



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

June 27, 2019

Jason Burkey  
Oldcastle SW Group, Inc. dba United Companies  
2273 River Road  
Grand Junction, CO 81505

**RE: Lyster Pit, Permit No. M-2008-009, Notice of Surety Increase (SI-2)**

Dear Mr. Burkey:

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 \$214,270. This is an increase of \$62,210 over the \$152,060 currently held by the Division. This estimate is based on conditions observed during the June 12, 2018 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, August 26, 2019**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Please make arrangements with Gabriel Benvenuti 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 Gabriel Benvenuti.

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

Ec: Travis Marshall, Senior EPS, Grand Junction DRMS



## COST SUMMARY WORK

Task description: Post inspection Update 06-12-19

Site: Lyster Pit

Permit Action: 2019-06

Permit/Job#: M2008009

### PROJECT IDENTIFICATION

Task #: ACY

State: Colorado

Abbreviation: None

Date: 6/27/2019

County: Moffat

Filename: M009-ACY

User: ACY

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Remove Scale house	DEMOLISH	1	8.00	\$1,310
02a	Distribute overburden	LOADER	4	45.68	\$24,881
03a	Establish 3H:1V grade around perimeter of pond	DOZER	2	19.19	\$8,002
03b	Rip compacted areas	RIPPER	2	43.28	\$19,497
04a	Distribute topsoil	LOADER	4	56.40	\$30,716
05a	Spread transported topsoil	DOZER	2	25.91	\$10,802
06a	Reveg 43 ac of affected lands	REVEGE	1	53.75	\$69,274
07a	Initial Mobilization	MOBILIZE	1	2.53	\$7,140
07b	Secondary Mobilization	MOBILIZE	1	2.53	\$1,523
<b><u>SUBTOTALS:</u></b>				<b>257.27</b>	<b>\$173,145</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$3,498

Performance bond: 1.05

Total = \$1,818

Job superintendent: 106.99

Total = \$7,816

Profit: 10.00

Total = \$17,314

TOTAL O & P = \$30,446

CONTRACT AMOUNT (direct + O & P) = \$203,591

#### 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

\$10,180

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$41,125

**TOTAL BOND AMOUNT (direct + indirect) = \$214,270**

## DEMOLITION WORK

Task description: Remove Scale house

Site: Lyster Pit

Permit Action: 2019-06

Permit/Job#: M2008009

### PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 6/27/2019

County: Moffat

Filename: M009-01a

User: ACY

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 95.50 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Scale House	10 x 20 x 8	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul	1,600.00	CF	\$0.35	\$560.00
Scale	70'L x 12'W	Loading and 2 mile haul, no salvage - Machine loading	31.00	CY	\$17.20	\$533.20
Scale Transpiration	31 CY	Hauling only, per mile, 12-18 CY truck - 50 mph average speed	26.00	MI	\$3.08	\$80.08
Scale foundations and ramps	40'L x 12'W	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul	240.00	SF	\$0.83	\$198.96

Job Hours: 8.00

Subtotal  
(unadjusted): \$1,372.24

Total Cost  
(adjusted for location): \$1,310.49

**WHEEL LOADER – LOAD AND CARRY WORK**Task description: **Distribute overburden**Site: **Lyster Pit** Permit Action: **2019-06** Permit/Job#: **M2008009****PROJECT IDENTIFICATION**

Task #: **02A** State: **Colorado** Abbreviation: **None**  
 Date: **6/27/2019** County: **Moffat** Filename: **M009-02a**  
 User: **ACY**

Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**

Basic Machine: **CAT 972H** Horsepower: **287**  
 Attachment 1: **ROPS Cab** Shift Basis: **1 per day**  
 Data Source: **(CRG)**

**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$44.67	NA
Operating Cost/Hour:	\$50.58	100
Operator Cost/Hour:	\$40.90	NA
Total Unit Cost/Hour:	\$136.15	
Total Fleet Cost/Hour:	\$544.61	

**MATERIAL QUANTITIES**

Initial volume: **37,463** CCY Swell factor: **1.115**  
 Loose volume: **41,771** LCY

