



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

October 3, 2023

April Sibson  
High Country Hard Rock, LLC  
45 6th St Unit 3  
Steamboat Springs, CO 80487

**Re: Williams/Illinois Gravel Pit - File No. M-1997-039**  
**High Country Hard Rock, LLC**  
**Surety Increase (SI-3)**  
**Bond increase to \$93,905**

Dear April Sibson:

On October 3, 2023 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$93,905.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$19,405.00.

The Division ordered amendment of the current Financial Warranty, or submittal of a new Financial Warranty reflecting the increase, within 60 days from the date of this letter (October 3, 2023).

Please make arrangements with Sara M. Stevenson-Benn at the Division's Denver office for submittal of the financial warranty. Any other questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Sara M. Stevenson-Benn by telephone at (303) 866-3567 (8148), or by email at [Sara.stevenson-benn@state.co.us](mailto:Sara.stevenson-benn@state.co.us).

The Permittee for this site may be scheduled for a Formal Board Hearing for possible revocation of the permit after December 2, 2023, if the amount of any increased Financial Warranty has not been provided.

Bond Held:	\$74,500.00
Prior Liability:	\$74,500.00
Change in Liability:	\$19,405.00
Revised Liability:	\$93,905.00
Prior Permit Acreage:	204.83
Change in Permit Acreage:	0.00



Revised Permit Acreage:	204.83
Prior Affected Acreage:	204.83
Change in Affected Acreage:	0.00
Revised Affected Acreage:	204.83

If you have any questions, please contact me by telephone at (303) 866-3567 x 8176, or by email at [Hunter.ridley@state.co.us](mailto:Hunter.ridley@state.co.us).

Sincerely,



Hunter C. Ridley  
Environmental Protection Specialist

cc: Josh Sibson

M-GR-04

## COST SUMMARY WORK

Task description: Updated post inspection

Site: Williams/Illinois Gravel Pit

Permit Action: 2023 Post Inspection

Permit/Job#: M1997039

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 9/6/2023

County: Jackson

Filename: 000

11:06:58 AM

User: HR1

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Final Grading - Stage 1 - East Boundary Only	DOZER	1	19.60	\$8,786
002	Replace 8" Topsoil - 14.98 Acres - 110c & Stage 1	DOZER	1	21.11	\$9,462
003	Revegetate 14.98 Acres - 110c & Stage 1	REVEGE	1	80.00	\$22,299
004	Fence 5 Acres in Reclamation	SITEMAINT ENANCE	1	0.00	\$500
005	Mob/Demob	MOBILIZE	1	4.26	\$2,051
006	Replace 8" Topsoil - 5.72 Acres - Stage 2	DOZER	1	8.06	\$3,613
007	Revegetate 5.72 Acres - Stage 2	REVEGE	1	80.00	\$8,515
008	Replace 8" Topsoil - 5.72 Acres - Stage 3	DOZER	1	8.06	\$3,613
009	Revegetate 5.72 Acres - Stage 3	REVEGE	1	80.00	\$8,515
<b><u>SUBTOTALS:</u></b>				<b>301.09</b>	<b>\$67,354</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$1,361
Performance bond:	1.05	Total =	\$707
Job superintendent:	150.54	Total =	\$9,797
Profit:	10.00	Total =	\$6,735

TOTAL O & P = \$18,600

CONTRACT AMOUNT (direct + O & P) = \$85,954

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$0	Total =	\$0
Engineering work and/or contract/bid preparation:	4.25	Total =	\$3,653
Reclamation management and/or administration:	5.00		\$4,298

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$26,551

**TOTAL BOND AMOUNT (direct + indirect) = \$93,905**

**BULLDOZER WORK**Task description: **Final Grading - Stage 1 - East Boundary Only**Site: **Williams/Illinois Gravel Pit**Permit Action: **2023\_Post Inspection**Permit/Job#: **M1997039****PROJECT IDENTIFICATION**

