



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

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**ADDENDUM NO. 2 TO PROJECT NO. Q1700**

**ELECTRICAL WORK  
REPLACE LIGHTING FIXTURES  
DOT REGION 4, WYOMING COUNTY  
ROUTE 78  
JAVA, NY 14082**

November 4, 2016

**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.

**PROJECT MANUAL**

1. PROJECT TITLE: Page 000101 and 000105, Replace Project Title with the following:

PROJECT NO. Q1700-E  
ELECTRICAL WORK  
REPLACE LIGHTING FIXTURES  
DOT REGION 4, WYOMING COUNTY  
ROUTE 78  
JAVA, NY 14082  
SEPTEMBER 26, 2016

**SPECIFICATION GROUP**

2. SECTION 265629 FUEL ISLAND LIGHTING: Add the accompanying section (pages 265629 – 1 thru 265629 – 6) to the Project Manual
3. SECTION 260924 LIGHTING CONTROLS: Add the accompanying section (pages 260924 – 1 thru 260924 – 2) to the Project Manual

**DRAWING**

4. Addendum Drawings:
  - a. Drawing Nos. E-101, E-102, and E-103, noted “ADDENDUM DRAWING 11/3/16” accompanies this Addendum and forms part of the Contract Documents.

**END OF ADDENDUM**

Margaret F. Larkin  
Executive Director  
Design and Construction

## SECTION 260924

### LIGHTING CONTROLS

#### PART 1 GENERAL

##### 1.01 SUBMITTALS

- A. Waiver of Submittals: The "Waiver of Certain Submittal Requirements" in Section 013300 does not apply to this Section.
- B. Submittals Package: Submit the shop drawings, and the product data specified below at the same time as a package.
- C. Shop Drawings: Wiring and/or schematic diagram of the control circuits as proposed to be installed (standard diagrams will not be accepted).
- D. Product Data: Catalog sheets, specifications and installation instructions.

#### PART 2 PRODUCTS

##### 2.01 PHOTOELECTRIC CONTROL

- A. Intermatic Inc.'s K4136M, Paragon Electric Co.'s CW Series, or Tork Inc.'s 2100 Series, having:
  - 1. Moveable shield for sensitivity adjustment.
  - 2. 120 volt operation, SPST, minimum rating of 15A, 1800W.
  - 3. 208-240V operation, SPST, minimum rating of 8.6A, 1800W.
- B. On-Off-Auto Switches: Maintained contact, single pole, double throw, center off:
  - 1. 20 Amp: Bryant Electric Co.'s 4922, Eagle Electric Mfg. Co. Inc.'s 2225B, General Electric Co.'s GE5957-1, Hubbell Inc.'s 1385, Leviton Mfg. Co. Inc.'s 1285, or Pass & Seymour Inc.'s 1225.

##### 2.02 CONTACTORS

- A. GE.'s 463M Lighting Contactor, having:
  - 1. Surface mounted NEMA 1 enclosure.
  - 2. Hand-off-auto selector switch.
  - 3. 120 volt control circuit (with transformer if required).
  - 4. Mechanically held contacts.
  - 5. Contacts rated 30 amps each.
  - 6. 2 wire control.
  - 7. Normally open contacts.
  - 8. OFF-AUTO maintained contact control selector switch.
  - 9. On and Off pilot lights.
  - 10. Number of poles as required to break all line and neutral conductors running to dispensing island.

## **PART 3 EXECUTION**

### **3.01 INSTALLATION**

- A. Install lighting controls in accordance with manufacturer's printed instructions unless otherwise indicated.
  
- B. Wire circuit so that lighting is:
  - 1. On at dusk by photoelectric control.
  - 2. Off at dawn by photoelectric control.
  - 3. Manual or photocell control through "On-Off-Auto" switch.

**END OF SECTION**

NMW

## SECTION 265629

### FUEL ISLAND LIGHTING

#### PART 1 GENERAL

##### 1.01 SUBMITTALS

- A. Waiver of Submittals: The "Waiver of Certain Submittals Requirements" in Section 013300 does not apply to the following products specified in this section.
  
- B. Product Data: Catalog sheets, specifications and installation instructions. Include candlepower distribution curves for each type fixture if different from Company or catalog number specified.

