

APPENDIX A

EUREKA MOLY LLC TAILINGS SITING EVALUATION

To: Renee Kochler

Project 1029A

From: Ronald Arlian**Date:** August 26, 2005**Re:** Mount Hope Phase II TSF Alternative Siting Analysis

This memorandum presents the preliminary results of the alternative analysis completed for the Phase II Mount Hope tailings storage facility (TSF) siting study incorporating the changes resulting from the discussions during the August 22/23, 2005 site visit. The intent of this memo is to present potential alternatives for consideration and discussion. Once the study team has a chance to review and comment on the alternatives, Smith Williams will finalize the alternative analysis.

The seven alternatives (Alternative 2a added as a result of the site discussions) under consideration as potential tailings storage sites are presented in Figure 7. Facility-specific layouts are presented in Figures 1 through 6 inclusive and Figure 8. The TSFs as analyzed consists of a small starter embankment constructed of mine waste or borrow which will be expanded by centerline construction methods using cycloned sands as embankment construction materials. In each case, it is assumed that distribution of the tailings will occur from the embankment face thereby resulting in a slimed beach immediately upstream of the embankment and a supernatant pond that will include surface water diversion, access roads, and tailings delivery and solution reclaim systems.

General layouts and physical details of each of the alternatives can be referenced on Figures 1 through 6 and Figure 8. Tables 1 through 7 are facility-specific cost estimates based on the criteria and assumptions presented below:

1. Total required storage capacity will be 925 million tonnes.
2. Tailings slurry solids content will be 35 percent.
3. Solids specific gravity will be 2.53.
4. Sand-to-slimes cyclone split will meet requirements for embankment construction. (Note: Actual required varies with alternative but do not exceed 20 percent of total tailings.)
5. The storage capacity of facilities was evaluated assuming a sand stored density of 1.6 T/m³ and a slimes stored density of 1.3 T/m³.
6. No geotechnical fatal flaws exist.
7. No environmental limitations exist that would completely eliminate any site from use.



8. Facilities will be constructed in phases with a starter embankment and basin with a capacity of one year's tailings storage constructed in Production Year minus 1 and subsequent basin expansions completed starting in Production Year 1 each with a 5-year storage capacity.
9. Embankment construction after the starter embankment will be via cycloned sand, which is assumed to be a continuous operation. (Note: Embankment foundation preparation will be phased with basin expansions.)
10. Minus 200 content of sand is less than 15 percent.
11. Embankment after starter will be constructed of cycloned sands and sand slopes will be stable at 3H:1V
12. Starter embankment will have a 10-meter crest width.
13. Reclaim system consists of a barge-mounted pump with a skid-mounted substation with a pole line for power supply.
14. Seepage collection ponds are double synthetic lined with LCRS.
15. Phreatic surface can be controlled in the sand portion of the embankment with an under drain system and toe drain.
16. Permanent diversion channels around the facility will need to be sized for the probable maximum flood event.
17. Operating costs are rough estimates (power cost is assumed as \$0.06 per kilowatt-hour).
18. Mill site is at elevation 2015 meters.
19. Each facility requires the same number of cyclones (6 ea) for tailings distribution and embankment construction.
20. Power pole line will follow the most direct route from the mill site to the skid-mounted substation at the reclaim barge.
21. HDPE pipe will be used for the reclaim and tailings lines for line pressures up to 160 psi (SDR 9) and carbon steel (Schedule Std) will be used where the line pressures exceed 160 psi.

A brief description of each site follows:

Site 1

Site 1 resides adjacent to the preferred mill site and in the general location previously identified as Alternative 1 in the Phase 1 Feasibility Study. The embankment location was selected such that relocation of State Highway 287 would not be required. (Note: The toe of the embankment parallels the highway with a 100-meter offset.) The general layout and specifics of the facility can be seen on Figure 1. The ultimate embankment crest of the facility is at elevation 2015 meters; and based on the latest site access road and waste dump configuration, the ultimate embankment and basin footprint will encroach slightly on these facilities along the TSF’s western boundary and to a lesser degree the plant administration area. It has been assumed that the access road fill would be placed in controlled lifts with a fill slope not greater than 2.5H:1V and that the face of the fill would be covered with a geosynthetic liner within the encroachment area. Tailings deposition initially can be by gravity with pumping required in the late production years. The general layout and specifics of the facility can be seen on Figure 1. The estimated capital, operating, and reclamation costs are summarized below as well as presented in Table 9:

Starter	Total Including Starter	Operating	Reclamation
\$24,400,635	\$88,483,159	\$106,904,120	\$48,320,000

Site 1a

Site 1a is similar to the Alternative 2 site for the Phase 1 Feasibility Study. The configuration consists of two facilities (referred to as upper and lower). The upper facility resides in the same location and has the same configuration as in the Phase 1 Study. The lower facility embankment toe has moved to the east in order to accommodate the greater overall tonnes (450 million versus 925 million tonnes); and in fact, the facility footprint is very near the same as Site 1 with the only difference being it is slightly smaller since the required storage capacity is slightly less. The embankment crest elevation is approximately 2002 meters. The ultimate embankment and basin footprint, based on the latest site access road and waste dump configuration, encroaches slightly on these facilities along the TSF’s western boundary. It has been assumed that the access road fill would be placed in controlled lifts with a fill slope not greater than 2.5H:1V and that the face of the fill would be covered with a geosynthetic liner within the encroachment area. The lower facility at this site, as with the Site 1 facility, was specifically sited such that the state highway would not have to be relocated, with the embankment toe paralleling the highway with a 100-meter offset. The general layout and specifics of the facility can be seen on Figure 2. Tailings deposition for the upper facility will require pumping. Deposition to the lower facility can initially be by gravity with pumping required in the late production years. The estimated capital, operating, and reclamation costs are summarized below as well as presented in Table 9:

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Starter	Total Including Starter	Operating	Reclamation
\$13,104,921	\$100,843,346	\$101,830,620	\$50,680,000

Site 1b

Site 1b is similar to the Exxon Study Alternative A site. The configuration is a single facility and would require the relocation of approximately 11 km of State Highway 278 at the time of construction of the starter facility. The embankment ultimate elevation is approximately 1990 meters and, based on the most recent waste dump/site access road layout, the TSF footprint would encroach slightly on the site access road fill along the TSF's western boundary. It has been assumed that the access road fill would be placed in controlled lifts with a fill slope not greater than 2.5H:1V and that the face of the fill would be covered with a geosynthetic liner within the encroachment area.

The general layout and specifics of the facility can be seen on Figure 5. The tailings deposition for the most part can be by gravity with pumping only required in the last few years. The estimated capital, operating, and reclamation costs are summarized below as well as presented in Table 9:

Starter	Total Including Starter	Operating	Reclamation
\$28,872,371	\$96,337,737	\$106,677,820	\$44,240,000

Site 1c

Site 1c is a combination of the Phase 1 Study Alternative 2 upper facility and the Exxon Study Alternative A site. The configuration consists of two facilities (referred to as upper and lower). The upper facility resides in the same location and has the same configuration as the upper facility for the Phase 1 Study Alternative 2 and also the Site 1a upper facility. The lower facility footprint is basically the same as the Site 1b facility footprint reduced by the storage capacity of the upper facility. The principal difference in this alternative and the Site 1b alternative is that the highway relocation is not required until approximately Production Year 11 (one year before the upper facility is at capacity). The embankment ultimate elevation for the upper facility is 2065 meters and for the lower facility 1975 meters. The general layout and specifics of the facility can be seen on Figure 6. The estimated capital, operating, and reclamation costs are summarized below as well as presented in Table 9:

Starter	Total Including Starter	Operating	Reclamation
\$13,104,921	\$117,640,637	\$101,544,460	\$54,160,000

Site 2

Site 2 is similar to the Exxon Site J alternative and is sited south of the pit across the divide in the Kobeh Valley. The facility is approximately 6 km from the plant site. This site requires that both the tailing slurry and the reclaim water be pumped to the top of the divide (approximate elevation 2050 meters). Presently a high-tension power line passes through the TSF proposed footprint and approximately 7 km of the line would have to be relocated at the time of construction of the starter facility. The ultimate embankment crest is at approximately elevation 2050 meters. The specifics of the facility can be seen on Figure 3. The estimated capital, operating, and reclamation costs are summarized below as well as presented in Table 9:

Starter	Total Including Starter	Operating	Reclamation
\$26,243,402	\$90,956,368	\$158,862,600	\$45,350,000

Site 2a

Site 2a is a combination of two sites. The configuration consists of two facilities (referred to as upper and lower). The upper facility resides in the same location and has the same configuration as the upper facility for the Phase 1 Study Alternative 2 and also the Phase II Alternative Sites 1a, and 1c upper facility. The lower facility footprint is similar to the Site 2 facility footprint moved slightly up the slope and reduced by the storage capacity of the upper facility. The lower facility ultimate embankment crest is at approximately elevation 2070 meters. The specifics of the facility can be seen on Figure 8. The estimated capital, operating, and reclamation costs are summarized below as well as presented in Table 9:

Starter	Total Including Starter	Operating	Reclamation
\$13,104,921	\$97,031,196	\$138,101,400	\$43,930,000

Site 3

The Site 3 facility location is the same as the Phase I Study Alternative 3 site basically with the footprint expanded to accommodate the 925 million tonnes. This site is located west of State Highway 278 approximately 6 km from the mill site; and the tailings and reclaim lines and facility access roads will have to cross the highway. For this study, it has been assumed that the tailings line and reclaim line would pass under the highway via a concrete vault and that a geomembrane-lined storage pond would be sited at the east side of the crossing for draining the

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lines in case of shutdown and/or to contain solution or tailings in the event of a line break. The ultimate embankment elevation is at 1910 meters. Tailings deposition for the entire life of the facility can be by gravity. The specifics of the facility can be seen on Figure 4. The estimated capital, operating, and reclamation costs are summarized below as well as presented in Table 8:

Starter	Total Including Starter	Operating	Reclamation
\$26,006,677	\$81,902,915	\$116,499,240	\$41,015,000

Capital Costs

The detailed estimate of the capital costs for the seven sites are provided on Tables 1 through 8 and summarized on Table 9. The estimated capital costs vary from a low of approximately \$88.5 million for Site 1 to approximately \$102.5 million for Site 1c. While Site 1c has the highest overall capital cost, it along with Sites 1a and 2a which utilize two facilities have the lowest initial capital cost, which is almost half of the next closest Alternative, Site 1.

Site	Starter	Total Including Starter
1	\$24,400,635	\$88,483,159
1a	\$13,104,921	\$100,843,346
1b	\$28,872,371	\$96,337,737
1c	\$13,104,921	\$117,640,637
2	\$26,243,402	\$90,956,368
2a	\$13,104,921	\$97,031,196
3	\$26,006,677	\$81,902,915

Operating Costs

The operating unit cost per tonne for each facility was estimated at both the starter and ultimate conditions, which was then assumed to be linear over the life of the mine. (Note: Will overestimate the costs where gravity tailings deposition is used for most of the mine life.) The cost for electric power used for the calculations was \$0.06 per kilowatt-hour. Maintenance costs were based on annual costs factored as a percent of the equipment capital cost. A factor of 25 percent of the capital costs was used for the pumps, 25 percent for cyclones and 10 percent of the capital costs for the pipelines and associated accessories. It was assumed that a D-6 dozer would be required to spread and shape the cycloned sands. The dozer was assumed to be working an average of 20 hours per day. The following table summarizes the estimated unit operating cost for each of the facilities at the starter and ultimate condition. The cost is based on 40,000 tonnes per day or 14.6 million tonnes per year.

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Facility	Starter (\$/T)	Ultimate (\$/T)	Total Operating Cost for Facility Life	Total Operating Cost for Site
Site 1	0.112	0.124	\$106,904,120	\$106,904,120
Site 1a (upper)	0.081	0.104	\$17,556,500	\$101,830,620
Site 1a (lower)	0.112	0.124	\$84,274,120	
Site 1b	0.109	0.127	\$106,677,820	\$106,677,820
Site 1c (upper)	0.081	0.104	\$17,556,500	\$101,544,460
Site 1c (lower)	0.108	0.127	\$83,987,960	
Site 2	0.162	0.189	\$158,862,600	\$158,862,600
Site 2a (upper)	0.137	0.108	\$17,556,500	\$138,101,400
Site 2a (lower)	0.153	0.184	\$120,544,900	
Site 3	0.145	0.112	\$116,499,240	\$116,499,240

The Site 1, 1a, 1c, and 3 facilities are reasonably close with the difference in cost being the result of the difference in pumping head for the reclaim water. Site 2 and 2a have a very high operating cost resulting from the fact that both the tailings and reclaim water require pumping for the life of the facility while for the other facilities the tailings for a certain amount of time is gravity flow. This operating cost could be reduced by cutting a slot 15 to 20 m deep at the divide (present elevation 2050 m) to reduce the pumping head. The cut material could probably be used in the starter embankment construction. This should be considered if either of these two options are viewed as possible final sites in the selection process.

Reclamation Cost

For purposes of this study, closure requirements for the tailings impoundments were viewed to entail the following work:

- Embankment reclamation:
 - Top surface to be regraded to reduce the amount of impoundment leveling required.
 - Surfaces to be stabilized with a 500-mm cap of mine waste.
 - Mine waste cap to be covered with a 300-mm layer of growth medium.
 - Surface area to be revegetated using seed/fertilizer mixture.
 - Spillway/channel to be constructed to convey top area surface water to existing diversion channels.
- Impoundment area:

- Pond and adjacent beach area to be filled with mine waste to produce positive grades from back to front.
 - Beach area to be stabilized with a 500-mm mine waste cap.
 - Localized shaping to direct surface runoff to embankment spillway/channel.
 - Mine waste cap to be covered with a 300-mm layer of growth medium.
- Underdrainage ponds (Note: Ponds will remain until seepage reduces to a level that can be handled via a method such as evapotranspiration.):
 - Pumps and sump to be removed.
 - Synthetic liners to be cut at anchor trench but not removed.
 - Pond to be backfilled with alluvium.
 - Surface area to be covered with growth medium and revegetated by use of a seed/fertilizer mixture.
- Perimeter roads:
 - Roads to be contoured into adjacent surfaces to remove abrupt slope changes.
 - Surface area to be covered with a 300-mm layer of growth medium and revegetated using seed/fertilizer mixture.
- Borrow areas:
 - Surface areas to be contoured to provide reasonably smooth contours and shaped to drain.
 - Surface area to be covered with a 300-mm layer of growth medium and seeded.

The estimated unit rates used in estimating the reclamation costs are summarized in the table below:

Estimated Closure Costs

Description	Unit Rate US\$/hectare
Embankment	\$15,000
Spillway/Channels	\$500,000
Impoundment	\$30,000
Underdrainage Ponds	\$25,000
Perimeter Roads	\$20,000

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Borrow Areas	\$5,000
Tailings Conveyance Line	Note 1
Reclaim Water Line	Note 1
Monitoring	\$25,000/yr

Using the parameters above, the reclamation costs by facility are summarized below:

Facility	Cost per Facility	Total Cost
Site 1	\$48,320,000	\$48,320,000
Site 1a (upper)	\$9,920,000	\$50,680,000
Site 1a (lower)	\$40,760,000	
Site 1b	\$44,240,000	\$44,240,000
Site 1c (upper)	\$9,920,000	\$54,160,000
Site 1c (lower)	\$44,240,000	
Site 2	\$45,350,000	\$45,350,000
Site 2a (upper)	\$9,920,000	\$43,930,000
Site 2a (lower)	\$34,010,000	
Site 3	\$41,015,000	\$41,015,000

NPV

Using the capital, operating, and reclamation costs, the NPV for each of the sites was determined using a rate of 7 percent. The capital costs were distributed using the following assumptions:

1. Starter facility will be sized for one year's production.
2. Year 2 relates to Production Year 1 (i.e., starter capital assumed to be all spent in the year before production starts).
3. Production starts on January 1.
4. First expansion will be completed in Production Year 1 and sized for 5 years' production and expansions will then completed each 5 years.
5. Capital cost for each expansion will be equal and has been distributed equally over the mine life.
6. Change in operating cost from starter to ultimate will be linear.
7. For sites with two facilities, reclamation will start on the first facility one year after the facility reaches capacity.
8. Reclamation for each facility will be spread over two years.

Using these assumptions, the NPV for the sites is summarized below with more detail shown on Table 10:



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Alternative	NPV (7%)
Site 1	\$60,229,497
Site 1a	\$60,232,833
Site 1b	\$64,844,895
Site 1c	\$63,391,717
Site 2	\$72,376,523
Site 2a	\$63,216,101
Site 3	\$64,288,627

Decision Matrix

A decision matrix has been prepared to rate the alternatives, taking into consideration various aspects including the following:

- NPV (20%)
- Initial capital cost (25%)
- Operating cost (15%)
- Permitting time/difficulty (15%)
- Land position (10%)
- Environmental considerations (7.5%)
- Technical considerations(7.5%)

The weighted percentages for each criterion were established during the discussions held at site August 23, 2005 and vary some from the criterion used for the Phase I Study.

Based on the criteria selected, the TSF sites were then given a rating using the following approach:

- The NPV, initial capital, and operating scores for each site were determined by assigning values between 1 and 7 to the alternative, based on a linear interpolation of the relationship between the lowest cost alternative (1) and the highest cost alternative (7).
- For the non-economic consideration, a value from 1 to 7 (1 = most favorable; 7 = least favorable) was assigned to each criterion for each alternative site. Values were assigned based primarily on comparisons between each of the facilities with the approach that, for criteria where there is no significant difference between sites, the scores will not be spread from 1 to 7 for the sites but will be evaluated upon comparison with ideal or extremely poor sites, with 1 being ideal and 7 being extremely poor.
- The items considered under environmental impact included the following:

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- Visual impact
- Impacted cultural resources
- Fugitive dust potential (air quality)
- Ground water
- Surface water
- Vegetation
- The items considered under Technical Considerations included:
 - Embankment sand volume requirements
 - Surface water hydrology (upstream watershed/diversions)
 - Presumed depth to ground water
 - Topography
 - Location with respect to the mill
 - Operating ease
 - Geotechnical risk
 - Impacts on preferred waste dumps/administration area and existing facilities.

Tables 11 and 12 show the scores assigned for the sub-items under Technical and Environmental Consideration. The sub-items were scored independently by R. Arlian and D. Wittwer and those scores then averaged for the final score.

Permitting Time/Difficulty has not been scored pending discussions/input from Val Sawyer of SRK.

