COST SUMMARY WORK

Task description: **Cost Summary of Reclamation Tasks**

Site: **Chaparral Meadows East** Permit Action: New NOI P2024017 Permit/Job#: P2024017

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 1/24/2025 County: Park Filename: P017-000
User: ERR

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Backfill Test Pits	LOADER	1	1.01	$174
002	Replace Topsoil	LOADER	1	0.63	$110
003	Revegetate Test Pit Disturbances	REVEGE	1	1.50	$210
004	Mob/Demob Reclamation Equipment	MOBILIZE	1	4.11	$1,147
	SUBTOTALS:			**7.25**	**$1,641**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$33
Performance bond:	1.05	Total =	$17
Job superintendent:	0.00	Total =	$0
Profit:	10.00	Total =	$164
		TOTAL O & P =	$214
		CONTRACT AMOUNT (direct + O & P) =	$1,855

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	$0	Total =	$0
Engineering work and/or contract/bid preparation:	4.25	Total =	$79
Reclamation management and/or administration:	5.00		$93
CONTINGENCY:	0.00	Total =	$0
		TOTAL INDIRECT COST =	$386
		TOTAL BOND AMOUNT (direct + indirect) =	**$2,027**

WHEEL LOADER – LOAD AND CARRY WORK

Task description: **Backfill Test Pits**

Site: **Chaparral Meadows East** Permit Action: New NOI P2024017 Permit/Job#: P2024017

PROJECT IDENTIFICATION

Task #: 001 State: Colorado Abbreviation: None
Date: 1/24/2025 County: Park Filename: P017-001
User: ERR

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: CAT 450E Horsepower: 101
Attachment 1: ROPS Cab Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$78.06	NA
Operating Cost/Hour:	$57.60	100
Operator Cost/Hour:	$36.85	NA
Total Unit Cost/Hour:	$172.51	

Total Fleet Cost/Hour: $172.51

MATERIAL QUANTITIES

Initial volume: 100 CCY Swell factor: 1.124
Loose volume: **112** LCY

Source of estimated volume: (6) test pits 15’ x 10’ x 3’
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.475 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Truck Ownership:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Operation:	Inconsistent operation 0.04	0.040	(Cat HB)
Dump Target:	Small target 0.04	0.040	(Cat HB)
	Net Cycle Time Adjustment:	0.100	minutes
	Adjusted Basic Cycle Time:	0.575	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:	25	0.00	8.00	8.00	0.0238	(Cat HB)
Return Route:	25	0.00	8.00	8.00	0.0238	(Cat HB)

Total Travel Time:	0.0476	minutes
Total Cycle Time:	**0.6226**	minutes

Load Bucket Capacity

Rated Capacity:	1.50	LCY (heaped)
Bucket Fill Factor:	0.975	Sand and gravel (95% - 100%) 0.975
Adjusted Capacity:	**1.46**	LCY

Job Condition Correction Factors
Site Altitude: 8760 feet

		Source
Altitude Adj:	0.95	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.79	multiplier

Unadjusted Hourly Unit Production:	140.95	LCY/Hour
Adjusted Hourly Unit Production:	111.14	LCY/Hour
Adjusted Hourly Fleet Production:	**111.14**	LCY/Hour

JOB TIME AND COST

Fleet size:	1	Loader(s)	Total job time:	**1.01**	Hours
Unit cost:	$1.552	/LCY	Total job cost:	**$174**	

WHEEL LOADER – LOAD AND CARRY WORK

Task description: **Replace Topsoil**

Site: **Chaparral Meadows East** Permit Action: New NOI P2024017 Permit/Job#: P2024017

PROJECT IDENTIFICATION

Task #: 002 State: Colorado Abbreviation: None
Date: 1/24/2025 County: Park Filename: P017-002
User: ERR

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: CAT 450E Horsepower: 101
Attachment 1: ROPS Cab Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$78.06	NA
Operating Cost/Hour:	$57.60	100
Operator Cost/Hour:	$36.85	NA
Total Unit Cost/Hour:	$172.51	

