

March 11, 2022

SOLICITATION ADDENDUM NO. 1

ITB 21-0016

Summit Building- Tenant Improvements- General Contractor

THE FOLLOWING CHANGES/ADDITIONS TO THE ABOVE CITED SOLICITATION ARE ANNOUNCED:

This Addendum modifies the Invitation to Bid (ITB) document(s) only to the extent indicated herein. All other areas not changed or otherwise modified by this Addendum shall remain in full force and effect. This Addendum is hereby made an integral part of the ITB document. Bidder must be responsive to any requirements of this Addendum as if the requirements were set forth in the ITB. Failure to do so may result in Bid rejection. See the ITB regarding requests for clarification or change and protests of this Addendum, and the deadlines for the foregoing.

This addendum is to be acknowledged in the space provided on the Bidder Certification form supplied in the solicitation document. Failure to acknowledge receipt of this addendum may be cause to reject your offer.

The closing date IS CHANGING:

March 24, 2022 at 2:00 PM Pacific Time

CLARIFICATIONS/QUESTIONS

The closing date has Changed to March 24, 2022 at 2:00 PM Pacific Time

Please see the amended Project Drawings and Specifications attached.

QUESTION: What is the estimated value of this project?

ANSWER: The estimated value is \$3M.

QUESTION: There are some specification sections missing from the project manual: Section 004322, 004323, 012100, 012200, 084313, 099723 and 122113. I am unsure if these were left out by mistake, or if they were meant to be removed from the table of contents.

ANSWER: Please refer to HBX and KCL's narrative attached.

QUESTION: Could you briefly summarize the concrete sawcutting/demo scope on this project?

ANSWER: Please refer to HBX's narrative below.

SUBSTITUTION REQUESTS:

Approved: Alfrex FR Metal Composite Material

Denied: Air-Shield SMO

MAR
11TH
2022

PROJECT | BEAVERTON SCHOOL DISTRICT - CENTRAL OFFICE
SUMMIT BUILDING
1260 NW WATERHOUSE AVE., BEAVERTON, OR 97006

BIDDING ADDENDUM 1

REVISION 1 - DATED 3/11/22

This addendum is issued to modify, clarify, or amend the original Project Drawings and Specifications and is hereby made part of the Contract Documents. The Contractor shall be responsible for incorporating items in this Addendum to the Work. The following shall take precedence over anything to the contrary in the Drawings or Specifications.

QUESTIONS/CLARIFICATIONS: *The below items are in response to additional information or clarifications within the Contract documents. Provide the below scope or clarification within your base bid.*

1. SIGNAGE AT RECEPTION -1/A651. *Logo and letter to reflect the district's 'B' logo and lettering saying "Beaverton School District" to be routed out of the finished wood panels by the General Contractor as part of the wall paneling scope. Interiors of letters, e.g. the inside of the "B" to be mounted on a painted MDF backer board flush with the french cleat mounting cavity. Align all joints in the backer material to be fully concealed.*

The district will provide a vector graphics file of the logo and lettering. Final location to and sizing to be coordinated through wall panel shop drawing review. Routing/Laser cutting and installation by the General Contractor. Approximate area of signage/lettering for routing is 7'-0" x 1'-6" tall.

2. SIGNAGE AT BOARD ROOM -2/A651. *Lettering to be in maple finish to match other maple veneer within the project with finished edges. Dimensional letter to sit proud of the wall by ½" on stems.*

The district will provide a vector graphics file of the lettering. Assuming 8" tall lettering for bidding purposes. Final coordination and review to be provided via shop drawings for Architect's review.

3. WOOD PANELING RETURN -5/A651. *Scribe termination of wood paneling at both edges at reception against adjacent surfaces. Terminate perpendicularly at the north edge and at an angle to the mailroom wall on the southside.*
4. SAWCUTTING & DEMOLITION SCOPE - AD101. *Demolition work is generally shown on architectural demolition plans for the removal of walls, doors and other elements. Additional scope may be required to install new finishes or mechanical, electrical, or plumbing elements. Bidders should review these elements within sub trade documents to provide a complete demolition scope to support all new scope elements.*

Saw Cutting or chipping is anticipated within the ground floor Coffee Bar (Room 108) to support reconfiguration of plumbing within this area to connect to an existing sanctuary drain. Additionally, floor cores within the ground floor reception area and within the board room and adjacent conference room for electrical and low voltage will be required.

Additional sawcutting and demolition may be required to support installation of a new flagpole and footing within the parking lot. See G102.

Removal of exterior brick is required to install new ventilation louvers, see A700.

Additional floor preparation is required to support new floor finishes, especially in areas for polished or sealed concrete. Review finish floor plans and these specification sections.

SPECIFICATION REVISIONS: *The below are revisions to the project specifications:*

1. 00 01 10 - TABLE OF CONTENTS - Remove the below sections from the table of contents. They were included within the project table of contents and are not applicable to this project.

- a. 00 43 33 - Unit Prices Form
- b. 00 43 23 - Alternates Form
- c. 01 21 00 - Allowances
- d. 01 22 00 - Unit Prices
- e. 01 23 00 - Alternates
- f. 08 43 13 - Aluminum Framed Storefronts
- g. 09 97 23 - Concrete and Masonry Coatings
- h. 10 26 00 - Wall & Door Protection
- i. 12 21 13 - Horizontal Louver Blinds

Add the following section to the table of contents. It is included within the project manual already, but mistakenly omitted from the table of contents.

- a. 23 05 93 - Testing, Adjusting, and Balancing for HVAC
-
2. 09 91 23 - INTERIOR PAINTING (2.03.A.3.b) - Change sheen for interior surfaces to align with table on Sheet A650. Include the below information within this section for sheen to specify the following instead of a blanket semi-gloss finish.
 - a. *Interior Gypsum Board Partitions: Eggshell*
 - b. *Gypsum Board Ceilings: Flat (REV1)*
 - c. *Doors, Trim Woodwork: Semi-Gloss (REV1)*
-
3. 10 26 00 - WALL & DOOR PROTECTION - Remove this section from the project manual. It contained corner guards product information, which are not required within the project at this time.

300 4th Street
West Des Moines, IA 50265
515.724.7938

312 NW 10th Ave., Suite 100
Portland, OR 97209
503.212.4612

4014 N. Goldwater Blvd., Suite 203
Scottsdale, AZ 85251
480.666.0767

296 E. 5th Ave., Suite 501
Eugene, OR 97401
541.729.7645

CONSULTING ENGINEERS

Mechanical
Electrical
Plumbing
Lighting
Technology

Summit Central Office Remodel – Beaverton School District

Addendum 1

March 11, 2022

This addendum is issued to modify, clarify, or amend the original Project Drawings and Specifications and is hereby made part of the Contract Documents. The Contractor shall be responsible for incorporating items in this Addendum to the Work. The following shall take precedence over anything to the contrary in the Drawings or Specifications.

Mechanical Specifications:

1. Section [000110] - Table of Contents:
 - a. **MODIFY** table of contents 2.17 Division 23 to include:
230593 TESTING, ADJUSTING, AND BALANCING FOR HVAC

Electrical Drawings:

1. Drawing ED101 – ELECTRICAL DEMOLITION – LEVEL 1:
 - a. **MODIFY** existing lighting control at office suite for room Waiting 111, remove and relocate.
2. Drawing E101 – ELECTRICAL LIGHTING PLAN – LEVEL 1:
 - a. **MODIFY** existing lighting control for office suite, show relocated relay/override switch controls.
 - b. **MODIFY** existing lighting control for Waiting 111, show new circuiting requirements and occupancy sensor controls.
3. Drawing E301 – ELECTRICAL SCHEDULES:
 - a. **MODIFY** approved equals column to include manufacturer and series for select fixtures.

Technology Drawings:

1. Drawing T201 – TECHNOLOGY COMMUNICATIONS CEILING PLAN – LEVEL 1:
 - a. Open Office 113
 - i. **MODIFY** the location of the southern most wireless access point. Relocate the cabling and termination to room Waiting 111.
2. Drawing T301 – TECHNOLOGY LIFE SAFETY & SECURITY PLAN – LEVEL 1:
 - b. Camera schedule
 - i. **MODIFY** CAM-1 model number in the schedule to be PNM-9085RQZ.
 - ii. **MODIFY** CAM-2 model number in the schedule to be PNM-9085RQZ.

- iii. **MODIFY** CAM-3 model number in the schedule to be PNM-9085RQZ.
 - iv. **MODIFY** CAM-4 model number in the schedule to be PNM-9085RQZ.
 - v. **MODIFY** CAM-5 model number in the schedule to be PNM-9085RQZ.
 - vi. **MODIFY** CAM-6 model number in the schedule to be PNM-9085RQZ.
3. Drawing T501 – TECHNOLOGY DETAILS
- c. General Notes
 - i. **MODIFY** General Note C. to read: “Labeling scheme for both patch panels and work area outlets shall follow the Beaverton Community School District Scheme. Demarcation Room shall be Frame 0, Frame Room 225 shall be Frame 1 and Frame 332 shall be Frame 2.
 - d. Rack Diagrams – Frame Room 225
 - i. **ADD** two (2) vertical power distribution units housing 24 NEMA 5-20R plugs. Install one between each rack. Provide device equal to APC model #AP8830.
 - e. Rack Diagrams – Frame Room 332
 - i. **ADD** one (1) 4-Post Rack to this room and label it “IDF.3”. Rack shall be positioned similarly to what is illustrated in Frame Room 225.
 - ii. **ADD** two (2) vertical power distribution units housing 24 NEMA 5-20R plugs. Install one between each rack. Provide device equal to APC model #AP8830.
4. Drawing AV301 AV Electrical Plan Level 1
- a. General notes
 - i. **DELETE** elevation call outs for room where PAC boxes were removed.
5. Drawing AV302 AV Electrical Plan Level 2
- a. General notes
 - i. **DELETE** elevation call outs for room where PAC boxes were removed.
6. Drawing AV303 AV Electrical Plan Level 3
- a. General notes
 - i. **DELETE** elevation call outs for room where PAC boxes were removed.

End of Addendum.

