

## **SECTION 111 - AS-BUILT DRAWINGS (RECORD DRAWINGS)**

### **111.01      DESCRIPTION**

The Contractor will be responsible for providing certified final redlined As-Built drawings of the project and obtain approval and closeout of all permits. The Contractor will also supply all documents related to the project to M-NCPPC.

### **111.02      REFERENCE STANDARDS**

MCDPS      As-Built/Record Drawing Plan Review Checklist – Latest Version  
WSSC      Sewer and Water Main As-Built and Service Connection Final  
                 Instruction and Requirements for Service Extension Permit Projects

### **111.03      DEFINITIONS**

Certified: A certified document shall be sealed by a professional surveyor.

### **111.04      MATERIALS**

Not applicable.

### **111.05      SUBMITTALS**

- A. The Contractor shall provide the Commission with electronic versions of all submittals, shop drawings, correspondence, material certifications, delivery tickets, operating manuals, inspections, and testing results related to completed project at the time of As-Built submission. The Contractor shall provide both in original form and as a PDF.
- B. The Contractor shall submit certified As-Built plans and support documents directly to the permitting agency, with electronic versions to the M-NCPPC Construction Manager.
- C. Digital files should be in AutoCAD format as well as a set of vectored PDFs of the approved As-Built plans and all supporting documents must be submitted to the M-NCPPC Construction Manager.

### **111.06      QUALITY ASSURANCE**

Not applicable.

### **111.07      CONSTRUCTION**

- A. Throughout construction, the Contractor shall maintain all pertinent records of construction materials, testing, and inspections required to document that the actual construction is in conformance with the Contract Documents and regulatory permits.

- B. At the completion of the project, the contractor shall develop certified final redlined As-Built drawings of the project and obtain approval and closeout of all permits, including those from the Montgomery County Department of Permitting Services (MCDPS). Preparation of As-Built plans includes, but is not limited to:
1. Confirming the horizontal locations and vertical elevations of all new facilities built throughout the park.
  2. Storm drain as well as storm water management facilities shall be surveyed during installation. This includes facility and structure inverts and top elevations and dimensions of core trench, infiltration trench, filters, underground structures and pipe networks, and geotechnical certifications as required by MCDPS, etc.
  3. Underground utilities, irrigation systems, septic tanks, etc. including profiles, inverts and top of facility elevations.
  4. Structural certifications for all retaining walls, columns, beams, supports, etc.
  5. Any considerable change or shift in the size or location of any facilities from approved drawings.
  6. Any utility certification as required for As-Built certification of the underground utilities such as WSSC and MCDPS.
  7. All the survey work required for As-Built plans is the sole responsibility of the contractor.
  8. Any significant deviations from the approved drawings.
  9. A digital file in AutoCAD format including scans of all approved electronic copies including permit drawings.
  10. GIS layer files of storm drain and underground utility assets.
  11. Electronic version of the approved As-Built plans and of all supporting documents must be submitted to the M-NCPPC Construction Manager.
- C. In addition to the standard requirements of the owner, the Contractor shall also be responsible for completing all As-Built requirements related to any permits issued for the project. The Contractor shall prepare As-Built plans in accordance with the standards, procedures, and requirements of the permit agency at the time of construction.

This includes any required survey, inspection, and professional certification by an independent firm familiar with the work performed. For example, the completed As-Built package for Stormwater Managements facilities shall include all supporting documents and information as required on the latest MCDPS “As-Built/Record Drawing Plan Review Checklist”. Furthermore, the Contractor shall make any and all repairs and/or modifications required to obtain As-Built approval and final release of permit at no additional cost to the owner.

The Contractor shall submit certified As-Built plans and support documents directly to the permitting agency, with electronic copies also sent to the M-NCPPC Construction Manager. Once the appropriate agency approves the As-Built plans and M-NCPPC Construction Manager concurs, the Contractor shall submit to the Commission a digital file including vectored PDFs of all approved permit drawings.

The Contractor shall coordinate with the permitting agency and inspectors as required to obtain final approval and permit release which includes a final field inspection with staff from the permitting agencies involved and M-NCPPC Construction Manager present. The Contractor shall consider the As-Built preparation, review, and approval as part of the overall construction schedule and shall complete this work within the Contract Period established for the project. The design documents in electronic file format including base survey information will be provided to the contractor.

- D. If required, the Contractor shall provide the Washington Suburban Sanitary Commission (WSSC) final sewer and water main As-Built. For instructions, see WSSC “Sewer and Water Main As-Built and Service Connection Final Instruction and Requirements for Service Extension Permit Projects”. The Contractor shall also provide copies to the M-NCPPC Construction Manager. The Contractor is responsible for obtaining the Certificate of Substantial Completion and water meter release(s).
- E. Stream Restoration: Contractors shall submit to the M-NCPPC Construction Manager (plans, profiles, and cross sections) for review and approval that show in-stream structures, pools, glides/runs, bankful channel dimensions, and features with field surveyed elevations.
- F. Irrigation: Contractor shall follow requirements as found in Specification 730 – Irrigation.

#### **111.08            MEASUREMENT AND PAYMENT**

Payment will be full compensation for all material, labor, equipment, tools and incidental items necessary to complete the work. Payment shall be made on a unit rate or lump sum basis as shown in the bid proposal. Up to 20% of the full payment for storm water management related bid items may be withheld at the discretion of the Commission pending MCDPS and/or WSSC approval of the As-Built plans.