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

September 17, 2025

Jason Burkey
Oldcastle SW Group, Inc. dba United Companies of Mesa County
2273 River Road
Grand Junction, CO 81502

Re: Mamm Creek Sand & Gravel - File No. M-2000-113
Oldcastle SW Group, Inc. dba United Companies of Mesa County
Surety Increase (SI-2)
Surety Increase to $237,367.00

Dear Jason Burkey:

On September 17, 2025 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to $237,367.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of $48,751.00.

Increase in the financial warranty to $237,367. The increase in the Financial Warranty is due to the increases in the cost of fuel, equipment, and labor since the last update.

Please see the May 27, 2025 inspection report for details regarding why this surety increase is required.

On September 17, 2025, the Division ordered amendment of the current Financial Warranty or submittal of a new Financial Warranty reflecting the increase, within 60 days.

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, or by email at 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 if the amount of any increased Financial Warranty has not been provided by November 16, 2025.

Bond Held:	$188,616.00
Prior Liability:	$188,616.00

Change in Liability:	$48,751.00
Revised Liability:	$237,367.00
Prior Permit Acreage:	238.10
Change in Permit Acreage:	0.00
Revised Permit Acreage:	238.10
Prior Affected Acreage:	122.96
Change in Affected Acreage:	0.00
Revised Affected Acreage:	122.96

If you have any questions, please contact me by telephone at (720) 688-0626, or by email at Todd.jesse@state.co.us.

Sincerely,

Todd Jesse
Environmental Protection Specialist

M-GR-04

COST SUMMARY WORK

Task description:

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-000
User: TJ1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Demo onsite support facilities	DEMOLISH	1	80.00	$70,663
02a	Mining Area E-Removal of Asphalt and Propane tank	DEMOLISH	1	40.00	$32,985
02b	Mining Area E-Rip compacted areas	RIPPER	2	1.90	$1,314
02c	Mining Area E- Grade misc. stockpiles	DOZER	2	0.48	$200
02d	Mining Area E- topsoil application	DOZER	2	2.65	$1,705
02e	Mining Area E-Reveg 3 ac	REVEGE	1	5.00	$6,729
03a	Mining Area C-Dewater pond	PUMPING	1	117.18	$8,201
03b	Mining Area C-Grading slopes adjacent to river and pad	DOZER	2	3.16	$2,031
03c	Mining Area C-Topsoil graded slopes	DOZER	2	0.80	$516
03d	Mining Area C-Reveg 1 ac	REVEGE	1	2.00	$2,243
04a	Mining Area A-Rip compacted areas	RIPPER	2	7.63	$5,256
04b	Mining Area B-Transport Topsoil	LOADER	2	35.38	$7,707
04c	Mining Area A-Spread Topsoil	DOZER	2	6.60	$4,248
04d	Mining Area A-Reveg 10 ac	REVEGE	1	13.00	$22,430
05a	Mining Area B-Rip compacted areas	RIPPER	2	1.52	$1,051
05b	Mining Area B- topsoil application	DOZER	2	2.43	$1,565
05c	Mining Area B-Reveg 1 ac	REVEGE	1	2.50	$4,486
06a	Initial Mobilization	MOBILIZE	1	2.40	$9,611
06b	Secondary Mobilization	MOBILIZE	1	2.40	$1,448
	SUBTOTALS:			**327.03**	**$184,389**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$3,725
Performance bond:	1.05	Total =	$1,936
Job superintendent:	105.00	Total =	$8,323
Profit:	10.00	Total =	$18,439
		TOTAL O & P =	$32,423
		CONTRACT AMOUNT (direct + O & P) =	$216,812

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	$500	Total =	$500
Engineering work and/or contract/bid preparation:	4.25	Total =	$9,215

Reclamation management and/or administration:	5.00		$10,841
CONTINGENCY:	0.00	Total =	$0
		TOTAL INDIRECT COST =	$52,978
		TOTAL BOND AMOUNT (direct + indirect) =	**$237,367**

DEMOLITION WORK

Task description: **Demo onsite support facilities**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 01A State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-01a
User: TJ1

