

September 19, 2018

Russell Larsen
Kilgore Companies LLC dba Elam Construction
556 Struthers Ave
Grand Junction, CO 81501



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

1313 Sherman Street, Room 215
Denver, CO 80203

RE: Surface Rock Pit, Permit No. M-1984-011, Reclamation Costs Update and Notice of Surety Increase (SI-1)

Dear Mr. Larsen:

On July 12, 2018 the Colorado Division of Reclamation, Mining and Safety (Division) approved the Transfer of Permit and Succession of Operators Application (SO-4). 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 Division has updated the reclamation cost estimate (copy enclosed).

Division calculations estimate the cost to reclaim the above referenced site to be \$39,820.00. This is an increase of \$22,796.00 over the \$17,024.00 currently held by the Division. This estimate is based on conditions observed during the September 4, 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, November 19, 2018**. 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

Ec: Wally Erickson, Senior EPS, Grand Junction DRMS

Enc: Financial Warranty Cost Estimate



COST SUMMARY WORK

Task description: SO-4 Update

Site: Surface Rock Pit

Permit Action: SO-4

Permit/Job#: M1984001

PROJECT IDENTIFICATION

Task #: ACY

State: Colorado

Abbreviation: None

Date: 8/2/2018

County: Mesa

Filename: M001-ACY

User: ACY

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Rip and regrade Site A imprint area	DOZER	1	76.15	\$17,051.00
02a	Distribute 6" of topsoil over 4 acres of Site A	DOZER	1	5.32	\$1,103.00
03a	Reveg of 4 acres in Site A-highwall floor	REVEGE	1	16.00	\$7,074.00
03b	Failure Reveg of 2.5 acres Site A-eastern reclaim area	REVEGE	1	6.00	\$2,948.00
04a	Initial Mobilization	MOBILIZE	1	3.95	\$3,121.00
04b	Secondary Mobilization	MOBILIZE	1	3.95	\$1,819.00
<u>SUBTOTALS:</u>				111.37	\$33,116

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$668.94

Performance bond: 1.05

Total = \$347.72

Job superintendent: 0.00

Total = \$0.00

Profit: 10.00

Total = \$3,311.60

TOTAL O & P = \$4,328.26

CONTRACT AMOUNT (direct + O & P) = \$37,444.26

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

\$1,872.21

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$6,700.47

TOTAL BOND AMOUNT (direct + indirect) = \$39,816.47

TOTAL BOND AMOUNT (Rounded) = \$39,820.00

BULLDOZER WORKTask description: **Rip and regrade Site A imprint area**Site: **Surface Rock Pit**Permit Action: SO-4Permit/Job#: M1984001**PROJECT IDENTIFICATION**Task #: 01AState: ColoradoAbbreviation: NoneDate: 8/2/2018County: MesaFilename: M001-01aUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: 3-shank ripperShift 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:	\$8.93	NA
Ripper op. Cost/Hour:	\$7.78	100
Operator Cost/Hour:	\$40.23	NA

Total unit Cost/Hour: \$223.91Total Fleet Cost/Hour: **\$223.91****MATERIAL QUANTITIES**Initial Volume: 12,907Swell factor: 1.330Loose volume: **17,166 LCY**Source of estimated volume: 4 acres at 2'Source of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 150 feetUnadjusted hourly production: 634.3 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 0 %Average site altitude: 6,600 feetMaterial weight: 2,900 lbs/LCYWeight description: Decomposed rock - 50% Rock, 50% Earth**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:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3554

Adjusted unit production: 225.43 LCY/hr

Adjusted fleet production: **225.43** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.993/LCY

Total job time: **76.15** Hours

Total job cost: **\$17,051**

BULLDOZER WORKTask description: **Distribute 6" of topsoil over 4 acres of Site A**Site: **Surface Rock Pit**Permit Action: SO-4Permit/Job#: M1984001**PROJECT IDENTIFICATION**Task #: 02AState: ColoradoAbbreviation: NoneDate: 8/2/2018County: MesaFilename: M001-02aUser: 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	100
Operator Cost/Hour:	\$40.23	NA

Total unit Cost/Hour: \$207.20Total Fleet Cost/Hour: **\$207.20****MATERIAL QUANTITIES**Initial Volume: 3,227Swell factor: 1.000Loose volume: **3,227 LCY**Source of estimated volume: 6" of topsoil over 4 acresSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feetUnadjusted hourly production: 852.6 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: 5 %Average site altitude: 6,600 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(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:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7113

Adjusted unit production: 606.45 LCY/hr

Adjusted fleet production: **606.45** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.342/LCY

Total job time: **5.32** Hours

Total job cost: **\$1,103**

REVEGETATION WORKTask description: Reveg of 4 acres in Site A-highwall floorSite: Surface Rock PitPermit Action: SO-4Permit/Job#: M1984001**PROJECT IDENTIFICATION**Task #: 03AState: ColoradoAbbreviation: NoneDate: 8/2/2018County: MesaFilename: M001-03aUser: ACYAgency 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
Chisel plowing {DMG}	\$92.77
Total Tilling Cost/Acre	\$92.77

