



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

October 11, 2016

Mr. James J. Theisen
Theisen Mineral
1251 Bailey Dr.
Brighton, CO 80603

Re: Suzanne Marie, Permit No. M-2009-093, Financial Warranty Increase, Revision No. SI-1

Dear Mr. Theisen:

On October 11, 2016 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$3,731.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of **\$1,050.00**.

The Division ordered amendment of the current Financial Warranty, or submittal of a new Financial Warranty reflecting the increase, within 60 days (**December 10, 2016**) from the date of this letter. If you wish to submit a different type of Financial Warranty, please contact me such that I may send you the applicable form.

If you have any questions, please contact me at (303)866-3567 x8116.

Sincerely,

Michael A. Cunningham

Enclosure: Financial Warranty Calculation

CC: Wally Erickson, DRMS
Barbara Coria, DRMS



COST SUMMARY WORK

Task description: _____

Site: Suzanne Marie

Permit Action: 2016 Bond Calculation

Permit/Job#: M2009093

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 9/27/2016

County: Larimer

Filename: M093-000

User: MAC

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Replacing overburden	DOZER	1	3.91	\$502.00
002	Replacing topsoil	DOZER	1	0.68	\$88.00
003	Revegetating Disturbed Areas	REVEGE	1	8.00	\$1,678.00
004	Equipment Mobilization/Demobilization	MOBILIZE	1	3.22	\$874.00
<u>SUBTOTALS:</u>				15.81	\$3,142

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$63.47

Performance bond: 1.05

Total = \$32.99

Job superintendent: 0.00

Total = \$0.00

Profit: 10.00

Total = \$314.20

TOTAL O & P = \$410.66

CONTRACT AMOUNT (direct + O & P) = \$3,552.66

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: 5.00

\$177.63

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$588.29

TOTAL BOND AMOUNT (direct + indirect) = \$3,730.29

TOTAL BOND AMOUNT (rounded up) = \$3,731.00

BULLDOZER WORKTask description: Replacing overburdenSite: Suzanne MariePermit Action: 2016 Bond CalculationPermit/Job#: M2009093**PROJECT IDENTIFICATION**Task #: 001State: ColoradoAbbreviation: NoneDate: 9/27/2016County: LarimerFilename: M093-001User: MACAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D6T XLHorsepower: 185Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$41.63	NA
Operating Cost/Hour:	\$46.82	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$39.87	NA

Total unit Cost/Hour: \$128.32Total Fleet Cost/Hour: \$128.32**MATERIAL QUANTITIES**Initial Volume: 250Swell factor: 1.000Loose volume: 250 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 200 feetUnadjusted hourly production: 153.6 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 0 %Average site altitude: 4,930 feetMaterial weight: 3,300 lbs/LCYWeight description: Decomposed rock - 75% Rock, 25% Earth**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:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4165

Adjusted unit production: 63.97 LCY/hr

Adjusted fleet production: 63.97 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$2,006/LCY

Total job time: 3.91 Hours

Total job cost: \$502

BULLDOZER WORKTask description: **Replacing topsoil**Site: **Suzanne Marie**Permit Action: **2016 Bond Calculation**Permit/Job#: **M2009093****PROJECT IDENTIFICATION**Task #: **002**State: **Colorado**Abbreviation: **None**Date: **9/27/2016**County: **Larimer**Filename: **M093-002**User: **MAC**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D6T XL**Horsepower: **185**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$41.63	NA
Operating Cost/Hour:	\$46.82	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$39.87	NA

Total unit Cost/Hour: **\$128.32**Total Fleet Cost/Hour: **\$128.32****MATERIAL QUANTITIES**Initial Volume: **90**Swell factor: **1.000**Loose volume: **90 LCY**Source of estimated volume: **Division of Reclamation, Mining & Safety**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **200 feet**Unadjusted hourly production: **153.6 LCY/hr**Materials consistency description: **Loose stockpile 1.2**Average push gradient: **0 %**Average site altitude: **4,930 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: 131.99 LCY/hr

Adjusted fleet production: 131.99 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.972/LCY

Total job time: 0.68 Hours

Total job cost: \$88

REVEGETATION WORKTask description: Revegetating Disturbed AreasSite: Suzanne MariePermit Action: 2016 Bond CalculationPermit/Job#: M2009093**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 9/27/2016County: LarimerFilename: M093-003User: MACAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description	Cost /Acre
	\$
Total Tilling Cost/Acre	\$0.00

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Big Bluestem - Kaw	5.50	16.41	\$55.33
Blue Grama - Hachita	1.50	24.48	\$16.01
Indiangrass - Cheyenne	5.00	15.24	\$46.05
Indian Ricegrass - Paloma	6.00	19.42	\$52.38
Little Bluestem - Pastura	3.60	21.49	\$57.02
Sideoats Grama - Vaughn	4.60	15.10	\$51.80
Sandberg Bluegrass - VNS	1.50	31.85	\$13.05
Needle and Thread	7.50	19.80	\$353.10
Western Wheatgrass - Rosanna	8.00	20.20	\$28.16

Totals Seed Mix	43.20	184.01	\$672.90
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Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$261.80
Total Seed Application Cost/Acre	\$261.80

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered (MEANS 31 25 14.16 1200)	2.00	TON	\$246.00	\$492.00
Total Mulch Materials Cost/Acre				\$492.00

Application

Description	Cost /Acre
Hand spread, 1" deep (MEANS 32 91 13.16 0200)	\$3,049.20
Total Mulch Application Cost/Acre	\$3,049.20

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:	0.25	Cost /Acre:	\$4,475.90
Estimated Failure Rate:	50%	Cost /Acre*:	\$4,475.90
*Selected Replanting Work Items:	SEEDING,MULCHING		
Initial Job Cost:	\$1,118.98		
Reseeding Job Cost:	\$559.49		
Total Job Cost:	\$1,678		
Job Hours:	8.00		

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Equipment Mobilization/DemobilizationSite: Suzanne MariePermit Action: 2016 Bond CalculationPermit/Job#: M2009093**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 9/27/2016County: LarimerFilename: M093-004User: MACAgency 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/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D6T XL	23.25	\$41.63	\$88.67	1	\$130.30	\$88.67	\$250.00

Subtotals: **\$130.30** **\$88.67** **\$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:	<u>FORT COLLINS</u>	
Total one-way travel distance:	<u>25.00</u>	miles
Average Travel Speed:	<u>45.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$873.60</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$0.00</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.56</u>	<u>0.56</u>
Return Time (Hours):	<u>0.56</u>	<u>0.56</u>
Loading Time (Hours):	<u>0.25</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.25</u>	<u>NA</u>
Subtotals:	<u>1.61</u>	<u>1.11</u>

JOB TIME AND COST

Total job time:	<u>3.22</u>	Hours
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Total job cost:	<u>\$874</u>
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