US Army Corps
of Engineers ®
Walla Walla District

OWYHEE RIVER ECOSYSTEM RESTORATION

Draft Feasibility Report with Integrated Environmental Assessment

Appendix D Cost

Engineering

Owyhee 206 Alt 6 Ecosystem Restoration Feasibility Study
NWW DISTRICT USACE

ALTERNATIVE ESTIMATES FOR SCREENING

Acquisition Plan: None discussed for this stage of estimate development.

Sub-contracting Plan: None discussed for this stage of estimate development. Alternative Estimate assumes a prime contractor doing most of the work.

Scope of Work: Owyhee 206, Alternative 6, Earthwork Quantities, Version 3, June 2023

ALTERNATIVE 6, SITE 3 QUANTITIES
1. Site 3 material to remove (Cut) from 5 levee segments = 12474 CY
2. Site 3 material to place (Fill) in river channel = 8110 CY
3. Subgrade Cobble 600 CY

ALTERNATIVE 6, SITE 4 QUANTITIES
1. Site 4 material to remove (Cut) from 5 levee segments = 11850 CY
2. Site 4 material to place (Fill) in river channel = 16486 CY
3. Subgrade Cobble 600 CY

Feasibility Report Draft
Documents Used as the Basis for this Estimate: Owyhee 206, Alternative 6, Earthwork Quantities, Version 3, June 2023

Narrative and Analytical Description on Rate/Price/Cost Development: The alternative level estimate in MII was developed as a Class 5 estimate to be used as a starting point based upon similar work type, materials, etc. for the purpose of comparing alternatives. This estimate has been undergone a DQC. Quantity takeoffs have been developed by NWW . Once a final array of alternatives is selected a risk analysis will need to be conducted to justify the assumed contingencies included in the alternatives.

Quantity Calculations/Sources: Quantities are based upon quantity takeoffs developed by NWW and information provided by the ETL A swell factor of 25% has been used.

Major Project Features: Cut Earth to rebuilding of levee.

Federal and non-Federal Cost Sharing Requirements: 65% Federal & 35% Non Federal

Construction Windows: None known or specified at this time.

Escalation: No additional escalation has been applied to the estimate.

General Assumptions:

1. Sales Tax: 6% sales tax has been assumed.
2. JOOH: 25%
3. HOOH: 15%
4. Profit: 10%
5. Bond 1.5%
6. Price Level: 2023
7. Productivity: 75% Productivity Applied based on estimator's Judgements

Contractors: A prime contractor is assumed for most of the work
Subcontracts: Dispose the material
Subsistence: Lodging $107/day + M&IE $ 59 = $166/day use $16.6/hr.

Contingency: Based on Abrv Risk Analysis

Volatile Cost Items: Equipment and labor, material availability, fuel.

Risk Analysis: The assumed contingency output has been applied in MII. A formal Cost and Schedule Risk Analysis (CSRA) or Abbreviated Risk Analysis (ARA) will be needed to support the study and to receive of a cost certification from the Cost MCX. A CSRA is needed for Total Project Costs exceeding $40M would require a CSRA.

Print Date Mon 18 November 2024 | U.S. Army Corps of Engineers | Time 08:20:18
Eff. Date 11/4/2024 | Project ATR: Owyhee 206 Alt 6 Earthwork - Prefered Alternative - 11 04 24
ROM Estimate Report | Title Page
N:\EC-X\PROJECTS\Owyhee 206\ATR Documents\Send Out 003

Estimated by Tang Tchamdja, CCE PE
Designed by CENWW
Prepared by Tang Tchamdja
Preparation Date 11/4/2024
Effective Date of Pricing 11/4/2024
Estimated Construction Time Days