SECTION 000110
TABLE OF CONTENTS**PROCUREMENT AND CONTRACTING REQUIREMENTS****1.01 DIVISION 00 -- PROCUREMENT AND CONTRACTING REQUIREMENTS**

- A 000101 - Project Title Page
- B 000110 - Table of Contents
- C ~~004322 - Unit Prices Form REV1~~
- D ~~004323 - Alternates Form REV1~~
- E 005000 - Contracting Forms and Supplements

SPECIFICATIONS**2.01 DIVISION 01 -- GENERAL REQUIREMENTS**

- A 011000 - Summary
- B 012000 - Price and Payment Procedures
- C ~~012100 - Allowances REV1~~
- D ~~012200 - Unit Prices REV1~~
- E ~~012300 - Alternates REV1~~
- F 012500 - Substitution Procedures
- G 013000 - Administrative Requirements
- H 013553 - Security Procedures
- I 014000 - Quality Requirements
- J 014100 - Regulatory Requirements
- K 015000 - Temporary Facilities and Controls
- L 016000 - Product Requirements
- M 017000 - Execution and Closeout Requirements
- N 017419 - Construction Waste Management and Disposal
- O 017800 - Closeout Submittals

2.02 DIVISION 02 -- EXISTING CONDITIONS

- A 024100 - Demolition

2.03 DIVISION 03 -- CONCRETE

- A 033511 - Concrete Floor Finishes

2.04 DIVISION 04 -- MASONRY**2.05 DIVISION 05 -- METALS****2.06 DIVISION 06 -- WOOD, PLASTICS, AND COMPOSITES**

- A 061000 - Rough Carpentry
- B 062000 - Finish Carpentry
- C 064100 - Architectural Wood Casework
- D 064200 - Wood Paneling

2.07 DIVISION 07 -- THERMAL AND MOISTURE PROTECTION

- A 072700 - Air Barriers
- B 075400 - Thermoplastic Membrane Roofing
- C 076200 - Sheet Metal Flashing and Trim
- D 079200 - Joint Sealants

2.08 DIVISION 08 -- OPENINGS

- A 081213 - Hollow Metal Frames
- B 081416 - Flush Wood Doors
- C 083200 - Sliding Glass Doors
- D ~~084313 - Aluminum Framed Storefronts REV 1~~
- E 087100 - Door Hardware
- F 089100 - Louvers

2.09 DIVISION 09 -- FINISHES

- A 090561 - Common Work Results for Flooring Preparation
- B 092116 - Gypsum Board Assemblies
- C 092216 - Non-Structural Metal Framing
- D 093000 - Tiling
- E 095100 - Acoustical Ceilings
- F 096500 - Resilient Flooring
- G 096813 - Tile Carpeting
- H 099123 - Interior Painting
- I 099300 - Staining and Transparent Finishing
- J ~~099723 - Concrete and Masonry Coatings REV 1~~

2.10 DIVISION 10 -- SPECIALTIES

- A ~~102600 - Wall and Door Protection REV 1~~
- B 107500 - Flagpoles

2.11 DIVISION 11 -- EQUIPMENT**2.12 DIVISION 12 -- FURNISHINGS**

- A ~~122113 - Horizontal Louver Blinds REV 1~~
- B 123600 - Countertops

2.13 DIVISION 13 -- SPECIAL CONSTRUCTION**2.14 DIVISION 14 -- CONVEYING EQUIPMENT****2.15 DIVISION 21 -- FIRE SUPPRESSION**

- A 210500 - Common Work Results for Fire Suppression
- B 210548 - Vibration and Seismic Controls for Fire Suppression Piping and Equipment
- C 210554 - Identification for Fire Suppression Piping and Equipment
- D 211300 - Fire Suppression Sprinkler Systems

2.16 DIVISION 22 -- PLUMBING

- A 220513 - Common Motor Requirements for Plumbing Equipment
- B 220517 - Sleeves and Sleeve Seals for Plumbing Equipment
- C 220529 - Hangers and Supports for Plumbing Piping and Equipment
- D 220548 - Vibration and Seismic Controls for Plumbing Piping and Equipment
- E 220553 - Identification for Plumbing Piping and Equipment
- F 221005 - Plumbing Piping
- G 221006 - Plumbing Piping Specialties
- H 2240 00 - Plumbing Fixtures

2.17 DIVISION 23 -- HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)

- A 230513 - Common Motor Requirements for HVAC Equipment
- B 230529 - Hangers and Supports for HVAC Piping and Equipment
- C 230548 - Vibration and Seismic Controls for HVAC
- D 230553 - Identification for HVAC Piping and Equipment
- E 240593 - Testing, Adjusting and Balancing for HVAC **(REV 1)**
- F 230713 - Duct Insulation
- G 230913 - Instrumentation and Control Devices for HVAC
- H 230923 - Direct-Digital Control Systems for HVAC
- I 233100 - HVAC Ducts and Casings
- J 233300 - Air Duct Accessories
- K 233423 - HVAC Power Ventilators
- L 233600 - Air Terminal Units
- M 233700 - Air Outlets and Inlets
- N 237223 - Packaged Air-to-Air Energy Recovery Units
- O 233126.13 - Small Capacity Split-System Air Conditioners

2.18 DIVISION 25 -- INTEGRATED AUTOMATION**2.19 DIVISION 26 -- ELECTRICAL**

- A 260500 - Common Work Results for Electrical
- B 260505 - Selective Demolition for Electrical
- C 260519 - Low-Voltage Electrical Power Conductors and Cables
- D 260526 - Grounding and Bonding for Electrical Systems
- E 2605 29 - Hangers and Supports for Electrical Systems
- F 260533.13 - Conduit for Electrical Systems
- G 260533.16 - Boxes for Electrical Systems
- H 260553 - Identification for Electrical Systems
- I 262416 - Panelboards
- J 262726 - Wiring Devices
- K 261816.16 - Enclosed Switches
- L 265553 - Static Uninterruptible Power Supply
- M 265100 - Interior Lighting

2.20 DIVISION 27 -- COMMUNICATIONS

- A 270000 - General Requirements for Communications Systems
- B 270505 - Selective Demolition of Communications Systems
- C 270526 - Grounding and Bonding for Communications Systems
- D 270528 - Pathways for Communications Systems
- E 270536 - Cable Trays for Communications Systems
- F 270544 - Sleeves and Sleeve Seals for Communications Pathways and Cabling
- G 270553 - Identification for Communications Systems
- H 271000 - Structured Cabling
- I 274100 - Audio-Visual Systems

2.21 DIVISION 28 -- ELECTRONIC SAFETY AND SECURITY

- A 280000 - General Requirements for Electronic Safety & Security Systems
- B 280505 - Selective Demolition of Electronic Safety and Security Systems
- C 281300 - Security Management System
- D 281500 - Security Management System Hardware Devices
- E 2820 00 - Video Management System
- F 283101 - Intrusion Detection
- G 284600 - Digital, Addressable Fire Alarm System

2.22 DIVISION 31 -- EARTHWORK**2.23 DIVISION 32 -- EXTERIOR IMPROVEMENTS**

- A 321623 - Sidewalks
- B 321723 - Pavement Markings

2.24 DIVISION 33 -- UTILITIES**2.25 DIVISION 34 -- TRANSPORTATION****2.26 DIVISION 40 -- PROCESS INTEGRATION****2.27 DIVISION 46 -- WATER AND WASTEWATER EQUIPMENT****END OF SECTION**

**SECTION 099123
INTERIOR PAINTING****PART 1 GENERAL****1.01 SECTION INCLUDES**

- A Surface preparation.
- B Field application of paints.
- C Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
- D Do Not Paint or Finish the Following Items:
 - 1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
 - 2. Items indicated to receive other finishes.
 - 3. Items indicated to remain unfinished.
 - 4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
 - 5. Floors, unless specifically indicated.
 - 6. Glass.
 - 7. Concealed pipes, ducts, and conduits.

1.02 REFERENCE STANDARDS

- A 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency current edition.
- B MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual Current Edition.
- C SSPC-SP 1 - Solvent Cleaning 2015, with Editorial Revision (2016).
- D SSPC-SP 6 - Commercial Blast Cleaning 2007.

1.03 SUBMITTALS

- A See Section 013000 - Administrative Requirements, for submittal procedures.
- B Product Data: Provide complete list of products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g., "alkyd enamel").
 - 2. MPI product number (e.g., MPI #47).
 - 3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.
- C Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches (216 by 279 mm) in size, illustrating range of colors available for each finishing product specified.
 - 1. Where sheen is specified, submit samples in only that sheen.
 - 2. Where sheen is not specified, discuss sheen options with Architect before preparing samples, to eliminate sheens not required.
 - 3. Allow 30 days for approval process, after receipt of complete samples by Architect.
- D Maintenance Data: Submit data including finish schedule showing where each product/color/finish was used, product technical data sheets, material safety data sheets (MSDS), care and cleaning instructions, touch-up procedures, repair of painted and finished surfaces, and color samples of each color and finish used.
- E Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 016000 - Product Requirements, for additional provisions.
 - 2. Extra Paint and Finish Materials: 1 gallon (4 L) of each color; from the same product run, store where directed.
 - 3. Label each container with color in addition to the manufacturer's label.

1.04 DELIVERY, STORAGE, AND HANDLING

- A Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C Paint Materials: Store at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated area, and as required by manufacturer's instructions.

1.05 FIELD CONDITIONS

- A Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C Provide lighting level of 80 ft candles (860 lx) measured mid-height at substrate surface.

PART 2 PRODUCTS**2.01 MANUFACTURERS**

- A Provide paints and finishes from the same manufacturer to the greatest extent possible.
 - 1. If a single manufacturer cannot provide specified products; minor exceptions will be permitted provided approval by Architect is obtained using the specified procedures for substitutions.
- B Paints:
 - 1. Rodda Paint Co: www.roddapaint.com/#sle.
 - 2. Sherwin-Williams Company: www.sherwin-williams.com/#sle.
 - 3. Miller Paint: www.millerpaint.com
 - 4. Kelly Moore: www.kellymoore.com
 - 5. As Approved by BSD Representative
- C Primer Sealers: Same manufacturer as top coats.

2.02 PAINTS AND FINISHES - GENERAL

- A Paints and Finishes: Ready-mixed, unless intended to be a field-catalyzed paint.
 - 1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
 - 2. For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color.
 - 3. Supply each paint material in quantity required to complete entire project's work from a single production run.
 - 4. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.
- B Volatile Organic Compound (VOC) Content:
 - 1. Provide paints and finishes that comply with the most stringent requirements specified in the following:
 - a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
 - b. Ozone Transport Commission (OTC) Model Rule, Architectural, Industrial, and Maintenance Coatings; www.otcair.org; specifically:
 - 1) Opaque, Flat: 50 g/L, maximum.
 - 2) Opaque, Nonflat: 150 g/L, maximum.
 - 3) Opaque, High Gloss: 250 g/L, maximum.
 - c. Architectural coatings VOC limits of the State in which the Project is located.

2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.