Agency or organization name: DRMS

UNIT COSTS **Location adjustment: 102.20 %**

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Scale house	60' x 10' x 10'	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul	6,000.00	CF	$0.42	$2,525.40
Scale house foundation	60' x 10'	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft. - Max. 10,000 ft. haul	140.00	LF	$4.63	$647.65
Scale-Loading/Hauling	70' x 8'	Loading and 2 mile haul, no salvage - Machine loading	20.00	CY	$21.15	$423.00
Scale-Hauling	70' x 8'	Hauling only, per mile, 12-18 CY truck - 50 mph average speed	10.00	MI	$4.43	$44.34
Scale-Footers	70' x 8'	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft. - Max. 10,000 ft. haul	32.00	LF	$4.63	$148.04
Conveyor-Belt Strucutre	900 LF x 10" W X 4" H	Conveyor, Demolition Cost only	36,000.00	CF	$0.44	$15,685.20
Conveyor-Load/Haul Belt Structure	36000 CF	Loading and 2 mile haul, no salvage - Machine loading	1,333.00	CY	$21.15	$28,192.95
Conveyor-Haul Belt Structure	10 mi x 75 trips	Hauling only, per mile, 12-18 CY truck - 50 mph average speed	750.00	MI	$4.43	$3,325.13
Conveyor- demo footers	3 pairs	Demo. and on-site disposal in existing pit, 2.0 ft. x 3 ft. - Max. 10,000 ft. haul	24.00	LF	$13.88	$333.08
Conveyor-metal support load/haul	3 pairs (2'Dia x 10'H)	Loading and 2 mile haul, no salvage - Machine loading	9.00	CY	$21.15	$190.35
Conveyor-metal support haul	10 mi x 9 cy	Hauling only, per mile, 12-18 CY truck - 50 mph average speed	10.00	MI	$4.43	$44.34
Conveyor-disposal fees	All non-rubble material	Dump fees - Building construction materials.	1,584.00	CY	$11.10	$17,582.40

Job Hours: **80.00** **Subtotal (unadjusted):** **$69,141.88** **Total Cost (adjusted for location):** **$70,663.00**

DEMOLITION WORK

Task description: **Mining Area E-Removal of Asphalt and Propane tank**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-02a
User: TJ1

Agency or organization name: DRMS

UNIT COSTS **Location adjustment: 95.50 %**

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Demo asphalt pad	250' x 250'	Pavement, bituminous, demolition only - 4 in. to 6 in. thick	3,472.20	SY	$8.66	$30,069.25
Load asphalt for offsite disposal	31250 cu ft	Loading only, open areas (unconfined) - Track loader	1,158.00	CY	$0.87	$1,012.09
Haul asphalt to Casey Pit for Disposal	65 trips 12 miles	Hauling only, per mile, 12-18 CY truck - 50 mph average speed	780.00	MI	$4.43	$3,458.13

Job Hours: 40.00 **Subtotal (unadjusted): $34,539.47** **Total Cost (adjusted for location): $32,985.19**

BULLDOZER RIPPING WORK

Task description: **Mining Area E-Rip compacted areas**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 02B State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-02b
User: TJ1

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:	$173.32	NA
Operating Cost/Hour:	$109.71	100
Ripper Ownership Cost/Hour:	$14.53	NA
Ripper Operating Cost/Hour:	$7.95	100
Operator Cost/Hour:	$38.59	NA
Total Unit Cost/Hour:	$344.10	

Total Fleet Cost/Hour: **$688.19**

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 2.50 acres Rip Depth (ft): 2.00 Volume: 8,067 BCY or CCY

Source of estimated quantity: Onsite observations

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.56 feet/pass
Average Ripping Width: 7.08 feet/pass
Average Ripping Length: 250.00 feet/pass
Average Dozer Speed: 88.00 feet/minute
Average Maneuver Time: 0.25 minutes/pass
Production per unit area: 0.789 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.789 Acres/hr

