

V. Other

A. Operation and Maintenance Manual: Submit for the systems and equipment indicated in the technical sections. Furnish three copies, and an electronic version bound in hardback binders (8 ½ x 11 - 3 ring) or an approved equivalent. Furnish one complete manual prior to performance of systems or equipment tests, and furnish the remaining manuals prior to contract completion. Inscribe the following identification on the cover: the words "OPERATION AND MAINTENANCE MANUAL," the name and location of the system, equipment, and name of Contractor. Include in the manual the names, addresses, and telephone numbers of each subcontractor installing the system or equipment and the local representatives for the system or equipment. Include a table of contents and assemble the manual to conform to the table of contents, with the tab sheets placed before instructions covering the subject. The instructions shall be legible and easily read, with large sheets of drawing folded in. The manual shall include, without being limited to, the following

1. Internal and interconnecting wiring and control diagrams with data to explain detailed operation, physical location, and control of the system or equipment. Clearly ID where wiring/controls pass to other "systems".
2. A control sequence describing startup, operation, and shutdown, including emergency procedures for fire or failure of major equipment
3. Description of the function of each principal item of equipment, giving principles and theory of operation
4. Installation and maintenance instructions/ preventative maintenance schedules
5. Safety precautions/personnel hazards
6. Diagrams, illustrations, and assembly drawings
7. Testing and trouble-shooting procedures
8. Performance data/specifications

9. Lubrication schedule including type, grade, temperature range, and frequency
10. Parts list indicating sources of supply, recommended spare parts, and name of servicing organization
11. An appendix listing qualified permanent servicing organizations for support of the equipment, including addresses and certified qualifications
12. Add manufacturer's model numbers in the maintenance manuals.

B. POSTED OPERATING INSTRUCTIONS: Furnish approved operating instructions for systems and equipment indicated in the technical sections for use by operation and maintenance personnel. The operating instructions shall include wiring diagrams, control diagrams, and control sequence for each principal system and equipment. Print or engrave operating instructions and frame under glass or in approved laminated plastic. Post instructions as directed. Attach or post operating instructions adjacent to each principal system and equipment including startup, proper adjustment, operating, lubrication, shutdown, safety precautions, procedure in the event of equipment failure, and other items of instruction as recommended by the manufacturer of each system or equipment. Provide weather-resistant materials or weatherproof enclosures for operating instructions exposed to the weather. Operating instructions shall not fade when exposed to sunlight and shall be secured to prevent easy removal or peeling.

C. FACILITY MANAGEMENT RECORD DRAWINGS

Provide the shown drawing layers on disks in AutoCAD format.

Additionally; include lighting and HVAC plans.