Based on the criteria and weighing as discussed above, Site 1a would show for this preliminary analysis to be the best overall site with Site 1b being the least desirable site with the order being Site 1a, 2a 1c, 1, 3, 2 and 1b. The three sites with the two facilities have the best overall scores. Of these three sites, Site 2a shows to be the best technically and environmentally while site 1a scored slightly better financially.

TABLE 1
IDAHO GENERAL MINES, INC
MT. HOPE FEASIBILITY STUDY PHASE I
Tailing Storage Facility Alternative Siting Analysis
Site No. 1

Work By Owner

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
1.0	Embankment Fill Placement								
1.1	Construction Temporary Haul Road	m	\$16.65	3050	\$50,773	0	\$0	3,050	\$50,773
1.2	Extra Haul Over Waste Dump Temp Haul Road	m ³ /km	\$0.12	729,316	\$87,518	0	\$0	729,316	\$87,518
1.3	Extra Haul Over Waste Dump for Starter Embankment	m ³ /km	\$0.12	7,673,800	\$920,856	1,700,924	\$204,111	9,374,724	\$1,124,967
1.4	Mine Waste to TSF	m ³	\$0.00	2,516,000	\$0	557,680	\$0	3,073,680	\$0
	Sub-Total				\$1,059,147		\$204,111		\$1,263,258

Work By Contractor

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
2.0	Mobilization/Demobilization								
2.1	Mobilization		5%	\$16,427,674	\$821,384	\$51,146,648	\$2,557,332	67,574,322	\$3,378,716
2.2	Demobilization		2%	\$16,427,674	\$328,553	\$49,971,648	\$999,433	66,399,322	\$1,327,986
	Sub-Total				\$1,149,937		\$3,556,765		\$4,706,703
3.0	Earthworks								
3.1	Clearing and Grubbing	m ²	\$0.11	1,524,661	\$167,713	12,972,865	\$1,427,015	14,497,526	\$1,594,728
3.2	Topsoil Stripping	m ²	\$0.50	1,524,661	\$762,331	12,972,865	\$6,486,433	14,497,526	\$7,248,763
3.3	Embankment Foundation Excavation	m ³	\$1.65	270,504	\$446,331	862,383	\$1,422,932	1,132,887	\$1,869,263
3.4	Embankment Foundation Preparation	m ²	\$0.28	541,007	\$151,482	1,724,766	\$482,934	2,265,773	\$634,416
3.5	Embankment Foundation Subgrade	m ²	\$1.10	541,007	\$595,108	1,724,766	\$1,897,243	2,265,773	\$2,492,350
3.6	Embankment Foundation Finger Drains	m	\$21.89	18,034	\$394,755	57,492	\$1,258,504	75,526	\$1,653,259
3.8	Embankment Spine drain	m	\$86.74	200	\$17,348	330	\$28,624	530	\$45,972
3.7	Embankment Toe Drain	m ³	\$2.20	0	\$0	557,680	\$1,226,896	557,680	\$1,226,896
3.9	Embankment Construction	m ³	\$0.39	2,836,000	\$1,106,040	0	\$0	2,836,000	\$1,106,040
3.10	Embankment Face Shaping	m ²	\$0.28	204,403	\$57,233			204,403	\$57,233
3.11	Basin Foundation Preparation	m ²	\$0.28	983,654	\$275,423	11,248,099	\$3,149,468	12,231,753	\$3,424,891
3.12	Basin Prepared Subgrade (300mm)	m ²	\$1.10	983,654	\$1,082,019	11,248,099	\$12,372,909	12,231,753	\$13,454,928
3.13	Basin Drain Blanket (400mm)	m ²	\$1.10	983,654	\$1,082,019	11,248,099	\$12,372,909	12,231,753	\$13,454,928
3.14	Basin Reclaim Slot Excavation	m ³	\$1.49	392,800	\$585,272	1,570,400	\$2,339,896	1,963,200	\$2,925,168
3.15	Basin Reclaim Slot Retarding Layer (200mm)	m ²	\$1.10	54,796	\$60,275	219,071	\$240,978	273,866	\$301,253
3.16	Basin Reclaim Slot Geotextile	m ²	\$1.38	109,591	\$151,236	438,141	\$604,635	547,732	\$755,870
3.17	Basin Reclaim Slot Erosion Protection (150mm)	m ²	\$0.50	54,796	\$27,398	219,071	\$109,535	273,866	\$136,933
3.18	Basin Drainage Collection Laterals (100 mm)	m	\$6.05	19,673	\$119,022	224,962	\$1,361,020	244,635	\$1,480,042
3.19	Basin Drainage Collection Headers (250mm)	m	\$27.94	1,967	\$54,967	22,496	\$628,544	24,464	\$683,510
3.20	Basin Drainage Collection Headers (300mm)	m	\$40.52	1,491	\$60,415	5,889	\$238,622	7,380	\$299,038
3.21	Basin Drainage Collection Headers (Solid HDPE 300 mm SDR 17)	m	\$550.00	530	\$291,500	0	\$0	530	\$291,500
	Sub-Total				\$7,487,886		\$47,649,096		\$55,136,982
4.0	Seepage Collection Pond								
4.1	Clearing and Grubbing	m ²	\$0.11	30,000	\$3,300	0	\$0	30,000	\$3,300
4.2	Topsoil Stripping	m ²	\$0.76	30,000	\$22,800	0	\$0	30,000	\$22,800
4.3	Excavation to Fill/Waste	m ³	\$3.30	111,000	\$366,300	0	\$0	111,000	\$366,300
4.4	Prepared Subgrade	m ²	\$1.65	30,900	\$50,985	0	\$0	30,900	\$50,985
4.5	Geomembrane Liner	m ²	\$5.76	61,800	\$355,968	0	\$0	61,800	\$355,968
4.6	Reclaim and Pumpback System	ls	\$50,000.00	1	\$50,000	0	\$0	1	\$50,000
	Sub-Total				\$849,353		\$0		\$849,353
5.0	Diversion Channels								
5.1	Minor Temporary Channels	m	\$19.00	0	\$0	0	\$0	0	\$0
5.2	Major Temporary Channels	m	\$87.00	6,628	\$576,636	26,696	\$2,322,552	33,324	\$2,899,188
5.3	Minor Permanent Channels	m	\$150.00	0	\$0	0	\$0	0	\$0
5.4	Major Permanent Channels	m	\$275.00	19,959	\$5,488,725	0	\$0	19,959	\$5,488,725
	Sub-Total				\$6,065,361		\$2,322,552		\$8,387,913
6.0	Tailing Delivery Line								
6.1	Delivery Line	ls	\$2,403,610.00	1	\$2,403,610	1	\$1,500,000	2	\$3,903,610
6.2	Adjacent Road and Trench	m	\$70.00	1,025	\$71,750			1,025	\$71,750
6.3	Valves and Fittings	ls	\$240,361.00	1	\$240,361		\$150,000	1	\$390,361
	Sub-Total				\$2,715,721		\$1,650,000		\$4,365,721
7.0	Reclaim Line								
7.1	Reclaim Line	ls	\$1,334,428.00	1	\$1,334,428	1	\$700,000	2	\$2,034,428
7.2	Sump at Mill	ls	\$30,000.00	0	\$0		\$0	0	\$0
7.3	Barge Costs	ls	\$250,000.00	1	\$250,000		\$0	1	\$250,000
7.4	Power Line Costs	km	\$100,000.00	2.5	\$250,000		\$0	2.5	\$250,000
7.5	Electrical Equipment	ls	\$100,000.00	1.0	\$100,000		\$0	1	\$100,000
	Sub-Total				\$1,934,428		\$700,000		\$2,634,428
	Grand Total				\$21,261,833		\$56,082,524		\$77,344,357
8.0	EPCM								
8.1	EPCM	ls	11%	21,261,833	\$2,338,802	1	\$8,000,000	21,261,834	\$10,338,802
8.2	Engineering Phase II and Phase III	ls	\$ 800,000.00	1	\$800,000		\$0	1	\$800,000
	Subtotal				\$3,138,802		\$8,000,000		\$11,138,802
9.0	Owners Costs								
9.1	Owners Costs	ls			Not Included		Not Included		
	Subtotal				\$0		\$0		\$0
10.0	Contingency								
10.1	Contingency				Not Included		Not Included		
	Subtotal				\$0		\$0		\$0
	Grand Total				\$24,400,635		\$64,082,524		\$88,483,159

TABLE 2
IDAHO GENERAL MINES, INC
MT. HOPE FEASIBILITY STUDY PHASE I
Tailing Storage Facility Alternative Siting Analysis
Site No. 1a, 1c and 2a (Upper)

Work By Owner

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
1.0	Embankment Fill Placement								
1.1	Construction Temporary Haul Road	m	\$16.58	2000	\$33,168	0	\$0	2000	\$33,168
1.2	Extra Haul Over Waste Dump Temp Haul Road	m ³ /km	\$0.12	313,600	\$37,632	0	\$0	313,600	\$37,632
1.3	Extra Haul Over Waste Dump for Embankment	m ³ /km	\$0.12	3,728,200	\$447,384	229,000	\$27,480	3,957,200	\$474,864
1.4	Mine Waste to TSF	m ³	\$0.00	1864100	\$0	114500	\$0	1978600	\$0
	Sub-Total				\$518,184		\$27,480		\$545,664

Work By Contractor

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
2.0	Mobilization/Demobilization								
2.1	Mobilization		5%	\$8,647,037	\$432,352	\$12,281,256	\$614,063	\$20,928,293	\$1,046,415
2.2	Demobilization		2%	\$8,647,037	\$172,941	\$12,281,256	\$245,625	\$20,928,293	\$418,566
	Sub-Total				\$605,293		\$859,688		\$1,464,981
3.0	Earthworks								
3.1	Clearing and Grubbing	m ²	\$0.19	636,000	\$117,660	2,696,471	\$498,847	3,332,471	\$616,507
3.2	Topsail Stripping	m ²	\$0.50	636,000	\$318,000	2,696,471	\$1,348,236	3,332,471	\$1,666,236
3.3	Embankment Foundation Excavation	m ³	\$1.65	82,885	\$136,760	189,465	\$312,617	272,350	\$449,378
3.4	Embankment Foundation Preparation	m ²	\$0.28	165,770	\$46,416	378,930	\$106,100	544,700	\$152,516
3.5	Embankment Foundation Subgrade	m ²	\$1.10	165,770	\$182,347	378,930	\$416,823	544,700	\$599,170
3.6	Embankment Foundation Finger Drains	m	\$21.89	6,631	\$145,153	12,631	\$276,493	19,262	\$421,645
3.7	Embankment Spine drain	m	\$86.74	1,400	\$121,436	1,200	\$104,088	2,600	\$225,524
3.8	Embankment Toe Drain	m ³	\$2.20	0	\$0	114,500	\$251,900	114,500	\$251,900
3.9	Embankment Construction	m ³	\$0.39	2,590,100	\$1,010,139	0	\$0	2,590,100	\$1,010,139
3.10	Embankment Face Shaping	m ²	\$0.28	182,347	\$51,057	0	\$0	182,347	\$51,057
3.11	Basin Foundation Preparation	m ²	\$0.28	549,000	\$153,720	2,239,800	\$627,144	2,788,800	\$780,864
3.12	Basin Prepared Subgrade (300mm)	m ²	\$1.10	549,000	\$603,900	2,239,800	\$2,463,780	2,788,800	\$3,067,680
3.13	Basin Drain Blanket (400mm)	m ²	\$1.10	549,000	\$603,900	2,239,800	\$2,463,780	2,788,800	\$3,067,680
3.14	Basin Reclaim Slot Excavation	m ³	\$1.49	726,000	\$1,081,740	755,400	\$1,125,546	1,481,400	\$2,207,286
3.15	Basin Reclaim Slot Retarding Layer (200mm)	m ²	\$1.10	180,000	\$198,000	328,492	\$361,341	508,492	\$559,341
3.16	Basin Reclaim Slot Geotextile	m ²	\$1.38	180,000	\$248,400	200,000	\$276,000	380,000	\$524,400
3.17	Basin Reclaim Slot Erosion Protection (150mm)	m ²	\$0.50	180,000	\$90,000	328,492	\$164,246	508,492	\$254,246
3.18	Basin Drainage Collection Laterals (100 mm)	m	\$6.05	14,580	\$88,209	98,783	\$597,637	113,363	\$685,846
3.19	Basin Drainage Collection Headers (250mm)	m	\$27.94	1,694	\$47,330	3,576	\$99,913	5,270	\$147,244
3.20	Basin Drainage Collection Headers (300mm)	m	\$40.52	1,997	\$80,918	1,623	\$65,764	3,620	\$146,682
3.21	Basin Drainage Collection Headers (Solid HDPE 300 mm S	m	\$550.00	500	\$275,000	0	\$0	500	\$275,000
	Sub-Total				\$5,600,085		\$11,560,256		\$17,160,341
4.0	Seepage Collection Pond								
4.1	Clearing and Grubbing	m ²	\$0.19	2,500	\$463	0	\$0	2,500	\$463
4.2	Topsail Stripping	m ²	\$0.76	2,500	\$1,900	0	\$0	2,500	\$1,900
4.3	Excavation to Fill/Waste	m ³	\$3.30	19,500	\$64,350	0	\$0	19,500	\$64,350
4.4	Prepared Subgrade	m ²	\$1.65	2,615	\$4,315	0	\$0	2,615	\$4,315
4.5	Geomembrane Liner with Geonet	m ²	\$5.76	5,230	\$30,125	0	\$0	5,230	\$30,125
4.6	Reclaim and Pumpback System	ls	\$50,000.00	1	\$50,000	0	\$0	1	\$50,000
	Sub-Total				\$151,152		\$0		\$151,152
5.0	Diversion Channels								
5.1	Minor Temporary Channels	m	\$19.00	3200	\$60,800	14000	\$266,000	17,200	\$326,800
5.2	Major Temporary Channels	m	\$87.00	0	\$0	0	\$0	0	\$0
5.3	Minor Permanent Channels	m	\$150.00	6000	\$900,000	0	\$0	6,000	\$900,000
5.4	Major Permanent Channels	m	\$275.00	4000	\$1,100,000	0	\$0	4,000	\$1,100,000
	Sub-Total				\$2,060,800		\$266,000		\$2,326,800
6.0	Tailing Delivery Line								
6.1	Tailing Distribution System	ls	\$900,000.00	1	\$900,000	1	\$810,000	2	\$1,710,000
	Sub-Total				\$900,000		\$810,000		\$1,710,000
7.0	Reclaim Line								
7.1	Reclaim Line	ls	\$770,000.00	1	\$770,000	1	\$100,000	2	\$870,000
7.2	Sump Mill	ls	\$30,000.00	1	\$30,000	0	\$0	1	\$30,000
7.3	Barge Costs	ls	\$250,000.00	1	\$250,000	0	\$0	1	\$250,000
7.4	Power Line Costs	km	\$100,000.00	1.0	\$100,000	0	\$0	1	\$100,000
7.5	Electrical Equipment	ls	\$100,000.00	1.0	\$100,000	0	\$0	1	\$100,000
	Sub-Total				\$1,250,000		\$100,000		\$1,350,000
	Grand Total				\$11,085,514		\$13,623,424		\$24,708,938
8.0	EPCM								
8.1	EPCM	ls	11%	13,623,424	\$1,219,407	1	\$1,498,577	13,623,425	\$2,717,983
8.2	Engineering Phase II and Phase III	ls	\$ 800,000.00	1	\$800,000	0	\$0	1	\$800,000
	Subtotal				\$2,019,407		\$1,498,577		\$3,517,983
9.0	Owners Costs								
9.1	Owners Costs	ls			Not Included		Not Included		
	Subtotal				\$0		\$0		\$0
10.0	Contingency								
10.1	Contingency				Not Included		Not Included		
	Subtotal				\$0		\$0		\$0
	Grand Total				\$13,104,921		\$15,122,000		\$28,226,921

TABLE 3
IDAHO GENERAL MINES, INC
MT. HOPE FEASIBILITY STUDY PHASE I
Tailing Storage Facility Alternative Siting Analysis
Site No. 1a (lower)

Work By Owner

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
1.0	Embankment Fill Placement								
1.1	Construction of Temporary Haul Road	m	\$16.76	5,000	\$83,820	0	\$0	5,000	\$83,820
1.2	Extra Haul Over Waste Dump to Construct Temp Haul Road	m ³ /km	\$0.12	1,960,000	\$235,200	0	\$0	1,960,000	\$235,200
1.3	Extra Haul Over Waste Dump for Starter Embankment	m ³ /km	\$0.12	12,216,000	\$1,465,920	2,788,400	\$334,608	15,004,400	\$1,800,528
1.4	Place and Compact Mine Waste	m ³	\$0.00	2,443,200	\$0	557,680	\$0	3,000,880	\$0
				Sub-Total	\$1,784,940		\$334,608	0	\$2,119,548

