

May 10, 2023

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

RE: D Road Gravel Pit, Permit No. M-2002-046, Proposed Surety Increase (SI-1)

Dear Mr. Gardner:

This reclamation cost update was in response to the site inspection conducted on May 2, 2023. It is Division policy to periodically update its costs to ensure that the Financial Warranty adequately, reflects the actual current cost of fulfilling the requirements of the approved reclamation plan.

The bond was last recalculated in 2014 with TR-1 and no increases have occurred since the permit issuance in 2003. Below is a table summarizing input values that have been updated based on site conditions. This table does not account for price changes resulting from inflation or other RS Means cost changes. Bond calculations are based on a combination of field observations and worst case scenario based on the approved reclamation plan.

Assumptions:

- Area C undisturbed, no tasks
- Did not include pumping dewatering task
- All compacted areas used for stockpiling or backfilled requires ripping prior to topsoil replacement
- Topsoil stockpiles are located in Area A and Area D. While perimeter berms consist of topsoil, per the Reclamation Plan these are permanent features and are thus not a source for reclamation materials. *Could revise Rec Plan via a TR. However this will require revegetation of the additional disturbed areas and must not be in conflict of a county permit (visual screen required post mining).
- Assumed enough topsoil/overburden material is on site for reclamation despite additional reveg areas created due to backfilling. No cost assessed for import of additional topsoil.
- Revegetation per Reclamation Plan calls for application of 1000 lbs. /ac of bio solids (used composted manure). Seed mix drilled, Straw mulch at 2000 lbs. /ac power mulched and crimped into place. Portions of this could also be revised via TR.



Task	Form Used	Description
A02	Ripper	Rip 13.8 ac
A03	Truck	Apply topsoil 13.8 ac @ 7" = 12,987CY
		Avg Haul 600 LF from stockpile in D
		Includes dozer to grade transported material
A04	Reveg	Reveg 13.8ac w 40% failure
B04	Reveg	Reveg 3.35 ac
		Total phase size 14.5 ac. West pond 3.41 ac, East pond 6.3 ac, land area 4.79 ac. 70% of the 4.79 ac = 3.353 ac
D02	Ripper	Rip 6.6 ac
D03	Dozer	Apply topsoil 6.6 ac @ 7" = 6,211 CY
		Dozer 250 ft. push
D04	Reveg	Reveg 6.6 ac
E01	Dozer	Highwall reduction 30'D to a 3:1 = 42,400 CY avg 170 push
		600 LF vertical backfill = 29,900 CY 200' push
		1500 LF cut/fill 1:1 = 12,500 CY 100' push
E02	Ripper	Rip backfilled area 6 ac
E03	Truck	Topsoil affected lands 8 ac @ 7" = 7,529 CY
		3 ac pond, 2 ac stripped not mined, 6 ac prev. backfilled, total of 11 ac total affected
		Haul 1500 LF from stockpile in D
		Includes dozer to grade transported material
E04	Reveg	Reveg 8 ac
F01	Dozer	Highwall reduction 30'D to a 3:1 = 19,167 CY
		2300 LF cut/fill 1:1 100' push
F02	Ripper	Rip backfilled areas 6.2 ac
		3.6 ac pond of 9.8 ac affected, 6.2 ac remain

F03	Truck	Topsoil 6.2 ac @ 7" = 5,835 CY Haul 950 LF from stockpile in D
F04	Reveg	Reveg 6.2 ac
X01	Mob	Initial Mobilization
X02	Mob	Secondary Mobilization reveg equipment only

Per policy I wanted to send this out for review prior to issuance. Please look it over and let me know if there are errors or concerns. As noted you may also wish to revise your reclamation plan. If no response is received by **Monday, July 10, 2023** then I'll issue SI-1 the following Monday as is. SI-1 will result in a total required bond amount of \$313,138, which is an increase of \$150,849 over the \$162,289 currently held.

