



Office of General Services

DESIGN & CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242

ADDENDUM NO. 1 TO PROJECT NO. 45998

CONSTRUCTION, PLUMBING AND ELECTRICAL WORK
UPGRADE PLUMBING & FIXTURES AND
REHABILITATE CELL BACKS, C BLOCK
CLINTON CORRECTIONAL FACILITY
ROUTE 374, COOK STREET
DANNEMORA, NY 12929

November 1, 2024

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

BIDDING REQUIREMENTS – COMMON DOCUMENTS

1. DOCUMENT 001114 ADVERTISEMENT FOR BIDS: The last date for receipt of bids is changed from 2:00pm Wednesday, November 6, 2024 to 2:00pm Wednesday November 13, 2024.

PLUMBING WORK SPECIFICATIONS

2. SECTION 211200 STANDPIPE AND HOSE SYSTEM: Discard the Section bound in the Project Manual and substitute the accompanying Section (pages 221200 – 1 thru 221200 – 3) noted “Revised 10/25/2024”.
3. Page 220576-1, Article 2.01: Change Article to Read:
“2.01 PINNED CLEANOUT
 - A. Cast brass or bronze with threaded female cleanout connection, 2-3/8 in. OD slip joint O-ring connection to 4 in. no-hub connection.
 - B. Cast brass or bronze 2-1/2 in. cleanout plug with raised or countersunk head.
 - C. Anti-Seize Lubricant: Never-Seez by Bostik Chemical Group, Broadview, IL; Molycote 1000 by Dow Corning Corp, Midland, MI; Anti-Seize Lubricant by Loctite Corp, Newington, CT.”
4. Page 224600-3, Subparagraph 2.02.A.4: Change Subparagraph to Read:
 - “4. Electronically operated cold water only push-button valve, metering non-hold open type requiring less than 5 lbs force to operate.
 - a. Maximum Flow: 0.25 gallons per cycle.”

5. SECTION 230130 EXISTING HVAC AIR DISTRIBUTION SYSTEM CLEANING: Add the accompanying Section (pages 230130 – 1 thru 230130 – 13) to the Project Manual.

PLUMBING WORK APPENDIX

6. SCHEDULE OF SUBMITTALS: Append the Schedule bound in the Project Manual with the additional page noted “ADDENDUM 1, 11/01/2024” attached to this addendum.

ELECTRICAL WORK SPECIFICATIONS

7. Page 260532-2 PART 2 PRODUCTS, 2.01.F. Add subparagraph 2 as follows:
“2. The Director’s Representative will furnish approximately:
a. 1080 ft (10ft sections)
b. 180 ft (5ft sections)
c. 3 ft (1ft sections)
End caps and couplings associated with the sections will be furnished as well. The EC shall provide any additional devices required to complete the work of the contract.
8. SECTION 260923 LIGHTING CONTROL DEVICES: Add the accompanying Section (pages 260923 – 1 thru 260923 – 3) to the Project Manual.
9. SECTION 265119 LED INTERIOR LIGHTING: Discard the Section bound in the Project Manual and substitute the accompanying Section (pages 265119 – 1 thru 265119 – 6) noted “Revised 10/23/2024”.
10. Page 265119-3, Paragraph 2.03 LINEAR INDUSTRIAL Type P: Delete this Paragraph in its entirety.
11. SECTION 265213 EMERGENCY AND EXIT LIGHTING: Delete this Section in its entirety.
12. Page 262416-4, Paragraph 3.01 INSTALLATION, Add the following paragraph:
“E. The Director’s Representative will furnish the panelboards (LP-1C, LP-2C & LP-3C) and circuit breakers listed to the EC for installation. The EC shall provide any additional devices required to complete the work of the contract.
a. LP-1C - 225A, 60 circuit panelboards
i. 1-3P.150A. MCB
ii. 2-2P.30A. Circuit breakers
iii. 28-1P.20A. Circuit Breakers
iv. 26-1P.20A. Circuit Breakers GFCI
v. 120 kA SPD
b. LP-2C - 225A, 72 circuit panelboards
i. 1-3P.150A. MCB
ii. 2-3P.30A. Circuit breakers
iii. 1-2P.60A. Circuit Breaker
iv. 1-2P.100A. Circuit Breaker
v. 28-1P.20A. Circuit Breakers
vi. 26-1P.20A. Circuit Breakers GFCI
vii. 120 kA SPD
c. LP-1C - 225A, 60 circuit panelboards
i. 1-3P.150A. MCB
ii. 2-3P.30A. Circuit breakers
iii. 28-1P.20A. Circuit Breakers
iv. 26-1P.20A. Circuit Breakers GFCI
v. 120 kA SPD”

ELECTRICAL WORK APPENDIX

13. SCHEDULE OF SUBMITTALS: Append the Schedule bound in the Project Manual with the additional page noted “ADDENDUM 1, 11/01/2024” attached to this addendum.

GENERAL DRAWINGS

14. Revised Drawing:
Drawing No. G-003, noted “ADDENDUM 1” dated 10/30/2024 accompanies this Addendum and supersedes the same numbered originally issued drawings.

ELECTRICAL WORK DRAWINGS

15. Revised Drawings:
Drawing Nos. E-001, E-101, E-102, E-103, E-104, E-105, E-106, E-107, E-108, E-109, E-503, E-504, E-601 and E-602, noted “ADDENDUM 1” dated 10/30/2024 accompany this Addendum and supersede the same numbered originally issued drawings.

16. Addendum Drawing:
Drawing No. E-603 accompanies this Addendum and forms part of the Contract Documents.

END OF ADDENDUM

Brady Sherlock, P.E.
Director, Division of Design
Design & Construction

SECTION 211200

STANDPIPE AND HOSE SYSTEM

PART 1 GENERAL

1.03 SUBMITTALS

- A. Product Data:
 - 1. Catalog sheets, specifications and installation instructions for each item specified.
 - 2. Schedule of pipe and fittings including manufacturer, materials, and pressure rating of fitting.

- B. Quality Control Submittals:
 - 1. Design Data: Standpipe & installations in buildings under construction; NFPA-14, add the following:
 - a. The top hose valve shall never be more than one floor level below the highest forms or staging attained.
 - b. Maintain at each highest hose outlet, a gear box constructed of metal, containing sufficient 2-1/2 inch fire hose to reach all parts of the floor, a 1-1/8 inch galvanized, cast iron nozzle, spanner wrench and hose straps.
 - c. Maintain accessibility to hose valves and siamese connections at all times. Keep access free of debris, snow, materials, and other obstructions. Erect signs so they are visible at all times, and notify the local fire department by letter that the temporary standpipe system is installed, and of the locations of the siamese connections. Furnish Director's Representative with copy of letter to fire department.
 - d. Commence installation of the temporary standpipe system as soon as possible after building construction is begun, and extend the system to meet the fire protection requirements as the construction progresses.
 - 2. Standpipe System Shut Down:
 - a. Authority: Before shutting down the standpipe system to perform the necessary Work, notify in writing, the Director's Representative and the local fire department that the system is to be shut down temporarily. Give date and time of proposed shutdown and the approximate length of time that the system will be out of service. Request instructions for any normal precautions that should be taken during the shut down period.
 - b. Permission: Do not shut down the system until written permission is given by the Director's Representative, who will assign a date and time of shutdown and give full instructions on all normal precautions to be taken to safeguard against fire during the shutdown period, based on information from the Agency for which the Work is being performed and the local fire department.

- c. Shut Down: Keep the system out of service as briefly as possible, observing all precautions. Perform the Work requiring the shutdown continuously and without interruption during the period the system is out of service.
 - d. Restoration: Restore the system to service as soon as possible after the Work has been performed and give written notice to the Director's Representative that the system has been returned to service.
- 3. Certificates: Certify by letter that all fire hose connections have hose threads conforming to those used by the local fire department.
 - 4. Qualifications: The workers and supervisors performing the Work of this Section shall be personally experienced in standpipe Work and shall have been regularly employed by a company engaging in the installation of standpipe systems for a minimum of 5 years and shall, upon request, furnish to the Director the names and addresses of 5 similar projects which they have worked on during the last 3 years.

1.04 QUALITY ASSURANCE

- A. Regulatory Requirements:
 - 1. Except as otherwise shown, or specified, comply with the National Fire Protection Association Standard for the Installation of Standpipe and Hose Systems, NFPA-14,
 - a. Standpipe System Type: Automatic-Wet.
 - b. Standpipe System Class: Class II.
 - 2. Conform to Local Plumbing Codes and/or Fire Department Regulations. Where conflicts occur in the above Code requirements, the most stringent requirements shall apply.
- B. Listing and Approval:
 - 1. All materials and equipment installed shall be Underwriter's listed, or Factory Mutual approved, as being suitable for use in standpipe and hose systems.

PART 2 PRODUCTS

2.01 CLOSETS AND CABINETS

- A. Existing fire hose cabinets to remain. Existing hose cabinet to contain 1-1/2 inch lined fire hose, hose valves of indicated sizes, and one 2-1/2 gallon fire extinguisher. The extinguisher is existing.

2.02 HOSE

- A. Materials: Only decay-mildew proof, and ozone resistant synthetic materials will be acceptable.
- B. Couplings: Provide rough brass oval lug couplings to match existing.
- C. Size: 1-1/2 inches internal diameter.
- D. Length: 150 feet each cabinet.

- E. Hose shall be rolled and laid on bottom of hose cabinet.

2.03 HOSE VALVES

- A. Hose Valve for Class II Service: Existing hose valve to remain; 1-1/2 inch double IPS female compression angle valve, 175 psig WOG minimum; rough brass body with a bonnet and spindle of polished brass, and spoked handwheel.
- B. Spanner: Malleable iron with head size and configuration to fit all hose connections within the cabinet; provide brass chain and hook.

2.04 NOZZLES

- A. Nozzle: Fog nozzle, capable of being completely shut off, and also capable of producing a solid straight stream, or any degree of solid, conical fog, up to 90 degrees. Nozzle shall be constructed of brass with a satin or polished finish, or of red polycarbonate with a brass stem.

2.05 LOCK FOR GATE VALVE

- A. Padlock: Yale, Series No. 800. Furnish 2 keys with 1-1/2 inch diameter identification tags stamped with valve number and service and delete to the Director's Representative..
- B. Chain: Alloy steel, hot dipped galvanized; 3/16 inch welded link.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install the Work of this Section in accordance with the manufacturer's printed installation instructions unless specified otherwise.
- B. Gate Valve: Lock in open position by means of chain looped through handwheel and around adjacent fire riser. Secure chain with padlock.

3.02 FIELD QUALITY CONTROL

- A. System Tests:
 - 1. Test all new Work. Test existing system only if directed.
 - 2. Notify the Director's Representative when the Work of this Section is ready for testing.
 - 3. Perform tests in accordance with NFPA-14.
- B. Identification: Affix decal to the exterior of the hose cabinet door after finish painting is applied.

END OF SECTION

SECTION 230130

CLEANING AIR CONVEYANCE SYSTEM COMPONENTS

PART 1 GENERAL

1.01 REFERENCES

- A. National Air Duct Cleaners Association (NADCA): ACR Standard - Assessment, Cleaning and Restoration of HVAC Systems
- B. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA).
- C. ASHRAE 52.2 - Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size.

1.02 DEFINITIONS

- A. Air Conveyance System (ACS): Interior surfaces of a building's air system, from the points that ambient air enters the system to the points where exhaust air is discharged from the system. This includes dampers, diffusers, ductwork, fans, grilles, and other nonporous components.
- B. DOP Testing: The percentage removal of 0.3 micrometer particles of dioctylphthalate (DOP) is used to rate high efficiency air filters, those with efficiencies above 98 percent. (See Military Standard 282, U.S. Department of Defense, 1956).
- C. Visibly Clean: Determined by internal visual inspection, that all portions of components of the ACS are free of debris.
- D. Visual Inspection: Examination of the cleaned components of the ACS to evaluate the effectiveness of the cleaning process using the human eye or optical instruments.

1.03 SUBMITTALS

- A. Product Data: Manufacturer's catalog cuts, specifications, and MSDS sheets for cleaning chemicals and treatments.
- B. Quality Control Submittals:
 - 1. Project Assessment Report and Work Plan:
 - a. Detailed step-by-step procedure for ACS cleaning.
 - b. Include locations and method of accessing ductwork; cleaning methods; vacuum equipment specifications, including particulate collection efficiency; intended cleaning sequence; methods of testing; method of resealing ductwork; and disposal of debris.

- c. Phasing plan showing sequencing of work and approximate days of work for each building.
 - 2. Duct Cleaning Procedure:
 - a. Detailed step-by-step procedure for duct cleaning.
 - b. Include locations and method of accessing ductwork; cleaning methods; vacuum equipment specifications, including particulate collection efficiency; intended cleaning sequence; methods of testing; method of resealing ductwork; and disposal of debris.
 - 3. Duct Cleaning Contractor Qualifications Data:
 - a. Names and addresses of 5 similar projects that the firm has worked on during the past 10 years.
 - b. Copy of firm's NADCA certification.
 - 4. Supervisor's Qualifications Data.
 - a. Name of the person who will be supervising the Work and their employer's name, business address and telephone number.
 - b. Names and addresses of 3 similar projects that the supervisor has worked on during the past 5 years.
 - c. Copy of supervisor's NADCA certification.
 - 5. Duct Cleaner's Qualifications Data.
 - a. Name of the person who will be performing the Work and their employer's name, business address and telephone number.
 - b. Names and addresses of 3 similar projects that each person has worked on during the past 5 years.
- C. Contract Closeout Submittals:
 - 1. Final Report consisting of the following information:
 - a. List locations of ACS components cleaned.
 - b. Report general conditions of the ducts (rusting steel, fiber delaminating, duct air leakage areas, duct sagging areas, etc).
 - c. Visual verification report indicating inspection locations and conditions for complete ACS analysis with the Director's Representative signature.
 - d. Post-Cleaning Sample Analysis Report taken to verify that duct is clean per NADCA.

1.04 QUALITY ASSURANCE

- A. Duct Cleaning Contractor Qualifications: The firm performing the Work of this Section shall have been regularly engaged in duct cleaning for a minimum of 10 years, shall have completed 5 similar projects, and shall be a certified member of the National Air Duct Cleaners Association (NADCA).
- B. Qualifications of Duct Cleaning Supervisor: The person supervising the Work of this Section shall be personally experienced in this type of Work and shall have been regularly employed by a company engaged in ACS cleaning for a minimum of 2 years, and shall be a certified Air System Cleaning Specialist by the National Air Duct Cleaners Association (NADCA).

- C. Duct Cleaner Qualifications: The persons performing the Work shall be personally experienced in duct cleaning and shall have been regularly employed by a Company performing duct cleaning for a minimum of 2 years.
- D. Pre-Cleaning Conference: Before commencement of the duct cleaning Work, a conference will be held for the purpose of reviewing the Contract Documents and discussing existing conditions of ductwork and equipment to be cleaned, equipment to be used for the Work, impact on building and personnel during cleaning process, and requirements for the Work. The conference shall be attended by the Director's Representative, Facility Representatives, and Duct Cleaning Supervisor.
- E. Work Plan: At the conclusion of the pre-cleaning conference, before the cleaning Work begins, prepare a detailed work plan. The work plan shall include, but not be limited to, work procedures, types of equipment to be used, and crew size.

1.05 SCOPE OF WORK

- A. The cleaning work for each building is for the complete Air Conveyance System including, but not limited to the following components:
 - 1. Exhaust duct system and all associated registers.
 - 2. Exhaust fans.
- B. Verify field conditions before start of work.
- C. Repair and replace to match existing materials where access to walls or ceilings is made, or damage occurs, including but not limited for access to:
 - 1. Ductwork and components.
 - 2. Pneumatic and electric control components.
- D. On the basis of field inspections and review, determine the method of cleaning the HVAC systems and its components, to prevent any damage to the system and its operation. Proposed methods and their effects on the system shall be included in submittal.
- E. Reset all balancing dampers to original settings. Mark original position so that during the final inspection original settings can be field verified.
- F. Report to Director's Representative any system defects discovered during the cleaning operation that will require repair to HVAC system (equipment, ductwork, dampers, registers, and other components).

PART 2 PRODUCTS

2.01 CLEANING METHODS

- A. Non-Porous Surfaces: Use various mechanical cleaning methods which shall render the ACS components visibly clean and capable of non-porous surface cleaning verification.
- B. Do not use cleaning methods which could potentially damage components of the ACS or negatively alter the integrity of the system.
- C. Do not use chemical cleaners that could potentially emit offensive odors and/or mist vapors.

2.02 DEBRIS COLLECTION EQUIPMENT

- A. Equipment used shall be portable and sized to enter the areas easily. Electrical requirements shall be the responsibility of the Contractor and any costs incurred due to modifications to the electrical systems shall be at the Contractor's expense.
- B. The collection systems shall be self-contained units, with the appropriate components to adequately collect dirt and debris loosened from the ductwork. Debris collection is to be performed by a high-powered vacuum system with three stages of filtration. The final stage shall be a HEPA filter. HEPA filter efficiency shall be 99.97% @ 0.3 micron.
- C. The collection system shall be capable of producing a minimum of 2,500 cfm, 0.42" water gauge negative static pressure and 0.25" water gauge velocity pressure in the area of ductwork to be cleaned.
- D. Where contact vacuuming is required, the equipment used shall be HEPA filtered vacuums. These vacuums shall be capable of at least 95 cfm at 88" water column. The vacuum shall have at least four (4) stages of filtration with the final stage being a HEPA filter.

2.03 AGITATION SYSTEM

- A. Type: Collom Duct Cleaning System by Collum Enterprises, 2640 North America Drive, Buffalo, NY 14224, (716) 675-5144,
 - 1. The system is capable of thoroughly cleaning (and sanitizing) to a distance of 60 lineal feet from access point. Exceptions to this requirement will apply when the removal of debris requires more aggressive agitation.
 - 2. A minimum of 85 cubic feet. per minute (cfm) of compressed air to 110 pounds per square inch. (psi) must be supplied to the air tool or nozzle in order to effectively dislodge the built-up debris.
 - 3. The air tool or nozzle shall be able to follow the contours of the ductwork, i.e. the tool must be able to come in contact with all sides/surfaces of the interior of the duct.

4. The air tool or nozzle shall be capable of dispensing coatings and sanitizing solutions to cover the entire interior surface areas of the ductwork without creating additional access openings in order to maintain the integrity of the ductwork.

2.04 DUCT DISINFECTANT

- A. Acceptable Disinfectants:
 1. Madacide by Mada Medical Products Inc., 625 Washington Ave., Carlstadt, NJ 07072, (800) 526-6370, www.madamedical.com.
 2. EnviroCon by Bio-Cide International, 2650 Venture Drive, Norman, OK 73069, (800) 323-1398, www.bio-cide.com.

2.05 SANITIZER

- A. Type: E.P.A. registered sanitizer that is specific for application inside HVAC/ductwork systems
 1. Do not apply to porous surfaces.
- B. Acceptable Sanitizer Microbiocide by BBJ Environmental Solutions, 400 North Ashley Drive, Suite 2590, Tampa, FL 33602, (800) 889-2251, www.bbjenviro.com.

2.06 INSULATION REPAIR COATING

- A. Type: Coating containing an anti-microbial agent, shall not affect the thermal or acoustic properties of the insulation, and shall conform to NFPA Standards 90A and 90B.
 1. Acceptable Coating: Tough Coat by VAC Systems International, 1800 East Cliff Road, Burnsville, MN 55337, (952) 808-1616, www.vacsysint.com.

2.07 DUCTWORK SEALING

- A. SMACNA Duct Sealing Classification shall be used for duct systems using the following criteria:
 1. Ductwork with pressure class ratings shall be constructed to Seal Class A, as required to meet the requirements of SMACNA Duct Construction Standards and with standard industry practice, including transverse joints, longitudinal seams, fitting connections, and all penetrations of the duct wall.
 2. Openings for rotating shafts shall be sealed with bushings or other devices that seal off air leakage. Pressure sensitive tape shall not be used.
 3. All connections shall be sealed, including but not limited to spin-ins, taps, other branch connections, access doors, access panels and duct connections to equipment.
 4. Sealing that would void product listings is not required.
 5. Spiral lock seams need not be sealed.

- B. Duct sealant for indoor applications shall be non-fibrated, water based, Hardcast Iron-Grip IG-601, Ductmate PRO Seal, Foster 32-17, or Childers CP146.
- C. Duct sealant for outdoor applications shall be fibrated, water based, Hardcast Versa-Grip VG-102, Ductmate Fiberseal, Foster 32-17 or Childers CP148.
- D. Sealants and tapes shall be listed and labeled in accordance with UL 181A or UL181B and marked according to type.
- E. For renovation projects with less cure time available than the recommended 72 hours (for above products), Hardcast "Aluma Grip" pressure sensitive duct joint sealing tape may be used.

2.08 AEROSOL DUCT SEALANT

- A. Duct Sealant
 - 1. Seal existing ductwork from the inside using automated aerosolized sealant injection.
 - a. Manufacturer: AeroSeal, LLC (or equal).
 - b. Application must be performed by a manufacturer approved service provider.
 - c. Sealant shall comply with UL Outline Scope 1381.
 - d. Sealant must cure within 2 hours with no VOC off-gassing thereafter.
 - e. Sealant shall remain elastic after curing.
 - f. Sealant shall be deposited substantially at areas of leakage only.
- B. Warranty:
 - 1. The Contractor shall warrant that the aerosol sealant application will be free from defects for a period of 3 years from the date of the sealing application. If defects should occur during this period, the Contractor shall repair or replace the defective duct seals, including the direct labor costs for performing the repair or replacement, at no additional cost.

PART 3 EXECUTION

3.01 PRE-CLEANING PREPARATIONS

- A. Prior to start of work, the HVAC system in whole or in that approved phase is to be carefully inspected and checked for all conditions affecting the cleaning.
 - 1. Defects are to be reported in writing to the Director's Representative and work will not proceed until all defects have been documented.
 - 2. Commencement of work will constitute acceptance of the conditions of the area to which the cleaning work is to be performed.
 - 3. Correct all defects in work resulting from such accepted service without additional expense to the State.
 - 4. No cleaning is to be performed to ducts where the process has the capability of damaging the duct lining.

5. Include in documentation the location of all porous lining and porous duct lining material. If encapsulation or coating must be performed to protect these surfaces, an approved mechanical cleaning must be performed to these surfaces first. When using cleaning methods in areas adjacent to these surfaces that are potentially damaging to such, encapsulate these surfaces prior to cleaning.
 6. Removal and replacement of duct lining or porous material are not included in contract.
- B. Disassemble all removable items as required for access to work area.
 1. Store the removed items in an approved storage area as directed until the completion of the cleaning work.
 - C. Provide temporary closures of metal or plastic sheeting where required to prevent dust from the cleaning process from dispersing throughout the Work area.
 - D. Remove all removable grilles and registers. Wash, dry, and sanitize these items before reinstallation.
 1. Avoid disturbing existing volume damper settings.
 - E. Mark duct mounted volume and fire dampers at current setting. Inspect and clean as required. Treat external moving parts with dry lubricant.
 - F. Fire protection devices (such as smoke detectors, panel and sensors) shall be protected prior to cleaning procedures. They are to be cleaned and tested at the conclusion of work.
 - G. Notify the Director's Representative of any Fire System shutdown and reactivating of the fire alarm system in advance to avoid accidental alarms during the cleaning process and related work.
 - H. Coordinate the shutdown of the equipment with the Director's Representative before starting work, and shall conform to OSHA requirements regarding fan motor disconnect lock-out/tag-out.

3.02 CLEANING PROCEDURES

- A. Visibly clean non-porous ACS surfaces in accordance with NADCA ACR Standard.
- B. Containment: Provide containment per NADCA ACR - Assessment, Cleaning, and Restoration of HVAC Systems.
 1. Collect debris removed during duct cleaning.
 2. Take precautions to ensure that debris is not dispersed outside the ACS during the cleaning process.
 3. Provide barriers at all air inlet devices as required and directed.
 4. After completion of ACS cleaning, restore areas affected by the cleaning work to a condition as clean or cleaner than their condition prior to the commencement of the cleaning operation.

