

Site Improvement Bond Quantity Worksheet

S15 Web date: 04/03/2015



Department of Permitting & Environmental Review

35030 SE Douglas Street, Suite 210
Snoqualmie, Washington 98065-9266
206-296-6600 TTY Relay 711

For alternate formats, call 206-296-6600.

Project Name: _____

Date: _____

Location: _____

Project No.: _____

Activity No.: _____

Clearing greater than or equal to 5,000 board feet of timber?

yes _____ no

If yes,

Forest Practice Permit Number: _____

(RCW 76.09)

Note: All prices include labor, equipment, materials, overhead and profit. Prices are from RS Means data adjusted for the Seattle area or from local sources if not included in the RS Means database.

Site Improvement Bond Quantity Worksheet

S15 Web date: 04/03/2015

		Reference #	Unit Price	Unit	Quantity	# of Applications	Cost
<u>EROSION/SEDIMENT CONTROL</u>							
	Number						
Backfill & compaction-embankment	ESC-1		\$ 6.00	CY			
Check dams, 4" minus rock	ESC-2	SWDM 5.4.6.3	\$ 80.00	Each			
Crushed surfacing 1 1/4" minus	ESC-3	WSDOT 9-03.9(3)	\$ 95.00	CY			
Ditching	ESC-4		\$ 9.00	CY			
Excavation-bulk	ESC-5		\$ 2.00	CY			
Fence, silt	ESC-6	SWDM 5.4.3.1	\$ 1.50	LF			
Fence, Temporary (NGPE)	ESC-7		\$ 1.50	LF			
Hydroseeding	ESC-8	SWDM 5.4.2.4	\$ 0.80	SY			
Jute Mesh	ESC-9	SWDM 5.4.2.2	\$ 3.50	SY			
Mulch, by hand, straw, 3" deep	ESC-10	SWDM 5.4.2.1	\$ 2.50	SY			
Mulch, by machine, straw, 2" deep	ESC-11	SWDM 5.4.2.1	\$ 2.00	SY			
Piping, temporary, CPP, 6"	ESC-12		\$ 12.00	LF			
Piping, temporary, CPP, 8"	ESC-13		\$ 14.00	LF			
Piping, temporary, CPP, 12"	ESC-14		\$ 18.00	LF			
Plastic covering, 6mm thick, sandbagged	ESC-15	SWDM 5.4.2.3	\$ 4.00	SY			
Rip Rap, machine placed; slopes	ESC-16	WSDOT 9-13.1(2)	\$ 45.00	CY			
Rock Construction Entrance, 50'x15'x1'	ESC-17	SWDM 5.4.4.1	\$ 1,800.00	Each			
Rock Construction Entrance, 100'x15'x1'	ESC-18	SWDM 5.4.4.1	\$ 3,200.00	Each			
Sediment pond riser assembly	ESC-19	SWDM 5.4.5.2	\$ 2,200.00	Each			
Sediment trap, 5' high berm	ESC-20	SWDM 5.4.5.1	\$ 19.00	LF			
Sed. trap, 5' high, riprapped spillway berm section	ESC-21	SWDM 5.4.5.1	\$ 70.00	LF			
Seeding, by hand	ESC-22	SWDM 5.4.2.4	\$ 1.00	SY			
Sodding, 1" deep, level ground	ESC-23	SWDM 5.4.2.5	\$ 8.00	SY			
Sodding, 1" deep, sloped ground	ESC-24	SWDM 5.4.2.5	\$ 10.00	SY			
TESC Supervisor	ESC-25		\$ 110.00	HR			
Water truck, dust control	ESC-26	SWDM 5.4.7	\$ 140.00	HR			
<u>WRITE-IN-ITEMS **** (see page 9)</u>							
				Each			

