL NOTES

- SEE BSD TECHNICAL STANDARDS DIVISION 10 FOR SPECIFICATIONS AND INSTRUCTIONS
- SIGNAGE MANUFACTURER: IVEK
  - A. COLORS: MP55840 COOL GRAY LVR 47.2, WHITE TEXT
  - B. FONT: CALIBRI, SIZE AND SPACING AS INDICATED
- MATERIALS: BACKGROUND 1/8" ACRYLIC, PHOTOPOLYMER, OR APPROVED EQ. COPY AND GRAPHICS TO BE RAISED 1/32". RAISED BRILLE SHALL MEET ALL JURISDICTIONAL REQUIREMENTS
- MOUNTING: SIGNS MUST NOT PROTRUDE MORE THAN 1" FROM WALL. SIGNS TO BE MOUNTED WITH PRE-APPLY, VERY-HIGH-BOND (VHB) TAPE OR OTHER HEAVY DUTY DSI-SIDES ADHESIVE TAPE IF ON GLASS. PROVIDE MATCHING ACRYLIC BACK PANEL ON INTERIOR SIDE. SIGNS MAY BE DRILLED WITH 4-HOLES (IN EACH CORNER) IN LIEU OF TAPE AS NEEDED.

### DRAWING REVISIONS

#	Date	Description
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### PERMIT SET

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### BLRB architects

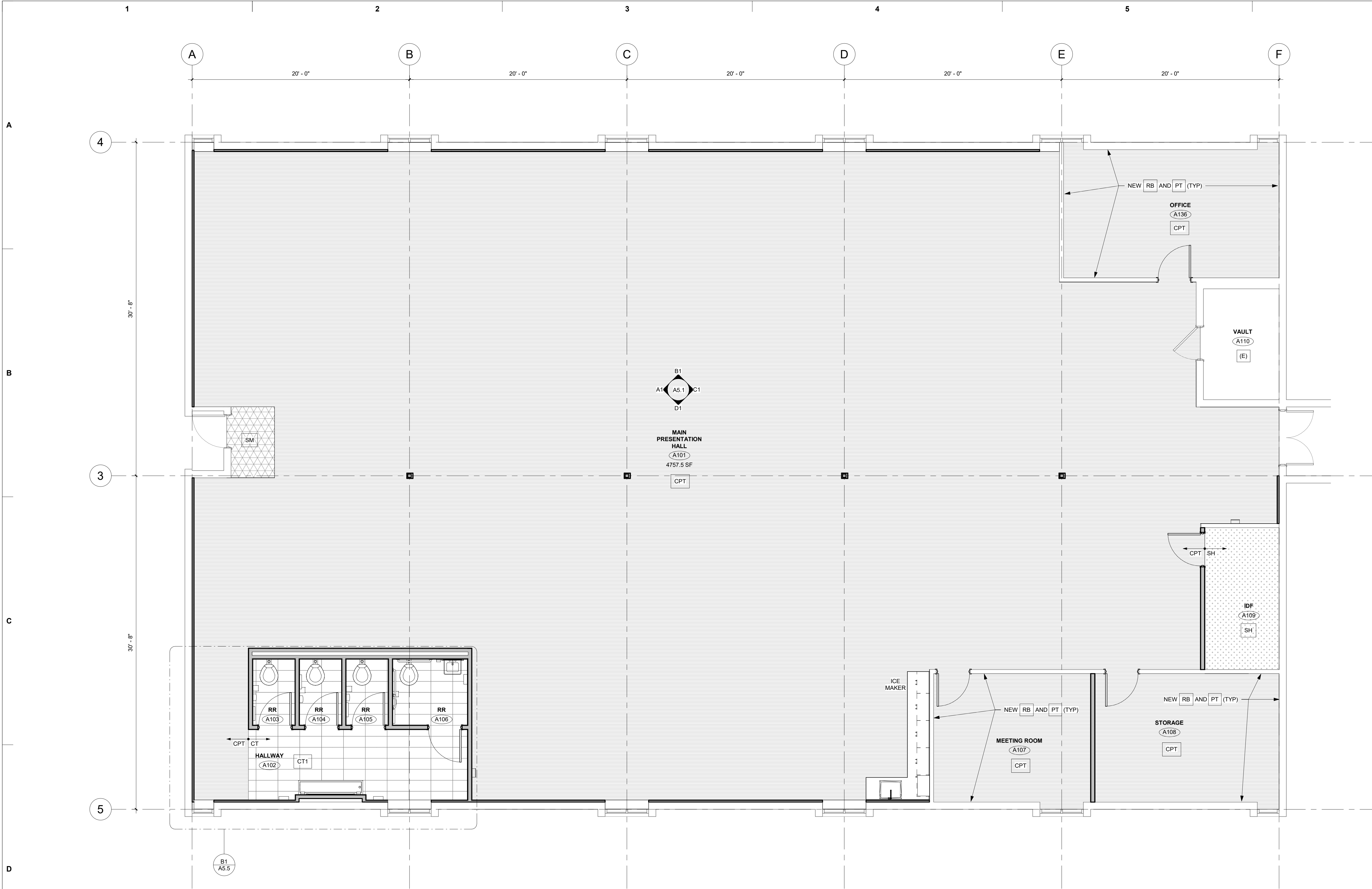
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Drawing Title:  
DOOR SCHEDULE, INTERIOR  
SIGNAGE, CASING DETAIL

Date : 04/21/23	Drawn By : Author
Revised :	Project No. 023030
Stamp	Sheet No.

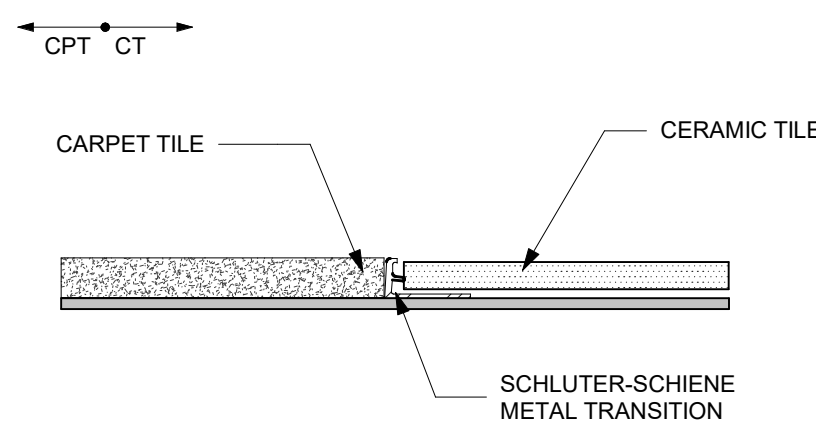
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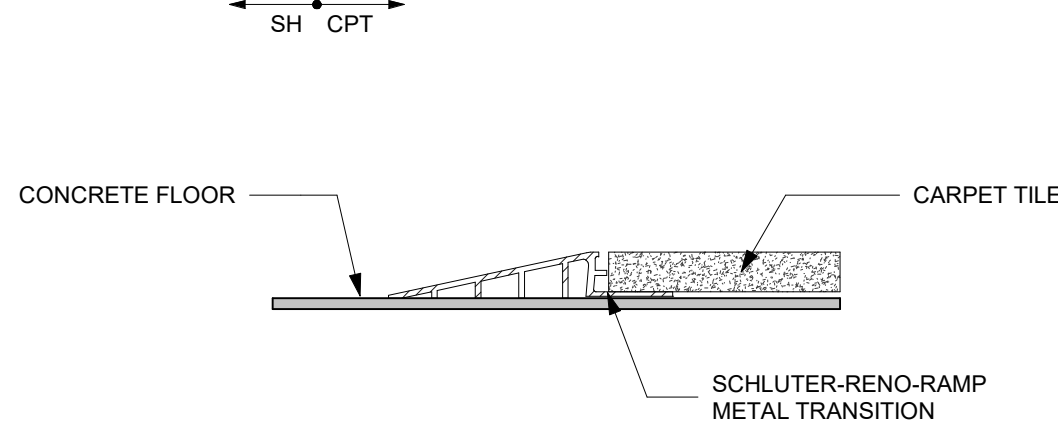


**E1 FINISHES PLAN - BLDG A**  
1/4" = 1'-0" @ FULL SIZE

**TRANSITION A**



**TRANSITION B**



**E5 FLOOR TRANSITIONS**  
6" = 1'-0" @ FULL SIZE

**FLOOR PLAN GENERAL NOTES**

1. PROVIDE BACKING FOR ALL WALL-MOUNTED CASEWORK, FURNISHING, AND EQUIPMENT. VERIFY WEIGHTS AND LOCATIONS.
2. COORDINATE ALL CASEWORK WITH MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS.
3. REFER TO SHEET AC2.0 FOR ACCESSIBILITY REQUIREMENTS.
4. SEE DIMENSION FLOOR PLANS FOR ADDITIONAL INFORMATION INCLUDING DIMENSIONS AND WALL TYPES.
5. FOR FLOOR PLAN CODE ANALYSIS SEE AC SERIES SHEETS.

**ROOM LEGEND - BLDG A**

A101	MAIN PRESENTATION HALL
A102	HALLWAY
A103	RR
A104	RR
A105	RR
A106	RR
A107	MEETING ROOM
A108	STORAGE
A109	IDF
A110	VAULT
A136	OFFICE

**WALL BID ALTERNATES**

**ADD ALTERNATE #2:** TUR AND FINISH REMAINING PERIMETER WALLS: 251

- (E) DOOR TO REMAIN  
(E) WALL TO REMAIN  
(E) COLUMN, PROTECT.
- NEW DOOR & FRAME, SEE A7.0A FOR SCHEDULE  
NEW WALL

**FLOORING TYPES LEGEND**

- (E) EXISTING FLOORING  
EXISTING FLOORING TO REMAIN
- CPT  
096800 CPT  
CARPET TILE
- SM  
124813 SM  
SURFACE MOUNTED ENTRY MAT
- CT1  
093000 CT  
CERAMIC TILE
- SH  
033000 SH  
SEALED CONCRETE

SEE A5.1 FOR MATERIAL FINISH INFORMATION

**DRAWING REVISIONS**

#	Date	Description
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BEAVERTON SCHOOL DISTRICT**

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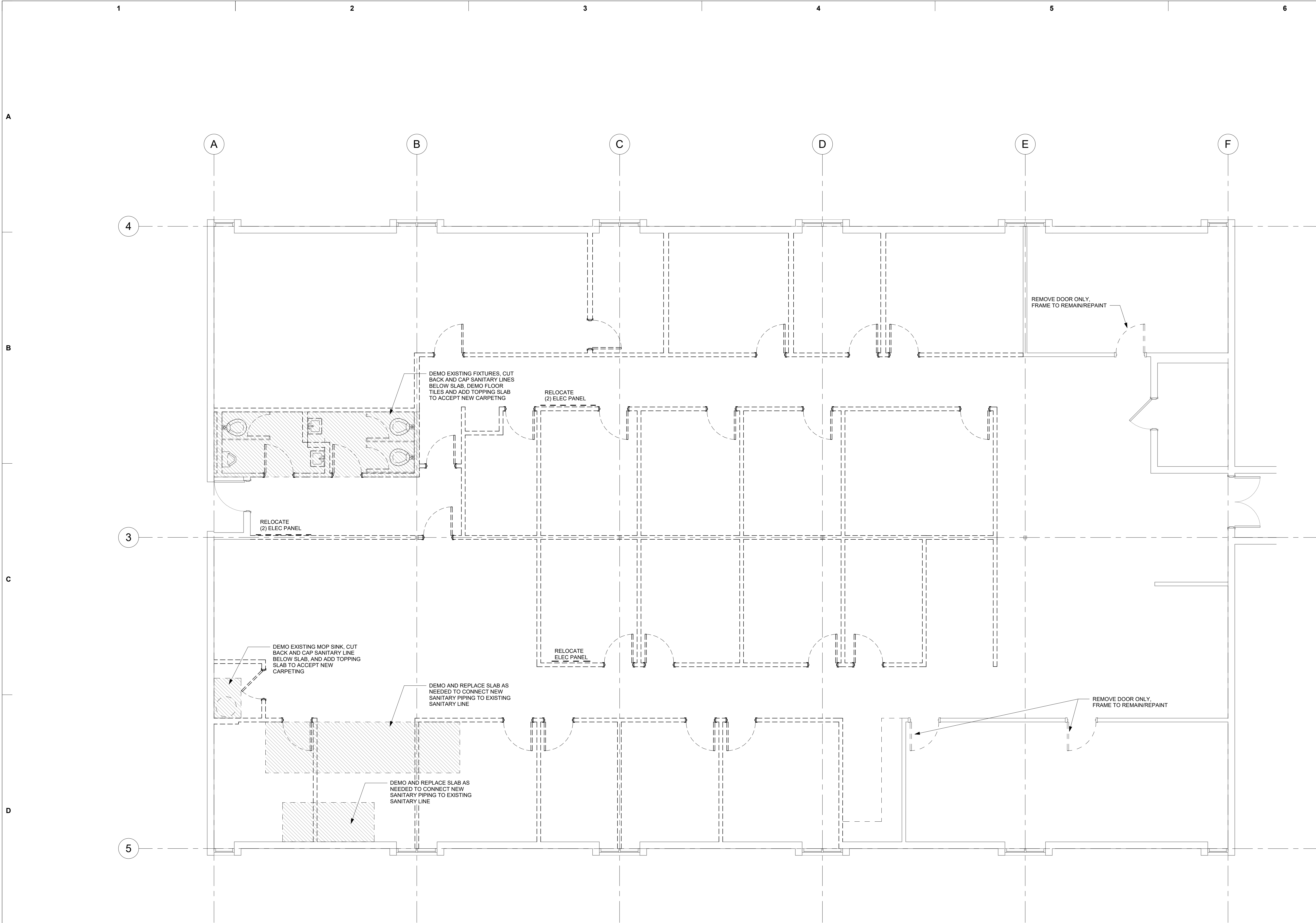
**BLRB architects**

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421 W Riverside Ave. Suite 511 WA 98001 509.252.5080  
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721 SW Industrial Suite 100 OR 97202 541.330.0506

Drawing Title:  
**FINISHES PLAN - BLDG A**

Date : 04/21/23	Drawn By : ALB
Revised :	Project No. 023030
Stamp	Sheet No.

**A9.1**








E1 DEMOLITION FLOOR PLAN - BLDG A  
1/4" = 1'-0" @ FULL SIZE

#### DEMOLITION PLAN NOTES

- REMOVE ALL (E) FLOORING AND RESILIENT WALL BASE, U.O.N.
- PRESERVATION OF ADJACENT OR EXISTING CONSTRUCTION:
  - AVOID DAMAGE TO EXISTING BUILDING, SIDEWALKS, CURBS, PAVING AND LANDSCAPING.
  - PATCH, REPAIR, OR REPLACE ANY ITEMS DAMAGED, OR AS DIRECTED BY THE PROPERTY OWNER.
  - PROTECT ALL (E) WINDOWS TO REMAIN.
- PRIOR TO CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE PLACED WITH THE RESPONSIBILITY OF NOTIFYING THE ARCHITECT OF ANY EXISTING DAMAGE TO THE BUILDING, SITE IMPROVEMENTS, ETC. FAILURE TO DO SO SHALL PLACE THE CONTRACTOR WITH THE SOLE RESPONSIBILITY OF SUCH DAMAGE.
- REFER TO HAZARDOUS MATERIALS REPORT. CONTRACTOR TO NOTIFY ARCHITECT AND OWNER IF ADDITIONAL SUSPECT ASBESTOS CONTAINING MATERIALS ARE DISCOVERED THAT ARE NOT IDENTIFIED IN THE REPORT. TESTING TO BE PERFORMED PRIOR TO IMPACT.
- DO NOT REMOVE LOAD BEARING BUILDING ELEMENTS. IF WALL SHEATHING OR LOAD BEARING ELEMENTS ARE DISCOVERED AND NOT INDICATED ON THESE PLANS TO REMAIN, NOTIFY THE ARCHITECT IMMEDIATELY.
- SALVAGE DEMOLISHED ELEMENTS AS DIRECTED BY THE BUILDING OWNER/TENANT.
- MAKE CLEAN STRAIGHT PLUMB/LEVEL CUTS AND REMOVE BUILDING ELEMENTS TO THE NEAREST SEAM, JOINT OR OTHER NATURAL BREAK POINT WHENEVER POSSIBLE. WHERE NEW WORK INTERFACES WITH DEMOLISHED OR CUT BUILDING ELEMENTS, MAKE CUTS AND REMOVALS IN A WAY THAT NEW WORK FITS WITH EXISTING TO ENSURE THAT THE SEVERAL PARTS FIT TOGETHER AND UPON COMPLETION THE NEW WORK WILL MATCH THE SURROUNDING SIMILAR SURFACES.
- LOCATE, IDENTIFY, DISCONNECT AND SEAL OR CAP OFF PLUMBING, ELECTRICAL, AND MECHANICAL SYSTEMS FOR SAFETY. TO PREVENT BUILDING DAMAGE AND PROTECTION OF ITEMS TO REMAIN.
  - WHERE PLUMBING FIXTURES ARE DEMOLISHED, PIPING SERVICES TO BE PERMANENTLY CAPPED BEHIND FINISH SURFACES.
- PROVIDE TEMPORARY HEATING OF BUILDING FOR FREEZE PROTECTION IF REMOVAL OR TEMPORARY SHUTDOWN OF MECHANICAL SYSTEMS COULD CREATE THE POTENTIAL FOR FREEZING.
- PROVIDE PROTECTION FOR BUILDING OCCUPANTS AND THE PUBLIC THAT MAY OCCUPY ADJACENT AREAS.
- MAINTAIN WEATHER TIGHTNESS AND SECURITY OF BUILDING DURING WORK.
- PROVIDE ALL NECESSARY SHORING.
- VERIFY EXISTING CONDITIONS REPORT ANY DISCREPANCIES IMMEDIATELY TO ARCHITECT.
- COORDINATE DEMOLITION EXTENTS AND LOCATIONS WITH NEW CONSTRUCTION DRAWINGS.
- INFILL WALL OPENINGS WHERE EXISTING MECHANICAL PIPING OR ELECTRICAL CONDUIT WORK ARE REMOVED TO MATCH EXISTING.
- REMOVE UNUSED OR ABANDONED WALL OR CEILING MOUNTED ITEMS SUCH AS, BUT NOT LIMITED TO CONDUITS, CONTROL DEVICES OR EQUIPMENT SUPPORTS.
- SEE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- SEE SPECIFICATIONS FOR ADDITIONAL NOTES.

#### DEMOLITION PLAN LEGEND

-  (E) DOOR TO REMAIN
-  (E) WALL TO REMAIN
-  (E) COLUMN, PROTECT.
-  REMOVE (E) DOOR & FRAME, U.O.N
-  REMOVE (E) WALL

#### DRAWING REVISIONS

#	Date	Description
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#### PERMIT SET

#### FACILITY OFFICE T1 BEAVERTON SCHOOL DISTRICT

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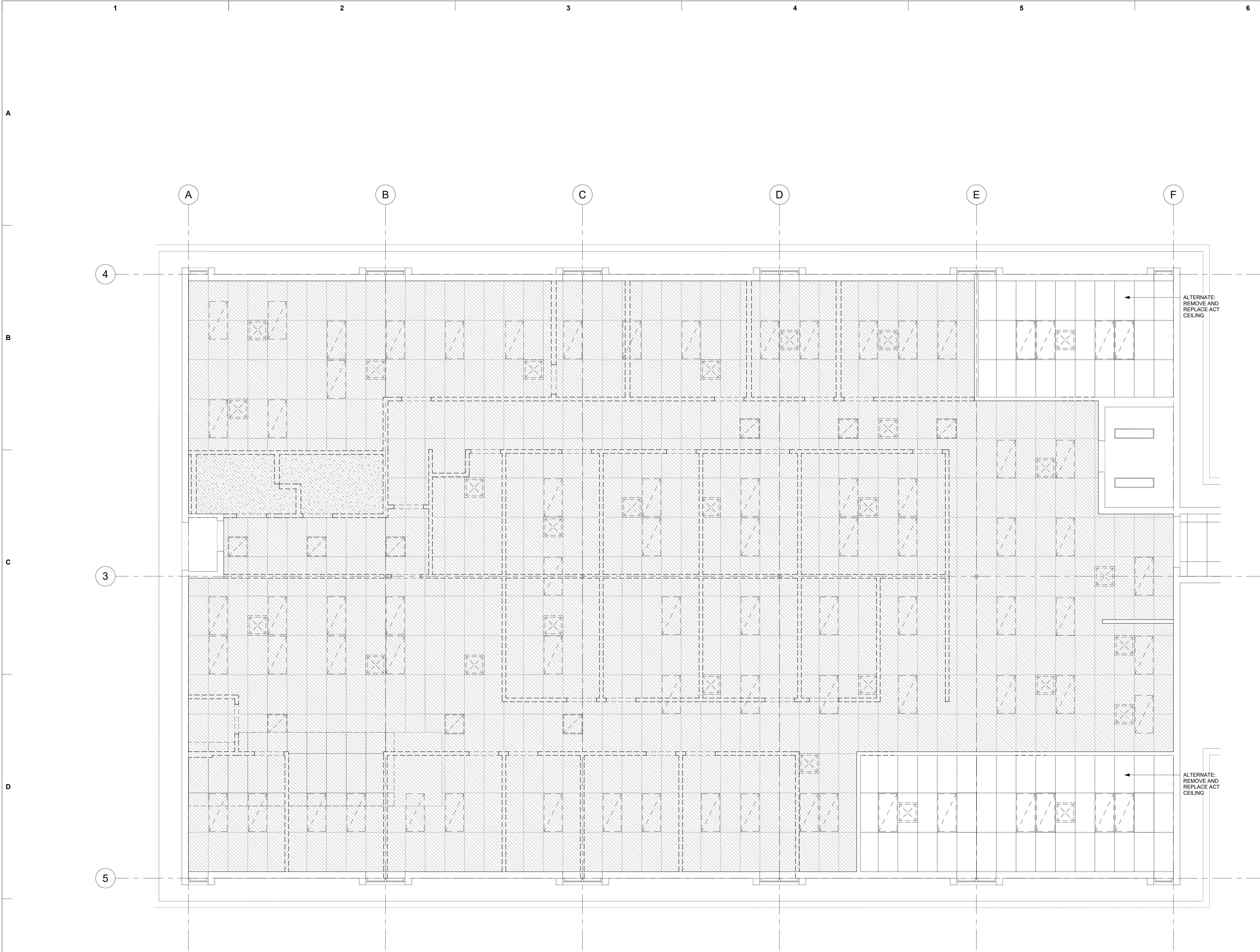
Drawing Title:  
**DEMOLITION FLOOR PLAN -  
BLDG A**

Date :	04/21/23	Drawn By :	ALB
Revised :		Project No.	023030
Stamp		Sheet No.	