Please feel free to contact me with any further questions. Amy Yeldell at the Division of Reclamation, Mining and Safety, Rm 215, 1001 E 62nd Ave, Denver CO 80216. Direct contact can be made by phone at 303-866-3567 Ext 8183 or via email at amy.yeldell@ state.co.us

Sincerely,

Amy Yeldell

Environmental Protection Specialist

Amy Geldell

Ec:

Travis Marshall, Senior EPS, Grand Junction DRMS

COST SUMMARY WORK

D Road (Gravel Pit	Pe	rmit Action:	2023-05	Permit/Job	#: <u>M2002046</u>
	IDENTIFIC	<u>CATION</u>				
Task #:	ACY	State:	Colorado		Abbreviation:	None
Date:	5/9/2023	County:	Mesa		Filename:	M046-ACY
User:	ACY					

TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	
Task	Description	Used	Size	Hours	Cost
A02	Rip Area A	RIPPER	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	7 1	9.67	\$2,737
D02 D03	Apply topsoil to Area D	DOZER	1	41.17	\$10,808
D03	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	7 1	2.26	T #5 224
			- 1		\$5,234
X02	Secondary Mobilization	MOBILIZE	1	2.26	\$1,376
		500.64	\$253,762		

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:2.02Total =\$5,126Performance bond:1.05Total =\$2,665Job superintendent:53.88Total =\$4,048

Profit: 10.00 Total = $\frac{$3.80}{$25,376}$

TOTAL O & $P = \frac{37,215}{}$

CONTRACT AMOUNT (direct + O & P) = $\sqrt{\$290,977}$

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

CONTINGENCY: 3.00 Total = \$7,613

TOTAL INDIRECT COST = \$59,376

TOTAL BOND AMOUNT (direct + indirect) = \$313,138

BULLDOZER RIPPING WORK

	Task description:	Rip	Area A				
Site	D Road Grave	el Pit	Permit Action:	2023-05	Permit/Job	o#: <u>M2002046</u>	
	PROJECT ID	ENTIFICATI	<u>ON</u>				
	Task #: A0	2	State: Colorado		Abbreviation	: None	
		/2023	County: Mesa		Filename		
	User: AC	Y	<u> </u>				
	Agency	or organization	name: DRMS				_
	HOURLY EQ	UIPMENT CO	OST				
	Basic	Machine: Cat	: D8T - 8SU		Horsepower:	310	
	Ripper Att		hank Ripper			l per day	_
	11		**		Data Source:	(CRG)	_
	Cost Breakdown:						_
		•			Utilization %		
		Ownership Co		\$124.85	NA		
		Operating Co		\$97.63	100		
		er Ownership Co		\$13.10	NA		
	Ripp	per Operating Co		\$7.30	100		
		Operator Co		\$40.04	NA		
		Total Unit Co	ost/Hour:	\$282.92			
		Total Fleet Co	ost/Hour: \$28	2.92			
	MATERIAL (UANTITIES	Sel	ected estimating	g method: Area		
	Alternate Method	<u>ls:</u>					
Seismic:	NA		Bank Volume:	NA	BCY	NA	
Area:	13.80	acres	Rip Depth (ft):	2.00	Volume: 44,528		CY or CC
		Source of estin	nated quantity: Rec Pl	an			
	HOURLY PRO	DDUCTION					_
		<u>32 C C 1101 (</u>					
	Seismic:		Seismic Velocity:	NA	feet/second		
		'	Seisinic velocity.	1111			
	Area:						
			ge Ripping Depth:	2.56	feet/pass		
			e Ripping Width:	7.08	feet/pass		
			e Ripping Length:age Dozer Speed:	500.00 88.00	feet/pass feet/minute		
			Maneuver Time:	0.25	minutes/pass		
		_	tion per unit area:	0.822	acres/hour		
	Job Condition Co						
			Unit Production:	0.822	Acres/hr		
	Oli		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		
		•	Hourly Fleet Production:	0.68	Acres/hr		
	JOB TIME AN	ND COST					
	Fleet size:	1	Grader(s)	Total job tin	ne: 20.23	Hours	
	Unit cost:	\$414.674	Per acre	Total job co	ost: \$5,723		

