



July 18, 2022

Robert Solberg  
Solberg Gravel LLC  
13745 Garrett Rd  
Peyton, CO 80831-7620

**Re: Solberg Pit, Permit No. M-1981-044; Third Adequacy Review for 112 Construction Materials Reclamation Permit Amendment Application (AM-3)**

Dear Mr. Solberg:

The Division of Reclamation, Mining and Safety (DRMS) has reviewed your responses to our March 2, 2022 second adequacy review letter for your 112 Construction Materials Reclamation Permit Amendment Application (AM-3) for the Solberg Pit, Permit No. M-1981-044. This response required an amendment to the original AM-3 application to account for additional affected area and was received on April 18, 2022. The public comment period for the amended amendment application ended on June 19, 2022. **The decision date for this application is July 31, 2022.** Please be advised that if you are unable to satisfactorily address any concerns identified in this review before the decision date, **it will be your responsibility to request an extension of the review period.** If there are outstanding issues that have not been adequately addressed prior to the end of the review period, and no extension has been requested, the DRMS may deny this application.

The following items must be addressed by the applicant in order to satisfy the requirements of C.R.S. 34-32.5-101 *et seq.* and the Mineral Rules and Regulations of the Mined Land Reclamation Board: *(the numbering sequence from the original adequacy letter has been retained for tracking purposes)*

**6.4 SPECIFIC EXHIBIT REQUIREMENTS – REGULAR 112 OPERATIONS**

**6.4.1 EXHIBIT A - Legal Description**

6. Exhibit A: The response is adequate.

**6.4.4 EXHIBIT D – Mining Plan**

12. Affected Area: The response requires additional clarification. All text responses were revised to a consistent 286 acres of affected area. However, the Exhibit C and F maps provided with the April 18, 2022 contradict this and the two maps are also inconsistent. The Exhibit C map lists the total affected area in the notes as 289 acres. Whereas, The Exhibit F map lists the total affected area in the notes as 306 acres. Exhibit F also includes the southwest corner as affected area, where that corner is not included as affected area in Exhibit C. Please provide Exhibit C



and F maps consistent with the revised 286 acres of affected area stated in the text. If the amended affected area is now to be 289 acres, Exhibits D, E and L will need to be revised.

13. Perimeter slopes: The DRMS accepts Pioneer's commitment to limit the length of active highwall to 1,700 feet. The response is adequate.

#### **6.4.6 EXHIBIT F – Reclamation Plan Map**

23. Affected Area Boundary: Please see Comment 12. Please revise Exhibit F to be consistent with the response to Comment 12.

#### **6.4.12 EXHIBIT L – Reclamation Costs**

25. Task 001C: Please see Comment 13. A DRMS bond estimate is enclosed for your review (see **Attachment A**). It assumes the affected area is 286 acres and the highwall length is limited to 1,700 feet. Please review the enclosed bond estimate.
26. Task 005: Please see Comment 12.
27. Tasks 006 and 010: Please see Comment 12.

#### **6.4.13 EXHIBIT M – Other Permits and Licenses**

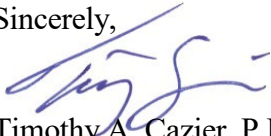
30. Update required: The response is adequate.

#### **6.4.19 EXHIBIT S – Permanent Man-Made Structures**

32. Utility lines/poles not addressed: The response is adequate.

**Please remember that the decision date for this application is July 31, 2022.** As previously mentioned if you are unable to provide satisfactory responses to any inadequacies prior to this date, it will be your responsibility to request an extension of time to allow for continued review of this application. If there are still unresolved issues when the decision date arrives and no extension has been requested, the application may be denied. If you have any questions, please contact me at (303) 328-5229.

Sincerely,



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

Enclosures: Attachment A: AM-3 DRMS Bond Estimate  
History Colorado and Colorado Division of Water Resources Comments

cc: Michael Cunningham, DRMS  
DRMS file  
Angela Bellantoni, PhD, Pioneer Landscaping Materials