2.03 PAINT SYSTEMS - INTERIOR

- A Paint I-OP - Interior Surfaces to be Painted, Unless Otherwise Indicated: Including gypsum board, concrete, concrete masonry units, brick, wood, plaster, uncoated steel, shop primed steel, galvanized steel, aluminum, and acoustical ceilings.
1. Two top coats and one coat primer.
 2. Primer Coat: PVA
 3. Top Coat(s): Institutional Low Odor/VOC Interior Latex; MPI #143, 144, 145, 146, 147, or 148.
 - a. Products:
 - 1) Basis of Design: Rodda Paint, Unique II .
 - b. Sheen:
 - 1) Interior Gypsum Board Partitions: Eggshell (REV1)
 - 2) Gypsum Board Ceilings: Flat (REV1)
 - 3) Doors, Trim & Woodwork: Semi-Gloss (REV1)
- B Paint I-OP-MD-DT - Medium Duty Door/Trim: For surfaces subject to frequent contact by occupants, including metals and wood:
1. Two top coats
 2. Top Coat(s): Interior Light Industrial Coating, Water Based; MPI #151, 153 or 154.
 - a. Products:
 - 1) Basis of Design: Rodda Multi Master DTM Acrylic Semi-Gloss Enamel, 548901. (MPI #153)

PART 3 EXECUTION

3.01 PREPARATION

- A Clean surfaces thoroughly and correct defects prior to application.
- B Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.
- D Seal surfaces that might cause bleed through or staining of topcoat.
- E Concrete:
- F Masonry:
- G Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.
- H Plaster: Fill hairline cracks, small holes, and imperfections with latex patching plaster. Make smooth and flush with adjacent surfaces. Wash and neutralize high alkali surfaces.
- I Aluminum: Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.
- J Galvanized Surfaces:
- K Ferrous Metal:
 1. Solvent clean according to SSPC-SP 1.
 2. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Re-prime entire shop-primed item.
 3. Remove rust, loose mill scale, and other foreign substances using using methods recommended in writing by paint manufacturer and blast cleaning according to SSPC-SP 6 "Commercial Blast Cleaning". Protect from corrosion until coated.
- L Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried;

sand between coats. Back prime concealed surfaces before installation.

3.02 APPLICATION

- A Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".
- B Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- C Apply each coat to uniform appearance in thicknesses specified by manufacturer.
- D Sand wood and metal surfaces lightly between coats to achieve required finish.
- E Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- F Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

END OF SECTION



- ELECTRICAL DEMOLITION NOTES**
- DEMOLITION DRAWINGS PRESENT LAYOUT OF EXISTING CONDITIONS AND MAJOR MECHANICAL/ELECTRICAL ITEMS. THEY ARE NOT TO BE CONSTRUED AS COMPLETE IN REPRESENTATION OF ACCESSORIES AND INCIDENTALS TO BE REMOVED, REPLACED, OR REWORKED. WORK SHOULD BE ACCESSIBLE TO BE INFERRED. THE CONTRACTOR IS RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE BUILDING AND EXISTING CONDITIONS, PRIOR TO THE SUBMITTING OF A BID FOR THIS PROJECT.
 - REMOVE ELECTRICAL FACILITIES SELECT DEMOLITION AREAS TO RECEIVE THE NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.
 - THIS ELECTRICAL DEMOLITION DRAWING SHOWING EXISTING CONDITIONS HAS BEEN PREPARED BASED ON FIELD OBSERVATION AND ORIGINAL DRAWINGS. ADDITIONAL COMPONENTS MAY EXIST WHICH DO NOT SHOW, AND SUCH ITEMS SHALL BE DEALT WITH IN A MANNER SIMILAR TO THOSE ITEMS WHICH DO SHOW. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS.
 - CONDUITS, BOXES, ETC., SHALL BE REMOVED AS REQUIRED BY WALL AND CEILING DEMOLITION AND REMOVALS. WIRING SHALL BE REMOVED. ALL WIRING FOR THE REMODELED AREAS SHALL BE NEW UNLESS SPECIFICALLY NOTED OTHERWISE. ALL BRANCH CIRCUITS TO BE DISCONNECTED SHALL BE IDENTIFIED AS TO LOCATION OR ITEM SERVED BEFORE DISCONNECTING. CIRCUITS SERVING AREAS BEYOND THE IMMEDIATE DEMOLITION AREA SHALL BE MAINTAINED.
 - CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH EXISTING ELECTRICAL SYSTEM WHICH WILL BE AFFECTED BY THE DEMOLITION WORK. CONTRACTOR SHALL OBTAIN PERMISSION FROM OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES OR SYSTEMS WHICH MAY AFFECT OTHER AREAS BEYOND THE LIMITS OF THE IMMEDIATE DEMOLITION AREA. SUCH PERMISSION WILL BE GRANTED ONLY AFTER OWNER'S REPRESENTATIVE IS INFORMED OF THE REASON FOR AND DURATION OF THE SHUTDOWN AND IS SATISFIED THAT THE SHUTDOWN CAN BE MADE WITH AS LITTLE INCONVENIENCE TO OTHER AREAS AS POSSIBLE.
 - PANELBOARDS, DISCONNECTS, FIXTURES, WIRING DEVICES, SIGNAL DEVICES, ETC., SHOWN ON PLANS SHALL BE REMOVED UNLESS NOTED OTHERWISE. REMOVAL SHALL BE DONE IN A TIMELY MANNER IN ACCORDANCE WITH THE GENERAL DEMOLITION WORK. COORDINATE WITH THE OWNER AND OTHER CONTRACTORS.
 - EXISTING FURNITURE JUNCTION BOXES AT WINDOWS: REMOVE EXPOSED SURFACE RACEWAY BACK TO SOURCE. JUNCTION BOX AND PROVIDE BLANK COVER AT EXISTING FLUSH JUNCTION BOX. PREPARE FOR EXTENSION TO NEW MODULAR FURNITURE LOCATIONS PER PLANS.
 - WHERE EXISTING LIGHTING IS BEING REMOVED, MAINTAIN EXISTING BRANCH CIRCUITING IN THE ROOM OR AREA TO REFERRED RELOCATED OR NEW FIXTURES PER PLAN. FIELD TRACE AND IDENTIFY BRANCH CIRCUIT AND SWITCHES AND PREPARE FOR RECONNECTION. REFER TO LIGHTING PLANS FOR ADDITIONAL REQUIREMENTS.
 - ABBREVIATIONS:
 E - EXISTING ITEM TO REMAIN
 ER - NEW LOCATION OF EXISTING ITEM
 N - NEW ITEM IN EXISTING LOCATION
 R - EXISTING ITEM TO BE REMOVED, PATCH AND/OR COVER
 RN - REPLACE EXISTING WITH NEW
 RR - EXISTING ITEM TO BE REMOVED AND RELOCATED

KEYNOTES

EXISTING OVERHEAD AND RELAY CONTROL FOR EXISTING OFFICE SUITE. REMOVE AND RELOCATE. SEE LIGHTING PLAN SHEET E101 FOR ADDITIONAL REQUIREMENTS.

ELECTRICAL DEMOLITION PLAN - LEVEL 1
 1/8" = 1'-0" 1



LIGHTING GENERAL NOTES

A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

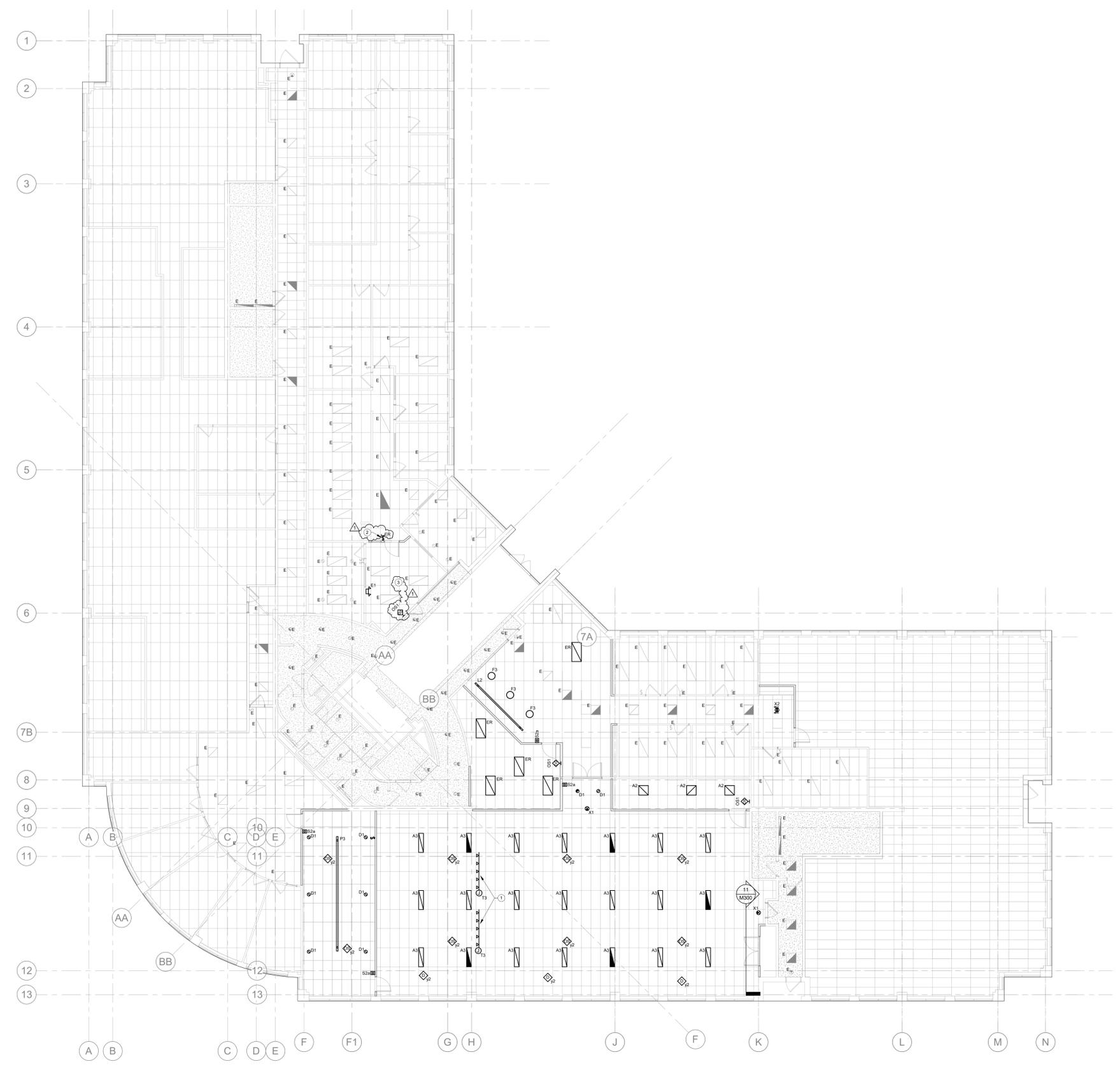
B. RELOCATED AND NEW FIXTURES SHALL UTILIZE THE EXISTING BRANCH CIRCUIT PREVIOUSLY FEEDING THE AREA WHERE LIGHTING IS REMOVED. AREAS WITH OCCUPANCY SENSOR CONTROLS SHALL BE CONNECTED DIRECTLY TO THE LIGHTING BRANCH CIRCUIT CONSTANT HOT. AREAS WHICH ARE IN COMMON AREAS WITH OCCUPANCY SENSOR CONTROL SHALL BE CONNECTED TO THE EXISTING TIMED-OFF COMMON AREA SWITCHLEG. FIELD TRACE AND IDENTIFY BRANCH CIRCUIT AND SWITCHLEGS AFFECTING EACH AREA OF WORK AND EXTEND EXISTING LIGHTING BRANCH CIRCUIT AND/OR SWITCHLEG AS APPLICABLE FOR THE SPACE.