ESC SUBTOTAL:	\$ -
30% CONTINGENCY & MOBILIZATION:	\$ -
ESC TOTAL:	\$ -
COLUMN:	A

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				Existing Right-of-Way		Future Public Right of Way & Drainage Facilities		Private Improvements		
		Unit Price	Unit	Quant.	Cost	Quant.	Cost	Quant.	Cost	
GENERAL ITEMS	No.									
Backfill & Compaction- embankment	GI - 1	\$ 6.00	CY							
Backfill & Compaction- trench	GI - 2	\$ 9.00	CY							
Clear/Remove Brush, by hand	GI - 3	\$ 1.00	SY							
Clearing/Grubbing/Tree Removal	GI - 4	\$10,000.00	Acre							
Excavation - bulk	GI - 5	\$ 2.00	CY							
Excavation - Trench	GI - 6	\$ 5.00	CY							
Fencing, cedar, 6' high	GI - 7	\$ 20.00	LF							
Fencing, chain link, vinyl coated, 6' high	GI - 8	\$ 20.00	LF							
Fencing, chain link, gate, vinyl coated, 20	GI - 9	\$ 1,400.00	Each							
Fencing, split rail, 3' high	GI - 10	\$ 15.00	LF							
Fill & compact - common barrow	GI - 11	\$ 25.00	CY							
Fill & compact - gravel base	GI - 12	\$ 27.00	CY							
Fill & compact - screened topsoil	GI - 13	\$ 39.00	CY							
Gabion, 12" deep, stone filled mesh	GI - 14	\$ 65.00	SY							
Gabion, 18" deep, stone filled mesh	GI - 15	\$ 90.00	SY							
Gabion, 36" deep, stone filled mesh	GI - 16	\$ 150.00	SY							
Grading, fine, by hand	GI - 17	\$ 2.50	SY							
Grading, fine, with grader	GI - 18	\$ 2.00	SY							
Monuments, 3' long	GI - 19	\$ 250.00	Each							
Sensitive Areas Sign	GI - 20	\$ 7.00	Each							
Sodding, 1" deep, sloped ground	GI - 21	\$ 8.00	SY							
Surveying, line & grade	GI - 22	\$ 850.00	Day							
Surveying, lot location/lines	GI - 23	\$ 1,800.00	Acre							
Traffic control crew (2 flaggers)	GI - 24	\$ 120.00	HR							
Trail, 4" chipped wood	GI - 25	\$ 8.00	SY							
Trail, 4" crushed cinder	GI - 26	\$ 9.00	SY							
Trail, 4" top course	GI - 27	\$ 12.00	SY							
Wall, retaining, concrete	GI - 28	\$ 55.00	SF							
Wall, rockery	GI - 29	\$ 15.00	SF							

SUBTOTAL

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Web date: 04/03/2015

				Existing Right-of-way		Future Public Right of Way & Drainage Facilities		Private Improvements	
		Unit Price	Unit	Quant.	Cost	Quant.	Cost	Quant.	Cost
ROAD IMPROVEMENT									
	No.								
AC Grinding, 4' wide machine < 1000sy	RI - 1	\$ 30.00	SY						
AC Grinding, 4' wide machine 1000-2000s	RI - 2	\$ 16.00	SY						
AC Grinding, 4' wide machine > 2000sy	RI - 3	\$ 10.00	SY						
AC Removal/Disposal	RI - 4	\$ 35.00	SY						
Barricade, type III (Permanent)	RI - 6	\$ 56.00	LF						
Curb & Gutter, rolled	RI - 7	\$ 17.00	LF						
Curb & Gutter, vertical	RI - 8	\$ 35.00	LF						
Curb and Gutter, demolition and disposal	RI - 9	\$ 18.00	LF						
Curb, extruded asphalt	RI - 10	\$ 5.50	LF						
Curb, extruded concrete	RI - 11	\$ 7.00	LF						
Sawcut, asphalt, 3" depth	RI - 12	\$ 5.00	LF						
Sawcut, concrete, per 1" depth	RI - 13	\$ 3.00	LF						
Sealant, asphalt	RI - 14	\$ 2.00	LF						
Shoulder, AC, (see AC road unit price)	RI - 15	\$ -	SY						
Shoulder, gravel, 4" thick	RI - 16	\$ 15.00	SY						
Sidewalk, 4" thick	RI - 17	\$ 38.00	SY						
Sidewalk, 4" thick, demolition and disposa	RI - 18	\$ 32.00	SY						
Sidewalk, 5" thick	RI - 19	\$ 70.00	SY						
Sidewalk, 5" thick, demolition and disposa	RI - 20	\$ 40.00	SY						
Sign, handicap	RI - 21	\$ 85.00	Each						
Striping, per stall	RI - 22	\$ 7.00	Each						
Striping, thermoplastic, (for crosswalk)	RI - 23	\$ 3.00	SF						
Striping, 4" reflectorized line	RI - 24	\$ 0.50	LF						