- C. Particulate Collection:
1. Where the particulate collection equipment is exhausting inside the building, use HEPA filtration with 99.97 percent collection efficiency for 0.3 micron size particles (See EPA's Building Air Quality).
 2. Mechanical cleaning operations shall be undertaken only with Particulate Collection Equipment in place, including adequate filtration to control debris removed from the ductwork.
 3. Where the particulate collection equipment is exhausting outside the building, mechanical cleaning operations shall be undertaken only with particulate collection equipment in place, including adequate filtration to contain debris removed from the ACS.
 4. Provide adequate filtration to contain debris removed from the ACS.
 5. Where the particulate collection equipment is exhausting outside the building, take precautions to ensure that exhausted air does not re-enter the building.
- D. Filtration Integrity:
1. Where particulate collection equipment is exhausting inside the building, certify that equipment effectiveness of 99.97 percent collection efficiency for 0.3 micron size particles through DOP test results, from an independent testing agency, for collection devices used on the Project.
 2. Equipment shall have inspection tags showing results and dates of the DOP test and is required before bringing equipment to work site and after equipment is moved to new work location, at the start of work or when requested by the Director's Representative. Include air monitoring at these locations.
- E. Agitation Equipment:
1. Remove all debris from the inside surface areas being the top, bottom and sides of rectangular duct by creating the least amount of access openings possible. The following restrictions for agitation tools shall be adhered to.
 2. High power/volume vacuum alone is not an acceptable method of agitation. See Article 2.03.
- F. Controlling Odors: Take all measures to control offensive odors and/or mist vapors during the cleaning process.
- G. Components Cleaning: Employ cleaning methods to ensure that non-porous ACS surface components are visibly cleaned.
1. Upon completion, all components must be returned to those settings recorded just prior to cleaning operations.
- H. Air-Volume Control Devices. Dampers and any air-directional mechanical devices inside the ductwork must have their position marked prior to cleaning, and upon completion, must be restored to their marked position.
- I. Access Holes:
1. Repair access holes cut for the cleaning process to ensure that no significant alteration of airflow occurs.

2. Seal openings made to facilitate the cleaning with materials and practices specified in SMACNA's HVAC Duct Construction Standards and NADCA Standard ACR
 3. Closure Panels shall be permanent. Seal openings per NADCA ACR Standard.
 4. Any access holes larger than a three-inch diameter shall be enlarged and fitted with an access door.
 5. Tape is not to be used.
- J. Verification of ACS cleanliness will be determined after completion of mechanical cleaning, and before the application of treatments or introduction of treatment-related substances to the ACS.

3.03 HEALTH AND SAFETY

- A. Comply with all applicable federal, state and local requirements for protecting the safety of the Contractors' employees, building occupants, and the environment. In particular, all applicable standards of the Occupational Safety and Health Administration (OSHA) should be followed when working in accordance with this specification.
- B. No processes or materials shall be employed in such a manner that they will create adverse health effects to the building occupants, cleaning contractors, or general public.
- C. Disposal of Debris. All debris removed from the Air Conveyance System shall be disposed of in accordance with all applicable federal, state and local requirements.

3.04 MECHANICAL CLEANING

- A. Interior Duct Surfaces:
 1. The interior of all ducts shall be brushed, wiped, and mechanically vacuumed such that all metal surfaces are visibly clean and capable of Non-Porous Surfaces Cleaning Verification as described in the NADCA Standards.
 - a. No cleaning method should be used which could potentially damage components of the ductwork or negatively alter the integrity of the system.
- B. Mechanical Spaces:
 1. Mechanical spaces shall be visibly clean but will not be subject to verification as per NADCA Standards.
- C. Volume, Fire and Zone Dampers:
 1. Duct mounted volume, fire and zone damper sets are to be marked to their current setting, then inspected and cleaned if necessary.
 2. External moving parts are to be treated with an approved dry lubricant material.

3. After cleaning, the dampers shall be repaired as necessary to insure proper operation and returned to original settings.
 4. Indicate locations of damaged and/or repaired dampers.
- E. Grilles and Registers:
1. Whenever the grilles and registers are not welded or permanently fastened to façade, they shall be removed, washed, dried, sanitized and replaced.
 2. When the GRD are restricted by a façade or welded in place, hand vacuuming and cleaning are acceptable.
 3. Avoid disturbing the existing volume damper settings.
 4. Cleaning the debris built-up on the ceiling is not required.
- F. Visibly clean interior duct surfaces until capable of passing the NADCA Vacuum Test. Make visual inspections at each duct penetration. Use borescope, as required.

3.05 VERIFICATION

- A. General:
1. Verification of cleanliness will be determined after Mechanical Cleaning and before the application of any treatment or introduction of any treatment-related substance
 2. Verification of Non-Porous Surface Cleaning shall be conducted after Mechanical Cleaning and before the system is restored to normal operation.
- B. Verification of Non-Porous Surface Cleaning:
1. All Non-Porous Interior Duct Surfaces must be Visibly Clean and capable of passing the NADCA Vacuum Test and wipe test. Make visual inspections at each duct penetration. Use borescope, as required.
 2. The weight of debris collected after cleaning shall not exceed 0.75 mg/100cm.².

3.06 SANITIZATION

- A. A sanitizing agent shall be applied to all supply and return air metal only ductwork cleaned as part of this project. Application and preparation shall be as per manufacturer's recommendations.
- B. Demonstrate to the Director's Representative how the application method is capable of dispensing the sanitizing solution to the entire surface areas of the ductwork.

3.07 DUCT SEALING

- A. Preparation:
1. Clean surfaces of dirt, oil, grease and loose of foreign matter that could impair adhesion, using soap and water or solvent.

2. Allow surfaces to dry completely before proceeding.
- A. Installation of Sealant System:
1. Apply sealant system to duct joints, fasteners and seams in accordance with manufacturer's instructions.
 2. Apply sealant by brush, putty knife or caulk gun, to full coverage. Remove excess adhesive immediately.
 3. Completely seal duct joint, fasteners and seams without voids, to a minimum 20 mil thick wet film.
 4. Apply and store at ambient temperature of 40°F to 100°F and protect from freezing until dry.
- B. Field Quality Control:
1. Allow duct sealant system to cure a minimum of 72 hours before operating the system.
 2. Do not apply external duct insulation or coatings until the joints have been inspected by the Owner's Representative.

3.08 AEROSOL SEALANT

- A. Duct Preparation:
1. Inspect air distribution systems for major leakage sites and significant accumulation of hubris or debris.
 2. Remove all debris and significant dust and dirt (>1/8 inch deep) in air distribution system using a NADCA approved duct cleaning method.
 3. Ensure adequate structural support for new and existing ductwork, including structural integrity of all mechanical duct joints and transitions per SMACNA standards.
 4. Temporarily remove or protect from aerosol particles building controls, fire and smoke sensors as recommended by manufacturer.
 5. Temporarily disable fire alarms and notify appropriate authorities.
 6. Temporarily isolate air-moving equipment and block off air inlets and outlets, and other devices and appurtenances as recommended by the manufacturer.
 7. Protect occupied spaces from aerosol particles using manufacturer's recommended procedures.
 8. All work shall be done in a substantial and workmanlike manner by factory trained technicians.
- B. Duct Sealing:
1. Seal existing ductwork from the inside using automated aerosolized sealant injection.
 2. Provide pre-sealing, post-sealing and sealing profile reports for all duct sections sealed.
 3. Repair all injection and test holes in existing ductwork using patching plates sealed tight per SMACNA standards.
- B. Duct Testing:
1. Provide pre-sealing and post-sealing leakage profile reports indicating percentage reduction of leakage for exhaust ductwork.

2. Use manufacturer calibrated blower fan box with digital manometer to measure leakage before and after sealing.
 3. Following completion of air handling unit installations, duct repairs and duct sealing, test all ductwork to ensure that the air distribution system is properly sealed.
 - a. Exhaust ducts shall have air losses of less than 3% of the total air flow volume measured at the fan or air-moving device.
 - b. Ducts shall be leak tested at a static pressure that is as close as possible to the system average operating static pressure. Duct test pressure should not exceed the lesser of the duct static pressure construction class, the duct system design static pressure or 2.5 in. w.g.
- C. Duct Reassembly and Cleanup:
1. Reinstall building controls and smoke detectors.
 2. Enable fire alarms and notify appropriate authorities.
 3. Remove blocking, reinstall grills and registers, and enable air handling fans.
 4. Cleanup sealant residue that may have adhered to surfaces in occupied areas as recommended by the Manufacturer.
 5. All work shall be done in a substantial and workmanlike manner by factory-trained technicians.

3.09 REPORT

- A. Submit three (3) copies of the final report to the Director's Representative outlining the conditions and work completed on each HVAC system.
- B. The report shall contain a tabulation of the samples taken before and after the cleaning process.
 1. Weight reported as (mg/100cm²) of debris per NADCA Vacuum Test 12.3 of ACR Standard.
- C. The report shall contain photographic or video documentation of representative areas of the ductwork systems cleaned as part of the project.
 1. This photo documentation shall show both before and after pictures verifying visual inspection.
 2. Require date stamped digital photo's before and after at three locations. Director's Representative will choose locations.
 3. Bid to include three locations.
- D. Submit report with results, citing EPA/ASHRAE guidelines and standards, and any variances. Methods of testing must be consistent with applicable EPA methods.

3.10 RESTORATION, REPAIRS AND INSTALLATION

- A. Reconnect ducts, replace straps or clamps and flexible duct. Replace flexible duct damaged during the cleaning process with matching material at no cost to the State.
- B. All major repairs not included in this specification which may be required shall be authorized by the Director's Representative prior to the Contractor commencing said repairs.

3.09 FINAL INSPECTION

- A. Perform final inspection in the presence of the Director's Representative to insure that no dust or debris remain on interior building furniture surfaces as a result of the cleaning and dismantling operations.
- B. Document any damages on finishes, equipment, or any other part of the work place.

END OF SECTION

SECTION 260923

LIGHTING CONTROL DEVICES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Retain or delete this article in all Sections of Project Manual.
- B. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section Includes:
 - 1. Lighting contactors.

1.03 RELATED REQUIREMENTS:

- A. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
- B. Manufacturer's installation instructions shall be provided along with product data.
- C. Product Data: For each type of product.
 - 1. Interconnection diagrams showing field-installed wiring.
 - 2. Include diagrams for power, signal, and control wiring.
- D. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
- E. Field quality-control reports.
- F. Sample Warranty: For manufacturer's warranties.

1.04 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For each type of lighting control device to include in operation and maintenance manuals.

1.05 WARRANTY

- A. Manufacturer's Warranty: Manufacturer and Installer agree to repair or replace lighting control devices that fail(s) in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Faulty operation of lighting control software.
 - b. Faulty operation of lighting control devices.
 - 2. Warranty Period: Two year(s) from date of Substantial Completion.

PART 2 - PRODUCTS

2.01 LIGHTING CONTACTORS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 - 1. ABB, Electrification Products Division.
 - 2. Eaton.
 - 3. Square D; Schneider Electric USA.
 - 4. Or equal.

- B. Description: Electrically operated and electrically held, combination-type lighting contactors with nonfused disconnect, complying with NEMA ICS 2 and UL 508.
 - 1. Current Rating for Switching: Listing or rating consistent with type of load served, including tungsten filament, inductive, and high-inrush ballast (ballast with 15 percent or less THD of normal load current).
 - 2. Fault Current Withstand Rating: Equal to or exceeding the available fault current at the point of installation.
 - 3. Enclosure: Comply with NEMA 250.

2.02 CONDUCTORS AND CABLES

- A. Power Wiring to Supply Side of Remote-Control Power Sources: Not smaller than No. 12 AWG. Comply with requirements in Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine lighting control devices before installation. Reject lighting control devices that are wet, moisture damaged, or mold damaged.

- B. Examine walls and ceilings for suitable conditions where lighting control devices will be installed.

- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION OF CONTACTORS

- A. Comply with NECA 1.

- B. Mount electrically held lighting contactors with elastomeric isolator pads to eliminate structure-borne vibration unless contactors are installed in an enclosure with factory-installed vibration isolators.

3.03 INSTALLATION OF WIRING

- A. Comply with NECA 1.

- B. Wiring Method: Comply with Section 260519 "Low-Voltage Electrical Power Conductors and Cables." Minimum conduit size is 1/2 inch (13 mm).
- C. Wiring within Enclosures: Comply with NECA 1. Separate power-limited and nonpower-limited conductors in accordance with conductor manufacturer's written instructions.
- D. Size conductors in accordance with lighting control device manufacturer's written instructions unless otherwise indicated.
- E. Splices, Taps, and Terminations: Make connections only on numbered terminal strips in junction, pull, and outlet boxes; terminal cabinets; and equipment enclosures.

3.04 IDENTIFICATION

- A. Identify components and power and control wiring in accordance with Section 260553 "Identification for Electrical Systems.
- B. Identify controlled circuits in lighting contactors.
- C. Identify circuits or luminaires controlled by photoelectric and occupancy sensors at each sensor.
- D. Label time switches and contactors with a unique designation.

END OF SECTION

SECTION 265119

LED INTERIOR LIGHTING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section Includes:
 - 1. Linear industrial.
 - 2. Surface mount, nonlinear.

1.03 DEFINITIONS

- A. CCT: Correlated color temperature.
- B. CRI: Color Rendering Index.
- C. Fixture: See "Luminaire."
- D. IP: International Protection or Ingress Protection Rating.
- E. LED: Light-emitting diode.
- F. Lumen: Measured output of lamp and luminaire, or both.
- G. Luminaire: Complete lighting unit, including lamp, reflector, and housing.

1.04 SUBMITTALS

- A. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
- B. Manufacturer's installation instructions shall be provided along with product data.
- C. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
- D. Product Data: For each type of product.
 - 1. Arrange in order of luminaire designation.
 - 2. Include data on features, accessories, and finishes.
 - 3. Include physical description and dimensions of luminaires.
 - 4. Include emergency lighting units, including batteries and chargers.
 - 5. Include life, output (lumens, CCT, and CRI), and energy-efficiency data.
 - 6. Photometric data and adjustment factors based on laboratory tests.

- a. Manufacturers' Certified Data: Photometric data certified by manufacturer's laboratory with a current accreditation under the National Voluntary Laboratory Accreditation Program for Energy Efficient Lighting Products.
 - b. Testing Agency Certified Data: For indicated luminaires, photometric data certified by a qualified independent testing agency. Photometric data for remaining luminaires shall be certified by manufacturer.
- E. Product Schedule: For luminaires and lamps. Use same designations indicated on Drawings.
- F. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
- G. Qualification Data: For testing laboratory providing photometric data for luminaires.
- H. Product Certificates: For each type of luminaire.
- I. Product Test Reports: For each type of luminaire, for tests performed by a qualified testing agency.
- J. Sample warranty.

1.05 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For luminaires and lighting systems to include in operation and maintenance manuals.
- 1. Provide a list of all lamp types used on Project; use ANSI and manufacturers' codes.

1.06 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
- 1. Lamps: Ten for every 100 of each type and rating installed. Furnish at least one of each type.
 - 2. Diffusers and Lenses: One for every 100 of each type and rating installed. Furnish at least one of each type.

1.07 QUALITY ASSURANCE

- A. Luminaire Photometric Data Testing Laboratory Qualifications:
- 1. Luminaire manufacturer's laboratory that is accredited under the NVLAP for Energy Efficient Lighting Products.
 - 2. Provided by an independent agency, with the experience and capability to conduct the testing indicated, that is an NRTL as defined by OSHA in 29 CFR 1910.7, accredited under the NVLAP for Energy Efficient Lighting Products, and complying with the applicable IES testing standards.
- B. Provide luminaires from a single manufacturer for each luminaire type.

- C. Each luminaire type shall be binned within a three-step MacAdam Ellipse to ensure color consistency among luminaires.

1.08 DELIVERY, STORAGE, AND HANDLING

- A. Protect finishes of exposed surfaces by applying a strippable, temporary protective covering before shipping.

1.09 WARRANTY

- A. Warranty: Manufacturer and Installer agree to repair or replace components of luminaires that fail in materials or workmanship within specified warranty period.
- B. Warranty Period: Five year(s) from date of Substantial Completion.

PART 2 - PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. Ambient Temperature: 41 to 104 deg F.
 - 1. Relative Humidity: Zero to 95 percent.
- B. Altitude: Sea level to 1000 feet.

2.02 LUMINAIRE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Factory-Applied Labels: Comply with UL 1598. Include recommended lamps. Locate labels where they will be readily visible to service personnel, but not seen from normal viewing angles when lamps are in place.
 - 1. Label shall include the following lamp characteristics:
 - a. "USE ONLY" and include specific lamp type.
 - b. Lamp diameter, shape, size, wattage, and coating.
 - c. CCT and CRI.

2.03 SURFACE MOUNT, NONLINEAR Type W

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 - 1. New Star Lighting 33L Series with Modifications
 - 2. Eaton Fail-Safe Lighting FUSL12 Series with Modifications
 - 3. Kenall's Mighty Mac SSA Series with Modifications.
- B. Nominal Operating Voltage: 120 V ac.
- C. Lamp:
 - 1. Minimum 2800 lm.
 - 2. Minimum allowable efficacy of 80 lm/W.

3. CRI of 80. CCT of 4000 K.
 4. Rated lamp life of 50,000 hours to L70.
 5. Electronic Driver; 120-277.
 6. Mounting: LED boards bolted to bridge, bridge bolted to backplate assembly.
- D. Housings:
1. Size; Nominal 12.5" Wide x 34" Long x 3.5" Deep, with nominal 24" long lensed area.
 2. 12 Gage cold rolled steel housing.
 3. white powder-coat finish.
 4. Fixture manufacturer to provide HDPE gasket for the full fixture housing size as shown in detail 5 on drawing E-503.
 5. Vandal Resistant Fasteners: Security head Torx center pin.
 6. Backplate Assembly; Minimum 12 gage die formed reinforced steel pan. Eight mounting hole recessed a minimum 1/8 inch below mounting plate's perimeter edge.
 7. Housing/Door: Clamshell design, sloped sides; minimum 12 gage die formed steel with continuously welded seams ground smooth. Minimum 16 gage full-length continuous steel piano hinge welded to housing/door and bolted to backplate assembly.
 8. Lens retention System; Minimum 12 gage steel angles, full length and continuous on sides and ends, secure to housing/door with minimum 1/4"-20 threaded studs and nuts. Studs welded to housing/door. Minimum stud spacing 8 inches on center (sides), minimum 2 studs per end. Lens drilled to fit studs with minimum 1 inch engagement on all sides.
- E. Security pushbutton switch: Flush panel-mount with flush button, nominal 5/8" dia stainless steel housing and button. Alternating, push on/push off action. Wired to LED driver only. Mounted on front of housing door, next to the receptacle.
- F. Diffusers and Lens: Consisting of 2 layers
1. Environmental Side: 0.500.
 2. Fixture Side 0.125 inch thick injection molded prismatic acrylic..
- G. Receptacle:
1. Tamper-resistant, white, 15 amp, 120V duplex receptacle: located in cutout on front of housing door: mounted with no exposed fasteners. Wired separately from light circuit.

2.04 MATERIALS

- A. Metal Parts:
1. Free of burrs and sharp corners and edges.
 2. Sheet metal components shall be steel unless otherwise indicated.
 3. Form and support to prevent warping and sagging.
- B. Steel:
1. ASTM A36 for carbon structural steel.
 2. ASTM A568 for sheet steel.
- C. Stainless Steel:

1. Manufacturer's standard grade.
 2. Manufacturer's standard type, ASTM A240.
- D. Galvanized Steel: ASTM A653.
- E. Aluminum: ASTM B209.

2.05 METAL FINISHES

- A. Variations in finishes are unacceptable in the same piece. Variations in finishes of adjoining components are acceptable if they are within the range of approved Samples and if they can be and are assembled or installed to minimize contrast.

2.06 LUMINAIRE SUPPORT

- A. Single-Stem Hangers: 1/2-inch steel tubing with swivel ball fittings and ceiling canopy. Finish same as luminaire.
- B. Wires: ASTM A641, Class 3, soft temper, zinc-coated steel, 12 gage.
- C. Rod Hangers: 3/16-inch minimum diameter, cadmium-plated, threaded steel rod.
- D. Hook Hangers: Integrated assembly matched to luminaire, line voltage, and equipment with threaded attachment, cord, and locking-type plug.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the work.
- B. Examine roughing-in for luminaire to verify actual locations of luminaire and electrical connections before luminaire installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 TEMPORARY LIGHTING

- A. If approved by the Architect, use selected permanent luminaires for temporary lighting. When construction is sufficiently complete, clean luminaires used for temporary lighting and install new lamps.

3.03 INSTALLATION

- A. Comply with NECA 1.
- B. Install luminaires level, plumb, and square with ceilings and walls unless otherwise indicated.

- C. Install lamps in each luminaire.
- D. Supports:
 - 1. Sized and rated for luminaire weight.
 - 2. Able to maintain luminaire position after cleaning and relamping.
 - 3. Provide support for luminaire without causing deflection of ceiling or wall.
 - 4. Luminaire-mounting devices shall be capable of supporting a horizontal force of 100 percent of luminaire weight and a vertical force of 400 percent of luminaire weight.
- E. Wall-Mounted Luminaires:
 - 1. Surface mounted to cellback wall.
- F. Suspended Luminaires:
 - 1. Ceiling Mount:
 - a. Provide uni-strut support for mounting to underside of ceiling/catwalk.

3.04 IDENTIFICATION

- A. Identify system components, wiring, cabling, and terminals.

3.05 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections:
 - 1. Operational Test: After installing luminaires, switches, and accessories, and after electrical circuitry has been energized, test units to confirm proper operation.
 - 2. Test for Emergency Lighting: Interrupt power supply to demonstrate proper operation. Verify transfer from normal power to battery power and retransfer to normal.
- B. Luminaire will be considered defective if it does not pass operation tests and inspections.
- C. Prepare test and inspection reports.

END OF SECTION

SUBMITTALS FOR APPROVAL				Send to:	Critical Submittals	Contractor's Projected Dates Allow at least 4 weeks for Approval (allows time for any resubmission)		
Spec Section	Sub Section	Type	Description	F	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
				F/O				
230130			EXISTING HVAC AIR DISTRIBUTION SYSTEM					
230130		PD	Cleaning Methods					
230130		PD	Debris Collection Equipment					
230130		PD	Agitation System					
230130		PD	Cleaning Agents					
230130		PD	Insulation Repair Coating					
230130		PD	Antimicrobial Surface Treatment					
230130		QCS	Project Assessment Report and Work Plan					
230130		QCS	Duct Cleaning Procedure					
230130		QCS	Duct Cleaning Contractor Qualifications Data					
230130		QCS	Supervisor's Qualifications Data					
230130		QCS	Duct Cleaner's Qualifications Data					
230130		QCS	Qualification Data: For an ASCS, IEP, CMR and CMRS.					
230130		QCS	Field Quality-Control Reports					
230130		CCS	Final Report consisting of locations, conditions, verification reports and sample analysis.	F				

ADDENDUM 1, 11/1/2024

SUBMITTALS FOR APPROVAL				Send to:	Critical Submittals	Contractor's Projected Dates Allow at least 4 weeks for Approval (allows time for any resubmission)				
Spec Section	Sub Section	Type	Description			F	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
						F/O				
				D						
260923			LIGHTING CONTROL DEVICES							
260923		PD	Lighting Contractors	D						
260923		QCS	Field Quality-Control Reports	F						
260923		QCS	Sample Warranty	F						
260923		CCS	Operation and Maintenance Data	D						

ADDENDUM 1, 11/1/2024



ENGINEERING
Mechanical/Electrical
Engineering Consultants

FoitaAlbert
ASSOCIATES
Architecture, Engineering, Surveying, Environmental.



WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS "A" MISDEMEANOR.