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	1.50	4.86	\$14.63
Blue Grama - Native	0.50	8.16	\$7.43
Sand Dropseed	0.80	95.50	\$8.88
Intermediate Wheatgrass - Oahe	4.50	9.61	\$17.69
Sainfoin - Remont	5.00	2.18	\$16.20
Saltbush, Four Wing	0.80	1.10	\$10.24
Winter Fat	0.50	1.27	\$10.50
Totals Seed Mix	13.60	122.68	\$85.55

Application

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

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
Total Mulch Materials Cost/Acre				\$578.81

Application

Description	Cost /Acre
Power mulcher (MEANS 32 91 13.16 0350)	\$92.78
Weed spray, truck, non-aquatic area, nox. [DMG]	\$73.22
Total Mulch Application Cost/Acre	\$166.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Pine, Pinyon	5	Tubling, 10 cu. in. container {(MEANS)}	\$4.78	\$2.40	\$23.90
Totals Nursery Stock Cost / Acre					\$23.90

JOB TIME AND COST

No. of Acres: 4 Cost /Acre: \$1,179.03
 Estimated Failure Rate: 50% Cost /Acre*: \$1,179.03
 *Selected Replanting Work Items: TILLING,SEEDING,NURSERY,MULC
HING

Initial Job Cost: \$4,716.12
 Reseeding Job Cost: \$2,358.06
 Total Job Cost: \$7,074
 Job Hours: 16.00

REVEGETATION WORKTask description: Failure Reveg of 2.5 acres Site A-eastern reclaimed areaSite: Surface Rock PitPermit Action: SO-4Permit/Job#: M1984001**PROJECT IDENTIFICATION**Task #: 03BState: ColoradoAbbreviation: NoneDate: 9/19/2018County: MesaFilename: M001-03bUser: ACYAgency 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
Chisel plowing {DMG}	\$92.77
Total Tilling Cost/Acre	\$92.77

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	1.50	4.86	\$14.63
Blue Grama - Native	0.50	8.16	\$7.43
Sand Dropseed	0.80	95.50	\$8.88
Intermediate Wheatgrass - Oahe	4.50	9.61	\$17.69
Sainfoin - Remont	5.00	2.18	\$16.20
Saltbush, Four Wing	0.80	1.10	\$10.24
Winter Fat	0.50	1.27	\$10.50
Totals Seed Mix	13.60	122.68	\$85.55

Application

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

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
Total Mulch Materials Cost/Acre				\$578.81

Application

Description	Cost /Acre
Power mulcher (MEANS 32 91 13.16 0350)	\$92.78
Weed spray, truck, non-aquatic area, nox. [DMG]	\$73.22
Total Mulch Application Cost/Acre	\$166.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Pine, Pinyon	5	Tubling, 10 cu. in. container {(MEANS)}	\$4.78	\$2.40	\$23.90
Totals Nursery Stock Cost / Acre					\$23.90

JOB TIME AND COST

No. of Acres:	<u>2.5</u>	Cost /Acre:	<u>\$1,179.03</u>
Estimated Failure Rate:	<u>50%</u>	Cost /Acre*:	<u>\$0.00</u>
*Selected Replanting Work Items:	<u>NONE</u>		

Initial Job Cost:	<u>\$2,947.58</u>
Reseeding Job Cost:	<u>\$0.00</u>
Total Job Cost:	<u>\$2,948</u>
Job Hours:	<u>6.00</u>

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Initial Mobilization**Site: **Surface Rock Pit**Permit Action: **SO-4**Permit/Job#: **M1984001****PROJECT IDENTIFICATION**Task #: **04A**State: **Colorado**Abbreviation: **None**Date: **8/2/2018**County: **Mesa**Filename: **M001-04a**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	\$102.55	\$125.45	1	\$228.00	\$125.45	\$250.00
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: **\$429.21** **\$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	\$47.74	1	\$47.74	\$47.74

Subtotals: **\$47.74** **\$47.74**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GRAND JUNCTION, CO	
Total one-way travel distance:	22.00	miles
Average Travel Speed:	45.00	mph
Total Non-Roadable Mob/Demob Cost *	\$3,074.15	
'* two round trips with haul rig:		
Total Roadable Mob/Demob Cost **	\$46.68	
** one round trip, no haul rig:		

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.49	0.49
Return Time (Hours):	0.49	0.49
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.98	0.98

JOB TIME AND COST

Total job time:	3.96	Hours
Total job cost:	\$3,121	

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Secondary Mobilization**Site: **Surface Rock Pit**Permit Action: **SO-4**Permit/Job#: **M1984001****PROJECT IDENTIFICATION**Task #: **04B**State: **Colorado**Abbreviation: **None**Date: **9/19/2018**County: **Mesa**Filename: **M001-04b**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
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:					\$201.21	\$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	\$47.74	1	\$47.74	\$47.74
Subtotals:			\$47.74	\$47.74

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GRAND JUNCTION, CO	
Total one-way travel distance:	22.00	miles
Average Travel Speed:	45.00	mph
Total Non-Roadable Mob/Demob Cost *	\$1,772.56	
'* two round trips with haul rig:		
Total Roadable Mob/Demob Cost **	\$46.68	
** one round trip, no haul rig:		

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.49	0.49
Return Time (Hours):	0.49	0.49
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.98	0.98

JOB TIME AND COST

Total job time:	3.96	Hours
Total job cost:	\$1,819	