

Appendix F

Cost Estimates

Cost Summary

Chicago Mine	Alternative				
	1	2	3	4	5
Years	0	30	30	30	5
Interest (APR)	n/a	5%	5%	5%	2%
Capital (one-time)	\$ -	\$ 336,276	\$ 502,451	\$ 533,470	\$ 3,017,598
Maintenance & Monitoring/Year	\$ -	\$ 6,423	\$ 10,686	\$ 13,763	\$ 2,435
Post-Removal Site Control/Year	\$ -	\$ 2,080	\$ 2,080	\$ 2,080	\$ -
Present Value	\$ -	\$ 466,992	\$ 698,698	\$ 777,023	\$ 3,029,074
Low Estimate -30%	\$ -	\$ 326,895	\$ 489,089	\$ 543,916	\$ 2,120,352
High Estimate +50%	\$ -	\$ 700,488	\$ 1,048,048	\$ 1,165,535	\$ 4,543,611

Research Mine	Alternative				
	1	2	3	4	5
Years	0	30	30	30	5
Interest Rate	n/a	5%	5%	5%	2%
Capital (one-time)	\$ -	\$ 382,544	\$ 728,590	\$ 773,787	\$ 3,096,371
Maintenance & Monitoring/Year	\$ -	\$ 6,423	\$ 10,686	\$ 13,763	\$ 5,640
Post-Removal Site Control/Year	\$ -	\$ 2,080	\$ 2,080	\$ 2,080	\$ 2,080
Present Value	\$ -	\$ 513,261	\$ 924,837	\$ 1,017,340	\$ 3,132,763
Low Estimate -30%	\$ -	\$ 359,283	\$ 647,386	\$ 712,138	\$ 2,192,934
High Estimate +50%	\$ -	\$ 769,891	\$ 1,387,255	\$ 1,526,011	\$ 4,699,145

Client: BLM
 Project: BLM Chicago Research
 Location: Lake County
 Estimate Date:
 Scope of Work:EE/CA Alternative 2, Chicago

Phase
 Task:
 Billing Type:
 Task Title:
 Duration:

1 2 3 4 5 6 7 8
 Design Pre-mob submittals Mob Chicago Veg RemovalChicago Controls Chicago Road Repair Barbed Wire Fence Phase Demob
 90 Days 20 Days 2 Days 1 Days 8 Days 1 Days 3 Days 2 Days
 Modification/Revision #:

1. Labor	Rate (\$)	Unit	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Total Units	Total Cost (\$)
Technical Editor	\$128.34	hour			8	\$1,026.72											8.00	\$1,026.72
Principal	\$144.77	hour	16	\$2,316.32	2	\$289.54			8	\$1,158.16	2	\$289.54					28.00	\$4,053.56
Project Manager	\$111.89	hour	56	\$6,265.84	16	\$1,790.24	4	\$447.56	16	\$1,790.24	2	\$223.78			4	\$447.56	98.00	\$10,965.22
Senior Project Engineer	\$108.58	hour	240	\$26,059.20			16	\$1,737.28			11	\$1,194.38	2	\$217.16	16	\$1,737.28	285.00	\$30,945.30
Senior Project Scientist	\$96.75	hour			40	\$3,870.00											40.00	\$3,870.00
Project Scientist	\$81.61	hour			40	\$3,264.40											40.00	\$3,264.40
Assistant Project Scientist	\$68.44	hour			40	\$2,737.60											40.00	\$2,737.60
Staff Engineer	\$65.81	hour	280	\$18,426.80					10	\$658.10	80	\$5,264.80	10	\$658.10			380.00	\$25,007.80
Project Accountant	\$65.81	hour	36	\$2,369.16			40	\$2,632.40	1	\$65.81	8	\$526.48	1	\$65.81			40.00	\$2,632.40
CADD Operator	\$72.38	hour			24	\$1,737.12											24.00	\$1,737.12
Superintendent	\$102.01	hour					20	\$2,040.20	10	\$1,020.10	80	\$8,160.80	10	\$1,020.10	30	\$3,060.30	170.00	\$17,341.70
Operator - DBA_CA20080029	\$95.66	hour					32	\$3,061.12	16	\$1,530.56	192	\$18,366.72	24	\$2,295.84			296.00	\$28,315.36
Operator DBA_CA20080029 (OT)	\$143.49	hour					8	\$1,147.92	4	\$573.96	48	\$6,887.52	6	\$860.94			74.00	\$10,618.26
Laborer - DBA_CA20080029	\$67.27	hour					32	\$2,152.64	16	\$1,076.32	120	\$8,072.40	16	\$1,076.32			216.00	\$14,530.32
Laborer DBA_CA20080029 (OT)	\$104.04	hour					8	\$832.32	4	\$416.16	36	\$3,745.44	4	\$416.16			60.00	\$6,242.40
Truck Driver - DBA_CA20080029	\$76.80	hour					32	\$2,457.60	8	\$614.40	120	\$9,216.00	16	\$1,228.80			208.00	\$15,974.40
Truck Driver - DBA_CA20080029 (OT)	\$115.20	hour					8	\$921.60	2	\$230.40	36	\$4,147.20	4	\$460.80			58.00	\$6,681.60
Senior CADD Operator	\$85.53	hour			8	\$684.24											8.00	\$684.24
Subtotals			628	\$55,437.32	178	\$15,399.86	200	\$17,430.64	71	\$6,185.81	755	\$68,530.14	97	\$8,813.35	30	\$3,060.30	2,159.00	\$192,288.06

2. Materials and Other Direct Costs	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)	
Posts & Wire (\$8ea + \$75/roll)	\$1.25	ft											1030	\$1,287.50			1,030.00	\$1,287.50	
Culvert, estimated, delivered, 50 feet	\$3,000.00	each																	
Riprap	\$50.82	ton									133	\$6,759.06					133.00	\$6,759.06	
Grout	\$175.54	cy									67	\$11,761.18					67.00	\$11,761.18	
Gravel	\$50.00	ton											100	\$5,000.00			100.00	\$5,000.00	
Concrete	\$300.00	yd																	
Forms and Bars	\$4,500.00	allow																	
Jute Mats and EC Mat's	\$14,291.00	Acre																	
Erosion Control Materials	\$18,972.46	allow																	
FOG large	\$23.15	hr						30	\$694.50	600	\$13,890.00	50	\$1,157.50				680.00	\$15,742.00	
Job trailer	\$405.21	month						0.15	\$60.78	1	\$405.21	0.1	\$40.52				1.25	\$506.51	
One time water fee	\$11,577.40	once					1	\$11,577.40									1.00	\$11,577.40	
Heavy equipment mob small	\$107.51	hr					70	\$7,525.70									70.00	\$7,525.70	
Hand tools	\$37.94	ea																	
Stress beverages	\$63.24	ea							2	\$126.48	20	\$1,264.80	3	\$189.72	1	\$63.24	26.00	\$1,644.24	
FOG small	\$6.32	hr						20	\$126.40	200	\$1,264.00	60	\$379.20	90	\$568.80			370.00	\$2,338.40
Misc	\$97.78	ea			2	\$195.56			1	\$97.78	11	\$1,075.58	3	\$293.34			17.00	\$1,662.26	
Mini ram	\$758.90	month							0.15	\$113.84	1	\$758.90	0.1	\$75.89			1.25	\$948.63	
Subtotals				\$0.00		\$195.56		\$19,103.10		\$1,219.78		\$37,178.73		\$7,136.17		\$1,919.54		\$66,752.88	

3. Equipment	Rate (\$)	Unit	Units	Total Cost (\$)	Total Units	Total Cost (\$)												
Aug for Skid	\$632.42	week																
Laser	\$1,264.83	allow					1	\$1,264.83			1	\$1,264.83					2.00	\$2,529.66
T300 Skidsteer	\$3,920.98	month							0.15	\$588.15	1	\$3,920.98	0.1	\$392.10			1.25	\$4,901.23
Nuke Guage	\$158.10	day																
Truck/Pickup/Supercab/F150Class/Gas/4WD	\$948.62	4 Week			0.1	\$94.86			0.5	\$474.31	1	\$948.62	0.1	\$94.86			1.70	\$1,612.65
Truck/Water/2000 Gallon/DSL	\$2,782.63	4 Week							0.25	\$695.66	1	\$2,782.63	0.1	\$278.26			1.35	\$3,756.55
Truck/Water/3700 Gallon/DSL/Duel Axle	\$4,869.60	4 Week							0.1	\$486.96	1	\$4,869.60	0.1	\$486.96			1.20	\$5,843.52
Power screen	\$13,913.14	month																
CAT 325	\$12,015.89	month							0.2	\$2,403.18	1	\$12,015.89	0.1	\$1,201.59			1.30	\$15,620.66
CAT D-6 dozer	\$8,853.82	month							0.1	\$885.38	1	\$8,853.82	0.1	\$885.38			1.20	\$10,624.58
25 cy off-road DT	\$15,177.97	month															0.10	\$1,517.80
Water Tower	\$2,276.70	month							0.1	\$227.67	1	\$2,276.70	0.1	\$227.67			1.20	\$2,732.04
CAT 615 (17 cy) Scraper	\$14,798.52	4 Week																
Chain Saw/28"/Gas	\$271.94	Week							2	\$543.88							2.00	\$543.88

Client: BLM
 Project: BLM Chicago Research
 Location: Lake County
 Estimate Date:
 Scope of Work:EE/CA Alternative 2, Chicago

Phase
 Task:
 Billing Type:
 Task Title:
 Duration:

	1	2	3	4	5	6	7	8	Modification\Revision #:	
	Design	Pre-mob submittals	Mob Chicago	Veg RemovalChicago	Controls	Chicago Road Repair	Barbed Wire Fence	Phase Demob		
	90 Days	20 Days	2 Days	1 Days	8 Days	1 Days	3 Days	2 Days		
Pole saw	\$505.93	ea		1	\$505.93				1.00	\$505.93
8" brush chipper	\$569.17	wk		1	\$569.17				1.00	\$569.17
Subtotals		\$0.00	\$94.86	\$1,264.83	\$7,380.29	\$36,933.07	\$5,084.62	\$0.00	\$0.00	\$50,757.67