Work By Contractor

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
2.1	Mobilization	ls	5%	\$15,169,569	\$758,478	\$38,958,799	\$1,947,940	54,128,368	\$2,706,418
2.2	Demobilization	ls	2%	\$15,169,569	\$303,391	\$38,958,799	\$779,176	54,128,368	\$1,082,567
				Sub-Total	\$1,061,870		\$2,727,116		\$3,788,986
3.0	Earthworks								
3.1	Clearing and Grubbing	m ²	\$0.11	1,524,661	\$167,713	9,631,200	\$1,059,432	11,155,861	\$1,227,145
3.2	Topsoil Stripping	m ²	\$0.50	1,524,661	\$762,331	9,631,200	\$4,815,600	11,155,861	\$5,577,931
3.3	Embankment Foundation Excavation	m ³	\$1.65	270,504	\$446,331	834,600	\$1,377,090	1,105,104	\$1,823,421
3.4	Embankment Foundation Preparation	m ²	\$0.28	541,007	\$151,482	1,669,200	\$467,376	2,210,207	\$618,858
3.5	Embankment Foundation Subgrade	m ²	\$1.10	541,007	\$595,108	1,669,200	\$1,836,120	2,210,207	\$2,431,228
3.6	Embankment Foundation Finger Drains	m	\$21.89	18,034	\$394,755	55,640	\$1,217,960	73,674	\$1,612,714
3.8	Embankment Spine drain	m	\$86.74	200	\$17,348	450	\$39,033	650	\$56,381
3.7	Embankment Toe Drain	m ³	\$2.20	0	\$0	557,680	\$1,226,896	557,680	\$1,226,896
3.9	Embankment Construction	m ³	\$0.39	2,836,000	\$1,106,040	0	\$0	2,836,000	\$1,106,040
3.10	Embankment Face Shaping	m ²	\$0.28	204,403	\$57,233			204,403	\$57,233
3.11	Basin Foundation Preparation	m ²	\$0.28	983,654	\$275,423	7,962,000	\$2,229,360	8,945,654	\$2,504,783
3.12	Basin Prepared Subgrade (300mm)	m ²	\$1.10	983,654	\$1,082,019	7,962,000	\$8,758,200	8,945,654	\$9,840,219
3.13	Basin Drain Blanket (400mm)	m ²	\$1.10	983,654	\$1,082,019	7,962,000	\$8,758,200	8,945,654	\$9,840,219
3.14	Basin Reclaim Slot Excavation	m ³	\$1.49	392,800	\$585,272	1,570,400	\$2,339,896	1,963,200	\$2,925,168
3.15	Basin Reclaim Slot Retarding Layer (200mm)	m ²	\$1.10	54,796	\$60,275	219,071	\$240,978	273,867	\$301,253
3.16	Basin Reclaim Slot Geotextile	m ²	\$1.38	109,591	\$151,236	438,141	\$604,635	547,732	\$755,870
3.17	Basin Reclaim Slot Erosion Protection (150mm)	m ²	\$0.50	54,796	\$27,398	219,071	\$109,536	273,867	\$136,933
3.18	Basin Drainage Collection Laterals (100 mm)	m	\$6.05	19,673	\$119,022	159,240	\$963,402	178,913	\$1,082,424
3.19	Basin Drainage Collection Headers (250mm)	m	\$27.94	1,967	\$54,967	15,924	\$444,917	17,891	\$499,883
3.20	Basin Drainage Collection Headers (300mm)	m	\$40.52	1,491	\$60,415	5,889	\$238,622	7,380	\$299,038
3.21	Basin Drainage Collection Headers (Solid HDPE 300 mm SDR 11)	m	\$550.00	530	\$291,500		\$0	530	\$291,500
				Sub-Total	\$7,487,886		\$36,727,252		\$44,215,137
4.0	Seepage Collection Pond								
4.1	Clearing and Grubbing	m ²	\$0.11	30,000	\$3,300	0	\$0	30,000	\$3,300
4.2	Topsoil Stripping	m ²	\$0.76	30,000	\$22,800	0	\$0	30,000	\$22,800
4.3	Excavation to Fill/Waste	m ³	\$3.30	111,000	\$366,300	0	\$0	111,000	\$366,300
4.4	Prepared Subgrade	m ²	\$1.65	30,900	\$50,985	0	\$0	30,900	\$50,985
4.5	Geomembrane Liner and Geonet	m ²	\$5.76	61,800	\$355,968	0	\$0	61,800	\$355,968
4.6	Reclaim and Pumpback System	ls	\$50,000.00	1	\$50,000	0	\$0	1	\$50,000
				Sub-Total	\$849,353		\$0		\$849,353
5.0	Diversion Channels								
5.1	Minor Temporary Channels	m	\$19.00	0	\$0	0	\$0	0	\$0
5.2	Major Temporary Channels (Without Riprap Protection)	m	\$87.00	6,628	\$576,636	13,581	\$1,181,547	20,209	\$1,758,183
5.3	Minor Permanent Channels	m	\$150.00	0	\$0	0	\$0	0	\$0
5.4	Major Permanent Channels (With Riprap Protection)	m	\$275.00	14,297	\$3,931,675	0	\$0	14,297	\$3,931,675
				Sub-Total	\$4,508,311		\$1,181,547		\$5,689,858
6.0	Tailing Delivery Line								
6.1	Tailing Distribution System	ls	\$2,726,010.00	1	\$2,726,010	1	\$1,500,000	2	\$4,226,010
6.2	Adjacent Road and Trench	m	\$70.00	4,500	\$315,000			4,500	\$315,000
6.3	Valves and Fittings	ls	\$272,601.00	1	\$272,601	1	\$150,000	2	\$422,601
				Sub-Total	\$3,313,611		\$1,500,000		\$4,813,611
7.0	Reclaim Line								
7.1	Reclaim System	ls	\$1,334,428.00	1	\$1,334,428	1	\$600,000	2	\$1,934,428
7.2	Sump at Mill	ls	\$30,000.00	0	\$0			0	\$0
7.3	Barge Costs	ls	\$250,000.00	1	\$250,000	1	\$250,000	2	\$500,000
7.4	Power Costs	km	\$100,000.00	2.5	\$250,000		\$0	3	\$300,000
7.5	Power Equipment	ls	\$100,000.00	1.0	\$100,000	2	\$200,000	3	\$300,000
				Sub-total	\$1,934,428		\$1,050,000		\$2,984,428
				Total	\$20,940,398		\$41,572,583		\$62,512,981
8.0	EPCM								
8.1	EPCM	ls	11%	20,940,398	\$2,303,444	1	\$7,000,000	20,940,399	\$9,303,444
8.2	Engineering Phase II and Phase III	ls	\$ 800,000.00	1	\$800,000			1	\$800,000
				Subtotal	\$3,103,444		\$7,000,000		\$10,103,444
9.0	Owners Costs								
9.1	Owners Costs	ls			Not Included		Not Included		
				Subtotal	\$0		\$0		\$0
10.0	Contingency								
10.1	Contingency				Not Included		Not Included		
				Subtotal	\$0		\$0		\$0
				Grand Total	\$24,043,842		\$48,572,583		\$72,616,425

TABLE 4
IDAHO GENERAL MINES, INC
MT. HOPE FEASIBILITY STUDY PHASE I
Tailing Storage Facility Alternative Siting Analysis
Site No. 1b (lower)

Work By Owner

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
1.0	Embankment Fill Placement								
1.1	Construction Temporary Haul Road	m	\$16.46	0	\$0	0	\$0	0	\$0
1.2	Extra Haul Over Waste Dump Temp Haul Road	m ³ /km	\$0.12	0	\$0	0	\$0	0	\$0
1.3	Extra Haul Over Waste Dump for Starter Embankment	m ³ /km	\$0.12	0	\$0	0	\$0	0	\$0
1.3	Place and Compact Mine Waste	m ³	\$0.00	0	\$0	0	\$0	0	\$0
	Sub-Total				\$0		\$0	0	\$0

Work By Contractor

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
2.0	Mobilization/Demobilization								
2.1	Mobilization		5%	\$13,807,686	\$690,384	\$52,211,609	\$2,610,580	66,019,295	\$3,300,965
2.2	Demobilization		2%	\$13,807,686	\$276,154	\$52,211,609	\$1,044,232	66,019,295	\$1,320,386
	Sub-Total				\$966,538		\$3,654,813	0	\$4,621,351
3.0	Earthworks								
3.1	Clearing and Grubbing	m ²	\$0.11	1,008,300	\$110,913	13,710,400	\$1,508,144	14,718,700	\$1,619,057
3.2	Topsoil Stripping	m ²	\$0.50	1,008,300	\$504,150	13,710,400	\$6,855,200	14,718,700	\$7,359,350
3.3	Embankment Foundation Excavation	m ³	\$1.65	44,000	\$72,600	403,050	\$665,033	447,050	\$737,633
3.4	Embankment Foundation Preparation	m ²	\$0.28	88,000	\$24,640	806,100	\$225,708	894,100	\$250,348
3.5	Embankment Prepared Subgrade	m ²	\$1.10	88,000	\$96,800	806,100	\$886,710	894,100	\$983,510
3.6	Embankment Foundation Finger Drains	m	\$21.89	2,933	\$64,211	26,870	\$588,184	29,803	\$652,395
3.7	Embankment Spine drain	m	\$86.74	200	\$17,348	470	\$40,768	670	\$58,116
3.8	Embankment Toe Drain	m ³	\$2.20	0	\$0	284,130	\$625,086	284,130	\$625,086
3.9	Embankment Construction (10 m wide crest)	m ³	\$0.39	1,057,596	\$412,462	0	\$0	1,057,596	\$412,462
3.10	Embankment Face Shaping	m ²	\$0.28	37,000	\$10,360	0	\$0	37,000	\$10,360
3.11	Basin Foundation Preparation	m ²	\$0.28	920,300	\$257,684	12,904,300	\$3,613,204	13,824,600	\$3,870,888
3.12	Basin Prepared Subgrade (300mm)	m ²	\$1.10	920,300	\$1,012,330	12,904,300	\$14,194,730	13,824,600	\$15,207,060
3.13	Basin Drain Blanket (400mm)	m ²	\$1.10	920,300	\$1,012,330	12,904,300	\$14,194,730	13,824,600	\$15,207,060
3.14	Basin Reclaim Slot Excavation	m ³	\$1.49	1,040,000	\$1,549,600	2,320,000	\$3,456,800	3,360,000	\$5,006,400
3.15	Basin Reclaim Slot Retarding Layer (200mm)	m ²	\$1.10	143,000	\$157,300	319,000	\$350,900	462,000	\$508,200
3.16	Basin Reclaim Slot Geotextile	m ²	\$1.38	286,000	\$394,680	638,000	\$880,440	924,000	\$1,275,120
3.17	Basin Reclaim Slot Erosion Protection (150mm)	m ²	\$0.50	143,000	\$71,500	319,000	\$159,500	462,000	\$231,000
3.18	Basin Drainage Collection Laterals (100 mm)	m	\$6.05	21,278	\$128,732	264,466	\$1,600,019	285,744	\$1,728,751
3.19	Basin Drainage Collection Headers (250mm)	m	\$27.94	2,128	\$59,451	26,447	\$738,929	28,575	\$798,380
3.20	Basin Drainage Collection Headers (300mm)	m	\$40.52	3,900	\$158,028	8,700	\$352,524	12,600	\$510,552
3.21	Basin Drainage Collection Headers (Solid HDPE 300 mm S	m	\$550.00	670	\$368,500	0	\$0	670	\$368,500
3.22	Highway Relocation	km	\$500,000.00	11	\$5,250,000	0	\$0	11	\$5,250,000
	Sub-Total				\$11,733,619		\$50,936,609		\$62,670,228
4.0	Seepage Collection Pond								
4.1	Clearing and Grubbing	m ²	\$0.11	30,000	\$3,300	0	\$0	30,000	\$3,300
4.2	Topsoil Stripping	m ²	\$0.76	30,000	\$22,800	0	\$0	30,000	\$22,800
4.3	Excavation to Fill/Waste	m ³	\$3.30	111,000	\$366,300	0	\$0	111,000	\$366,300
4.4	Prepared Subgrade	m ²	\$1.65	30,900	\$50,985	0	\$0	30,900	\$50,985
4.5	Geomembrane Liner and Geonet	m ²	\$5.76	61,800	\$355,968	0	\$0	61,800	\$355,968
4.6	Reclaim and Pumpback System	ls	\$50,000.00	1	\$50,000	0	\$0	1	\$50,000
	Sub-Total				\$849,353		\$0		\$849,353
5.0	Diversion Channels								
5.1	Minor Temporary Channels	m	\$19.00	0	\$0	0	\$0	0	\$0
5.2	Major Temporary Channels	m	\$87.00	6,513	\$566,631	26,712	\$2,323,944	33,225	\$2,890,575
5.3	Minor Permanent Channels	m	\$150.00	0	\$0	0	\$0	0	\$0
5.4	Major Permanent Channels	m	\$275.00	22,786	\$6,266,150	0	\$0	22,786	\$6,266,150
	Sub-Total				\$6,832,781		\$2,323,944		\$9,156,725
6.0	Tailing Delivery Line								
6.1	Delivery Line With Adjacent Access Road	ls	\$2,112,460.00	1	\$2,112,460	1	\$1,850,000	2	\$3,962,460
6.2	Adjacent Road and Trench	m	\$70.00	7,000	\$490,000	0	\$0	7,000	\$490,000
6.3	Valves and Fittings	ls	\$211,246.00	1	\$211,246	1	\$185,000	2	\$396,246
	Sub-Total				\$2,813,706		\$1,850,000		\$4,663,706
7.0	Reclaim System								
7.1	Reclaim System	ls	\$1,334,428.00	1	\$1,334,428	1	\$700,000	2	\$2,034,428
7.2	Sump at Mill	ls	\$30,000.00	0	\$0	0	\$0	0	\$0
7.3	Barge Costs	ls	\$250,000.00	1	\$250,000	0	\$0	1	\$250,000
7.4	Power Line Costs	km	\$100,000.00	4.1	\$410,000	0	\$0	4	\$410,000
7.5	Electrical Equipment	ls	\$100,000.00	1.0	\$100,000	0	\$0	1	\$100,000
	Sub-Total				\$2,094,428		\$700,000		\$2,794,428
	Grand Total				\$25,290,425		\$59,465,366		\$84,755,790
8.0	EPCM								
8.1	EPCM	ls	11%	25,290,425	\$2,781,947	1	\$8,000,000	25,290,426	\$10,781,947
8.2	Engineering Phase II and Phase III	ls	\$ 800,000.00	1	\$800,000	0	\$0	1	\$800,000
	Subtotal				\$3,581,947		\$8,000,000		\$11,581,947
9.0	Owners Costs								
9.1	Owners Costs	ls			Not Included		Not Included		
	Subtotal				\$0		\$0		\$0
10.0	Contingency								
10.1	Contingency				Not Included		Not Included		
	Subtotal				\$0		\$0		\$0
	Grand Total				\$28,872,371		\$67,465,366		\$96,337,737

**TABLE 5
IDAHO GENERAL MINES, INC
MT. HOPE FEASIBILITY STUDY PHASE I**

**Tailing Storage Facility Alternative Siting Analysis
Site No.1c (Lower)**

Work By Owner

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
1.0	Embankment Fill Placement								
1.1	Construction Temporary Haul Road	m	\$16.46	0	\$0	0	\$0	0	\$0
1.2	Extra Haul Over Waste Dump Temp Haul Road	m ³ /km	\$0.12	0	\$0	0	\$0	0	\$0
1.3	Extra Haul Over Waste Dump for Starter Embankment	m ³ /km	\$0.12	0	\$0	0	\$0	0	\$0
1.3	Place and Compact Mine Waste	m ³	\$0.00	0	\$0	0	\$0	0	\$0
				Sub-Total	\$0		\$0		\$0

Work By Contractor

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
2.0	Mobilization/Demobilization								
2.1	Mobilization		5%	\$13,807,686	\$690,384	\$46,721,870	\$2,336,093	60,529,556	\$3,026,478
2.2	Demobilization		2%	\$13,807,686	\$276,154	\$46,721,870	\$934,437	60,529,556	\$1,210,591
				Sub-Total	\$966,538		\$3,270,531		\$4,237,069
3.0	Earthworks								
3.1	Clearing and Grubbing	m ²	\$0.11	1,008,300	\$110,913	11,243,453	\$1,236,780	12,251,753	\$1,347,693
3.2	Topsoil Stripping	m ²	\$0.50	1,008,300	\$504,150	11,243,453	\$5,621,727	12,251,753	\$6,125,877
3.3	Embankment Foundation Excavation	m ³	\$1.65	44,000	\$72,600	293,941	\$485,002	337,941	\$557,602
3.4	Embankment Foundation Preparation	m ²	\$0.28	88,000	\$24,640	587,881	\$164,607	675,881	\$189,247
3.5	Embankment Prepared Subgrade	m ²	\$1.10	88,000	\$96,800	587,881	\$646,669	675,881	\$743,469
3.6	Embankment Foundation Finger Drains	m	\$21.89	2,933	\$64,211	19,596	\$428,957	22,529	\$493,168
3.7	Embankment Spine drain	m	\$86.74	200	\$17,348	470	\$40,768	670	\$58,116
3.8	Embankment Toe Drain	m ³	\$2.20	0	\$0	284,130	\$625,086	284,130	\$625,086
3.9	Embankment Construction (10 m wide crest)	m ³	\$0.39	1,057,596	\$412,462	0	\$0	1,057,596	\$412,462
3.10	Emankment Face Shaping	m ²	\$0.28	37,000	\$10,360	0	\$0	37,000	\$10,360
3.11	Basin Foundation Preparation	m ²	\$0.28	920,300	\$257,684	11,575,872	\$3,241,244	12,496,172	\$3,498,928
3.12	Basin Prepared Subgrade (300mm)	m ²	\$1.10	920,300	\$1,012,330	11,575,872	\$12,733,459	12,496,172	\$13,745,789
3.13	Basin Drain Blanket (400mm)	m ²	\$1.10	920,300	\$1,012,330	11,575,872	\$12,733,459	12,496,172	\$13,745,789
3.14	Basin Reclaim Slot Excavation	m ³	\$1.49	1,040,000	\$1,549,600	2,320,000	\$3,456,800	3,360,000	\$5,006,400
3.15	Basin Reclaim Slot Retarding Layer (200mm)	m ²	\$1.10	143,000	\$157,300	319,000	\$350,900	462,000	\$508,200
3.16	Basin Reclaim Slot Geotextile	m ²	\$1.38	286,000	\$394,680	638,000	\$880,440	924,000	\$1,275,120
3.17	Basin Reclaim Slot Erosion Protection (150mm)	m ²	\$0.50	143,000	\$71,500	319,000	\$159,500	462,000	\$231,000
3.18	Basin Drainage Collection Laterals (100 mm)	m	\$6.05	21,278	\$128,732	264,466	\$1,600,019	285,744	\$1,728,751
3.19	Basin Drainage Collection Headers (250mm)	m	\$27.94	2,128	\$59,451	26,447	\$738,929	28,575	\$798,380
3.20	Basin Drainage Collection Headers (300mm)	m	\$40.52	3,900	\$158,028	8,700	\$352,524	12,600	\$510,552
3.21	Basin Drainage Collection Headers (Solid HDPE 300 mm SDR 17)	m	\$550.00	670	\$368,500	0	\$0	670	\$368,500
3.22	Highway Relocation	km	\$500,000.00	11	\$5,250,000	0	\$0	11	\$5,250,000
				Sub-Total	\$11,733,619		\$45,496,870		\$57,230,489
4.0	Seepage Collection Pond								
4.1	Clearing and Grubbing	m ²	\$0.11	30,000	\$3,300	0	\$0	30,000	\$3,300
4.2	Topsoil Stripping	m ²	\$0.76	30,000	\$22,800	0	\$0	30,000	\$22,800
4.3	Excavation to Fill/Waste	m ³	\$3.30	111,000	\$366,300	0	\$0	111,000	\$366,300
4.4	Prepared Subgrade	m ²	\$1.65	30,900	\$50,985	0	\$0	30,900	\$50,985
4.5	Geomembrane Liner and Geonet	m ²	\$5.76	61,800	\$355,968	0	\$0	61,800	\$355,968
4.6	Reclaim and Pumpback System	ls	\$50,000.00	1	\$50,000	0	\$0	1	\$50,000
				Sub-Total	\$849,353		\$0		\$849,353
5.0	Diversion Channels								
5.1	Minor Temporary Channels	m	\$19.00	0	\$0	0	\$0	0	\$0
5.2	Major Temporary Channels	m	\$87.00	6,513	\$566,631	26,712	\$2,323,944	33,225	\$2,890,575
5.3	Minor Permanent Channels	m	\$150.00	0	\$0	0	\$0	0	\$0
5.4	Major Permanent Channels	m	\$275.00	22,786	\$6,266,150	0	\$0	22,786	\$6,266,150
				Sub-Total	\$6,832,781		\$2,323,944		\$9,156,725
6.0	Tailing Delivery Line								
6.1	Delivery Line With Adjacent Access Road	ls	\$2,112,460.00	1	\$2,112,460	1	\$1,750,000	2	\$3,862,460
6.2	Adjacent Road and Trench	m	\$70.00	7,000	\$490,000	0	\$0	7,000	\$490,000
6.3	Valves and Fittings	ls	\$211,246.00	1	\$211,246	1	\$175,000	2	\$386,246
				Sub-Total	\$2,813,706		\$1,750,000		\$4,563,706
7.0	Reclaim System								
7.1	Reclaim System	ls	\$1,334,428.00	1	\$1,334,428	1	\$700,000	2	\$2,034,428
7.2	Sump at Mill	ls	\$30,000.00	0	\$0	0	\$0	0	\$0
7.3	Barge Costs	ls	\$250,000.00	1	\$250,000	0	\$0	1	\$250,000
7.4	Power Line Costs	km	\$100,000.00	4.1	\$410,000	0	\$0	4	\$410,000
7.5	Electrical Equipment	ls	\$100,000.00	1.0	\$100,000	0	\$0	1	\$100,000
				Sub-Total	\$2,094,428		\$700,000		\$2,794,428
				Grand Total	\$25,290,425		\$53,541,345		\$78,831,770
8.0	EPCM								
8.1	EPCM	ls	11%	25,290,425	\$2,781,947	1	\$7,000,000	25,290,426	\$9,781,947
8.2	Engineering Phase II and Phase III	ls	\$ 800,000.00	1	\$800,000	0	\$0	1	\$800,000
				Subtotal	\$3,581,947		\$7,000,000		\$10,581,947
9.0	Owners Costs								
9.1	Owners Costs	ls			Not Included		Not Included		
				Subtotal	\$0		\$0		\$0
10.0	Contingency								
10.1	Contingency				Not Included		Not Included		
				Subtotal	\$0		\$0		\$0
				Grand Total	\$28,872,371		\$60,541,345		\$89,413,716

