

# STATE OF COLORADO

## DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215

Denver, Colorado 80203

Phone: (303) 866-3567

FAX: (303) 832-8106



April 2, 2012

Jim Duran

Duran and Pearce Contractors, Inc.

P.O. Box 1331

Craig, CO

81626

John W. Hickenlooper  
Governor

Mike King  
Executive Director

Loretta E. Piñeda  
Director

**RE: Martin Pit 1-A, Permit No. M-1990-140, Reclamation Costs Update and Notice of Surety Increase SI-1**

Dear Mr. Duran:

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.* The additional amount needs to be accepted prior to **Friday, June 01, 2012**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Staff calculations estimate the cost to reclaim the above referenced site to be \$21,220.00. This is an increase of \$16,220.00 over the \$5,000.00 currently held by the Division. This estimate is based on conditions observed during the March 27, 2012 inspection.

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.

Duran and Pearce Contractors, Inc.

Page 2 of 2

April 2, 2012

Sincerely,

  
**Dustin Czaplak**

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: (970) 243-6299

Fax: (970) 241-1516

Cc:

Enc: Financial Warranty Cost Estimate

## COST SUMMARY WORK

Task description: Reclamation cost review

Site: Martin Pit 1-A

Permit Action: 2012 March Review

Permit/Job#: M1990140

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 3/30/2012

County: Moffat

Filename: M140-000

User: DMC

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Remove refuse from site	DEMOLISH	1	8.00	\$4,135.89
02a	Reduce pit walls to 4H:1V, site grading	DOZER	1	20.91	\$4,179.25
03a	Rip compacted access roads and stockpile areas	RIPPER	1	1.01	\$215.00
04a	Transport topsoil from stockpiles	LOADER	1	20.18	\$2,841.00
05a	Distribute topsoil	DOZER	1	5.77	\$1,153.36
06a	Revegetate disturbed area	REVEGE	1	8.00	\$2,700.68
07a	Mobilize reclamation crew and equipment	MOBILIZE	1	2.57	\$2,648.01
<b><u>SUBTOTALS:</u></b>				<b>66.44</b>	<b>\$17,873.19</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02  
Performance bond: 1.05  
Job superintendent: 0.00  
Profit: 10.00

Total = \$361.04

Total = \$187.67

Total = \$0.00

Total = \$1,787.32

TOTAL O & P = \$2,336.03

CONTRACT AMOUNT (direct + O & P) = \$20,209.22

#### 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

\$1,010.46

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$3,346.49

**TOTAL BOND AMOUNT (direct + indirect) = \$21,220**

## DEMOLITION WORK

Task description: Remove refuse from site

Site: Martin Pit 1-A

Permit Action: 2012 March Review

Permit/Job#: M1990140

### PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 3/30/2012

County: Moffat

Filename: M140-01a

User: DMC

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 91.30 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Remove asphalt, concrete, and trash piles	300 cyd.	Loading and 2 mile haul, no salvage - Machine loading	300.00	CY	\$15.10	\$4,530.00

Job Hours: 8.00

Subtotal  
(unadjusted): \$4,530.00

Total Cost  
(adjusted for location): \$4,135.89

**BULLDOZER WORK**Task description: Reduce pit walls to 4H:1V, site gradingSite: Martin Pit 1-APermit Action: 2012 March ReviewPermit/Job#: M1990140**PROJECT IDENTIFICATION**Task #: 02AState: ColoradoAbbreviation: NoneDate: 3/30/2012County: MoffatFilename: M140-02aUser: DMCAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8UHorsepower: 310Blade Type: UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$58.56	NA
Operating Cost/Hour:	\$102.84	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.49	NA

Total unit Cost/Hour: \$199.89Total Fleet Cost/Hour: \$199.89**MATERIAL QUANTITIES**Initial Volume: 7,000Swell factor: 1.125Loose volume: 7,875 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feetUnadjusted hourly production: 931.6 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 0 %Average site altitude: 6,500 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packed**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:	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: 0.4043

Adjusted unit production: 376.65 LCY/hr

Adjusted fleet production: 376.65 LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.531/LCY

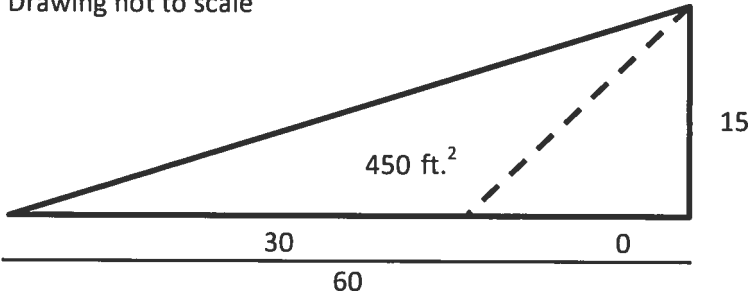
Total job time: 20.91 Hours

Total job cost: \$4,179.25

Highwall reduction - backfill

Highwall Height (ft.)	15.00	
Length of Highwall (lft.)	400.00	
- - - - Initial Slope	0.00	H:1V
———— Desired Slope	4.00	H:1V
Volume of material to be moved (ft. <sup>3</sup> )	180,000	
Volume of material to be moved (yd. <sup>3</sup> )	6,667	