##### 1.02 QUALITY ASSURANCE

- A. Equipment Qualifications For Products Other Than Those Specified:
  - 1. At the time of submission provide written notice to the Director of the intent to propose an "or equal" for products other than those specified. Make the "or equal" submission in a timely manner to allow the Director sufficient time to review the proposed product, perform inspections and witness test demonstrations.
  - 2. If products other than those specified are proposed for use furnish the name, address, and telephone numbers of at least 5 comparable installations that can prove the proposed products have performed satisfactorily for 3 years. Certify in writing that the owners of the 5 comparable installations will allow inspection of their installation by the Director's Representative and the Company Field Advisor.
    - a. Make arrangements with the owners of 2 installations (selected by the Director) for inspection of the installations by the Director's Representative. Also obtain the services of the Company Field Advisor for the proposed products to be present. Notify the Director a minimum of 3 weeks prior to the availability of the installations for the inspection, and provide at least one alternative date for each inspection.
    - b. Only references from the actual owner or owner's representative (Security Supervisor, Maintenance Supervisor, etc.) will be accepted. References from dealers, system installers or others, who are not the actual owners of the proposed products, are not acceptable.
      - 1) Verify the accuracy of all references submitted prior to submission and certify in writing that the accuracy of the information has been confirmed.
  - 3. The product manufacturer shall have test facilities available that can demonstrate that the proposed products meet the contract requirements.

- a. Make arrangements with the test facility for the Director's Representative to witness test demonstrations. Also obtain the services of the Company Field Advisor for the proposed product to be present at the test facility. Notify the Director a minimum of 3 weeks prior to the availability of the test facility, and provide at least one alternative date for the testing.
4. Provide written certification from the manufacturer that the proposed products are compatible for use with all other equipment proposed for use for this system and meet all contract requirements.

## **PART 2 PRODUCTS**

### **2.01 LED LUMINAIRES**

- A. Type PLL-1: Model ARE-EDG-3M-DA-08-E-UL-BZ-350 Area Light – Pole Mounted by Cree Lighting (formerly BETA Lighting).
  1. Slim low profile design with rugged cast aluminum fixture sides, weathertight LED driver compartments, and high performance aluminum heatsinks.
  2. Mounting Housing: Direct arm type constructed of rugged die cast aluminum which mounts to 2 inch tenon.
  3. LED Lighting: IES Type III, modular design accommodates varied lighting output from high brightness, white 6000K (+/- 500k per full fixture, minimum 70 CRI, long life LED
    - a. LED Drivers: Class 1, 120-277 V, with power factor > 90 percent, and THD < 20 percent full load.
  4. Finish: Epoxy primer with bronze powder top coat to match lighting standard and transformer base.

### **2.02 LIGHTING STANDARDS**

- A. Type: Steel, 4 inch square non-tapered shaft, Cree's (formerly Beta Lighting) Model PS4S15C1-BZ, with the following:
  1. Finish: Epoxy primer with bronze powder top coat to match luminaire and transformer base.
  2. Wall Thickness: 0.125 inch wall thickness.
  3. Height: 15 feet.
  4. Anchor Bolts: Hot dipped galvanized, number and size of anchor bolts as recommended by lighting standard manufacturer.
    - a. Galvanized nut, lockwasher and flatwasher with each bolt.
  5. Template for setting anchor bolts.
  6. Provisions for Luminaire Mounting:
    - a. Holes predrilled to accommodate direct arm mounted luminaires.
    - b. Pole top tenon to accommodate tenon mounted luminaires.
  7. Base cover attached to base with vandal resistant fasteners.
  8. Ground lug at base.

## **2.04 TRANSFORMER BASES**

- A. Cast aluminum body construction as manufactured by Tapco Inc, Flemington Aluminum and Brass, Inc, and Valmont, Inc.
  - a. Vandal resistant stainless steel hardware
  - b. Tapered body construction
  - c. Galvanized steel anchor bolts for fastening to concrete base.
  - d. Hardware –Galvanized steel connecting bolts, lock washers, flat washers, retaining lug and hex nuts
  - e. Grounding provision with hardware.
  - f. Steel access door with hardware
  - g. Finish: Epoxy primer with bronze powder top coat to match luminaire and lighting standard

## **2.05 TAGS**

- A. Embossed or engraved aluminum tags with one inch high characters stating lighting standard number.

## **2.06 GROUT**

- A. L&M Const. Chemicals Inc.'s Crystex, Protex Industries Inc.'s Propak, Sonneborn's SonogROUT, or U.S. Grout Corp.'s 5 Star Grout.

## **2.07 INSULATED GROUNDING BUSHINGS**

- A. Appleton Electric Co.'s GIB-50 Series, EfcOR Inc.'s 56-50-4 Series, Midwest Electric Mfg. Corp.'s GLL Series, OZ/Gedney Co.'s IBC-50L Series, Raco Inc.'s 1212 Series, or Thomas & Betts Corp.'s 3870 Series.