4. Subcontractors	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)
Test America	\$28.94	ea metal							9	\$260.46					9.00	\$260.46
hydro-seeding (Selby)	\$4,294.10	ac														
riprap																
grout																
surveyor	\$2,656.14				2	\$5,312.28							0.5	\$1,328.07	2.50	\$6,640.35
temp fence	\$2.32	ft			240	\$556.80								240.00	\$556.80	
Subtotals				\$0.00		\$0.00		\$5,869.08		\$260.46		\$0.00		\$1,328.07		\$7,457.61

5. Travel	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)								
Per diem	\$44.00	day					14	\$616.00	9	\$396.00	60	\$2,640.00	9	\$396.00	3	\$132.00
Hotel - Middletown	\$70.00	day					14	\$980.00	9	\$630.00	60	\$4,200.00	9	\$630.00	3	\$210.00
Subtotals				\$0.00		\$0.00		\$1,596.00		\$1,026.00		\$6,840.00		\$1,026.00		\$342.00
SUBTOTALS				\$55,437.32		\$15,690.28		\$45,263.65		\$16,072.34		\$149,481.94		\$22,060.14		\$5,321.84
																\$20,354.71
																\$329,682.22

6. Bonding, Insurance, and Taxes	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)								
	2%	%														\$6,593.64
Subtotals				\$0.00		\$6,593.64		\$0.00		\$0.00		\$0.00		\$0.00		\$6,593.64
TOTALS				\$55,437.32		\$22,283.92		\$45,263.65		\$16,072.34		\$149,481.94		\$22,060.14		\$336,275.86

Notes:

Moderate effort for low complexity alternative.
 HEC-1 modeling.

Schedule, Access Control Plan, Equip Decon Plan, Potable Water and Sanitation Plan, Fuel and Haz Mat Plan, and HASP

Mob/demob equipment & labor. Laborer hours for mob/demob & travel time.

Fairly rugged site. Lots of manzanita to remove, Clear areas to access swale lines, Brush cut existing roads.
 Chicago has 1030 feet of fence and 1500 feet of run on/off controls

Sediment trap. Super, QC, 3 EO, 2 trk drivers, 2 laborers 2 days.
 1020+110+125=1255 feet of swale @10'
 190+50=240 feet grouted riprap.
 riprap is 1.5feet deep, 10 feet wide or 15x240=3600 cubic feet or 133 cuyd.
 Grout is 0.75' x 10' x 240 feet=1800 cuft or 67yds
 Grouted riprap is similar to culvert pipe in cost and

Place only 100 tons gravel on road surface and otherwise repair road to access from Research

1030 ft of fence

Client: BLM
 Project: BLM Chicago Research
 Location: Lake County
 Estimate Date:
 Scope of Work:EE/CA Alternative 2, Research

Phase Task:
 Billing Type:
 Task Title:
 Duration:

	1	2	3	4	5	6	7	8	Modification/Revision #:
Design	Pre-mob submittals	Mob Research	Veg Removal Research	Res Run-On & Off Controls	Research Road & Culvert	Barbed Wire Fence	Phase Demob		
90 Days	20 Days	2 Days	1 Days	10 Days	3 Days	6 Days	2 Days		

hydro-seeding (Selby)	\$4,294.10	ac																
riprap																		
grout																		
surveyor	\$2,656.14				2	\$5,312.28								0.5	\$1,328.07	2.50	\$6,640.35	
temp fence	\$2.32	ft			240	\$556.80										240.00	\$556.80	
Subtotals						\$5,869.08									\$1,328.07			\$7,197.15

5. Travel	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)										
Per diem	\$44.00	day					14	\$616.00	7	\$308.00	90	\$3,960.00	27	\$1,188.00	6	\$264.00	14	\$616.00	158.00	\$6,952.00
Hotel - Middletown	\$70.00	day					14	\$980.00	7	\$490.00	90	\$6,300.00	27	\$1,890.00	6	\$420.00	14	\$980.00	158.00	\$11,060.00
Subtotals				\$0.00		\$0.00		\$1,596.00		\$798.00		\$10,260.00		\$3,078.00		\$684.00		\$1,596.00		\$18,012.00
SUBTOTALS				\$62,412.92		\$15,690.28		\$45,263.65		\$17,784.55		\$155,369.33		\$47,044.56		\$11,123.44		\$20,354.71		\$375,043.44

6. Bonding, Insurance, and Taxes	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)										
	2.00%	%																		
Subtotals				\$0.00		\$7,500.87		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$7,500.87		
TOTALS				\$62,412.92		\$23,191.15		\$45,263.65		\$17,784.55		\$155,369.33		\$47,044.56		\$11,123.44		\$20,354.71		\$382,544.31

Notes:

Moderate effort for low complexity alternative but challenging site topography. HEC-1 modeling.	Schedule, Access Control Plan, Equip Decon Plan, Potable Water and Sanitaion Plan, Fuel and Haz Mat Plan, and HASP	Mob/demob equipment & labor. Laborer hours for mob/demob & travel time.	Fairly rugged site. Lots of manzanita to remove. Clear areas to build fences and ditches. Research has 225 feet grouted riprap on steep slope. Research has 1118 feet lined swales. Research has 2967 feet fence.	Lined swales . Super, QC, 3 EO, 2 trk drivers, 2 laborers 2 days. 1118 feet of swale @10' 225 feet grouted riprap. riprap is 1.5feet deep, 10 feet wide or 1.5x10x 225=3375 cubic feet or 125 cuyd. Grout is 0.75' x 10' x 225 feet=1688 cuft or 62.5 CY	Place only 200 tons gravel on road surface and otherwise repair road to access for Research enough to construct run on/off controls and fences	3000 ft of fence	For mob and demob.
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Client: BLM
 Project: BLM Chicago Research
 Location: Lake County
 Estimate Date:
 Scope of Work: EE/CA Chicago Alternative 3

Phase
 Task:
 Billing Type:
 Task Title:
 Duration:

	1	2	3	4	5	6	7	8	9	
	Design	Pre-mob submittals	Mob Chicago	Veg Removal Chicago	Controls	CH Road Repair	Revegetation	Barbed Wire Fence	Phase Demob	Modification/Revision #:
	90 Days	20 Days	1 Days	3 Days	8 Days	1 Days	5 Days	3 Days	2 Days	

1. Labor	Rate (\$)	Unit	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Total Units	Total Cost (\$)										
Technical Editor	\$128.34	hour			8	\$1,026.72													8.00	\$1,026.72		
Principal	\$144.77	hour	16	\$2,316.32	2	\$289.54			8	\$1,158.16	2	\$289.54	8	\$1,158.16			4	\$579.08	40.00	\$5,790.80		
Project Manager	\$111.89	hour	56	\$6,265.84	16	\$1,790.24	4	\$447.56	16	\$1,790.24	2	\$223.78	12	\$1,342.68			16	\$1,790.24	122.00	\$13,650.58		
Senior Project Engineer	\$108.58	hour	280	\$30,402.40			16	\$1,737.28			11	\$1,194.38	2	\$217.16	8	\$868.64			317.00	\$34,419.86		
Senior Project Scientist	\$96.75	hour			40	\$3,870.00													40.00	\$3,870.00		
Project Scientist	\$81.61	hour			40	\$3,264.40													40.00	\$3,264.40		
Assistant Project Scientist	\$68.44	hour			40	\$2,737.60													40.00	\$2,737.60		
Staff Engineer	\$65.81	hour	320	\$21,059.20					30	\$1,974.30	80	\$5,264.80	10	\$658.10	50	\$3,290.50			40	\$2,632.40		
Project Accountant	\$65.81	hour	36	\$2,369.16			40	\$2,632.40	1	\$65.81	8	\$526.48	1	\$65.81	4	\$263.24			90.00	\$5,922.90		
CADD Operator	\$72.38	hour			24	\$1,737.12													24.00	\$1,737.12		
Superintendent	\$102.01	hour					20	\$2,040.20	30	\$3,060.30	80	\$8,160.80	10	\$1,020.10	50	\$5,100.50	30	\$3,060.30	40	\$4,080.40		
Operator - DBA_CA20080029	\$95.66	hour			48	\$4,591.68	48	\$4,591.68	192	\$18,366.72	24	\$2,295.84	120	\$11,479.20			24	\$2,295.84	456.00	\$43,620.96		
Operator DBA_CA20080029 (OT)	\$143.49	hour			12	\$1,721.88	12	\$1,721.88	48	\$6,887.52	6	\$860.94	30	\$4,304.70					108.00	\$15,496.92		
Laborer - DBA_CA20080029	\$67.27	hour			32	\$2,152.64	48	\$3,228.96	128	\$8,610.56	16	\$1,076.32	160	\$10,763.20			24	\$1,614.48	408.00	\$27,446.16		
Laborer DBA_CA20080029 (OT)	\$104.04	hour			8	\$832.32	12	\$1,248.48	32	\$3,329.28	4	\$416.16	40	\$4,161.60					96.00	\$9,987.84		
Truck Driver - DBA_CA20080029	\$76.80	hour			32	\$2,457.60	24	\$1,843.20	128	\$9,830.40	16	\$1,228.80	80	\$6,144.00			24	\$1,843.20	304.00	\$23,347.20		
Truck Driver - DBA_CA20080029 (OT)	\$115.20	hour			8	\$921.60	6	\$691.20	32	\$3,686.40	4	\$460.80	20	\$2,304.00					70.00	\$8,064.00		
Senior CADD Operator	\$85.53	hour			8	\$684.24													8.00	\$684.24		
Subtotals			708	\$62,412.92	178	\$15,399.86	220	\$19,535.16	211	\$18,425.81	763	\$68,805.74	97	\$8,813.35	582	\$51,180.42	30	\$3,060.30	172	\$14,835.64	2,961.00	\$262,469.20