Total Fleet Cost/Hour: $172.51

MATERIAL QUANTITIES

Initial volume: 56 CCY Swell factor: 1.429
Loose volume: **80** LCY

Source of estimated volume: (6) test pits disturbances 25’ diameter x 6”
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.475 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Truck Ownership:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Operation:	Inconsistent operation 0.04	0.040	(Cat HB)
Dump Target:	Small target 0.04	0.040	(Cat HB)
	Net Cycle Time Adjustment:	0.100	minutes
	Adjusted Basic Cycle Time:	0.575	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:	25	0.00	8.00	8.00	0.0238	(Cat HB)
Return Route:	25	0.00	8.00	8.00	0.0238	(Cat HB)

Total Travel Time:	0.0476	minutes
Total Cycle Time:	**0.6226**	minutes

Load Bucket Capacity

Rated Capacity:	1.50	LCY (heaped)
Bucket Fill Factor:	1.100	Other - rock/dirt mixtures (100-120%) 1.100
Adjusted Capacity:	**1.65**	LCY

Job Condition Correction Factors
Site Altitude: 8760 feet

		Source
Altitude Adj:	0.95	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.79	multiplier

Unadjusted Hourly Unit Production:	159.02	LCY/Hour
Adjusted Hourly Unit Production:	125.39	LCY/Hour
Adjusted Hourly Fleet Production:	**125.39**	LCY/Hour

JOB TIME AND COST

Fleet size:	1	Loader(s)	Total job time:	**0.64**	Hours
Unit cost:	$1.376	/LCY	Total job cost:	**$110**	

REVEGETATION WORK

Task description: **Revegetate Test Pit Disturbances**

Site: **Chaparral Meadows East** Permit Action: New NOI P2024017 Permit/Job#: P2024017

PROJECT IDENTIFICATION

Task #: 003 State: Colorado Abbreviation: None
Date: 1/24/2025 County: Park Filename: P017-003
User: ERR

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
Hand raking (MEANS 32 91 13.23 0250)	$1,698.84
Total Tilling Cost/Acre	**$1,698.84**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Mountain Brome - Bromar	5.96	9.58	$35.86
Ryegrass, Annual/Gulf	7.84	34.20	$10.46
Streambank Wheatgrass - Sodar	7.86	25.62	$65.26
Thickspike Wheatgrass - Critana	7.72	27.29	$62.91
Needlegrass, Green - Lodorm	3.98	16.54	$34.41
Siberian Wheatgrass	5.80	14.65	$38.42
Totals Seed Mix	39.16	127.87	**$247.31**

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
			$	$
Total Mulch Materials Cost/Acre				**$0.00**

Application

Description	Cost /Acre
	$
Total Mulch Application Cost/Acre	**$0.00**

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: 0.07
Estimated Failure Rate: 35%
*Selected Replanting Work Items: TILLING,SEEDING

Cost /Acre: $2,218.71
Cost /Acre*: $2,218.71

Initial Job Cost: **$155.31**
Reseeding Job Cost: **$54.36**
Total Job Cost: **$210**
Job Hours: **1.50**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Mob/Demob Reclamation Equipment**

Site: **Chaparral Meadows East** Permit Action: New NOI P2024017 Permit/Job#: P2024017

PROJECT IDENTIFICATION

Task #: 004 State: Colorado Abbreviation: None
Date: 1/24/2025 County: Park Filename: P017-004
User: ERR

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
CAT 450E	9.80	$78.06	$59.44	1	$137.50	$59.44	$250.00
Subtotals:					**$137.50**	**$59.44**	**$250.00**

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	$130.54	1	$130.54	$130.54
Subtotals:			**$130.54**	**$130.54**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	BUENA VISTA, CO	
Total one-way travel distance:	35.00	miles
Average Travel Speed:	45.00	mph

Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$943.85
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$203.06

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.78	0.78
Return Time (Hours):	0.78	0.78
Loading Time (Hours):	0.25	NA
Unloading Time (Hours):	0.25	NA
Subtotals:	2.06	1.56

JOB TIME AND COST

Total job time:	**4.11**	Hours
Total job cost:	**$1,147**	