



## **DESIGN STANDARDS FOR: MEASUREMENT AND PAYMENT**

Where bids are utilities for construction, repair or alteration for Public Work park projects, the following bid item descriptions and units of measure may be used as a guide for preparing bid proposal forms as part of the project specifications manual.

<b>Item Name</b>	<b>Description</b>	<b>Unit of Measure</b>
Mobilization	Per WSDOT 1-09.7	Lump Sum
Trench Excavation	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals for all trench excavation and safety provisions not included in any other unit price items.	Lump Sum
Temporary Erosion and Sedimentation Control (TESC)	<p>Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals for the construction of a temporary construction entrance, installation of temporary orange PVC fencing, installation of straw wattles, installation of a construction staging area, and installation of catch basin inlet protection as shown on the drawings and as specified in the specifications.</p> <p>Payment also includes the removal of all of these TESC measures after the construction of the new trail is complete and the restoration of the existing trail and construction staging area to its pre-construction condition.</p> <p>Upon acceptance of the Contractor's Erosion and Sediment Control Plan (CESCP) and TESC personnel list with certification cards, 25 percent.</p> <p>After NTP and before Substantial Completion, 50 percent will be prorated and paid monthly for compliance with CESCP. Non-compliance will result in withholding of payment for the month of non-compliance.</p> <p>At final payment, 25 percent for a clean site.</p>	Lump Sum

<b>Item Name</b>	<b>Description</b>	<b>Unit of Measure</b>
Construction Access Road	<p>Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals for all construction access roads required for the duration of the project.</p> <p>Includes restoring construction access road areas to original conditions at the project's completion.</p> <p>After initial installation, 50% will be paid</p> <p>After site is restored, the remaining 50% will be paid</p>	Lump Sum
Surveying	<p>Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals necessary to survey critical areas, clearing limits, layout, cut and fill and all other surveying necessary to provide compliance with the contract drawings.</p> <p>All surveying shall be completed by a professional land surveyor licensed and registered in the State of Washington.</p>	Lump Sum
Site Protection	<p>Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals to protect all trees and park facilities such as benches, walkways and tables within the contractor staging area or near construction activities per City of Bellingham Parks standards.</p>	Lump Sum
Traffic Control	<p>Includes full compensation for all materials, labor, supervision, temporary signage, tools, equipment, supplies, and incidentals necessary to furnish and install all pedestrian and vehicular traffic control items required for the duration of the project.</p> <p>Remove all traffic control items at the project's completion.</p>	Lump Sum
Landscape Restoration	<p>Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals to remove all construction related materials and restore construction site and surrounding areas to original conditions.</p> <p>Payment at initial restoration: 75%</p> <p>Payment after restoration seeding establishment meeting contract specifications: 25%</p>	Lump Sum
Superstructure Removal and Disposal	<p>Full compensation for labor, materials, tools, equipment and incidentals necessary to remove existing superstructure, including stringers, decking, railings and appurtenances as required to construct improvements as shown in the drawings and written in the specifications.</p>	Lump Sum

<b>Item Name</b>	<b>Description</b>	<b>Unit of Measure</b>
Demolition, Clearing & Grubbing	<p>Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals for all clearing &amp; grubbing activities as defined in these specifications.</p> <p>Clearing and grubbing includes the removal of all trees less than 10 inches in diameter and their associated stumps and root wads to a depth as indicated in these specifications.</p> <p>Payment also includes the felling and removal of trees over 10 inches in diameter including their root wads where shown on the Drawings. Payment also includes the hauling and disposing of off-site.</p>	Lump Sum
Grading, Excavation, and Embankment	<p>Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals to excavate trail to subgrade elevation as shown on the Drawings and haul excavated material to the construction staging area for stockpiling.</p> <p>Also includes all labor and equipment to excavate trail to a recommended stripping depth of approximately [enter depth here, which shall be determined on a project by project basis, typically 12 inches] inches below existing ground surface throughout as recommended in the geotechnical report for this project (and deeper in those areas where grades dictate and to and haul and dispose of excavated material to an off-site location.</p> <p>Includes all labor and equipment to excavate soil as determined by the project geotechnical engineer to be unsuitable material for trail subgrade to a depth as determined by the geotechnical engineer and to and haul and dispose of excavated material to an off-site location.</p> <p>Also includes all labor, equipment, and materials to place and compact native soil from on-site as embankment fill as required by the Drawings and as specified in these specifications.</p>	Cubic Yard In Place
Fine Grading	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals to prepare site to an elevation as shown on the drawings and as specified in these specifications.	Lump Sum
Crushed Limestone Top Course	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals for complete installation of crushed limestone top course trail surfacing based on approved truck tickets and as shown on the Drawings and as specified in these specifications.	Ton

