

July 17, 2015

Ed Supples
The Uncompahgre Valley Water Users Association
601 N. Park Avenue
Montrose, CO 81401



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

1313 Sherman Street, Room 215
Denver, CO 80203

RE: South D-20 Pit, Permit No. M-1992-102, Reclamation Costs Update and Notice of Surety Increase (SI-4)

Dear Mr. Supples:

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 **Tuesday, September 15, 2015**. 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 \$121,573.00. This is an increase of \$83,673.00 over the \$37,900.00 currently held by the Division. This estimate is based on conditions observed during the April 6, 2015 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.

Sincerely,

Dustin Czaplak
Environmental Protection Specialist
Department of Natural Resources
Division of Reclamation, Mining and Safety
101 South 3rd, Suite 301
Grand Junction, CO 81501
Phone: (970) 243-6299
Fax: (970) 241-1516

Enc: Financial Warranty Cost Estimate (6/1/2015)



COST SUMMARY WORK

Task description: Total costs

Site: South D-20 Pit

Permit Action: UVWUA

Permit/Job#: M1992102

PROJECT IDENTIFICATION

Task #: UVWUA

State: Colorado

Abbreviation: None

Date: 6/1/2015

County: Montrose

Filename: M102-UVWUA

User: SJM

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
SO1	reduce existing highwalls to final grade	DOZER	1	126.47	\$34,295.00
SO1a	push out stockpiles of material	DOZER	1	64.79	\$17,570.00
SO1b	replace topsoil over sloped areas	DOZER	1	50.69	\$12,861.00
SO1c	rough grade pit floor	GRADER	1	10.27	\$1,944.00
SO1d	mobilization to/ from site	MOBILIZE	1	2.50	\$4,815.00
SO1e	reveg of 20 acres total disturbance	REVEGE	1	40.00	\$31,235.00
SO1f	rip pit floor and roads	RIPPER	1	28.76	\$7,801.00
SUBTOTALS:				323.48	\$110,521

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 0.00%

Total = \$0.00

Performance bond: 0.00%

Total = \$0.00

Job superintendent: 0.00 hrs

Total = \$0.00

Profit: 10.00%

Total = \$11,052.10

TOTAL O & P = \$11,052.10

CONTRACT AMOUNT (direct + O & P) = \$121,573.10

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: 0.00%

\$0.00

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$11,052.10

TOTAL BOND AMOUNT (direct + indirect) = \$121,573.10

BULLDOZER WORKTask description: Reduce existing highwalls to final gradeSite: South D-20 PitPermit Action: UWVUAPermit/Job#: M1992102**PROJECT IDENTIFICATION**Task #: SO1State: ColoradoAbbreviation: NoneDate: 6/1/2015County: MontroseFilename: M102-SO1User: SJMAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9UHorsepower: 405Blade Type: UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$81.10	NA
Operating Cost/Hour:	\$143.16	100
Ripper op. Cost/Hour:	\$8.91	100
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$271.17Total Fleet Cost/Hour: \$271.17**MATERIAL QUANTITIES**Initial Volume: 53,000Swell factor: 1.120Loose volume: 59,360 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 60 feetUnadjusted hourly production: 1,973.7 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 15 %Average site altitude: 6,080 feetMaterial weight: 3,250 lbs/LCYWeight description: Gravel - Pitrun**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:	0.900	(SSD-FC)
Push gradient:	0.666	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.708	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.2378

Adjusted unit production: 469.35 LCY/hr

Adjusted fleet production: 469.35 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.578/LCY

Total job time: 126.47 Hours

Total job cost: \$34,295

BULLDOZER WORKTask description: Push out stockpiles of materialSite: South D-20 PitPermit Action: UWVUAPermit/Job#: M1992102PROJECT IDENTIFICATIONTask #: SO1AState: ColoradoAbbreviation: NoneDate: 6/1/2015County: MontroseFilename: M102-SO1aUser: SJMAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D9T - 9UHorsepower: 405Blade Type: UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$81.10	NA
Operating Cost/Hour:	\$143.16	100
Ripper op. Cost/Hour:	\$8.91	100
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$271.17Total Fleet Cost/Hour: \$271.17MATERIAL QUANTITIESInitial Volume: 50,000Swell factor: 1.000Loose volume: 50,000 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat HandbookHOURLY PRODUCTIONAverage push distance: 75 feetUnadjusted hourly production: 1,600.0 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 0 %Average site altitude: 6,080 feetMaterial weight: 2,850 lbs/LCYWeight description: Gravel - Dry (1/4"-2" diam.)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:	0.807	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4823