# ATTACHMENT A

## COST SUMMARY WORK

Task description: Cost Summary

Site: Solberg Pit

Permit Action: AM-3

Permit/Job#: M1981044

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 7/14/2022

County: El Paso

Filename: M044-000

User: TC1

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001A	Knock down 1700 ft of 0.5H:1V Highwalls	DOZER	1	15.27	\$4,008
002	Rip haul roads and scale house site	RIPPER	1	1.73	\$490
003	Backfill water ponds	DOZER	1	48.97	\$12,855
005	Finish grade disturbed area	GRADER	1	49.93	\$7,571
006	Place 6" Topsoil over disturbed area	SCRAPER1	1	391.26	\$410,286
010	Revegetate 286 Acres	REVEGE	1	120.00	\$902,913
011	Remove truck scale and house [ref. Exhibit L]	NA	1	4.00	\$13,962
012	Mob/Demob	MOBILIZE	1	1.57	\$3,662
<b><u>SUBTOTALS:</u></b>				<b>632.73</b>	<b>\$1,355,747</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$27,386

Performance bond: 1.05

Total = \$14,235

Job superintendent: 316.37

Total = \$23,769

Profit: 10.00

Total = \$135,575

TOTAL O & P = \$200,965

CONTRACT AMOUNT (direct + O & P) = \$1,556,712

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0

Total = \$0

Engineering work and/or contract/bid preparation: 4.25

Total = \$66,160

Reclamation management and/or administration: 5.00

\$77,836

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$344,960

**TOTAL BOND AMOUNT (direct + indirect) = \$1,700,707**

**BULLDOZER WORK**Task description: **Knock down 1700 ft of 0.5H:1V Highwalls**Site: **Solberg Pit**Permit Action: **AM-3**Permit/Job#: **M1981044****PROJECT IDENTIFICATION**Task #: **001A**State: **Colorado**Abbreviation: **None**Date: **7/14/2022**County: **El Paso**Filename: **M044-001A**User: **TC1**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:	<b><u>\$124.85</u></b>	<b><u>NA</u></b>
Operating Cost/Hour:	<b><u>\$97.63</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: **\$262.52**Total Fleet Cost/Hour: **\$262.52****MATERIAL QUANTITIES**Initial Volume: **14,941**Swell factor: **1.060**Loose volume: **15,837 LCY**Source of estimated volume: **Task 001C.1 Spreadsheet**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: **-25 %**Average site altitude: **6,650 feet**Material weight: **2,900 lbs/LCY**Weight description: **Sand and gravel - Dry**

Job Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.100	(50% SL)
Visibility:	1.000	(AVG.)
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:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7409

Adjusted unit  
production: 1,037.26 LCY/hr

Adjusted fleet  
production: **1037.26** LCY/hr

**JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.253/LCY

Total job time: **15.27** Hours

Total job cost: **\$4,008**

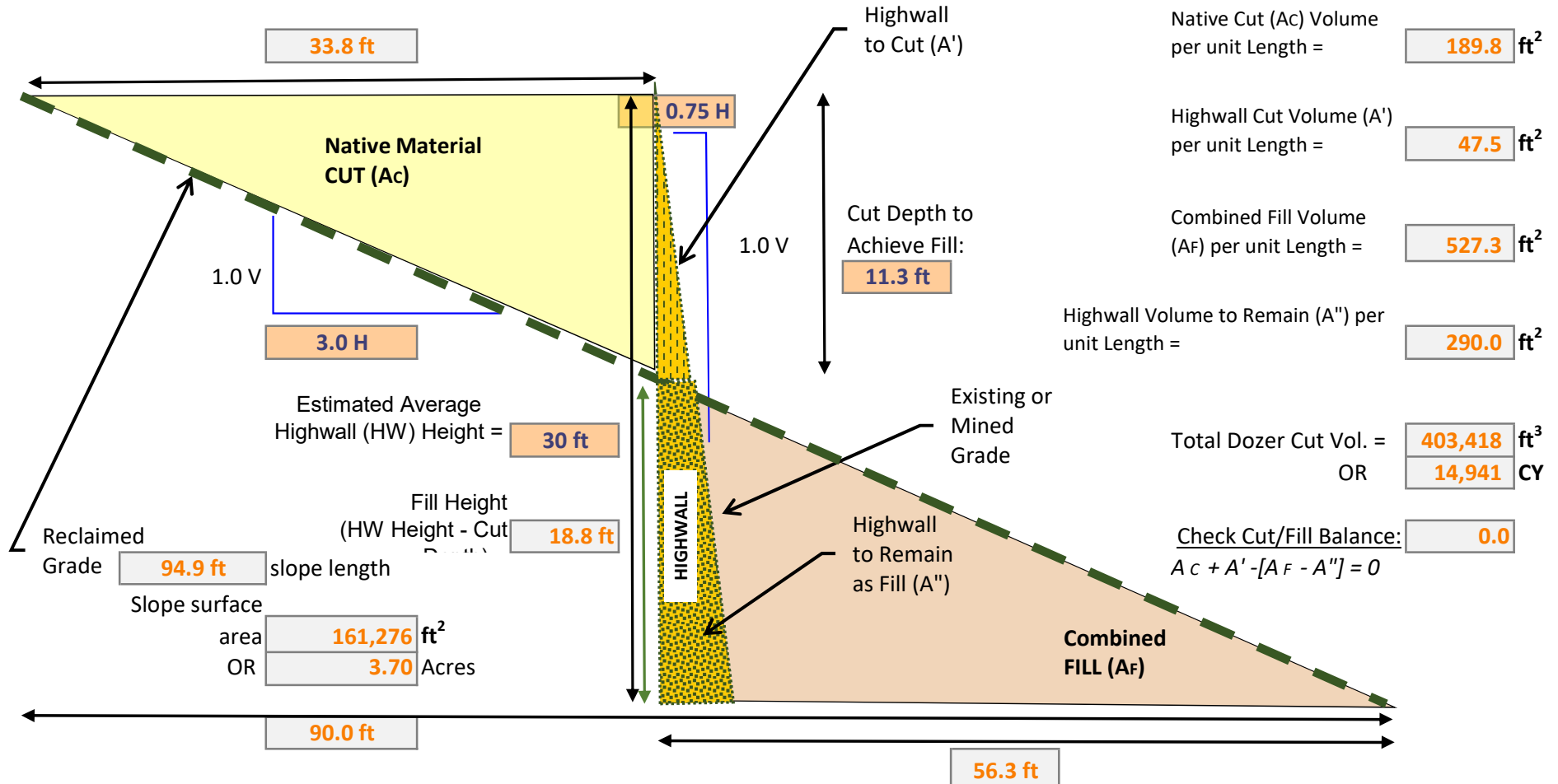
## Task # 001A.1 Highwall Backfill Volume Estimate

