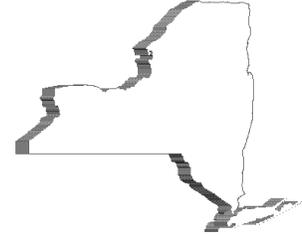




STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242



ADDENDUM NO. 2 TO PROJECT NO. 44707

HVAC WORK

**REPLACE FEEDWATER TANK -
POWERHOUSE BUILDING 13
ADIRONDACK CORRECTIONAL FACILITY
ROUTE 86, RAY BROOK, N.Y.**

March 12, 2014

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.

SPECIFICATIONS

1. SECTION 262416 – PANELBOARDS AND CIRCUIT BREAKERS: Discard the Section bound in the Project Manual and substitute the accompanying Sections (pages 262416 – 1 thru 262416 - 4) noted “Revised 3/12/2014”.

DRAWINGS

2. DRAWING E-001 – Discard drawing E-001 Electrical Symbols, Notes, Schedules and Details and replace with attached E-001 noted “Addendum 2 dated 2/28/14”.
3. DRAWING E-102 – Discard drawing E-102 First Floor Electrical Proposed Plan and replace with attached E-102 noted “Addendum 2 dated 2/28/14”.

END OF ADDENDUM

Margaret F. Larkin
Acting Executive Director

SECTION 262416

PANELBOARDS

PART 1 GENERAL

1.01 REFERENCES

- A. NEMA, UL.

1.02 SUBMITTALS

- A. Waiver of Submittals: The “Waiver of Certain Submittal Requirements” in Section 013300 does not apply to this Section.
- B. Submittal Packages: Submit the shop drawings, and the product data specified below at the same time as a package.
- C. Shop Drawings; include the following for each panelboard:
 - 1. Cabinet and gutter size.
 - 2. Voltage and current rating.
 - 3. Panelboard short circuit rating. Indicate if rating is Fully Rated Equipment Rating, or where acceptable, UL listed Integrated Equipment Short Circuit Rating.
 - 4. Circuit breaker enumeration (frame, ATE, poles, I.C.).
 - a. Indicate if circuit breakers are suitable for the panelboards’ Fully Rated Equipment Rating, or where acceptable, are series connected devices which have been test verified and listed with UL (include documentation proving the compatibility of the proposed circuit breaker combinations). Circuit breakers do not have to be listed as series connected devices when all of the circuit breaker interrupting ratings are equal to, or greater than, the short circuit rating of the panelboard.
 - 5. Accessories.
- D. Product Data:
 - 1. Catalog sheets, specifications and installation instructions.
 - 2. Bill of materials.
- E. Contract Closeout Submittals:
 - 1. Operation and Maintenance Data: Deliver 2 copies, covering the installed products, to the Director’s Representative.

PART 2 PRODUCTS

2.01 PANELBOARDS

- A. As produced by Cutler-Hammer/Eaton Corp., Challenger Electrical Equipment Corp. General Electric Co., Siemens/ITE, Square D Co., or Westinghouse Electric Corp., having:
 - 1. Flush or surface type cabinets as indicated on the drawings.
 - 2. Increased gutter space for gutter taps, sub-feed wiring, through-feed wiring, oversize lugs.
 - 3. UL label “SUITABLE FOR USE AS SERVICE EQUIPMENT” where used as service equipment.
 - a. Where indicated, equip panelboards used as service equipment with secondary surge arresters; GE’s Tranquell Series, Joslyn’s Mfr. Co.’s Surge Tec Series, Intermatic Incorp.’s AG2401 or AG6503, Square D Co.’s SDSA 1175 or SDSA 3650, to suit system primary (transformer size, available current) and secondary characteristics.
 - 4. Door and one piece trim. Door fastened to trim with butt or piano hinges. Trim fastened to cabinet with devices having provision for trim adjustment.
 - 5. Yale No. 511S locks with brass cylinder rosette, blind fastened from inside of door. 2 No. 47 keys with each lock (Exception: Not more than 7 keys, total).
 - 6. Solid copper bus bars. Ampere rating of bus bars not less than frame size of main circuit breaker.
 - 7. Full capacity copper neutral bus in panelboards where neutrals are required.
 - 8. Copper equipment grounding bus in panelboards where equipment grounding conductors are required.
 - 9. Sections designated “space” or “provision for future breaker” equipped to accept future circuit breakers.
 - 10. Lock on devices for exit light, fire alarm, stair well circuits.
 - 11. Provisions for padlocking circuit breaker handle in OFF position where indicated.
 - 12. Directory.
 - 13. Short circuit rating not less than indicated on panelboard schedule. Furnish panelboards having Fully Rated Equipment Rating (the short circuit rating of the panelboard is equal to the lowest interrupting rating of any device installed in the panelboard). Exception:
 - a. Where indicated to be acceptable on panelboard schedule, panelboard having UL listed Integrated Equipment Short Circuit Rating may be used.
 - 14. Molded case, bolt-on circuit breakers:
 - a. Mounting: Individually mounted main circuit breaker (when MCB is required), and group mounted branch/feeder circuit breakers to accommodate the circuit breaker style and panelboard construction.
 - b. Single pole 15 ATE and 20 ATE circuit breakers marked SWD where used as switches.