Source of estimated volume: **TR-2 vol 17'H 3500 LF 1:1 to 3:1 backfill**  
 Source 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:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -0.04	-0.040	(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:		-0.060	minutes
Adjusted Basic Cycle Time:		0.465	minutes

**Rolling Resistance – Road Conditions**

Haul: **Rutted dirt, little maintenance, no water, 2" tire penetration 5.0**  
 Return: **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:	500	0.00	5.00	5.00	0.4611	(Cat HB)
Return Route:	500	0.00	5.00	5.00	0.4160	(Cat HB)

Total Travel Time: 0.8771 minutes  
 Total Cycle Time: 1.3421 minutes

Load Bucket Capacity

Rated Capacity: 5.60 LCY (heaped)  
 Bucket Fill Factor: 1.100 Other - rock/dirt mixtures (100-120%) 1.100  
 Adjusted Capacity: 6.16 LCY

Job Condition Correction Factors

Site Altitude: 6200 feet

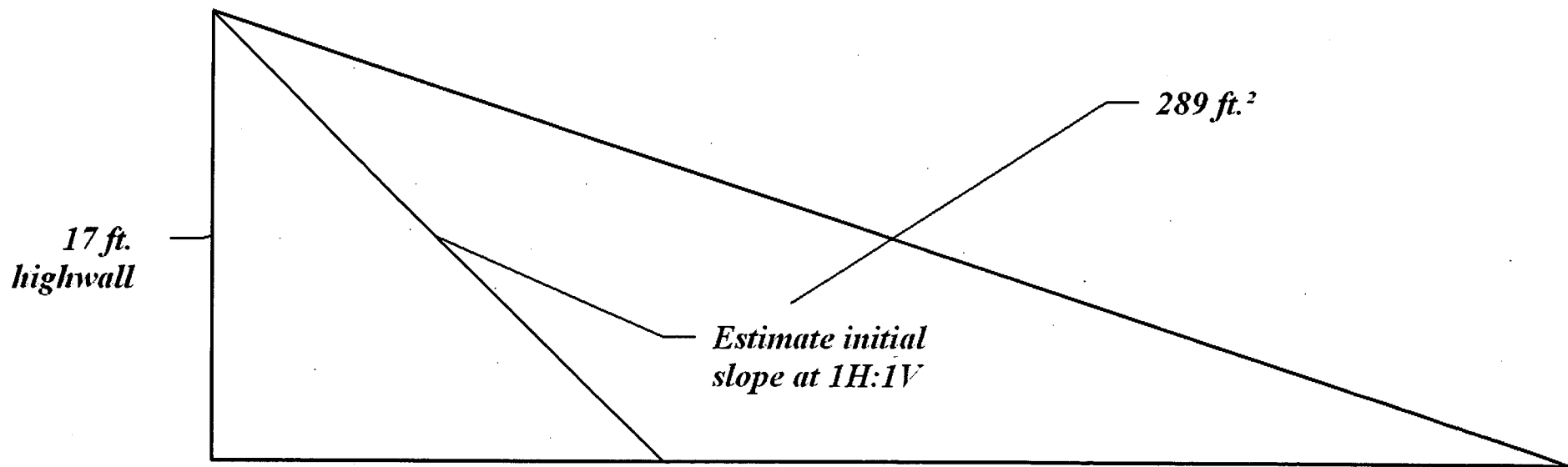
		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.83</u>	(1 shift/day)
Net Correction:	<u>0.83</u>	multiplier

Unadjusted Hourly Unit Production: 275.39 LCY/Hour  
 Adjusted Hourly Unit Production: 228.58 LCY/Hour  
 Adjusted Hourly Fleet Production: 914.31 LCY/Hour

JOB TIME AND COST

Fleet size:	<u>4</u>	Loader(s)	Total job time:	<u>45.69</u>	Hours
Unit cost:	<u>\$0.596</u>	/LCY	Total job cost:	<u>\$24,881</u>	

*Amount of backfill material required to establish 3H:1V slopes.  
Approx. pond perimeter of 3,500 lft. x 289 sqft. = 37,463 cyd.*



