

March 23, 2017

Fred Frei
Flag Resources Inc
1412 CR 311
New Castle, CO 81647



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

1313 Sherman Street, Room 215
Denver, CO 80203

RE: Goldman Gravel Pit, Permit No. M-1978-279, Reclamation Costs Update and Notice of Surety Increase (SI-2)

Dear Mr. Frei:

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 \$20,408 rounded up from \$20,407.55. This is an increase of \$3,108 over the \$17,300.00 currently held by the Division. This estimate is based on conditions observed during the March 3, 2017 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 **Monday, May 22, 2017**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

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, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@state.co.us

Sincerely,

Amy Yeldell

Environmental Protection Specialist
Department of Natural Resources
Division of Reclamation, Mining and Safety
Phone: (970) 254-8511

Ec: Russ Means, Senior EPS, Grand Junction DRMS
Enc: Financial Warranty Cost Estimate



COST SUMMARY WORK

Task description: Post inspection 03-2017-Does not include well pad slope

Site: Goldman Gravel Pit

Permit Action: 03-2017

Permit/Job#: M1978279

PROJECT IDENTIFICATION

Task #: ACY

State: Colorado

Abbreviation: None

Date: 3/2/2017

County: Garfield

Filename: M279-ACY

User: ACY

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Highwall reduction	DOZER	1	22.66	\$4,346.00
02a	Rip compacted pit floor	RIPPER	1	5.13	\$1,062.00
03a	Distribute topsoil over disturbed area	DOZER	1	5.36	\$1,029.00
04a	Revegetate affected area	REVEGE	1	16.00	\$6,162.00
05a	Mobilize reclamation crew and equipment	MOBILIZE	1	2.57	\$2,600.00
05b	Secondary seeding	MOBILIZE	1	2.57	\$1,569.00
<u>SUBTOTALS:</u>				54.29	\$16,768

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$338.71

Performance bond: 1.05

Total = \$176.06

Job superintendent: 0.00

Total = \$0.00

Profit: 10.00

Total = \$1,676.80

TOTAL O & P = \$2,191.57

CONTRACT AMOUNT (direct + O & P) = \$18,959.57

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 500.00

Total = 500.00

Engineering work and/or contract/bid preparation: 0.00

Total = \$0.00

Reclamation management and/or administration: 5.00

\$947.98

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$3,639.55

TOTAL BOND AMOUNT (direct + indirect) = \$20,407.55

TOTAL BOND AMOUNT (rounded) = \$20,408.00

BULLDOZER WORKTask description: **Highwall reduction**Site: **Goldman Gravel Pit** Permit Action: **03-2017** Permit/Job#: **M1978279****PROJECT IDENTIFICATION**

Task #: **01A** State: **Colorado** Abbreviation: **None**
 Date: **3/2/2017** County: **Garfield** Filename: **M279-01a**
 User: **ACY**

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:	\$83.81	NA
Operating Cost/Hour:	\$66.17	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.85	NA

Total unit Cost/Hour: **\$191.83**
 Total Fleet Cost/Hour: **\$191.83**

MATERIAL QUANTITIES

Initial Volume: **16,667**
 Swell factor: **1.124**
 Loose volume: **18,727 LCY**

Source of estimated volume: **Cut and fill 500 lft. of HW 30' high, 1H:1V to 3H:1V.**
 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: **-15 %**
 Average site altitude: **5,600 feet**

Material weight: **2,900 lbs/LCY**Weight description: **Sand and gravel - Dry****Job Condition Correction Factor**

		<u>Source</u>
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:	1.000	(DOZ-OC)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5904

Adjusted unit production: 826.56 LCY/hr

Adjusted fleet production: **826.56** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.232/LCY

Total job time: **22.66** Hours

Total job cost: **\$4,346**

BULLDOZER RIPPING WORK

Task description: Rip compacted pit floor

Site: Goldman Gravel Pit

Permit Action: 03-2017

Permit/Job#: M1978279

PROJECT IDENTIFICATION

Task #: 02A

State: Colorado

Abbreviation: None

Date: 3/2/2017

County: Garfield

Filename: M279-02a

User: ACY

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU
Ripper Attachment: 3-Shank Ripper

Horsepower: 310
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$83.81	NA
Operating Cost/Hour:	\$66.17	100
Ripper Ownership Cost/Hour:	\$7.55	NA
Ripper Operating Cost/Hour:	\$7.21	100
Operator Cost/Hour:	\$41.85	NA
Total Unit Cost/Hour:	\$206.59	
Total Fleet Cost/Hour:	\$206.59	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 3.00 acres Rip Depth (ft): 2.00 Volume: 9,680 BCY or CCY

