

SECTION 01 77 00
CLOSEOUT PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for Contract closeout, including:
 - 1. Project Record Drawings.
 - 2. Closeout Submittals.
 - 3. Substantial Completion and Final Inspection.
 - 4. Permit Closure and Transfer.
 - 5. Final Acceptance of the Work.
 - 6. Warranties.

1.2 PROJECT RECORD DRAWINGS

- A. Maintain one complete full-size set of the Drawings and one full-size set of vendor-supplied drawings. Clearly mark changes, deletions, and additions using National Park Service (NPS) drafting standards to show actual construction conditions. Show additions in red, deletions in green and special instructions in blue.
- B. Keep Record Drawings current. Make Record Drawings available to Contracting Officer (CO) for inspection at the time of monthly progress payment requests. If Project Record Drawings are not current, Contracting Officer may retain an appropriate amount of progress payment.
- C. Submit complete Record Drawings on completion of total Project. Include Shop Drawings, sketches, and additional drawings to be included in final set, with clear instructions showing the location of these Drawings.

1.3 CLOSEOUT SUBMITTALS

- A. A list of closeout requirements has been attached at the end of the Division 01, General Requirements specifications for Contractor's convenience. The intent is to provide an overall summary of requirements and not a comprehensive list. Terms and conditions of the Contract require satisfaction of requirements of individual specification sections regardless of what is shown on the list. Submit the following before requesting final inspection:
 - 1. Specific warranties, guarantees, workmanship bonds, final certifications, and similar documents.
 - 2. NPS required forms for occupancy, Fire Sprinkler/Alarm acceptance, and other similar forms or certificates.

3. Project Record Documents, operation and maintenance manuals, final completion construction digital images recorded with index and descriptions, and similar final record information.
4. Environmental Record Documents:
 - a. IAQ Management Plan: As specified in Section 01 57 19.11, Indoor Air Quality (IAQ) Management.
 - b. Product Data for filtration media: As specified in Section 01 57 19.11, Indoor Air Quality (IAQ) Management.
 - c. Moisture Control inspections and reports: As specified in Section 01 57 19.11, Indoor Air Quality (IAQ) Management.
 - d. Material Safety Data Sheet (MSDS) Data: As specified in Section 01 57 19.11, Indoor Air Quality (IAQ) Management and Section 01 78 23, Operation and Maintenance Data.
 - e. Affirmative Procurement Reporting Form: As specified in Section 01 67 00, Product Requirements.
 - f. Environmental Product Data: As specified in Section 01 67 00, Product Requirements.
 - g. Chain-of-Custody Data: As specified in Section 01 67 00, Product Requirements.
 - h. Final Summary of Solid Waste Disposal and Diversion: As specified in Section 01 74 19, Construction Waste Management.
 - i. Commissioning Report: As specified in Section 01 91 14, Equipment Testing and Facility Startup, and Section 01 91 15, Total Building Commissioning.
5. Posted Operating Instructions: As specified in individual sections. Furnish operating instructions attached to or posted adjacent to equipment. Include wiring diagrams, control diagrams, control sequence, startup, adjustment, operation, lubrication, shut-down, safety precautions, procedures in the event of equipment failure, and other items of instruction recommended by manufacturer.
6. Deliver tools, spare parts, extra materials, and similar items to location designated by Contracting Officer. Label with manufacturer's name and model number where applicable.
 - a. Special Tools: One set of special tools required to operate, adjust, dismantle, or repair equipment. Special tools are those not normally found in possession of mechanics or maintenance personnel.
7. Keys and Keying Schedule: Submit keys including duplicates. Wire keys for each lock securely together. Tag and plainly mark with lock number, equipment identification, or panel or switch number, and indicate location, building, and room name or number.
8. Make final changeover of permanent locks and deliver keys to Contracting Officer. Advise Park personnel of changeover in security provisions.

9. Approved pre-functional checklists and functional performance testing reports from commissioning documentation.
 - a. Equipment startup requires coordination with commissioning process. Refer to Section 01 91 14, Equipment Testing and Facility Startup. Equipment, shall not be “temporarily” started for commissioning.
10. Test and balance report.
11. Terminate and remove temporary facilities, mockups, construction tools, and similar elements from Project Site.
12. Complete final cleaning requirements, including touchup painting.
13. Touch up and repair and restore marred exposed finishes to eliminate visual defects.
14. Instruct NPS personnel in operation, adjustment, and maintenance of products, equipment, and systems.