Date	Author	Note

Description	Quantity	UOM	ContractCost	ProjectCost
Project Cost Summary Report			**3,233,842**	**3,233,842**
			1,688,251.40	*1,688,251.40*
1001 ALTERNATIVE 6, SITE 3	**1.00**	**EA**	**1,688,251**	**1,688,251**
			75,186.48	*75,186.48*
1001A Mob/Demob	**1.00**	**EA**	**75,186**	**75,186**
			13,249.86	*13,249.86*
1001B Survey Pre & Post Construction	**5.00**	**DAY**	**66,249**	**66,249**
			29.93	*29.93*
1001C Site 3 Material to Remove	**12,474.00**	**CY**	**373,329**	**373,329**
			26.14	*26.14*
1001D Site 3 Material to Place Fill	**8,110.00**	**CY**	**211,986**	**211,986**
			273.10	*273.10*
1001E Subgrade Cobble	**600.00**	**CY**	**163,861**	**163,861**
			20,000.00	*20,000.00*
1001F Beaver Dam Analogs	**1.00**	**EA**	**20,000**	**20,000**
			48.26	*48.26*
1001G Fencing	**12,500.00**	**LF**	**603,287**	**603,287**
			5,846.67	*5,846.67*
1001H Boulders and Logs	**1.00**	**EA**	**5,847**	**5,847**
			2,560.77	*2,560.77*
1001J Planting St#3	**60.00**	**ACR**	**153,646**	**153,646**
			2,476.53	*2,476.53*
1001K Seeding St#3	**6.00**	**ACR**	**14,859**	**14,859**
			1,545,590.41	*1,545,590.41*
2001 ALTERNATIVE 6, SITE 4	**1.00**	**EA**	**1,545,590**	**1,545,590**
			75,186.48	*75,186.48*
2001A Mob/Demob	**1.00**	**EA**	**75,186**	**75,186**
			13,249.86	*13,249.86*
2001B Survey Pre & Post Construction	**5.00**	**DAY**	**66,249**	**66,249**
			29.93	*29.93*
2001C Site 4 Material to Remove	**11,850.00**	**CY**	**354,632**	**354,632**
			24.89	*24.89*
2001D Site 4 Material to Place Fill	**16,486.00**	**CY**	**410,405**	**410,405**
			273.10	*273.10*
2001E Subgrade Cobble	**600.00**	**CY**	**163,861**	**163,861**
			20,000.00	*20,000.00*
2001F Beaver Dam Analogs	**1.00**	**EA**	**20,000**	**20,000**
			48.43	*48.43*

Labor ID: NLS2022 EQ ID: EP22R08 Currency in US dollars TRACES MII Version 4.4

Description	Quantity	UOM	ContractCost	ProjectCost
2001G Fencing	**5,800.00**	**LF**	**280,905**	**280,905**
			5,846.67	*5,846.67*
2001H Boulders and Logs	**1.00**	**EA**	**5,847**	**5,847**
			2,560.77	*2,560.77*
2001J Planting St#4	**60.00**	**ACR**	**153,646**	**153,646**
			2,476.53	*2,476.53*
2001K Seeding St#4	**6.00**	**ACR**	**14,859**	**14,859**

Labor ID: NLS2022 EQ ID: EP22R08 Currency in US dollars TRACES MII Version 4.4

Abbreviated Risk Analysis

Project (less than $40M): **Owyhee Alt 6 - TSP Earthwork**
Project Development Stage/Alternative: **Feasibility (Recommended Plan)**
Risk Category: **Low Risk: Typical Construction, Simple**

Alternative: **Alt 6**
Meeting Date: **8/26/2024**

Total Estimated Construction Contract Cost = **$ 3,233,842**

	CWWBS	Feature of Work	Estimated Cost	% Contingency	$ Contingency	Total
	01 LANDS AND DAMAGES	Real Estate			$ -	$ -
1	11 LEVEES AND FLOODWALLS	**Alternative 6: Side channel and Main channel**	**$ 3,233,842**	55%	$ 1,785,233	$ 5,019,075
2				0%	$ -	$ -
3				0%	$ -	$ -
4				0%	$ -	$ -
5				0%	$ -	$ -
6			**$ -**	0%	$ -	$ -
7			**$ -**	0%	$ -	$ -
8			**$ -**	0%	$ -	$ -
9			**$ -**	0%	$ -	$ -
10			**$ -**	0%	$ -	$ -
11			**$ -**	0%	$ -	$ -
12				0%	$ -	$ -
13	30 PLANNING, ENGINEERING, AND DESIGN	**Planning, Engineering, & Design**	**$ 985,000**	16%	$ 153,962	$ 1,138,962
14	31 CONSTRUCTION MANAGEMENT	**Construction Management**	**$ 469,000**	18%	$ 84,732	$ 553,732
XX	FIXED DOLLAR RISK ADD (EQUALLY DISPERSED TO ALL, MUST INCLUDE JUSTIFICATION SEE BELOW)				**$ -**	