Task #:	001	State:	Colorado	Abbreviation:	None
Date:	9/6/2023	County:	Jackson	Filename:	001
	11:04:09 AM				
User:	HR1				

Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**

Basic Machine:	Cat D8T - 8SU
Horsepower:	310
Blade Type:	Semi-Universal
Attachment:	3-shank ripper
Shift Basis:	1 per day
Data Source:	(CRG)

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper own. Cost/Hour:	\$14.11	NA
Ripper op. Cost/Hour:	\$7.45	100
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour:	\$448.16
Total Fleet Cost/Hour:	<b>\$448.16</b>

**MATERIAL QUANTITIES**

Initial Volume:	8,167
Swell factor:	1.000
Loose volume:	<b>8,167 LCY</b>

Source of estimated volume:	Division of Reclamation, Mining & Safety
Source of estimated swell factor:	Cat Handbook

**HOURLY PRODUCTION**

Average push distance:	80 feet
Unadjusted hourly production:	984.2 LCY/hr

Materials consistency description: **Consolidated stockpile 1.0**

Average push gradient:	-10 %
Average site altitude:	8,450 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:	1.000	(CAT HB)
Dozing method:	1.000	(GEN.)

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4233

Adjusted unit production: 416.61 LCY/hr

Adjusted fleet production: **416.61** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$1.076/LCY

Total job time: **19.60** Hours  
Total job cost: **\$8,786**

**BULLDOZER WORK**Task description: **Replace 8" Topsoil - 14.98 Acres - 110c & Stage 1**Site: **Williams/Illinois Gravel Pit**Permit Action: 2023\_Post InspectionPermit/Job#: M1997039**PROJECT IDENTIFICATION**

Task #:	<u>002</u>	State:	<u>Colorado</u>	Abbreviation:	<u>None</u>
Date:	<u>9/6/2023</u>	County:	<u>Jackson</u>	Filename:	<u>002</u>
	<u>11:04:50 AM</u>				
User:	<u>HR1</u>				

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine:	<u>Cat D8T - 8SU</u>
Horsepower:	<u>310</u>
Blade Type:	<u>Semi-Universal</u>
Attachment:	<u>3-shank ripper</u>
Shift Basis:	<u>1 per day</u>
Data Source:	<u>(CRG)</u>

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$241.38</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$143.92</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$14.11</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$7.45</u>	<u>100</u>
Operator Cost/Hour:	<u>\$41.30</u>	<u>NA</u>

Total unit Cost/Hour:	<u>\$448.16</u>
Total Fleet Cost/Hour:	<b><u>\$448.16</u></b>

**MATERIAL QUANTITIES**

Initial Volume:	<u>15,950</u>
Swell factor:	<u>1.000</u>
Loose volume:	<b><u>15,950 LCY</u></b>

Source of estimated volume:	<u>Division of Reclamation, Mining &amp; Safety</u>
Source of estimated swell factor:	<u>Cat Handbook</u>

**HOURLY PRODUCTION**

Average push distance:	<u>80 feet</u>
Unadjusted hourly production:	<u>984.2 LCY/hr</u>

Materials consistency description: Consolidated stockpile 1.0

Average push gradient:	<u>-10 %</u>
Average site altitude:	<u>8,450 feet</u>

Material weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.000</u>	<u>(CAT HB)</u>
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7676

Adjusted unit production: 755.47 LCY/hr

Adjusted fleet production: **755.47** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
 Unit cost: \$0.593/LCY

Total job time: **21.11** Hours  
 Total job cost: **\$9,462**

**REVEGETATION WORK**Task description: Revegetate 14.98 Acres - 110c & Stage 1Site: Williams/Illinois Gravel PitPermit Action: 2023\_Post InspectionPermit/Job#: M1997039**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 9/6/2023County: JacksonFilename: 00311:01:05 AMUser: HR1Agency 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
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
<b>Total Tilling Cost/Acre</b>	<b>\$451.62</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Beardless Wheatgrass - Whitmar	5.00	16.30	\$58.63
Mountain Brome - Bromar	10.00	16.07	\$38.00
Bottlebrush Squirreltail	2.50	11.02	\$40.56
Sandberg Bluegrass - VNS	5.00	106.18	\$42.00
Rocky Mountain Fescue	5.00	80.35	\$36.25
Slender Wheatgrass - Native	10.00	36.50	\$46.25
Streambank Wheatgrass - Sodar	5.00	16.30	\$28.50
Thickspike Wheatgrass - Critana	5.00	17.68	\$34.38



