



March 6, 2025

Matthew Mueller  
Siloam Stone, Inc.  
315 N. 7<sup>th</sup> St  
Canon City, CO 81212

**RE: Bedrock Mine #1, Permit No. M-1997-086; Technical Revision Application (TR-4), Revise Reclamation Plan, Preliminary Adequacy Review #2**

Dear Mr. Mueller,

On February 3, 2025, the Division of Reclamation, Mining, and Safety (the Division/DRMS) received the technical revision application (TR-4) revising the reclamation plan to reduce the amount of growth medium to be replaced from 12 inches to 6 inches and remove the use of mulch. Please address the following item and provide comments and/or supplemental information if needed.

**Rule 6.4.12 Exhibit L – Reclamation Costs**

1. According to discussion had over the phone and the decision date extension request letter sent to the Division, a less aggressive weed control method will be implemented in calculating the required financial warranty. The updated reclamation cost estimate (RCE) with the adjusted cost associated with weed control amounts to \$109,502; an increase of \$883 of the current \$108,619 bond amount. The Division's calculated RCE is attached with this letter for your review.

This concludes the Division's preliminary adequacy review of the TR-4 application. The decision date for this revision is **March 19, 2025**. Please reply to this letter at least 5 days prior to the decision date, **March 14, 2025**, to allow for the Division to review your response. If more time is needed to address these issues, an extension request must be submitted to the Division in writing prior to the decision date.

If you have any questions or concerns, please reach out to me at [Jocelyn.carter@state.co.us](mailto:Jocelyn.carter@state.co.us) or (720) 666-1065.

Sincerely,

Jocelyn Carter



March 6, 2025  
Mr. Matthew Mueller  
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Environmental Protection Specialist

Ec: Amy Eschberger, DRMS  
Steve O'Brien, Environment, Inc.

Enclosures: Updated Reclamation Cost Estimate (RCE)

## COST SUMMARY WORK

Task description: Cost Summary

Site: Bedrock Mine #1

Permit Action: 2025 TR4

Permit/Job#: M1997086

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 2/19/2025

County: Pueblo

Filename: M086-000

User: JLC

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Backfilling Slab Stone Area	DOZER	2	2.25	\$1,525
002a	Grading 11.04 acres	GRADER	2	1.64	\$505
003	Tilling 39.80 acres	REVEGE	1	20.00	\$4,681
004	Spreading Topsoil, 6", 9.65 acres	SCRAPER1	1	17.83	\$36,614
006	Revegetation of 49.46 acres	REVEGE	1	64.30	\$23,608
007	Mob/Demob	MOBILIZE	1	6.81	\$15,354
<b><u>SUBTOTALS:</u></b>				<b>112.83</b>	<b>\$82,287</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02  
Performance bond: 1.05  
Job superintendent: 56.41  
Profit: 10.00

Total = \$1,662

Total = \$864

Total = \$4,472

Total = \$8,229

TOTAL O & P = \$15,227

CONTRACT AMOUNT (direct + O & P) = \$97,514

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$500

Total = \$500

Engineering work and/or contract/bid preparation: 4.25

Total = \$4,144

Reclamation management and/or administration: 5.00

\$4,876

CONTINGENCY: 3.00

Total = \$2,469

TOTAL INDIRECT COST = \$27,215

**TOTAL BOND AMOUNT (direct + indirect) = \$109,502**

**BULLDOZER WORK**Task description: **Backfilling Slab Stone Area**Site: **Bedrock Mine #1**Permit Action: **2025 TR4**Permit/Job#: **M1997086****PROJECT IDENTIFICATION**Task #: **001**State: **Colorado**Abbreviation: **None**Date: **2/18/2025**County: **Pueblo**Filename: **001**User: **JLC**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D8T - 8SU**Horsepower: **310**Blade Type: **Semi-Universal**Attachment: **1-shank ripper**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<b><u>Utilization %</u></b>
Ownership Cost/Hour:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper own. Cost/Hour:	\$13.69	NA
Ripper op. Cost/Hour:	\$2.31	25
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: **\$339.07**Total Fleet Cost/Hour: **\$678.13****MATERIAL QUANTITIES**Initial Volume: **4,000**Swell factor: **1.250**Loose volume: **5,000 LCY**Source of estimated volume: **Division of Reclamation, Mining & Safety**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **50 feet**Unadjusted hourly production: **1,400.0 LCY/hr**Materials consistency description: **Consolidated stockpile 1.0**Average push gradient: **-10 %**Average site altitude: **5,800 feet**Material weight: **2,650 lbs/LCY**Weight description: **Decomposed rock - 25% Rock, 75% Earth****Job Condition Correction Factor**

		<b><u>Source</u></b>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7943

Adjusted unit production: 1,112.02 LCY/hr

Adjusted fleet production: **2224.04** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)

