



August 18, 2023

Baxter W. Kirkland  
Midway Aggregates, RLLP  
P.O. Box 580  
Rye, CO 81069

**Re: Midway Pit - File No. M-1988-018;  
Technical Revision (TR-4) Adequacy Notice and Bond Review**

Dear Mr. Kirkland:

The Division of Reclamation, Mining and Safety (DRMS) received responses to our June 14<sup>th</sup> adequacy review letter from Telesto on August 11, 2023. The responses were adequate. The DRMS generated an updated reclamation cost estimate based on the original submittal and the responses from Telesto. The resulting bond estimate is a significant increase over the \$62,260 bond we currently hold. The increase is primarily a result of increasing the bonded area by roughly 10 percent, combined with increases in material and equipment unit costs. There is one new task for hauling the estimated 350 CY of stockpiled asphalt and concrete offsite. The DRMS assumed it would be hauled to the nearby Midway landfill, thus reducing haul costs.

I have attached a copy of the updated bond estimate. Please review it. This Technical Revision (TR-4) is open until September 5<sup>th</sup>. If you would like to make additional changes to the mine or reclamation plans, it could be done under this TR.

**Please remember that the extended decision date for this application is September 5, 2023.** If we do hear from you before the current decision date, we will assume you accept the new bond estimate, and we will approve this TR and issue a surety increase. Please contact me at (303) 328-5229 with any questions.

Sincerely,

Timothy A. Cazier, P.E.  
Environmental Protection Specialist

Enclosure: Revised Bond Estimate

cc: Michael Cunningham, DRMS  
DRMS file  
Tim Gerken, Telesto



## COST SUMMARY WORK

Task description: Cost Summary (updated)

Site: Midway Pit Permit Action: TR-4 Permit/Job#: M1988018

### PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None  
Date: 8/17/2023 County: El Paso Filename: Yes  
User: TC1

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Backfill 3 Ponds	DOZER	1	12.55	\$5,534
0011	Remove all asphalt and concrete materials to LF	TRUCK1	1	1.34	\$516
002	Knockdown Near Vert. West Highwalls	DOZER	1	0.92	\$405
003	Knockdown Northside Highwalls	DOZER	1	0.89	\$394
004	Place 3" Topsoil on Disturbed Area (32.5 acres)	SCRAPER1	1	42.17	\$28,423
06A	Reveg using seed drill (R1): 31.5 acres	REVEGE	1	36.00	\$69,045
06B	Reveg using broadcast method	REVEGE	1	4.00	\$2,092
070	Mob/Demob (revised)	MOBILIZE	1	2.84	\$4,341
<b><u>SUBTOTALS:</u></b>				<b>100.71</b>	<b>\$110,750</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$2,237
Performance bond:	1.05	Total =	\$1,163
Job superintendent:	50.35	Total =	\$3,277
Profit:	10.00	Total =	\$11,075

TOTAL O & P = \$17,752

CONTRACT AMOUNT (direct + O & P) = \$128,502

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$0	Total =	\$0
Engineering work and/or contract/bid preparation:	4.25	Total =	\$5,461
Reclamation management and/or administration:	5.00		\$6,425

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$29,638

**TOTAL BOND AMOUNT (direct + indirect) = \$140,388**

**BULLDOZER WORK**Task description: **Backfill 3 Ponds**Site: **Midway Pit**Permit Action: **TR-4**Permit/Job#: **M1988018****PROJECT IDENTIFICATION**Task #: **001**State: **Colorado**Abbreviation: **None**Date: **8/17/2023**County: **El Paso**Filename: **X**User: **TC1**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D9T - 9SU**Horsepower: **405**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$238.76	NA
Operating Cost/Hour:	\$162.29	100
Ripper own.		
Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: **\$441.09**Total Fleet Cost/Hour: **\$441.09****MATERIAL QUANTITIES**Initial Volume: **14,755**Swell factor: **1.125**Loose volume: **16,599 LCY**Source of estimated volume: **See spread sheets - assume 12 ft depth**

Source of estimated swell

factor:

**Cat Handbook****HOURLY PRODUCTION**Average push distance: **75 feet**

Unadjusted hourly

production:

**1,514.3 LCY/hr**Materials consistency description: **Partly consolidated stockpile 1.1**

Average push

gradient:

Average site altitude: **5,400 feet**Material weight: **2,650 lbs/LCY**Weight description: **Decomposed rock - 25% Rock, 75% Earth**

