

COST SUMMARY WORK

Task description: 2025-04-30 TR1 Cost Estimate

Site: Donley Rock Quarry

Permit Action: 2025-04-30 TR1

Permit/Job#: M2011005

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 4/30/2025

County: Montrose

Filename: M005-000

User: DMC

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Highwall reduction to 3:1	DOZER	1	15.23	\$4,900
02a	Spread topsoil	DOZER	1	12.01	\$3,863
03a	Revegetation	REVEGE	1	20.00	\$51,965
04a	Mobilize reclamation equipment and crew	MOBILIZE	1	3.25	\$1,457
<u>SUBTOTALS:</u>				50.49	\$62,185

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02
Performance bond: 1.05
Job superintendent: 25.25
Profit: 10.00

Total = \$1,256
Total = \$653
Total = \$2,001
Total = \$6,218

TOTAL O & P = \$10,129

CONTRACT AMOUNT (direct + O & P) = \$72,314

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0
Engineering work and/or contract/bid preparation: 0.00
Reclamation management and/or administration: 5.00

Total = \$0
Total = \$0
\$3,616

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$13,744

TOTAL BOND AMOUNT (direct + indirect) = \$75,929

BULLDOZER WORKTask description: **Highwall reduction to 3:1**Site: **Donley Rock Quarry** Permit Action: **2025-04-30 TR1** Permit/Job#: **M2011005****PROJECT IDENTIFICATION**

Task #: **01A** State: **Colorado** Abbreviation: **None**
 Date: **4/30/2025** County: **Montrose** Filename: **M005-01a**
 User: **DMC**

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:	\$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: **\$321.62**

MATERIAL QUANTITIES

Initial Volume: **9,167**
 Swell factor: **1.000**
 Loose volume: **9,167 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: **Rock, poorly ripped or blasted 0.6**

Average push gradient: **-15 %**
 Average site altitude: **6,775 feet**

Material weight: **2,550 lbs/LCY**Weight description: **Sandstone**

<u>Job Condition Correction Factor</u>	<u>Source</u>
Operator Skill: 0.750	(AVG.)
Material consistency: 0.600	(CAT HB)
Dozing method: 1.200	(SLOT)
Visibility: 1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4298

Adjusted unit production: 601.72 LCY/hr

Adjusted fleet production: **601.72** LCY/hr

JOB TIME AND COST



Fleet size: 1 Dozer(s)

Unit cost: \$0.534/LCY

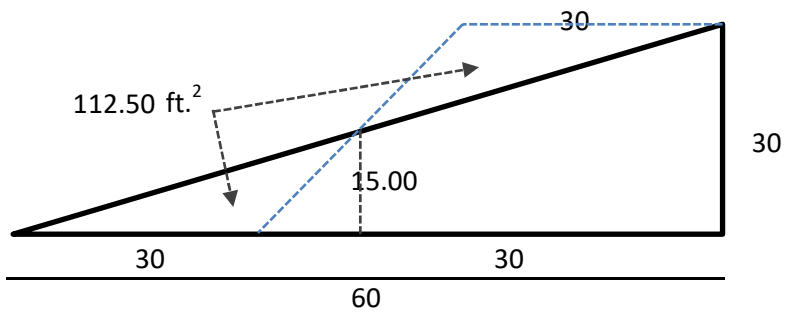
Total job time: **15.23** Hours

Total job cost: **\$4,900**

Highwall reduction - cut and fill

Highwall Height (ft.)	30.0	
Length of Highwall (lft.)	2200	
 Initial Slope	1.0	H:1V
 Desired Slope	2	H:1V
Volume of material to be moved (ft. ³)	247,500	
Volume of material to be moved (yd. ³)	9,167	

All dimensions measured in feet
Drawing not to scale



BULLDOZER WORKTask description: Spread topsoilSite: Donley Rock Quarry Permit Action: 2025-04-30 TR1 Permit/Job#: M2011005**PROJECT IDENTIFICATION**