Site Altitude: 5,350 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.65 Acres/hr
Adjusted Hourly Fleet Production: **1.31** Acres/hr

JOB TIME AND COST

Fleet size: 2 Grader(s) Total job time: **1.91** Hours

Unit cost: $525.601 Per acre Total job cost: **$1,314**

BULLDOZER WORK

Task description: **Mining Area E- Grade misc. stockpiles**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 02C State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-02c
User: TJ1

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:

		Utilization %
Ownership Cost/Hour:	$173.32	NA
Operating Cost/Hour:	$109.71	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.59	NA

Total unit Cost/Hour: $321.62
Total Fleet Cost/Hour: **$643.23**

MATERIAL QUANTITIES

Initial Volume: 500
Swell factor: 1.060
Loose volume: **530** LCY

Source of estimated volume: Division of Reclamation, Mining & Safety
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: Consolidated stockpile 1.0

Average push gradient: 0 %
Average site altitude: 5,350 feet

Material weight: 2,900 lbs/LCY

Weight description: Sand and gravel - Dry

Job Condition Correction Factor		Source
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:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3949

Adjusted unit production: 552.86 LCY/hr
Adjusted fleet production: **1105.72** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: $0.582/LCY

Total job time: **0.48** Hours
Total job cost: **$308**

BULLDOZER WORK

Task description: **Mining Area E- topsoil application**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 02D State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-02d
User: TJ1

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:

		Utilization %
Ownership Cost/Hour:	$173.32	NA
Operating Cost/Hour:	$109.71	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.59	NA

Total unit Cost/Hour: $321.62
Total Fleet Cost/Hour: **$643.23**

MATERIAL QUANTITIES

Initial Volume: 3,630
Swell factor: 1.115
Loose volume: **4,047** LCY

Source of estimated volume: 3 ac at 9" depth
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: Consolidated stockpile 1.0

Average push gradient: 0 %
Average site altitude: 5,350 feet

Material weight: 2,100 lbs/LCY

Weight description: Earth - Loam

Job Condition Correction Factor		Source
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:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5453

Adjusted unit production: 763.42 LCY/hr
Adjusted fleet production: **1526.84** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: $0.421/LCY

Total job time: **2.65** Hours
Total job cost: **$1,705**

REVEGETATION WORK

Task description: **Mining Area E-Reveg 3 ac**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 02E State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-02e
User: TJ1

Agency 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)	$117.61
Total Tilling Cost/Acre	**$117.61**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	1.50	4.86	$25.83
Big Bluegrass - Sherman	1.00	20.66	$15.85
Intermediate Wheatgrass - Rush	1.50	3.20	$7.10
Milk Vetch, Cicer - Lutana	0.50	1.66	$4.89
Western Wheatgrass - Arriba	1.50	3.79	$13.55
Needlegrass, Green - Lodorm	0.50	2.08	$4.32
Sage, Fringed	0.25	20.89	$24.81
Saltbush, Shadscale	0.50	0.75	$9.04
Penstemon, Rocky Mountain	0.25	3.92	$15.35

Totals Seed Mix	7.50	61.81	**$120.75**

Application

Description	**Cost /Acre**
Drill Seeding (DRMS Survey Cost)	$236.64
Total Seed Application Cost/Acre	**$236.64**

MULCHING and MISCELLANEOUS

Materials

Description	**Units / Acre**	**Unit**	**Cost / Unit**	**Cost /Acre**
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	$4.13	$4.13
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	$3.86	$3.86
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	$492.78	$985.56
Total Mulch Materials Cost/Acre				**$993.55**

Application

Description	**Cost /Acre**
Crimping, with tractor {DMG survey data}	$85.37
Power mulcher (MEANS 32 91 13.16 0350)	$157.25
Weed spray, truck, non-aquatic area, nox. [DMG]	$83.26
Total Mulch Application Cost/Acre	**$325.89**

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: 3 Cost /Acre: $1,794.44
Estimated Failure Rate: 25% Cost /Acre*: $1,794.44
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$5,383.32**
Reseeding Job Cost: **$1,345.83**
Total Job Cost: **$6,729**
Job Hours: **5.00**

