

Section 16060

ELECTRICAL DEMOLITION

PART 1 GENERAL

1.01 SUMMARY

This Section includes Electrical Demolition as indicated on the Contract Drawings.

1.02 MEASUREMENT AND PAYMENT

No separate payment for work performed under this Section. Include cost of same in Contract price bid for work of which this is a component part.

1.03 REFERENCES

This specification references the following publications in their current editions. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

- A. Temporary wiring of systems to maintain operation of facilities while undergoing modifications and demolition shall be provided in accordance with:

- 1. NFPA 70: National Electrical Code (NEC), Article No. 590 – Temporary Installations

1.04 SUBMITTALS

- A. Annotate existing drawings to sequence the demolition of systems, equipment removal, and temporary hook-ups.
- B. Schedule with the Project Manager for required shut downs to accommodate system demolition and installation of temporary facilities.

1.05 RELATED REQUIREMENTS (NOT USED)

1.06 QUALITY ASSURANCE

- A. Verify field measurements and circuiting arrangements are as shown on Plans.
- B. Verify that abandoned wiring and equipment serve only abandoned facilities. Remove abandoned wiring and conduits.
- C. Demolition items on the Contract Drawings are based on field observation and existing record documents. Report discrepancies to the Project Manager before disturbing existing installations.

- D. By beginning demolition, Contractor accepts existing conditions and warrants that they shall maintain service to equipment and items not scheduled or indicated for removal, and that he shall return to the Owner all items and systems in good operating condition, or discard it at the Owner's option at no cost to the Owner.

1.07-1.13 (NOT USED)

PART 2 PRODUCTS

2.01 MANUFACTURER(S) (NOT USED)

2.02 MATERIALS AND EQUIPMENT

Materials and equipment for patching and extending work as specified in individual Sections.

2.03 FABRICATION

Temporary electrical wiring and facilities shall be designed and constructed in strict compliance with NEC - Article No. 590.

2.04 SOURCE QUALITY CONTROL (NOT USED)

PART 3 EXECUTION

3.01 GENERAL (NOT USED)

3.02 PREPARATION

- A. Disconnect electrical systems in walls, floors, and ceilings scheduled for removal.
- B. Coordinate power outages with the Project Manager to provide continuous service to operating equipment.
- C. Provide temporary wiring and connections to maintain existing systems in service during construction. When work must be performed on energized equipment or circuits, use personnel experienced in such operations. Work to be carried out on energized equipment shall receive prior approval from the Project Manager or Engineer, as required.
- D. Existing Electrical Equipment:
1. Maintain existing system in service until new system is complete and ready for service.
 2. Disable system only to make switchovers and connections.
 3. Obtain permission from the Project Manager at least 21 days before partially or completely disabling system.

4. Minimize outage duration

3.03 INSTALLATION AND CONSTRUCTION

- A. Survey the existing electrical systems and equipment identified for removal with representatives from the other trades prior to performing any demolition work. Identify all conduit and equipment to be removed with tags or paint.
- B. The electrical and process equipment to be removed or relocated under this contract has been identified on the Plans.
- C. Demolition and Extension of Existing Electrical Work
 1. Remove, relocate, and extend existing installations to accommodate new construction.
 - a. Trace out existing wiring that is to be relocated, or removed and perform the relocation or removed work as required for a complete operating and safe system.
 - b. Remove abandoned wiring to source of supply, turn device off, mark as spare.
 - c. Unless otherwise specifically noted, remove unused exposed conduit and support systems back to point of concealment including abandoned circuit above accessible ceiling finishes. Removed unused wiring back to source (or nearest point of usage). Cut conduit flush with walls and floors, and patch surfaces.
 - d. Remove exposed conduits, wireways, outlet boxes, pull boxes and hangers made obsolete by the alterations, unless specifically designated to remain. Patch surfaces and provide blank covers for abandoned outlets which are removed.
 - e. Disconnect abandoned outlets and remove devices. Remove abandoned outlets if conduit servicing them is abandoned and removed. Provide blank cover for abandoned outlets not removed.
 - f. Disconnect and remove abandoned panelboards and distribution equipment.
 - g. Where a piece of equipment is to be removed all associated ancillary components (e.g. solenoid valves, pressure switches, etc.) and associated wiring and conduit shall also be removed.
 - h. Equipment, building or structures scheduled for complete demolition shall be made safe from electrical shock hazard prior to demolition. Disconnect all electrical power, communications, alarm and signal system.

- i. All equipment, materials, controls, motor starters, branch and feeder breakers, panelboards, transformers, wiring, raceways, etc. furnished and installed to keep circuits temporarily energized shall be removed when the permanent installation is fully operational.
 - j. Disconnect and remove electrical devices and equipment serving utilization equipment that has been removed.
 - k. Remove electrical work associated with equipment scheduled for demolition except those portions to remain or be reused.
 - l. Disconnect and remove abandoned electrical equipment unless otherwise indicated or specified.
 - m. Disconnect and remove abandoned luminaries. Remove brackets, stems, hangers and other accessories.
2. Where electrical systems pass through the demolition areas to serve other portions of the premises, they shall remain or be suitably relocated and the system restored to normal operation.
 3. Repair adjacent construction and finishes damaged during demolition and extension work.
 4. Maintain access to existing active installations. Modify installations or provide access panels as appropriate.
 5. Extend existing installations using materials and methods as specified for new work.
- D. Disposal and Salvage
1. When items are to be removed, verify with the Project Manager to determine if any items are to be salvaged.
 2. Equipment scheduled to be turned over to the Project Manager shall be carefully disconnected, removed and delivered to the Project Manager where indicated. Provide labor, hoisting and transportation of the equipment.
 3. Materials and equipment that are not designated to be salvaged shall be removed and properly disposed of by the Contractor.

3.04-3.06 (NOT USED)

3.07 CLEANING

- A. Clean and repair existing materials and equipment which remain or are to be reused.

B. Panelboards:

1. Clean exposed surfaces and check tightness of electrical connections.
2. Replace damaged circuit breakers and provide closure plates for vacant positions.
3. Provide typed circuit directory showing revised circuiting arrangement.

3.08-3.10 (NOT USED)

END OF SECTION