STATE OF COLORADO

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M2024023, Brown Quarry Application, Reclamation Cost Estimate

Simmons - DNR, Leigh <leigh.simmons@state.co.us> Mon, Aug 11, 2025 at 3:05 PM
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Robert,

The Division's Reclamation Cost Estimate (RCE) is attached. The RCE includes indirect costs required by the BLM in addition to those required by the Division, I have also attached a letter signed by Larry Sandoval in 2019 explaining these costs.

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

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2 attachments

M2024023_BrownQuarry_RCE_2.pdf
1197K

20190604_BLM_RCEreview_V2.pdf
348K

COST SUMMARY WORK

Task description: **Site-wide reclamation cost estimate for Brown Quarry**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 7/16/2025 County: Eagle Filename: M023-000
User: LDS

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Pre-reclamation demolition tasks	DEMOLISH	1	40.00	$2,610
002	Rip and regrade yard	DOZER	1	5.31	$1,870
003	Topsoil yard	DOZER	1	1.38	$454
004	Rip and regrade quarry access road	DOZER	1	7.45	$2,625
005	Topsoil quarry access road	DOZER	1	1.95	$638
006	Create 2' high mounds with 4:1 slope on quarry benches	EXCAVATE	1	43.35	$6,421
007	Remove and regrade rock check dam	EXCAVATE	1	0.16	$24
008	Revegetate yard	REVEGE	1	16.00	$1,979
009	Revegetate quarry access road	REVEGE	1	24.00	$3,364
010	Revegetate quarry and rock check dam area	REVEGE	1	40.00	$10,093
011	Post-reclamation demolition	DEMOLISH	1	16.00	$831
012	Mobilize all equipment	MOBILIZE	1	6.40	$3,855
		SUBTOTALS:		**202**	**$34,764**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$702
Performance bond:	1.05	Total =	$365
**BLM req. total of 1.5% DC:*	*0.45*	*Total =*	*$156*
Job superintendent:	101.00	Total =	$7,588
Profit:	10.00	Total =	$3,476
		TOTAL O & P =	$12,132
		CONTRACT AMOUNT (direct + O & P) =	$47,052

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	$500	Total =	$500
Engineering work and/or contract/bid preparation:	4.25	Total =	$2,000
Reclamation management and/or administration:	5.00		$2,353
**BLM req. total of 10% (CA):*	*5.00*	*Total =*	*$2,353*
**BLM req. management cost (DC):*	*2.10*	*Total =*	*$730*
CONTINGENCY:	3.00	Total =	$1,043
**BLM req. total of 10% (DC):*	*7.00*	*Total =*	*$2,433*

TOTAL INDIRECT COST =	$23,700
TOTAL BOND AMOUNT (direct + indirect) =	**$58,464**

DEMOLITION WORK

Task description: **Pre-reclamation demolition tasks**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 001 State: Colorado Abbreviation: None
Date: 7/29/2025 County: Eagle Filename: M023-001
User: LDS

Agency or organization name: DRMS

UNIT COSTS **Location adjustment: 86.90 %**

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Utility box and powerline	1 box	Powerline or utility line - Structural Steel Box Type Frame Structure Dismantle and Dispose	1.00	EA	$2,309.00	$2,309.00
Remove access road culvert	3 x 18" x 25'	Pipe, corrugated metal (CMP) - 18 in. diameter pipe	75.00	LF	$6.54	$490.58
Load water tanks, culverts, miscellaneous material	18 CY	Loading only, open areas (unconfined) - Track loader	18.00	CY	$0.86	$15.41
Haul water tanks, culverts, miscellaneous material to nearest landfill	18 CY	Hauling only, per mile, 12-18 CY truck - 30 mph average speed	12.00	MI	$10.41	$124.96
Remove temporary office structure	1	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul	150.00	CF	$0.43	$63.95

Job Hours: **40.00** **Subtotal (unadjusted):** **$3,003.90** **Total Cost (adjusted for location):** **$2,610.39**

BULLDOZER WORK

Task description: **Rip and regrade yard**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 002 State: Colorado Abbreviation: None
Date: 8/10/2025 County: Eagle Filename: M023-002
User: LDS

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:

		Utilization %
Ownership Cost/Hour:	$179.60	NA
Operating Cost/Hour:	$110.45	100
Ripper own. Cost/Hour:	$15.28	NA
Ripper op. Cost/Hour:	$9.14	100
Operator Cost/Hour:	$38.02	NA

