SECTION 017716 – CONTRACT CLOSEOUT

SEE INFORMATION AT END OF SECTION

Revise this Section by deleting and inserting text to meet Project-specific requirements.

1. GENERAL
	* + 1. RELATED REQUIREMENTS SPECIFIED ELSEWHERE
				1. Other provisions pertaining to this Section are included in Article 9 of the General Conditions.
			2. CONTRACT CLOSEOUT INSPECTIONS
				1. The following 3 inspections will be made in addition to the normal inspections to ensure that all Contract requirements are met and that the Work is complete and acceptable. The purpose of each of these inspections is to furnish the Contractor a written list of Contract exceptions, omissions, and incompletions so that the Work can be progressed to timely completion in accordance with the Contract Documents.

Detailed Inspection: The “Detailed Inspection” will be made when the Work is substantially complete. A copy of the detailed inspection list will be furnished to the Contractor. When this inspection progresses over any length of time, copies of the list will be furnished as the inspection progresses so that the Contractor may proceed with the required Work without delay.

Final Inspection: The Contractor will be advised by letter of the date and time of final inspection. A copy of the final inspection list containing all incomplete or unsatisfactory items and the time allowed to complete the Work will be furnished to the Contractor.

Joint Inspection for Physical Completion: The joint inspection for physical completion may be made to verify completion of the exception items listed on the final inspection list so that the physical completion date (defined in the General Conditions) may be established.

* + - 1. FINAL CLEANING
				1. Perform final cleaning prior to joint inspection for physical completion. Leave the premises in a neat, unobstructed condition, the work areas broom clean (except where more thorough cleaning is specified), and everything in perfect repair and adjustment.

DELETE PARAGRAPH BELOW IF ALL WORK IS INSIDE BUILDING

* + - * 1. Clean site; sweep paved areas, rake clean landscaped surfaces.
				2. Remove tools, equipment, waste and surplus materials, rubbish, and construction facilities from the premises as soon as possible upon completion of the Work.
			1. PROJECT RECORD DOCUMENTS
				1. Maintain on site, 2 sets of the following record documents; record actual revisions to the Work.

Contract Drawings.

Project Manual.

Addenda.

Change Orders and other modifications to the Contract.

Reviewed shop drawings, product data, and samples.

* + - * 1. Store record documents separate from documents used for construction.
				2. Record information concurrent with construction progress.
				3. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including.

Measured depths of foundations in relation to finish (first) (main) floor datum.

Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.

Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.

Field changes of dimension and detail.

Details not on original Contract Drawings.

DELETE PARAGRAPH BELOW IF THERE IS NO PROTECTED EPDM ROOFING SYSTEM, SECTION 075553. IF THIS IS A SINGLE CONSTRUCTION CONTRACT PROJECT, DELETE “Construction Work Contract,” FROM THE PARAGRAPH BELOW.

* + - * 1. Construction Work Contract, Protected EPDM Roofing System Work, Section 075553: Maintain, at the site, 2 sets of the membrane manufacturer’s sheet layout drawings for recording joint locations. Mark up the drawings in red as follows.

Show the actual size of membrane sheets.

Dimension the location of end and edge joints, and factory and field fabricated patches in the membrane. Show dimensions taken from fixed locations such as parapet walls, gravel stops, etc. Dimensions shall be accurate to within one foot.

Show the type and location of penetrations through the roof.

**USE PARAGRAPH BELOW FOR PROJECTS AT HARRIMAN STATE OFFICE CAMPUS AND ANY FACILIITY UTILIZING GIS INFORMATION. ADD TO, OR DELETE, PARAGRAPH BELOW TO SUIT PROJECT**

* + - * 1. Upon completion of construction a detailed as-built survey shall be prepared by a licensed land surveyor and shall include the following:

Survey as-built location and mapping of all new site improvements resulting from the subject project. This work can be performed prior to completion as required.

Underground utilities not visible as surface evidence shall be surveyed prior to being buried and located to plus or minus 1 foot horizontal accuracy.

New sanitary and storm sewer utilities with rim elevation, invert elevations, pipe sizes and materials, service lines into buildings, stand pipes and sanitary pump or lift stations.

New watermains, water services, water line sizes and material, hydrant and valve locations, service lines into buildings.

New gas lines, steam lines and tunnels, service lines into buildings.

New underground electric and communications conduit including electric and communications manholes and handholds, with rim elevations and invert elevations to conduit, service lines into buildings.

Light standards, signage, pedestrian features such as benches and kiosks.

New paved areas, pavement striping, walkways.

Buildings with first floor elevations.

Location of landscaped areas and individual trees, tree species and diameter at breast height (DBH).

Location of irrigation lines, valves and controls.

1-foot contour interval topography and 3-D surface for any areas where construction resulted in changes in grade.

Elevations at 25-foot intervals along roadway centerlines, top and bottom of curb. 25-foot spot grade grid on paved areas, 50-foot spot grade grid on grass or unpaved areas.

Mapping shall be completed in in compliance with OGS CAD Standards (as defined in Section 5.4 of the OGS Design Procedure Manual)..

Horizontal and vertical datums shall be consistent with the project datums.

Deliverables will be provided as certified hard copy and digital format. Drawings are to be prepared in compliance with OGS CAD Standards. These standards are an interpretation of the National CAD Standard. The Standard incorporates the CAD Layer Guidelines published by the American Institute of Architects, the Uniform Drawing System published by the Construction Specifications Institute, and the Tri-Service Plotting Guidelines published by the Tri-Service CADD/GIS Technology Center and U.S. Coast Guard.