TRUCK/LOADER TEAM WORK

Task description:	Apply to	opsoil to Are	a A				
Site: D Road Gravel	Pit	Permit .	Action	: 2023-05	1	Permit/Job#: M	2002046
PROJECT IDEN	NTIFICATION	<u>I</u>					
Task #: A03			olorad	0	Ab	breviation: No	
Date: 5/9/20 User: ACY	023	County: M	Iesa			Filename: MO)46-A03
	organization nar	ne: DRMS	1				
Agency of	organization har	iic. <u>Didivis</u>	,				
HOURLY EQUI	PMENT COST	<u>r</u>			Shift bas	is: 1 per day	
		T 1		quipment Descri	ption		
	Fruck Loader Tea	m -Truck: -Loader:	Cat 74				
Supp	ort Equipment -L		NA	<i>712</i> 11			
		ump Area:		98T - 8SU			
Road M	Iaintenance –Mot -Wa	or Grader: iter Truck:	NA NA				
		1					
Cost Breakdown:		ader Team			Equipment		ce Equipment Water Truck
	Truck	Loader		Load Area	Dump Area	Motor Grader	water Truck
%Utilization-machine:	100		.00	NA	100	NA	NA
Ownership cost/hour:	\$104.55	\$53.		NA	\$124.85	NA	NA
Operating cost/hour:	\$73.81	\$50.		NA	\$97.63	NA	NA
%Utilization-riper: Ripper own. cost/hour:	NA NA	0.2	.00	NA NA	NA \$0.00	NA NA	NA NA
Ripper op. cost/hour:	NA NA	-	.00	NA NA	\$0.00	NA NA	NA NA
Operator cost/hour:	\$24.82	\$35.		NA	\$40.04	NA	NA
Unit Subtotals:	\$203.18	\$140		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 co	st/hour: \$809.5 9)	,				
MATERIAL QU	<u> IANTITIES</u>						
Initial volume	: 12,987	(CCY	Swell	factor: 1.125		
Loose volume	14,61	<u>0</u> 1	LCY				
So	ource of estimated	volume:	13.8 ac	e @7"`			
Source	of estimated swe			ndbook			
	Material Purch		\$0.00 \$0.00				
	10	Jui COSt	,0.00				
HOURLY PRO	DUCTION						
Truck Capacity:							
Truck Payload (wei				Pounds/LCY			
Material v Descr		Dry packed		_ FOUNDS/LCY			

Pounds

LCY

87,000

34.12

Rated Payload:

Payload Capacity:

Truck Bed (volume) Basis: Struck Volume:	24.20 L	.CY				
Heaped Volume:	31.40 L	.CY				
Average Volume:	27.80 I	.CY				
Adjusted Volume:	31.40 L	LCY .				
Final	Truck Volume I	Based on Number o	f Loader Passes:	30.80	LCY	
Loading Tool Capacity			•			
			Buck	et Size Class: N	A	_
Rated Capacity:	5.600	LCY (heaped)				_
Bucket Fill Factor:	1.100	Other - rock/dia	rt mixtures (100-	120%) 1.100		_
Adjusted Capacity: _	6.160	LCY				
Job Condition Corrections:		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				
T 1' T 10 1 T'	NT 1	CT 1' TT 1 D	D : 1. T	211.00 1	~	
Loading Tool Cycle Time:		of Loading Tool Pa	asses Required to F	Fill Truck:	5	passes
Loading Tool Cycle Time: Excavators and Front Shove		of Loading Tool Pa	asses Required to F	Fill Truck:	5	passes
-	<u>ls:</u> s. Job Condition	Rating: NA	sses Required to F	Fill Truck:	5	passes
Excavators and Front Shove Machine Cycle Time v Selected Value v	ls: s. Job Condition within this Basic	Rating: NA Rating: NA	asses Required to F	Fill Truck:	5	passes
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders –	ls: s. Job Condition within this Basic Material Descrip	Rating: NA Rating: NA	asses Required to F	Fill Truck:	5	passes
Excavators and Front Shove Machine Cycle Time v Selected Value v	ls: s. Job Condition within this Basic Material Descrip	Rating: NA Rating: NA	asses Required to F	Fill Truck:		passes
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA	ls: s. Job Condition within this Basic Material Descrip Ma	Rating: NA	· 	Dump: 0.100)	
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders –	ls: s. Job Condition within this Basic Material Descrip Ma	Rating: NA	· 	Dump: 0.100) min	
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA	ls: s. Job Condition within this Basic Material Descrip Ma Unadjusted Bas	Rating: NA Rating: NA otion: nneuver: NA ic Loader Cycle Ti	me (load, dump, n	Dump: 0.100)	
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors	Is: s. Job Condition within this Basic Material Descrip Ma Unadjusted Bas Material up to	Rating: NA	me (load, dump, m	Dump: 0.100 naneuver): 0. Factor (min.)	.525 min Source	
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material:	ls: s. Job Condition within this Basic Material Descrip Ma Unadjusted Bas Material up to Conveyor or d	Rating: NA Rating: NA otion: nneuver: NA ic Loader Cycle Ti	me (load, dump, n	Dump: 0.100 naneuver): 0. Factor (min.) 0.020	.525 min Source (Cat HB)	
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Is: s. Job Condition within this Basic Material Descrip Ma Unadjusted Bas Material up to Conveyor or descriped Constant opera	Rating: NA Rating: NA Dition: Inneuver: NA It Loader Cycle Tit I/8" diameter 0.02 Divide Title 10 ft. highership of trucks and attion -0.04	me (load, dump, mgh and up 0.00	Dump: 0.100 naneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040	Source (Cat HB) (Cat HB)	
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	Is: s. Job Condition within this Basic Material Descrip Ma Unadjusted Bas Material up to Conveyor or descriped Constant opera	Rating: NA Rating: NA Potion: Inneuver: NA It Loader Cycle Tit I/8" diameter 0.02 ozer piled 10 ft. highership of trucks and attion -0.04 I factor not application.	me (load, dump, mgh and up 0.00 l loaders -0.04	Dump: 0.100 naneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Is: s. Job Condition within this Basic Material Descrip Ma Unadjusted Bas Material up to Conveyor or descriped Constant opera	Rating: NA Rating: NA Potion: Inneuver: NA Ic Loader Cycle Tit I/8" diameter 0.02 Ozer piled 10 ft. high ership of trucks and attion -0.04 - factor not applica Net Cycle Tir	me (load, dump, me) thand up 0.00 loaders -0.04 loaders -0.00 me Adjustment:	Dump: 0.100 naneuver): 0. 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	
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Is: s. Job Condition within this Basic Material Descrip Ma Unadjusted Bas Material up to Conveyor or descriped Constant opera	Rating: NA Rating: NA Potion: Inneuver: NA It Loader Cycle Tit I/8" diameter 0.02 Ozer piled 10 ft. high ership of trucks and attion -0.04 I factor not applicated to adjusted Load	me (load, dump, m gh and up 0.00 I loaders -0.04 able 0.00 me Adjustment:	Dump: 0.100 naneuver): 0. 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) minutes minutes	
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Is: s. Job Condition within this Basic Material Descrip Ma Unadjusted Bas Material up to Conveyor or descriped Constant opera	Rating: NA Rating: NA Potion: Inneuver: NA It Loader Cycle Tit I/8" diameter 0.02 Ozer piled 10 ft. high ership of trucks and attion -0.04 I factor not applicated to adjusted Load	me (load, dump, me) thand up 0.00 loaders -0.04 loaders -0.00 me Adjustment:	Dump: 0.100 naneuver): 0. 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	
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Is: s. Job Condition within this Basic Material Descrip Ma Unadjusted Bas Material up to Conveyor or descriped Constant opera	Rating: NA Rating: NA Potion: Inneuver: NA It Loader Cycle Tit I/8" diameter 0.02 Ozer piled 10 ft. high ership of trucks and attion -0.04 I factor not applicated to adjusted Load	me (load, dump, m gh and up 0.00 I loaders -0.04 able 0.00 me Adjustment:	Dump: 0.100 naneuver): 0. 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) minutes minutes	
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	s. Job Condition within this Basic Material Descrip Ma Unadjusted Bas Material up to Conveyor or d Common own Constant opera No adjustment	Rating: NA Rating: NA Potion: Inneuver: NA It Loader Cycle Tit I/8" diameter 0.02 Ozer piled 10 ft. high ership of trucks and attion -0.04 I factor not applicated to adjusted Load	me (load, dump, me) gh and up 0.00 I loaders -0.04 able 0.00 me Adjustment: ler Cycle Time: Time per Truck:	Dump: 0.100 naneuver): 0. 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) minutes minutes	
Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	s. Job Condition within this Basic Material Descrip Ma Unadjusted Bas Material up to Conveyor or descriped Common owner Constant operation No adjustment 1. 0.60	Rating: NA Rating: NA NA Dition: Inneuver: NA It Loader Cycle Tit I/8" diameter 0.02 Diver piled 10 ft. hig ership of trucks and attion -0.04 I factor not applicate the cycle Tit Adjusted Load Net Load T	me (load, dump, me) thand up 0.00 I loaders -0.04 able 0.00 me Adjustment: ler Cycle Time: Cime per Truck:	Dump: 0.100 naneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465 1.960	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

