



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

October 6, 2023

1313 Sherman Street, Room 215  
Denver, CO 80203

Randy Riggs  
Bull Dog Trucking, Inc.  
PO Box 271  
Creede, CO 81130

***RE: Soward Ranch Pit, Permit No. M-1988-021, Notice of Surety Increase (SI-3)***

Dear Mr. Riggs:

On October 6, 2023 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$25,105.00. Per rule 4.2.1 of the Rules and Regulations, the Financial Warranty is periodically updated to ensure that the Division holds a sufficient sum to cover the cost of reclamation. The increase in the Financial Warranty is due to the increases in the cost of fuel, equipment, and labor since the last update.

Staff calculations estimate the cost to reclaim the above referenced site to be \$25,105. This is an increase of \$10,071 over the \$15,034 currently held by the Division. This estimate is based on conditions observed during the July 19, 2023 inspection.

**The Division ordered amendment of the current Financial Warranty, or submittal of a new Financial Warranty reflecting the increase, must be submitted within 60 days from the date of this letter.**

Please make arrangements with Sara M Stevenson-Benn at the Division of Reclamation, Mining and Safety Denver Office (phone no. 303.866.3567, ext. 8148 or by email at [sara.stevenson-benn@state.co.us](mailto:sara.stevenson-benn@state.co.us)) 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 contact me by phone (720) 688-0626 or by email at [todd.jesse@state.co.us](mailto:todd.jesse@state.co.us)

Sincerely,

**Todd Jesse**

Environmental Protection Specialist  
Department of Natural Resources  
Division of Reclamation, Mining and Safety  
101 South 3<sup>rd</sup>, Suite 301  
Grand Junction, CO 81501  
Phone: (720) 688-0626

Enc: Financial Warranty Cost Estimate



## COST SUMMARY WORK

Task description: Cost Summary

Site: Soward Ranch Pit

Permit Action: SI-03

Permit/Job#: M1988021

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 9/8/2023

County: Mineral

Filename: M021-000

User: TJ1

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Reduce Highwall to 3:1	DOZER	1	2.81	\$1,200
002	Grade Processing Area	DOZER	1	7.44	\$3,175
003	Rip Compaction in Pit Floor	RIPPER	1	3.66	\$1,642
004	Spread Topsoil	DOZER	1	9.16	\$3,907
005	Revegetate Disturbed Area	REVEGE	1	0.00	\$7,001
006	Haul Reclamation Equipment To and From Site	MOBILIZE	1	3.20	\$2,508
007	Secondary Mobilization for Reseeding	MOBILIZE	1	3.20	\$781
<b><u>SUBTOTALS:</u></b>				<b>29.47</b>	<b>\$20,214</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$408

Performance bond: 1.05

Total = \$212

Job superintendent: 0.00

Total = \$0

Profit: 10.00

Total = \$2,021

TOTAL O & P = \$2,642

CONTRACT AMOUNT (direct + O & P) = \$22,856

#### 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

\$1,143

CONTINGENCY: 3.00

Total = \$606

TOTAL INDIRECT COST = \$4,891

**TOTAL BOND AMOUNT (direct + indirect) = \$25,105**

**BULLDOZER WORK**Task description: **Reduce Highwall to 3:1**Site: **Soward Ranch Pit**Permit Action: **SI-03**Permit/Job#: **M1988021****PROJECT IDENTIFICATION**Task #: **001**State: **Colorado**Abbreviation: **None**Date: **9/8/2023**County: **Mineral**Filename: **M021-001**User: **TJ1**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D8T - 8SU**Horsepower: **310**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

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

Total unit Cost/Hour: **\$426.60**Total Fleet Cost/Hour: **\$426.60****MATERIAL QUANTITIES**Initial Volume: **1,500**Swell factor: **1.330**Loose volume: **1,995 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: **Compacted fill or embankment 0.9**Average push gradient: **-20 %**Average site altitude: **8,900 feet**Material weight: **2,900 lbs/LCY**Weight description: **Decomposed rock - 50% Rock, 50% Earth****Job Condition Correction Factor****Source**