Job Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.8737

Adjusted unit  
production: 1,323.04 LCY/hr  
Adjusted fleet  
production: **1323.04** LCY/hr

**JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.333/LCY

Total job time: **12.55** Hours  
Total job cost: **\$5,534**

**TRUCK/LOADER TEAM WORK**Task description: **Remove all asphalt and concrete materials to LF**Site: **Midway Pit**Permit Action: **TR-4**Permit/Job#: **M1988018****PROJECT IDENTIFICATION**Task #: **0011**State: **Colorado**Abbreviation: **None**Date: **8/17/2023**County: **El Paso**Filename: **M018-0011**User: **TC1**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Shift basis: **1 per day**

		Equipment Description
Truck Loader Team -Truck:		Generic 8-10 cy, 6x4
-Loader:		CAT 928Hz
Support Equipment -Load Area:		NA
-Dump Area:		NA
Road Maintenance -Motor Grader:		NA
-Water Truck:		NA

**Cost Breakdown:****Truck/Loader Team****Support Equipment****Maintenance Equipment**

	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	NA
Ownership cost/hour:	\$16.85	\$47.37	NA	NA	NA	NA
Operating cost/hour:	\$49.69	\$34.52	NA	NA	NA	NA
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Operator cost/hour:	\$0.00	\$35.97	NA	NA	NA	NA
Unit Subtotals:	\$66.54	\$117.86	NA	NA	NA	NA
Number of Units:	4	1	0	0	0	0
Group Subtotals:	Work: \$384.02		Support: \$0.00		Maint: \$0.00	

Total work team cost/hour: **\$384.02****MATERIAL QUANTITIES**Initial volume: **350**

CCY

Swell factor: **1.000**Loose volume: **350**

LCY

Source of estimated volume: **TR-4 PAR response; Truck to Midway LF**Source of estimated swell factor: **Cat Handbook**Material Purchase Cost: **\$0.00**Total Cost: **\$0.00****HOURLY PRODUCTION****Truck Capacity:****Truck Payload (weight) Basis:**Material weight: **2,700**

Pounds/LCY

Description: **Stone - crushed**Rated Payload: **27,280**

Pounds

Payload Capacity: **10.10**

LCY

**Truck Bed (volume) Basis:**

Struck Volume:	8.00	LCY
Heaped Volume:	10.00	LCY
Average Volume:	9.00	LCY
Adjusted Volume:	10.00	LCY

Final Truck Volume Based on Number of Loader Passes: 8.10 LCY

**Loading Tool Capacity**

Bucket Size Class: NA

Rated Capacity:	3.000	LCY (heaped)
Bucket Fill Factor:	0.900	Other - cemented materials (85 - 95%) 0.900
Adjusted Capacity:	2.700	LCY

**Job Condition Corrections:**

Site Altitude (ft.): 5400 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

**Loading Tool Cycle Time:** Number of Loading Tool Passes Required to Fill Truck: 3 passes

**Excavators and Front Shovels:**

Machine Cycle Time vs. Job Condition Rating: NA  
 Selected Value within this Basic Rating: NA

Track Loaders – Material Description: \_\_\_\_\_

Cycle Time Elements (min.):

Load: NA Maneuver: NA Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.475 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Dumped by truck 0.02	0.020	(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:		-0.040	minutes
Adjusted Loader Cycle Time:		0.435	minutes
Net Load Time per Truck:		0.970	minutes

**Truck Cycle Time:**

Truck Exchange Time:	0.50	Minutes	Adjusted for site altitude:	0.500	Minutes
Truck Load Time:	0.970	Minutes	Adjusted for site altitude:	0.970	Minutes
Truck Maneuver and Dump Time:	0.80	Minutes	Adjusted for site altitude:	0.800	Minutes

Truck Travel (Haul & Return) Time:  
maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	5280.00	1.00	3.00	4.00	2665	2.081

Haul Time: 2.081 minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	5280.00	-1.00	3.00	2.00	2905	1.846

Return Time: 1.846 minutes

Total Truck Cycle Time: 6.197 minutes

Loading Tool unit

Production 330.61 LCY/Hour      Adjusted for job efficiency: 274.41 LCY/Hour  
 Truck Unit Production 78.43 LCY/Hour      Adjusted for job efficiency: 65.09 LCY/Hour