- c. Single pole and two pole 15, 20, and 30 ATE circuit breakers rated for high intensity discharge lighting loads when applicable.

2.02 NAMEPLATES

- A. General: Precision engrave letters and numbers with uniform margins, character size minimum 3/16 inch high.
 - 1. Phenolic: Two color laminated engravers stock, 1/16 inch minimum thickness, machine engraved to expose inner core color (white).
 - 2. Aluminum: Standard aluminum alloy plate stock, minimum .032 inches thick, engraved areas enamel filled or background enameled with natural aluminum engraved characters.
 - 3. Materials for Outdoor Applications: As recommended by nameplate manufacturer to suit environmental conditions.

PART 3 EXECUTION

3.01 INSTALLATION

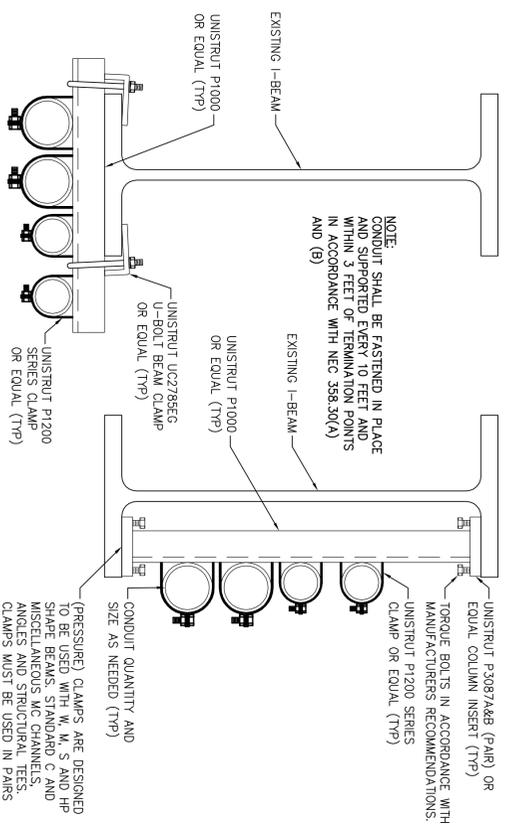
- A. Install panelboards in accordance with NEMA Publication No. PB1.1 “General Instructions for Proper Installation, Operation and Maintenance of Panelboards Rated 600 Volts or Less”.
 - 1. Set/program the circuit breakers.
- B. Flush Cabinets: Set flush cabinets so that edges will be flush with the finished wall line. Where space will not permit flush type cabinets to be set entirely in the wall, set cabinet as nearly flush as possible, and cover the protruding sides with the trim extending over the exposed sides of the cabinet and back to the finished wall line.
- C. Directory: Indicate on typewritten directory the equipment controlled by each circuit breaker, and size of feeder servicing panelboard. For power panelboards also include ATE rating and feeder size for each breaker.
- D. Identification:
 - 1. Use nameplates, or stencil on front of each panelboard with white paint, “LP-1, PP-1, etc.” in 1/2 inch lettering corresponding to panelboard designations on the drawings, and electrical parameters (phase, wire, voltage).
 - 2. Install a nameplate on each panelboard which explains the means of identifying each ungrounded system conductor by phase and system. Examples of nameplate statements:
 - a. Identification of 120/208 Volt Circuit Conductors:
 - 1) 2 wire circuit - white*, black.
 - 2) 3 wire circuit - white*, black, red.
 - 3) 4 wire circuit - white*, black, red, blue.