SUBTOTAL

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Web date: 04/03/2015

		Existing Right-of-way				Future Public Right of Way & Drainage Facilities		Private Improvements	
		Unit Price	Unit	Quant.	Cost	Quant.	Cost	Quant.	Cost
ROAD SURFACING		No.		(4" Rock = 2.5 base & 1.5" top course) 9 1/2" Rock= 8" base & 1.5" top course)					
Additional 2.5" Crushed Surfacing	RS - 1	\$ 15.00	SY						
HMA 1/2" Overlay, 1.5"	RS - 2	\$ 14.00	SY						
HMA 1/2" Overlay 2"	RS - 3	\$ 23.00	SY						
HMA Road, 2", 4" rock, First 2500 SY	RS - 4	\$ 28.00	SY						
HMA Road, 2", 4" rock, Qty. over 2500 SY	RS - 5	\$ 21.00	SY						
HMA Road, 3", 9 1/2" Rock, First 2500 SY	RS - 6	\$ 42.00	SY						
HMA Road, 3", 9 1/2" Rock, Qty Over 2500 SY	RS - 7	\$ 35.00	SY						
Not Used	RS - 8								
Not Used	RS - 9								
HMA Road, 6" Depth, First 2500 SY	RS - 10	\$ 33.10	SY						
HMA Road, 6" Depth, Qty. Over 2500 SY	RS - 11	\$ 30.00	SY						
HMA 3/4" or 1", 4" Depth	RS - 12	\$ 20.00	SY						
Gravel Road, 4" rock, First 2500 SY	RS - 13	\$ 15.00	SY						
Gravel Road, 4" rock, Qty. over 2500 SY	RS - 14	\$ 10.00	SY						
PCC Road (Add Under Write-Ins w/Design)	RS - 15								
Thickened Edge	RS - 17	\$ 8.60	LF						

SUBTOTAL

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Web date: 04/03/2015

				Existing Right-of-way		Future Public Right of Way & Drainage Facilities		Private Improvements		
		Unit Price	Unit	Quant.	Cost	Quant.	Cost	Quant.	Cost	
DRAINAGE (CPP = Corrugated Plastic Pipe, N12 or Equivalent) For Culvert prices, Average of 4' cover was assumed. Assume perforated PVC is same price as solid pipe.										
Access Road, R/D	D - 1	\$ 21.00	SY							
Bollards - fixed	D - 2	\$ 240.74	Each							
Bollards - removable	D - 3	\$ 452.34	Each							
* (CBs include frame and lid)										
CB Type I	D - 4	\$ 1,500.00	Each							
CB Type IL	D - 5	\$ 1,750.00	Each							
CB Type II, 48" diameter	D - 6	\$ 2,300.00	Each							
for additional depth over 4'	D - 7	\$ 480.00	FT							
CB Type II, 54" diameter	D - 8	\$ 2,500.00	Each							
for additional depth over 4'	D - 9	\$ 495.00	FT							
CB Type II, 60" diameter	D - 10	\$ 2,800.00	Each							
for additional depth over 4'	D - 11	\$ 600.00	FT							
CB Type II, 72" diameter	D - 12	\$ 3,600.00	Each							
for additional depth over 4'	D - 13	\$ 850.00	FT							
Through-curb Inlet Framework (Add)	D - 14	\$ 400.00	Each							
Cleanout, PVC, 4"	D - 15	\$ 150.00	Each							
Cleanout, PVC, 6"	D - 16	\$ 170.00	Each							
Cleanout, PVC, 8"	D - 17	\$ 200.00	Each							
Culvert, PVC, 4"	D - 18	\$ 10.00	LF							
Culvert, PVC, 6"	D - 19	\$ 13.00	LF							
Culvert, PVC, 8"	D - 20	\$ 15.00	LF							
Culvert, PVC, 12"	D - 21	\$ 23.00	LF							
Culvert, CMP, 8"	D - 22	\$ 19.00	LF							
Culvert, CMP, 12"	D - 23	\$ 29.00	LF							
Culvert, CMP, 15"	D - 24	\$ 35.00	LF							
Culvert, CMP, 18"	D - 25	\$ 41.00	LF							
Culvert, CMP, 24"	D - 26	\$ 56.00	LF							
Culvert, CMP, 30"	D - 27	\$ 78.00	LF							
Culvert, CMP, 36"	D - 28	\$ 130.00	LF							
Culvert, CMP, 48"	D - 29	\$ 190.00	LF							
Culvert, CMP, 60"	D - 30	\$ 270.00	LF							
Culvert, CMP, 72"	D - 31	\$ 350.00	LF							