TABLE 6
IDAHO GENERAL MINES, INC
MT. HOPE FEASIBILITY STUDY PHASE I
Tailing Storage Facility Alternative Siting Analysis
Site No. 2

Work By Owner

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
1.0	Embankment Fill Placement								
1.1	Construction Temporary Haul Road	m	\$16.46	0	\$0	0	\$0	0	\$0
1.2	Extra Haul Over Waste Dump Temp Haul Road	m ³ /km	\$0.12	0	\$0	0	\$0	0	\$0
1.3	Extra Haul Over Waste Dump for Starter Embankment	m ³ /km	\$0.12	0	\$0	0	\$0	0	\$0
1.3	Place and Compact Mine Waste	m ³	\$0.21	0	\$0	0	\$0	0	\$0
				Sub-Total	\$0		\$0		\$0

Work By Contractor

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
2.0	Mobilization/Demobilization								
2.1	Mobilization		5%	\$14,152,717	\$707,636	\$52,185,015	\$2,609,251	66,337,732	\$3,316,887
2.2	Demobilization		2%	\$14,152,717	\$283,054	\$52,185,015	\$1,043,700	66,337,732	\$1,326,755
				Sub-Total	\$990,690		\$3,652,951		\$4,643,641
3.0	Earthworks								
3.1	Clearing and Grubbing	m ²	\$0.19	1,792,980	\$331,701	13,939,438	\$2,578,796	15,732,418	\$2,910,497
3.2	Topsoil Stripping	m ²	\$0.50	1,792,980	\$896,490	13,939,438	\$6,969,719	15,732,418	\$7,866,209
3.3	Embankment Foundation Excavation	m ³	\$1.65	154,231	\$254,480	995,430	\$1,642,459	1,149,660	\$1,896,939
3.4	Embankment Foundation Preparation	m ²	\$0.28	308,461	\$86,369	1,990,859	\$557,441	2,299,320	\$643,810
3.5	Embankment Prepared Subgrade	m ²	\$1.10	308,461	\$339,307			308,461	\$339,307
3.6	Embankment Foundation Finger Drains	m	\$21.89	10,282	\$225,074	66,362	\$1,452,663	76,644	\$1,677,737
3.7	Embankment Spine drain	m	\$86.74	100	\$8,674	300	\$26,022	400	\$34,696
3.8	Embankment Toe Drain	m ³	\$2.20	0	\$0	841,355	\$1,850,981	841,355	\$1,850,981
3.9	Embankment Construction (10 m wide crest)	m ³	\$0.39	2,202,284	\$858,891	0	\$0	2,202,284	\$858,891
3.10	Embankment Face Shaping	m ²	\$0.28	655,355	\$183,499			655,355	\$183,499
3.11	Basin Foundation Preparation	m ²	\$0.28	1,425,419	\$399,117	11,948,600	\$3,345,608	13,374,019	\$3,744,725
3.12	Basin Prepared Subgrade (300mm)	m ²	\$1.10	1,425,419	\$1,567,961	11,948,600	\$13,143,460	13,374,019	\$14,711,421
3.13	Basin Drain Blanket (400mm)	m ²	\$1.10	1,425,419	\$1,567,961	11,948,600	\$13,143,460	13,374,019	\$14,711,421
3.14	Basin Recalim Slot Excavation	m ³	\$1.49	648,000	\$965,520	1,993,600	\$2,970,464	2,641,600	\$3,935,984
3.15	Basin Reclaim Slot Retarding Layer (200mm)	m ²	\$1.10	90,396	\$99,436	278,107	\$305,918	368,503	\$405,353
3.16	Basin Reclaim Slot Geotextile	m ²	\$1.38	180,792	\$249,493	556,214	\$767,575	737,006	\$1,017,068
3.17	Basin Reclaim Slot Erosion Protection (150mm)	m ²	\$0.50	90,396	\$45,198	278,107	\$139,054	368,503	\$184,252
3.18	Basin Drainage Collection Laterals (100 mm)	m	\$6.05	28,508	\$172,476	238,972	\$1,445,781	267,480	\$1,618,256
3.19	Basin Drainage Collection Headers (250mm)	m	\$27.94	2,851	\$79,652	23,897	\$667,688	26,748	\$747,340
3.20	Basin Drainage Collection Headers (300mm)	m	\$40.52	2,430	\$98,464	7,476	\$302,928	9,906	\$401,391
3.21	Basin Drainage Collection Headers (Solid HDPE 300 mm SDR 17)	m	\$550.00	400	\$220,000	0	\$0	400	\$220,000
3.23	Relocation of Powerlines	km	\$250,000.00	11.5	\$2,875,000	0	\$0	12	\$2,875,000
				Sub-Total	\$11,524,763		\$51,310,015		\$62,834,778
4.0	Seepage Collection Pond								
4.1	Clearing and Grubbing	m ²	\$0.19	30,000	\$5,550	0	\$0	30,000	\$5,550
4.2	Topsoil Stripping	m ²	\$0.76	30,000	\$22,800	0	\$0	30,000	\$22,800
4.3	Excavation to Fill/Waste	m ³	\$3.30	111,000	\$366,300	0	\$0	111,000	\$366,300
4.4	Prepared Subgrade	m ²	\$1.65	30,900	\$50,985	0	\$0	30,900	\$50,985
4.5	Geomembrane Liner and Geonet	m ²	\$5.76	61,800	\$355,968	0	\$0	61,800	\$355,968
4.6	Reclaim and Pumpback System	ls	\$50,000.00	1	\$50,000	0	\$0	1	\$50,000
				Sub-Total	\$851,603		\$0		\$851,603
5.0	Diversion Channels								
5.1	Minor Temporary Channels	m	\$19.00	0	\$0	0	\$0	0	\$0
5.2	Major Temporary Channels	m	\$87.00	4,960	\$431,520	22,032	\$1,916,784	26,992	\$2,348,304
5.3	Minor Permanent Channels	m	\$150.00	18,050	\$2,707,500	0	\$0	18,050	\$2,707,500
5.4	Major Permanent Channels	m	\$275.00		\$0	0	\$0	0	\$0
				Sub-Total	\$3,139,020		\$0		\$3,139,020
6.0	Tailing Delivery Line								
6.1	Delivery Line With Adjacent Access Road	ls	\$3,255,150.00	1	\$3,255,150	1	\$1,050,000	2	\$4,305,150
6.2	Adjacent Access Road and Trench	m	\$70.00	5,400	\$378,000			5,400	\$378,000
6.3	Valves and Fittings	ls	\$162,757.50	1	\$162,758	1	\$105,000	2	\$267,758
				Sub-Total	\$3,795,908		\$1,050,000		\$4,845,908
7.0	Reclaim Line								
7.1	Reclaim Line	ls	\$1,460,000.00	1	\$1,460,000	1	\$700,000	2	\$2,160,000
7.2	Sump at Mill	ls	\$60,000.00	1	\$60,000			1	\$60,000
7.3	Barge Costs	ls	\$250,000.00	1	\$250,000		\$0	1	\$250,000
7.4	Power Line Costs	km	\$100,000.00	7.5	\$750,000		\$0	8	\$750,000
7.5	Electrical Equipment	ls	\$100,000.00	1.0	\$100,000		\$0	1	\$100,000
				Sub-Total	\$2,620,000		\$700,000		\$3,320,000
				Grand Total	\$22,921,984		\$56,712,966		\$79,634,950
8.0	EPCM								
8.1	EPCM	ls	11%	22,921,984	\$2,521,418	1	\$8,000,000	22,921,985	\$10,521,418
8.2	Engineering Phase II and Phase III	ls	\$ 800,000.00	1	\$800,000			1	\$800,000
				Subtotal	\$3,321,418		\$8,000,000		\$11,321,418
9.0	Owners Costs								
9.1	Owners Costs	ls			Not Included		Not Included		
				Subtotal	\$0		\$0		\$0
10.0	Contingency								
10.1	Contingency				Not Included		Not Included		
				Subtotal	\$0		\$0		\$0
				Grand Total	\$26,243,402		\$64,712,966		\$90,956,368

TABLE 7
IDAHO GENERAL MINES, INC
MT. HOPE FEASIBILITY STUDY PHASE I
Tailing Storage Facility Alternative Siting Analysis
Site No. 2a(Lower)

Work By Owner

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
1.0	Embankment Fill Placement								
1.1	Construction Temporary Haul Road	m	\$16.46	0	\$0	0	\$0	0	\$0
1.2	Extra Haul Over Waste Dump Temp Haul Road	m ³ /km	\$0.12	0	\$0	0	\$0	0	\$0
1.3	Extra Haul Over Waste Dump for Starter Embankment	m ³ /km	\$0.12	0	\$0	0	\$0	0	\$0
1.3	Place and Compact Mine Waste	m ³	\$0.21	0	\$0	0	\$0	0	\$0
				Sub-Total	\$0		\$0		\$0

Work By Contractor

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
2.0	Mobilization/Demobilization								
2.1	Mobilization		5%	\$11,741,237	\$587,062	\$33,409,705	\$1,670,485	45,150,942	\$2,257,547
2.2	Demobilization		2%	\$11,741,237	\$234,825	\$33,409,705	\$668,194	45,150,942	\$903,019
				Sub-Total	\$821,887		\$2,338,679		\$3,160,566
3.0	Earthworks								
3.1	Clearing and Grubbing	m ²	\$0.19	1,379,953	\$255,291	8,531,736	\$1,578,371	9,911,689	\$1,833,662
3.2	Topsoil Stripping	m ²	\$0.50	1,379,953	\$689,977	8,531,736	\$4,265,868	9,911,689	\$4,955,845
3.3	Embankment Foundation Excavation	m ³	\$1.65	142,875	\$235,744	743,500	\$1,226,775	886,375	\$1,462,519
3.4	Embankment Foundation Preparation	m ²	\$0.28	285,750	\$80,010	1,487,000	\$416,360	1,772,750	\$496,370
3.5	Embankment Prepared Subgrade	m ²	\$1.10	285,750	\$314,325			285,750	\$314,325
3.6	Embankment Foundation Finger Drains	m	\$21.89	9,525	\$208,502	49,567	\$1,085,014	59,092	\$1,293,517
3.7	Embankment Spine drain	m	\$86.74	100	\$8,674	300	\$26,022	400	\$34,696
3.8	Embankment Toe Drain	m ³	\$2.20	0	\$0	657,994	\$1,447,587	657,994	\$1,447,587
3.9	Embankment Construction (10 m wide crest)	m ³	\$0.39	2,500,000	\$975,000	0	\$0	2,500,000	\$975,000
3.10	Embankment Face Shaping	m ²	\$0.28	655,355	\$183,499			655,355	\$183,499
3.11	Basin Foundation Preparation	m ²	\$0.28	1,094,203	\$306,377	7,044,736	\$1,972,526	8,138,939	\$2,278,903
3.12	Basin Prepared Subgrade (300mm)	m ²	\$1.10	1,094,203	\$1,203,623	7,044,736	\$7,749,210	8,138,939	\$8,952,833
3.13	Basin Drain Blanket (400mm)	m ²	\$1.10	1,094,203	\$1,203,623	7,044,736	\$7,749,210	8,138,939	\$8,952,833
3.14	Basin Reclaim Slot Excavation	m ³	\$1.49	560,000	\$834,400	1,698,400	\$2,530,616	2,258,400	\$3,365,016
3.15	Basin Reclaim Slot Retarding Layer (200mm)	m ²	\$1.10	78,120	\$85,932	236,927	\$260,620	315,047	\$346,552
3.16	Basin Reclaim Slot Geotextile	m ²	\$1.38	156,240	\$215,611	473,854	\$653,919	630,094	\$869,530
3.17	Basin Reclaim Slot Erosion Protection (150mm)	m ²	\$0.50	78,120	\$39,060	236,927	\$118,464	315,047	\$157,524
3.18	Basin Drainage Collection Laterals (100 mm)	m	\$6.05	21,884	\$132,399	140,895	\$852,413	162,779	\$984,812
3.19	Basin Drainage Collection Headers (250mm)	m	\$27.94	2,188	\$61,144	14,089	\$393,660	16,278	\$454,804
3.20	Basin Drainage Collection Headers (300mm)	m	\$40.52	2,100	\$85,092	6,369	\$258,072	8,469	\$343,164
3.21	Basin Drainage Collection Headers (Solid HDPE 300 mm)	m	\$550.00	400	\$220,000	0	\$0	400	\$220,000
3.23	Relocation of Powerlines	km	\$250,000.00	7.1	\$1,775,000	0	\$0	7	\$1,775,000
				Sub-Total	\$9,113,283		\$32,584,705		\$41,697,989
4.0	Seepage Collection Pond								
4.1	Clearing and Grubbing	m ²	\$0.19	30,000	\$5,550	30,000	\$5,550	60,000	\$11,100
4.2	Topsoil Stripping	m ²	\$0.76	30,000	\$22,800	30,000	\$22,800	60,000	\$45,600
4.3	Excavation to Fill/Waste	m ³	\$3.30	111,000	\$366,300	111,000	\$366,300	222,000	\$732,600
4.4	Prepared Subgrade	m ²	\$1.65	30,900	\$50,985	30,900	\$50,985	61,800	\$101,970
4.5	Geomembrane Liner and Geonet	m ²	\$5.76	61,800	\$355,968	61,800	\$355,968	123,600	\$711,936
4.6	Reclaim and Pumpback System	ls	\$50,000.00	1	\$50,000	1	\$50,000	2	\$100,000
				Sub-Total	\$851,603		\$851,603		\$1,703,206
5.0	Diversion Channels								
5.1	Minor Temporary Channels	m	\$19.00	0	\$0	0	\$0	0	\$0
5.2	Major Temporary Channels	m	\$87.00	4,960	\$431,520		\$0	4,960	\$431,520
5.3	Minor Permanent Channels	m	\$150.00	18,050	\$2,707,500	0	\$0	18,050	\$2,707,500
5.4	Major Permanent Channels	m	\$275.00		\$0	0	\$0	0	\$0
				Sub-Total	\$3,139,020				\$3,139,020
6.0	Tailing Delivery Line								
6.1	Delivery Line With Adjacent Access Road	ls	\$3,255,150.00	1	\$3,255,150	1	\$1,050,000	2	\$4,305,150
6.2	Adjacent Access Road and Trench	m	\$70.00	5,400	\$378,000		\$0	5,400	\$378,000
6.3	Valves and Fittings	ls	\$162,757.50	1	\$162,758	1	\$105,000	2	\$267,758
				Sub-Total	\$3,795,908		\$1,050,000		\$4,845,908
7.0	Reclaim Line								
7.1	Reclaim Line	ls	\$1,460,000.00	1	\$1,460,000	1	\$600,000	2	\$2,060,000
7.2	Sump at Mill	ls	\$60,000.00	1	\$60,000		\$0	1	\$60,000
7.3	Barge Costs	ls	\$250,000.00	1	\$250,000		\$0	1	\$250,000
7.4	Power Line Costs	km	\$100,000.00	7.5	\$750,000		\$0	8	\$750,000
7.5	Electrical Equipment	ls	\$100,000.00	1.0	\$100,000		\$0	1	\$100,000
				Sub-Total	\$2,620,000		\$600,000		\$3,220,000
				Grand Total	\$20,341,701		\$37,424,987		\$57,766,688
8.0	EPCM								
8.1	EPCM	ls	11%	20,341,701	\$2,237,587	1	\$8,000,000	20,341,702	\$10,237,587
8.2	Engineering Phase II and Phase III	ls	\$ 800,000.00	1	\$800,000		\$0	1	\$800,000
				Subtotal	\$3,037,587		\$8,000,000		\$11,037,587
9.0	Owners Costs								
9.1	Owners Costs	ls			Not Included		Not Included		
				Subtotal	\$0		\$0		\$0
10.0	Contingency								
10.1	Contingency				Not Included		Not Included		
				Subtotal	\$0		\$0		\$0
				Grand Total	\$23,379,288		\$45,424,987		\$68,804,275