PROJECT: Solberg Pit  
 PERMIT No.: M-1981-044  
 HIGHWALL LOCATION: 1,700 feet Maximum Length of Highwall

### LEGEND

Input

Result



**HIGHWALL CUT - FILL VOLUME ESTIMATE**

## BULLDOZER RIPPING WORK

Task description: Rip haul roads and scale house site

Site: Solberg Pit

Permit Action: AM-3

Permit/Job#: M1981044

### PROJECT IDENTIFICATION

Task #: 002

State: Colorado

Abbreviation: None

Date: 7/14/2022

County: El Paso

Filename: M044-002

User: TC1

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:	\$124.85	NA
Operating Cost/Hour:	\$97.63	100
Ripper Ownership Cost/Hour:	\$13.10	NA
Ripper Operating Cost/Hour:	\$7.30	100
Operator Cost/Hour:	\$40.04	NA
Total Unit Cost/Hour:	\$282.92	
Total Fleet Cost/Hour:	<b>\$282.92</b>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA  
Area: 1.20 acres Rip Depth (ft): 1.00 Volume: 1,936 BCY or CCY

Source of estimated quantity: Google Earth: access road to truck scale

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth:	<u>2.56</u>	feet/pass
Average Ripping Width:	<u>7.08</u>	feet/pass
Average Ripping Length:	<u>800.00</u>	feet/pass
Average Dozer Speed:	<u>88.00</u>	feet/minute
Average Maneuver Time:	<u>0.25</u>	minutes/pass
Production per unit area:	<u>0.835</u>	acres/hour

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.835 Acres/hr

Site Altitude: 6,650 feet

Altitude Adj: 1.00 (CAT HB)

Job Efficiency: 0.83 (1 shift/day)

Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.69 Acres/hr

Adjusted Hourly Fleet Production: 0.69 Acres/hr

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 1.73 Hours

Unit cost: \$408.120 Per acre Total job cost: \$490

**BULLDOZER WORK**Task description: **Backfill water ponds**Site: **Solberg Pit**Permit Action: **AM-3**Permit/Job#: **M1981044****PROJECT IDENTIFICATION**Task #: **003**State: **Colorado**Abbreviation: **None**Date: **7/14/2022**County: **El Paso**Filename: **M044-003**User: **TC1**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:	\$124.85	NA
Operating Cost/Hour:	\$97.63	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:	\$262.52	
Total Fleet Cost/Hour:	<b>\$262.52</b>	