All dimensions measured in feet  
Drawing not to scale



**WHEEL LOADER – LOAD AND CARRY WORK**Task description: Transport topsoil from stockpilesSite: Martin Pit 1-APermit Action: 2012 March ReviewPermit/Job#: M1990140**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 3/30/2012County: MoffatFilename: M140-04aUser: DMCAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: CAT 972HHorsepower: 287Attachment 1: ROPS CabShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$36.70	NA
Operating Cost/Hour:	\$65.54	100
Operator Cost/Hour:	\$38.49	NA
Total Unit Cost/Hour:	\$140.73	
Total Fleet Cost/Hour:	\$140.73	

**MATERIAL QUANTITIES**Initial volume: 8,067

CCY

Swell factor: 1.000Loose volume: 8,067

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): 0.525 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material up to 1/8" diameter 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	No adjustment - factor not applicable 0.00	0.000	(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:		-0.020	minutes
Adjusted Basic Cycle Time:		0.505	minutes

**Rolling Resistance – Road Conditions**Haul: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0Return: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0**Haul and Return Time**

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	100	0.00	5.00	5.00	0.0922	(Cat HB)
Return Route:	100	0.00	5.00	5.00	0.0832	(Cat HB)



Total Travel Time: 0.1754 minutes  
 Total Cycle Time: 0.6804 minutes

Load Bucket Capacity

Rated Capacity: 5.60 LCY (heaped)  
 Bucket Fill Factor: 0.975 Loose material - uniform aggregates to 1/8" (95-100%) 0.975  
 Adjusted Capacity: 5.46 LCY

Job Condition Correction FactorsSite Altitude: 6500 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: 481.47 LCY/Hour  
 Adjusted Hourly Unit Production: 399.62 LCY/Hour  
 Adjusted Hourly Fleet Production: 399.62 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Loader(s) Total job time: 20.19 Hours  
 Unit cost: \$0.352 /LCY Total job cost: \$2,841.00

**BULLDOZER WORK**Task description: **Distribute topsoil**Site: **Martin Pit 1-A**Permit Action: **2012 March Review**Permit/Job#: **M1990140****PROJECT IDENTIFICATION**Task #: **05A**State: **Colorado**Abbreviation: **None**Date: **3/30/2012**County: **Moffat**Filename: **M140-05a**User: **DMC**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D8T - 8U**Horsepower: **310**Blade Type: **Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$58.56	NA
Operating Cost/Hour:	\$102.84	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.49	NA

Total unit Cost/Hour: **\$199.89**Total Fleet Cost/Hour: **\$199.89****MATERIAL QUANTITIES**Initial Volume: **8,067**Swell factor: **1.000**Loose volume: **8,067 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: **1,627.0 LCY/hr**Materials consistency description: **Loose stockpile 1.2**Average push gradient: **0 %**Average site altitude: **6,500 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: 1,398.08 LCY/hr

Adjusted fleet production: **1398.08 LCY/hr**

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.143/LCY

Total job time: **5.77 Hours**

Total job cost: **\$1,153.36**

**REVEGETATION WORK**Task description: Revegetate disturbed areaSite: Martin Pit 1-APermit Action: 2012 March ReviewPermit/Job#: M1990140**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 3/30/2012County: MoffatFilename: M140-06aUser: DMCAgency 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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$92.35
Total Tilling Cost/Acre	\$92.35

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Western Wheatgrass - Arriba	16.00	40.40	\$57.60
Totals Seed Mix	16.00	40.40	\$57.60

**Application**

Description	Cost /Acre
Drill seeding {DMG}	\$90.11
Total Seed Application Cost/Acre	\$90.11

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

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

**Application**

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

**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:	9	Cost /Acre:	\$240.06
Estimated Failure Rate:	25%	Cost /Acre*:	\$240.06
*Selected Replanting Work Items:	TILLING, SEEDING		
Initial Job Cost:	\$2,160.54		
Reseeding Job Cost:	\$540.14		
Total Job Cost:	\$2,700.68		
Job Hours:	8.00		

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: Mobilize reclamation crew and equipmentSite: Martin Pit 1-APermit Action: 2012 March ReviewPermit/Job#: M1990140**PROJECT IDENTIFICATION**Task #: 07AState: ColoradoAbbreviation: NoneDate: 3/30/2012County: MoffatFilename: M140-07aUser: DMCAgency 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
CAT 972H	28.00	\$36.70	\$117.55	1	\$154.25	\$117.55	\$250.00
Cat D8T - 8U	48.33	\$58.56	\$117.55	1	\$176.11	\$117.55	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00

Subtotals: **\$458.62** **\$323.77** **\$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	\$25.30	1	\$25.30	\$25.30

Subtotals: **\$25.30** **\$25.30**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>CRAIG</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 *		
** two round trips with haul rig:	<u>\$2,640.78</u>	
Total Roadable Mob/Demob Cost **		
** one round trip, no haul rig:	<u>\$7.23</u>	

**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
Total job cost:	<u>\$2,648.01</u>	