



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

1313 Sherman Street, Room 215  
Denver, CO 80203

May 5, 2021

Doug Grant  
Grant Bros Construction Ltd  
P.O. Box 1027  
Basalt, CO 81621

**RE: Loesch Pit, Permit No. M-1981-068, Reclamation Costs Update and Notice of Surety Increase (SI-2)**

Dear Mr. Grant:

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).

Division calculations estimate the cost to reclaim the above referenced site to be \$30,468.00. This is an increase of \$6,682.00 over the \$23,786.00 currently held by the Division. This estimate is based on conditions observed during the April 15, 2021 inspection. ***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.*** The additional amount needs to be accepted prior to **Tuesday, July 06, 2021**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Please make arrangements with Sara Stevenson-Benn 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 Sara Stevenson-Benn.

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

Sincerely,

**Amy Yeldell**  
Environmental Protection Specialist

Ec: Travis Marshall, Senior EPS, Grand Junction DRMS  
Sara Stevenson-Benn, Financial Warranty Specialist, DRMS



## COST SUMMARY WORK

Task description: Update post inspection 2021

Site: Loesch Pit

Permit Action: 2021-04

Permit/Job#: M1981068

### PROJECT IDENTIFICATION

Task #: ACY

State: Colorado

Abbreviation: None

Date: 5/4/2021

County: Garfield

Filename: M068-ACY

User: ACY

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Backfilling and grading highwalls	DOZER	1	20.00	\$5,240
02a	Apply topsoil	DOZER	1	7.07	\$1,854
03a	Rip haul road	RIPPER	1	0.67	\$180
04a	Rip processing areas	RIPPER	1	19.84	\$5,414
05a	Reseed disturbed areas-pit slopes	REVEGE	1	24.00	\$6,064
06a	Initial mobilization to site	MOBILIZE	1	2.57	\$2,578
07a	Secondary mobilization to site	MOBILIZE	1	2.57	\$1,399
<b><u>SUBTOTALS:</u></b>				<b>76.72</b>	<b>\$22,729</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$459

Performance bond: 1.05

Total = \$239

Job superintendent: 38.36

Total = \$2,668

Profit: 10.00

Total = \$2,273

TOTAL O & P = \$5,639

CONTRACT AMOUNT (direct + O & P) = \$28,368

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0

Total = \$0

Engineering work and/or contract/bid preparation: 0.00

Total = \$0

Reclamation management and/or administration: 5.00

\$1,418

CONTINGENCY: 3.00

Total = \$682

TOTAL INDIRECT COST = \$7,739

**TOTAL BOND AMOUNT (direct + indirect) = \$30,468**

**BULLDOZER WORK**Task description: **Backfilling and grading highwalls**Site: **Loesch Pit** Permit Action: **2021-04** Permit/Job#: **M1981068****PROJECT IDENTIFICATION**

Task #: **01A** State: **Colorado** Abbreviation: **None**  
 Date: **5/4/2021** County: **Garfield** Filename: **M068-001a**  
 User: **ACY**

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

Basic Machine: **Cat D8T - 8SU**  
 Horsepower: **310**  
 Blade Type: **Semi-Universal**  
 Attachment: **3-shank ripper**  
 Shift Basis: **1 per day**  
 Data Source: **(CRG)**

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$116.22	NA
Operating Cost/Hour:	\$89.77	100
Ripper own. Cost/Hour:	\$12.00	NA
Ripper op. Cost/Hour:	\$2.75	30
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: **\$262.03**  
 Total Fleet Cost/Hour: **\$262.03**

**MATERIAL QUANTITIES**

Initial Volume: **10,000**  
 Swell factor: **1.120**  
 Loose volume: **11,200 LCY**

Source of estimated volume: **1500' 1:1 to 3:1 cutfill and 300' 2:1 to 4:1 backfill @20'H**  
 Source of estimated swell factor: **Cat Handbook**

**HOURLY PRODUCTION**

Average push distance: **60 feet**  
 Unadjusted hourly production: **1,246.9 LCY/hr**

Materials consistency description: **Consolidated stockpile 1.0**

Average push gradient: **0 %**  
 Average site altitude: **6,360 feet**

Material weight: **2,550 lbs/LCY**Weight description: **Gravel - Dry****Job Condition Correction Factor**

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

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4492

Adjusted unit production: 560.11 LCY/hr

Adjusted fleet production: **560.11** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.468/LCY

Total job time: **20.00** Hours

Total job cost: **\$5,240**

**BULLDOZER WORK**Task description: Apply topsoilSite: Loesch Pit Permit Action: 2021-04 Permit/Job#: M1981068**PROJECT IDENTIFICATION**

Task #: 02A State: Colorado Abbreviation: None  
 Date: 5/4/2021 County: Garfield Filename: M068-02a  
 User: ACY

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

Basic Machine: Cat D8T - 8SU  
 Horsepower: 310  
 Blade Type: Semi-Universal  
 Attachment: 3-shank ripper  
 Shift Basis: 1 per day  
 Data Source: (CRG)

