

July 12, 2023

Mark Gardner Ephemeral Resources, LLC P.O. Box 1769 Grand Junction, CO 81502

Re: D Road Gravel Pit - File No. M-2002-046 Ephemeral Resources, LLC Surety Increase (SI-1) Surety Increase based on inspection and inflation.

Dear Mark Gardner:

On July 12, 2023 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$313,138.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$150,849.00.

Please see the May 2, 2023 inspection report for details regarding why this surety increase is required.

The Division ordered amendment of the current Financial Warranty, or submittal of a new Financial Warranty reflecting the increase, within 60 days from the date of this letter (July 12, 2023).

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 (8148), 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 after September 10, 2023, if the amount of any increased Financial Warranty has not been provided.

Bond Held:	\$162,289.00
Prior Liability:	\$162,289.00
Change in Liability:	\$150,849.00
Revised Liability:	\$313,138.00
Prior Permit Acreage:	104.00
Change in Permit Acreage:	0.00



Revised Permit Acreage:	104.00
Prior Affected Acreage:	104.00
Change in Affected Acreage:	0.00
Revised Affected Acreage:	104.00

If you have any questions, please contact me by telephone at (303) 866-3567 x 8183, or by email at Amy.yeldell@state.co.us.

Sincerely,

Amy Geldell

Amy C. Yeldell Environmental Protection Specialist

M-GR-04

COST SUMMARY WORK

Task description: Post ins		Post inspection	update					
Site:	Site: D Road Gravel Pit		Pe	Permit Action: 2023-05			o#: M2002046	
<u>P1</u>		IDENTIFIC ACY 5/9/2023 ACY	CATION State: County:	Colorado Mesa		Abbreviation: Filename:	None M046-ACY	

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Tal		Form	Fleet	Task	
Task	Description	Used	Size	Hours	Cost
A02	Rip Area A	1	20.22	\$5,723	
A03	Apply topsoil to Area A	TRUCK1	1	24.38	\$19,742
A04	Revegetate Area A	REVEGE	1	20.00	\$37,866
B04	Revegetate Area B-Failure areas	REVEGE	1	8.00	\$9,192
D02	Rip Area D	RIPPER	1	9.67	\$2,737
D03	Apply topsoil to Area D	DOZER	1	41.17	\$10,808
D04	Revegetate Area D	REVEGE	1	10.00	\$18,110
E01	Grade highwalls to 3H:1V in Area E	DOZER	1	234.28	\$61,503
E02	Rip Area E	RIPPER	1	8.79	\$2,488
E03	Apply topsoil to Area E	TRUCK1	1	15.02	\$12,158
E04	Revegetate Area E	REVEGE	1	12.00	\$21,951
F01	Grade highwalls to 3H:1V in Area F	DOZER	1	62.55	\$16,421
F02	Rip Area F	RIPPER	1	9.08	\$2,571
F03	Apply topsoil to Area F	TRUCK1	1	10.96	\$8,870
F04	Revegetate Area F	REVEGE	1	10.00	\$17,012
X01	Initial Mobilization	MOBILIZE	1	2.26	\$5,234
X01 X02	Secondary Mobilization	MOBILIZE	1	2.26	\$1,376
A02	Secondary Mobilization	WIODILIZE	1	2.20	\$1,570
		500.64	\$253,762		

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$5,126
Performance bond:	1.05	Total =	\$2,665
Job superintendent:	53.88	Total =	\$4,048
Profit:	10.00	Total =	\$25,376
		TOTAL O & P =	\$37,215
		CONTRACT AMOUNT (direct + O & P) = $($	\$290,977

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$0	Total =	\$0
Engineering work and/or contract/bid preparation:	0.00	Total =	\$0
Reclamation management and/or administration:	5.00		\$14,549
CONTINGENCY:	3.00	Total =	\$7,613
	TOTAL IN	DIRECT COST =	\$59,376
TOTAL BO	ND AMOUNT (di	irect + indirect) =	\$313,138

BULLDOZER RIPPING WORK

	Task description	: Rip	Area A			
Site	: D Road Grav	el Pit	Permit Action:	2023-05	Permit/Job	#: <u>M2002046</u>
	PROJECT ID	ENTIFICATI	ON			
	$\begin{array}{c} \text{Task #:} \underline{A0} \\ \text{Date:} \underline{5/9} \\ \text{User:} \overline{A0} \end{array}$	0/2023	State:ColoradoCounty:Mesa		Abbreviation: Filename:	
		v or organization	name: DRMS			
	HOURLY EQ	•				
			t D8T - 8SU		Horsepower:	310
	Ripper Att		Shank Ripper		-	per day
					Data Source:	(CRG)
	Cost Breakdown	<u>:</u>		I		
		Ownership C	ost/Hour:	\$124.85	Utilization % NA	
		Operating C	ost/Hour:	\$97.63	100	
		er Ownership C		\$13.10	NA	
	Rip	per Operating C Operator C		\$7.30 \$40.04	100 NA	
		Total Unit C		\$282.92		
		Total Fleet C	ost/Hour: \$282	.92		
	MATERIAL (
			Sele	cted estimating 1	method: Area	
	Alternate Method	<u>as:</u>				
Seismic: Area:	NA 13.80	acres	Bank Volume:	NA 2.00	BCY Volume: 44,528	NA BCY or C
nica.	15.00					
			mated quantity: <u>Rec Pla</u>			
	HOURLY PR	<u>ODUCTION</u>				
	Seismic:		Seismic Velocity:	NA	feet/second	
			Seisinie Velocity.	INA		
	Area:	Avera	ge Ripping Depth:	2.56	feet/pass	
			ge Ripping Width:	7.08	feet/pass	
			e Ripping Length:	500.00	feet/pass	
			age Dozer Speed: Maneuver Time:	88.00 0.25	feet/minute minutes/pass	
			tion per unit area:	0.822	acres/hour	
	Job Condition Co	orrection Factors	S			
	Ur	adjusted Hourly	Unit Production:	0.822	Acres/hr	
			Site Altitude:	4,600	feet	
			Altitude Adj:	1.00	(CAT HB)	
			Job Efficiency:	0.83	(1 shift/day)	
			Net Correction:	0.83	multiplier	
			Hourly Unit Production: Hourly Fleet Production:	0.68	Acres/hr Acres/hr	
				0.68	AUU5/111	
	JOB TIME AN	ND CUST		m , 1, 1 , 1		
	Fleet size:	I	Grader(s)	Total job time	20.23	Hours
	Unit cost:	\$414.674	Per acre	Total job cost	\$5,723	

