

March 2, 2017

Cecil Powell
Powell's Gravel Pit
P.O. Box 23
Dinosaur, CO 81610



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

1313 Sherman Street, Room 215
Denver, CO 80203

RE: Powell's Gravel Pit, Permit No. M-1995-012, Technical Revision (TR-1) Approval

Dear Mr. Powell:

On February 17, 2017 the Division of Reclamation, Mining and Safety (Division) approved the Technical Revision request (TR-1) submitted on December 8, 2016, addressing the following:

Revised Reclamation as following:

- *All slopes disturbed by mining after 1995 will be regarded to a slope of 2:1 or less*
- *Areas disturbed after 1995 not to remain as storage will be reclaimed as following:*
 - *Compacted areas will be ripped to a depth of 18-24"*
 - *Salvaged topsoil will be reapplied to a depth of 1-4" as available*
 - *A cover crop will be planted and tilled under for 2 years prior to final reclamation*
 - *Cover crop will be broadcast seeded (Barley @40 PLS/AC, Triticale @10 PLS/AC, Wheat @40 PLS/AC)*
 - *Early fall planting*
 - *disk soil, broadcast seed - table 6 (Siberian Wheatgrass @24 PLS/AC, Russian Wildrye @ 8 PLS/AC, Slender Wheatgrass @ 6 PLS/AC, Yellow Sweet Clover @ 1 PLS/AC or approved alternatives)*
 - *Late fall planting*
 - *Broadcast seed with recently harvested Forage Kochia @ 4 PLS/AC, apply straw mulch and crimp into place at 1 ton/AC*
- *Weeds will be treated as necessary throughout the life of the permit*

The terms of the TR-1 approved by the Division are hereby incorporated into Permit No. M-1995-012. All other conditions and requirements of the permit remain in full force and effect.

As previously stated with the approval of TR-1 the Division will withdrawal SI-1 issued on June 28, 2016.

The estimated liability amount of \$12,327.91 exceeds the \$ 9,200 Financial Warranty currently held for this site. If you have not already done so, please submit additional bond in the amount of \$ 3,127.91 ***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, May 01, 2017**. The revision will not be final until the bond is approved by the Division.



If you require additional information, or have questions or concerns, please feel free to contact me.

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:

Matt Combs
Great Basin Environmental and Aquatics
P.O. Box 114
Richmond, UT 84333

Ec:

Tony Waldron, Minerals Program Supervisor, DRMS
Russ Means, Senior EPS, Grand Junction DRMS
Amy Yeldell, EPS, Grand Junction DRMS

COST SUMMARY WORK

Task description: Updates based on TR-1

Site: Powell's Gravel Pit

Permit Action: TR-1

Permit/Job#: M1995012

PROJECT IDENTIFICATION

Task #: ACY

State: Colorado

Abbreviation: None

Date: 12/12/2016

County: Moffat

Filename: M012-ACY

User: ACY

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Grade slopes to 2:1	DOZER	1	2.21	\$424.00
02a	Rip compacted areas	RIPPER	1	0.45	\$94.00
03a	Apply available topsoil	DOZER	1	0.77	\$125.00
03b	Cover crop planting #1 building topsoil	REVEGE	1	8.00	\$663.00
03c	Cover crop planting #2 building topsoil	REVEGE	1	8.00	\$663.00
04a	Reveg disturbed areas-initial planting	REVEGE	1	8.00	\$900.00
04b	Reveg disturbed areas-late fall planting	REVEGE	1	8.00	\$1,149.00
04c	Secondary seeding (50% of 1.43 ac)	REVEGE	1	8.00	\$1,359.00
05a	Initial mobilization and early fall planting	MOBILIZE	1	2.57	\$1,839.00
05b	Late fall planting mobilization	MOBILIZE	1	2.57	\$1,551.00
06a	Secondary seeding mobilization	MOBILIZE	1	2.57	\$808.00
<u>SUBTOTALS:</u>				51.14	\$9,575

INDIRECT COSTS

OVERHEAD AND PROFIT:

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

Total = \$193.42
Total = \$100.54
Total = \$0.00
Total = \$957.50

TOTAL O & P = \$1,251.46

CONTRACT AMOUNT (direct + O & P) = \$10,826.46

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 500.00
Engineering work and/or contract/bid preparation: 4.25
Reclamation management and/or administration: 5.00