Task #: 02A State: Colorado Abbreviation: None
 Date: 4/30/2025 County: Montrose Filename: M005-02a
 User: DMC

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:	<u>\$173.32</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$109.71</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>
Operator Cost/Hour:	<u>\$38.59</u>	<u>NA</u>

Total unit Cost/Hour: \$321.62
 Total Fleet Cost/Hour: \$321.62

MATERIAL QUANTITIES

Initial Volume: 8,067
 Swell factor: 1.000
 Loose volume: 8,067 LCY

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

HOURLY PRODUCTION

Average push distance: 100 feet
 Unadjusted hourly production: 852.6 LCY/hr

Materials consistency description: Partly consolidated stockpile 1.1

Average push gradient: 0 %
 Average site altitude: 6,775 feet

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>1.100</u>	<u>(CAT HB)</u>
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>

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:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7877

Adjusted unit production: 671.59 LCY/hr

Adjusted fleet production: **671.59** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.479/LCY

Total job time: **12.01** Hours

Total job cost: **\$3,863**

Topsoil/Overburden Volume (yd. ³)	8066.667
Acreage	20
Thickness/Depth (in.)	3

REVEGETATION WORKTask description: RevegetationSite: Donley Rock QuarryPermit Action: 2025-04-30 TR1Permit/Job#: M2011005PROJECT IDENTIFICATIONTask #: 03AState: ColoradoAbbreviation: NoneDate: 4/30/2025County: MontroseFilename: M005-03aUser: DMCAgency or organization name: DRMSFERTILIZING**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
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$338.80

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	0.30	4.90	\$6.40
Indian Ricegrass - Native	2.40	7.77	\$41.50
Bottlebrush Squirreltail	2.70	11.90	\$68.59
Sandberg Bluegrass - VNS	0.40	8.49	\$5.78
Galleta	1.10	4.02	\$60.98
Sagebrush, Wyoming Big	0.50	29.57	\$39.40
Saltbush, Four Wing	0.50	0.69	\$9.94
Globemallow, Scarlet (or copper)	0.40	4.53	\$74.22
		71.86	\$306.81

Totals Seed Mix	8.30		
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Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$272.56
Total Seed Application Cost/Acre	\$272.56

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37
Power mulcher (MEANS 32 91 13.16 0350)	\$157.25
Total Mulch Application Cost/Acre	\$242.63

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:	20	Cost /Acre:	\$2,146.36
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,807.56
*Selected Replanting Work Items:	SEEDING,MULCHING		

Initial Job Cost:	\$42,927.20
Reseeding Job Cost:	\$9,037.80
Total Job Cost:	\$51,965
Job Hours:	20.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mobilize reclamation equipment and crew**Site: **Donley Rock Quarry**Permit Action: 2025-04-30 TR1Permit/Job#: M2011005**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 4/30/2025County: MontroseFilename: M005-04aUser: DMCAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,
400 HP (2ND HALF, 2006)Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT
TRAILER (25T, 50T, AND 100T)**Cost Breakdown:**

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$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
Cat D8T - 8SU	47.71	\$173.32	\$122.78	1	\$296.10	\$122.78	\$250.00
Subtotals:					\$296.10	\$122.78	\$250.00

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	\$79.16	1	\$79.16	\$79.16
Power Mulcher (Bowie LD-90)	\$58.47	1	\$58.47	\$58.47
Light Duty Pickup, 4x4, 1 T. Crew	\$24.60	1	\$24.60	\$24.60
Subtotals:				
			\$162.23	\$162.23

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>MONTROSE</u>	
Total one-way travel distance:	<u>11.00</u>	miles
Average Travel Speed:	<u>35.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$1,355.50</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$101.97</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.31</u>	<u>0.31</u>
Return Time (Hours):	<u>0.31</u>	<u>0.31</u>
Loading Time (Hours):	<u>0.50</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.50</u>	<u>NA</u>
Subtotals:	<u>1.63</u>	<u>0.63</u>

JOB TIME AND COST

Total job time:	<u>3.26</u>	Hours
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Total job cost:	<u>\$1,457</u>
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