

**ADDENDUM NO. 1**

TO THE PLANS AND PROJECT MANUAL FOR

**INTERMOUNTAIN LAKE PARK NORTH LEVEL 1  
REMODEL**

4646 LAKE PARK BLVD.  
WEST VALLEY, UTAH 84120

Prepared by:



**233 South Pleasant Grove Blvd.  
Suite 105  
Pleasant Grove, Utah 84062  
(801) 769-3000 Office  
(801) 769-3001 Fax**

This addendum issued, May 09, 2022 is hereby made a part of the contract documents. It shall be the responsibility of each Contractor to notify his subcontractors of the contents of this addendum. In case of conflict between drawings, specifications and the Addendum, this Addendum shall govern. All changes, corrections, deletions and/or additions to the initial bidding documents shall be included in the bid.

# ADDENDUM NO. 1

May 09, 2022

**Purpose for the Addendum:** These changes resulted from various contractor questions during the bidding process and additional clarifications from the design team. Contractor questions are listed below with their response. The responses to some questions have triggered the modification of the plans and or specifications, which are indicated in the narrative below.

## **Bidder's Instructions:**

The initial bidding instructions provided clarifications for various contractor questions that have been asked since bidding has commenced and are being documented as part of this Addendum below:

- 1- Cameras will be provided and installed by the Owner's vendor (Convergint). Contractor to coordinate with Owner's vendor as required.
- 2- Access control will be provided and installed by Owner's vendor (Accent Automatics). Contractor to provide junction boxes and conduit as required and coordinate with Owner's vendor.
- 3- Structured Cabling will be provided and installed by Owner's vendor (TBD). Contractor to provide junction boxes and conduit as shown in the drawings and as required and to coordinate with the Owner's vendor.
- 4- Audio Visual Equipment will be provided and installed by the Contractor. The Owner has pre-approved Marshall Industries and Cache Valley Electric as the only allowed sub-bidders on this equipment.
- 5- Please fill out the schedule of values provided in the specification book and submit with initial bid.
- 6- Contractor to submit number of calendar days to substantial completion.

## **Contractor Questions:**

1. Who is responsible to provide the cable trays?  
**Response: The cable trays will be provided by the Owner's Structured Cabling Vendor.**
2. Who is responsible for the fire alarm system?  
**Response: The General Contractor will be responsible for the fire alarm system. See EP101 and the revised 00 0010, and the new Division 28 specification sections. New fire alarm devices shall be white. The existing Fire Alarm System Vendor is Fire Protection Systems.**
3. Who handles HVAC controls for the building?  
**Response: Carrier.**
4. What brand is the Access Control Brand?  
**Response: The brand is Continental. As a reminder, Access Controls will be provided by Owner.**
5. Will the general contractor be required to provide the primary subcontractors as part of the bid?  
**Response: Yes, per Owner requirement, please fill out the Schedule of Values provided in the Spec book including the requested Subcontractors.**
6. How much weight will the existing raised access flooring hold? Can we use scissor lifts, which are approximately 3500 lbs.?  
**Response: We don't have adequate raised access panel product information to determine whether this would be a problem or not. If the Contractor chooses to use scissor lifts or other heavy equipment, it will be at his / her own risk and liability. It may be helpful to lay**

**down ¾” sheets of plywood in order to distribute weight over a larger area, but no guarantees are being provided from the design team if this approach is used.**

7. Note 14 on A101 calls for rebar at 24” O.C. in the new 6” interior slab. Is it supposed to be 24” in both directions or just one way? Also, does the new slab require control joints?

**Response: Provide rebar at 24” O.C. in both directions and control joints in both directions not to exceed 15’ O.C.. See the revised A101.**

8. Note 18 on A101 refers to a detail A5/A501, but I can't find that detail.

**Response: The correct detail reference was A4/A501. See the revised A101.**

**Other Items:**

1. Various modifications have been made to the Data Rack, Wire Managers and Basket Tray. See the Electrical Narrative, and the revised ET111, ET401, ET501, and ET502.

**Summary of Attachments:**

**Drawing Sheets (8.5X11): Electrical Narrative.**

**Specification Sections (8.5X11): 00 0010, Division 28.**

**Drawing Sheets (24X36): A101, ET111, ET401, ET501, ET502.**

Issued by:

Jonathan Johnson

Project Manager (Curtis Miner Architecture)

Copy to: Owner, Contractor, Architect, Consultants

**END OF ADDENDUM SUMMARY NO. 1 – INTERMOUNTAIN LAKE PARK LEVEL 1**



Mechanical Engineering  
Electrical Engineering  
Technology Engineering  
Acoustical Engineering  
Lighting Design  
Theatre Design  
Fire Protection Engineering  
Building Commissioning

Salt Lake City | Phoenix | St. Louis | Baltimore  
[p] 800-678-7077  
www.spectrum-engineers.com

## Electrical Addendum

---

**Date:** May 9, 2022  
**To:** Jonathan Johnson  
**Company:** CMA  
**Job:** Intermountain Lake Park  
**Job No:** 220120  
**Cc:**

**From:** Jonathan Arnold  
**Email:** jda@spectrum-engineers.com  
**Phone:** 801-401-8454  
**Re:**

---

This Addendum shall be considered part of the Contract Documents and Project Manual for the above mentioned project as though it had been issued at the same time and shall be incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original Contract Documents and Project Manual, the Addendum shall govern and take precedence.

---

### Electrical Addendum

#### Drawings

1. ET111 - Changed cable tray size to 18"x4"
2. ET401 – Removed 2 post rack and shifted remaining racks.
3. ET501 - Removed 2 post rack and shifted remaining racks.

END OF ADDENDUM

Attachments <ET111, ET401, ET501>

## TABLE OF CONTENTS

00 0105	Consultant Information
00 0110	Table of Contents

### **DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS**

00 4113	Bid Form
00 4373	Schedule of Values
00 6276.13	Exemption Certificate

### **DIVISION 01 - GENERAL REQUIREMENTS**

01 1000	Summary
01 2500	Substitution Procedures
01 2600	Contract Modification Procedures
01 2900	Payment Procedures
01 3100	Project Management and Coordination
01 3200	Construction Progress Documentation
01 3300	Submittal Procedures
01 4000	Quality Requirements
01 4200	References
01 5000	Temporary Facilities and Controls
01 6000	Product Requirements
01 7300	Execution
01 7419	Construction Waste Management and Disposal
01 7700	Closeout Procedures
01 7823	Operation and Maintenance Data
01 7839	Project Record Documents
01 7900	Demonstration and Training

### **DIVISION 02 - EXISTING CONDITIONS**

02 4119	Selective Demolition
---------	----------------------

### **DIVISION 03 - CONCRETE**

03 3053	Cast-In-Place Concrete
---------	------------------------

### **DIVISION 04 - MASONRY**

Not Used

### **DIVISION 05 - METALS**

05 4000	Cold-Formed Metal Framing
---------	---------------------------

05 5000 Metal Fabrications

**DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES**

06 1053 Miscellaneous Rough Carpentry  
06 4116 Plastic-Laminate-Faced Architectural Cabinets

**DIVISION 07 - THERMAL AND MOISTURE PROTECTION**

07 8413 Penetration Firestopping  
07 9200 Joint Sealants

**DIVISION 08 - OPENINGS**

08 1113.13 Hollow Metal Frames  
08 1119 Stainless-Steel Frames  
08 1416 Flush Wood Doors  
08 1613 Fiberglass (FRP) Doors  
08 3113 Access Doors and Frames  
08 4113 Aluminum-Framed Entrances and Storefronts  
08 7100 Door Hardware  
08 8000 Glazing

**DIVISION 09 - FINISHES**

09 2116 Non-Structural Metal Framing  
09 2900 Gypsum Board  
09 3000 Tiling  
09 5113 Acoustical Panel Ceilings  
09 6513 Resilient Base and Accessories  
09 6519 Resilient Tile Flooring  
09 6536 Static-Control Resilient Flooring  
09 6813 Tile Carpeting  
09 9123 Interior Painting

**DIVISION 10 - SPECIALTIES**

10 2113.16 Plastic-Laminate-Clad Toilet Compartments  
10 2239 Folding Panel Partitions  
10 2600 Wall Protection  
10 2800 Toilet, Bath, and Laundry Accessories  
10 4413 Fire Protection Cabinets  
10 4416 Fire Extinguishers  
10 5113 Metal Lockers

## **DIVISION 11 - EQUIPMENT**

Not Used

## **DIVISION 12 - FURNISHINGS**

12 2413	Roller Window Shades
12 3623.13	Plastic-Laminate-Clad Countertops
12 3661.19	Quartz Agglomerate Countertops

## **DIVISION 13 - SPECIAL CONSTRUCTION**

Not Used

## **DIVISION 14 - CONVEYING EQUIPMENT**

Not Used

## **DIVISION 21 - FIRE SUPPRESSION**

21 1000	Water Based Fire Suppression Systems
---------	--------------------------------------

## **DIVISION 22 - PLUMBING**

22 0523	General-Duty Valves for Plumbing Piping
22 0529	Hangers and Supports for Plumbing Piping and Equipment
22 0553	Identification for Plumbing Pipes and Equipment
22 0719	Plumbing Piping Insulation
22 1116	Domestic Water Piping
22 1119	Domestic Water Piping Specialties
22 1316	Sanitary Waste and Vent Piping
22 1319	Sanitary Waste Piping Specialties
22 3300	Electric Water Heaters
22 4000	Plumbing Fixtures
22 4500	Emergency Plumbing Fixtures
22 4716	Pressure Water Coolers

## **DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING**

23 0100	Mechanical Requirements
23 0150	Temporary Use of Equipment and Systems
23 0500	Common Work Result for HVAC
23 0550	Operation and Maintenance of HVAC Systems
23 0553	Identification for HVAC Piping and Equipment
23 0593	Testing, Adjusting, and Balancing for HVAC
23 0713	Duct Insulation
23 2116	Hydronic Piping Specialties

23 3001	Common Duct Requirements
23 3113	Metal Ducts
23 3300	Air Duct Accessories
23 3713	Diffusers, Registers and Grilles
23 4010	Air Terminals

## **DIVISION 25 - INTEGRATED AUTOMATION**

Not Used

## **DIVISION 26 - ELECTRICAL**

26 0500	Basic Electrical Materials and Methods
26 0519	Conductors and Cables
26 0526	Grounding and Bonding
26 0533	Raceways and Boxes
26 0548	Seismic Controls for Electrical Work
26 0553	Electrical Identification
26 0923	Lighting Control Devices
26 2726	Wiring Devices
26 2726SC	Wiring Device Schedule
26 5100	Interior Lighting

## **DIVISION 27 - COMMUNICATIONS**

27 0000	General Common Conditions for All Communications Sections
27 0100	Operation and Maintenance of Communications Systems
27 0113	Warranty, Products and Systems
27 0119	Field Testing and Reporting
27 0133	Shop Drawings, Product Data, Samples, Design Records, and Existing Conditions
27 0143	Qualifications and Required Training for Contractor and Installer
27 0171	Responsibility and Workmanship of Contractor
27 0500	Common Work Results for Communications
27 0526	Grounding and Bonding for Communications Systems
27 0528	Pathways for Communications Systems
27 0529	Hangers and Supports for Communications Systems
27 0533	Conduits and Back Boxes for Communications Systems
27 0536	Cable Trays for Communications Systems
27 0543/46	Underground Ducts, Utility Poles, and Raceways for Interbuilding/Campus Cable Routing
27 0553	Identification for Low-Voltage Cables and Labeling
27 1100	Equipment Room Fittings
27 1116	Cabinets, Racks, Frames, and Enclosures
27 1119	Termination Blocks and Patch Panels
27 1300	Backbone Cabling
27 1500	Horizontal Cabling
27 1513	Copper Cable
27 1543	Faceplates and Connectors
27 1619	Patch Cables
27 4100	General Technology Systems Requirements
27 4101	Basic Technology Systems Requirements



27 4102	Basic Technology Systems Materials and Methods
27 4113	Audio Systems
27 4114	Video Systems
27 4115	Control Systems
27 5113	Overhead Paging
27 5119	Sound Masking Systems
27 6001	Appendix 01 – Deviation Request Process
27 6002	Appendix 02 – Document Refresh Process
27 6003	Appendix 03 – Data Center, TEC, TDR Part Numbers
27 6004	Appendix 04 – Reference Standards
27 6005	Appendix 05 – Definitions and Abbreviations
27 6006	Appendix 06 – Material Suppliers
27 6007	Appendix 07 – Siemon Certified Installation Firms
27 6008	Appendix 08 – Lead Wall Penetrations

**DIVISION 28 - ELECTRONIC SAFETY AND SECURITY**

28 3101      Fire Alarm

**DIVISION 31 - EARTHWORK**

Not Used

**DIVISION 32 - EXTERIOR IMPROVEMENTS**

Not Used

**DIVISION 33 – UTILITIES**

Not Used

**END OF TABLE OF CONTENTS**

**DIVISION 28 – ELECTRONIC SAFETY AND SECURITY**

28 3101 Fire Alarm

## SECTION 283101 - FIRE ALARM

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes fire alarm systems with manual stations, detectors, signal equipment, controls, and devices.
- B. Related Sections include the following:
  - 1. Division 8 Section "Hardware" for door closers/holders/smoke detectors, electric door locks, and release devices that interface with fire alarm systems.