<u>Truck Travel (Haul & Return) Time:</u> Road Condition: <u>Rutted dirt, little maintenance, no water, 2" tire penetration 5.0</u>

Truck(s)

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	0.00	5.00	5.00	1845	0.654

Haul Time: **0.654** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min) 600.00 0.00 5.00 5.00 3005 0.439

Truck(s)

Return Time: 0.439 minutes
Total Truck Cycle Time: 4.653 minutes

Selected Number of Trucks: 2

Loading Tool unit

Production 721.88 LCY/Hour Adjusted for job efficiency: 599.16 LCY/Hour Truck Unit Production 397.16 LCY/Hour Adjusted for job efficiency: 329.65 LCY/Hour

Adjusted hourly truck team production: 659.29 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

Optimal No. of Trucks: 2

 Fleet size:
 1
 Team(s)
 Total job time:
 24.38
 Hours

 Unit cost:
 \$1.351
 /LCY
 Total job cost:
 \$19,742

REVEGETATION WORK

D Road Gravel Pit	Perm	it Action: 2023-	-05		Permit/Job#	#: <u>M2002046</u>
ROJECT IDENTIFICA	ATION					
Task #: A04	State: (Colorado		Abł	breviation:	None
Date: 5/9/2023		Mesa				M046-A04
User: ACY						
Agency or organiza	ation name: DRM	IS				
ERTILIZING						
nterials						
Description		Units / Acre	Unit	Cost	t / Unit	Cost /Acre
Composted manure DRM	IS Survey	1,000.00	pound	\$0.0		\$23.70
Composice manare Draw	is survey	1,000.00	pound			Ψ23.70
				Tot	al Fertilizer	
					Materials	444
					Cost/Acre	\$23.70
plication Description						Cost /Acre
-	(MEANS 32 91 13.2	23 4450)				Cost /Acre \$71.00
Description	(MEANS 32 91 13.2		Fertilizer A _l	pplication	n Cost/Acre	
Description	(MEANS 32 91 13.2		Fertilizer A _l	oplication	n Cost/Acre	\$71.00
Description Manure, tractor spreader LLING	(MEANS 32 91 13.2		Fertilizer Ap	oplicatio	n Cost/Acre	\$71.00
Description Manure, tractor spreader		Total	Fertilizer Aj	oplication	n Cost/Acre	\$71.00 \$71.00
Description Manure, tractor spreader LLING Description		Total	Fertilizer A _l	oplication	n Cost/Acre	\$71.00 \$71.00 Cost /Acre
Description Manure, tractor spreader LLING Description		Total			n Cost/Acre	\$71.00 \$71.00 Cost /Acre \$117.18
Description Manure, tractor spreader LLING Description		Total				\$71.00 \$71.00 Cost /Acre
Description Manure, tractor spreader LLING Description		Total				\$71.00 \$71.00 Cost /Acre \$117.18
Description Manure, tractor spreader LLING Description Disc harrowing, 6" deep (Total	Tot		g Cost/Acre	\$71.00 \$71.00 Cost /Acre \$117.18
Description Manure, tractor spreader LLING Description Disc harrowing, 6" deep (Total	Tot	tal Tilling Rate – PLS	g Cost/Acre	\$71.00 \$71.00 Cost /Acre \$117.18
Description Manure, tractor spreader LLING Description Disc harrowing, 6" deep (Total	Tot	tal Tilling Rate – PLS LBS /	g Cost/Acre Seeds per SQ.	\$71.00 \$71.00 Cost /Acre \$117.18
Description Manure, tractor spreader LLING Description Disc harrowing, 6" deep of the de	(MEANS 32 91 13.2	Total	Total	tal Tilling Rate – PLS LBS / Acre	g Cost/Acre Seeds per SQ. FT	\$71.00 \$71.00 Cost /Acre \$117.18 \$117.18
Description Manure, tractor spreader LLING Description Disc harrowing, 6" deep of the de	(MEANS 32 91 13.2	Total	Total	Rate – PLS LBS / Acre	g Cost/Acre Seeds per SQ. FT 9.71	\$71.00 \$71.00 \$71.00 Cost /Acre \$117.18 \$117.18
Description Manure, tractor spreader LLING Description Disc harrowing, 6" deep of the	(MEANS 32 91 13.2	Total	Total	Rate – PLS LBS / Acre 3.00	Seeds per SQ. FT 9.71 7.30	\$71.00 \$71.00 \$71.00 Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38 \$44.70
Description Manure, tractor spreader LLING Description Disc harrowing, 6" deep of the second secon	(MEANS 32 91 13.2	Total	Tot I H	Rate – PLS LBS / Acre 3.00 2.00	Seeds per SQ. FT 9.71 7.30 2.75	\$71.00 \$71.00 \$71.00 Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38 \$44.70 \$25.00
Description Manure, tractor spreader LLING Description Disc harrowing, 6" deep of the	(MEANS 32 91 13.2	Total	Tot H	Rate – PLS LBS / Acre 3.00	Seeds per SQ. FT 9.71 7.30	\$71.00 \$71.00 \$71.00 Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38 \$44.70