REGISTRATION EXPIRES: 4/30/2025

CONTRACT: C, P, E

TITLE: UPGRADE PLUMBING & FIXTURES AND REHABILITATE CELL BACKS, C BLOCK

LOCATION: CLINTON CORRECTIONAL FACILITY
ROUTE 374, COOK STREET
DANNEMORA, NY 12929-2000

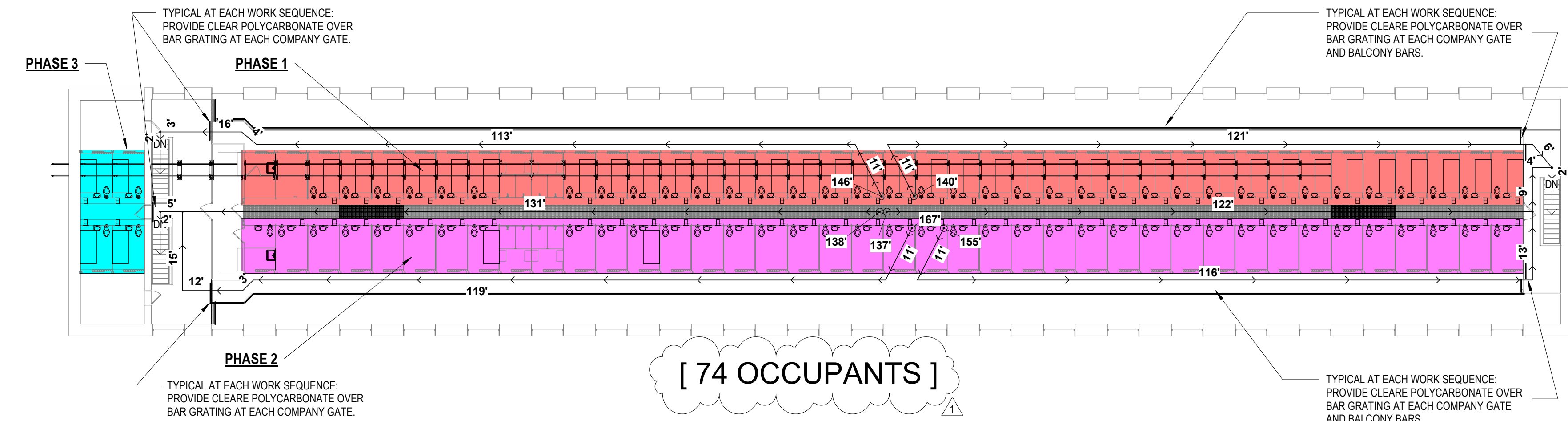
CLIENT: NYS DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION

BUILDING CODE SUMMARY DATA

ITEM (SECTION)	REQUIRED	PROPOSED	REMARKS
BUILDING NAME AND LOCATION	CLINTON CORRECTIONAL FACILITY ROUTE 374, 1156 COOK STREET DANNEMORA, NEW YORK		
CODE REFERENCE	REFER TO APPLICABLE CODES AND DESIGN GUIDELINES CHART		
ALTERATION CLASSIFICATION TYPE (EBCNYS CHAPTER 5)	X	LEVEL 1	
USE & OCCUPANCY GROUP (BCNYS CHAPTER 3)	I-3	NIC	CONDITION 5
CONSTRUCTION TYPE (BCNYS CHAPTER 6)	II-B	NIC	
BUILDING HEIGHT (BCNYS 504.3)	55'	40.0' (EXISTING)	EXISTING CONDITION, NO CHANGES
BUILDING AREA (BCNYS 506.2)	10,000 SF	9,200 SF (EXISTING)	EXISTING CONDITION, NO CHANGES
BUILDING NUMBER OF STORIES (BCNYS TABLE 504.4)	5	3 (EXISTING)	EXISTING CONDITION, NO CHANGES
MIXED USE AND OCCUPANCIES	N/A	N/A	
SEPARATION OF OCCUPANCIES (BCNYS 508.4)	N/A	N/A	
INCIDENTAL USES (BCNYS 509)	N/A	N/A	
ACCESSORY USE AREAS (BCNYS 508.2)	N/A	N/A	
SPECIAL USE & OCCUPANCY (BCNYS CHAPTER 4)	N/A	N/A	
MEANS OF EGRESS (BCNYS CHAPTER 10)	N/A	N/A	
TRAVEL DISTANCE (BCNYS CHAPTER 10)	200' (W/SPRINKLER)	311' (EXISTING NIC)	EXISTING CONDITION, NO CHANGES
ACCESSIBILITY (BCNYS CHAPTER 11)	N/A	N/A	
SPRINKLER SYSTEM (BCNYS 903)	N/A	N/A	
BUILDING ELEMENT FIRE-RESISTANCE RATING (BCNYS TABLE 601)	N/A	N/A	EXISTING CONDITION, NO CHANGES
GENERAL COMPLIANCE (2020 BCNYS & 2020 EBCNYS)	ALL CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS, AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE BUILDING CODE OF NEW YORK STATE AND EXISTING BUILDING CODE		
N/A NOT APPLICABLE N/C NO CHANGE N/R - NOT REQUIRED N/P - NOT PROVIDED			

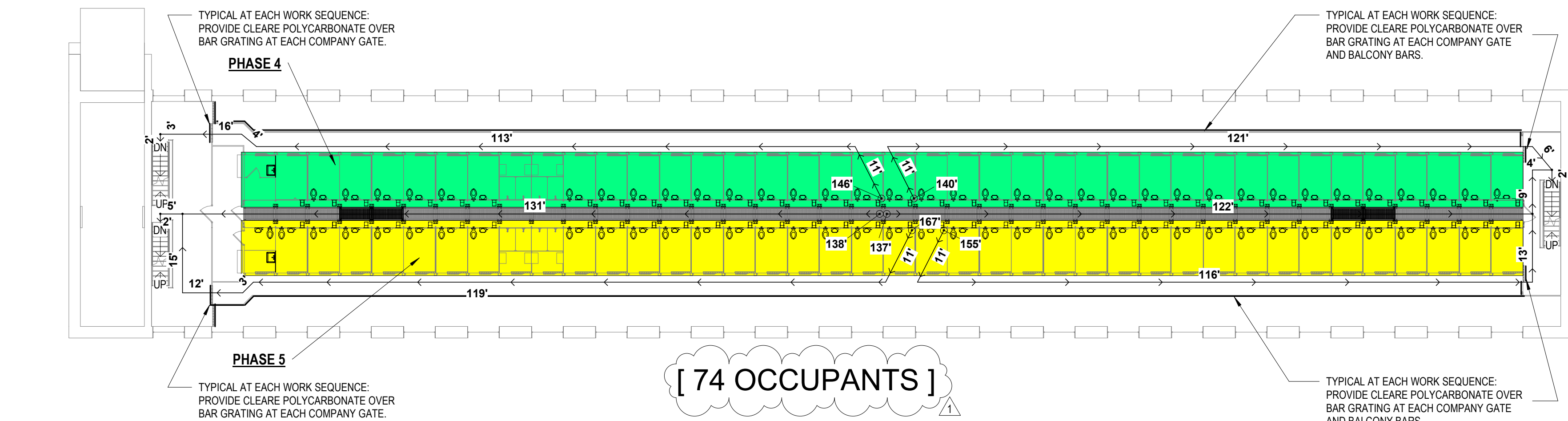
APPLICABLE CODES AND DESIGN GUIDELINES:

- UNDER THE NYSUPP&BC, ALL BUILDING PROJECTS MUST MEET OR EXCEED THE FOLLOWING CODES AND APPLICABLE REFERENCE STANDARDS IDENTIFIED:
- 2020 EXISTING BUILDING CODE OF NEW YORK STATE
 - 2020 BUILDING CODE OF NEW YORK STATE
 - 2020 BUILDING CODE OF NEW YORK STATE CHAPTER 10: GUARDS- 1015.2 WHERE REQUIRED, 1015.3 HEIGHT, 1015.4 OPENING LIMITATIONS.
 - 2020 BUILDING CODE OF NEW YORK STATE CHAPTER 11: ACCESSIBILITY 1103.2.7 LIMITED ACCESS SPACES (CATWALKS)
 - 2020 BUILDING CODE OF NEW YORK STATE TABLE 1607.1 CATWALKS
 - 2020 FIRE CODE OF NEW YORK STATE
 - 2020 MECHANICAL CODE OF NEW YORK STATE
 - 2020 MECHANICAL CODE OF NEW YORK STATE: 306.5 EQUIPMENT AND APPLIANCES ON ROOFS OR ELEVATED STRUCTURES
 - 2020 PLUMBING CODE OF NEW YORK STATE
 - 2020 FUEL AND GAS CODE OF NEW YORK STATE
 - 2020 ENERGY CONSTRUCTION CODE OF NEW YORK STATE
 - 2020 UNIFORM CODE SUPPLEMENT - NEW YORK STATE
 - NEW YORK STATE LABOR DEPARTMENT INDUSTRIAL CODE FOR ITEMS RELATING TO PEOPLE WHO WORK IN THE BUILDING SUCH AS SAFETY GLASS, PROVISIONS FOR WINDOW WASHING, COAT SPACE FOR FEMALE EMPLOYEES, ASBESTOS ABATEMENT, BOILER DESIGN, ETC.
 - 2009 ICC ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES / ANSI A117.1, AS REFERENCED IN THE CODES ABOVE.
 - 2017 NATIONAL ELECTRIC CODE NFPA 70, AS REFERENCED IN THE CODES ABOVE.
 - 2020 EXISTING BUILDING CODE OF NEW YORK STATE CHAPTER 15: CONSTRUCTION SAFEGUARDS, AS REFERENCED IN THE CODES ABOVE.
 - 2020 BUILDING CODE OF NEW YORK STATE CHAPTER 33: SAFEGUARDS DURING CONSTRUCTION, AS REFERENCED IN THE CODES ABOVE.
 - 2020 FIRE CODE OF NEW YORK STATE CHAPTER 33: FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION, AS REFERENCED IN THE CODES ABOVE.
 - 2020 FIRE CODE OF NEW YORK STATE CHAPTER 35: WELDING AND OTHER HOT WORKS, AS REFERENCED IN THE CODES ABOVE.
 - FOR MORE INFORMATIONAL USE, SEE ALSO OSHA SECTION 1910.23 AND 1910.29 AS APPLICABLE.



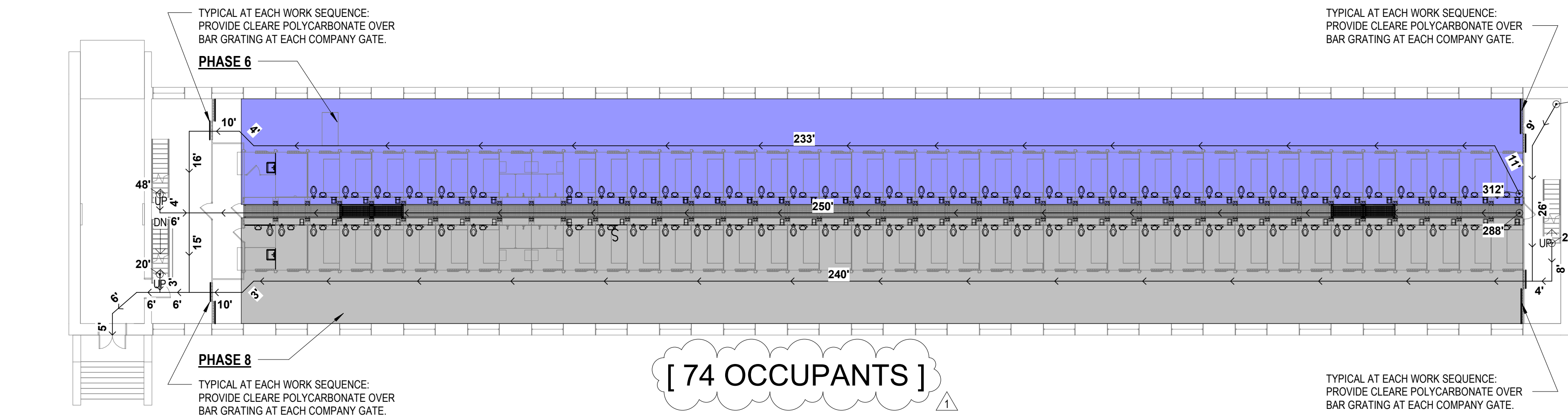
THIRD FLOOR - LIFE SAFETY AND STAGING PLAN

1/16" = 1'-0"



SECOND FLOOR - LIFE SAFETY AND STAGING PLAN

1/16" = 1'-0"



FIRST FLOOR - LIFE SAFETY AND STAGING PLAN

1/16" = 1'-0"

UNIFORM CODE COMPLIANCE STATEMENT:

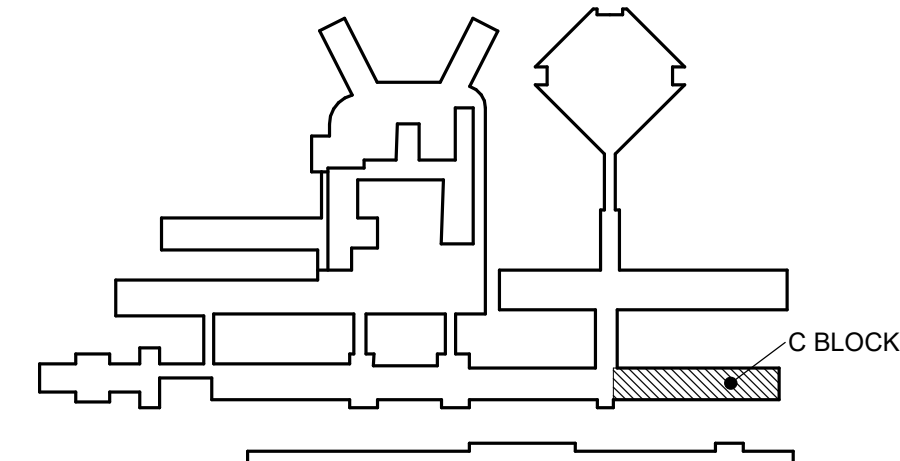
TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 UNIFORM CODE.

ENERGY CODE COMPLIANCE STATEMENT:

TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 ENERGY CODE.

STAGING PLAN GENERAL NOTE:

- COORDINATE WITH STRUCTURAL SEQUENCING REQUIREMENTS FOR SIMULTANEOUS CELL BACK REMOVALS. REFER TO A-500 ~A-502.
- COORDINATE WITH H-DRAWINGS TO CONSIDER ABATEMENT SEQUENCING REQUIREMENTS DURING THE REMOVALS.
- COORDINATE WITH THE DIRECTOR'S REPRESENTATIVE TO ALIGN WITH THE PHASING REQUIREMENTS FOR P AND E CONTRACTS.



KEYPLAN
SCALE: NONE

CODE LEGEND:

B ROOM	ROOM NAME	ROOM OCCUPANT LOAD
###	ROOM NUMBER	[#]
DIRECTION OF TRAVEL		SEGMENT LENGTH
TOTAL LENGTH OF TRAVEL PATH		TRAVEL PATH
		EXIT START AT FURTHEST TRAVEL POINT

NOTE: NO CHANGE TO EXISTING TRAVEL DISTANCES

MARK	DATE	DESCRIPTION
1	10/30/2024	ADDENDUM 1
	08/16/2024	FINAL SUBMISSION

PROJECT NUMBER: **45998-C, P, E**

DESIGNED BY: BTB

DRAWN BY: MJM

FIELD CHECK: -

APPROVED: BTB

SHEET TITLE:
LIFE SAFETY AND STAGING PLANS- FIRST, SECOND & THIRD FLOOR

DRAWING NUMBER:
G-003

SHEET 03 OF 78

GENERAL PHASING NOTES

- A. ALL SHUT-DOWNS SHALL BE COORDINATED & SCHEDULED WITH DIRECTORS REPRESENTATIVE AT LEAST 72 HOURS IN ADVANCE. DURATIONS OF SHUT-DOWNS SHALL BE KEPT TO ABSOLUTE MINIMUMS.
- B. ALL PIPING SYSTEMS SHALL BOTH BE MAINTAINED FULLY OPERATIONAL UNTIL ALL FIXTURES HAVE BEEN CONNECTED TO THE REPLACED SYSTEM. CROSS-OVER OF FIXTURES FROM EXISTING TO REPLACED PIPING SYSTEMS SHALL BE DONE ON A FIXTURE BY FIXTURE OR CELL BY CELL BASIS AS PERMITTED BY THE LOCATIONS AND CONDITIONS OF EXISTING VALVES.
- C. ONCE COMPLETE, ALL CELL FIXTURES WILL REQUIRE ELECTRICAL POWER TO OPERATE. THE PC SHALL NOT BEGIN WORK IN ANY AREA UNTIL THE ELECTRICAL WORK FOR THAT AREA IS COMPLETE, TESTED & FULLY OPERATIONAL.

GENERAL NOTES (APPLY TO ALL DRAWINGS):

- A. ALL CONDUITS SHALL BE INSTALLED AS HIGH AS POSSIBLE ABOVE FINISHED CEILINGS AND CONCEALED IN WALLS UNLESS OTHERWISE INDICATED. ALL CONDUITS SHALL RUN PARALLEL AND PERPENDICULAR TO BUILDING WALLS AND STRUCTURE. CONDUITS CONCEALED IN WALLS SHALL BE INSTALLED VERTICALLY.
- B. DIVISION 26 SHALL REVIEW ALL TRADES' CONTRACT DOCUMENTS TO DETERMINE SPECIFIC MOUNTING LOCATIONS FOR ELECTRICAL EQUIPMENT. COORDINATE EXACT MOUNTING LOCATIONS WITH THE DIRECTOR'S REPRESENTATIVE
- C. EXACT LOCATION OF PLUMBING EQUIPMENT THAT REQUIRES ELECTRICAL CONNECTIONS ARE SHOWN ON THE DRAWINGS.
- D. PROVIDE CONDUIT/WIRING (CIRCUITING) AND REQUIRED CONNECTIONS TO ALL DEVICES/EQUIPMENT. CONNECT TO CIRCUIT(S) AS INDICATED.
- E. CIRCUITING TO DEVICES/EQUIPMENT SHALL BE 2 #12 WITH 1 #12 GROUND (MULTIPLE HOMERUNS IN SAME CONDUIT MAY SHARE SAME EQUIPMENT GROUND) FOR EACH 20 AMPERE CIRCUIT UNLESS OTHERWISE NOTED.
- F. PERFORM ALL CUTTING, CORE DRILLING, ETC. OF MASONRY, STUD, STEEL OR OTHER CONSTRUCTION TYPES NECESSARY TO COMPLETE THE RELATED WORK, INCLUDING WALLS, FLOORS, CEILINGS, PARTITIONS, ETC. PATCH CONSTRUCTION AFFECTED BY CUTTING, CORE DRILLING, ETC. OR ANY OTHER OPERATIONS REQUIRED TO COMPLETE THE WORK TO MATCH ADJACENT CONSTRUCTION. PATCH ALL HOLES LEFT AFTER REMOVALS. RESTORE REQUIRED FIRE RATINGS.
- G. ALL FASTENERS PROVIDED TO SUPPORT CONDUIT, EQUIPMENT, ETC. SHALL BE VANDAL PROOF.
- H. WHERE CONDUIT IS INDICATED TO BE REMOVED, REMOVE ALL HANGERS, SUPPORTS, RODS ETC., ASSOCIATED WITH CONDUIT BEING REMOVED. PATCH AND PAINT ALL HOLES IN FLOORS, WALLS ETC.

ABBREVIATIONS

ABBREV.	DESCRIPTION
A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
A.	AMPERE
AUTO.	AUTOMATIC
BSMT.	BASEMENT
BKR.	BREAKER
CLG.	CEILING
CONTR.	CONTRACTOR
C.	CONDUIT
DP.	DISTRIBUTION PANEL
DN.	DOWN
EA.	EACH
E.C.	ELECTRICAL CONTRACTOR
ELEC.	ELECTRIC
EM.	EMERGENCY
EXIST.	EXISTING
F.A.	FIRE ALARM
F.A.C.P.	FIRE ALARM CONTROL PANEL
F.A.T.C.	FIRE ALARM TERMINAL CABINET
GRS.	GALVANIZED RIGID STEEL
GND.	GROUND
G.F.C.I.	GROUND FAULT CIRCUIT INTERRUPTER
H.V.A.C.	HEATING, VENTILATING AND AIR CONDITIONING
HP.	HORSEPOWER
KW.	KILOWATT
LTG.	LIGHTING
M.C.B.	MAIN CIRCUIT BREAKER
M.L.O.	MAIN LUG ONLY
NL.	NIGHT LIGHT
PNL.	PANEL
PH.	PHASE
P.C.	PLUMBING CONTRACTOR
PV.	POWER VENTILATOR
P.	POLE
SP.	SPACE
SPEC.	SPECIFICATION
SW.	SWITCH
TYP.	TYPICAL
U.L.	UNDERWRITER'S LABORATORY
V.	VOLT
WP.	WEATHERPROOF
4 W.	WIRE
3P_15A	3 = POLE A = AMPERE
OC	MOUNTED OVER COUNTER HEIGHT
UC	MOUNTED UNDER COUNTER HEIGHT
UV	UNIT VENTILATOR
VP	VANDAL PROOF POLYCARBONATE GUARD

BASIC MATERIALS AND METHODS

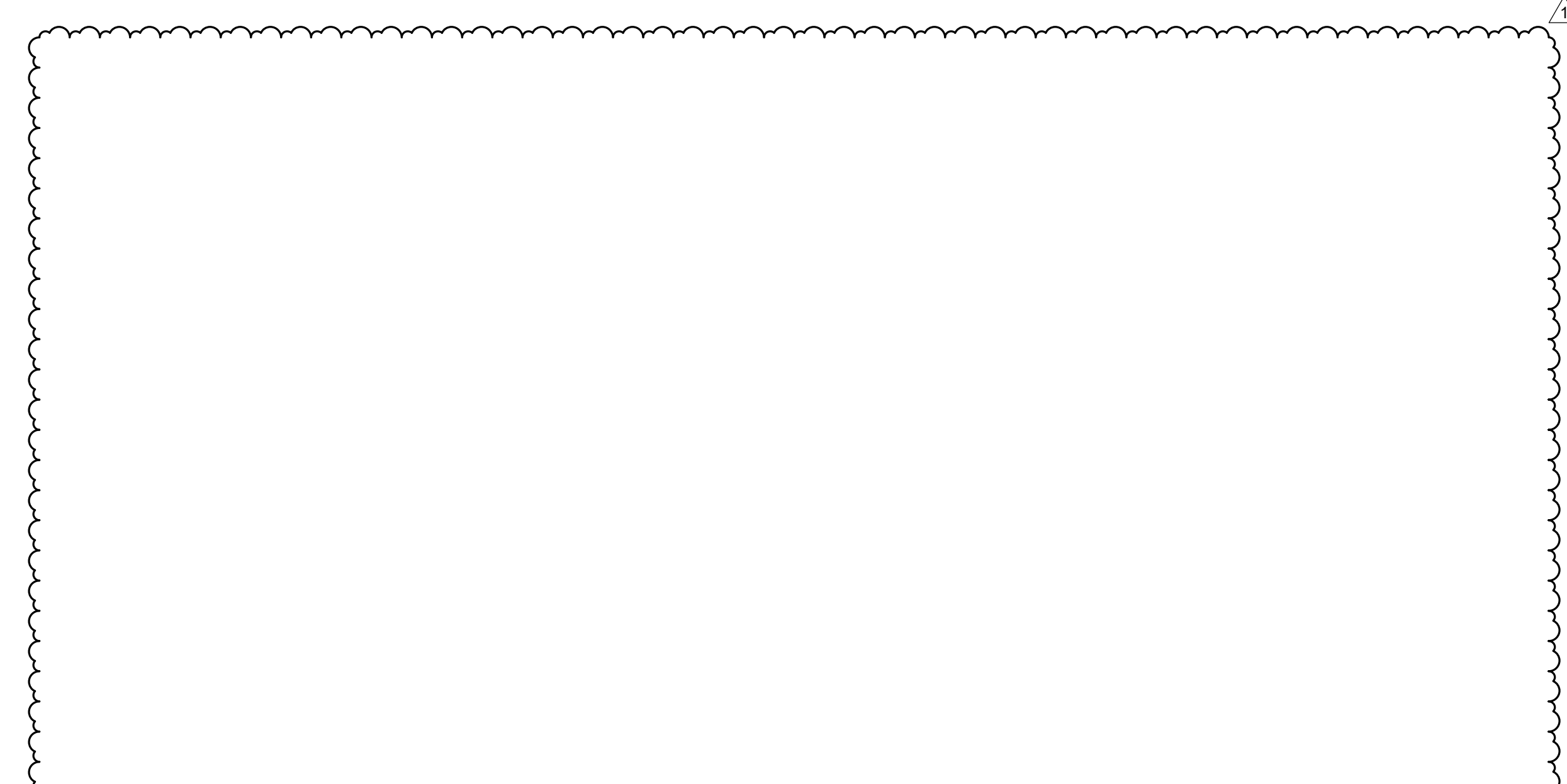
SYMBOL	DESCRIPTION
	HOMERUN TO PANELBOARD. LETTERS/NUMBERS INDICATE PANEL. NUMBERS INDICATE CIRCUITS. NUMBER OF ARROWS EQUALS NUMBER OF CIRCUITS. CIRCUIT SHALL BE 20 AMP, 120 VOLT, 2 #12, 1 #12 EG. IN 1/2" C. UNLESS NOTED OTHERWISE. BRANCH CIRCUIT WIRING SIZE AND NUMBER TO MATCH HOMERUN. REFER TO SPEC'S FOR RACEWAY TYPE.
	SOLID HALF ARROW(S) INDICATES 120 VOLT CIRCUIT TO SINGLE POLE CIRCUIT BREAKER(S), UNLESS NOTED OTHERWISE.
	RIGID METAL CONDUIT AND WITH (6) #16/14 AWG FOR WATER CONTROL SYSTEM TRANSFORMERS FROM CONTROL PANEL TO WATER CONTROLLERS. EACH ARROW INDICATES TWO (2) CONDUCTORS. DISTANCES OVER 200' PROVIDE (2) #14 AWG. REFER TO FLOOR PLANS AND DETAILS FOR ADDITIONAL INFORMATION.
	EXISTING ELECTRICAL WIRING, EQUIPMENT OR DEVICE. SOLID LIGHT IS EXISTING TO REMAIN
	HEAVY SOLID IS NEW
	PULLBOX - EXISTING
	REFERENCE TO DRAWING NOTE
	REFERENCE TO REMOVAL NOTE
	REFERENCE TO POWER RISER DIAGRAM
	JUNCTION BOX
	DUPLEX RECEPTACLE, 20 AMP, 125 VOLT
	DUPLEX RECEPTACLE, GROUND FAULT CIRCUIT INTERRUPTING TYPE
	TAP BOX
	ENCLOSED CIRCUIT BREAKER, SUBSCRIPT INDICATES AMP RATING
	RADIO JACK STATION
	8-POLE LIGHTING CONTACTOR
(E)	EXISTING TO REMAIN - INDICATES EXISTING ITEM SHALL REMAIN. MAINTAIN EXISTING ELECTRICAL CONNECTIONS UNLESS OTHERWISE NOTED.
(R)	EXISTING TO BE RELOCATED - INDICATES EXISTING ITEM TO BE RELOCATED TO NEW WALL. RECONNECT TO EXISTING ELECTRICAL CONNECTIONS UNLESS OTHERWISE NOTED.