Optimal No. of Trucks: 4 Truck(s)      Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 260.37 LCY/Hour  
 Adjusted single truck/loader team production: 260.37 LCY/Hour  
 Adjusted multiple truck/loader team production: 260.37 LCY/Hour

### JOB TIME AND COST

Fleet size: 1 Team(s)      Total job time: 1.34 Hours

Unit cost: \$1.475 /LCY      Total job cost: \$516

**BULLDOZER WORK**Task description: **Knockdown Near Vert. West Highwalls**Site: **Midway Pit**Permit Action: **TR-4**Permit/Job#: **M1988018****PROJECT IDENTIFICATION**Task #: **002**State: **Colorado**Abbreviation: **None**Date: **8/17/2023**County: **El Paso**Filename: **Y**User: **TC1**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D9T - 9SU**Horsepower: **405**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<b><u>Utilization %</u></b>
Ownership Cost/Hour:	<b><u>\$238.76</u></b>	<b><u>NA</u></b>
Operating Cost/Hour:	<b><u>\$162.29</u></b>	<b><u>100</u></b>
Ripper own. Cost/Hour:	<b><u>\$0.00</u></b>	<b><u>NA</u></b>
Ripper op. Cost/Hour:	<b><u>\$0.00</u></b>	<b><u>0</u></b>
Operator Cost/Hour:	<b><u>\$40.04</u></b>	<b><u>NA</u></b>

Total unit Cost/Hour: **\$441.09**Total Fleet Cost/Hour: **\$441.09****MATERIAL QUANTITIES**Initial Volume: **1,864**Swell factor: **1.125**Loose volume: **2,097 LCY**Source of estimated volume: **See revised spreadsheets - assume 10 ft height**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **50 feet**Unadjusted hourly production: **2,110.5 LCY/hr**Materials consistency description: **Partly consolidated stockpile 1.1**Average push gradient: **-25 %**Average site altitude: **5,400 feet**Material weight: **2,650 lbs/LCY**Weight description: **Decomposed rock - 25% Rock, 75% Earth****Job Condition Correction Factor**

		<b><u>Source</u></b>
Operator Skill:	<b><u>0.750</u></b>	<b><u>(AVG.)</u></b>
Material consistency:	<b><u>1.100</u></b>	<b><u>(CAT HB)</u></b>
Dozing method:	<b><u>1.200</u></b>	<b><u>(SLOT)</u></b>
Visibility:	<b><u>1.000</u></b>	<b><u>(AVG.)</u></b>



Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.0813

Adjusted unit production: 2,282.08 LCY/hr

Adjusted fleet production: **2282.08** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.193/LCY

Total job time: **0.92** Hours

Total job cost: **\$405**

**BULLDOZER WORK**Task description: **Knockdown Northside Highwalls**Site: **Midway Pit**Permit Action: **TR-4**Permit/Job#: **M1988018****PROJECT IDENTIFICATION**Task #: **003**State: **Colorado**Abbreviation: **None**Date: **8/17/2023**County: **El Paso**Filename: **Z**User: **TC1**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D9T - 9SU**Horsepower: **405**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<b><u>Utilization %</u></b>
Ownership Cost/Hour:	<b><u>\$238.76</u></b>	<b><u>NA</u></b>
Operating Cost/Hour:	<b><u>\$162.29</u></b>	<b><u>100</u></b>
Ripper own. Cost/Hour:	<b><u>\$0.00</u></b>	<b><u>NA</u></b>
Ripper op. Cost/Hour:	<b><u>\$0.00</u></b>	<b><u>0</u></b>
Operator Cost/Hour:	<b><u>\$40.04</u></b>	<b><u>NA</u></b>

Total unit Cost/Hour: **\$441.09**Total Fleet Cost/Hour: **\$441.09****MATERIAL QUANTITIES**Initial Volume: **1,813**Swell factor: **1.125**Loose volume: **2,040 LCY**Source of estimated volume: **See revised spreadsheets - assume 15 ft height**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **50 feet**Unadjusted hourly production: **2,110.5 LCY/hr**Materials consistency description: **Partly consolidated stockpile 1.1**Average push gradient: **-25 %**Average site altitude: **5,400 feet**Material weight: **2,650 lbs/LCY**Weight description: **Decomposed rock - 25% Rock, 75% Earth****Job Condition Correction Factor**