## **2.08 ANCHORING DEVICES**

- A. Sleeve Anchors: Molly/Emhart's Parasleeve Series, Phillips' Red Head AN, HN, FS Series, or Ramset's Dynabolt Series.
- B. Wedge Anchors: Hilti's Kwik Bolt Series, Molly/Emhart's Parabolt Series, Phillips' Red Head WS, or Ramset's Trubolt Series.
- C. Self-Drilling Anchors: Phillips' Red Head Series S or Ramset's Ram Drill Series.
- D. Non-Drilling Anchors: Hilti's Drop-In Anchor Series, Phillips' Red Head J Series, or Ramset's Dynaset Series.
- E. Stud Anchors: Phillips' Red Head JS Series.

## **2.09 MISCELLANEOUS FASTENERS**

- A. Except where shown otherwise on the Drawings, furnish type, size, and grade required for proper installation of the Work, selected from but not limited to the following: Furnish galvanized fasteners for exterior use, or for items anchored to exterior walls, except where stainless steel is indicated.
  - 1. Standard Bolts and Nuts: ASTM A 307, Grade A, regular hexagon head.
  - 2. Lag Screws: ASME B18.2.1.
  - 3. Machine Bolts: ASME B18.5 or ASME B18.9, Type, Class, and Form as required.
  - 4. Wood Screws: Flat head, ASME B18.6.1.
  - 5. Plain Washers: Round, ASME B18.22.1.
  - 6. Lock Washers: Helical, spring type, ASME B18.21.1.
  - 7. Toggle Bolts: Spring Wing Type; Wing AISI 1010, Trunion Nut AISI1010 or Zamac Alloy, Bolt Carbon Steel ANSI B18.6.3.
  
- B. Stainless Steel Fasteners: Type 316 for exterior Work; Phillips head screws and bolts for exposed Work unless otherwise specified.

## **PART 3 EXECUTION**

### **3.01 PREPARATION**

- A. Before installing any Work, lay out the proposed location of lighting standards, etc. and have same approved.

### **3.02 INSTALLATION**

- A. Lighting Standards:
  - 1. Attach lighting standard to transformer base with anchor bolts in accordance with manufacturer's printed installation instructions
  - 2. Install lighting standards vertical:
    - a. Use 2 nuts on each anchor bolt. Run first nut down on the thread to the top of the foundation.
    - b. Install pole, run second nut down.
    - c. Adjust pole if necessary, then tighten nuts in accordance with pole manufacturer's recommendations.
    - d. Seal voids between metal base of lighting standard and transformer base.
  
- B. Transformer Base:
  - 1. Attach transformer base to concrete slab with anchor bolts in accordance with manufacturer's printed installation instructions
  - 2. Install transformer base vertical:
    - a. Use 2 nuts on each anchor bolt. Run first nut down on the thread to the top of the foundation.
    - b. Install transformer base, run second nut down.
    - c. Adjust transformer base if necessary, then tighten nuts in

accordance with transformer base manufacturer's recommendations.

- d. Grout voids between metal base of transformer base and concrete slab. Create a drain through the grout by slipping a short length of conduit under the base in the wet grout, projecting it into the large drain hole in the base of the lighting standard. Rotate the conduit to finish the drain, then remove conduit.

C. Luminaires:

1. Type PLL-1 Fixtures: Attach luminaire to 4 inch square pole in accordance with manufacture's printed installation instructions.

D. Grounding:

1. Provide a bare copper equipment grounding conductor (same size as phase conductors) installed within the conduit. Terminate and bond equipment grounding conductor with suitable fitting in panel.
2. Bond lighting standards, conduit and equipment grounding conductors in lighting standard base with indent type splice connectors, insulated grounding bushings and ground lug on standard.
3. Bond rigid ferrous metal conduit in manholes to the equipment grounding conductor.
4. Make grounding splice connections in manholes with exothermic type weld or compression connectors.

- E. Tags: Install aluminum tags with lighting standard numbers thereon. Fasten tags to standards with vandal resistant screws, 4 feet above finished grade, facing roadway.

### **3.03 FASTENER INSTALLATION**

- A. Where specific fasteners are not specified or indicated for securing items to in-place construction, provide appropriate type, size, and number of fasteners for a secure, rigid installation.
- B. Install anchoring devices and other fasteners in accordance with manufacturer's printed instructions.