Prairie Junegrass	2.50	132.89	\$65.00
<b>Totals Seed Mix</b>	50.00	433.28	<b>\$389.56</b>

**Application**

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

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

<b>Description</b>	<b>Units / Acre</b>	<b>Unit</b>	<b>Cost / Unit</b>	<b>Cost /Acre</b>
			\$	\$
<b>Total Mulch Materials Cost/Acre</b>				<b>\$0.00</b>

**Application**

<b>Description</b>	<b>Cost /Acre</b>
Weed spray, hand, non-aquatic area, nox. [DMG]	\$183.16
<b>Total Mulch Application Cost/Acre</b>	<b>\$183.16</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres: 14.98                      Cost /Acre: \$1,291.56  
 Estimated Failure Rate: 30%                      Cost /Acre\*: \$656.78  
 \*Selected Replanting Work Items: SEEDING

Initial Job Cost: **\$19,347.57**  
 Reseeding Job Cost: **\$2,951.57**  
 Total Job Cost: **\$22,299**  
 Job Hours: **80.00**

## SITE MAINTENANCE

Task description: **Fence 5 Acres in Reclamation**

Site: **Williams/Illinois Gravel Pit**

Permit Action: **2023\_Post Inspection**

Permit/Job#: **M1997039**

### PROJECT IDENTIFICATION

Task #: **004**

State: **Colorado**

Abbreviation: **None**

Date: **9/6/2023 11:00:27**

County: **Jackson**

Filename: **004**

AM

User: **HR1**

Agency or organization name: **DRMS**

### UNIT COSTS

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Electric Fence - 5 Acres @ \$100/Acre	0.00	USER PROVIDED ITEM	5.00		\$100.00	\$500.00

Job Hours: **0.00**

Total Cost: **\$500.00**

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mob/Demob**Site: **Williams/Illinois Gravel Pit**Permit Action: 2023\_Post InspectionPermit/Job#: M1997039**PROJECT IDENTIFICATION**

Task #: 005 State: Colorado Abbreviation: None  
 Date: 9/6/2023 County: Jackson Filename: 005  
11:03:22 AM  
 User: HR1

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 D8T - 8SU	53.08	\$255.49	\$175.95	1	\$431.44	\$175.95	\$250.00
Subtotals:					<b>\$431.44</b>	<b>\$175.95</b>	<b>\$250.00</b>

**ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Subtotals:			<b>\$0.00</b>	<b>\$0.00</b>

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	WALDEN	
Total one-way travel distance:	17.00	miles
Average Travel Speed:	30.00	mph

Total Non-Roadable Mob/Demob Cost *	\$2,051.26
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	\$0.00
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.57	0.57
Return Time (Hours):	0.57	0.57
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.13	1.13

**JOB TIME AND COST**

Total job time:	4.27	Hours
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Total job cost:	\$2,051
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**BULLDOZER WORK**Task description: **Replace 8" Topsoil - 5.72 Acres - Stage 2**Site: **Williams/Illinois Gravel Pit**Permit Action: 2023\_Post InspectionPermit/Job#: M1997039**PROJECT IDENTIFICATION**

Task #:	<u>006</u>	State:	<u>Colorado</u>	Abbreviation:	<u>None</u>
Date:	<u>9/6/2023</u>	County:	<u>Jackson</u>	Filename:	<u>006</u>
	<u>11:05:37 AM</u>				
User:	<u>HR1</u>				