PUMPING WORK

Task description: **Mining Area C-Dewater pond**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None
Date: 6/18/2025 County: Garfield Filename: M113-03a
User: TJ1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

	Description	Quantity
Make and Model:	Submersible pump - 460v, 8 in.	3
Attachment 1:	Suction hose - 6 in. diam., 25 ft.	3
Attachment 2:	Discharge hose - 6 in. D., 25 ft.	24
Labor Unit 1:	Pump operator	1

Horsepower: 95
Shift Basis: 1 per day
Weight: 0.70
(US Tons)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$34.71	NA
Operating Cost/Hour:	$13.20	100
Operator Cost/Hour:	$22.07	NA
Total Unit Cost/Hour:	$69.98	

Total Fleet Cost/Hour: $69.98

PUMPING QUANTITIES

Initial Pond Volume: 195.00
Final Pond Volume: **63,540,863.10** gallons
Total Pond Inflow Surface Area: 40,000 Sq. ft.
Total Pond Inflow Volume per Hour: 7,032.00 gallons

Conversion factor: 325850.5800
Unit inflow rate in gph/sq. ft.: 0.1758

Source of estimated volume: 13 ac pond, pumped down 15 ft deep

PUMPING TIME

Maximum Pump Capacity:	170,000	gph/pump
Estimated Suction Head:	10	feet
Estimated Discharge Head:	10	feet
Total Head:	20	feet
CPB Pump Capacity:	168,000	gph/pump
Site Altitude:	5,330	feet

Adjusted Pumping Capacity:	504,000	gph
Initial Unadjusted Pumping Time:	126.07	hours
Inflow during Initial Pumping:	886,546	gallons
Net Unadjusted Pumping Time:	127.83	Hours
Altitude Adjustment Factor:	1.0000	(3% rule)
Pump Efficiency Factor:	0.9167	(55 min./hr.)
Total Adjusted Pumping Time:	117.18	hours

JOB TIME AND COST

Total job time: **117.18** Hours

Unit cost: $0.000127 /Gallon Total job cost: **$8,201**

BULLDOZER WORK

Task description: **Mining Area C-Grading slopes adjacent to river and pad**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 03B State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-03b
User: TJ1

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:

		Utilization %
Ownership Cost/Hour:	$173.32	NA
Operating Cost/Hour:	$109.71	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.59	NA

Total unit Cost/Hour: $321.62
Total Fleet Cost/Hour: **$643.23**

MATERIAL QUANTITIES

Initial Volume: 3,125
Swell factor: 1.050
Loose volume: **3,281** LCY

Source of estimated volume: 3000 LF 15'H 2:1 to 3:1
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: 5,350 feet

Material weight: 3,400 lbs/LCY

Weight description: Sand and gravel - Wet

Job Condition Correction Factor		Source
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:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.676	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3712

Adjusted unit production: 519.68 LCY/hr
Adjusted fleet production: **1039.36** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: $0.619/LCY

Total job time: **3.16** Hours
Total job cost: **$2,031**

BULLDOZER WORK

Task description: **Mining Area C-Topsoil graded slopes**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #:	03C	State:	Colorado	Abbreviation:	None
Date:	6/17/2025	County:	Garfield	Filename:	M113-03c
User:	TJ1				

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:

		Utilization %
Ownership Cost/Hour:	$173.32	NA
Operating Cost/Hour:	$109.71	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.59	NA

Total unit Cost/Hour: $321.62
Total Fleet Cost/Hour: **$643.23**

MATERIAL QUANTITIES

Initial Volume:	1,210
Swell factor:	1.115
Loose volume:	**1,349** LCY

Source of estimated volume: 1 ac @ 9"
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: 5,350 feet

Material weight: 2,100 lbs/LCY

Weight description: Earth - Loam

Job Condition Correction Factor		Source
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:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6012

Adjusted unit production: 841.68 LCY/hr
Adjusted fleet production: **1683.36** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: $0.382/LCY