TABLE 8
IDAHO GENERAL MINES, INC
MT. HOPE FEASIBILITY STUDY PHASE I
Tailing Storage Facility Alternative Siting Analysis
Site No. 3

Work By Owner

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
1.0	Embankment Fill Placement								
1.1	Construction Temporary Haul Road	m	\$16.46	0	\$0	0	\$0	0	\$0
1.2	Extra Haul Over Waste Dump Temp Haul Road	m ³ /km	\$0.12	0	\$0	0	\$0	0	\$0
1.3	Extra Haul Over Waste Dump for Starter Embankment	m ³ /km	\$0.12	0	\$0	0	\$0	0	\$0
1.4	Place and Compact Mine Waste	m ³	\$0.21	0	\$0	0	\$0	0	\$0
				Sub-Total	\$0		\$0		\$0

Work By Contractor

Item	Description	Units	Unit Rate	Starter Facility		Ultimate Facility		Total Facility	
				Quantity	Total (US\$)	Quantity	Total (US\$)	Quantity	Total (US\$)
2.0	Mobilization/Demobilization								
2.1	Mobilization		5%	\$8,351,539	\$417,577	\$2,891,147	\$144,557	11,242,685	\$562,134
2.2	Demobilization		2%	\$8,351,539	\$167,031	\$2,108,984	\$42,180	10,460,523	\$209,210
				Sub-Total	\$584,608		\$186,737		\$771,345
3.0	Earthworks								
3.1	Clearing and Grubbing	m ²	\$0.06	1,531,550	\$88,064	12,914,510	\$742,584	14,446,060	\$830,648
3.2	Topsoil Stripping	m ²	\$0.45	1,531,550	\$689,198	12,914,510	\$5,811,530	14,446,060	\$6,500,727
3.3	Embankment Foundation Excavation	m ³	\$1.50	153,750	\$230,625	1,197,773	\$1,796,659	1,351,523	\$2,027,284
3.4	Embankment Foundation Preparation	m ²	\$0.25	307,500	\$76,875	2,395,545	\$598,886	2,703,045	\$675,761
3.5	Embankment Prepared Subgrade	m ²	\$1.00	307,500	\$307,500	2,395,545	\$2,395,545	2,703,045	\$2,703,045
3.6	Embankment Foundation Finger Drains	m	\$19.90	10,250	\$203,975		\$0	10,250	\$203,975
3.7	Embankment Spine drain	m	\$78.85	120	\$9,462	330	\$26,021	450	\$35,483
3.8	Embankment Toe Drain	m ³	\$3.50	0	\$0	1,162,238	\$4,067,833	1,162,238	\$4,067,833
3.9	Embankment Construction	m ³	\$1.50	2,346,164	\$3,519,246	0	\$0	2,346,164	\$3,519,246
3.10	Embankment Face Shaping	m ²	\$0.25	135,800	\$33,950		\$0	135,800	\$33,950
3.11	Basin Foundation Preparation	m ²	\$0.25	1,224,050	\$306,013	10,518,965	\$2,629,741	11,743,015	\$2,935,754
3.12	Basin Prepared Subgrade (300mm)	m ²	\$1.00	1,224,050	\$1,224,050	10,518,965	\$10,518,965	11,743,015	\$11,743,015
3.13	Basin Drain Blanket (400mm)	m ²	\$1.00	1,224,050	\$1,224,050	10,518,965	\$10,518,965	11,743,015	\$11,743,015
3.14	Basin Reclaim Slot Excavation	m ³	\$1.35	576,000	\$777,600	1,624,000	\$2,192,400	2,200,000	\$2,970,000
3.15	Basin Reclaim Slot Retarding Layer (200mm)	m ²	\$1.00	79,200	\$79,200	223,300	\$223,300	302,500	\$302,500
3.16	Basin Reclaim Slot Geotextile	m ²	\$1.25	158,400	\$198,000	446,600	\$558,250	605,000	\$756,250
3.17	Basin Reclaim Slot Erosion Protection (150mm)	m ²	\$0.45	79,200	\$35,640	223,300	\$100,485	302,500	\$136,125
3.18	Basin Drainage Collection Laterals (100 mm)	m	\$5.05	26,065	\$131,628	214,845	\$1,084,967	240,910	\$1,216,596
3.19	Basin Drainage Collection Headers (250mm)	m	\$25.40	2,607	\$66,205	21,485	\$545,706	24,091	\$611,911
3.20	Basin Drainage Collection Headers (300mm)	m	\$36.84	2,160	\$79,574	6,090	\$224,356	8,250	\$303,930
3.21	Basin Drainage Collection Headers (Solid HDPE 300 mm SDR 17)	m	\$500.00	450	\$225,000		\$0	450	\$225,000
				Sub-Total	\$9,505,855		\$44,036,193		\$53,542,048
4.0	Seepage Collection Pond								
4.1	Clearing and Grubbing	m ²	\$0.06	30,000	\$1,725	0	\$0	30,000	\$1,725
4.2	Topsoil Stripping	m ²	\$0.69	30,000	\$20,700	0	\$0	30,000	\$20,700
4.3	Excavation to Fill/Waste	m ³	\$3.00	111,000	\$333,000	0	\$0	111,000	\$333,000
4.4	Prepared Subgrade	m ²	\$1.50	30,900	\$46,350	0	\$0	30,900	\$46,350
4.5	Geomembrane Liner and Geonet	m ²	\$5.25	61,800	\$324,450	0	\$0	61,800	\$324,450
4.6	Reclaim and Pumpback System	ls	\$45,000.00	1	\$45,000	0	\$0	1	\$45,000
				Sub-Total	\$771,225		\$0		\$771,225
5.0	Diversion Channels								
5.1	Minor Temporary Channels	m	\$17.00	0	\$0	0	\$0	0	\$0
5.2	Major Temporary Channels	m	\$79.00	4,593	\$362,847	26,696	\$2,108,984	31,289	\$2,471,831
5.3	Minor Permanent Channels	m	\$136.00	0	\$0	0	\$0	0	\$0
5.4	Major Permanent Channels	m	\$250.00	14,403	\$3,600,750	0	\$0	14,403	\$3,600,750
				Sub-Total	\$3,963,597		\$2,108,984		\$6,072,581
6.0	Tailing Delivery Line								
6.1	Delivery Line	ls	\$3,696,510.00	1	\$3,696,510	1	\$785,750	2	\$4,482,260
6.2	Adjacent Access Road and Trench	m	\$70.00	7,214	\$504,980		\$0	7,214	\$504,980
6.3	Valves and Fittings	ls	\$369,651.00	1	\$369,651	1	\$78,575	2	\$448,226
6.4	Culvert Crossings	m	\$1,650.00	30	\$49,500		\$0	30	\$49,500
6.5	Sump at Low Point	ls	\$50,000.00	1	\$50,000		\$0	1	\$50,000
				Sub-Total	\$4,670,641		\$864,325		\$5,534,966
7.0	Reclaim Line								
7.1	Reclaim Line	ls	\$2,112,792.00	1	\$2,112,792	1	\$700,000	2	\$2,812,792
7.2	Sump at Low Point	ls	\$50,000.00	1	\$50,000		\$0	1	\$50,000
7.3	Barge Costs	ls	\$250,000.00	1	\$250,000		\$0	1	\$250,000
7.4	Power Line Costs	km	\$100,000.00	7.0	\$700,000		\$0	7	\$700,000
7.5	Electrical Equipment	ls	\$100,000.00	1.0	\$100,000		\$0	1	\$100,000
				Sub-Total	\$3,212,792		\$700,000		\$3,912,792
				Grand Total	\$22,708,718		\$47,896,239		\$70,604,956
8.0	EPCM								
8.1	EPCM	ls	11%	22,708,718	\$2,497,959	1	\$8,000,000	22,708,719	\$10,497,959
8.2	Engineering Phase II and Phase III	ls	\$ 800,000.00	1	\$800,000		\$0	1	\$800,000
				Subtotal	\$3,297,959		\$8,000,000		\$11,297,959
9.0	Owners Costs								
9.1	Owners Costs	ls			Not Included		Not Included		
				Subtotal	\$0		\$0		\$0
10.0	Contingency								
10.1	Contingency				Not Included		Not Included		
				Subtotal	\$0		\$0		\$0
				Grand Total	\$26,006,677		\$55,896,239		\$81,902,915

Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Year 41	Year 42	Year 43	Year 44	Year 45	Year 46	Year 47	Year 48	Year 49	Year 50	Year 51	Year 52	Year 53	Year 54	Year 55	Year 56	Year 57	Year 58	Year 59	Year 60	Year 61	Year 62	Year 63	Year 64	Year 65																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
\$1,743,829	\$1,713,702	\$1,683,575	\$1,653,448	\$1,623,321	\$1,593,194	\$1,563,067	\$1,532,940	\$1,502,813	\$1,472,686	\$1,442,559	\$1,412,432	\$1,382,305	\$1,352,178	\$1,322,051	\$1,291,924	\$1,261,797	\$1,231,670	\$1,201,543	\$1,171,416	\$1,141,289	\$1,111,162	\$1,081,035	\$1,050,908	\$1,020,781	\$990,654	\$960,527	\$930,400	\$900,273	\$870,146	\$840,019	\$809,892	\$779,765	\$749,638	\$719,511	\$689,384	\$659,257	\$629,130	\$599,003	\$568,876	\$538,749	\$508,622	\$478,495	\$448,368	\$418,241	\$388,114	\$357,987	\$327,860	\$297,733	\$267,606	\$237,479	\$207,352	\$177,225	\$147,098	\$116,971	\$86,844	\$56,717	\$26,590	\$-3,537	\$-33,664	\$-63,791	\$-93,918	\$-124,045	\$-154,172	\$-184,299	\$-214,426	\$-244,553	\$-274,680	\$-304,807	\$-334,934	\$-365,061	\$-395,188	\$-425,315	\$-455,442	\$-485,569	\$-515,696	\$-545,823	\$-575,950	\$-606,077	\$-636,204	\$-666,331	\$-696,458	\$-726,585	\$-756,712	\$-786,839	\$-816,966	\$-847,093	\$-877,220	\$-907,347	\$-937,474	\$-967,601	\$-997,728	\$-1,027,855	\$-1,057,982	\$-1,088,109	\$-1,118,236	\$-1,148,363	\$-1,178,490	\$-1,208,617	\$-1,238,744	\$-1,268,871	\$-1,298,998	\$-1,329,125	\$-1,359,252	\$-1,389,379	\$-1,419,506	\$-1,449,633	\$-1,479,760	\$-1,509,887	\$-1,539,914	\$-1,569,941	\$-1,599,968	\$-1,629,995	\$-1,659,995	\$-1,689,995	\$-1,719,995	\$-1,749,995	\$-1,779,995	\$-1,809,995	\$-1,839,995	\$-1,869,995	\$-1,899,995	\$-1,929,995	\$-1,959,995	\$-1,989,995	\$-2,019,995	\$-2,049,995	\$-2,079,995	\$-2,109,995	\$-2,139,995	\$-2,169,995	\$-2,199,995	\$-2,229,995	\$-2,259,995	\$-2,289,995	\$-2,319,995	\$-2,349,995	\$-2,379,995	\$-2,409,995	\$-2,439,995	\$-2,469,995	\$-2,499,995	\$-2,529,995	\$-2,559,995	\$-2,589,995	\$-2,619,995	\$-2,649,995	\$-2,679,995	\$-2,709,995	\$-2,739,995	\$-2,769,995	\$-2,799,995	\$-2,829,995	\$-2,859,995	\$-2,889,995	\$-2,919,995	\$-2,949,995	\$-2,979,995	\$-3,009,995	\$-3,039,995	\$-3,069,995	\$-3,099,995	\$-3,129,995	\$-3,159,995	\$-3,189,995	\$-3,219,995	\$-3,249,995	\$-3,279,995	\$-3,309,995	\$-3,339,995	\$-3,369,995	\$-3,399,995	\$-3,429,995	\$-3,459,995	\$-3,489,995	\$-3,519,995	\$-3,549,995	\$-3,579,995	\$-3,609,995	\$-3,639,995	\$-3,669,995	\$-3,699,995	\$-3,729,995	\$-3,759,995	\$-3,789,995	\$-3,819,995	\$-3,849,995	\$-3,879,995	\$-3,909,995	\$-3,939,995	\$-3,969,995	\$-3,999,995	\$-4,029,995	\$-4,059,995	\$-4,089,995	\$-4,119,995	\$-4,149,995	\$-4,179,995	\$-4,209,995	\$-4,239,995	\$-4,269,995	\$-4,299,995	\$-4,329,995	\$-4,359,995	\$-4,389,995	\$-4,419,995	\$-4,449,995	\$-4,479,995	\$-4,509,995	\$-4,539,995	\$-4,569,995	\$-4,599,995	\$-4,629,995	\$-4,659,995	\$-4,689,995	\$-4,719,995	\$-4,749,995	\$-4,779,995	\$-4,809,995	\$-4,839,995	\$-4,869,995	\$-4,899,995	\$-4,929,995	\$-4,959,995	\$-4,989,995	\$-5,019,995	\$-5,049,995	\$-5,079,995	\$-5,109,995	\$-5,139,995	\$-5,169,995	\$-5,199,995	\$-5,229,995	\$-5,259,995	\$-5,289,995	\$-5,319,995	\$-5,349,995	\$-5,379,995	\$-5,409,995	\$-5,439,995	\$-5,469,995	\$-5,499,995	\$-5,529,995	\$-5,559,995	\$-5,589,995	\$-5,619,995	\$-5,649,995	\$-5,679,995	\$-5,709,995	\$-5,739,995	\$-5,769,995	\$-5,799,995	\$-5,829,995	\$-5,859,995	\$-5,889,995	\$-5,919,995	\$-5,949,995	\$-5,979,995	\$-6,009,995	\$-6,039,995	\$-6,069,995	\$-6,099,995	\$-6,129,995	\$-6,159,995	\$-6,189,995	\$-6,219,995	\$-6,249,995	\$-6,279,995	\$-6,309,995	\$-6,339,995	\$-6,369,995	\$-6,399,995	\$-6,429,995	\$-6,459,995	\$-6,489,995	\$-6,519,995	\$-6,549,995	\$-6,579,995	\$-6,609,995	\$-6,639,995	\$-6,669,995	\$-6,699,995	\$-6,729,995	\$-6,759,995	\$-6,789,995	\$-6,819,995	\$-6,849,995	\$-6,879,995	\$-6,909,995	\$-6,939,995	\$-6,969,995	\$-6,999,995	\$-7,029,995	\$-7,059,995	\$-7,089,995	\$-7,119,995	\$-7,149,995	\$-7,179,995	\$-7,209,995	\$-7,239,995	\$-7,269,995	\$-7,299,995	\$-7,329,995	\$-7,359,995	\$-7,389,995	\$-7,419,995	\$-7,449,995	\$-7,479,995	\$-7,509,995	\$-7,539,995	\$-7,569,995	\$-7,599,995	\$-7,629,995	\$-7,659,995	\$-7,689,995	\$-7,719,995	\$-7,749,995	\$-7,779,995	\$-7,809,995	\$-7,839,995	\$-7,869,995	\$-7,899,995	\$-7,929,995	\$-7,959,995	\$-7,989,995	\$-8,019,995	\$-8,049,995	\$-8,079,995	\$-8,109,995	\$-8,139,995	\$-8,169,995	\$-8,199,995	\$-8,229,995	\$-8,259,995	\$-8,289,995	\$-8,319,995	\$-8,349,995	\$-8,379,995	\$-8,409,995	\$-8,439,995	\$-8,469,995	\$-8,499,995	\$-8,529,995	\$-8,559,995	\$-8,589,995	\$-8,619,995	\$-8,649,995	\$-8,679,995	\$-8,709,995	\$-8,739,995	\$-8,769,995	\$-8,799,995	\$-8,829,995	\$-8,859,995	\$-8,889,995	\$-8,919,995	\$-8,949,995	\$-8,979,995	\$-9,009,995	\$-9,039,995	\$-9,069,995	\$-9,099,995	\$-9,129,995	\$-9,159,995	\$-9,189,995	\$-9,219,995	\$-9,249,995	\$-9,279,995	\$-9,309,995	\$-9,339,995	\$-9,369,995	\$-9,399,995	\$-9,429,995	\$-9,459,995	\$-9,489,995	\$-9,519,995	\$-9,549,995	\$-9,579,995	\$-9,609,995	\$-9,639,995	\$-9,669,995	\$-9,699,995	\$-9,729,995	\$-9,759,995	\$-9,789,995	\$-9,819,995	\$-9,849,995	\$-9,879,995	\$-9,909,995	\$-9,939,995	\$-9,969,995	\$-9,999,995	\$-10,029,995	\$-10,059,995	\$-10,089,995	\$-10,119,995	\$-10,149,995	\$-10,179,995	\$-10,209,995	\$-10,239,995	\$-10,269,995	\$-10,299,995	\$-10,329,995	\$-10,359,995	\$-10,389,995	\$-10,419,995	\$-10,449,995	\$-10,479,995	\$-10,509,995	\$-10,539,995	\$-10,569,995	\$-10,599,995	\$-10,629,995	\$-10,659,995	\$-10,689,995	\$-10,719,995	\$-10,749,995	\$-10,779,995	\$-10,809,995	\$-10,839,995	\$-10,869,995	\$-10,899,995	\$-10,929,995	\$-10,959,995	\$-10,989,995	\$-11,019,995	\$-11,049,995	\$-11,079,995	\$-11,109,995	\$-11,139,995	\$-11,169,995	\$-11,199,995	\$-11,229,995	\$-11,259,995	\$-11,289,995	\$-11,319,995	\$-11,349,995	\$-11,379,995	\$-11,409,995	\$-11,439,995	\$-11,469,995	\$-11,499,995	\$-11,529,995	\$-11,559,995	\$-11,589,995	\$-11,619,995	\$-11,649,995	\$-11,679,995	\$-11,709,995	\$-11,739,995	\$-11,769,995	\$-11,799,995	\$-11,829,995	\$-11,859,995	\$-11,889,995	\$-11,919,995	\$-11,949,995	\$-11,979,995	\$-12,009,995	\$-12,039,995	\$-12,069,995	\$-12,099,995	\$-12,129,995	\$-12,159,995	\$-12,189,995	\$-12,219,995	\$-12,249,995	\$-12,279,995	\$-12,309,995	\$-12,339,995	\$-12,369,995	\$-12,399,995	\$-12,429,995	\$-12,459,995	\$-12,489,995	\$-12,519,995	\$-12,549,995	\$-12,579,995	\$-12,609,995	\$-12,639,995	\$-12,669,995	\$-12,699,995	\$-12,729,995	\$-12,759,995	\$-12,789,995	\$-12,819,995	\$-12,849,995	\$-12,879,995	\$-12,909,995	\$-12,939,995	\$-12,969,995	\$-12,999,995	\$-13,029,995	\$-13,059,995	\$-13,089,995	\$-13,119,995	\$-13,149,995	\$-13,179,995	\$-13,209,995	\$-13,239,995	\$-13,269,995	\$-13,299,995	\$-13,329,995	\$-13,359,995	\$-13,389,995	\$-13,419,995	\$-13,449,995	\$-13,479,995	\$-13,509,995	\$-13,539,995	\$-13,569,995	\$-13,599,995	\$-13,629,995	\$-13,659,995	\$-13,689,995	\$-13,719,995	\$-13,749,995	\$-13,779,995	\$-13,809,995	\$-13,839,995	\$-13,869,995	\$-13,899,995	\$-13,929,995	\$-13,959,995	\$-13,989,995	\$-14,019,995	\$-14,049,995	\$-14,079,995	\$-14,109,995	\$-14,139,995	\$-14,169,995	\$-14,199,995	\$-14,229,995	\$-14,259,995	\$-14,289,995	\$-14,319,995	\$-14,349,995	\$-14,379,995	\$-14,409,995	\$-14,439,995	\$-14,469,995	\$-14,499,995	\$-14,529,995	\$-14,559,995	\$-14,589,995	\$-14,619,995	\$-14,649,995	\$-14,679,995	\$-14,709,995	\$-14,739,995	\$-14,769,995	\$-14,799,995	\$-14,829,995	\$-14,859,995	\$-14,889,995	\$-14,919,995	\$-14,949,995	\$-14,979,995	\$-15,009,995	\$-15,039,995	\$-15,069,995	\$-15,099,995	\$-15,129,995	\$-15,159,995	\$-15,189,995	\$-15,219,995	\$-15,249,995	\$-15,279,995	\$-15,309,995	\$-15,339,995	\$-15,369,995	\$-15,399,995	\$-15,429,995	\$-15,459,995	\$-15,489,995	\$-15,519,995	\$-15,549,995	\$-15,579,995	\$-15,609,995	\$-15,639,995	\$-15,669,995	\$-15,699,995	\$-15,729,995	\$-15,759,995	\$-15,789,995	\$-15,819,995	\$-15,849,995	\$-15,879,995	\$-15,909,995	\$-15,939,995	\$-15,969,995	\$-15,999,995	\$-16,029,995	\$-16,059,995	\$-16,089,995	\$-16,119,995	\$-16,149,995	\$-16,179,995	\$-16,209,995	\$-16,239,995	\$-16,269,995	\$-16,299,995	\$-16,329,995	\$-16,359,995	\$-16,389,995	\$-16,419,995	\$-16,449,995	\$-16,479,995	\$-16,509,995	\$-16,539,995	\$-16,569,995	\$-16,599,995	\$-16,629,995	\$-16,659,995	\$-16,689,995	\$-16,719,995	\$-16,749,995	\$-16,779,995	\$-16,809,995	\$-16,839,995	\$-16,869,995	\$-16,899,995	\$-16,929,995	\$-16,959,995	\$-16,989,995	\$-17,019,995	\$-17,049,995	\$-17,079,995	\$-17,109,995	\$-17,139,995	\$-17,169,995	\$-17,199,995	\$-17,229,995	\$-17,259,995	\$-17,289,995	\$-17,319,995	\$-17,349,995	\$-17,379,995	\$-17,409,995	\$-17,439,995	\$-17,469,995	\$-17,499,995	\$-17,529,995	\$-17,559,995	\$-17,589,995	\$-17,619,995	\$-17,649,995	\$-17,679,995	\$-17,709,995	\$-17,739,995	\$-17,769,995	\$-17,799,995	\$-17,829,995	\$-17,859,995	\$-17,889,995	\$-17,919,995	\$-17,949,995	\$-17,979,995	\$-18,009,995	\$-18,039,995	\$-18,069,995	\$-18,099,995	\$-18,129,995	\$-18,159,995	\$-18,189,995	\$-18,219,995	\$-18,249,995	\$-18,279,995	\$-18,309,995	\$-18,339,995	\$-18,369,995	\$-18,399,995	\$-18,429,995	\$-18,459,995	\$-18,489,995	\$-18,519,995	\$-18,549,995	\$-18,579,995	\$-18,609,995	\$-18,639,995	\$-18,669,995	\$-18,699,995	\$-18,729,995	\$-18,759,995	\$-18,789,995	\$-18,819,995	\$-18,849,995	\$-18,879,995	\$-18,909,995	\$-18,939,995	\$-18,969,995	\$-18,999,995	\$-19,029,995	\$-19,059,995	\$-19,089,995	\$-19,119,995	\$-19,149,995	\$-19,179,995	\$-19,209,995	\$-19,239,995	\$-19,269,995	\$-19,299,995	\$-19,329,995	\$-19,359,995	\$-19,389,995	\$-19,419,995	\$-19,449,995	\$-19,479,995	\$-19,509,995	\$-19,539,995	\$-19,569,995	\$-19,599,995	\$-19,629,995	\$-19,659,995	\$-19,689,995	\$-19,719,995	\$-19,749,995	\$-19,779,995	\$-19,809,995	\$-19,839,995	\$-19,869,995	\$-19,899,995	\$-19,929,995	\$-19,959,995	\$-19,989,995	\$-20,019,995	\$-20,049,995	\$-20,079,995	\$-20,109,995	\$-20,139,995	\$-20,169,995	\$-20,199,995	\$-20,229,995

