

Cost Estimate Workbook

Project: Assotin Creek PA 3.2
Project Number: 22281-009-00

Analyst: BHM
Latest Revision: 10/21/24

Workbook Description

- This workbook contains spreadsheets that facilitate the analysis and/or design of this project.
- This spreadsheet lists the general project and workbook information that is consistent throughout the workbook.
- It also lists the titles of the spreadsheets contained in this workbook.
- This workbook is limited to the Construction Cost Estimate for modifications identified in the GeoEngineers Construction drawings and does **NOT** include the modifications proposed by others.
- This workbook is intended for use with ENGLISH UNITS.

Filename: [https://geoengineers.sharepoint.com/sites/2228100900/Technical Analysis/\[Asotin PA3.2 - Quantities and Cost Estimate.xlsx\]Intro](https://geoengineers.sharepoint.com/sites/2228100900/Technical Analysis/[Asotin PA3.2 - Quantities and Cost Estimate.xlsx]Intro)

Sheet Titles:

Cost Estimate Workbook
Unit Costs
Engineers's Construction Cost Estimate - Phase 1
Engineers's Construction Cost Estimate - Phase 2
Engineers's Construction Cost Estimate - Combined
Bid Response Form - Phase 1
Bid Response Form - Phase 2
Bid Response Form - Combined

Unit Costs

Project: Assotin Creek PA 3.2
Project Number: 22281-009-00

Analyst: BHM
Latest Revision: 10/21/2024

- This spreadsheet calculates the costs associated with site preparation. Unit costs include materials, labor, equipment, overhead and contractor profit.
 - Reference used for "unit costs" include:
 (1) R.S. Means Heavy Construction Cost Data Manual, 2012 (Means)
 (2) Engineering Experience & Recent Similar Projects
 (3) Contractor or Supplier
 - Inflation adjustment is negligible.
 - Additional adjustments are based on engineering judgement, experience and site-specific degree of difficulty.
 - Blank rows are provided at the bottom for additional items. Add new items & unit costs on this sheet, if necessary. These will be used to calculate costs on subsequent sheets.
 - General mark-up percentages are also provided at the bottom.
 - Specification # References the 2018 version of WSDOT's Standard Specifications for Road, Bridge, and Municipal Construction as amended in August 2018. Project-specific special provisions are affixed with "SP."

= Adjustment for inflation from to 2015 to 2019 (Construction) (%) (consumer price index calculator http://www.bls.gov/data/inflation_calculator.htm)
 = Location Factor (Enter Location) (%) (Adjustment from national average)
 = Additional Location Factor (Enter Location) (%) (consumer price index calculator http://www.bls.gov/data/inflation_calculator.htm)

Item No.	Specification Section	Item Description	Ref. ID	Ref. #	Page #	Unit Measure	Unit Price in Figures	Inflation & Location Adjustments (%)	Additional Adjustments (%)	Adjusted Unit Price in Figures
1	210	Mobilization and Demobilization	2			LS	\$ 45,000.00	0		\$ 45,000.00
2	210 & 480	Temporary Livestock Fence Removal and Resinstall	2			LS	\$ 5,000.00			\$ 5,000.00
3	280 & 290	Erosion Control and Water Pollution Control	2			LS	\$ 20,000.00	0		\$ 20,000.00
4	320	Clearing and Grubbing	2			LS	\$ 10,000.00	0		\$ 10,000.00
5	330	Channel Excavation Incl. Haul and Dispose Onsite	2			CY	\$ 30.00	0		\$ 30.00
6	340	Select Borrow Inc. Haul	2			CY	\$ 40.00	0		\$ 40.00
7	350	Class A Rock for Erosion and Scour Protection	2			CY	\$150.00	0		\$ 150.00
8	470	8'x75' Bridge (Incl. Footings and Bridge Railings)	2			LS	\$ 132,000.00	0		\$ 132,000.00
9	480	Livestock Exclusion Fencing	2			LF	\$40.00	0		\$ 40.00
10	1080	Streambed Boulders	2			EA	\$ 100.00	0		\$ 100.00
11	1090	Install Flow Deflection Jam	2			EA	\$ 15,000.00	0		\$ 15,000.00
12	1090	Install Sweeper Logs	2			EA	\$ 2,500.00	0		\$ 2,500.00
13	1090	Install Bank Rootwads	2			EA	\$ 4,500.00	0		\$ 4,500.00
14	1090	Install Main Channel Single Rootwads	2			EA	\$ 1,750.00	0		\$ 1,750.00
15	1090	Install Side Channel Logs	2			EA	\$ 1,000.00	0		\$ 1,000.00
16	1100	Seeding and Mulching	2			AC	\$ 800.00	0		\$ 800.00
Taxes (as 15% of Construction Sub-Total)									15%	
Contingency (as 10% of Construction Sub-Total)									10%	