Total job time: **0.80** Hours
Total job cost: **$516**

REVEGETATION WORK

Task description: **Mining Area C-Reveg 1 ac**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 03D State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-03d
User: TJ1

Agency 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)	$117.61
Total Tilling Cost/Acre	**$117.61**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	1.50	4.86	$25.83
Big Bluegrass - Sherman	1.00	20.66	$15.85
Intermediate Wheatgrass - Rush	1.50	3.20	$7.10
Milk Vetch, Cicer - Lutana	0.50	1.66	$4.89
Western Wheatgrass - Arriba	1.50	3.79	$13.55
Needlegrass, Green - Lodorm	0.50	2.08	$4.32
Sage, Fringed	0.25	20.89	$24.81
			$

Totals Seed Mix			**$**

Application

Description	**Cost /Acre**
	$
Total Seed Application Cost/Acre	**$**

MULCHING and MISCELLANEOUS

Materials

Description	**Units / Acre**	**Unit**	**Cost / Unit**	**Cost /Acre**
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	$4.13	$4.13
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	$3.86	$3.86
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	$492.78	$985.56
Total Mulch Materials Cost/Acre				**$993.55**

Application

Description	**Cost /Acre**
Crimping, with tractor {DMG survey data}	$85.37
Power mulcher (MEANS 32 91 13.16 0350)	$157.25
Weed spray, truck, non-aquatic area, nox. [DMG]	$83.26
Total Mulch Application Cost/Acre	**$325.89**

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 Cost /Acre: $1,794.44
Estimated Failure Rate: 25% Cost /Acre*: $1,794.44
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$1,794.44**
Reseeding Job Cost: **$448.61**
Total Job Cost: **$2,243**
Job Hours: **2.00**

BULLDOZER RIPPING WORK

Task description: **Mining Area A-Rip compacted areas**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-04a
User: TJ1

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:	$173.32	NA
Operating Cost/Hour:	$109.71	100
Ripper Ownership Cost/Hour:	$14.53	NA
Ripper Operating Cost/Hour:	$7.95	100
Operator Cost/Hour:	$38.59	NA
Total Unit Cost/Hour:	$344.10	

Total Fleet Cost/Hour: **$688.19**

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 10.00 acres Rip Depth (ft): 2.00 Volume: 32,267 BCY or CCY

Source of estimated quantity: Onsite observations

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth:	2.56	feet/pass
Average Ripping Width:	7.08	feet/pass
Average Ripping Length:	250.00	feet/pass
Average Dozer Speed:	88.00	feet/minute
Average Maneuver Time:	0.25	minutes/pass
Production per unit area:	0.789	acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.789 Acres/hr

Site Altitude:	5,350	feet
Altitude Adj:	1.00	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.83	multiplier

Adjusted Hourly Unit Production: 0.65 Acres/hr
Adjusted Hourly Fleet Production: **1.31** Acres/hr

JOB TIME AND COST

Fleet size: 2 Grader(s) Total job time: **7.64** Hours

Unit cost: $525.601 Per acre Total job cost: **$5,256**

WHEEL LOADER – LOAD AND CARRY WORK

Task description: **Mining Area B-Transport Topsoil**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 04B State: Colorado Abbreviation: None
Date: 6/18/2025 County: Garfield Filename: M113-04b
User: TJ1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: CAT 950H Horsepower: 197
Attachment 1: ROPS Cab Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$36.61	NA
Operating Cost/Hour:	$35.43	100
Operator Cost/Hour:	$36.85	NA
Total Unit Cost/Hour:	$108.89	
Total Fleet Cost/Hour:	$217.79	

MATERIAL QUANTITIES

Initial volume: 12,100 CCY Swell factor: 1.115
Loose volume: **13,492** LCY

Source of estimated volume: 12 ac @ 9" depth
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material 3/4" to 6" diameter 0.00	0.000	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high or less 0.01	0.010	(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:	-0.070	minutes
	Adjusted Basic Cycle Time:	0.430	minutes

Rolling Resistance – Road Conditions

Haul: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0
Return: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0