#### 1.3 DEFINITIONS

- A. FACP: Fire alarm control panel.
- B. LED: Light-emitting diode.
- C. Definitions in NFPA 72 apply to fire alarm terms used in this Section.

#### 1.4 SYSTEM DESCRIPTION

- A. General: Noncoded, addressable-analog system with manual and automatic alarm initiation; automatic sensitivity control of certain smoke detectors; and multiplexed signal transmission dedicated to fire alarm service only. Class A wiring.

#### 1.5 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings:
  - 1. Wiring Diagrams: Detail wiring and differentiate between manufacturer-installed and field-installed wiring. Include diagrams for equipment and for system with all terminals and interconnections identified.
  - 2. Battery: Sizing calculations.
  - 3. Floor Plans: Indicate final outlet locations and routings of raceway connections.
  - 4. Device Address List: Coordinate with final system programming.
  - 5. System Operation Description: Detailed description for this Project, including method of operation and supervision of each type of circuit and sequence of operations for manually and automatically initiated system inputs and outputs. Manufacturer's standard descriptions for generic systems are not acceptable.
- C. Operating Instructions: For mounting at the FACP.

- D. Product Certificates: Signed by manufacturers of system components certifying that products furnished comply with requirements.
- E. Installer Certificates: Signed by manufacturer certifying that installers comply with requirements.
- F. Field Test Reports: Indicate and interpret test results for compliance with performance requirements. Comply with NFPA 72.
- G. Maintenance Data: For fire alarm systems to include in maintenance manuals specified in Division 1. Comply with NFPA 72.
- H. Submissions to Authorities Having Jurisdiction: In addition to distribution requirements for Submittals specified in Division 1 Section "Submittals," make an identical submission to authorities having jurisdiction. Include copies of annotated Contract Drawings as needed to depict component locations to facilitate review. Resubmit if required to make clarifications or revisions to obtain approval. On receipt of comments from authorities having jurisdiction, submit them to Architect for review.
- I. Certificate of Completion: Comply with NFPA 72.

#### 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who is an authorized representative of the FACP manufacturer for both installation and maintenance of units required for this Project.
- B. Manufacturer Qualifications: A firm experienced in manufacturing systems similar to those indicated for this Project and with a record of successful in-service performance.
- C. Source Limitations: Obtain fire alarm system components through one source from a single manufacturer.
- D. Compliance with Local Requirements: Comply with applicable building code, local ordinances and regulations, and requirements of authorities having jurisdiction.
- E. Comply with NFPA 72.

#### 1.7 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Smoke Detectors, Fire Detectors, and Flame Detectors: Quantity equal to 10 percent of amount of each type installed, but not less than one unit of each type.
  - 2. Printer Ribbons: Six spares.
  - 3. Keys and Tools: One extra set for access to locked and tamperproofed components.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Notifier

## 2.2 FUNCTIONAL DESCRIPTION OF SYSTEM

- A. Control of System: By the FACP.
- B. System Supervision: Automatically detect and report open circuits, shorts, and grounds of wiring for initiating device, signaling line, and notification-appliance circuits.
- C. Priority of Signals: Automatic alarm response functions resulting from an alarm signal from one zone or device are not altered by subsequent alarm, supervisory, or trouble signals. An alarm signal is the highest priority. Supervisory and trouble signals have second- and third-level priority. Higher-priority signals take precedence over signals of lower priority, even when the lower-priority condition occurs first. Annunciate and display all alarm, supervisory, and trouble signals regardless of priority or order received.
- D. Noninterference: A signal on one zone shall not prevent the receipt of signals from other zones.
- E. System Reset: All zones are manually resettable from the FACP after initiating devices are restored to normal.
- F. Loss of primary power at the FACP initiates a trouble signal at the FACP and the annunciator. An emergency power light is illuminated at both locations when the system is operating on the secondary power supply.
- G. Basic Alarm Performance Requirements: Unless otherwise indicated, operation of initiating device initiates the sequence of operation as indicated in the fire alarm matrix.
- H. Alarm Silencing, System Reset and Indication: Controlled by switches in the FACP and the remote annunciator.
  - 1. Silencing-switch operation halts alarm operation of notification appliances and activates an "alarm silence" light. Display of identity of the alarm zone or device is retained.
  - 2. Subsequent alarm signals from other devices or zones reactivate notification appliances until silencing switch is operated again.
  - 3. When alarm-initiating devices return to normal and system reset switch is operated, notification appliances operate again until alarm silence switch is reset.
- I. Water-flow alarm switch operation initiates the following:
  - 1. Notification-appliance operation.
  - 2. Flashing of the device location-indicating light for the device that has operated.
- J. Water-flow alarm for connection to sprinkler in an elevator shaft and elevator machine room shuts down elevators associated with the location without time delay.
  - 1. A field-mounted relay actuated by the fire detector or the FACP closes the shunt trip circuit and operates building notification appliances and annunciator.
- K. Smoke detection for zones or detectors with alarm verification initiates the following:
  - 1. Audible and visible indication of an "alarm verification" signal at the FACP.

2. Activation of a listed and approved "alarm verification" sequence at the FACP and the detector.
  3. Recording of the event by the system printer.
  4. General alarm if the alarm is verified.
  5. Cancellation of the FACP indication and system reset if the alarm is not verified.
- L. Sprinkler valve-tamper switch operation initiates the following:
1. A supervisory, audible, and visible "valve-tamper" signal indication at the FACP and the annunciator.
  2. Flashing of the device location-indicating light for the device that has operated.
  3. Recording of the event by the system printer.
  4. Transmission of supervisory signal to remote alarm receiving station.
- M. Remote Detector Sensitivity Adjustment: Manipulation of controls at the FACP causes the selection of specific addressable smoke detectors for adjustment, display of their current status and sensitivity settings, and control of changes in those settings. Same controls can be used to program repetitive, scheduled, automated changes in sensitivity of specific detectors. Sensitivity adjustments and sensitivity-adjustment schedule changes are recorded in system memory and are printed out by the system printer.
- N. Removal of an alarm-initiating device or a notification appliance initiates the following:
1. A "trouble" signal indication at the FACP and the annunciator for the device or zone involved.
  2. Recording of the event by the system printer.
  3. Transmission of trouble signal to remote alarm receiving station.
- O. Printout of Events: On receipt of the signal, print alarm, supervisory, and trouble events. Identify zone, device, and function. Include type of signal (alarm, supervisory, or trouble), and date and time of occurrence. Differentiate alarm signals from all other printed indications. Also print system reset event, including the same information for device, location, date, and time. Commands initiate the printout of a list of existing alarm, supervisory, and trouble conditions in the system and a historical log of events.
- P. FACP Alphanumeric Display: Plain-English-language descriptions of alarm, supervisory, and trouble events; and addresses and locations of alarm-initiating or supervisory devices originating the report. Display monitoring actions, system and component status, system commands, programming information, and data from the system's historical memory.

## 2.3 MANUAL PULL STATIONS

- A. Description: Fabricated of metal or plastic, and finished in red with molded, raised-letter operating instructions of contrasting color.
1. Double-action mechanism requires two actions, such as a push and a pull, to initiate an alarm.
  2. Station Reset: Key or wrench operated; double pole, double throw; switch rated for the voltage and current at which it operates.
  3. Integral Addressable Module: Arranged to communicate manual-station status (normal, alarm, or trouble) to the FACP.

## 2.4 SMOKE DETECTORS

- A. General: Include the following features:
  1. Operating Voltage: 24-V dc, nominal.
  2. Self-Restoring: Detectors do not require resetting or readjustment after actuation to restore them to normal operation.
  3. Plug-in Arrangement: Detector and associated electronic components are mounted in a module that connects in a tamper-resistant manner to a fixed base with a twist-locking plug connection. Terminals in the fixed base accept building wiring.
  4. Integral Visual-Indicating Light: LED type. Indicates detector has operated.
  5. Sensitivity: Can be tested and adjusted in-place after installation.
  6. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to the FACP.
  7. Remote Controllability: Unless otherwise indicated, detectors are analog-addressable type, individually monitored at the FACP for calibration, sensitivity, and alarm condition, and individually adjustable for sensitivity from the FACP.
  
- B. Photoelectric Smoke Detectors: Include the following features:
  1. Sensor: LED or infrared light source with matching silicon-cell receiver.
  2. Detector Sensitivity: Between 2.5 and 3.5 percent/foot (0.008 and 0.011 percent/mm) smoke obscuration when tested according to UL 268A.
  
- C. Beam-Type Smoke Detector: Each detector consists of a separate transmitter and receiver with the following features:
  1. Adjustable Sensitivity: More than a six-level range, minimum.
  2. Linear Range of Coverage: 600 feet (180 m), minimum.
  3. Tamper Switch: Initiates trouble signal at the central FACP when either transmitter or receiver is disturbed.
  4. Separate Color-Coded LEDs: Indicate normal, alarm, and trouble status. Any detector trouble, including power loss, is reported to the central FACP as a composite "trouble" signal.
  
- D. Duct Smoke Detector: Ionization type.
  1. Sampling Tube: Design and dimensions as recommended by the manufacturer for the specific duct size, air velocity, and installation conditions where applied.
  2. Relay Fan Shutdown: Rated to interrupt fan motor-control circuit.

## 2.5 OTHER DETECTORS

- A. Heat Detector, Combination Type: Actuated by either a fixed temperature of 135 deg F (57 deg C) or rate of rise of temperature that exceeds 15 deg F (8.3 deg C) per minute, unless otherwise indicated.
  1. Mounting: Plug-in base, interchangeable with smoke detector bases.
  2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to the FACP.
  
- B. Heat Detector, Fixed-Temperature Type: Actuated by temperature that exceeds a fixed temperature of 190 deg F (88 deg C).
  1. Mounting: Plug-in base, interchangeable with smoke detector bases.
  2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to the FACP.
  3. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to the FACP.

4. Mounting: Plug-in base, interchangeable with smoke detector bases.
5. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to the FACP.

## 2.6 NOTIFICATION APPLIANCES

- A. Description: Equip for mounting as indicated and have screw terminals for system connections.
  1. Combination Devices: Factory-integrated audible and visible devices in a single-mounting assembly.
- B. Horns: Electronic-vibrating-polarized type, 24-V dc; with provision for housing the operating mechanism behind a grille. Horns produce a sound-pressure level of 90 dB, measured 10 feet (3 m) from the horn.
- C. Visible Alarm Devices: Xenon strobe lights listed under UL 1971 with clear or nominal white polycarbonate lens. Mount lens on an aluminum faceplate. The word "FIRE" is engraved in minimum 1-inch- (25-mm-) high letters on the lens.
  1. Rated Light Output: as shown on drawings.
  2. Strobe Leads: Factory connected to screw terminals.

## 2.7 MAGNETIC DOOR HOLDERS

- A. Description: Units are equipped for wall or floor mounting as indicated and are complete with matching door plate.
  1. Electromagnet: Requires no more than 3 W to develop 25-lbf (111-N) holding force.
  2. Wall-Mounted Units: Flush mounted, unless otherwise indicated.
  3. Rating: 24-V ac or dc.
- B. Material and Finish: Match door hardware.

