

EXHIBIT LReclamation Costs



1.0 SUMMARY

This reclamation cost estimate is performed to determine the financial warranty needed if the quarry goes out of operation today. To estimate the cost, a worst-case scenario is defined, representing the time at which the maximum cost will be incurred to reclaim the pits and the operation within the next five years. The current state of the mine is considered the worst case scenario for reclamation in the 5-year window as no additional disturbance or highwall extension is created in the Lower Pit, additional proposed mining in the Upper Pit will increase the disturbed area only minimally (~6 acres expansion on the lower bench, no additional highwall), and no development or mining associated with the East Pit is proposed in this window. The volumes of waste material generated during this window will reduce backfill/regrade requirements from the current pit configuration with all waste placed in-pit. The reclamation cost estimate quantities presented in Exhibit L represent the worst case in the 5-year window and assume unforeseen and unexpected cessation of mine operations and reclamation of the site in its current condition.

In the current state, high walls in the lower and upper pit will be regraded to a slope of 3H:1V or flatter. The main haul road as well as the roads connecting to the lower and upper pit will be reclaimed. The stockpile staging area and the sedimentation ponds will be reclaimed. In addition, any cost incurred during site maintenance, infrastructure demolition, and mobilization are also estimated. The hours and the direct cost incurred to perform these activities are listed in Table 1-1. The area of the different pit regions disturbed is listed in Table 1-2, and the areas are shown in Figure 1-1.

Table 1-1. Direct reclamation cost broken down by major infrastructure/activity

Description	Task Hours	Task Cost
Stockpile Staging Area	45	\$33,887
Lower Pit	2,979	\$2,918,802
Upper pit	388	\$460,816
Demolition	998	\$213,424
Main Haul Road	65	\$85,511
Lower Pit Road	50	\$71,078
Sed Pond M201	10	\$13,717
Sed Pond M601	20	\$31,535
Upper Pit Road	151	\$191,587



Site Maintenance	460	\$102,000
Plug Drill Holes, Misc	139	\$29,700
Mobilization	38	\$8,082
Total Direct Cost	5,343	\$ 4,160,139

Overhead costs are in addition to the direct costs and include:

- Liability insurance at 2.02%
- Performance bond at 1.05%
- Job superintendent (2,671 hrs \$200,717)
- Profit at 10%

These overheads and profit amount to an additional \$744,447

- Financial warranty processing \$500
- Engineering design and contract/bid preparation at 4.25%
- Reclamation management and/or administration at 5.00%

These additional costs amount to an additional \$454,174

A contingency allowance of 3% is also included amounting to \$124,804

The total reclamation cost estimate for the worst-case scenario in the current five-year period is \$5,358,760

Table 1-2. Areas disturbed during reclamation

Areas	Revegation / Disturbed Area (acres)
Stockpile Staging Area	4.9
Lower Pit	52.8
Upper Pit	28.5
Main Haul Rd	18.0
Lower Pit Rd	15.4
Sed Pond M201 Rd	1.3
Sed Pond M601 Rd	6.3
Upper Pit Rd	8.7





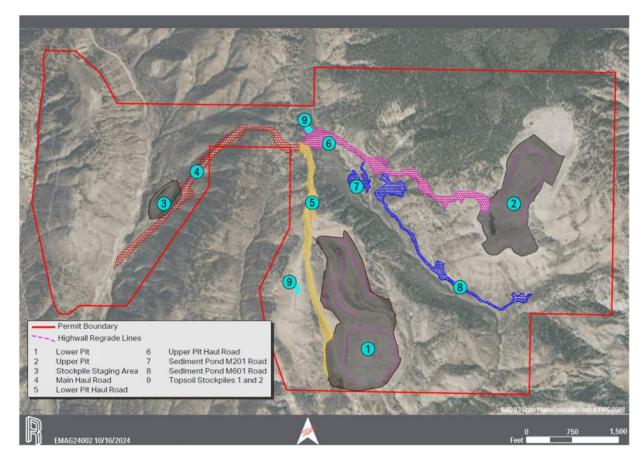


Figure 1-1. The areas used for reclamation cost estimation

2.0 EQUIPMENT LIST

The majority of the reclamation tasks involve regarding the current contours of the mine across the disturbed areas, followed by surface preparation and revegetation. To accomplish these tasks, the following equipment will be utilized in Table 2-1.