TABLE 9
IDAHO GENERAL MINES, INC
MT HOPE FEASIBILITY STUDY PHASE I

Tailing Storage Facility Alternative Analysis
Decision Matrix

Alternative	NPV (7%)	Initial Capital Cost	Operating Cost	NPV (20%)	Initial Capital (25%)	Operating Cost (15%)	Permit Time (15%)	Land Position (10%)	Environmental (7.5%)	Technical (7.5%)	Score	Overall Rank
No.1	\$60,229,497	\$24,400,635	\$106,904,120	0.95	5.30	1.56		1	6.6	7.0	268	4
No.1a (two facilities)	\$60,337,198	\$13,104,921	\$101,830,620	1.00	1.00	1.03		1	7.0	5.5	144	1
No.1b	\$64,772,179	\$28,872,371	\$106,677,820	3.22	7.00	1.54		2	6.1	7.3	319	7
No. 1c (two facilities)	\$63,562,890	\$13,104,921	\$101,544,460	2.62	1.00	1.00		2	6.6	9.4	180	3
No.2	\$72,301,922	\$26,243,402	\$158,862,600	7.00	6.00	7.00		4	1.0	1.0	310	6
No.2a (two facilities)	\$63,216,101	\$13,104,921	\$138,101,400	2.44	1.00	4.83		4	2.3	1.6	167	2
No.3	\$64,221,387	\$26,006,677	\$116,499,240	2.95	5.91	2.57		3	1.6	6.2	275	5

Rating Criteria

Alternatives rated from 1 to 7, with 1 being best

Costs were rated with a formula that compared the cost of each alternative based on the difference of the costs between the highest priced and lowest alternatives priced. This was used as to not penalize alternatives that were extremely close in cost.

Site Descriptions:

Alternative 1: One large site along the Highway.

Alternative 1a: One upper site and one smaller lower site along the Highway.

Alternative 1b: One large site that uses Highway 278 causing relocation of the Highway

Alternative 1c: Lower site that uses Highway 278 causing relocation of the road and creates a smaller upper site.

Alternative 2: One large site that is West of the pit.

Alternative 2a: One upper site and one site West of the pit (over the divide in Kobeh Valley).

Alternative 3. One large pit that is Southeast of the Pit. This crosses Highway 278 but doesn't require relocation of the Highway.

Table 11
IDAHO GENERAL MINES, INC
MT HOPE FEASIBILITY STUDY PHASE I

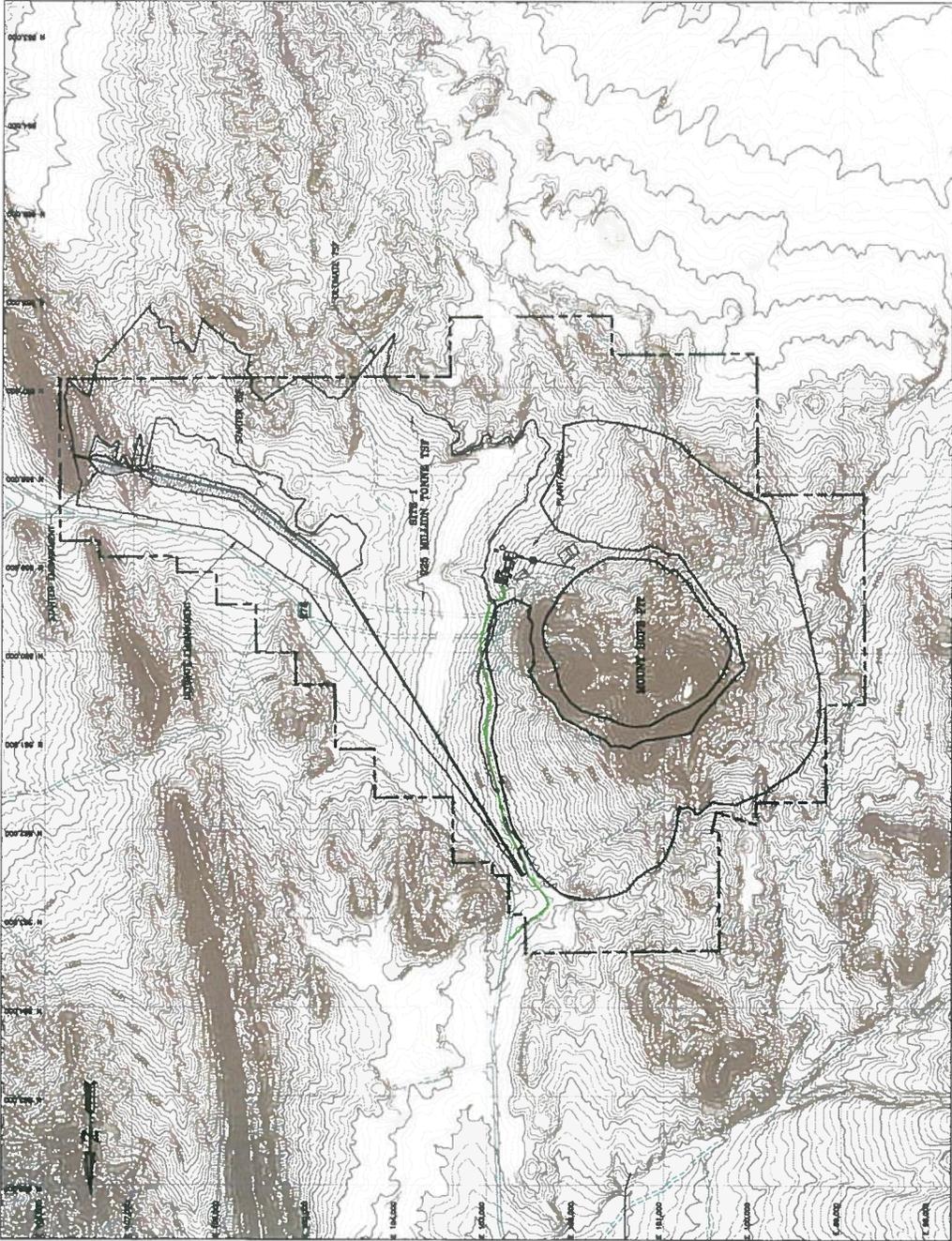
Tailing Storage Facility Alternative Analysis
Environmental Considerations (Sub-Scores)

Site	Visual Impact	Impacted Culture Resources	Fugitive Dust Visual Impact	Ground Water	Surface Water	Vegetation	Raw Score	Rating
1	6.50	3	5.5	6	5	2	28.00	6.6
1a	6.50	3.5	5.5	6	4.5	3	29.00	7.0
1b	5.00	3.5	4	6	6.5	2	27.00	6.1
1c	5.00	3.5	4	6	6.5	3	28.00	6.6
2	1.00	4	2	3	2	3	15.00	1.0
2a	2.50	4	2.5	4	2	3	18.00	2.3
3	3.00	2	3.5	3	3	2	16.50	1.6

Table 12
IDAHO GENERAL MINES, INC
MT HOPE FEASIBILITY STUDY PHASE I

Tailing Storage Facility Alternative Analysis
Technical Considerations (Sub-Score)

Site	Sand Volume	Surface Water Hydrology	Depth to GW	Topo	Location From Mill	Operating Ease	Geotechnical Risk	Impacts on Other Facilities	Raw Score	Rating
1	5.52	4	5.5	1.5	2	1.5	5.5	5	30.52	7.0
1a	5.43	3.5	5.5	1.5	1.5	2	5.5	4	28.93	5.5
1b	2.30	6.5	5.5	2	3	2	3.5	6	30.80	7.3
1c	4.62	6.5	5.5	2	2.5	2.5	3.5	6	33.12	9.4
2	4.62	2	1.5	4	4	5	2	1	24.12	1.0
2a	5.29	2	2	3.5	4	4	2.5	1.5	24.79	1.6
3	5.15	3	3.5	2.5	6	5	2.5	2	29.65	6.2



- LEGEND:**
- EXISTING GROUND SURFACE CONTOUR AND CL FEET
 - EXISTING PAVED ROAD
 - EXISTING UNPAVED ROAD
 - EXISTING TRAIL
 - EXISTING STREAM OR DRAINAGE
 - PROPERTY BOUNDARY
 - RAIL DISPOSAL BOUNDARY

TSF STATISTICS

TSF & Embankment Footprint Area (M ²)	15,432,482
Volume of TSF and Embankment (M ³)	765,724,746
Volume of Embankment (M ³)	125,840,715
Capacity of Embankment (TONNES)	201,345,144
Embankment Elevation (M)	2,015
TSF Volume (M ³)	639,884,029
Capacity of TSF (TONNES)	831,849,236
Starter Embankment Volume (M ³)	5,768,023
Starter Embankment Elevation (M)	1,910
Starter Embankment Capacity (TONNES)	9,225,637
Starter TSF and Embankment Footprint Area (M ²)	1,560,280
Starter TSF and Embankment Volume (M ³)	15,794,286
Starter TSF Volume (M ³)	10,028,273
Capacity of Embankment Less Starter Embankment (TONNES)	192,119,507
Total Capacity (TONNES)	1,023,968,743

FOR DISCUSSION
PURPOSES ONLY

CLIENT IDAHO GENERAL MINES, INC.

PROJECT MOUNT HOPE FEASIBILITY STUDY PHASE II

TITLE MOUNT HOPE TSF ALTERNATIVES
925 MILLION TONNE FACILITY
SITE 1

DESIGNED BY	BY	CHECKED BY	DATE
SMITH WILLIAMS CONSULTANTS, INC.			10/24/08
PROJECT NO.	1029P28	SCALE	AS SHOWN
DATE	10/24/08	BY	AW

SMITH WILLIAMS CONSULTANTS, INC.
200 West 10th Avenue, Suite 110, Denver, CO 80202
Phone: 303-733-8222 Fax: 303-733-8222

LEGEND:

- EXISTING GROUND SURFACE CONTOUR AND EL. FEET
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING TRAIL
- STREAM OR DRAINAGE
- PROPERTY BOUNDARY
- SLM DISPOSAL BOUNDARY

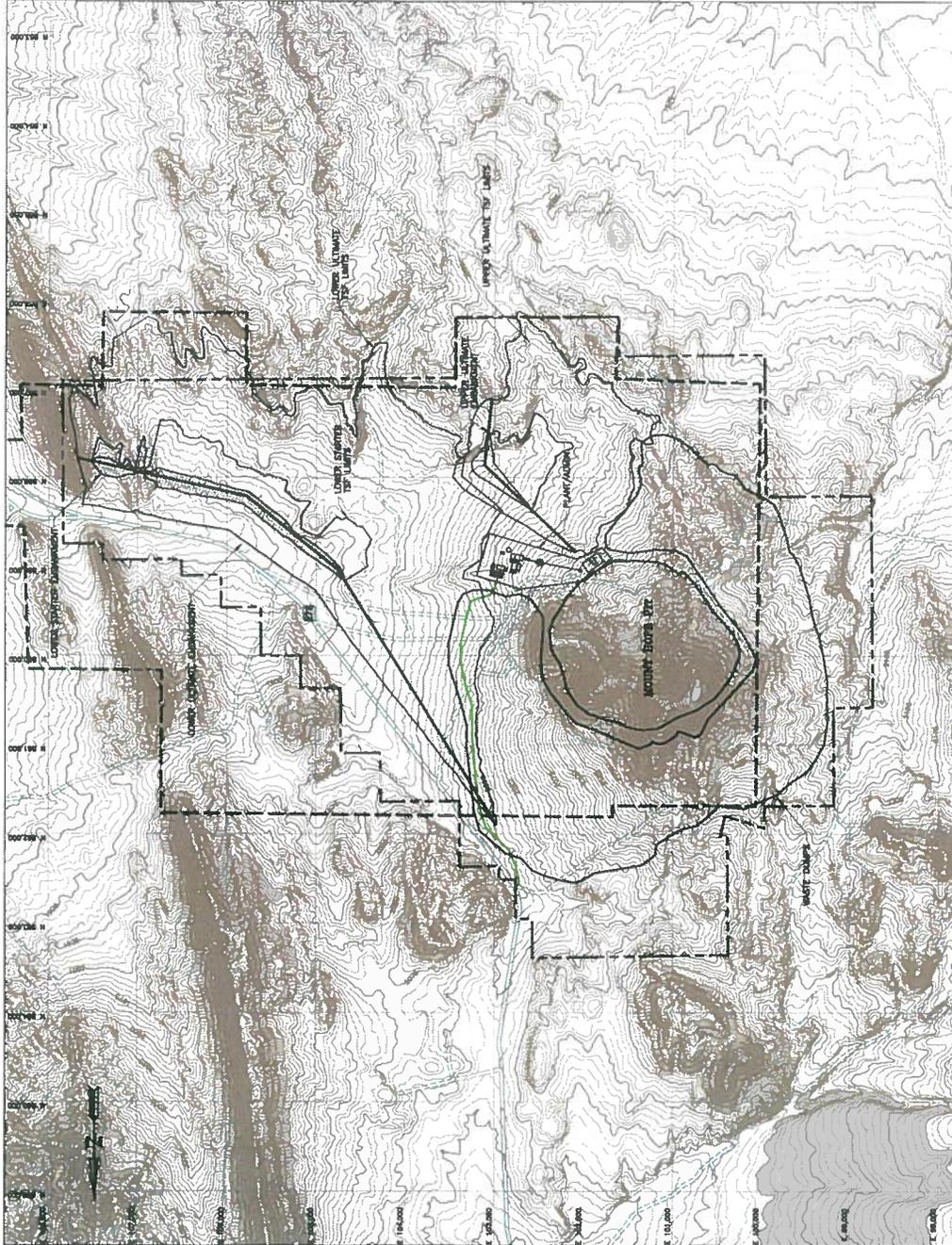
LOWER TSF STATISTICS

TSF & Embankment Footprint Area (M ²)	12,131,696
Volume of TSF and Embankment (M ³)	800,761,652
Capacity of Embankment (TONNES)	97,098,714
Embankment Elevation (M)	155,357,942
TSF Volume (M ³)	2,002
Capacity of TSF (TONNES)	596,593,357
Starter Embankment Volume (M ³)	775,556,364
Starter Embankment Elevation (M)	3,277,620
Starter Embankment Capacity (TONNES)	1,905
Starter TSF and Embankment Footprint Area (M ²)	5,244,192
Starter TSF and Embankment Volume (M ³)	1,524,981
Starter TSF Volume (M ³)	12,919,449
Capacity of Embankment Less Starter Embankment (TONNES)	9,641,628
Total Capacity (TONNES)	150,113,760

UPPER TSF STATISTICS

TSF & Embankment Footprint Area (M ²)	4,146,600
Volume of TSF and Embankment (M ³)	128,457,205
Capacity of Embankment (TONNES)	16,629,273
Embankment Elevation (M)	28,628,838
TSF Volume (M ³)	2,065
Capacity of TSF (TONNES)	112,295,491
Starter Embankment Volume (M ³)	145,116,310
Starter Embankment Elevation (M)	1,749,663
Starter Embankment Capacity (TONNES)	1,997
Starter TSF and Embankment Footprint Area (M ²)	4,397,860
Starter TSF and Embankment Volume (M ³)	9,486,569
Capacity of Embankment Less Starter Embankment (TONNES)	6,737,900
Total Capacity (TONNES)	22,328,978

FOR DISCUSSION
PURPOSES ONLY



CLIENT IDAHO GENERAL MINES, INC.