## 2.8 CENTRAL FACP

- A. Cabinet: Lockable steel enclosure. Arrange interior components so operations required for testing or for normal maintenance of the system are performed from the front of the enclosure. If more than one unit is required to form a complete control panel, fabricate with matching modular unit enclosure to accommodate components and to allow ample gutter space for field wiring and interconnecting panels.
  1. Identify each enclosure with an engraved, red, laminated, phenolic-resin nameplate with lettering not less than 1 inch (25 mm) high. Identify individual components and modules within cabinets with permanent labels.
  2. Mounting: Flush.
  3. Mounting: Surface.
- B. Alarm and Supervisory Systems: Separate and independent in the FACP. Alarm-initiating zone boards consist of plug-in cards. Construction requiring removal of field wiring for module replacement is unacceptable.
- C. Control Modules: Include types and capacities required to perform all functions of fire alarm systems.



- D. Indications: Local, visible, and audible signals announce alarm, supervisory, and trouble conditions. Each type of audible alarm has a different sound.
- E. Indicating Lights and System Controls: Individual LED devices identify zones transmitting signals. Zone lights distinguish between alarm and trouble signals, and indicate the type of device originating the signal. Manual switches and push-to-test buttons do not require a key to operate. Controls include the following:
  1. Alarm acknowledge switch.
  2. Alarm silence switch.
  3. System reset switch.
  4. LED test switch.
- F. Resetting Controls: Prevent the resetting of alarm, supervisory, or trouble signals while the alarm or trouble condition still exists.
- G. Alphanumeric Display and System Controls: Arranged for interface between human operator at the FACP and addressable system components, including annunciation and supervision. Display alarm, supervisory, and component status messages and the programming and control menu.
  1. Display: Liquid-crystal type, 40 characters, minimum.
  2. Keypad: Arranged to permit entry and execution of programming, display, and control commands.
- H. Alphanumeric Display and System Controls: Arranged for interface between human operator at the FACP and addressable system components, including annunciation, supervision, and control.
  1. Display: A minimum of 80 characters; alarm, supervisory, and component status messages; and indicate control commands to be entered into the system for control of smoke detector sensitivity and other parameters.
  2. Keypad: Arranged to permit entry and execution of programming, display, and control commands.
- I. Instructions: Printed or typewritten instruction card mounted behind a plastic or glass cover in a stainless-steel or aluminum frame. Include interpretation and describe appropriate response for displays and signals. Briefly describe the functional operation of the system under normal, alarm, and trouble conditions.

## 2.9 REMOTE ANNUNCIATOR

- A. Description: Duplicate annunciator functions of the FACP for alarm, supervisory, and trouble indications. Also duplicate manual switching functions of the FACP, including acknowledging, silencing, reset, and test.
  1. Mounting: Flush cabinet, NEMA 250, Class 1.
- B. Display Type and Functional Performance: Alphanumeric display same as the FACP. Controls with associated LEDs permit acknowledging, silencing, resetting, and testing functions for alarm, supervisory, and trouble signals identical to those in the FACP.
  1. Materials: Satin-finished stainless steel or brushed aluminum.
  2. Mounting: Integral with lamp-type annunciator. Locate zone lamps in the floor plan zones they represent.

## 2.10 EMERGENCY POWER SUPPLY

- A. General: Components include nickel-cadmium battery, charger, and an automatic transfer switch.
  - 1. Battery Nominal Life Expectancy: 20 years, minimum.
- B. Battery Capacity:
  - 1. Comply with NFPA 72.
  - 2. Magnetic door holders are not served by emergency power. Magnetic door holders are released when normal power fails.
  - 3. Minimum Capacity: 24 hour operation of complete system (except where specifically noted otherwise) plus 15 minutes with all indicating devices. In addition, include 25% spare capacity.
- C. Battery Charger: Solid-state, fully automatic, variable-charging-rate type. Provide capacity for 150 percent of the connected system load while maintaining batteries at full charge. If batteries are fully discharged, the charger recharges them completely within four hours. Charger output is supervised as part of system power supply supervision.
- D. Integral Automatic Transfer Switch: Transfers the load to the battery without loss of signals or status indications when normal power fails.

## 2.11 ADDRESSABLE INTERFACE DEVICE

- A. Description: Microelectronic monitor module listed for use in providing a multiplex system address for listed fire and sprinkler alarm-initiating devices with normally open contacts.
- B. Integral Relay: Capable of providing a direct signal to the elevator controller to initiate elevator recall or to a circuit-breaker shunt trip for power shutdown.

## 2.12 DIGITAL ALARM COMMUNICATOR TRANSMITTER

- A. Listed and labeled under UL 864 and NFPA 72.
- B. Functional Performance: Unit receives an alarm, supervisory, or trouble signal from the FACP panel, and automatically captures one or two telephone lines and dials a preset number for a remote central station. When contact is made with the central station(s), the signal is transmitted. The unit supervises up to two telephone lines. Where supervising two lines, if service on either line is interrupted for longer than 45 seconds, the unit initiates a local trouble signal and transmits a signal indicating loss of telephone line to the remote alarm receiving station over the remaining line. When telephone service is restored, unit automatically reports that event to the central station. If service is lost on both telephone lines, the local trouble signal is initiated.
- C. Secondary Power: Integral rechargeable battery and automatic charger. Battery capacity is adequate to comply with NFPA 72 requirements.
- D. Self Test: Conducted automatically every 24 hours with report transmitted to central station.

## 2.13 WIRE

- A. Non-Power-Limited Circuits: Solid-copper conductors with 600-V rated, 75 deg C, color-coded insulation.
  - 1. Low-Voltage Circuits: No. 16 AWG, minimum.
  - 2. Line-Voltage Circuits: No. 12 AWG, minimum.
- B. Power-Limited Circuits: NFPA 70, Types FPL, FPLR, or FPLP, as recommended by manufacturer.

## PART 3 - EXECUTION

### 3.1 EQUIPMENT INSTALLATION

- A. Connect the FACP to a circuit breaker with lockable handle.
- B. Manual Pull Stations: Mount semiflush in recessed back boxes.
- C. Water-Flow Detectors and Valve Supervisory Switches: Connect for each sprinkler valve station required to be supervised.
- D. Ceiling-Mounted Smoke Detectors: Not less than **4 inches (100 mm)** from a side wall to the near edge. For exposed solid-joint construction, mount detectors on the bottom of joists. On smooth ceilings, install not more than **30 feet (9 m)** apart in any direction.
- E. Wall-Mounted Smoke Detectors: At least **4 inches (100 mm)**, but not more than **12 inches (300 mm)**, below the ceiling.
- F. Smoke Detectors near Air Registers: Install no closer than **60 inches (1520 mm)**.
- G. Duct Smoke Detectors: Comply with manufacturer's written instructions.
  - 1. Verify that each unit is listed for the complete range of air velocity, temperature, and humidity possible when air-handling system is operating.
  - 2. Install sampling tubes so they extend the full width of the duct.
- H. Heat Detectors in Elevator Shafts: Coordinate temperature rating and location with sprinkler rating and location.
- I. Audible Alarm-Indicating Devices: Install not less than **6 inches (150 mm)** below the ceiling. Install bells and horns on flush-mounted back boxes with the device-operating mechanism concealed behind a grille. Combine audible and visible alarms at the same location into a single unit.
- J. Visible Alarm-Indicating Devices: Install adjacent to each alarm bell or alarm horn and at least **6 inches (150 mm)** below the ceiling.
  - 1. Synchronization: synchronize any two strobes located such that they are visible from the same location.
- K. Device Location-Indicating Lights: Locate in public space near the device they monitor.
- L. FACP: Surface mount with tops of cabinets not more than **72 inches (1830 mm)** above the finished floor.

- M. Annunciator: Install with the top of the panel not more than 72 inches (1830 mm) above the finished floor.

### 3.2 WIRING INSTALLATION

- A. Wiring Method: Install wiring in metal raceway according to Division 16 Section "Raceways and Boxes." Conceal raceway except in unfinished spaces and as indicated.
- B. Wiring within Enclosures: Separate power-limited and non-power-limited conductors as recommended by the manufacturer. Install conductors parallel with or at right angles to sides and back of the enclosure. Bundle, lace, and train conductors to terminal points with no excess. Connect conductors that are terminated, spliced, or interrupted in any enclosure associated with the fire alarm system to terminal blocks. Mark each terminal according to the system's wiring diagrams. Make all connections with approved crimp-on terminal spade lugs, pressure-type terminal blocks, or plug connectors.
- C. Cable Taps: Use numbered terminal strips in junction, pull and outlet boxes, cabinets, or equipment enclosures where circuit connections are made.
- D. Color-Coding: Color-code fire alarm conductors differently from the normal building power wiring. Use one color-code for alarm circuit wiring and a different color-code for supervisory circuits. Color-code audible alarm-indicating circuits differently from alarm-initiating circuits. Use different colors for visible alarm-indicating devices. Paint fire alarm system junction boxes and covers red.
- E. Risers: Install at least two vertical cable risers to serve the fire alarm system. Separate risers in close proximity to each other with a minimum one-hour-rated wall, so the loss of one riser does not prevent the receipt or transmission of signal from other floors or zones.
- F. Wiring to Remote Alarm Transmitting Device: **1-inch (25-mm)** conduit between the FACP and the transmitter. Install number of conductors and electrical supervision for connecting wiring as needed to suit monitoring function.

### 3.3 IDENTIFICATION

- A. Identify system components, wiring, cabling, and terminals according to Division 16 Section "Electrical Identification."
  - 1. Paint all fire alarm system junction boxes, device boxes, and pull boxes with red paint.
- B. Install instructions frame in a location visible from the FACP.
- C. Prepare laminated drawings showing each device and identifying the device address or zone

### 3.4 GROUNDING

- A. Ground cable shields and equipment according to system manufacturer's written instructions to eliminate shock hazard and to minimize, to the greatest extent possible, ground loops, common-mode returns, noise pickup, cross talk, and other impairments.
- B. Signal Ground Terminal: Locate at main equipment rack or cabinet. Isolate from power system and equipment grounding.

- C. Install grounding electrodes of type, size, location, and quantity as indicated. Comply with installation requirements in Division 16 Section "Grounding."
- D. Ground equipment and conductor and cable shields. For audio circuits, minimize, to the greatest extent possible, ground loops, common-mode returns, noise pickup, cross talk, and other impairments. Provide 5-ohm ground at main equipment location. Measure, record, and report ground resistance.

### 3.5 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect field-assembled components and connections and to supervise pretesting, testing, and adjustment of the system. Report results in writing.
- B. Pretesting: After installation, align, adjust, and balance the system and perform complete pretesting. Determine, through pretesting, the compliance of the system with requirements of Drawings and Specifications. Correct deficiencies observed in pretesting. Replace malfunctioning or damaged items with new ones, and retest until satisfactory performance and conditions are achieved. Prepare forms for systematic recording of acceptance test results.
- C. Report of Pretesting: After pretesting is complete, provide a letter certifying the installation is complete and fully operable, including the names and titles of witnesses to preliminary tests.
- D. Final Test Notice: Provide a minimum of 10 days' notice in writing when the system is ready for final acceptance testing.
- E. Minimum System Tests: Test the system according to procedures outlined in NFPA 72. Minimum required tests are as follows:
  - 1. Verify the absence of unwanted voltages between circuit conductors and ground.
  - 2. Test all conductors for short circuits using an insulation-testing device.
  - 3. With each circuit pair, short circuit at the far end of the circuit and measure the circuit resistance with an ohmmeter. Record the circuit resistance of each circuit on record drawings.
  - 4. Verify that the control unit is in the normal condition as detailed in the manufacturer's operation and maintenance manual.
  - 5. Test initiating and indicating circuits for proper signal transmission under open circuit conditions. One connection each should be opened at not less than 10 percent of initiating and indicating devices. Observe proper signal transmission according to class of wiring used.
  - 6. Test each initiating and indicating device for alarm operation and proper response at the control unit.
    - a. Test smoke detectors with actual products of combustion.
    - b. Test each heat detector with hair dryer or other means approved by the manufacturer.
    - c. Test fan shut down, sprinkler flow and tamper switches, door closers, magnetic door holders, and elevator return.
  - 7. Test the system for all specified functions according to the approved operation and maintenance manual. Systematically initiate specified functional performance items at each station, including making all possible alarm and monitoring initiations and using all communications options. For each item, observe related performance at all devices

required to be affected by the item under all system sequences. Observe indicating lights, displays, signal tones, and annunciator indications.