Table 2-1. Equipment used for reclamation

Equipment	No. of units	Task performed
CAT 966H high lift loader	1	For excavating overburden/interburden and dumping into haul truck
Generic truck 12-18 cy, 6x4	2	For hauling overburden/interburden and topsoil
Water tank 3500 Gal	1	To suppress dust
CAT D10T dozer/ripper	2	For ripping and grading
CAT 815F compactor	2	For compacting the topsoil
Drill/Broadcast Seeder with Tractor	1	For revegetation



3.0 SUMMARY OF UNIT COSTS

Unit rates utilized within the estimate across the multiple disciplines are:

Activity	Description	Unit	Rate	
Truck	Utilization	%		100
	Ownership	\$/hr	\$	24.94
	Operating	\$/hr	\$	71.60
	Operator	\$/hr	\$	31.03
Loader	Utilization	%		100
	Ownership	\$/hr	\$	68.81
	Operating	\$/hr	\$	53.80
	Operator	\$/hr	\$	44.96
Water Truck	Utilization	%		100
	Ownership	\$/hr	\$	14.98
	Operating	\$/hr	\$	33.32
Dozer	Ownership	\$/hr	\$	174.79
	Operating	\$/hr	\$	136.68
	Ripper Ownership	\$/hr	\$	22.93
	Ripper Operating	\$/hr	\$	12.04
	Operator	\$/hr	\$	56.06
	Unadjusted hourly production (mass grade)	LCY/hr		1800
	Unadjusted hourly production(final grade)	LCY/hr		100
Ripper	Ownership	\$/hr	\$	174.79
	Operating	\$/hr	\$	136.68
	Ripper Ownership	\$/hr	\$	22.93
	Ripper Operating	\$/hr	\$	12.04
	Operator	\$/hr	\$	56.06
	Unadjusted Production	ac/hr		0.59
Revegetation	Indian Rice Grass - White RIver/ Paloma/ Nezpar	\$/lb	\$	18.00
	Bottlebrush Squarriletail - Fish Creek/ VNS	\$/lb	\$	21.60
	Sandberg Bluegrass - CO/ High Plains/ VNS	\$/lb	\$	14.00
	Thickspike Wheatgrass - Critana/ Bannock	\$/lb	\$	5.90
	Muttongrass - Ruin Canyon/ VNS	\$/lb	\$	44.50
	Rabbibrush, Rubber - CO/ UT	\$/lb	\$	37.00
	Winter Fat - CO/ UT	\$/lb	\$	42.00
	Bluebunch Wheatgrass - CO/ Anatone/ Goldar	\$/lb	\$	13.00
	Indian Rice Grass - White RIver/ Paloma/ Nezpar	pls lbs/ ac		2.50
	Bottlebrush Squarriletail - Fish Creek/ VNS	pls lbs/ ac		1.40
	Sandberg Bluegrass - CO/ High Plains/ VNS	pls lbs/ ac		0.40
	Thickspike Wheatgrass - Critana/ Bannock	pls lbs/ ac		2.50
	Muttongrass - Ruin Canyon/ VNS	pls lbs/ ac		0.30