AD2.1

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E1 DEMOLITION REFLECTED CEILING PLAN - BLDG A

DEMOLITION GENERAL NOTES

- A. REMOVE ALL (E) FLOORING AND RESILIENT WALL BASE, U.O.N.
- B. PRESERVATION OF ADJACENT OR EXISTING CONSTRUCTION:
  - AVOID DAMAGE TO EXISTING BUILDING, SIDEWALKS, CURBS, PAVING AND LANDSCAPING.
  - PATCH, REPAIR, OR REPLACE ANY ITEMS DAMAGED, OR AS DIRECTED BY THE PROPERTY OWNER.
  - PROTECT ALL (E) WINDOWS TO REMAIN.
  - PROTECT (E) WOOD BASE/BASEBOARD AT INTERIOR WALLS TO REMAIN.
  - (E) SPECIALTY EQUIPMENT TO BE RELOCATED ARE SHOWN IN (AS) ELEVATIONS.
- C. PRIOR TO CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE PLACED WITH THE RESPONSIBILITY OF NOTIFYING THE ARCHITECT OF ANY EXISTING DAMAGE TO THE BUILDING, SITE IMPROVEMENTS, ETC. FAILURE TO DO SO SHALL PLACE THE CONTRACTOR WITH THE SOLE RESPONSIBILITY OF SUCH DAMAGE.
- D. REFER TO HAZARDOUS MATERIALS REPORT. CONTRACTOR TO NOTIFY ARCHITECT AND OWNER IS ADDITIONAL SUSPECT ASBESTOS CONTAINING MATERIALS ARE DISCOVERED THAT ARE NOT IDENTIFIED IN THE REPORT. TESTING TO BE PERFORMED PRIOR TO IMPACT.
- E. DO NOT REMOVE LOAD BEARING BUILDING ELEMENTS. IF WALL SHEATHING OR LOAD BEARING ELEMENTS ARE DISCOVERED AND NOT INDICATED ON THESE PLANS TO REMAIN, NOTIFY THE ARCHITECT IMMEDIATELY.
- F. SALVAGE DEMOLISHED ELEMENTS AS DIRECTED BY THE BUILDING OWNER/TENANT.
- G. MAKE CLEAN STRAIGHT, PLUMB/LEVEL CUTS AND REMOVE BUILDING ELEMENTS TO THE NEAREST SEAM, JOINT OR OTHER NATURAL BREAK POINT WHEREVER POSSIBLE. WHERE NEW WORK INTERFACES WITH DEMOLISHED OR CUT BUILDING ELEMENTS, MAKE CUTS AND REMOVALS IN A WAY THAT NEW WORK FITS WITH EXISTING TO ENSURE THAT THE SEVERAL PARTS FIT TOGETHER AND UPON COMPLETION THE NEW WORK WILL MATCH THE SURROUNDING SIMILAR SURFACES.
- H. LOCATE, IDENTIFY, DISCONNECT AND SEAL OR CAP OFF PLUMBING, ELECTRICAL, AND MECHANICAL SYSTEMS FOR SAFETY, TO PREVENT BUILDING DAMAGE AND PROTECTION OF ITEMS TO REMAIN.
  - WHERE PLUMBING FIXTURES ARE DEMOLISHED, PIPING SERVICES TO BE PERMANENTLY CAPPED BEHIND FINISH SURFACES.
- I. PROVIDE TEMPORARY HEATING OF BUILDING FOR FREEZE PROTECTION IF REMOVAL OR TEMPORARY SHUTDOWN OF MECHANICAL SYSTEMS COULD CREATE THE POTENTIAL FOR FREEZING.
- J. PROVIDE PROTECTION FOR BUILDING OCCUPANTS AND THE PUBLIC THAT MAY OCCUPY ADJACENT AREAS.
- K. MAINTAIN WEATHER TIGHTNESS AND SECURITY OF BUILDING DURING WORK.
- L. PROVIDE ALL NECESSARY SHORING.
- M. VERIFY EXISTING CONDITIONS REPORT ANY DISCREPANCIES IMMEDIATELY TO ARCHITECT.
- N. COORDINATE DEMOLITION EXTENTS AND LOCATIONS WITH NEW CONSTRUCTION DRAWINGS.
- O. INFILL WALL OPENINGS WHERE EXISTING MECHANICAL, PIPING OR ELECTRICAL CONDUIT WORK ARE REMOVED TO MATCH EXISTING.
- P. REMOVE UNUSED OR ABANDONED WALL OR CEILING MOUNTED ITEMS SUCH AS, BUT NOT LIMITED TO CONDUITS, CONTROL DEVICES OR EQUIPMENT SUPPORTS.
- Q. SEE MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- R. SEE SPECIFICATIONS FOR ADDITIONAL NOTES.

DEMOLITION RCP LEGEND

- REMOVE (E) SUSPENDED ACT CEILING AND (E) GRID
- KEEP (E) SUSPENDED ACT CEILING AND (E) GRID
- REMOVE (E) GYPSUM CEILING
- REMOVE (E) LIGHT FIXTURE
- REMOVE (E) SUPPLY DIFFUSER (V/F)
- REMOVE (E) RETURN DIFFUSER (V/F)

DRAWING REVISIONS

#	Date	Description

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Drawing Title:

DEMOLITION REFLECTED  
CEILING PLAN - BLDG A

Date : 04/21/23

Drawn By : Author

Revised :

Project No. 023030

Stamp

Sheet No.

AD6.1

BLRB ARCHITECTS, P.S.



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DEMOLITION NOTES

A

THE EXISTING CONDITIONS SHOWN WERE TAKEN FROM AVAILABLE RECORD INFORMATION. FIELD VERIFY ALL CONDITIONS THAT MAY AFFECT CONSTRUCTION. IF ANY DISCREPANCIES ARE DISCOVERED, NOTIFY THE ENGINEER IN WRITING AND REQUEST DIRECTION PRIOR TO COMMENCING WORK.

EXISTING LIGHT FIXTURES SHALL BE CAREFULLY REMOVED (DO NOT DAMAGE) AND RETURNED TO THE OWNER.

ANY AND ALL EQUIPMENT HAVING ELECTRICAL CONNECTIONS THAT REQUIRE DISCONNECTING AND/OR RE-CONNECTING AS A RESULT OF CONSTRUCTION SHALL BE INCLUDED AS A PART OF THIS CONTRACT.

THE EXISTING ELECTRICAL DEVICES, CONDUIT, AND/OR EQUIPMENT THAT FOR ANY REASON OBSTRUCTS CONSTRUCTION SHALL BE RELOCATED UNLESS OTHERWISE NOTED. LOCATION IS TO BE AS CLOSE AS POSSIBLE TO THE ORIGINAL LOCATION.

ALL CIRCUITS, CONDUIT AND WIRE THAT ARE NOT TO REMAIN IN SERVICE SHALL BE REMOVED BACK TO THE FIRST ACCESSIBLE JUNCTION BOX WHERE IT SHALL BE TIED OFF AND LABELED AS SPARE WITH CIRCUIT NUMBER INDICATED.

REMOVE ALL ABANDONED WIRE AND CABLEING.

GENERAL NOTES

SYMBOLS/LEGENDS ARE PROVIDED FOR REFERENCE PURPOSES ONLY. THE SYMBOLS REPRESENT THE TYPE OF DEVICES THAT MAY BE REQUIRED IN THE WORK. QUANTITIES AND LOCATIONS ARE AS SHOWN ON THE PLAN SHEETS.

PROVIDE 3/4" CONDUIT & #12 CONDUCTORS UNLESS NOTED OTHERWISE. PROVIDE ONE NEUTRAL CONDUCTOR FOR EACH UNGROUNDED CONDUCTOR OF SINGLE PHASE LINE-NEUTRAL BRANCH CIRCUITS. DO NOT SHARE NEUTRAL CONDUCTORS.

EACH FEEDER AND BRANCH CIRCUIT CONDUIT SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NFPA 70, ARTICLE 250.

ALL ELECTRICAL EQUIPMENT IN PORTIONS OF THE BUILDING NOT BEING REMODELED SHALL BE LEFT IN WORKING CONDITION. RESTORE ANY CIRCUITS INTERRUPTED.

ALL NEW LIGHT FIXTURES AND FIXTURES IN AREAS ADJACENT DEMOLITION & CONSTRUCTION AREAS ARE TO BE THOROUGHLY CLEANED IMMEDIATELY PRIOR TO NOTICE OF SUBSTANTIAL COMPLETION.

THE FOLLOWING IS PART OF THIS PROJECT AND ALL COSTS PERTAINING THERETO SHALL BE INCLUDED IN THE BASE BID:

NEW ELECTRICAL EQUIPMENT AND APPARATUS SHALL BE COORDINATED AND CONNECTED INTO THE EXISTING SYSTEM AS REQUIRED.

POWER WIRING AND CABLE INSTALLATIONS SHALL BE CONCEALED ABOVE ACCESSIBLE CEILINGS AND IN WALLS. EXPOSED WIRING SHALL BE INSTALLED IN APPROVED SURFACE METAL RACEWAY WHERE INDICATED.

WHERE EXISTING CONDUITS ARE INDICATED FOR REUSE, FIELD VERIFY INTEGRITY OF REUSED RACEWAYS PRIOR TO INSTALLATION OF CONDUCTORS. PROVIDE NEW RACEWAYS WHERE EXISTING ARE UNUSABLE.

LOCATIONS OF ALL WALL MOUNTED DEVICES SUCH AS SWITCHES, RECEPTACLES, AND OUTLETS ARE SHOWN DIAGRAMMATICALLY. DETERMINE EXACT DEVICE LOCATIONS IN FIELD; COORDINATE INSTALLATIONS WITH EXISTING CASEWORK, DOORS AND RELITES.

PROVIDE PENETRATIONS THROUGH WALLS, FLOORS, AND CEILINGS AS REQUIRED. PROVIDE SUITABLE FIRE RATED MATERIALS AND SEAL ALL CEILING, FLOOR, AND WALL PENETRATIONS TO MATCH FIRE RATING OF SURFACES PENETRATED.

LIGHTING AND RECEPTACLE NOTES

LIGHTING SYSTEMS SHALL BE PROVIDED WITH CONTROLS AS ZONED ON THE LIGHTING PLANS. SWITCHING AND DIMMING ZONES ARE INDICATED ADJACENT TO EACH FIXTURE.

MANUAL CONTROLS SHALL ALLOW OCCUPANTS TO UNIFORMLY REDUCE ILLUMINATION LEVELS AT LEAST 50%, EXCEPTION: CORRIDORS, RESTROOMS, LOBBIES, MECHANICAL, ELECTRICAL, AND INFORMATION TECHNOLOGY (IDF) ROOMS CONTROLLED BY OCCUPANCY SENSORS.

LUMINAIRES PROVIDING MEANS OF EGRESS ILLUMINATION AND HAVING BOTH NORMAL AND EMERGENCY POWER SOURCES SHALL BE CONTROLLED BY A COMBINATION OF UL 924 LISTED EMERGENCY RELAYS AND OCCUPANCY SENSORS THAT ENABLES THE LIGHTING TO BE SHUT OFF WHEN THE AREAS SERVED ARE UNOCCUPIED AND AUTOMATICALLY ILLUMINATES IN THE EVENT OF NORMAL POWER SOURCE FAILURE.

THE MAXIMUM LIGHTING POWER THAT MAY BE CONTROLLED FROM A SINGLE SWITCH OR AUTOMATIC CONTROL SHALL NOT EXCEED THAT WHICH IS PROVIDED BY A 20 AMPERE CIRCUIT LOADED TO NOT MORE THAN 80 PERCENT.

PROVIDE FUNCTIONAL TESTING OF AUTOMATIC LIGHTING CONTROLS. SUBMIT WRITTEN PROCEDURES FOR FUNCTIONAL TESTING OF ALL AUTOMATIC CONTROLS WITH DESCRIPTION OF THE EXPECTED SYSTEM RESPONSE.

STRUCTURED CABLE SYSTEM PATHWAY NOTES

SYSTEM CABLING PATHWAYS SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT VERSION OF TIA-568.

MODIFICATIONS TO EXISTING BUILDING ANCILLARY LOW-VOLTAGE SYSTEMS INCLUDING, BUT NOT LIMITED TO, NETWORK, WIRELESS ACCESS POINTS, PUBLIC ADDRESS, ELECTRONIC ACCESS CONTROL, INTRUSION DETECTION SYSTEMS TO BE A DELEGATED DESIGN. CONDUITS, SPACES, AND PATHWAYS INDICATED ON DRAWINGS ARE SHOWN TO CONVEY DESIGN INTENT. EXACT SYSTEM REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, CABLING, CONNECTORS, HEAD-ENDS/EQUIPMENT, AND DEVICES ARE TO BE DETERMINED AND PROVIDED BY THE DESIGN-BUILD CONTRACTOR AND COORDINATED WITH BEAVERTON SCHOOL DISTRICT IT PERSONNEL. GC TO DEVELOP AND SUBMIT SHOP DRAWING(S) FOR REVIEW BY DESIGN TEAM.

CABLE SUPPORTS SHALL NOT BE PLACED MORE THAN 5' APART.

CABLE "SAG" BETWEEN SUPPORTS SHALL NOT EXCEED 12".

CABLE LENGTHS SHALL NOT EXCEED 295', INCLUDING PATCH CORD LENGTHS AT COMM ROOMS AND WORKSTATIONS. IF A CABLE LENGTH WILL EXCEED 295', INFORM THE ICT ENGINEER IMMEDIATELY BEFORE INSTALLATION.

CABLE MINIMUM BEND RADIUS AND MAXIMUM PULLING TENSION SHALL NOT BE EXCEED. REFER TO MANUFACTURER'S REQUIREMENTS AND REFERENCE DOCUMENTS.

CABLES SHALL BE INSTALLED IN CONTINUOUS LENGTHS FROM ORIGIN TO DESTINATION (NO SPLICES).

CABLES SHALL BE INSTALLED ABOVE FIRE-SPRINKLER SYSTEMS AND SUPPORTED INDEPENDENTLY OF SPRINKLER PIPING OR ANY ANCILLARY EQUIPMENT OR HARDWARE. THE CABLE SYSTEM AND SUPPORT HARDWARE SHALL BE INSTALLED SO THAT IT DOES NOT OBSCURE ANY VALVES, FIRE ALARM CONDUIT, BOXES, OR OTHER CONTROLLED DEVICES.

CABLES SHALL NOT BE ATTACHED TO CEILING GRID OR LIGHTING FIXTURE WIRES.

AT NO POINT SHALL CABLES REST ON ACOUSTIC CEILING GRIDS OR PANELS, OR BE ATTACHED TO ANY PORTION OF THE BUILDING MECHANICAL OR PIPING SYSTEMS. PROVIDE COMPLETE CABLE SUPPORT PATHWAYS CONSISTING OF CONDUIT, RACEWAY, LADDER RACK, CABLE TRAY, J-HOOKS OR BRIDAL RINGS.

ANY CABLE DAMAGED DURING INSTALLATION OR EXCEEDING RECOMMENDED INSTALLATION PARAMETERS SHALL BE REPLACED PRIOR TO FINAL ACCEPTANCE AT NO ADDITIONAL COST TO THE OWNER.

CABLES AND PATHWAYS SHALL BE CLEARLY LABELED IN ACCORDANCE WITH TIA-606-C.

PROVIDE "VELCRO" TYPE HOOK AND LOOP/TIE WRAPS FOR BUNDLING / MANAGING HORIZONTAL AND BACKBONE CABLING. PLACE EVERY 9" FOR CABLE RUNS IN CEILING AND EVERY 18" AFTER ENTERING TELECOMMUNICATIONS ROOM. PLASTIC "ZIP-TIES" SHALL NOT BE PERMITTED WITHIN THE STRUCTURED CABLING SYSTEM.

HORIZONTAL UTP PAIR UNTWIST AT THE TERMINATION SHALL NOT EXCEED 0.5".

PROVIDE (1) 2" CONDUIT SLEEVE WITH INSULATED BUSHINGS FOR PENETRATION INTO OFFICES, EXAM ROOMS, ETC., AS REQUIRED TO FACILITATE CABLE ROUTING WHETHER SHOWN ON DRAWINGS OR NOT.

ALL PENETRATIONS MUST BE FIRE-STOPPED IN ACCORDANCE OF THE NFPA, NEC AND TO THE SATISFACTION OF THE AHJ.

ALL TELECOMMUNICATION ROOMS AND PATHWAYS SHALL ADHERE TO TIA-569-D.

ALL TELECOMMUNICATION BONDING AND GROUNDING SHALL ADHERE TO TIA-607-D.

NOT ALL PARTS SHOWN. ENSURE A COMPLETE WORKING INSTALLATION INCLUDING MISCELLANEOUS INSTALLATION MATERIALS, CONNECTORS, CONSUMABLES, AND APPURTENANCES.

ABBREVIATIONS

@

AIR CONDITIONING(ER)

A (AMP)

AMPERE

ADJ

ADJUSTABLE

AFF

ABOVE FINISHED FLOOR

AHU

AUTHORITY HAVING JURISDICTION

AIC

AMPERE INTERRUPTING CAPACITY

ALT

ALTERNATE

ANN

ANNUNCIATOR

ARCH

ARCHITECT/ARCHITECTURAL

ATS

AUTOMATIC TRANSFER SWITCH

AUTO

AUTOMATIC

AUX

AUXILIARY

AWG

AMERICAN WIRE GAUGE

BKBD

BACKBOARD

BKR

BREAKER

BLDG

BUILDING

C

CONDUIT

CAP

CAPACITY

CB

CIRCUIT BREAKER

CKT

CIRCUIT

CLS

CEILING

CLR

CLEAR

COL

COLUMN

COM

COMMUNICATION

CPS

CYCLES PER SECOND

CT

CURRENT TRANSFORMER

CTL

CONTROL

CU

COPPER

DC

DIRECT CURRENT

DISC SW

DISCONNECT SWITCH

DISC

DISCONNECT

DN

DOWN

DWG

DRAWING

E

EXIST, EAST

EDH

ELECTRIC DUCT HEATER

EF

EXHAUST FAN

EGC

EQUIPMENT GROUNDING CONDUCTOR

EL

ELEVATION

ELEC

ELECTRIC(AL)

ELEV

ELEVATOR

EM

EMERGENCY

EMT

ELECTRICAL METALLIC TUBING

ENCL

ENCLOSURE

ENTR

ENTRANCE

EPO

EXPLOSION PROOF

EP

EMERGENCY POWER OFF

EQUIP/EP

EQUIPMENT

EWC

ELECTRIC WATER COOLER

EW

ELECTRIC WATER HEATER

EXH

EXHAUST

EXT

EXTERIOR

EXIST

EXISTING

F

FAHRENHEIT/FUSE

FA

FIRE ALARM

FAA

FIRE ALARM ANNUNCIATOR

FAP

FIRE ALARM PANEL

FC

FOOTCANDLE

FCL

FAN COIL UNIT

FD

FIRE DAMPER

FDR

FEEDER

FXIT

FIXTURE

FLA

FULL LOAD AMPS

FSD

FIRE/SMOKE DAMPER

GEC

GROUNDING ELECTRODE CONDUCTOR

GEN

GENERATOR

GFI

GROUND FAULT CIRCUIT INTERRUPTER

GFR

GROUND FAULT RELAY

H

HEIGHT

HOA

HAND OFF AUTOMATIC

HOR

HORIZONTAL

HP

HORSEPOWER

HR

HOUR

HT

HEIGHT

HW

HOT WATER

HZ

HERTZ

IBC

INTERNATIONAL BUILDING CODE

IC

INTERCOM

IES

ILLUMINATING ENGINEERING SOCIETY

IEE

INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS

IG

ISOLATED GROUND

IMC

INTERMEDIATE METAL CONDUIT

IN

INCH

JB

JUNCTION BOX

KOML

THOUSAND CIRCULAR MILLS

KVA

KILOVOLT AMPERES

KVAR

KILOVOLT AMPERES REACTIVE

KW

KILOWATT

KWH

KILOWATT HOUR

LBS

POUNDS

LF

LINEAR FEET (FEET)

LRA

LOCKED ROTOR AMPS

LS

LIFE SAFETY

LT

LIGHT

LTG

LIGHTING

LV

LOW VOLTAGE

MAG

MAGNETIC

MAN

MANUAL

MAT

MATERIAL

MAX

MAXIMUM

MCA

MINIMUM CIRCUIT AMPACITY

MCB

MAIN CIRCUIT BREAKER

MECH

MECHANICAL

MEZZ

MEZZANINE

MG

MOTOR GENERATOR

MIN

MINIMUM

MISC

MISCELLANEOUS

MLO

MAIN LUG ONLY

MOCP

MAXIMUM OVERCURRENT

PROTECTION

MTD

MAGNETIC STARTER

MOUNTED

MTG

MOUNTING

MTR

MOTOR

N

NORTH

NOT APPLICABLE

NA

NORTH

NC

NORMALLY CLOSED

NEC

NATIONAL ELECTRICAL CODE

NEMA

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

NEISC

NATIONAL ELECTRICAL SAFETY CODE

NEUT

NEUTRAL

NFPA

NATIONAL FIRE PROTECTION ASSOC.

NIC

NOT IN CONTRACT

NO

NORMALLY OPEN

NTS

NOT TO SCALE

OC

ON CENTER

OFCI

OWNER FURNISHED CONTRACTOR

INSTALLED

OFI

OWNER FURNISHED OWNER

OL

INSTALLED OVERLOAD

OS

OPTIONAL STANDBY

P

PRIMARY

PA

PUBLIC ADDRESS

PAR

PARALLEL

PB

PULL BOX

PE

PHOTO ELECTRIC

PF

POWER FACTOR

PH

PHASE

PV

POST INDICATOR VALVE

PNL

PANEL

POC

POINT OF CONNECTION

PWR

POWER

QTY

QUANTITY

R (R)

RELOCATE (D)

RAD

RADIUS

RECPT

RECEPTACLE

REF

REFRIGERATOR

RLA

RATED LOAD AMPS

RPM

REVOLUTIONS PER MINUTE

S

SOUTH

SC

SECURITY

SD

SMOKE DETECTOR

SECT

SECTION

SF

SUPPLY FAN

SHT

SHEET

SPEC

SPECIFICATION

SPL

SPECIAL

SQ

SQUARE

STOR

STORAGE

SPD

SURGE PROTECTION DEVICE

SW

SWITCH

SWBD

SWITCHBOARD

SYM

SYMMETRICAL

SYS

SYSTEM

T

THERMOSTAT

TB

TERMINAL BOX

TC

TIME CLOCK

TEL

TELEPHONE

TV

TELEVISION

TYP

TYPICAL

UFC

UNIFORM FIRE CODE

UG

UNDERGROUND

UH

UNIT HEATER

UL

UNDERWRITERS LABORATORIES

UN

UNLESS OTHERWISE NOTED

UV

UNIT VENTILATOR

V

VOLT

VAV

VARIABLE AIR VOLUME

VEL

VELOCITY

VM

VOLTMETER

VOL

VOLUME

W

WATT, WEST

W

WITH

W/O

WITHOUT

WH

WATER HEATER

WHM

WATTHOUR METER

WP

WEATHERPROOF

X

REACTANCE

XFMR

TRANSFORMER

XMTR

TRANSMITTER

Z

IMPEDANCE

&

AND

IE:

THAT IS

ELECTRICAL BID ALTERNATE SUMMARY

BID ALTERNATE

BASE BID SCOPE OF WORK

ALTERNATE SCOPE OF WORK

#1 - OFFICE A136

RETAIN EXISTING POWER, LIGHTING (& CONTROLS), AND DATA OUTLETS. EXTEND EXISTING CIRCUIT(S) TO RELOCATED PANELS. PROVIDE HORIZONTAL CABLING TO EXISTING DATA OUTLETS.

PROVIDE NEW RECEPTACLES, LIGHTING (& CONTROLS), DATA OUTLETS AS SHOWN ON SHEET E4.01

#2 - MEETING ROOM A107, STORAGE RM A108

RETAIN EXISTING POWER, LIGHTING (& CONTROLS), AND DATA OUTLETS. EXTEND EXISTING CIRCUIT(S) TO RELOCATED PANELS. PROVIDE HORIZONTAL CABLING TO EXISTING DATA OUTLETS.

PROVIDE NEW RECEPTACLES, LIGHTING (& CONTROLS), DATA OUTLETS AS SHOWN ON SHEET E4.01

#3 - ELECTRICAL PANELS A1, A2

RETAIN PANELBOARD AND REINSTALL IN NEW LOCATION AS SHOWN ON E4.01. PROVIDE BREAKERS AS REQUIRED.

REPLACE PANELBOARD LIKE-FOR-LIKE. 400A, 3P4W, 208Y/120V, AL BUSSING, 42 SPACE, FEED-THRU ARRANGEMENT, FLUSH-MOUNTED

DRAWING REVISIONS

Δ

Date

Description

Δ

PERMIT SET

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GENERAL NOTES, ABBREVIATIONS AND SHEET INDEX

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ELECTRICAL SHEET INDEX

E0.00

GENERAL NOTES, ABBREVIATIONS AND SHEET INDEX

E0.01

ELECTRICAL LEGEND

E2.00

ELECTRICAL SCHEDULES

E01.01

ELECTRICAL DEMOLITION - BLDG A

E3.01

ELECTRICAL LIGHTING - BLDG A

E4.01

ELECTRICAL POWER & SIGNAL - BLDG A

E4.11

ELECTRICAL POWER & SIGNAL - ROOF PLAN

REGISTERED PROFESSIONAL

95614PE

THOMAS

Expires: 12/31/23

E0.00

BLRB ARCHITECTS, P.S.