8. Test Both Primary and Secondary Power: Verify by test that the secondary power system is capable of operating the system for the period and in the manner specified.
  - a. Disconnect fire alarm from primary power source 24 hours prior to test, or longer as specified. Test all indicating devices to determine whether audio and visual devices comply with testing requirements for a 15 minute test.

F. Retesting: Correct deficiencies indicated by tests and completely retest work affected by such deficiencies. Verify by the system test that the total system meets Specifications and complies with applicable standards.

G. Report of Tests and Inspections: Provide a written record of inspections, tests, and detailed test results in the form of a test log. Submit log on the satisfactory completion of tests.

H. Tag all equipment, stations, and other components at which tests have been satisfactorily completed.

### 3.6 CLEANING AND ADJUSTING

A. Cleaning: Remove paint splatters and other spots, dirt, and debris. Touch up scratches and marred finish to match original finish. Clean unit internally using methods and materials recommended by manufacturer.

### 3.7 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel as specified below:
  1. Train Owner's maintenance personnel on procedures and schedules for starting and stopping, troubleshooting, servicing, adjusting, and maintaining equipment and schedules. Provide a minimum of 8 hours' training.
  2. Training Aid: Use the approved final version of the operation and maintenance manual as a training aid.
  3. Schedule training with Owner, through Architect, with at least seven days' advance notice.

### 3.8 ON-SITE ASSISTANCE

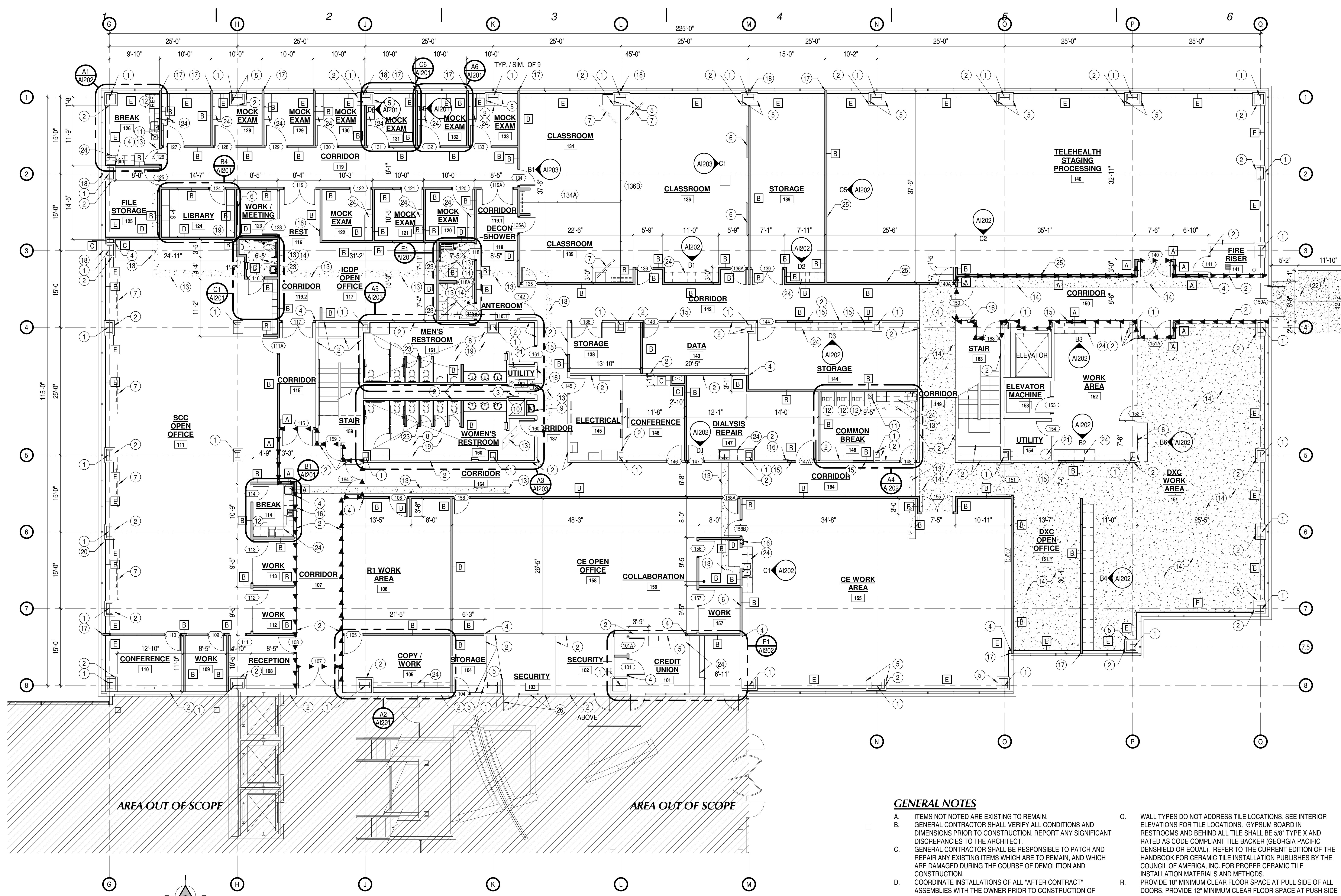
A. Occupancy Adjustments: When requested within one year of date of Substantial Completion, provide on-site assistance in adjusting sound levels, controls, and sensitivities to suit actual occupied conditions. Provide up to three requested visits to Project site for this purpose.

END OF SECTION 283101

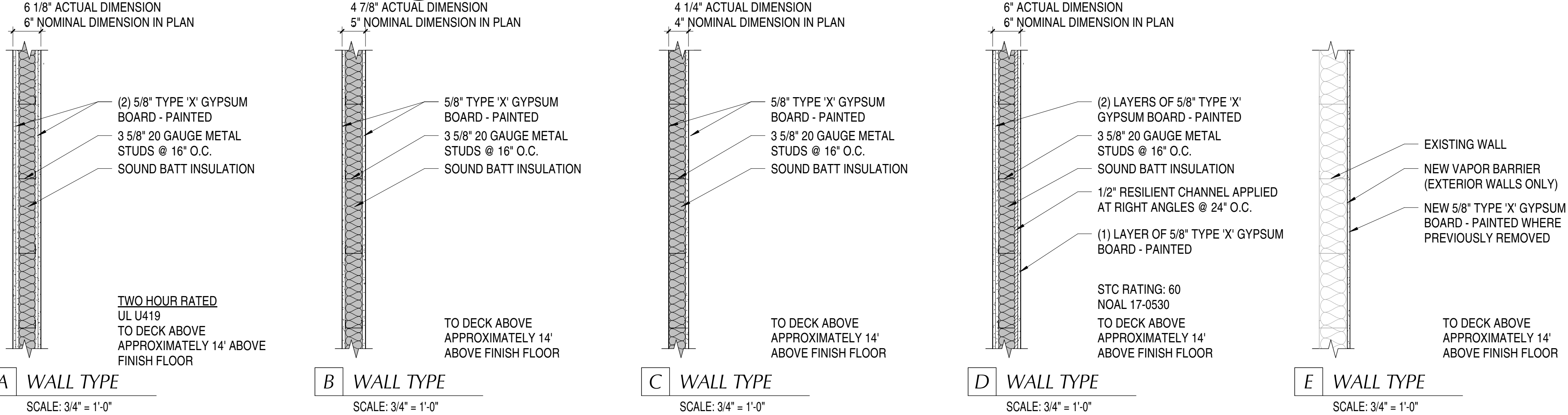
MARK	REVISION	DATE
1	ADDENDUM #01	05/09/22

**SHEET NOTES**

- EXISTING STRUCTURAL STEEL COLUMN TO REMAIN. PROTECT COLUMN AND FIREPROOFING FROM DAMAGE.
- EXISTING WALL TO REMAIN. PROTECT DURING CONSTRUCTION. PROVIDE NEW MATERIALS AS INDICATED BY OTHER SHEET NOTES OR AS NOTED WITH WALL TYPES. PATCH AND REPAIR AS REQUIRED.
- EXISTING DOOR TO REMAIN. PROTECT DURING CONSTRUCTION. ALIGN NEW WALL WITH EXISTING. CREATE SMOOTH TRANSITION.
- REPLACE GYPSUM BOARD WHERE IT WAS REMOVED ONCE ELECTRICAL DEVICES HAVE BEEN INSTALLED WITH 5/8" TYPE X GYPSUM BOARD AS REQUIRED.
- WALL MOUNTED TELEVISION. PROVIDE BACKING IN WALL. SEE AUDIO VISUAL PACKAGE WITHIN ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- CEILING MOUNTED TELEVISION. SEE AUDIO VISUAL PACKAGE WITHIN ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- NEW PLUMBING FIXTURES WITHIN ENTIRE ROOM. RELOCATE PLUMBING DIMENSIONS AS REQUIRED TO FIT WITHIN THE NEW TOILET PARTITION LAYOUT IN ORDER TO PROVIDE ADA COMPLIANCE. SEE PLUMBING.
- NEW DRINKING FOUNTAIN IN EXISTING LOCATION. SEE PLUMBING.
- NEW WOP SINK. SEE PLUMBING AND REFERENCED INTERIOR ELEVATION.
- ICE / WATER DISPENSER - O.F.C.I. PROVIDE WATER SUPPLY AND FLOOR SINK. SEE PLUMBING.
- REFRIGERATOR - O.F.O.I. PROVIDE POWER AS PER ELECTRICAL.
- PATCH CONCRETE FLOOR WHERE TRENCH OCCURRED FOR PLUMBING OR ELECTRICAL MODIFICATIONS.
- CONCRETE PATTERNS SHADING REPRESENTS AREA WHERE RAISED ACCESS FLOORING HAS BEEN DEMOLISHED AND CONCRETE NEEDS TO BE FILLED BACK IN TO THE FINISHED FLOOR ELEVATION (APPROXIMATELY 6" THICKNESS). BLOCK EDGES FROM ADJACENT RAISED ACCESS FLOORING AND FILL WITH CONCRETE AS REQUIRED. REINFORCE WITH #4 BARS AT 24" O.C. EACH DIRECTION IN THE MIDDLE OF THE SLAB. PROVIDE SAWCUT CONTROL JOINTS AT INTERVALS NOT TO EXCEED 15 FEET IN BOTH DIRECTIONS. IN AREAS THAT ARE TO RECEIVE TILE (SEE A1101), HOLD TOP OF SLAB ELEVATION DOWN 2" FROM THE FINISHED FLOOR TO ALLOW FOR THICKER TILE.
- INFILL WALL WHERE DOOR / FRAME WAS REMOVED TO MATCH EXISTING CONSTRUCTION. PROVIDE SOUND INSULATION AS REQUIRED.
- NEW SEMI-RECESSED FIRE EXTINGUISHER CABINET AND FIRE EXTINGUISHER TO BE INSTALLED IN EXISTING LOCATION. J.L INDUSTRIES COSMOPOLITAN STAINLESS STEEL 1037/10. INTENT IS TO MATCH NEW SOUTH BUILDING STANDARD. SEE DETAIL C4/A501 (INSTALL AT ADA HEIGHT). EXTEND NEW WALL TO WINDOW MULLION PER DETAIL A6/A501. EXISTING WINDOW HAS A RADIANT HEATER SYSTEM ATTACHED. TEMPORARILY REMOVE RADIANT HEATER CAP AT INTERSECTION AND INSTALL ROCK WOOL BATT INSULATION AT WALL INTERSECTION AS REQUIRED TO FILL VOID. REPLACE CAP AND BUILD NEW WALL AROUND THE RADIANT HEATER SYSTEM.
- PROVIDE SOUND ISOLATION IN FILL CONNECTION TO VERTICAL WINDOW MULLION PER A4/A501 BEHIND EXISTING COLUMN AS REQUIRED.
- PROVIDE NEW 5/8" TYPE X CODE COMPLIANT TILE BACKER (GEORGIA PACIFIC DENSHEILD OR EQUAL) BEHIND ALL NEW TILE IN ENTIRE ROOM. PATCH ALUMINUM RADIANT HEATER CAP WHERE IT WAS PREVIOUSLY MISSING.
- NEW WATER HEATER. SEE PLUMBING.
- PROVIDE NEW EXTERIOR CONCRETE SLAB AS DIMENSIONED WHERE DEMOLISHED. SYSTEM SHALL MATCH EXISTING (4" MIN. OVER 4" MIN. GRANULAR BASE). FIRST SECTION OF CONCRETE NEAR DOOR TO BE 2% MAX. SLOPE. REMAINING SECTIONS ARE INTENDED TO BE 5% MAX. SLOPE. INTENT IS TO MAKE SMOOTH TRANSITION AT THRESHOLD FOR PALETTE JACKS.
- NEW FLOOR DRAIN. SEE PLUMBING. SLOPE NEW CONCRETE TO DRAIN AS REQUIRED. ALLOW FOR THICK SET TILE WHERE APPLICABLE.
- NEW MILLWORK PER REFERENCED DETAILS.
- DASHED LINE INDICATES TO PROVIDE 1/2" NOMINAL FIRE TREATED PLYWOOD. APPLY DIRECTLY TO STUDS AND ATTACH GYPSUM BOARD ON TOP OF PLYWOOD. EXTEND PLYWOOD TO 6" ABOVE FINISHED CEILING. GYPSUM BOARD TO EXTEND TO DECK.
- ADD WINDOW FILM TO EXISTING GLASS AS DIRECTED BY OWNER (3M OR EQUAL).



