

SECTION 16421

UTILITY SERVICE ENTRANCE

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Provide new incoming electrical utility service entrances.
- B. Provide new incoming telephone utility service entrances.
- C. Provide new incoming cable television utility service entrances.

1.2 RELATED SECTIONS

- A. Section 16111 - Conduit.
- B. Section 16123 - Wire and Cable.
- C. Section 16450 - Grounding.
- D. Section 16470 - Panelboards.
- E. Section 16742 - Telephone System.
- F. Section 16745 - Cable Television

1.3 ELECTRICAL SYSTEM DESCRIPTION

- A. Electrical Service Description: The existing overhead *CMP* electrical utility line at St. Lawrence Street shall be removed, and a new underground electrical service shall be provided as shown on the Contract Drawings. The contractor shall coordinate with the utility company all the work required to complete this project.
- B. Work associated with the new electrical services shall be coordinated with:
Central Maine Power Company (CMP)
- C. Arrange with *CMP* to modify the existing overhead utility line on St. Lawrence Street as required to provide a new underground secondary service to the building. Arrange with *CMP* to provide a new pole mounted service transformer bank, with a 208/120 volt, 3-phase secondary. A new 3-phase secondary service shall be extended from the pole mounted service transformer to the modular meter center.

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- D. Work by *CMP*: The Contractor shall make all necessary arrangements with *CMP* to provide the following:
 - 1. Modifications to the existing overhead utility line at St. Lawrence Street.
 - 2. New pole mounted service transformer bank.

- E. Work by Contractor: The Contractor shall provide the following:
 - 1. All conduit and secondary service conductors from the pole mounted service transformer to the meter centers at the building.
 - 2. Service meter center.
 - 3. Service grounding.

- F. Work by General Contractor:
 - 1. Excavation and backfill.

1.4 TELEPHONE SYSTEM DESCRIPTION

- A. Telephone Service Description: A new underground telephone service shall be provided as shown on the Contract Drawings. The contractor shall coordinate with the utility company all the work required to complete this project.

- B. Arrange with *FairPoint* to modify the existing overhead utility line at St. Lawrence Street as required. Also, arrange with *FairPoint* to provide a new underground service from the utility pole at St. Lawrence Street to the building. Telephone service cable shall be extended to new telephone service termination equipment within the building.

- C. Work associated with new telephone services shall be coordinated with: *FairPoint*.

- D. Work by *FairPoint*: The Contractor shall make all necessary arrangements with *FairPoint* to provide the following:
 - 1. Modification of existing overhead telephone service line at St. Lawrence Street as required.
 - 2. Provide new underground telephone service cables from the utility pole at St. Lawrence Street.
 - 3. Service entrance connections for individual living units, including wiring termination means, and service cables from exterior connection point on the building.

- E. Work by Contractor: The Contractor shall provide the following:
 - 1. Underground conduits between the utility pole at St. Lawrence Street and the service termination equipment at the building.

1.5 CABLE TELEVISION SYSTEM DESCRIPTION

- A. Cable Television Service Description: A new underground cable television service shall be provided as shown on the Contract Drawings. The contractor shall coordinate with the utility company all the work required to complete this project.

- B. The Owner will arrange with *Time-Warner* to provide a new underground service from the utility pole at St. Lawrence Street to the building. Cable TV service cable shall be extended

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underground to new cable service termination equipment in the electrical room in the building.

- C. Work by *Time-Warner*: Work associated with new cable television services shall be arranged by the Owner.
- D. Work by Contractor: The Contractor shall provide the following:
 - 1. Underground conduits between the utility pole at St. Lawrence Street and the service termination equipment at the building.

1.6 QUALITY ASSURANCE

- A. Conform to the requirements of ANSI/NFPA 70 - National Electrical Code.
- B. Conform to the requirements of:
 - 1. *Central Maine Power Company*.
 - 2. *FairPoint Communications*.
 - 3. *Time Warner*

1.7 UTILITY SERVICE CHARGE ALLOWANCE

- A. The Contractor shall include under Division 16 an allowance of \$20,000.00 to cover the cost of utility service charges. This allowance will be paid according to actual utility company invoices received.

PART 2 - PRODUCTS

2.1 UTILITY SERVICES MATERIALS

- A. Conduit shall be as specified in Section 16111.
- B. Electrical service conductors shall be as specified in Section 16123.
- C. Service grounding shall be as specified in Section 16450.

2.2 MODULAR METER CENTERS

- A. Manufacturers:
 - 1. *Square D*
 - 2. *Anchor*
 - 3. *Landis & Gyr*
 - 4. *Milbank*
 - 5. *Murray*
- B. UL listed, multi-gang meter center with ringless meter sockets and main circuit breaker service sections as detailed on the Drawings.

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- C. Meter Centers shall be NEMA Type 3R construction, rated for use on a three-wire 240/120-volt system. Meter sockets shall have a fifth terminal in the 6 o'clock position, and shall include a simple handle lever operated by-pass. Meter sockets shall be rated as indicated on the Drawings. Main devices shall have 100K AIC ratings.
- D. All meters shall be supplied with an output branch circuit breaker, in sizes as indicated on the Drawings.
- E. Approval: Meter centers shall be approved by the *Central Maine Power Company*.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install all service related work in conformance with the standards and requirements of the serving utility.

END OF SECTION