KEYNOTES

1 TRACK LIGHTS TO BE FOCUSED AND AIMED AT BOARD SEATING AREA. VERIFY LOCATION OF TRACK LIGHTING WITH OWNER AND ARCHITECT PRIOR TO SPRINKLER.

2 NEW LOCATION OF EXISTING RELAY CONTROL AND OVERRIDE SWITCH FOR EXISTING OFFICE SUITE.

3 FIELD LOCATE AND INTERCEPT EXISTING UNSWITCHED LIGHTING BRANCH CIRCUIT IN THIS AREA. EXISTING LIGHTS IN WAITING 111 TO BE DISCONNECTED FROM EXISTING RELAY CONTROL, FED BY EXISTING BRANCH CIRCUIT AND CONTROLLED VIA NEW OCCUPANCY SENSOR AS SPECIFIED.



1 LIGHTING PLAN - LEVEL 1
1/8" = 1'-0"

EQUIPMENT CONNECTION SCHEDULE																																																			
ABBREVIATIONS:																																																			
1	NEMA 1 ENCLOSURE	INT	INTEGRAL WITH EQUIPMENT FROM FACTORY	3R	NEMA 3R ENCLOSURE	MMS	MANUAL MOTOR STARTER WITH FUSES	4	NEMA 4 ENCLOSURE	NFD	NON-FUSED DISCONNECT SWITCH, HEAVY DUTY	4X	NEMA 4X ENCLOSURE	RD	RETURN AIR DUCT DETECTOR	BO	PROVIDED BY OTHERS	RSR	RUN STATUS RELAY, NORMALLY OPEN	CB	CIRCUIT BREAKER IN PANEL	SD	SUPPLY AIR DUCT DETECTOR	CSD	COMBINATION STARTER/DISCONNECT	SSP	START/STOP PUSHBUTTON WITH PILOT	CP	CORD AND PLUG PROVIDED WITH UNIT	SS	START/STOP PUSHBUTTON	ECB	ENCLOSED CIRCUIT BREAKER	ST	SHUNT TRIP	FAR	FIRE ALARM SHUTDOWN RELAY	TOR	TIME DELAY OFF RELAY	FDS	FUSED DISCONNECT SWITCH, HEAVY DUTY	TS	TOGGLE SWITCH WITH PLUG FUSE	GF	GROUND FAULT CIRCUIT INTERRUPTION	VFD	VARIABLE FREQUENCY DRIVE	HQA	HAND-OFF-AUTO		
ELECTRICAL CHARACTERISTICS				DISCONNECT				CONTROLS		REMARKS																																									
TAG	VOLTAGE	PHASE	MOTOR HP	KW	MCA	TYPE	SIZE (AMPS)	NEMA RATING	FUSE SIZE (AMPS)	STARTER	DESCRIPTION																																								
CU-1	208 V	1	-	-	14	FDS	30	3R	25	-	-	POWERS SS-1																																							
CU-2	208 V	1	-	-	14	FDS	30	3R	20	-	-	POWERS SS-2																																							
EDH-1	480 V	3	-	7	8.4	BO	-	-	-	-	-	PROVIDE CONTACTOR/RELAY TO INTERLOCK EDH-1 WITH ERV-1																																							
EF-1	120 V	1	-	0.093	0.8	TS	20	1	-	-	-	PROVIDE WALL MOUNTED TOGGLE SWITCH AND LABEL "EXHAUST FAN". REFER TO MECHANICAL SCHEDULES FOR ADDITIONAL REQUIREMENTS.																																							
ERV-1	208 V	1	1	-	9.9	BO	-	-	-	-	-	POWER FED FROM OUTDOOR UNIT AT ROOF. PROVIDE CONDUIT FROM INDOOR UNIT TO ROOF UNIT AND WIRING CONNECTIONS PER MANUFACTURER REQUIREMENTS.																																							
SS-1	208 V	1	-	-	1	TS	20	1	-	-	-	POWER FED FROM OUTDOOR UNIT AT ROOF. PROVIDE CONDUIT FROM INDOOR UNIT TO ROOF UNIT AND WIRING CONNECTIONS PER MANUFACTURER REQUIREMENTS.																																							
SS-2	208 V	1	-	-	1	TS	20	1	-	-	-	POWER FED FROM OUTDOOR UNIT AT ROOF. PROVIDE CONDUIT FROM INDOOR UNIT TO ROOF UNIT AND WIRING CONNECTIONS PER MANUFACTURER REQUIREMENTS.																																							
VAV-1	120 V	1	-	-	1	TS	20	1	-	-	-																																								
VAV-2	120 V	1	-	-	1	TS	20	1	-	-	-																																								

NOTES:

A. PROVIDE FUSE AMP RATINGS PER EQUIPMENT NAMEPLATE, WHERE FUSES ARE INSTALLED.

B. SAFETY DISCONNECT SWITCHES AT ROOF SHALL BE MOUNTED ON PIPE OR METAL STRUT VERTICAL SUPPORT, ADJACENT TO MECHANICAL EQUIPMENT AND LABELED. COORDINATE LOCATION WITH MECHANICAL SYSTEM INSTALLER AND MAINTAIN ACCESS CLEARANCE TO MECHANICAL EQUIPMENT. SEAL ROOF PENETRATIONS PER ARCHITECTURAL ROOFING REQUIREMENTS.

C. CONDUIT SHALL BE CONCEALED BELOW ROOF, EXCEPT FOR STUB-UP CONNECTIONS TO EQUIPMENT AND DISCONNECTS, UNLESS OTHERWISE NOTED OR APPROVED.

D. CONTRACTOR TO CONFIRM OVERCURRENT PROTECTION RATINGS RECOMMENDED BY MANUFACTURER OF APPROVED EQUIPMENT PRIOR TO ORDERING AND INSTALLATION OF CIRCUIT BREAKERS IN PANELS.