TRUCK/LOADER TEAM WORK

Site: Decod Gravel Pit Permit Action: 2023-05 Permit/Joh#: M2002046 PROJECT IDENTIFICATION Task #: A03 None: Mainteget Date: 5/92023 County: Mesa Abbreviation: None: Date: Support County: Mesa Miniteget Mainteget Agency or organization name: DRMS Equipment Description Total Counteget Mainteget Track Loader Team Loader: CAT 972H Support Equipment -Load Area: Na Support Equipment -Load Area: Na Na Na Na Moder State: Track Loader Team Support Equipment - Maintenance Equipment Maintenance Equipment Support Equipment -Load Area: Na Na Na Na Moder State: Track Loader: Na Na Na Support Equipment - State: Na Na Na Na Na Support Equipment: Track Loader Team Support Equipment Maintenance Equipment Maintenance Equipment Support Equipment: Load Area Durmp Area Motor Grade	Task description:	Apply to	opsoil to Area A				
Task #: A03 State: County: Mesa Mesa Mesa Juse: Acy County: Mesa Mesa Mesa Mesa Agency or organization name: DBMS Agency or organization name: DBMS Magency or organization name: Cat 740	Site: D Road Gravel	Pit	Permit Act	tion: 2023-05		Permit/Job#: <u>M</u>	2002046
Date: <u>59/2023</u> County: <u>Mesa</u> Filename: <u>M046-A03</u> Agency or organization name: DRMS BIOURLY EQUIPMENT COST Fujiment Description Truck Loader Team -Truck: Cat 740 -Loader CAT 972H Support Equipment -Load Area: NA -Dump Area: Cat 071 H -Dump Area: NA -Water Truck: NA Support Equipment Motor Grader Water Truck: NA Support Equipment Motor Grader Water Truck: NA Support Equipment Motor Grader Water Truck: NA Support Southour: \$124.85 Support Southour: \$140.71 NA \$000 NA Nut		NTIFICATION	_	rado	Ah	breviation: No	1e
Agency or organization name: DEMS HOURL YEOUPMENT COST Shift basis: Lequipment Description Truck Loader Team -Truck: Cat 740 Loader CAT 972H Support Equipment - Loader CAT 972H Support Equipment - Loader CAT 972H Water Truck: NA Road Maintenance - Motor Grader NA NA Vater Truck: NA Na Support Equipment - Loader Load Area: Maintenance Equipment Matteriance - Motor Grader NA NA Vater Truck: NA NA Support Equipment - Loader Load Area Dump Area Motor Grader Water Truck Support Schour: S104.55 \$53.96 NA \$104 NA Ownership cost/hour: \$104.55 \$53.96 NA S104 NA Operating cost/hour: \$104.55 \$53.96 NA S104 NA Na port Sitosthour: \$104.55 \$53.96 NA S104 NA Operating cost/hour: \$104.55 \$53.97 NA S0.00 NA NA Number of Unitis: 2 <t< td=""><td></td><td>023</td><td></td><td></td><td></td><td></td><td></td></t<>		023					
HOURLY EQUIPMENT COST Entry the service of the servi	User: ACY						
Equipment Description Truck Loader Team -Truck: Cat 740 Support Equipment -Load Area: NA -Dump Area: Cat D81 - 88U Road MaintenanceMotor Grader: NA -Water Truck: NA SUfilization-machine: 100 100 NA NA Operating cost/hour: \$104.55 \$53.96 NA \$124.85 NA NA %Utilization-riper: NA 0 NA NA NA %Utilization-riper: NA 0 NA NA NA %Utilization-riper: NA 0 NA NA NA NA \$0.00 NA \$20.00 NA NA Motor Grader: NA \$0.00 NA NA Querating cost/hour: \$3.83.97 NA \$40.04 NA Number of Units: </td <td>Agency of</td> <td>r organization nar</td> <td>me: DRMS</td> <td></td> <td></td> <td></td> <td></td>	Agency of	r organization nar	me: DRMS				
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Image: Support Equipment -Load Area: NA					ption		
NA Cat DBT - 88U Road MaintenanceMotor Grader: NA -Water Truck: NA Cost Breakdown: Truck/Loader Team Support Equipment MaintenanceMotor Grader: %Utilization-machine: 100 100 NA 100 NA NA %Utilization-machine: 100 100 NA 100 NA NA %Utilization-machine: 100 100 NA 100 NA NA Ownership cost/hour: \$\$104.55 \$\$53.96 NA \$\$124.85 NA NA Ownership cost/hour: SY3.81 \$\$50.78 NA \$\$97.63 NA NA Øperator cost/hour: NA 0 NA \$\$0.00 NA \$\$0.00 NA NA Querator cost/hour: NA \$\$0.00 NA \$\$0.00 NA \$\$0.00 Gard Bay Solutials: Work: \$\$41.071 NA \$\$20.22 NA NA Munter of Units: 2 1 0 1 <td>,</td> <td>Fruck Loader Tea</td> <td></td> <td></td> <td></td> <td></td> <td></td>	,	Fruck Loader Tea					
Image: Dump Area: Cat D8T - 8SU Road MaintenanceMotor Grader: NA -Water Truck: NA -Water Truck: NA -Water Truck: NA Water Truck: Load Area Dump Area Motor Grader Water Truck %Utilization-machine: 100 100 NA 100 NA NA Ownership cost/hour: \$104.55 \$53.96 NA \$124.85 NA NA Operating cost/hour: \$104.55 \$53.96 NA \$97.63 NA NA %Utilization-riper: NA 0 NA NA NA NA %uper op. cost/hour: NA \$0.00 NA NA NA Riper op. cost/hour: S24.82 \$35.97 NA \$40.04 NA NA Operator cost/hour: \$24.82 \$35.97 NA \$40.04 NA NA Number of Units: 2 1 0 1 0 0 0 Graup Subtotals: Work: \$54.707 Support: \$262.52 Maint: \$0.00<	Supr	ort Equipment -I					
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Ripper op. cost/hour: NA \$0.00 NA \$0.00 NA \$0.00 NA NA Operator cost/hour: \$24.82 \$35.97 NA \$40.04 NA NA Unit Subtotals: \$203.18 \$140.71 NA \$262.52 NA NA Number of Units: 2 1 0 1 0 0 Group Subtotals: Work: \$547.07 Support: \$262.52 Maint: \$0.00 Total work team cost/hour: \$809.59	%Utilization-riper:	NA	0	NA	NA	NA	NA
Operator cost/hour: \$24.82 \$35.97 NA \$40.04 NA NA Unit Subtotals: \$203.18 \$140.71 NA \$262.52 NA NA Number of Units: 2 1 0 1 0 0 Group Subtotals: Work: \$547.07 Support: \$262.52 Maint: \$0.00 Total work team cost/hour: \$809.59 MATERIAL QUANTITIES Initial volume: 12,987 CCY Swell factor: 1.125 Loose volume: 13.8 ac @7 ^m Source of estimated volume: 13.8 ac @7 ^m Cat Handbook Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Pounds/LCY Pounds/LCY Description: Earth - Dry packed Pounds Pounds						NA	
Unit Subtotals: \$203.18 \$140.71 NA \$262.52 NA NA Number of Units: 2 1 0 1 0 0 Group Subtotals: Work: \$547.07 Support: \$262.52 Maint: \$0.00 Total work team cost/hour: \$809.59							
Number of Units: 2 1 0 1 0 0 Group Subtotals: Work: \$547.07 Support: \$262.52 Maint: \$0.00 Total work team cost/hour: \$809.59							
Group Subtotals: Work: \$547.07 Support: \$262.52 Maint: \$0.00 Total work team cost/hour: \$809.59			-				
Total work team cost/hour: \$809.59 MATERIAL QUANTITIES Initial volume: 12,987 CCY Swell factor: Loose volume: 14,610 LOY Source of estimated volume: Source of estimated swell factor: 13.8 ac @7"* Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$0.00 Total Cost: \$0.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 2,550 Pounds/LCY Description: Earth - Dry packed Rated Payload: 87,000						_	
MATERIAL QUANTITIES Initial volume: 12,987 CCY Swell factor: 1.125 Loose volume: 14,610 LCY Source of estimated volume: 13.8 ac @7"* Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$0.00 Total Cost: \$0.00 Source \$0.00 Material Purchase Cost: \$0.00 \$0.00 \$0.00 Total Cost: \$0.00 Material weight: \$2,550 Pounds/LCY Pounds/LCY Description: Earth - Dry packed Rated Payload: \$7,000 Pounds	Group Subtotals:	Work:	\$547.07	Support:	\$262.52	Maint:	\$0.00
Initial volume: 12,987 CCY Swell factor: 1.125 Loose volume: 14,610 LCY Source of estimated volume: 13.8 ac @7"* Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$0.00 Total Cost: \$0.00 Source of estimated swell factor: 1000 Material Purchase Cost: \$0.00 Total Cost: \$0.00 Material Purchase Cost: \$0.00 Source of estimated swell factor: \$0.00 Total Cost: \$0.00 Source of estimated swell \$0.00 Source of estimated swell factor: \$0.00 Total Cost: \$0.00 Source of estimated cost: \$0.00 Source of estimated cost: \$0.00 Bottom Cost: \$0.00 Source of estimated cost: \$0.00 Source of estimated cost: \$0.00 Source of estimated cost: \$0.00 Description: \$2,550 Pounds/LCY Description: Earth - Dry packed Pounds Rated Payload: \$7,000 Pounds)				
Loose volume: 14,610 LCY Source of estimated volume: 13.8 ac @7"* Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$0.00 Total Cost: \$0.00 Source of estimated swell factor: \$0.00 Total Cost: \$0.00 Material Purchase Cost: \$0.00 Total Cost: \$0.00 Material cost: \$0.00 Material cost: \$0.00 Pounds/LCY Pounds/LCY Description: Earth - Dry packed Rated Payload: \$7,000 Pounds							
Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: Total Cost: <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u> <u>50.00</u>					factor: 1.125		
Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$0.00 Total Cost: \$0.00 HOURLY PRODUCTION \$0.00 Image: Truck Capacity: \$0.00 Truck Capacity: Pounds/LCY Material weight: 2,550 Pounds/LCY Pounds Bescription: Earth - Dry packed Rated Payload: 87,000 Pounds		/					
Material Purchase Cost: \$0.00 Total Cost: \$0.00 HOURLY PRODUCTION <u>Truck Capacity:</u> Truck Payload (weight) Basis: Material weight: 2,550 Pounds/LCY Description: Earth - Dry packed Rated Payload: 87,000 Pounds							
Total Cost: \$0.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 2,550 Pounds/LCY Description: Earth - Dry packed Rated Payload: 87,000 Pounds	Source						
Truck Capacity: Truck Payload (weight) Basis: Material weight: 2,550 Pounds/LCY Description: Earth - Dry packed Rated Payload: 87,000 Pounds							
Truck Payload (weight) Basis:Material weight:2,550Pounds/LCYDescription:Earth - Dry packedRated Payload:87,000Pounds	HOURLY PRO	DUCTION					
Rated Payload: 87,000 Pounds	Truck Payload (we Material	weight: 2,550	Dry packed	Pounds/LCY			
Payload Capacity: 34.12 LCY	Rated Pa	ayload: 87,000	• •				
				LCY			

Struck Volume: Heaped Volume: Average Volume: Adjusted Volume:	$\frac{24.20}{21.40}$ LC	Y				
Average Volume:						
		CY				
Adjusted Volume:		CY				
	31.40 LO	CY				
Final	Truck Volume Ba	ased on Number o	f Loader Passes:	30.80	LCY	
Loading Tool Capacity						
			Buck	tet Size Class: <u>N</u>	A	_
Rated Capacity:	5.600	LCY (heaped)	(100	120000 1 100		-
Bucket Fill Factor:	1.100	Other - rock/di	rt mixtures (100	-120%) 1.100		-
Adjusted Capacity:	6.160	LCY				
Job Condition Corrections:	1 	S	ite Altitude (ft.): 4	600 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HB)		
Job Efficiency:	0.830	0.830	(CAT HB	/		
Net Correction:	0.830	0.830				
	I				-	
Loading Tool Cycle Time:	Number of	f Loading Tool Pa	sses Required to I	Fill Truck:	<u> 5 </u> F	basses
Excavators and Front Shovel	ls:					
Machine Cycle Time va Selected Value v	within this Basic F	-				
Track Loaders –	Material Descript	ion:				
Cycle Time Elements (min.):						
Load: NA	Mar	euver: NA		Dump: 0.100		
Wheel and Track Loaders -	Unadjusted Basic	c Loader Cycle Ti	me (load, dump, n	naneuver): 0.	525 minu	ites
Cycle Time Factors				Factor (min.)	Source	
Material:	Material up to 1	/8" diameter 0.02		0.020	(Cat HB)	
Stockpile:	Conveyor or do	zer piled 10 ft. hig	sh and up 0.00	0.000	(Cat HB)	_
Truck Ownership:	Common owner	ship of trucks and	l loaders -0.04	-0.040	(Cat HB)	
Operation:	Constant operat	ion -0.04		-0.040	(Cat HB)	
Dump Target:	No adjustment -	factor not application	able 0.00	0.000	(Cat HB)	_
		Net Cycle Tir	ne Adjustment:	-0.060	minutes	
		Adjusted Load	ler Cycle Time:	0.465	minutes	
		Net Load 7	ime per Truck:	1.960	minutes	
Truck Cycle Time:						
Truck Exchange Time	: 0.60	Minutes	Adjusted	for site altitude:	0.600	Minute
Truck Exchange Time	: 1.960	Minutes	Adjusted	for site altitude:	1.960	Minute
Truck Load Time						
C C		Minutes	Adjusted	for site altitude:	1.000	Minute

Haul Route:

	Seg #		Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
_	1	600.0	0	0.00	5.00	5.00	1845	0.654	
_	Return R	oute:				Haul Time:	0.654	minutes	
	Seg #	1	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
	1	600.0	0	0.00	5.00	5.00	3005	0.439	
					Total Tru	Return Time: ck Cycle Time:	0.439 4.653	minute	
	oading Too Prod Unit Prod	uction	721.88	LCY/Hour		Adjusted for j	ob efficiency:	599.16	LCY/Hour
		-	397.16	LCY/Hour		Adjusted for j	ob efficiency:	329.65	LCY/Hour
Optima	ll No. of T	rucks:	2	Truck(s)		Selected Num	ber of Trucks:	2	Truck(s)
					le truck/loade	k team productio er team productio er team productio	on: 599	.16 LCY	//Hour //Hour //Hour
	JOB TI	ME AN	D COST						
	Fleet	size:	1	Team(s)]	Fotal job time:	24.3	8 He	ours
	Unit	cost:	\$1.351	/LCY		Total job cost:	\$19,74	42	