**D2 FLOOR PLAN - LEVEL 1**  
A101 SCALE: 1/8" = 1'-0"



**GENERAL NOTES**

- ITEMS NOT NOTED ARE EXISTING TO REMAIN.
- GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND REPAIR ANY EXISTING ITEMS WHICH ARE TO REMAIN, AND WHICH ARE DAMAGED DURING THE COURSE OF DEMOLITION AND CONSTRUCTION.
- COORDINATE INSTALLATIONS OF ALL "AFTER CONTRACT" ASSEMBLIES WITH THE OWNER PRIOR TO CONSTRUCTION OF ADJOINING OR RELATED STRUCTURES.
- SEE G001 FOR LEGENDS, SYMBOLS, AND OTHER ARCHITECTURAL GENERAL INFORMATION.
- SEE SHEET A151 FOR REFLECTED CEILING PLAN.
- SEE SHEET A600'S FOR DOOR AND WINDOW INFORMATION.
- SEE SHEET A1101 FOR FINISH INFORMATION AND A1200'S FOR INTERIOR ELEVATIONS.
- SEE AP101 FOR SPECIFIC ARCHITECTURAL ELECTRICAL AND OTHER INFORMATION.
- SEE ENGINEERING SHEETS FOR ADDITIONAL INFORMATION.
- SOME AREAS WITHIN THE SCOPE OF THE PROJECT REQUIRE SIGNIFICANT DRYWALL PATCHING. INTENT IS TO PATCH AND REPAIR ALL WALLS AND CEILING TO A LEVEL 5 SMOOTH TEXTURE FINISH. FIELD VERIFY EXISTING CONDITIONS AND BID ACCORDINGLY.
- SOME EXISTING WALLS INTERSECTED WITH THE EXTERIOR WINDOW SYSTEM THAT INCLUDED A RADIANT HEATING SYSTEM. PATCH AND REPAIR THE EXTERIOR WALL / WINDOW AND RADIANT HEATER SYSTEM AS REQUIRED TO MATCH EXISTING ADJACENT CONDITIONS.
- GENERAL CONTRACTOR SHALL REVIEW AND APPROVE ALL APPLIANCES WITH OWNER PRIOR TO PURCHASING EQUIPMENT AND FABRICATING MILLWORK.
- PROVIDE BLOCKING/BACKING PER G002 SHEET, PROVIDE BLOCKING FOR ALL WALL MOUNTED ACCESSORIES AND EQUIPMENT AS REQUIRED. PATCH AND REPAIR EXISTING WALLS AS REQUIRED FOR NEW BLOCKING.
- STRUCTURAL COLUMNS AND BEAMS ARE PROTECTED WITH FIRE RETARDANT SPRAY AND ARE TO REMAIN. SPRAY MUST BE REPLACED IF REMOVED OR DAMAGED TO MAINTAIN EXISTING FIRE RATINGS. PROVIDE SPRAY PROOFING WHERE IT WAS MISSING FROM ORIGINAL CONSTRUCTION - FIELD VERIFY CONDITIONS AND LOCATIONS.
- SEE G002 FOR TYPICAL FIXTURE MOUNTING HEIGHTS.
- WALL TYPES DO NOT ADDRESS TILE LOCATIONS. SEE INTERIOR ELEVATIONS FOR TILE LOCATIONS. GYPSUM BOARD IN RESTROOMS AND BEHIND ALL TILE SHALL BE 5/8" TYPE X AND RATED AS CODE COMPLIANT TILE BACKER (GEORGIA PACIFIC DENSHEILD OR EQUAL). REFER TO THE CURRENT EDITION OF THE HANDBOOK FOR CERAMIC TILE INSTALLATION PUBLISHED BY THE COUNCIL OF AMERICA, INC. FOR PROPER CERAMIC TILE INSTALLATION MATERIALS AND METHODS.
- PROVIDE 18" MINIMUM CLEAR FLOOR SPACE AT PULL SIDE OF ALL DOORS. PROVIDE 12" MINIMUM CLEAR FLOOR SPACE AT PUSH SIDE OF ALL DOORS.
- THE CONTRACTOR SHALL MODIFY THE EXISTING FIRE SPRINKLER SYSTEM THROUGHOUT THE REMODELED SPACE(S) IN COMPLIANCE WITH NFPA 13. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL DRAWINGS, SPECIFICATIONS AND CALCULATIONS REQUIRED BY THE FIRE MARSHAL. USE RECESSED HEADS WHERE APPLICABLE. SEE PLUMBING DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- LOCATE DOOR JAMBS 4" FROM WALL UNLESS NOTED OTHERWISE.
- DOE TO NEW ELECTRICAL DEVICES EXISTING WALLS. SOME AREAS WILL HAVE SECTIONS OF THE GYPSUM BOARD THAT WILL NEED TO BE REMOVED. COORDINATE THE EXTENT OF THIS WORK WITH THE ELECTRICAL. PATCH AND REPAIR ALL EXISTING WALLS AND CEILING THAT ARE TO REMAIN AS REQUIRED FOR NEW ELECTRICAL DEVICES, NEW BACKING OR ANY OTHER REASON. THIS BUILDING IS OF TYPE I (NON-COMBUSTIBLE CONSTRUCTION). COMBUSTIBLE MATERIALS ARE NOT ALLOWED EXCEPT AS IDENTIFIED IN IBC 2018 SECTION 603.
- PATCH AND REPAIR THE ROOF FOR ANY NEW PENETRATIONS AS/ IF REQUIRED BY CODE OR MANUFACTURER.
- UPON COMPLETION OF PROJECT, CLEAN ALL AREAS WITHIN SCOPE OF PROJECT, INCLUDING FLOORS, CEILING, AND WINDOWS. DO NOT SCALE DRAWINGS.
- WHERE SOUND BATT IS NOTED, FILL CAVITIES WITH FIBERGLASS BATT INSULATION TO MATCH THICKNESS OF WALL.
- FIRE RATED WALLS THAT EXTEND TO DECK SHALL HAVE FLUTED DECK CAVITIES FILLED WITH MINERAL AND FIRE CAULK. GYPSUM BOARD TO DECK AS REQUIRED.
- IN NON-RATED WALL THAT EXTEND TO DECK, PROVIDE SOUND SEALANT.

**SEPARATION LEGEND**

- ▼ TWO HOUR FIRE BARRIER
- ONE HOUR FIRE PARTITION

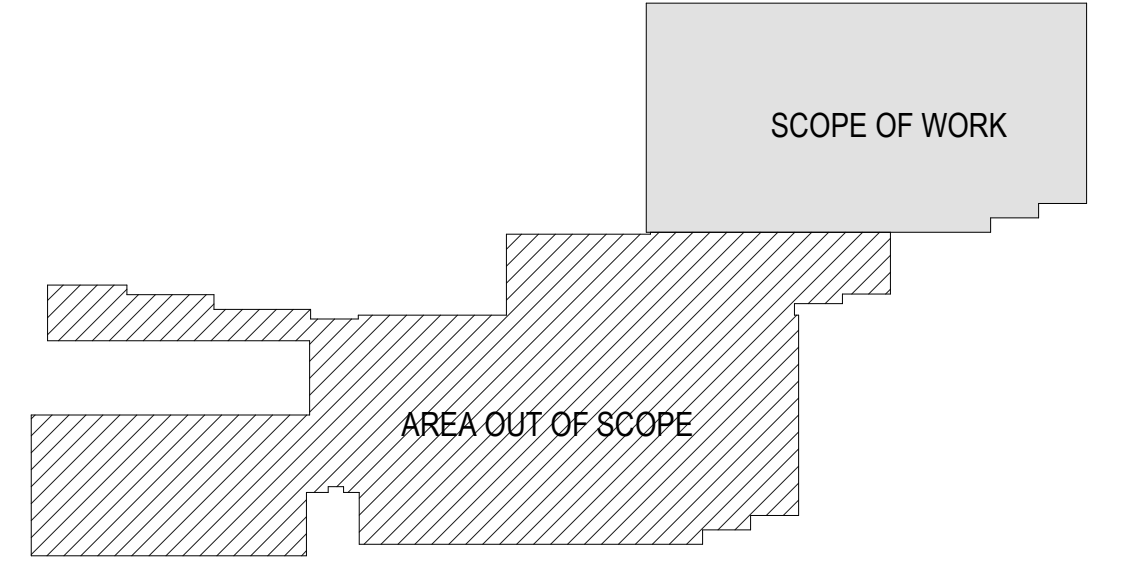
<p>233 SOUTH PLEASANT GROVE BLVD. PLEASANT GROVE, UTAH 84062 PHONE: (801) 769-3000 cma@curtisminer.com</p>	<p>DATE: 19 APRIL 2022 PROJECT #: 21-099 PROJ. MAN.: JSJ CHECKED BY: GWT</p>
	<p>PROJECT: <b>INTERMOUNTAIN LAKE PARK NORTH LEVEL 1 REMODEL</b></p> <p>4648 LAKE PARK BLVD WEST VALLEY CITY, UTAH 84120</p>
<p>SHEET DESCRIPTION: <b>FLOOR PLAN - LEVEL 1</b></p>	<p>SHEET: <b>A101</b></p>

MARK	REVISION	DATE
1	Addendum 1	05/03/2022



**D1 TELECOM RACEWAY PLAN - LEVEL 1**  
SCALE: 1/8" = 1'-0"

**SPECTRUM ENGINEERS**  
324 S. State St., Suite 400  
Salt Lake City, UT 84111  
800-478-7077  
801-328-5151  
fax: 801-328-5155  
www.spectrum-engineers.com



<p><b>CURTIS MINER ARCHITECTURE</b></p>	<p>233 SOUTH PLEASANT GROVE BLVD. SUITE #105 PLEASANT GROVE, UTAH 84062 PHONE: (801) 769-3000 cma@cmautah.com</p>	<p>DATE: 19 APRIL 2022 PROJECT #: 21-099 PROJ. MAN.: JSJ CHECKED BY: GWT</p>
	<p>PROJECT: <b>INTERMOUNTAIN LAKE PARK NORTH LEVEL 1 REMODEL</b></p> <p>4646 LAKE PARK BLVD WEST VALLEY CITY, UTAH 84120</p>	
<p>SHEET DESCRIPTION: <b>TELECOM RACEWAY PLAN - LEVEL 1</b></p>		<p>SHEET: <b>ET111</b></p>

BIM 360://21-099 IHC Lake Park Level 1 - North Remodel/20120-Elec Central.rvt  
 5/9/2022 12:33:30 PM