4/19/2023 10:02:20 AM



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SYMBOLS LEGEND - GENERAL	
SYMBOL	DESCRIPTION
	CONDUIT CONCEALED IN CEILING SPACE OR IN WALL. PROVIDE MINIMUM 3/4" WITH #12 AWG CONDUCTORS AND DEDICATED NEUTRAL EACH CIRCUIT UNLESS OTHERWISE NOTED ON PLAN. PROVIDE EQUIPMENT GROUNDING CONDUCTORS SIZED PER NFPA 70.
	FLEXIBLE METAL CONDUIT
	CONDUIT - CONCEALED IN OR UNDER FLOOR
	CONDUIT - ROUTED UNDERGROUND
	LOW-VOLTAGE WIRING (CLASS B)
	CONDUIT OR CABLE VERTICAL DOWN
	CONDUIT OR CABLE VERTICAL UP
	CONDUIT STUB - TERMINATE WITH BUSHING OR CAP IF UNDERGROUND
	BREAK LINE
	CONDUIT SEAL
	EXPANSION FITTING
	CABLE TRAY
	BRANCH CIRCUIT NUMBERS
	PANEL DESIGNATION
	HOME RUN TO SOURCE OF SUPPLY
	CONDUCTORS - CONNECTED
	CONDUCTORS - NOT CONNECTED
	JUNCTION BOX
	PULLBOX - SIZE AS INDICATED OR AS REQUIRED BY CODE
	HANDHOLE
	MANHOLE

SYMBOLS LEGEND - POWER	
SYMBOL	DESCRIPTION
	480Y/277V, 3Ø, 4W PANELBOARD
	208Y/120V, 3Ø, 4W PANELBOARD
	EQUIPMENT CABINET - TYPE AS NOTED
	PANELBOARD
	TRANSFER SWITCH ( AUTO )
	AMPERES SHORT CIRCUIT AVAILABLE (SYMMETRICAL)
	FEEDER TAG - REFER TO FEEDER SCHEDULE

SYMBOLS LEGEND - GROUNDING	
SYMBOL	DESCRIPTION
	GROUND CONNECTION
	GROUND ROD
	GROUND WELL
	AIR TERMINAL

SYMBOLS LEGEND - WIRING DEVICES	
SYMBOL	DESCRIPTION
	SINGLE-POLE WALL SWITCH MOUNT SWITCHES AT 48" AFF. TO TOP, UON.
	WALL SWITCH - SUBSCRIPT 2 = 2-POLE 3 = 3-WAY 4 = 4-WAY K = KEYPAD LV = LOW-VOLTAGE OS = OCCUPANCY SENSOR TYPE OP = OCCUPANCY/PHOTOELECTRIC TYPE WP = WEATHERPROOF LOWER CASE LETTER INDICATES SWITCHING GROUP MOUNT SWITCHES AT 48" AFF. TO TOP, UON. ANY COMBINATION OF SWITCH TYPES CAN BE USED (IE: 3K + 3-WAY KEYPAD SWITCH) SPECIAL PURPOSE RECEPTACLE TYPE AS SHOWN ON PLANS SINGLE SERVICE OR COMBINATION FLUSH MOUNTED FLOOR BOX. REFER TO FLOOR PLANS FOR DEVICES. SINGLE SERVICE OR COMBINATION FLUSH FLOOR POKE THRU. REFER TO FLOOR PLANS FOR DEVICES. POWER/COMM POLE - FLOOR TO CEILING. SURFACE MOUNTED FLOOR BOX (PEDESTAL TYPE). PUSH BUTTON SIMPLEX RECEPTACLE NEMA 5-20R, +18" AFF UON NEMA 5-20R, +18" AFF UON TAMPER RESISTANT, NEMA 5-20R, +18" AFF UON SWITCHED RECEPTACLE, NEMA 5-20R, +18" AFF UON ISOLATED GROUND, NEMA 5-20R, +18" AFF UON NEMA 5-20R W/ GROUND FAULT CIRCUIT INTERRUPTER, +18" AFF UON SPLIT WIRED, NEMA 5-20R, +18" AFF UON CONTROLLED, NEMA 5-20R, +18" AFF UON NEMA 5-20R, ABOVE COUNTER, COORDINATE WITH CASEWORK SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS. NEMA 5-20R WITH GROUND FAULT CIRCUIT INTERRUPTER, ABOVE COUNTER, COORDINATE WITH CASEWORK SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS. TAMPER RESISTANT, NEMA 5-20R WITH GROUND FAULT CIRCUIT INTERRUPTER, ABOVE COUNTER, COORDINATE WITH CASEWORK SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS. NEMA 5-20R, CONNECTED TO EMERGENCY CIRCUIT, +18" AFF UON NEMA 5-20R ON EMERGENCY CIRCUIT MOUNTED ABOVE COUNTER, COORDINATE WITH CASEWORK SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS. CEILING-MOUNTED, NEMA 5-20R NEMA 5-20R WITH USB CHARGER - (2) TYPE A USB PORTS TAMPER RESISTANT, NEMA 5-20R WITH USB CHARGER - (2) TYPE A USB PORTS

SYMBOLS LEGEND - LIGHTING	
SYMBOL	DESCRIPTION
	L1 - LIGHT FIXTURE IDENTIFIER - REFER TO LUMINAIRE SCHEDULE A-1 - PANEL NAME - CIRCUIT NUMBER Z-XXX-1 - SWITCH DESIGNATION - MIDDLE DIGITS REFER TO ROOM NUMBER - END DIGITS REFER TO SWITCH LEG EM - SUBSCRIPT (IF APPLICABLE) * IF LABEL IS ORIENTED HORIZONTALLY A SLASH WILL SEPARATE THIS INFORMATION. EX: RL1 / A-1 / a / NL SHADING INDICATES LUMINAIRE ON EMERGENCY CIRCUIT OR WITH BATTERY BACKUP 2x4 LUMINAIRE 1x4 LUMINAIRE 2x2 LUMINAIRE LINEAR LUMINAIRE WALL WASH LUMINAIRE WALL MOUNTED LUMINAIRE UNDER-CABINET LUMINAIRE STRIP LUMINAIRE DOWNLIGHT WALL WASH DOWNLIGHT LUMINAIRE WALL MOUNTED LUMINAIRE WALL MOUNTED DIRECTIONAL LUMINAIRE PENDANT MOUNTED LUMINAIRE TRACK LIGHT - LENGTH AS INDICATED ON PLANS NUMBER OF LUMINAIRES AS SHOWN POLE-MOUNTED LUMINAIRE - NUMBER OF LUMINAIRES AS SHOWN ON PLANS STREET LIGHT IN-GROUND LANDSCAPE LUMINAIRE ILLUMINATED EXIT SIGN - SINGLE FACE ARROW INDICATES DIRECTION OF EGRESS, UNIVERSAL MOUNT ILLUMINATED EXIT SIGN - DOUBLE FACE ARROW INDICATES DIRECTION OF EGRESS, UNIVERSAL MOUNT BATTERY-POWERED EMERGENCY WALLPACK COMBINATION BATTERY POWERED EMERGENCY WALLPACK AND ILLUMINATED EXIT SIGN TIME CLOCK - TYPE AS NOTED LIGHTING CONTROL SYSTEM POWER PACK SWITCH BYPASS DEVICE ILLUMINATION CONTROL STATION OCCUPANCY SENSOR CEILING MOUNTED WITH POWER PACK - DUAL TECHNOLOGY TYPE UNLESS NOTED: U = ULTRASONIC P = PASSIVE INFRARED OCCUPANCY SENSOR WALL MOUNTED PHOTOELECTRIC CONTROL CEILING MOUNTED PHOTOELECTRIC CONTROL WALL MOUNTED

SYMBOLS LEGEND - FIRE ALARM	
SYMBOL	DESCRIPTION
	FIRE ALARM SYSTEM CONTROL PANEL ESR - ELEVATOR STATUS/RECALL FAC - FIRE ALARM COMMUNICATOR FACP - FIRE ALARM CONTROL PANEL FAA OR FARA - FIRE ALARM ANNUNCIATOR HVA - HVAC OR EXHAUST STAIRWELL PRESSURIZATION LCD - FIRE ALARM LCD ANNUNCIATOR
	FIRE ALARM FLOW SWITCH
	HILO AIR PRESSURE SWITCH
	VALVE SUPERVISORY SWITCH
	POST INDICATOR VALVE SUPERVISORY SWITCH
	FIRE ALARM PULL STATION
	FIRE/SMOKE DAMPER
	SMOKE DAMPER
	FIRE ALARM HORN ONLY
	FIRE ALARM HORN STROBE, XX = CANDELA RATING
	FIRE ALARM SPEAKER ONLY
	FIRE ALARM SPEAKER STROBE, XX = CANDELA RATING
	FIRE ALARM STROBE ONLY - WALL, XX = CANDELA RATING
	FIRE ALARM STROBE ONLY - CEILING, XX = CANDELA RATING
	FIRE ALARM BELL
	FIRE FIGHTER PHONE JACK
	HEAT DETECTOR, RATE OF RISE AND FIXED TEMPERATURE UON F - FIXED TEMPERATURE R - RATE OF RISE ONLY RC - RATE COMPENSATION
	SMOKE DETECTOR, PHOTOELECTRIC UON BT - BEAM TRANSMITTER BR - BEAM RECEIVER I - IONIZATION
	FIRE ALARM DUCT SMOKE DETECTOR WITH SAMPLING TUBE
	FLAME DETECTOR
	GAS DETECTOR
	ADDRESSABLE INPUT MODULE
	ADDRESSABLE OUTPUT MODULE
	ISOLATION MODULE
	FIRE ALARM EQUIPMENT CONNECTION
	RELAY BLOCK

SYMBOLS LEGEND - AUDIO VISUAL / CLOCK	
SYMBOL	DESCRIPTION
	TV OUTLET
	PAGING SYSTEM SPEAKER - CEILING RECESSED MOUNTED. LOWER CASE DENOTES ZONE GROUP (TYP.)
	PAGING SYSTEM SPEAKER - CEILING SURFACE MOUNTED. LOWER CASE DENOTES ZONE GROUP (TYP.)
	PAGING SYSTEM SPEAKER - WALL RECESSED MOUNTED. LOWER CASE DENOTES ZONE GROUP (TYP.)
	PAGING SYSTEM SPEAKER - WALL SURFACE MOUNTED. LOWER CASE DENOTES ZONE GROUP (TYP.)
	CLOCK - WALL SURFACE MOUNTED
	CLOCK - RECESSED MOUNTED

SYMBOLS LEGEND - COMMUNICATIONS	
SYMBOL	DESCRIPTION
	WALL MOUNTED DATA DEVICE. MOUNT AT 18" AFF UNLESS OTHERWISE NOTED. NUMBER INDICATES QUANTITY OF PORTS.
	MUD RING TO ACCOMMODATE PASS THRU FOR AUDIOVISUAL CABLING MOUNT AT 18" AFF UNLESS OTHERWISE NOTED. NUMBER INDICATES NUMBER OF GANG SPACES.
	CEILING MOUNTED DATA DEVICE. COORDINATE WITH ARCHITECTURAL CEILING PLANS FOR MOUNTING HEIGHTS UNLESS OTHERWISE NOTED. NUMBER INDICATES QUANTITY OF PORTS.
	WIRELESS ACCESS POINT LOCATION. PROVIDE CABLING IN THE QUANTITY INDICATED WITH 10'-0" SERVICE LOOP IN ACCESSIBLE CEILING SPACE.
	VIDEO PROJECTOR LOCATION. PROVIDE CABLING IN THE QUANTITY INDICATED WITH 10'-0" SERVICE LOOP IN ACCESSIBLE CEILING SPACE.
	DATA DEVICE MOUNTED IN FLOOR BOX. NUMBER INDICATES QUANTITY OF PORTS. FLOOR BOX PROVIDED BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
	DATA DEVICE MOUNTED IN POKE-THRU. NUMBER INDICATES QUANTITY OF PORTS. POKE-THRU PROVIDED BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
	FLOOR SURFACE MOUNTED DATA DEVICE. NUMBER INDICATES QUANTITY OF PORTS.
	DATA DEVICE MOUNTED POWER/COMM POLE. NUMBER INDICATES QUANTITY OF PORTS. POWER/COMM POLE PROVIDED BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

DRAWING REVISIONS		
Δ	Date	Description

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Drawing Title:			
ELECTRICAL LEGEND			
Date: 4/21/23		Drawn By: Author	
Revised:		Project No: 023030	
Stamp		Sheet No.	
		E0.01	



## PANEL A2 SCHEDULE

LOCATION: **IDF A109** FED FROM: **A1** VOLTAGE: **120/208 Wye 3-PH, 4-WIRE**  
 TYPE: **BOLT-ON**  
 GROUNDING: **EQUIPMENT GROUND BUS** MOUNTING: **RECESSED**  
 SKIRTS: **NONE**  
 A.I.C. RATING:

400 A MLO													
C K T #	ITEM	N O T E	A M P S	P O L E	A	B	C	P O L E	A M P S	N O T E	ITEM	C K T #	
1	EXTERIOR SIGN		20 A	1	500 VA	4800 VA		2	60 A		WH-1	2	
3	WH-2		50 A	2		3600 VA	4800 VA		--	--	--	4	
5	--	--	--	--				3600 VA	400 VA	1	20 A	ACCESS CONTROL CABINETS	6
7												8	
9												10	
11												12	
13												14	
15												16	
17												18	
19												20	
21												22	
23												24	
25												26	
27												28	
29												30	
31												32	
33												34	
35												36	
37												38	
39												40	
41												42	
Total Load:					5255 VA	8400 VA	4800 VA						
Total Amps:					45 A	72 A	33 A						
Load Classification		Connected Load		Demand Factor		Estimated Demand		Panel Totals					
Equipment		400 VA		100.00%		400 VA							
Heating		16800 VA		100.00%		16800 VA		Total Conn. Load: 17651 VA					
Lighting		500 VA		125.00%		625 VA		Total Est. Demand: 17765 VA					
								Total Conn. Current: 49 A					
								Total Est. Demand Current: 49 A					
Notes:													

## PANEL A1 SCHEDULE

LOCATION: **IDF A109** FED FROM: **A1** VOLTAGE: **120/208 Wye 3-PH, 4-WIRE**  
 TYPE: **BOLT-ON**  
 GROUNDING: **EQUIPMENT GROUND BUS** MOUNTING: **RECESSED**  
 SKIRTS: **NONE**  
 A.I.C. RATING:

400 A MLO													
C K T #	ITEM	N O T E	A M P S	P O L E	A	B	C	P O L E	A M P S	N O T E	ITEM	C K T #	
1	LTS - NORTH		20 A	1	582 VA	312 VA		1	20 A		LTS - CENTER NORTH	2	
3	LTS - CENTER SOUTH		20 A	1		733 VA						4	
5	RCPT - OFFICE A136		20 A	1			1080 VA	1260 VA	1	20 A	RCPT - MAIN HALL NE	6	
7	RCPT - MAIN HALL NW		20 A	1	1260 VA	720 VA			1	20 A	RCPT - MAIN HALL W	8	
9	RCPT - DRINKING FOUNTAIN		20 A	1		600 VA	1080 VA		1	20 A	RCPT - MAIN HALL SW	10	
11	RCPT - KITCHENETTE		20 A	1			720 VA	1200 VA	1	20 A	RCPT - KITCHENETTE MICROWAVE	12	
13	RCPT - KITCHENETTE REF		20 A	1	720 VA	900 VA			1	20 A	RCPT - MEETING RM A102 / STORAGE A7	14	
15	RCPT - MAIN HALL SE		20 A	1		540 VA	180 VA		1	20 A	RCPT - IDF	16	
17	RCPT - IDF		20 A	1			180 VA	720 VA	1	20 A	RCPT - MAIN HALL COLUMNS	18	
19	RTU-1		40 A	3	3369 VA	3369 VA			3	40 A	RTU-2	20	
21	--	--	--	--		3369 VA	3369 VA		--	--	--	22	
23	--	--	--	--			3369 VA	3369 VA	--	--	--	24	
25	RTU-3		50 A	3	4212 VA	1040 VA			2	20 A	RTU-12	26	
27	--	--	--	--		4212 VA	1040 VA		--	--	--	28	
29	--	--	--	--			4212 VA	2500 VA	1	30 A	WATER HEATER - JANITOR	30	
31					996 VA			1	15 A		ECH-01	32	
33	VAV-01		25 A	1		1997 VA	1501 VA		1	20 A	VAV-02	34	
35	VAV-03		60 A	1			5000 VA	2000 VA	1	25 A	VAV-05	36	
37	VAV-06		15 A	1	1000 VA	3500 VA			2	40 A	VAV-04	38	
39	EF-01		15 A	1		100 VA	3500 VA		--	--	--	40	
41	EF-02		15 A	1			100 VA	360 VA	1	20 A	RCPT - ROOFTOP GFCI	42	
Total Load:					27231 VA	30621 VA	30070 VA						40
Total Amps:					227 A	259 A	254 A						42
Load Classification		Connected Load		Demand Factor		Estimated Demand		Panel Totals					
Equipment		400 VA		100.00%		400 VA							
HVAC		53629 VA		100.00%		53629 VA		Total Conn. Load: 87922 VA					
Heating		17796 VA		100.00%		17796 VA		Total Est. Demand: 87681 VA					
Lighting		2098 VA		125.00%		2610 VA		Total Conn. Current: 244 A					
Mechanical		2500 VA		100.00%		2500 VA		Total Est. Demand Current: 243 A					
Receptacle		11520 VA		93.40%		10760 VA							
Notes:													

## MECHANICAL EQUIPMENT CONNECTION SCHEDULE

NO.	VOLTAGE	PHASES	CONDUIT SIZE	WIRE SIZE	DISC/FUSE/POLES	NOTES
ECH-01	120	1	3/4"	2#12, 1#12 GND	20/1	
ECH-02	120	1	3/4"	2#12, 1#12 GND	20/1	
EF-01	120	1	3/4"	2#12, 1#12 GND	20/1	
EF-02	120	1	3/4"	2#12, 1#12 GND	20/1	
RTU-1	208	3	3/4"	(3)#8 CU, (1)#10 GND	EXIST	
RTU-2	208	3	3/4"	(3)#8 CU, (1)#10 GND	EXIST	
RTU-3	208	3	1"	(3)#8 CU, (1)#10 GND	EXIST	
RTU-12	208	1	3/4"	(2)#12 CU, (1)#10 GND	EXIST	
VAV-01	120	1	3/4"	(2)#10 CU, (1)#10 GND	30/25/1	
VAV-02	120	1	3/4"	(2)#12 CU, (1)#10 GND	30/25/1	
VAV-03	120	1	3/4"	(2)#4 CU, (1)#10 GND	60/60/1	
VAV-04	208	1	3/4"	(2)#8 CU, (1)#10 GND	60/40/2	
VAV-05	120	1	3/4"	(2)#10 CU, (1)#10 GND	30/25/1	
VAV-06	120	1	3/4"	(2)#12 CU, (1)#12 GND	30/15/1	
WH-1	208	1	3/4"	(2)#4 CU, (1)#10 GND	INTEGRAL	
WH-2	208	1	3/4"	(2)#8 CU, (1)#10 GND	INTEGRAL	

## SEQUENCE OF OPERATIONS CONTROLS MATRIX

FLOOR/LEVEL	NAME	ROOM NUMBER	ASHRAE 90.1 SPACE CLASSIFICATION	MANUAL ON / MANUAL OFF SWITCH	MANUAL ON / VACANCY OFF	PARTIAL AUTOMATIC ON TO 50% OUTPUT USING OCCUPANCY SENSORS	4 BUTTON SWITCH- ON, DIMMING SCALING OFF	PARTIAL AUTOMATIC OFF TO 50% OCCUPANCY SENSORS	AUTOMATIC FULL OFF USING OCCUPANCY SENSORS	TIMECLOCK SCHEDULED ON/OFF	NOTES
INTERIOR											
	OFFICE	A136	Office Enclosed and <=250 ft^2	X		X	X		X		
	VAULT	A8	Storage Room >=50 ft^2	X		X			X		
	IDF	A105	Electrical/Mechanical Room	X							
	STORAGE	A7	Storage Room >=50 ft^2	X		X			X		
	MEETING ROOM	A102	Conference/Meeting/Multipurpose...	X	X		X		X		
	RESTROOM	A3	Restroom in all other occupancies						X		4
	RESTROOM	A4	Restroom in all other occupancies						X		4
	RESTROOM	A5	Restroom in all other occupancies						X		4
	RESTROOM	A6	Restroom in all other occupancies						X		4
	CUST. A	A2	Restroom in all other occupancies						X		
	MAIN PRESENTATION HALL	A1	All Other Classroom/Lecture...	X		X	X		X		

1.) OR APPROVED EQUAL.  
 2.) CONFIRM TIMECLOCK SETPOINTS WITH OWNER.  
 3.) 20 MINUTE TIMEOUT FOR ALL OCCUPANCY SENSORS.  
 4.) OCCUPANCY SENSOR IN RESTROOM TO BE 100% OUTPUT AUTO-ON WITH 20 MINUTE TIMEOUT TO OFF.  
 5.) OCCUPANCY SENSOR IN STAIRWELL TO BE 100% OUTPUT AUTO-ON WITH 20 MINUTE TIMEOUT TO 50% OUTPUT.  
 6.) T.I. SPACES TO BE DESIGNED BY OTHERS. SCOPE TO PROVIDE MINIMAL CONTROL MEANS FOR WORK LIGHTING ONLY.

## LUMINAIRE SCHEDULE

TYPE MARK	DESCRIPTION	MOUNTING	FIXTURE WATTAGE	LUMENS OUTPUT	EFFICACY	VOLTAGE	MANUFACTURER	REMARKS (ACCESSORIES / OPTIONS)	QUANTITY
R1	RECESSED 2x4 LUMINAIRE	RECESSED	31 W	4470	146	120 V	LITHONIA - STAKS 2x4 AL06 SWW7	SET TO 40K / LOW LUMEN	57
R2	RECESSED 2x2 LUMINAIRE	RECESSED	26 W	3683	141	120 V	LITHONIA - STAKS 2x2 AL03 SWW7	SET TO 40K / LOW LUMEN	7
X1	EXIT SIGN	CEILING	3 W	NA	NA	120 V	LITHONIA - ERXG		2

## LIGHTING CONTROL STATIONS

CONTROL STATION DESIGNATION	ZONES CONTROLLED	BUTTON NUMBER	FUNCTION	LABEL	NOTES
\$OS	ALL	1	ALL ON	ON	1
		2	ALL OFF	OFF	
\$OSD	ALL	1	ALL ON/HOLD DIM UP	A	1
		2	ALL OFF/HOLD DIM DOWN	V	
\$LVB	ALL	1	ALL ON/HOLD DIM UP	ON	1
		2	ALL OFF/HOLD DIM DOWN	OFF	
\$LVC	ALL	1	ALL ON	ON	1
	ALL	2	ALL OFF	OFF	
	a	3	a- HOLD DIM UP	A	
	a	4	a- HOLD DIM DOWN	V	
	b	5	b- HOLD DIM UP	A	
	b	6	b- HOLD DIM DOWN	V	

GENERAL NOTES:  
 1.) OCCUPANCY SENSOR AUTO-ON TO 50%, 20 MINUTE VACANCY TIMEOUT.

## DRAWING REVISIONS

Rev	Date	Description
1		

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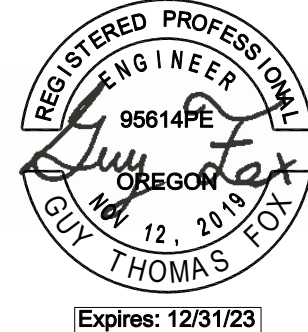
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Drawing Title:  
ELECTRICAL SCHEDULES

Date : 4/21/23  
 Drawn By : Author

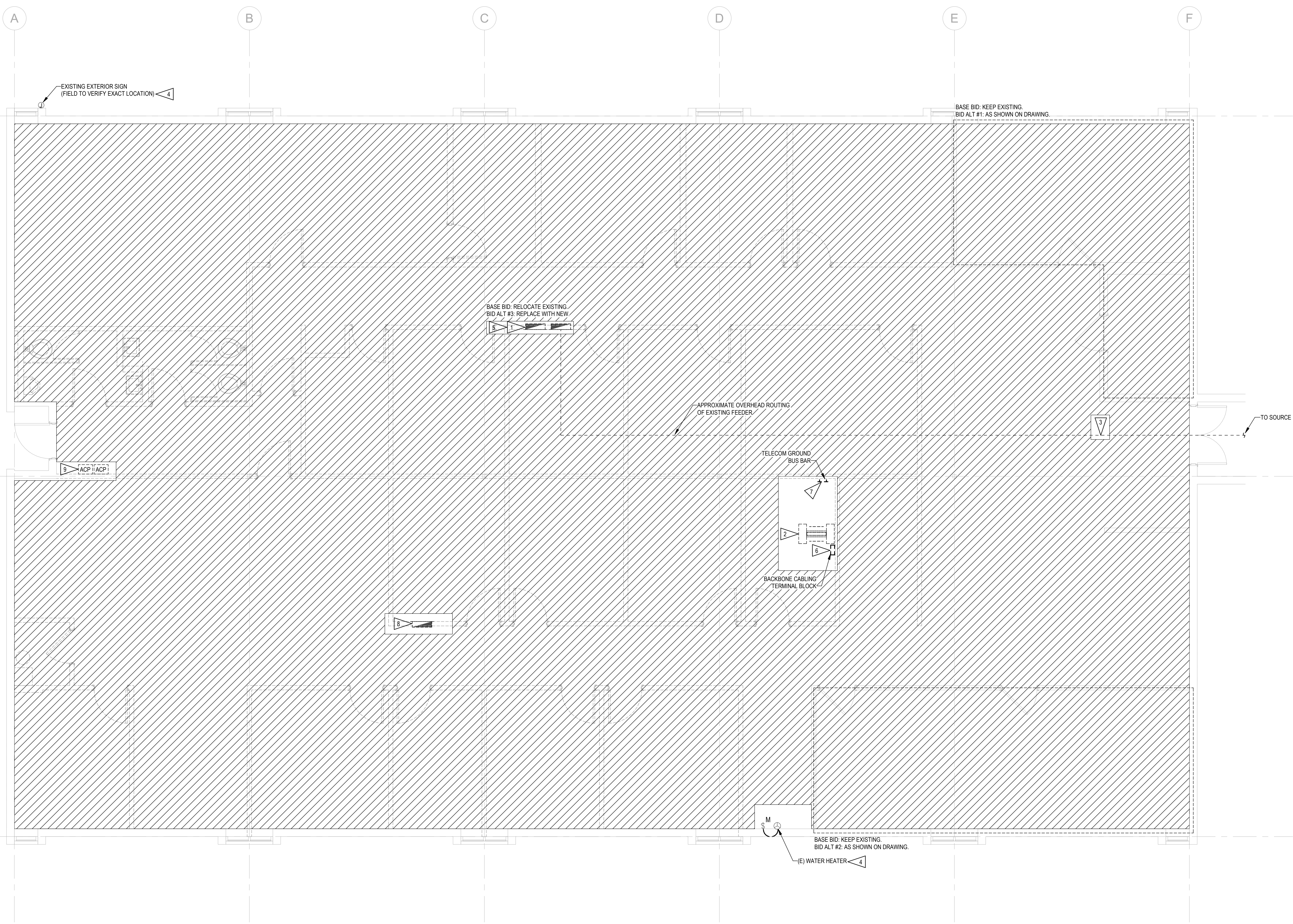
Revised :  
 Project No: 023030

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 Sheet No.