**BULLDOZER WORK**Task description: Establish 3H:1V grade around perimeter of pondSite: Lyster Pit Permit Action: 2019-06 Permit/Job#: M2008009**PROJECT IDENTIFICATION**

Task #: 03A State: Colorado Abbreviation: None  
 Date: 6/27/2019 County: Moffat Filename: M009-03a  
 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:	<u>\$93.62</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$73.35</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>
Operator Cost/Hour:	<u>\$41.52</u>	<u>NA</u>

Total unit Cost/Hour: \$208.49  
 Total Fleet Cost/Hour: **\$416.99**

**MATERIAL QUANTITIES**

Initial Volume: 18,731  
 Swell factor: 1.000  
 Loose volume: **18,731 LCY**

Source of estimated volume: Half transported vol (37,463)  
 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: 15 %  
 Average site altitude: 6,200 feet

Material weight: 2,100 lbs/LCYWeight description: Earth - Loam**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.200</u>	<u>(CAT HB)</u>
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>
Visibility:	<u>0.800</u>	<u>(POOR)</u>

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.666	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3486

Adjusted unit production: 488.04 LCY/hr

Adjusted fleet production: **976.08** LCY/hr

### **JOB TIME AND COST**

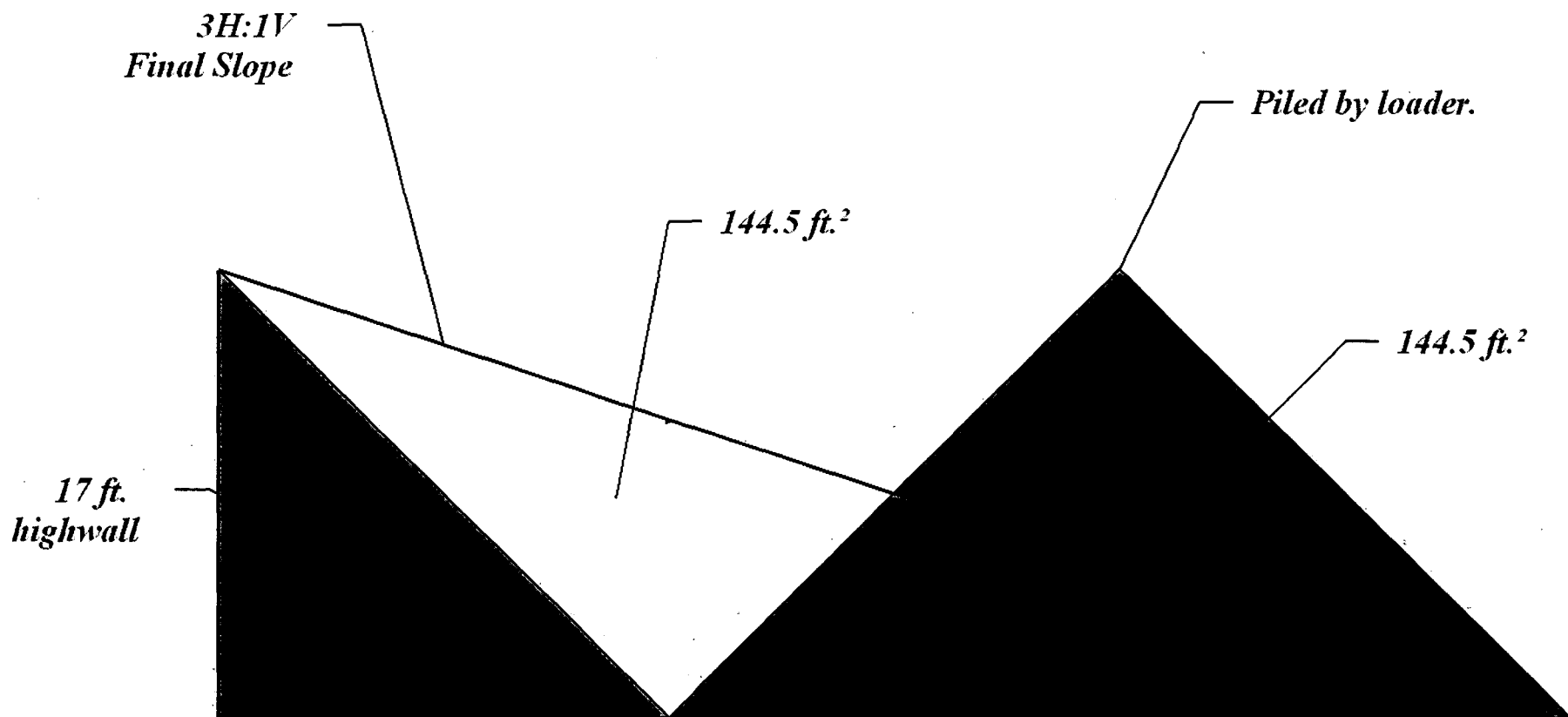
Fleet size: 2 Dozer(s)