Haul and Return Time

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	250	0.00	8.00	8.00	0.2899	(Cat HB)
Return Route:	250	0.00	8.00	8.00	0.2629	(Cat HB)

Total Travel Time:	0.5529	minutes
Total Cycle Time:	**0.9829**	minutes

Load Bucket Capacity

Rated Capacity:	4.30	LCY (heaped)
Bucket Fill Factor:	0.875	Loose material - 1/2" to 3/4" (85 - 90%) 0.875
Adjusted Capacity:	**3.76**	LCY

Job Condition Correction Factors
Site Altitude: 5350 feet

		Source
Altitude Adj:	1.00	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.83	multiplier

Unadjusted Hourly Unit Production:	229.68	LCY/Hour
Adjusted Hourly Unit Production:	190.64	LCY/Hour
Adjusted Hourly Fleet Production:	**381.27**	LCY/Hour

JOB TIME AND COST

Fleet size:	2	Loader(s)	Total job time:	**35.39**	Hours
Unit cost:	$0.571	/LCY	Total job cost:	**$7,707**	

BULLDOZER WORK

Task description: **Mining Area A-Spread Topsoil**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #:	04C	State:	Colorado	Abbreviation:	None
Date:	6/17/2025	County:	Garfield	Filename:	M113-04c
User:	TJ1				

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:

		Utilization %
Ownership Cost/Hour:	$173.32	NA
Operating Cost/Hour:	$109.71	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.59	NA

Total unit Cost/Hour: $321.62
Total Fleet Cost/Hour: **$643.23**

MATERIAL QUANTITIES

Initial Volume:	12,100
Swell factor:	1.000
Loose volume:	**12,100** LCY

Source of estimated volume: 12 ac @ 9"
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: Loose stockpile 1.2

Average push gradient: 0 %
Average site altitude: 5,350 feet

Material weight: 2,100 lbs/LCY

Weight description: Earth - Loam

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(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:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6544

Adjusted unit production: 916.16 LCY/hr
Adjusted fleet production: **1832.32** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: $0.351/LCY

Total job time: **6.60** Hours
Total job cost: **$4,248**

REVEGETATION WORK

Task description: **Mining Area A-Reveg 10 ac**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 04D State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-04d
User: TJ1

Agency 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)	$117.61
Total Tilling Cost/Acre	**$117.61**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	1.50	4.86	$25.83
Big Bluegrass - Sherman	1.00	20.66	$15.85
Intermediate Wheatgrass - Rush	1.50	3.20	$7.10
Milk Vetch, Cicer - Lutana	0.50	1.66	$4.89
Western Wheatgrass - Arriba	1.50	3.79	$13.55
Needlegrass, Green - Lodorm	0.50	2.08	$4.32
Sage, Fringed	0.25	20.89	$24.81
Saltbush, Shadscale	0.50	0.75	$9.04
Penstemon, Rocky Mountain	0.25	3.92	$15.35

Totals Seed Mix	7.50	61.81	**$120.75**

Application

Description	**Cost /Acre**
Drill Seeding (DRMS Survey Cost)	$236.64
Total Seed Application Cost/Acre	**$236.64**

MULCHING and MISCELLANEOUS

Materials

Description	**Units / Acre**	**Unit**	**Cost / Unit**	**Cost /Acre**
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	$4.13	$4.13
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	$3.86	$3.86
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	$492.78	$985.56
Total Mulch Materials Cost/Acre				**$993.55**

Application

Description	**Cost /Acre**
Crimping, with tractor {DMG survey data}	$85.37
Power mulcher (MEANS 32 91 13.16 0350)	$157.25
Weed spray, truck, non-aquatic area, nox. [DMG]	$83.26
Total Mulch Application Cost/Acre	**$325.89**

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: 10 Cost /Acre: $1,794.44
Estimated Failure Rate: 25% Cost /Acre*: $1,794.44
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$17,944.40**
Reseeding Job Cost: **$4,486.10**
Total Job Cost: **$22,430**
Job Hours: **13.00**