REVEGETATION WORK

Task description:		Revegetate Area A			
Site: D Road Gravel Pit		Permit Action:	2023-05	Permit/Job	o#: M2002046
PROJECT Task #:	IDENTIFIC	CATION State: Colorado		Abbreviation:	None
Date: User:	5/9/2023 ACY	County: Mesa		Filename:	M046-A04
User:	ACY	County: Mesa		Filename:	M046-A0

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Composted manure DRMS Survey	1,000.00	pound	\$0.02	\$23.70
			Total Fertilizer Materials Cost/Acre	\$23.70

Application

Description		Cost /Acre
Manure, tractor spreader (MEANS 32 91 13.23 4450)		\$71.00
Total	l Fertilizer Application Cost/Acre	\$71.00

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	3.00	9.71	\$33.38
Galleta	2.00	7.30	\$44.70
Saltbush, Four Wing	2.00	2.75	\$25.00
Globemallow, Scarlet (or copper)	0.50	5.66	\$67.75
Saltbush, Shadscale	2.00	2.98	\$20.00
Totals Seed Mix	9.50	28.41	\$190.83

Application

Description	Cost /Acre
-------------	------------

Drill Seeding (DRMS Survey Cost)		\$232.00
	Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Escort @ 1.0 pt/ac	1.00	ACRE	\$198.41	\$198.41
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	\$4.61	\$4.61
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
Total Mulch Materials Cost/Acre				\$1,045.74

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$73.00
Power mulcher (MEANS 32 91 13.16 0350)		\$141.57
Weed spray, truck, aquatic area, nox. [DMG]		\$62.72
Weed spray, truck, non-aquatic area, nox. [DMG]		\$62.72
	Total Mulch Application Cost/Acre	\$340.01

NURSERY STOCK PLANTING

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

No. of Acres:	13.8	Cost /Acre:	\$2,020.46	
Estimated Failure Rate:	40%	Cost /Acre*:	\$1,808.58	
*Selected Replanting Work Items:	SEEDING, MULCHING			
Initial Job Cost: \$27,882.35				

Reseeding Job Cost:	\$9,983.36
Total Job Cost:	\$37,866
Job Hours:	20.00

REVEGETATION WORK

Г	Task descrip	otion:	Revegetate Area B-Failure a	areas		
Site:	D Road (Gravel Pit	Permit Action:	2023-05	Permit/Job	#: <u>M2002046</u>
<u>P</u>]	ROJECT	IDENTIFIC	CATION			
	Task #:	B04	State: Colorado		Abbreviation:	None
	Date:	5/9/2023	County: Mesa		Filename:	M046-B04
	User:	ACY				

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Composted manure DRMS Survey	1,000.00	pound	\$0.02	\$23.70
			Total Fertilizer Materials Cost/Acre	\$23.70

Application

Description		Cost /Acre
Manure, tractor spreader (MEANS 32 91 13.23 4450)		\$71.00
	Total Fertilizer Application Cost/Acre	\$71.00

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	3.00	9.71	\$33.38
Galleta	2.00	7.30	\$44.70
Saltbush, Four Wing	2.00	2.75	\$25.00
Globemallow, Scarlet (or copper)	0.50	5.66	\$67.75
Saltbush, Shadscale	2.00	2.98	\$20.00
Totals Seed Mix	9.50	28.41	\$190.83

Application

Description	Cost /Acre
-------------	------------

Drill Seeding (DRMS Survey Cost)		\$232.00
	Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Escort @ 1.0 pt/ac	1.00	ACRE	\$198.41	\$198.41
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	\$4.61	\$4.61
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
Total Mulch Materials Cost/Acre				\$1,045.74

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$73.00
Power mulcher (MEANS 32 91 13.16 0350)		\$141.57
Weed spray, truck, aquatic area, nox. [DMG]		\$62.72
Weed spray, truck, non-aquatic area, nox. [DMG]		\$62.72
	Total Mulch Application Cost/Acre	\$340.01

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

	No. of Acres:	3.35	Cost /Acre:	\$2,020.46
Estimate	ed Failure Rate:	40%	Cost /Acre*:	\$1,808.58
*Selected Replanti	ng Work Items:	SEEDING, MULC	HING	
Initial Job Cost:	\$6,768.54			
Reseeding Job Cost:	\$2.423.50			

cesecung job Cost.	\$ 4423.3 0
Total Job Cost:	\$9,192
Job Hours:	8.00

BULLDOZER RIPPING WORK

	Task description:	Rip Area	D				
Site	D Road Grave	el Pit	Permit Action:	2023-05	Perm	it/Job#: _]	M2002046
	PROJECT ID	ENTIFICATION					
	Task #: D0 Date: 5/9 User: AC	/2023 C	State: Colorado Jounty: Mesa		Abbrevi Filer		None 1046-D02
		or organization nam	e: DRMS				
	• •	•	· · · · · · · · · · · · · · · · · · ·				
		UIPMENT COST				21(a
	Ripper Att	Machine: Cat D87 achment: 3-Shank			Horsepower: Shift Basis:	310 1 per 0	
					Data Source:	(CRO	
	Cost Breakdown:	- -					
			•		Utilization %		
		Ownership Cost/H Operating Cost/H		\$124.85 \$97.63	<u>NA</u> 100		
	Ripp	er Ownership Cost/H		\$13.10	NA		
		per Operating Cost/H	our:	\$7.30	100		
		Operator Cost/H		\$40.04	NA		
		Total Unit Cost/H	our:	\$282.92			
		Total Fleet Cost/H	our: \$282	2.92			
	MATERIAL (<u>UANTITIES</u>	Sele	cted estimating	method: Area		
	Alternate Method	<u>ls:</u>					
mic:	NA		Bank Volume:	NA	BCY	NA	A
rea:	6.60	acres	Rip Depth (ft):	2.00	Volume: 21,2	.96	BCY of
		Source of estimated	d quantity: Staff es	stimates			
	HOURLY PR	ODUCTION					
	Seismic:	Seisr	nic Velocity:	NA	feet/second		
	A	20151					
	Area:	Average Riv	pping Depth:	2.56	feet/pass		
			oping Width:	7.08	feet/pass		
		Average Rip	ping Length:	500.00	feet/pass		
			Dozer Speed:	88.00	feet/minute		
		Average Mar		0.25	minutes/pas	SS	
			per unit area:	0.822	acres/hour		
	Job Condition Co	orrection Factors					
	Un	adjusted Hourly Uni	t Production:	0.822	Acres/hr		
			Site Altitude:	4,600	feet		
			Altitude Adj:	1.00	(CAT HB)	`	
			b Efficiency: t Correction:	0.83	(1 shift/day)	
					multiplier		
			rly Unit Production: ly Fleet Production:	0.68	Acres/hr Acres/hr		
		-		0.68	ACIES/111		
	JOB TIME AN					_	
	Fleet size:	G1	rader(s)	Total job time	: 9.67	7	Hours
	Unit cost:	\$414.674 Pe	r acre	Total job cost	: \$2,73	27	

BULLDOZER WORK

Task description:	Apply topsoil to A				
D Road Gravel Pit	Perr	mit Action:	2023-05	Permit/Job#:	M2002046
PROJECT IDENTI	FICATION				
Task #: D03	State:	Colorado		Abbreviation:	None
Date: $5/9/2023$	County:	Mesa		Filename:	M046-D03
User: ACY					
Agency or org	anization name: DR	RMS			
HOURLY EQUIPM	ENT COST				
Basic Machine:	at D8T - 8SU				
Horsepower: 31					
• •	emi-Universal				
Attachment: N					
	per day				
Data Source: (C	CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$124.85	NA		
Operating Cost/Hour:		\$97.63	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$40.04	NA		
Total Fleet Cost/Hour:	\$262.52 \$262.52				
Total Fleet Cost/Hour: MATERIAL QUAN	\$262.52 TITIES				
Total Fleet Cost/Hour: <u>MATERIAL QUAN</u> Initial Volume:6,2	\$262.52 TITIES 11				
Total Fleet Cost/Hour: <u>MATERIAL QUAN</u> Initial Volume: <u>6,2</u> Swell factor: <u>1.1</u>	\$262.52 TITIES 11				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9	\$262.52 TITIES 11 25 87 LCY				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volume	\$262.52 TITIES 11 25 87 LCY ume:6.6 ac @				
Swell factor: 1.1	\$262.52 TITIES 11 25 87 LCY ume:6.6 ac @				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volu Source of estimated swe	\$262.52 TITIES 11 25 87 LCY ume: 6.6 ac @ ell factor: Cat Hand				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volu Source of estimated sweet HOURLY PRODUCC	\$262.52 TITIES 11 25 87 LCY ume: 6.6 ac @ ell factor: Cat Hand CTION				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance:	\$262.52 TITIES 11 25 87 LCY ume: 6.6 ac @ ell factor: Cat Hand CTION 250 feet	book			
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volume	\$262.52 TITIES 11 25 87 LCY ume: 6.6 ac @ ell factor: Cat Hand CTION 250 feet	book			
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ	\$262.52 TITIES 11 25 87 LCY ume: 6.6 ac @ ell factor: Cat Hand CTION uction: 377.8 LCY/	book	 pile 1.0		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volu Source of estimated volu Source of estimated swee HOURLY PRODUC Average push distance: Unadjusted hourly produced Materials consistency defined	\$262.52 TITIES 11 25 87 LCY ume: 6.6 ac @ ell factor: Cat Hand CTION uction: 250 feet 377.8 LCY/ escription: Consoli	book hr	 bile 1.0		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volu Source of estimated volu Source of estimated swee HOURLY PRODUC Average push distance: Unadjusted hourly produced Materials consistency de Average push gradient:	\$262.52 TITIES 11 25 87 LCY ume: 6.6 ac @ ell factor: Cat Hand CTION uction: 377.8 LCY/	book hr	 pile 1.0		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volu Source of estimated volu Source of estimated swee HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude:	\$262.52 TITIES 11 25 87 LCY ume: 6.6 ac @ ell factor: Cat Hand CTION uction: 250 feet 377.8 LCY/ escription: Consoli 0 %	book hr	 pile 1.0		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>6,2</u> Swell factor: <u>1.1</u> Loose volume: <u>6,9</u> Source of estimated volu Source of estimated volu Source of estimated swee HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight:	\$262.52 TITIES 11 25 87 LCY ume: 6.6 ac @ ell factor: Cat Hand CTION uction: 377.8 LCY/ escription: Consoli 0 % 4,600 feet	book hr idated stockj			
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volu Source of estimated swee HOURLY PRODUC Average push distance: Unadjusted hourly produ	\$262.52 TITIES 11 25 87 LCY ume: 6.6 ac @ ell factor: Cat Hand CTION uction: 377.8 LCY/ escription: Consoli 0 % 4,600 feet 2,550 lbs/LCY Earth - Dry packed	book hr idated stockj			
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volu Source of estimated volu Source of estimated swee HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator	\$262.52 TITIES 11 25 87 LCY ume: 6.6 ac @ ell factor: Cat Hand CTION uction: 250 feet uction: 377.8 LCY/ escription: Consoli 0 % 4,600 feet 2,550 lbs/LCY Earth - Dry packed on Factor 0.1	book hr idated stock			
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volto Source of estimated swee HOURLY PRODUC Average push distance: Unadjusted hourly produc Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist	\$262.52 TITIES 11 25 87 LCY ume: 6.6 ac @ ell factor: Cat Hand CTION uction: 250 feet uction: 377.8 LCY/ escription: Consoli 0 % 4,600 feet 2,550 lbs/LCY Earth - Dry packed m Factor 0.stency: 1. 0.	book hr idated stockp l 750 000	Source (AVG.) (CAT HB)		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.1 Loose volume: 6,9 Source of estimated volt Source of estimated volt Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consis Dozing m	\$262.52TITIES112587 LCY6.6 ac @87 LCYume:6.6 ac @ell factor:Cat HandCTIONuction:250 feetarticle377.8 LCY/escription:Consoli0 %4,600 feet2,550 lbs/LCYEarth - Dry packedon Factorrr Skill:0.stency:1.ethod:1.	book hr idated stock	Source (AVG.)		

