

January 26, 2024

Jim Helmericks  
Glacier Gravel Products  
995 Hwy 3  
Durango, CO 81301



**COLORADO**  
Division of Reclamation,  
Mining and Safety  
Department of Natural Resources

1313 Sherman Street, Room 215  
Denver, CO 80203

***RE: J & J Pit, Permit # M-1985-001, Reclamation Costs Update***

Dear Operator:

In an effort to ensure the Financial Warranty for the above referenced site adequately reflects the actual current costs of fulfilling the requirements of the approved reclamation plan, the Colorado Division of Reclamation, Mining and Safety (Division) has updated the reclamation cost estimate (copy enclosed) for this site. Division calculations estimate the cost to reclaim the site to be \$54,493.00. This is an increase of \$7,103.00 over the \$47,390.00 currently held by the Division.

Within 15 days, please review the attached estimate and notify me if any calculation errors are noted.

If you require additional information, or have questions or concerns, please contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Dustin Czapla', with a long horizontal flourish extending to the right.

***Dustin Czapla***  
Environmental Protection Specialist  
Division of Reclamation, Mining and Safety  
Phone: (303) 866-3567, ext. 8188



## COST SUMMARY WORK

Task description: 2024-01-17 Update

Site: J & J Pit

Permit Action: 2024-01-17 Update

Permit/Job#: M1985001

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 1/17/2024

County: La Plata

Filename: M1985001-000

User: DMC

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Move stockpile to highwall for backfill	LOADER	1	61.00	\$9,842
02a	Backfill north highwall	DOZER	2	13.23	\$11,290
03a	Cut and fill remaining highwalls to 2H:1V	DOZER	2	6.90	\$5,887
04a	Remove scrap steel and tires	DEMOLISH	1	0.00	\$1,550
05a	Revegetate slopes with weed control and mulch	REVEGE	1	16.00	\$7,844
06a	Mob/Demob	MOBILIZE	1	4.26	\$5,458
<b><u>SUBTOTALS:</u></b>				<b>101.39</b>	<b>\$41,871</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$846

Performance bond: 1.05

Total = \$440

Job superintendent: 62.67

Total = \$4,079

Profit: 10.00

Total = \$4,187

TOTAL O & P = \$9,551

CONTRACT AMOUNT (direct + O & P) = \$51,422

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$500

Engineering work and/or contract/bid preparation: 0.00

Total = \$0

Reclamation management and/or administration: 5.00

\$2,571

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$12,622

**TOTAL BOND AMOUNT (direct + indirect) = \$54,493**

**WHEEL LOADER – LOAD AND CARRY WORK**Task description: Move stockpile to highwall for backfillSite: J & J Pit Permit Action: 2024-01-17 Update Permit/Job#: M1985001**PROJECT IDENTIFICATION**

Task #: 01A State: Colorado Abbreviation: None  
 Date: 1/17/2024 County: La Plata Filename: M001-01a  
 User: DMC

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine: CAT 980H Horsepower: 315  
 Attachment 1: ROPS Cab Shift Basis: 1 per day  
 Data Source: (CRG)

**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$61.69	NA
Operating Cost/Hour:	\$58.92	100
Operator Cost/Hour:	\$40.71	NA
Total Unit Cost/Hour:	\$161.32	
Total Fleet Cost/Hour:	\$161.32	

**MATERIAL QUANTITIES**

Initial volume: 26,000 CCY Swell factor: 1.000  
 Loose volume: 26,000 LCY

Source of estimated volume: Division of Reclamation, Mining & Safety  
 Source of estimated swell factor: Cat Handbook

**HOURLY PRODUCTION**Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.550 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -0.04	-0.040	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		-0.060	minutes
Adjusted Basic Cycle Time:		0.490	minutes

**Rolling Resistance – Road Conditions**

Haul: Packed snow 2.5  
 Return: Packed snow 2.5

**Haul and Return Time**

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	300	0.00	2.50	2.50	0.2190	(Cat HB)
Return Route:	300	0.00	2.50	2.50	0.2112	(Cat HB)

Total Travel Time: 0.4302 minutes  
 Total Cycle Time: 0.9202 minutes

Load Bucket Capacity

Rated Capacity: 7.50 LCY (heaped)  
 Bucket Fill Factor: 1.050 Other - moist loam (100-110%) 1.050  
 Adjusted Capacity: 7.88 LCY

Job Condition Correction Factors

Site Altitude: 6760 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.83</u>	(1 shift/day)
Net Correction:	<u>0.83</u>	multiplier

Unadjusted Hourly Unit Production: 513.47 LCY/Hour  
 Adjusted Hourly Unit Production: 426.18 LCY/Hour  
 Adjusted Hourly Fleet Production: 426.18 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Loader(s) Total job time: 61.01 Hours  
 Unit cost: \$0.379 /LCY Total job cost: \$9,842

**BULLDOZER WORK**Task description: **Backfill north highwall**Site: **J & J Pit** Permit Action: **2024-01-17 Update** Permit/Job#: **M1985001****PROJECT IDENTIFICATION**