<b>Item Name</b>	<b>Description</b>	<b>Unit of Measure</b>
Crushed Surfacing Base Course	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals for complete installation of crushed surfacing base course based on approved truck tickets and as shown on the Drawings and as specified in these specifications.	Ton
Rip Rap	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals necessary to construct the riprap protection, except excavation, and based on approved truck tickets.  When it is necessary to dump and sort individual loads, payment will be made only for that portion accepted by the Owner's Representative.	Ton
Abutment Fill	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals necessary to furnish and install geotextile fabric, structural fill, pea gravel, and other fill for abutment slopes as shown in the drawings and written in the specifications.	Lump Sum
Abutment Steel Piles	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals necessary to furnish and install steel pipe piles as shown on the drawings and written in the specifications.	Each
Abutment Concrete Pile Caps	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals necessary to furnish and install reinforced concrete abutment pile caps as shown on the drawings and written in the specifications.	Lump Sum
Fiber Reinforced Plastic (FRP) Deck	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals necessary to furnish and install fiber reinforced plastic (FRP) deck panels as shown on the drawings and written in the specifications.	Lump Sum
Precast Concrete Deck Slabs	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals necessary to furnish and install precast concrete deck slabs complete as specified and shown on Drawings and not provided in other unit price items.	Lump Sum
Metal Fabrications	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals necessary to furnish and install all other miscellaneous steel not included in other unit prices.	Lump Sum
As-Built Drawings	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals necessary to furnish as-built drawings of the project meeting the requirements of the specifications, reviewed and approved by Owner.	Lump Sum

<b>Item Name</b>	<b>Description</b>	<b>Unit of Measure</b>
Permeable Ballast	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals necessary to furnish and complete installation of permeable ballast based on approved truck tickets and as shown on the Drawings and as specified in these specifications.	Ton
Import, Place, and Compact Select Borrow	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals for compacting of select borrow fill material to elevations as shown on the Drawings and based on approved truck tickets.	Ton
Non-woven Geotextile	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals to provide and install non-woven geotextile fabric as shown on the Drawings and as specified in the specifications.	Square Yard
Sign Post for Dog Waste Station:	Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals for the fabrication and installation of sign post, post base, graphics, sign, and hardware as specified in the Drawings for a dog waste station.	Each
Force Account	<p>This item includes monies for repairing unknown existing public/private facilities that are disturbed during construction and for other miscellaneous changes as approved by the Owner.</p> <p>The estimated amount provided as shown on the Bid Form is an allowance for work outside the Contract Requirements to be paid in accordance with the provisions of the Supplementary Conditions and only with prior approval of the City of Bellingham Parks and Recreation.</p>	EST
Mulch	<p>Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals to complete stockpile, haul and install imported wood chip mulch to the depth indicated on the plans along the trail, within the entire planting areas, in wetland creation areas, and to cover restored contractor's access into the site as indicated on the plans.</p> <p>This item also includes all compensation to the contractor for any optional chipping of any on site felled trees.</p>	CY
Plant Selection Including Plant Establishment Trees, 2 Gal	<p>Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals to complete, provide, install, guarantee and maintain container trees as detailed and described on the plans and in the specifications, complete in place.</p> <p>Payment shall be per WSDOT 8-02.5</p>	EA

<b>Item Name</b>	<b>Description</b>	<b>Unit of Measure</b>
Plant Selection Including Plant Establishment Shrubs, 1 Gal	<p>Shall include all labor, equipment Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals to complete, provide, install, guarantee and maintain container shrubs as detailed and described on the plans and in the specifications, complete in place.</p> <p>Payment shall be per WSDOT 8-02.5</p>	EA
Plant Maintenance and Guarantee	<p><b>[use this section if plant maintenance and guarantee is paid for separate from plant selection]</b></p> <p>Work shall be completed in accordance with WSDOT Standard Specification 8-02.1.</p> <p>Watering of all planted material shall occur a minimum of once a week for the duration of the 2yr plant maintenance period.</p> <p>Weeding of the entire planted area shall occur a minimum of once a month for the duration of the 2yr plant maintenance period.</p> <p>Payment shall be per lump sum on a monthly basis at a partial payment equal to a percentage complete of the unit Contract price.</p>	Lump Sum
Way Finding Post and Foundation	<p>Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals to complete, provide, and install specified way finding post and post footing, complete in place.</p> <p>Payment shall be per each, installed.</p>	EA
Fence	<p>Includes full compensation for all materials, labor, supervision, tools, equipment, supplies, and incidentals to complete, provide, and install specified fence, complete in place.</p> <p>Payment shall be per LF, installed.</p>	LF

END OF SECTION