1

2

3

4

5

6

A

B

C

D

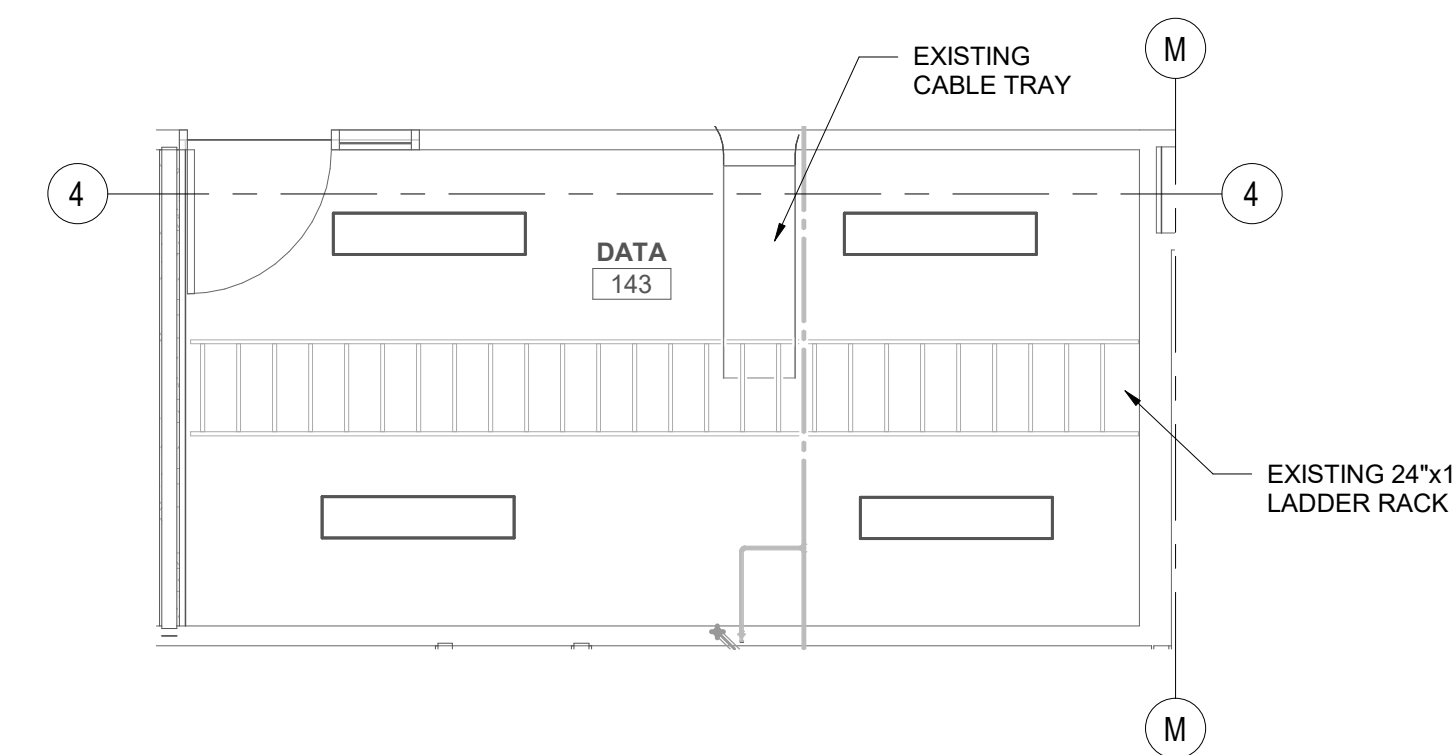
E

MARK	REVISION	DATE
1	Addendum 1	05/03/2022

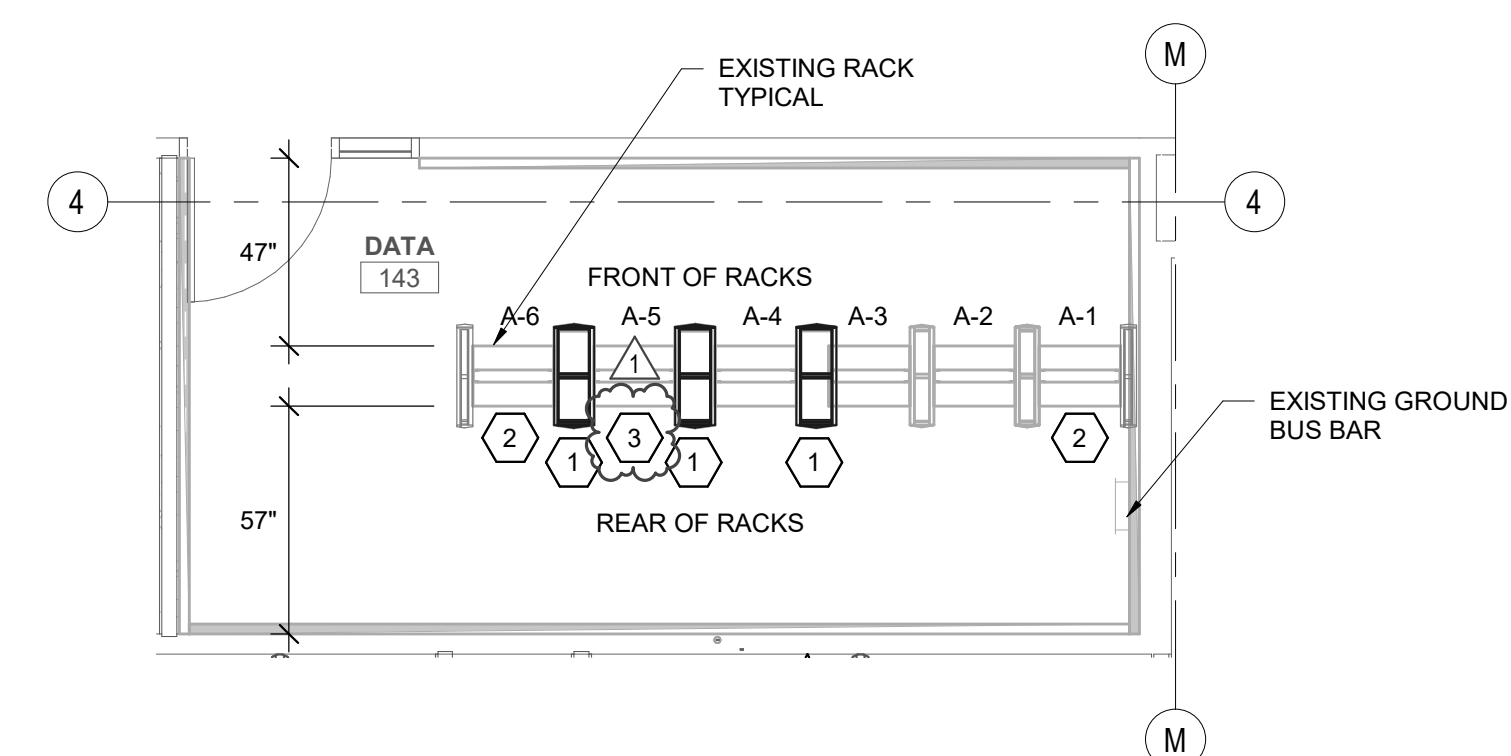
**SHEET KEYNOTES**

- 1 CONTRACTOR TO DETACH RACKS FROM FLOOR AND REMOVE EXISTING VERTICAL WIRE MANAGERS AND REPLACE WITH NEW 10" VERTICAL WIRE MANAGERS.
- 2 CONTRACTOR TO PRESERVE BACKBONE CABLING DURING DEMOLITION FOR USE.
- 3 CONTRACTOR TO REMOVE EXISTING RACK 5 FROM EXISTING RACK LINE UP. INSTALL NEW 10" WWM AS SHOWN IN RACK ELEVATIONS AND SHIFT RACKS IN LINE UP TO MATCH.

**SPECTRUM ENGINEERS**  
 324 S. State St., Suite 400  
 Salt Lake City, UT 84111  
 800-478-7077  
 801-328-5151  
 fax: 801-328-5155  
 www.spectrum-engineers.com



**D5 ENLARGED DATA ROOM 143 LADDER RACK PLAN**  
 SCALE: 1/4" = 1'-0"



**E5 ENLARGED DATA ROOM 143 EQUIPMENT RACK PLAN**  
 SCALE: 1/4" = 1'-0"

**CURTIS MINER ARCHITECTURE**  
 233 SOUTH PLEASANT GROVE BLVD. SUITE #105  
 PLEASANT GROVE, UTAH 84062  
 PHONE: (801) 769-3000  
 cma@cmautah.com

DATE: 19 APRIL 2022  
 PROJECT #: 21-099  
 PROJ. MAN.: JSJ  
 CHECKED BY: GWT

PROJECT:  
**INTERMOUNTAIN LAKE PARK  
 NORTH LEVEL 1 REMODEL**

4646 LAKE PARK BLVD  
 WEST VALLEY CITY, UTAH 84120

SHEET DESCRIPTION:  
**ENLARGED TELECOM PLANS**

SHEET:  
**ET401**

1

2

3

4

5

6

A

B

C

D

E

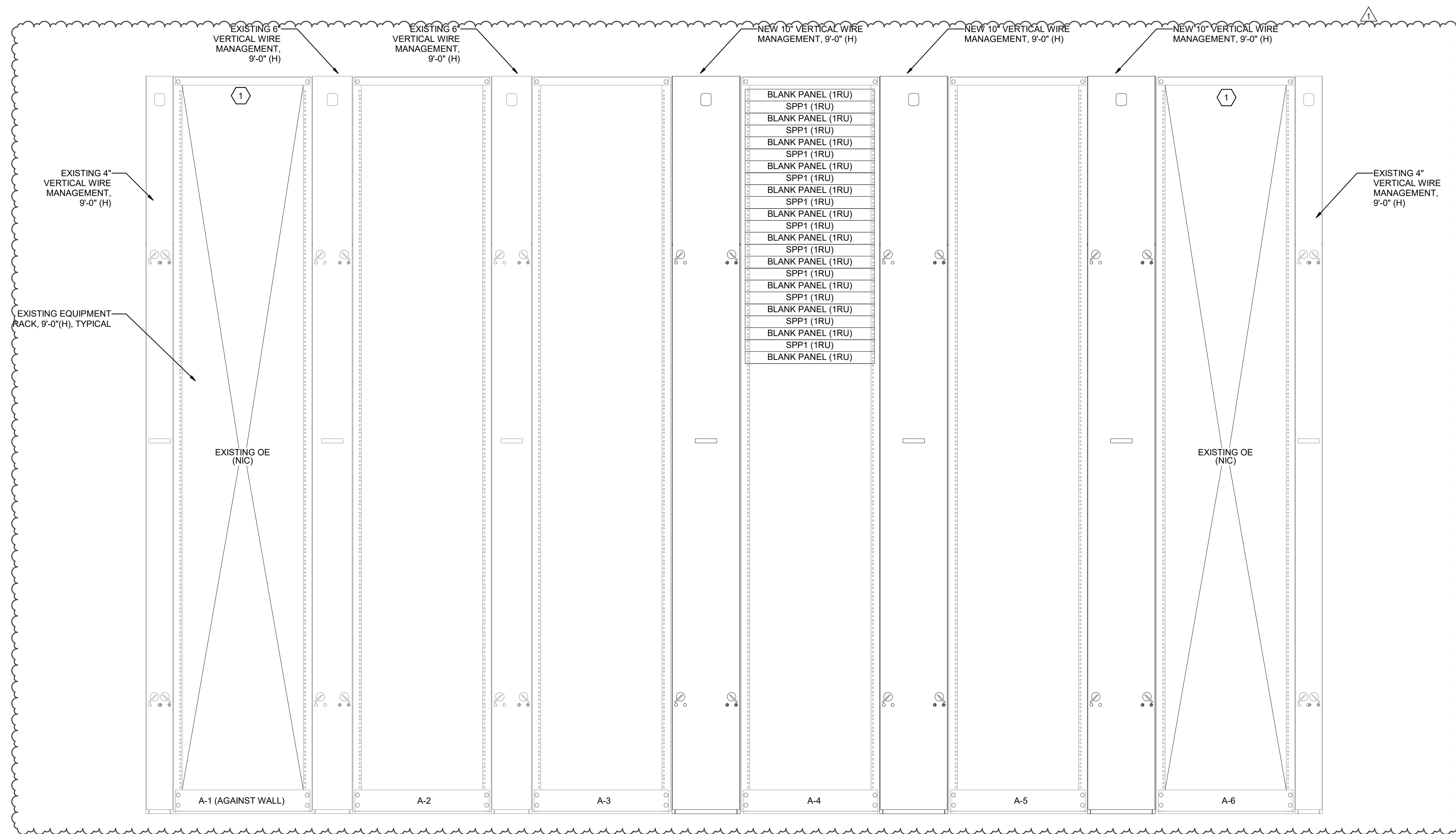
### DATA DEVICE DROP SCHEDULE - DATA ROOM 143