Engineers's Construction Cost Estimate - Phase 1

Project: Assotin Creek PA 3.2
 Project No: 22281-009-00

Analyst: BHM
 Latest Revision: 10/21/2024

- This spreadsheet summarizes the costs for construction of the culvert, roadway, and channel restoration measures.

Item No.	Specification Section	Item Description	Approx. Quantity	Unit Measure	Unit Price in Figures	Extended Price (\$)	
1	210	Mobilization and Demobilization	1.0	LS	45000.00	\$45,000	
2	210 & 480	Temporary Livestock Fence Removal and Resinstall	1.0	LS	5000.00	\$5,000	
3	280 & 290	Erosion Control and Water Pollution Control	1.0	LS	20000.00	\$20,000	
4	320	Clearing and Grubbing	1.0	LS	10000.00	\$10,000	
5	330	Channel Excavation Incl. Haul and Dispose Onsite	1970.0	CY	30.00	\$59,100	
6	340	Select Borrow Inc. Haul	50.0	CY	40.00	\$2,000	
7	350	Class A Rock for Erosion and Scour Protection	50.0	CY	150.00	\$7,500	
8	470	8'x75' Bridge (Incl. Footings and Bridge Railings)	1.0	LS	132000.00	\$132,000	
9	480	Livestock Exclusion Fencing	330.0	LF	40.00	\$13,200	
10	1080	Streambed Boulders	414.0	EA	100.00	\$41,400	
11	1080	Install Flow Deflection Jam	3.0	EA	15000.00	\$45,000	
12	1090	Install Sweeper Logs	7.0	EA	2500.00	\$17,500	
13	1090	Install Bank Rootwads	7.0	EA	4500.00	\$31,500	
14	1090	Install Main Channel Single Rootwads	26.0	EA	1750.00	\$45,500	
15	1090	Install Side Channel Logs	21.0	EA	1000.00	\$21,000	
16	1100	Seeding and Mulching	2.0	AC	800.00	\$1,600	
SUBTOTAL CONSTRUCTION COST						\$497,300	
					Taxes (as 15% of Construction Sub-Total)	15%	\$74,595
					Contingency (as 10% of Construction Sub-Total)	10%	\$49,730.00
FINAL CONSTRUCTION COST						\$621,625	

Engineers's Construction Cost Estimate - Phase 2

Project: Assotin Creek PA 3.2
 Project No: 22281-009-00

Analyst: BHM
 Latest Revision: 10/21/2024

- This spreadsheet summarizes the costs for construction of the culvert, roadway, and channel restoration measures.