Unit cost: \$0.427/LCY

Total job time: **19.19** Hours

Total job cost: **\$8,002**

*Establish 3H:1V slopes around pond from  
material placed by front end loader.  
3,500 lft. x 144.5 sqft. = 18,731.5 cyd.*



## BULLDOZER RIPPING WORK

Task description: Rip compacted areas

Site: Lyster Pit Permit Action: 2019-06 Permit/Job#: M2008009

### PROJECT IDENTIFICATION

Task #: 03B State: Colorado Abbreviation: None  
Date: 6/27/2019 County: Moffat Filename: M009-03b  
User: ACY

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:	<u>\$93.62</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$73.35</u>	<u>100</u>
Ripper Ownership Cost/Hour:	<u>\$8.93</u>	<u>NA</u>
Ripper Operating Cost/Hour:	<u>\$7.78</u>	<u>100</u>
Operator Cost/Hour:	<u>\$41.52</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$225.20</u>	
Total Fleet Cost/Hour:	<u>\$450.40</u>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA  
Area: 25.00 acres Rip Depth (ft): 2.00 Volume: 80,667 BCY or CCY

Source of estimated quantity: Staff estimates-Stockpile areas

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth:	<u>2.56</u>	<u>feet/pass</u>
Average Ripping Width:	<u>7.08</u>	<u>feet/pass</u>
Average Ripping Length:	<u>15.00</u>	<u>feet/pass</u>
Average Dozer Speed:	<u>88.00</u>	<u>feet/minute</u>
Average Maneuver Time:	<u>0.25</u>	<u>minutes/pass</u>
Production per unit area:	<u>0.348</u>	<u>acres/hour</u>

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production:	<u>0.348</u>	<u>Acres/hr</u>
Site Altitude:	<u>6,200</u>	<u>feet</u>
Altitude Adj:	<u>1.00</u>	<u>(CAT HB)</u>
Job Efficiency:	<u>0.83</u>	<u>(1 shift/day)</u>
Net Correction:	<u>0.83</u>	<u>multiplier</u>

Adjusted Hourly Unit Production: 0.29 Acres/hr  
Adjusted Hourly Fleet Production: 0.58 Acres/hr

### JOB TIME AND COST

Fleet size: 2 Grader(s) Total job time: 43.29 Hours

Unit cost: \$779.869 Per acre Total job cost: \$19,497

**WHEEL LOADER – LOAD AND CARRY WORK**Task description: **Distribute topsoil**Site: **Lyster Pit** Permit Action: **2019-06** Permit/Job#: **M2008009****PROJECT IDENTIFICATION**

Task #: **04A** State: **Colorado** Abbreviation: **None**  
 Date: **6/27/2019** County: **Moffat** Filename: **M009-04a**  
 User: **ACY**

Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**

Basic Machine: **CAT 972H** Horsepower: **287**  
 Attachment 1: **ROPS Cab** Shift Basis: **1 per day**  
 Data Source: **(CRG)**

**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$44.67	NA
Operating Cost/Hour:	\$50.58	100
Operator Cost/Hour:	\$40.90	NA
Total Unit Cost/Hour:	\$136.15	
Total Fleet Cost/Hour:	\$544.61	

**MATERIAL QUANTITIES**

Initial volume: **46,249** CCY Swell factor: **1.115**  
 Loose volume: **51,568** LCY