Adjusted unit production: 771.68 LCY/hr

Adjusted fleet production: 771.68 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.351/LCY

Total job time: 64.79 Hours

Total job cost: \$17,570

BULLDOZER WORKTask description: Replace topsoil over sloped areasSite: South D-20 PitPermit Action: UVWUAPermit/Job#: M1992102**PROJECT IDENTIFICATION**Task #: SO1BState: ColoradoAbbreviation: NoneDate: 6/1/2015County: MontroseFilename: M102-SO1bUser: SJMAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9UHorsepower: 405Blade Type: UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$72.57	NA
Operating Cost/Hour:	\$143.16	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$253.73Total Fleet Cost/Hour: \$253.73**MATERIAL QUANTITIES**Initial Volume: 13,000Swell factor: 1.125Loose volume: 14,625 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 150 feetUnadjusted hourly production: 952.6 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 15 %Average site altitude: 6,080 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:	0.900	(SSD-FC)
Push gradient:	0.666	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3029

Adjusted unit production: 288.54 LCY/hr

Adjusted fleet production: 288.54 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.879/LCY

Total job time: 50.69 Hours

Total job cost: \$12,861

MOTOR GRADER WORK

Task description: Rough grade pit floor

Site: South D-20 Pit

Permit Action: UVWUA

Permit/Job#: M1992102

PROJECT IDENTIFICATION

Task #: SO1C

State: Colorado

Abbreviation: None

Date: 6/1/2015

County: Montrose

Filename: M102-SO1c

User: SJM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: CAT 16M
Ripper Attachment: Multi-Shank Ripper

Horsepower: 297
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$72.27	NA
Operating Cost/Hour:	\$91.67	100
Ripper Operating Cost/Hour:	\$0.89	25
Operator Cost/Hour:	\$24.47	NA
Total Unit Cost/Hour:	\$189.30	
Total Fleet Cost/Hour:	\$191.96	

MATERIAL QUANTITIES

Total Area to be graded or ripped: 20.00 acres

Source of estimated acreage: Total acreage disturbed currently

HOURLY PRODUCTION

Average Grader Speed: 1.50 mph
Selected Application: Finish grading (0-2.5 mph) - 1.5
Selected Blade Angle: 30 degrees
Effective Blade Length: 13.90 feet
Width of blade overlap per pass: 2.00 feet
Net grading or ripping width per pass: 11.90 feet
Unadjusted Hourly Unit Production: 2.1636 acres/hour

Job Condition Correction Factors

Site Altitude: 6080 feet

Altitude Adj: 1.00
Job Efficiency: 0.90
Net Correction: 0.9000

Source
(CAT HB)
(1sh/d, fav.)
multiplier

Adjusted Hourly Unit Production: 1.9473 acres/Hour
Adjusted Hourly Fleet Production: 1.9473 acres/Hour

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 10.27 Hours

Unit cost: \$97.21 per acre Total job cost: \$1,944

EQUIPMENT MOBILIZATION/DEMobilIZATIONTask description: Mobilization to/ from siteSite: South D-20 PitPermit Action: UVWUAPermit/Job#: M1992102**PROJECT IDENTIFICATION**Task #: SO1DState: ColoradoAbbreviation: NoneDate: 6/1/2015County: MontroseFilename: M102-SO1dUser: SJMAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per day
Cost 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 D9T - 9U	66.78	\$80.19	\$125.45	2	\$411.28	\$250.90	\$500.00
CAT 16M	28.73	\$68.74	\$117.55	1	\$186.29	\$117.55	\$250.00
Cat 631G	52.50	\$75.63	\$125.45	1	\$201.08	\$125.45	\$250.00
Water Tanker, 7,000 Gal.	29.65	\$34.10	\$117.55	1	\$151.65	\$117.55	\$250.00

Subtotals: **\$950.30** **\$611.45** **\$1,250.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 4x2, 30K GVW	\$62.73	1	\$62.73	\$62.73
Light Duty Pickup, 4x4, 3/4 T.	\$34.08	1	\$34.08	\$34.08