		<b><u>Source</u></b>
Operator Skill:	<b><u>0.750</u></b>	<b><u>(AVG.)</u></b>
Material consistency:	<b><u>1.100</u></b>	<b><u>(CAT HB)</u></b>
Dozing method:	<b><u>1.200</u></b>	<b><u>(SLOT)</u></b>
Visibility:	<b><u>1.000</u></b>	<b><u>(AVG.)</u></b>

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.0813

Adjusted unit production: 2,282.08 LCY/hr

Adjusted fleet production: **2282.08** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.193/LCY

Total job time: **0.89** Hours

Total job cost: **\$394**

**SCRAPER TEAM WORK**Task description: **Place 3" Topsoil on Disturbed Area (32.5 acres)**Site: **Midway Pit**Permit Action: **TR-4**Permit/Job#: **M1988018****PROJECT IDENTIFICATION**Task #: **004**State: **Colorado**Abbreviation: **None**Date: **8/17/2023**County: **El Paso**Filename: **Xa**User: **TC1**Agency or organization name: **DRMS****HOURLY EQUIPMENT**COST Shift basis: **1 per day**

Equipment Description	
-Scraper:	Cat 631G
-Dozer:	NA
Support Equipment -Load Area:	NA
-Dump Area:	NA
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	NA	NA	NA
Ownership cost/hour:	\$341.67	NA	NA	NA	NA	NA
Operating cost/hour:	\$285.26	NA	NA	NA	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	NA	NA	NA	NA
Ripper op. cost/hour:	NA	NA	NA	NA	NA	NA
Operator cost/hour:	\$47.07	NA	NA	NA	NA	NA
Unit Subtotals:	\$674.00	NA	NA	NA	NA	NA
Number of Units:	1	0	0	0	0	0
Group Subtotals:	Work: \$674.00		Support:	\$0.00	Maint:	\$0.00

Total work team cost/hour: **\$674.00****MATERIAL QUANTITIES**Initial volume: **13,108**

CCY

Swell factor: **1.125**Loose volume: **14,747**

LCY

Source of estimated volume: **3" depth over 32.5 acres (TR-4 Map)**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight: **2,650 lbs/LCY**  
 Material description: **Decomposed rock - 25% Rock,  
75% Earth**  
 Rated Payload: **81,600 pounds**  
 Payload Capacity: **30.79 LCY**

Struck Volume: **24.00** LCY  
 Heaped Volume: **34.00** LCY  
 Average Volume: **29.00** LCY  
 Adjusted Capacity: **29.00** LCY

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

Site Altitude: 5400 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	1500.00	-5.00	8.00	3.00	2227	0.97

Haul Time: 0.97 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1500.00	5.00	8.00	13.00	918	1.66

Return Time: 1.66 minutesTotal Scraper team cycle time: 4.13 minutesAdjusted for job conditions: 349.69 LCY/HourSelected Number of Scrapers: 1 Scraper(s)Adjusted single scraper team (unit) hourly production: 349.69 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 349.69 LCY/HourUnadjusted unit production/hour: 421.31 LCY/Hour

Optimal Number of Scrapers per push dozer: \_\_\_\_\_

**JOB TIME AND COST**Fleet size: 1 Team(s)Total job time: 42.17 HoursUnit cost: \$1.927 /LCYTotal job cost: \$28,423

**REVEGETATION WORK**Task description: Reveg using seed drill (R1): 31.5 acresSite: Midway PitPermit Action: TR-4Permit/Job#: M1988018**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 8/17/2023County: El PasoFilename: V1User: TC1Agency 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)	\$112.82
<b>Total Tilling Cost/Acre</b>	<b>\$112.82</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	0.15	5.85	\$4.27
Sand Dropseed	0.05	5.97	\$0.49
Little Bluestem - Pastura	1.34	8.00	\$18.07
Sideoats Grama - Vaughn	1.82	5.97	\$15.24
Galleta	0.37	1.35	\$8.27
Needle and Thread	1.09	2.88	\$45.62
Western Wheatgrass - Native	3.20	8.08	\$19.20
Saltbush, Four Wing	1.00	1.38	\$12.50
Winter Fat	0.02	0.05	\$0.41
<b>Totals Seed Mix</b>	<b>9.04</b>	<b>39.53</b>	<b>\$124.06</b>

**Application**

Description	Cost /Acre
Drill seeding (MEANS 32 92 19.13 0020)	\$468.00
<b>Total Seed Application Cost/Acre</b>	<b>\$468.00</b>