Total unit Cost/Hour: $352.49
Total Fleet Cost/Hour: **$352.49**

MATERIAL QUANTITIES

Initial Volume: 1,613
Swell factor: 1.000
Loose volume: **1,613** 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: Consolidated stockpile 1.0

Average push gradient: 5 %
Average site altitude: 7,130 feet

Material weight: 2,900 lbs/LCY

Weight description: Decomposed rock - 50% Rock, 50% Earth

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:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3566

Adjusted unit production: 304.04 LCY/hr
Adjusted fleet production: **304.04** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $1.159/LCY

Total job time: **5.31** Hours
Total job cost: **$1,870**

BULLDOZER WORK

Task description: **Topsoil yard**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 003 State: Colorado Abbreviation: None
Date: 8/10/2025 County: Eagle Filename: M023-003
User: LDS

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:	$179.60	NA
Operating Cost/Hour:	$110.45	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	100
Operator Cost/Hour:	$38.02	NA

Total unit Cost/Hour: $328.07
Total Fleet Cost/Hour: **$328.07**

MATERIAL QUANTITIES

Initial Volume: 403
Swell factor: 1.000
Loose volume: **403** 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: Consolidated stockpile 1.0

Average push gradient: 5 %
Average site altitude: 7,130 feet

Material weight: 2,650 lbs/LCY

Weight description: Decomposed rock - 25% Rock, 75% Earth

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:	0.700	(FND-MF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3415

Adjusted unit production: 291.16 LCY/hr
Adjusted fleet production: **291.16** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $1.127/LCY

Total job time: **1.38** Hours
Total job cost: **$454**

BULLDOZER WORK

Task description: **Rip and regrade quarry access road**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 004 State: Colorado Abbreviation: None
Date: 8/10/2025 County: Eagle Filename: M023-004
User: LDS

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:

		Utilization %
Ownership Cost/Hour:	$179.60	NA
Operating Cost/Hour:	$110.45	100
Ripper own. Cost/Hour:	$15.28	NA
Ripper op. Cost/Hour:	$9.14	100
Operator Cost/Hour:	$38.02	NA

Total unit Cost/Hour: $352.49
Total Fleet Cost/Hour: **$352.49**

MATERIAL QUANTITIES

Initial Volume: 2,742
Swell factor: 1.000
Loose volume: **2,742** 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: 15 %
Average site altitude: 6,950 feet

Material weight: 2,900 lbs/LCY

Weight description: Decomposed rock - 50% Rock, 50% Earth

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:	0.666	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.2630

Adjusted unit production: 368.20 LCY/hr
Adjusted fleet production: **368.2** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.957/LCY

Total job time: **7.45** Hours
Total job cost: **$2,625**

BULLDOZER WORK

Task description: **Topsoil quarry access road**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 005 State: Colorado Abbreviation: None
Date: 8/10/2025 County: Eagle Filename: M023-005
User: LDS

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:	$179.60	NA
Operating Cost/Hour:	$110.45	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	100
Operator Cost/Hour:	$38.02	NA

Total unit Cost/Hour: $328.07
Total Fleet Cost/Hour: **$328.07**

MATERIAL QUANTITIES

Initial Volume: 686
Swell factor: 1.000
Loose volume: **686** 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: 15 %
Average site altitude: 6,950 feet

Material weight: 2,650 lbs/LCY

Weight description: Decomposed rock - 25% Rock, 75% Earth

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:	0.700	(FND-MF)
Push gradient:	0.666	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.2519

Adjusted unit production: 352.66 LCY/hr
Adjusted fleet production: **352.66** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.930/LCY

Total job time: **1.95** Hours
Total job cost: **$638**

HYDRAULIC EXCAVATOR WORK

Task description: **Create 2' high mounds with 4:1 slope on quarry benches**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 006 State: Colorado Abbreviation: None
Date: 8/10/2025 County: Eagle Filename: M023-006
User: LDS

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat 315D L 8'-6" Stick Horsepower: 115
Attachment 1: ROPS Cab Weight (MT): 17.32
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$56.38	NA
Operating Cost/Hour:	$32.42	100
Operator Cost/Hour:	$59.31	NA
Total Unit Cost/Hour:	$148.11	