Job efficiency:		0.830	(1 SHIFT/DAY)
Spoil pi	le:	0.800	(FND-RF)
Push gradie	nt:	1.000	(CAT HB)
Altitud	de:	1.000	(CAT HB)
Material Weig	ht:	0.902	(CAT HB)
Blade typ	pe:	1.000	(PAT)
Net correction	on:	0.4492	
Adjusted unit production:	16	9.71 LCY/hr	
Adjusted fleet production:	16	9.71 LCY/hr	
	-		

Fleet size:	1 Dozer(s)
Unit cost:	\$1.547/LCY

Total job time:	41.17 Hours
Total job cost:	\$10,808

REVEGETATION WORK

r	Fask descrip	otion:	Revegetate Area D			
Site:	D Road (Gravel Pit	Permit Action:	2023-05	Permit/Job	o#: M2002046
<u>P</u>	ROJECT Task #:	IDENTIFIC			Abbreviation:	None
	Date: User:	5/9/2023 ACY	State:ColoradoCounty:Mesa		Abbreviation: Filename:	M046-D04
		ency or organiz	zation name: DRMS			

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Composted manure DRMS Survey	1,000.00	pound	\$0.02	\$23.70
			Total Fertilizer Materials Cost/Acre	\$23.70

Application

Description	Cost /A	cre
Manure, tractor spreader (MEANS 32 91 13.23 4450)	\$71.00	
Total Fertiliz	zer Application Cost/Acre \$71.00	

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	3.00	9.71	\$33.38
Galleta	2.00	7.30	\$44.70
Saltbush, Four Wing	2.00	2.75	\$25.00
Globemallow, Scarlet (or copper)	0.50	5.66	\$67.75
Saltbush, Shadscale	2.00	2.98	\$20.00
Totals Seed Mix	9.50	28.41	\$190.83

Application

Description	Cost /Acre
-------------	------------

Drill Seeding (DRMS Survey Cost)		\$232.00
	Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Escort @ 1.0 pt/ac	1.00	ACRE	\$198.41	\$198.41
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	\$4.61	\$4.61
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
Total Mulch Materials Cost/Acre				\$1,045.74

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$73.00
Power mulcher (MEANS 32 91 13.16 0350)		\$141.57
Weed spray, truck, aquatic area, nox. [DMG]		\$62.72
Weed spray, truck, non-aquatic area, nox. [DMG]		\$62.72
	Total Mulch Application Cost/Acre	\$340.01

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

No. of Acres:	6.6	Cost /Acre:	\$2,020.46
Estimated Failure Rate:	40%	Cost /Acre*:	\$1,808.58
*Selected Replanting Work Items:	SEEDING, MULCHING		
Initial Job Cost: \$13,335.04			

Reseeding Job Cost:	\$4,774.65
Total Job Cost:	\$18,110
Job Hours:	10.00

Page 1 of 2

BULLDOZER WORK

Task description:	Grade highwa	lls to 3H:1V in	Area E		
D Road Gravel Pit	P	ermit Action:	2023-05	Permit/Job#:	M2002046
PROJECT IDENTIF	TICATION				
Task #: E01	State	: Colorado		Abbreviation:	None
Date: $5/9/2023$	County			Filename:	M046-E01
User: ACY	County			- Inchannet	
	• .•				
Agency or orga	inization name:	DRMS			
HOURLY EQUIPMI	ENT COST				
Basic Machine: Ca	ıt D8T - 8SU				
Horsepower: 31					
VI	mi-Universal				
Attachment: NA					
	per day				
Data Source: (C	RG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$124.85	NA		
Operating Cost/Hour:	. <u></u>	\$97.63	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:	. <u> </u>	\$0.00	0		
		\$40.04	NA		
Total Fleet Cost/Hour:	\$262.52 \$262.52	<i></i>			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUAN</u> Initial Volume: <u>42,4</u> Swell factor: <u>1.12</u>	\$262.52 FITIES 400				
Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUAN</u> Initial Volume: <u>42,4</u> Swell factor: <u>1.12</u>	\$262.52 FITIES 400				
Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUAN</u> Initial Volume: <u>42,4</u> Swell factor: <u>1.12</u>	\$262.52 FITIES 400 25 700 LCY		 1, 1500LF 1:1 cut/fill 3	30'D	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 42,4 Swell factor: 1.12 Loose volume: 47,7	\$262.52 FITIES 400 25 700 LCY ume:600LF			30'D	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 42,4 Swell factor: 1.12 Loose volume: 47,7 Source of estimated volu Source of estimated swel	\$262.52 FITIES 400 25 700 LCY Ime: <u>600LF</u> Il factor: <u>Cat Ha</u>	vertical backfil		30'D	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 42,4 Swell factor: 1.12 Loose volume: 47,7 Source of estimated volu Source of estimated swel HOURLY PRODUCC	\$262.52 FITIES 400 25 700 LCY Ime: <u>600LF</u> Il factor: <u>Cat Ha</u> TION	vertical backfil		30'D	
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Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 42,4 Swell factor: 1.12 Loose volume: 47,7 Source of estimated volu Source of estimated swel HOURLY PRODUCC	\$262.52 FITIES 400 25 700 LCY Ime: 600LF 11 factor: Cat Ha TION 	vertical backfil ndbook		30,D	
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Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 42,4 Swell factor: 1.12 Loose volume: 47,7 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency de	\$262.52 FITIES 400 25 700 LCY ume:	vertical backfil ndbook	 1, 1500LF 1:1 cut/fill 3 	30'D	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 42,4 Swell factor: 1.12 Loose volume: 47,7 Source of estimated volu Source of estimated swel HOURLY PRODUCC Average push distance: Unadjusted hourly produ	\$262.52 FITIES 400 25 700 LCY Ime: 600LF 11 factor: Cat Ha TION 170 feet 170 feet 576.6 LC	vertical backfil ndbook	 1, 1500LF 1:1 cut/fill 3 	30'D	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 42,4 Swell factor: 1.12 Loose volume: 47,7 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient:	\$262.52 FITIES 400 25 700 LCY time: <u>600LF</u> 11 factor: <u>Cat Ha</u> TION 170 feet 170 feet 576.6 LC scription: <u>Cons</u> 10 %	vertical backfil ndbook	 1, 1500LF 1:1 cut/fill 3 	30,D	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 42,4 Swell factor: 1.12 Loose volume: 47,7 Source of estimated volu Source of estimated swel HOURLY PRODUCC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude:	\$262.52 FITIES 400 25 700 LCY ume: 600LF Il factor: Cat Ha TION action: 576.6 LC escription: Cons 10 % 4,600 feet	vertical backfil ndbook	 1, 1500LF 1:1 cut/fill 3 	30,D	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 42,4 Swell factor: 1.12 Loose volume: 47,7 Source of estimated volu Source of estimated swell HOURLY PRODUCC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description:	\$262.52 FITTIES 400 25 700 LCY ume: 600LF Il factor: Cat Ha TION action: 576.6 LC escription: Cons 10 % 4,600 feet 2,550 lbs/LCY Earth - Dry pach	vertical backfil ndbook	 1, 1500LF 1:1 cut/fill 3 	30'D	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 42,4 Swell factor: 1.12 Loose volume: 47,7 Source of estimated volu Source of estimated swell HOURLY PRODUCC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Material weight:	\$262.52 FITTIES 400 25 700 LCY nme: 600LF If factor: Cat Ha TION action: 576.6 LC escription: Cons 10 % 4,600 feet 2,550 lbs/LCY Earth - Dry pack n Factor 1000 feet	vertical backfil ndbook	 1, 1500LF 1:1 cut/fill 3 pile 1.0	30,D	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 42,4 Swell factor: 1.12 Loose volume: 47,7 Source of estimated volu Source of estimated swell HOURLY PRODUCC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist	\$262.52 FITTES 400 25 700 LCY ume: 600LF Il factor: Cat Ha TION action: 576.6 LC sscription: Cons 10 % 4,600 feet 2,550 lbs/LCY Earth - Dry pack n Factor Skill:	vertical backfil ndbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 42,4 Swell factor: 1.12 Loose volume: 47,7 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist Dozing me	\$262.52 FITTES 400 25 700 LCY ume: 600LF Il factor: Cat Ha TION action: 576.6 LC sscription: Cons 10 % 4,600 feet 2,550 lbs/LCY Earth - Dry pack n Factor Skill:	vertical backfil ndbook Y/hr solidated stockp			

