

SECTION 01370**SCHEDULE OF VALUES****PART 1 GENERAL****1.01 SUMMARY**

- A.** This Section defines the process whereby the Schedule of Values shall be developed and incorporated into the cost loading function of the Critical Path Method (CPM) Schedule as specified in Section 01310 – Progress Schedules. Monthly progress payment amounts shall be determined from the monthly progress updates of the CPM Schedule activities.
- B.** The Schedule of Values shall be developed independently, but simultaneous with the development of the CPM Schedule activities and logic, as follows.

1.02 RELATED SECTIONS

- A.** Section 01200 – Coordination and Meetings
- B.** Section 01300 – Submittals
- C.** Section 01310 – Progress Schedules
- D.** Section 01570 – Construction Zone Safety Plan

1.03 CODES AND STANDARDS (NOT USED)**1.04 SUBMITTALS**

- A.** Submit the Schedule of Values in accordance with Section 01300 – Submittals and per the requirements below:
 - 1.** Identify the Schedule of Values with:
 - a. Contract Name and location
 - b. Contract Number
 - c. Name and Address of Contractor
 - d. Date of Submission
 - 2.** The Schedule of Values shall provide a breakdown of all lump sum items.
 - a. Revise and resubmit the Schedule of Values until approved by the Authority.

- b. The sum of the items listed in the Schedule of Values shall equal the price bid.
- c. Mobilization and demobilization shall be broken out as separate line items in the Schedule of Values. Under both mobilization and demobilization, the Schedule of Values shall include separate line items for bond premiums and temporary construction facilities. Mobilization shall include costs of: submittals required by Section 01300 - Submittals, as applicable; establishing construction offices for the Contractor and the Authority, including communications and temporary utilities; transporting construction equipment to the site; construction permits not obtained by the Authority; project signs; and site preparation required for temporary facilities and utilities.
- d. 10% of the values of pipe installation, electrical equipment, controls, mechanical equipment, and instrumentation will be withheld until the items have been tested and accepted by the Authority.
- e. Breakdown installed costs into:
 - i. Delivered cost of product.
 - ii. Total installed cost with overhead and profit.
 - 1) Do not list overhead and profit as separate items.
 - iii. Cost for testing and placing into service.
- 3. An unbalanced Schedule of Values providing for overpayment on items of work performed will not be approved.
- 4. The Schedule of Values, after review by the Authority, shall be used as the only basis for the Contractor's Application for Payment.
- 5. The Schedule of Values shall be supported by the Construction Schedule as outlined in Section 01310 – Progress Schedules.
- 6. The Schedule of Values shall include:
 - a. The value of both the installed and removed component parts of the work with sufficient detail and with documentation to support the values in the Schedule. A component part is defined as any activity spanning greater than 20 working days and having a value greater than \$100,000.
 - b. Values that are the same as the values used for activity nodes on the Construction Schedule.
 - c. Anticipated payments for products delivered, but stored off-site.

- d. The cost of all traffic control measures specified in Section 01570 – Construction Zone Safety Plan and indicated on the Construction Zone Safety Plan Drawings.
- e. The cost per linear foot of pipe, reflecting all costs associated with pipe installation, including: soil and ground water testing, subsurface utilities engineering, support of excavation, excavation, dewatering, pipe bedding, new pipe, testing, backfill, removal of support of excavation (as applicable), surface restoration, and disposal of abandoned utility pipes and surplus materials.
- f. The cost per linear foot of pipe to be installed by trenchless construction, reflecting all costs associated with shaft installation including: soil and ground water testing, subsurface utilities engineering, support of excavation, excavation, dewatering, backfill, removal of support of excavation (as applicable), surface restoration, and disposal of abandoned utility pipes and surplus materials.
- g. The cost of each of the following items: site maintenance; health and safety plan; emissions control; dust control, noise control, construction photographs; pre- and post-construction surveys; vibration monitoring; settlement monitoring; lateral deformation monitoring; existing structures monitoring; existing utilities monitoring; groundwater monitoring; and pest control.
- h. The cost of any other items not assigned a unit price cost.

1.05 QUALITY ASSURANCE (NOT USED)

1.06 QUALIFICATIONS (NOT USED)

1.07 DELIVERY, STORAGE, AND HANDLING (NOT USED)

1.08 PROJECT/SITE CONDITIONS (NOT USED)

1.09 DEFINITIONS (NOT USED)

1.10 TOLERANCE (NOT USED)

1.11 PRELIMINARY SCHEDULE OF VALUES

 Submit a preliminary Schedule of Values for the major components of the Work at the pre-construction meeting. The listing shall include, at a minimum, the proposed value for the following major Work components:

1. The Contractor and all Subcontractors – Mobilization. Mobilization costs shall constitute no more than 5% of the total Contract values.
2. The total value of civil piping and other buried infrastructure work inclusive of

support of excavation, excavation, pipe and structures installation, testing and backfill of pipe or other structures, disposal of surplus material, and all incidental work associated with underground construction.