E2.00





1. REFER TO SHEET E0.00 FOR ELECTRICAL DEMOLITION NOTES.
2. WIRING DEVICES, DATA OUTLETS, AND ELECTRICAL CONNECTIONS WITHIN HATCHED REGION SHOWN SHALL BE DEMOLISHED IN THEIR ENTIRETY UNLESS OTHERWISE NOTED.
3. DISCONNECT AND RETAIN FIRE ALARM DEVICES AND CABLEING FOR REINSTALLATION WHERE FEASIBLE. PROVIDE CABLEING AS REQUIRED TO MAINTAIN ANY DOWNSTREAM DEVICES AND SYSTEM FUNCTIONALITY ELSEWHERE IN THE FACILITY THROUGHOUT THE DURING OF CONSTRUCTION. THE FIRE ALARM SYSTEM MODIFICATIONS SHALL BE A DELEGATED DESIGN PROVIDED BY THE GENERAL CONTRACTOR.


2. REMOVE PANELBOARD FROM WALL AND RETAIN FOR REINSTALLATION. SEE E4.01 FOR MORE INFORMATION.
3. REMOVE EXISTING TIE RACK, 12 VERTICAL WIRE MANAGERS, AND OVERHEAD CABLES AND RETAIN FOR REINSTALLATION. DEMOLISH ALL HORIZONTAL CABLING AND TELECOM OUTLETS. SEE E4.01 FOR MORE INFORMATION.
4. DISCONNECT FEEDER CONDUCTORS AT PANELBOARD AND PULL BACK TO TERMINAL BLOCK AND PREPARE FOR REINSTALLATION. INTERCEPT EXISTING FEEDER CONDUIT ROUTED ABOVE CEILING AND PREPARE FOR REINSTALLATION.
5. ELECTRICAL CONNECTIONS IN THIS SPACE TO REMAIN.
6. IDENTIFY AND SAVE OFF CIRCUITS TO BE RETAINED FOR REUSE. COORDINATE EXIST CIRCUITS TO REMAIN WITH OWNER AND EXISTING FLIGHT CONDITIONS.
7. DISCONNECT BACKBONE CABLING FROM TERMINAL BLOCK AND RETAIN BLOCK FOR REINSTALLATION. PREP CABLE FOR REINSTALLATION.
8. DISCONNECT GROUNDING CONDUCTORS AND RETAIN TELECOM GROUND BUS BAR FOR REINSTALLATION.
9. DEMOLISH PANELBOARD AND ASSOCIATED FEEDER BACK TO SOURCE. DISCONNECT EXIST CIRCUITS TO BE RETAINED FOR REUSE. COORDINATE EXIST CIRCUITS TO REMAIN WITH OWNER AND EXISTING FLIGHT CONDITIONS. AS-BUILT PANEL A1 AND A2 SCHEDULES AS REQUIRED.
10. REMOVE ACCESS CONTROL CABINETS AND RETAIN FOR REINSTALLATION. DISCONNECT EXISTING CABLING AND 120V CIRCUIT, COIL IN CEILING, AND PREP FOR REINSTALLATION.

#	Date	Description
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Drawing Title:

# ELECTRICAL DEMOLITION - BLDG A

Date : 4/21/23

Revised :

Stamp

REGISTERED PROFESSIONAL  
ENGINEER  
95614PE  
OREGON  
GUY FOX  
No. 12, 2019  
Expires: 12/31/23

Drawn By : Author

Project No. 023030

Sheet N

# ED1.01



- SHEET NOTES**
- REFER TO SHEET E0.00 FOR ELECTRICAL BID ALTERNATE SUMMARY TABLE.
  - PROVIDE BRANCH CIRCUIT CONDUIT/CONDUCTORS FROM RELOCATED PANELS TO EACH FIXTURE.
  - COORDINATE LOCATION AND MOUNTING HEIGHT OF ALL ELECTRICAL DEVICES WITH ARCHITECTURAL SHEETS AND ACTUAL FIELD CONDITIONS.
  - FIXTURES, WIRING DEVICES, AND CONTROLS ARE NEW UNLESS OTHERWISE NOTED.
  - FOR FIXTURES ASSIGNED FOR EMERGENCY EGRESS FURNISH WITH INTEGRAL BATTERY BACKUP.
- FLAG NOTES**
- SWITCH ZONING TO BE COORDINATED WITH OWNER SUCH THAT NO MORE THAN 2500 SQ FT ARE CONTROLLED IN ACCORDANCE WITH OESC § 4.1.1.a. CONTRACTOR TO SUBMIT CONTROL SHOP DRAWINGS FOR REVIEW OF ZONING.
  - EXTEND EXISTING CIRCUIT SERVING ROOM FIXTURE/CONTROLS AND CONNECT TO NEW CIRCUIT A1-1.

**DRAWING REVISIONS**

Δ	Date	Description
Δ		

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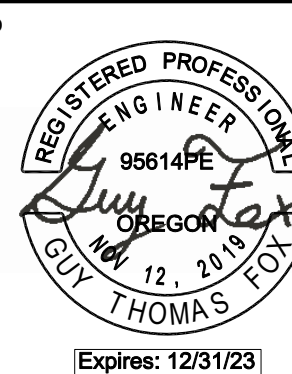
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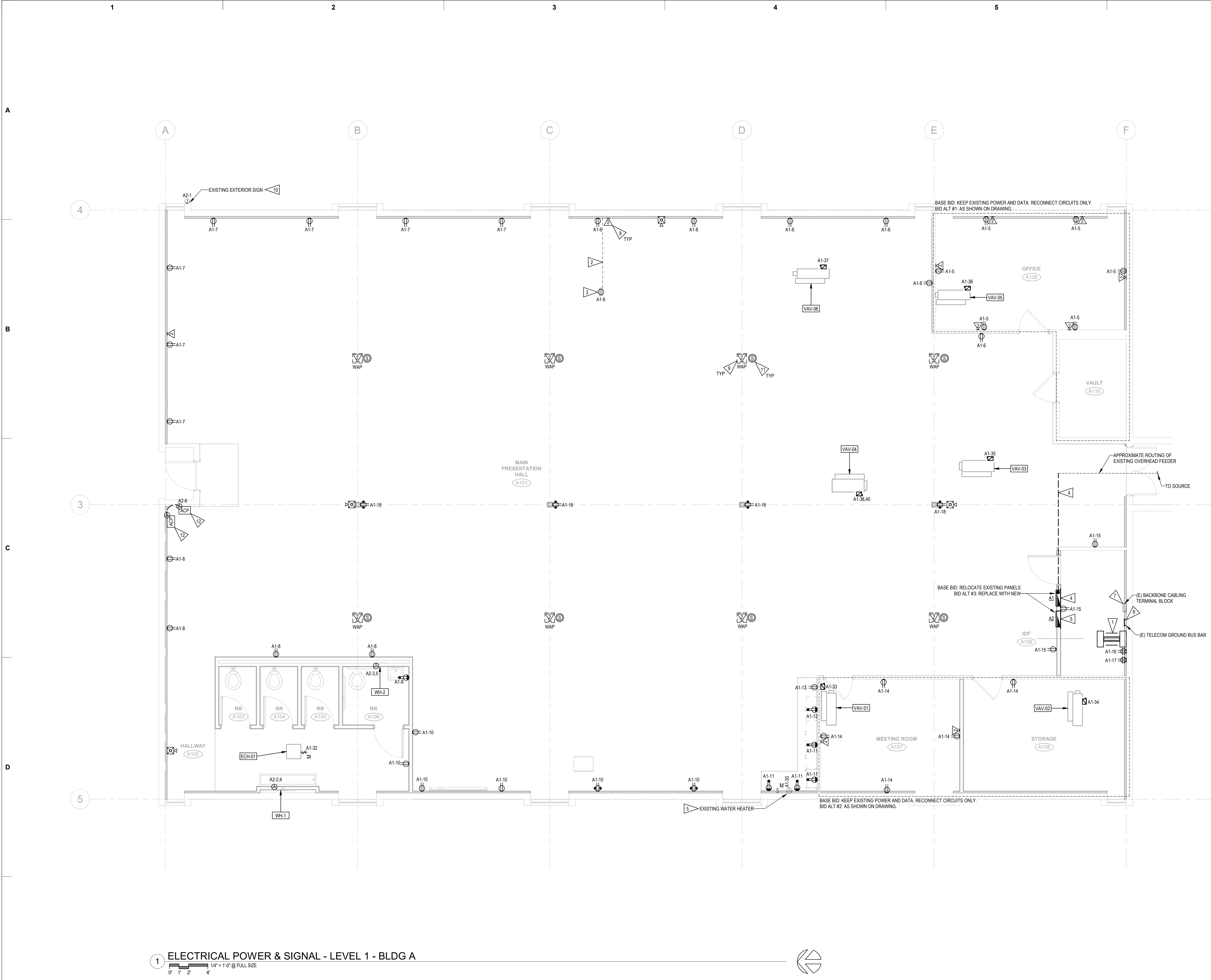
Drawing Title:  
**ELECTRICAL LIGHTING - BLDG A**

Date : 4/21/23	Drawn By : Author
Revised :	Project No. 023030
Stamp	Sheet No.



**E3.01**





### SHEET NOTES

- REFER TO SHEET E0.00 FOR ELECTRICAL BID ALTERNATE SUMMARY TABLE.
- PROVIDE BRANCH CIRCUIT CONDUIT/CONDUCTORS FROM RELOCATED PANELS TO EACH WIRING DEVICE.
- COORDINATE LOCATION AND MOUNTING HEIGHT OF ALL ELECTRICAL DEVICES WITH ARCHITECTURAL SHEETS AND ACTUAL FIELD CONDITIONS.
- WIRING DEVICES, DATA OUTLETS, AND ELECTRICAL CONNECTIONS ARE NEW UNLESS OTHERWISE NOTED.
- FIRE ALARM DEVICES SHOWN FOR REFERENCE ONLY. THE FIRE ALARM SYSTEM MODIFICATIONS SHALL BE A DELEGATED DESIGN PROVIDED BY THE GENERAL CONTRACTOR. REUSE THE EXISTING FIRE ALARM DEVICES/CABLING WHERE FEASIBLE. EXPAND THE EXISTING FIRE ALARM SYSTEM AS REQUIRED TO ACCOMMODATE ANY ADDITIONAL DEVICES. PROVIDE ANY ANCILLARY COMPONENTS AS NEEDED FOR A COMPLETE AND OPERATIONAL SYSTEM.

### FLAG NOTES

- REINSTALL 2-POST EQUIPMENT RACK, (2) VERTICAL WIRE MANAGERS, AND OVERHEAD LADDER RACK. COORDINATE WITH DISTRICT IT.
- PROVIDE WALL GROMMET AND ROUTE 1-1/2" CONDUIT TO CEILING GROMMET.
- PROVIDE CEILING MOUNT RECEPTACLE.
- RELOCATE PANELS TO THIS LOCATION. INTERCEPT AND RECONNECT EXISTING FEEDER. PERFORM MEGGER TEST OF CONDUCTOR INSULATION PER NETA AITS FROM NEW PANEL LOCATION BACK TO SOURCE AND NOTIFY ENGINEER OF RECORD IF ANY INSULATION RESISTANCE VALUES LESS THAN 100 MEGAOHMS ARE FOUND.
- RECONNECT EXISTING CIRCUITS TO REMAIN BACK TO PANEL. COORDINATE EXACT CIRCUITS WITH OWNER AND EXISTING FIELD CONDITIONS.
- REINSTALL EXISTING TELECOM GROUND BUS BAR. PROVIDE #6 GREEN/YELLOW TRACER BONDING CONDUCTOR TO CONDUITS, EQUIPMENT, AND RACK. PROVIDE #2 GREEN/YELLOW TRACER TELECOM BONDING CONDUCTOR FROM GROUND BAR TO NEAREST BUILDING GROUNDING ELECTRODE. COORDINATE WITH OWNER.
- REINSTALL EXISTING BACKBONE CABLING TERMINAL BLOCK. RE-ROUTE CABLING PATHWAY / RACEWAY OVER TO NEW IDF ROOM.
- ROUGH-IN 3/4" CONDUIT AND SINGLE GANG BACKBOX WITH MUDRING INTO ACCESSIBLE CEILING SPACE OF IDF FOR NETWORK CABLING.
- PROVIDE 3/4" CONDUIT AND CEILING-MOUNTED SINGLE GANG BACKBOX WITH MUDRING INTO ACCESSIBLE CEILING SPACE OF IDF FOR WAP. COORDINATE EXACT LOCATION WITH DISTRICT IT PRIOR TO ROUGH-IN.
- RECONNECT EXISTING EXTERIOR SIGN. LOCATION SHOWN FOR REFERENCE ONLY. FIELD TO VERIFY.
- PROVIDE 3/4" CONDUIT AND CEILING-MOUNTED SINGLE GANG BACKBOX WITH MUDRING INTO ACCESSIBLE CEILING SPACE OF IDF FOR PA SYSTEM SPEAKER. COORDINATE EXACT LOCATION WITH DISTRICT IT PRIOR TO ROUGH-IN.
- REINSTALL ACCESS CONTROL CABINET AND EXISTING HORIZONTAL CABLING/120V CIRCUIT. PROVIDE A MINIMUM OF (3) 3/4" CONDUITS FROM ACCESSIBLE CEILING SPACE TO CABINET. COORDINATE WITH DISTRICT IT PRIOR TO ROUGH-IN.

### DRAWING REVISIONS

Date	Description

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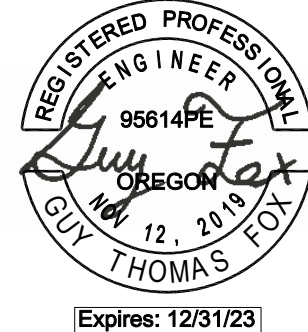
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Drawing Title:  
**ELECTRICAL POWER & SIGNAL -  
BLDG A**

Date : 4/21/23	Drawn By : Author
Revised :	Project No: 023030
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E4.01



**FLAG NOTES** 

1. RECONNECT EXISTING EQUIPMENT TO RELOCATED PANELS. PROVIDE CIRCUIT CONDUIT AND CONDUCTORS.

**DRAWING REVISIONS**

	Date	Description
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**PERMIT SET**

**FACILITY OFFICE TI**

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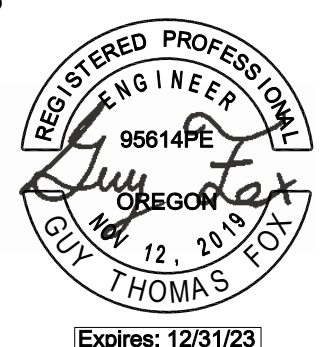
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Drawing Title:  
**ELECTRICAL POWER & SIGNAL - ROOF PLAN**

Date : 4/21/23	Drawn By : Author
Revised :	Project No: 023030
Stamp	Sheet No.



**E4.11**



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GENERAL NOTES

1. MATERIALS, METHODS, AND INSTALLATION SHALL COMPLY WITH THE PROVISIONS OF THE LATEST EDITION OF THE FOLLOWING CODES AS ADOPTED BY LOCAL AUTHORITIES HAVING JURISDICTION:  
2022 OREGON STRUCTURAL SPECIALTY CODE (OSCS)  
2022 OREGON MECHANICAL SPECIALTY CODE (OMSC)  
2021 OREGON PLUMBING SPECIALTY CODE (OPSC)  
2022 OREGON FIRE CODE (OFC)  
2021 OREGON ENERGY EFFICIENCY SPECIALTY CODE (OEECS)

2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE AND ADOPTED REGULATIONS INCLUDING BUT NOT LIMITED TO NATIONAL, CITY, STATE, LOCAL CODES AND ORDINANCES WHICH MAY BE IN EFFECT. ALL MECHANICAL MATERIALS, INSTALLATION PROCEDURES AND SYSTEM LAYOUTS SHALL BE APPROVED BY ALL APPLICABLE CODE ENFORCEMENT AUTHORITIES. THE MECHANICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FOR THIS INSTALLATION. PAY ALL ROYALTIES OR FEES REQUIRED IN CONNECTION WITH THE USE OF PATENTED DEVICES AND SYSTEMS.

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19. ALL CONTRACTORS SHALL PROVIDE CUTTING AND PATCHING FOR THEIR RESPECTIVE TRADES. ALL CONTRACTORS REMOVING OR RELOCATING ANY EQUIPMENT, PIPES, DUCTS, CONDUITS, ETC SHALL PATCH ALL SURFACES DISTURBED BY THIS WORK TO MATCH ADJACENT SURFACES.

20. CONTRACTOR IS RESPONSIBLE FOR THE PROPER CARE OF ALL OWNER'S EQUIPMENT AND/OR FURNISHINGS WHICH ARE REQUIRED TO BE TEMPORARILY REMOVED, STORED, OR RELOCATED. CONTRACTOR SHALL REPLACE, REPAIR, OR REIMBURSE OWNER FOR ALL DAMAGES TO SUCH PROPERTIES AT FULL REPLACEMENT VALUE AND EQUIVALENCY. CONTRACTOR SHALL ADVISE OWNER FOR DISPOSITION OF REMOVED EQUIPMENT AND/OR MATERIALS.

21. CONTRACTOR'S WORK MAY BE REQUIRED OUTSIDE OF THE DESIGNATED SPACE. ALL SYSTEMS BEING DEMOLISHED AND REMOVED, MODIFIED, AND/OR TERMINATED SHALL BE FIELD VERIFIED TO INSURE NO WORK PERFORMED, INSIDE OR OUTSIDE, OF THE DESIGNATED SPACE SHALL DISRUPT ANY SERVICE OR SYSTEMS OF ANY OTHER AREAS. IF ANY CONDITIONS ARISE THAT ARE NOT IDENTIFIED ON THE DRAWINGS, IMMEDIATE NOTIFICATION SHALL BE PROVIDED TO THE ENGINEER OR OWNER. NO WORK SHALL PROCEED WITHOUT APPROVALS FROM ENGINEER OR OWNER.

22. DO NOT CUT OR PENETRATE STRUCTURAL ELEMENTS WITHOUT PRIOR WRITTEN APPROVAL.

23. THE MECHANICAL CONTRACTOR SHALL MOUNT THE DUCT SMOKE DETECTOR. THE ELECTRICAL CONTRACTOR TO PROVIDE AND WIRE DUCT MOUNTED SMOKE DETECTOR. ELECTRICAL CONTRACTOR SHALL ALSO PROVIDE AND WIRE A REMOTE MONITORING KEY OPERATED TEST AND ALARM STATION FOR EACH DUCT SMOKE DETECTOR. THE REMOTE TEST ALARM STATION SHALL BE MOUNTED AS DIRECTED IN THE AREA OF THE SMOKE DETECTOR.

24. THE MECHANICAL CONTRACTOR TO PROVIDE ALL ROOF CURBS, EQUIPMENT RAILS, SUPPORTS, ROOF PORTALS AND ASSOCIATED EQUIPMENT TO ENSURE A COMPLETE INSTALLATION FOR NEW HVAC EQUIPMENT. MECHANICAL CONTRACTOR RESPONSIBLE TO PROVIDE EXACT LOCATIONS AND REVIEWED AND RELEASED EQUIPMENT SUBMITTALS OF ROOF CURBS, EQUIPMENT SUPPORTS, ROOF PORTALS, AND ASSOCIATED EQUIPMENT TO THE ARCHITECT. ALL ROOF PENETRATIONS, EQUIPMENT SUPPORTS, ROOF PORTALS AND ASSOCIATED EQUIPMENT SHALL BE INSTALLED BY ROOFING SUB-CONTRACTOR. ROOFING CONTRACTOR SHALL BE BONDED AND ALL WORK SHALL BE DONE SO AS NOT TO VOID ROOF WARRANTY. ROOFING CONTRACTOR SHALL PROVIDE BASE FLASHING, AND PROVIDE TEMPORARY WEATHER-PROOF COVERS UNTIL MECHANICAL CONTRACTOR INSTALLS NEW HVAC UNITS. MECHANICAL CONTRACTOR TO PROVIDE COUNTER FLASHING.

25. FURNISH TO ELECTRICAL CONTRACTOR ALL MOTOR STARTERS AND CONTROL DEVICES FOR MECHANICAL EQUIPMENT. ELECTRICAL CONTRACTOR SHALL INSTALL AND WIRE STARTER AND CONTROL EQUIPMENT FOR ALL MOTORS.

26. ALL HVAC EQUIPMENT CONTAINING COOLING (EVAPORATOR) COILS INCLUDING DOWN FLOW ROOF TOP UNITS SHALL HAVE CONDENSATE MONITORING FOR OVERFLOW PROTECTION FOR PRIMARY OR SECONDARY DRAIN PANS AS APPLICABLE. SUCH DEVICES SHALL BE LABELED TO COMPLY WITH UL983 AND SHALL SHUT DOWN COOLING SYSTEM AND SIGNAL BMS SYSTEM IF APPLICABLE.

27. ALL EXPOSED HORIZONTAL AND VERTICAL PIPING SHALL BE INSTALLED IN A NEAT ARRANGEMENT IN LOCATIONS WHICH ARE THE MOST INCONSPICUOUS. VERTICAL DROPS SHALL BE KEPT TO AN ABSOLUTE MINIMUM AND THEIR FINAL LOCATIONS SHALL BE COORDINATED AND RUN WITHIN CHASES, WALLS, OR SOFFITS WITH OTHER PLUMBING AND ELECTRICAL FEEDS. MECHANICAL CONTRACTOR SHALL REVIEW ARCHITECTURAL DRAWINGS FOR CHASE AND SOFFIT LOCATIONS TO COORDINATE ALL EXPOSED PIPING ROUTING. ALL SUCH LOCATIONS SHALL BE REVIEWED WITH ARCHITECT/ENGINEER PRIOR TO INSTALLATION.