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.786	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.3531	
Adjusted unit production: 2	03.60 LCY/hr	
Adjusted fleet production: 2	03.6 LCY/hr	

Fleet size:	1 Dozer(s)
Unit cost:	\$1.289/LCY

Total job time:	234.28 Hours
Total job cost:	\$61,503

BULLDOZER RIPPING WORK

	Task description:	Rip Area E			
Site	: D Road Grave	Permit Actio	on: 2023-05	Permit/Jo	b#: M2002046
	PROJECT ID	ENTIFICATION			
	Task #: E02 Date: 5/9 User: AC	/2023 County: Mesa	do	Abbreviation Filenam	
		or organization name: DRMS			
		UIPMENT COST			
		Machine: <u>Cat D8T - 8SU</u>		Horsepower: Shift Basis: Data Source:	310 1 per day (CRG)
	Cost Breakdown:				
		Ownership Cost/Hour:	\$124.85	Utilization % NA	
	Rippe	Operating Cost/Hour: er Ownership Cost/Hour:	\$97.63 \$13.10	100 NA	
	11	per Operating Cost/Hour:	\$7.30	100	
		Operator Cost/Hour:	\$40.04	NA	
		Total Unit Cost/Hour:	\$282.92		
		Total Fleet Cost/Hour:	\$282.92		
	MATERIAL Q	DUANTITIES	Selected estimating	method: Area	
	Alternate Method	<u>s:</u>			
Seismic:	NA	Bank Volume	-	BCY	NA
Area:	6.00	acres Rip Depth (ft)): 2.00	Volume: 19,360	BCY or 0
		Source of estimated quantity:Sta	ff estimates		
	HOURLY PRO	DDUCTION			
	Seismic:				
		Seismic Velocity:	NA	feet/second	
	Area:		2.54		
		Average Ripping Depth: Average Ripping Width:	<u>2.56</u> 7.08	feet/pass feet/pass	
		Average Ripping Length:	500.00	feet/pass	
		Average Dozer Speed:	88.00	feet/minute	
		Average Maneuver Time:	0.25 0.822	minutes/pass acres/hour	
		Production per unit area:	0.822		
	Job Condition Co				
	Un	adjusted Hourly Unit Production:	0.822	Acres/hr	
		Site Altitude:	4,600	feet	
		Altitude Adj:	<u> </u>	(CAT HB)	
		Job Efficiency:	0.83	(1 shift/day) multiplier	
		Adjusted Hourly Unit Production Adjusted Hourly Fleet Production	on: 0.68	Acres/hr Acres/hr	
	JOB TIME AN				
	Fleet size:	<u>1</u> Grader(s)	Total job time	e: <u>8.79</u>	Hours
	Unit cost:	\$414.674 Per acre	Total job cost	t: \$2,488	

TRUCK/LOADER TEAM WORK

Task description:	Apply to	opsoil to Area	E			
Site: D Road Gravel I	Pit	Permit A	ction: 2023-05		Permit/Job#: <u>M</u>	2002046
PROJECT IDEN	TIFICATION	Ī				
Task #: <u>E03</u>	22		lorado	Ab	breviation: No	
Date: 5/9/20 User: ACY)23	County: Me	sa		Filename: M0	46-E03
	organization nar	ne: DRMS				
HOURLY EQUI	PMENT COST	Г		Shift bas	is: <u>1 per day</u>	
		_	Equipment Descri		<u> </u>	
Т	ruck Loader Tea	m -Truck: C	Cat 740	puon		
			CAT 972H			
Supp	ort Equipment -L		VA Cat D8T - 8SU			
Road M	aintenance – Mot		Lat D81 - 850 NA			
Roud M			NA			
<u>Cost Breakdown</u> :		ader Team		Equipment		ce Equipment Water Truck
	Truck	Loader	Load Area	Dump Area	Motor Grader	water Truck
%Utilization-machine:	100	10	0 NA	100	NA	NA
Ownership cost/hour:	\$104.55	\$53.9		\$124.85	NA	NA
Operating cost/hour:	\$73.81	\$50.7		\$97.63	NA	NA
%Utilization-riper:	NA		0 NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.0		\$0.00	NA	NA
Ripper op. cost/hour:	NA	\$0.0		\$0.00	NA	NA
Operator cost/hour:	\$24.82	\$35.9		\$40.04	NA	NA
Unit Subtotals:	\$203.18	\$140.7		\$262.52	NA	NA
Number of Units:	2		1 0	1	0	0
Group Subtotals:	Work:	\$547.07	Support:	\$262.52	Maint:	\$0.00
Total work team cos MATERIAL QU)				
Initial volume:	7,529	C	CY Swell	factor: 1.125		
Loose volume:	8,47	0 LC	CY			
So	urce of estimated	volume: 8	ac @7"`			
Source	of estimated swe		at Handbook			
	Material Purch		0.00			
	Te	otal Cost: \$0	0.00			
HOURLY PRO	DUCTION					
Truck Capacity:						
Truck Payload (wei						
Material w		D 1 1	Pounds/LCY			
Descr Rated Pa		Dry packed	Pounds			
Payload Ca	•	1	LCY			
	. <u>,</u>					

Struck Volume:	24.20	LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:		LCY				
Augusted Volume.	<u> </u>					
Final	Truck Volume	Based on Number of	of Loader Passes:	30.80	LCY	
Loading Tool Capacity						
<u>.</u>			Buc	ket Size Class: N	JA	
Rated Capacity:	5.600	LCY (heaped)				_
Bucket Fill Factor:	1.100	Other - rock/di		-120%) 1.100		_
Adjusted Capacity:	6.160	LCY				_
		_				
Job Condition Corrections:	-	S	Site Altitude (ft.): 4	<u>4600</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.830				
	i.					
Loading Tool Cycle Time:	Number	of Loading Tool Pa	asses Required to	Fill Truck:	5 1	passes
Excavators and Front Shovel	ls:					
Machine Cycle Time y	s Job Condition	Rating NA				
Machine Cycle Time v Selected Value v						
•	within this Basic	c Rating: NA				
Selected Value v	vithin this Basic Material Descri	c Rating: NA				
Selected Value v Track Loaders – Cycle Time Elements (min.):	vithin this Basic Material Descri	c Rating: NA ption:		 Dump: 0.10	0	
Selected Value v Track Loaders –	vithin this Basic Material Descri	c Rating: NA		 Dump:0.10	0	
Selected Value v Track Loaders – Cycle Time Elements (min.):	vithin this Basic Material Descri M	c Rating: NA ption: aneuver: NA	ime (load, dump, r	1	0 0.525 min	utes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders -	vithin this Basic Material Descri M	c Rating: NA ption: aneuver: NA	ime (load, dump, r	naneuver):(0.525 min	utes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u>	vithin this Basic Material Descri Unadjusted Bas	c Rating: NA ption: aneuver: NA		1		utes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - Cycle Time Factors	vithin this Basic Material Descri Unadjusted Bas Material up to	c Rating: <u>NA</u> ption: aneuver: <u>NA</u> sic Loader Cycle Ti	2	naneuver):(Factor (min.)	0.525 min Source	utes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material:	within this Basic Material Descri Unadjusted Bas Material up to Conveyor or c	c Rating: NA ption: aneuver: NA sic Loader Cycle Ti 0 1/8" diameter 0.02	2 gh and up 0.00	naneuver):(Factor (min.) 0.020	0.525 min Source (Cat HB)	utes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile:	within this Basic Material Descri — Ma — Unadjusted Bas <u>Material up to</u> <u>Conveyor or c</u> <u>Common own</u> Constant oper	c Rating: NA ption: aneuver: NA sic Loader Cycle Ti o 1/8" diameter 0.02 lozer piled 10 ft. hig tership of trucks and ation -0.04	gh and up 0.00 d loaders -0.04	naneuver):(Factor (min.) 0.020 0.000 -0.040 -0.040	0.525 min Source (Cat HB) (Cat HB)	utes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	within this Basic Material Descri — Ma — Unadjusted Bas <u>Material up to</u> <u>Conveyor or c</u> <u>Common own</u> Constant oper	c Rating: NA ption:	2 gh and up 0.00 d loaders -0.04 able 0.00	naneuver):(Factor (min.) 0.020 0.000 -0.040	0.525 min Source (Cat HB) (Cat HB) (Cat HB)	utes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	within this Basic Material Descri — Ma — Unadjusted Bas <u>Material up to</u> <u>Conveyor or c</u> <u>Common own</u> Constant oper	c Rating: NA ption: aneuver: NA sic Loader Cycle Ti o 1/8" diameter 0.02 lozer piled 10 ft. hig tership of trucks and ation -0.04 t - factor not applic Net Cycle Tim	gh and up 0.00 d loaders -0.04 able 0.00 me Adjustment:	naneuver):(Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.525 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	within this Basic Material Descri — Ma — Unadjusted Bas <u>Material up to</u> <u>Conveyor or c</u> <u>Common own</u> Constant oper	c Rating: NA ption: aneuver: NA sic Loader Cycle Ti o 1/8" diameter 0.02 lozer piled 10 ft. hig tership of trucks and ation -0.04 t - factor not applic Net Cycle Tin Adjusted Load	gh and up 0.00 d loaders -0.04 able 0.00 me Adjustment: der Cycle Time:	naneuver):(Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465	0.525 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	within this Basic Material Descri — Ma — Unadjusted Bas <u>Material up to</u> <u>Conveyor or c</u> <u>Common own</u> Constant oper	c Rating: NA ption: aneuver: NA sic Loader Cycle Ti o 1/8" diameter 0.02 lozer piled 10 ft. hig tership of trucks and ation -0.04 t - factor not applic Net Cycle Tin Adjusted Load	gh and up 0.00 d loaders -0.04 able 0.00 me Adjustment:	naneuver):(Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.525 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	utes
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Haul Rout	e:							
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	1500.0	00	0.00	5.00	5.00	1845	1.141	
					Haul Time:	1.141	minutes	
Return Ro	ute:				=			
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	1500.0	00	0.00	5.00	5.00	3005	0.738	
					Return Time:	0.738	minute	S
				Total True	ck Cycle Time:	5.439	minute	S
Loading Tool	l unit							
Produe		721.88	LCY/Hour		Adjusted for j	ob efficiency:	599.16	LCY/Hour
Truck Unit Produce	ction							
	_	339.77	LCY/Hour		Adjusted for j	ob efficiency:	282.01	LCY/Hour
Optimal No. of Tru	ucks:	2	Truck(s)		Selected Num	ber of Trucks:	2	Truck(s)
			Adjuste	d hourly truc	k team production	on: 564	.02 LCY	/Hour
					er team production		.02 LCY	/Hour
			Adjusted multip	le truck/loade	er team production	on: 564	.02 LCY	/Hour
JOB TIM	/IE AN	D COST						
Fleet s	size:	1	Team(s)	7	Fotal job time:	15.02	2 Ho	ours
Unit c	cost:	\$1.435	/LCY	r	Total job cost:	\$12,1	58	

