

## COST SUMMARY WORK

Task description: CN-1

Site: Simla Highway Pit

Permit Action: CN1

Permit/Job#: M1995095

### PROJECT IDENTIFICATION

Task #: HCR

State: Colorado

Abbreviation: None

Date: 4/4/2024

County: El Paso

Filename: M095-HCR

User: HR1

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001a	Rip compacted areas	RIPPER	1	19.45	\$8,781
001b	Distribute topsoil	DOZER	1	14.12	\$6,005
002a	Grade topsoil	GRADER	1	6.87	\$1,218
003a	Revege 10 acres of active area	REVEGE	1	10.00	\$8,538
003b	Maintenance of 5 reclamation acres (25%)	REVEGE	1	1.25	\$2,547
004	Mob/Demob	MOBILIZE	1	2.96	\$3,997
<b><u>SUBTOTALS:</u></b>				<b>54.65</b>	<b>\$31,086</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$628

Performance bond: 1.05

Total = \$326

Job superintendent: 8.32

Total = \$541

Profit: 10.00

Total = \$3,109

TOTAL O & P = \$4,604

CONTRACT AMOUNT (direct + O & P) = \$35,690

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0

Total = \$0

Engineering work and/or contract/bid preparation: 4.25

Total = \$1,517

Reclamation management and/or administration: 5.00

\$1,785

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$7,906

**TOTAL BOND AMOUNT (direct + indirect) = \$38,992**

## BULLDOZER RIPPING WORK

Task description: Rip compacted areas

Site: Simla Highway Pit Permit Action: CN1 Permit/Job#: M1995095

### PROJECT IDENTIFICATION

Task #: 001A State: Colorado Abbreviation: None  
Date: 4/24/2024 County: El Paso Filename: 001a  
User: HR1

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU Horsepower: 310  
Ripper Attachment: 1-Shank Ripper Shift Basis: 1 per day  
Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper Ownership Cost/Hour:	\$17.40	NA
Ripper Operating Cost/Hour:	\$8.74	100
Operator Cost/Hour:	\$40.04	NA
Total Unit Cost/Hour:	\$451.48	
Total Fleet Cost/Hour:	<b>\$451.48</b>	

### 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: Exhibit E, Reclamation Plan & L(1) Costs, CN-1

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth: 3.71 feet/pass  
Average Ripping Width: 5.56 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: 0.619 acres/hour

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.619 Acres/hr  
Site Altitude: 6,400 feet  
Altitude Adj: 1.00 (CAT HB)  
Job Efficiency: 0.83 (1 shift/day)  
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.51 Acres/hr  
Adjusted Hourly Fleet Production: **0.51** Acres/hr

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **19.45** Hours

Unit cost: \$878.150 Per acre Total job cost: **\$8,781**

**BULLDOZER WORK**Task description: Distribute topsoilSite: Simla Highway PitPermit Action: CN1Permit/Job#: M1995095**PROJECT IDENTIFICATION**Task #: 001BState: ColoradoAbbreviation: NoneDate: 4/24/2024County: El PasoFilename: 001bUser: HR1Agency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: \$425.34Total Fleet Cost/Hour: **\$425.34****MATERIAL QUANTITIES**Initial Volume: 12,100Swell factor: 1.215Loose volume: **14,702 LCY**Source of estimated volume: Avg 9" depth over 10 acSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feetUnadjusted hourly production: 852.6 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: -25 %Average site altitude: 6,400 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil**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:	0.900	(SSD-FC)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.2213

Adjusted unit production: 1,041.28 LCY/hr

Adjusted fleet production: **1041.28** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.408/LCY

Total job time: **14.12** Hours

Total job cost: **\$6,005**

## MOTOR GRADER WORK

Task description: Grade topsoil

Site: Simla Highway Pit

Permit Action: CN1

Permit/Job#: M1995095

### PROJECT IDENTIFICATION

Task #: 002A

State: Colorado

Abbreviation: None

Date: 4/24/2024

County: El Paso

Filename: 002a

User: HR1

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: CAT 12M

Horsepower: 158

Ripper Attachment: \_\_\_\_\_

Shift Basis: 1 per day

Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$74.98	NA
Operating Cost/Hour:	\$55.26	100
Ripper Ownership Cost/Hour:	\$0.00	NA
Ripper Operating Cost/Hour:	\$0.00	
Operator Cost/Hour:	\$46.87	NA
Total Unit Cost/Hour:	\$177.11	
Total Fleet Cost/Hour:	<b>\$177.11</b>	

### MATERIAL QUANTITIES

Total Area to be graded or ripped: 10.00 acres

Source of estimated acreage: Exhibit E Reclamation Plan, CN-1

### HOURLY PRODUCTION

Average Grader Speed:	<u>1.50</u>	mph
Selected Application:	<u>Finish grading (0-2.5 mph) - 1.5</u>	
Selected Blade Angle:	<u>0</u>	degrees
Effective Blade Length:	<u>12.00</u>	feet
Width of blade overlap per pass:	<u>2.00</u>	feet
Net grading or ripping width per pass:	<u>10.00</u>	feet
Unadjusted Hourly Unit Production:	<u>1.8182</u>	acres/hour