LIGHTING FIXTURE SCHEDULE									
NOTES:									
1. ALL FIXTURES SHALL BE U.L. OR SIMILARLY LISTED.									
2. REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS, DETAILS, AND CONFIGURATIONS OF ALL LUMINAIRES. IF ARCHITECTURAL DRAWINGS DO NOT CLARIFY EXACT MOUNTING LOCATION OR DETAIL, ISSUE AN RFI FOR ARCHITECT TO SPECIFICALLY CLARIFY PRIOR TO FIXTURE ROUGH-IN.									
3. VERIFY COMPATIBILITY OF LIGHT FIXTURES WITH CEILING MATERIAL, ADJACENT CONSTRUCTION, AND ADJACENT FINISHES PRIOR TO SHOP DRAWINGS SUBMITTAL. NOTIFY THE ARCHITECT OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.									
4. CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE NECESSARY TO INSTALL AND SUPPORT THE LUMINAIRES. VERIFY MOUNTING OPTIONS WITH FIELD CONDITIONS PRIOR TO SUBMITTALS.									
5. AIM AND TARGET ADJUSTABLE LIGHT FIXTURES UNDER THE OBSERVATION AND IN COMPLIANCE WITH RECOMMENDATIONS OF THE OWNER AND ARCHITECT. INCLUDE LABOR AND MATERIAL COSTS MADE NECESSARY BY THIS REQUIREMENT.									
6. TRACK LIGHTING SHALL INCLUDE FITTINGS AND ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION AT THE CEILING LOCATIONS PROPOSED.									
7. EMERGENCY FIXTURE SYMBOLS NOTED ON THE DRAWINGS SHALL BE AS SCHEDULED BELOW, WITH THE ADDITION OF INTEGRAL 90-MINUTE BATTERY PACK OPERATION. PROVIDE CONSTANT HOT AND SWITCH LEG TO FIXTURES WITH INTEGRAL EMERGENCY..									
8. LIGHTING FIXTURE EQUAL ALTERNATES DIFFERING FROM THE SPECIFIED MANUFACTURER AND MODEL ARE SUBJECT TO REVIEW AND APPROVAL BY OWNER AND ARCHITECT. FOOTCANDLE CALCULATIONS OF THE APPLICATION WILL BE REQUIRED UPON...									
TYPE	MANUFACTURER	MODEL	DESCRIPTION	VOLTAGE	LOAD-VA	LAMP TYPE	APPROVED EQUALS		
A1	MARK	WHSPPR-2X4-90CRI-400LM-MINI-MVOLT-SWC-2T	LED RECESSED 2X4, WITH SOFT WHITE ACRYLIC SHIELD, WHITE, 90CRI	277 V	34 VA	LED 2500K 400LM	LEDALITE SILKSPACE		
A2	MARK	WHSPPR-2X2-90CRI-400LM-NODIM-MVOLT-SWC	LED RECESSED 2X2, WITH SOFT WHITE ACRYLIC SHIELD, WHITE, 90CRI	277 V	38 VA	LED 2500K 400LM	LEDALITE SILKSPACE		
A3	MARK	WHSPPR-1X4-90CRI-480LM-MINI-MVOLT-SWC-2T	RECESSED TROFFER 1X4, WITH SOFT WHITE ACRYLIC SHIELD, WHITE, 90CRI	277 V	49 VA	LED 2500K 480LM	LEDALITE SILKSPACE		
D1	GOTHAM	EV06-35-20-ARMWD-LSS-MVOLT-GZ1	6IN LED OPEN DOWNLIGHT, WITH CLEAR FLANGE AND SEMI-SPECULAR FINISH	277 V	20 VA	LED 2500K 200LM	LIGHTOLIER CALCULITE		
E1	LITHONIA	ELMAL	EMERGENCY LIGHT, WALL MOUNTED, WHITE THERMOPLASTIC HOUSING, 2 LED ADJUSTABLE LAMP HEADS, WITH 90-MINUTE BATTERY BACKUP	277 V	2 VA	LED	EATON/COOPER, PHILIPS		
F1	RBW	PASTILLE 1 DISC PAS-10-D-PC20-35-277 10 DEX	LED INTERIOR WALL SCONCE, WHITE, 90CRI	277 V	8 VA	LED 3500K 430LM			
F2	RBW	CENTRO CTF-18-PC20-35-277 10 DIN	LED SURFACE MOUNTED FIXTURE - 18IN ROUND, WHITE, 90CRI	277 V	30 VA	LED 3500K 240LM			
F3	TECH LIGHTING	KOSA 18	LED SURFACE MOUNTED FIXTURE - 18IN ROUND, WHITE, 90CRI, 0-10V DIMMING	277 V	22 VA	LED 3000K 300LM			
L1	LITHONIA	ZLN-L48-5000LM-FST-MVOLT-3K-80CRI-WH-HC(L) LENGTH)	4FT LED STRIP WITH FROSTED LENS, CUSTOM LENGTH CHAIN HUNG PENDANT MOUNT AT 9" FT AFF, CONFIRM PROPER CLEARANCE FROM LADDER TRAY IN FRAME ROOM.	277 V	25 VA	LED 3500K 750LMFT	EATON/COOPER, PHILIPS		
L2	AXIS	BEAM 2 TROFFER-750-90-35-WW-S(14)W-UNV-OP-1-S	14FT LED LINEAR SURFACE MOUNT, DIRECT WALLWASH, 90CRI, MOUNT 2FT SETBACK FROM WALL, FLUSH TO CEILING WITH TYPED ROD THROUGH CEILING TILE	277 V	90 VA	LED 3500K 750LMFT	CORONET L52		
P1	FINELIGHT	HPXP-ID-8-S-B-835-TG-277-SC-FC1%-FA100-C2-F E-SW	18FT LED LINEAR PENDANT FIXTURE, DIRECT/INDIRECT, VERIFY MOUNTING HEIGHT WITH ARCHITECT.	277 V	62 VA	LED 3500K 7560LM	CORONET L53		
P2	FINELIGHT	HPXP-ID-16-S-B-835-TG-277-SC-FC1%-FA100-C2-F E-SW	18FT LED LINEAR PENDANT FIXTURE, DIRECT/INDIRECT, VERIFY MOUNTING HEIGHT WITH ARCHITECT.	277 V	124 VA	LED 3500K 15120LM	CORONET L53		
P3	FINELIGHT	HPXP-ID-24-S-B-835-TG-277-SC-FC1%-FA100-C2-F E-SW	24FT LED LINEAR PENDANT FIXTURE, DIRECT/INDIRECT, VERIFY MOUNTING HEIGHT WITH ARCHITECT.	277 V	185 VA	LED 3500K 22680LM	CORONET L53		
T1	WAC	WHK-5028W-405-WT GLARE SHIELD, 5028-HSHR-WHT W SERIES TRACK	34FT LED TRACK, 3X4 WALL WASH HEADS, BLACK FINISH, 90CRI, MOUNT TRACK 3FT SETBACK FROM WALL, SPAGE HEADS 3FT ON CENTER, TOTAL OF (6) 28W HEADS, 1-AMP CURRENT LIMITER, SET AT 30 DEGREES AND ADJUST IN FIELD.	277 V	224 VA	LED 3500K			
T2	WAC	WHK-5028W-405-WT GLARE SHIELD, 5028-HSHR-WHT W SERIES TRACK	18FT LED TRACK, 3X4 WALL WASH HEADS, BLACK FINISH, 90CRI, MOUNT TRACK 3FT SETBACK FROM WALL, SPAGE HEADS 3FT ON CENTER, TOTAL OF (6) 28W HEADS, 1-AMP CURRENT LIMITER, SET AT 30 DEGREES AND ADJUST IN FIELD.	277 V	140 VA	LED 3500K			
T3	WAC	PALOMA WHK-4023-835-WT W SERIES TRACK	8FT LED TRACK, 45-DEGREE BEAM, BLACK FINISH, 90CRI, SPAGE HEADS 1.5FT ON CENTER, TOTAL OF (1) 22W HEADS, 1-AMP CURRENT LIMITER, AIM AND ADJUST BEAM IN FIELD AS DIRECTED BY OWNER.	277 V	110 VA	LED 3500K			
X1	LITHONIA	LQM-S-W-3-G-MVOLT-ELN	LED EXIT SIGN, SINGLE FACE, UNIVERSAL MOUNTING, WITH 90-MINUTE BATTERY BACKUP	277 V	5 VA	GREEN LED	EVENITE TELESIS		
X2	LITHONIA	LQM-S-W-3-G-MVOLT-ELN	LED EXIT SIGN, DOUBLE FACE, UNIVERSAL MOUNTING, WITH 90-MINUTE BATTERY BACKUP, CHEVRONS AS SHOWN ON PLANS.	277 V	5 VA	GREEN LED	EVENITE TELESIS		

LIGHTING CONTROLS SCHEDULE

NOTES:

1. ALL DEVICES SHALL BE U.L. OR SIMILARLY LISTED.

2. ALL DEVICES PROVIDED WITH MANUFACTURER LIMITED 5 YEAR WARRANTY.

3. PROVIDE LIGHTING CONTROLS WITH MANUFACTURER COMPLIANT POWER PACKS AND LOW VOLTAGE ROOM CONTROLLERS IN QUANTITY REQUIRED TO INSTALL A COMPLETE AND OPERATIONAL SYSTEM. MANUFACTURER OR MANUFACTURERS REP TO PROVIDE DEVICE QUANTITIES, LAYOUTS AND TYPICAL WIRING DETAILS DURING SHOP SUBMITTAL PROCESS. LIGHTING CONTROL COMPONENTS SHALL BE WIRING CONNECTION, NO WIRELESS ARE ACCEPTED. PROVIDE DIMMING COMPATIBLE DEVICES WHERE DIMMING CONTROLS ARE SHOWN, COORDINATE DIMMING TYPE WITH LIGHTING FIXTURES SHOWN. REFER TO...

4. INSTALL LOW VOLTAGE POWER PACKS AND ROOM CONTROLLERS ABOVE NEARBY ACCESSIBLE CEILING TILES OR IN MECHANICAL/STORAGE SPACES ADJACENT TO CONTROLLED FIXTURES. DO NOT INSTALL POWERPACKS EXPOSED IN COMMON SPACES OR IN INACCESSIBLE LOCATIONS.

5. PROVIDE FACTORY AUTHORIZED REPRESENTATIVE TO DEMONSTRATE TYPICAL INSTALLATION AND COMMISSIONING OF EQUIPMENT.

6. WHERE APPROVED EQUAL MANUFACTURER PRODUCTS SENSOR COVERAGE OR LOAD RATINGS DIFFER FROM BASIS OF DESIGN, CONTRACTOR AND MANUFACTURER ARE RESPONSIBLE FOR PROVIDING ADDITIONAL DEVICES AS NECESSARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.

7. EMERGENCY LIGHTING AND BATTERY BACKUP COMPONENTS SHALL BE TESTED AND LISTED AS COMPATIBLE BY MANUFACTURER WITH NORMAL LIGHTING CONTROLS IN ALL AREAS.

8. UNLESS INDICATED OTHERWISE, LIGHTING CONTROL SCHEMES/OPERATION SHALL BE AS FOLLOWS:

CORRIDORS, RECEPTION VESTIBULES, COMMON SPACES	EXISTING RELAY SYSTEM WITH MANUAL ON/LOW-VOLTAGE TOGGLES AND AUTOMATIC TIMED OFF OPERATION
BOARD ROOM	SENSORS PROGRAMMED FOR VACANCY MODE, MANUAL ON/AUTOMATIC OFF OPERATION 20 MINUTE TIME DELAY, DIMMING CONTROL OF FIXTURES WITHIN DAYLIGHT ZONES SHALL BE BY ALWAYS ON DAYLIGHT SENSOR, INTEGRATED PROVISIONS FOR THREE (3) PRESET SCENES BY DRY CONTACT INTERFACE WITH AV SYSTEM. VERIFY PRESET CONTROLS WITH OWNER...
ALL OTHER SPACES	SENSORS PROGRAMMED FOR VACANCY MODE, MANUAL ON/AUTOMATIC OFF OPERATION 20 MINUTE TIME DELAY, DIMMING CONTROL OF FIXTURES WITHIN DAYLIGHT ZONES SHALL BE BY ALWAYS ON DAYLIGHT SENSOR