PROJECT MOUNT HOPE FEASIBILITY STUDY PHASE II

TITLE MOUNT HOPE TSF ALTERNATIVES
925 MILLION TONNE FACILITY
SITE 1A

DESIGNED BY	IS	CHECKED BY	MS	DATE
DRAWN BY	IS	APPROVED BY	MS	07/28/06
PROJECT NUMBER				1029F29
DRAWING SHEET				2
TOTAL SHEETS				A

SNC
SMITH WILLIAMS CONSULTANTS, INC.
2033 West 9th Avenue, Suite 200, Vail, CO 80651
Phone: 303.461.4400 Fax: 303.461.4401

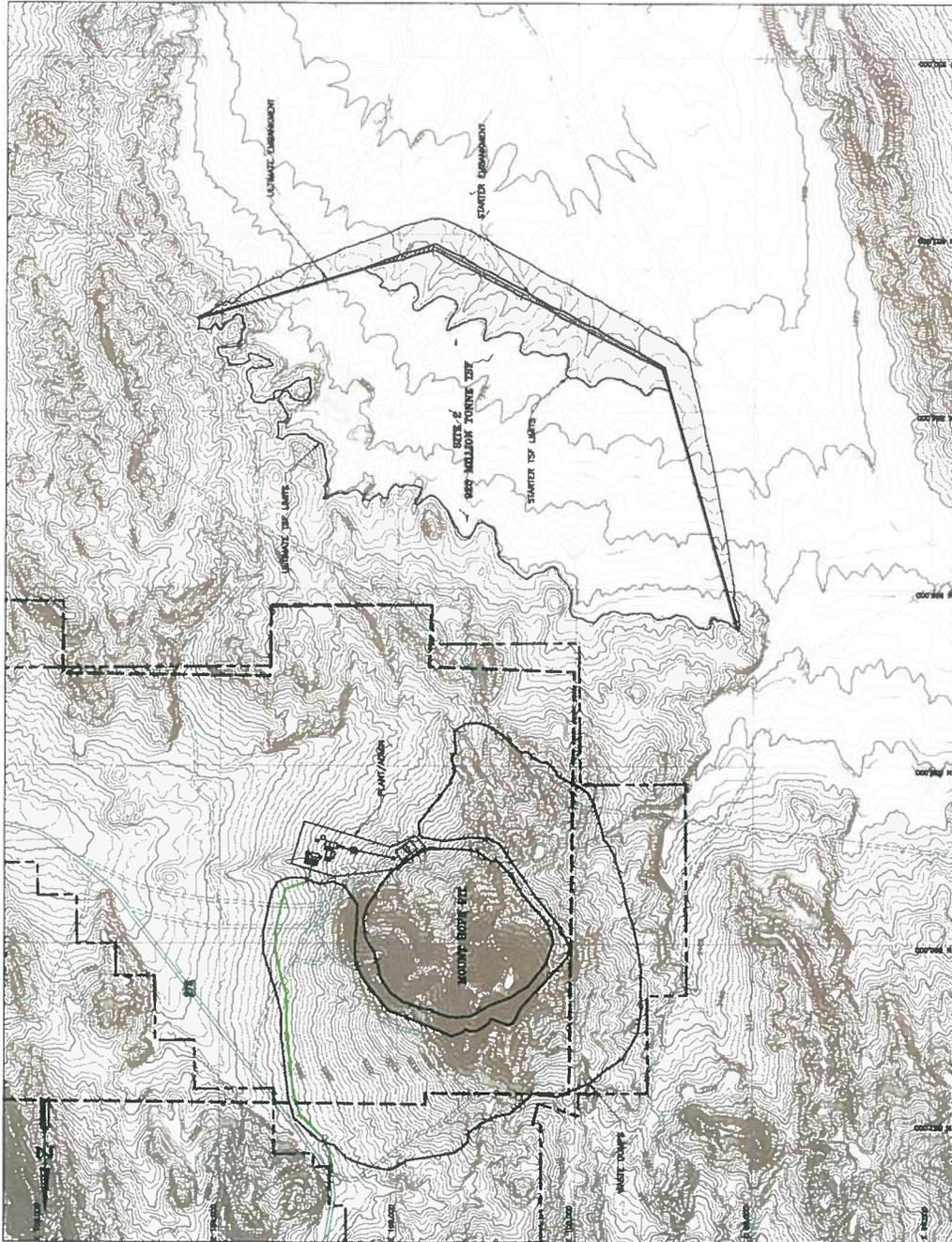
LEGEND:

- EXISTING GROUND SURFACE CONTOUR AND E.L. FEET
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING TRAIL
- STREAM OR DRAINAGE
- PROPERTY BOUNDARY
- BLM DISPOSAL BOUNDARY

TSF STATISTICS

TSF & Embankment Footprint Area (M ²)	15,732,418
Volume of TSF and Embankment (M ³)	775,089,715
Volume of Embankment (M ³)	110,899,716
Capacity of Embankment (TONNES)	177,439,946
Embankment Elevation (M)	2,050
TSF Volume (M ³)	674,101,271
Capacity of TSF (TONNES)	878,331,652
Starter Embankment Volume (M ³)	1,875,730
Starter Embankment Elevation (M)	1,883
Starter Embankment Capacity (TONNES)	3,001,088
Starter TSF and Embankment Footprint Area (M ²)	1,792,890
Starter TSF Volume (M ³)	13,475,730
Starter TSF and Embankment Volume (M ³)	11,600,000
Capacity of Embankment Less Starter Embankment (TONNES)	174,438,377
Total Capacity (TONNES)	1,050,770,029

FOR DISCUSSION
PURPOSES ONLY



IDaho GENERAL MINES, INC.			
PROJECT: MOUNT HOPE FEASIBILITY STUDY PHASE II			
TITLE: MOUNT HOPE TSF ALTERNATIVES 925 MILLION TONNE FACILITY SITE 2			
DESIGNED BY	DTW	CHECKED BY	RLA
DRAWN BY	DB	APPROVED BY	DB
DATE: 10/28/05		DATE: 10/28/05	
PROJECT NO: 1028F50		FIGURE NO: 100	
SNC		SMITH WILLIAMS CONSULTANTS, INC.	
2425 West 9th Avenue, Suite 111, Salt Lake City, UT 84119		Phone: (801) 462-1000	

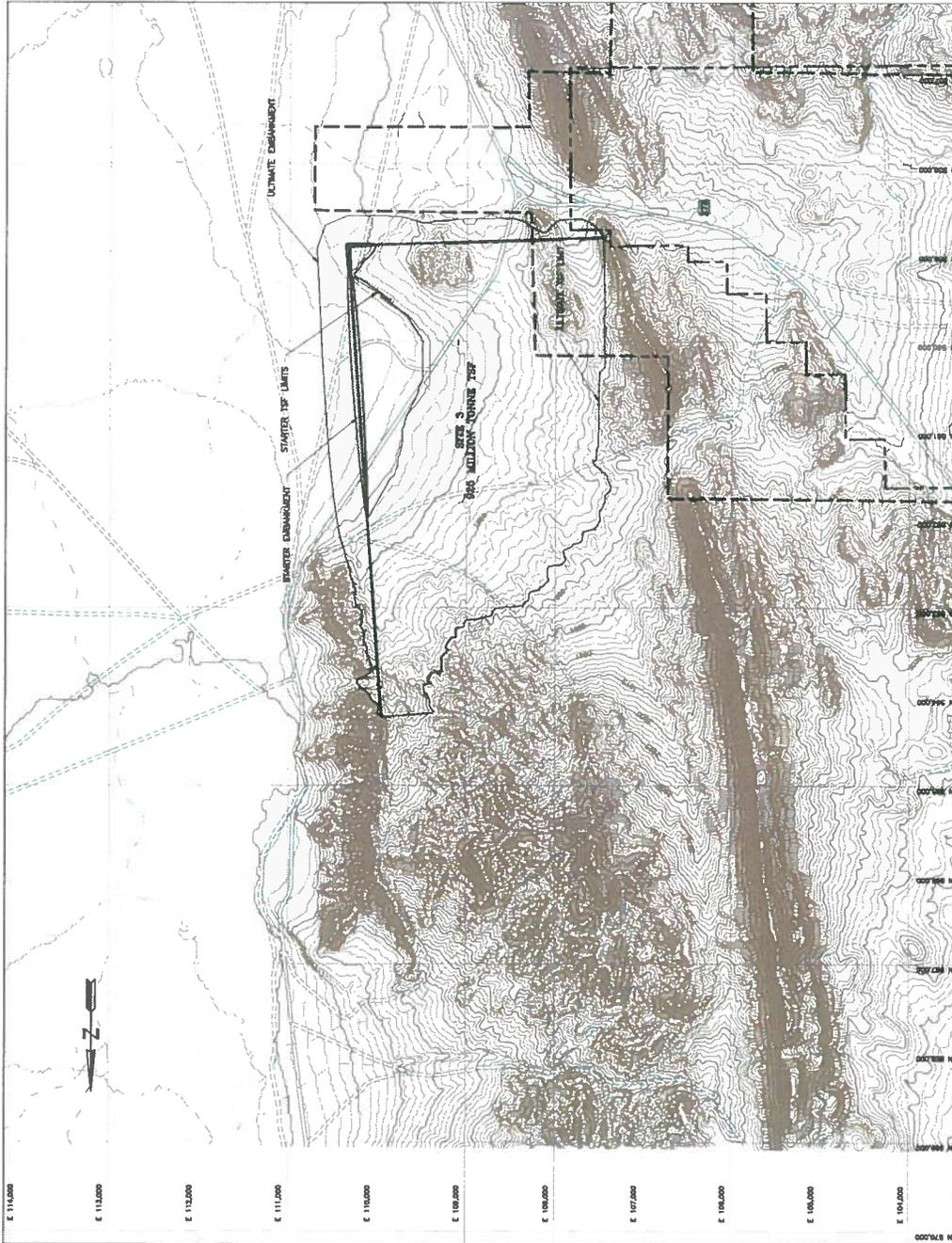
LEGEND:

- EXISTING GROUND SURFACE CONTOUR AND CL FEET
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING TRAIL
- STREAM OR DRAINAGE
- PROPERTY BOUNDARY
- SUM DEPOSITION BOUNDARY

TSP STATISTICS

TSP & Embankment Footprint Area (M ²)	14,448,057
Volume of TSP and Embankment (M ³)	618,745,310
Volume of Embankment (M ³)	118,142,638
Capacity of Embankment (TONNES)	188,028,220
Embankment Elevation (M)	1,910
TSP Volume (M ³)	700,602,672
Capacity of TSP (TONNES)	908,866,791
Starter Embankment Volume (M ³)	2,348,164
Starter Embankment Elevation (M)	1,805
Starter TSP Capacity (TONNES)	3,754,822
Starter TSP and Embankment Footprint Area (M ²)	1,604,267
Starter TSP Volume (M ³)	12,927,874
Capacity of Embankment Less Starter Embankment (TONNES)	185,273,396
Total Capacity (TONNES)	1,114,908,190

FOR DISCUSSION
PURPOSES ONLY



CLIENT		IDaho GENERAL MINES, INC.	
PROJECT		MOUNT HOPE FEASIBILITY STUDY PHASE II	
TITLE		MOUNT HOPE TSP ALTERNATIVES 925 MILLION TONNE FACILITY SITE 3	
DESIGNED BY	HWB	CHECKED BY	RLA
DATE	10/20/05	DATE	10/20/05
DRAWN BY	DB	APPROVED BY	
PROJECT NO.	1029F31	SCALE	1" = 4'
SAC		SMITH WILLIAMS CONSULTANTS, INC.	
243 West 10th Avenue, Suite 2, Anchorage, Alaska 99501		Phone: 907-562-8888 Fax: 907-562-8889	

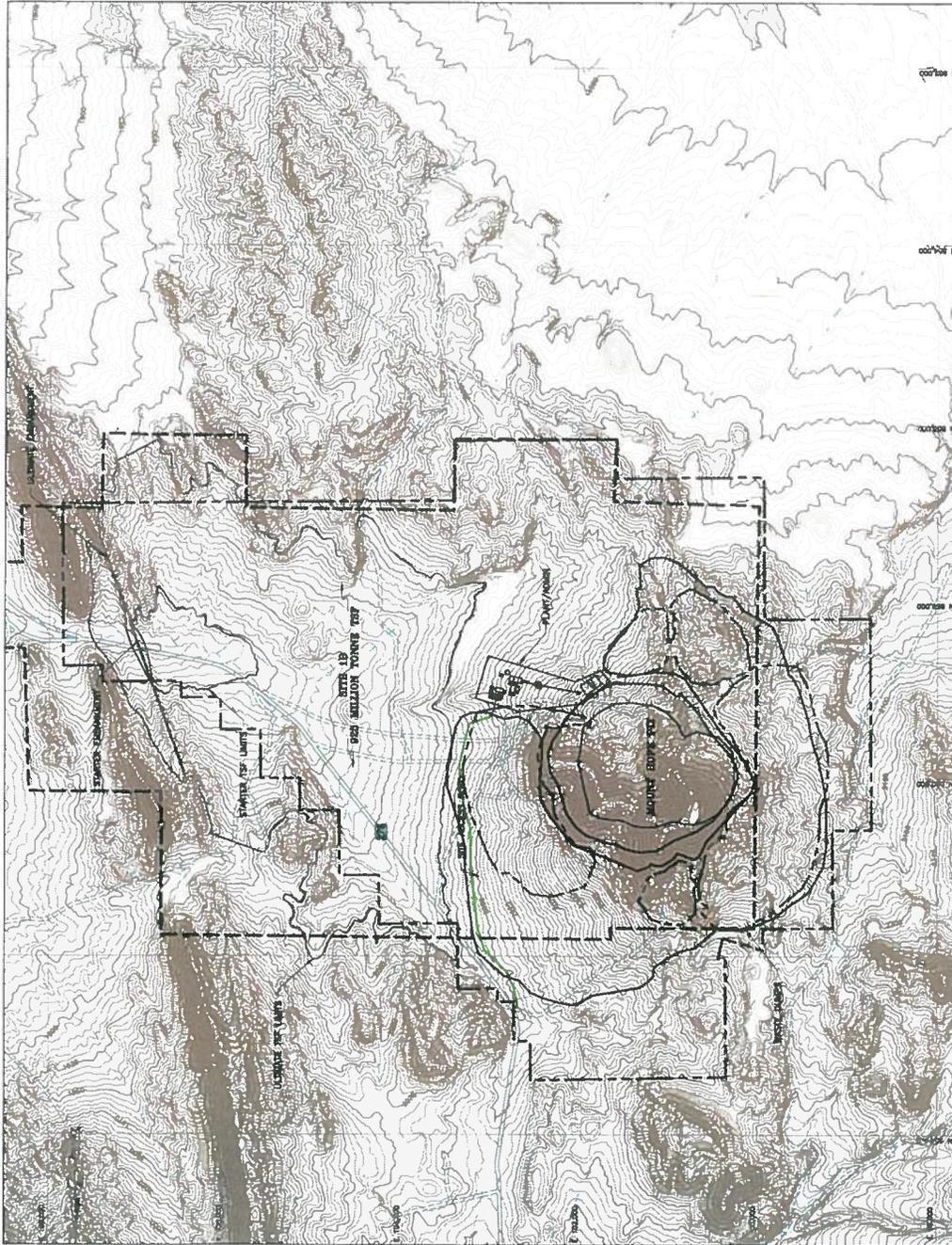
LEGEND:

- EXISTING GROUND SURFACE CONTOUR AND E.L. FEET
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING TRAIL
- STREAM OR DRAINAGE
- PROPERTY BOUNDARY
- BLM DISPOSAL BOUNDARY

TSF STATISTICS

TSF & Embankment Footprint Area (M ²)	14,704,000
Volume of TSF and Embankment (M ³)	750,489,600
Volume of Embankment (M ³)	43,968,972
Capacity of Embankment (TONNES)	70,350,356
Embankment Elevation (M)	1,990
TSF Volume (M ³)	706,530,628
Capacity of TSF (TONNES)	918,489,618
Starter Embankment Volume (M ³)	988,700
Starter Embankment Elevation (M)	1,882
Starter Embankment Capacity (TONNES)	1,561,920
Starter TSF and Embankment Footprint Area (M ²)	1,041,550
Starter TSF and Embankment Volume (M ³)	12,557,700
Starter TSF Volume (M ³)	11,569,000
Capacity of Embankment Less Starter Embankment (TONNES)	66,788,036
Total Capacity (TONNES)	987,286,352

FOR DISCUSSION
PURPOSES ONLY



CLIENT: IDAHO GENERAL MINES, INC.

