16010 BASIC ELECTRICAL REQUIREMENTS

PART 1: GENERAL

1.01 CODES AND STANDARDS

A. Electrical equipment and installation shall be in compliance with the most recent versions of the National Electrical Code (“NEC”), National Fire Protection Association (“NFPA”), American National Standards Institute Code (“ANSI”), The American with Disabilities Act (“ADA”), International Conference of Building Officials Codes (“ICBO”), State of New York Codes, Rules, & Regulations (“NYCRR”), Illuminating Engineering Society of North America Standards (“IESNA”), The Institute of Electrical and Electronics Engineers standards (“IEEE”), The International Organization for Standardization (“ISO”), and state, municipal or other codes, rules or regulations applicable to the work shall be followed.

B. Electrical equipment, components, and accessories shall be UL certified for the purpose for which the equipment, components, and accessories are used.

1.02 INSPECTIONS

A. The City of Ithaca Building Department shall inspect work in the City of Ithaca. The New York State Board of Fire Underwriters shall inspect work in areas other than the City of Ithaca. The electrical contractor shall furnish the original Certificate of Inspection to the Cornell University Electrical Shop, and a copy to Cornell University’s Project Manager for the following items before submitting their final payment requisition at the end of the project.

1. Temporary inspection of electrical work for temporary construction power for the job site and contractor trailers requiring power.

2. Temporary inspection of building primary and secondary power systems, before energizing building permanent power.

3. Final inspection of the complete electrical system, submitting the final payment requisition at end of project.

B. The Fire Prevention Bureau of the Ithaca Fire Department shall inspect fire detection, alarm, and suppression systems work in the City of Ithaca. The electrical contractor shall furnish a Systems Installation Permit to the Cornell University Electrical Shop before submitting their final payment requisition at the end of the project.
C. The Contractor shall assist Cornell University’s Department of Environmental Health & Safety during the walk-through. The electrical contractor shall furnish a satisfactorily completed Pre-Occupancy Safety Checklist to the Cornell University Electrical Shop before submitting their final payment requisition at the end of the project.

1.03 SUBMITTALS

A. Submit manufacturers’ shop drawings for proposed equipment, components, and accessories.

B. Submit names, addresses, telephone numbers, sales and technical contacts, and other details for each of the proposed equipment, components, and accessories manufacturers (“Manufacturers”) and the proposed manufacturers’ local representatives (“Manufacturers’ Representatives”). Provide Uniform Resource Locator (“URL”) addresses (i.e., web-site addresses) when available.

C. Submit delivery lead times for proposed equipment, components, and accessories with the manufacturers’ shop drawings. The Electrical Contractor shall supply detailed delivery schedules to Cornell University’s Project Manager of long lead items within five (5) business days after shop drawing review is found in compliance with the specifications by the Engineer of Record.

D. Submit instructional manuals where required for approved equipment, components, and accessories.

E. Submit submittals, shop drawings, schematics, documents, requests for authorization, as-built drawings, and instructional manuals as described in Cornell University’s Design & Construction Standards (see Division 01001 - General Requirements).

F. Four (4) copies each of submittals, shop drawings, schematics, documents, as-built drawings, and instructional manuals shall be provided and submitted in compliance with Cornell University’s Design & Construction Standards (see Division 01001 - General Requirements) to: Cornell University’s Project Manager at Planning, Design, & Construction, Cornell University, 201 Humphreys Service Building, Ithaca, NY. 14853-3701.

1.04 CERTIFICATION AND TESTING

A. The Electrical Contractor shall assist Cornell University’s Environmental Health & Safety Department during the Pre-Occupancy Safety Checklist walk-through.
B. The Electrical Contractor shall test all systems for proper operation, code compliance, and standards compliance. (Note: Lighting fixtures, devices, and panels shall be tested in a manner that does not affect the equipments’, components’, or accessories’ performance.)

C. The Contractor shall co-sign a certified letter attesting to the completion of testing and submit two (2) copies of said signed and certified letter each to: the Architect, the Consulting Engineers, and Planning, Design, & Construction.

D. The Contractor and Manufacturer’s Representative shall co-sign a certified letter attesting to the completion of testing of special systems, such as dimming systems, emergency power systems, fire alarm systems, and security systems. Submit two (2) copies of said signed and certified letter each to: the Architect, the Consulting Engineers, and Cornell University’s Project Manager.

E. Perform testing at a time convenient to Cornell University’s representatives. The Contractor shall pay costs associated with the scheduling, performance, and completion of the testing.

1.05 WARRANTIES

A. The Electrical Contractor shall warranty the complete electrical work for a period of one year from the date the complete electrical system is accepted by Cornell University’s Project Manager. The warranty shall include parts, labor, travel (expense necessary for repairs at the job site), and expendables (used during the course of repair such as lubricating oil, filters, antifreeze, and other service items made unusable by defect).