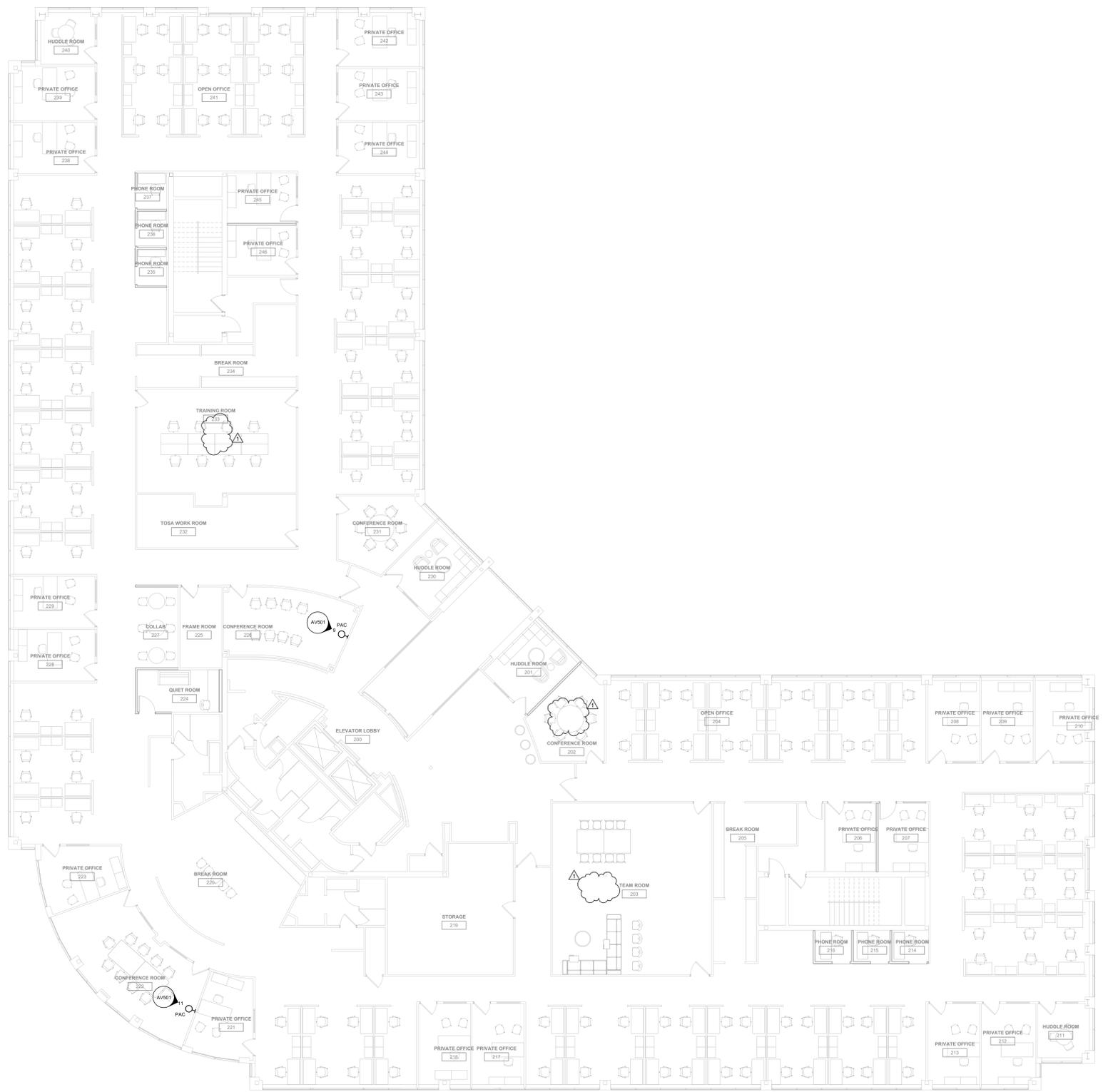
TYPE	DESCRIPTION	ELECTRICAL	MOUNTING	SENSOR	COVERAGE	APPROVED MANUFACTURERS	DESIGNED BY: INITIALS	
							TYPE	
OS1	WALL SWITCH OCCUPANCY SENSOR, DEVICE FINISH MATCHING WIRING DEVICES SPEC. RATED FOR MIN 1/8 HP MOTOR, INTEGRAL AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION, 8-30 MINUTE TIMER SETTINGS.	277V	WALL SWITCH / SINGLE GANG	PASSIVE INFRARED	1000 SQ FT / 180 DEG	WATTSTOPPER		
S18	SINGLE ZONE CONTROL LIGHT SWITCH, DIMMING LIGHTING CONTROL, LIGHTING CONTROL NETWORK COMPATIBLE DEVICE, ROOM CONTROLLER COMPATIBLE, ENABLING MULTI-ZONE SWITCHING CONTROL AND MULTI-SOURCE DIMMING, PROVIDED WITH MANUFACTURER DECORATIVE WALLPLATE, DEVICE FINISH MATCHING WIRING DEVICES SPEC.	LOW VOLTAGE	WALL SWITCH / SINGLE GANG	N/A	N/A	WATTSTOPPER		
S28	TWO ZONE CONTROL LIGHT SWITCH, DIMMING LIGHTING CONTROL, LIGHTING CONTROL NETWORK COMPATIBLE DEVICE, ROOM CONTROLLER COMPATIBLE, ENABLING MULTI-ZONE SWITCHING CONTROL AND MULTI-SOURCE DIMMING, PROVIDED WITH MANUFACTURER DECORATIVE WALLPLATE, DEVICE FINISH MATCHING WIRING DEVICES SPEC.	LOW VOLTAGE	WALL SWITCH / SINGLE GANG	N/A	N/A	WATTSTOPPER		
D 1/2	CONTINUOUS DIMMING 0-10V CONTROL, PHOTOCELL, LIGHTING CONTROL NETWORK COMPATIBLE DEVICE, ROOM CONTROLLER COMPATIBLE, ENABLING MULTI-ZONE SWITCHING CONTROL AND MULTI-SOURCE DIMMING, 0-50 FC LIGHT SENSITIVITY WITH ADJUSTABLE THRESHOLD, ADJUSTABLE DIMMING TIME DELAY.	LOW VOLTAGE	CEILING	CLOSED LOOP	N/A	WATTSTOPPER		
OS OS2	WALL SWITCH OCCUPANCY SENSOR, DEVICE FINISH MATCHING WIRING DEVICES SPEC. RATED FOR MIN 1/8 HP MOTOR, INTEGRAL AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION, 8-30 MINUTE TIMER SETTINGS.	277V / 0-10V DIMMING	WALL SWITCH / SINGLE GANG	DUAL-TECH	1000 SQ FT / 180 DEG	WATTSTOPPER		
OS 1/2	CEILING MOUNTED OCCUPANCY/VACANCY SENSOR, WHITE FINISH, AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION, 8-30 MINUTE TIMER SETTINGS, INDOOR USE.	LOW VOLTAGE	CEILING / 8'-12" MH	DUAL-TECH	2000 SQ FT / 360 DEG	WATTSTOPPER		



BEAVERTON SCHOOL DISTRICT - SUMMIT CENTRAL OFFICE REMODEL

SUMMIT BUILDING
1200 NW WATERHOUSE AVE BEAVERTON, OREGON 97006
PERMIT DOCUMENTATION

PROJECT: 21019
DATE: 02.18.2022



- GENERAL NOTES**
- COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
 - PROVIDE PENETRATIONS REQUIRED FOR ROUTING CABLE AND RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.
 - PROVIDE JACKS, BRLE RINGS AND OTHER ACCESSORIES REQUIRED TO SUPPORT ALL TELECOMMUNICATIONS AND SECURITY MANAGEMENT SYSTEM CABLEING.
 - ABBREVIATIONS:
N - NEW ITEM IN EXISTING LOCATION

KEYNOTES Ⓢ

TECHNOLOGY AUDIO VISUAL ELECTRICAL PLAN - LEVEL 2 1
1/8" = 1'-0"

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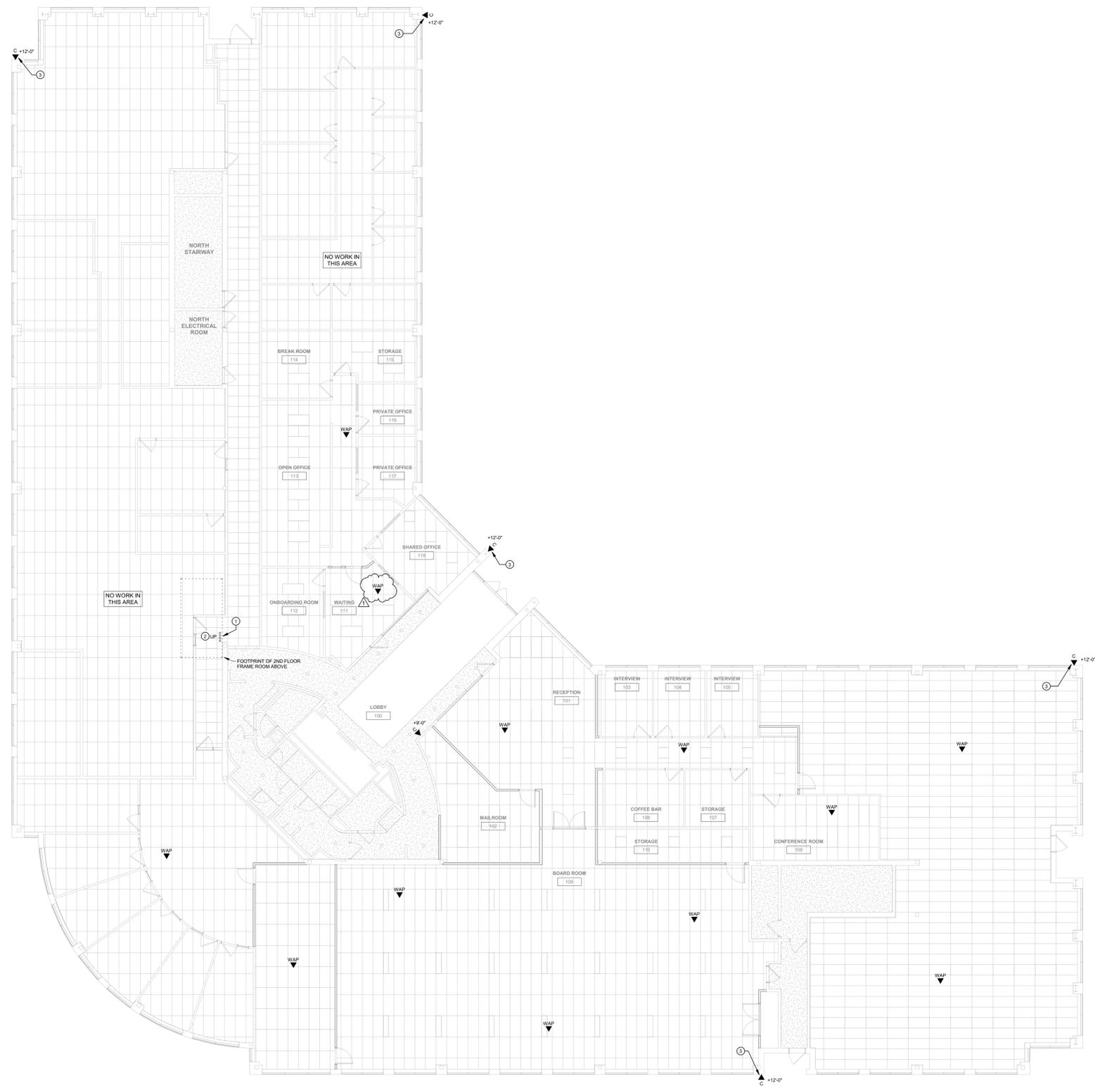


- GENERAL NOTES**
- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
 - B. PROVIDE PENETRATIONS REQUIRED FOR ROUTING CABLING AND RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.
 - C. PROVIDE JACKS, BRLE RINGS AND OTHER ACCESSORIES REQUIRED TO SUPPORT ALL TELECOMMUNICATIONS AND SECURITY MANAGEMENT SYSTEM CABLING.
 - D. ABBREVIATIONS:
N - NEW ITEM IN EXISTING LOCATION