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine:	<u>Cat D8T - 8SU</u>
Horsepower:	<u>310</u>
Blade Type:	<u>Semi-Universal</u>
Attachment:	<u>3-shank ripper</u>
Shift Basis:	<u>1 per day</u>
Data Source:	<u>(CRG)</u>

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$241.38</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$143.92</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$14.11</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$7.45</u>	<u>100</u>
Operator Cost/Hour:	<u>\$41.30</u>	<u>NA</u>

Total unit Cost/Hour:	<u>\$448.16</u>
Total Fleet Cost/Hour:	<b><u>\$448.16</u></b>

**MATERIAL QUANTITIES**

Initial Volume:	<u>6,090</u>
Swell factor:	<u>1.000</u>
Loose volume:	<b><u>6,090 LCY</u></b>

Source of estimated volume:	<u>Division of Reclamation, Mining &amp; Safety</u>
Source of estimated swell factor:	<u>Cat Handbook</u>

**HOURLY PRODUCTION**

Average push distance:	<u>80 feet</u>
Unadjusted hourly production:	<u>984.2 LCY/hr</u>

Materials consistency description: Consolidated stockpile 1.0

Average push gradient:	<u>-10 %</u>
Average site altitude:	<u>8,450 feet</u>

Material weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.000</u>	<u>(CAT HB)</u>
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7676

Adjusted unit production: 755.47 LCY/hr

Adjusted fleet production: **755.47** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
 Unit cost: \$0.593/LCY

Total job time: **8.06** Hours  
 Total job cost: **\$3,613**

**REVEGETATION WORK**Task description: Revegetate 5.72 Acres - Stage 2Site: Williams/Illinois Gravel PitPermit Action: 2023\_Post InspectionPermit/Job#: M1997039**PROJECT IDENTIFICATION**

Task #: 007 State: Colorado Abbreviation: None  
 Date: 9/6/2023 County: Jackson Filename: M039-007  
11:01:48 AM  
 User: HR1

Agency 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
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
<b>Total Tilling Cost/Acre</b>	<b>\$451.62</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Beardless Wheatgrass - Whitmar	5.00	16.30	\$58.63
Mountain Brome - Bromar	10.00	16.07	\$38.00
Bottlebrush Squirreltail	2.50	11.02	\$40.56
Sandberg Bluegrass - VNS	5.00	106.18	\$42.00
Rocky Mountain Fescue	5.00	80.35	\$36.25
Slender Wheatgrass - Native	10.00	36.50	\$46.25
Streambank Wheatgrass - Sodar	5.00	16.30	\$28.50
Thickspike Wheatgrass - Critana	5.00	17.68	\$34.38

Prairie Junegrass	2.50	132.89	\$65.00
<b>Totals Seed Mix</b>	50.00	433.28	<b>\$389.56</b>

**Application**

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

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

<b>Description</b>	<b>Units / Acre</b>	<b>Unit</b>	<b>Cost / Unit</b>	<b>Cost /Acre</b>
			\$	\$
<b>Total Mulch Materials Cost/Acre</b>				<b>\$0.00</b>

**Application**

<b>Description</b>	<b>Cost /Acre</b>
Weed spray, hand, non-aquatic area, nox. [DMG]	\$183.16
<b>Total Mulch Application Cost/Acre</b>	<b>\$183.16</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres: 5.72                      Cost /Acre: \$1,291.56  
 Estimated Failure Rate: 30%                      Cost /Acre\*: \$656.78  
 \*Selected Replanting Work Items: SEEDING

Initial Job Cost: **\$7,387.72**  
 Reseeding Job Cost: **\$1,127.03**  
 Total Job Cost: **\$8,515**  
 Job Hours: **80.00**



**BULLDOZER WORK**Task description: **Replace 8" Topsoil - 5.72 Acres - Stage 3**Site: **Williams/Illinois Gravel Pit**Permit Action: 2023\_Post InspectionPermit/Job#: M1997039**PROJECT IDENTIFICATION**