### **3.04 FASTENER SCHEDULE**

A. Material:

1. Use hot dipped galvanized or stainless steel anchors and fasteners in damp and wet locations.
2. For corrosive atmospheres or other extreme environmental conditions, use fasteners made of materials suitable for the conditions.

B. Types and Use: Unless otherwise specified or indicated use:

1. Anchoring devices to fasten items to solid masonry and concrete when the anchor is not subjected to pull out loads, or vibration in shear loads.

### **3.05 ATTACHMENT SCHEDULE**

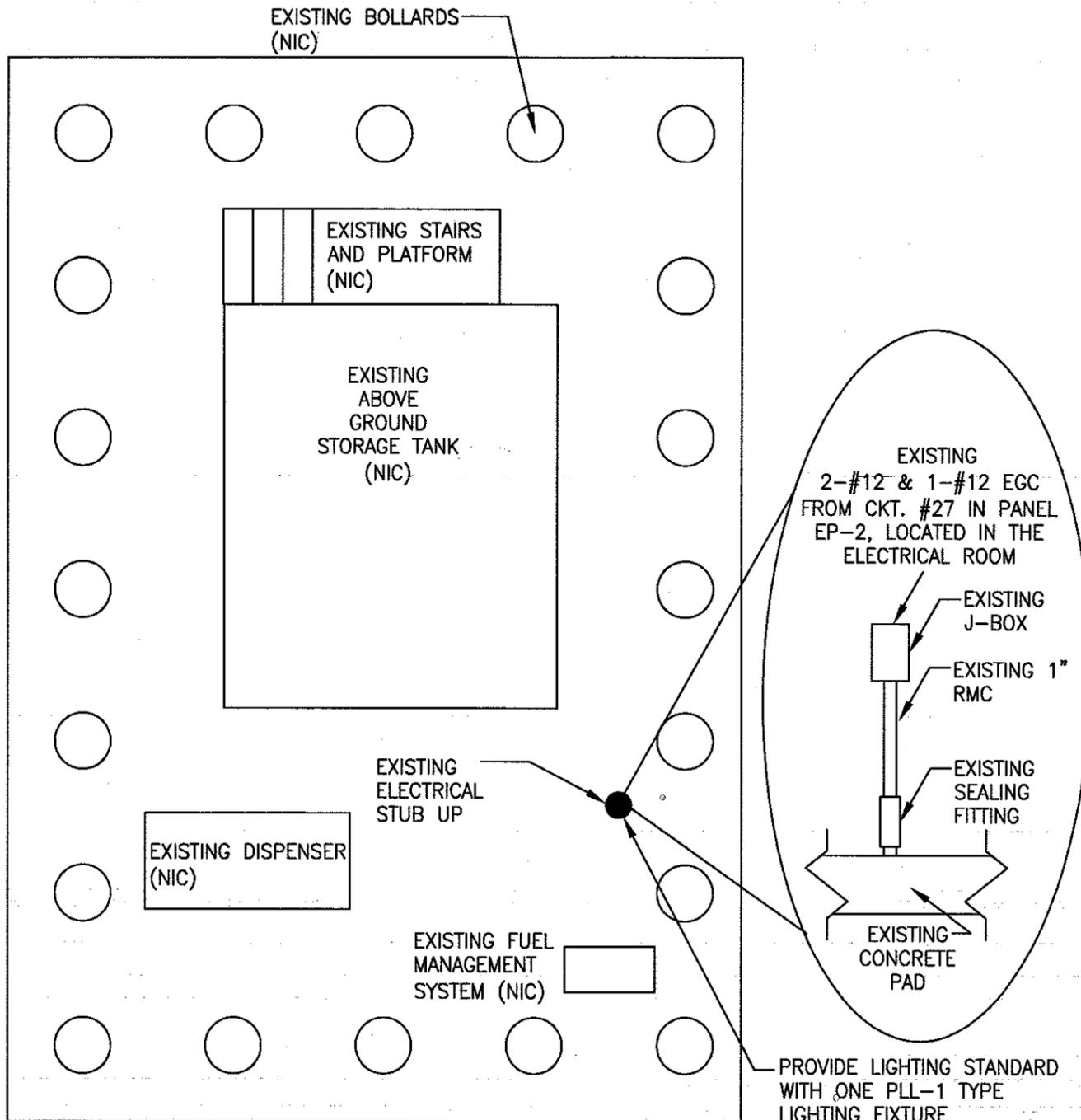
- A. Use the following methods of attachment to suit type of construction unless otherwise specified or indicated on the drawings:
  - 1. Attachment to existing concrete: Use anchoring devices.