KEYNOTES ②

TECHNOLOGY AUDIO VISUAL ELECTRICAL PLAN - LEVEL 3 1
1/8" = 1'-0"

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TECHNOLOGY COMMUNICATIONS CEILING PLAN - LEVEL 1
 1/8" = 1'-0" 1

- GENERAL NOTES**
- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
 - B. PROVIDE PENETRATIONS REQUIRED FOR ROUTING CABLING AND RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.
 - C. PROVIDE JUNCTIONS, BRLE RINGS AND OTHER ACCESSORIES REQUIRED TO SUPPORT ALL TELECOMMUNICATIONS AND SECURITY MANAGEMENT SYSTEM CABLING.
 - D. ABBREVIATIONS:
 N - NEW ITEM IN EXISTING LOCATION

- KEYNOTES**
- 1. PROVIDE FOUR (4) 4" CONDUIT SLEEVE FLOOR PENETRATIONS FROM THIS FRAME ROOM DOWN TO THE FLOOR BELOW. UTILIZE THESE PATHWAYS FOR TELECOMMUNICATIONS CABLING AND ALL OTHER SPECIAL SYSTEMS.
 - 2. ROUTE ALL 1ST FLOOR DATA CABLING TO THE 2ND FLOOR FRAME ROOM.
 - 3. PROVIDE AN EXTERIOR WEATHERPROOF PENETRATION FOR THE CORNER MOUNTED VIDEO SURVEILLANCE CAMERA CABLING. TERMINATE CABLE ON THE INTERIOR OF THE BUILDING UTILIZING A SURFACE MOUNT JACK. FINAL CONNECTION TO THE CAMERA SHALL BE THROUGH THE USE OF A MANUFACTURER TERMINATED PATCH CABLE. DIRECT CAMERA ATTACHMENT WILL NOT BE ACCEPTED.

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REGISTERED PROFESSIONAL ENGINEER
 OREGON
 R. KOSKI
 EXPIRES: 6/30/2023
 REVISIONS:
 1 REVISION 1 3/11/22

KCL
 ENGINEERING
 312 NW 10th Ave
 Suite 100
 Portland, OR
 97209

BEAVERTON SCHOOL DISTRICT - SUMMIT CENTRAL OFFICE REMODEL

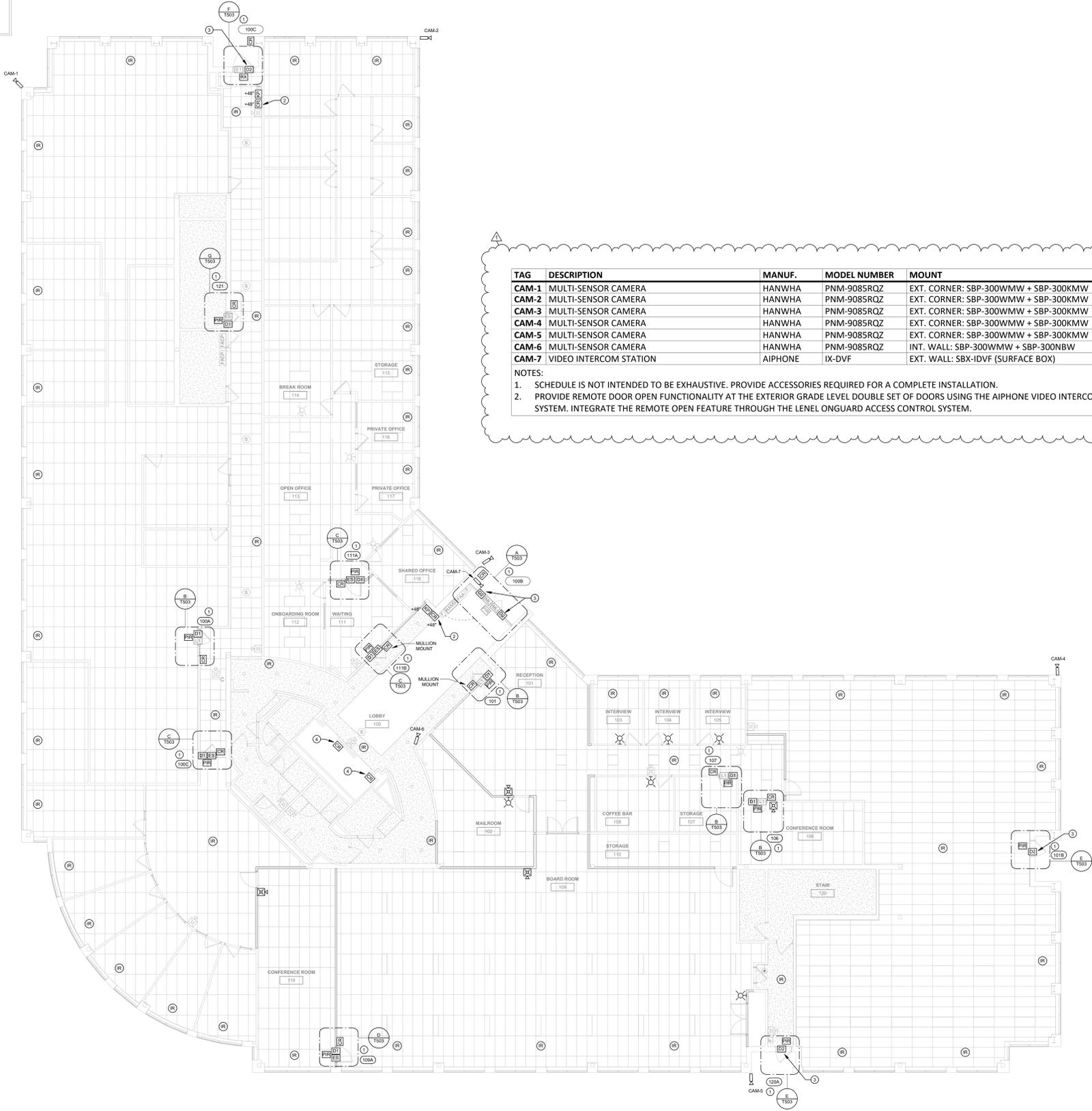
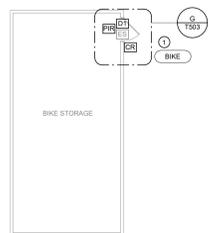
SUMMIT BUILDING
 1200 NW WATERHOUSE AVE BEAVERTON, OREGON 97006
 PERMIT DOCUMENTATION

PROJECT: 21019
 DATE: 02.18.2022

TECHNOLOGY COMMUNICATIONS CEILING PLAN - LEVEL 1

T201

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TAG	DESCRIPTION	MANUF.	MODEL NUMBER	MOUNT
CAM-1	MULTI-SENSOR CAMERA	HANWHA	PNM-9085RQZ	EXT. CORNER: SBP-300WMW + SBP-300KMW
CAM-2	MULTI-SENSOR CAMERA	HANWHA	PNM-9085RQZ	EXT. CORNER: SBP-300WMW + SBP-300KMW
CAM-3	MULTI-SENSOR CAMERA	HANWHA	PNM-9085RQZ	EXT. CORNER: SBP-300WMW + SBP-300KMW
CAM-4	MULTI-SENSOR CAMERA	HANWHA	PNM-9085RQZ	EXT. CORNER: SBP-300WMW + SBP-300KMW
CAM-5	MULTI-SENSOR CAMERA	HANWHA	PNM-9085RQZ	EXT. CORNER: SBP-300WMW + SBP-300KMW
CAM-6	MULTI-SENSOR CAMERA	HANWHA	PNM-9085RQZ	INT. WALL: SBP-300WMW + SBP-300NBW
CAM-7	VIDEO INTERCOM STATION	AIPHONE	IX-DVF	EXT. WALL: SBX-IDVF (SURFACE BOX)

NOTES:

- SCHEDULE IS NOT INTENDED TO BE EXHAUSTIVE. PROVIDE ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
- PROVIDE REMOTE DOOR OPEN FUNCTIONALITY AT THE EXTERIOR GRADE LEVEL DOUBLE SET OF DOORS USING THE AIPHONE VIDEO INTERCOM SYSTEM. INTEGRATE THE REMOTE OPEN FEATURE THROUGH THE LENEL ONGUARD ACCESS CONTROL SYSTEM.

GENERAL NOTES

A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

B. PROVIDE PENETRATIONS REQUIRED FOR ROUTING CABLING AND RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.

C. PROVIDE JACOBS, BRIDLE RINGS AND OTHER ACCESSORIES REQUIRED TO SUPPORT ALL TELECOMMUNICATIONS AND SECURITY MANAGEMENT SYSTEM CABLING.

D. ABBREVIATIONS:
N - NEW ITEM IN EXISTING LOCATION

KEYNOTES

1. ACCESS CONTROL OPENING. REFER TO THE ACCESS CONTROL DETAILS FOR ROUGH-IN, WIRING AND DEVICE REQUIREMENTS.

2. PROVIDE A PROXIMITY CARD READER ADJACENT TO THE INTRUSION DETECTION KEYPAD. PROXIMITY READER SHALL BE DEDICATED TO ARMING AND DISARMING THE BUILDING USING GROUPS WITHIN THE LENEL ONGUARD SOFTWARE. WIRING FROM THE LNL-1320 READER BOARD SHALL BE INTERFACED WITH THE DEDICATED INPUT ON THE BOSCH INTRUSION DETECTION PANEL THAT ALLOWS FOR ARMING AND DISARMING BASED ON CONTACT CLOSURE.