POWER DISTRIBUTION AND CONTROL

SYMBOL	DESCRIPTION
	208Y/120 VOLT PANELBOARD.
	CONTROLLER
	CELLBLOCK CONTROL PANEL
	SAFETY SWITCH
	COMPLETE ELECTRICAL CONNECTION TO EQUIPMENT
	SURGE PROTECTIVE DEVICE
	DISTRIBUTION PANEL

LUMINAIRES

SYMBOL	DESCRIPTION
	TOGGLE SWITCH, VOLTAGE AS INDICATED ON FIXTURE SCHEDULE. SUBSCRIPTS INDICATE TYPE: 2 - TWO POLE SWITCH 3 - THREE WAY SWITCH K - KEY OPERATED PL - PILOT LIGHT WP - WEATHER PROOF M - MOMENTARY CONTACT SWITCH a,b,c - SWITCHING DESIGNATIONS NUMBER OF LETTERS EQUALS NO. OF GANGED SWITCHES
	WALL MOUNTED LUMINAIRE. UPPER CASE LETTERS INDICATE FIXTURE TYPE ON SCHEDULE. LOWER CASE LETTER INDICATES CONTROL DESIGNATION.
	WALL MOUNTED EMERGENCY LUMINAIRE WITH BATTERY PACK



LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	MFR. & CATALOG No.	LAMP	DRIVER VOLTAGE	UNIT WATTS	COLOR TEMP [K]	MOUNTING	REMARKS
P	2' LED STRIP LIGHTS WITH FIBERGLASS BODY AND POLYCARBONATE FROSTED LENS.	ILP LIGHTING W/TZ2-4L-U-40-SPFL OR APPROVED EQUAL	LED, 4000 LUMENS	120/277V	32	4000K	SURFACE OR PENDANT MOUNT	
W	34" LED WITH 12 GAGE COLD ROLLED STEEL ENCLOSURE WITH POLYCARBONATE LENS AND WHITE POWDER COAT.	NEW STAR LIGHTING 13L-A-CL01C-4IPAV12-UN-DR-LN-PBS-13L-SD01 OR APPROVED EQUAL	LED, 2800 LUMENS	120V	24	4000K	WALL MOUNT	NIGHT LIGHT LED: 4W, 3500K, 82 CRI, 220 LUMENS
WP	16 1/4" LED EMERGENCY BATTERY LIGHT WITH ALUMINUM CASING AND POLYCARBONATE LENS.	EVENLITE TUFFLITE IPX-4E60-L127 OR APPROVED EQUAL		12V	7		WALL MOUNT	

UNIFORM CODE COMPLIANCE STATEMENT:
TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 UNIFORM CODE.

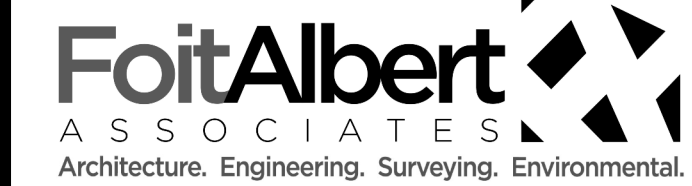
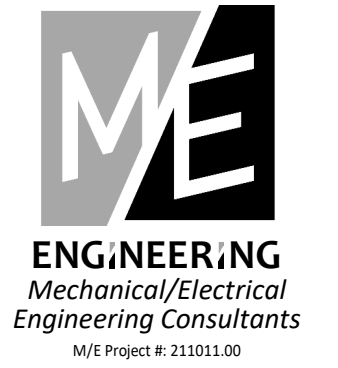
ENERGY CODE COMPLIANCE STATEMENT:
TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 ENERGY CODE.

LEAD AWARENESS NOTE:
STEEL COMPONENTS IN THIS BUILDING, INCLUDING BUT NOT LIMITED TO CELL WALL PLATES, CEILING PLATES, ANGLE BRACKETS, GUSET PLATES, BATTEN STRIPS AND BEAMS, ARE PRIMED WITH LEAD-BASED PAINT. STEEL COMPONENTS THAT OVERLAP MAY HAVE LEAD-BASED PAINT OR PRIMER THAT IS NOT ACCESSIBLE FOR ABATEMENT. LEAD-BASED PAINT IN THESE AREAS MAY BE RELEASED AS VAPOR WHEN HEATED DURING WELDING AND TORCHING, CREATING HAZARDOUS CONDITIONS FOR WORKERS AND BUILDING OCCUPANTS. REFER TO SPECIFICATION SECTION 028303 AND H-DRAWINGS FOR ADDITIONAL INFORMATION.

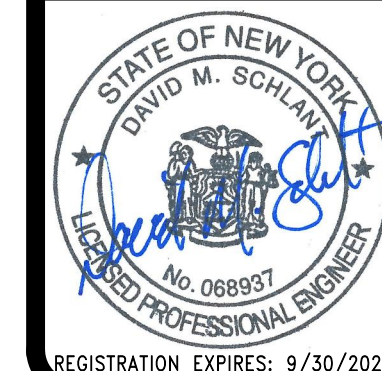
COMPLIANCE STATEMENTS

THE PROVISIONS OF CHAPTER 27 OF THE 2020 BUILDING CODE OF NEW YORK STATE (BCNYS) AND NFPA 70-2017 SHALL GOVERN THE CONSTRUCTION, ERECTION AND INSTALLATION OF THE ELECTRICAL COMPONENTS, APPLIANCES, EQUIPMENT AND SYSTEMS.

WE HEREBY AFFIRM THAT TO THE BEST OF OUR KNOWLEDGE, BELIEF, AND PROFESSIONAL JUDGEMENT, THE CONTRACT DOCUMENTS ARE IN COMPLIANCE WITH THE 2020 BUILDING CODE OF NEW YORK STATE AND THE 2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.



WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.



CONTRACT: ELECTRICAL

TITLE: UPGRADE PLUMBING & FIXTURES AND REHABILITATE CELL BACKS, C BLOCK

LOCATION: CLINTON CORRECTIONAL FACILITY
ROUTE 374, COOK STREET
DANNEMORA, NY 12929-2000

CLIENT: NYS DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION

MARK	DATE	DESCRIPTION
1	10/30/2024	ADDENDUM 1
	08/16/2024	FINAL SUBMISSION

PROJECT NUMBER: **45998 - E**

DESIGNED BY: BPT

DRAWN BY: BPT/JAW

FIELD CHECK: -

APPROVED: DMS

SHEET TITLE:

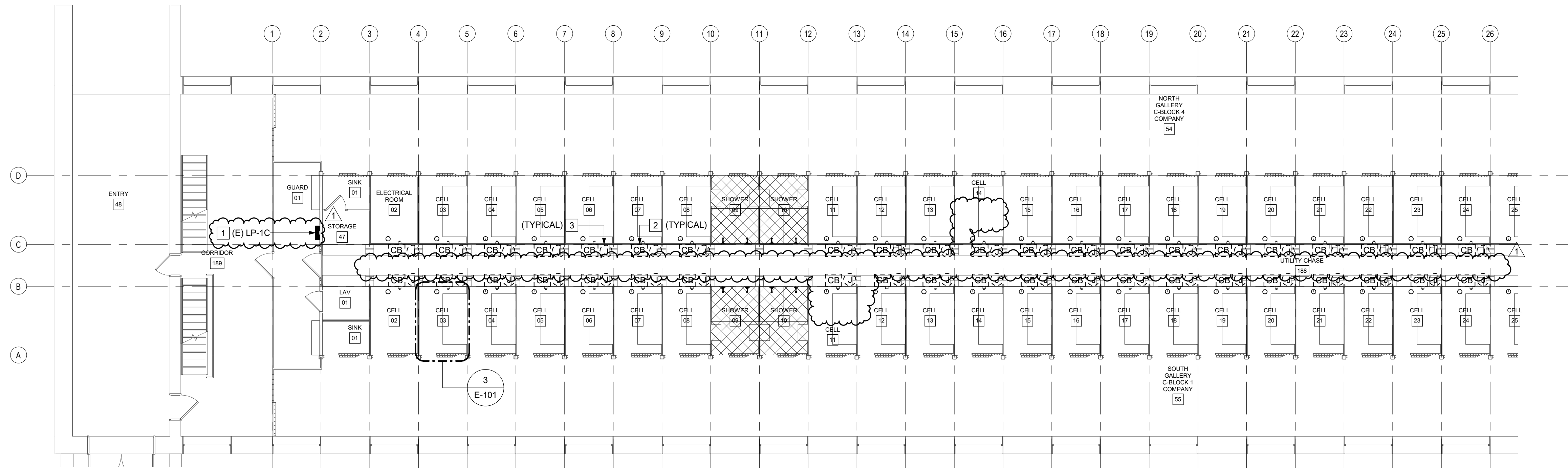
SYMBOL LIST, ABBREVIATIONS AND GENERAL NOTES

DRAWING NUMBER: **E-001**

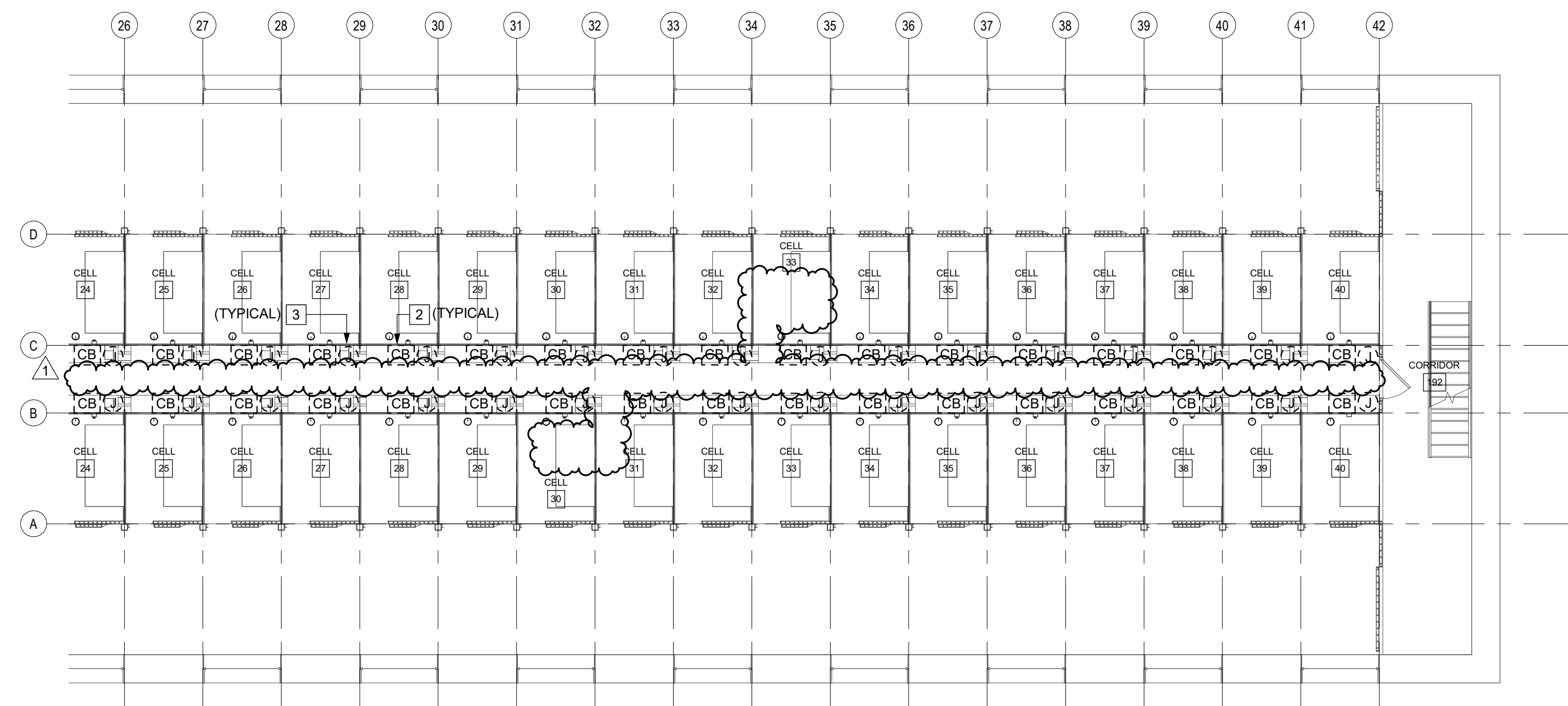
ALL LIGHTING PREVIOUSLY INDICATED HAS BEEN REMOVED FROM THIS PROJECT SCOPE

E-101 REMOVAL NOTES

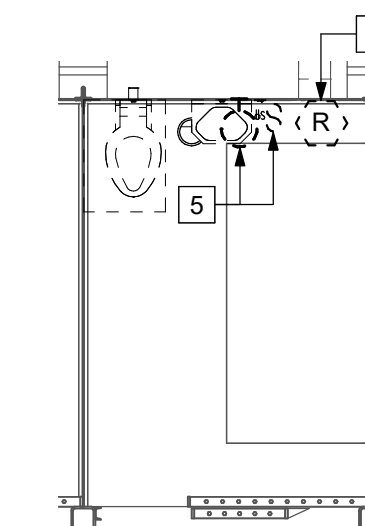
- 1 REMOVE AND REPLACE EXISTING PANELBOARD WITH NEW IN NEW LOCATION. REFER TO E-106 AND E-303 FOR ADDITIONAL INFORMATION.
- 2 REMOVE ENCLOSED CIRCUIT BREAKER, POWER AND LIGHTING JUNCTION BOXES. REMOVE ALL CONDUIT AND WIRING BACK TO POWER PANEL.
- 3 REMOVE RADIO/CAV JUNCTION BOXES. REMOVE ALL CONDUIT AND WIRING BACK TO PANEL.
- 4 DISCONNECT REMOVE THE EXISTING CELL RADIO/CAV FACEPLATE AS INDICATED. TYPICAL OF ALL CELLS. REMOVE ALL CABLING AND CONDUIT BACK TO SOURCE. REFER TO 1 & 2/E-503.
- 5 DISCONNECT AND REMOVE WALL SWITCH AND FIXTURE. REMOVE ALL CONDUIT AND WIRING BACK TO SOURCE. REFER TO 1 & 2/E-503.



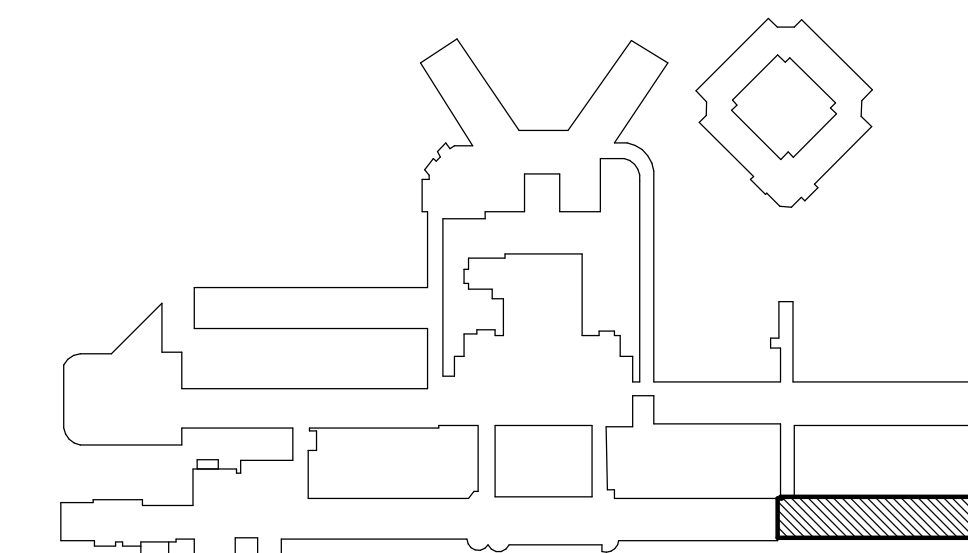
2 FIRST FLOOR REMOVAL PLAN - WEST - ELECTRICAL
 1/8" = 1'-0"
 NORTH



1 FIRST FLOOR REMOVAL PLAN - EAST - ELECTRICAL
 1/8" = 1'-0"
 NORTH



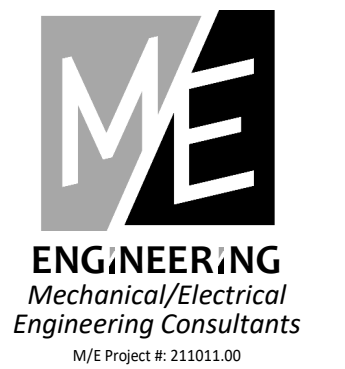
3 TYPICAL CELL - REMOVALS
 1/4" = 1'-0"



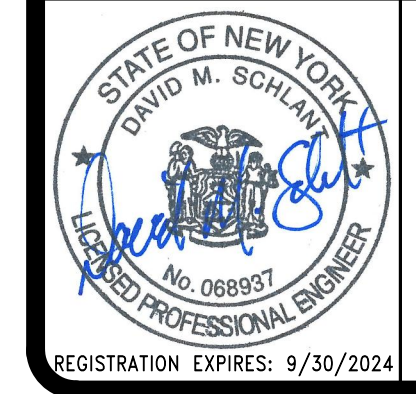
KEYPLAN
 SCALE: NONE

DESIGN & CONSTRUCTION

CONSULTANT — M/E ENGINEERING
 CERTIFICATE OF AUTHORIZATION #: 0018443



WARNING:
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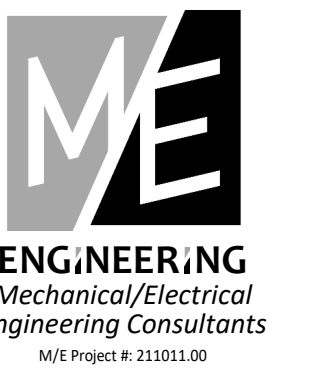


CONTRACT: ELECTRICAL
TITLE: UPGRADE PLUMBING & FIXTURES AND REHABILITATE CELL BACKS, C BLOCK
LOCATION: CLINTON CORRECTIONAL FACILITY, ROUTE 374, COOK STREET, DANMORA, NY 12929-2000
CLIENT: NYS DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION

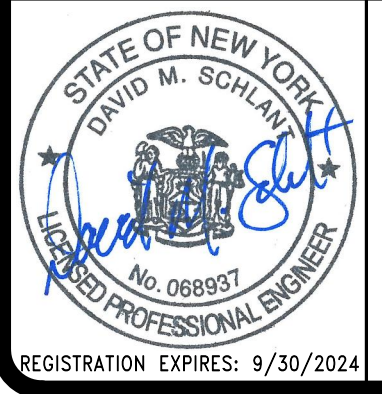
MARK	DATE	DESCRIPTION
1	10/30/2024	ADDENDUM 1
	08/16/2024	FINAL SUBMISSION

PROJECT NUMBER: **45998 - E**
 DESIGNED BY: BPT
 DRAWN BY: BPT/JAW
 FIELD CHECK: -
 APPROVED: DMS

SHEET TITLE:
FIRST FLOOR REMOVAL PLAN - ELECTRICAL



WARNING:
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CONTRACT: ELECTRICAL
TITLE: UPGRADE PLUMBING & FIXTURES AND REHABILITATE CELL BACKS, C BLOCK
LOCATION: CLINTON CORRECTIONAL FACILITY, ROUTE 374, COOK STREET, DANMORA, NY 12929-2000
CLIENT: NYS DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION

MARK	DATE	DESCRIPTION
1	10/30/2024	ADDENDUM 1
	08/16/2024	FINAL SUBMISSION

PROJECT NUMBER: **45998 - E**
 DESIGNED BY: BPT
 DRAWN BY: BPT/JAW
 FIELD CHECK: -
 APPROVED: DMS

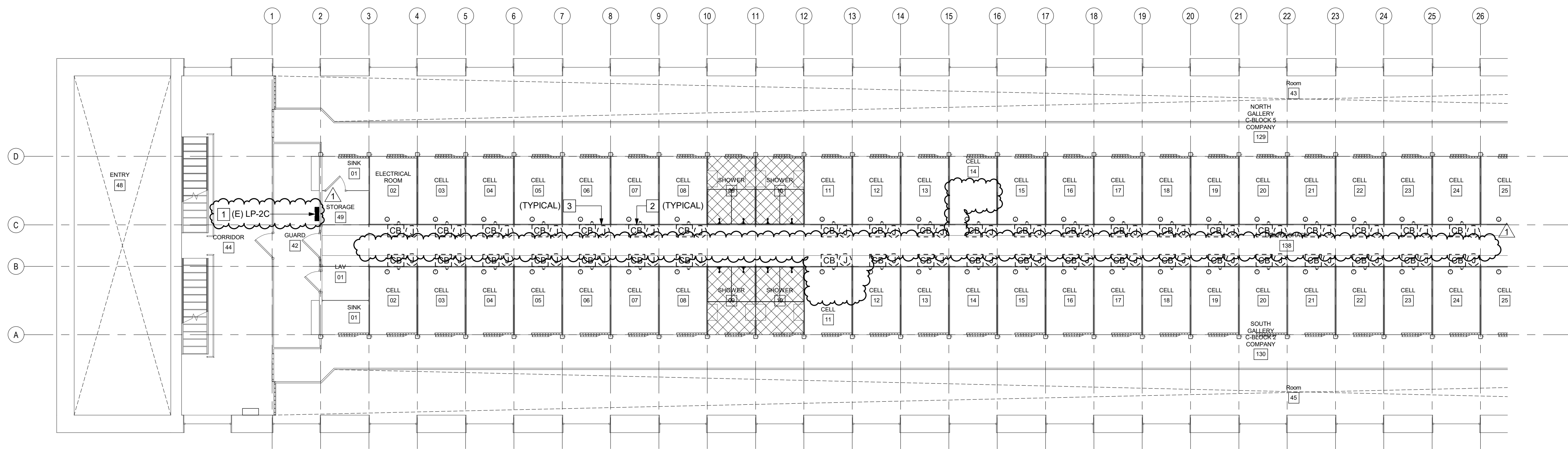
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SECOND FLOOR REMOVAL PLAN - ELECTRICAL

DRAWING NUMBER:
E-102

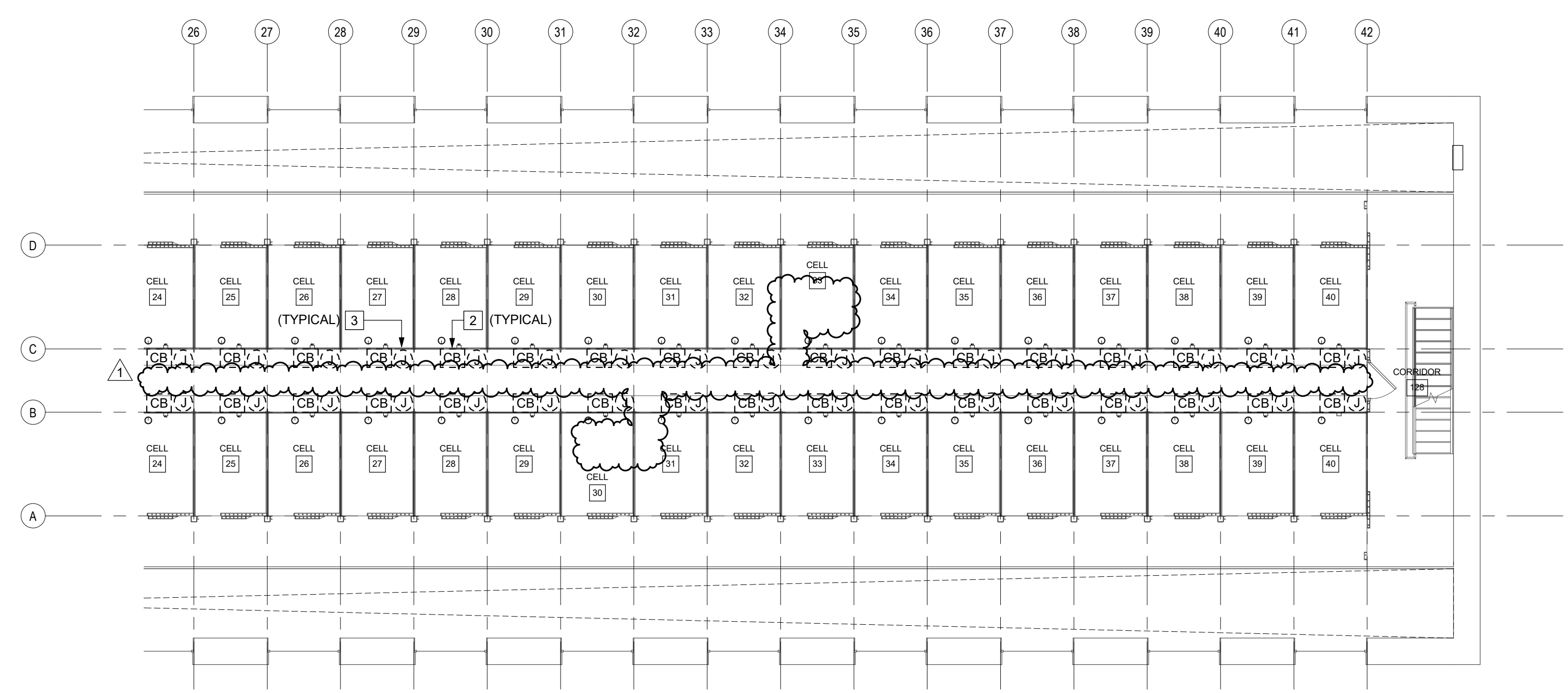
SHEET 64 OF 78

- E-102 REMOVAL NOTES**
- 1 REMOVE AND REPLACE EXISTING PANELBOARD WITH NEW IN NEW LOCATION. REFER TO E-108 AND E-603 FOR ADDITIONAL INFORMATION.
 - 2 REMOVE ENCLOSED CIRCUIT BREAKER, POWER AND LIGHTING JUNCTION BOXES. REMOVE ALL CONDUIT AND WIRING BACK TO POWER PANEL.
 - 3 REMOVE RADIO/CATV JUNCTION BOXES. REMOVE ALL CONDUIT AND WIRING BACK TO PANEL.