Item No.	Specification Section	Item Description	Approx. Quantity	Unit Measure	Unit Price in Figures	Extended Price (\$)
1	210	Mobilization and Demobilization	1.0	LS	45000.00	\$45,000
2	210 & 480	Temporary Livestock Fence Removal and Resinstall	1.0	LS	5000.00	\$5,000
3	280 & 290	Erosion Control and Water Pollution Control	1.0	LS	20000.00	\$20,000
4	320	Clearing and Grubbing	1.0	LS	10000.00	\$10,000
5	330	Channel Excavation Incl. Haul and Dispose Onsite	80.0	CY	30.00	\$2,400
10	1080	Streambed Boulders	126.0	EA	100.00	\$12,600
11	1080	Install Flow Deflection Jam	3.0	EA	15000.00	\$45,000
12	1090	Install Sweeper Logs	8.0	EA	2500.00	\$20,000
13	1090	Install Bank Rootwads	1.0	EA	4500.00	\$4,500
14	1090	Install Main Channel Single Rootwads	7.0	EA	1750.00	\$12,250
15	1090	Install Side Channel Logs	0.0	EA	1000.00	\$0
16	1100	Seeding and Mulching	1.0	AC	800.00	\$800
SUBTOTAL CONSTRUCTION COST						\$177,550
Taxes (as 15% of Construction Sub-Total)					15%	\$26,633
Contingency (as 10% of Construction Sub-Total)					10%	\$17,755.00
FINAL CONSTRUCTION COST						\$221,938

Bid Response Form - Phase 1

Project: Assotin Creek PA 3.2
 Project Number: 22281-009-00

- This spreadsheet provides an outline of the Bid Response Form for inclusion with the bid package and construction contract.

Item No.	Specification Section	Item Description	Approx. Quantity	Unit Measure	Unit Price in Figures	Extended Price (\$)
1	210	Mobilization and Demobilization	1.0	LS		
2	210 & 480	Temporary Livestock Fence Removal and Resinstall	1.0	LS		
3	280 & 290	Erosion Control and Water Pollution Control	1.0	LS		
4	320	Clearing and Grubbing	1.0	LS		
5	330	Channel Excavation Incl. Haul and Dispose Onsite	1970.0	CY		
6	340	Select Borrow Inc. Haul	50.0	CY		
7	350	Class A Rock for Erosion and Scour Protection	50.0	CY		
8	470	8'x75' Bridge (Incl. Footings and Bridge Railings)	1.0	LS		
9	480	Livestock Exclusion Fencing	330.0	LF		
10	1080	Streambed Boulders	414.0	EA		
11	1090	Install Flow Deflection Jam	3.0	EA		
12	1090	Install Sweeper Logs	7.0	EA		
13	1090	Install Bank Rootwads	7.0	EA		
14	1090	Install Main Channel Single Rootwads	26.0	EA		
15	1090	Install Side Channel Logs	21.0	EA		
16	1100	Seeding and Mulching	2.0	AC		
Construction Sub-Total						
		Taxes (as 15% of Construction Sub-Total)				
Final Construction Cost						

Bid Response Form - Phase 2

Project: Assotin Creek PA 3.2
Project Number: 22281-009-00

- This spreadsheet provides an outline of the Bid Response Form for inclusion with the bid package and construction contract.

Item No.	Specification Section	Item Description	Approx. Quantity	Unit Measure	Unit Price in Figures	Extended Price (\$)	
1	210	Mobilization and Demobilization	1	LS			
2	210 & 480	Temporary Livestock Fence Removal and Resinstall	1	LS			
3	280 & 290	Erosion Control and Water Pollution Control	1	LS			
4	320	Clearing and Grubbing	1	LS			
5	330	Channel Excavation Incl. Haul and Dispose Onsite	80	CY			
10	1080	Streambed Boulders	126	EA			
11	1080	Install Flow Deflection Jam	3	EA			
12	1090	Install Sweeper Logs	8	EA			
13	1090	Install Bank Rootwads	1	EA			
14	1090	Install Main Channel Single Rootwads	7	EA			
15	1090	Install Side Channel Logs	0	EA			
16	1100	Seeding and Mulching	1	AC			
Construction Sub-Total							
	Taxes (as 15% of Construction Sub-Total)						
Final Construction Cost							

Engineers's Construction Cost Estimate - Combined

Project: Assotin Creek PA 3.2
 Project No: 22281-009-00

Analyst: BHM
 Latest Revision: 10/21/2024

- This spreadsheet summarizes the costs for construction of the culvert, roadway, and channel restoration measures.