Total = 500.00
Total = \$460.12
Total = \$541.32

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$2,752.91

TOTAL BOND AMOUNT (direct + indirect) = \$12,327.91

BULLDOZER WORKTask description: **Grade slopes to 2:1**Site: **Powell's Gravel Pit**Permit Action: **TR-1**Permit/Job#: **M1995012****PROJECT IDENTIFICATION**Task #: **01A**State: **Colorado**Abbreviation: **None**Date: **12/20/2016**County: **Moffat**Filename: **M012-01a**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:	\$83.81	NA
Operating Cost/Hour:	\$66.17	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.85	NA

Total unit Cost/Hour: **\$191.83**Total Fleet Cost/Hour: **\$191.83****MATERIAL QUANTITIES**Initial Volume: **1,000**Swell factor: **1.250**Loose volume: **1,250 LCY**Source of estimated volume: **Operator provided 10'H 350'L**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: **Compacted fill or embankment 0.9**Average push gradient: **0 %**Average site altitude: **6,070 feet**Material weight: **2,550 lbs/LCY**Weight 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: 566.02 LCY/hr

Adjusted fleet production: **566.02** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.339/LCY

Total job time: **2.21** Hours

Total job cost: **\$424**

BULLDOZER RIPPING WORK

Task description: Rip compacted areas

Site: Powell's Gravel Pit Permit Action: TR-1 Permit/Job#: M1995012

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 2/7/2017 County: Moffat Filename: M012-02a
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>\$83.81</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$66.17</u>	<u>100</u>
Ripper Ownership Cost/Hour:	<u>\$7.55</u>	<u>NA</u>
Ripper Operating Cost/Hour:	<u>\$7.21</u>	<u>100</u>
Operator Cost/Hour:	<u>\$41.85</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$206.59</u>	
Total Fleet Cost/Hour:	<u>\$206.59</u>	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 0.25 acres Rip Depth (ft): 2.00 Volume: 807 BCY or CCY

Source of estimated quantity: Rip compacted areas 18-24" deep - Operator provided

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.56 mph
Average Ripping Width: 7.08 degrees
Average Ripping Length: 75.00 feet
Average Dozer Speed: 88.00 feet
Average Maneuver Time: 0.25 feet
Production per unit area: 0.664 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.664 Acres/hr
Site Altitude: 6,070 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.55 Acres/hr
Adjusted Hourly Fleet Production: 0.55 Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 0.45 Hours

Unit cost: \$375.113 Per acre Total job cost: \$94

BULLDOZER WORKTask description: Apply available topsoilSite: Powell's Gravel PitPermit Action: TR-1Permit/Job#: M1995012**PROJECT IDENTIFICATION**Task #: 03AState: ColoradoAbbreviation: NoneDate: 2/7/2017County: MoffatFilename: M012-03aUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: OBSOLETE-Cat D8T - 8UHorsepower: 305Blade Type: UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$52.86	NA
Operating Cost/Hour:	\$68.35	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.85	NA

Total unit Cost/Hour: \$163.06Total Fleet Cost/Hour: **\$163.06****MATERIAL QUANTITIES**Initial Volume: 500Swell factor: 1.125Loose volume: **563 LCY**Source of estimated volume: 1.43 ac @ 2-3"Source of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 1,627.0 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: 0 %Average site altitude: 6,070 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packed**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(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: 0.4492

Adjusted unit production: 730.85 LCY/hr

Adjusted fleet production: **730.85** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.223/LCY

Total job time: **0.77** Hours

Total job cost: **\$125**

REVEGETATION WORKTask description: Cover crop planting #1 building topsoilSite: Powell's Gravel PitPermit Action: TR-1Permit/Job#: M1995012**PROJECT IDENTIFICATION**Task #: 03BState: ColoradoAbbreviation: NoneDate: 2/7/2017County: MoffatFilename: M012-03bUser: 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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$107.59
Total Tilling Cost/Acre	\$107.59