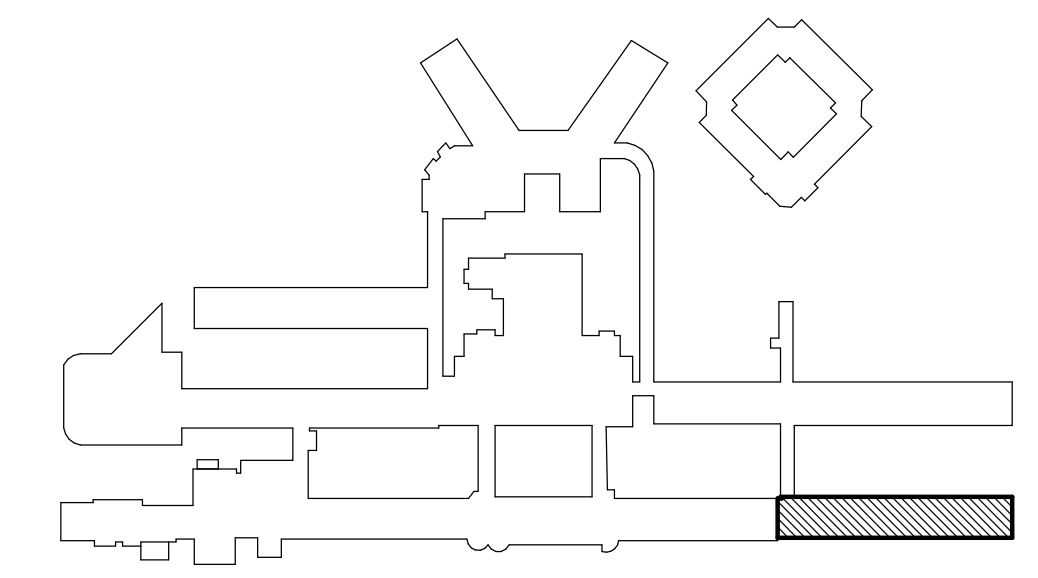
ALL LIGHTING PREVIOUSLY INDICATED HAS BEEN REMOVED FROM THIS PROJECT SCOPE



2 SECOND FLOOR REMOVAL PLAN - WEST - ELECTRICAL
 1/8" = 1'-0" NORTH



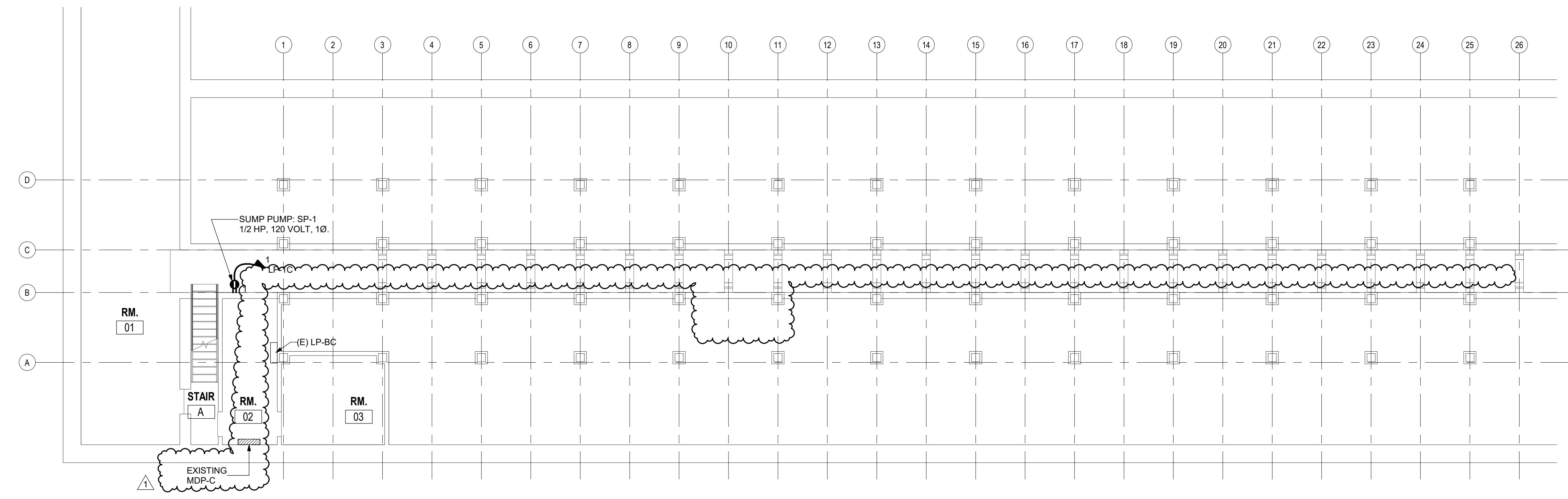
1 SECOND FLOOR REMOVAL PLAN - EAST - ELECTRICAL
 1/8" = 1'-0" NORTH



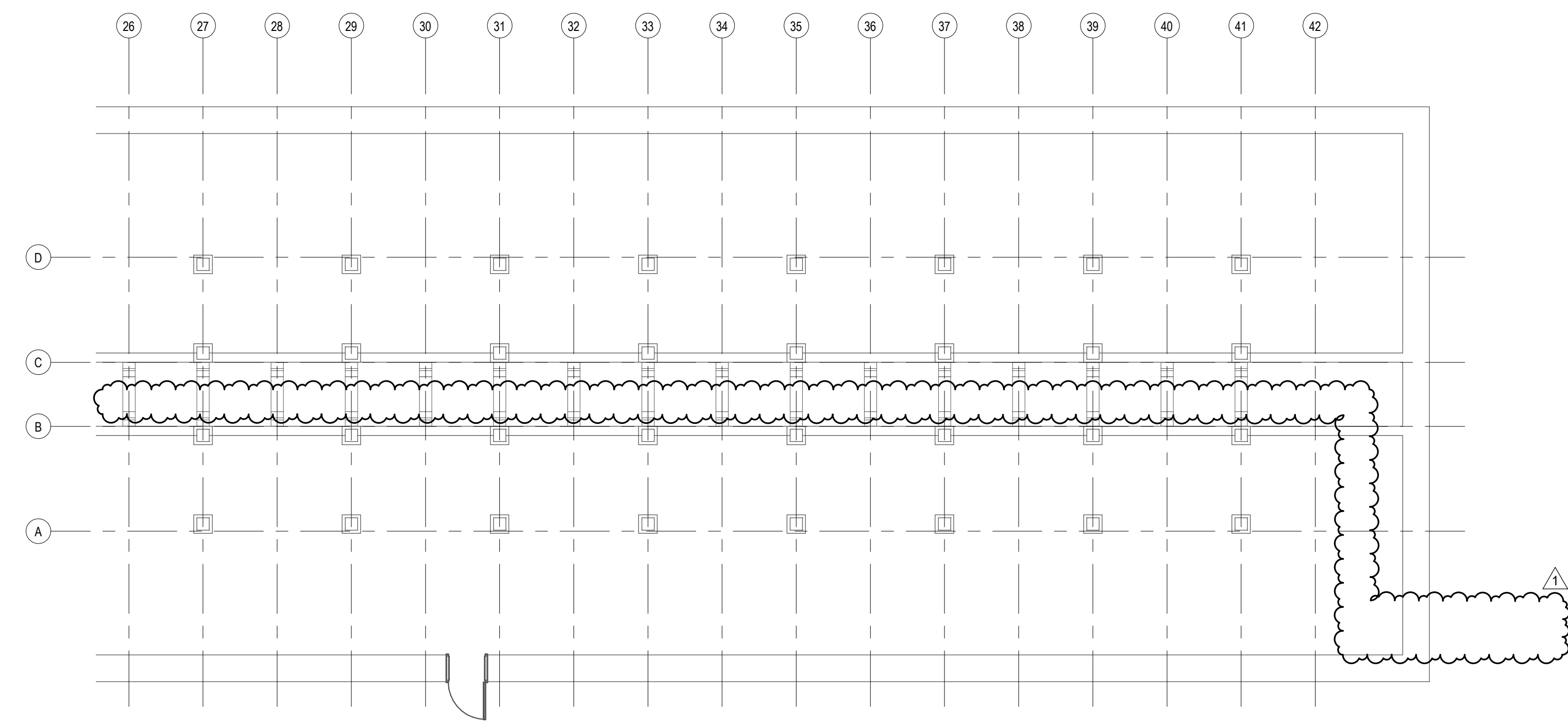
KEYPLAN
 SCALE: NONE

E-105 DRAWING NOTES

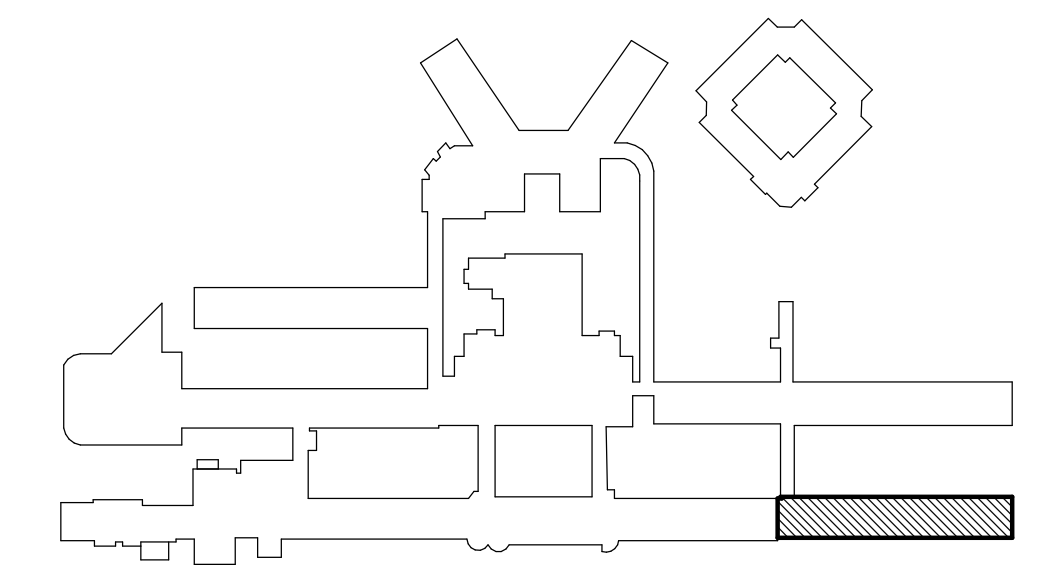
1 NOT USED



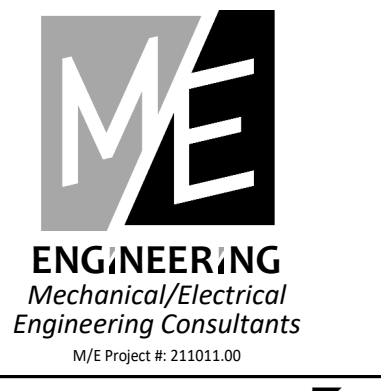
1 BASEMENT PLAN - WEST - ELECTRICAL
 E-105 1/8" = 1'-0" NORTH
 0' 4' 8' 16'



2 BASEMENT PLAN - EAST - ELECTRICAL
 E-105 1/8" = 1'-0" NORTH
 0' 4' 8' 16'



KEYPLAN
 SCALE: NONE



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CONTRACT: ELECTRICAL
TITLE: UPGRADE PLUMBING & FIXTURES AND REHABILITATE CELL BACKS, C BLOCK
LOCATION: CLINTON CORRECTIONAL FACILITY ROUTE 374, COOK STREET DANMORA, NY 12929-2000
CLIENT: NYS DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION

MARK	DATE	DESCRIPTION
1	10/30/2024	ADDENDUM 1
	08/16/2024	FINAL SUBMISSION

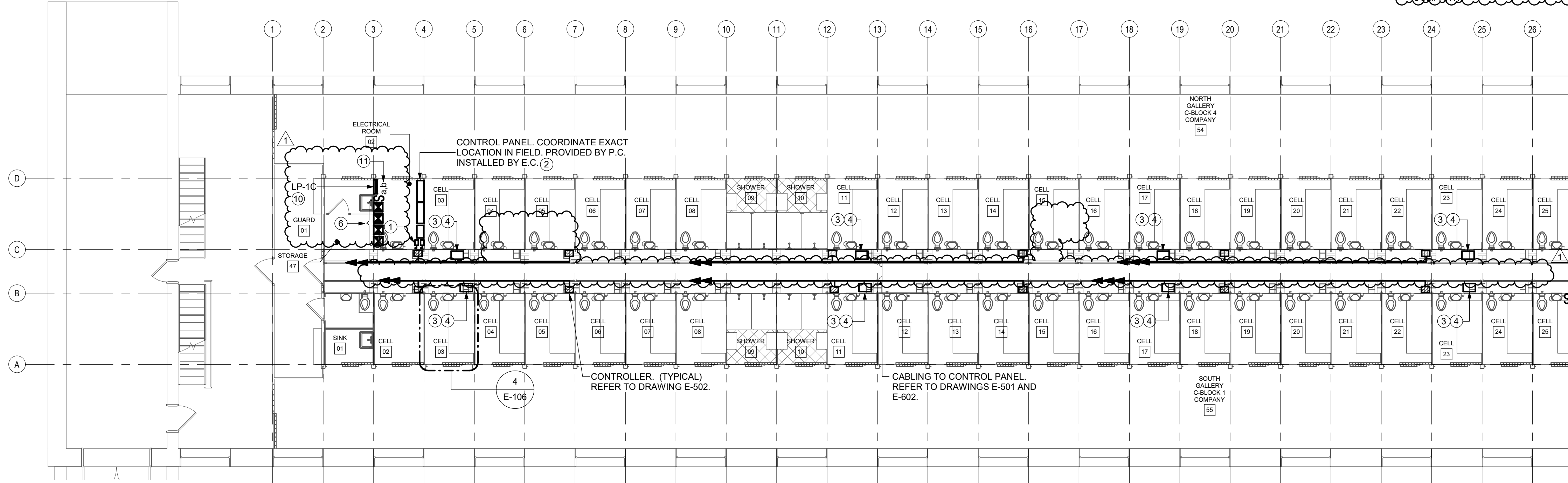
PROJECT NUMBER: **45998 - E**
 DESIGNED BY: BPT
 DRAWN BY: BPT/JAW
 FIELD CHECK: -
 APPROVED: DMS

SHEET TITLE:
BASEMENT FLOOR PLAN - ELECTRICAL

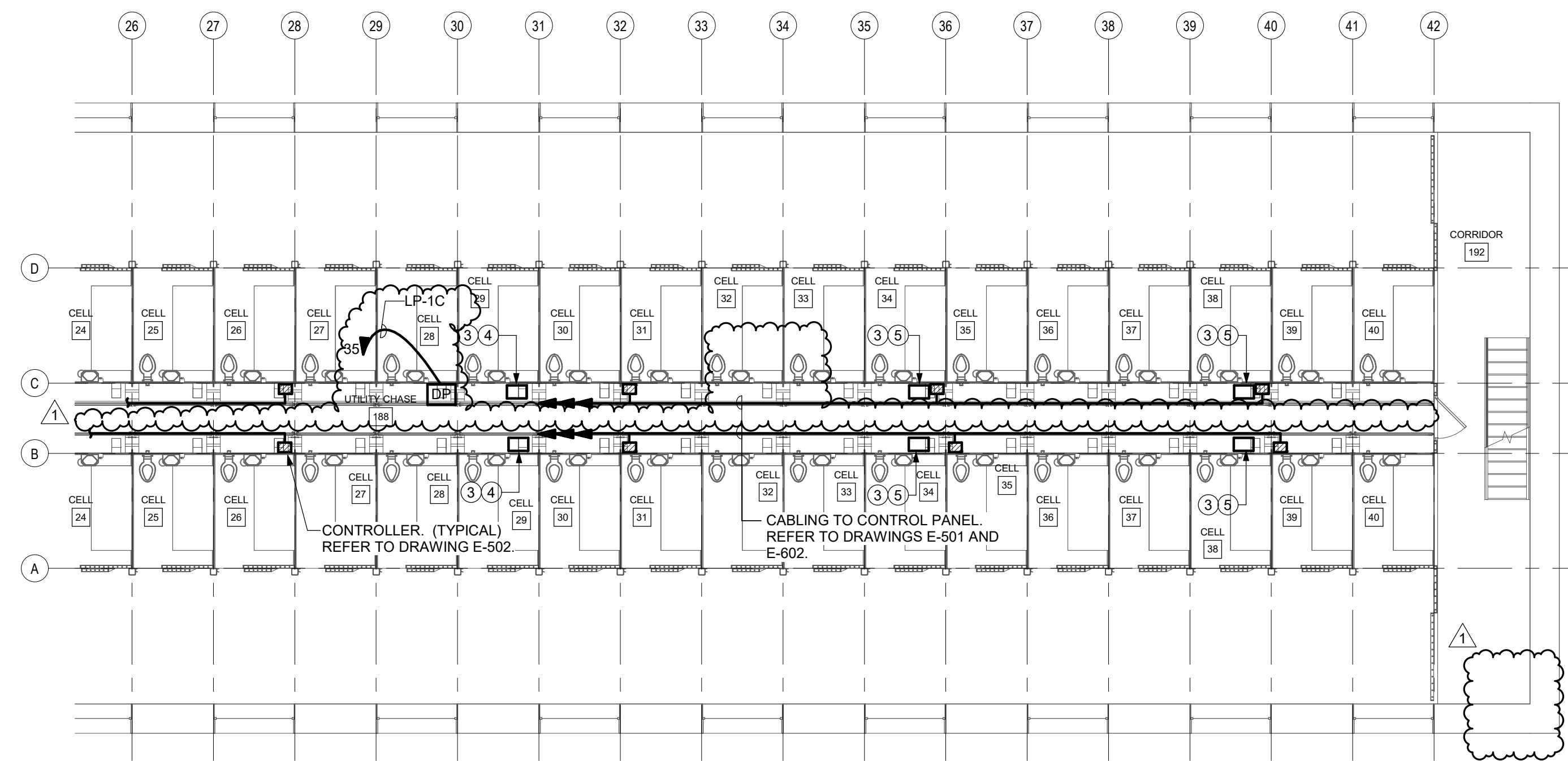
ALL LIGHTING PREVIOUSLY INDICATED HAS BEEN REMOVED FROM THIS PROJECT SCOPE

E-106 DRAWING NOTES

- 1 PROVIDE LOCKABLE NEMA 1,2 POLE SAFETY SWITCH WITH SOLID NEUTRAL FOR CONTROL PANEL POWER. REFER TO DRAWING E-601 FOR ADDITIONAL INFORMATION.
- 2 PROVIDE UNISTRUT FOR MOUNTING OF CONTROL PANEL ON CELL WALL. PENETRATIONS THROUGH CELL WALL WILL NOT BE ACCEPTABLE. ALL SUPPORTS (UNISTRUT) WILL NEED TO BE WELDED TO CELL WALL.
- 3 CELL POWER/LIGHTING DISTRIBUTION PANEL FURNISHED BY THE DIRECTORS REPRESENTATIVE. REFER TO RISER DIAGRAM 2/E-602 FOR SPECIFIC WIRING REQUIREMENTS. REFER TO DETAIL SHEET E-503 FOR CUSTOM DISTRIBUTION PANEL CONFIGURATION.
- 4 REFER TO DETAIL 6/E-503.
- 5 REFER TO DETAIL 7/E-503.
- 6 PROVIDE FOUR (4) 8 POLE CONTACTORS, 2 PER COMPANY FOR CONTROL OF NORMAL LIGHTING AND CELL RECEPTACLE (INTEGRAL TO LUMINAIRE). LIGHTING CIRCUIT TO BE CIRCUITED FROM LOAD SIDE OF CONTACTOR TO STOP ENCLOSURE THEN TO CELL FROM TOP ENCLOSURE.
- 7 CAT/RADIO TAP BOX. REFER TO 2/E-504 AND 1/E-602.
- 8 PROVIDE MAXIMUM SECURITY COMBINATION CELL LIGHTING AND RECEPTACLE UNIT. REFER TO LUMINAIRE SCHEDULE AND DETAILS ON DRAWING 5/E-503.
- 9 CELL CATV AND RADIO JACK FACEPLATE. REFER TO DETAIL 3/E-504.
- 10 NEW PANELBOARD AND CIRCUIT BREAKERS TO BE FURNISHED BY THE DIRECTORS REPRESENTATIVE AND INSTALLED BY ELECTRICAL CONTRACTOR.
- 11 CIRCUIT ALL TYPE W NIGHT LIGHT CIRCUITS TO LOCAL SWITCH CONTROLS, PROVIDE ONE SWITCH PER COMPANY.

