



# **CONTRACT TECHNICAL SPECIFICATIONS**

## **PD Modular Building Site Development**

These Technical Specifications are intended to supplement Division 1 through Division 9 of the 2024 Standard Specifications for Road, Bridge, and Municipal Construction, prepared by the Washington State Department of Transportation (WSDOT) and the American Public Works Associations, Washington State Chapter and amendments thereto, herein referred to as Standard Specifications. In case of conflict, these Technical Specifications shall take precedence over the Standard Specifications.

## **DIVISION 1    General Requirements**

### **1-09 MEASUREMENT AND PAYMENT**

**(Revised Section)**

Delete this section and replace with the following:

#### **1-09.1 Scope**

- A. This section defines Measurement and Payment for the Project.

#### **1-09.2 Measurement and Quantities**

- A. Measurement for all items shall be as indicated in these Specifications for unit price and Lump sum price bid items. Bid items are outlined in detail in this Section.

#### **1-09.3 Payment**

- A. Payment will be the unit price multiplied by the measured quantity. Lump sum payment will be paid at the price indicated on the Bid Form. Bid items are outlined in detail in the specifications section.
- B. No separate payment shall be made for any Work item that is not specifically set forth in the Bid Schedule, and all costs therefore shall be included in the prices named in the Bid Schedule for the various appurtenant items of Work.
- C. All other Work required to complete the Work specified in the contract documents, but not indicated specifically as a pay item, shall be considered necessary and incidental work.

#### **1-09.4 Schedule of Bid Items**

The following is a list of bid items for the project. The contract price for each item constitutes full compensation for furnishing all equipment, labor, materials, appurtenances, and incidentals and performing all operations necessary to construct and complete the various bid items in accordance with the Contract Documents. Payment for each item shall be considered as full compensation, notwithstanding that minor features may not be mentioned herein. Work paid for under one item will not be paid for under any other item. If a particular item of work shown on the Plans or described in Specifications is not described in a specific bid item, this item of work shall be considered as incidental to the work and the costs for this work shall be merged into the various respective bid items.

##### **A. Bid Item 1. Mobilization & Demobilization**

1. Measurement shall be by lump sum.
2. Description
  - a. Mobilization: The work to be performed includes the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of offices, buildings and other facilities necessary for work on the project; for permitting, premiums on bonds and insurance for the project and for all other work and operations which must be performed, or costs incurred before beginning work on the various contract items.
  - b. Demobilization: At the end of the project includes removal of tools, materials, equipment, and facilities used by the Contractor during construction; final cleanup that consists of complete restoration of the project site to pre-existing conditions. This pay-item shall also include the final clean-up if the site and restoration of all property not designated for alteration by the Contract Documents.
  - c. Dust control, mud control, and street cleaning is considered incidental to the project.

- d. Equipment staging and storage may occur at the project site.
3. Payment: Mobilization and Demobilization will not be measured for payment. The original contract bid amount for "Mobilization and Demobilization" shall not be adjusted, although the Contractor may have, for any reason, shut down the Work on the project or moved equipment away from the project and then returned.
4. Partial payments will be made as the Work progresses as follows:
  - a. When 5% of the total original contract amount is earned from other pay items, 50% of the amount bid for Mobilization, or 5% of the original contract amount, whichever is lesser, will be paid.
  - b. When 10% of the total original contract amount is earned from other pay items, 100% of the amount bid for Mobilization, or 10% of the original contract amount, whichever is lesser, will be paid.
  - c. Upon completion of all Work on the Project, payment of any amount bid for Mobilization in excess of 10% of the total original contract amount will be paid.

**B. Bid Item No. 2. Tree Removal 8-10" Diameter**

1. Measurement shall be per each.
2. Payment: The price bid for Tree Removal 8-10" Diameter shall include all materials, equipment, labor, and incidentals required to complete this work as described, according to these Specifications and Plans, and as specified below:
  - a. Complete removal of large diameter (8-10 inch) Oregon White Oaks as shown on the Demolition Exhibit Sheet of the Plans.
  - b. Excess debris shall become property of the Contractor and shall be removed and disposed of in a legal manner off of the Owner's property. Location of dump and length of haul shall be the Contractor's responsibility.
3. Payment: Payment for this item shall be made on a per each basis as completed during the project.