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

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
<b>Total Mulch Materials Cost/Acre</b>				<b>\$859.57</b>

**Application**

Description	Cost /Acre
Power mulcher (MEANS 32 91 13.16 0350)	\$147.67
<b>Total Mulch Application Cost/Acre</b>	<b>\$147.67</b>

**NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$0.00</b>

**JOB TIME AND COST**

No. of Acres: 31.5                      Cost /Acre: \$1,712.12  
 Estimated Failure Rate: 30%                      Cost /Acre\*: \$1,599.30  
 \*Selected Replanting Work Items: SEEDING, MULCHING

Initial Job Cost: **\$53,931.78**  
 Reseeding Job Cost: **\$15,113.39**  
 Total Job Cost: **\$69,045**  
 Job Hours: **36.00**

**REVEGETATION WORK**Task description: Reveg using broadcast methodSite: Midway PitPermit Action: TR-4Permit/Job#: M1988018**PROJECT IDENTIFICATION**Task #: 06BState: ColoradoAbbreviation: NoneDate: 8/17/2023County: El PasoFilename: V1User: TC1Agency 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)	\$112.82
<b>Total Tilling Cost/Acre</b>	<b>\$112.82</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	0.30	11.71	\$8.54
Sand Dropseed	0.10	11.94	\$0.98
Little Bluestem - Pastura	2.68	16.00	\$36.14
Sideoats Grama - Vaughn	3.64	11.95	\$30.49
Galleta	0.74	2.70	\$16.54
Needle and Thread	2.18	5.76	\$91.23
Western Wheatgrass - Native	6.40	16.16	\$38.40
Saltbush, Four Wing	2.00	2.75	\$25.00
Winter Fat	0.04	0.10	\$0.82
<b>Totals Seed Mix</b>	<b>18.08</b>	<b>79.07</b>	<b>\$248.13</b>



**Application**

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

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

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
<b>Total Mulch Materials Cost/Acre</b>				<b>\$859.57</b>

**Application**

Description	Cost /Acre
Power mulcher (MEANS 32 91 13.16 0350)	\$147.67
<b>Total Mulch Application Cost/Acre</b>	<b>\$147.67</b>

**NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$0.00</b>

**JOB TIME AND COST**

No. of Acres: 1 Cost /Acre: \$1,635.41  
 Estimated Failure Rate: 30% Cost /Acre\*: \$1,522.59  
 \*Selected Replanting Work Items: SEEDING, MULCHING

Initial Job Cost: **\$1,635.41**  
 Reseeding Job Cost: **\$456.78**  
 Total Job Cost: **\$2,092**  
 Job Hours: **4.00**

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mob/Demob (revised)**Site: **Midway Pit**Permit Action: **TR-4**Permit/Job#: **M1988018****PROJECT IDENTIFICATION**Task #: **070**State: **Colorado**Abbreviation: **None**Date: **8/17/2023**County: **El Paso**Filename: **M**User: **TC1**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:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

**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 - 9SU	60.01	\$238.76	\$175.95	1	\$414.71	\$175.95	\$250.00
Cat 631G	52.50	\$341.67	\$175.95	1	\$517.62	\$175.95	\$250.00
CAT 928Hz	13.91	\$47.37	\$82.29	1	\$129.66	\$82.29	\$250.00

Subtotals: **\$1,061.99** **\$434.19** **\$750.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Drill/Broadcast Seeder with Tractor	\$14.81	1	\$14.81	\$14.81
Power Mulcher (Bowie LD-90)	\$57.02	1	\$57.02	\$57.02
Generic 8-10 cy, 6x4	\$91.36	4	\$365.44	\$365.44

Subtotals: **\$437.27** **\$437.27**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>COLORADO SPRINGS</u>	
Total one-way travel distance:	<u>23.00</u>	miles
Average Travel Speed:	<u>50.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$3,938.48</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$402.29</u>
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.46</u>	<u>0.46</u>
Return Time (Hours):	<u>0.46</u>	<u>0.46</u>
Loading Time (Hours):	<u>0.25</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.25</u>	<u>NA</u>
Subtotals:	<u>1.42</u>	<u>0.92</u>

**JOB TIME AND COST**

Total job time:	<u>2.84</u>	Hours
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Total job cost:	<u>\$4,341</u>
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