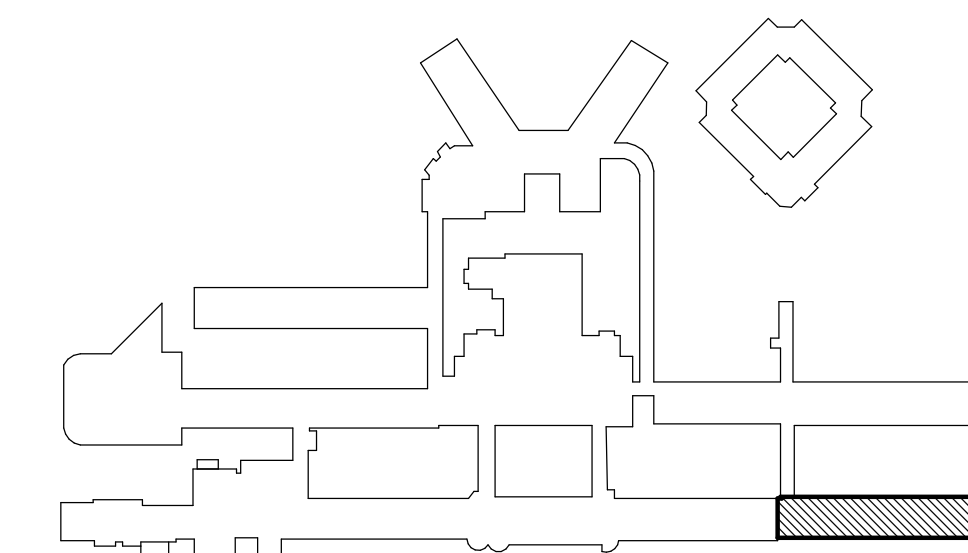
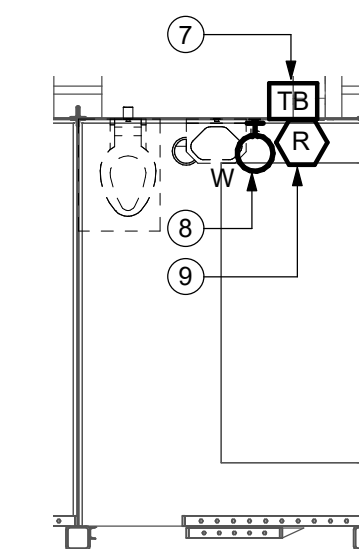


1 FIRST FLOOR PLAN - WEST - ELECTRICAL
 E-106 1/8" = 1'-0" NORTH



2 FIRST FLOOR PLAN - EAST - ELECTRICAL
 E-106 1/8" = 1'-0" NORTH

4 TYPICAL CELL - ELECTRICAL
 E-106 1/4" = 1'-0"



KEYPLAN
 SCALE: NONE

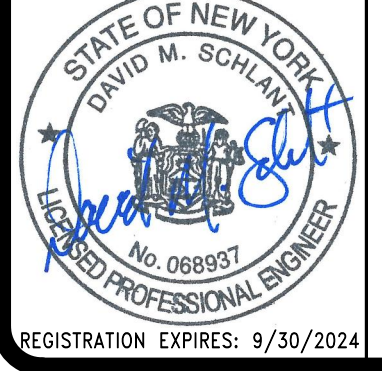
NEW YORK STATE Office of General Services
 DESIGN & CONSTRUCTION
 CONSULTANT — M/E ENGINEERING
 CERTIFICATE OF AUTHORIZATION #: 0018443

ME
 ENGINEERING
 Mechanical/Electrical
 Engineering Consultants
 M/E Project #: 231011.00

FoitAlbert
 ASSOCIATES
 Architecture, Engineering, Surveying, Environmental.

ENCORUS
 GROUP

WARNING:
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CONTRACT: ELECTRICAL
 TITLE: UPGRADE PLUMBING & FIXTURES AND REHABILITATE CELL BACKS, C BLOCK
 LOCATION: CLINTON CORRECTIONAL FACILITY, ROUTE 374, COOK STREET, DANMORA, NY 12929-2000
 CLIENT: NYS DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION

MARK	DATE	DESCRIPTION
1	10/30/2024	ADDENDUM 1
	08/16/2024	FINAL SUBMISSION

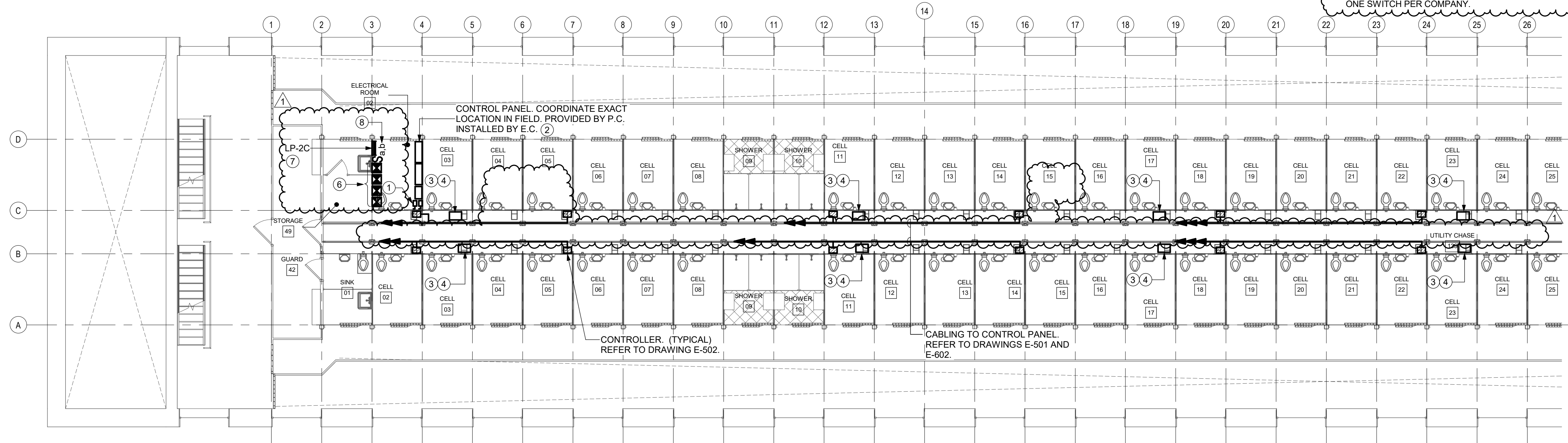
PROJECT NUMBER: **45998 - E**
 DESIGNED BY: BPT
 DRAWN BY: BPT/JAW
 FIELD CHECK: -
 APPROVED: DMS
 SHEET TITLE: **FIRST FLOOR PLAN - ELECTRICAL**
 DRAWING NUMBER: **E-106**

SHEET 68 OF 78

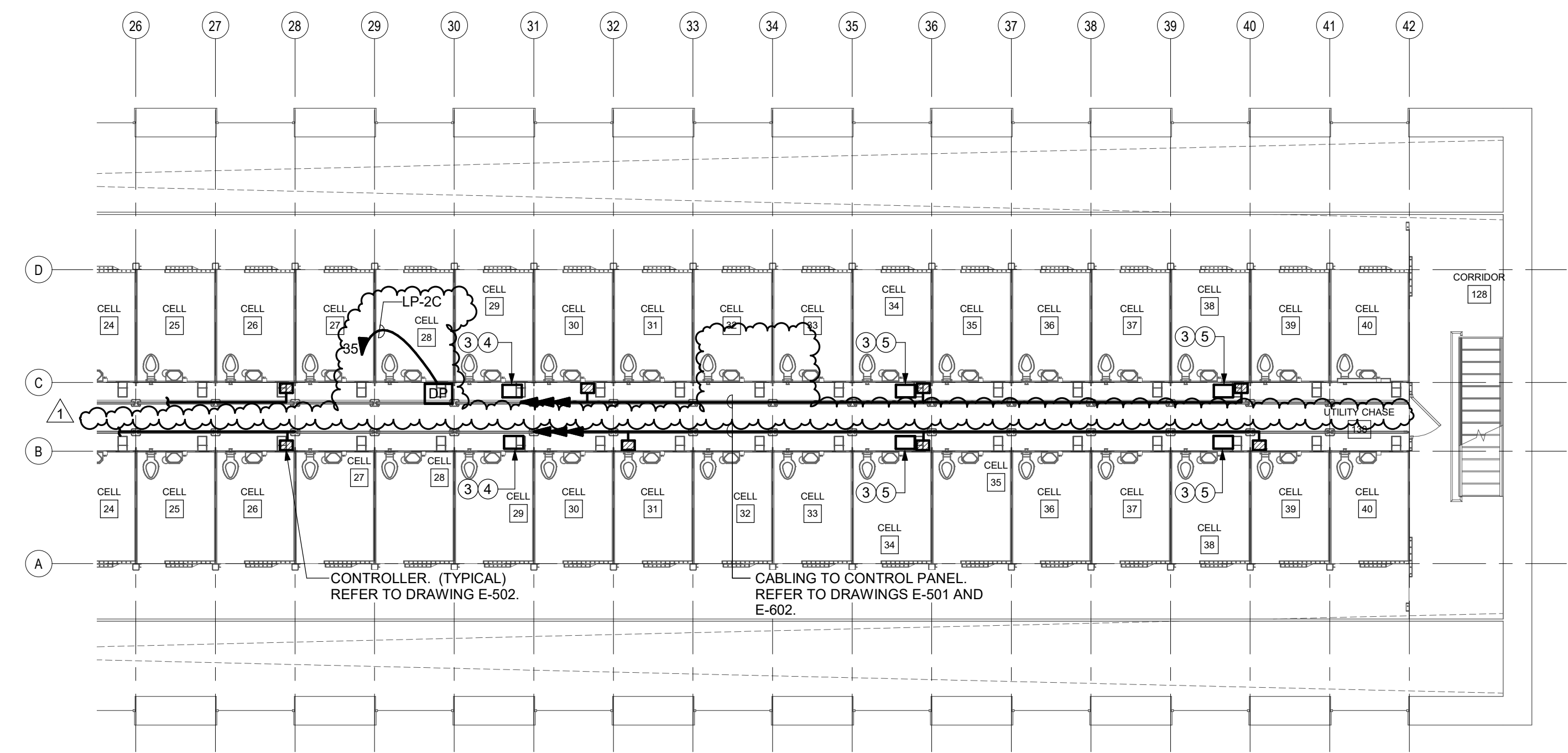
ALL LIGHTING PREVIOUSLY INDICATED HAS BEEN REMOVED FROM THIS PROJECT SCOPE

E-107 DRAWING NOTES

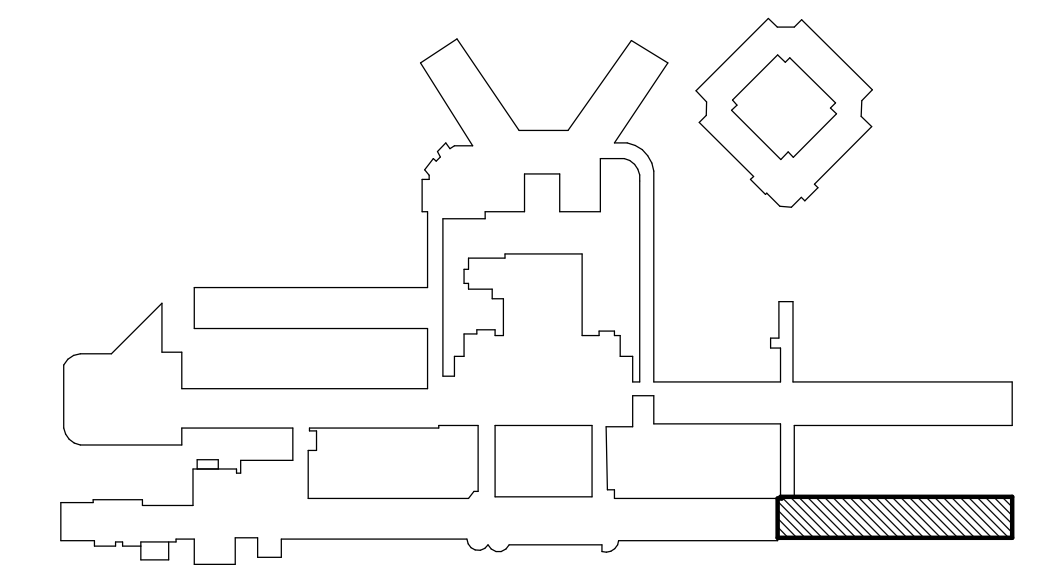
- 1 PROVIDE LOCKABLE NEMA 1.2 POLE SAFETY SWITCH WITH SOLID NEUTRAL FOR CONTROL PANEL POWER. REFER TO DRAWING E-601 FOR ADDITIONAL INFORMATION.
- 2 PROVIDE UNISTRUT FOR MOUNTING OF CONTROL PANEL ON CELL WALL. PENETRATIONS THROUGH CELL WALL WILL NOT BE ACCEPTABLE ALL SUPPORTS (UNISTRUT) WILL NEED TO BE WELDED TO CELL WALL.
- 3 CELL POWER/LIGHTING DISTRIBUTION PANEL, FURNISHED BY THE DIRECTORS REPRESENTATIVE. REFER TO RISER DIAGRAM 2/E-602 FOR SPECIFIC WIRING REQUIREMENTS. REFER TO DETAIL SHEET E-503 FOR CUSTOM DISTRIBUTION PANEL CONFIGURATION.
- 4 REFER TO DETAIL 6/E-503.
- 5 REFER TO DETAIL 7/E-503.
- 6 PROVIDE FOUR (4) 8 POLE CONTACTORS, 2 PER COMPANY FOR CONTROL OF NORMAL LIGHTING AND CELL RECEPTACLE (INTEGRAL TO LUMINAIRE). LIGHTING CIRCUIT TO BE CIRCUITED FROM LOAD SIDE OF CONTACTOR TO CDP ENCLOSURE THEN TO CELL FROM CDP ENCLOSURE.
- 7 NEW PANELBOARD AND CIRCUIT BREAKERS TO BE FURNISHED BY THE DIRECTORS REPRESENTATIVE AND INSTALLED BY ELECTRICAL CONTRACTOR.
- 8 CIRCUIT ALL TYPE W NIGHT LIGHT CIRCUITS TO LOCAL SWITCH CONTROLS. PROVIDE ONE SWITCH PER COMPANY.



1 SECOND FLOOR PLAN - WEST - ELECTRICAL
 NORTH
 1/8" = 1'-0"
 0' 4' 8' 16'



2 SECOND FLOOR PLAN - EAST - ELECTRICAL
 NORTH
 1/8" = 1'-0"
 0' 4' 8' 16'



KEYPLAN
 SCALE: NONE

DESIGN & CONSTRUCTION

CONSULTANT — M/E ENGINEERING
 CERTIFICATE OF AUTHORIZATION #: 0018443



ENGINEERING
 Mechanical/Electrical
 Engineering Consultants
 M/E Project # 211011.00

FoittAlbert
 ASSOCIATES
 Architecture, Engineering, Surveying, Environmental.

ENCORUS
 GROUP

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CONTRACT: **ELECTRICAL**

TITLE: **UPGRADE PLUMBING & FIXTURES AND REHABILITATE CELL BACKS, C BLOCK**

LOCATION: **CLINTON CORRECTIONAL FACILITY
 ROUTE 374, COOK STREET
 DANMORA, NY 12929-2000**

CLIENT: **NYS DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION**

MARK	DATE	DESCRIPTION
1	10/30/2024	ADDENDUM 1
	08/16/2024	FINAL SUBMISSION

PROJECT NUMBER: **45998 - E**
 DESIGNED BY: BPT
 DRAWN BY: BPT/JAW
 FIELD CHECK: -
 APPROVED: DMS
 SHEET TITLE:

SECOND FLOOR PLAN - ELECTRICAL

DRAWING NUMBER: **E-107**

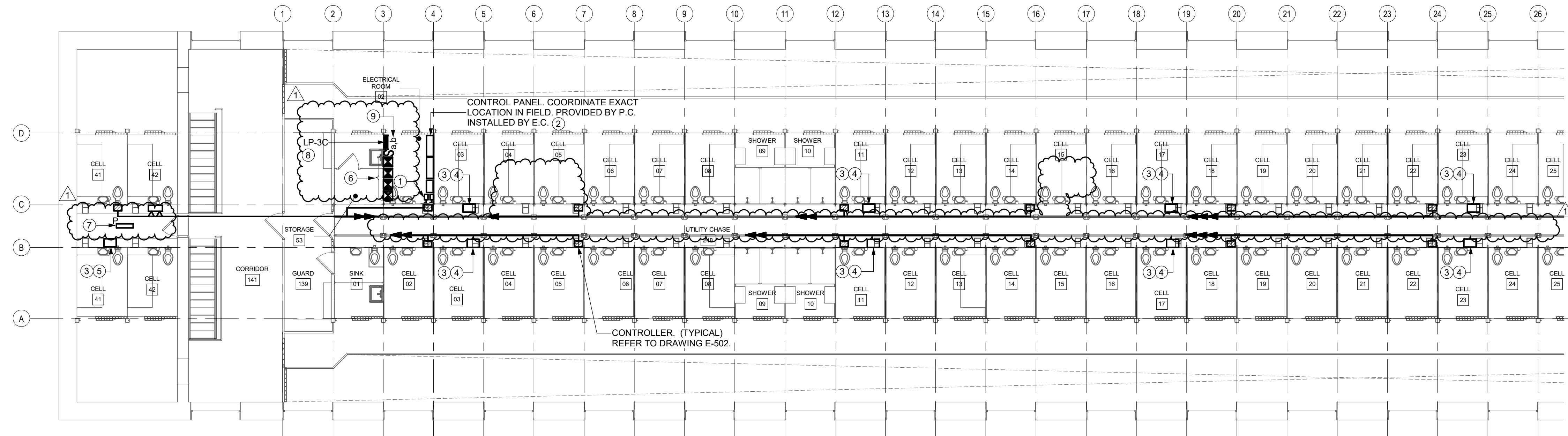
ALL LIGHTING PREVIOUSLY INDICATED HAS BEEN REMOVED FROM THIS PROJECT SCOPE

E-108 DRAWING NOTES

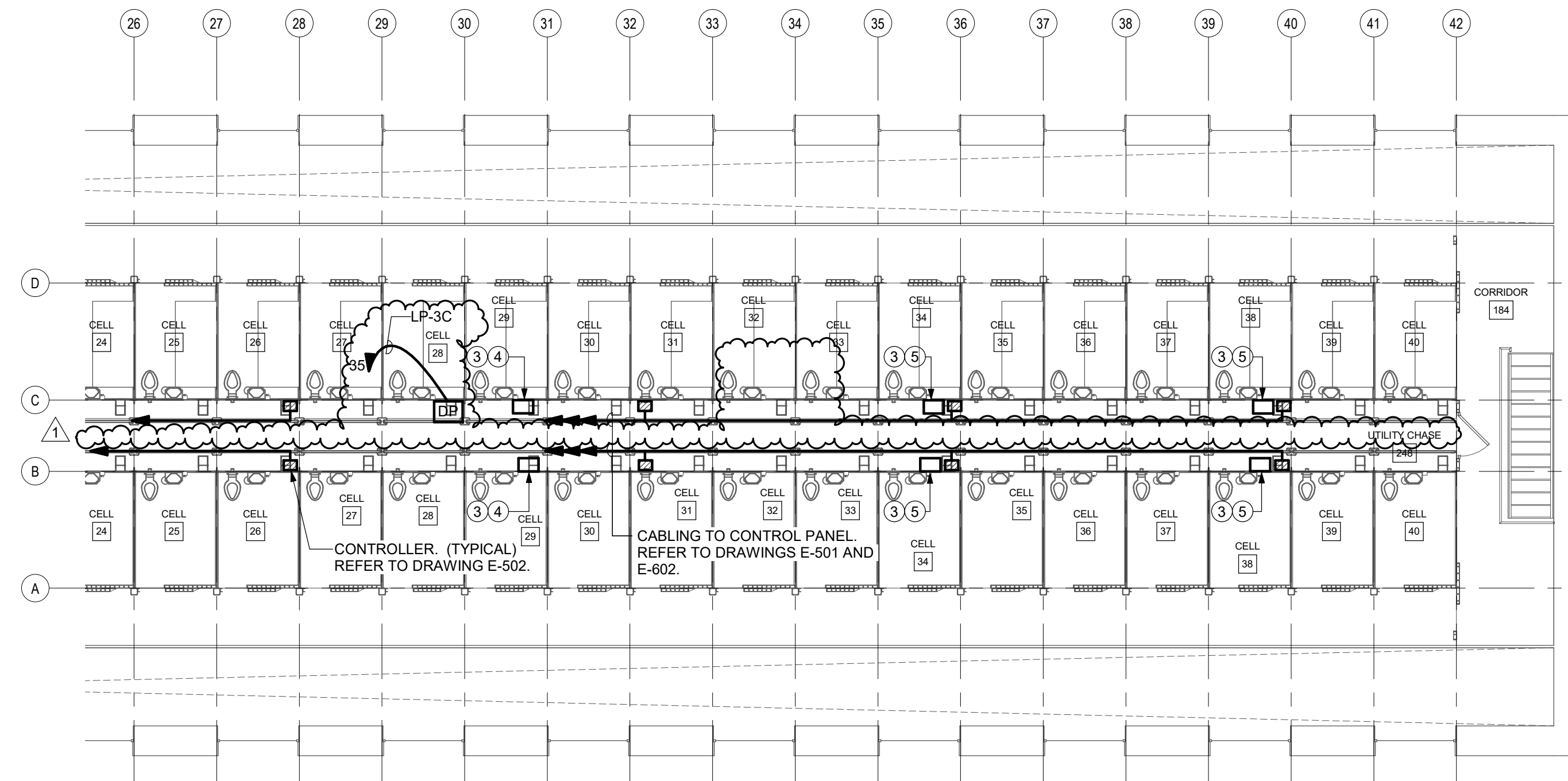
- 1 PROVIDE LOCKABLE NEMA 1, 2 POLE SAFETY SWITCH WITH SOLID NEUTRAL FOR CONTROL PANEL POWER. REFER TO DRAWING E-601 FOR ADDITIONAL INFORMATION.
- 2 PROVIDE UNISTRUT FOR MOUNTING OF CONTROL PANEL ON CELL WALL. PENETRATIONS THROUGH CELL WALL WILL NOT BE ACCEPTABLE. ALL SUPPORTS (UNISTRUT) WILL NEED TO BE WELDED TO CELL WALL.
- 3 CELL POWER/LIGHTING DISTRIBUTION PANEL, FURNISHED BY THE DIRECTORS REPRESENTATIVE. REFER TO RISER DIAGRAM 2/E-602 FOR SPECIFIC WIRING REQUIREMENTS. REFER TO DETAIL SHEET E-503 FOR CUSTOM DISTRIBUTION PANEL CONSTRUCTION.
- 4 REFER TO DETAIL 6/E-503.
- 5 REFER TO DETAIL 7/E-503.

E-108 DRAWING NOTES

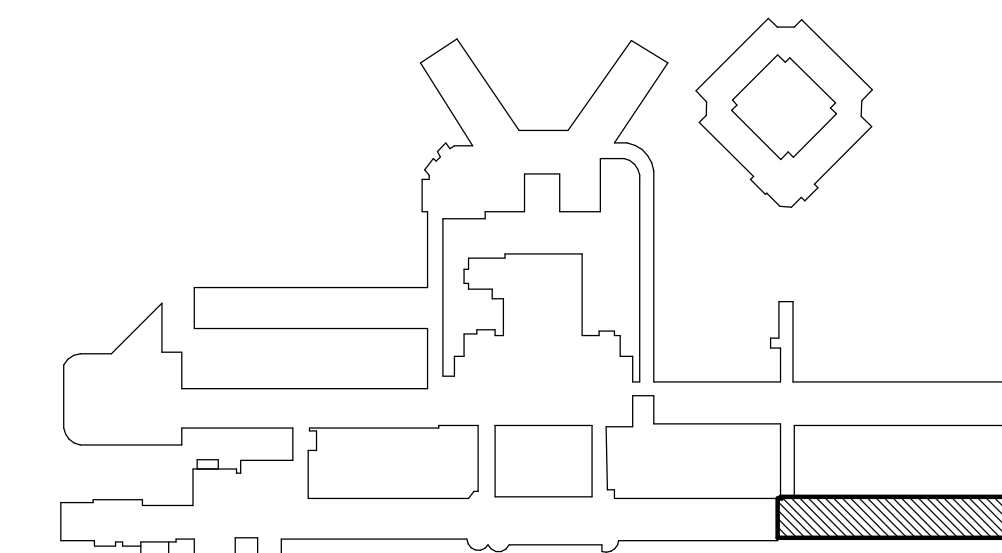
- 6 PROVIDE FOUR (4) 8 POLE CONTACTORS, 2 PER COMPANY FOR CONTROL OF NORMAL LIGHTING AND CELL RECEPTACLE (INTEGRAL TO LUMINAIRE). LIGHTING CIRCUIT TO BE CIRCUITED FROM LOAD SIDE OF CONTACTOR TO CDP ENCLOSURE THEN TO CELL FROM CDP ENCLOSURE.
- 7 EXTEND EXISTING UTILITY CHASE LIGHTING CIRCUIT AND CONTROLS FROM UTILITY CHASE 248.
- 8 NEW PANELBOARD AND CIRCUIT BREAKERS TO BE FURNISHED BY THE DIRECTORS REPRESENTATIVE AND INSTALLED BY ELECTRICAL CONTRACTOR.
- 9 CIRCUIT ALL TYPE W NIGHT LIGHT CIRCUITS TO LOCAL SWITCH CONTROLS, PROVIDE ONE SWITCH PER COMPANY.