BULLDOZER RIPPING WORK

Task description: **Mining Area B-Rip compacted areas**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 05A State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-05a
User: TJ1

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:	$173.32	NA
Operating Cost/Hour:	$109.71	100
Ripper Ownership Cost/Hour:	$14.53	NA
Ripper Operating Cost/Hour:	$7.95	100
Operator Cost/Hour:	$38.59	NA
Total Unit Cost/Hour:	$344.10	

Total Fleet Cost/Hour: **$688.19**

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 2.00 acres Rip Depth (ft): 2.00 Volume: 6,453 BCY or CCY

Source of estimated quantity: Onsite observations

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.56 feet/pass
Average Ripping Width: 7.08 feet/pass
Average Ripping Length: 250.00 feet/pass
Average Dozer Speed: 88.00 feet/minute
Average Maneuver Time: 0.25 minutes/pass
Production per unit area: 0.789 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.789 Acres/hr

Site Altitude: 5,350 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.65 Acres/hr
Adjusted Hourly Fleet Production: **1.31** Acres/hr

JOB TIME AND COST

Fleet size: 2 Grader(s) Total job time: **1.53** Hours

Unit cost: $525.601 Per acre Total job cost: **$1,051**

BULLDOZER WORK

Task description: **Mining Area B- topsoil application**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 05B State: Colorado Abbreviation: None
Date: 6/17/2025 County: Garfield Filename: M113-05b
User: TJ1

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:

		Utilization %
Ownership Cost/Hour:	$173.32	NA
Operating Cost/Hour:	$109.71	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.59	NA

Total unit Cost/Hour: $321.62
Total Fleet Cost/Hour: **$643.23**

MATERIAL QUANTITIES

Initial Volume: 2,420
Swell factor: 1.115
Loose volume: **2,698** LCY

Source of estimated volume: 2 ac at 9" depth
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 75 feet
Unadjusted hourly production: 1,017.1 LCY/hr

Materials consistency description: Consolidated stockpile 1.0

Average push gradient: 0 %
Average site altitude: 5,350 feet

Material weight: 2,100 lbs/LCY

Weight description: Earth - Loam

Job Condition Correction Factor		Source
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:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5453

Adjusted unit production: 554.62 LCY/hr
Adjusted fleet production: **1109.24** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: $0.580/LCY

Total job time: **2.43** Hours
Total job cost: **$1,565**

REVEGETATION WORK

Task description: **Mining Area B-Reveg 1 ac**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 05C State: Colorado Abbreviation: None
Date: 6/18/2025 County: Garfield Filename: M113-05c
User: TJ1

Agency 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)	$117.61
Total Tilling Cost/Acre	**$117.61**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	1.50	4.86	$25.83
Big Bluegrass - Sherman	1.00	20.66	$15.85
Intermediate Wheatgrass - Rush	1.50	3.20	$7.10
Milk Vetch, Cicer - Lutana	0.50	1.66	$4.89
Western Wheatgrass - Arriba	1.50	3.79	$13.55
Needlegrass, Green - Lodorm	0.50	2.08	$4.32
Sage, Fringed	0.25	20.89	$24.81
Saltbush, Shadscale	0.50	0.75	$9.04
Penstemon, Rocky Mountain	0.25	3.92	$15.35

Totals Seed Mix	7.50	61.81	**$120.75**

Application

Description	**Cost /Acre**
Drill Seeding (DRMS Survey Cost)	$236.64
Total Seed Application Cost/Acre	**$236.64**

MULCHING and MISCELLANEOUS

Materials

Description	**Units / Acre**	**Unit**	**Cost / Unit**	**Cost /Acre**
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	$4.13	$4.13
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	$3.86	$3.86
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	$492.78	$985.56
Total Mulch Materials Cost/Acre				**$993.55**

Application

Description	**Cost /Acre**
Crimping, with tractor {DMG survey data}	$85.37
Power mulcher (MEANS 32 91 13.16 0350)	$157.25
Weed spray, truck, non-aquatic area, nox. [DMG]	$83.26
Total Mulch Application Cost/Acre	**$325.89**