Total Fleet Cost/Hour: $148.11

MATERIAL QUANTITIES

Initial volume: 7,421 CCY Swell factor: 1.000
Loose volume: **7,421** LCY

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

HOURLY PRODUCTION

Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):

Basic Job Condition Description: AVERAGE
Secondary Job Condition within Basic Description: AVERAGE
Cycle Time Value: 0.256 minutes

Load Bucket Capacity

Bucket Size Class: Medium

Rated Capacity: 0.80 LCY (heaped)
Bucket Fill Factor: 1.100 Other - rock/dirt mixtures (100-120%) 1.100
Adjusted Capacity: **0.88** LCY

Job Condition Correction Factors Site Altitude: 6750 feet

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

Unadjusted Hourly Unit Production: 206.25 LCY/Hour
Adjusted Hourly Unit Production: 171.19 LCY/Hour
Adjusted Hourly Fleet Production: **171.19** LCY/Hour

JOB TIME AND COST

Fleet size: 1 Excavator Total job time: **43.35** Hours

Unit cost: $0.865 /LCY Total job cost: **$6,421**

HYDRAULIC EXCAVATOR WORK

Task description: **Remove and regrade rock check dam**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 007 State: Colorado Abbreviation: None
Date: 8/10/2025 County: Eagle Filename: M023-007
User: LDS

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat 315D L 8'-6" Stick
Attachment 1: ROPS Cab

Horsepower: 115
Weight (MT): 17.32
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$56.38	NA
Operating Cost/Hour:	$32.42	100
Operator Cost/Hour:	$59.31	NA
Total Unit Cost/Hour:	$148.11	

Total Fleet Cost/Hour: $148.11

MATERIAL QUANTITIES

Initial volume: 28 CCY Swell factor: 1.000
Loose volume: **28** LCY

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

HOURLY PRODUCTION

Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):

Basic Job Condition Description: AVERAGE
Secondary Job Condition within Basic Description: AVERAGE
Cycle Time Value: 0.256 minutes

Load Bucket Capacity

Bucket Size Class: Medium

Rated Capacity: 0.80 LCY (heaped)
Bucket Fill Factor: 1.100 Other - rock/dirt mixtures (100-120%) 1.100
Adjusted Capacity: **0.88** LCY

Job Condition Correction Factors Site Altitude: 6750 feet

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

Unadjusted Hourly Unit Production: 206.25 LCY/Hour
Adjusted Hourly Unit Production: 171.19 LCY/Hour
Adjusted Hourly Fleet Production: **171.19** LCY/Hour

JOB TIME AND COST

Fleet size: 1 Excavator Total job time: **0.16** Hours

Unit cost: $0.865 /LCY Total job cost: **$24**

REVEGETATION WORK

Task description: **Revegetate yard**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 008 State: Colorado Abbreviation: None
Date: 8/10/2025 County: Eagle Filename: M023-008
User: LDS

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)	$114.13
Weed control spraying (MEANS 31 31 16.13 3100)	$338.80
Total Tilling Cost/Acre	**$452.93**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	3.20	3.98	$326.09
Blue Grama - Hachita	6.00	97.93	$175.99
Indian Ricegrass - Native	5.00	16.18	$88.53
Needle and Thread	3.80	10.03	$316.82
Prairie Junegrass	0.18	9.57	$8.98
Flax, Lewis Blue	1.00	6.63	$43.31
Saltbush, Four Wing	6.60	9.09	$134.30
Bluebunch Wheatgrass - Goldar	5.00	16.07	$58.67

Totals Seed Mix	30.78	169.49	**$1,152.69**

Application

Description	**Cost /Acre**
Broadcast seeding [DMG]	$279.08
Total Seed Application Cost/Acre	**$279.08**

MULCHING and MISCELLANEOUS

Materials

Description	**Units / Acre**	**Unit**	**Cost / Unit**	**Cost /Acre**
Hay, delivered	0.50	TON	$504.56	$252.28
Herbicide - Curtail @ 4.0 pt/ac	0.50	ACRE	$38.14	$19.07
Total Mulch Materials Cost/Acre				**$271.35**

Application

Description	**Cost /Acre**
Crimping, with tractor {DMG survey data}	$239.35
Weed spray, hand, non-aquatic area, nox. [DMG]	$243.21
Total Mulch Application Cost/Acre	**$482.56**