REVEGETATION WORK

Task description:		Revegetate Area E			
te: D Road (Gravel Pit	Permit Action:	2023-05	Permit/Job	o#: <u>M2002046</u>
PROJECT Task #:	IDENTIFI	CATION State: Colorado		Abbreviation:	None
Date: User:	5/9/2023 ACY	County: Mesa		Filename:	M046-E04

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Composted manure DRMS Survey	1,000.00	pound	\$0.02	\$23.70
			Total Fertilizer Materials Cost/Acre	\$23.70

Application

Description	Cost /A	cre
Manure, tractor spreader (MEANS 32 91 13.23 4450)	\$71.00	
Total Fertiliz	zer Application Cost/Acre \$71.00	

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	3.00	9.71	\$33.38
Galleta	2.00	7.30	\$44.70
Saltbush, Four Wing	2.00	2.75	\$25.00
Globemallow, Scarlet (or copper)	0.50	5.66	\$67.75
Saltbush, Shadscale	2.00	2.98	\$20.00
Totals Seed Mix	9.50	28.41	\$190.83

Application

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

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Escort @ 1.0 pt/ac	1.00	ACRE	\$198.41	\$198.41
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	\$4.61	\$4.61
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
Total Mulch Materials Cost/Acre				\$1,045.74

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$73.00
Power mulcher (MEANS 32 91 13.16 0350)		\$141.57
Weed spray, truck, aquatic area, nox. [DMG]		\$62.72
Weed spray, truck, non-aquatic area, nox. [DMG]		\$62.72
	Total Mulch Application Cost/Acre	\$340.01

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

No. of Acres:	8	Cost /Acre:	\$2,020.46
Estimated Failure Rate:	40%	Cost /Acre*:	\$1,808.58
*Selected Replanting Work Items:	SEEDING, MULCHING		
Initial Job Cost: \$16 163 68			

\$10,103.00	
\$5,787.46	
\$21,951	
12.00	
	\$5,787.46 \$21,951

BULLDOZER WORK

Task description:	Grade highwalls to 3H:1V in	Area r		
D Road Gravel Pit	Permit Action:	2023-05	Permit/Job#:	M2002046
PROJECT IDENTIFI	CATION			
Task #: F01	State: Colorado		Abbreviation:	None
Date: 5/9/2023	County: Mesa		Filename:	M046-F01
User: ACY			-	
Agency or organ	ization name: DRMS			
HOURLY EQUIPME	NT COST			
	D8T - 8SU			
Horsepower: 310		_		
	ni-Universal	_		
Attachment: NA		_		
	er day	_		
Data Source: (CR	<u>(</u> ()	_		
Cost Breakdown:				
		Utilization %		
Ownership Cost/Hour:	\$124.85	NA		
Operating Cost/Hour:	\$97.63	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:	\$262.52			
Total Fleet Cost/Hour:	\$262.52			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19,16 Swell factor: 1.125 Loose volume: 21,56	\$262.52 ITIES 57 53 ICY	 D		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19,16 Swell factor: 1.125	\$262.52 ITIES 57 53 53 LCY ne:2300LF 1:1 cut/fill 30'1	 D		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19,16 Swell factor: 1.125 Loose volume: 21,56 Source of estimated volun Source of estimated swell HOURLY PRODUCT	\$262.52 <u>ITIES</u> 57 53 53 LCY ne: 2300LF 1:1 cut/fill 30'1 factor: Cat Handbook <u>'ION</u>	 D		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19,16 Swell factor: 1.125 Loose volume: 21,56 Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance:	\$262.52 <u>ITIES</u> <u>57</u> <u>53</u> LCY ne: <u>2300LF 1:1 cut/fill 30'1</u> factor: <u>Cat Handbook</u> <u>'ION</u> <u>100 feet</u>	 D		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19,16 Swell factor: 1.125 Loose volume: 21,56 Source of estimated volun Source of estimated swell HOURLY PRODUCT	\$262.52 <u>ITIES</u> <u>57</u> <u>53</u> LCY ne: <u>2300LF 1:1 cut/fill 30'1</u> factor: <u>Cat Handbook</u> <u>'ION</u> <u>100 feet</u>	 D		
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Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19,16 Swell factor: 1.125 Loose volume: 21,56 Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc	\$262.52 ITIES 57 53 ICY ne:2300LF 1:1 cut/fill 30'1 factor:2300LF 1:1 cut/fill 30'1 factor:200LF 1:1 cut/fill 30'1 factor:300LF 1:1 cut/			
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Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19,16 Swell factor: 1.125 Loose volume: 21,56 Source of estimated volun Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S	\$262.52 ITIES 57 53 LCY ne: 2300LF 1:1 cut/fill 30'1 factor: Cat Handbook ION 100 feet tion: 852.6 LCY/hr cription: Compacted fill or em 0 % 4,600 feet 2,550 lbs/LCY Earth - Dry packed Factor Skill: 0.750	nbankment 0.9 <u>Source</u> (AVG.)		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19,16 Swell factor: 1.125 Loose volume: 21,56 Source of estimated volun Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S Material consiste	\$262.52 ITIES 57 53 53 53 53 53 53 53 53 53 53 53 53 53 54 55 53 54 55 55 100	<u>Source</u> (AVG.) (CAT HB))		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19,16 Swell factor: 1.125 Loose volume: 21,56 Source of estimated volun Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S	\$262.52 ITIES 57 57 53 LCY ne: 2300LF 1:1 cut/fill 30? factor: Cat Handbook 'ION factor: 100 feet tion: 852.6 LCY/hr cription: Compacted fill or em 0 % 4,600 feet 2,550 lbs/LCY Earth - Dry packed Factor Skill: 0.750 ncy: 0.900 hod: hod: 1.000 1.000	nbankment 0.9 <u>Source</u> (AVG.)		

cy: 0.830	(1 SHIFT/DAY)
le: 0.800	(FND-RF)
nt: 1.000	(CAT HB)
le: 1.000	(CAT HB)
ht: 0.902	(CAT HB)
be: 1.000	(PAT)
on: 0.4043	
344.71 LCY/hr	
344.71 LCY/hr	
	le: 0.800 nt: 1.000 le: 1.000 nt: 0.902 pe: 1.000 ph: 0.4043

Fleet size:	1 Dozer(s)
Unit cost:	\$0.762/LCY

Total job time:	62.55 Hours
Total job cost:	\$16,421

BULLDOZER RIPPING WORK

Site: D Road Gravel Pit Permit Action: 2023-05 Permit/Job#: M200 PROJECT IDENTIFICATION Task #: F02 State: Colorado Abbreviation: None Date: 5/9/2023 County: Mesa Permit/Job#: M046 User: ACY 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) Octor (CRG) Cost Breakdown: \$124.85 NA (CRG) Operating Cost/Hour: \$13.10 NA (CRG) Operating Cost/Hour: \$13.10 NA (CRG) Operating Cost/Hour: \$13.10 NA (CRG) Operating Cost/Hour: \$282.92 Total Unit Cost/Hour: \$282.92 Total Fleet Cost/Hour: \$282.92 Total Fleet Cost/Hour: \$282.92 MATERIAL QUANTITIES Selected estimating method: Area Atternate Methods: \$2.00 Volume: 20,005 <th></th>	
Task #: F02 State: Colorado Abbreviation: None Date: 5/9/2023 County: Mesa Mode User: ACY AcY Mode Agency or organization name: DRMS 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 % Operating Cost/Hour: \$124.85 NA Operating Cost/Hour: \$97.63 100 Operator Cost/Hour: \$282.92 Total Unit Cost/Hour: \$282.92 Total Unit Cost/Hour: \$282.92 Total Unit Cost/Hour: \$282.92 MATERIAL QUANTITIES Selected estimating method: Area G.20 acres Rip Depth (ft): 2.00 Volume: 20,005 Source of estimated quantity: Staff estimates Staff estimates Staff estimates	-F02
Date: 5/9/2023 County: Mesa Filename: M046 User: ACY Agency or organization name: DRMS Filename: M046 Agency or organization name: DRMS Horsepower: 310 Basic Machine: Cat D8T - 8SU Horsepower: 310 Ripper Attachment: 3-Shank Ripper Basic Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: \$124.85 NA Operating Cost/Hour: \$97.63 100 Ripper Ownership Cost/Hour: \$97.63 100 Ripper Ownership Cost/Hour: \$13.10 NA Ripper Operating Cost/Hour: \$7.30 100 Operator Cost/Hour: \$282.92 Total Unit Cost/Hour: \$282.92 Total Fleet Cost/Hour: \$282.92 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: mic: NA Bank Volume: NA Marea 6.20 acres Bank Volume: NA BCY NA Source of estimated quantity: Staff estimates Staff es	-F02
User: ACY 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 % Operating Cost/Hour: \$124.85 NA Operating Cost/Hour: \$124.85 NA Operating Cost/Hour: \$124.85 NA Operating Cost/Hour: \$124.85 NA Operating Cost/Hour: \$13.10 NA Ripper Ownership Cost/Hour: \$13.10 NA Ripper Operating Cost/Hour: \$13.00 NA Ripper Operating Cost/Hour: \$282.92 Total Unit Cost/Hour: Operator Cost/Hour: \$282.92 Selected estimating method: Area Alternate Methods: Matternate Methods: Maternate Methods: NA mic: NA Bank Volume: NA BCY NA G.20 acres Rip Depth (ft): 2.00 Volume: 20,005 Source of estimated quantity: Sta	-F02
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Basic Machine: Cat D8T - 8SU Horsepower: 310 Ripper Attachment: 3-Shank Ripper Data Source: 1 per day Data Source: (CRG) Cost Breakdown: Utilization % Ownership Cost/Hour: \$124.85 NA Operating Cost/Hour: \$97.63 100 Ripper Ownership Cost/Hour: \$97.63 100 Ripper Operating Cost/Hour: \$13.10 NA Ripper Operating Cost/Hour: \$40.04 NA Total Unit Cost/Hour: \$282.92 Total Fleet Cost/Hour: \$282.92 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: area Area nic: NA Bank Volume: NA BCY NA Gource of estimated quantity: Staff estimates Source of estimated quantity: Staff estimates	
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Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day Data Source: Cost Breakdown: Utilization % Ownership Cost/Hour: \$124.85 NA Operating Cost/Hour: \$97.63 100 Ripper Ownership Cost/Hour: \$13.10 NA Ripper Ownership Cost/Hour: \$13.10 NA Ripper Operating Cost/Hour: \$7.30 100 Operator Cost/Hour: \$282.92 Total Unit Cost/Hour: \$282.92 Total Fleet Cost/Hour: \$282.92 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: Area Alternate Methods: mic: NA Bank Volume: NA BCY NA rea: 6.20 acres Rip Depth (ft): 2.00 Volume: 20,005 Source of estimated quantity: Staff estimates Staff estimates Staff estimates	
Cost Breakdown: Utilization % Ownership Cost/Hour: \$124.85 NA Operating Cost/Hour: \$97.63 100 Ripper Ownership Cost/Hour: \$13.10 NA Ripper Operating Cost/Hour: \$7.30 100 Operator Cost/Hour: \$7.30 100 Operator Cost/Hour: \$282.92 Total Unit Cost/Hour: \$282.92 Total Fleet Cost/Hour: \$282.92 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: Image: NA Bank Volume: NA rea: 6.20 acres Rip Depth (ft): 2.00 Volume: 20,005 Source of estimated quantity: Staff estimates Staff estimates Staff estimates Staff estimates	
Ownership Cost/Hour: \$124.85 NA Operating Cost/Hour: \$97.63 100 Ripper Ownership Cost/Hour: \$13.10 NA Ripper Operating Cost/Hour: \$7.30 100 Operator Cost/Hour: \$282.92 Total Unit Cost/Hour: \$282.92 Total Fleet Cost/Hour: \$282.92 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: Area Alternate nic: NA Bank Volume: NA rea: 6.20 acres Rip Depth (ft): 2.00 Volume: 20,005 Source of estimated quantity: Staff estimates Staff estimates Staff estimates Staff estimates	
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rea: 6.20 acres Rip Depth (ft): 2.00 Volume: 20,005 Source of estimated quantity: Staff estimates	
Source of estimated quantity: Staff estimates	
	BCY or
HOURLY PRODUCTION	
<u>Seismic:</u>	
Seismic Velocity: <u>NA</u> feet/second	
Area:	
Average Ripping Depth:2.56feet/passAverage Ripping Width:7.08feet/pass	
Average Ripping Width:7.08feet/passAverage Ripping Length:500.00feet/pass	
Average Dozer Speed: 88.00 feet/minute	
Average Maneuver Time: 0.25 minutes/pass	
Production per unit area: 0.822 acres/hour	
Job Condition Correction Factors	
Unadjusted Hourly Unit Production: 0.822 Acres/hr	
Site Altitude: 4,600 feet	
Altitude Adj: 1.00 (CAT HB)	
Job Efficiency: 0.83 (1 shift/day)	
Net Correction: 0.83 multiplier	
Adjusted Hourly Unit Production: 0.68 Acres/hr	
Adjusted Hourly Fleet Production: 0.68 Acres/hr	
JOB TIME AND COST	
Fleet size: 1 Grader(s) Total job time: 9.09	
Unit cost: \$414.674 Per acre Total job cost: \$2,571	Hours

