



## COLORADO

Division of Reclamation,  
Mining and Safety

Department of Natural Resources

1313 Sherman St. Room 215  
Denver, CO 80203

April 11, 2017

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

**Re: J & J Pit, Permit No. M-1985-001, Financial Warranty Increase, Revision No. SI-3**

Dear Mr. Helmericks:

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). *Therefore, pursuant to Section 34-32.5-117(4) of the Colorado Land Reclamation Act, adequate Financial Warranty must be submitted to the Division within 60 days of the mailing date of this letter.*

Staff calculations estimate the cost to reclaim the above referenced site to be \$47,390.00. This is an increase of \$38,932.45 over the \$8,457.58 currently held by the Division. This estimate is based on the approved reclamation plan and conditions observed during the April 5, 2017 inspection. The additional amount needs to be accepted prior to **Monday, June 12, 2017**.

Please make arrangements with Barbara Coria at the Division of Reclamation, Mining and Safety Denver Office, phone no. 303.866.3567, ext. 8148 for submittal of the financial warranty. Any questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Barbara Coria. If you require additional information, have questions or concerns, please contact me at the DRMS Grand Junction Field Office.

Sincerely,

**Lucas J. West**  
Environmental Protection Specialist  
Division of Reclamation, Mining and Safety  
1313 Sherman Street, Room 215  
Denver, CO 80203  
**Phone:** (970)-243-6368

Cc: Russ Means, Senior Environmental Protection Specialist  
Barbara J. Coria, DRMS Bonding Specialist  
Ec: Nathan Barton, Wasteline Inc.



## COST SUMMARY WORK

Task description: Cost Summary

Site: J & J Pit

Permit Action: 2017 Update

Permit/Job#: M1985001

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 4/11/2017

County: La Plata

Filename: M001-000

User: LJW

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Move stockpile to highwall for backfill	LOADER	1	61.00	\$8,686.00
002	Backfill north highwall to 2:H 1V	DOZER	2	28.90	\$11,089.00
003	Cut and fill remaining high walls to 2H:1V	DOZER	2	15.18	\$5,824.00
004	Remove scrap steel and tires	DEMOLISH	1	0.00	\$1,813.85
005	Revegetate slopes with weed control and mulch	REVEGE	1	16.00	\$6,039.00
006	Mob/Demob	MOBILIZE	1	4.26	\$3,433.00
<b><u>SUBTOTALS:</u></b>				<b>125.34</b>	<b>\$36,885</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02  
Performance bond: 1.05  
Job superintendent: 62.67  
Profit: 10.00

Total = \$745.08

Total = \$387.29

Total = \$4,578.04

Total = \$3,688.50

TOTAL O & P = \$9,398.91

CONTRACT AMOUNT (direct + O & P) = \$46,283.91

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 0.00

Total = 0.00

Engineering work and/or contract/bid preparation: 0.00

Total = \$0.00

Reclamation management and/or administration: 0.00

\$0.00

CONTINGENCY: 3.00

Total = \$1,106.55

TOTAL INDIRECT COST = \$10,505.46

**TOTAL BOND AMOUNT (direct + indirect) = \$47,390.46**

**WHEEL LOADER – LOAD AND CARRY WORK**Task description: Move stockpile to highwall for backfillSite: J & J PitPermit Action: 2017 UpdatePermit/Job#: M1985001**PROJECT IDENTIFICATION**Task #: 001State: ColoradoAbbreviation: NoneDate: 4/11/2017County: La PlataFilename: M001-001User: LJWAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: CAT 980HHorsepower: 315Attachment 1: ROPS CabShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	<u>\$48.81</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$52.37</u>	<u>100</u>
Operator Cost/Hour:	<u>\$41.20</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$142.38</u>	
Total Fleet Cost/Hour:	<u>\$142.38</u>	

**MATERIAL QUANTITIES**Initial volume: 26,000

CCY

Swell factor: 1.000Loose volume: 26,000

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource 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 2.5Return: 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: \$0.334 /LCY Total job cost: \$8,686

**BULLDOZER WORK**Task description: Backfill north highwallSite: J & J PitPermit Action: 2017 UpdatePermit/Job#: M1985001**PROJECT IDENTIFICATION**Task #: 002State: ColoradoAbbreviation: NoneDate: 4/11/2017County: La PlataFilename: M001-002User: LJWAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$83.81</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$66.17</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>\$41.85</u>	<u>NA</u>
Total unit Cost/Hour:	<u>\$191.83</u>	
Total Fleet Cost/Hour:	<u>\$383.65</u>	

**MATERIAL QUANTITIES**Initial Volume: 25,481Swell factor: 1.000Loose volume: 25,481 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell  
factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feetUnadjusted hourly  
production: 852.6 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push  
gradient: 5 %Average site altitude: 6,760 feetMaterial weight: 2,100 lbs/LCYWeight description: Earth - Loam**Job Condition Correction Factor****Source**

Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5170

Adjusted unit  
production: 440.79 LCY/hr

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Adjusted fleet  
production: 881.58 LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)

