

May 4, 2018

Mike Anson
Moffat Limestone Company
P.O. Box 363
Craig, CO 81626



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

1313 Sherman Street, Room 215
Denver, CO 80203

***RE: Juniper Mountain Gravel, Permit No. M-2003-073, Surety Reduction Request (SR-1),
Approval***

Dear Mr. Anson:

On May 4, 2018 the Division of Reclamation, Mining and Safety approved your Surety Reduction Request (SR-1), submitted on March 30, 2018. Staff has calculated an estimate (copy enclosed) of the actual cost to complete reclamation at the site and determined that an adequate financial warranty shall be an amount of \$28,135.00. The bond amount currently held by the Division is \$43,721.00. This is a reduction of \$15,586.00. The remaining reclamation includes full reclamation of the 5 ac of maximum disturbance and secondary seeding of previously reclaimed area.

Please contact Barbara Coria at our Denver office, ph. 303-866-3567 ext. 8148, to make arrangements for replacement of the current financial warranty with a financial warranty in the reduced amount, as calculated for the approved SR-1.

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
Department of Natural Resources
Division of Reclamation, Mining and Safety
Phone: (970) 254-8511
Fax: (970) 241-1516

Cc:
Russ Means, Senior EPS, Grand Junction DRMS



COST SUMMARY WORK

Task description: Reclamation cost with TR-3 changes for SR-1

Site: Juniper Mountain Gravel

Permit Action: TR-3

Permit/Job#: M2003073

PROJECT IDENTIFICATION

Task #: ACY

State: Colorado

Abbreviation: None

Date: 12/15/2017

County: Moffat

Filename: M073-ACY

User: ACY

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Replace overburden on max 5 acre disturbance	SCRAPER1	1	13.35	\$5,226.00
02a	Replace topsoil over 5 acre max disturbance	SCRAPER1	1	6.65	\$2,528.00
03a	Reveg active area 5 ac	REVEGE	1	12.00	\$6,727.00
04a	35% of fall 2017-Reveg failure	REVEGE	1	8.00	\$2,551.00
05a	Transport reclamation equipment to/from site	MOBILIZE	1	4.40	\$3,690.00
05b	Secondary seeding mobilization	MOBILIZE	1	4.40	\$978.00
<u>SUBTOTALS:</u>				48.8	\$21,700

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02
Performance bond: 1.05
Job superintendent: 24.40
Profit: 10.00

Total = \$438.34

Total = \$227.85

Total = \$1,782.42

Total = \$2,170.00

TOTAL O & P = \$4,618.61

CONTRACT AMOUNT (direct + O & P) = \$26,318.61

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

\$1,315.93

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$6,434.54

TOTAL BOND AMOUNT (direct + indirect) = \$28,134.54

TOTAL BOND AMOUNT (Rounded) = \$28,135.00

SCRAPER TEAM WORKTask description: **Replace overburden on max 5 acre disturbance**Site: **Juniper Mountain Gravel**Permit Action: TR-3Permit/Job#: M2003073**PROJECT IDENTIFICATION**Task #: 01A
Date: 12/15/2017
User: ACYState: Colorado
County: MoffatAbbreviation: None
Filename: M073-01aAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

	Equipment Description
-Scraper:	Cat 631G
-Dozer:	NA
Support Equipment -Load Area:	NA
-Dump Area:	Cat D8T - 8SU
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

Cost Breakdown:**Scraper Work Team****Support Equipment****Maintenance Equipment**

	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	NA	25	NA	NA
Ownership cost/hour:	\$98.72	NA	NA	\$83.81	NA	NA
Operating cost/hour:	\$108.19	NA	NA	\$16.54	NA	NA
%Utilization-ripper:	NA	NA	NA	50	NA	NA
Ripper own. cost/hour:	NA	NA	NA	\$7.55	NA	NA
Ripper op. cost/hour:	NA	NA	NA	\$3.61	NA	NA
Operator cost/hour:	\$31.26	NA	NA	\$41.85	NA	NA
Unit Subtotals:	\$238.17	NA	NA	\$153.35	NA	NA
Number of Units:	1	0	0	1	0	0
Group Subtotals:	Work: \$238.17		Support: \$153.35		Maint:	\$0.00