All information is to be provided in tabular format (excel). Format and examples are to be provided upon award of contract.

* + - * 1. Upon completion of the work, create electronic versions of the project record documents. Black and white documents are to be scanned into TIFF format using CCIT Group 4 compression. Documents with color, which include black line documents with color notations, are to be scanned into TIFF format using a minimum of 8 colors and “packbits” compression test.

The scanned images are to be put on a USB flash drive using NTFS/NTFS5 format. Name the electronic files with the same name as the drawing. Create a folder on the USB flash drive for each trade and one for Shop Drawings.

 Label the USB flash drive with the project number, name, and title as it appears on the project manual cover. If there is more than one USB flash drive include notation to that effect on the label; i.e., 1 of 3, 2 of 3, 3 of 3. The project record documents, and USB flash drive(s) are to be turned over to the Director’s Representative.

**DELETE PARAGRAPH IF AN ELECTRONIC SUBMITTALS WEBSITE IS NOT USED**

* + - * 1. Applications for progress payments will not be approved if the record documents are not kept current. Application for final payment will not be approved until the project record documents are delivered to the Director’s Representative.
			1. OPERATION AND MAINTENANCE DATA
				1. Prepare 2 sets comprised of 8-1/2 x 11 inch text pages bound in capacity expansion binders with durable plastic covers identified with printed title “OPERATION AND MAINTENANCE INSTRUCTIONS”, title of project, and subject matter of binder when multiple binders are required. Prepare a printed Table of Contents for each volume, with each product or system description identified. Internally subdivide the binder contents with permanent page dividers, logically organized as described below, with tab titles clearly printed under reinforced laminated plastic tabs:

Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, subcontractors, and major equipment suppliers.

Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of subcontractors and suppliers. Identify the following:

1. Significant design criteria.

2. List of equipment.

3. Parts list for each component.

4. Operating instructions.

5. Maintenance instructions for equipment and systems.

6. Maintenance instructions for finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.

Part 3: Project documents and certificates, including the following:

1. Shop drawings and product data.

2. Air and water balance reports.

3. Certificates.

4. Photocopies of warranties.

* + - * 1. Submit one copy of completed volumes in final form 15 days prior to final inspection. This copy will be returned after final inspection, with the Director’s comments. Revise content of documents as required prior to final submittal.
				2. Submit 2 volumes prior to final Application for Payment.
			1. WARRANTIES
				1. Furnish warranty certification and copies of warranties that extend beyond the one year period required by the General Conditions. Warranties submitted without warranty certification will not be accepted.

Warranty Certification: Written certification from the warrantor that invoices for installation, service, supplies, and warranty fees have been paid in full to persons or firms due payment, and that the warranty is in effect and non-retractable due to any of the specified conditions.

* + - * 1. Prepare printed Table of Contents and assemble warranty certifications and warranty copies in a binder with a durable plastic cover.
				2. Deliver the binder to the Director’s Representative prior to final Application for Payment.
				3. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within 10 days after acceptance, indicating date of acceptance as start of warranty period.
				4. Applications for final payment will not be approved until the warranty certification and warranty documents are delivered to the Director’s Representative.
			1. SPARE PARTS AND MAINTENANCE MATERIALS
				1. Label and deliver spare parts, maintenance items, and extra materials to the Site. Place in locations as directed.

Include “NOT FOR WARRANTY REPAIRS” on the labels.

Obtain receipt prior to final payment.

* + - * 1. Do not use the spare parts and maintenance materials required by the Contract Documents to remedy defects during the one-year period described in Paragraph 9.8 of the General Conditions except when approved otherwise by authorized Facility Representative. In such cases, replace items used.

**USE PARAGRAPH BELOW WHEN REQUIRED BY TECHNICAL SPECIFICATIONS SECTIONS. EDIT AS REQUIRED.**

* + - * 1. Furnish the names, business addresses, and telephone numbers of fully equipped authorized service organizations to the Director’s Representative.
				2. Applications for final payment will not be approved until these items are delivered to the Director’s Representative.
1. PRODUCTS (NOT USED)
2. EXECUTION (NOT USED)

END OF SECTION 017716

**THE REMAINDER OF THIS DOCUMENT IS FOR INFORMATION ONLY, NOT TO BE INCLUDED IN PROJECT SPECIFICATIONS.**

**INSTRUCTIONS AND MODIFICATIONS FOR THIS SECTION**

**Paragraph 1.2 A.: When there is more than one completion date for the Work of a Contract, the first sentence in the paragraph must be modified to read as follows.**

 **The following 3 inspections will be made for each completion date in addition to the normal inspections to ensure that all Contract requirements are met and that the Work is complete and acceptable.**

**Article 1.04: Insert paragraph below at the end of the article ONLY for wastewater discharges involving subsurface systems. This procedure is valid as a result of a memorandum of understanding signed by the Commissioners of OGS and Department of Environmental Conservation (DEC).**

 **I. Department of Environmental Conservation Requirements: In addition to the foregoing requirements, maintain 2 additional sets of the Contract Drawings which show the site plan and all of the components of the subsurface wastewater disposal system. Prepare the drawings as directed, marking (in red) all changes made during construction.**

 **1. The Director’s Representative will obtain the seal and signature of a licensed New York State professional engineer on the marked prints, who will send the 2 sets together with written certification that the constructed facilities have been under his supervision and have been fully completed in accordance with the approved design to the appropriate regional water engineer of the Department of Environmental Conservation.**

**END OF INFORMATION**