2. Materials and Other Direct Costs	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)		
3-wire, installed	\$5.00	ft																	1030.00	\$5,150.00		
Culvert, estimated, delivered, 50 feet	\$3,000.00	each																				
riprap	\$50.82	ton							300	\$15,246.00									300.00	\$15,246.00		
grout	\$175.54	cy							100	\$17,554.00									100.00	\$17,554.00		
gravel	\$50.00	ton									100	\$5,000.00							100.00	\$5,000.00		
concrete	\$300.00	yd																				
Forms and Bars	\$4,500.00	allow																				
Jute Mats and Earthguard	\$16,591.00	Acre											1.5	\$24,886.50					1.50	\$24,886.50		
Erosion Control Materials	\$18,972.46	allow											0.5	\$9,486.23					0.50	\$9,486.23		
fog large	\$23.15	hr					90	\$2,083.50	600	\$13,890.00	50	\$1,157.50	50	\$1,157.50					790.00	\$18,288.50		
job trailer	\$405.21	month					0.15	\$60.78	1	\$405.21	0.1	\$40.52	0.05	\$20.26					1.30	\$526.77		
one time water fee	\$11,577.40	once			1	\$11,577.40													1.00	\$11,577.40		
heavy equipment mob small	\$107.51	hr			70	\$7,525.70							70	\$7,525.70					140.00	\$15,051.40		
hand tools	\$37.94	ea																				
stress beverages	\$63.24	ea					5	\$316.20	20	\$1,264.80	3	\$189.72	5	\$316.20	3	\$189.72			36.00	\$2,276.64		
fog small	\$6.32	hr					60	\$379.20	200	\$379.20	60	\$379.20	60	\$379.20	30	\$189.60			410.00	\$2,591.20		
misc	\$97.78	ea			2	\$195.56			3	\$293.34	11	\$1,075.58	3	\$293.34	3	\$293.34			22.00	\$2,151.16		
mini ram	\$758.90	month					0.45	\$341.51	1	\$758.90	0.1	\$75.89	0.15	\$113.84					1.70	\$1,290.14		
Subtotals				\$0.00		\$195.56		\$19,103.10		\$3,474.53		\$51,458.49		\$7,136.17		\$44,178.77		\$5,529.32		\$0.00		\$131,075.94

3. Equipment	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)		
Aug for Skid	\$632.42	week																				
Laser	\$1,264.83	allow					1	\$1,264.83			1	\$1,264.83							2.00	\$2,529.66		
T300 Skidsteer	\$3,920.98	month							0.15	\$588.15	1	\$3,920.98	0.1	\$392.10	0.05	\$196.05			1.30	\$5,097.28		
Nuke Guage	\$158.10	day																				
Truck/Pickup/Supercab/F150Class/Gas/4WD	\$948.62	4 Week			0.1	\$94.86			0.5	\$474.31	1	\$948.62	0.1	\$94.86	0.1	\$94.86			1.80	\$1,707.51		
Truck/Water/2000 Gallon/DSL	\$2,782.63	4 Week							0.25	\$695.66	1	\$2,782.63	0.1	\$278.26	0.05	\$139.13			1.40	\$3,895.68		
Truck/Water/3700 Gallon/DSL/Duel Axle	\$4,869.60	4 Week							0.25	\$1,217.40	1	\$4,869.60	0.1	\$486.96	0.05	\$243.48			1.40	\$6,817.44		
Power screen	\$13,913.14	month																				
CAT 325	\$12,015.89	month							1	\$12,015.89	1	\$12,015.89	0.1	\$1,201.59	0.1	\$1,201.59			2.20	\$26,434.96		
CAT D-6 dozer	\$8,853.82	month							0.25	\$2,213.46	1	\$8,853.82	0.1	\$885.38	0.05	\$442.69			1.40	\$12,395.35		
25 cy off-road DT	\$15,177.97	month											0.1	\$1,517.80	0.1	\$1,517.80			0.20	\$3,035.60		
Water Tower	\$2,276.70	month							0.25	\$569.18	1	\$2,276.70	0.1	\$227.67	0.05	\$113.84			1.40	\$3,187.39		
CAT 615 (17 cy) Scraper	\$14,798.52	4 Week																				
Chain Saw/28"/Gas	\$271.94	Week							2	\$543.88									2.00	\$543.88		
pole saw	\$505.93	ea							1	\$505.93									1.00	\$505.93		
8" brush chipper	\$569.17	wk							1	\$569.17									1.00	\$569.17		
Subtotals				\$0.00		\$94.86		\$1,264.83		\$19,393.03		\$36,933.07		\$5,084.62		\$3,949.44		\$0.00		\$0.00		\$66,719.85

Client: BLM
 Project: BLM Chicago Research
 Location: Lake County
 Estimate Date:
 Scope of Work: EE/CA Chicago Alternative 3

Phase
 Task:
 Billing Type:
 Task Title:
 Duration:

1	2	3	4	5	6	7	8	9	Modification\Revision #:
Design	Pre-mob submittals	Mob Chicago	Veg Removal Chicago	Controls	CH Road Repair	Revegetation	Barbed Wire Fence	Phase Demob	
90 Days	20 Days	1 Days	3 Days	8 Days	1 Days	5 Days	3 Days	2 Days	

4. Subcontractors	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)		
Test Amaerica	\$28.94	ea metal																		
hydro-seeding (Selby)	\$4,294.10	ac									1.5	\$6,441.15					1.50	\$6,441.15		
riprap																				
grout																				
surveyor	\$2,656.14						2	\$5,312.28							0.5	\$1,328.07	2.50	\$6,640.35		
temp fence	\$2.32	ft					240	\$556.80									240.00	\$556.80		
Subtotals				\$0.00		\$0.00		\$5,869.08		\$0.00		\$0.00		\$6,441.15		\$0.00		\$1,328.07		\$13,638.30

5. Travel	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)												
Per diem	\$44.00	day					16	\$704.00	27	\$1,188.00	64	\$2,816.00	9	\$396.00	45	\$1,980.00	3	\$132.00	164.00	\$7,216.00		
Hotel - Middletown	\$70.00	day					16	\$1,120.00	27	\$1,890.00	64	\$4,480.00	9	\$630.00	45	\$3,150.00	3	\$210.00	164.00	\$11,480.00		
Subtotals				\$0.00		\$0.00		\$1,824.00		\$3,078.00		\$7,296.00		\$1,026.00		\$5,130.00		\$342.00		\$0.00		\$18,696.00
SUBTOTALS				\$62,412.92		\$15,690.28		\$47,596.17		\$44,371.37		\$164,493.30		\$22,060.14		\$110,879.78		\$8,931.62		\$16,163.71		\$492,599.29

6. Bonding, Insurance, and Taxes	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)												
	2.00%	\$																				
Subtotals				\$0.00		\$9,851.99		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$9,851.99				
TOTALS				\$62,412.92		\$25,542.27		\$47,596.17		\$44,371.37		\$164,493.30		\$22,060.14		\$110,879.78		\$8,931.62		\$16,163.71		\$502,451.28

Notes:

Moderately complex design on moderately complex site. HEC-1 modeling.	Schedule, Access Control Plan, Equip Decon Plan, Potable Water and Sanitation Plan, Fuel and Haz Mat Plan, and HASP	Mob/demob equipment & labor. Laborer hours for mob/demob & travel time.	Fairly rugged site. Lots of manzanita to remove, Clear areas to access piles, Brush cut existing roads. Approx 1.5 acres.	Sediment trap. Super, QC, 3 EO, 2 trk drivers, 2 laborers 2 days. 140+225=365 feet grouted riprap. 280+150+680=1110 feet of swale @10' Riprap is 1.5feet deep, 10 feet wide or 15x365=3600 cubic feet or 147 cuyd. Grout is 0.75' x 10' x 365 feet=2738 cuft or 101yds Added one day labor to place the extra riprap compared to alt2	Place only 100 tons gravel on road surface and otherwise repair road to access from Research	Jute mats and stakes. Hydroseeding. Significant labor to stake down 1.5 acres of jute mat on slopes.	1030 ft of fence
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Client: BLM
 Project: BLM Rathburn Mine Phase I Alt 2
 Location: Lake County
 Estimate Date:
 Scope of Work: EE/CA Chicago Alternative 4
 Mine Encapsulation

Phase
 Task:
 Billing Type:
 Task Title:
 Duration:

1 2 3 4 5 6 7 8
 Design 90 Days Pre-mob Submittals 20 Days Mob Chicago 2 Days Veg Removal Chicago 3 Days Chi Consolidate & Cap Piles 5 Days Revegetate Chicago 1 Days Chi Run-On & Off Controls 5 Days Chi Road Improvement 1 Days Phase Demob 2 Days
 Modification/Revision #:

			1		2		3		4		5		6		7		8					
			Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Total Units	Total Cost (\$)										
1. Labor			Rate (\$)	Unit	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Total Units	Total Cost (\$)								
Technical Editor	\$128.34	hour			8	\$1,026.72													8.00	\$1,026.72		
Principal	\$144.77	hour	16	\$2,316.32	2	\$289.54			5	\$723.85									31.00	\$4,487.87		
Project Manager	\$111.89	hour	120	\$13,426.80	16	\$1,790.24	4	\$447.56	8	\$895.12	12	\$1,342.68	2	\$223.78	4	\$447.56			166.00	\$18,573.74		
Senior Project Engineer	\$108.58	hour	400	\$43,432.00			16	\$1,737.28	12	\$1,302.96			8	\$868.64	2	\$217.16	16	\$1,737.28	454.00	\$49,295.32		
Senior Project Scientist	\$96.75	hour			40	\$3,870.00													40.00	\$3,870.00		
Project Scientist	\$81.61	hour			40	\$3,264.40													40.00	\$3,264.40		
Assistant Project Scientist	\$68.44	hour			40	\$2,737.60													40.00	\$2,737.60		
Staff Engineer	\$65.81	hour	440	\$28,956.40					30	\$1,974.30	50	\$3,290.50			50	\$3,290.50	10	\$658.10	580.00	\$38,169.80		
Project Accountant	\$65.81	hour					40	\$2,632.40	1	\$65.81	8	\$526.48			4	\$263.24	1	\$65.81	94.00	\$6,186.14		
CADD Operator	\$72.38	hour			24	\$1,737.12													24.00	\$1,737.12		
Superintendent	\$102.01	hour					20	\$2,040.20	30	\$3,060.30	50	\$5,100.50	10	\$1,020.10	50	\$5,100.50	10	\$1,020.10	200.00	\$20,402.00		
Operator - DBA_CA20080029	\$95.66	hour					48	\$4,591.68	48	\$4,591.68	120	\$11,479.20	24	\$2,295.84	48	\$4,591.68			408.00	\$39,029.28		
Operator DBA_CA20080029 (OT)	\$143.49	hour					12	\$1,721.88	12	\$1,721.88	30	\$4,304.70	6	\$860.94	12	\$1,721.88			102.00	\$14,635.98		
Laborer - DBA_CA20080029	\$67.27	hour					32	\$2,152.64	48	\$3,228.96	80	\$5,381.60	16	\$1,076.32	32	\$2,152.64			288.00	\$19,373.76		
Laborer DBA_CA20080029 (OT)	\$104.04	hour					8	\$832.32	12	\$1,248.48	20	\$2,080.80	4	\$416.16	8	\$832.32			72.00	\$7,490.88		
Truck Driver - DBA_CA20080029	\$76.80	hour					32	\$2,457.60	24	\$1,843.20	80	\$6,144.00	16	\$1,228.80	32	\$2,457.60			264.00	\$20,275.20		
Truck Driver - DBA_CA20080029 (OT)	\$115.20	hour					8	\$921.60	6	\$691.20	20	\$2,304.00	4	\$460.80	8	\$921.60			66.00	\$7,603.20		
Senior CADD Operator	\$85.53	hour			8	\$684.24													8.00	\$684.24		
Subtotals			976	\$88,131.52	178	\$15,399.86	220	\$19,535.16	211	\$18,425.81	483	\$43,533.71	10	\$1,020.10	480	\$43,428.48	97	\$8,813.35	220	\$19,535.16	2,885.00	\$258,843.25
2. Materials and Other Direct Costs			Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)								
3-wire fence	\$5.00	each																	625.00	\$3,125.00		
riprap	\$50.82	ton												200	\$10,164.00				200.00	\$10,164.00		
grout	\$175.54	cy												100	\$17,554.00				100.00	\$17,554.00		
gravel	\$50.00	ton																100.00	\$5,000.00			
Fill, procure excavate and transport	\$15.00	cuyd									2350	\$35,250.00							2,350.00	\$35,250.00		
Jute Mats and Earthguard	\$16,591.00	Acre																	1.50	\$24,886.50		
Erosion Control Materials	\$18,972.46	allow																				
fog large	\$23.15	hr							90	\$2,083.50	240	\$5,556.00	500	\$11,575.00	50	\$1,157.50			880.00	\$20,372.00		
job trailer	\$405.21	month							0.15	\$60.78	0.5	\$202.61	1	\$405.21	0.1	\$40.52			1.75	\$709.12		
one time water fee	\$11,577.40	once							1	\$11,577.40									1.00	\$11,577.40		
heavy equipment mob small	\$107.51	hr							70	\$7,525.70									70.00	\$7,525.70		
hand tools	\$37.94	ea																				
stress beverages	\$63.24	ea							5	\$316.20	5	\$316.20	15	\$948.60	3	\$189.72			29.00	\$1,833.96		
fog small	\$6.32	hr							60	\$379.20	50	\$316.00	150	\$948.00	60	\$379.20			350.00	\$2,212.00		
misc	\$97.78	ea			2	\$195.56			3	\$293.34	8	\$782.24	8	\$782.24	3	\$293.34			24.00	\$2,346.72		
mini ram	\$758.90	month							0.45	\$341.51	1	\$758.90	1	\$758.90	0.1	\$75.89			2.55	\$1,935.20		
Subtotals				\$0.00		\$195.56		\$19,103.10		\$3,474.53		\$43,181.95		\$0.00		\$43,135.95		\$7,136.17		\$0.00		\$144,491.60
3. Equipment			Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)								
XRF Rental	\$1,650.00	week									1	\$1,650.00							1.00	\$1,650.00		
Laser	\$1,264.83	allow							1	\$1,264.83									2.00	\$2,529.66		
T300 Skidsteer	\$3,920.98	month							0.15	\$588.15	0.45	\$1,764.44	1	\$3,920.98	0.1	\$392.10			1.70	\$6,665.67		
Nuke Guage	\$158.10	day									5	\$790.50							5.00	\$790.50		
Truck/Pickup/Supercab/F150Class/Gas/4WD	\$948.62	4 Week			0.1	\$94.86			0.5	\$474.31	0.5	\$474.31	1	\$948.62	0.1	\$94.86			2.20	\$2,086.96		
Truck/Water/2000 Gallon/DSL	\$2,782.63	4 Week							0.25	\$695.66	0.3	\$834.79	1	\$2,782.63	0.1	\$278.26			1.65	\$4,591.34		
Truck/Water/3700 Gallon/DSL/Duel Axle	\$4,869.60	4 Week							0.25	\$1,217.40	0.2	\$973.92	1	\$4,869.60	0.1	\$486.96			1.55	\$7,547.88		
Power screen	\$13,913.14	month																				
CAT 325	\$12,015.89	month							1	\$12,015.89	0.4	\$4,806.36	1	\$12,015.89	0.1	\$1,201.59			2.50	\$30,039.73		
CAT D-6 dozer	\$8,853.82	month							0.25	\$2,213.46	0.4	\$3,541.53	1	\$8,853.82	0.1	\$885.38			1.75	\$15,494.19		
25 cy off-road DT	\$15,177.97	month									0.4	\$6,071.19	0.1	\$1,517.80	0.1	\$1,517.80			0.50	\$7,588.99		
Water Tower	\$2,276.70	month							0.25	\$569.18	0.25	\$569.18	1	\$2,276.70	0.1	\$227.67			1.60	\$3,642.73		
CAT 615 (17 cy) Scraper	\$14,798.52	4 Week																				
Chain Saw/28"/Gas	\$271.94	Week							2	\$543.88									2.00	\$543.88		
pole saw	\$505.93	ea							1	\$505.93									1.00	\$505.93		
8" brush chipper	\$569.17	wk							1	\$569.17									1.00	\$569.17		
Subtotals				\$0.00		\$94.86		\$1,264.83		\$19,393.03		\$21,476.22		\$0.00		\$36,933.07		\$5,084.62		\$0.00		\$84,246.63
4. Subcontractors			Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)								
Test Amaerica-cam17	\$90.00	ea									15	\$1,350.00							15.00	\$1,350.00		
hydro-seeding (Selby)	\$4,294.10	ac											1.5	\$6,441.15				1.50	\$6,441.15			
surveyor	\$2,656.14	ft							2	\$5,312.28	1	\$2,656.14							3.50	\$9,296.49		
temp fence	\$2.32	ft							240	\$556.80									240.00	\$556.80		
Subtotals				\$0.00		\$0.00		\$5,869.08		\$0.00		\$4,006.14		\$6,441.15		\$0.00		\$1,328.07		\$0.00		\$17,644.44
5. Travel			Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)								
Per diem	\$44.00	day							16	\$704.00	27	\$1,188.00	40	\$1,760.00	2	\$88.00	45	\$1,980.00	9	\$396.00	16	\$704.00
Hotel - Middletown	\$70.00	day							16	\$1,120.00	27	\$1,890.00	40	\$2,800.00	2	\$140.00	45	\$3,150.00	9	\$630.00	16	\$1,120.00
Subtotals				\$0.00		\$0.00		\$1,824.00		\$3,078.00		\$4,560.00		\$228.00		\$5,130.00		\$1,026.00		\$1,824.00		\$17,784.00
SUBTOTALS				\$88,131.52		\$15,690																

Client: BLM
 Project: BLM Rathburn Mine Phase I Alt 2
 Location: Lake County
 Estimate Date:
 Scope of Work: EE/CA Chicago Alternative 4
 Mine Encapsulation

Phase Task:	1	2	3	4	5	6	7	8	Modification/Revision #:
Billing Type: Task Title: Design Duration: 90 Days	Pre-mob Submittals 20 Days	Mob Chicago 2 Days	Veg Removal Chicago 3 Days	Chi Consolidate & Cap Piles 5 Days	Revegetate Chicago 1 Days	Chi Run-On & Off Controls 5 Days	Chi Road Improvement 1 Days	Phase Demob 2 Days	
Notes: Complex design on moderately rugged site. HEC-1 Modeling HELP Modeling	Schedule, Access Control Plan, Equip Decon Plan, Potable Water and Sanitation Plan, Fuel and Haz Mat Plan, and HASP	Mob/demob equipment & labor. Laborer hours for mob/demob & travel time.	Chicago has about 1.5 acre to clear.	Five days to move about 625 cuyd for onsite consolidation. Assumes 1250 cuyd clean borrow found nearby. 1100 Topsoil found nearby. 2350 total fill import/borrow	Capping covered during fill and regrade. Includes hydroseeding only.	Sediment trap. Super, QC, 3 EO, 2 trk drivers, 2 laborers 5 days. 665 feet lined swale@10' 350 feet grouted riprap riprap is 1.5feet deep, 10 feet wide or 15x350=5250 cubic feet or 200 cuyd. Grout is 0.75' x 10' x 350 feet=2625 cuft or 100yds	Improved road for construction access.		