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

JOB TIME AND COST

 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

20.00

REVEGETATION WORK

D Road Gravel Pit		Permit Action: 2023-05 Permit/Job#s				
Task #: B04 Date: 5/9/2023	CATION State: County:	Colorado Mesa			reviation: Filename:	None M046-B04
User: ACY Agency or organ	ization name:DR	MS				
ERTILIZING						
aterials						
D 1.11		Units /	T T •4	Cont	/ T T 24	Cost /A one
Description	NAC C	Acre	Unit		/ Unit	Cost /Acre
Composted manure DR	avis survey	1,000.00	pound	\$0.02	<u>Z</u>	\$23.70
				Tota	l Fertilizer Materials Cost/Acre	
1						
Description Manure, tractor spreade	er (MEANS 32 91 13	3.23 4450)				Cost /Acre \$71.00
Description	er (MEANS 32 91 13		Fertilizer A	application	ı Cost/Acre	\$71.00
Description Manure, tractor spreado	er (MEANS 32 91 13		Fertilizer A	Application	ı Cost/Acre	\$71.00
Description Manure, tractor spreado	er (MEANS 32 91 13		Fertilizer A	application	ı Cost/Acre	\$71.00
Description Manure, tractor spreade		Total	Fertilizer A	application	ı Cost/Acre	\$71.00 \$71.00
Description Manure, tractor spreado LLING Description		Total			a Cost/Acre	\$71.00 \$71.00 Cost /Acre \$117.18
Description Manure, tractor spreade LLING Description Disc harrowing, 6" dee		Total				\$71.00 \$71.00 Cost /Acre \$117.18
Description Manure, tractor spreade LLING Description Disc harrowing, 6" dee		Total	To			\$71.00 \$71.00 Cost /Acre \$117.18
Description Manure, tractor spreade LLING Description Disc harrowing, 6" dee	ep (MEANS 32 91 13	Total	To	Rate – PLS LBS /	Seeds per SQ.	\$71.00 \$71.00 Cost /Acre \$117.18 \$117.18
Description Manure, tractor spreade LLING Description Disc harrowing, 6" dee CEDING Seed Mix Indian Ricegrass - Palo Galleta	ep (MEANS 32 91 13	Total	Te	Rate – PLS LBS / Acre 3.00 2.00	Seeds per SQ. FT 9.71 7.30	\$71.00 \$71.00 Cost /Acre \$117.18 \$117.18 Cost /Acre
Description Manure, tractor spreade LLING Description Disc harrowing, 6" dee EEDING Seed Mix Indian Ricegrass - Palo Galleta Saltbush, Four Wing	p (MEANS 32 91 13	Total	Te	Rate – PLS LBS / Acre 3.00 2.00 2.00	Seeds per SQ. FT 9.71 7.30 2.75	\$71.00 \$71.00 \$71.00 Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38 \$44.70 \$25.00
Description Manure, tractor spreade LLING Description Disc harrowing, 6" dee CEDING Seed Mix Indian Ricegrass - Palo Galleta Saltbush, Four Wing Globemallow, Scarlet (p (MEANS 32 91 13	Total	To	Rate – PLS LBS / Acre 3.00 2.00 2.00 0.50	Seeds per SQ. FT 9.71 7.30 2.75 5.66	\$71.00 \$71.00 \$71.00 Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38 \$44.70 \$25.00 \$67.75
Description Manure, tractor spreade LLING Description Disc harrowing, 6" dee EEDING Seed Mix Indian Ricegrass - Palo Galleta Saltbush, Four Wing	p (MEANS 32 91 13	Total	To	Rate – PLS LBS / Acre 3.00 2.00 2.00	Seeds per SQ. FT 9.71 7.30 2.75	\$71.00 \$71.00 \$71.00 Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38 \$44.70 \$25.00