ABBREVIATIONS

A  
ACU  
AFF  
AHU  
AL  
ARRGT  
ATM  
BC  
BOD  
BFF  
BFP  
BHP  
BLDG  
BOB  
BOD  
BOS  
BTUH  
CAP  
CC  
CD  
CFM  
CHR  
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CLG  
CNFGCL  
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COND  
CONC  
COMP  
CP  
COP  
CRU  
CCT  
CU FT  
CV  
C/CTR  
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CWR  
CWS  
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DB  
DCA  
DEG  
DF  
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DIA  
DMPR  
DN  
DS  
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EAT  
EER  
EF  
EFF  
EG  
EL  
EQUIP  
ESP  
EWT  
EXH  
EWC  
EXIST  
EXP  
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FD  
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FOT  
FPM  
FPS  
FSD  
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FV  
GA  
GAL  
GALV  
GPM  
H  
HC  
HD  
HEX  
HOA  
HP  
HPS  
HTG  
HW  
HWC  
HWP  
HWS  
HZ

AIR AMP  
AIR CONDITIONING UNIT  
ABOVE FINISHED FLOOR  
AIR HANDLING UNIT  
ALUMINUM, ACOUSTICAL LINING  
ARRANGEMENT  
ATMOSPHERE  
BLOWER COIL  
BACKDRAFT DAMPER  
BELOW FINISHED FLOOR  
BACKFLOW PREVENTER  
BRKHS HORSEPOWER  
BUILDING  
BOTTOM OF BEAM  
BOTTOM OF DUCT  
BOTTOM OF STEEL  
BRITISH THERMAL UNITS PER HOUR  
CAPACITY  
COOLING COIL  
CEILING DIFFUSER  
CUBIC FEET PER MINUTE  
CHILLED WATER RETURN  
CONTINUOUS WATER SUPPLY  
CAST IRON  
CEILING, COOLING  
CENTRIFUGAL  
CLEANOUT  
CONCRETE  
CONDENSATE  
CONDENSATE CONTROL  
COMPRESSOR  
COEFFICIENT OF PERFORMANCE  
CIRCULATING PUMP  
CONDENSATE RETURN UNIT  
CONDENSING UNIT  
CUBIC FEET  
CONSTANT VOLUME  
CONVERTER  
COLD WATER  
CONDENSER WATER RETURN  
CONDENSER WATER SUPPLY  
DECIBELS  
DRY BULB  
DOUBLE CHECK VALVE ASSEMBLY  
DEGREE  
DRINKING FOUNTAIN  
DE-IONIZED  
DIAMETER  
DAMPER  
DOWNSPOUT  
EXISTING  
EXHAUST AIR  
ENTERING AIR TEMPERATURE  
ENERGY EFFICIENCY RATING  
EXHAUST FAN  
EFFICIENCY  
EXHAUST GRILLE  
ELEVATION  
EQUIPMENT  
EXTERNAL STATIC PRESSURE  
ENTERING WATER TEMPERATURE  
EXHAUST  
ELECTRIC WATER COOLER  
EXISTING  
EXPANSION  
EXTERIOR, EXTERNAL  
FAHRENHEIT, FIRE LINE  
FIRE DAMPER, FLOOR DRAIN  
FIRE DEPARTMENT CONNECTION  
FULL LOAD AMPS  
FLOOR  
FILTER  
FLOW METER  
FLAT ON BOTTOM  
FLAT OVAL  
FLAT ON TOP  
FEET PER MINUTE  
FEET PER SECOND  
FIRE SMOKE DAMPER  
FEET, FAN TERMINAL  
FACE VELOCITY  
GAGE  
GALLONS  
GALVANIZED  
GALLONS PER MINUTE  
HUMIDIFIER, HEIGHT  
HOSE BIBB  
HEATING COIL  
HEAD  
HEAT EXCHANGE  
HAND-OFF-AUTOMATIC  
HORSEPOWER, HEAT PUMP  
HIGH PRESSURE STEAM  
HEATING  
HOT WATER  
HOT WATER CIRCULATING  
HOT WATER PUMP  
HEATING WATER RETURN  
HEATING WATER SUPPLY  
HERTZ

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INDIRECT DRAIN  
INVERT ELEVATION  
INTAKE HOOD  
INCH  
INITIAL  
INTERIOR  
INTEGRATED PART LOAD VALUE  
KILOWATT  
KILOWATT HOURS  
LENGTH  
LEAVING AIR TEMPERATURE  
POUND, LINEAR BAR  
POUNDS  
LINEAR DIFFUSER  
LEAVING WATER TEMPERATURE  
MAXIMUM  
THOUSAND BTU PER HOUR  
MINIMUM CIRCUIT AMPACITY  
MANUAL DAMPER  
MECHANICAL  
MANUFACTURER  
MINIMUM  
MAXIMUM OVER CURRENT PROTECTION  
MOTOR OPERATED DAMPER  
MOTOR  
NORMALLY CLOSED  
NEGATIVE  
NOT IN CONTRACT  
NUMBER, NORMALLY OPEN  
NOT TO SCALE  
OUTDOOR AIR  
ON CENTER  
OUTSIDE DIAMETER  
OPENING  
OVERFLOW ROOF DRAIN  
OVERFLOW RAIN LEADER  
PUMP, PLUMBING  
PRESSURE DROP  
PHASE  
POINT OF CONNECTION  
POSITIVE  
PUMPED RETURN  
PRESSURE/TEMPERATURE  
POLYVINYL CHLORIDE  
QUANTITY  
RETURN AIR  
ROOF DRAIN  
REFERENCE  
REQUIRED  
RETURN FAN  
RETURN GRILLE  
RELIEF HOOD, RELATIVE HUMIDITY  
RAIN LEADER  
REDUCED PRESSURE BACKFLOW  
PREVENTER  
REVOLUTIONS PER MINUTE  
SOIL  
SUPPLY AIR  
STORM DRAIN, SMOKE DAMPER  
SENSIBLE  
SEASONAL ENERGY EFFICIENCY RATING  
SUPPLY FAN, SQUARE FEET  
SUPPLY GRILLE  
SOUNDLINING  
STATIC PRESSURE  
SPRINKLER  
STAINLESS STEEL, SANITARY SEWER  
STANDPIPE  
THERMOSTAT  
TEMPERATURE  
TRANSFER GRILLE  
TOP OF DUCT  
TOTAL  
TRAP PRIMER, TOTAL PRESSURE  
TOTAL STATIC PRESSURE  
TERMINAL UNIT  
TYPICAL  
UNIT HEATER  
UNLESS OTHERWISE NOTED  
VENT, VOLT  
VALVE  
VARIABLE AIR VOLUME  
VELOCITY  
VARIABLE FREQUENCY DRIVE  
VENT THROUGH ROOF  
WASTE, WATER, WATT, WIDTH  
WET BULB  
WATER GAGE  
WATER HEATER, WALL HYDRANT  
WATER

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22. DO NOT CUT OR PENETRATE STRUCTURAL ELEMENTS WITHOUT PRIOR WRITTEN APPROVAL.

23. THE MECHANICAL CONTRACTOR SHALL MOUNT THE DUCT SMOKE DETECTOR. THE ELECTRICAL CONTRACTOR TO PROVIDE AND WIRE DUCT MOUNTED SMOKE DETECTOR. ELECTRICAL CONTRACTOR SHALL ALSO PROVIDE AND WIRE A REMOTE MONITORING KEY OPERATED TEST AND ALARM STATION FOR EACH DUCT SMOKE DETECTOR. THE REMOTE TEST ALARM STATION SHALL BE MOUNTED AS DIRECTED IN THE AREA OF THE SMOKE DETECTOR.

24. THE MECHANICAL CONTRACTOR TO PROVIDE ALL ROOF CURBS, EQUIPMENT RAILS, SUPPORTS, ROOF PORTALS AND ASSOCIATED EQUIPMENT TO ENSURE A COMPLETE INSTALLATION FOR NEW HVAC EQUIPMENT. MECHANICAL CONTRACTOR RESPONSIBLE TO PROVIDE EXACT LOCATIONS AND REVIEWED AND RELEASED EQUIPMENT SUBMITTALS OF ROOF CURBS, EQUIPMENT SUPPORTS, ROOF PORTALS, AND ASSOCIATED EQUIPMENT TO THE ARCHITECT. ALL ROOF PENETRATIONS, EQUIPMENT SUPPORTS, ROOF PORTALS AND ASSOCIATED EQUIPMENT SHALL BE INSTALLED BY ROOFING SUB-CONTRACTOR. ROOFING CONTRACTOR SHALL BE BONDED AND ALL WORK SHALL BE DONE SO AS NOT TO VOID ROOF WARRANTY. ROOFING CONTRACTOR SHALL PROVIDE BASE FLASHING, AND PROVIDE TEMPORARY WEATHER-PROOF COVERS UNTIL MECHANICAL CONTRACTOR INSTALLS NEW HVAC UNITS. MECHANICAL CONTRACTOR TO PROVIDE COUNTER FLASHING.

25. FURNISH TO ELECTRICAL CONTRACTOR ALL MOTOR STARTERS AND CONTROL DEVICES FOR MECHANICAL EQUIPMENT. ELECTRICAL CONTRACTOR SHALL INSTALL AND WIRE STARTER AND CONTROL EQUIPMENT FOR ALL MOTORS.

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ABBREVIATIONS

A  
ACU  
AFF  
AHU  
AL  
ARRGT  
ATM  
BC  
BOD  
BFF  
BFP  
BHP  
BLDG  
BOB  
BOD  
BOS  
BTUH  
CAP  
CC  
CD  
CFM  
CHR  
CHS  
CI  
CLG  
CNFGCL  
CO  
CONC  
COND  
CONC  
COMP  
CP  
COP  
CRU  
CCT  
CU FT  
CV  
C/CTR  
CW  
CWR  
CWS  
dB  
DB  
DCA  
DEG  
DF  
DI  
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DMPR  
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EA  
EAT  
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EF  
EFF  
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FLA  
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FV  
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GAL  
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GPM  
H  
HC  
HD  
HEX  
HOA  
HP  
HPS  
HTG  
HW  
HWC  
HWP  
HWS  
HZ

AIR AMP  
AIR CONDITIONING UNIT  
ABOVE FINISHED FLOOR  
AIR HANDLING UNIT  
ALUMINUM, ACOUSTICAL LINING  
ARRANGEMENT  
ATMOSPHERE  
BLOWER COIL  
BACKDRAFT DAMPER  
BELOW FINISHED FLOOR  
BACKFLOW PREVENTER  
BRKHS HORSEPOWER  
BUILDING  
BOTTOM OF BEAM  
BOTTOM OF DUCT  
BOTTOM OF STEEL  
BRITISH THERMAL UNITS PER HOUR  
CAPACITY  
COOLING COIL  
CEILING DIFFUSER  
CUBIC FEET PER MINUTE  
CHILLED WATER RETURN  
CONTINUOUS WATER SUPPLY  
CAST IRON  
CEILING, COOLING  
CENTRIFUGAL  
CLEANOUT  
CONCRETE  
CONDENSATE  
CONDENSATE CONTROL  
COMPRESSOR  
COEFFICIENT OF PERFORMANCE  
CIRCULATING PUMP  
CONDENSATE RETURN UNIT  
CONDENSING UNIT  
CUBIC FEET  
CONSTANT VOLUME  
CONVERTER  
COLD WATER  
CONDENSER WATER RETURN  
CONDENSER WATER SUPPLY  
DECIBELS  
DRY BULB  
DOUBLE CHECK VALVE ASSEMBLY  
DEGREE  
DRINKING FOUNTAIN  
DE-IONIZED  
DIAMETER  
DAMPER  
DOWNSPOUT  
EXISTING  
EXHAUST AIR  
ENTERING AIR TEMPERATURE  
ENERGY EFFICIENCY RATING  
EXHAUST FAN  
EFFICIENCY  
EXHAUST GRILLE  
ELEVATION  
EQUIPMENT  
EXTERNAL STATIC PRESSURE  
ENTERING WATER TEMPERATURE  
EXHAUST  
ELECTRIC WATER COOLER  
EXISTING  
EXPANSION  
EXTERIOR, EXTERNAL  
FAHRENHEIT, FIRE LINE  
FIRE DAMPER, FLOOR DRAIN  
FIRE DEPARTMENT CONNECTION  
FULL LOAD AMPS  
FLOOR  
FILTER  
FLOW METER  
FLAT ON BOTTOM  
FLAT OVAL  
FLAT ON TOP  
FEET PER MINUTE  
FEET PER SECOND  
FIRE SMOKE DAMPER  
FEET, FAN TERMINAL  
FACE VELOCITY  
GAGE  
GALLONS  
GALVANIZED  
GALLONS PER MINUTE  
HUMIDIFIER, HEIGHT  
HOSE BIBB  
HEATING COIL  
HEAD  
HEAT EXCHANGE  
HAND-OFF-AUTOMATIC  
HORSEPOWER, HEAT PUMP  
HIGH PRESSURE STEAM  
HEATING  
HOT WATER  
HOT WATER CIRCULATING  
HOT WATER PUMP  
HEATING WATER RETURN  
HEATING WATER SUPPLY  
HERTZ

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INDIRECT DRAIN  
INVERT ELEVATION  
INTAKE HOOD  
INCH  
INITIAL  
INTERIOR  
INTEGRATED PART LOAD VALUE  
KILOWATT  
KILOWATT HOURS  
LENGTH  
LEAVING AIR TEMPERATURE  
POUND, LINEAR BAR  
POUNDS  
LINEAR DIFFUSER  
LEAVING WATER TEMPERATURE  
MAXIMUM  
THOUSAND BTU PER HOUR  
MINIMUM CIRCUIT AMPACITY  
MANUAL DAMPER  
MECHANICAL  
MANUFACTURER  
MINIMUM  
MAXIMUM OVER CURRENT PROTECTION  
MOTOR OPERATED DAMPER  
MOTOR  
NORMALLY CLOSED  
NEGATIVE  
NOT IN CONTRACT  
NUMBER, NORMALLY OPEN  
NOT TO SCALE  
OUTDOOR AIR  
ON CENTER  
OUTSIDE DIAMETER  
OPENING  
OVERFLOW ROOF DRAIN  
OVERFLOW RAIN LEADER  
PUMP, PLUMBING  
PRESSURE DROP  
PHASE  
POINT OF CONNECTION  
POSITIVE  
PUMPED RETURN  
PRESSURE/TEMPERATURE  
POLYVINYL CHLORIDE  
QUANTITY  
RETURN AIR  
ROOF DRAIN  
REFERENCE  
REQUIRED  
RETURN FAN  
RETURN GRILLE  
RELIEF HOOD, RELATIVE HUMIDITY  
RAIN LEADER  
REDUCED PRESSURE BACKFLOW  
PREVENTER  
REVOLUTIONS PER MINUTE  
SOIL  
SUPPLY AIR  
STORM DRAIN, SMOKE DAMPER  
SENSIBLE  
SEASONAL ENERGY EFFICIENCY RATING  
SUPPLY FAN, SQUARE FEET  
SUPPLY GRILLE  
SOUNDLINING  
STATIC PRESSURE  
SPRINKLER  
STAINLESS STEEL, SANITARY SEWER  
STANDPIPE  
THERMOSTAT  
TEMPERATURE  
TRANSFER GRILLE  
TOP OF DUCT  
TOTAL  
TRAP PRIMER, TOTAL PRESSURE  
TOTAL STATIC PRESSURE  
TERMINAL UNIT  
TYPICAL  
UNIT HEATER  
UNLESS OTHERWISE NOTED  
VENT, VOLT  
VALVE  
VARIABLE AIR VOLUME  
VELOCITY  
VARIABLE FREQUENCY DRIVE  
VENT THROUGH ROOF  
WASTE, WATER, WATT, WIDTH  
WET BULB  
WATER GAGE  
WATER HEATER, WALL HYDRANT  
WATER

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GENERAL NOTES

1. MATERIALS, METHODS, AND INSTALLATION SHALL COMPLY WITH THE PROVISIONS OF THE LATEST EDITION OF THE FOLLOWING CODES AS ADOPTED BY LOCAL AUTHORITIES HAVING JURISDICTION:  
2022 OREGON STRUCTURAL SPECIALTY CODE (OSCS)  
2022 OREGON MECHANICAL SPECIALTY CODE (OMSC)  
2021 OREGON PLUMBING SPECIALTY CODE (OPSC)  
2022 OREGON FIRE CODE (OFC)  
2021 OREGON ENERGY EFFICIENCY SPECIALTY CODE (OEECS)

2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE AND ADOPTED REGULATIONS INCLUDING BUT NOT LIMITED TO NATIONAL, CITY, STATE, LOCAL CODES AND ORDINANCES WHICH MAY BE IN EFFECT. ALL MECHANICAL MATERIALS, INSTALLATION PROCEDURES AND SYSTEM LAYOUTS SHALL BE APPROVED BY ALL APPLICABLE CODE ENFORCEMENT AUTHORITIES. THE MECHANICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FOR THIS INSTALLATION. PAY ALL ROYALTIES OR FEES REQUIRED IN CONNECTION WITH THE USE OF PATENTED DEVICES AND SYSTEMS.

3. UPON CONTRACT AWARD, CONTRACTOR SHALL CONTACT LOCAL UTILITY COMPANY TO SCHEDULE UTILITY CONNECTIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL UTILITY WORK, SECURE ALL PERMITS AND INSPECTIONS.

4. ALL CONNECTIONS TO BUILDING SERVICES SHALL BE CAREFULLY COORDINATED WITH THE UTILITY COMPANY AND THE CONSTRUCTION MANAGER. SERVICE WORK OF THIS NATURE TO OCCUR DURING UNOCCUPIED BUILDING HOURS. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL EXISTING EQUIPMENT IS OPERATIONAL AFTER ANY SHUTDOWN OCCURS.

5. ALL CONTRACT WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE WRITTEN SPECIFICATIONS FOR THIS PROJECT WHICH ARE CONSIDERED TO BE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS. ALL CONTRACTORS AND SUBCONTRACTORS SHALL MAINTAIN (AT THE JOB SITE) AND REFER TO COPIES OF THE WRITTEN SPECIFICATIONS AS PART OF THESE DRAWINGS. REFER TO THE WRITTEN SPECIFICATIONS IN CONJUNCTION WITH THE PLANS FOR FULL PROJECT SCOPE. IN ALL CASES OF DISCREPANCY BETWEEN PLANS AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN AND WHERE IT IS UNCLEAR, SUCH CASES SHALL BE REFERRED TO THE ENGINEER FOR ADJUDICATION.

6. ANY DISCREPANCIES OR INADEQUACIES WITHIN THESE BID DOCUMENTS OR BETWEEN THESE BID DOCUMENTS AND RELATED PLUMBING, ELECTRICAL, FIRE PROTECTION, ARCHITECTURAL, INTERIOR DECOR AND FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER PRIOR TO BID SUBMISSION. DURING THE COURSE OF CONSTRUCTION COORDINATION AND ACTUAL CONSTRUCTION, THE MECHANICAL CONTRACTOR SHALL COOPERATE WITH ALL OTHER CONTRACTORS AND TRADES ON THIS PROJECT TO ENSURE A SMOOTH RUNNING AND CAREFULLY COORDINATED INSTALLATION.

7. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING HIS BID FOR THE PROPOSED WORK. HE SHALL BE RESPONSIBLE TO VERIFY FIELD CONDITIONS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO SUBMISSION OF BIDS IN WRITING.

8. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR GENERAL CONSTRUCTION INCLUDING LOUVERS, CONCRETE EQUIPMENT PADS, FLASHING DETAILS, ETC. REFER TO ARCHITECTURAL DRAWINGS FOR ROOM ELEVATIONS. LOCATE MECHANICAL DEVICES SUCH AS TEMPERATURE SENSORS, HUMIDISTATS, PANELS, ETC. SO THAT THEY DO NOT CONFLICT WITH GENERAL CONSTRUCTION (WANSICOT, DOOR HARDWARE, ETC.) NOR WITH ELECTRICAL SYSTEM (LIGHT SWITCHES, SPEAKERS, OUTLETS, ETC.).

9. COORDINATE WITH OTHER TRADES: A) REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS OF MECHANICAL EQUIPMENT (VOLTAGE, PHASE, HZ, ETC.) B) PROVIDE ADEQUATE CLEARANCE OF MECHANICAL WORK FROM ELECTRICAL ITEMS. MAINTAIN MINIMUM ACCESS OF 6-INCHES ABOVE ELECTRICAL CABLE TRAYS AND 18-INCHES TO THE SIDE OF CABLE TRAYS.

10. DUCTING AND PIPING SHOWN ON DRAWINGS SHOW THE GENERAL RUN AND CONNECTIONS AND MAY OR MAY NOT IN ALL PARTS BE SHOWN IN ITS EXACT POSITION. CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING THE DUCTING AND PIPING SUITABLE IN EVERY RESPECT FOR THE WORK PERFORMED. DUCTWORK AND PIPING SHALL BE INSTALLED SO THAT ACCESS, CLEARANCE, HEADROOM, AND PITCH ARE MAINTAINED. CONTRACTORS OF THE VARIOUS TRADES SHALL COORDINATE THE INSTALLATION. MECHANICAL CONTRACTOR SHALL REVIEW ARCHITECTURAL DRAWINGS FOR CHASE AND SOFFIT LOCATIONS TO COORDINATE ALL EXPOSED DUCTWORK AND PIPE ROUTING.

11. THE COMMISSIONING SPECIFICATION, INCLUDING ALL FUNCTIONAL, TEST PROCEDURES, SHALL BE PROVIDED AND ENFORCED BY THE CONTRACTOR.

12. PROVIDE SEISMIC RESTRAINT IN ACCORDANCE WITH IBC AND ASCE STANDARD 7. SUBMIT CALCULATIONS BY LICENSED STRUCTURAL ENGINEER. PRODUCTS MAY CONFORM TO SMACNA SEISMIC RESTRAINT GUIDELINES.

13. PROVIDE A SINGLE SUBMITTAL OF ALL MECHANICAL EQUIPMENT AS SPECIFIED. AS A MINIMUM, SUBMIT PRODUCT DATA FOR ALL EQUIPMENT AND FIXTURES LISTED IN ACCOMPANYING SCHEDULES FOR APPROVAL.

14. USE EXPERIENCED INSTALLERS. DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

15. ARRANGEMENT OF SYSTEMS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC, AND INDICATES THE MINIMUM REQUIREMENTS FOR PLUMBING AND MECHANICAL WORK. ADJUST BOX LOCATIONS, BASED ON FIELD MEASUREMENTS, TO AVOID INSTALLATION ABOVE DESK. SITE CONDITIONS SHALL DETERMINE THE ACTUAL ARRANGEMENT OF THE WORK. TAKE FIELD MEASUREMENTS BEFORE PREPARING SHOP DRAWINGS, OBTAIN APPROVAL OF SHOP DRAWINGS BEFORE BEGINNING FABRICATION. BE RESPONSIBLE FOR ACCURACY OF DIMENSIONS AND LAYOUT. OVERLAP PIPING AND DUCTWORK SHALL BE ARRANGED TO OBTAIN MAXIMUM HEAD ROOM. SHOP DRAWING SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD.

16. CLEAN AND PROTECT WORK FROM DAMAGE. RESTORE DAMAGED FINISHES. COVER ENDS OF PIPING AND DUCTWORK NOT ACTIVELY BEING WORKED ON. DO NOT USE ANY PART OF THE OWNER'S BUILDING AS A SHOP. EXCEPT PARTS DESIGNATED FOR SUCH PURPOSES BY THE OWNER.

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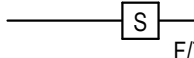

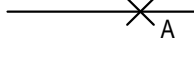
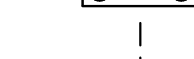
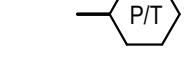
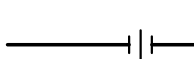
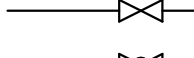
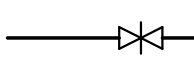
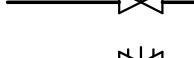
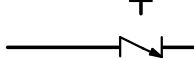

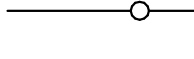










25. FURNISH TO ELECTRICAL CONTRACTOR ALL MOTOR STARTERS AND CONTROL DEVICES FOR MECHANICAL EQUIPMENT. ELECTRICAL CONTRACTOR SHALL INSTALL AND WIRE STARTER AND CONTROL EQUIPMENT FOR ALL MOTORS.


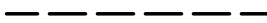
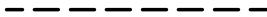












26. ALL HVAC EQUIPMENT CONTAINING COOLING (EVAPORATOR) COILS INCLUDING DOWN FLOW ROOF TOP UNITS SHALL HAVE CONDENSATE MONITORING FOR OVERFLOW PROTECTION FOR PRIMARY OR SECONDARY DRAIN PANS AS APPLICABLE. SUCH DEVICES SHALL BE LABELED TO COMPLY WITH UL983 AND SHALL SHUT DOWN COOLING SYSTEM AND SIGNAL BMS SYSTEM IF APPLICABLE.

27. ALL EXPOSED HORIZONTAL AND VERTICAL PIPING SHALL BE INSTALLED IN A NEAT ARRANGEMENT IN LOCATIONS WHICH ARE THE MOST INCONSPICUOUS. VERTICAL DROPS SHALL BE KEPT TO AN ABSOLUTE MINIMUM AND THEIR FINAL LOCATIONS SHALL BE COORDINATED AND RUN WITHIN CHASES, WALLS, OR SOFFITS WITH OTHER PLUMBING AND ELECTRICAL FEEDS. MECHANICAL CONTRACTOR SHALL REVIEW ARCHITECTURAL DRAWINGS FOR CHASE AND SOFFIT LOCATIONS TO COORDINATE ALL EXPOSED PIPING ROUTING. ALL SUCH LOCATIONS SHALL BE REVIEWED WITH ARCHITECT/ENGINEER PRIOR TO INSTALLATION.

