

**SECTION 017700**  
**CLOSEOUT PROCEDURES**

**PART 1 - GENERAL**

**1.01 SUBSTANTIAL COMPLETION INSPECTION**

- A. Substantial Completion is when the Work is sufficiently completed in accordance with the Contract and certified by the University, as modified by change orders, so that the project can be used, occupied, or operated for its intended use. In no event shall a project be certified as substantially complete until at least ninety percent (90%) of the Work on the project is complete. The University reserves, at its sole discretion, the right to certify substantial completion for portions of the project.
- B. Each Separate Prime Contractor is responsible for requesting and executing a Substantial Completion inspection. Maximum coordination between the various Separate Prime Contractors is strongly encouraged for the execution of Substantial Completion inspections.
- C. Before a Substantial Completion inspection can be held, the following items shall have been completed by the Contractor and/or been submitted to the University.
  - 1. completion of start-up, testing, and commissioning checks of equipment and systems
  - 2. completion of user training
  - 3. completion of Contract Work
  - 4. completion of final cleaning
  - 5. removal of temporary protection and facilities
  - 6. removal of construction tools, mock-ups, and similar elements
  - 7. removal of surplus materials, rubbish, and similar elements
  - 8. change to permanent locks, and submission of keys
  - 9. submission of testing, test and balance, and commissioning reports
  - 10. submission of Operating and Maintenance Manuals and Instructions
  - 11. submission of Record Documents
  - 12. submission of warranty documents and warranty plan
  - 13. submission of spare parts, tools, extra stock, and similar required items
  - 14. submission of final meter readings, and measured record of stored fuel(s) (if any)
  - 15. submission of or coordination for Occupancy permits (UCC)
  - 16. submission of or coordination for other permits and approvals (boiler inspection, etc.)
- D. The Contractor shall submit to the University a written request for a Substantial Completion inspection. The request shall certify that the items required for a Substantial Completion inspection (paragraph 1.01 C.) have been completed, or shall identify when they will be completed or explain reasons why items will not be complete. The request shall be submitted at least seven (7) days prior to the requested date for the inspection, unless otherwise specified or agreed upon.
- E. Within seven (7) days of receipt of a request for a Substantial Completion inspection, unless otherwise specified or agreed upon, the University will either proceed with the inspection, schedule the inspection to take place within a reasonable period of time, or advise the Contractor of requirements that must be met before the Project can be considered ready for a Substantial Completion inspection.
- F. Upon inspection, the University will either issue the Certificate of Substantial Completion, advise the Contractor of items that must be completed or corrected before the Certificate will be issued, or advise the Contractor that another Substantial Completion inspection must be requested and take place.

## 1.02 FINAL COMPLETION AND FINAL COMPLETION INSPECTION

- A. Final Completion is that point in the Contract at which all Work on the Project is complete, and all other Contract requirements have been completed. Final Completion may or may not involve an inspection.
- B. Each Separate Prime Contractor is responsible for requesting Final Completion. Coordination between the various Separate Prime Contractors is encouraged for the execution of any Final Completion inspections that may be required.
- C. Before the Contractor can request Final Completion, the following items shall have been completed by the Contractor and/or been submitted to the University.
  - 1. completion of punchlist items
  - 2. completion of all items required for Substantial Completion (paragraph 1.01)
  - 3. completion of any and all other Contract requirements
- D. The Contractor shall submit to the University a written request for Final Completion. The request shall certify that the items required for Final Completion (paragraph 1.02 C.) have been completed. If an inspection is required, the request shall be submitted at least seven (7) days prior to the requested date for the inspection.
- E. Upon receipt of a request for Final Completion, the University will either issue the Certificate of Final Completion or advise the Contractor of requirements that must be met before the Project can be considered ready for Final Completion.
- F. When the University issues the Certificate of Final Completion, the Final Application for Payment can be processed.