**END OF SECTION**

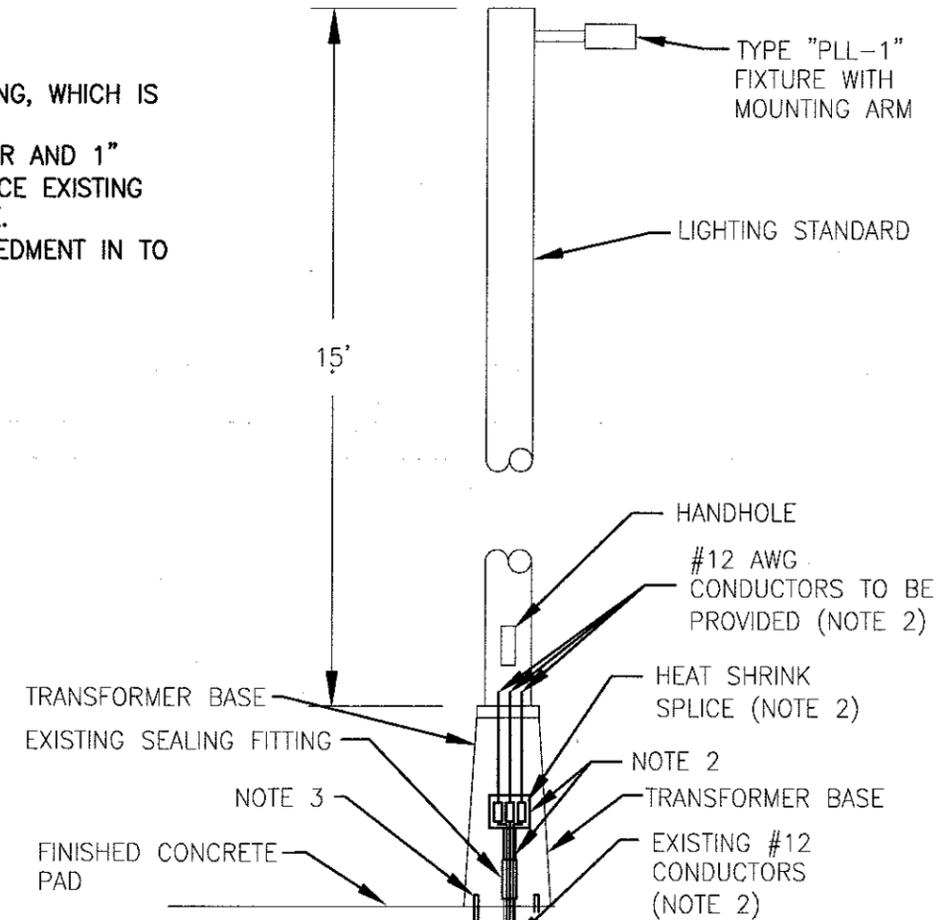
GLB

**SPECIFIC NOTE:**

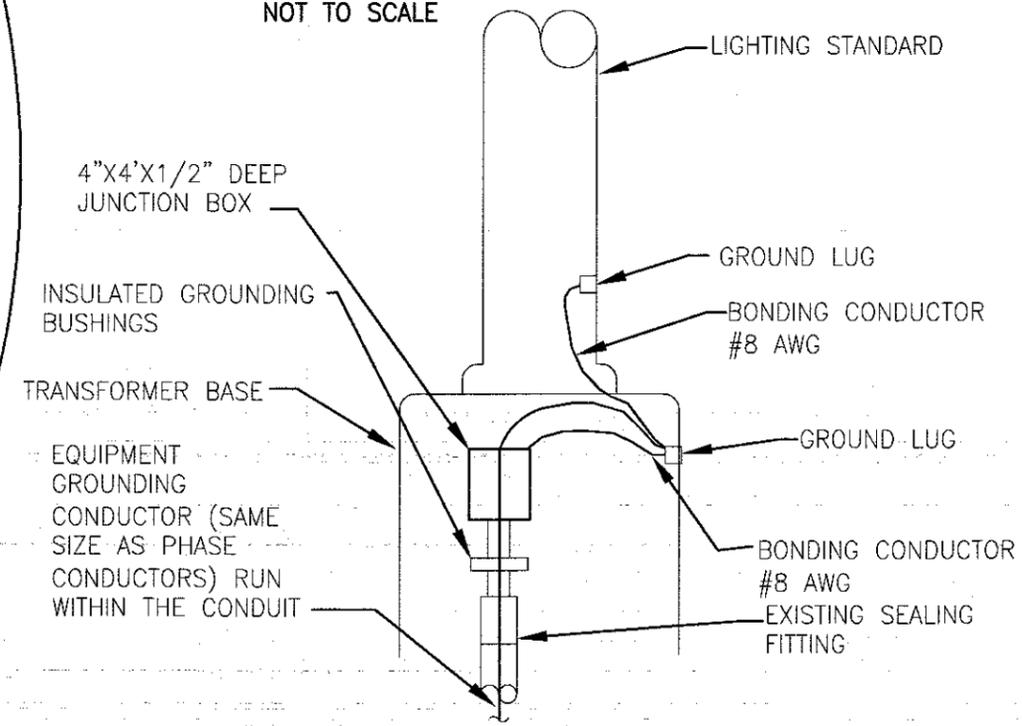
1. REMOVE EXISTING JUNCTION BOX AND CONDUIT BACK TO SEALING FITTING, WHICH IS TO REMAIN.
2. PROVIDE 4" X 4" X 1/2" DEEP GALVANIZED JUNCTION BOX WITH COVER AND 1" RMC, 6" IN LENGTH. IN GALVANIZED JUNCTION BOX, HEAT SHRINK SPLICE EXISTING CONDUCTORS TO CONDUCTORS TO BE PROVIDED FOR LIGHTING FIXTURE.
3. PROVIDE 3/4" DIAMETER X 8" LONG EXPANSION ANCHOR WITH 5" EMBEDMENT IN TO EXISTING CONCRETE PAD (TYPICAL OF 4).



**EXISTING FUEL ISLAND DETAIL**  
NOT TO SCALE



**LIGHTING STANDARD DETAIL**  
NOT TO SCALE



**GROUNDING AND BONDING DETAIL FOR LIGHTING STANDARD**  
NOT TO SCALE



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.

**ELECTRICAL**  
REPLACE LIGHTING FIXTURES

DOT REGION 4, WYOMING COUNTY  
ROUTE 78  
JAVA, NY 14082  
NYS DEPARTMENT OF  
TRANSPORTATION

|          |                  |
|----------|------------------|
| 11/03/16 | ADDENDUM DRAWING |
| 09/28/16 | BID DOCUMENT     |

| MARK            | DATE       | DESCRIPTION |
|-----------------|------------|-------------|
| PROJECT NUMBER: | Q1700-E    |             |
| DESIGNED BY:    | G. BRADLEY |             |
| DRAWN BY:       | G. BRADLEY |             |
| CHECKED BY:     |            |             |
| APPROVED BY:    |            |             |

SHEET TITLE  
FUEL ISLAND LIGHTING  
DETAILS

17x11 PLOT SHEET



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.