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(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:	1.426	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5068

Adjusted unit  
production: 709.52 LCY/hr  
Adjusted fleet  
production: **709.52** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.601/LCY

Total job time: **2.81** Hours  
Total job cost: **\$1,200**

**BULLDOZER WORK**Task description: **Grade Processing Area**Site: **Soward Ranch Pit**Permit Action: **SI-03**Permit/Job#: **M1988021****PROJECT IDENTIFICATION**Task #: **002**State: **Colorado**Abbreviation: **None**Date: **9/8/2023**County: **Mineral**Filename: **M021-002**User: **TJ1**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D8T - 8SU**Horsepower: **310**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

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

Total unit Cost/Hour: **\$426.60**Total Fleet Cost/Hour: **\$426.60****MATERIAL QUANTITIES**Initial Volume: **1,936**Swell factor: **1.165**Loose volume: **2,255 LCY**Source of estimated volume: **Division of Reclamation, Mining & Safety**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**Unadjusted hourly production: **852.6 LCY/hr**Materials consistency description: **Compacted fill or embankment 0.9**Average push gradient: **0 %**Average site altitude: **8,900 feet**Material weight: **2,900 lbs/LCY**Weight description: **Decomposed rock - 50% Rock, 50% Earth****Job Condition Correction Factor****Source**

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(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:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3554

Adjusted unit  
production: 303.01 LCY/hr  
Adjusted fleet  
production: **303.01** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$1.408/LCY

Total job time: **7.44** Hours  
Total job cost: **\$3,175**

## BULLDOZER RIPPING WORK

Task description: Rip Compaction in Pit Floor

Site: Soward Ranch Pit

Permit Action: SI-03

Permit/Job#: M1988021

### PROJECT IDENTIFICATION

Task #: 003

State: Colorado

Abbreviation: None

Date: 9/8/2023

County: Mineral

Filename: M021-003

User: TJ1

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:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper Ownership Cost/Hour:	\$14.11	NA
Ripper Operating Cost/Hour:	\$7.45	100
Operator Cost/Hour:	\$41.30	NA
Total Unit Cost/Hour:	\$448.16	
Total Fleet Cost/Hour:	<b>\$448.16</b>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA

Bank Volume: NA

BCY NA

Area: 2.50 acres

Rip Depth (ft): 1.00

Volume: 4,033

BCY or CCY

Source of estimated quantity: Current Map

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth:	<u>1.00</u>	feet/pass
Average Ripping Width:	<u>7.08</u>	feet/pass
Average Ripping Length:	<u>500.00</u>	feet/pass
Average Dozer Speed:	<u>88.00</u>	feet/minute
Average Maneuver Time:	<u>0.25</u>	minutes/pass
Production per unit area:	<u>0.822</u>	acres/hour

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.822 Acres/hr

Site Altitude: 8,900 feet

Altitude Adj: 1.00 (CAT HB)

Job Efficiency: 0.83 (1 shift/day)

Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.68 Acres/hr

Adjusted Hourly Fleet Production: **0.68** Acres/hr

### JOB TIME AND COST

Fleet size: 1

Grader(s)

Total job time: 3.66

Hours

Unit cost: \$656.865

Per acre

Total job cost: **\$1,642**





**BULLDOZER WORK**Task description: Spread TopsoilSite: Soward Ranch PitPermit Action: SI-03Permit/Job#: M1988021**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 9/8/2023County: MineralFilename: M021-004User: TJ1Agency 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:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper own.		
Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: \$426.60Total Fleet Cost/Hour: \$426.60**MATERIAL QUANTITIES**Initial Volume: 2,823Swell factor: 1.000Loose volume: 2,823 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 200 feetUnadjusted hourly production: 491.9 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: 0 %Average site altitude: 8,900 feetMaterial weight: 1,600 lbs/LCYWeight description: Top SoilJob Condition Correction FactorSource

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:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6266