Client: BLM
 Project: BLM Chicago-Research Mines
 Location: Lake County
 Estimate Date:
 Scope of Work: EE/CA Research Alternative 4
 Mine Encapsulation

Phase Task:
 Billing Type:
 Task Title:
 Duration:

1	2	3	4	5	6	7	8	9	10
Design	Pre-mob Submittals	Mob Research	Veg Removal Research	Consolidate to Helen	Culverts	Furnace Decon and Wall	Vegetation Establishment	Barbed Wire Fence	Phase Demob
90 Days	20 Days	2 Days	5 Days	10 Days	5 Days	6 Days	1 Days	1 Days	2 Days

Modification/Revision #:

1. Labor	Rate (\$)	Unit	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Total Units	Total Cost (\$)		
Technical Editor	\$128.34	hour			8	\$1,026.72													8.00	\$1,026.72		
Principal	\$144.77	hour	16	\$2,316.32	2	\$289.54			4	\$579.08	8	\$1,158.16	12	\$1,737.24					42.00	\$6,080.34		
Project Manager	\$111.89	hour	120	\$13,426.80	16	\$1,790.24	4	\$447.56	24	\$2,685.36	12	\$1,342.68	15	\$1,678.35					195.00	\$21,818.55		
Senior Project Engineer	\$108.58	hour	400	\$43,432.00			16	\$1,737.28	14	\$1,520.12	8	\$868.64	8	\$868.64					462.00	\$50,163.96		
Senior Project Scientist	\$96.75	hour			40	\$3,870.00													40.00	\$3,870.00		
Project Scientist	\$81.61	hour			40	\$3,264.40													40.00	\$3,264.40		
Assistant Project Scientist	\$68.44	hour			40	\$2,737.60													40.00	\$2,737.60		
Staff Engineer	\$65.81	hour	440	\$28,956.40					40	\$2,632.40	100	\$6,581.00	40	\$2,632.40	60	\$3,948.60			680.00	\$44,750.80		
Project Accountant	\$65.81	hour	60	\$3,948.60			40	\$2,632.40	8	\$526.48	2	\$131.62	5	\$329.05	6	\$394.86			161.00	\$10,595.41		
CADD Operator	\$72.38	hour			24	\$1,737.12													24.00	\$1,737.12		
Superintendent	\$102.01	hour			20	\$2,040.20	40	\$4,080.40	40	\$4,080.40	100	\$10,201.00	40	\$4,080.40	60	\$6,120.60	10	\$1,020.10	300.00	\$30,603.00		
Operator - DBA_CA20080029	\$95.66	hour			48	\$4,591.68	96	\$9,183.36	240	\$22,958.40	96	\$9,183.36	144	\$13,775.04					672.00	\$64,283.52		
Operator DBA_CA20080029 (OT)	\$143.49	hour			12	\$1,721.88	30	\$4,304.70	60	\$8,609.40	24	\$3,443.76	36	\$5,165.64					174.00	\$24,967.26		
Laborer - DBA_CA20080029	\$67.27	hour			32	\$2,152.64	96	\$6,457.92	160	\$10,763.20	96	\$6,457.92	192	\$12,915.84					608.00	\$40,900.16		
Laborer DBA_CA20080029 (OT)	\$104.04	hour			8	\$832.32	30	\$3,121.20	40	\$4,161.60	24	\$2,496.96	48	\$4,993.92					158.00	\$16,438.32		
Truck Driver - DBA_CA20080029	\$76.80	hour			32	\$2,457.60	64	\$4,915.20	240	\$18,432.00	64	\$4,915.20	96	\$7,372.80					528.00	\$40,550.40		
Truck Driver - DBA_CA20080029 (OT)	\$115.20	hour			8	\$921.60	20	\$2,304.00	60	\$6,912.00	16	\$1,843.20	24	\$2,764.80					136.00	\$15,667.20		
Senior CADD Operator	\$85.53	hour			8	\$684.24													8.00	\$684.24		
Subtotals			1036	\$92,080.12	178	\$15,399.86	220	\$19,535.16	424	\$37,525.66	1044	\$93,534.78	701	\$61,736.33	10	\$1,020.10	10	\$1,020.10	220	\$19,535.16	4,276	\$380,139.00

2. Materials and Other Direct Costs	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)				
3-strand barbed wire	\$5.00	ft																	330.00	\$1,650.00				
Fill, procure, excavate and transport	\$15.00	cuyd							5500	\$82,500.00									5,500.00	\$82,500.00				
Culvert, estimated, delivered, 50 feet	\$3,000.00	each									1	\$3,000.00							3.00	\$9,000.00				
grout	\$175.54	cy																						
gravel	\$50.00	ton									500	\$25,000.00							1,100.00	\$55,000.00				
concrete	\$300.00	cuyd											15	\$4,500.00					15.00	\$4,500.00				
Forms and Bars	\$4,500.00	allow											1	\$4,500.00					1.00	\$4,500.00				
Jute Mats and EC Mat's	\$14,342.00	Acre													0.5	\$7,171.00			0.50	\$7,171.00				
Erosion Control Materials	\$18,972.46	allow											0.1	\$1,897.25					0.10	\$1,897.25				
fog large	\$23.15	hr						75	\$1,736.25	600	\$13,890.00	72	\$1,666.80	225	\$5,208.75				972.00	\$22,501.80				
job trailer	\$405.21	month						0.15	\$60.78	0.5	\$202.61			0.3	\$121.56				0.95	\$384.95				
one time water fee	\$11,577.40	once						1	\$11,577.40										1.00	\$11,577.40				
heavy equipment mob small	\$107.51	hr					70	\$7,525.70											70.00	\$7,525.70				
hand tools	\$37.94	ea										3	\$113.82						3.00	\$113.82				
stress beverages	\$63.24	ea						5	\$316.20	10	\$632.40	3	\$189.72	30	\$1,897.20				48.00	\$3,035.52				
fog small	\$6.32	hr						60	\$379.20	120	\$758.40	60	\$379.20	360	\$2,275.20				600.00	\$3,792.00				
misc	\$97.78	ea			2	\$195.56			3	\$293.34	6	\$586.68	3	\$293.34	20	\$1,955.60			34.00	\$3,324.52				
mini ram	\$758.90	month						0.45	\$341.51	1.5	\$1,138.35	0.1	\$75.89	1	\$758.90				3.05	\$2,314.65				
Subtotals				\$0.00		\$195.56		\$19,103.10		\$3,127.28		\$99,708.44		\$30,718.77		\$23,114.46		\$7,171.00		\$1,650.00		\$0.00		\$220,788.61

3. Equipment	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)				
XRF	\$1,650.00	week									2	\$3,300.00							2.00	\$3,300.00				
Laser	\$1,264.83	allow																	1.00	\$1,264.83				
T300 Skidsteer	\$3,920.98	month						0.15	\$588.15	1	\$3,920.98	0.2	\$784.20	0.4	\$1,568.39				1.75	\$6,861.72				
Nuke Guage	\$158.10	day								24	\$3,794.40								24.00	\$3,794.40				
Truck/Pickup/Supercab/F150Class/Gas/4WD	\$948.62	4 Week			0.1	\$94.86			0.5	\$474.31	1.5	\$1,422.93	0.2	\$189.72	0.4	\$379.45			2.70	\$2,561.27				
Truck/Water/2000 Gallon/DSL	\$2,782.63	4 Week						0.25	\$695.66	1	\$2,782.63	0.2	\$556.53	0.1	\$278.26				1.55	\$4,313.08				
Truck/Water/3700 Gallon/DSL/Duel Axle	\$4,869.60	4 Week						0.25	\$1,217.40	0.4	\$1,947.84	0.2	\$973.92	0.1	\$486.96				0.95	\$4,626.12				
Power screen	\$13,913.14	month																						
CAT 325	\$12,015.89	month						1	\$12,015.89	1.5	\$18,023.84	0.2	\$2,403.18	0.1	\$1,201.59				2.80	\$33,644.50				
CAT D-6 dozer	\$8,853.82	month						0.25	\$2,213.46	1	\$8,853.82	0.2	\$1,770.76	0.1	\$885.38				1.55	\$13,723.42				
25 cy off-road DT	\$15,177.97	month								1.5	\$22,766.96			0					1.50	\$22,766.96				
Water Tower	\$2,276.70	month						0.25	\$569.18	0.5	\$1,138.35	0.2	\$455.34	0.1	\$227.67				1.05	\$2,390.54				
CAT 615 (17 cy) Scraper	\$14,798.52	4 Week																						
Chain Saw/28"/Gas	\$271.94	Week						2	\$543.88										2.00	\$543.88				
pole saw	\$505.93	ea						1	\$505.93										1.00	\$505.93				
8" brush chipper	\$569.17	wk						1	\$569.17										1.00	\$569.17				
Subtotals				\$0.00		\$94.86		\$1,264.83		\$19,393.03		\$67,951.75		\$7,133.65		\$5,027.70		\$0.00		\$0.00		\$0.00		\$100,865.82

4. Subcontractors	Rate (\$)	Unit	Units	Total Cost (\$)	Total Units	Total Cost (\$)														
Test Amaerica	\$28.94	ea metal																		
hydro-seeding (Selby)	\$4,294.10	ac													3	\$12,882.30			3.00	\$12,882.30

Client: BLM
 Project: BLM Chicago-Research Mines
 Location: Lake County
 Estimate Date:
 Scope of Work: EE/CA Research Alternative 4
 Mine Encapsulation

Phase Task:
 Billing Type:
 Task Title:
 Duration:

1	2	3	4	5	6	7	8	9	10	Modification/Revision #:
Design	Pre-mob Submittals	Mob Research	Veg Removal Research	Consolidate to Helen	Culverts	Furnace Decon and Wall	Vegetation Establishment	Barbed Wire Fence	Phase Demob	
90 Days	20 Days	2 Days	5 Days	10 Days	5 Days	6 Days	1 Days	1 Days	2 Days	

surveyor	\$2,656.14				2	\$5,312.28			1	\$2,656.14						0.5	\$1,328.07	3.50	\$9,296.49	
temp fence	\$2.32	ft			240	\$556.80												240.00	\$556.80	
Subtotals			\$0.00	\$0.00		\$5,869.08	\$0.00			\$2,656.14	\$0.00		\$0.00		\$12,882.30		\$0.00		\$1,328.07	\$22,735.59

5. Travel	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)												
Per diem	\$44.00	day					16	\$704.00	54	\$2,376.00	100	\$4,400.00	50	\$2,200.00	60	\$2,640.00	2	\$88.00	1	\$44.00	16	\$704.00	299.00	\$13,156.00
Hotel - Middletown	\$70.00	day					16	\$1,120.00	54	\$3,780.00	100	\$7,000.00	50	\$3,500.00	60	\$4,200.00	2	\$140.00	1	\$70.00	16	\$1,120.00	299.00	\$20,930.00
Subtotals				\$0.00		\$0.00		\$1,824.00		\$6,156.00		\$11,400.00		\$5,700.00		\$6,840.00		\$228.00		\$114.00		\$1,824.00		\$34,086.00
SUBTOTALS				\$92,080.12		\$15,690.28		\$47,596.17		\$66,201.97		\$275,251.11		\$82,304.15		\$96,718.49		\$21,301.40		\$2,784.10		\$22,687.23		\$758,615.02

6. Bonding, Insurance, and Taxes	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)												
	2.00%	%				\$15,172.30																	\$15,172.30	
Subtotals				\$0.00		\$15,172.30		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$15,172.30
TOTALS				\$92,080.12		\$30,862.58		\$47,596.17		\$66,201.97		\$275,251.11		\$82,304.15		\$96,718.49		\$21,301.40		\$2,784.10		\$22,687.23		\$773,787.32