#### Job Condition Correction Factors

Site Altitude: 6400 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.80</u>	(2sh/d, mod.)
Net Correction:	<u>0.8000</u>	multiplier

Adjusted Hourly Unit Production: 1.4545 acres/Hour

Adjusted Hourly Fleet Production: **1.4545** acres/Hour

### JOB TIME AND COST

Fleet size: 1 Grader(s)

Total job time: **6.88** Hours

Unit cost: \$121.76 per acre

Total job cost: **\$1,218**

**REVEGETATION WORK**Task description: Revege 10 acres of active areaSite: Simla Highway PitPermit Action: CN1Permit/Job#: M1995095**PROJECT IDENTIFICATION**Task #: 003AState: ColoradoAbbreviation: NoneDate: 4/24/2024County: El PasoFilename: 003aUser: 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
Blue Grama - Native	0.45	7.35	\$6.18
Buffalograss - Native/Plains	2.40	2.31	\$28.96
Little Bluestem - Native	1.05	6.27	\$14.25
Sideoats Grama - Vaughn	0.90	2.95	\$7.54
Western Wheatgrass - Native	4.00	10.10	\$24.00
Needlegrass, Green - Lodorm	0.75	3.12	\$8.83
<b>Totals Seed Mix</b>	<b>9.55</b>	<b>32.10</b>	<b>\$89.75</b>

**Application**

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$232.00
<b>Total Seed Application Cost/Acre</b>	<b>\$232.00</b>

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

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

**Application**

Description	Cost /Acre
	\$
<b>Total Mulch Application Cost/Acre</b>	<b>\$0.00</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres:	10	Cost /Acre:	\$773.37
Estimated Failure Rate:	25%	Cost /Acre*:	\$321.75
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	<b>\$7,733.70</b>
Reseeding Job Cost:	<b>\$804.38</b>
Total Job Cost:	<b>\$8,538</b>
Job Hours:	<b>10.00</b>

**REVEGETATION WORK**Task description: Maintenance of 5 reclamation acres (25%)Site: Simla Highway PitPermit Action: CN1Permit/Job#: M1995095**PROJECT IDENTIFICATION**Task #: 003BState: ColoradoAbbreviation: NoneDate: 4/24/2024County: El PasoFilename: M095-003bUser: HR1Agency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	40.00	pound	\$0.62	\$24.93
Triple superphosphate, 0-46-0	40.00	pound	\$0.89	\$35.60
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$60.53</b>

**Application**

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$41.82
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$41.82</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
Blue Grama - Native	0.45	7.35	\$6.18
Buffalograss - Native/Plains	2.40	2.31	\$28.96
Little Bluestem - Native	1.05	6.27	\$14.25
Sideoats Grama - Vaughn	0.90	2.95	\$7.54
Western Wheatgrass - Native	4.00	10.10	\$24.00
Needlegrass, Green - Lodorm	0.75	3.12	\$8.83
<b>Totals Seed Mix</b>	<b>9.55</b>	<b>32.10</b>	<b>\$89.75</b>



**Application**

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$232.00
<b>Total Seed Application Cost/Acre</b>	<b>\$232.00</b>

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

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
<b>Total Mulch Materials Cost/Acre</b>				<b>\$859.57</b>

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$74.46
Power mulcher (MEANS 32 91 13.16 0350)	\$147.67
<b>Total Mulch Application Cost/Acre</b>	<b>\$222.13</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres: 1.25                      Cost /Acre: \$1,957.42  
 Estimated Failure Rate: 25%                      Cost /Acre\*: \$321.75  
 \*Selected Replanting Work Items: SEEDING

Initial Job Cost: **\$2,446.78**  
 Reseeding Job Cost: **\$100.55**  
 Total Job Cost: **\$2,547**  
 Job Hours: **1.25**

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mob/Demob**Site: **Simla Highway Pit**Permit Action: CN1Permit/Job#: M1995095**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 4/23/2024County: El PasoFilename: 004User: HR1Agency 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:**

<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 12M	16.01	\$78.07	\$82.29	1	\$160.36	\$82.29	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00
Cat D8T - 8SU	47.71	\$241.38	\$158.17	1	\$399.55	\$158.17	\$250.00
Subtotals:					<b>\$757.16</b>	<b>\$405.04</b>	<b>\$1,000.00</b>

**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	\$100.24	1	\$100.24	\$100.24
Subtotals:			<b>\$100.24</b>	<b>\$100.24</b>

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: LIMON  
 Total one-way travel distance: 27.00 miles  
 Average Travel Speed: 55.00 mph

Total Non-Roadable Mob/Demob Cost \* \$3,898.23  
 \*\* two round trips with haul rig:  
 Total Roadable Mob/Demob Cost \*\* \$98.42  
 \*\* one round trip, no haul rig:

**Transportation Cycle Time:**

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.49	0.49
Return Time (Hours):	0.49	0.49
Loading Time (Hours):	0.25	NA
Unloading Time (Hours):	0.25	NA
Subtotals:	1.48	0.98

**JOB TIME AND COST**

Total job time: 2.96 Hours

Total job cost: \$3,997