Description

Cost /Acre

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

MULCHING and MISCELLANEOUS

Materials

Reveg Worksheet Cont'd

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

JOB TIME AND COST

 No. of Acres:
 3.35
 Cost / Acre:
 \$2,020.46

 Estimated Failure Rate:
 40%
 Cost / Acre*:
 \$1,808.58

*Selected Replanting Work Items: SEEDING, MULCHING

Initial Job Cost: \$6,768.54

Reseeding Job Cost: \$2,423.50

Total Job Cost: \$9,192

3.00

BULLDOZER RIPPING WORK

	Task description:	Rip	Area D				
Site	D Road Grave	el Pit	Permit Action:	2023-05	Permit/Jo	ob#: <u>M200</u>	2046
	PROJECT ID	ENTIFICATI	<u>ON</u>				
	Task #: D0	2	State: Colorado		Abbreviation	n: None	
		/2023	County: Mesa		Filenam		D02
	User: AC						
	Agency	or organization	name: DRMS				
	HOURLY EQ	UIPMENT CO	OST				
	Basic	Machine: Cat			Horsepower:	310	
	Ripper Att		hank Ripper		Shift Basis:	1 per day	
	11		11		Data Source:	(CRG)	
	Cost Breakdown:						
		-			Utilization %		
		Ownership Co	ost/Hour:	\$124.85	NA		
		Operating Co		\$97.63	100		
		er Ownership Co		\$13.10	NA		
	Ripp	per Operating Co		\$7.30	100		
		Operator Co		\$40.04	NA		
		Total Unit Co	ost/Hour:	\$282.92			
		Total Fleet Co	ost/Hour: \$28	2.92			
	MATERIAL C	<u>UANTITIES</u>	. Sel	ected estimating	g method: Area		
	Alternate Method	ls:		·			
Seismic:	NA	_	Bank Volume:	NA	ВСҮ	NA	
Area:	6.60	acres	Rip Depth (ft):	2.00	Volume: 21,296	1171	BCY or CC
		Source of estin	mated quantity: Staff e	estimates			
	HOURLY PRO						
		<u>JDUCTION</u>					
	Seismic:		Caianaia Walaaitan	NTA	f		
		1	Seismic Velocity:	NA	feet/second		
	Area:						
			ge Ripping Depth:	2.56	feet/pass		
			e 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			0.022			
			_	0.822	A		
	Un	adjusted Hourly	Unit Production:	0.822	Acres/hr		
			Site Altitude:	4,600	feet (CATIUD)		
			Altitude Adj:	1.00	(CAT HB)		
			Job Efficiency: Net Correction:	0.83 0.83	(1 shift/day) multiplier		
		•	Hourly Unit Production:		Acres/hr		
		· ·	Hourly Fleet Production:	0.68	Acres/hr		
	JOB TIME AN	ND COST					
	Fleet size:	1	Grader(s)	Total job tin	ne: 9.67	I	Hours
	Unit cost:	\$414.674	Per acre	Total job co	ost: \$2,737		

BULLDOZER WORK

Task description:	Appl	y topsoil to A	rea D				
: D Road Gravel I	Pit	Pern	nit Action:	2023-05		Permit/Job#:	M2002046
PROJECT IDEN	TIFICATI	<u>ON</u>					
Task #: D03		State:	Colorado			Abbreviation:	None
Date: 5/9/20)23	County:	Mesa			Filename:	M046-D03
User: ACY		-				-	
Agency or	organization	name: DR	MS				
HOURLY EQUI	PMENT CO	<u>OST</u>					
Basic Machine:	Cat D8T - 8	BSU					
Horsepower:	310						
Blade Type:	Semi-Unive	ersal					
Attachment:	NA 1 man day			<u></u>			
Shift Basis: Data Source:	1 per day (CRG)						
	(CKU)			_			
Cost Breakdown:				1			
			449 :07		zation %		
Ownership Cost/H			\$124.85		NA 100		
Operating Cost/H			\$97.63		100		
Ripper own. Cost/H			\$0.00 \$0.00	-	NA 0		
Ripper op. Cost/H							
Operator Cost/H	our:		\$40.04	-	NA		
MATERIAL QU Initial Volume: Swell factor:	6,211 1.125		_				
Loose volume:	6,987 LCY		_				
Source of estimated Source of estimated		6.6 ac @ 7					
HOURLY PROD	<u>UCTION</u>						
Average push distant Unadjusted hourly p		250 feet 377.8 LCY/h	nr				
Materials consistence	ey description	: Consolie	dated stock	oile 1.0			
Average push gradic Average site altitude		feet					
Material weight:	_2,550	lbs/LCY					
Weight description:	Earth	- Dry packed					
Job Condition Corre				T.	Source		
	rator Skill:		750		(AVG.)		
Material co			000	((CAT HB)		
Dozir	g method:		000		(GEN.)		
	Visibility: _	1.0	000		(AVG.)		