Subtotals: **\$96.81** **\$96.81**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	MONTROSE	
Total one-way travel distance:	5.00	miles
Average Travel Speed:	40.00	mph
Total Non-Roadable Mob/Demob Cost *		
** two round trips with haul rig:	\$4,791.04	
Total Roadable Mob/Demob Cost **		
** one round trip, no haul rig:	\$24.20	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.13	0.13
Return Time (Hours):	0.13	0.13
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.25	0.25

JOB TIME AND COST

Total job time:	2.50	Hours
Total job cost:	\$4,815	

REVEGETATION WORKTask description: Reveg of 20 acres total disturbanceSite: South D-20 PitPermit Action: UVWUAPermit/Job#: M1992102**PROJECT IDENTIFICATION**Task #: SO1EState: ColoradoAbbreviation: NoneDate: 6/1/2015County: MontroseFilename: M102-SO1eUser: SJMAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	62.00	pound	\$0.36	\$22.26
Muriate of potash, 0-0-60	67.00	pound	\$0.33	\$21.91
Triple superphosphate, 0-46-0	88.00	pound	\$0.50	\$43.65
Total Fertilizer Materials Cost/Acre				\$87.82

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$52.71
Total Fertilizer Application Cost/Acre	\$52.71

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$98.01
Total Tilling Cost/Acre	\$98.01

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	1.40	4.53	\$9.91
Crested Wheatgrass - Nordan	0.50	2.30	\$1.17
Russian Wildrye - Vinal	1.00	4.02	\$3.71
Galleta	1.10	4.02	\$27.72
Streambank Wheatgrass - Sodar	1.10	3.59	\$4.63
Thickspike Wheatgrass - Critana	1.70	6.01	\$8.79
Western Wheatgrass - Arriba	1.60	4.04	\$5.89
Rabbitbrush, Rubber	0.25	3.72	\$9.15
Sagebrush, Mountain or Big	0.05	2.64	\$1.69
Saltbush, Shadscale	1.30	1.94	\$15.50

Winter Fat	0.80	2.04	\$26.15
Totals Seed Mix	10.80	38.84	\$114.30

Application

Description	Cost /Acre
Drill seeding (DRMS Cost Data)	\$88.20
Total Seed Application Cost/Acre	\$88.20

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$265.00	\$530.00
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$16.24	\$16.24
Total Mulch Materials Cost/Acre				\$546.24

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$65.89
Power mulcher (MEANS 32 91 13.16 0250)	\$86.68
Weed spray, truck, non-aquatic area, nox. [DMG]	\$61.49
Total Mulch Application Cost/Acre	\$214.06

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: 20
 Estimated Failure Rate: 30%
 *Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,MULCHING

Cost /Acre: \$1,201.34

Cost /Acre*: \$1,201.34

Initial Job Cost: \$24,026.80
 Reseeding Job Cost: \$7,208.04
 Total Job Cost: \$31,235
 Job Hours: 40.00

BULLDOZER RIPPING WORK

Task description:

Rip pit floor and roadsSite: South D-20 PitPermit Action: UVWUAPermit/Job#: M1992102

PROJECT IDENTIFICATION

Task #: SO1FState: ColoradoAbbreviation: NoneDate: 6/1/2015County: MontroseFilename: M102-SO1fUser: SJMAgency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D9T - 9UHorsepower: 405Ripper Attachment: 3-Shank RipperShift Basis: 1 per dayData Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$81.10	NA
Operating Cost/Hour:	\$143.16	100
Ripper Operating Cost/Hour:	\$8.91	100
Operator Cost/Hour:	\$38.01	NA
Total Unit Cost/Hour:	\$271.17	
Total Fleet Cost/Hour:	\$271.17	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NABank Volume: NABCY NAArea: 20.00 acresRip Depth (ft): 2.00Volume: 64,533

BCY or CCY

Source of estimated quantity: Entire permit floor less 7 acres sloped areas

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth:	2.63	mph
Average Ripping Width:	7.67	degrees
Average Ripping Length:	200.00	feet
Average Dozer Speed:	88.00	feet
Average Maneuver Time:	0.25	feet
Production per unit area:	0.838	acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.838 Acres/hrSite Altitude: 6,080 feetAltitude Adj: 1.00 (CAT HB)Job Efficiency: 0.83 (1 shift/day)Net Correction: 0.83 multiplierAdjusted Hourly Unit Production: 0.70 Acres/hrAdjusted Hourly Fleet Production: 0.70 Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s)Total job time: 28.77 HoursUnit cost: \$390.072 Per acreTotal job cost: \$7,801