

**READ THIS FIRST**

This Project Spec Document may need additional modifications to suit your project. It is recommended that you proofread each section, paying attention to any “Notes” boxes such as this one--you should remove these “Notes” sections as you go. Also, do a search for all bracket characters “ [ ] “ as they are used to show you areas containing options or project specific details (you can use Microsoft Word’s Find feature {Ctrl-F} to jump to an open bracket “ [ “ character quickly). Again, these bracket characters should be removed.

It is important that every paragraph be numbered to allow for easy referencing. If you use the document’s built in styles and formatting your outline should be fine (turn on the formatting toolbar by going to View > Toolbars > Formatting). Most paragraphs will use the style “Numbered Material” and can be promoted (Shift) or demoted (Shift-Tab).

You should not have to manually enter extra spaces, carriage returns or outline characters such as A, B, C, or 1.01, 1.02; the formatting will do this for you. The entire document is 11 pt. Arial. If you paste items in, you may need to reapply the “Numbered Material” format.

Port Surveying (Manager of Survey and Mapping, and/or Survey Crew Manager) **MUST** be consulted in drafting this section

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Surveys provided by the Port
- B. Contractor Survey Requirements. All work must be performed by a surveyor registered in the State of Washington.
- C. All elevations indicated on drawings refer to National Ocean Survey Mean Lower Low Water (MLLW) Datum unless otherwise noted.

**1.02 SURVEYS PROVIDED BY THE PORT**

- A. The Port will provide those and only those services listed below:
  - 1. Establish primary survey control points.
  - 2. Layout phasing and barricade lines.
  - 3. Layout erosion control points.
  - 4. Layout demolition limits.
  - 5. Slope stakes for fill or excavation areas.
  - 6. Cross-section for quantities.
  - 7. Sub-grade limits will be staked with initial set of cut or slope stakes.

8. Sub-grade hubs prior to rock placement.
  9. Hubs for base course rock.
  10. Finish rock hubs.
  11. Provide storm sewer manhole and catch basin centerline and offset.
  12. Provide sanitary sewer manhole and clean-out centerline and offset.
  13. Provide manhole and catch basin centerline and offsets.
  14. Provide main and lateral sewer line offsets.
  15. Provide electrical and communication vault, manhole, handhole centerline and offset.
  16. Provide electrical and communication trenching centerline and offsets.
  17. Electrical signage locations.
  18. Provide water vaults, manhole, valve centerline and offset.
  19. Provide main and lateral water line centerline and offsets.
  20. Mark asphalt paving limits.
  21. Line and grade hubs for concrete placement.
  22. Mark saw cuts for concrete.
  23. Lay out paint stripes.
  24. Assist Contractor with utility locations.
  25. Check hubs and stakes set by Contractor before paving operations.
  26. As-builts of utilities and paved areas. The Port Survey must locate and as-build all new underground utilities prior to placement of cover.
  27. Other surveys as directed by the Resident Engineer.
  28. Provide soundings.
- B. All other survey work needed for construction is the sole responsibility of the Contractor.
- C. The Contractor and Port will agree on the staking requirement and frequency for each of the selected tasks from the checklist.

Discuss with CM and Port Surveying and specify who is to provide as-built surveys and select below.

- D. All surveys for the purposes of completing as-built drawings are the responsibility of the [Port] [Contractor]. The Contractor may use Port Survey as-built data for underground utilities].

#### 1.03 REQUIRED CONTRACTOR SUPPORT

- A. The Contractor shall provide sufficient space and safe facilities to enable the Engineer to set control points and perform other work required by this specification.
- B. Requests for setting primary control points shall be made at least 2 weeks prior to the need. Delays due to Contractor failure to give timely notice to the Port for surveying services are at the sole risk and expense of the Contractor.
- C. Requests for Port Survey to verify and as-build the underground utilities must be made at least 48 hours prior to placement of cover.
- D. If the Contractor encounters any underground utilities that are not shown on the existing conditions drawings, or known utilities that are not in the location that is shown on the existing conditions drawings, the Contractor must notify the Engineer immediately. The Engineer will work with Port Survey to determine whether and how this variation will be surveyed and recorded by Port Survey.

#### 1.04 PRESERVATION OF STAKES AND MARKS

- A. All primary controls shall be set once by the Engineer or others and shall be carefully preserved by the Contractor. The Contractor will be back charged for the replacement costs of stakes and marks set by the Port Survey, and damaged or destroyed by the Contractor's operation.
- B. Major survey control points will not be removed by the Contractor without the approval of the Port Surveyor. The Contractor will be responsible to remove survey stakes and markings before Substantial Completion.

#### 1.05 CONTRACTOR SURVEYS

- A. The Contractor shall establish such additional lines, grades and controls as are needed for construction.
- B. All work performed shall be in conformance with the lines, grades and dimensions indicated on the drawings. If a discrepancy is noted between the drawings, the same shall immediately be brought to the Engineer's attention. Where tolerances are stated, the work performed shall be within those tolerances. The Engineer will determine if the work conforms to such lines, grades and dimensions and the determination shall be final.
- C. The Contractor assumes full responsibility for detailed dimensions and elevations measured from primary control points.

PART 2 PRODUCTS - Not used

PART 3 EXECUTION - Not used

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

- A. No separate measurement or payment will be made for the work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the [Schedule of Unit Prices] [Lump Sum price] bid for the Project.

End of Section
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