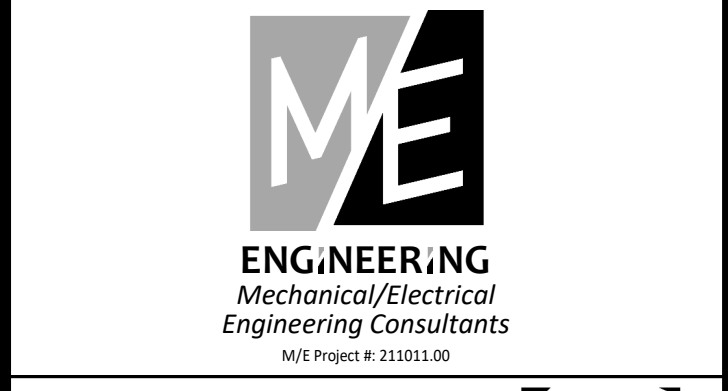
1 THIRD FLOOR PLAN - WEST - ELECTRICAL
 E-108 1/8" = 1'-0"
 0' 4' 8' 16'
 NORTH



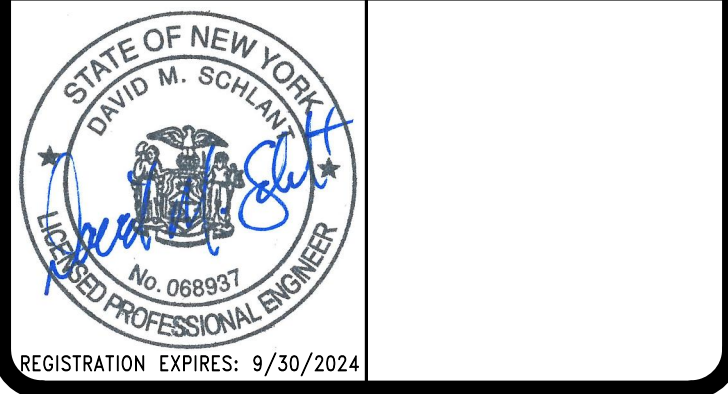
2 THIRD FLOOR PLAN - EAST - ELECTRICAL
 E-108 1/8" = 1'-0"
 0' 4' 8' 16'
 NORTH



KEYPLAN
 SCALE: NONE



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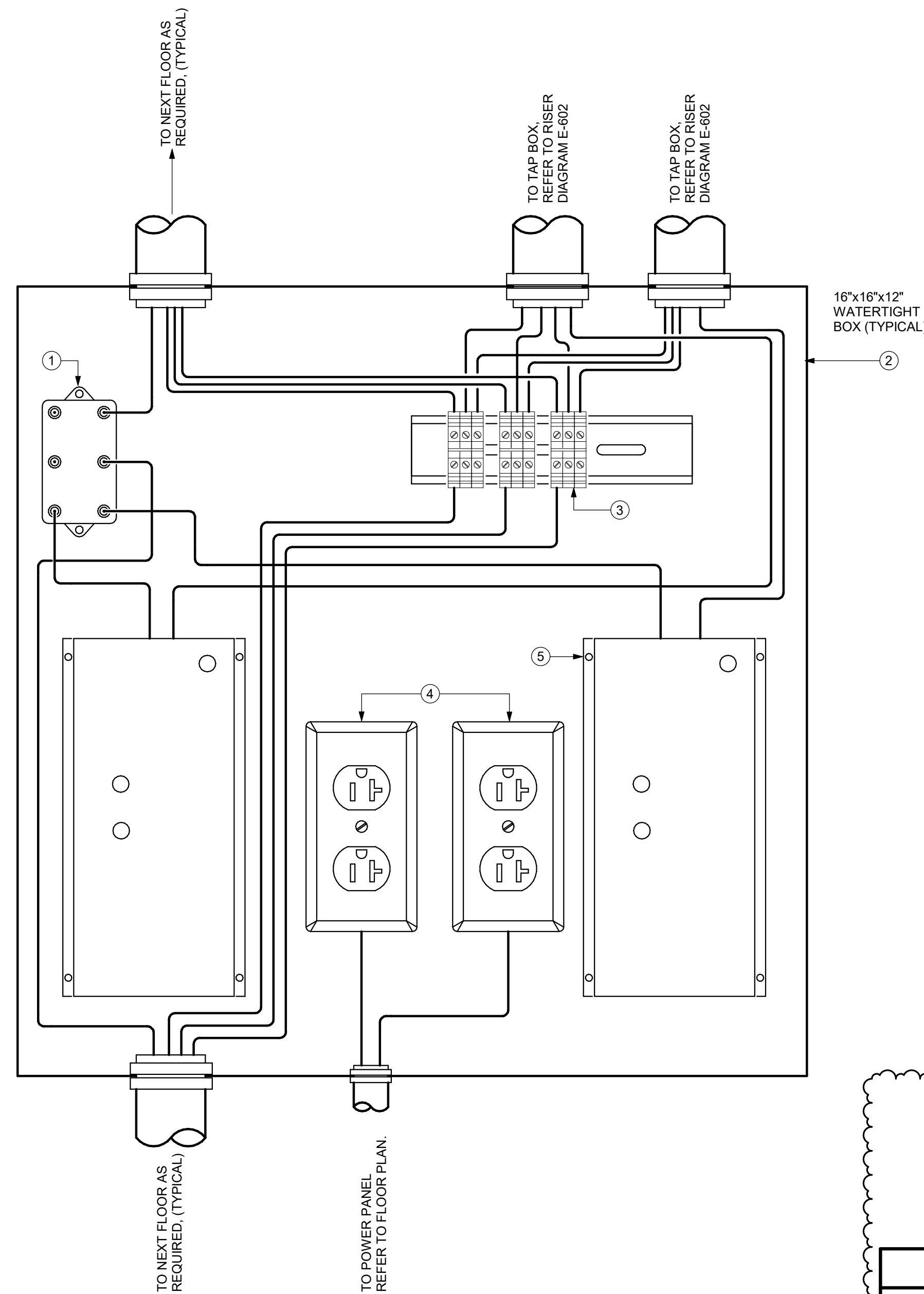
CONTRACT: ELECTRICAL
TITLE: UPGRADE PLUMBING & FIXTURES AND REHABILITATE CELL BACKS, C BLOCK
LOCATION: CLINTON CORRECTIONAL FACILITY, ROUTE 374, COOK STREET, DANMORA, NY 12929-2000
CLIENT: NYS DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION

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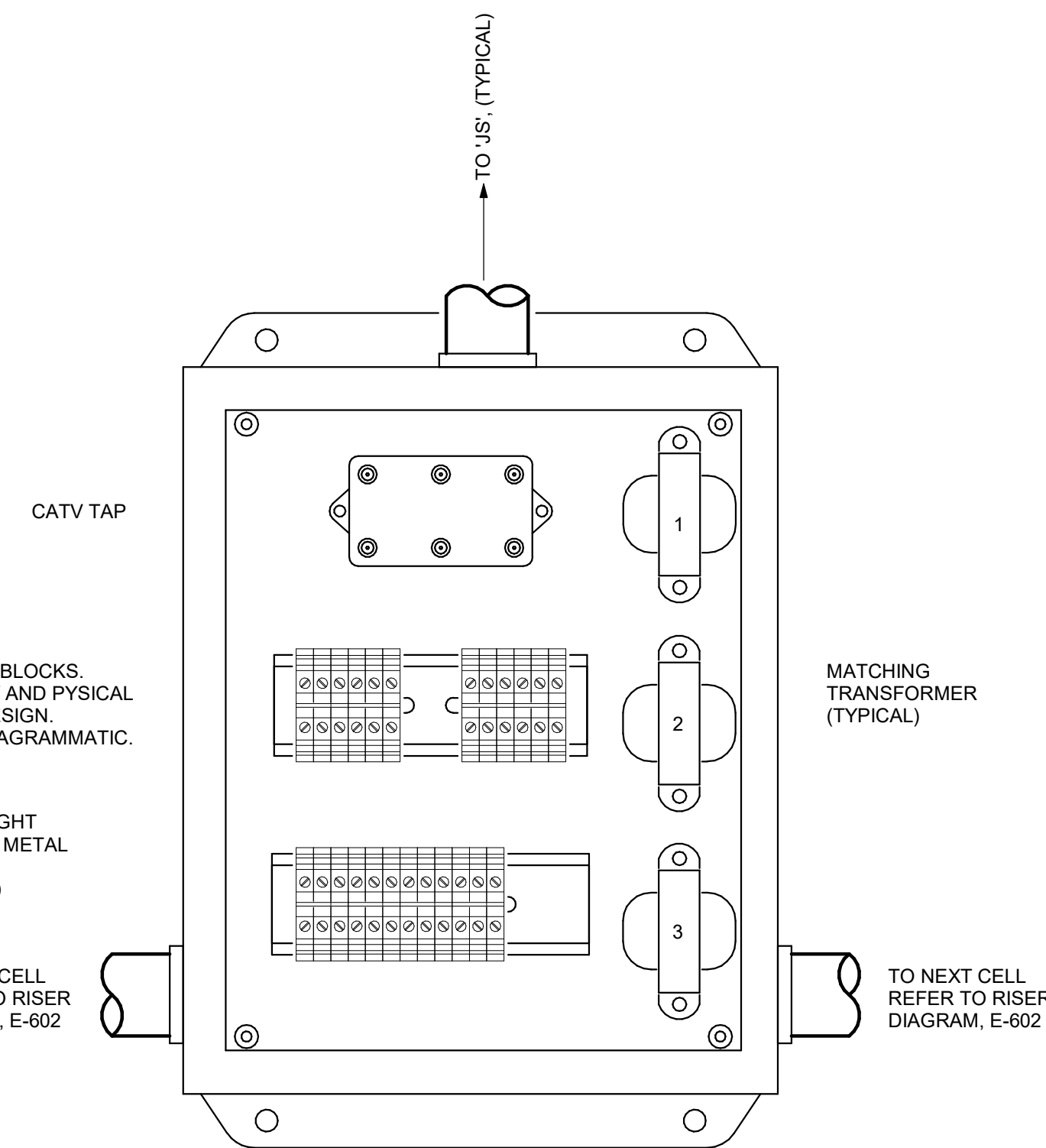
PROJECT NUMBER: **45998 - E**
 DESIGNED BY: BPT
 DRAWN BY: BPT/JAW
 FIELD CHECK: -
 APPROVED: DMS
 SHEET TITLE:
THIRD FLOOR PLAN - ELECTRICAL

E-504 DRAWING NOTES

- 1 PROVIDE TAP-OFF FOR CATV DISTRIBUTION PANEL FOR EACH CELL-BLOCK FLOOR PER FLOOR PLANS.
- 2 CELL RADIO/CATV DISTRIBUTION SYSTEM SHALL HAVE A MOUNTING PANEL WITH LEFT-HAND HINGED DOOR & NO FACTORY KNOCK-OUTS. EACH PANEL SHALL BE FIELD-PUNCHED FOR SPECIFIC TAPS REQUIRED. PANEL SHALL HAVE VENTILATION LOUVERS ON BOTH SIDES & BOTTOM.
- 3 PROVIDE DIN RAIL TERMINAL BLOCKS FOR RADIO WIRING CONNECTIONS, QUANTITY AS REQUIRED.
- 4 PROVIDE TWO (2) 20A RECEPTACLES.
- 5 PROVIDE TWO (2) 2-WAY BROADBAND DISTRIBUTION AMPLIFIERS.



1
E-504 NTS
TYPICAL RADIO/CATV DISTRIBUTION PANEL



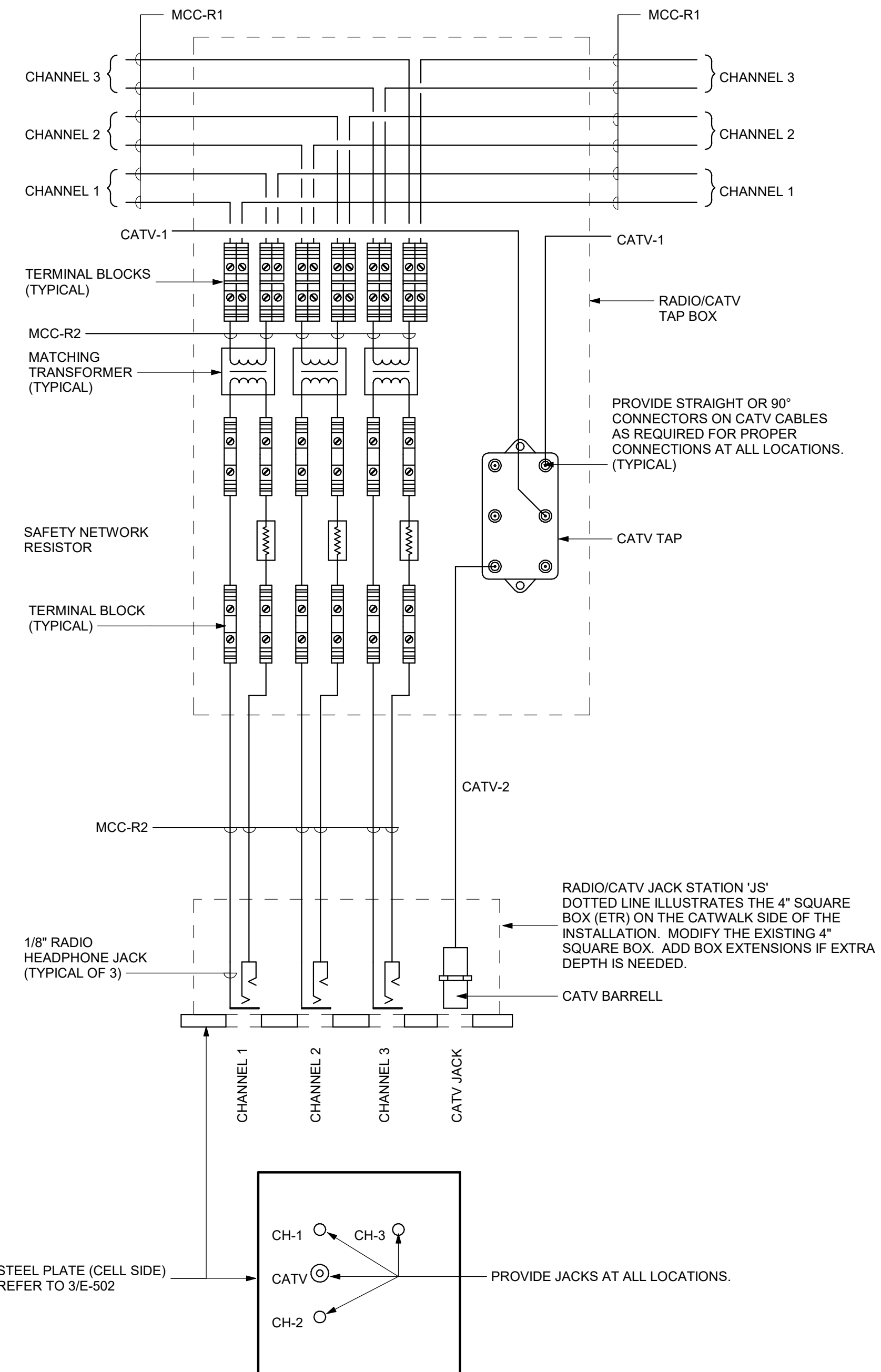
2
E-504 NTS
TYPICAL TAP BOX

DETAIL NOTES:

A. TAP BOXES - THE DIRECTOR'S REPRESENTATIVE WILL FURNISH 114 DEVICES TO THE EC FOR INSTALLATION. THE EC SHALL PROVIDE ANY ADDITIONAL TAP BOX DEVICES REQUIRED BY THE CONTRACT.

TAP BOX - PARTS LIST

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	456	AS38-8-88	ALUMINUM 3/8 OD x 1.72 ID 1-3/8 LONG SPACER
2	684	BO-T72S	25/70V SPEAKER TRANSFORMER
5	456	124764	8-32 x 1/2" MACHINE SCREW/TORX/PAN HEAD/STEEL
6	944	121745	8-32 HEX HEAD NUT
7	456	130165	8-32 x 1-5/8" MACHINE SCREW/PHILLIPS/PAN HEAD/STEEL
8	114	A12106PHC	POLYESTER ENCLUSRE, TYPE 4X, QUICK RELEASE SOLID COVER, 12.08 H x 10.09 W x 6.38 IN D.
11	684	FE-ADT-470	3.5mm AUDIO PANEL MT COUPLER F-BULKHEAD - READ SIDE NUT
12	944	FE-ADT-185	COAX COUPLER ADAPTER, NICKEL PLATED (RG59/RG6) 2.5GHz SUPPORT (HIGH SPEED)
14	228	SHEET METAL L-BRACKET	4" X 1-1/2", 14 GAUGE STEEL CONNECTOR MOUNTING BRACKET
15	114	1297649	DIN RAIL 35MMX7.5MM UNSLOT (7.5")
16	684	OCE X3 OR OCE X2	3X RAIL ASSEMBLY
17	114	PTTB	PTTB RAIL ASSEMBLY
18	114	TGT4	CABLE 4 OUTPUT INDOOR DIRECTIONAL TAP
19	228	COAX COUPLER	



3
E-504 NTS
TYPICAL TAP BOX & JACK STATION WIRING DIAGRAM

DETAIL NOTES:

A. JACK PLATES - THE DIRECTOR'S REPRESENTATIVE WILL FURNISH 228 DEVICES TO THE EC FOR INSTALLATION. THE EC SHALL PROVIDE ANY ADDITIONAL TAP BOX DEVICES REQUIRED BY THE CONTRACT.

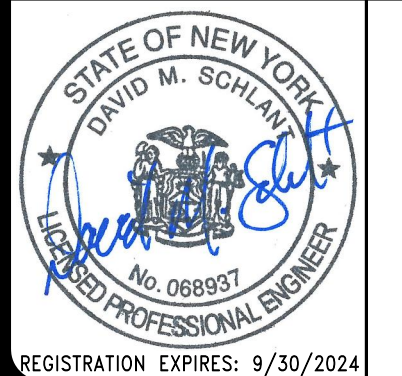


ENGINEERING
Mechanical/Electrical
Engineering Consultants
M/E Project # 211011.00

FoitAlbert
ASSOCIATES
Architecture, Engineering, Surveying, Environmental.



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CLIENT: **NYS DEPARTMENT OF CORRECTIONS
AND COMMUNITY SUPERVISION**

MARK	DATE	DESCRIPTION
1	10/30/2024	ADDENDUM 1
	08/16/2024	FINAL SUBMISSION

PROJECT NUMBER:	45998 - E
DESIGNED BY:	BPT
DRAWN BY:	BPT/JAW
FIELD CHECK:	-
APPROVED:	DMS
SHEET TITLE:	DETAILS - ELECTRICAL

PROJECT NUMBER: **45998 - E**

DESIGNED BY: BPT

DRAWN BY: BPT/JAW

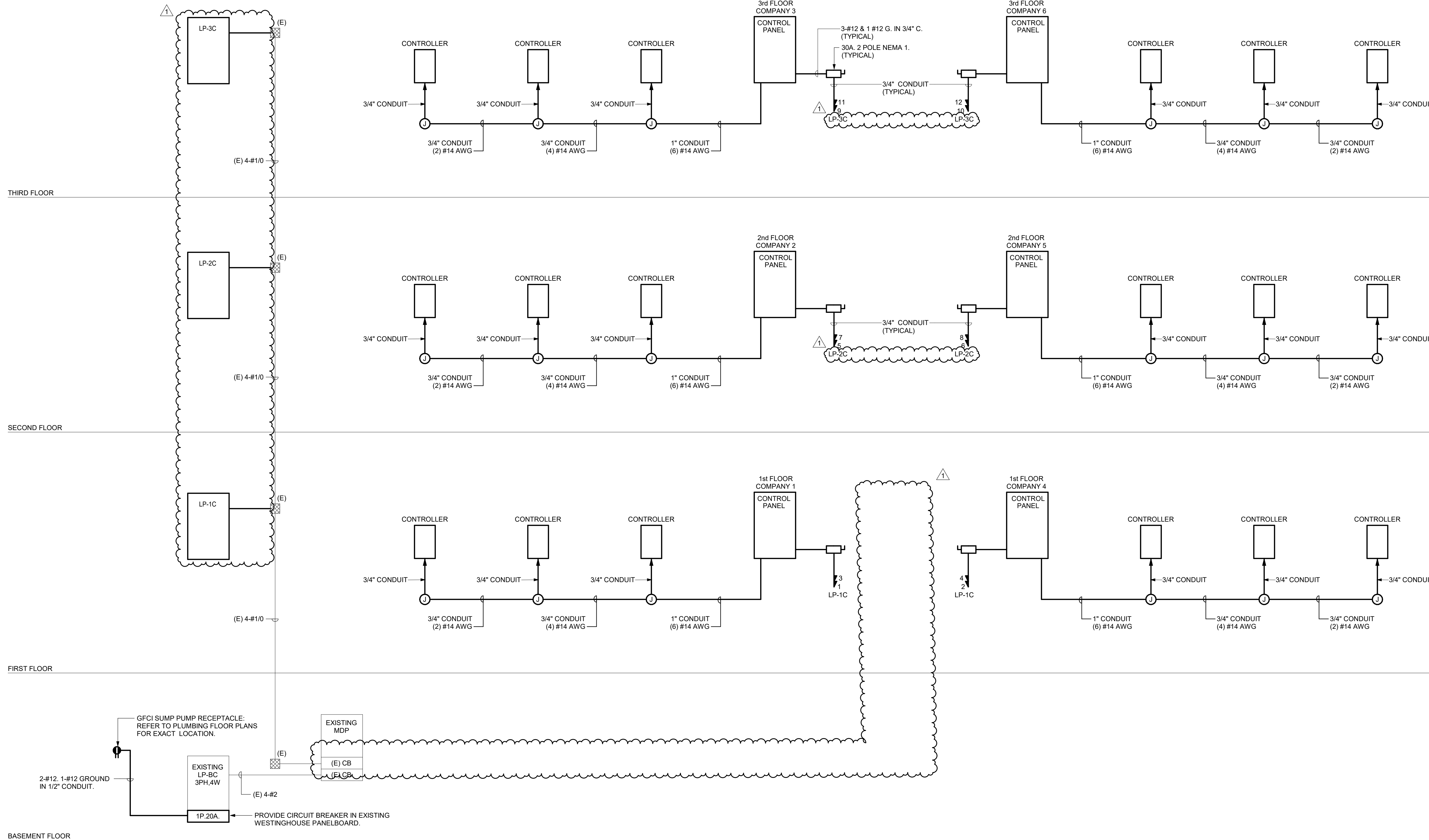
FIELD CHECK: -

APPROVED: DMS

SHEET TITLE: **DETAILS - ELECTRICAL**

DRAWING NUMBER: **E-504**

SHEET 75 OF 78



CONTROL RISER DIAGRAM GENERAL NOTES:


- A. SUPPORT CONDUIT AT EACH CELL DIVISION FLANGE. CLAMP SUPPORTS TO FLANGES AS REQUIRED. WHERE SUPPORT AT CELL DIVISION IS NOT POSSIBLE, SPOT WELD SUPPORT TO CELL BACK. COORDINATE ALL WORK WITH ABATEMENT CONTRACTOR. MAXIMUM SUPPORT SPACING SHALL BE 10'-0". ALL PANEL SUPPORTS SHALL BE SPOT WELDED TO STEEL.
- B. COORDINATE QUANTITIES OF CONTROLLERS, CONTROL PANELS, SAFETY SWITCHES, CIRCUITS, ETC. WITH FLOOR PLANS AND PROJECT SCOPE.
- C. RISER DIAGRAM DOES NOT ILLUSTRATE ALL NECESSARY CONTROL PANELS, CONTROLLERS AND CONDUIT RUNS. REFER TO FLOOR PLANS FOR LOCATIONS AND QUANTITIES REQUIRED FOR A FULLY FUNCTIONAL SYSTEM TO CELLS.