Source of estimated volume: **43 ac (60-17 ac pond) @ 8" deep**  
 Source 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:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -0.04	-0.040	(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:		-0.060	minutes
Adjusted Basic Cycle Time:		0.465	minutes

**Rolling Resistance – Road Conditions**

Haul: **Rutted dirt, little maintenance, no water, 2" tire penetration 5.0**  
 Return: **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:	500	0.00	5.00	5.00	0.4611	(Cat HB)
Return Route:	500	0.00	5.00	5.00	0.4160	(Cat HB)

Total Travel Time: 0.8771 minutes  
 Total Cycle Time: 1.3421 minutes

Load Bucket Capacity

Rated Capacity: 5.60 LCY (heaped)  
 Bucket Fill Factor: 1.100 Other - rock/dirt mixtures (100-120%) 1.100  
 Adjusted Capacity: 6.16 LCY

Job Condition Correction Factors

Site Altitude: 6200 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: 275.39 LCY/Hour  
 Adjusted Hourly Unit Production: 228.58 LCY/Hour  
 Adjusted Hourly Fleet Production: 914.31 LCY/Hour

JOB TIME AND COST

Fleet size: 4 Loader(s) Total job time: 56.40 Hours  
 Unit cost: \$0.596 /LCY Total job cost: \$30,716

**BULLDOZER WORK**Task description: Spread transported topsoilSite: Lyster PitPermit Action: 2019-06Permit/Job#: M2008009**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 6/27/2019County: MoffatFilename: M009-05aUser: ACYAgency 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:	\$93.62	NA
Operating Cost/Hour:	\$73.35	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.52	NA

Total unit Cost/Hour: \$208.49Total Fleet Cost/Hour: **\$416.99****MATERIAL QUANTITIES**Initial Volume: 23,125Swell factor: 1.000Loose volume: **23,125 LCY**Source of estimated volume: Half transported vol (46249)Source of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feetUnadjusted hourly production: 852.6 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 0 %Average site altitude: 6,200 feetMaterial weight: 2,100 lbs/LCYWeight description: Earth - Loam**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	0.800	(POOR)

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:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5235

Adjusted unit production: 446.34 LCY/hr

Adjusted fleet production: **892.68** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)

Unit cost: \$0.467/LCY

Total job time: **25.91** Hours

Total job cost: **\$10,802**

**REVEGETATION WORK**Task description: Reveg 43 ac of affected landsSite: Lyster PitPermit Action: 2019-06Permit/Job#: M2008009**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 6/27/2019County: MoffatFilename: M009-06aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

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

**Application**

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

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

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Orchardgrass - Latar	0.30	3.72	\$1.01
Smooth Brome - Lincoln	1.60	5.33	\$6.98
Intermediate Wheatgrass - Tegmar	2.50	5.34	\$9.83
Pubescent Wheatgrass - Luna	2.25	4.65	\$9.38
Sainfoin - Remont	2.50	1.09	\$8.10
<b>Totals Seed Mix</b>	<b>9.15</b>	<b>20.12</b>	<b>\$35.29</b>

**Application**

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Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$232.00
<b>Total Seed Application Cost/Acre</b>	<b>\$232.00</b>

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

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$2.81	\$2.81
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$288.00	\$576.00
<b>Total Mulch Materials Cost/Acre</b>				<b>\$578.81</b>

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$68.78
Power mulcher (MEANS 32 91 13.16 0350)	\$92.78
Weed spray, truck, non-aquatic area, nox. [DMG]	\$73.22
<b>Total Mulch Application Cost/Acre</b>	<b>\$234.78</b>

**NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Cottonwood, Plains	5	Container, 1 gallon (MEANS)	\$20.33	\$2.40	\$101.65
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$101.65</b>

**JOB TIME AND COST**

No. of Acres: 43  
 Estimated Failure Rate: 25%  
 \*Selected Replanting Work Items: TILLING, SEEDING, NURSERY, MULCHING

Cost /Acre: \$1,288.82

Cost /Acre\*: \$1,288.82

Initial Job Cost: **\$55,419.26**  
 Reseeding Job Cost: **\$13,854.82**  
 Total Job Cost: **\$69,274**  
 Job Hours: **53.75**