Notes:

complex design on complex topography. Design Helen Cap, road repairs and culverts, small removals on distant slopes. HELP modeling.	Schedule, Access Control Plan, Equip Decon Plan, Potable Water and Sanitation Plan, Fuel and Haz Mat Plan, and HASP	Mob/demob equipment & labor. Laborer hours for mob/demob & travel time.	Research has about 2.2 acres to clear.	Ten days to move about 10000 cuyd for onsite consolidation. Assumes clean borrow found nearby.	Significant road work efforts for soil moving, access to furnaces, etc.	3 day whole team decon. 2 day whole team form and rebar. 1 day whole team pour. Wall is 8" thick x 5 feet (4 high and 1" "L" on bottom) and 120' long. "Whole Team" consists of the original RN road decommissioning team.	3 acres hydroseed, 0.5 acre jute mats,	Approx 330 feet of 3-wire fence.
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Client: BLM
 Project: BLM Chicago-Research Mines
 Location: Lake County
 Estimate Date:
 Scope of Work: EE/CA Chicago Alternative 5

Phase
 Task:
 Billing Type:
 Task Title:
 Duration:

1 2 3 4 5 7 8

Design Pre-mob Submittals Mob CH Veg Removal CH CH Excavate T&D Revegetate Chicago CH Road Improvement Phase Demob

90 Days 20 Days 2 Days 1 Days 25 Days 1 Days 5 Days 2 Days

Modification/Revision #:

1. Labor	Rate (\$)	Unit	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Total Units	Total Cost (\$)		
Technical Editor	\$128.34	hour			8	\$1,026.72											8	\$1,026.72		
Principal	\$144.77	hour	16	\$2,316.32	2	\$289.54					8	\$1,158.16		4	\$579.08		30	\$4,343.10		
Project Manager	\$111.89	hour	120	\$13,426.80	16	\$1,790.24	4	\$447.56			48	\$5,370.72		8	\$895.12	4	\$447.56	200	\$22,378.00	
Senior Project Engineer	\$108.58	hour	400	\$43,432.00			16	\$1,737.28			32	\$3,474.56		16	\$1,737.28	16	\$1,737.28	480	\$52,118.40	
Senior Project Scientist	\$96.75	hour			40	\$3,870.00											40	\$3,870.00		
Project Scientist	\$81.61	hour			40	\$3,264.40											40	\$3,264.40		
Assistant Project Scientist	\$68.44	hour			40	\$2,737.60											40	\$2,737.60		
Staff Engineer	\$65.81	hour	440	\$28,956.40					10	\$658.10	250	\$16,452.50		50	\$3,290.50		750	\$49,357.50		
Project Accountant	\$65.81	hour					40	\$2,632.40	1	\$65.81	48	\$3,158.88		5	\$329.05	40	\$2,632.40	134	\$8,818.54	
CADD Operator	\$72.38	hour			24	\$1,737.12											24	\$1,737.12		
Superintendent	\$102.01	hour					20	\$2,040.20	10	\$1,020.10	250	\$25,502.50	10	\$1,020.10	50	\$5,100.50	20	\$2,040.20	360	\$36,723.60
Operator - DBA_CA20080029	\$95.66	hour					48	\$4,591.68	16	\$1,530.56	600	\$57,396.00		120	\$11,479.20	48	\$4,591.68	832	\$79,589.12	
Operator DBA_CA20080029 (OT)	\$143.49	hour					12	\$1,721.88	4	\$573.96	150	\$21,523.50		30	\$4,304.70	12	\$1,721.88	208	\$29,845.92	
Laborer - DBA_CA20080029	\$67.27	hour					32	\$2,152.64	16	\$1,076.32	400	\$26,908.00		80	\$5,381.60	32	\$2,152.64	560	\$37,671.20	
Laborer DBA_CA20080029 (OT)	\$104.04	hour					8	\$832.32	4	\$416.16	100	\$10,404.00		20	\$2,080.80	8	\$832.32	140	\$14,565.60	
Truck Driver - DBA_CA20080029	\$76.80	hour					32	\$2,457.60	8	\$614.40	600	\$46,080.00		80	\$6,144.00	32	\$2,457.60	752	\$57,753.60	
Truck Driver - DBA_CA20080029 (OT)	\$115.20	hour					8	\$921.60	2	\$230.40	150	\$17,280.00		20	\$2,304.00	8	\$921.60	188	\$21,657.60	
Senior CADD Operator	\$85.53	hour			8	\$684.24											8	\$684.24		
Subtotals			976	\$88,131.52	178	\$15,399.86	220	\$19,535.16	71	\$6,185.81	2636	\$234,708.82		\$1,020.10	483	\$43,625.83	220	\$19,535.16	4,794	\$428,142.26

2. Materials and Other Direct Costs	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)		
3-wire fence	\$5.00	each																		
riprap	\$50.82	ton																		
grout	\$175.54	cy																		
gravel	\$50.00	ton																		
Fill and Topsoil, local borrow cost	\$15.00	cu yd									1500	\$22,500.00					600	\$30,000.00	1,500	\$22,500.00
Jute Mats and Earthguard	\$16,591.00	Acre																	2	\$24,886.50
Erosion Control Materials	\$18,972.46	allow																		
fog large	\$23.15	hr							90	\$2,083.50	1440	\$33,336.00		250	\$5,787.50			1,780	\$41,207.00	
job trailer	\$405.21	month							0.15	\$60.78	1.2	\$486.25		0.5	\$202.61			2	\$749.64	
one time water fee	\$11,577.40	once					1	\$11,577.40											1	\$11,577.40
heavy equipment mob small	\$107.51	hr					70	\$7,525.70											70	\$7,525.70
hand tools	\$37.94	ea																		
stress beverages	\$63.24	ea							5	\$316.20	24	\$1,517.76		15	\$948.60			44	\$2,782.56	
fog small	\$6.32	hr							60	\$379.20	288	\$1,820.16		300	\$1,896.00			648	\$4,095.36	
misc	\$97.78	ea					2	\$195.56			3	\$293.34		15	\$1,466.70			35	\$3,422.30	
mini ram	\$758.90	month							0.45	\$341.51	4	\$3,035.60		0.5	\$379.45			5	\$3,756.56	
Subtotals				\$0.00		\$195.56		\$19,103.10		\$3,474.53		\$64,162.47		\$0.00		\$40,680.86		\$0.00		\$152,503.02

3. Equipment	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)		
XRF	\$1,650.00	week	1	\$1,650.00							4	\$6,600.00					5	\$8,250.00		
Laser	\$1,264.83	allow					1	\$1,264.83									1	\$1,264.83		
T300 Skidsteer	\$3,920.98	month							0.15	\$588.15	2.4	\$9,410.35		0.5	\$1,960.49		3	\$11,958.99		
Nuke Guage	\$158.10	day									58	\$9,169.80					58	\$9,169.80		
Truck/Pickup/Supercab/F150Class/Gas/4WD	\$948.62	4 Week			0.1	\$94.86			0.5	\$474.31	4	\$3,794.48		0.5	\$474.31		5	\$4,837.96		
Truck/Water/2000 Gallon/DSL	\$2,782.63	4 Week							0.25	\$695.66	3	\$8,347.89		0.5	\$1,391.32		4	\$10,434.87		
Truck/Water/3700 Gallon/DSL/Duel Axle	\$4,869.60	4 Week							0.25	\$1,217.40	2	\$9,739.20		0.5	\$2,434.80		3	\$13,391.40		
Power screen	\$13,913.14	month																		
CAT 325	\$12,015.89	month							1	\$12,015.89	4	\$48,063.56		0.5	\$6,007.95		6	\$66,087.40		
CAT D-6 dozer	\$8,853.82	month							0.25	\$2,213.46	3	\$26,561.46		0.5	\$4,426.91		4	\$33,201.83		
25 cy off-road DT	\$15,177.97	month									4	\$60,711.88		0.5	\$7,588.99		5	\$68,300.87		
Water Tower	\$2,276.70	month							0.25	\$569.18	2	\$4,553.40		0.5	\$1,138.35		3	\$6,260.93		
CAT 615 (17 cy) Scraper	\$14,798.52	4 Week																		
Chain Saw/28"/Gas	\$271.94	Week							2	\$543.88							2	\$543.88		
pole saw	\$505.93	ea							1	\$505.93							1	\$505.93		
8" brush chipper	\$569.17	wk							1	\$569.17							1	\$569.17		
Subtotals				\$1,650.00		\$94.86		\$1,264.83		\$19,393.03		\$186,952.02		\$0.00		\$25,423.12		\$0.00		\$234,777.86

Client: BLM
 Project: BLM Chicago-Research Mines
 Location: Lake County
 Estimate Date:
 Scope of Work: EE/CA Chicago Alternative 5

Phase
 Task:
 Billing Type:
 Task Title: Design
 Duration: 90 Days

1
 Pre-mob Submittals
 20 Days

2
 Mob CH
 2 Days

3
 Veg Removal CH
 1 Days

4
 CH Excavate T&D
 25 Days

5
 Revegetate Chicago
 1 Days

7
 CH Road Improvement
 5 Days

8
 Phase Demob
 2 Days

Modification/Revision #:

4. Subcontractors			Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)										
Test Amaerica-CAM-17, WET tests	\$120.00	eal	40	\$4,800.00													40	\$4,800.00		
hydro-seeding (Selby)	\$4,294.10	ac											1.5	\$6,441.15			1.5	\$6,441.15		
T&D (80% Class I)	\$120.00	ton															16,000	\$1,920,000.00		
T&D (20% Class II)	\$40.00	ton															4,000	\$160,000.00		
surveyor	\$2,656.14						2	\$5,312.28									4	\$10,624.56		
temp fence	\$2.32	ft					240	\$556.80									240	\$556.80		
Subtotals				\$4,800.00		\$0.00		\$5,869.08		\$0.00				\$6,441.15		\$0.00		\$1,328.07		\$2,102,422.51
5. Travel			Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)										
Per diem	\$44.00	day					16	\$704.00	27	\$1,188.00	250	\$11,000.00	2	\$88.00	45	\$1,980.00	16	\$704.00	356	\$15,664.00
Hotel - Middletown	\$70.00	day					16	\$1,120.00	27	\$1,890.00	250	\$17,500.00	2	\$140.00	45	\$3,150.00	16	\$1,120.00	356	\$24,920.00
Subtotals				\$0.00		\$0.00		\$1,824.00		\$3,078.00		\$28,500.00		\$228.00		\$5,130.00		\$1,824.00		\$40,584.00
SUBTOTALS				\$94,581.52		\$15,690.28		\$47,596.17		\$32,131.37		\$2,598,307.52		\$7,689.25		\$114,859.81		\$22,687.23		\$2,958,429.65
6. Bonding, Insurance, and Taxes			Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)										
	Rate (\$)	Unit																		
	2.00%							\$59,168.59										\$59,168.59		
Subtotals				\$0.00		\$59,168.59		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$59,168.59		
TOTALS				\$94,581.52		\$74,858.87		\$47,596.17		\$32,131.37		\$2,598,307.52		\$7,689.25		\$114,859.81		\$22,687.23		\$3,017,598.24

Notes:

Complex design on moderately rugged site.
 Design includes statistical soil characterization effort to minimize Class I disposal.