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: 0.5 Cost /Acre: $2,638.61
Estimated Failure Rate: 50% Cost /Acre*: $2,638.61
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$1,319.31**
Reseeding Job Cost: **$659.65**
Total Job Cost: **$1,979**
Job Hours: **16.00**

REVEGETATION WORK

Task description: **Revegetate quarry access road**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 009 State: Colorado Abbreviation: None
Date: 8/11/2025 County: Eagle Filename: M023-009
User: LDS

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)	$114.13
Weed control spraying (MEANS 31 31 16.13 3100)	$338.80
Total Tilling Cost/Acre	**$452.93**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	3.20	3.98	$326.09
Blue Grama - Hachita	6.00	97.93	$175.99
Indian Ricegrass - Native	5.00	16.18	$88.53
Needle and Thread	3.80	10.03	$316.82
Prairie Junegrass	0.18	9.57	$8.98
Flax, Lewis Blue	1.00	6.63	$43.31
Saltbush, Four Wing	6.60	9.09	$134.30
Bluebunch Wheatgrass - Goldar	5.00	16.07	$58.67

Totals Seed Mix	30.78	169.49	**$1,152.69**

Application

Description	**Cost /Acre**
Broadcast seeding [DMG]	$279.08
Total Seed Application Cost/Acre	**$279.08**

MULCHING and MISCELLANEOUS

Materials

Description	**Units / Acre**	**Unit**	**Cost / Unit**	**Cost /Acre**
Hay, delivered	0.50	TON	$504.56	$252.28
Herbicide - Curtail @ 4.0 pt/ac	0.50	ACRE	$38.14	$19.07
Total Mulch Materials Cost/Acre				**$271.35**

Application

Description	**Cost /Acre**
Crimping, with tractor {DMG survey data}	$239.35
Weed spray, hand, non-aquatic area, nox. [DMG]	$243.21
Total Mulch Application Cost/Acre	**$482.56**

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: 0.85 Cost /Acre: $2,638.61
Estimated Failure Rate: 50% Cost /Acre*: $2,638.61
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$2,242.82**
Reseeding Job Cost: **$1,121.41**
Total Job Cost: **$3,364**
Job Hours: **24.00**

REVEGETATION WORK

Task description: **Revegetate quarry and rock check dam area**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 010 State: Colorado Abbreviation: None
Date: 8/11/2025 County: Eagle Filename: M023-010
User: LDS

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)	$114.13
Weed control spraying (MEANS 31 31 16.13 3100)	$338.80
Total Tilling Cost/Acre	**$452.93**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	3.20	3.98	$326.09
Blue Grama - Hachita	6.00	97.93	$175.99
Indian Ricegrass - Native	5.00	16.18	$88.53
Needle and Thread	3.80	10.03	$316.82
Prairie Junegrass	0.18	9.57	$8.98
Flax, Lewis Blue	1.00	6.63	$43.31
Saltbush, Four Wing	6.60	9.09	$134.30
Bluebunch Wheatgrass - Goldar	5.00	16.07	$58.67

Totals Seed Mix	30.78	169.49	**$1,152.69**

Application

Description	**Cost /Acre**
Broadcast seeding [DMG]	$279.08
Total Seed Application Cost/Acre	**$279.08**

MULCHING and MISCELLANEOUS

Materials

Description	**Units / Acre**	**Unit**	**Cost / Unit**	**Cost /Acre**
Hay, delivered	0.50	TON	$504.56	$252.28
Herbicide - Curtail @ 4.0 pt/ac	0.50	ACRE	$38.14	$19.07
Total Mulch Materials Cost/Acre				**$271.35**

Application

Description	**Cost /Acre**
Crimping, with tractor {DMG survey data}	$239.35
Weed spray, hand, non-aquatic area, nox. [DMG]	$243.21
Total Mulch Application Cost/Acre	**$482.56**

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: 2.55 Cost /Acre: $2,638.61
Estimated Failure Rate: 50% Cost /Acre*: $2,638.61
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$6,728.46**
Reseeding Job Cost: **$3,364.23**
Total Job Cost: **$10,093**
Job Hours: **40.00**

DEMOLITION WORK

Task description: **Post-reclamation demolition**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 011 State: Colorado Abbreviation: None
Date: 8/11/2025 County: Eagle Filename: M023-011
User: LDS

Agency or organization name: DRMS

UNIT COSTS **Location adjustment: 86.90 %**

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Remove fence from yard	531ft	Fencing, barbed wire, - 3 strand	531.00	LF	$1.80	$955.80