NURSERY STOCK PLANTING

Common Name	**No / Acre**	**Type and Size**	**Planting Cost**	**Fertilizer Pellet Cost**	**Cost /Acre**
					$
				Totals Nursery Stock Cost / Acre	**$0.00**

JOB TIME AND COST

No. of Acres: 2 Cost /Acre: $1,794.44
Estimated Failure Rate: 25% Cost /Acre*: $1,794.44
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$3,588.88**
Reseeding Job Cost: **$897.22**
Total Job Cost: **$4,486**
Job Hours: **2.50**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Initial Mobilization**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 06A State: Colorado Abbreviation: None
Date: 6/18/2025 County: Garfield Filename: M113-06a
User: TJ1

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:	$10.44	$22.18	$23.94
Operating Cost/Hour:	$26.48	$54.55	$55.65
Operator Cost/Hour:	$22.52	$22.52	$22.52
Helper Cost/Hour:	$0.00	$23.53	$23.53
Total Unit Cost/Hour:	$59.44	$122.78	$125.64

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
Grove RT760E, 110', 54.40 MT	42.34	$176.37	$122.78	1	$299.15	$122.78	$250.00
Cat 385C L 18'-1" Stick	95.42	$220.92	$125.64	1	$346.56	$125.64	$250.00
CAT 950H	20.13	$36.61	$59.44	2	$192.10	$118.88	$500.00
CAT 973D	29.07	$120.46	$122.78	1	$243.24	$122.78	$250.00
Cat D8T - 8SU	53.08	$187.85	$125.64	2	$626.98	$251.28	$500.00
Drill/Broadcast Seeder with Tractor	25.00	$41.02	$59.44	1	$100.46	$59.44	$250.00
Power Mulcher (Bowie LD-90)	6.00	$27.21	$59.44	1	$86.65	$59.44	$250.00
Submersible pump - 460v, 8 in.	0.70	$9.89	$59.44	1	$69.33	$59.44	$250.00
Subtotals:					**$1,964.47**	**$919.68**	**$2,500.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet

Light Duty Pickup, 4x4, 1 T. Crew	$75.09	1	$75.09	$75.09
Flatbed Truck, 4x2, 15K GVW	$64.31	1	$64.31	$64.31
Generic 15-18 cy, 6x4	$129.15	3	$387.45	$387.45
		Subtotals:	**$526.85**	**$526.85**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	RIFLE, CO	
Total one-way travel distance:	5.00	miles
Average Travel Speed:	50.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$9,505.77	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$105.37	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.10	0.10
Return Time (Hours):	0.10	0.10
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.20	0.20

JOB TIME AND COST

Total job time:	**2.40**	Hours
Total job cost:	**$9,611**	

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Secondary Mobilization**

Site: **Mamm Creek Sand & Gravel** Permit Action: 2025-06-17 Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 06B State: Colorado Abbreviation: None
Date: 6/18/2025 County: Garfield Filename: M113-06b
User: TJ1

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:	$10.44	$22.18	$23.94
Operating Cost/Hour:	$26.48	$54.55	$55.65
Operator Cost/Hour:	$22.52	$22.52	$22.52
Helper Cost/Hour:	$0.00	$23.53	$23.53
Total Unit Cost/Hour:	$59.44	$122.78	$125.64

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	$41.02	$59.44	1	$100.46	$59.44	$250.00
Power Mulcher (Bowie LD-90)	6.00	$27.21	$59.44	1	$86.65	$59.44	$250.00
Subtotals:					**$187.11**	**$118.88**	**$500.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 4x2, 15K GVW	$64.31	1	$64.31	$64.31
Subtotals:			**$64.31**	**$64.31**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	RIFLE, CO	
Total one-way travel distance:	5.00	miles
Average Travel Speed:	50.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$1,435.42	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$12.86	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.10	0.10
Return Time (Hours):	0.10	0.10
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.20	0.20

JOB TIME AND COST

Total job time:	**2.40**	Hours
Total job cost:	**$1,448**	