SUBTOTAL

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Web date: 04/03/2015

DRAINAGE CONTINUED				Existing Right-of-way		Future Public Right of Way & Drainage Facilities		Private Improvements		
	No.	Unit Price	Unit	Quant.	Cost	Quant.	Cost	Quant.	Cost	
Culvert, Concrete, 8"	D - 32	\$ 25.00	LF							
Culvert, Concrete, 12"	D - 33	\$ 36.00	LF							
Culvert, Concrete, 15"	D - 34	\$ 42.00	LF							
Culvert, Concrete, 18"	D - 35	\$ 48.00	LF							
Culvert, Concrete, 24"	D - 36	\$ 78.00	LF							
Culvert, Concrete, 30"	D - 37	\$ 125.00	LF							
Culvert, Concrete, 36"	D - 38	\$ 150.00	LF							
Culvert, Concrete, 42"	D - 39	\$ 175.00	LF							
Culvert, Concrete, 48"	D - 40	\$ 205.00	LF							
Culvert, CPP, 6"	D - 41	\$ 14.00	LF							
Culvert, CPP, 8"	D - 42	\$ 16.00	LF							
Culvert, CPP, 12"	D - 43	\$ 24.00	LF							
Culvert, CPP, 15"	D - 44	\$ 35.00	LF							
Culvert, CPP, 18"	D - 45	\$ 41.00	LF							
Culvert, CPP, 24"	D - 46	\$ 56.00	LF							
Culvert, CPP, 30"	D - 47	\$ 78.00	LF							
Culvert, CPP, 36"	D - 48	\$ 130.00	LF							
Ditching	D - 49	\$ 9.50	CY							
Flow Dispersal Trench (1,436 base+)	D - 50	\$ 28.00	LF							
French Drain (3' depth)	D - 51	\$ 26.00	LF							
Geotextile, laid in trench, polypropylene	D - 52	\$ 3.00	SY							
Mid-tank Access Riser, 48" dia, 6' deep	D - 54	\$ 2,000.00	Each							
Pond Overflow Spillway	D - 55	\$ 16.00	SY							
Restrictor/Oil Separator, 12"	D - 56	\$ 1,150.00	Each							
Restrictor/Oil Separator, 15"	D - 57	\$ 1,350.00	Each							
Restrictor/Oil Separator, 18"	D - 58	\$ 1,700.00	Each							
Riprap, placed	D - 59	\$ 42.00	CY							
Tank End Reducer (36" diameter)	D - 60	\$ 1,200.00	Each							
Trash Rack, 12"	D - 61	\$ 350.00	Each							
Trash Rack, 15"	D - 62	\$ 410.00	Each							
Trash Rack, 18"	D - 63	\$ 480.00	Each							
Trash Rack, 21"	D - 64	\$ 550.00	Each							