Schedule, Access Control Plan, Equip Decon Plan, Potable Water and Sanitaion Plan, Fuel and Haz Mat Plan, and HASP

Mob/demob equipment & labor. Laborer hours for mob/demob & travel time.

Chicago has about an acre to clear.

Load out 20,000 yds

Capping covered during fill and regrade

High quality roads, turnaround, scale, loading facility, etc.

Client: BLM
 Project: BLM Rathburn Mine Phase I Alt 2
 Location: Lake County
 Estimate Date:
 Scope of Work: EE/CA Research Alternative 5

Phase Task: 1 2 3 4 5 6 8 9 10 11
 Billing Type:
 Task Title: Design Pre-mob Submittals Mob Research Veg Removal Research Excavate, T&D Culverts Furnace Decon and Wall Vegetation Establishment Barbed Wire Fence Phase Demob
 Duration: 90 Days 20 Days 1 Days 5 Days 20 Days 10 Days 6 Days 1 Days Days 2 Days
 Modification/Revision #:

1. Labor	Rate (\$)	Unit	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Total Units	Total Cost (\$)				
Technical Editor	\$128.34	hour			8	\$1,026.72													8	\$1,026.72				
Principal	\$144.77	hour	16	\$2,316.32	2	\$289.54			8	\$1,158.16	8	\$1,158.16	12	\$1,737.24					46	\$6,659.42				
Project Manager	\$111.89	hour	120	\$13,426.80	16	\$1,790.24	4	\$447.56	48	\$5,370.72	12	\$1,342.68	15	\$1,678.35			4	\$447.56	219	\$24,503.91				
Senior Project Engineer	\$108.58	hour	400	\$43,432.00			16	\$1,737.28	32	\$3,474.56	8	\$868.64	8	\$868.64			16	\$1,737.28	480	\$52,118.40				
Senior Project Scientist	\$96.75	hour			40	\$3,870.00													40	\$3,870.00				
Project Scientist	\$81.61	hour			40	\$3,264.40													40	\$3,264.40				
Assistant Project Scientist	\$68.44	hour			40	\$2,737.60													40	\$2,737.60				
Staff Engineer	\$65.81	hour	440	\$28,956.40					40	\$2,632.40	200	\$13,162.00	100	\$6,581.00	60	\$3,948.60			840	\$55,280.40				
Project Accountant	\$65.81	hour	60	\$3,948.60			40	\$2,632.40	8	\$526.48	40	\$2,632.40	10	\$658.10	6	\$394.86			204	\$13,425.24				
CADD Operator	\$72.38	hour			24	\$1,737.12													24	\$1,737.12				
Superintendent	\$102.01	hour					20	\$2,040.20	40	\$4,080.40	200	\$20,402.00	100	\$10,201.00	60	\$6,120.60	10	\$1,020.10	1	\$102.01				
Operator - DBA_CA20080029	\$95.66	hour			48	\$4,591.68	96	\$9,183.36	480	\$45,916.80	240	\$22,958.40	144	\$13,775.04					1,056	\$101,016.96				
Operator DBA_CA20080029 (OT)	\$143.49	hour			12	\$1,721.88	30	\$4,304.70	120	\$17,218.80	60	\$8,609.40	36	\$5,165.64					270	\$38,742.30				
Laborer - DBA_CA20080029	\$67.27	hour			32	\$2,152.64	96	\$6,457.92	320	\$21,526.40	240	\$16,144.80	192	\$12,915.84					912	\$61,350.24				
Laborer DBA_CA20080029 (OT)	\$104.04	hour			8	\$832.32	30	\$3,121.20	80	\$8,323.20	60	\$6,242.40	48	\$4,993.92					234	\$24,345.36				
Truck Driver - DBA_CA20080029	\$76.80	hour			32	\$2,457.60	64	\$4,915.20	480	\$36,864.00	160	\$12,288.00	96	\$7,372.80					864	\$66,355.20				
Truck Driver - DBA_CA20080029 (OT)	\$115.20	hour			8	\$921.60	20	\$2,304.00	120	\$13,824.00	40	\$4,608.00	24	\$2,764.80					220	\$25,344.00				
Senior CADD Operator	\$85.53	hour			8	\$684.24													8	\$684.24				
Subtotals			1036	\$92,080.12	178	\$15,399.86	220	\$19,535.16	424	\$37,525.66	2128	\$189,873.04	2128	\$91,660.58	701	\$61,736.33	10	\$1,020.10	1	\$102.01	220	\$19,535.16	5,946.00	\$528,468.02

2. Materials and Other Direct Costs	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)				
3-strand barbed wire	\$5.00	ft																	330	\$1,650.00				
Topsoil and fill (equivalent to borrow effort)	\$15.00	cu yd							3000	\$45,000.00									3,000	\$45,000.00				
Culvert, estimated, delivered, 50 feet	\$3,000.00	each									2	\$6,000.00							4	\$12,000.00				
grout	\$175.54	cy									1000	\$50,000.00							1,600	\$80,000.00				
gravel and road base	\$50.00	ton											15	\$4,500.00					15	\$4,500.00				
concrete	\$300.00	cuyd											1	\$4,500.00					1	\$4,500.00				
Forms and Bars	\$4,500.00	allow																	0.10	\$1,897.25				
Jute Mats and EC Mat's	\$14,342.00	Acre																	1.45	\$587.55				
Erosion Control Materials	\$18,972.46	allow																	1.00	\$11,577.40				
fog large	\$23.15	hr					75	\$1,736.25	1200	\$27,780.00	72	\$1,666.80	225	\$5,208.75					70	\$7,525.70				
job trailer	\$405.21	month					0.15	\$60.78	1	\$405.21			0.3	\$121.56					1.00	\$11,577.40				
one time water fee	\$11,577.40	once																	1.00	\$11,577.40				
heavy equipment mob small	\$107.51	hr					70	\$7,525.70											70	\$7,525.70				
hand tools	\$37.94	ea									3	\$113.82							3	\$113.82				
stress beverges	\$63.24	ea					5	\$316.20	20	\$1,264.80	3	\$189.72	30	\$1,897.20					58	\$3,667.92				
fog small	\$6.32	hr					60	\$379.20	240	\$1,516.80	60	\$379.20	360	\$2,275.20					720	\$4,550.40				
misc	\$97.78	ea			2	\$195.56			3	\$293.34	12	\$1,173.36	3	\$293.34	20	\$1,955.60			40	\$3,911.20				
mini ram	\$758.90	month					0.45	\$341.51	3	\$2,276.70	0.1	\$75.89	1	\$758.90					4.55	\$3,453.00				
Subtotals				\$0.00		\$195.56		\$19,103.10		\$3,127.28		\$79,416.87		\$58,718.77		\$23,114.46		\$0.00		\$1,650.00		\$0.00		\$221,326.04

3. Equipment	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Total Units	Total Cost (\$)				
XRF	\$1,650.00	week	1	\$1,650.00					3	\$4,950.00									4.00	\$6,600.00				
Laser	\$1,264.83	allow					1	\$1,264.83											1.00	\$1,264.83				
T300 Skidsteer	\$3,920.98	month					0.15	\$588.15	2	\$7,841.96	0.4	\$1,568.39	0.4	\$1,568.39					2.95	\$11,566.89				
Nuke Guage	\$158.10	day							48	\$7,588.80									48.00	\$7,588.80				
Truck/Pickup/Supercab/F150Class/Gas/4WD	\$948.62	4 Week			0.1	\$94.86			0.5	\$474.31	3	\$2,845.86	0.4	\$379.45	0.4	\$379.45			4.40	\$4,173.93				
Truck/Water/2000 Gallon/DSL	\$2,782.63	4 Week					0.25	\$695.66	2	\$5,565.26	0.4	\$1,113.05	0.1	\$278.26					2.75	\$7,652.23				
Truck/Water/3700 Gallon/DSL/Duel Axle	\$4,869.60	4 Week					0.25	\$1,217.40	1	\$4,869.60	0.4	\$1,947.84	0.1	\$486.96					1.75	\$8,521.80				
Power screen	\$13,913.14	month							1	\$12,015.89	3	\$36,047.67	0.4	\$4,806.36	0.1	\$1,201.59			4.50	\$54,071.51				
CAT 325	\$12,015.89	month					0.25	\$2,213.46	2	\$17,707.64	0.4	\$3,541.53	0.1	\$885.38					2.75	\$24,348.01				
CAT D-6 dozer	\$8,853.82	month							3	\$45,533.91			0						3.00	\$45,533.91				
25 cy off-road DT	\$15,177.97	month							0.25	\$569.18	1	\$2,276.70	0.4	\$910.68	0.1	\$227.67			1.75	\$3,984.23				
Water Tower	\$2,276.70	month																	2.00	\$543.88				
CAT 615 (17 cy) Scraper	\$14,798.52	4 Week							1	\$505.93									1.00	\$505.93				
Chain Saw/28"/Gas	\$271.94	Week					2	\$543.88											1.00	\$569.17				
pole saw	\$505.93	ea					1	\$505.93											1.00	\$505.93				
8" brush chipper	\$569.17	wk					1	\$569.17											1.00	\$569.17				
Subtotals				\$1,650.00		\$94.86		\$1,264.83		\$19,393.03		\$135,227.40		\$14,267.30		\$5,027.70		\$0.00		\$0.00		\$0.00		\$176,925.12