Unit cost: \$0.305/LCY

Total job time: **2.25** Hours

Total job cost: **\$1,525**

## MOTOR GRADER WORK

Task description: Grading 11.04 acres

Site: Bedrock Mine #1

Permit Action: 2025 TR4

Permit/Job#: M1997086

### PROJECT IDENTIFICATION

Task #: 002A

State: Colorado

Abbreviation: None

Date: 2/19/2025

County: Pueblo

Filename: M086-002a

User: JLC

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: CAT 120M

Horsepower: 138

Ripper Attachment: \_\_\_\_\_

Shift Basis: 1 per day

Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$52.82	NA
Operating Cost/Hour:	\$43.76	100
Ripper Ownership Cost/Hour:	\$0.00	NA
Ripper Operating Cost/Hour:	\$0.00	
Operator Cost/Hour:	\$56.70	NA
Total Unit Cost/Hour:	\$153.28	
Total Fleet Cost/Hour:	<b>\$306.56</b>	

### MATERIAL QUANTITIES

Total Area to be graded or ripped: 11.04 acres

Source of estimated acreage: TR4 Current Reclamation Tasks Needed

### HOURLY PRODUCTION

Average Grader Speed:	<u>3.25</u>	mph
Selected Application:	<u>Heavy blading (0-6 mph) - 3.25</u>	
Selected Blade Angle:	<u>0</u>	degrees
Effective Blade Length:	<u>12.00</u>	feet
Width of blade overlap per pass:	<u>2.00</u>	feet
Net grading or ripping width per pass:	<u>10.00</u>	feet
Unadjusted Hourly Unit Production:	<u>3.9394</u>	acres/hour

#### Job Condition Correction Factors

Site Altitude: 5800 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.85</u>	(2sh/d, fav.)
Net Correction:	<u>0.8500</u>	multiplier

Adjusted Hourly Unit Production: 3.3485 acres/Hour

Adjusted Hourly Fleet Production: **6.6970** acres/Hour

### JOB TIME AND COST

Fleet size: 2 Grader(s)

Total job time: **1.65** Hours

Unit cost: \$45.78 per acre

Total job cost: **\$505**

REVEGETATION WORKTask description: Tilling 39.80 acresSite: Bedrock Mine #1Permit Action: 2025 TR4Permit/Job#: M1997086PROJECT IDENTIFICATIONTask #: 003State: ColoradoAbbreviation: NoneDate: 2/18/2025County: PuebloFilename: M086-003User: JLCAgency or organization name: DRMSTILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
<b>Total Tilling Cost/Acre</b>	<b>\$117.61</b>

JOB TIME AND COSTNo. of Acres: 39.8Cost /Acre: \$117.61Estimated Failure Rate: 0%Cost /Acre\*: \$117.61\*Selected Replanting Work Items: TILLINGInitial Job Cost: \$4,680.88Reseeding Job Cost: \$0.00Total Job Cost: \$4,681Job Hours: 20.00

**SCRAPER TEAM WORK**Task description: **Spreading Topsoil, 6', 9.65 acres**Site: **Bedrock Mine #1**Permit Action: 2025 TR4Permit/Job#: M1997086**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 2/19/2025County: PuebloFilename: M086-004User: JLCAgency or organization name: DRMS**HOURLY EQUIPMENT**COST Shift basis: 1 per day

	Equipment Description
-Scraper:	Cat 627G w/push-pull
-Dozer:	Cat D8T - 8SU
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	CAT 120M
-Water Truck:	NA

**Cost Breakdown:****Scraper Work Team****Support Equipment****Maintenance Equipment**

	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	50	NA
Ownership cost/hour:	\$234.09	\$173.32	NA	NA	\$52.82	NA
Operating cost/hour:	\$265.71	\$109.71	NA	NA	\$21.88	NA
%Utilization-ripper:	NA	15	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$13.69	NA	NA	\$0.00	NA
Ripper op. cost/hour:	NA	\$1.39	NA	NA	\$0.00	NA
Operator cost/hour:	\$57.52	\$40.04	NA	NA	\$56.70	NA
Unit Subtotals:	\$557.32	\$338.14	NA	NA	\$131.40	NA
Number of Units:	2	2	0	0	2	0
Group Subtotals:	Work:	\$1,790.92	Support:	\$0.00	Maint:	\$262.80

Total work team cost/hour: **\$2,053.72****MATERIAL QUANTITIES**Initial volume: 7,784

CCY

Swell factor: 1.250Loose volume: **9,730**

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight: 2,650 lbs/LCY  
 Material description: Decomposed rock - 25% Rock,  
75% Earth  
 Rated Payload: 52,800 pounds  
 Payload Capacity: 19.92 LCY

Struck Volume: 15.70 LCY  
 Heaped Volume: 22.00 LCY  
 Average Volume: 18.85 LCY  
 Adjusted Capacity: **18.85** LCY



Cycle Time:Scraper Loading Time: 0.90 MinutesManeuver and Spread Time: 0.60 MinutesJob Condition Correction:

Site Altitude: 5800 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Travel Time:Road Condition: Hard, smooth, stabilized, surfaced, watered, maintained 2.0Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1025.00	0.00	2.00	2.00	2868	0.55
2	850.00	0.00	2.00	2.00	2868	0.30
3	500.00	0.00	2.00	2.00	2868	0.17

Haul Time: 1.02 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	0.00	2.00	2.00	2905	0.28
2	850.00	0.00	2.00	2.00	2905	0.29
3	1025.00	0.00	2.00	2.00	2905	0.35

Return Time: 0.92 minutesTotal Scraper team cycle time: 3.44 minutesAdjusted for job conditions: 545.77 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 545.77 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 545.77 LCY/HourUnadjusted unit production/hour: 657.56 LCY/Hour

Optimal Number of Scrapers per push dozer: \_\_\_\_\_

**JOB TIME AND COST**Fleet size: 1 Team(s)Total job time: 17.83 HoursUnit cost: \$3.763 /LCYTotal job cost: \$36,614

**REVEGETATION WORK**Task description: Revegetation of 49.46 acresSite: Bedrock Mine #1Permit Action: 2025 TR4Permit/Job#: M1997086**PROJECT IDENTIFICATION**Task #: 006State: ColoradoAbbreviation: NoneDate: 2/19/2025County: PuebloFilename: M086-006User: JLCAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$0.00</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

Description	Cost /Acre
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Orchardgrass - Paiute	1.00	12.40	\$4.59
Rye, Perennial Tetraploid - Tetra-Plus	1.00	5.67	\$2.28
Crested Wheatgrass - Hy-Crest	1.00	4.59	\$5.05
Russian Wildrye - Bozoisky	2.00	8.03	\$22.15
Smooth Brome - Lincoln	2.00	6.66	\$9.71
Intermediate Wheatgrass - Oahe	2.00	4.27	\$9.29
Slender Wheatgrass - Native	1.00	3.65	\$7.06
<b>Totals Seed Mix</b>	<b>10.00</b>	<b>45.27</b>	<b>\$60.13</b>

**Application**

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
<b>Total Seed Application Cost/Acre</b>	<b>\$236.64</b>

**MULCHING and MISCELLANEOUS****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	2.00	ACRE	\$4.13	\$8.25
<b>Total Mulch Materials Cost/Acre</b>				<b>\$8.25</b>

**Application**

Description	Cost /Acre
Weed spray, truck, non-aquatic area, nox. [DMG]	\$83.26
<b>Total Mulch Application Cost/Acre</b>	<b>\$83.26</b>

**NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$0.00</b>

**JOB TIME AND COST**

No. of Acres: 49.46                      Cost /Acre: \$388.28  
 Estimated Failure Rate: 30%                      Cost /Acre\*: \$296.77  
 \*Selected Replanting Work Items: TILLING,SEEDING

Initial Job Cost: **\$19,204.33**  
 Reseeding Job Cost: **\$4,403.47**  
 Total Job Cost: **\$23,608**  
 Job Hours: **64.30**

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mob/Demob**Site: **Bedrock Mine #1**Permit Action: 2025 TR4Permit/Job#: M1997086**PROJECT IDENTIFICATION**Task #: 007State: ColoradoAbbreviation: NoneDate: 2/19/2025County: PuebloFilename: M086-007User: JLCAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,  
400 HP (2ND HALF, 2006)Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT  
TRAILER (25T, 50T, AND 100T)**Cost Breakdown:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
Ownership Cost/Hour:	\$10.44	\$22.18	\$23.94
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$59.44	\$122.78	\$125.64

**NON ROADABLE EQUIPMENT:**

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8SU	52.21	\$187.01	\$125.64	2	\$625.30	\$251.28	\$500.00
Cat 627G w/push-pull	43.48	\$234.09	\$122.78	2	\$713.74	\$245.56	\$500.00
Drill/Broadcast Seeder with Tractor	25.00	\$41.02	\$59.44	2	\$200.92	\$118.88	\$500.00
CAT 120M	15.53	\$52.82	\$59.44	2	\$224.52	\$118.88	\$500.00

Subtotals: **\$1,764.48** **\$734.60** **\$2,000.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$108.47	1	\$108.47	\$108.47

Subtotals: **\$108.47** **\$108.47**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>PUEBLO</u>	
Total one-way travel distance:	<u>20.00</u>	miles
Average Travel Speed:	<u>55.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$15,275.13</u>
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    \*\* two round trips with haul rig:

Total Roadable Mob/Demob Cost **	<u>\$78.89</u>
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    \*\* one round trip, no haul rig:

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.36</u>	<u>0.36</u>
Return Time (Hours):	<u>0.36</u>	<u>0.36</u>
Loading Time (Hours):	<u>1.34</u>	<u>NA</u>
Unloading Time (Hours):	<u>1.34</u>	<u>NA</u>
Subtotals:	<u>3.41</u>	<u>0.73</u>

**JOB TIME AND COST**

Total job time:	<u>6.81</u>	Hours
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Total job cost:	<u>\$15,354</u>
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