SUBTOTAL

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		Existing Right-of-way			Future Public Right of Way & Drainage Facilities			Private Improvements	
		Unit Price	Unit	Quant.	Price	Quant.	Cost	Quant.	Cost
PARKING LOT SURFACING Not To Be Used For Roads Or Shoulders									
	<u>No.</u>								
2" AC, 2" top course rock & 4" borrow	PL - 1	\$ 21.00	SY	NA		NA			
2" AC, 1.5" top course & 2.5" base cours	PL - 2	\$ 28.00	SY	NA		NA			
4" select borrow	PL - 3	\$ 5.00	SY	NA		NA			
1.5" top course rock & 2.5" base course	PL - 4	\$ 14.00	SY	NA		NA			
UTILITY POLES & STREET LIGHTING Utility pole relocation costs must be accompanied by Franchise Utility's Cost Estimate									
Utility Pole(s) Relocation	UP-1	Lump Sum							
Street Light Poles w/Luminaires	UP-2	\$ 7,500.00	Each						
WRITE-IN-ITEMS									
(Such as detention/water quality vaults.)	<u>No.</u>								
Stormwater Vault	WI - 1	\$ 3,000.00	Each						
Block Wall	WI - 2	\$ 16.00	SY						
Yard Drain	WI - 3	\$ 225.00	CY						
Traffic Control	WI - 4	\$ 8,588.00	LS						
landscaping	WI - 5	\$ 500.00	LS						
	WI - 6								
	WI - 7								
	WI - 8								
	WI - 9								
	WI - 10								

SUBTOTAL			
SUBTOTAL (SUM ALL PAGES):			
30% CONTINGENCY & MOBILIZATION:			
GRANDTOTAL:			
COLUMN:	B	C	D

*KCC 27A authorizes only one bond reduction.
Bond Quantity Worksheet - Site Improvements

Site Improvement Bond Quantity Worksheet

Web date: 04/03/2015

Original bond computations prepared by:

Name: _____
 PE Registration Number: _____
 Firm Name: _____
 Address: _____

Date: _____
 Tel. #: _____
 Project No: _____

FINANCIAL GUARANTEE REQUIREMENTS

	PERFORMANCE BOND* AMOUNT		MINIMUM BOND* AMOUNT REQUIRED FOR RECORDING OR TEMPORARY OCCUPANCY AT SUBSTANTIAL COMPLETION ***	PUBLIC ROAD & DRAINAGE MAINTENANCE/DEFECT BOND*
Stabilization/Erosion Sediment Control (ESC)	(A) \$ -			
Existing Right-of-Way Improvements	(B) \$ -			
Future Public Right of Way & Drainage Facilities	(C) \$ -			
Private Improvements	(D) \$ -			
Calculated Quantity Completed				
Total Right-of Way and/or Site Restoration Bond**/** (First \$7,500 of bond* shall be cash.)	(A+B) \$ -			
Performance Bond* Amount (A+B+C+D) = TOTAL	(T) \$ - Minimum is \$2000.		T x 0.30 \$ - Minimum is \$2000.	
Maintenance/Defect Bond* Total				(B+C) x 0.25 = \$ - Minimum is \$2000.

NAME OF PERSON PREPARING BOND* REDUCTION: _____

Date: _____

* **NOTE:** The word "bond" as used in this document means a financial guarantee acceptable to King County.

** **NOTE:** KCC 27A authorizes right of way and site restoration bonds to be combined when both are required.

The restoration requirement shall include the total cost for all TESC as a minimum, not a maximum. In addition, corrective work, both on- and off-site needs to be included. Quantities shall reflect worse case scenarios not just minimum requirements. For example, if a salmonid stream may be damaged, some estimated costs for restoration needs to be reflected in this amount. The 30% contingency and mobilization costs are computed in this quantity.

*** **NOTE:** Per KCC 27A, total bond amounts remaining after reduction shall not be less than 30% of the original amount (T) or as revised by major design changes.

REQUIRED BOND* AMOUNTS ARE SUBJECT TO REVIEW AND MODIFICATION BY KING COUNTY