*White is used only as neutral. Where neutral is not required, black, red, or black, red, blue is used for phase to phase circuits.

- b. Identification of 277/480 Volt Circuit Conductors:
- 1) 2 wire circuit - natural gray**, brown.
 - 2) 3 wire circuit - natural gray**, brown, yellow.
 - 3) 4 wire circuit - natural gray**, brown, yellow, orange.

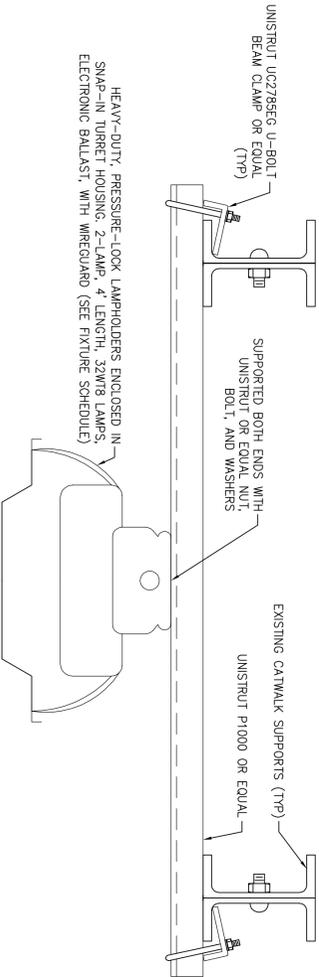
**Natural gray is used only as neutral. Where neutral is not required, brown, yellow, or brown, yellow, orange is used for phase to phase circuits.

END OF SECTION



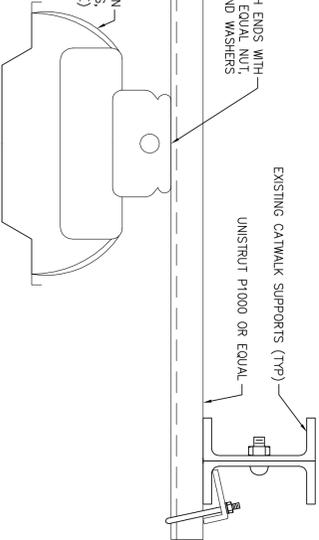
1 HORIZONTAL BEAM MTD.
E-001 NOT TO SCALE

(PRESSURE) CLAMPS ARE DESIGNED TO BE USED WITH 1/2" AND 3/4" SHAPED BEAMS, STANDARD C AND MISCELLANEOUS MC CHANNELS, ANGLES AND STRUCTURAL TEES. CLAMPS MUST BE USED IN PAIRS WHERE INDICATED. DO NOT DRILL HOLES IN STEEL SUPPORTING STRUCTURE.



2 VERTICAL BEAM MTD.
E-001 NOT TO SCALE

3 FIXTURE MOUNTING DETAIL
E-001 NOT TO SCALE



HEAVY-DUTY, PRESSURE-LOCK LAMP HOLDERS ENCLOSED IN SNAP-IN TURRET HOUSING, 2-LAMP, 4' LENGTH, 32W/8 LAMPS, ELECTRONIC BALLAST, WITH WIREGUARD (SEE FIXTURE SCHEDULE)