TRUCK/LOADER TEAM WORK

Task description:	Apply to	opsoil to Area F				
Site: D Road Gravel P	it	Permit Acti	on: 2023-05		Permit/Job#: <u>M</u>	2002046
PROJECT IDEN	TIFICATION					
Task #: $F03$ Date: $5/9/202$	23	State: Colora County: Mesa	ado	Ab	breviation: <u>No</u> Filename: <u>M</u>	ne 46-F03
User: ACY						
Agency or	organization nan	ne: DRMS				
HOURLY EQUI	PMENT COST	<u>r</u>		Shift bas	is: <u>1 per day</u>	
			Equipment Descri	ption		
T	ruck Loader Tea		740			
Suppo	ort Equipment -L		Т 972Н			
Suppo			D8T - 8SU			
Road Ma	intenance – Moto					
	-Wa	ter Truck: NA				
Cost Prooledown	Truck/Loa	dan Taam	Support	Tauinmant	Mointonon	as Equipment
<u>Cost Breakdown:</u>	Truck	Loader	Load Area	Equipment Dump Area	Motor Grader	ce Equipment Water Truck
%Utilization-machine:	100	100	NA	100	NA	NA
Ownership cost/hour:	\$104.55	\$53.96	NA	\$124.85	NA	NA
Operating cost/hour:	\$73.81	\$50.78	NA	\$97.63	NA	NA
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	\$0.00	NA	NA
Ripper op. cost/hour:	NA	\$0.00	NA	\$0.00	NA	NA
Operator cost/hour:	\$24.82	\$35.97	NA	\$40.04	NA	NA
Unit Subtotals:	\$203.18	\$140.71	NA	\$262.52	NA	NA
Number of Units:	2	1	0	1	0	0
Group Subtotals:	Work:	\$547.07	Support:	\$262.52	Maint:	\$0.00
Total work team cost						
Initial volume:	5,835	CCY	Swell	factor: 1.125		
Loose volume:	6,564	LCY				
Sou	rce of estimated	volume: 6.2 a	c @7"`			
Source	of estimated swe	Il factor: Cat I	Handbook			
	Material Purcha					
	To	otal Cost: \$0.00	U			
HOURLY PRO	DUCTION					
<u>Truck Capacity:</u> Truck Payload (weig	t) Basic					
<u>I ruck Payload (weig</u> Material w			Pounds/LCY			
Descri		Dry packed				
Rated Pay			Pounds			
Payload Cap	acity: 34.12		LCY			

Struck Volume:	24.20 1.0	۲V				
Haanad Valumay	$ \begin{array}{c} 24.20 \\ 31.40 \end{array} $ LC					
Average Volume:	27.80 LC					
Adjusted Volume:	<u>31.40</u> LC					
Aujusted Volume.	<u></u> EC	.1				
Final	Truck Volume Βε	used on Number of	f Loader Passes:	30.80	LCY	
Loading Tool Capacity			Buc	ket Size Class: 1	NA	
Rated Capacity:	5.600	LCY (heaped)	Duel			-
Bucket Fill Factor:	1.100	Other - rock/dir	t mixtures (100	0-120%) 1.100		
Adjusted Capacity:	6.160	LCY		12070) 1.100		
Job Condition Corrections:	_	Si	te Altitude (ft.):	<u>4600</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:	Number of	f Loading Tool Pa	sses Required to	Fill Truck:	5 pa	asses
Excavators and Front Shovel		Louding 10011 d	sses required to	1 III 11uck.	<u> </u>	45505
Machine Cycle Time vs Selected Value v	s. Job Condition R vithin this Basic R					
Track Loaders –	Material Descript	ion:				
Cycle Time Elements (min.):						
Load: NA	Man	euver: NA		Dump: 0.10	0	
Wheel and Track Londors	Unadjusted Basic		ne (load dumn i	maneuver):	0.525 minu	4
wheel and Track Loaders -	5	Loader Cycle 1 if	ne (10au, dump, 1			tes
Cycle Time Factors	5	Loader Cycle 11	ne (10ad, dump, 1	Factor (min.)	Source	tes
	-	/8" diameter 0.02		·		-
Cycle Time Factors	Material up to 1	•		Factor (min.)	Source	- -
Cycle Time Factors Material: Stockpile: Truck Ownership:	Material up to 1. Conveyor or doz Common owner	/8" diameter 0.02 zer piled 10 ft. hig ship of trucks and	h and up 0.00	Factor (min.) 0.020 0.000 -0.040	Source (Cat HB) (Cat HB) (Cat HB)	tes - - -
Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Material up to 1. Conveyor or doz Common owner Constant operati	/8" diameter 0.02 zer piled 10 ft. hig ship of trucks and ion -0.04	h and up 0.00 loaders -0.04	Factor (min.) 0.020 0.000 -0.040 -0.040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	tes - - - -
Cycle Time Factors Material: Stockpile: Truck Ownership:	Material up to 1. Conveyor or doz Common owner Constant operati	/8" diameter 0.02 zer piled 10 ft. hig ship of trucks and ion -0.04 factor not applica	h and up 0.00 loaders -0.04 ble 0.00	Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	tes - - - - -
Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Material up to 1. Conveyor or doz Common owner Constant operati	/8" diameter 0.02 zer piled 10 ft. hig ship of trucks and ion -0.04 factor not applica Net Cycle Tin	h and up 0.00 loaders -0.04 ble 0.00 ne Adjustment:	Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	Tes
Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Material up to 1. Conveyor or doz Common owner Constant operati	/8" diameter 0.02 zer piled 10 ft. hig ship of trucks and ion -0.04 factor not applica Net Cycle Tin Adjusted Load	h and up 0.00 loaders -0.04 ble 0.00 ne Adjustment: er Cycle Time:	Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	Tes
Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Material up to 1. Conveyor or doz Common owner Constant operati	/8" diameter 0.02 zer piled 10 ft. hig ship of trucks and ion -0.04 factor not applica Net Cycle Tin Adjusted Load	h and up 0.00 loaders -0.04 ble 0.00 ne Adjustment:	Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	Tes
Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Material up to 1. Conveyor or doz Common owner Constant operati	/8" diameter 0.02 zer piled 10 ft. hig ship of trucks and ion -0.04 factor not applica Net Cycle Tin Adjusted Load	h and up 0.00 loaders -0.04 ble 0.00 ne Adjustment: er Cycle Time:	Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	Tes - - - -
Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time: Truck Exchange Time:	Material up to 1 Conveyor or doz Common owner Constant operati No adjustment -	/8" diameter 0.02 zer piled 10 ft. hig ship of trucks and ion -0.04 factor not applica Net Cycle Tin Adjusted Load Net Load T Minutes	h and up 0.00 loaders -0.04 ble 0.00 ne Adjustment: er Cycle Time: 'ime per Truck: Adjusted	Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465 1.960 for site altitude:	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.600	- - - - Minute
Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time: Truck Exchange Time: Truck Load Time:	Material up to 1 Conveyor or doz Common owner Constant operati No adjustment -	/8" diameter 0.02 zer piled 10 ft. higj ship of trucks and ion -0.04 factor not applica Net Cycle Tim Adjusted Loade Net Load T Minutes Minutes	h and up 0.00 loaders -0.04 ble 0.00 ne Adjustment: er Cycle Time: ime per Truck: Adjusted Adjusted	Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465 1.960 for site altitude: for site altitude:	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.600 1.960	- - - - Minute
Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time: Truck Exchange Time:	Material up to 1 Conveyor or doz Common owner Constant operati No adjustment -	/8" diameter 0.02 zer piled 10 ft. hig ship of trucks and ion -0.04 factor not applica Net Cycle Tin Adjusted Load Net Load T Minutes	h and up 0.00 loaders -0.04 ble 0.00 ne Adjustment: er Cycle Time: ime per Truck: Adjusted Adjusted	Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465 1.960 for site altitude:	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.600	Minutes Minutes Minutes