	Rabbibrush, Rubber - CO/ UT	pls lbs/ ac	0.25
	Winter Fat - CO/ UT	pls lbs/ ac	1.50
	Bluebunch Wheatgrass - CO/ Anatone/ Goldar	pls lbs/ ac	2.80
	Drill Seeding (DRMS Survey Cost)	\$/ac	\$ 232.00
	Herbicide - Curtail	pt/ac	4.00
	Straw, delivered	ton/ac	2.00
	Herbicide - Curtail	\$/unit	\$ 7.94
	Straw, delivered	\$/unit	\$ 421.36
	Crimping, with tractor	\$/ac	\$ 73.00
	Weed spray, truck, non-aquatic area, nox.	\$/ac	\$ 62.72
	Estimated Failure Rate:	%	30
Demolition	Used Oils Tank	\$/EA	\$ 1,000.00
	Used Oils Tank - Foundtion	\$/SF	\$ 100.00
	Used Oil Tank - Haul Foundation	\$/CY	\$ 500.00
	Flammable Cabinet - Haul	\$/CY	\$ 500.00
	Clear Diesel Tank	\$/EA	\$ 1,000.00
	Dyed Deisel Tank	\$/EA	\$ 1,000.00
	Generator - Haul	\$/CY	\$ 500.00
	Main Breaker Box - Haul	\$/CY	\$ 500.00
	Parts Storage 1	\$/CY	\$ 0.75
	Parts Storage 1	\$/SF	\$ 5.00
	Parts Storage 1 - Haul Foundation	\$/CY	\$ 500.00
	Parts Storage 1 (Outer)	\$/SF	\$ 45.00
	Parts Storage 1 (Outer) - Haul Foundation	\$/CY	\$ 225.00
	Maintenance Shop	\$/CY	\$ 0.25
	Maintenance Shop - Floor	\$/SF	\$ 12.50
	Maintenance Shop - haul foundation	\$/CY	\$ 500.00
	Parts Storage 2	\$/CF	\$ 0.25
	Parts Storage 3	\$/CF	\$ 0.75
	Main Office	\$/CF	\$ 0.25
	Main Office - Cinder Blocks	\$/CY	\$ 2.00
	Main Office - Haul Foundation	\$/CY	\$ 500.00
	Propane Tanks	\$/CY	\$ 500.00
	Block Heater Breaker Box	\$/CF	\$ 2.00
	Block Heater Breaker Box - Floor	\$/CY	\$ 500.00
	Truck Shed- Canopy	\$/EA	\$ 5,000.00
	Truck Shed- Foundation	\$/SF	\$ 12.50
	Remove North Fence	\$/LF	\$ 2.85
	Culvert - Concrete plug & Bury	\$/LF	\$ 24.90
	Mine Sign	\$/EA	\$ 1,250.00
	Slope Monitoring	\$/hr	\$ 250.00
Site Maintenance	Reclamation Monitoring	\$/hr	\$ 200.00
	Stormwater Monitoring	\$/hr	\$ 200.00



Boreholes/Misc	Backfill Exploratory Drillholes	\$/EA	\$ 1,485.00
	Purchase Rip Rap	\$/CY	\$ 65.00
	Rock Vortex Weirs – Ad Hoc Remidiation	LS	\$ 125,000

4.0 ACTIVITIES UNDER RECLAMATION

4.1 LOWER PIT

The lower pit is divided into lower pit upper section and lower pit lower section. The dashed yellow line in Figure 4-1 represents the high wall which needs to be regraded. The solid blue lines across the high walls in the figure represent the variable height of the highwall noted at different locations in the pit. The characteristics of these high walls and the volume dozed to regrade them are listed in Table 4-1.

Table 4-1. Lower pit high walls characteristics

Pit area	Total Highwall Iength (ft)	Maximum highwall height (ft)	Maximum highwall slope	Regrading Volume (lcy)
Lower pit upper section	3175	180	1H:1V	408,110
Lower pit lower section	2535	90	1.4H:1V	538,760

Figure 4-2 shows the regraded lower pit. The solid brown line shows the regrade boundary. The material along the high wall has been pushed and dozed, and filled into the pit. The average dozer push distance generally is 300 ft. The lower section of the lower pit is backfilled to an elevation of 6660 ft amsl. This elevation was selected to prevent accumulation of water within the pit and ensure proper drainage. The upper section of the lower pit was backfilled to pit floor elevation. The volume of material dozed was sufficient to regrade the high walls to a slope of 3H:1V or flatter, and no material was needed to be hauled from outside. A swell factor of 1.22 was assumed while performing volume estimation.