1.4 FINAL INSPECTION, SUBSTANTIAL COMPLETION AND ACCEPTANCE PROCEDURES

- A. Prior to Requesting Final Inspection:
 1. Complete commissioning requirements of Section 01 91 14, Equipment Testing and Facility Startup, unless approved in writing by Contracting Officer.
 2. Complete commissioning requirements of Section 01 91 15, Total Building Commissioning, unless approved in writing by Contracting Officer.
- B. Request final inspection in writing when Project or designated portion of Project is substantially complete. Contracting Officer will proceed with inspection within 15 days of receipt of written request or will advise Contractor of items that prevent Project from being substantially complete.
- C. If work is determined substantially complete, following final inspection, Contracting Officer will prepare Punch List and issue a Letter of Substantial Completion.
- D. If work is not determined substantially complete following final inspection, Contracting Officer will notify Contractor in writing. Contractor shall request new final inspection after completing work. Re-inspection costs may be charged against Contractor in accordance with Inspection of Construction Contract clause.
- E. Contractor shall complete Punch List within 30 calendar days, documented weather permitting.
- F. If Contractor completes items of work on Punch List and contractually required items, Contracting Officer will issue Letter of final acceptance of Work.

- G. If Contractor fails to complete work within the time frame, Contracting Officer may correct work with an appropriate reduction in contract price or charge for re-inspection costs in accordance with Inspection of Construction Contract clause.

1.5 PERMIT CLOSURE AND TRANSFER

- A. When work covered by the permits is complete, create list of tasks required to close or transfer permits to Park. Submit to Contracting Officer for approval.
- B. After substantial completion and Punch List completion, permits shall be closed and documented by Agency(ies) with Jurisdiction for the permit.
- C. If responsibility for permits is to be transferred to Park, Park shall be informed of permit provisions completed and responsibilities that will transfer to Park staff.
- D. Permits that require close out include:
 - 1. Aquifer Protection Permit: Engineer's Certification of Completion signed, dated, and sealed by an Arizona-registered Professional engineer.
 - 2. Aquifer Protection Permit: A Closure Plan is requirement to be submitted 90 days after submission of a letter notifying the ADEQ if the intent to demolish the Old WWTP.
 - 3. Stormwater/Construction Dewatering NPDES Permits: Notice of Termination Forms when the activity requirement for the permit is complete. Requires for stormwater that 70 percent of the preconstruction stabilization. For construction dewatering the notice of termination is based on no additional dewatering activity.

1.6 WARRANTIES

- A. Contractor Warranty on Materials and Workmanship:
 - 1. Period of 1 year after Substantial Completion.
 - 2. Provide one contractor warranty inspection during the warranty period to address any warranty issues.
- B. Submittal Time: Submit written warranties on request of Contracting Officer for designated portions of Work where commencement of warranties other than date of Substantial Completion is indicated.
- C. Organize warranty documents into an orderly sequence based on table of contents of Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-inch by 11-inch paper.

2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify product or installation. Provide typed description of product or installation, including name of product and name, address, and telephone number of Installer.
3. Identify each binder on front and spine with typed or printed title "WARRANTIES," Project name, and name of Contractor.
4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF (portable document format) file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.

D. Provide additional copies of each warranty in operation and maintenance manuals.

PART 2 PRODUCTS

2.1 MATERIALS

A. See Section 01 73 40, Execution, for information on cleaning agents.

PART 3 EXECUTION

3.1 FINAL CLEANING

- A. General: Conduct final cleaning and waste-removal operations to comply with local laws and ordinances and federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 1. Complete following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project Site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project Site.
 - e. Remove snow and ice to provide safe access to building.
 - f. Clean exposed exterior and interior hard-surfaced finishes to dirt-free condition, free of stains, films, and foreign substances. Avoid disturbing

natural weathering of exterior surfaces. Restore reflective surfaces to original condition.

- g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
- h. Sweep concrete floors broom clean in unoccupied spaces.
- i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo, soil or stains remain.
- j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and vision-obscuring materials. Replace chipped or broken glass and transparent materials. Polish mirrors and glass.
- k. Remove labels that are not permanent.
- l. Touch up, repair, and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.

1) Do not paint over “UL” (Underwriters Laboratories) and similar labels, including mechanical and electrical nameplates.

- m. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- n. Replace parts subject to unusual operating conditions.
- o. Clean plumbing fixtures to sanitary condition, free of stains, including stains resulting from water exposure.
- p. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
- q. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out and noticeably dimmed bulbs, and defective or noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
- r. Leave Project clean and ready for occupancy.

- C. Pest Control: Engage experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests. Provide Government with report.
- D. Waste Disposal: Comply with requirements of Section 01 74 19, Construction Waste Management and Disposal.

END OF SECTION