Truck Unit Production 372.73 LCY/Hour Adjusted for job efficiency: 309.37 LCY/Hour Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s) Adjusted hourly truck team production: 618.73 LCY/Hour Adjusted single truck/loader team production: 618.73 LCY/Hour Adjusted multiple truck/loader team production: 599.16 LCY/Hour JOB TIME AND COST Fleet size: 1 Team(s) Total job time: 10.96 Hours	Haul	Route:							
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$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		(Ft)		(%)	(%)	(fpm)		
Return Route:Seg #Haul DistanceGrade (%)Roll. ResTotal ResVelocityTravel1950.000.005.0030050.555Return Time:0.555minutesTotal Truck Cycle Time:4.958minutesLoading Tool unit Production Truck Unit Production721.88 LCY/HourAdjusted for job efficiency:599.16 LCY/HourOptimal No. of Trucks:2Truck(s)Selected Number of Trucks:2Truck(s)Adjusted ingle truck/loader team production: Adjusted multiple truck/loader team production:618.73 LCY/HourJOB TIME AND COST Fleet size:1Team(s)Total job time:10.96Hours	1	950	0.00	0.00	5.00	5.00	1845		
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Orgen Instruct Order (10) Instruct Instrut <thinstrut< th=""> Ins</thinstrut<>									
Image: Construction of the system of the	Seg #			Grade (%)	Roll. Res	Total Res	•		
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	P	roductior	721.88	LCY/Hour		Adjusted for j	ob efficiency:	599.16	LCY/Hour
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Adjusted hourly truck team production: 618.73 LCY/Hour Adjusted single truck/loader team production: 599.16 LCY/Hour Adjusted multiple truck/loader team production: 599.16 LCY/Hour JOB TIME AND COST Fleet size: 1 Team(s) Total job time: 10.96 Hours			372.73	LCY/Hour		Adjusted for j	ob efficiency:	309.37	LCY/Hour
Adjusted single truck/loader team production: 599.16 LCY/Hour Adjusted multiple truck/loader team production: 599.16 LCY/Hour JOB TIME AND COST Fleet size: 1 Team(s) Total job time: 10.96 Hours	Optimal No. o	of Trucks	2	Truck(s)		Selected Num	ber of Trucks:	2	Truck(s)
Adjusted multiple truck/loader team production: 599.16 LCY/Hour JOB TIME AND COST Fleet size: 1 Team(s) Total job time: 10.96 Hours				Adjuste	d hourly true	k team production	on: 618	.73 LCY	/Hour
JOB TIME AND COST Fleet size: 1 Team(s) Total job time: 10.96 Hours									
Fleet size: 1 Team(s) Total job time: 10.96 Hours				Adjusted multip	le truck/loade	r team production	on: 599	<u>.16</u> LCY	//Hour
	JOB	TIME	AND COST						
Unit cost: \$1.351 /I CY Total iob cost: \$8.870	F	leet size:	1	Team(s)	1	Total job time:	10.9	6 Ho	ours
	τ	Jnit cost:	\$1.351	/LCY	r	Fotal job cost:	\$8,87	70	

REVEGETATION WORK

5	Fask descrip	otion:	Revegetate Area F			
Site:	D Road (Gravel Pit	Permit Action:	2023-05	Permit/Job	#: M2002046
<u>P</u>	ROJECT Task #:	IDENTIFIC F04	CATION State: Colorado		Abbreviation:	None
	Date: User:	5/9/2023 ACY	County: Mesa		Filename:	M046-F04
	Age	ency or organi	zation name: DRMS			

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Composted manure DRMS Survey	1,000.00	pound	\$0.02	\$23.70
			Total Fertilizer Materials Cost/Acre	\$23.70

Application

Description		Cost /Acre
Manure, tractor spreader (MEANS 32 91 13.23 4450)		\$71.00
	Total Fertilizer Application Cost/Acre	\$71.00

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	3.00	9.71	\$33.38
Galleta	2.00	7.30	\$44.70
Saltbush, Four Wing	2.00	2.75	\$25.00
Globemallow, Scarlet (or copper)	0.50	5.66	\$67.75
Saltbush, Shadscale	2.00	2.98	\$20.00
Totals Seed Mix	9.50	28.41	\$190.83

Application

Description	Cost /Acre
-------------	------------

Drill Seeding (DRMS Survey Cost)		\$232.00
	Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Escort @ 1.0 pt/ac	1.00	ACRE	\$198.41	\$198.41
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	\$4.61	\$4.61
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
Total Mulch Materials Cost/Acre				\$1,045.74

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$73.00
Power mulcher (MEANS 32 91 13.16 0350)		\$141.57
Weed spray, truck, aquatic area, nox. [DMG]		\$62.72
Weed spray, truck, non-aquatic area, nox. [DMG]		\$62.72
	Total Mulch Application Cost/Acre	\$340.01

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

No. of Acres:	6.2	Cost /Acre:	\$2,020.46
Estimated Failure Rate:	40%	Cost /Acre*:	\$1,808.58
*Selected Replanting Work Items:	SEEDING, MULCHING		
Initial Job Cost: \$12,526.85			

Reseeding Job Cost:	\$4,485.28
Total Job Cost:	\$17,012
Job Hours:	10.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description	n: Ini t	tial Mobilization					
D Road Grav	vel Pit	Permit	Action: 2023-	-05		Permit/Job#: <u>M</u>	2002046
PROJECT IDI	ENTIFICATI	<u>ION</u>					
Task #: X		State: Co	olorado		Abbre	eviation: None	
	9/2023 CY	County: Me	esa		Fi	lename: M040	5-X01
Agency	or organization	n name: DRMS					
EQUIPMENT	TRANSPOR	<u>T RIG COST</u>					
					Shift ba Cost Data Sou	1	
Truo	ck Tractor Desc	cription: GENE	RIC ON-HIGH		UCK TRACT(P (2ND HALF,	DR, 6X4, DIESEI 2006)	L POWERED,
Tru	ck Trailer Desc	cription: G		ING GOO		ROP DECK EQU	IPMENT
Cost Breakdown:							
Available Rig		0-25 Tons	26-50 Tons		+ Tons		
	ip Cost/Hour:	\$15.25	\$23.06		37.58		
	ng Cost/Hour:	\$25.26	\$30.83	\$	51.41		
Operate	or Cost/Hour:	\$27.71	\$27.71	\$	27.71		
Help	er Cost/Hour:	\$0.00	\$20.22	\$	20.22		
Total Un	nit Cost/Hour:	\$68.22	\$101.82	\$	136.92		
NON ROADA	BLE EQUIPN	MENT:					
Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
I	(TONS)		t		fleet		
Cat D8T - 8SU	53.08	\$137.95	\$136.92	1	\$274.87	\$136.92	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.25	\$68.22	1	\$74.47	\$68.22	\$250.00
Power Mulcher	6.00	\$14.79	\$68.22	1	\$83.01	\$68.22	\$250.00
(Bowie LD-90)							
Cat 740 CAT 972H	36.49	\$104.55 \$53.96	\$101.82 \$101.82	2	\$412.74 \$155.78	\$203.64 \$101.82	\$500.00 \$250.00

Subtotals: \$1,000.87 \$578.82 \$1,500.00

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	\$80.76	2	\$161.52	\$161.52
		Subtotals:	\$161.52	\$161.52

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: Total one-way travel distance:	GRAND JUNCTION 3.00	miles
Average Travel Speed:	45.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$5,212.37	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$21.54	

Transportation Cycle Time:

Haul Time (Hours):	Non- Roadable Equipment 0.07	Roadable Equipment 0.07
Return Time (Hours):	0.07	0.07
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.13	0.13

JOB TIME AND COST

Total job time: 2.27 Hours

Total job cost: **\$5,234**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task descrij	ption: See	condary Mobilizat	tion				
e: D Road (Gravel Pit	Permit	Action: 2023-	-05	1	Permit/Job#:	M2002046
PROJECT	IDENTIFICAT	<u>ION</u>					
Task #: Date: User:	X02 5/10/2023 ACY	County: Mo	olorado esa				one 046-X02
C	ency or organizatio						
	Truck Tractor Deso	cription: GENE	RIC ON-HIGH ENERIC FOLD	WAY TR 400 HP	(2ND HALF,	rce: <u>CRG</u> DR, 6X4, DIE 2006)	Data SEL POWERED,
Cost Breakdo					(25T, 50T, AN	ND 100T)	
	Rig Capacities	0-25 Tons \$15.25	26-50 Tons \$23.06		+ Tons		
	ership Cost/Hour:				37.58 51.41		
	rating Cost/Hour: erator Cost/Hour:	\$25.26 \$27.71	\$30.83 \$27.71		27.71		
	Helper Cost/Hour:	\$0.00	\$20.22		20.22		
	l Unit Cost/Hour:	\$68.22	\$101.82		36.92		
NON ROA Machine Description		MENT: Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni	Fleet Size	Haul Trip Cost/hr/	Return Trip Cost/hr/ flee	
Drill/Broadc	(TONS) ast 25.00	\$6.25	t \$68.22	1	fleet \$74.47	\$68.22	\$250.00
Seeder with Tractor							

 Subtotals:
 \$157.48
 \$136.44
 \$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	\$80.76	2	\$161.52	\$161.52
Subtotals:			\$161.52	\$161.52

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	GRAND JUNCTION 3.00 45.00	miles mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$1,354.15	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$21.54	_

Transportation Cycle Time:

Haul Time (Hours):	Non- Roadable Equipment 0.07	Roadable Equipment 0.07
Return Time (Hours):	0.07	0.07
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.13	0.13

JOB TIME AND COST

Total job time: **2.27** Hours

Total job cost: \$1,376