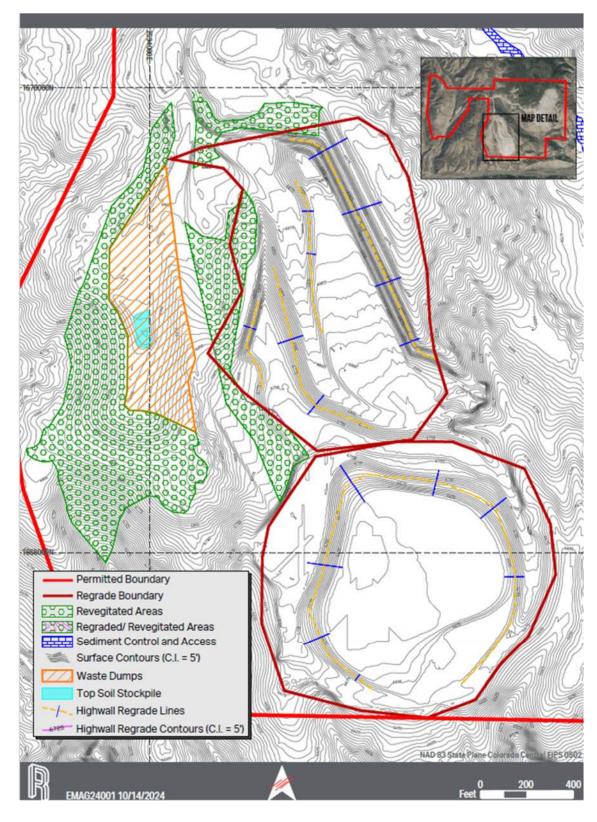


Figure 4-1. Lower pit- identified high walls which need to be regraded



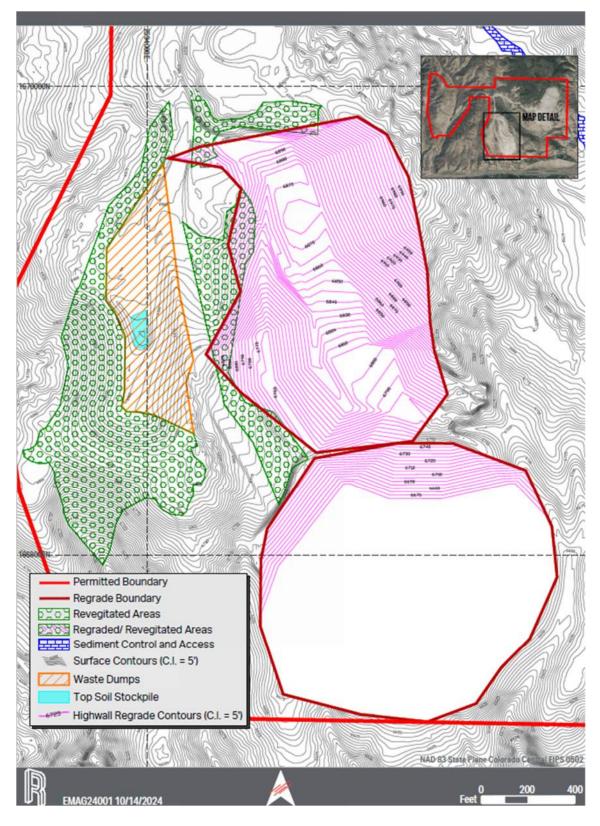


Figure 4-2. Lower pit regraded



4.2 UPPER PIT

The dashed yellow line in Figure 4-3 represents the high wall which needs to be regraded. The solid blue lines across the high walls in the figure represent the variable height of the highwall noted at different locations in the pit. The characteristics of these high walls and the volume dozed to regrade them are listed in Table 4-2.

Table 4-2. Lower pit high walls characteristics

Pit area	Total Highwall Iength (ft)	Maximum highwall height (ft)	Maximum highwall slope	Regrading Volume (Icy)
Upper pit	2800	130	1.5H:1V	199,933

Figure 4-4 shows the regraded upper pit. The solid brown line shows the regrade boundary. The material along the high wall has been pushed and dozed and filled into the pit. The average dozer push distance generally is 155 ft. The lower section of the upper pit is kept at an elevation of around 7015 ft amsl, and slightly sloped from east to west to allow movement of water from the pit into the drainage structure down the hill in the south. The upper section of the upper pit is backfilled to pit floor elevation. The volume of material dozed was sufficient to regrade the high walls to a slope of 3H:1V or flatter, and no material was needed to be hauled from outside. A swell factor of 1.22 was assumed while performing volume estimation.