Job Hours: **16.00** **Subtotal (unadjusted):** **$955.80** **Total Cost (adjusted for location):** **$830.59**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Mobilize all equipment**

Site: **Brown Quarry** Permit Action: Application Permit/Job#: M2024023

PROJECT IDENTIFICATION

Task #: 012 State: Colorado Abbreviation: None
Date: 8/11/2025 County: Eagle Filename: M023-012
User: LDS

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:	$21.47	$38.32	$48.96
Operating Cost/Hour:	$31.47	$60.11	$65.86
Operator Cost/Hour:	$22.52	$22.52	$22.52
Helper Cost/Hour:	$0.00	$22.25	$22.25
Total Unit Cost/Hour:	$75.46	$143.20	$159.59

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	$194.88	$159.59	1	$354.47	$159.59	$250.00
Cat 315D L 8'-6" Stick	19.05	$56.38	$75.46	1	$131.84	$75.46	$250.00
Subtotals:					**$486.31**	**$235.05**	**$500.00**

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	$36.63	1	$36.63	$36.63
Subtotals:			**$36.63**	**$36.63**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GYPSUM	
Total one-way travel distance:	12.00	miles
Average Travel Speed:	20.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$3,810.87	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$43.96	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.60	0.60
Return Time (Hours):	0.60	0.60
Loading Time (Hours):	1.00	NA
Unloading Time (Hours):	1.00	NA
Subtotals:	3.20	1.20

JOB TIME AND COST

Total job time:	**6.40**	Hours
Total job cost:	**$3,855**	

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
COLORADO RIVER VALLEY FIELD OFFICE
2300 River Frontage Road
Silt, CO 81652
www.blm.gov

June 4, 2019

In Reply Refer To:
COC-074205 (CON040)

Amy Yeldell
Colorado Division of Reclamation, Mining and Safety
101 S. 3rd Street, Suite 301
Grand Junction, CO 81501

Dear Ms. Yeldell,

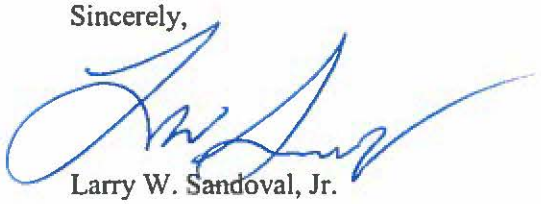
An administrative error was discovered with BLM's previous reclamation cost estimate indirect cost requirements after our May 23, 2019 letter to you. Please refer to the corrected indirect cost requirements below:

1. Per the BLM Solid Minerals Handbook H-3809-1, the following indirect costs are required in the reclamation cost estimate:
    a. Engineering, design, and construction plan: 8% of estimated reclamation operation and maintenance costs
        i. DRMS has documented 7.22% of the direct plus overhead and profit costs. While the agencies' percentage rates are different, the costs upon which the rates are calculated are different and the difference are minor. This is acceptable.
    b. Contingency: 10% of estimated reclamation operation and maintenance costs
        i. DRMS has documented 3% of direct costs. This figure must be increased to 10%.
    c. Contractor Profit: 10% of estimated reclamation operation and maintenance costs
        i. DRMS has documented 10% of direct costs. This is acceptable.
    d. Liability Insurance: 1.5% of the total labor costs
        i. DRMS has documented 2.02% of total costs. This is acceptable.
    e. Performance and Payment Bond: 1.5% of the estimated contract cost
        i. DRMS has documented 1.05% for a performance bond. This indirect rate must increased to 1.5% of the estimated contract cost.
    f. BLM Contract Administration: 10% of the estimated reclamation operation and maintenance costs
        i. DRMS has documented 5.3% for reclamation management and/or administration. This indirect rate must be increased to 10%.
    g. BLM Indirect Cost: 21.6% of the BLM contract administration costs
        i. DRMS does not have this documented in the reclamation cost estimate. Please include this indirect cost as 21.6% of the reclamation management and/or administration costs.

The addition of spruce or fir seedlings at a rate of ten (10) seedlings per 1,000 square feet of reclaimed bench remains a BLM requirement of the reclamation cost estimate.

If you have any questions or concerns, please contact Jessica Lopez Pearce, Geologist, at (970) 876-9018 or jlopezpearce@blm.gov.

Sincerely,



Larry W. Sandoval, Jr.
Field Manager