Adjusted unit  
production: 308.22 LCY/hr  
Adjusted fleet  
production: **308.22** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$1.384/LCY

Total job time: **9.16** Hours  
Total job cost: **\$3,907**

**REVEGETATION WORK**Task description: Revegetate Disturbed AreaSite: Soward Ranch PitPermit Action: SI-03Permit/Job#: M1988021**PROJECT IDENTIFICATION**Task #: 005State: ColoradoAbbreviation: NoneDate: 9/8/2023County: MineralFilename: M021-005User: TJ1Agency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
8-32-16, 16-20-0	200.00	pound	\$0.90	\$179.34
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$179.34</b>

**Application**

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$41.82
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$41.82</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
Arizona Fescue - Redondo	0.50	5.74	\$4.63
Mountain Brome - Bromar	12.50	20.09	\$47.50
Western Wheatgrass - Arriba	6.40	16.16	\$41.60
<b>Totals Seed Mix</b>	<b>19.40</b>	<b>41.99</b>	<b>\$93.73</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>
Straw, 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**

<b>Description</b>	<b>Cost /Acre</b>
Power mulcher (MEANS 32 91 13.16 0350)	\$147.67
<b>Total Mulch Application Cost/Acre</b>	<b>\$147.67</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>
					\$
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$0.00</b>

**JOB TIME AND COST**

No. of Acres: 3.5 Cost /Acre: \$1,666.95  
 Estimated Failure Rate: 20% Cost /Acre\*: \$1,666.95  
 \*Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,MU  
LCHING

Initial Job Cost: **\$5,834.33**  
 Reseeding Job Cost: **\$1,166.87**  
 Total Job Cost: **\$7,001**  
 Job Hours: **0.00**

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Haul Reclamation Equipment To and From Site**Site: **Soward Ranch Pit**Permit Action: **SI-03**Permit/Job#: **M1988021****PROJECT IDENTIFICATION**Task #: **006**State: **Colorado**Abbreviation: **None**Date: **9/12/2023**County: **Mineral**Filename: **M021-006**User: **TJ1**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:	\$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 D8T - 8SU	53.08	\$255.49	\$175.95	1	\$431.44	\$175.95	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Subtotals:					<b>\$520.46</b>	<b>\$258.24</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
Subtotals:			<b>\$0.00</b>	<b>\$0.00</b>

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: CREEDE  
 Total one-way travel distance: 12.00 miles  
 Average Travel Speed: 40.00 mph

Total Non-Roadable Mob/Demob Cost \* \$2,508.14  
 \*\* two round trips with haul rig:  
 Total Roadable Mob/Demob Cost \*\* \$0.00  
 \*\* one round trip, no haul rig:

**Transportation Cycle Time:**

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.30	0.30
Return Time (Hours):	0.30	0.30
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.60	0.60

**JOB TIME AND COST**

Total job time: 3.20 Hours

Total job cost: \$2,508

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Secondary Mobilization for Reseeding**Site: **Soward Ranch Pit**Permit Action: **SI-03**Permit/Job#: **M1988021****PROJECT IDENTIFICATION**Task #: **007**State: **Colorado**Abbreviation: **None**Date: **9/12/2023**County: **Mineral**Filename: **M021-007**User: **TJ1**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:	\$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
Drill/Broadcast Seeder with Tractor	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00

Subtotals: **\$89.02** **\$82.29** **\$250.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
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Subtotals: **\$0.00** **\$0.00**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: CREEDE  
 Total one-way travel distance: 12.00 miles  
 Average Travel Speed: 40.00 mph

Total Non-Roadable Mob/Demob Cost \* \$780.83  
 \* two round trips with haul rig:  
 Total Roadable Mob/Demob Cost \*\* \$0.00  
 \*\* one round trip, no haul rig:

**Transportation Cycle Time:**

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.30	0.30
Return Time (Hours):	0.30	0.30
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.60	0.60

**JOB TIME AND COST**

Total job time: 3.20 Hours

Total job cost: \$781