Totals					
Real Estate	$ -	0%	$ -	$ -	
Total Construction Estimate	$ 3,233,842	55%	$ 1,785,233	$ 5,019,075	
Total Planning, Engineering & Design	$ 985,000	16%	$ 153,962	$ 1,138,962	
Total Construction Management	$ 469,000	18%	$ 84,732	$ 553,732	
Total Excluding Real Estate	**$ 4,687,842**	**43%**	**$ 2,023,927**	**$ 6,711,769**	
		Base	**50%**	**80%**	
Confidence Level Range Estimate ($000's)		$4,688k	$5,902k	$6,712k	

* 50% based on base is at 5% CL.

Fixed Dollar Risk Add: (Allows for additional risk to be added to the risk analsyis. Must include justification. Does not allocate to Real Estate.	

****** TOTAL PROJECT COST SUMMARY ******

Printed:11/15/2024
Page 1 of 2

PROJECT: **OWYHEE RIVER ECOSYSTEM RESTORATION** DISTRICT: **NWW** PREPARED: **11/13/2024**

PROJECT NO: **479131**

LOCATION: **DUCK VALLEY INDIAN RESERVATION, IDAHO/NEVADA** POC: **CHIEF, COST ENGINEERING, Mike Jacobs**

This Estimate reflects the scope and schedule in report; Scoping Documentation Report

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)						TOTAL PROJECT COST (FULLY FUNDED)			
						Program Year (Budget EC): 2025									
						Effective Price Level Date: 1-Oct- 24									
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	REMAINING COST ($K)	Spent Thru: **1-Oct-24** ($K)	**TOTAL FIRST COST** ($K)	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
06	ALTERNATIVE 6, SITE 3	$1,688	$929	55%	$2,617	2.0%	$1,722	$947	$2,669		$2,669	6.8%	$1,838	$1,011	$2,849
06	ALTERNATIVE 6, SITE 4	$1,546	$850	55%	$2,396	2.0%	$1,576	$867	$2,443		$2,443	7.4%	$1,694	$931	$2,625
	CONSTRUCTION ESTIMATE TOTALS:	$3,234	$1,779		$5,012	2.0%	$3,298	$1,814	$5,112		$5,112	7.1%	$3,532	$1,942	$5,474
01	LANDS AND DAMAGES	$1,073	$215	20%	$1,288	2.3%	$1,098	$220	$1,317		$1,317	3.4%	$1,134	$227	$1,361
30	PLANNING, ENGINEERING & DESIGN	$985	$158	16%	$1,143	3.4%	$1,019	$163	$1,182		$1,182	3.7%	$1,057	$169	$1,226
31	CONSTRUCTION MANAGEMENT	$469	$84	18%	$553	3.4%	$485	$87	$572		$572	7.9%	$523	$94	$618
	PROJECT COST TOTALS:	$5,761	$2,235	39%	$7,996		$5,899	$2,284	$8,183		**$8,183**	6.1%	$6,246	$2,433	$8,679

	CHIEF, COST ENGINEERING, Mike Jacobs
	PROJECT MANAGER, Herzog, Kathryn
	CHIEF, REAL ESTATE, Allison Needham
	CHIEF, PLANNING, Cindy Boen
	CHIEF, ENGINEERING, Weston, Dwayne
	CHIEF, OPERATIONS,Chad Rhynard
	CHIEF, CONSTRUCTION, XXX
	CHIEF, CONTRACTING, Hillary Morgan
	CHIEF, PM-PB, xxxx
	CHIEF, DPM, Thomas Fichera

ESTIMATED TOTAL PROJECT COST:		**$8,679**
ESTIMATED FEDERAL COST:	**65%**	$5,641
ESTIMATED NON-FEDERAL COST:	**35%**	$3,038
22 - FEASIBILITY STUDY (CAP studies):		**$611**
ESTIMATED FEDERAL COST:	100%	$611
ESTIMATED NON-FEDERAL COST:		
ESTIMATED FEDERAL COST OF PROJECT		**$6,252**