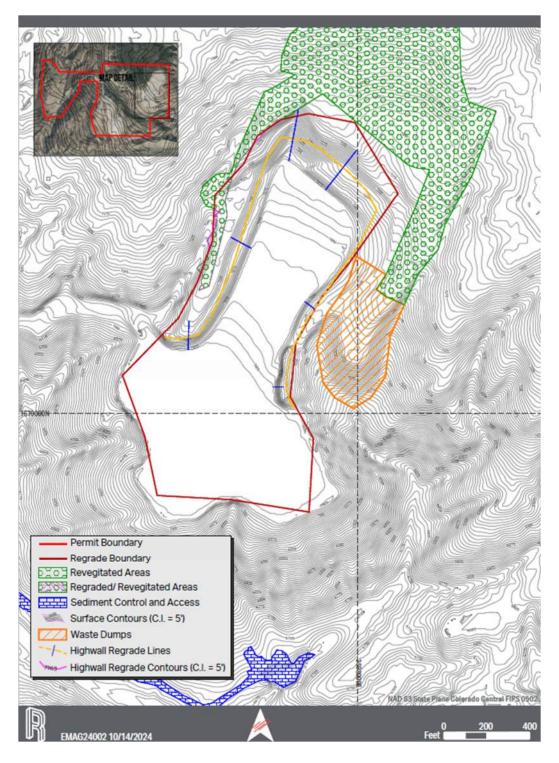


Figure 4-3. Upper pit- Identified high walls which need to be regraded



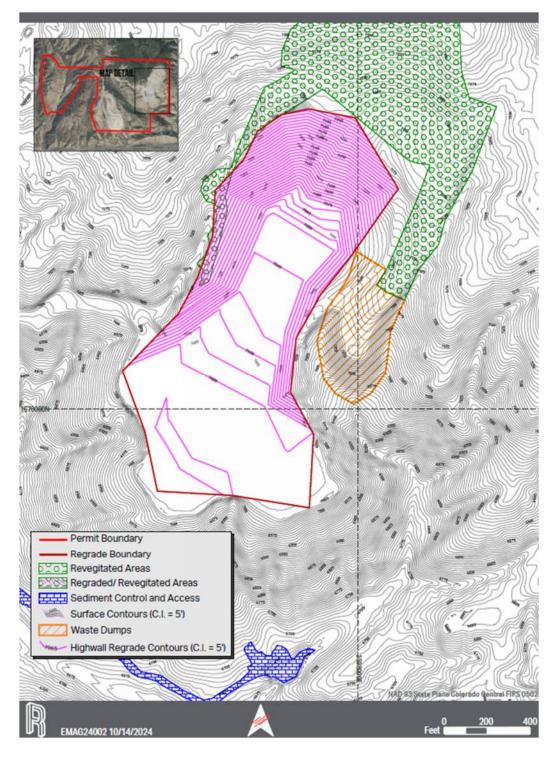


Figure 4-4. Upper pit regraded

4.3 PIT ROADS

Upper, Lower, and Main Pit roads will be ripped and revegetated with a similar methodology as the upper and lower pits.



4.4 SEDIMENTATION PONDS

Sediment pods (M101, M201, M301, M401, M501, and M601) will be regraded to a near level surface and revegetated.

4.5 DEMOLITION

Though there are no permanent structures onsite, there are several temporary structures to demolish and dispose of the building material offsite.

4.6 SITE MAINTENANCE

The following five years post reclamation will include site monitoring that will observe geotechnical stability, revegetation effectiveness, and erosion impacts.

4.7 PLUGGING DRILL HOLES

The estimate is carrying twenty holes at a max depth of two hundred feet that may require backfill and abandonment.

4.8 MOBILIZATION

Two mobilizations are included that cover all equipment for earthwork and revegetation efforts.

4.9 STOCKPILE STAGING AREA

The onsite stockpile will be dispersed along the main, upper, and lower haul roads during topsoil reclamation. The site has a deficit of topsoil and will need to import material offsite. The estimate includes purchasing topsoil from 3rd party vendors.