**MATERIAL QUANTITIES**Initial Volume: **38,720**Swell factor: **1.060**Loose volume: **41,043 LCY**Source of estimated volume: **Exhibit L, task 003**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: **-10 %**Average site altitude: **6,650 feet**Material weight: **2,900 lbs/LCY**Weight description: **Sand and gravel - Dry**



Job Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.100	(50% SL)
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:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5987

Adjusted unit  
production: 838.18 LCY/hr  
Adjusted fleet  
production: **838.18** LCY/hr

**JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.313/LCY

Total job time: **48.97** Hours  
Total job cost: **\$12,855**

## MOTOR GRADER WORK

Task description: Finish grade disturbed area

Site: Solberg Pit

Permit Action: AM-3

Permit/Job#: M1981044

### PROJECT IDENTIFICATION

Task #: 005

State: Colorado

Abbreviation: None

Date: 7/14/2022

County: El Paso

Filename: M044-005

User: TC1

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: CAT 12M

Horsepower: 158

Ripper Attachment: \_\_\_\_\_

Shift Basis: 1 per day

Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$57.51	NA
Operating Cost/Hour:	\$47.24	100
Ripper Ownership Cost/Hour:	\$0.00	NA
Ripper Operating Cost/Hour:	\$0.00	
Operator Cost/Hour:	\$46.87	NA
Total Unit Cost/Hour:	\$151.62	
Total Fleet Cost/Hour:	<b>\$151.62</b>	

### MATERIAL QUANTITIES

Total Area to be graded or ripped: 286.00 acres

Source of estimated acreage: Exhibit L

### HOURLY PRODUCTION

Average Grader Speed:	<u>6.25</u>	mph
Selected Application:	<u>Road maintenance (3-9.5 mph) - 6.25</u>	
Selected Blade Angle:	<u>30</u>	degrees
Effective Blade Length:	<u>10.40</u>	feet
Width of blade overlap per pass:	<u>2.00</u>	feet
Net grading or ripping width per pass:	<u>8.40</u>	feet
Unadjusted Hourly Unit Production:	<u>6.3636</u>	acres/hour

#### Job Condition Correction Factors

Site Altitude: 6650 feet

Altitude Adj:	<u>1.00</u>	Source (CAT HB)
Job Efficiency:	<u>0.90</u>	(1sh/d, fav.)
Net Correction:	<u>0.9000</u>	multiplier

Adjusted Hourly Unit Production: 5.7273 acres/Hour

Adjusted Hourly Fleet Production: 5.7273 acres/Hour

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 49.94 Hours

Unit cost: \$26.47 per acre Total job cost: \$7,571

**SCRAPER TEAM WORK**Task description: Place 6" Topsoil over disturbed areaSite: Solberg PitPermit Action: AM-3Permit/Job#: M1981044**PROJECT IDENTIFICATION**Task #: 006State: ColoradoAbbreviation: NoneDate: 7/14/2022County: El PasoFilename: M044-006User: TC1Agency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 623G
-Dozer:	NA
Support Equipment -Load Area:	NA
-Dump Area:	CAT 12M
Road Maintenance -Motor Grader:	NA
-Water Truck:	Water Tanker, 2,500 Gal.

**Cost Breakdown:**

	Scraper Work Team		Support Equipment		Maintenance Equipment	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	NA	100	NA	100
Ownership cost/hour:	\$222.02	NA	NA	\$57.51	NA	\$10.28
Operating cost/hour:	\$164.11	NA	NA	\$47.24	NA	\$20.32
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	NA	\$0.00	NA	\$0.00
Ripper op. cost/hour:	NA	NA	NA	\$0.00	NA	\$0.00
Operator cost/hour:	\$47.07	NA	NA	\$46.87	NA	\$0.00
Unit Subtotals:	\$433.20	NA	NA	\$151.62	NA	\$30.60
Number of Units:	2	0	0	1	0	1
Group Subtotals:	Work:	\$866.40	Support:	\$151.62	Maint:	\$30.60

Total work team cost/hour: \$1,048.62**MATERIAL QUANTITIES**Initial volume: 230,707

CCY

Swell factor: 1.215Loose volume: 280,309

LCY

Source of estimated volume: 286 acres x 6"Source of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight:	<u>1,600 lbs/LCY</u>	Struck Volume:	<u>18.00</u>	LCY
Material description:	<u>Top Soil</u>	Heaped Volume:	<u>23.00</u>	LCY
Rated Payload:	<u>55,200 pounds</u>	Average Volume:	<u>20.50</u>	LCY
Payload Capacity:	<u>34.50 LCY</u>	Adjusted Capacity:	<u>20.50</u>	LCY