Task #:	<u>008</u>	State:	<u>Colorado</u>	Abbreviation:	<u>None</u>
Date:	<u>9/6/2023</u>	County:	<u>Jackson</u>	Filename:	<u>008</u>
	<u>11:06:19 AM</u>				
User:	<u>HR1</u>				

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine:	<u>Cat D8T - 8SU</u>
Horsepower:	<u>310</u>
Blade Type:	<u>Semi-Universal</u>
Attachment:	<u>3-shank ripper</u>
Shift Basis:	<u>1 per day</u>
Data Source:	<u>(CRG)</u>

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$241.38</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$143.92</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$14.11</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$7.45</u>	<u>100</u>
Operator Cost/Hour:	<u>\$41.30</u>	<u>NA</u>

Total unit Cost/Hour:	<u>\$448.16</u>
Total Fleet Cost/Hour:	<b><u>\$448.16</u></b>

**MATERIAL QUANTITIES**

Initial Volume:	<u>6,090</u>
Swell factor:	<u>1.000</u>
Loose volume:	<b><u>6,090 LCY</u></b>

Source of estimated volume:	<u>Division of Reclamation, Mining &amp; Safety</u>
Source of estimated swell factor:	<u>Cat Handbook</u>

**HOURLY PRODUCTION**

Average push distance:	<u>80 feet</u>
Unadjusted hourly production:	<u>984.2 LCY/hr</u>

Materials consistency description: Consolidated stockpile 1.0

Average push gradient:	<u>-10 %</u>
Average site altitude:	<u>8,450 feet</u>

Material weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.000</u>	<u>(CAT HB)</u>
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7676

Adjusted unit production: 755.47 LCY/hr

Adjusted fleet production: **755.47** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.593/LCY

Total job time: **8.06** Hours

Total job cost: **\$3,613**

**REVEGETATION WORK**Task description: Revegetate 5.72 Acres - Stage 3Site: Williams/Illinois Gravel PitPermit Action: 2023\_Post InspectionPermit/Job#: M1997039**PROJECT IDENTIFICATION**

Task #: 009 State: Colorado Abbreviation: None  
 Date: 9/6/2023 County: Jackson Filename: 009  
11:02:33 AM  
 User: HR1

Agency 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
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
<b>Total Tilling Cost/Acre</b>	<b>\$451.62</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Beardless Wheatgrass - Whitmar	5.00	16.30	\$58.63
Mountain Brome - Bromar	10.00	16.07	\$38.00
Bottlebrush Squirreltail	2.50	11.02	\$40.56
Sandberg Bluegrass - VNS	5.00	106.18	\$42.00
Rocky Mountain Fescue	5.00	80.35	\$36.25
Slender Wheatgrass - Native	10.00	36.50	\$46.25
Streambank Wheatgrass - Sodar	5.00	16.30	\$28.50
Thickspike Wheatgrass - Critana	5.00	17.68	\$34.38

Prairie Junegrass	2.50	132.89	\$65.00
<b>Totals Seed Mix</b>	50.00	433.28	<b>\$389.56</b>

**Application**

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

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

<b>Description</b>	<b>Units / Acre</b>	<b>Unit</b>	<b>Cost / Unit</b>	<b>Cost /Acre</b>
			\$	\$
<b>Total Mulch Materials Cost/Acre</b>				<b>\$0.00</b>

**Application**

<b>Description</b>	<b>Cost /Acre</b>
Weed spray, hand, non-aquatic area, nox. [DMG]	\$183.16
<b>Total Mulch Application Cost/Acre</b>	<b>\$183.16</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres: 5.72                      Cost /Acre: \$1,291.56  
 Estimated Failure Rate: 30%                      Cost /Acre\*: \$656.78  
 \*Selected Replanting Work Items: SEEDING

Initial Job Cost: **\$7,387.72**  
 Reseeding Job Cost: **\$1,127.03**  
 Total Job Cost: **\$8,515**  
 Job Hours: **80.00**