Source of estimated quantity: Onsite observations

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.56 mph
Average Ripping Width: 7.08 degrees
Average Ripping Length: 100.00 feet
Average Dozer Speed: 88.00 feet
Average Maneuver Time: 0.25 feet
Production per unit area: 0.703 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.703 Acres/hr
Site Altitude: 5,600 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.58 Acres/hr
Adjusted Hourly Fleet Production: **0.58** Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **5.14** Hours

Unit cost: \$353.844 Per acre Total job cost: **\$1,062**

BULLDOZER WORKTask description: **Distribute topsoil over disturbed area**Site: **Goldman Gravel Pit**Permit Action: **03-2017**Permit/Job#: **M1978279****PROJECT IDENTIFICATION**Task #: **03A**State: **Colorado**Abbreviation: **None**Date: **3/2/2017**County: **Garfield**Filename: **M279-03a**User: **ACY**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:	\$83.81	NA
Operating Cost/Hour:	\$66.17	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.85	NA

Total unit Cost/Hour: **\$191.83**Total Fleet Cost/Hour: **\$191.83****MATERIAL QUANTITIES**Initial Volume: **6,453**Swell factor: **1.000**Loose volume: **6,453 LCY**Source of estimated volume: **4 ac. / 12" depth**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: **Loose stockpile 1.2**Average push gradient: **0 %**Average site altitude: **5,600 feet**Material weight: **1,600 lbs/LCY**Weight description: **Top Soil****Job Condition Correction Factor**

		<u>Source</u>
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:	0.800	(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: 0.8593

Adjusted unit production: 1,203.02 LCY/hr

Adjusted fleet production: **1203.02** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.159/LCY

Total job time: **5.36** Hours

Total job cost: **\$1,029**

REVEGETATION WORKTask description: Revegetate affected areaSite: Goldman Gravel PitPermit Action: 03-2017Permit/Job#: M1978279**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 3/2/2017County: GarfieldFilename: M279-04aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
8-32-16, 16-20-0	300.00	pound	\$0.32	\$96.00
			Total Fertilizer Materials Cost/Acre	\$96.00

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$144.62
Total Fertilizer Application Cost/Acre	\$144.62

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$106.29
Total Tilling Cost/Acre	\$106.29

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.25	4.05	\$8.75
Crested Wheatgrass - Nordan	7.00	32.14	\$28.00
Yellow Sweet Clover - Madrid	1.40	8.36	\$3.96
Totals Seed Mix	9.65	44.54	\$40.71

Application

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

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

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$7.16	\$7.16
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$261.00	\$522.00
Total Mulch Materials Cost/Acre				\$529.16

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$66.02
Power mulcher (MEANS 32 91 13.16 0350)	\$99.32
Weed spray, truck, non-aquatic area, nox. [DMG]	\$71.50
Total Mulch Application Cost/Acre	\$236.84

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: 4 Cost /Acre: \$1,385.62
 Estimated Failure Rate: 25% Cost /Acre*: \$619.62
 *Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING

Initial Job Cost: **\$5,542.48**
 Reseeding Job Cost: **\$619.62**
 Total Job Cost: **\$6,162**
 Job Hours: **16.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mobilize reclamation crew and equipment**Site: **Goldman Gravel Pit**Permit Action: **03-2017**Permit/Job#: **M1978279****PROJECT IDENTIFICATION**

Task #: **05A** State: **Colorado** Abbreviation: **None**
 Date: **3/2/2017** County: **Garfield** Filename: **M279-05a**
 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:**

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
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 D8T - 8SU	53.08	\$91.36	\$125.45	1	\$216.81	\$125.45	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$7.03	\$88.67	1	\$95.70	\$88.67	\$250.00

Subtotals: **\$440.77** **\$302.79** **\$750.00**

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	\$20.91	1	\$20.91	\$20.91

Subtotals: **\$20.91** **\$20.91**

EQUIPMENT HAUL DISTANCE and Time

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

Total Non-Roadable Mob/Demob Cost * \$2,593.99
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$5.97
 ** 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: \$2,600

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Secondary seedingSite: Goldman Gravel PitPermit Action: 03-2017Permit/Job#: M1978279**PROJECT IDENTIFICATION**Task #: 05BState: ColoradoAbbreviation: NoneDate: 3/17/2017County: GarfieldFilename: M279-05bUser: 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:**

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
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
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$7.03	\$88.67	1	\$95.70	\$88.67	\$250.00
Subtotals:					\$223.96	\$177.34	\$500.00

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	\$20.91	1	\$20.91	\$20.91
Subtotals:			\$20.91	\$20.91

EQUIPMENT HAUL DISTANCE and Time

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

Total Non-Roadable Mob/Demob Cost * \$1,562.58
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$5.97
 ** 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: \$1,569