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Barley - Steptoe	40.00	12.86	\$14.40
Triticale	10.00	5.74	\$4.00
Wheat, Spring - Westbred 926	40.00	36.73	\$12.00
Totals Seed Mix	90.00	55.33	\$30.40

Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$261.80

Total Seed Application Cost/Acre	\$261.80
---	-----------------

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$1.25	\$1.25
Total Mulch Materials Cost/Acre				\$1.25

Application

Description	Cost /Acre
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$62.72

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:	1.43	Cost /Acre:	\$463.76
Estimated Failure Rate:	0%	Cost /Acre*:	\$0.00
*Selected Replanting Work Items:	NONE		

Initial Job Cost:	\$663.18
Reseeding Job Cost:	\$0.00
Total Job Cost:	\$663
Job Hours:	8.00

REVEGETATION WORKTask description: Cover crop planting #2 building topsoilSite: Powell's Gravel PitPermit Action: TR-1Permit/Job#: M1995012**PROJECT IDENTIFICATION**Task #: 03CState: ColoradoAbbreviation: NoneDate: 2/7/2017County: MoffatFilename: M012-03cUser: 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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$107.59
Total Tilling Cost/Acre	\$107.59

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Barley - Steptoe	40.00	12.86	\$14.40
Triticale	10.00	5.74	\$4.00
Wheat, Spring - Westbred 926	40.00	36.73	\$12.00
Totals Seed Mix	90.00	55.33	\$30.40

Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$261.80

Total Seed Application Cost/Acre	\$261.80
---	-----------------

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$1.25	\$1.25
Total Mulch Materials Cost/Acre				\$1.25

Application

Description	Cost /Acre
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$62.72

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:	1.43	Cost /Acre:	\$463.76
Estimated Failure Rate:	0%	Cost /Acre*:	\$0.00
*Selected Replanting Work Items:	NONE		

Initial Job Cost:	\$663.18
Reseeding Job Cost:	\$0.00
Total Job Cost:	\$663
Job Hours:	8.00

REVEGETATION WORKTask description: Reveg disturbed areas-initial plantingSite: Powell's Gravel PitPermit Action: TR-1Permit/Job#: M1995012**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 2/7/2017County: MoffatFilename: M012-04aUser: 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
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
Russian Wildrye - Bozoisky	8.00	32.14	\$50.64
Yellow Sweet Clover - Madrid	1.00	5.97	\$2.83
Slender Wheatgrass - Native	6.00	21.90	\$16.92
Siberian Wheatgrass	28.00	70.71	\$111.16
Totals Seed Mix	43.00	130.72	\$181.55

Application

Description	Cost /Acre
-------------	------------

Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

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: 1.43 Cost /Acre: \$629.30
 Estimated Failure Rate: 0% Cost /Acre*: \$0.00
 *Selected Replanting Work Items: NONE

Initial Job Cost: **\$899.90**
 Reseeding Job Cost: **\$0.00**
 Total Job Cost: **\$900**
 Job Hours: **8.00**

REVEGETATION WORKTask description: Reveg disturbed areas-late fall plantingSite: Powell's Gravel PitPermit Action: TR-1Permit/Job#: M1995012**PROJECT IDENTIFICATION**Task #: 04BState: ColoradoAbbreviation: NoneDate: 2/7/2017County: MoffatFilename: M012-04bUser: 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
	\$
Total Tilling Cost/Acre	\$0.00

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Kochia, Forage (Prostrate)	4.00	561.80	\$35.92
Totals Seed Mix	4.00	561.80	\$35.92

Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22

	Total Seed Application Cost/Acre	\$267.22
--	---	-----------------

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
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$261.00	\$261.00
Total Mulch Materials Cost/Acre				\$263.74

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$66.02
Power mulcher (MEANS 32 91 13.16 0350)	\$99.32
Weed spray, truck, non-aquatic area, nox. [DMG]	\$71.50
Total Mulch Application Cost/Acre	\$236.84

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:	<u>1.43</u>	Cost /Acre:	<u>\$803.72</u>
Estimated Failure Rate:	<u>0%</u>	Cost /Acre*:	<u>\$803.72</u>
*Selected Replanting Work Items:	<u>SEEDING,MULCHING</u>		
Initial Job Cost:	<u>\$1,149.32</u>		
Reseeding Job Cost:	<u>\$0.00</u>		
Total Job Cost:	<u>\$1,149</u>		
Job Hours:	<u>8.00</u>		