- ABBREVIATIONS**
- A AC
 - AF/FS ALTERNATING CURRENT ABOVE FINISHED FLOOR/GRADE
 - AF/0 ALTERNATING CURRENT ABOVE FINISHED FLOOR/GRADE
 - AMP AMPERE INTERRUPTING CAPACITY
 - AMP AMPERE
 - AWG AMERICAN WIRE GAUGE
 - BCW BARE COPPER WIRE
 - BKR BREAKER
 - BLDG BUILDING
 - C CABINET
 - CB CIRCUIT BREAKER
 - CRT CIRCUIT BREAKER
 - CONDUIT CONDUIT
 - CONN CONNECTION, CONNECT
 - CU COPPER
 - D DEEP
 - DIST DISTRIBUTION
 - DN DOWN
 - DWG DRAWING
 - EA ELECTRICAL ENCLOSURE
 - EQP EQUIPMENT
 - EXT EXTERIOR
 - F FUSE(D)
 - FIB FIBER
 - FLR FLOOR
 - FT FOOT (FEET)
 - G, GND GROUND (GENERAL CONTRACTOR)
 - GRV GENERAL CONTRACTOR
 - GRF GROUND FAULT INTERRUPTER
 - HD HEAVY DUTY
 - HGT HEIGHT
 - HP HORSEPOWER
 - HP HORSEPOWER
 - J-BOX JUNCTION BOX
 - LCT LIGHTING
 - LT(S) LIGHTING
 - MAX MAXIMUM
 - MCB MAIN CIRCUIT BREAKER
 - MFR MANUFACTURER
 - MECH MECHANICAL
 - MT MOUNT
 - MTD MOUNTED
 - MTR MOTOR
 - N NORTH
 - NC NOT IN CONTACT
 - NO/# NUMBER
 - P P
 - PNL PANEL
 - PHASE PHASE
 - RECEPT RECEPTACLE
 - RGS RIGID GALVANIZED STEEL
 - RM ROOM
 - SW SWITCH
 - TRMP TEMPORARY/TEMPERATURE TYPICAL
 - UN UNLESS OTHERWISE NOTED
 - V VOLT, VOLTS
 - W WATT, WIRE

- GENERAL**
- 1 NUMBER IN CIRCLE, WITH OR WITHOUT ARROW OR LEADER, REFER TO MATCHING NUMBERED CODED NOTE
 - 2 NUMBER IN DIAMOND, WITH OR WITHOUT ARROW OR LEADER, REFER TO THE DEMOLITION CODED NOTE WITH THE MATCHING NUMBER
 - 3 DETAIL CALLOUT
- GENERAL NOTES**
1. REFER TO CONSTRUCTION DRAWINGS FOR SYMBOLS ASSOCIATED WITH WORK, EQUIPMENT, ETC. BY OTHER(S).
 2. COORDINATE WORK WITH ALL TRADES.
 3. CONDUIT RUNS SHOWN ARE DIAGNOSTIC. EXACT LOCATION OF ALL CONDUIT RUNS SHALL BE DETERMINED IN THE FIELD. COORDINATE INSTALLATIONS AND AVOID CONFLICT WITH PIPING, DUCTWORK, ACCESS DOWNS AND WORK BY OTHER TRADES.
 4. GENERAL NOTES APPLY TO ALL CONTRACT DRAWINGS.
 5. RESTORE ALL THRU PENETRATIONS OF CONDUITS.



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- POWER DISTRIBUTION EQUIPMENT**
- 1 SURFACE MOUNTED BRANCH CIRCUIT PANELBOARD 208/120V, 3φ, 4W, 100
 - 2 SURFACE MOUNTED BRANCH CIRCUIT PANELBOARD 480/277V, 3φ, 4W, 100
 - 3 CONTROL PANEL, SUPPLIED AND INSTALLED BY DIVISION 23
 - 4 ELECTRIC MOTOR
 - 5 COMBINATION MOTOR STARTER
- DEVICES AND APPURTENANCES**
- 1 DUPLEX RECEPTACLE GF INDICATES GROUND FAULT CIRCUIT INTERRUPTER
 - 2 DUPLEX RECEPTACLE TO BE REMOVED
 - 3 LIGHT SWITCH TO REMAIN
 - 4 LIGHT SWITCH TO BE REMOVED
 - 5 MOTORIZED VALVES
 - 6 PULL BOX
 - 7 JUNCTION BOX
 - 8 JUNCTION BOX TO BE REMOVED

WARNING:
 THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPELLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT, IS PROHIBITED. THIS DOCUMENT IS THE PROPERTY OF CHA CONSULTING AND IS A CLASS 'A' MISDEMEANOR.