Total work team cost/hour: **\$391.52****MATERIAL QUANTITIES**Initial volume: 8,066 CCY Swell factor: 1.000
Loose volume: 8,066 LCYSource of estimated volume: Exhibit L- 12" Deep
Source of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight:	<u>2,500 lbs/LCY</u>	Struck Volume:	<u>24.00</u>	LCY
Material description:	<u>Clay - Dry</u>	Heaped Volume:	<u>34.00</u>	LCY
Rated Payload:	<u>81,600 pounds</u>	Average Volume:	<u>29.00</u>	LCY
Payload Capacity:	<u>32.64 LCY</u>	Adjusted Capacity:	<u>29.00</u>	LCY

Cycle Time:Scraper Loading Time: 0.80 MinutesManeuver and Spread Time: 0.70 MinutesJob Condition Correction:

Site Altitude: 6200 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:Road Condition: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	0.00	8.00	8.00	783	0.54

Haul Time: 0.54 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	0.00	8.00	8.00	1446	0.35

Return Time: 0.35 minutesTotal Scraper team cycle time: 2.39 minutesAdjusted for job conditions: 604.27 LCY/HourSelected Number of Scrapers: 1 Scraper(s)Adjusted single scraper team (unit) hourly production: 604.27 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 604.27 LCY/HourUnadjusted unit production/hour: 728.03 LCY/Hour

Optimal Number of Scrapers per push dozer: _____

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 13.35 HoursUnit cost: \$0.648 /LCYTotal job cost: \$5,226

SCRAPER TEAM WORKTask description: **Replace topsoil over 5 acre max disturbance**Site: **Juniper Mountain Gravel**Permit Action: TR-3Permit/Job#: M2003073**PROJECT IDENTIFICATION**Task #: 02A
Date: 12/15/2017
User: ACYState: Colorado
County: MoffatAbbreviation: None
Filename: M073-02aAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 631G
-Dozer:	NA
Support Equipment -Load Area:	NA
-Dump Area:	Cat D8T - 8SU
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

Cost Breakdown:**Scraper Work Team****Support Equipment****Maintenance Equipment**

	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	NA	25	NA	NA
Ownership cost/hour:	\$98.72	NA	NA	\$83.81	NA	NA
Operating cost/hour:	\$108.19	NA	NA	\$16.54	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	NA	\$0.00	NA	NA
Ripper op. cost/hour:	NA	NA	NA	\$0.00	NA	NA
Operator cost/hour:	\$31.26	NA	NA	\$41.85	NA	NA
Unit Subtotals:	\$238.17	NA	NA	\$142.20	NA	NA
Number of Units:	1	0	0	1	0	0
Group Subtotals:	Work: \$238.17		Support: \$142.20		Maint:	\$0.00

Total work team cost/hour: **\$380.37****MATERIAL QUANTITIES**Initial volume: 4,033 CCY Swell factor: 1.000
Loose volume: 4,033 LCYSource of estimated volume: Assume 5 acres covered with 6" of soil
Source of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight:	<u>1,600 lbs/LCY</u>	Struck Volume:	<u>24.00</u>	LCY
Material description:	<u>Top Soil</u>	Heaped Volume:	<u>34.00</u>	LCY
Rated Payload:	<u>81,600 pounds</u>	Average Volume:	<u>29.00</u>	LCY
Payload Capacity:	<u>51.00 LCY</u>	Adjusted Capacity:	<u>29.00</u>	LCY

Cycle Time:Scraper Loading Time: 0.80 MinutesManeuver and Spread Time: 0.70 MinutesJob Condition Correction:

Site Altitude: 6200 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:Road Condition: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	0.00	8.00	8.00	783	0.53

Haul Time: 0.53 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	0.00	8.00	8.00	1446	0.35

Return Time: 0.35 minutesTotal Scraper team cycle time: 2.38 minutesAdjusted for job conditions: 606.81 LCY/HourSelected Number of Scrapers: 1 Scraper(s)Adjusted single scraper team (unit) hourly production: 606.81 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 606.81 LCY/HourUnadjusted unit production/hour: 731.09 LCY/Hour

Optimal Number of Scrapers per push dozer: _____

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 6.65 HoursUnit cost: \$0.627 /LCYTotal job cost: \$2,528

REVEGETATION WORKTask description: Reveg active area 5 acSite: Juniper Mountain GravelPermit Action: TR-3Permit/Job#: M2003073**PROJECT IDENTIFICATION**Task #: 03AState: ColoradoAbbreviation: NoneDate: 4/17/2018County: MoffatFilename: M073-03aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Mono-Ammonium Phosphate, 11-50-0	150.00	pound	\$0.30	\$45.00
			Total Fertilizer Materials Cost/Acre	\$45.00

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$144.62
Total Fertilizer Application Cost/Acre	\$144.62