3. The total value of structural reinforced concrete work. Miscellaneous and minor concrete work may be listed as one item in this breakdown.
 4. The total value of site civil work inclusive of regrading, grading, cold planning, paving, curbs and sidewalks, and landscaping.
- B. After the Pre-construction meeting, meet with the Authority and jointly review the preliminary Schedule of Values and make any adjustments in value allocations if, in the opinion of the Authority, these are necessary to establish fair and reasonable allocation of values for the major work components. Front end loading will not be permitted. The Authority may require reallocation of major work components from items in the above listing if in the opinion of the Authority such reallocation is necessary. This review and any necessary revisions shall be completed within 14 days from the date of Notice to Proceed.

1.12 DETAILED SCHEDULE OF VALUES

- A. Prepare and submit a detailed Schedule of Values to the Authority within 21 days from the date of Notice to Proceed. The detailed Schedule of Values shall be based on the accepted preliminary Schedule of Values for major work components. Because the ultimate requirement is to develop a detailed Schedule of Values sufficient to determine appropriate monthly progress payment amounts through cost loading of the CPM Schedule activities, sufficient detailed breakdown shall be provided to meet this requirement. The Authority shall be the sole judge of acceptable numbers, details and description of values established. If, in the opinion of the Authority, a greater number of Schedule of Values items than proposed is necessary, add the additional items so identified by the Authority.
1. Submit documentation to support the values with data which will substantiate their correctness.
- B. Meet with the Authority to jointly review the detailed Schedule of Values within 28 days from the date of Notice to Proceed. The value allocations and extent of detail shall be reviewed to determine any necessary adjustments to the values and to determine if sufficient detail has been proposed to provide cost loading of the CPM Schedule activities. Any adjustments deemed necessary to the value allocation or level of detail shall be made and a revised detailed Schedule of Values shall be submitted within seven (7) days from the joint review.
- C. Following acceptance of the detailed Schedule of Values, meet with the Authority to incorporate the values into their respective cost loading portions of the Construction

Schedule in accordance with Section 01310 – Progress Schedules. The CPM activities and logic shall have been developed concurrent with development of the detailed Schedule of Values; however, it shall be necessary to adjust the detailed Schedule of Values to correlate to individual Schedule activities. It is anticipated that instances will occur, due to the independent, but simultaneous development of the Schedule of Values and the CPM Schedule activities, where interfacing these two (2) documents will require changes to each document. Schedule activities may need to be added to accommodate the detail of the Schedule of Values. Schedule of Value items may need to be added to accommodate the detail of the CPM Schedule activities. Where such instances arise, propose changes to the Schedule of Values and to the CPM Schedule activities to satisfy the CPM Schedule cost loading requirements.

1.13 CROSS REFERENCE LISTING

- A. To assist in the correlation of the Schedule of Values and the CPM Schedule, provide a Cross Reference Listing which shall be furnished in two (2) parts. The first part shall list each Scheduled Activity with the breakdown of the respective valued items making up the total cost of the activity. The second part shall list the valued item with the respective Scheduled Activity or Activities that make up the total cost indicated. In the case where a number of schedule items make up the total cost for a valued item (indicated in the Schedule of Values) the total cost for each scheduled item shall be indicated.
- B. These listings shall be updated and submitted in conjunction with the CPM monthly submittals as specified in Specification Section 01310 – Progress Schedules.
- C. Approved change orders reflected in the CPM Schedule shall be incorporated into the Schedule of Values as a single unit identified by the change order number.

1.14 CHANGES TO SCHEDULE OF VALUES

- A. Changes to the CPM Schedule which add activities not included in the original schedule but included in the original Work (schedule omissions) shall have values assigned as approved by the Authority. Other activity values shall be reduced to provide equal value adjustment increases for added activities as approved by the Authority.
- B. In the event that adjustments to the original Schedule of Values are agreed upon with the Authority because of inequities discovered in the original accepted detailed Schedule of Values, increases and equal decreases to values for activities may be made.

1.15 SEQUENCING AND SCHEDULE

- A. In addition to other submissions of the Schedule of Values specified herein, submit the Schedule of Values concurrent with the CPM Schedule in accordance with Section 01310 – Progress Schedule.

- B. The Authority will not process the first monthly payment requisition until the detailed Schedule of Values has been determined to be complete, and has been accepted, by the Authority.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**** END OF SECTION ****