Filename: Owyhee Alt 6 Update Earthwork TPCS - 11 07 24
TPCS

****** TOTAL PROJECT COST SUMMARY ******

Printed:11/15/2024
Page 2 of 2

****** CONTRACT COST SUMMARY ******

PROJECT: OWYHEE RIVER ECOSYSTEM RESTORATION
LOCATION: DUCK VALLEY INDIAN RESERVATION, IDAHO/NEVADA
This Estimate reflects the scope and schedule in report; Scoping Documentation Report

DISTRICT: NWW
POC: CHIEF, COST ENGINEERING, Mike Jacobs

PREPARED: 11/13/2024

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 24-Oct-24				Program Year (Budget EC): 2025								
		Estimate Price Level: 1-Oct-24				Effective Price Level Date: 1 -Oct-24								
				RISK BASED										
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
	ETS SDR													
06	ALTERNATIVE 6, SITE 3	$1,688	$929	55.0%	$2,617	2.0%	$1,722	$947	$2,669	2027Q3	6.8%	$1,838	$1,011	$2,849
06	ALTERNATIVE 6, SITE 4	$1,546	$850	55.0%	$2,396	2.0%	$1,576	$867	$2,443	2027Q4	7.4%	$1,694	$931	$2,625
	CONSTRUCTION ESTIMATE TOTALS:	$3,234	$1,779	55.0%	$5,012		$3,298	$1,814	$5,112			$3,532	$1,942	$5,474
01	LANDS AND DAMAGES	$1,073	$215	20.0%	$1,288	2.3%	$1,098	$220	$1,317	2026Q2	3.4%	$1,134	$227	$1,361
30	PLANNING, ENGINEERING & DESIGN													
2.5%	Project Management	$81	$13	16.0%	$94	3.4%	$84	$13	$97	2026Q1	3.1%	$86	$14	$100
1.0%	Planning & Environmental Compliance	$32	$5	16.0%	$37	3.4%	$33	$5	$38	2026Q1	3.1%	$34	$5	$40
15.0%	Engineering & Design	$485	$78	16.0%	$563	3.4%	$502	$80	$582	2026Q1	3.1%	$517	$83	$600
1.0%	Reviews, ATRs, IEPRs, VE	$32	$5	16.0%	$37	3.4%	$33	$5	$38	2026Q1	3.1%	$34	$5	$40
1.0%	Life Cycle Updates (cost, schedule, risks)	$32	$5	16.0%	$37	3.4%	$33	$5	$38	2026Q1	3.1%	$34	$5	$40
1.0%	Contracting & Reprographics	$32	$5	16.0%	$37	3.4%	$33	$5	$38	2027Q3	7.9%	$36	$6	$41
3.0%	Engineering During Construction	$97	$16	16.0%	$113	3.4%	$100	$16	$116	2027Q3	7.9%	$108	$17	$126
2.0%	Planning During Construction	$65	$10	16.0%	$75	3.4%	$67	$11	$78	2026Q1	3.1%	$69	$11	$80
3.0%	Adaptive Management & Monitoring	$97	$16	16.0%	$113	3.4%	$100	$16	$116	2026Q1	3.1%	$103	$17	$120
1.0%	Project Operations	$32	$5	16.0%	$37	3.4%	$33	$5	$38	2026Q1	3.1%	$34	$5	$40
	Seeding													
31	CONSTRUCTION MANAGEMENT													
10.0%	Construction Management	$323	$58	18.0%	$381	3.4%	$334	$60	$394	2027Q3	7.9%	$361	$65	$425
2.0%	Project Operation:	$65	$12	18.0%	$77	3.4%	$67	$12	$79	2027Q3	7.9%	$73	$13	$86
2.5%	Project Management	$81	$15	18.0%	$96	3.4%	$84	$15	$99	2027Q3	7.9%	$90	$16	$107
	CONTRACT COST TOTALS:	$5,761	$2,235		$7,996		$5,899	$2,284	**$8,183**			$6,246	$2,433	**$8,679**