4. Subcontractors	Rate (\$)	Unit	Units	Total Cost (\$)	Total Units	Total Cost (\$)														
Test America CAM-17, WET	\$120.00	ea	60	\$7,200.00					27	\$3,240.00									87.0	\$10,440.00

Client: Bureau of Land Management, Ukiah Field Office
 Project: BLM Chicago Research
 Location: Lake County
 Estimate Date:
 Scope of Work:

Phase
 Task:
 Billing Type:
 Task Title:
 Duration:

Chicago Research Annual Operations, Maintenance, Monitoring, and Post-Removal Site Control Costs

1 2 3 4 5 6 7 8

Annual Site Monitoring Annual Maintenance 5-Year Maintenance (Alt 2) 5-Year Maintenance (Alt 3) 5-Year Maintenance (Alt 4) 5-Year Maintenance (Alt 5) Annual Tree Removal 3-Year Road Re-Grading

20 Days 2 Days 3 Days 5 Days 5 Days 1 Days 1 Days Days

1. Labor	Rate (\$)	Unit	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)	Units	Total Task Cost (\$)								
Technical Editor	\$128.34	hour	0.5	\$64.17			0.1	\$12.83	0.1	\$12.83	0.1	\$12.83				
Principal	\$144.77	hour														
Project Manager	\$111.89	hour	0.5	\$55.95			0.1	\$11.19	0.1	\$11.19	0.1	\$11.19				
Senior Project Engineer	\$108.58	hour														
Senior Project Scientist	\$96.75	hour	2	\$193.50			0.4	\$38.70	0.4	\$38.70	0.4	\$38.70				
Project Scientist	\$81.61	hour	16	\$1,305.76			3.2	\$261.15	3.2	\$261.15	3.2	\$261.15				
Assistant Project Scientist	\$68.44	hour	24	\$1,642.56			4.8	\$328.51	4.8	\$328.51	4.8	\$328.51				
Staff Engineer	\$65.81	hour														
Project Accountant	\$65.81	hour														
CADD Operator	\$72.38	hour														
Superintendent	\$102.01	hour			4	\$408.04	4.8	\$489.65	8	\$816.08	8	\$816.08	2.4	\$244.82	1	\$102.01
Operator - DBA_CA20080029	\$95.66	hour													1.33333333	\$136.01
Operator DBA_CA20080029 (OT)	\$143.49	hour													5.33333333	\$510.19
Laborer - DBA_CA20080029	\$67.27	hour			32	\$2,152.64	9.6	\$645.79	16	\$1,076.32	16	\$1,076.32			16	\$1,076.32
Laborer DBA_CA20080029 (OT)	\$104.04	hour													8	\$832.32
Truck Driver - DBA_CA20080029	\$76.80	hour														
Truck Driver - DBA_CA20080029 (OT)	\$115.20	hour														
Senior CADD Operator	\$85.53	hour	2	\$171.06												
Subtotals			45	\$3,433.00	36	\$2,560.68	23	\$1,787.82	33	\$2,544.78	33	\$2,544.78	2	\$244.82	25	\$2,010.65

2. Materials and Other Direct Costs	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)										
Posts & Wire (\$8ea + \$75/roll)	\$1.25	ft			100	\$125.00										
Culvert, estimated, delivered, 50 feet	\$3,000.00	each														
riprap	\$50.82	ton														
grout	\$175.54	cy														
gravel	\$50.00	ton														
concrete	\$300.00	yd														
Forms and Bars	\$4,500.00	allow														
Jute Mats and EC Mat's	\$14,291.00	Acre			0.01	\$142.91										
Erosion Control Materials	\$18,972.46	allow			0.01	\$189.72										
fog large	\$23.15	hr														
job trailer	\$405.21	month														
one time water fee	\$11,577.40	once														
heavy equipment mob small	\$107.51	hr			1	\$107.51	1.2	\$129.01	1.2	\$129.01	1.2	\$129.01			2	\$215.02
hand tools	\$37.94	ea			1	\$37.94	0.6	\$22.76	1	\$37.94	1	\$37.94			1	\$37.94
stress beverges	\$63.24	ea			1	\$63.24	0.6	\$37.94	1	\$63.24	1	\$63.24			1	\$63.24
fog small	\$6.32	hr					4.8	\$30.34	8	\$50.56	8	\$50.56			5.33333333	\$33.71
misc	\$97.78	ea	1	\$97.78	1	\$97.78	0.6	\$58.67	1	\$97.78	1	\$97.78			1	\$97.78
mini ram	\$758.90	month													0.45	\$341.51
Subtotals				\$97.78		\$764.10		\$278.72		\$378.53		\$378.53		\$0.00		\$540.47

3. Equipment	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)										
Aug for Skid	\$632.42	week														
Laser	\$1,264.83	allow			1	\$1,264.83										
T300 Skidsteer	\$435.66	day													0.66666667	\$290.44
Nuke Guage	\$158.10	day														
Truck/Pickup/Supercab/F150Class/Gas/4WD	\$100.00	day	2	\$200.00	2	\$200.00	1.2	\$120.00	2	\$200.00	2	\$200.00	0.2	\$20.00	1	\$100.00
Truck/Water/2000 Gallon/DSL	\$2,782.63	4 Week														
Truck/Water/3700 Gallon/DSL/Duel Axle	\$4,869.60	4 Week														
Power screen	\$13,913.14	month														
CAT 325	\$1,335.10	day					0.6	\$801.06	2	\$2,670.20	2	\$2,670.20				
CAT D-6 dozer	\$8,853.82	month														
25 cy off-road DT	\$15,177.97	month														
Water Tower	\$2,276.70	month														
CAT 615 (17 cy) Scraper	\$14,798.52	4 Week														
Chain Saw/28"/Gas	\$271.94	Week					0.2	\$54.39	0.2	\$54.39	0.2	\$54.39			0.3333	\$90.64

Client: Bureau of Land Management, Ukiah Field Office
 Project: BLM Chicago Research
 Location: Lake County
 Estimate Date:
 Scope of Work:

Phase: **Chicago Research Annual Operations, Maintenance, Monitoring, and Post-Removal Site Control Costs**
 Task:
 Billing Type:
 Task Title:
 Duration:

	1	2	3	4	5	6	7	8	
	Annual Site Monitoring	Annual Maintenance	5-Year Maintenance (Alt 2)	5-Year Maintenance (Alt 3)	5-Year Maintenance (Alt 4)	5-Year Maintenance (Alt 5)	Annual Tree Removal	3-Year Road Re-Grading	
	20 Days	2 Days	3 Days	5 Days	5 Days	1 Days	1 Days	Days	
pole saw	\$505.93	ea							
8" brush chipper	\$569.17	wk							
Subtotals		\$200.00	\$1,464.83	\$975.45	\$2,924.59	\$2,924.59	\$20.00	\$190.64	\$390.44

4. Subcontractors	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)
Test America - CAM 17	\$103.50	sample	11	\$1,138.50												
HydroSeeding/Earthguard	\$4,294.10	ac					0.92	\$3,950.57	0.2	\$858.82	0.2	\$858.82				
riprap																
grout																
jute matting (installed)	\$10,410.40	ac					0.92	\$9,577.57	0.2	\$2,082.08	0.2	\$2,082.08				
temp fence	\$2.32	ft														
Subtotals				\$1,138.50		\$0.00		\$0.00		\$13,528.14		\$2,940.90		\$2,940.90		\$0.00

5. Travel	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)						
Per diem	\$44.00	day					1.8	\$79.20	1.8	\$79.20	1.8	\$79.20				
Hotel - Middletown	\$54.63	day					1.2	\$65.56	1.2	\$65.56	1.2	\$65.56			0.66666667	\$29.33
															0.33333333	\$18.21
Subtotals				\$0.00		\$0.00		\$144.76		\$144.76		\$144.76		\$0.00		\$47.54
SUBTOTALS				\$4,869.28		\$4,789.61		\$3,186.75		\$19,520.80		\$8,933.56		\$3,205.72		\$2,741.76

6. Bonding, Insurance, and Taxes	Rate (\$)	Unit	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)	Units	Total Cost (\$)						
Subtotals				\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
TOTALS				\$4,869.28		\$4,789.61		\$3,186.75		\$19,520.80		\$8,933.56		\$3,205.72		\$2,741.76

Unit Type:
 # of Units
 Unit Rate:

Notes:

Sample surface water and sediments at 3 locations, groundwater at 2 locations, spring water at 1 location, and 2 QA/QC samples. Run each in lab for total CAM 17 metals. Inspect storm water run-on/run-off controls, condition of cap, erosion controls, road conditions, hay bales, sediments traps, etc. Brief letter report to summarize sampling, analysis, and inspection results.

Based on monitoring reports, clear debris from run-on/run-off channels, replace hay bales, inspect caps or erosion control measures, minor fence repairs as necessary.

Fix run-on/run-off controls. Replace sediment dropped out in sediment trap. Prepare brief report of actions. Costs shown are 1/5 of the cost per event to show the annual cost.

Fix run-on/run-off controls as in Alt 2. Replace sediment dropped out in sediment trap. Re-apply bonded fiber matrix and jute matting over 1.4 ac at Chicago and 3.2 ac at Research. Prepare brief report of actions. Costs shown are 1/5 of the cost per event to show the annual cost.

Fix run-on/run-off controls as in Alt 2. Replace sediment dropped out in sediment trap. Re-apply bonded fiber matrix and jute matting over 0.13 ac at Research. Patch repository caps as needed. Prepare brief report of actions. Costs shown are 1/5 of the cost per event to show the annual cost.

Re-apply bonded fiber matrix and jute matting over 0.13 ac at Research. Costs shown are 1/5 of the cost per event to show the annual cost.

Based on monitoring reports, clear debris from run-on/run-off channels, replace hay bales, inspect caps or erosion control measures, minor fence repairs as necessary.

Regrade roads every three years with a skidsteer. This is assumed to require 2 long days of operator time. Costs shown are 1/3 of the cost per event to show the annual cost.