**C. Bid Item No. 3. Tree Removal 3" Diameter**

1. Measurement shall be per each.
2. Payment: The price bid for Tree Removal 8-10" Diameter shall include all materials, equipment, labor, and incidentals required to complete this work as described, according to these Specifications and Plans, and as specified below:
  - a. Complete removal of small diameter (3 inch) Oregon White Oaks as shown on the Demolition Exhibit Sheet of the Plans.
  - b. Excess debris shall become property of the Contractor and shall be removed and disposed of in a legal manner off of the Owner's property. Location of dump and length of haul shall be the Contractor's responsibility.
  - c. No additional payment shall be made for this item should actual costs exceed the amount of the Bid and all compensation therefore is to be included in this items price. Full compensation for this item, as described in these Specification and Plans, shall be considered as included in the contract price paid per this bid item and no additional compensation shall be allowed therefore.
3. Payment: Payment for this item shall be made on a per each basis as completed during the

project.

**D. Bid Item No. 4. Clearing and Grubbing**

1. Measurement shall be per square foot.
2. Payment: The price bid for Clearing and Grub shall include all materials, equipment, labor, and incidentals required to complete this work as described, according to these Specifications and Plans, and as specified below:
  - a. Completely remove stumps, roots, obstructions and debris extending to a depth of 12 inches below subgrade.
    - (1) Cut, cap, and relocation of existing irrigation items within the demolition area. Any existing irrigation items outside of the demolition area that are damaged during the removal of trees and landscaping shall be replaced at no extra charge to the City.
  - b. Removal of existing shrubs, bushes, plants, grass, roots, and miscellaneous debris that interfere with construction limits.
  - c. All tree roots, debris, and excess earth materials shall become the property of the Contractor and shall be removed and disposed of in a legal manner off of the Owner's property. Location of dump and length of haul shall be Contractor's responsibility.
3. Payment: Payment for this item shall be made on a per square foot basis as completed during the project.

**E. Bid Item No. 5. Asphalt Pavement (2" HMA Class B)**

1. Measurement shall be per ton.
2. Payment: The price bid for Hot Mix Asphalt (HMA) shall include all materials, equipment, labor, and incidentals required to complete this work as described, to the line, grade, and compaction according to these Specifications and Plans, and as specified below:
  - a. Placement and compaction of 2" HMA pavement section, Class 1/2" PG 58H-22, constructed in accordance with section 5-04 of the WSDOT Standard Specifications.
  - b. Compaction shall be 92% of maximum density as determined by WSDOT FOP for AASHTO T209.
  - c. Application of a uniform tack coat, CSS-1 or CSS-1h emulsified asphalt, to all existing concrete or asphalt on which new courses of HMA are to be placed or abutted, as well as between subsequent lifts of new HMA, is considered incidental to this work and shall be paid for under this bid item.
  - d. No additional payment shall be made for this item should actual costs exceed the amount of the Bid and all compensation therefor is to be included in this items price. Full compensation for this item, as described in these Specification and Plans, shall be considered as included in the contract price paid per this bid item and no additional compensation shall be allowed therefore.
3. Payment: Payment for this item shall be made on a per ton basis as completed during the project.

**F. Bid Item No. 6. Crushed Rock (5/8" Minus)**

1. Measurement shall be per ton.
2. Payment: The price bid for Crushed Rock (5/8" Minus) shall include all materials, equipment,

labor, and incidentals required to complete this work as described, to the line, grade, and compaction according to these Specifications and Plans, and as specified below:

- a. Placement of Crushed Rock section to the depth and width as noted on the Plans.
    - (1) Area of demolished planter receives 4" compacted base for paving
    - (2) Trench backfill
  - b. The quantity shown for this item shall be considered as approximate and is indicated for bid comparison only and no guarantee is made or implied that the quantities shown will not be reduced or increased or deleted as required.
3. Payment: Payment for this item shall be made on a per ton basis as completed during the project.

**G. Bid Item No. 7. Asphalt Landscape Curb**

1. Measurement shall be per linear foot.
2. Payment: The price bid for Asphalt Landscape Curb shall include all materials, equipment, labor, and incidentals required to complete this work as described, excavation, subgrade preparation, grading and construction of asphalt curb, to the line, grade, and compaction according to these Specifications and Plans, and as specified below:
  - a. Placement of Asphalt Curb per City Std. ST-16.
  - b. Placement where indicated on Sheet ST-1 of the Plans and where necessary for trench restoration.
3. Payment: Payment for this item shall be made on a per linear foot basis as completed during the project.

**H. Bid Item No. 8. Concrete Sidewalk**

1. Measurement shall be per square foot.
2. Payment: The price bid for Concrete Sidewalk shall include all materials, equipment, labor, and incidentals required to complete this work as described, excavation, subgrade preparation, grading, sand, and construction of concrete sidewalk, to the line, grade, according to these Specifications and Plans, and as specified below:
  - a. Pedestrian path of travel shall be in compliance with the ADA Guidelines, most recent edition.
  - b. Concrete in the sidewalks and curb ramps shall be air entrained concrete Class 3000 in accordance with the requirements of Section 6-02 of WSDOT Standard Specifications.
3. Payment: Payment for this item shall be made on a per square foot basis as completed during the project.