Task #:	<u>02A</u>	State:	<u>Colorado</u>	Abbreviation:	<u>None</u>
Date:	<u>1/17/2024</u>	County:	<u>La Plata</u>	Filename:	<u>M001-02a</u>
User:	<u>DMC</u>				

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine:	<u>Cat D8T - 8SU</u>
Horsepower:	<u>310</u>
Blade Type:	<u>Semi-Universal</u>
Attachment:	<u>NA</u>
Shift Basis:	<u>1 per day</u>
Data Source:	<u>(CRG)</u>

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$241.38</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$143.92</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>
Operator Cost/Hour:	<u>\$41.30</u>	<u>NA</u>

Total unit Cost/Hour:	<u>\$426.60</u>
Total Fleet Cost/Hour:	<u><b>\$853.20</b></u>

**MATERIAL QUANTITIES**

Initial Volume:	<u>13,333</u>
Swell factor:	<u>1.000</u>
Loose volume:	<u><b>13,333</b> LCY</u>

Source of estimated volume:	<u>Existing Conditions</u>
Source of estimated swell factor:	<u>Cat Handbook</u>

**HOURLY PRODUCTION**

Average push distance:	<u>100 feet</u>
Unadjusted hourly production:	<u>852.6 LCY/hr</u>

Materials consistency description: Loose stockpile 1.2

Average push gradient:	<u>5 %</u>
Average site altitude:	<u>6,760 feet</u>

Material weight: 2,100 lbs/LCYWeight description: Earth - Loam

<u>Job Condition Correction Factor</u>		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.200</u>	<u>(CAT HB)</u>
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5909

Adjusted unit production: 503.80 LCY/hr

Adjusted fleet production: **1007.6** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)

Unit cost: \$0.847/LCY

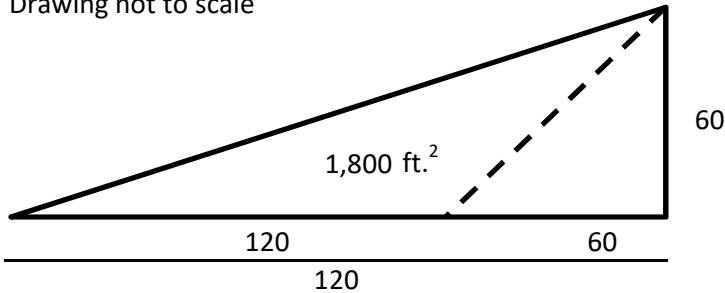
Total job time: **13.23** Hours

Total job cost: **\$11,290**

Highwall reduction - backfill

Highwall Height (ft.)	60.00	
Length of Highwall (lft.)	200.00	
- - - Initial Slope	1.00	H:1V
— Desired Slope	2.00	H:1V
Volume of material to be moved (ft. <sup>3</sup> )	360,000	
Volume of material to be moved (yd. <sup>3</sup> )	13,333	

All dimensions measured in feet  
Drawing not to scale



**BULLDOZER WORK**Task description: Cut and fill remaining highwalls to 2H:1VSite: J & J Pit Permit Action: 2024-01-17 Update Permit/Job#: M1985001**PROJECT IDENTIFICATION**

Task #:	<u>03A</u>	State:	<u>Colorado</u>	Abbreviation:	<u>None</u>
Date:	<u>1/17/2024</u>	County:	<u>La Plata</u>	Filename:	<u>M001-03a</u>
User:	<u>DMC</u>				

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine:	<u>Cat D8T - 8SU</u>
Horsepower:	<u>310</u>
Blade Type:	<u>Semi-Universal</u>
Attachment:	<u>NA</u>
Shift Basis:	<u>1 per day</u>
Data Source:	<u>(CRG)</u>

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$241.38</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$143.92</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>
Operator Cost/Hour:	<u>\$41.30</u>	<u>NA</u>

Total unit Cost/Hour:	<u>\$426.60</u>
Total Fleet Cost/Hour:	<u>\$853.20</u>

**MATERIAL QUANTITIES**

Initial Volume:	<u>10,000</u>
Swell factor:	<u>1.115</u>
Loose volume:	<u>11,150 LCY</u>

Source of estimated volume:	<u>Existing Conditions</u>
Source of estimated swell factor:	<u>Cat Handbook</u>

**HOURLY PRODUCTION**

Average push distance:	<u>70 feet</u>
Unadjusted hourly production:	<u>1,093.7 LCY/hr</u>

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient:	<u>-5 %</u>
Average site altitude:	<u>6,760 feet</u>

Material weight: 2,100 lbs/LCYWeight description: Earth - Loam

<u>Job Condition Correction Factor</u>		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>0.900</u>	<u>(CAT HB))</u>
Dozing method:	<u>1.200</u>	<u>(SLOT)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>



Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7387

Adjusted unit production: 807.92 LCY/hr

Adjusted fleet production: **1615.84** LCY/hr

### **JOB TIME AND COST**



Fleet size: 2 Dozer(s)