REVEGETATION WORKTask description: Secondary seeding (50% of 1.43 ac)Site: Powell's Gravel PitPermit Action: TR-1Permit/Job#: M1995012**PROJECT IDENTIFICATION**Task #: 04CState: ColoradoAbbreviation: NoneDate: 2/7/2017County: MoffatFilename: M012-04cUser: 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
Hand raking (MEANS 32 91 13.23 0250)	\$1,328.58
Total Tilling Cost/Acre	\$1,328.58

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Russian Wildrye - Bozoisky	8.00	32.14	\$50.64
Yellow Sweet Clover - Madrid	1.00	5.97	\$2.83
Slender Wheatgrass - Native	6.00	21.90	\$16.92
Siberian Wheatgrass	28.00	70.71	\$111.16
Kochia, Forage (Prostrate)	4.00	561.80	\$35.92
Totals Seed Mix	47.00	692.51	\$217.47

Application

--	--

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

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: 0.72 Cost /Acre: \$1,887.51
 Estimated Failure Rate: 0% Cost /Acre*: \$0.00
 *Selected Replanting Work Items: NONE

Initial Job Cost: **\$1,359.01**
 Reseeding Job Cost: **\$0.00**
 Total Job Cost: **\$1,359**
 Job Hours: **8.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Initial mobilization and early fall plantingSite: Powell's Gravel PitPermit Action: TR-1Permit/Job#: M1995012**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 2/7/2017County: MoffatFilename: M012-05aUser: 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
Drill/Broadcast Seeder with Tractor	25.00	\$30.65	\$88.67	1	\$119.32	\$88.67	\$250.00
Subtotals:					\$336.13	\$214.12	\$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, 3/4 T.	\$33.81	1	\$33.81	\$33.81
Subtotals:			\$33.81	\$33.81

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>DINOSAUR</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 *	<u>\$1,829.47</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$9.66</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.14	0.14
Return Time (Hours):	0.14	0.14
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.29	0.29

JOB TIME AND COST

Total job time: 2.57 Hours

Total job cost: \$1,839

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Late fall planting mobilizationSite: Powell's Gravel PitPermit Action: TR-1Permit/Job#: M1995012**PROJECT IDENTIFICATION**Task #: 05BState: ColoradoAbbreviation: NoneDate: 2/7/2017County: MoffatFilename: M012-05bUser: 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	\$30.65	\$88.67	1	\$119.32	\$88.67	\$250.00
Power Mulcher (Reinco M90)	6.00	\$6.72	\$88.67	1	\$95.39	\$88.67	\$250.00

Subtotals: **\$214.71** **\$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, 3/4 T.	\$33.81	1	\$33.81	\$33.81

Subtotals: **\$33.81** **\$33.81**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: DINOSAUR
 Total one-way travel distance: 5.00 miles
 Average Travel Speed: 35.00 mph

Total Non-Roadable Mob/Demob Cost * \$1,541.43
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$9.66
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.14	0.14
Return Time (Hours):	0.14	0.14
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.29	0.29

JOB TIME AND COST

Total job time: 2.57 Hours

Total job cost: \$1,551

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Secondary Seeding Mobilization**Site: **Powell's Gravel Pit**Permit Action: **TR-1**Permit/Job#: **M1995012****PROJECT IDENTIFICATION**Task #: **06A**State: **Colorado**Abbreviation: **None**Date: **2/7/2017**County: **Moffat**Filename: **M012-06a**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	\$30.65	\$88.67	1	\$119.32	\$88.67	\$250.00

Subtotals: **\$119.32** **\$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.	\$33.81	1	\$33.81	\$33.81

Subtotals: **\$33.81** **\$33.81**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: DINOSAUR
 Total one-way travel distance: 5.00 miles
 Average Travel Speed: 35.00 mph

Total Non-Roadable Mob/Demob Cost * \$798.07
 * two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$9.66
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.14	0.14
Return Time (Hours):	0.14	0.14
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.29	0.29

JOB TIME AND COST

Total job time: 2.57 Hours

Total job cost: \$808