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$116.22	NA
Operating Cost/Hour:	\$89.77	100
Ripper own. Cost/Hour:	\$12.00	NA
Ripper op. Cost/Hour:	\$2.75	30
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: \$262.03  
 Total Fleet Cost/Hour: \$262.03

**MATERIAL QUANTITIES**

Initial Volume: 4,665  
 Swell factor: 1.215  
 Loose volume: 5,668 LCY

Source of estimated volume: 20' D x 2000LF of 3:1 and 300LF of 4:1 @ 10" deep  
 Source of estimated swell factor: Cat Handbook

**HOURLY PRODUCTION**

Average push distance: 75 feet  
 Unadjusted hourly production: 1,017.1 LCY/hr

Materials consistency description: Partly consolidated stockpile 1.1

Average push gradient: 0 %  
 Average site altitude: 6,360 feet

Material weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7877

Adjusted unit production: 801.17 LCY/hr

Adjusted fleet production: **801.17 LCY/hr**

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.327/LCY

Total job time: **7.07 Hours**

Total job cost: **\$1,854**

## BULLDOZER RIPPING WORK

Task description: Rip haul road

Site: Loesch Pit Permit Action: 2021-04 Permit/Job#: M1981068

### PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None  
Date: 5/4/2021 County: Garfield Filename: M068-03a  
User: ACY

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU Horsepower: 310  
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day  
Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$116.22	NA
Operating Cost/Hour:	\$89.77	100
Ripper Ownership Cost/Hour:	\$12.00	NA
Ripper Operating Cost/Hour:	\$9.18	100
Operator Cost/Hour:	\$41.30	NA
Total Unit Cost/Hour:	\$268.46	
Total Fleet Cost/Hour:	<b>\$268.46</b>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA  
Area: 0.43 acres Rip Depth (ft): 2.00 Volume: 1,387 BCY or CCY

Source of estimated quantity: Reclamation Plan

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth: 1.00 feet/pass  
Average Ripping Width: 7.08 feet/pass  
Average Ripping Length: 200.00 feet/pass  
Average Dozer Speed: 88.00 feet/minute  
Average Maneuver Time: 0.25 minutes/pass  
Production per unit area: 0.773 acres/hour

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.773 Acres/hr  
Site Altitude: 6,360 feet  
Altitude Adj: 1.00 (CAT HB)  
Job Efficiency: 0.83 (1 shift/day)  
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.64 Acres/hr  
Adjusted Hourly Fleet Production: **0.64** Acres/hr

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **0.67** Hours

Unit cost: \$418.355 Per acre Total job cost: **\$180**

## BULLDOZER RIPPING WORK

Task description: Rip processing areas

Site: Loesch Pit Permit Action: 2021-04 Permit/Job#: M1981068

### PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None  
Date: 5/4/2021 County: Garfield Filename: M068-04a  
User: ACY

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU Horsepower: 310  
Ripper Attachment: 1-Shank Ripper Shift Basis: 1 per day  
Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$116.22	NA
Operating Cost/Hour:	\$89.77	100
Ripper Ownership Cost/Hour:	\$15.57	NA
Ripper Operating Cost/Hour:	\$10.00	100
Operator Cost/Hour:	\$41.30	NA
Total Unit Cost/Hour:	\$272.85	
Total Fleet Cost/Hour:	<b>\$272.85</b>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA  
Area: 10.00 acres Rip Depth (ft): 2.00 Volume: 32,267 BCY or CCY

Source of estimated quantity: Mining Plan

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth: 1.00 feet/pass  
Average Ripping Width: 5.56 feet/pass  
Average Ripping Length: 200.00 feet/pass  
Average Dozer Speed: 88.00 feet/minute  
Average Maneuver Time: 0.25 minutes/pass  
Production per unit area: 0.607 acres/hour

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.607 Acres/hr  
Site Altitude: 6,360 feet  
Altitude Adj: 1.00 (CAT HB)  
Job Efficiency: 0.83 (1 shift/day)  
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.50 Acres/hr  
Adjusted Hourly Fleet Production: **0.50** Acres/hr

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **19.84** Hours

Unit cost: \$541.437 Per acre Total job cost: **\$5,414**



**REVEGETATION WORK**Task description: Reseed disturbed areas-pit slopesSite: Loesch PitPermit Action: 2021-04Permit/Job#: M1981068**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 5/4/2021County: GarfieldFilename: M068-05aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
10-34-0, 18-46-0, 5-10-5	200.00	pound	\$0.34	\$68.00
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$68.00</b>

**Application**

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$37.03
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$37.03</b>

**TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$107.16
<b>Total Tilling Cost/Acre</b>	<b>\$107.16</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	0.50	19.51	\$14.24
Tall Wheatgrass - Jose	6.00	10.88	\$20.25
Western Wheatgrass - Arriba	4.00	10.10	\$26.00
Saltbush, Four Wing	1.00	1.38	\$12.50
<b>Totals Seed Mix</b>	<b>11.50</b>	<b>41.87</b>	<b>\$72.99</b>