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Initial Mobilization**Site: **Lyster Pit**Permit Action: **2019-06**Permit/Job#: **M2008009****PROJECT IDENTIFICATION**Task #: **07A**State: **Colorado**Abbreviation: **None**Date: **6/27/2019**County: **Moffat**Filename: **M009-07a**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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
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	47.71	\$93.62	\$117.55	2	\$422.34	\$235.10	\$500.00
CAT 972H	28.00	\$44.67	\$117.55	4	\$648.88	\$470.20	\$1,000.00
Drill/Broadcast Seeder with Tractor	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$8.33	\$88.67	1	\$97.00	\$88.67	\$250.00
Subtotals:					<b>\$1,272.43</b>	<b>\$882.64</b>	<b>\$2,000.00</b>

**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	\$74.99	1	\$74.99	\$74.99
Subtotals:			<b>\$74.99</b>	<b>\$74.99</b>

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: CRAIG, CO  
 Total one-way travel distance: 4.00 miles  
 Average Travel Speed: 30.00 mph

Total Non-Roadable Mob/Demob Cost \* \$7,119.55  
 \* two round trips with haul rig:  
 Total Roadable Mob/Demob Cost \*\* \$20.00  
 \*\* one round trip, no haul rig:

**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:	1.27	0.27

**JOB TIME AND COST**

Total job time: 2.53 Hours

Total job cost: \$7,140

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Secondary Mobilization**Site: **Lyster Pit**Permit Action: **2019-06**Permit/Job#: **M2008009****PROJECT IDENTIFICATION**Task #: **07B**State: **Colorado**Abbreviation: **None**Date: **6/27/2019**County: **Moffat**Filename: **M009-07b**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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
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	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$8.33	\$88.67	1	\$97.00	\$88.67	\$250.00
Subtotals:					<b>\$201.21</b>	<b>\$177.34</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
Light Duty Pickup, 4x4, 1 T. Crew	\$74.99	1	\$74.99	\$74.99
Subtotals:			<b>\$74.99</b>	<b>\$74.99</b>

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: CRAIG, CO  
 Total one-way travel distance: 4.00 miles  
 Average Travel Speed: 30.00 mph

Total Non-Roadable Mob/Demob Cost \* \$1,503.37  
 \* two round trips with haul rig:  
 Total Roadable Mob/Demob Cost \*\* \$20.00  
 \*\* one round trip, no haul rig:

**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:	1.27	0.27

**JOB TIME AND COST**

Total job time: 2.53 Hours

Total job cost: \$1,523



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

1313 Sherman Street, Room 215  
Denver, CO 80203

June 27, 2019

***RE: Lyster Pit, Permit No. M-2008-009, SI-2 Reclamation Cost Estimate***

Dear Mr. Burkey:

This reclamation cost update was in response to site inspection conducted on June 12, 2019. It is Division policy to periodically update its costs to ensure that the Financial Warranty adequately, reflects the actual current cost of fulfilling the requirements of the approved reclamation plan.

Below is a table summarizing input values that have been updated in this Surety Increase (SI-2). This table does not account for price changes resulting from inflation or other RS Means cost changes. Bond calculations are based on a combination of field observations and worst case scenario based on the approved reclamation permit. The operator may elect to revise the reclamation plan and potentially reduce overall liabilities.

Task	Form Used	Change	Justification
01a	Demo	+	Demo of Scale and Scale House
03b	Ripper	+	Rip compacted stockpile area (25 ac) since not yet a pond and will need reveg
05a	Dozer	-	Spread only half the transported volume
07a	Mob	+	Updated equipment: 4 x 972H loaders, 2 x D8 Dozers, power mulcher
07b	Mob	+	Added secondary mobilization

Please feel free to contact me with any further questions. 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 303-866-3567 Ext8183 or via email at [amy.yeldell@state.co.us](mailto:amy.yeldell@state.co.us)



Sincerely,

A handwritten signature in blue ink that reads "Amy Yeldell". The signature is written in a cursive, flowing style.

**Amy Yeldell**  
Environmental Protection Specialist

Ec:  
Travis Marshall, Senior EPS, Grand Junction DRMS