Item No.	Specification Section	Item Description	Approx. Quantity	Unit Measure	Unit Price in Figures	Extended Price (\$)	
1	210	Mobilization and Demobilization	2.0	LS	45000.00	\$90,000	
2	210 & 480	Temporary Livestock Fence Removal and Resinstall	2.0	LS	5000.00	\$10,000	
3	280 & 290	Erosion Control and Water Pollution Control	2.0	LS	20000.00	\$40,000	
4	320	Clearing and Grubbing	2.0	LS	10000.00	\$20,000	
5	330	Channel Excavation Incl. Haul and Dispose Onsite	2050.0	CY	30.00	\$61,500	
6	340	Select Borrow Inc. Haul	50.0	CY	40.00	\$2,000	
7	350	Class A Rock for Erosion and Scour Protection	50.0	CY	150.00	\$7,500	
8	470	8'x75' Bridge (Incl. Footings and Bridge Railings)	1.0	LS	132000.00	\$132,000	
9	480	Livestock Exclusion Fencing	330.0	LF	40.00	\$13,200	
10	1080	Streambed Boulders	540.0	EA	100.00	\$54,000	
11	1080	Install Flow Deflection Jam	6.0	EA	15000.00	\$90,000	
12	1090	Install Sweeper Logs	15.0	EA	2500.00	\$37,500	
13	1090	Install Bank Rootwads	8.0	EA	4500.00	\$36,000	
14	1090	Install Main Channel Single Rootwads	33.0	EA	1750.00	\$57,750	
15	1090	Install Side Channel Logs	21.0	EA	1000.00	\$21,000	
16	1100	Seeding and Mulching	3.0	AC	800.00	\$2,400	
SUBTOTAL CONSTRUCTION COST						\$674,850	
					Taxes (as 15% of Construction Sub-Total)	15%	\$101,228
					Contingency (as 10% of Construction Sub-Total)	10%	\$67,485.00
FINAL CONSTRUCTION COST						\$843,563	

Bid Response Form - Combined

Project: Assotin Creek PA 3.2
 Project Number: 22281-009-00

- This spreadsheet provides an outline of the Bid Response Form for inclusion with the bid package and construction contract.

Item No.	Specification Section	Item Description	Approx. Quantity	Unit Measure	Unit Price in Figures	Extended Price (\$)
1	210	Mobilization and Demobilization	2.0	LS		
2	210 & 480	Temporary Livestock Fence Removal and Resinstall	2.0	LS		
3	280 & 290	Erosion Control and Water Pollution Control	2.0	LS		
4	320	Clearing and Grubbing	2.0	LS		
5	330	Channel Excavation Incl. Haul and Dispose Onsite	2050.0	CY		
6	340	Select Borrow Inc. Haul	50.0	CY		
7	350	Class A Rock for Erosion and Scour Protection	50.0	CY		
8	470	8'x75' Bridge (Incl. Footings and Bridge Railings)	1.0	LS		
9	480	Livestock Exclusion Fencing	330.0	LF		
10	1080	Streambed Boulders	540.0	EA		
11	1090	Install Flow Deflection Jam	6.0	EA		
12	1090	Install Sweeper Logs	15.0	EA		
13	1090	Install Bank Rootwads	8.0	EA		
14	1090	Install Main Channel Single Rootwads	33.0	EA		
15	1090	Install Side Channel Logs	21.0	EA		
16	1100	Seeding and Mulching	3.0	AC		
Construction Sub-Total						
		Taxes (as 15% of Construction Sub-Total)				
Final Construction Cost						