**Application**

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$232.00

<b>Total Seed Application Cost/Acre</b>	<b>\$232.00</b>
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**MULCHING and MISCELLANEOUS****Materials**

<b>Description</b>	<b>Units / Acre</b>	<b>Unit</b>	<b>Cost / Unit</b>	<b>Cost /Acre</b>
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$7.63	\$7.63
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$301.00	\$301.00
<b>Total Mulch Materials Cost/Acre</b>				<b>\$308.63</b>

**Application**

<b>Description</b>	<b>Cost /Acre</b>
Crimping, with tractor {DMG survey data}	\$70.17
Power mulcher (MEANS 32 91 13.16 0350)	\$101.93
Weed spray, truck, aquatic area, nox. [DMG]	\$62.72
<b>Total Mulch Application Cost/Acre</b>	<b>\$234.82</b>

**NURSERY STOCK PLANTING**

<b>Common Name</b>	<b>No / Acre</b>	<b>Type and Size</b>	<b>Planting Cost</b>	<b>Fertilizer Pellet Cost</b>	<b>Cost /Acre</b>
Cottonwood, Narrowleaf	5	Tubling, 10 cu. in. container { (MEANS)	\$4.43	\$2.40	\$22.15
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$22.15</b>

**JOB TIME AND COST**

No. of Acres: 4 Cost /Acre: \$1,082.78  
 Estimated Failure Rate: 40% Cost /Acre\*: \$1,082.78  
 \*Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,NU  
RSERY,MULCHING

Initial Job Cost: \$4,331.12  
 Reseeding Job Cost: \$1,732.45  
 Total Job Cost: \$6,064  
 Job Hours: 24.00

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Initial mobilization to site**Site: **Loesch Pit**Permit Action: **2021-04**Permit/Job#: **M1981068****PROJECT IDENTIFICATION**Task #: **06A**State: **Colorado**Abbreviation: **None**Date: **5/4/2021**County: **Garfield**Filename: **M068-06a**User: **ACY**Agency or organization name: **DRMS****EQUIPMENT TRANSPORT RIG COST**Shift basis: **1 per day**Cost Data Source: **CRG Data**Truck 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:	\$17.20	\$29.63	\$38.69
Operating Cost/Hour:	\$26.56	\$47.02	\$55.69
Operator Cost/Hour:	\$23.63	\$23.63	\$23.63
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$67.39	\$123.81	\$141.54

**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	53.08	\$128.22	\$141.54	1	\$269.76	\$141.54	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.72	\$67.39	1	\$74.11	\$67.39	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$11.19	\$67.39	1	\$78.58	\$67.39	\$250.00

Subtotals: **\$422.45** **\$276.32** **\$750.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 6x4, 45K GVW	\$77.71	1	\$77.71	\$77.71
Light Duty Pickup, 4x4, 3/4 T.	\$40.91	1	\$40.91	\$40.91

Subtotals: **\$118.62** **\$118.62**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>RIFLE, CO</u>	
Total one-way travel distance:	<u>5.00</u>	miles
Average Travel Speed:	<u>35.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$2,544.55</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$33.89</u>
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.14</u>	<u>0.14</u>
Return Time (Hours):	<u>0.14</u>	<u>0.14</u>
Loading Time (Hours):	<u>0.50</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.50</u>	<u>NA</u>
Subtotals:	<u>1.29</u>	<u>0.29</u>

**JOB TIME AND COST**

Total job time:	<u>2.57</u>	Hours
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Total job cost:	<u>\$2,578</u>
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**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: Secondary mobilization to siteSite: Loesch PitPermit Action: 2021-04Permit/Job#: M1981068**PROJECT IDENTIFICATION**Task #: 07AState: ColoradoAbbreviation: NoneDate: 5/4/2021County: GarfieldFilename: M068-07aUser: ACYAgency 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:	\$17.20	\$29.63	\$38.69
Operating Cost/Hour:	\$26.56	\$47.02	\$55.69
Operator Cost/Hour:	\$23.63	\$23.63	\$23.63
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$67.39	\$123.81	\$141.54

**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
Drill/Broadcast Seeder with Tractor	25.00	\$6.72	\$67.39	1	\$74.11	\$67.39	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$11.19	\$67.39	1	\$78.58	\$67.39	\$250.00
Subtotals:					<b>\$152.69</b>	<b>\$134.78</b>	<b>\$500.00</b>

**ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$40.91	1	\$40.91	\$40.91
Subtotals:			<b>\$40.91</b>	<b>\$40.91</b>

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: RIFLE, CO  
 Total one-way travel distance: 5.00 miles  
 Average Travel Speed: 35.00 mph

Total Non-Roadable Mob/Demob Cost \* \$1,387.51  
 \*\* two round trips with haul rig:  
 Total Roadable Mob/Demob Cost \*\* \$11.69  
 \*\* one round trip, no haul rig:

**Transportation Cycle Time:**

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.14	0.14
Return Time (Hours):	0.14	0.14
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.29	0.29

**JOB TIME AND COST**

Total job time: 2.57 Hours

Total job cost: \$1,399