Unit cost: \$0.528/LCY

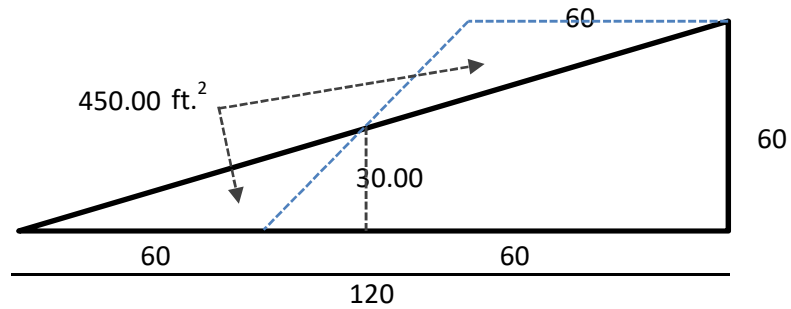
Total job time: **6.90** Hours

Total job cost: **\$5,887**

## Highwall reduction - cut and fill

Highwall Height (ft.)	60.0
Length of Highwall (lft.)	600
 Initial Slope	1.0 H:1V
 Desired Slope	2 H:1V
Volume of material to be moved (ft. <sup>3</sup> )	<b>270,000</b>
Volume of material to be moved (yd. <sup>3</sup> )	<b>10,000</b>

All dimensions measured in feet  
Drawing not to scale



## DEMOLITION WORK

Task description: Remove scrap steel and tires

Site: J & J Pit

Permit Action: 2024-01-17 Update

Permit/Job#: M1985001

### PROJECT IDENTIFICATION

Task #: 04A

State: Colorado

Abbreviation: None

Date: 1/17/2024

County: La Plata

Filename: M001-04a

User: DMC

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 93.10 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Various scrap Iron and metal	100	Loading and 5 mile haul, salvage allowed - Steel frame structures	75.00	CY	\$12.50	\$937.50
Disposal of Tires	25	Hazardous waste removal - Bulk solids, small quantities (up to 1.5 tons)	0.50	TON	\$1,455.71	\$727.86

Job Hours: 0.00

Subtotal  
(unadjusted): \$1,665.36

Total Cost  
(adjusted for location): \$1,550.45

**REVEGETATION WORK**Task description: Revegetate slopes with weed control and mulchSite: J & J PitPermit Action: 2024-01-17 UpdatePermit/Job#: M1985001**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 1/17/2024County: La PlataFilename: M001-05aUser: DMCAgency 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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
<b>Total Tilling Cost/Acre</b>	<b>\$112.82</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.80	5.83	\$11.70
Intermediate Wheatgrass - Oahe	2.00	4.27	\$5.60
Mahogany, Mountain	0.50	0.68	\$18.40
Western Wheatgrass - Barton	2.40	6.06	\$16.80
Needle and Thread	1.50	3.96	\$62.78
<b>Totals Seed Mix</b>	<b>8.20</b>	<b>20.79</b>	<b>\$115.28</b>

**Application**

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Description	Cost /Acre
Drill seeding (MEANS 32 92 19.13 0020)	\$468.00
<b>Total Seed Application Cost/Acre</b>	<b>\$468.00</b>

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

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
<b>Total Mulch Materials Cost/Acre</b>				<b>\$859.57</b>

**Application**

Description	Cost /Acre
Power mulcher (MEANS 32 91 13.16 0350)	\$147.67
Weed spray, hand, aquatic area, nox. [DMG]	\$183.16
<b>Total Mulch Application Cost/Acre</b>	<b>\$330.83</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: 3.5                      Cost /Acre: \$1,886.50  
 Estimated Failure Rate: 20%                      Cost /Acre\*: \$1,773.68  
 \*Selected Replanting Work Items: SEEDING,MULCHING

Initial Job Cost: **\$6,602.75**  
 Reseeding Job Cost: **\$1,241.58**  
 Total Job Cost: **\$7,844**  
 Job Hours: **16.00**

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mob/Demob**Site: **J & J Pit**Permit Action: 2024-01-17 UpdatePermit/Job#: M1985001**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 1/17/2024County: La PlataFilename: M001-06aUser: DMCAgency 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:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

**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 980H	33.12	\$61.69	\$158.17	1	\$219.86	\$158.17	\$250.00
Cat D8T - 8SU	47.71	\$241.38	\$158.17	1	\$399.55	\$158.17	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00

Subtotals: **\$816.66** **\$480.92** **\$1,000.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Generic 15-18 cy, 6x4	\$137.31	1	\$137.31	\$137.31

Subtotals: **\$137.31** **\$137.31**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>DURANGO</u>	
Total one-way travel distance:	<u>2.00</u>	miles
Average Travel Speed:	<u>30.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$5,439.65</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$18.31</u>
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.07</u>	<u>0.07</u>
Return Time (Hours):	<u>0.07</u>	<u>0.07</u>
Loading Time (Hours):	<u>1.00</u>	<u>NA</u>
Unloading Time (Hours):	<u>1.00</u>	<u>NA</u>
Subtotals:	<u>2.13</u>	<u>0.13</u>

**JOB TIME AND COST**

Total job time: 4.27 Hours

Total job cost: \$5,458