TILLING

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

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	6.00	19.42	\$46.50
Sandberg Bluegrass - VNS	3.00	63.71	\$24.18
Thickspike Wheatgrass - Critana	5.50	19.44	\$31.57
Western Wheatgrass - Arriba	8.00	20.20	\$64.64
Prairie Junegrass	7.50	398.66	\$227.48
Totals Seed Mix	30.00	521.43	\$394.37

Application

Description	Cost /Acre
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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	\$2.74	\$2.74
Total Mulch Materials Cost/Acre				\$2.74

Application

Description	Cost /Acre
Weed spray, truck, non-aquatic area, nox. [DMG]	\$71.50
Total Mulch Application Cost/Acre	\$71.50

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: 5 Cost /Acre: \$996.52
 Estimated Failure Rate: 35% Cost /Acre*: \$996.52
 *Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,MU
LCHING

Initial Job Cost: **\$4,982.60**
 Reseeding Job Cost: **\$1,743.91**
 Total Job Cost: **\$6,727**
 Job Hours: **12.00**

REVEGETATION WORKTask description: 35% of fall 2017-Reveg failureSite: Juniper Mountain GravelPermit Action: TR-3Permit/Job#: M2003073**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 4/17/2018County: MoffatFilename: M073-04aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Mono-Ammonium Phosphate, 11-50-0	150.00	pound	\$0.30	\$45.00
			Total Fertilizer Materials Cost/Acre	\$45.00

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$144.62
Total Fertilizer Application Cost/Acre	\$144.62

TILLING

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

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	6.00	19.42	\$46.50
Sandberg Bluegrass - VNS	3.00	63.71	\$24.18
Thickspike Wheatgrass - Critana	5.50	19.44	\$31.57
Western Wheatgrass - Arriba	8.00	20.20	\$64.64
Prairie Junegrass	7.50	398.66	\$227.48
Totals Seed Mix	30.00	521.43	\$394.37

Application

Description	Cost /Acre
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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	\$2.74	\$2.74
Total Mulch Materials Cost/Acre				\$2.74

Application

Description	Cost /Acre
Weed spray, truck, non-aquatic area, nox. [DMG]	\$71.50
Total Mulch Application Cost/Acre	\$71.50

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: 2.56 Cost /Acre: \$996.52
 Estimated Failure Rate: 0% Cost /Acre*: \$0.00
 *Selected Replanting Work Items: NONE

Initial Job Cost: **\$2,551.09**
 Reseeding Job Cost: **\$0.00**
 Total Job Cost: **\$2,551**
 Job Hours: **8.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Transport reclamation equipment to/from siteSite: Juniper Mountain GravelPermit Action: TR-3Permit/Job#: M2003073**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 12/15/2017County: MoffatFilename: M073-05aUser: ACYAgency 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 D8T - 8SU	53.08	\$91.36	\$125.45	1	\$216.81	\$125.45	\$250.00
Cat 631G	52.50	\$98.72	\$125.45	1	\$224.17	\$125.45	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$12.22	\$88.67	1	\$100.89	\$88.67	\$250.00
Subtotals:					\$541.87	\$339.57	\$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, 3/4 T.	\$40.24	1	\$40.24	\$40.24
Subtotals:			\$40.24	\$40.24

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>CRAIG CO</u>	
Total one-way travel distance:	<u>30.00</u>	miles
Average Travel Speed:	<u>50.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$3,641.47</u>
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$48.29</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.60	0.60
Return Time (Hours):	0.60	0.60
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.20	1.20

JOB TIME AND COST

Total job time: 4.40 Hours

Total job cost: \$3,690

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Secondary seeding mobilizationSite: Juniper Mountain GravelPermit Action: TR-3Permit/Job#: M2003073**PROJECT IDENTIFICATION**Task #: 05BState: ColoradoAbbreviation: NoneDate: 12/15/2017County: MoffatFilename: M073-05bUser: ACYAgency 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
Drill/Broadcast Seeder with Tractor	25.00	\$12.22	\$88.67	1	\$100.89	\$88.67	\$250.00

Subtotals: **\$100.89** **\$88.67** **\$250.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$40.24	1	\$40.24	\$40.24

Subtotals: **\$40.24** **\$40.24**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: CRAIG CO
 Total one-way travel distance: 30.00 miles
 Average Travel Speed: 50.00 mph

Total Non-Roadable Mob/Demob Cost * \$929.25
 * two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$48.29
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.60	0.60
Return Time (Hours):	0.60	0.60
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.20	1.20

JOB TIME AND COST

Total job time: 4.40 Hours

Total job cost: \$978