Filename: Owyhee Alt 6 Update Earthwork TPCS - 11 07 24 TPCS

Abbreviated Risk Analysis

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Alternative: **Alt 6**
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1	11 LEVEES AND FLOODWALLS	**Alternative 6: Side channel and Main channel**	**$ 3,233,842**	55%	$ 1,785,233	$ 5,019,075
2				0%	$ -	$ -
3				0%	$ -	$ -
4				0%	$ -	$ -
5				0%	$ -	$ -
6			**$ -**	0%	$ -	$ -
7			**$ -**	0%	$ -	$ -
8			**$ -**	0%	$ -	$ -
9			**$ -**	0%	$ -	$ -
10			**$ -**	0%	$ -	$ -
11			**$ -**	0%	$ -	$ -
12				0%	$ -	$ -
13	30 PLANNING, ENGINEERING, AND DESIGN	**Planning, Engineering, & Design**	**$ 985,000**	16%	$ 153,962	$ 1,138,962
14	31 CONSTRUCTION MANAGEMENT	**Construction Management**	**$ 469,000**	18%	$ 84,732	$ 553,732
XX	FIXED DOLLAR RISK ADD (EQUALLY DISPERSED TO ALL, MUST INCLUDE JUSTIFICATION SEE BELOW)				**$ -**	

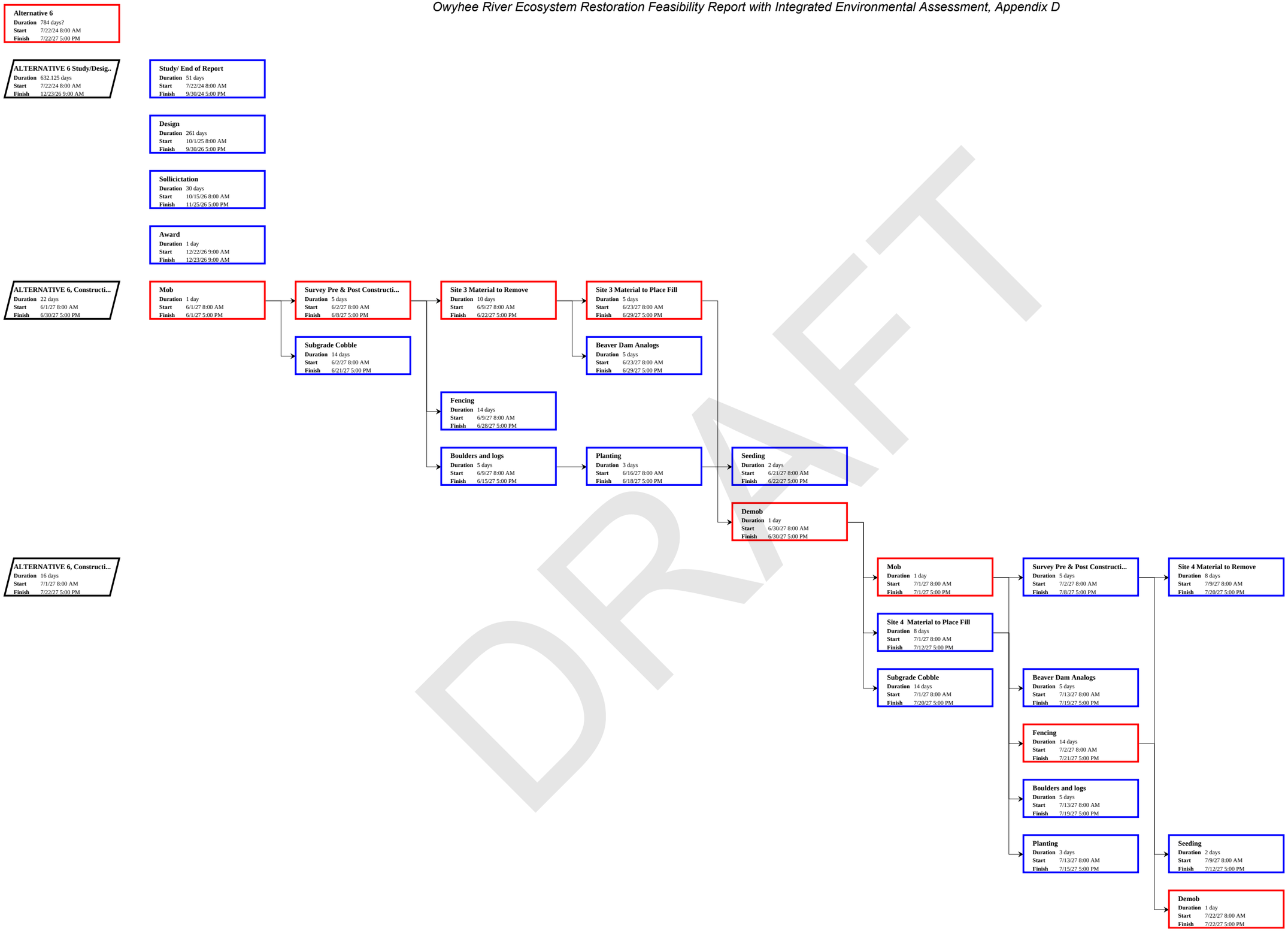
Totals					
Real Estate	$ -	0%	$ -	$ -	
Total Construction Estimate	$ 3,233,842	55%	$ 1,785,233	$ 5,019,075	
Total Planning, Engineering & Design	$ 985,000	16%	$ 153,962	$ 1,138,962	
Total Construction Management	$ 469,000	18%	$ 84,732	$ 553,732	
Total Excluding Real Estate	**$ 4,687,842**	**43%**	**$ 2,023,927**	**$ 6,711,769**	
		Base	**50%**	**80%**	
Confidence Level Range Estimate ($000's)		$4,688k	$5,902k	$6,712k	