CONTRACT:
 HVAC
 REPLACE FEEDWATER TANK
 POWERHOUSE, BUILDING 13

LOCATION:
 ADIRONDACK CORRECTIONAL FACILITY
 OLD RAY BROOK ROAD
 RAY BROOK, NY

CLIENT:
 NYS OFFICE OF
 GENERAL SERVICES

LOCATION: PUMP ROOM 1-8
 MOUNTING: SURFACE
 SOURCE: PANELBOARD PP-2 OKT NO. 8

BANELID PP-3

VOLTS, PHASE, WIRE: 480/277V, 3φ, 4W
 MANS: 125A, MLO
 SHORT CIRCUIT RATING: MATCH FEEDER CB

OKT	LOAD DESCRIPTION	CB AMP/POLE	CONN LOAD KVA	CB AMP/POLE	LOAD DESCRIPTION	OKT				
1	DA-1 20HP DUPELEXER	60/3	7.78	7.78	3.50	15/3	CP-1 15HP DUPELEXER	2		
3					3.50			4		
5					3.50			6		
7	RT-1 3HP DUPELEXER	15/3	7.00	7.00		20/1	SPARE	8		
9						20/1	SPARE	10		
11						20/1	SPARE	12		
		14.78	14.78	14.78	3.50	3.50				
		TOTAL KVA		54.84						

NOTE: ALL MOTOR CIRCUIT BREAKERS SHALL BE HACR RATED

LOADING FIXTURE SCHEDULE

FIXTURE DESIGNATION	TYPE	DESCRIPTION	MOUNTING	LAMPS QUANTITY AND TYPE	VOLTAGE	MANUFACTURER	NOTES
F-1A	2L 4' FLUORESCENT INDUSTRIAL	HEAVY-DUTY INDUSTRIAL WITH 10% UPUGHT APERTURED REFLECTOR, 2-LAMP, 32W T8, WOLV ELECTRONIC BALLAST, 108THD, INSTANT START, PRESSURE-LOCK LAMP HOLDERS ENCLOSED IN SNAP-IN TURRET HOUSING.	SURFACE	(2)F03218/4IK	277V	LITHONIA LIGHTING A710-232-WVOLT-GE810S-WG4FPV	MOUNT UNDER CATWALKS (SEE DETAIL 5/E-001)

- NOTES:**
1. PROVIDE WITH WIREGUARD
 2. SUSPEND STRUT SUPPORTS AS NEEDED TO AVOID CONFLICTS WITH EXISTING MECHANICAL OR ELECTRICAL EQUIPMENT

PROJECT NUMBER: 44707 - H

MARK: 2/28/14

DATE: 2/29/14

DESCRIPTION: BID DOCUMENTS

DESIGNED BY: WAF

DRAWN BY: WAF

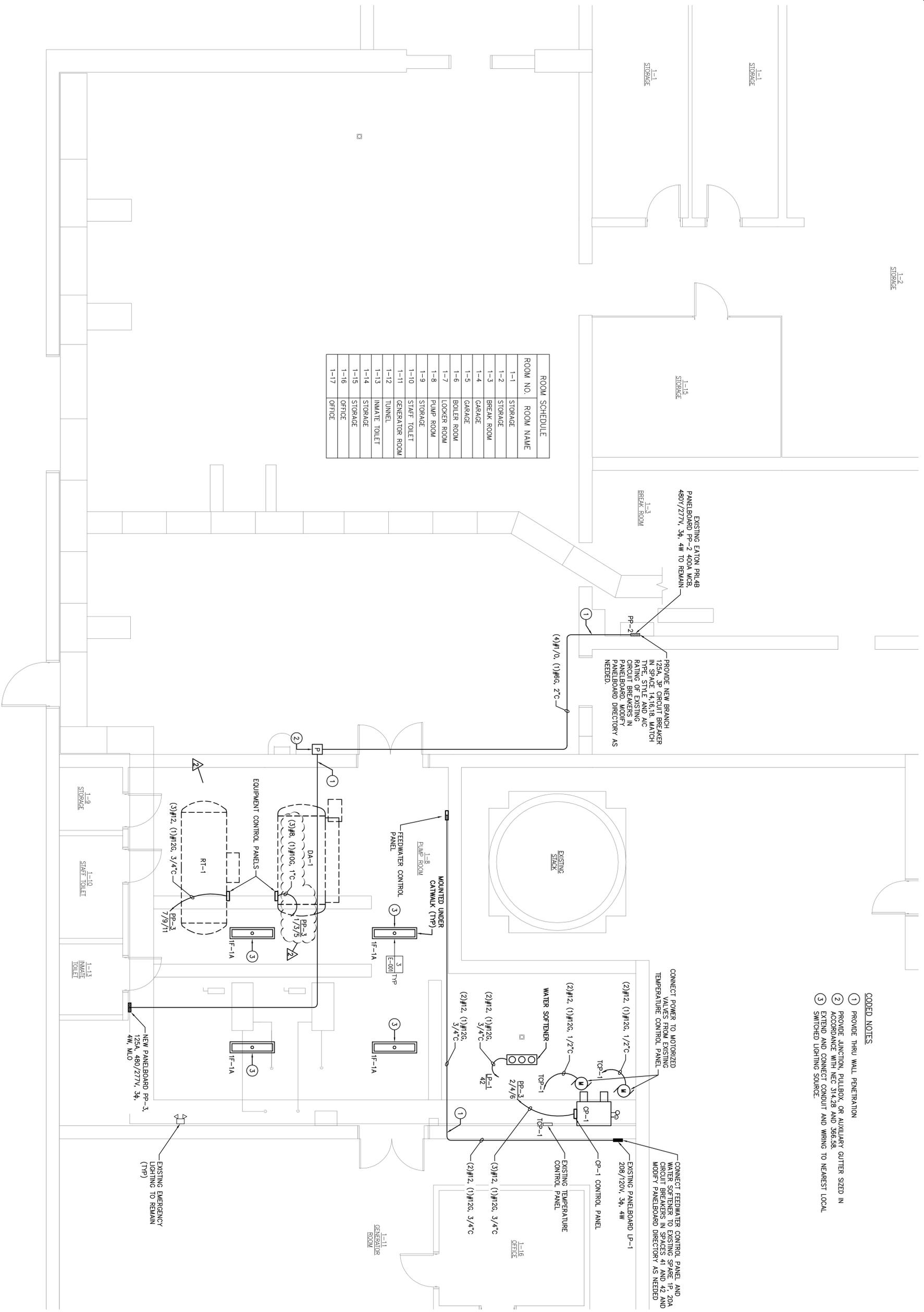
FIELD CHECK: BRUCE DALET (GSS)