Cycle Time:Scraper Loading Time: 0.90 MinutesManeuver and Spread Time: 0.70 MinutesJob Condition Correction:

Site Altitude: 6650 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: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	3.00	3.00	2189	0.67

Haul Time: 0.67 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	3.00	3.00	2666	0.58

Return Time: 0.58 minutesTotal Scraper team cycle time: 2.85 minutesAdjusted for job conditions: 358.21 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 716.42 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 716.42 LCY/HourUnadjusted unit production/hour: 431.58 LCY/Hour

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

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 391.26 HoursUnit cost: \$1.464 /LCYTotal job cost: \$410,286

REVEGETATION WORKTask description: Revegetate 286 AcresSite: Solberg PitPermit Action: AM-3Permit/Job#: M1981044PROJECT IDENTIFICATIONTask #: 010State: ColoradoAbbreviation: NoneDate: 7/14/2022County: El PasoFilename: M044-010User: TC1Agency or organization name: DRMSFERTILIZING**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)	\$117.18
Weed control spraying (MEANS 31 31 16.13 3100)	\$290.40
<b>Total Tilling Cost/Acre</b>	<b>\$407.58</b>

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	2.00	32.64	\$27.45
Little Bluestem - Native	4.00	23.88	\$54.27
Sideoats Grama - Vaughn	8.00	26.26	\$67.00
Intermediate Wheatgrass - Rush	10.00	21.35	\$28.00
Western Wheatgrass - Native	12.00	30.30	\$72.00
Needlegrass, Green - Lodorm	6.00	24.93	\$70.65
Regreen Hybrid	30.00	7.58	\$140.25
<b>Totals Seed Mix</b>	<b>72.00</b>	<b>166.94</b>	<b>\$459.62</b>

**Application**

Description	Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)	\$1,247.99
<b>Total Seed Application Cost/Acre</b>	<b>\$1,247.99</b>

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

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hydromulch, 1 ton/ac. rate {Materials Only}	1.00	ACRE	\$407.29	\$407.29
<b>Total Mulch Materials Cost/Acre</b>				<b>\$407.29</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Mulch Application Cost/Acre</b>	<b>\$0.00</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: 286  
 Estimated Failure Rate: 30%  
 \*Selected Replanting Work Items: TILLING,SEEDING

Cost /Acre: \$2,522.48  
 Cost /Acre\*: \$2,115.19

Initial Job Cost: **\$721,429.28**  
 Reseeding Job Cost: **\$181,483.30**  
 Total Job Cost: **\$902,913**  
 Job Hours: **120.00**

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mob/Demob**Site: **Solberg Pit**Permit Action: **AM-3**Permit/Job#: **M1981044****PROJECT IDENTIFICATION**Task #: **012**State: **Colorado**Abbreviation: **None**Date: **7/18/2022**County: **El Paso**Filename: **M044-012**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:	\$15.25	\$23.06	\$37.58
Operating Cost/Hour:	\$25.26	\$30.83	\$51.41
Operator Cost/Hour:	\$27.71	\$27.71	\$27.71
Helper Cost/Hour:	\$0.00	\$20.22	\$20.22
Total Unit Cost/Hour:	\$68.22	\$101.82	\$136.92

**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	\$137.95	\$136.92	1	\$274.87	\$136.92	\$250.00
Cat 623G	41.35	\$222.02	\$101.82	2	\$647.68	\$203.64	\$500.00
CAT 12M	16.01	\$57.51	\$68.22	2	\$251.46	\$136.44	\$250.00

Subtotals: **\$1,174.01** **\$477.00** **\$1,000.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 2,500 Gal.	\$30.60	1	\$30.60	\$30.60
Hydroseeder with Tractor	\$25.23	1	\$25.23	\$25.23

Subtotals: **\$55.83** **\$55.83**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>FALCON</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>\$3,645.73</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$15.95</u>
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.14</u>	<u>0.14</u>
Return Time (Hours):	<u>0.14</u>	<u>0.14</u>
Loading Time (Hours):	<u>0.25</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.25</u>	<u>NA</u>
Subtotals:	<u>0.79</u>	<u>0.29</u>

**JOB TIME AND COST**

Total job time:	<u>1.57</u>	Hours
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Total job cost:	<u>\$3,662</u>
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