## 1.03 FINAL CLEANING AND PREPARATION OF THE FACILITY

- A. The following paragraphs address final cleaning and preparation generally applicable to most Contracts. Additional or specific requirements applicable to this Contract may be included in Specification Section 011000, Summary, in specific Technical Specification sections, or in a dedicated Section on Final Cleaning and Preparation.
- B. Cleaning.
  - 1. The Contractor shall employ experienced workers or professional cleaners for final cleaning. Workers shall be supervised.
  - 2. Each surface, equipment, or unit shall be cleaned to the condition expected in a normal, commercial building cleaning and maintenance program.
  - 3. Transparent materials, including mirrors and glass in doors and windows, shall be cleaned. Glazing compound and other substances that are noticeable vision-obscuring materials shall be removed. Chipped or broken glass and other damaged transparent materials shall be replaced. Windows and two-sided glass shall be cleaned on both sides.
  - 4. Exposed exterior and interior hard-surfaced finishes shall be cleaned to a dust-free condition, free of stains, films, and similar foreign substances. Reflective surfaces shall be restored to their original reflective condition. Concrete floors shall be broom clean. Finished floors shall be clean wet-mopped. Carpeted surfaces shall be vacuumed.

5. Surfaces of mechanical and electrical equipment shall be wiped to remove excess lubrication and other substances. Plumbing fixtures shall be cleaned to a sanitary condition. Light fixtures, lamps, switches, and outlet plates shall be cleaned. Construction bulbs shall be replaced with new bulbs.
6. The site, including landscape development areas, shall be cleaned of rubbish, litter, and other foreign substances. Paved areas shall be broom clean, and all stains, spills, and other foreign deposits shall be removed. Grounds that are neither paved nor planted shall be raked to a smooth even-textured surface.
7. Debris shall be removed from roofs, drainage systems, gutters, and downspouts.
8. The inside of cabinets and other concealed areas shall be cleaned.
9. Labels that are not permanent labels shall be removed.
10. In all cases the Contractor shall comply with manufacturer's instructions for cleaning and preparation, and with regulations of authorities having jurisdiction and safety standards for cleaning.

C. Other Preparation.

1. Filters of operating equipment shall be replaced. Strainers of operating equipment and/or systems shall be cleaned. Ducts, blowers, coils, and similar components shall be cleaned if the system was operated during construction without filters.
2. The Contractor shall engage an experienced exterminator to make a final inspection, and rid the Project of rodents, insects, and other pests.
3. The Contractor shall remove temporary protection and facilities installed for protection of the Work, workers, and the general public during construction.
4. Waste or excess materials and debris shall be removed from the site and disposed of in a lawful manner. Such materials shall not be burned, and shall not be buried on University property. Volatile, harmful, or dangerous materials shall not be discharged into drainage systems or onto or into the ground.
5. The Contractor shall arrange with the University for disposition of excess materials of value that remain after completion of Work and become University property.

1.04 RECORD DOCUMENTS

See Specification Section 017836, Project Record Documents.

1.05 OPERATION AND MAINTENANCE MANUALS

See Specification Section 017823, Operation and Maintenance Data.

1.06 USER TRAINING

- A. The following subparagraphs address general User Training requirements. The requirements for User Training, and any additional or specific requirements related to that User Training, is identified and included in specific Technical Specification sections.

- B. Each Separate Prime Contractor shall arrange for and perform User Training for any equipment or system installed by that Contractor. Where equipment and systems involve more than one Separate Prime Contractor, the University will designate one Contractor as the lead for the Training. The Lead shall coordinate with the other Separate Prime Contractors involved, and all Contractors shall participate in the Training.
- C. User Training shall provide to the University's operating and maintenance personnel instruction in proper operation and maintenance of that equipment or system.
- D. User Training shall be held at mutually agreed upon times and locations. Unless impossible or impractical, Training should be held at the location of the equipment or the system.
- E. For equipment or systems that require seasonal operation, separate Training sessions may be required at appropriate times.
- F. The Contractor shall engage for the Training instructors who are thoroughly trained and experienced in the operation and maintenance of the equipment or system involved. The instructors should come from the installers or from the manufacturer.
- G. Draft Operating and Maintenance Manuals shall be available for User Training, and shall be used as the basis of the Training.
- H. The Contractor shall videotape or digitally record the User Training, in a format suitable to the University. One (1) copy shall be provided with the Operating and Maintenance Manual.

PART 2 – PRODUCTS

(Not Used)

PART 3 – EXECUTION

(Not Used)

END OF SECTION 017700