DATA DEVICE TYPE	DETAIL LOCATION	COMM ROOM LOCATION	TOTAL BY FLOOR	Num of Drops
LEVEL 1 FLOOR				
CEILING DATA (2-DROP)	SEE DETAIL D6/ETS02	DATA ROOM 143	14	28
CEILING DATA - CAMERA (1-DROP)	SEE DETAIL B5/ETS02	DATA ROOM 143	12	12
CEILING WIRELESS ACCESS POINT (2-DROP)	SEE DETAIL E6/ETS02	DATA ROOM 143	19	38
FLOOR DATA (2-DROP)	SEE DETAIL A6/ETS02	DATA ROOM 143	9	18
FURNITURE DATA (2-DROP)	SEE DETAIL B6/ETS02	DATA ROOM 143	37	74
FURNITURE DATA (4-DROP)	SEE DETAIL C6/ETS02	DATA ROOM 143	24	96
WALL DATA (2-DROP)	SEE DETAIL A6/ETS02	DATA ROOM 143	99	198
WALL DATA (4-DROP)	SEE DETAIL A5/ETS02	DATA ROOM 143	2	8
WALL DATA - ABOVE COUNTER (2-DROP)	SEE DETAIL A6/ETS02	DATA ROOM 143	8	16
WALL DATA - CAMERA (1-DROP)	SEE DETAIL B5/ETS02	DATA ROOM 143	2	2
<b>Grand total</b>			<b>226</b>	<b>490</b>

MARK	REVISION	DATE
1	Addendum 1	05/03/2022

### SHEET KEYNOTES

1 CONTRACTOR TO PRESERVE BACKBONE CABLING DURING DEMOLITION FOR USE.



**SPECTRUM ENGINEERS**  
 324 S. State St., Suite 400  
 Salt Lake City, UT 84111  
 800-478-7077  
 801-328-5151  
 fax: 801-328-5155  
 www.spectrum-engineers.com

**CURTIS MINER ARCHITECTURE**  
 233 SOUTH PLEASANT GROVE BLVD. SUITE #105  
 PLEASANT GROVE, UTAH 84062  
 PHONE: (801) 769-3000  
 cma@cmautah.com

DATE: 19 APRIL 2022  
 PROJECT #: 21-099  
 PROJ. MAN.: JSJ  
 CHECKED BY: GWT

PROJECT:  
**INTERMOUNTAIN LAKE PARK  
 NORTH LEVEL 1 REMODEL**

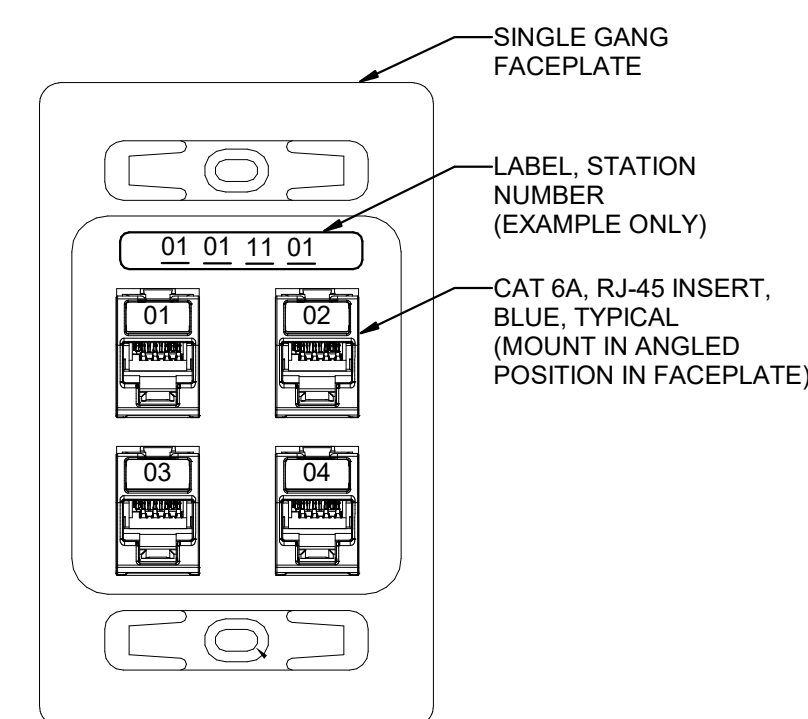
4646 LAKE PARK BLVD  
 WEST VALLEY CITY, UTAH 84120

SHEET DESCRIPTION:  
**TELECOM EQUIPMENT RACK  
 ELEVATIONS**

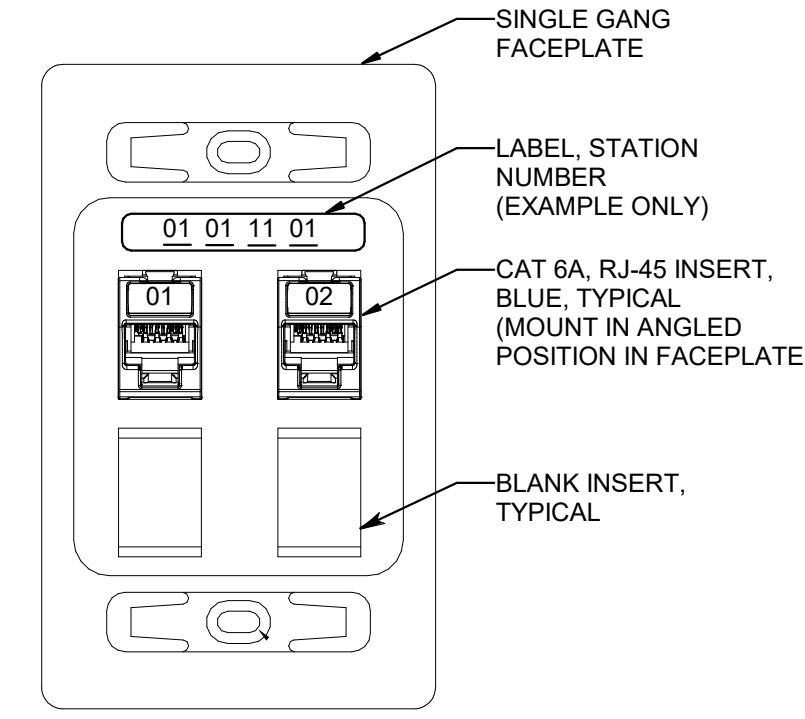
SHEET:  
**ET501**

**E2** TYPICAL DATA ROOM 143 EQUIPMENT RACK ELEVATION  
 SCALE: NTS

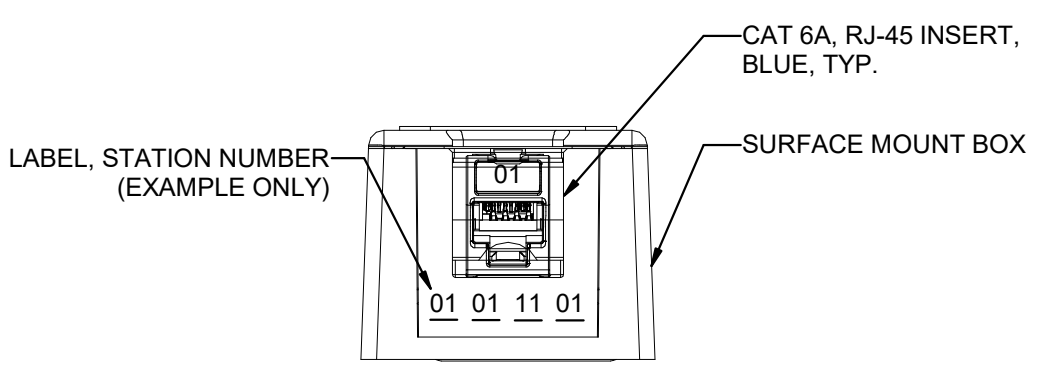
MARK	REVISION	DATE



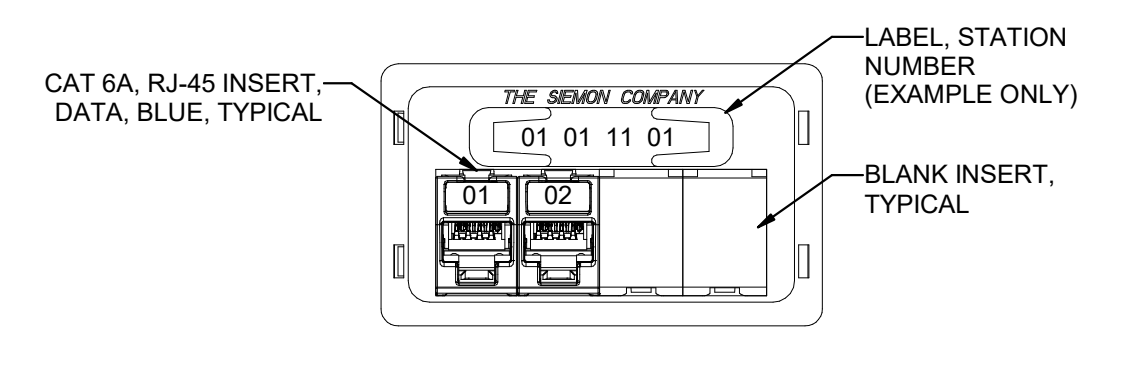
**A5** TYPICAL 4-PORT WALL DATA OUTLET  
SCALE: NTS



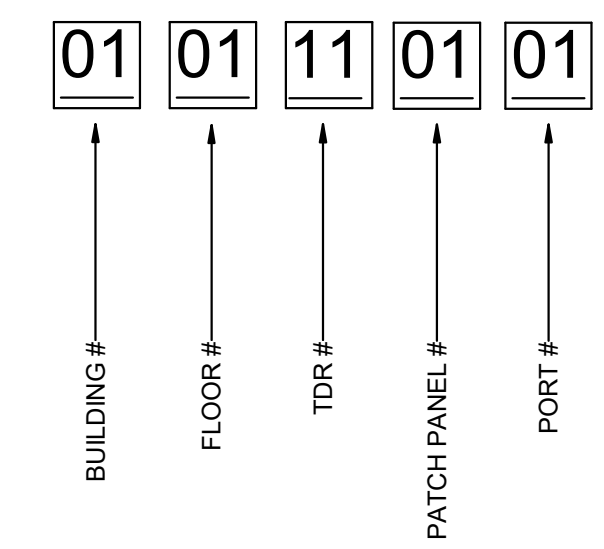
**A6** TYPICAL 2-PORT WALL DATA OUTLET  
SCALE: NTS



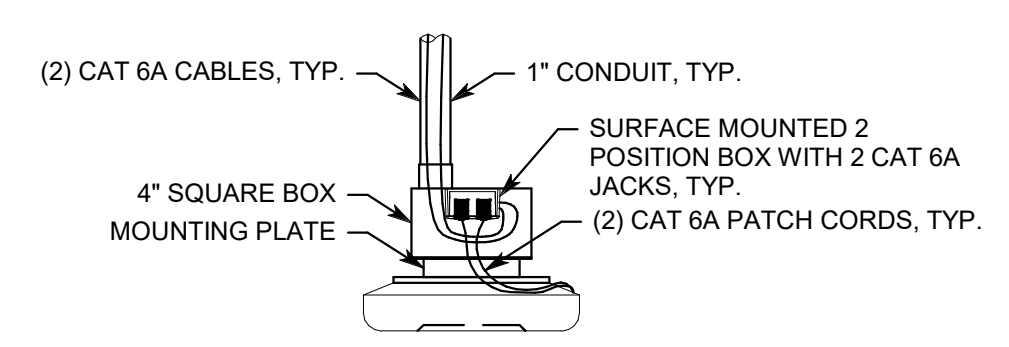
**B5** TYPICAL 1-PORT CAMERA DATA OUTLET  
SCALE: NTS