ABBREVIATIONS

A  
ACU  
AFF  
AHU  
AL  
ARRGT  
ATM  
BC  
BOD  
BFF  
BFP  
BHP  
BLDG  
BOB  
BOD  
BOS  
BTUH  
CAP  
CC  
CD  
CFM  
CHR  
CHS  
CI  
CLG  
CNFGCL  
CO  
CONC  
COND  
CONC  
COMP  
CP  
COP  
CRU  
CCT  
CU FT  
CV  
C/CTR  
CW  
CWR  
CWS  
dB  
DB  
DCA  
DEG  
DF  
DI  
DIA  
DMPR  
DN  
DS  
E  
EA  
EAT  
EER  
EF  
EFF  
EG  
EL  
EQUIP  
ESP  
EWT  
EXH  
EWC  
EXIST  
EXP  
EXT  
F  
FD  
FDC  
FLA  
FLR  
FL

SYMBOL	DESCRIPTION
	STEAM TRAP ASSEMBLY F/T = FLOAT AND THERMOSTATIC F = FLOAT T = THERMOSTATIC
	B = BUCKET IB = INVERTED BUCKET
	I = IMPULSE O = ORIFICE
	PIPE ANCHOR
	PIPE ALIGNMENT GUIDE
	CONTROL VALVE STATION
	PIPE SUPPORT
	PRESSURE/TEMPERATURE TEST PORT
	CAP
	PLUG
	UNION
	WYE STRAINER
	GATE VALVE
	GLOBE VALVE
	BALL VALVE
	BALANCING OR PLUG VALVE
	NEEDLE VALVE
	PRESSURE REDUCING VALVE
	BALANCING/MEASURING VALVE
	RELIEF VALVE
	CHECK VALVE
	PIPE TURNING DOWN / AWAY
	PIPE TURNING UP / TOWARDS
	PIPE DOWN TEE
	PIPE DOWN TEE / AWAY
	PIPE UP TEE / TOWARDS

SYMBOLS LEGEND - PIPING & AIRFLOW DIAGRAMS	
SYMBOL	DESCRIPTION
	PIPING OR DUCTED AIRFLOW
	NON-DUCTED AIRFLOW
	ELECTRICAL CONNECTION
	FLOW CONTINUATION ARROW
	COMPLEX INTERLOCK (ELEC., PNEUMATIC, ETC.)
	CONNECTION TO CENTRAL MONITORING AND CONTROL SYSTEM (CMCS)
	PUMP
	CENTRIFUGAL FAN
	ELECTRIC MOTOR/STARTER ASSEMBLY
	ELECTRIC MOTOR OPERATOR (VALVES AND DAMPERS)
	FLOOR DRAIN
	FUNNEL DRAIN
 	FLOOR SINK (SQUARE AND ROUND)
	FLOW DIRECTION

SYMBOLS LEGEND - LABORATORY	
SYMBOL	DESCRIPTION
—•—•—•—	NON POTABLE COLD WATER
—••—••—••	NON POTABLE HOT WATER
—•••—•••—•••	NON POTABLE HOT WATER RECIRCULATE
—LA—	LABORATORY AIR
—LV—	LABORATORY VACUUM

BLRB ARCHITECTS, P.S.



4/19/2023 8:25:28 AM

1

2

3

FAN SCHEDULE																
EQUIP NO.	LOCATION	SERVICE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN SERIES	TYPE	DRIVE TYPE	AIRFLOW (CFM)	TOTAL ESP (IN WG)	FAN RPM	MOTOR (BHP)	MOTOR (HP)	VFD YES/NO	V/PHHZ	SONES	OPERATING WEIGHT (LBS)	REMARKS
EF-01	ROOF	RESTROOMS	GREENHECK	G-080-VG	DOWNBLAST	DIRECT	250	0.5	1575	0.06	0.1	N	120/160	7.7	30	1.2
EF-02	ROOF	IDF ROOM	GREENHECK	G-080-VG	DOWNBLAST	DIRECT	300	0.5	1703	0.07	0.1	N	120/160	8.5	30	1.2
REMARKS: 1. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS 2. PROVIDE WITH MANUFACTURER'S ROOF CURB																

A

DIFFUSER-GRILLE SCHEDULE							
EQUIP. NO	LOCATION	SERVICE	BASIS OF DESIGN		DESCRIPTION	MAXIMUM SOUND PRESSURE (dBA)	REMARKS
			MANUFACTURER	SERIES			
CD-1	CEILING	SUPPLY DIFFUSER	TITUS	MCD	4-WAY ADJUSTABLE, MODULAR CORE DIFFUSER		1.2,3
SWG-1	WALL	SUPPLY GRILLE	TITUS	300RL	DOUBLE DEFLECTION GRILLE		1.3,4
DG-1	DUCT	SUPPLY GRILLE	TITUS	300RL	DOUBLE DEFLECTION GRILLE		1.3,4
RG-1	CEILING	RETURN GRILLE	TITUS	50P	EGGCRATE RETURN GRILLE		1.3,5
EG-1	CEILING	EXHAUST GRILLE	TITUS	350PL	SINGLE DEFLECTION GRILLE		1.6
REMARKS: 1. SEE MECHANICAL FLOOR PLANS FOR DUCT SIZE AND CFM 2. STEEL, WHITE, ROUND NECK, SEE MECHANICAL FLOOR PLANS FOR NECK SIZE 3. BORDER TO MATCH CEILING TYPE 4. STEEL, WHITE, 3/4" BLADE SPACING 5. STEEL, WHITE, CORE ONLY IN ACT, 1/2"x1/2"x1/2" GRID 6. ALUMINUM, WHITE, FOR GWS CEILING, 3/4" BLADE SPACING, 35 DEG. FIXED DEFLECTION							

B

REQUIRED OUTSIDE AIR FLOW RATE														
MINIMUM VENTILATION RATES FROM TABLE 403.3, 2019 OREGON MECHANICAL SPECIALTY CODE														
ROOM NUMBER	ROOM NAME	TOTAL AREA (SQFT)	DEFAULT OCCUPANT DENSITY #/1,000 SQFT	ZONE NO. OF PEOPLE	CFM PER PERSON	Pz/Pz (CFM)	CFM PER SQFT.	Ra/Ra (CFM)	Vbzp+Vbza (CFM)	ZONE AIR DISTRIBUTION EFFECTIVENESS	Voz+Vbz/Ez (CFM)	SCHEDULED OUTDOOR AIRFLOW (CFM)	REQUIRED EXHAUST AIRFLOW RATE (CFM)	SCHEDULED EXHAUST AIRFLOW (CFM)
		Az	Pz	Rp	Vbzp	Ra	Vbza	Vbz	Ez	Voz				
A101	MAIN PRESENTATION HALL	4,900	100	250	8	1,875	0.06	294.0	2,169	0.8	2,711	2,780	0	0
A136	OFFICE	240	5	2	5	10	0.06	14.4	24	0.8	31	40	0	0
A108	STORAGE	200	-	0	-	-	0.12	24.0	24	0.8	30	100	0	0
A107	MEETING ROOM	180	5	1	5	5	0.06	10.8	16	0.8	20	133	0	0
A102, A103,...	UNISEX RESTROOM	340	-	0	-	-	-	-	0.8	-	0	200	200	
0		5,860		253		1,890		343	2,233		2,792	3,053		200

SINGLE DUCT VARIABLE AIR VOLUME UNIT SCHEDULE (ELECTRIC)																		
EQUIP. NO	LOCATION	SERVICE	BASIS OF DESIGN		PRIMARY AIR		ELECTRIC HEATING COIL							MAXIMUM DISCHARGE SOUND (NC)	MAXIMUM RADIATED SOUND (NC)	OPERATING WEIGHT (LBS)	REMARKS	
			MANUFACTURER	SERIES	INLET SIZE (IN)	MAX AIRFLOW (CFM)	MIN AIRFLOW (CFM)	KW	STAGES	EAT DB (DEG F)	LAT DB (DEG F)	MCA	MOCp					VPHHZ
VAV-01	A102	RTU-03	CARRIER	3SE	6	400	200	2	2	55	86.6	20.83	25.0	120/160	20	22	41	1
VAV-02	A108	RTU-03	CARRIER	3SE	6	300	150	1.5	2	55	86.6	15.63	20	120/160	15	18	41	1
VAV-03	A101	RTU-03	CARRIER	3SE	10	1,000	500	5	2	55	86.6	52.08	60	120/160	18	19	53	1
VAV-04	A101	RTU-03	CARRIER	3SE	12	1,300	700	7	2	55	86.6	36.46	60	240/160	17	21	60	1
VAV-05	A136	RTU-12	CARRIER	3SE	6	400	200	2	2	55	86.6	20.83	25	120/160	20	22	41	1
VAV-06	A101	RTU-12	CARRIER	3SE	5	200	100	1	2	55	86.6	10.42	15	120/160	16	12	41	1
REMARKS: 1. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.																		

C

ELECTRIC UNIT HEATER SCHEDULE											
EQUIP. NO	LOCATION	SERVICE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN SERIES	TYPE	MOUNTING HEIGHT (FT)	ELECTRICAL			OPERATING WEIGHT (LBS)	REMARKS
							KW	AMPS	VPHHZ		
ECH-01	RESTROOM	RESTROOM	QMARK	QCH1101F	FAN FORCED	CEILING	1	8.3	120/160	10	1.2,3
REMARKS: 1. PROVIDE WALL MOUNTED 24 VOLT THERMOSTAT. 2. PROVIDE SURFACE MOUNTING FRAME, 1" OR 2" SEMI RECESS MOUTING FRAME, COORDINATE REQUIREMENT WITH ARCHITECT, COLOR AS PER ARCHITECT. 3. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.											

D

E

4

5

6

EXISTING PACKAGED ROOFTOP AIR CONDITIONING UNIT SCHEDULE																					
EQUIP. NO	LOCATION	SERVICE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN SERIES	NOMINAL CAPACITY (TONS)	NEW SUPPLY AIRFLOW (CFM)	NEW MIN OUTSIDE AIR (CFM)	ECONOMIZER	FAN			COOLING COIL		AIR		GAS HEATER		ELECTRICAL		OPERATING WEIGHT (LBS)	REMARKS
									QTY	EXT SP (IN WG)	MOTOR (HP) EACH	TOTAL LOAD (TON)	SENSIBLE LOAD (MBH)	EAT DB (DEG F)	AMBIENT AIR (DEG F)	INPUT CAPACITY (MBH)	EFFICIENCY	MCA	V/PHHZ		
(E)RTU-1	ROOF	AS SHOWN	CARRIER	48HJE008	5	1500	1000	YES	1	0.6	2	5	60	80	95	115	82%	-	-	1000	1,2,3
(E)RTU-2	ROOF	AS SHOWN	CARRIER	48HJE008	5	1750	1000	YES	1	0.6	2	5	60	80	95	115	82%	-	-	1000	1,2,3
(E)RTU-3	ROOF	AS SHOWN	CARRIER	48HJE008	7.5	3000	1000	YES	1	0.6	3	7.5	90	80	95	180	82%	-	-	1500	1,2,3
(E)RTU-12	ROOF	WORKSHOP	CARRIER	48SS018	1.5	600	60	YES	1	0.3	-	1.5	17	79	95	40	81%	-	-	450	1,2,3
REMARKS: 1. CONFIGURE EXISTING RTU TO MEET UPDATED SUPPLY AIR FLOW AND MIN OUTSIDE AIR. REPLACE INTERNAL DRIVE TO ACHIEVE NEW PARAMETERS. 2. PROVIDE 24 VOLT SMOKE DETECTOR IN RETURN DUCTWORK WIRED FOR UNIT SHUTDOWN. 3. CONTRACTOR TO ADD REQUIRED EQUIPMENT TO ENSURE COMPATIBILITY WITH NEW VAV'S.																					

DRAWING REVISIONS		
Δ	Date	Description

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Drawing Title:

MECHANICAL SCHEDULE

Date : 4/21/23

Revised :

Stamp

Drawn By : Author

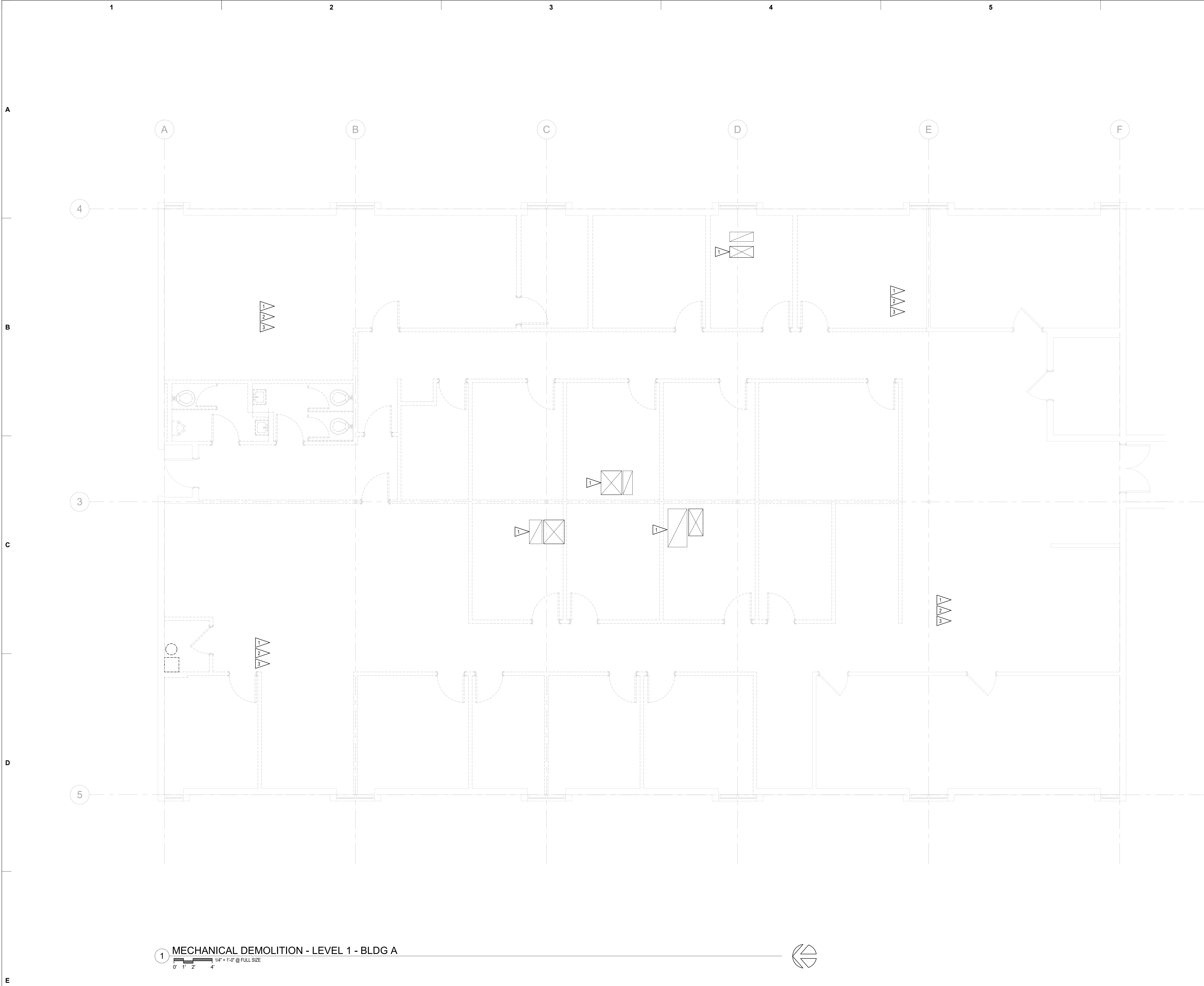
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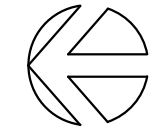
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1 MECHANICAL DEMOLITION - LEVEL 1 - BLDG A

0' 1' 2' 4' 1/4" = 1'-0" @ FULL SIZE



#### SHEET NOTES

- A. DRAWINGS ARE SCHEMATIC IN NATURE. NOT ALL EQUIPMENT, FITTINGS OR BRANCHES ARE SHOWN. IT IS UP TO THE CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND THE EXTENT OF WORK REQUIRED.
- B. PENETRATIONS AT ALL ASSEMBLIES TO BE PROPERLY SEALED.
- C. PERFORM PRE-DEMO BALANCING OF ALL UNITS WITHIN THE SCOPE OF WORK. PROVIDE REPORT TO ENGINEERS FOR REVIEW BEFORE COMMENCING ANY DEMO WORK.

#### FLAG NOTES

1. DEMO AND REMOVE ALL EXISTING DUCTWORK, DUCTWORK SUPPORTS AND ALL ASSOCIATED ACCESSORIES BACK TO RTU DROPS IN THEIR ENTIRETY. PREPARE DUCTWORK FOR CONNECTION TO NEW.
2. DEMO AND REMOVE ALL EXISTING VAVS, SUPPORTS AND ASSOCIATED ACCESSORIES IN THEIR ENTIRETY.
3. DEMO AND REMOVE ALL EXISTING DIFFUSERS, GRILLES AND ASSOCIATED ACCESSORIES IN THEIR ENTIRETY.

#### DRAWING REVISIONS

Rev	Date	Description
1		

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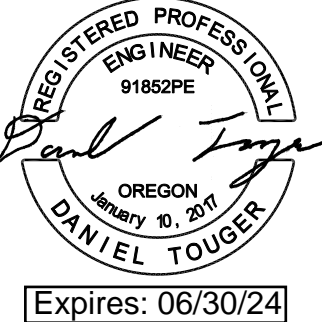
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Drawing Title:  
**MECHANICAL DEMOLITION -  
BLDG A**

Date : 4/21/23	Drawn By : Author
Revised :	Project No. 023030
Stamp	Sheet No.



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SHEET NOTES

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- B. PENETRATIONS AT ALL ASSEMBLIES TO BE PROPERLY SEALED.

FLAG NOTES

1. EXISTING RTU'S TO REMAIN IN PLACE.

DRAWING REVISIONS

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Drawing Title:

MECHANICAL DEMOLITION -  
ROOF PLAN

Date : 4/21/23

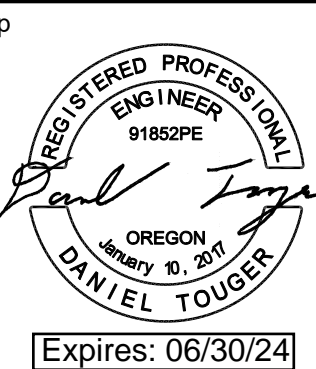
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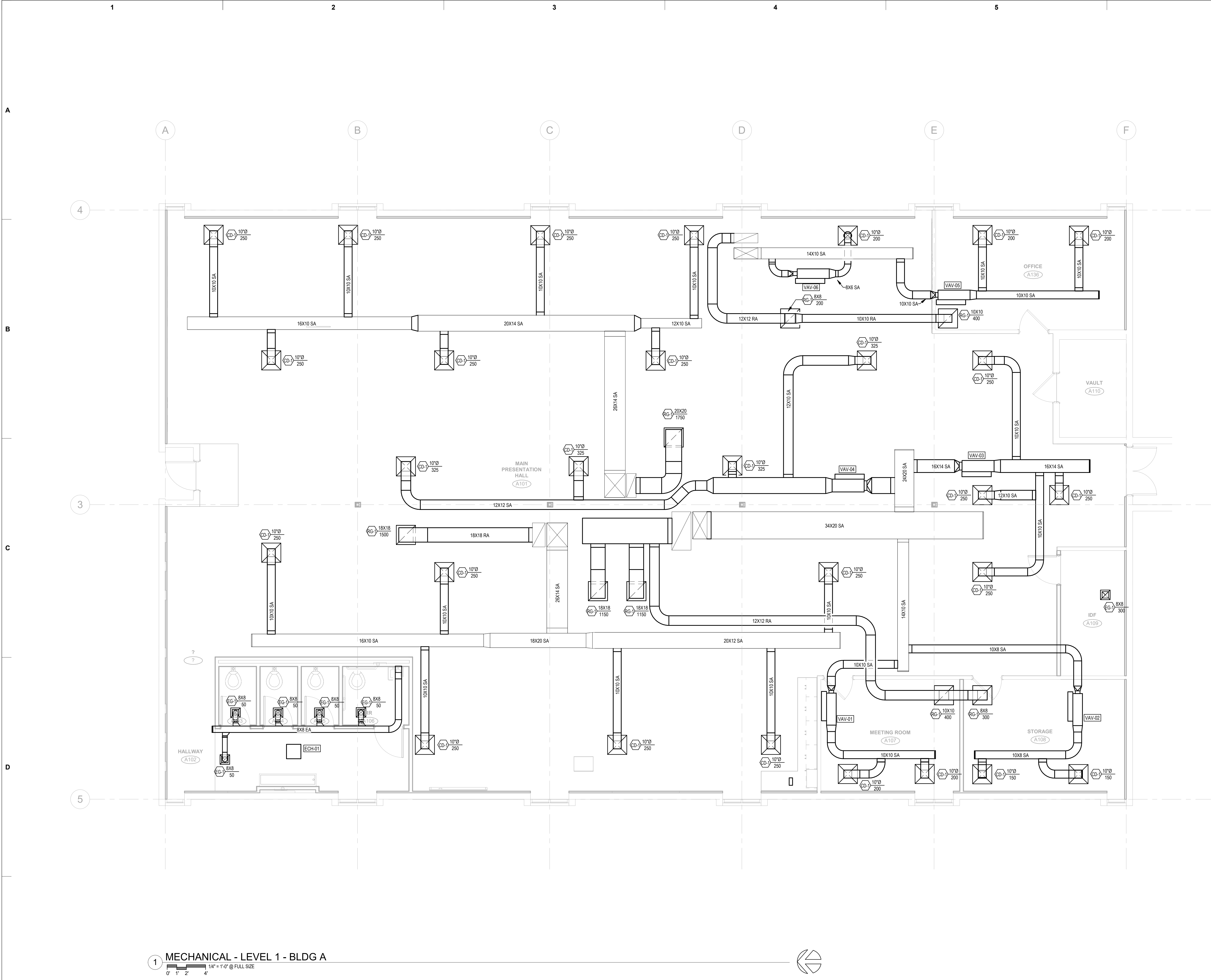
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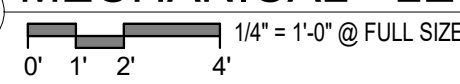


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1 MECHANICAL - LEVEL 1 - BLDG A



SHEET NOTES

- A. DRAWINGS ARE SCHEMATIC IN NATURE. NOT ALL EQUIPMENT, FITTINGS OR BRANCHES ARE SHOWN. IT IS UP TO THE CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND THE EXTENT OF WORK REQUIRED.
- B. PENETRATIONS AT ALL ASSEMBLIES TO BE PROPERLY SEALED.