* 50% based on base is at 5% CL.

Fixed Dollar Risk Add: (Allows for additional risk to be added to the risk analsyis. Must include justification. Does not allocate to Real Estate.	

		Name	Duration	Start	Finish	Predecessors
1		Alternative 6	784 days?	7/22/24 8:00 AM	7/22/27 5:00 PM	
2		**ALTERNATIVE 6 Study/Design/Award**	**632.125 da...**	**7/22/24 8:00 AM**	**12/23/26 9:00 AM**	
3		Study/ End of Report	51 days	7/22/24 8:00 AM	9/30/24 5:00 PM	
4		Design	261 days	10/1/25 8:00 AM	9/30/26 5:00 PM	
5		Sollicictation	30 days	10/15/26 8:00 AM	11/25/26 5:00 PM	
6		Award	1 day	12/22/26 9:00 AM	12/23/26 9:00 AM	
7		**ALTERNATIVE 6, Construction SITE 3**	**22 days**	**6/1/27 8:00 AM**	**6/30/27 5:00 PM**	
8		Mob	1 day	6/1/27 8:00 AM	6/1/27 5:00 PM	
9		Survey Pre & Post Construction	5 days	6/2/27 8:00 AM	6/8/27 5:00 PM	8
10		Site 3 Material to Remove	10 days	6/9/27 8:00 AM	6/22/27 5:00 PM	9
11		Site 3 Material to Place Fill	5 days	6/23/27 8:00 AM	6/29/27 5:00 PM	10
12		Subgrade Cobble	14 days	6/2/27 8:00 AM	6/21/27 5:00 PM	8
13		Beaver Dam Analogs	5 days	6/23/27 8:00 AM	6/29/27 5:00 PM	10
14		Fencing	14 days	6/9/27 8:00 AM	6/28/27 5:00 PM	9
15		Boulders and logs	5 days	6/9/27 8:00 AM	6/15/27 5:00 PM	9
16		Planting	3 days	6/16/27 8:00 AM	6/18/27 5:00 PM	15
17		Seeding	2 days	6/21/27 8:00 AM	6/22/27 5:00 PM	16
18		Demob	1 day	6/30/27 8:00 AM	6/30/27 5:00 PM	11
19		**ALTERNATIVE 6, Construction SITE 4**	**16 days**	**7/1/27 8:00 AM**	**7/22/27 5:00 PM**	
20		Mob	1 day	7/1/27 8:00 AM	7/1/27 5:00 PM	18
21		Survey Pre & Post Construction	5 days	7/2/27 8:00 AM	7/8/27 5:00 PM	20
22		Site 4 Material to Remove	8 days	7/9/27 8:00 AM	7/20/27 5:00 PM	21
23		Site 4 Material to Place Fill	8 days	7/1/27 8:00 AM	7/12/27 5:00 PM	18
24		Subgrade Cobble	14 days	7/1/27 8:00 AM	7/20/27 5:00 PM	18
25		Beaver Dam Analogs	5 days	7/13/27 8:00 AM	7/19/27 5:00 PM	23
26		Fencing	14 days	7/2/27 8:00 AM	7/21/27 5:00 PM	20
27		Boulders and logs	5 days	7/13/27 8:00 AM	7/19/27 5:00 PM	23
28		Planting	3 days	7/13/27 8:00 AM	7/15/27 5:00 PM	23
29		Seeding	2 days	7/9/27 8:00 AM	7/12/27 5:00 PM	21
30		Demob	1 day	7/22/27 8:00 AM	7/22/27 5:00 PM	26