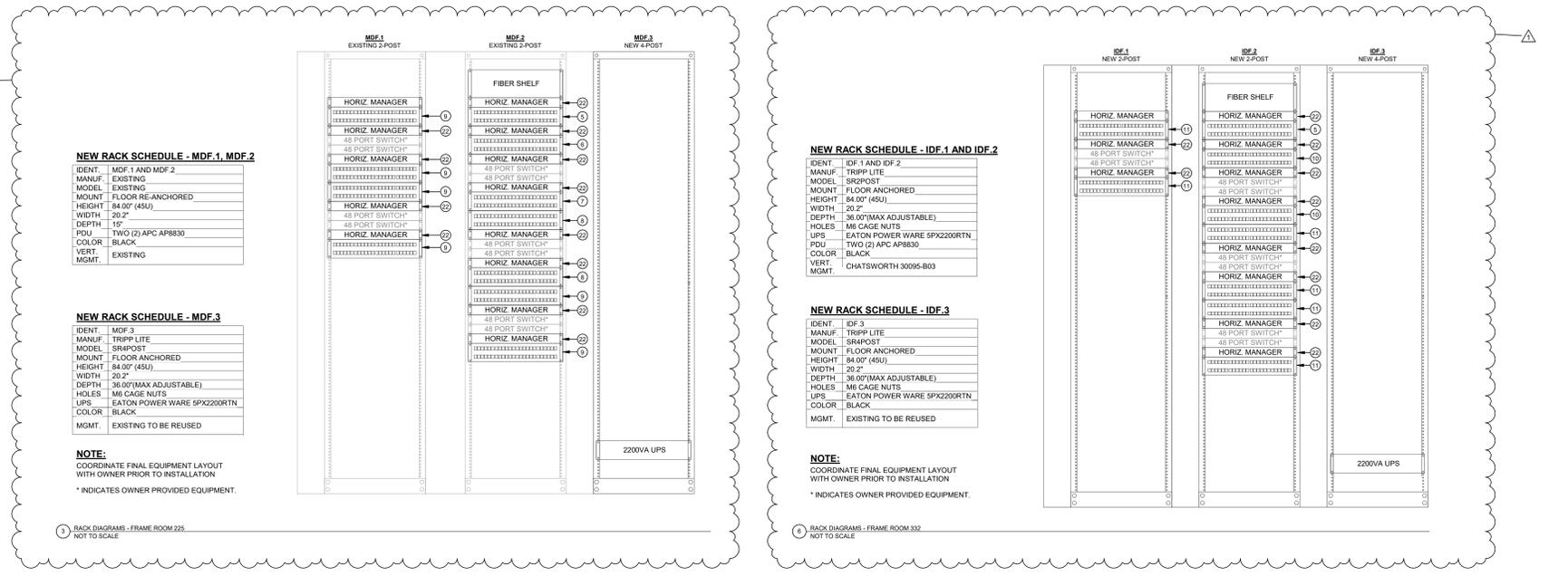
3. EXTERIOR PERIMETER DOOR NEW DOOR POSITION SWITCHES SHALL BE DOUBLE-POLE, DOUBLE-THROW. INTERFACE ONE SET OF CONTACTS TO THE ACCESS CONTROL SYSTEM AND THE SECOND SET TO THE INTRUSION DETECTION SYSTEM.

4. EXISTING ELEVATOR FLOOR CONTROL THROUGH THE HONEYWELL WINPAK ACCESS CONTROL SYSTEM. PROVIDE NEW CARD READERS AND RE-INTERFACE THE ELEVATOR FLOOR CONTROL CABLING WITH THE NEW LENEL ONGUARD ACCESS CONTROL SYSTEM.

TECHNOLOGY SAFETY & SECURITY CEILING PLAN - LEVEL 1
1/8" = 1'-0"

- GENERAL NOTES:**
- A. DETAILS ILLUSTRATED HERE ARE FOR BID PURPOSES. AWARDED CONTRACTOR SHALL COORDINATE THE ROOM AND RACK LAYOUT WITH THE DESIGN TEAM AND OWNER PRIOR TO INSTALLATION.
 - B. BIDDING CONTRACTOR FOR THE TELECOMMUNICATIONS CABLING INFRASTRUCTURE SHALL BE MANUFACTURER CERTIFIED AND CAPABLE OF PROVIDING THE 20 YEAR WARRANTY ON THE INSTALLATION.
 - C. LABELING SCHEME FOR BOTH PATCH PANELS AND WORK AREA OUTLETS SHALL FOLLOW THE BEAVERTON COMMUNITY SCHOOL DISTRICT SCHEME. DEMARCATION ROOM SHALL BE FRAME 0, FRAME ROOM 225 SHALL BE FRAME 1, AND FRAME 332 SHALL BE FRAME 2.
 - D. PROVIDE NEATLY MANAGED BUNDLES OF ALL EXPOSED SPECIAL SYSTEMS CABLING INSIDE THE TELECOMMUNICATIONS ROOMS. UTILIZE VELCRO STRAPS SUPPORTING THE BUNDLES EVERY 5 FEET. ZIP TIES SHALL NOT BE ACCEPTED.
 - E. PROVIDE A FINAL CLEANING OF THE ROOM AND EQUIPMENT RACKS TO KEEP THEM FREE FROM DUST, DIRT AND DEBRIS PRIOR TO ACTIVE EQUIPMENT INSTALLATION.
 - F. ALL FIBER AND COPPER PATCH CABLES SHALL BE PROVIDED AND INSTALLED BY THE BEAVERTON COMMUNITY SCHOOL DISTRICT.
EXCEPTION: WIRELESS ACCESS POINT PATCH CABLES SHALL BE PROVIDED BY THE OWNER BUT INSTALLED BY THE AWARDED CONTRACTOR ALONG WITH THE ACCESS POINT.

- KEYNOTES:**
1. EXISTING AC GRADE PLYWOOD TO REMAIN.
 2. EXISTING CHATSWORTH 2-POST RACKS AND VERTICAL CABLE MANAGERS TO BE RE-USED. RE-ANCHOR THE 2-POST RACKS TO ACCOMMODATE THE NEW 4-POST RACK AS ILLUSTRATED.
 3. PROVIDE NEW 4-POST RACK AND ANCHOR INTO POSITION. COORDINATE THE ADJUSTABLE DEPTH WITH THE BEAVERTON SCHOOL DISTRICT PRIOR TO INSTALLING. PROVIDE 4" X 8" SHEETS OF 3/4" AC GRADE PLYWOOD AND LINE ALL WALLS AS ILLUSTRATED.
 4. 2U 48-PORT MODULAR PATCH PANEL SERVING COPPER TIES TO OTHER CLOSETS AND SERVICE PROVIDER TIE.
 5. 2U 48-PORT MODULAR PATCH PANEL SERVING WIRELESS ACCESS POINTS ON LEVEL 1.
 6. 2U 48-PORT MODULAR PATCH PANEL SERVING WIRELESS ACCESS POINTS ON LEVEL 2.
 7. 2U 48-PORT MODULAR PATCH PANEL SERVING ALL OTHER HORIZONTAL CABLING ON LEVEL 1.
 8. 2U 48-PORT MODULAR PATCH PANEL SERVING ALL OTHER HORIZONTAL CABLING ON LEVEL 2.
 9. 2U 48-PORT MODULAR PATCH PANEL SERVING WIRELESS ACCESS POINTS ON LEVEL 3.
 10. PROVIDE NEW 2-POST FLOOR ANCHORED RACK AND ASSOCIATED DOUBLE-SIDED VERTICAL CABLE MANAGERS. PROVIDE THE BOSCH DR450VA INTRUSION DETECTION PANEL AND ASSOCIATED ENCLOSURE. PROVIDE REQUIRED POWER SUPPLY, BACKUP BATTERY AND ACCESSORIES FOR A FULLY FUNCTIONAL SYSTEM.
 11. PROVIDE FOUR (4) 1/2" CONDUIT SLEEVE FLOOR PENETRATIONS FROM THIS FRAME ROOM DOWN TO THE FLOOR BELOW. UTILIZE THESE PATHWAYS FOR TELECOMMUNICATIONS CABLING AND ALL OTHER SPECIAL SYSTEMS.
 12. PROVIDE CABLE RUNWAY (LADDER) AS ILLUSTRATED HERE TO SERVE TELECOMMUNICATIONS AND DATA CABLING. SECURE LADDER TO THE RACKS AND PROVIDE J-BOLTS AND ASSOCIATED ACCESSORIES AND HARDWARE TO INSTALL RUNWAY PER MANUFACTURER'S RECOMMENDATIONS.
 13. PROVIDE THREE (3) 1/2" E-Z-PATH SERIES 44 SLEEVES. TWO SHALL BE RESERVED FOR TELECOMMUNICATIONS VOICE AND DATA CABLING WITH THE OTHER SERVING ALL OTHER SPECIAL SYSTEMS.
 14. PROVIDE A SEPARATE CABLE TRAY PATHWAY FOR INTRUSION DETECTION AND ACCESS CONTROL AS ILLUSTRATED. UTILIZE WIRE BASKET STYLE TRAY FOR THIS PATHWAY.
 15. PROVIDE A SECONDARY BONDING BUSBAR MOUNTED JUST BELOW THE CABLE TRAY. PROVIDE GROUNDING AND BONDING CONNECTIVITY AS DEFINED IN SPECIFICATION SECTION 27 0526.
 16. RE-INSTALL THE EXISTING SECONDARY BONDING BUSBAR MOUNTED BELOW THE CABLE TRAY. PROVIDE GROUNDING AND BONDING CONNECTIVITY AS DEFINED IN SPECIFICATION SECTION 27 0526.
 17. PROVIDE A 24" X 2" WIRE BASKET TRAY AND WALL MOUNT IT TO MANAGE AND SUPPORT INCOMING AND OUTGOING INFRASTRUCTURE.
 18. PROVIDE ALL TRONIX TROVE SERIES ENCLOSURE TO HOUSE ALL ASSOCIATED LEVEL INTELLIGENT SYSTEM CONTROLLERS AND READER INTERFACE BOARDS. ENSURE POWER SUPPLY OPTIONS ARE COORDINATED WITH THE PLANNED FIELD DEVICES AND BATTERY BACKUP IS PROVIDED.
 19. PROVIDE 1U HORIZONTAL WIRE MANAGER EQUAL TO LEVITON 49252LPM.
 20. PROVIDE CABLE DROPOUTS TO LADDER RUNWAY FOR EACH LOCATION THAT CABLING EXITS THE RUNWAY.



Non Mandatory

ATTENDANCE SHEET

Meeting: ITB 21-0016 Pre-Bid Conference
 Project: Summit Building- General Contractor
 Date & Time: March 1, 2022- 3:30 PM

Name	Organization / Address	Phone Number	Email Address
Brian Dussanoff	ASIA CONSTRUCTION	503 887-1728	HEATHER@ASIACONSTRUCTION.COM
Jeremy Barrett	Siegner and Company	971-303-6414	jeremy@siegnerandcompany.com
Jon Cook	Andersen Construction	503-680-9133	jcook@andersen-const.com
Eddie Phillips	BSD		
Adam Koble	KCL Engineering	503-679-5954	akoble@kclengineering.com
Ali Al-Dossary	KCL Engineering	503-502-7084	ali-dossary@kclengineering.com
JASON MONTGOMERY	BSD		
MICHAEL DARRETT	HEX STUDIO	541-968-9374	MICHAEL@HEX-STUDIO.COM
Aaron Boyle	BSD		
Mike Boell	BSD		
CHAD WALKER	SKYWARD CONSTRUCTION	(360) 546-1625	hjdse@skywardconstruction.com