Unit cost: \$0.435/LCY

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Total job time: 28.90 Hours

Total job cost: \$11,089

**BULLDOZER WORK**Task description: Cut and fill remaining highwalls to 2H:1VSite: J & J PitPermit Action: 2017 UpdatePermit/Job#: M1985001**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 4/11/2017County: La PlataFilename: M001-003User: LJWAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$83.81</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$66.17</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>\$41.85</u>	<u>NA</u>
Total unit Cost/Hour:	<u>\$191.83</u>	
Total Fleet Cost/Hour:	<u>\$383.65</u>	

**MATERIAL QUANTITIES**Initial Volume: 22,000Swell factor: 1.115Loose volume: 24,530 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell  
factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 70 feetUnadjusted hourly  
production: 1,093.7 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push  
gradient: -5 %Average site altitude: 6,760 feetMaterial weight: 2,100 lbs/LCYWeight description: Earth - LoamJob Condition Correction FactorSource

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)
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:	\$0.237/LCY
Total job time:	15.18 Hours
Total job cost:	\$5,824



## DEMOLITION WORK

Task description: Remove scrap steel and tires

Site: J & J Pit

Permit Action: 2017 Update

Permit/Job#: M1985001

### PROJECT IDENTIFICATION

Task #: 004

State: Colorado

Abbreviation: None

Date: 4/11/2017

County: La Plata

Filename: M001-004

User: LJW

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	\$10.71	\$803.25
Disposal of Tires	25	Hazardous waste removal - Bulk solids, small quantities (up to 1.5 tons)	0.50	TON	\$2,290.06	\$1,145.03

Job Hours: 0.00

Subtotal  
(unadjusted): \$1,948.28

Total Cost  
(adjusted for location): \$1,813.85

REVEGETATION WORKTask description: Revegetate slopes with weed control and mulchSite: J & J PitPermit Action: 2017 UpdatePermit/Job#: M1985001PROJECT IDENTIFICATIONTask #: 005State: ColoradoAbbreviation: NoneDate: 4/11/2017County: La PlataFilename: 1985005User: LJWAgency or organization name: DRMSFERTILIZING**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)	\$106.29
<b>Total Tilling Cost/Acre</b>	<b>\$106.29</b>

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.80	5.83	\$12.60
Intermediate Wheatgrass - Oahe	2.00	4.27	\$7.68
Mahogany, Mountain	0.50	0.68	\$18.41
Western Wheatgrass - Barton	2.40	6.06	\$18.22
Needle and Thread	1.50	3.96	\$62.25
<b>Totals Seed Mix</b>	<b>8.20</b>	<b>20.79</b>	<b>\$119.15</b>

**Application**

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Description	Cost /Acre
Drill seeding (MEANS 32 92 19.13 0020)	\$438.00
Total Seed Application Cost/Acre	\$438.00

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

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$261.00	\$522.00
Total Mulch Materials Cost/Acre				\$522.00

**Application**

Description	Cost /Acre
Power mulcher (MEANS 32 91 13.16 0350)	\$99.32
Weed spray, hand, aquatic area, nox. [DMG]	\$170.90
Total Mulch Application Cost/Acre	\$270.22

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres: 3.5                      Cost /Acre: \$1,455.66  
 Estimated Failure Rate: 20%                      Cost /Acre\*: \$1,349.37  
 \*Selected Replanting Work Items: SEEDING,MULCHING

Initial Job Cost: \$5,094.81  
 Reseeding Job Cost: \$944.56  
 Total Job Cost: \$6,039  
 Job Hours: 16.00

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: Mob/DemobSite: J & J PitPermit Action: 2017 UpdatePermit/Job#: M1985001**PROJECT IDENTIFICATION**Task #: 006State: ColoradoAbbreviation: NoneDate: 4/11/2017County: La PlataFilename: 1985006User: LJWAgency 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:	\$16.63	\$18.37	\$22.33
Operating Cost/Hour:	\$44.38	\$46.13	\$50.07
Operator Cost/Hour:	\$27.66	\$27.66	\$27.66
Helper Cost/Hour:	\$0.00	\$25.39	\$25.39
Total Unit Cost/Hour:	\$88.67	\$117.55	\$125.45

**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	\$51.27	\$117.55	1	\$168.82	\$117.55	\$250.00
Cat D8T - 8SU	47.71	\$83.81	\$117.55	2	\$402.72	\$235.10	\$250.00

Subtotals: **\$571.54** **\$352.65** **\$500.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Drill/Broadcast Seeder with Tractor	\$52.78	1	\$52.78	\$52.78
Generic 15-18 cy, 6x4	\$106.65	1	\$106.65	\$106.65
Power Mulcher (Bowie LD-90)	\$21.31	1	\$21.31	\$21.31

Subtotals: **\$180.74** **\$180.74**

**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>\$3,409.39</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$24.10</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:	<u>4.27</u>	Hours
Total job cost:	<u>\$3,433</u>	