**I. Bid Item No. 9. Perpendicular Curb Ramp**

1. Measurement shall be per square foot.
2. Payment: The price bid for Perpendicular Curb Ramp shall include all materials, equipment, labor, and incidentals required to complete this work as described, excavation, subgrade preparation, grading, sand, and construction of concrete perpendicular curb ramp, to the line, grade, according to these Specifications and Plans, and as specified below:
  - a. Pedestrian Path of Travel shall be in compliance with the Americans with Disabilities

Act 2010 Guidelines.

- b. Concrete in the sidewalks and curb ramps shall be air entrained concrete Class 3000 in accordance with the requirements of Section 6-02 of WSDOT Standard Specifications.
  - c. Wet-Set Detectable Warning Surface Tile.
3. Payment: Payment for this item shall be made on a per square foot basis as completed during the project.

**J. Bid Item No. 10. Meter Excavation and Trench/Shore**

1. Measurement shall be per lump sum.
2. Payment: The price bid for Meter Excavation and Trench/Shore shall include all materials, equipment, labor, and incidentals required to complete this work as described, to these Specifications and Plans, and as specified below:
  - a. This item shall include all potholing, locating, excavation, sheeting, shoring and bracing for the excavation, needed to allow City Crews to perform the meter install on the existing 8 inch water main.
  - b. Coordinating with City to provide meter and perform direct tap and installation of the meter. Two weeks notice required. City will perform tap on a on a Wednesday.
  - c. Backfill and restoration of the area. Set new meter box on firm, compacted gravel and adjust to finish grade. Boxes must be perpendicular to the street.
3. Payment: Payment for this item shall be prorated over the life of the project based on the percentage of this construction item completed during the project.

**K. Bid Item No. 11. 1" RPBA**

1. Measurement shall be per each unit.
2. Payment: The price bid for 1" RPBA shall include all materials, equipment, labor, and incidentals required to complete this work as described, excavation, trenching, and work needed to install 1" RPBA per these Specifications and Plans, and as specified below:
  - a. Install an approved 1" RPBA at the meter location.
  - b. Have the RPBA tested and inspected within 30 days of the installation by a person certified as a BAT (Backflow Assembly Tester) by the Washington State Department of Health, and the results shall be delivered to the City.
3. Payment: Payment for this item shall be made on a per each basis as completed during the project.

**L. Bid Item No. 12. 1" PVC Water Service**

1. Measurement shall be per linear foot.
2. Payment: The price bid for 1" PVC Water Service shall include all materials, equipment, labor, and incidentals required to complete this work as described, all excavation, trenching, utility avoidance, and backfill needed to install 1" PVC Water Service per these Specifications and Plans, and as specified below:
  - a. Install 1" PVC water service from the installed RPBA to Buildings 1 and 3.
  - b. Install tracer wire along the entire length of pipe
  - c. Acceptable methods for install include open cut and boring.

- (3) If the Contractor elects to bore long services, the Contractor will be required to pothole prior to boring. The Contractor is responsible for verifying underground utilities, avoiding conflicts or other concerns, and repairing any damaged utilities at the Contractor's expense. The City is not responsible for any damage caused by the Contractor's boring operations. All other provisions of the specifications shall apply.
    - d. The minimum depth of cover shall be 30 inches from finish grade.
3. Payment: Payment for this item shall be made on a per linear foot as completed during the project.

**M. Bid Item No. 13. Building Service Connections (Water)**

1. Measurement shall be per each unit.
2. Payment: The price bid for Building Service Connections (Water) shall include all materials, equipment, labor, and incidentals required to complete this work as described, to these Specifications and Plans, and as specified below:
  - a. This item shall include all work necessary to make above ground water connections to buildings as shown on PAE sheet P2.01 and Water-Sewer Connection Detail sheet.
  - b. Installation of 1" vertical RPBA within the modular building as shown on PAE sheet P2.01.
  - c. Installation of heat trace frost protection on exposed pipe.
3. Payment: Payment for this item shall be made on a per each basis as completed during the project.

**N. Bid Item No. 14. Water Disinfection & Testing**

1. Measurement shall be per lump sum.
2. Payment: The price bid for Water Disinfection & Testing shall include all materials, equipment, labor, and incidentals required to complete this work as described, to these Specifications and Plans, and as specified below:
  - a. This item shall include all work necessary to perform post installation pressure testing and disinfection of the water connection as required by all state and local requirements.
3. Payment: Payment for this item shall be prorated over the life of the project based on the percentage of this construction item completed during the project.