FLAG NOTES

1. FLAG NOTE
2. FLAG NOTE

DRAWING REVISIONS

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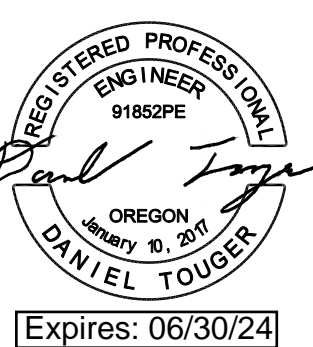
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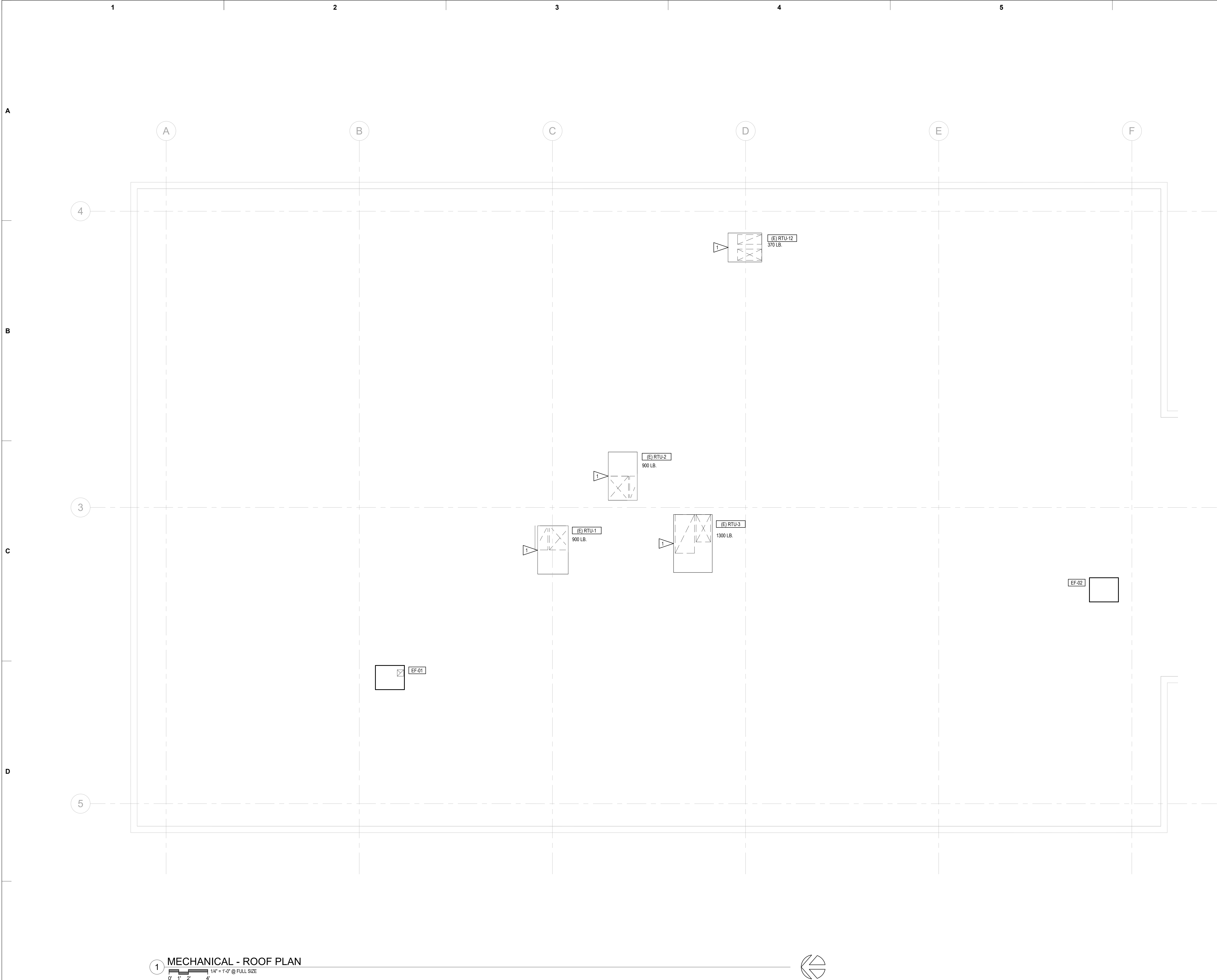
Drawing Title:  
MECHANICAL - BLDG A

Date : 4/21/23	Drawn By : Author
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M3.01





1 MECHANICAL - ROOF PLAN  
0' 1' 2' 4' 1/4" = 1'-0" @ FULL SIZE

SHEET NOTES

- A. DRAWINGS ARE SCHEMATIC IN NATURE. NOT ALL EQUIPMENT, FITTINGS OR BRANCHES ARE SHOWN. IT IS UP TO THE CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND THE EXTENT OF WORK REQUIRED.
- B. PENETRATIONS AT ALL ASSEMBLIES TO BE PROPERLY SEALED.

FLAG NOTES

1. EXISTING RTU TO BE REUSED. INSPECT UNIT FOR ANY DEFICIENCIES BEFORE COMMENCING WORK. REPLACE FILTERS, BELTS AND PERFORM MANUFACTURER RECOMMENDED SERVICE.

DRAWING REVISIONS

Rev	Date	Description
1		

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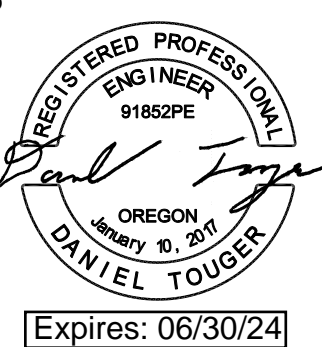
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Drawing Title:  
MECHANICAL - ROOF PLAN

Date : 4/21/23	Drawn By : Author
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- RTU S00

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#	Date	Description
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M5.00



## GENERAL NOTES

1. THE SCOPE OF THE PLUMBING WORK CONSISTS OF WORK SHOWN ON THE PLANS AND AS DESCRIBED IN THE SPECIFICATIONS. IN CASE OF CONFLICT, THE SPECIFICATIONS SHALL GOVERN. PROVIDE A COMPLETE & FUNCTIONAL SYSTEM.
2. PERFORM ALL WORK IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND PAY FOR ALL FEES REQUIRED BY AUTHORITIES HAVING JURISDICTION. PAY ALL ROYALTIES OR FEES REQUIRED IN CONNECTION WITH THE USE OF PATENTED DEVICES AND SYSTEMS.
3. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR GENERAL CONSTRUCTION INCLUDING LOUVERS, CONCRETE EQUIPMENT PADS, FLOORING DETAILS, ETC. REFER TO ARCHITECTURAL DRAWINGS FOR ROOM ELEVATIONS. LOCATE DEVICES SO THAT THEY DO NOT CONFLICT WITH GENERAL CONSTRUCTION (WAINSCOT, DOOR HARDWARE, ETC.) NOR WITH ELECTRICAL SYSTEM (LIGHT SWITCHES, SPEAKERS, OUTLETS, ETC.).

**A**

- COORDINATE WITH OTHER TRADES:
  - A. REFER TO ELECTRICAL DRAWINGS AND CONFIRM ELECTRICAL CHARACTERISTICS SHOWN FOR MECHANICAL EQUIPMENT (VOLTAGE, PHASE, Hz, ETC.) MATCHES THAT OF THE ELECTRICAL EQUIPMENT PROVIDED.
  - B. PROVIDE ADEQUATE CLEARANCE OF PLUMBING WORK FROM ELECTRICAL EQUIPMENT MAINTAIN MINIMUM ACCESS OF 6 INCHES ABOVE CABLE TRAYS AND 18-INCHES TO THE SIDE OF CABLE TRAYS. CLEARANCE ABOVE CABLE TRAY SHOULD BE 12 INCHES AND NOT LESS THAN 6-INCHES WHEN RUNNING PARALLEL WITH CABLE TRAY. AND NOT LESS THAN 6-INCHES WHEN RUNNING PERPENDICULAR TO THE CABLE TRAY.
5. ARRANGE EQUIPMENT SO THAT ACCESS CLEARANCES INDICATED BY DRAWINGS, REQUIRED BY CODES, OR RECOMMENDED BY MANUFACTURER ARE PROVIDED.
6. INSTALL MATERIALS AND SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND ACCEPTED SUBMITTALS. INSTALL MATERIAL IN PROPER RELATION TO ADJACENT CONSTRUCTION AND WITH UNIFORM APPEARANCE FOR EXPOSED WORK.
7. THOROUGHLY EXAMINE ALL AREAS WHERE EQUIPMENT AND PIPING WILL BE INSTALLED AND REPORT ANY CONDITION THAT PREVENTS THE PROPER INSTALLATION OF THE PLUMBING WORK.
8. THE COMMISSIONING SPECIFICATION, INCLUDING ALL FUNCTIONAL TEST PROCEDURES, SHALL BE PROVIDED AND ENFORCED BY THE CONTRACTOR.
9. PROVIDE SEISMIC RESTRAINT IN ACCORDANCE WITH OSS C AND ASCC STANDARD 7. SUBMIT CALCULATIONS BY LICENSED STRUCTURAL ENGINEER. PRODUCTS MAY CONFORM TO SMACNA SEISMIC RESTRAINT GUIDELINES.
10. PROVIDE A SINGLE SUBMITTAL OF ALL PLUMBING EQUIPMENT AS SPECIFIED. AS A MINIMUM, SUBMIT PRODUCT DATA FOR ALL EQUIPMENT AND FIXTURES LISTED IN ACCOMPANYING SCHEDULES FOR APPROVAL.
11. USE EXPERIENCED INSTALLERS, DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
12. ARRANGEMENT OF SYSTEMS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC, AND INDICATES THE MINIMUM REQUIREMENTS FOR PLUMBING WORK, TAKE FIELD MEASUREMENTS BEFORE PREPARING SHOP DRAWINGS, OBTAIN APPROVAL OF SHOP DRAWINGS BEFORE BEGINNING FABRICATION, BE RESPONSIBLE FOR ACCURACY OF DIMENSIONS AND LAYOUT. OVERHEAD PIPING SHALL BE ARRANGED TO OBTAIN MAXIMUM HEAD ROOM.
13. CLEAN AND PROTECT WORK FROM DAMAGE. RESTORE DAMAGED FINISHES, COVER ENDS OF PIPING NOT ACTIVELY BEING WORKED ON.
14. MODIFY AND EXTEND EXISTING SERVICE TO ACCOMMODATE NEW WORK. RELOCATE EXISTING COMPONENTS AS REQUIRED FOR NEW SYSTEM. COORDINATE WITH BUILDING MANAGEMENT.
15. PROVIDE PRODUCTS OF ACCEPTABLE MANUFACTURERS, WHICH HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR THREE YEARS. DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
16. DO NOT CUT STRUCTURAL MEMBERS WITHOUT PRIOR WRITTEN APPROVAL.
17. CONCEAL PIPING TO THE GREATEST EXTENT POSSIBLE.
18. INSTRUCT OWNER IN PROPER OPERATION OF SYSTEMS.

19. DRAWINGS DO NOT SHOW ALL OFFSETS WHICH MAY BE REQUIRED. MAKE OFFSETS WITH FITTINGS USING THE LEAST ANGLE OF OFFSET POSSIBLE. PIPING SHALL BE ROUTED TO AVOID ALL STRUCTURAL SUPPORTS, AND COORDINATED WITH WORK OF OTHER TRADES.
20. MATERIALS, METHODS, AND INSTALLATION SHALL COMPLY WITH THE PROVISIONS OF THE LATEST EDITION OF THE FOLLOWING CODES AS ADOPTED BY THE AUTHORITY HAVING JURISDICTION.
- 2022 OREGON STRUCTURAL SPECIALTY CODE (OSSC)  
2022 OREGON MECHANICAL SPECIALTY CODE  
2021 OREGON PLUMBING SPECIALTY CODE (OPSC)  
2022 OREGON FIRE CODE  
2021 OREGON STATE ENERGY CODE WITH LOCAL AMENDMENTS

## REMODEL CONSTRUCTION NOTES

1. DEMOLITION: WORK REQUIRED IS NOTED ON PLANS. VERIFY WITH ON SITE CONDITION AND OWNER. SALVAGE EQUIPMENT FOR OWNER'S USE AS NOTED.
2. COORDINATE INTERRUPTIONS OF SERVICES PASSING THROUGH WORK AREA TO MINIMIZE DISRUPTION IN ADJACENT SPACES. COORDINATE WITH BUILDING OWNER.
3. INSTALL NEW WORK GENERALLY AS SHOWN. ADEQUATE SPACE HAS BEEN VERIFIED TO THE DEGREE POSSIBLE, BUT MAY REQUIRE MINOR RELOCATION OF SMALL CONDUIT AND CEILING WIRE. COORDINATE EXTENT OF RELOCATION WITH GENERAL CONSTRUCTION WORK.
4. COORDINATE WORK WITH GENERAL CONSTRUCTION TO MINIMIZE DUST & DUST MIGRATION.

## PIPING NOTES

1. SANITARY, WASTE, AND VENT PIPING (PLASTIC NOT ALLOWED) SHALL BE NO-HUB CAST IRON OR DWV COPPER.
2. HOT AND COLD WATER PIPING SHALL BE HARD DRAWN COPPER TUBING - TYPE L, ASSEMBLED WITH WROT COPPER FITTINGS AND LEAD-AND ANTIMONY-FREE SOLDER.
3. INSULATE ALL HOT AND COLD WATER PIPING WITH GLASS FIBER INSULATION WITH ALL SERVICE JACKET. USE HEAT BONDING TAPE TO CLOSE INSULATION. STAPLES AND PRESSURE TAPE ARE PROHIBITED.
4. PROVIDE ALL REQUIRED ACCESSORIES INCLUDING SHUT-OFFS AND CLEAN-OUTS. PROVIDE COMPONENTS WHICH PREVENT BACK-SIPHONAGE OR CROSS-CONNECTIONS. PROVIDE ISOLATION DEVICES TO REDUCE SOUND TRANSMISSION.
5. PROVIDE STOPS FOR EACH WATER CONNECTION TO EACH FIXTURE OR ITEM OF EQUIPMENT.
6. DISINFECT WATER DISTRIBUTION SYSTEM. FLUSH AND TEST ALL SYSTEMS FOR PROPER OPERATION. ADJUST SYSTEM TO PREVENT WATER HAMMER.
7. REFER TO PIPING DIAGRAMS AND DETAILS FOR REQUIRED FITTINGS, VALVES, ETC. FLOOR PLANS AND SECTIONS INDICATE EQUIPMENT LOCATIONS AND GENERAL PIPE ROUTING ONLY.
8. REFER TO CIVIL DRAWINGS FOR UTILITY WORKS 3'-0" BEYOND THE BUILDING LINE.

## D

**E**

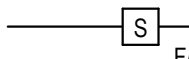

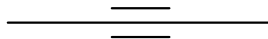
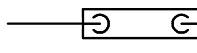
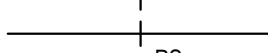
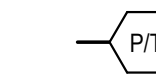
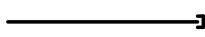

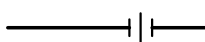
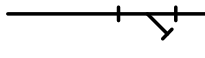


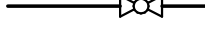
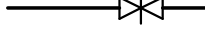
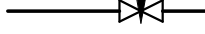
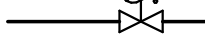
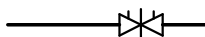

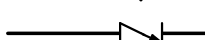



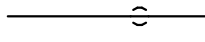
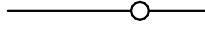
## ABBREVIATIONS

AFB	AIR	ID	INDIRECT DRAIN
AFE	ABOVE FINISHED FLOOR	IE	ENTER ELEVATION
ARR	ARRANGEMENT	IN	INCH
ATM	ATMOSPHERE	INT	INITIAL
		INT	INTERIOR
BFF	BELOW FINISHED FLOOR		
BHP	BACKFLOW PREVENTER	KWH	KILOWATT
BUDG	BRAKE HORSEPOWER	KWH	KILOWATT HOURS
BOB	BUILDING		
BOS	BOTTOM OF BEAM	L	LENGTH
BT	BOTTOM OF STEEL	LB	POUND, LINEAR BAR
CA	BRITISH THERMAL UNITS PER HOUR	LS	POUNDS
CAV	CAPACITY	LWT	LEAVING WATER TEMPERATURE
CFM	CUBIC FEET PER MINUTE	MAX	MAXIMUM
CI	CAST IRON	MBS	THOUSAND BTU PER HOUR
CLG	CEILING, COOLING	MMH	MINIMUM CRITICAL GAP
CM	CENTRIFUGAL	MECH	MECHANICAL
CMFCL	CLEANOUT	MFR	MANUFACTURER
CONC	CONCRETE	MIN	MINIMUM
COND	CONDENSATE	MTR	MOTOR
CONT	CONTINUE, CONTROL		
COMP	COMPRESSOR	NC	NORMALLY CLOSED
CP	CIRCULATING PUMP	NEG	NEGATIVE
CU	CLEANOUT TO GRADE	NOT	NOT IN CONTRACT
CT	CUBIC FEET	NO	NUMBER, NORMALLY OPEN
CTF	CONSTANT VOLUME	NOT	NOT TO SCALE
CV	COLD WATER	OTS	
DB	DECIBELS	ON	ON CENTER
DOV	DOUBLE CHECK VALVE ASSEMBLY	OD	OUTSIDE DIAMETER
DEG	DEGREE	OPNG	OPENING
DF	DRINKING FOUNTAIN	ORL	OVERFLOW ROOF DRAIN
DI	DI-KRONZ		OVERFLOW RAIN LEADER
DIA	DIAMETER		
DN	DOWN		
DS	DOWNDRAFT		
E	EXISTING	PH	PUMP, PLUMBING
EER	ENERGY EFFICIENCY RATING	POS	PHASE
EFF	EFFICIENCY	PCC	POINT OF CONNECTION
EL	ELEVATION	POS	POSITIVE
EQUIP	EQUIPMENT	PVT	PRESSURE/TEMPERATURE
ESP	EXTERNAL STATIC PRESSURE	PVC	POLYVINYL CHLORIDE
EW	EXITING WATER TEMPERATURE	QTY	QUANTITY
EXH	EXHAUST	RD	ROOF DRAIN
EWC	ELECTRIC WATER COOLER	REF	REFERENCE
EXT	EXISTING	REQD	REQUIRED
EXP	EXPANSION	RL	RAIN LEADER
EXR	EXTERNAL, EXTERNAL	RFBP	REDUCED PRESSURE BACKFLOW PREVENTER
		RFM	REVOLUTIONS PER MINUTE
F	FAHRENHEIT, FIRE LINE	S	SOIL
F	FIRE DAMPER, FLOOR DRAIN	SD	STORM DRAIN, SMOKE DAMPER
FDC	FIRE DEPARTMENT CONNECTION	SP	SPRINKLER
FLA	FULL LOAD AMPS	SS	STAINLESS STEEL, SANITARY SE
FLR	FLOOR	STR	STAIRSTEP
FLTR	FILTER		
FM	FLOW METER	TEMP	TEMPERATURE
FPM	FEET PER MINUTE	TOT	TOTAL
FPS	FEET PER SECOND	TP	TRAP PRIMER, TOTAL PRESSURE
FT	FACE VELOCITY	TP	TYPICAL
		U	UNLESS OTHERWISE NOTED
G	GAGE	V	VENT, VOLT
GAL	GALLONS	VV	VALVE
GALV	GALVANIZED	VEL	VELOCITY
GPW	GALLONS PER MINUTE	VFD	VARIABLE FREQUENCY DRIVE
		VTR	VENT THROUGH ROOF
H	HOSE BIBB		
HD	HEAD	W	WASTE, WATER, WATT, WIDTH
HX	HEAT EXCHANGE	WG	WATER GAGE
HWA	HAND-OFF-AUTOMATIC	WH	WATER HEAT, WALL HYDRANT
HO	HOT WATER	WTR	WATER
HWC	HOT WATER CIRCULATING		
HWP	HOT WATER PUMP		
HZ	HERTZ		

## SYMBOLS LEGEND - GENERAL

SYMBOL	DESCRIPTION
	DRAWING CONSTRUCTION ("FLAG") NOTE
	EQUIPMENT IDENTIFIER
	MATCHLINE
	REVISION CLOUD (ENCIRCLES DRAWING CHANGES MADE SINCE THE PREVIOUS RELEASE)
	REVISION REFERENCE
	EXISTING TO BE REMOVED (HATCH)
	HEAVY LINEWEIGHT INDICATES NEW WORK
	LIGHT LINEWEIGHT INDICATES EXISTING INFORMATION
	POINT OF CONNECTION
	<b>DETAIL REFERENCE</b> DETAIL IDENTIFICATION NUMBER SHEET WHERE DETAIL IS DRAWN
	<b>ELEVATION REFERENCE</b> ELEVATION IDENTIFICATION NUMBER SHEET WHERE ELEVATION IS DRAWN
	<b>SECTION REFERENCE SECTION</b> IDENTIFICATION NUMBER SHEET WHERE SECTION IS DRAWN
	NORTH REFERENCE






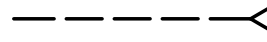








## SYMBOLS LEGEND - PIPING

SYMBOL	DESCRIPTION
	STEAM TRAP ASSEMBLY FIT = FLOAT AND THERMOSTATIC F = FLOAT T = THERMOSTATIC B = BUCKET IB = INVERTED BUCKET I = IMPULSE O = ORIFICE
	PIPE ANCHOR
	PIPE ALIGNMENT GUIDE
	CONTROL VALVE STATION
	PIPE SUPPORT
	PRESSURE/TEMPERATURE TEST PORT
	CAP
	PLUG
	UNION
	WYE STRAINER
	GATE VALVE
	GLOBE VALVE
	BALL VALVE
	BALANCING OR PLUG VALVE
	NEEDLE VALVE
	PRESSURE REDUCING VALVE
	BALANCING/MEASURING VALVE
	RELIEF VALVE
	CHECK VALVE
	PIPE TURNING DOWN / AWAY
	PIPE TURNING UP / TOWARDS
	PIPE DOWN TEE
	PIPE DOWN TEE / AWAY
	PIPE UP TEE / TOWARDS
















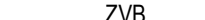
## SYMBOLS LEGEND - PIPING

SYMBOL	DESCRIPTION
	SOIL OR WASTE
	VENT
	RAIN LEADER
	OVERFLOW RAIN LEADER
	INDIRECT DRAIN
	COLD WATER
	HOT WATER
	HOT WATER CIRCULATING
	140° POTABLE HOT WATER
	120° POTABLE HOT WATER
	FIRE
	SPRINKLER
	STANDPIPE
	HIGH PRESSURE STEAM
	HEATING WATER SUPPLY
	HEATING WATER RETURN
	CHILLED WATER SUPPLY
	CHILLED WATER RETURN
	REDUCER, CONCENTRIC
	WYE STRAINER WITH CAPPED HOSE AND BLOWDOWN VALVE
	ANGLE VALVE
	AUTOMATIC CONTROL VALVE - TWO WAY (PNEUMATIC OPERATOR SHOWN)
	AUTOMATIC CONTROL VALVE - THREE WAY (ELECTRIC OPERATOR SHOWN)
	BUTTERFLY VALVE
	FLEXIBLE CONNECTION IN PIPING
	MANUAL AIR VENT (MAV), AUTOMATIC AIR VENT (AAV)
	PRESSURE GAUGE
	THERMOMETER
	THERMOMETER WELL
	SIGHT GLASS
	HOSE BIB

## SYMBOLS LEGEND - PIPING & AIRFLOW DIAGRAMS

SYMBOL	DESCRIPTION
	PIPING OR DUCTED AIRFLOW
	NON-DUCTED AIRFLOW
	ELECTRICAL CONNECTION
	FLOW CONTINUATION ARROW
	COMPLEX INTERLOCK (ELEC., PNEUMATIC, ETC.)
	CONNECTION TO CENTRAL MONITORING AND CONTROL SYSTEM (CMCS)
	PUMP
	CENTRIFUGAL FAN
	ELECTRIC MOTOR/STARTER ASSEMBLY
	ELECTRIC MOTOR OPERATOR (VALVES AND DAMPERS)
	FLOOR DRAIN
	FUNNEL DRAIN
	FLOOR SINK (SQUARE AND ROUND)
	FLOW DIRECTION

## SYMBOLS LEGEND - MEDICAL GASES

SYMBOL	DESCRIPTION
	OXYGEN
	MEDICAL COMPRESSED AIR
	MEDICAL VACUUM
	WASTE ANESTHETIC GAS
	MEDICAL AIR OUTLET
	WASTE ANESTHETIC GAS DEVICE
	NITROUS OXIDE (NITROUS)
	NITROGEN
	CARBON DIOXIDE
	ETHYLENE OXIDE
	MEDICAL GAS VALVE (SERVICE VALVE)
	ZONE VALVE BOX
	MEDICAL GAS ALARM BOX
	
	MEDICAL AIR PRESSURE SENSOR
	HOSE REEL (RETRACTABLE)

## SYMBOLS LEGEND - LABORATORY

SYMBOL	DESCRIPTION
— + —	NON POTABLE COLD WATER
— ++ —	NON POTABLE HOT WATER
— +++ —	NON POTABLE HOT WATER RECIRCULATE
— LA —	LABORATORY AIR
— LV —	LABORATORY VACUUM

## DRAWING REVISIONS

#	Date	Description
1		

**PERMIT SET**

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**BLRB architects**

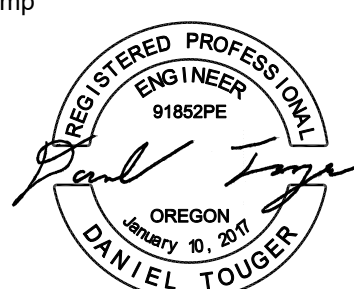
<b>TACOMA</b>	<b>SPOKANE</b>	<b>PORTLAND</b>	<b>BEND</b>
1201 Pacific Ave Suite 700 WA 98402 253.627.5599	421 W Riverside Ave Suite 511 WA 99201 509.252.5080	621 SW Morrison St. Suite 950 OR 97205 503.595.0270	721 SW Industrial Suite 130 OR 97702 541.330.6506

Drawing Title:

# GENERAL NOTES, ABBREVIATIONS AND SHEET INDEX

Date : 4/21/23	Drawn By : Author
Revised :	Project No. 023030

Stamp



Expires: 06/30/24

P0.00

PLUMBING SHEET INDEX	
P0.00	GENERAL NOTES, ABBREVIATIONS AND SHEET INDEX
P2.00	PLUMBING SCHEDULES
P01.01	PLUMBING DEMOLITION - BLDG A
P3.00	PLUMBING - UNDERGROUND - BLDG A
P3.01	PLUMBING - BLDG A
P6.00	PLUMBING DIAGRAMS

1

2

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4

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6

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	ROUGH-IN CONNECTION IN					REMARKS
		W	V	CW	HW	TW	
L-1	LAVATORY, WALL MOUNTED	1-1/4	1-1/4	1/2	1/2	--	SLOANSTONE 2-STATION WALL-MOUNTED ROUND FRONT SINK, MODEL: ELRF-82000, PROVIDED WITH HANGER PLATE AND HOLES FOR CONCEALED ARM CARRIER SYSTEMS, MODEL #28746-PC ADA GRID STRAINER, MODEL #28700 SERIES P-TRAP, MODEL #28800 SERIES STOP WITH FLEXIBLE SUPPLIES, MODEL #28946-3-NT ADA TRAP, STOP, AND SUPPLY PROTECTORS FOR OFFSET GRID STRAINER, PROVIDE HARDWIRED FAUCET SLOAN MODEL: EAF-100-HLT-CP-0.5GPM ASSEMBLY INSTALLED PER ALL ADA REQUIREMENTS.
L-2	LAVATORY, WALL MOUNTED	1-1/4	1-1/4	1/2	1/2	--	ZURN MODEL #Z5344, 20" X 18" VITREOUS CHINA WALL HUNG LAVATORY WITH 4" CENTER FAUCET HOLE, PROVIDED WITH HANGER PLATE AND HOLES FOR CONCEALED ARM CARRIER SYSTEMS, MODEL #Z2746-PC ADA GRID STRAINER, MODEL #Z8700 SERIES P-TRAP, MODEL #Z8800 SERIES STOP WITH FLEXIBLE SUPPLIES, MODEL #Z8946-3-NT ADA TRAP, STOP, AND SUPPLY PROTECTORS FOR OFFSET GRID STRAINER, ZURN MODEL #Z8100C-XL 3M AQUA SPEC SINGLE CONTROL FAUCET, POLISHED CHROME PLATED CAST BRASS 4" CENTER SET SINGLE CONTROL LAVATORY FAUCET, ADA COMPLIANT LEVER HANDLE, MOUNTING HARDWARE, 1/2" NPSM COUPLING NUTS FOR STANDARD LAVATORY RISERS, POP-UP HOLE PLUGGED, 0.5 GPM VANDAL-RESISTANT PRESSURE COMPENSATING MALE AERATOR (COMPLYING WITH ANSI A112.18.1M STANDARD FOR FLOW), THERMOSTATIC MIXING VALVE: ZURN ZW387DXT, ASSEMBLY INSTALLED PER ALL ADA REQUIREMENTS.
(E) S-1	SINK	2"	1-1/2"	3/4	3/4	--	EXISTING SINK TO REMAIN IN PLACE.
WC-1	WATER CLOSET, WALL MOUNTED FLUSH VALVE TYPE	4	2	1	--	--	ZURN MODEL #Z5665-BWL, HET ELONGATED FLOOR MOUNTED ECOVANTAGE® FLUSH VALVE TOILET SYSTEM, ECOVANTAGE HIGH EFFICIENCY TOILET SYSTEM, VITREOUS CHINA, 1.28 GPF HIGH EFFICIENCY, ADA COMPLIANT, FLOOR MOUNTED, BOTTOM OUTLET TOILET WITH SIPHON JET FLUSHING ACTION AND ELONGATED FRONT RIM WITH 1-1/2" TOP SPUD, ZURN MODEL #Z2892-COMB CLOSET BOLT & WAX RING KIT, ZURN MODEL #Z6955S-BL ELONGATED, STANDARD WHITE, OPEN FRONT TOILET SEAT, LESS COVER, WITH STAINLESS STEEL CHECK HINGE ZURN MODEL #Z6000AV-HET, AQUAVANTAGE® EXPOSED CHROME PLATED FLUSHOMETER VALVE, EXPOSED QUIET DIAPHRAGM-TYPE, 1.28 GPF AQUAVANTAGE® TPE, CHLORAMINE RESISTANT, DUAL SEAL DIAPHRAGM WITH A CLOG RESISTANT FILTERED BY-PASS, ADA COMPLIANT, HIGH BACK PRESSURE VACUUM BREAKER, ONE PIECE HEX COUPLING NUT, ADJUSTABLE TAIL PIECE, SPUD COUPLING AND FLANGE FOR TOP-SPUD CONNECTION, CONTROL STOP HAS INTERNAL SIPHON GUARD PROTECTION, VANDAL RESISTANT STOP CAP, SWEAT SOLDER KIT, AND A CAST WALL FLANGE WITH SET SCREW, AND CHLORAMINE RESISTANT MATERIALS INTERNAL SEALS.

REMARKS:  
1. COORDINATE MOUNTING HEIGHTS AND HANDING WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS.  
2. MANUFACTURER LISTED IS BASIS OF DESIGN. PROVIDE LISTED OR EQUAL APPROVED BY OWNER.

ELECTRIC WATER HEATER SCHEDULE

EQUIP. NO	LOCATION	SERVICE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN SERIES	DESCRIPTION	CAPACITY (GAL)	INPUT (KW)	ELECTRICAL		OPERATING WEIGHT (LBS)	REMARKS
								FLA	V/PH/Hz		
(E) EWH-1	JANITOR	DOMESTIC HW	AO SMITH	ELSC20917	TANK TYPE WATER HEATER	19	2.5	-	120/160	-	2
(E) EWH-2	UNDER SINK	DOMESTIC HW	STIEBEL ELTRON	SHC2.5	ON DEMAND HOT WATER	2.65	1.3	-	120/160	-	1
WH-1	MAIN LAV	MAIN LAV	CHRONOMITE	CM-40L/240	ON DEMAND HOT WATER	-	9.6	40	240/160	-	3,4
WH-2	ADA LAV	ADA LAV	CHRONOMITE	CM-30L/240	ON DEMAND HOT WATER	-	7.2	30	240/160	-	3,4

REMARKS:  
1. EXISTING WATER HEATER TO REMAIN IN PLACE.  
2. EXISTING WATER HEATER AND ASSOCIATED ACCESSORIES TO BE DEMOED AND REMOVED.  
3. CONTRACTOR TO INSTALL PER MANUFACTURER RECOMMENDATIONS.  
4. PROVIDE 2-S16160, CL IN WALL CABINET.

SANITARY CALCULATION

QUANTITY	DESCRIPTION	UNITS PER PUBLIC GENERAL	TOTAL UNITS
4	WATER CLOSET	4.00	16.00
2	LAVATORY	1.00	2.00
1	KITCHEN SINK	2.00	2.00
TOTAL FIXTURE UNITS			20.00
MINIMUM BUILDING GRAVITY DRAIN SIZE = 4" AT 1/8"/FT SLOPE			

san scale: 06/14/23

OVERALL WATER SERVICE CALCULATION

ITEM	DESCRIPTION		FIXTURE UNIT EACH	TOTAL UNITS (COMB)	(75) COLD WATER	(75) HOT WATER
	HOSE BIBB		2.50	0.00	0.00	0.00
	HOSE BIBB (EACH ADDITIONAL)		1.00	0.00	0.00	0.00
4	WATER CLOSET		2.50	10.00	10.00	0.00
2	LAVATORY		1.00	2.00	1.50	1.50
1	KITCHEN SINK		1.50	1.50	1.13	1.13
FIXTURE UNIT TOTAL				13.50	12.63	2.63
FLOW IN GPM				17.00		
IRRIGATION--SEPARATE METER				0		
a.	MINIMUM DAILY SERVICE PRESSURE			50		psi
b.	STATIC HEAD LOSS 434 FT X	6		2.604		psi
c.	WATER METER PRESSURE DROP			3		psi
d.	BACKFLOW PREVENTER--RPBP			8		psi
e.	BOOSTER PUMPS			0		psi
f.	PRESSURE REQUIRED AT FIXTURE			30		psi
PRESSURE AVAILABLE FOR FRICTION LOSS, a - b - c - d + e - f				6.396		psi
TOTAL EQUIVALENT PIPE LENGTH FT, PLUS FITTINGS				X 1.3	380	ft
MAXIMUM FRICTION LOSS PRESS. AVAIL. X 100/EQUIV. LENGTH					1.640	psi
BUILDING COLD WATER MAIN				1-1/2"		

DRAWING REVISIONS

Date	Description
------	-------------

PERMIT SET

FACILITY OFFICE TI

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721 SW Industrial Suite 130 OR 97702 541.330.6506

Drawing Title:

PLUMBING SCHEDULES

Date : 4/21/23

Revised :

Stamp

Drawn By : Author

Project No 023030

Sheet No

REGISTERED PROFESSIONAL ENGINEER  
91802PE  
DANIEL TOUGER

OREGON  
JANUARY 6, 2020

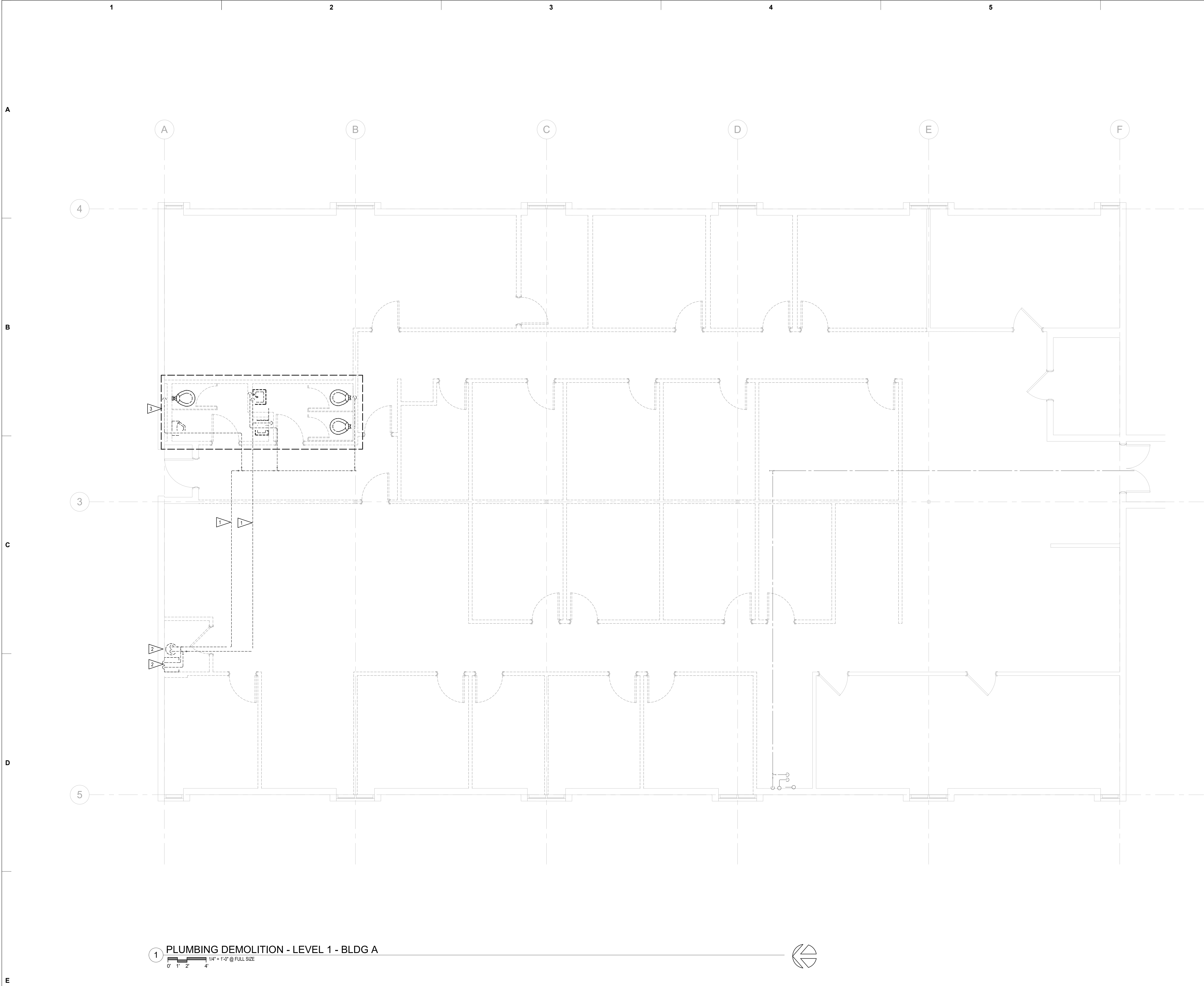
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**SHEET NOTES**

- A. DRAWINGS ARE SCHEMATIC IN NATURE. NOT ALL EQUIPMENT, FITTINGS OR BRANCHES ARE SHOWN. IT IS UP TO THE CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND THE EXTENT OF WORK REQUIRED.
- B. PENETRATIONS AT ALL ASSEMBLIES TO BE PROPERLY SEALED.
- C. EXISTING POINT OF USE WATER HEATER TO REMAIN IN PLACE

**FLAG NOTES**

1. DEMO HOT AND COLD WATER LINE FOR EXISTING RESTROOMS AND ASSOCIATED ACCESSORIES.
2. DEMO EXISTING MOP SINK AND WATER HEATER AND ASSOCIATED ACCESSORIES.
3. DEMO, CAP, AND ABANDON EXISTING LAVATORY AND WATER CLOSET SANITARY AND VENT CONNECTIONS.

**DRAWING REVISIONS**

Rev	Date	Description
1		

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Drawing Title:

**PLUMBING DEMOLITION - BLDG A**

Date : 4/21/23

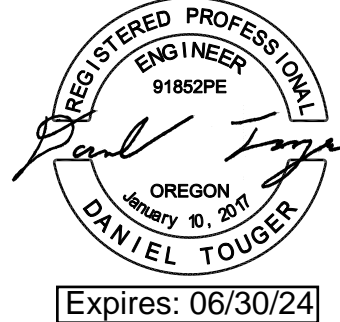
Drawn By : Author

Revised :

Project No.

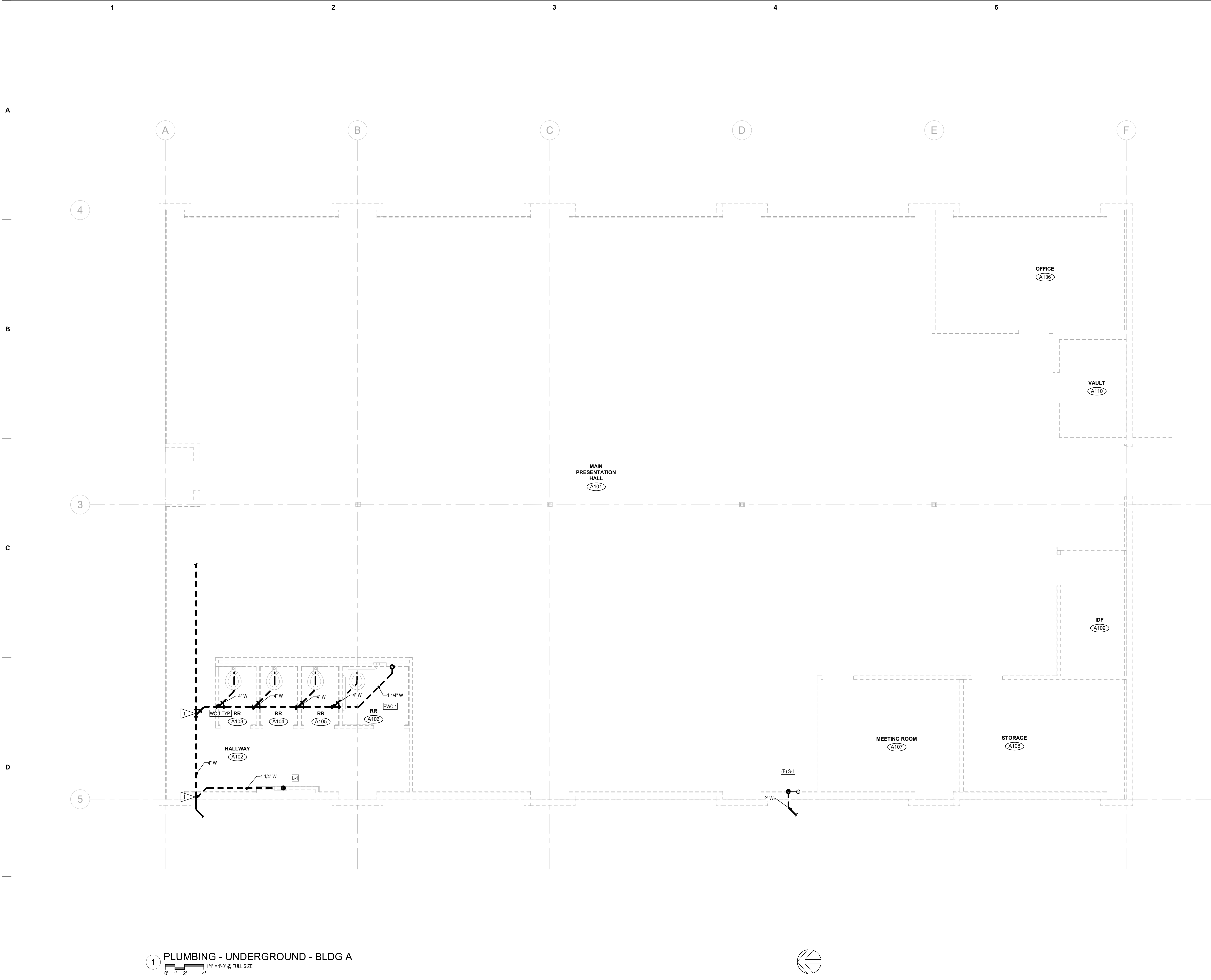
023030

Stamp



Sheet No.

**PD1.01**



- SHEET NOTES**
- A. DRAWINGS ARE SCHEMATIC IN NATURE. NOT ALL EQUIPMENT, FITTINGS OR BRANCHES ARE SHOWN. IT IS UP TO THE CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND THE EXTENT OF WORK REQUIRED.
- B. PENETRATIONS AT ALL ASSEMBLIES TO BE PROPERLY SEALED.

- FLAG NOTES**
1. CONNECT NEW FIXTURE SANITARY LINES TO EXISTING SANITARY MAIN.

**DRAWING REVISIONS**

	Date	Description

**PERMIT SET**

**FACILITY OFFICE TI**

16550 SW MERLO RD BEAVERTON, OR 97003

**SAZAN GROUP**

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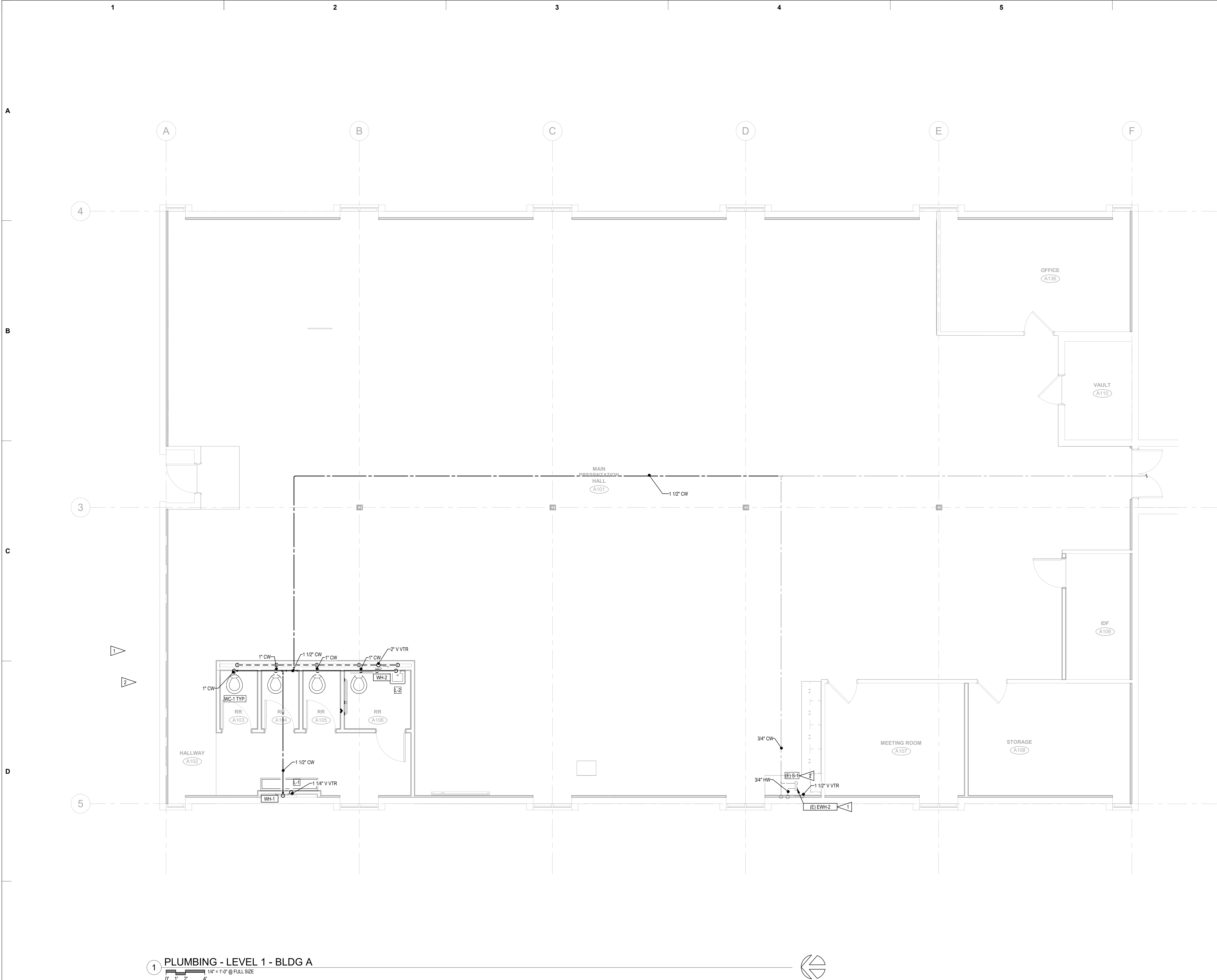
Drawing Title:  
**PLUMBING - UNDERGROUND -  
BLDG A**

Date : 4/21/23	Drawn By : Author
Revised :	Project No. 023030
Stamp	Sheet No.



**P3.00**





1 PLUMBING - LEVEL 1 - BLDG A

0' 1' 2' 4' 1/4" = 1'-0" @ FULL SIZE

SHEET NOTES

- A. DRAWINGS ARE SCHEMATIC IN NATURE. NOT ALL EQUIPMENT, FITTINGS OR BRANCHES ARE SHOWN. IT IS UP TO THE CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND THE EXTENT OF WORK REQUIRED.
- B. PENETRATIONS AT ALL ASSEMBLIES TO BE PROPERLY SEALED.
- C. CONTRACTOR TO ENSURE EXISTING TANK TYPE WATER HEATER AND POINT OF USE WATER HEATER ARE IN GOOD WORKING ORDER.

FLAG NOTES

1. EXISTING WATER HEATER TO REMAIN IN PLACE.
2. EXISTING SINK TO REMAIN IN PLACE.

DRAWING REVISIONS

Rev	Date	Description
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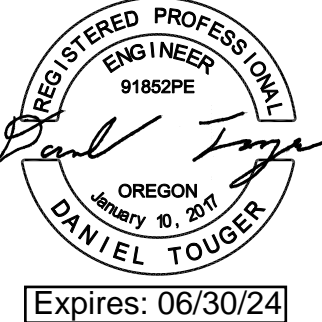
BLRB architects

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Drawing Title: PLUMBING - BLDG A

Date : 4/21/23	Drawn By : Author
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P3.01



DRAWING REVISIONS

Date	Description
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Drawing Title:

PLUMBING DIAGRAMS

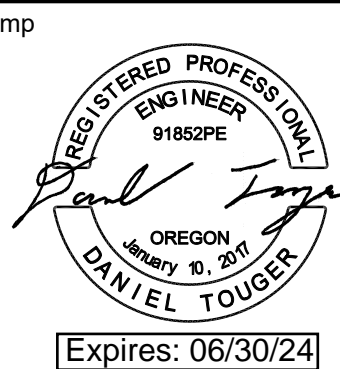
Date : 4/21/23

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Project No. 023030

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P6.00