**ELECTRICAL**

REPLACE LIGHTING FIXTURES

DOT REGION 4, WYOMING COUNTY  
ROUTE 78  
JAVA, NY 14082

NYS DEPARTMENT OF  
TRANSPORTATION

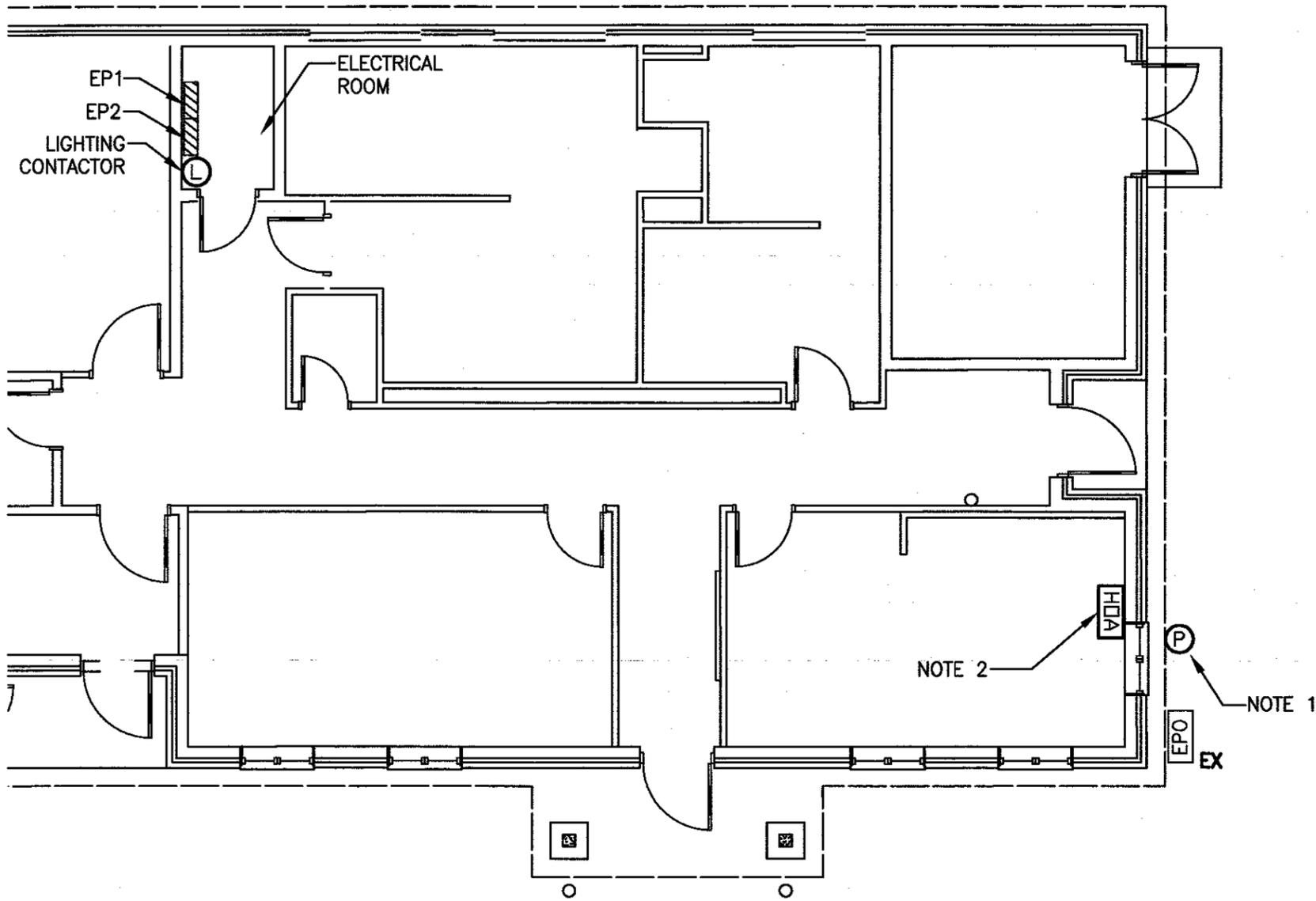
| MARK | DATE     | DESCRIPTION      |
|------|----------|------------------|
|      | 11/03/16 | ADDENDUM DRAWING |
|      | 09/26/16 | BID DOCUMENT     |

|                 |            |
|-----------------|------------|
| PROJECT NUMBER: | Q1700- E   |
| DESIGNED BY:    | G. BRADLEY |
| DRAWN BY:       | G. BRADLEY |
| CHECKED BY:     |            |
| APPROVED BY:    |            |

SHEET TITLE  
  
SITE PLAN

E-102

SHEET OF



EXISTING FUEL ISLAND

**GENERAL NOTES:**

(THIS DRAWING ONLY)

- A. SEE DRAWING E-103 FOR POWER ONE LINE

**SPECIFIC NOTES:**

(THIS DRAWING ONLY)

- 1. MOUNT PHOTOCELL ON THE EXTERIOR OF THE BUILDING AT APPROXIMATELY 10 FEET ABOVE GRADE AS DIRECTED.
- 2. LOCATE HAND-OFF-AUTO SWITCH AS DIRECTED BY THE DIRECTORS REPRESENTATIVE.

17x11 PLOT SHEET



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.

**ELECTRICAL**  
**REPLACE LIGHTING FIXTURES**

DOT REGION 4, WYOMING COUNTY  
ROUTE 78  
JAVA, NY 14082  
NYS DEPARTMENT OF TRANSPORTATION

| MARK            | DATE     | DESCRIPTION      |
|-----------------|----------|------------------|
|                 | 11/03/16 | ADDENDUM DRAWING |
|                 | 09/26/16 | BID DOCUMENT     |
| PROJECT NUMBER: |          | Q1700-E          |
| DESIGNED BY:    |          | G. BRADLEY       |
| DRAWN BY:       |          | G. BRADLEY       |
| CHECKED BY:     |          |                  |
| APPROVED BY:    |          |                  |