Owyhee 206 Earthwork_ Alt 6 - page1


Alternative 6
Duration 784 days?
Start 7/22/24 8:00 AM
Finish 7/22/27 5:00 PM
ALTERNATIVE 6 Study/Desig..
Duration 632.125 days
Start 7/22/24 8:00 AM
Finish 12/23/26 9:00 AM
Study/ End of Report
Duration 51 days
Start 7/22/24 8:00 AM
Finish 9/30/24 5:00 PM
Design
Duration 261 days
Start 10/1/25 8:00 AM
Finish 9/30/26 5:00 PM
Sollicictation
Duration 30 days
Start 10/15/26 8:00 AM
Finish 11/25/26 5:00 PM
Award
Duration 1 day
Start 12/22/26 9:00 AM
Finish 12/23/26 9:00 AM
ALTERNATIVE 6, Constructi...
Duration 22 days
Start 6/1/27 8:00 AM
Finish 6/30/27 5:00 PM
Mob
Duration 1 day
Start 6/1/27 8:00 AM
Finish 6/1/27 5:00 PM
Survey Pre & Post Constructi...
Duration 5 days
Start 6/2/27 8:00 AM
Finish 6/8/27 5:00 PM
Subgrade Cobble
Duration 14 days
Start 6/2/27 8:00 AM
Finish 6/21/27 5:00 PM
Site 3 Material to Remove
Duration 10 days
Start 6/9/27 8:00 AM
Finish 6/22/27 5:00 PM
Site 3 Material to Place Fill
Duration 5 days
Start 6/23/27 8:00 AM
Finish 6/29/27 5:00 PM
Beaver Dam Analogs
Duration 5 days
Start 6/23/27 8:00 AM
Finish 6/29/27 5:00 PM
Fencing
Duration 14 days
Start 6/9/27 8:00 AM
Finish 6/28/27 5:00 PM
Boulders and logs
Duration 5 days
Start 6/9/27 8:00 AM
Finish 6/15/27 5:00 PM
Planting
Duration 3 days
Start 6/16/27 8:00 AM
Finish 6/18/27 5:00 PM
Seeding
Duration 2 days
Start 6/21/27 8:00 AM
Finish 6/22/27 5:00 PM
Demob
Duration 1 day
Start 6/30/27 8:00 AM
Finish 6/30/27 5:00 PM
ALTERNATIVE 6, Constructi...
Duration 16 days
Start 7/1/27 8:00 AM
Finish 7/22/27 5:00 PM
Mob
Duration 1 day
Start 7/1/27 8:00 AM
Finish 7/1/27 5:00 PM
Site 4 Material to Place Fill
Duration 8 days
Start 7/1/27 8:00 AM
Finish 7/12/27 5:00 PM
Subgrade Cobble
Duration 14 days
Start 7/1/27 8:00 AM
Finish 7/20/27 5:00 PM
Survey Pre & Post Constructi...
Duration 5 days
Start 7/2/27 8:00 AM
Finish 7/8/27 5:00 PM
Site 4 Material to Remove
Duration 8 days
Start 7/9/27 8:00 AM
Finish 7/20/27 5:00 PM
Beaver Dam Analogs
Duration 5 days
Start 7/13/27 8:00 AM
Finish 7/19/27 5:00 PM
Fencing
Duration 14 days
Start 7/2/27 8:00 AM
Finish 7/21/27 5:00 PM
Boulders and logs
Duration 5 days
Start 7/13/27 8:00 AM
Finish 7/19/27 5:00 PM
Planting
Duration 3 days
Start 7/13/27 8:00 AM
Finish 7/15/27 5:00 PM
Seeding
Duration 2 days
Start 7/9/27 8:00 AM
Finish 7/12/27 5:00 PM
Demob
Duration 1 day
Start 7/22/27 8:00 AM
Finish 7/22/27 5:00 PM