APPROVED: MS

SHEET TITLE: ELECTRICAL SYMBOLS, NOTES, SCHEDULES, AND DETAILS

DRAWING NUMBER: E-001

SHEET: 24 OF 27



ROOM NO.	ROOM NAME
1-1	STORAGE
1-2	STORAGE
1-3	BREAK ROOM
1-4	GARAGE
1-5	GARAGE
1-6	BOILER ROOM
1-7	LOCKER ROOM
1-8	PUMP ROOM
1-9	STORAGE
1-10	STAFF TOILET
1-11	GENERATOR ROOM
1-12	TUNNEL
1-13	INMATE TOILET
1-14	STORAGE
1-15	STORAGE
1-16	OFFICE
1-17	OFFICE

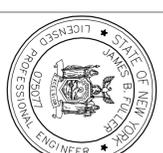
- CODED NOTES**
- 1 PROVIDE THRU WALL PENETRATION
 - 2 PROVIDE JUNCTION, PULLBOX, OR AUXILIARY GUTTER SIZED IN ACCORDANCE WITH NEC 314.28 AND 366.58.
 - 3 EXTEND AND CONNECT CONDUIT AND WIRING TO NEAREST LOCAL SWITCHED LIGHTING SOURCE.

FIRST FLOOR ELECTRICAL PROPOSED PLAN
 1/4"=1'0"

NY'S OFFICE OF GENERAL SERVICES
Serving New York
ANDREW M. CLOAK
 Governor
ROANN M. DESTITO
 Commissioner

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CONTRACT:
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TITLE:
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 POWERHOUSE, BUILDING 13
LOCATION:
 ADIRONDACK CORRECTIONAL FACILITY
 OLD RAY BROOK ROAD
 RAY BROOK, NY
CLIENT:
 NYS OFFICE OF
 GENERAL SERVICES

MARK	DATE	DESCRIPTION
▲	2/28/14	ADDENDUM 2
	2/3/14	BD DOCUMENTS

PROJECT NUMBER: 44707 - H
DESIGNED BY: WAF
DRAWN BY: WAF
FIELD CHECK: DALE BALET (OAS)
APPROVED: MS
SHEET TITLE: FIRST FLOOR ELECTRICAL PROPOSED PLAN

DRAWING NUMBER: E-102
SHEET: 26 **OF:** 27