**O. Bid Item No. 15. Sewer Service Tie-In**

1. Measurement shall be per lump sum basis.
2. Payment: The price bid for Sewer Service Tie-In shall include all materials, equipment, labor, and incidentals required to complete this work as described, locating, potholing, excavation, trenching, shoring and bracing, and backfill needed to complete the sewer service tie-in per these Specifications and Plans, and as specified below:
  - a. Work necessary to tie into the existing capped tee located on the existing AC sewer main.
3. Payment: Payment for this item shall be prorated over the life of the project based on the percentage of this construction item completed during the project.

**P. Bid Item No. 16. Building Service Connections (Sewer)**

1. Measurement shall be per each unit.
2. Payment: The price bid for Building Service Connections (Sewer) shall include all materials, equipment, labor, and incidentals required to complete this work as described, to these Specifications and Plans, and as specified below:
  - a. This item shall include all work necessary to make above ground sewer connections to buildings as shown on PAE sheet P2.01 and Water-Sewer Connection Detail sheet.
  - b. Includes all added waste piping and pipe supports to make the complete connection under trailers.
  - c. Installation of pipe insulation frost protection on exposed pipe.
3. Payment: Payment for this item shall be made on a per each basis as completed during the project.

**Q. Bid Item No. 17. 6" PVC SDR 35 Sewer Pipe**

1. Measurement shall be per linear foot.
2. Payment: The price bid for 6" PVC SDR 35 Sewer Pipe shall include all materials, equipment, labor, and incidentals required to complete this work as described, all excavation, trenching, utility avoidance, and backfill per these Specifications and Plans, and as specified below:
  - a. Installation of 6" side sewer per the Mercer Island Side Sewer Construction requirements.
    - (1) Six-inch (6") pipe must be laid at a minimum 1.2% grade
    - (2) Meet water sewer separation requirements
    - (3) 42 inches cover minimum
    - (4) The broad, "bell" ends of pipe must be laid uphill
    - (5) Imported backfill material will be required in all paved areas and must be compacted to 95% of maximum density in 1 ft. lifts. In public right of way, only select material (5/8" minus C.R.) will be allowed for bedding and backfill
    - (6) 5/8 minus paid for under bid item 6.
    - (7) All changes in direction must be made with 1/8 bends (45 degrees), 1/16 bends (22 ½ degrees), or "Y"
    - (8) branches with the straight-through opening plugged for clean-out
  - b. Installation of tracer wire along the entire length of pipe.
  - c. ASTM 3034 SDR 35 PVC pipe, fused solid wall HDPE, schedule 40 ABS, DIP or CIP.
  - d. Newly installed side sewer requires a 4 psi air test or provide 10' of hydrostatic head test.
3. Payment: Payment for this item shall be made on a per linear foot as completed during the project.

**R. Bid Item No. 18. Sewer Clean-out**

1. Measurement shall be per each unit.
2. Payment: The price bid for Sewer Clean-out shall include all materials, equipment, labor, and incidentals required to complete this work as described, to these Specifications and



Plans, and as specified below:

- a. Installation of sewer clean-outs where shown on the plans and per the applicable City Std. Detail.
  - b. No more than two bends are permitted between clean-outs, which must be placed at least every 100 feet. Clean-outs must extend to within 12" of the finished grade and capped with a water-tight plug. Clean-outs in paved areas, patios, or sidewalks must have cast iron frames and covers with locking lids set to finished paved grade.
3. Payment: Payment for this item shall be made on a per each basis as completed during the project.

**S. Bid Item No. 19. Sewer Testing**

1. Measurement shall be a lump sum basis..
2. Payment: The price bid for Sewer Testing shall include all materials, equipment, labor, and incidentals required to complete this work as described, to these Specifications and Plans, and as specified below:
  - c. Newly installed side sewer requires a 4 psi air test or provide 10' of hydrostatic head test.
3. Payment: Payment for this item shall be prorated over the life of the project based on the percentage of this construction item completed during the project.

**T. Bid Item No. 20. Minor Changes**

1. Measurement shall be a lump sum basis.
2. Payment: Payment or credits for field changes may be made under the Bid Item "Minor Changes". At the discretion of the City, this procedure for changes may be used in lieu of the more formal procedure as outlined in the GENERAL TERMS AND CONDITIONS. The Contractor will be provided a copy of the completed order for change. The agreement for the change will be documented by signature of the Contractor or notation of the verbal agreement. If the Contractor disagrees with anything required by the order for change, the Contractor may protest the order as provided in the GENERAL TERMS AND CONDITIONS.
3. For the purpose of provided a common Bid Proposal, the City has entered an amount for "Minor Changes" in the Proposal to become part of the Total Bid by the Contractor.

**END OF SECTION**