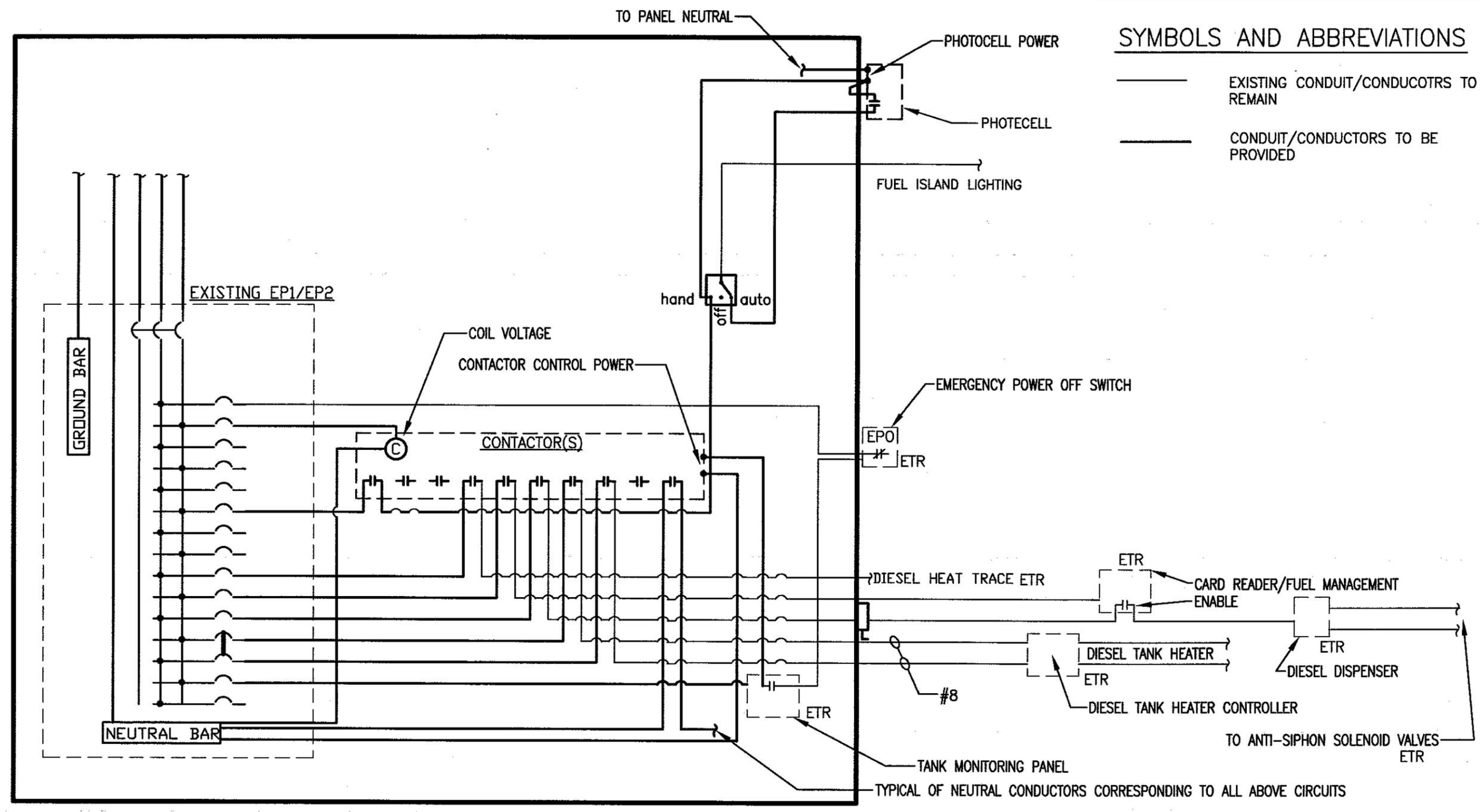
SHEET TITLE  
**POWER ONE LINE DIAGRAM**

E-103

SHEET OF

**SYMBOLS AND ABBREVIATIONS**

- EXISTING CONDUIT/CONDUCTORS TO REMAIN
- CONDUIT/CONDUCTORS TO BE PROVIDED



**GENERAL NOTES:**

- (THIS DRAWING ONLY)
- A. MINIMUM CONDUCTOR SIZE #12 UNLESS OTHERWISE NOTED.
  - B. SEE DWG. E-102 'FLOOR PLAN' FOR LOCATIONS
  - C. PROVIDE NUMBER OF CONDUCTORS AS REQUIRED TO OPEN ALL LINE AND NEUTRAL CONDUCTORS SHOWN ON DIAGRAM

TYPICAL OF NEUTRAL CONDUCTORS CORRESPONDING TO ALL ABOVE CIRCUITS

17x11 PLOT SHEET