1
E-601 NTS
TYPICAL CELL BLOCK 'C' PARTIAL CONTROL AND POWER RISER DIAGRAM

NEW YORK STATE
Office of General Services


DESIGN & CONSTRUCTION

CONSULTANT — M/E ENGINEERING
CERTIFICATE OF AUTHORIZATION #: 0018443




ENGINEERING
Mechanical/Electrical
Engineering Consultants
M/E Project # 211011.00

FoitAlbert
ASSOCIATES
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STATE OF NEW YORK
DAVID M. SCHMIDT
REGISTERED PROFESSIONAL ENGINEER
No. 068937
REGISTRATION EXPIRES: 9/30/2024

CONTRACT: **ELECTRICAL**

TITLE: **UPGRADE PLUMBING & FIXTURES AND REHABILITATE CELL BACKS, C BLOCK**

LOCATION:
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	08/16/2024	FINAL SUBMISSION

PROJECT NUMBER: **45998 - E**

DESIGNED BY: BPT

DRAWN BY: BPT/JAW

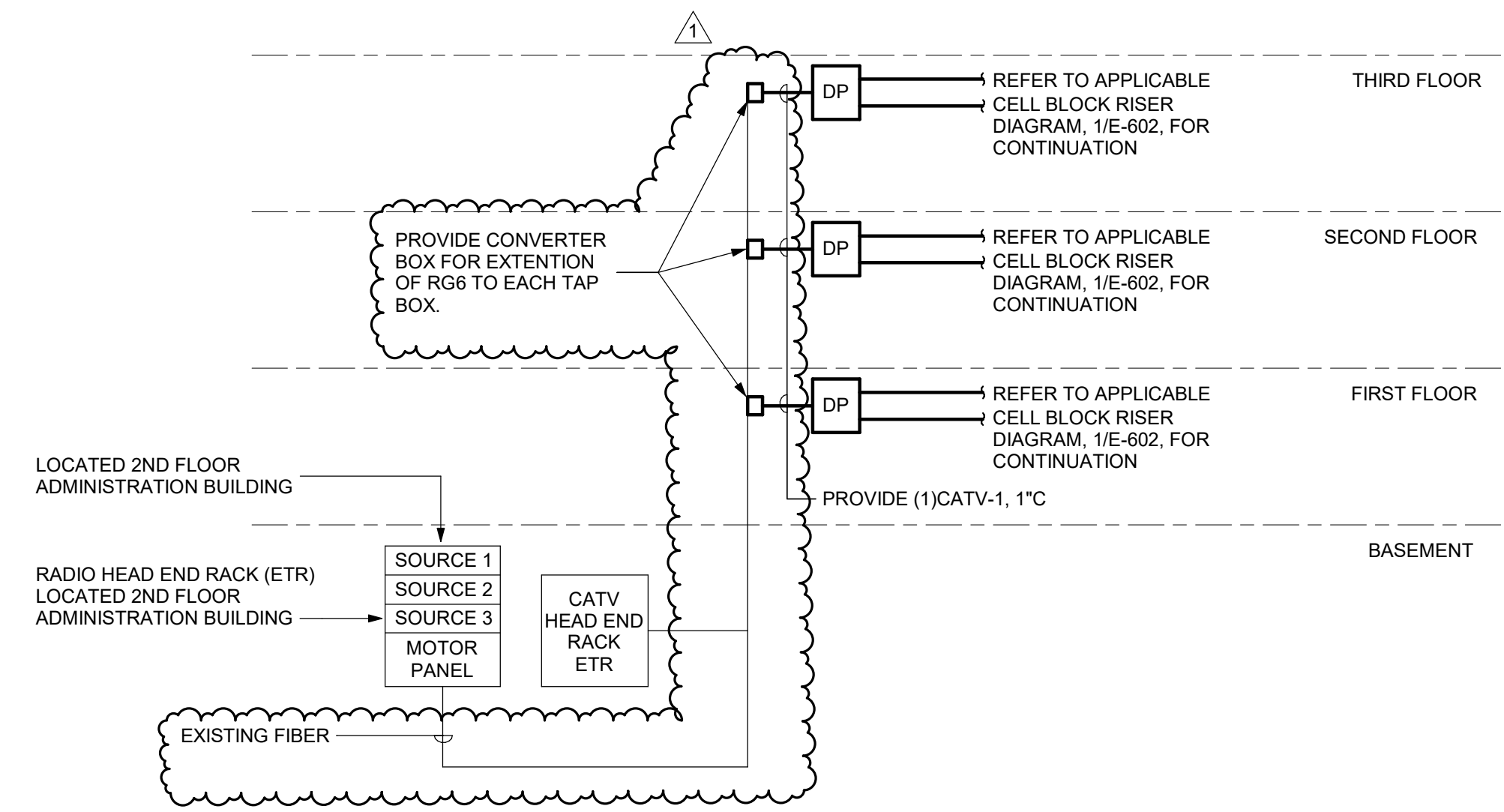
FIELD CHECK: -

APPROVED: DMS

SHEET TITLE:
RISER DIAGRAMS - ELECTRICAL

DRAWING NUMBER: **E-601**

SHEET 76 OF 78



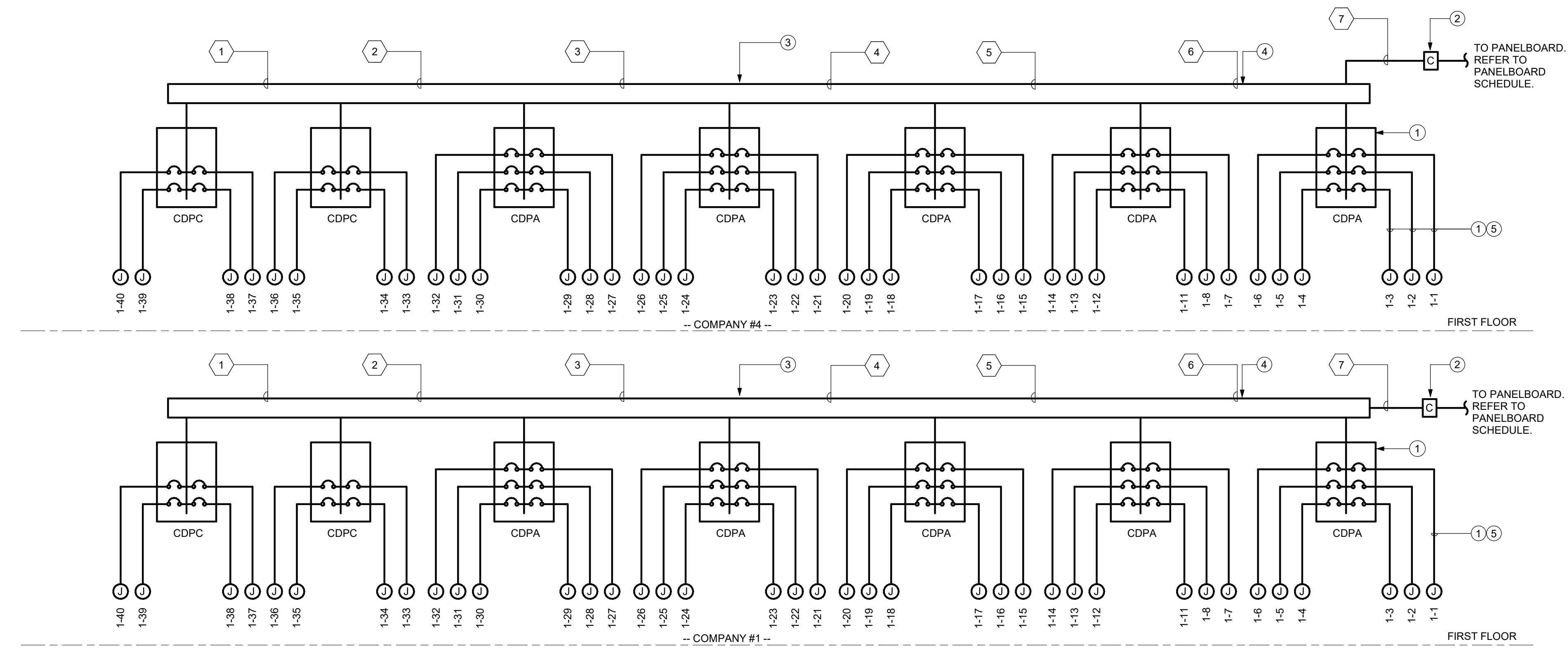
3
E-602 NTS
TYPICAL RADIO/CATV RISER DIAGRAM

E-602 DRAWING NOTES

- BRANCH CIRCUIT WIRING SHOWN DIAGRAMMATICALLY. CONDUCTORS SHALL BE IN COMMON CONDUITS. REFER TO DISTRIBUTION PANEL DETAILS 6 & 7/E-503 FOR ADDITIONAL INFORMATION.
- PROVIDE MECHANICALLY HELD CONTACTOR FOR GUARD CONTROL OF ALL POWER AND LIGHTING CIRCUITS. EACH CONTACTOR SHALL BE 8 POLE CAPABLE. ALL HOT CONDUCTORS SHALL BE SWITCH-CONTROLLED. PROVIDE NUMBER OF ENCLOSED CONTRACTORS AS REQUIRED FOR CONTROL OF ALL PROPOSED CIRCUITS. BASIS OF DESIGN SQUARE D LXX80 (30A, 8 POLE). LOCATE CONTACTORS ADJACENT TO PANELS & LABEL ACCORDINGLY.
- PROVIDE 4" x 4" UL LISTED ELECTRICAL NEMA 3R WIREWAY/WIRE TROUGH SYSTEM. PROVIDE TAMPER RESISTANT FASTENERS. SYSTEM SHALL RUN THE LENGTH OF THE COMPANY AND BE UTILIZED FOR WIRE MANAGEMENT. CONTRACTOR SHALL EXPECT OFFSETS AND DIRECTION CHANGES OF WIREWAY SYSTEM TO ACCOMMODATE FOR FIELD CONDITIONS. FASTEN WIREWAY TO VERTICAL STEEL RIBS. PROVIDE ADDITIONAL FASTENERS AND SUPPORTS AS NEEDED. ALL HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL.
- HEXAGONAL NOTES ARE INTENDED TO ILLUSTRATE THE QUANTITY OF ANTICIPATED CONDUCTORS WITHIN THE WIREWAY SYSTEM AND/OR CONDUIT RUNS AT THE APPROXIMATE LOCATION SHOWN. SIZES SHOWN TAKE INTO ACCOUNT BOTH VOLTAGE DROP AND DE-RATING.
- ROUTE CONDUCTORS IN COMMON CONDUIT TO CELLS INDICATED. PROVIDE JUNCTION BOXES & CONDUIT OFFSETS AS NECESSARY TO ACCOMMODATE FIELD CONDITIONS.

GENERAL NOTES:

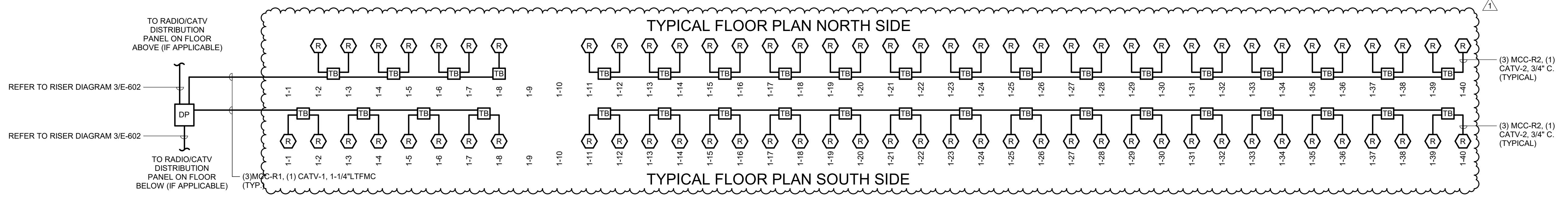
- REFER TO E-001 FOR ELECTRICAL LEGENDS, ABBREVIATIONS AND GENERAL PROJECT NOTES.
- ALL CONDUCTORS SHALL BE THHN/THWN-2.
- INSTALLATION SHALL BE PER NECA1 GUIDELINES.
- PROVIDE HANGARS & SUPPORTS AS REQUIRED.
- PROVIDE GROUNDING PER NEC FOR ALL ELECTRICAL EQUIPMENT AND ASSOCIATED EQUIPMENT.
- ALL CONDUCTORS AND EQUIPMENT NOT SHOWN FOR CLARITY. COORDINATE WITH ALL TRADES AND PROVIDE COMPLETE ELECTRICAL CIRCUITING FOR ALL INSTALLED EQUIPMENT. ALL REQUIREMENTS TO BE PER NEC.



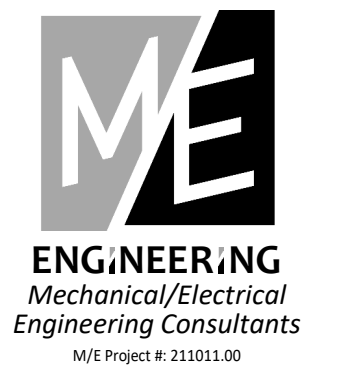
CONDUIT NOTES:

- CIRCUIT SHALL CONTAIN:
4 #8 & #10G (2 POWER CIRCUITS)
2 #8 & #10G (1 LIGHTING CIRCUIT)
ALL IN COMMON WIREWAY SYSTEM.
- CIRCUIT SHALL CONTAIN:
8 #8 & #10G (4 POWER CIRCUITS)
2 #8 & #10G (1 LIGHTING CIRCUIT)
ALL IN COMMON WIREWAY SYSTEM.
- CIRCUIT SHALL CONTAIN:
12 #8 & #10G (6 POWER CIRCUITS)
4 #8 & #10G (2 LIGHTING CIRCUITS)
ALL IN COMMON WIREWAY SYSTEM.
- CIRCUIT SHALL CONTAIN:
16 #8 & #10G (8 POWER CIRCUITS)
4 #8 & #10G (2 LIGHTING CIRCUITS)
ALL IN COMMON WIREWAY SYSTEM.
- CIRCUIT SHALL CONTAIN:
20 #8 & #10G (10 POWER CIRCUITS)
4 #8 & #10G (2 LIGHTING CIRCUITS)
ALL IN COMMON WIREWAY SYSTEM.
- CIRCUIT SHALL CONTAIN:
24 #8 & #10G (12 POWER CIRCUITS)
6 #8 & #10G (3 LIGHTING CIRCUITS)
ALL IN COMMON WIREWAY SYSTEM.
- CIRCUIT SHALL CONTAIN:
28 #8 & #10G (14 POWER CIRCUITS)
6 #8 & #10G (3 LIGHTING CIRCUITS)
ALL IN COMMON WIREWAY SYSTEM.

2
E-602 NTS
TYPICAL POWER RISER DIAGRAM FLOORS 1-3



1
E-602 NTS
CELL BLOCK C - TYPICAL RADIO/CATV RISER DIAGRAM FLOORS 1-3



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LOCATION:	CLINTON CORRECTIONAL FACILITY ROUTE 374, COOK STREET DANMORA, NY 12929-2000
CLIENT:	NYS DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION

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	08/16/2024	FINAL SUBMISSION

PROJECT NUMBER:	45998 - E
DESIGNED BY:	BPT
DRAWN BY:	BPT/JAW
FIELD CHECK:	-
APPROVED:	DMS

PANELBOARD DIRECTORY																											
M/E PROJECT:		CLINTON CORRECTIONAL						PANEL NAME:						LP-2C						TYPE:		BRANCH					
PROJECT NO.:		211011.00						VOLTAGE:						208 L-L						PHASE:		3		MOUNTING:		SURFACE	
FACILITY:		0						AIC:						22 k						WIRE:		4		OCB TYPE:		MCB	
LOCATION:		2ND FLOOR ELEC. RM. 02						SOURCE:						-						BUS RATING:		225		MCB RATING:		150	
DESCRIPTION	CKT NO.	TRIP	LTG. VA	RECEPT. VA	MOTOR VA	EQUIP. VA	HVAC VA	KIT VA	KIT VA	HVAC VA	EQUIP. VA	MOTOR VA	RECEPT. VA	LTG. VA	TRIP	CKT NO.	DESCRIPTION										
CELLS 2-1-2-2-3 (CO. 3) PWR	1a	G-20/1		540									540		G-20/1	2a	CELLS 2-1-2-2-3 (CO. 4) PWR										
CELLS 2-4-5-2-6 (CO. 3) PWR	3b	G-20/1		540									540		G-20/1	4b	CELLS 2-4-5-2-6 (CO. 4) PWR										
CELLS 2-7-8-2-11 (CO. 3) PWR	5c	G-20/1		540									540		G-20/1	5c	CELLS 2-7-8-2-11 (CO. 4) PWR										
CELLS 2-12-2-13-2-14 (CO. 3) PWR	7a	G-20/1		540									540		G-20/1	8a	CELLS 2-12-2-13-2-14 (CO. 4) PWR										
CELLS 2-15-2-16-2-17 (CO. 3) PWR	9b	G-20/1		540									540		G-20/1	10b	CELLS 2-15-2-16-2-17 (CO. 4) PWR										
CELLS 2-18-2-19-2-20 (CO. 3) PWR	11c	G-20/1		540									540		G-20/1	12c	CELLS 2-18-2-19-2-20 (CO. 4) PWR										
CELLS 2-21-2-22-2-23 (CO. 3) PWR	13a	G-20/1		540									540		G-20/1	14a	CELLS 2-21-2-22-2-23 (CO. 4) PWR										
CELLS 2-24-2-25-2-26 (CO. 3) PWR	15b	G-20/1		540									540		G-20/1	15b	CELLS 2-24-2-25-2-26 (CO. 4) PWR										
CELLS 2-27-2-28-2-29 (CO. 3) PWR	17c	G-20/1		540									540		G-20/1	18c	CELLS 2-27-2-28-2-29 (CO. 4) PWR										
CELLS 2-30-2-31-2-32 (CO. 3) PWR	19a	G-20/1		540									540		G-20/1	20a	CELLS 2-30-2-31-2-32 (CO. 4) PWR										
CELLS 2-33-2-34-2-35 (CO. 3) PWR	21b	G-20/1		540									540		G-20/1	22b	CELLS 2-33-2-34-2-35 (CO. 4) PWR										
CELLS 2-36-2-37-2-38 (CO. 3) PWR	23c	G-20/1		540									540		G-20/1	24c	CELLS 2-36-2-37-2-38 (CO. 4) PWR										
CELLS 2-39-2-40 (CO. 3) PWR	25a	G-20/1		540									540		G-20/1	26a	CELLS 2-39-2-40 (CO. 4) PWR										
CELL LIGHTING (CO. 3)	27b	G-20/1		540									540		G-20/1	27b	CELL LIGHTING (CO. 4)										
ALLEY LIGHTING	29c	20/1	1120												20/1	30c	CELL LIGHTING (CO. 4)										
CELL LIGHTING (CO. 3)	31a	20/1													20/1	32a	CELL LIGHTING (CO. 4)										
CELL LIGHTING (CO. 3)	33b	20/1													20/1	33b	SPARE										
CHASE RECEPT. FOR AMP.	35c	20/1		200											20/1	35c	SPARE										
EXISTING LOAD RECONNECT	37a	20/1													20/1	38a	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	39b	20/1													20/1	40b	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	41c	20/1													20/1	42c	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	43a	20/1													20/1	44a	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	45b	20/1													20/1	46b	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	47c	20/1													20/1	48c	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	49a	20/1													20/1	50a	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	51b	20/1													20/1	52b	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	53c	20/1													20/1	54c	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	55a	20/1													20/1	56a	EXISTING LOAD RECONNECT										
	57b	20/1													20/1	58b	EXISTING LOAD RECONNECT										
	59c	20/1													20/1	60c	EXISTING LOAD RECONNECT										
	61a	20/1													20/1	62a											
	63b	20/1													20/1	64b											
	65c	20/1													20/1	66c											
	67a	20/1													20/1	68a											
	69b	20/1													20/1	70b											
	71c	20/1													20/1	72c											
TOTAL PHASE "A" ODD	0	2700	0	0	0	0	0	0	0	0	0	0	2700	0	TOTAL PHASE "A" EVEN												
TOTAL PHASE "B" ODD	0	2700	0	0	0	0	0	0	0	0	0	0	2160	0	TOTAL PHASE "B" EVEN												
TOTAL PHASE "C" ODD	1120	2360	0	0	0	0	0	0	0	0	0	0	2160	0	TOTAL PHASE "C" EVEN												
OPTIONS:		CIRCUIT BREAKER NOTES:						G - GFCI BREAKER						LP-2C													
		A - ARC-FAULT BREAKER						N - SWITCHED NEUTRAL																			

PANELBOARD DIRECTORY																											
M/E PROJECT:		CLINTON CORRECTIONAL						PANEL NAME:						LP-3C						TYPE:		BRANCH					
PROJECT NO.:		211011.00						VOLTAGE:						208 L-L						PHASE:		3		MOUNTING:		SURFACE	
FACILITY:		0						AIC:						22 k						WIRE:		4		OCB TYPE:		MCB	
LOCATION:		3RD FLOOR ELEC. RM. 02						SOURCE:						-						BUS RATING:		225		MCB RATING:		150	
DESCRIPTION	CKT NO.	TRIP	LTG. VA	RECEPT. VA	MOTOR VA	EQUIP. VA	HVAC VA	KIT VA	KIT VA	HVAC VA	EQUIP. VA	MOTOR VA	RECEPT. VA	LTG. VA	TRIP	CKT NO.	DESCRIPTION										
CELLS 3-1-3-2-3-3 (CO. 5) PWR	1a	G-20/1		540									540		G-20/1	2a	CELLS 3-1-3-2-3-3 (CO. 6) PWR										
CELLS 3-4-3-5-3-6 (CO. 5) PWR	3b	G-20/1		540									540		G-20/1	4b	CELLS 3-4-3-5-3-6 (CO. 6) PWR										
CELLS 3-7-3-8-3-11 (CO. 5) PWR	5c	G-20/1		540									540		G-20/1	6c	CELLS 3-7-3-8-3-11 (CO. 6) PWR										
CELLS 3-12-3-13-3-14 (CO. 5) PWR	7a	G-20/1		540									540		G-20/1	8a	CELLS 3-12-3-13-3-14 (CO. 6) PWR										
CELLS 3-15-3-16-3-17 (CO. 5) PWR	9b	G-20/1		540									540		G-20/1	10b	CELLS 3-15-3-16-3-17 (CO. 6) PWR										
CELLS 3-18-3-19-3-20 (CO. 5) PWR	11c	G-20/1		540									540		G-20/1	12c	CELLS 3-18-3-19-3-20 (CO. 6) PWR										
CELLS 3-21-3-22-3-23 (CO. 5) PWR	13a	G-20/1		540									540		G-20/1	14a	CELLS 3-21-3-22-3-23 (CO. 6) PWR										
CELLS 3-24-3-25-3-26 (CO. 5) PWR	15b	G-20/1		540									540		G-20/1	15b	CELLS 3-24-3-25-3-26 (CO. 6) PWR										
CELLS 3-27-3-28-3-29 (CO. 5) PWR	17c	G-20/1		540									540		G-20/1	18c	CELLS 3-27-3-28-3-29 (CO. 6) PWR										
CELLS 3-30-3-31-3-32 (CO. 5) PWR	19a	G-20/1		540									540		G-20/1	20a	CELLS 3-30-3-31-3-32 (CO. 6) PWR										
CELLS 3-33-3-34-3-35 (CO. 5) PWR	21b	G-20/1		540									540		G-20/1	22b	CELLS 3-33-3-34-3-35 (CO. 6) PWR										
CELLS 3-36-3-37-3-38 (CO. 5) PWR	23c	G-20/1		540									540		G-20/1	24c	CELLS 3-36-3-37-3-38 (CO. 6) PWR										
CELLS 3-39-3-40 (CO. 5) PWR	25a	G-20/1		540									540		G-20/1	26a	CELLS 3-39-3-40 (CO. 6) PWR										
CELL LIGHTING (CO. 5)	27b	G-20/1		540									540		G-20/1	28b	CELL LIGHTING (CO. 6)										
ALLEY LIGHTING	29c	20/1	1120												20/1	30c	CELL LIGHTING (CO. 6)										
EXISTING LOAD RECONNECT	31a	20/1													20/1	32a	CELL LIGHTING (CO. 6)										
CELL LIGHTING (CO. 5)	33b	20/1													20/1	34b	SPARE										
CHASE RECEPT. FOR AMP.	35c	20/1		200											20/1	36c	CELL LIGHTING (CO. 6)										
EXISTING LOAD RECONNECT	37a	20/1													20/1	38a	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	39b	20/1													20/1	40b	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	41c	20/1													20/1	42c	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	43a	20/1													20/1	44a	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	45b	20/1													20/1	46b	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	47c	20/1													20/1	48c	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	49a	20/1													20/1	50a	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	51b	20/1													20/1	52b	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	53c	20/1													20/1	54c	EXISTING LOAD RECONNECT										
EXISTING LOAD RECONNECT	55a	20/1													20/1	56a	EXISTING LOAD RECONNECT										
	57b	20/1													20/1	58b	EXISTING LOAD RECONNECT										
	59c	20/1													20/1	60c	EXISTING LOAD RECONNECT										
TOTAL PHASE "A" ODD	0	2700	0	0	0	0	0	0	0	0	0	0	2700	0	TOTAL PHASE "A" EVEN												
TOTAL PHASE "B" ODD	0	2700	0	0	0	0	0	0	0	0	0	0	2160	0	TOTAL PHASE "B" EVEN												
TOTAL PHASE "C" ODD	1120	2360	0	0	0	0	0	0	0	0	0	0	2160	0	TOTAL PHASE "C" EVEN												
OPTIONS:		CIRCUIT BREAKER NOTES:						G - GFCI BREAKER						LP-3C													
		A - ARC-FAULT BREAKER						N - SWITCHED NEUTRAL																			

PANELBOARD DIRECTORY																											
M/E PROJECT:		CLINTON CORRECTIONAL						PANEL NAME:						LP-1C						TYPE:		BRANCH					
PROJECT NO.:		211011.00						VOLTAGE:						208 L-L						PHASE:		3		MOUNTING:		SURFACE	
FACILITY:		0						AIC:						22 k						WIRE:		4		OCB TYPE:		MCB	
LOCATION:		1ST FLOOR ELEC. RM. 02						SOURCE:						-						BUS RATING:		225		MCB			