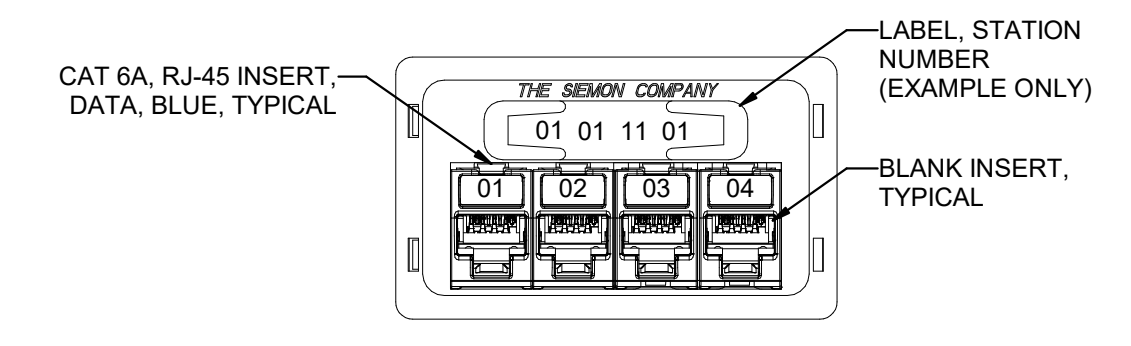
**B6** TYPICAL 2-PORT FURNITURE DATA OUTLET  
SCALE: NTS



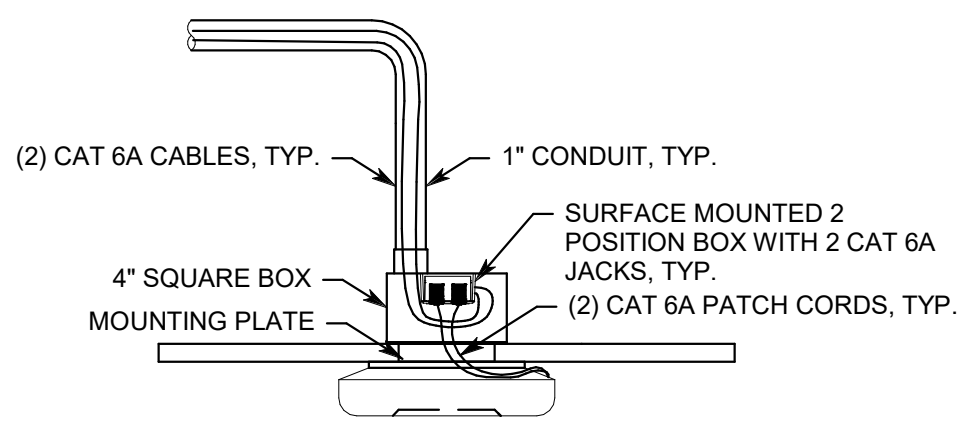
**C4** TYPICAL CABLE ID EXAMPLE DETAIL  
SCALE: NTS



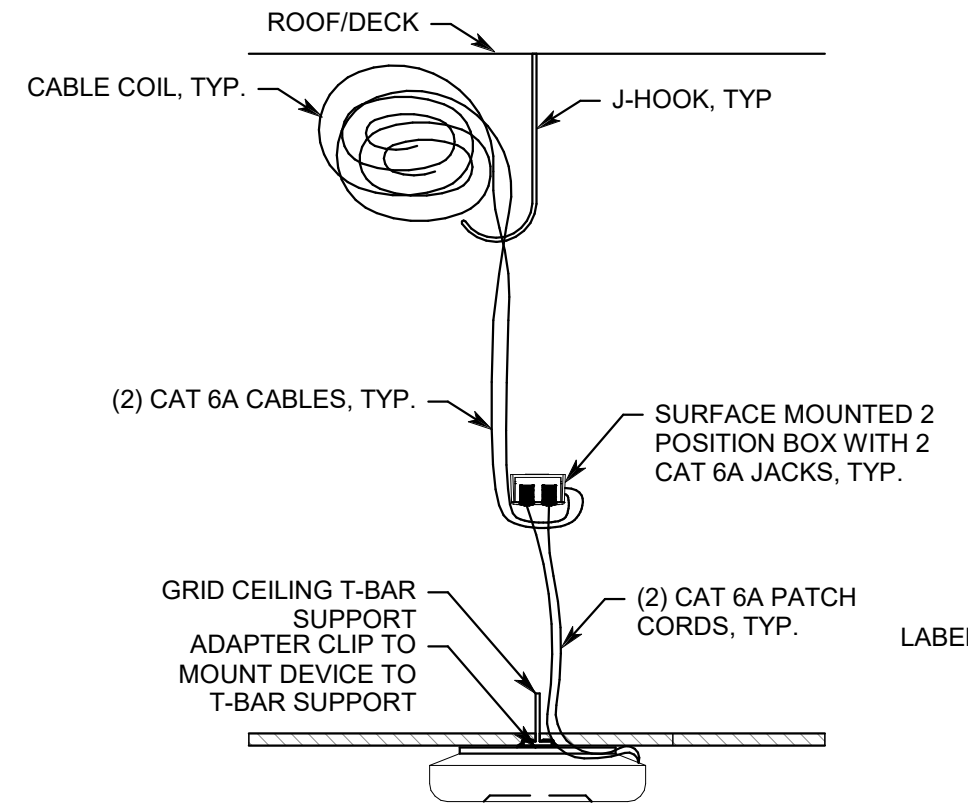
**C5** OPEN CEILING MOUNT WIRELESS ACCESS POINT MOUNTING DETAIL (OPEN CEILING)  
SCALE: NTS



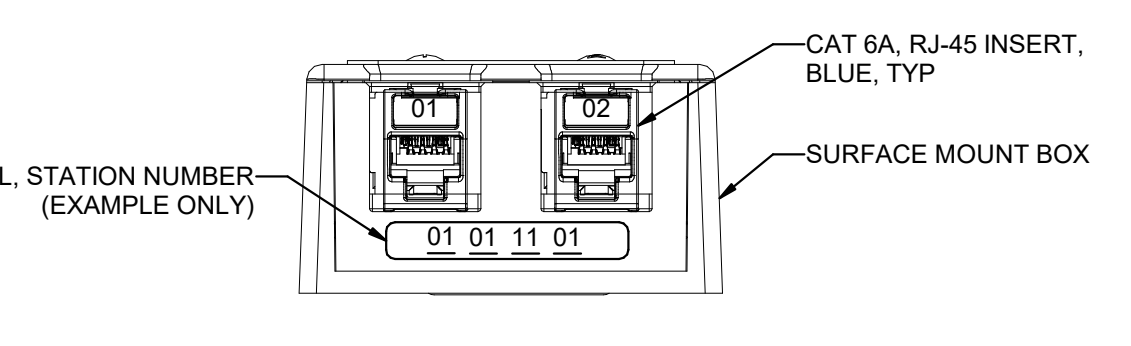
**C6** TYPICAL 4-PORT FURNITURE DATA OUTLET  
SCALE: NTS



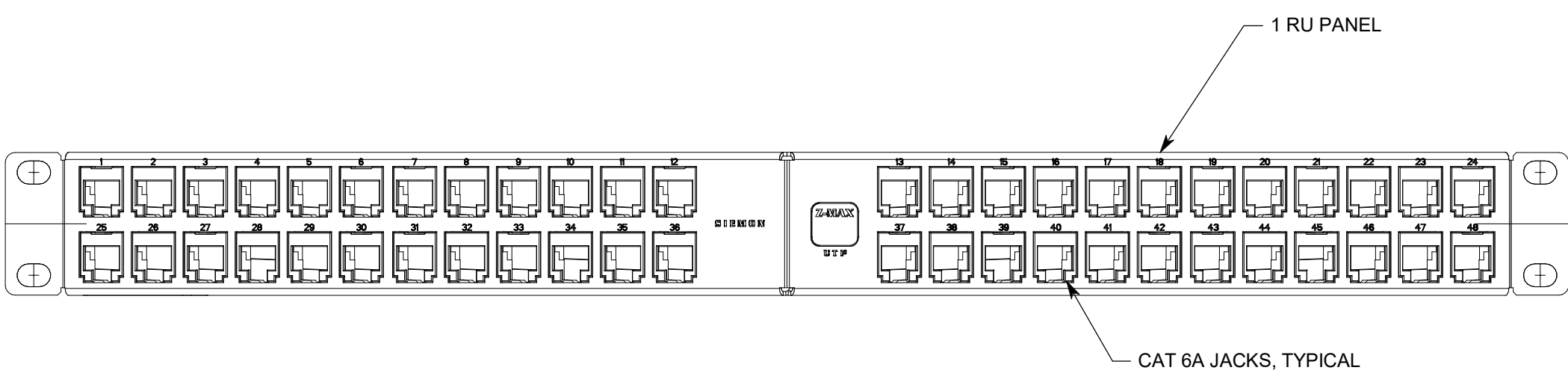
**D4** HARD-LID CEILING MOUNT WIRELESS ACCESS POINT MOUNTING DETAIL (HARD-LID CEILING)  
SCALE: NTS



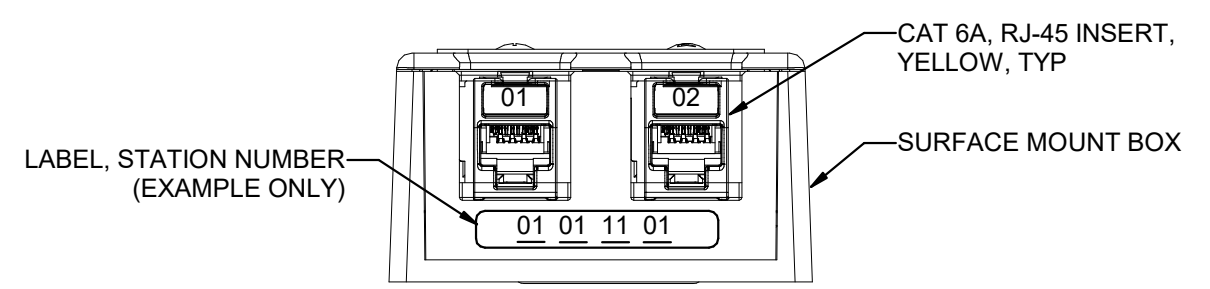
**D5** T-BAR MOUNT WIRELESS ACCESS POINT MOUNTING DETAIL (T-BAR)  
SCALE: NTS



**D6** TYPICAL 2-PORT CEILING DATA  
SCALE: NTS



**E3** STATION PATCH PANEL (SPP1) DETAIL, TDR  
SCALE: 1/8" = 1'-0"



**E6** TYPICAL 2-PORT WIRELESS ACCESS POINT  
SCALE: NTS

**SPECTRUM ENGINEERS**  
324 S. State St., Suite 400  
Salt Lake City, UT 84111  
800-478-7077  
801-328-5151  
fax: 801-328-5155  
www.spectrum-engineers.com

<p>233 SOUTH PLEASANT GROVE BLVD. SUITE #105 PLEASANT GROVE, UTAH 84062 PHONE: (801) 769-3000 cma@cmautah.com</p>	<p>DATE: 19 APRIL 2022 PROJECT #: 21-099 PROJ. MAN.: JSJ CHECKED BY: GWT</p>
	<p>PROJECT: <b>INTERMOUNTAIN LAKE PARK NORTH LEVEL 1 REMODEL</b></p> <p>4646 LAKE PARK BLVD WEST VALLEY CITY, UTAH 84120</p>
<p>SHEET DESCRIPTION: <b>TELECOM DETAILS</b></p>	<p>SHEET: <b>ET502</b></p>

BIM 360://21-099 IHC Lake Park Level 1 - North Remodel/20210-Elec Central.rvt  
 5/9/2022 12:33:34 PM