PROJECT: MOUNT HOPE FEASIBILITY STUDY PHASE II

TITLE: MOUNT HOPE TSF ALTERNATIVES
925 MILLION TONNE FACILITY
SITE 1B

DESIGNED BY	INTV	CHECKED BY	BLA	DATE
DRAWN BY	DB	APPROVED BY	MS	10/24/05
PROJECT:				FRAME No.
SMITH WILLIAMS CONSULTANTS, INC.				1029F52
243 West 5th Avenue, Suite 610, Salt Lake City, Utah 84111				5
Phone: 801-533-8888 Fax: 801-533-8888				A

SWC
SMITH WILLIAMS CONSULTANTS, INC.

LEGEND:
 --- EXISTING GROUND SURFACE CONTOUR AND CL. FEET
 --- EXISTING PAVED ROAD
 --- EXISTING UNPAVED ROAD
 --- EXISTING TRAIL
 --- STREAM OR DRAINAGE
 --- PROPERTY BOUNDARY
 --- SLOPE DEPOSITION BOUNDARY

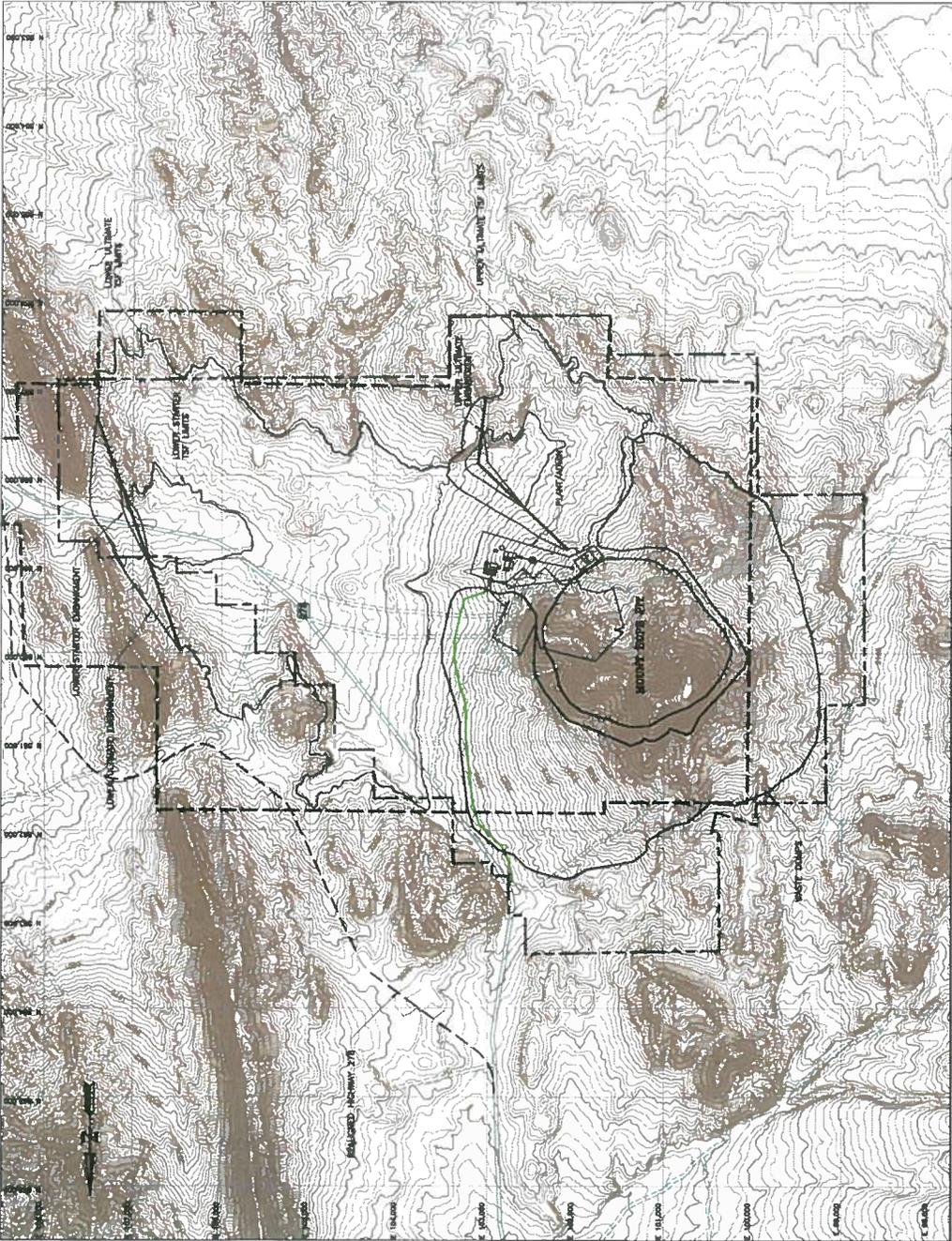
LOWER TSF STATISTICS

TSF & Embankment Footprint Area (M ²)	12,251,753
Volume of TSF and Embankment (M ³)	557,996,451
Capacity of Embankment (M ³)	34,595,219
Embankment Elevation (M)	55,336,350
TSF Volume (M ³)	1,975
Capacity of TSF (TONNES)	523,011,232
Slarier Embankment Volume (M ³)	678,914,602
Slarier Embankment Elevation (M)	595,700
Slarier Embankment Capacity (TONNES)	1,882
Slarier TSF and Embankment Footprint Area (M ²)	1,581,620
Slarier TSF and Embankment Volume (M ³)	1,041,560
Slarier TSF Volume (M ³)	12,557,700
Capacity of Embankment Less Slarier Embankment (TONNES)	11,969,000
Total Capacity (TONNES)	53,754,430
	733,660,032

UPPER TSF STATISTICS

TSF & Embankment Footprint Area (M ²)	4,146,600
Volume of TSF and Embankment (M ³)	128,457,205
Capacity of Embankment (M ³)	18,828,273
Embankment Elevation (M)	26,926,638
TSF Volume (M ³)	2,065
Capacity of TSF (TONNES)	112,295,491
Slarier Embankment Volume (M ³)	145,115,370
Slarier Embankment Elevation (M)	1,740,863
Slarier Embankment Capacity (TONNES)	1,967
Slarier TSF and Embankment Footprint Area (M ²)	4,397,860
Slarier TSF and Embankment Volume (M ³)	655,069
Slarier TSF Volume (M ³)	9,486,569
Capacity of Embankment Less Slarier Embankment (TONNES)	6,737,900
Total Capacity (TONNES)	22,526,978
	172,943,149

FOR DISCUSSION PURPOSES ONLY

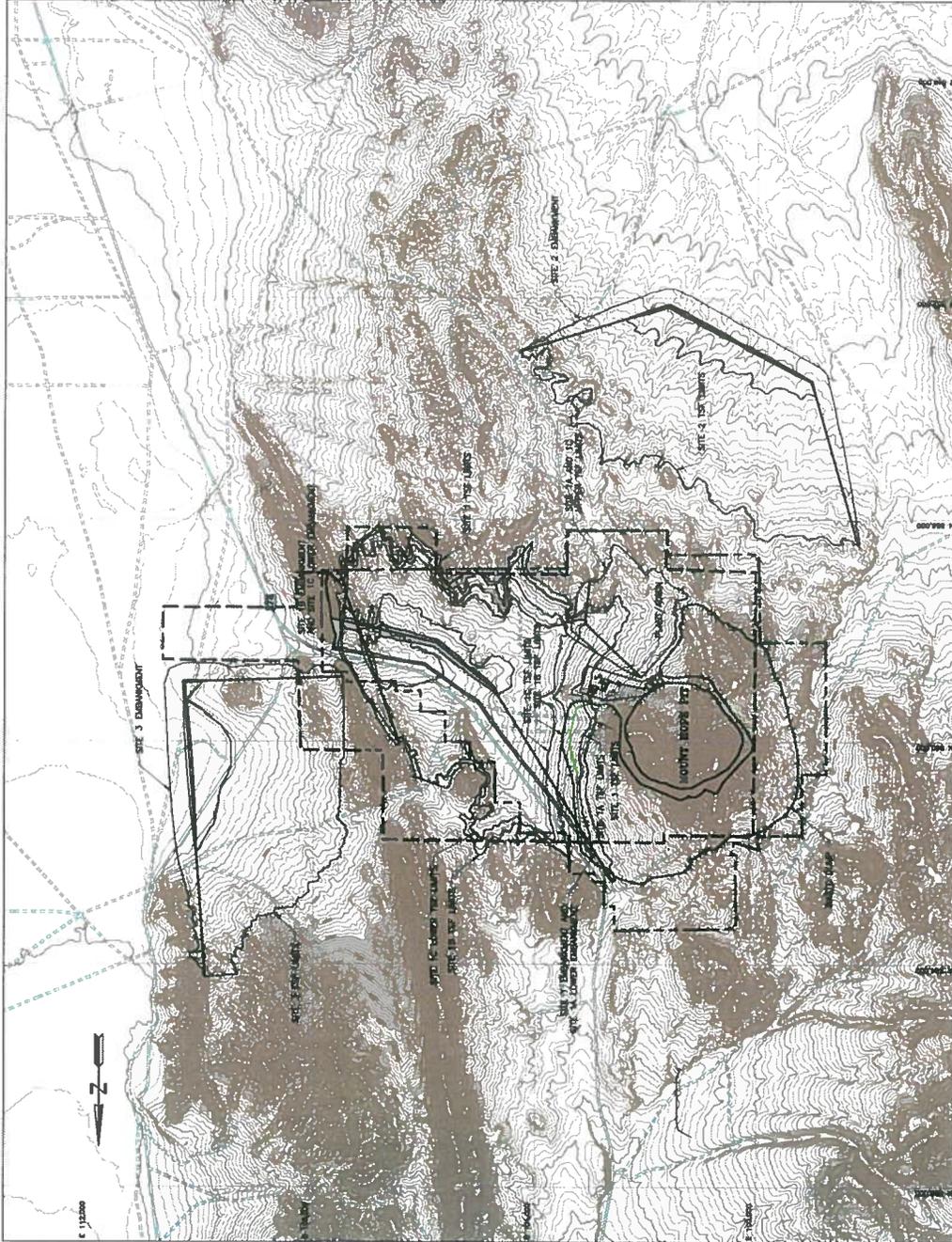


CLIENT: IDAHO GENERAL MINES, INC.
PROJECT: MOUNT HOPE FEASIBILITY STUDY PHASE II
TITLE: MOUNT HOPE TSF ALTERNATIVES
 925 MILLION TONNE FACILITY
 SITE 1C

DESIGNED BY	INTV	CHECKED BY	BLA	DATE
DRAWN BY	DS	APPROVED BY	IMS	07/24/06
FILE NAME	1029F-33			REV
			6	A

SNC
 SMITH WILLIAMS CONSULTANTS, INC.
 2410 West Adams, Suite 500 • Salt Lake City, UT 84119
 Phone: 801-462-8800 Fax: 801-462-8800

- LEGEND:**
- EXISTING GROUND SURFACE CONTOUR AND CL FEET
 - EXISTING PAVED ROAD
 - EXISTING IMPAVED ROAD
 - EXISTING TRAIL
 - STREAM OR DRAINAGE
 - PROPERTY BOUNDARY
 - SLM DISPOSAL BOUNDARY



FOR DISCUSSION
PURPOSES ONLY

CLIENT		IDAHO GENERAL MINES, INC.	
PROJECT		MOUNT HOPE FEASIBILITY STUDY PHASE II	
TITLE		MOUNT HOPE TSF ALTERNATIVES 925 MILLION TONNE FACILITIES ALL SITES	
DESIGNED BY	DATE	CHECKED BY	DATE
DR	10/24/05	MS	10/24/05
APPROVED BY	DATE	APPROVED BY	DATE
MS	10/24/05	MS	10/24/05
PROJECT NUMBER		1029F-35	
DRAWING NUMBER		7	
SCALE		A	

SMC
SMITH WILLIAMS CONSULTANTS, INC.
2025 West 20th Avenue, Suite 200, Denver, CO 80202
Phone: 303-733-8888 Fax: 303-733-8889

LEGEND:

- EXISTING GROUND SURFACE CONTOUR AND G.L. FEET
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING TAIL
- STREAM OR DRAINAGE
- PROPERTY BOUNDARY
- SLM DEPOSAL BOUNDARY

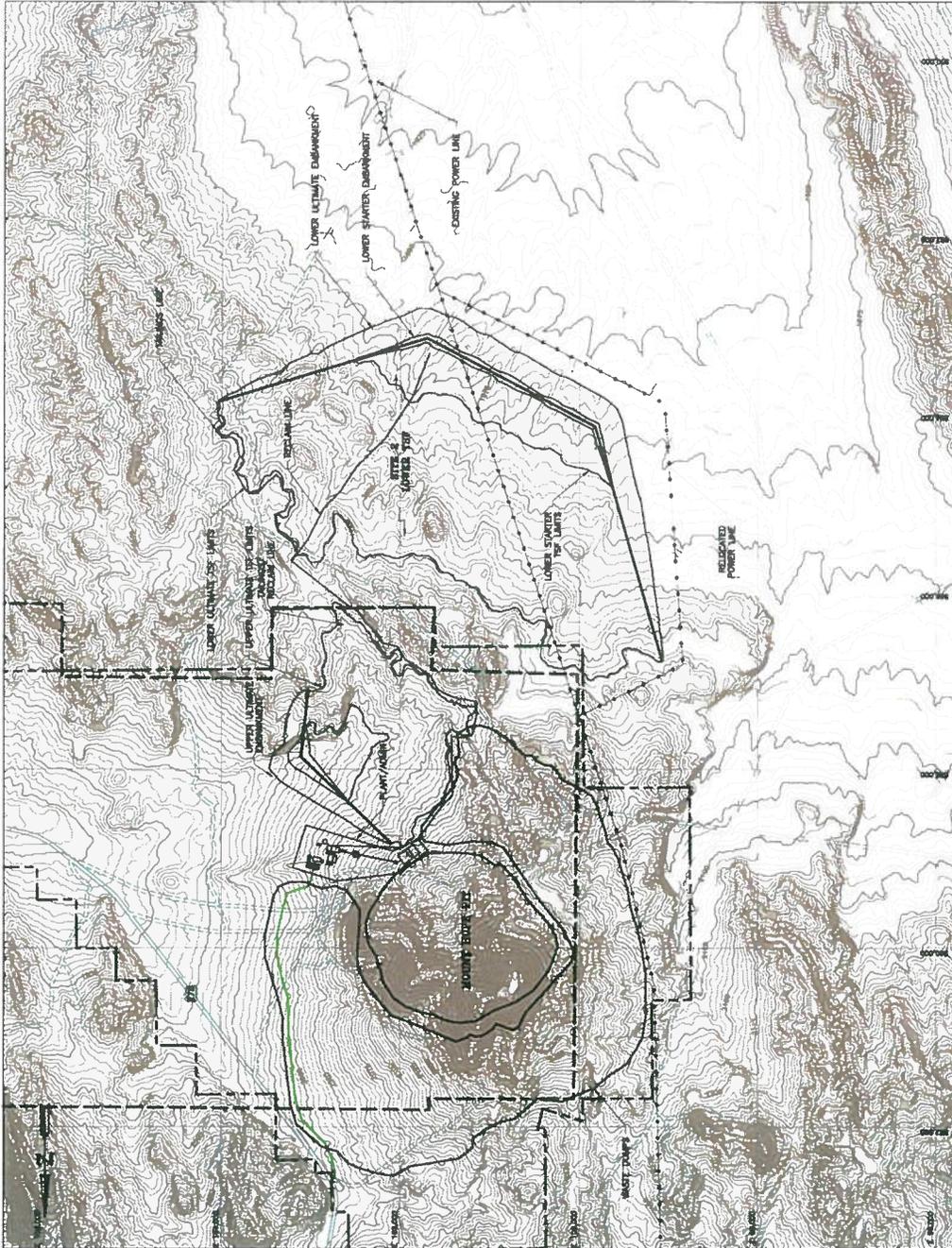
UPPER TSF STATISTICS

TSF & Embankment Footprint Area (M ²)	4,146,600
Volume of TSF and Embankment (M ³)	128,457,205
Volume of Embankment (M ³)	16,629,273
Capacity of Embankment (TONNES)	26,926,838
Embankment Elevation (M)	2,065
TSF Volume (M ³)	112,295,491
Capacity of TSF (TONNES)	145,118,310
Slater Embankment Volume (M ³)	1,748,643
Slater Embankment Elevation (M)	1,997
Slater Embankment Capacity (TONNES)	4,387,860
Slater TSF and Embankment Footprint Area (M ²)	655,069
Slater TSF Volume (M ³)	9,466,569
Capacity of Embankment Less Slater Embankment (TONNES)	6,737,900
Total Capacity (TONNES)	172,843,149

2A-LOWER TSF STATISTICS

TSF & Embankment Footprint Area (M ²)	9,911,689
Volume of TSF and Embankment (M ³)	54,086,511
Volume of Embankment (M ³)	88,229,374
Capacity of Embankment (TONNES)	141,186,699
Embankment Elevation (M)	2,070
TSF Volume (M ³)	468,035,344
Capacity of TSF (TONNES)	604,893,989
Slater Embankment Volume (M ³)	2,500,000
Slater Embankment Elevation (M)	1,985
Slater Embankment Capacity (TONNES)	4,000,000
Slater TSF and Embankment Footprint Area (M ²)	1,376,963
Slater TSF Volume (M ³)	14,158,397
Capacity of Embankment Less Slater Embankment (TONNES)	137,186,699
Total Capacity (TONNES)	742,160,895

FOR DISCUSSION
PURPOSES ONLY



CLIENT	IDAHO GENERAL MINES, INC.			
PROJECT	MOUNT HOPE FEASIBILITY STUDY PHASE II			
TITLE	MOUNT HOPE TSF ALTERNATIVES 925 MILLION TONNE FACILITY SITE 2A LOWER			
DESIGNED BY	DTW	CHECKED BY	MLA	DATE
DRAWN BY	CS	APPROVED BY	MS	17/04/05
PROJECT NO.	1029F36			SCALE
				8 A

SNC
SMITH WILLIAMS CONSULTANTS, INC.
2025 West 9th Avenue, Suite 200, Boise, ID 83725
Phone: 208-333-8888 Fax: 208-333-8888