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

Net correction: 0.4492

Adjusted unit production: 169.71 LCY/hr
Adjusted fleet production: 169.71 LCY/hr

JOB TIME AND COST

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

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

REVEGETATION WORK

User: ACY		Action: 2023- lorado	03			: <u>M2002046</u>
Task #: D04 Date: 5/9/2023 User: ACY				Abbr	eviation:	N
Task #: D04 Date: 5/9/2023 User: ACY				Abbr	eviation:	N
Date: 5/9/2023 C User: ACY				Abbi	evianon:	
User: ACY	ounty. Nie	sa		E		None M046-D04
				_	iiciiaiiic.	M040-D04
A						
Agency or organization nam	e: DRMS					
<u>ERTILIZING</u>						
aterials						
Description		Units /	T T 24	Cost /	'I Init	Cost /Acre
Description Control of the DRMS S		Acre	Unit		Omt	
Composted manure DRMS Survey	<u>'</u>	1,000.00	pound	\$0.02		\$23.70
				Total	Fertilizer	
					Materials	
					Cost/Acre	\$23.70
		Total	Fertilizer <i>i</i>	Application	Cost/Acre	\$71.00
LLING						
Description						Cost /Acre
Disc harrowing, 6" deep (MEANS	32 91 13.23	6100)				\$117.18
•						
			T	otal Tilling	Cost/Acre	\$117.18
						Ψ117110
<u>EEDING</u>						
				Rate –		
				PLS	Seeds	Cost /Acre
Seed Mix				LBS/	per SQ. FT	
Seed Mix					1' 1	
				Acre		
Indian Ricegrass - Paloma				3.00	9.71	\$33.38
Indian Ricegrass - Paloma Galleta				3.00 2.00	9.71 7.30	\$44.70
Indian Ricegrass - Paloma Galleta Saltbush, Four Wing				3.00 2.00 2.00	9.71 7.30 2.75	\$44.70 \$25.00
Indian Ricegrass - Paloma Galleta Saltbush, Four Wing Globemallow, Scarlet (or copper)				3.00 2.00 2.00 0.50	9.71 7.30 2.75 5.66	\$44.70 \$25.00 \$67.75
Indian Ricegrass - Paloma Galleta Saltbush, Four Wing				3.00 2.00 2.00	9.71 7.30 2.75	\$44.70 \$25.00

Application

Description

CIRCES	Cost	Estimating	Software

Cost /Acre

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

MULCHING and MISCELLANEOUS

Materials

Reveg Worksheet Cont'd

	Units /			
Description	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 1	Nursery Stoc	k Cost / Acre	\$0.00

JOB TIME AND COST

 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

10.00

BULLDOZER WORK

PROJECT IDENTIFICATION Task #: E01 State: Colorado Date: 5/9/2023 County: Mesa User: ACY Agency or organization name: DRMS HOURLY EQUIPMENT COST	Permit/Job#: Abbreviation: Filename:	M2002046
Task #: E01 State: Colorado Date: 5/9/2023 County: Mesa User: ACY Agency or organization name: DRMS HOURLY EQUIPMENT COST	-	
Task #: E01 State: Colorado Date: 5/9/2023 County: Mesa User: ACY Agency or organization name: DRMS HOURLY EQUIPMENT COST	-	
Date: 5/9/2023 County: Mesa User: ACY Agency or organization name: DRMS HOURLY EQUIPMENT COST	-	None
User: ACY Agency or organization name: DRMS HOURLY EQUIPMENT COST	i ilciiailic.	M046-E01
HOURLY EQUIPMENT COST	-	
HOURLY EQUIPMENT COST		
D I M II G DOM OGII		
Basic Machine: Cat D8T - 8SU		
Horsepower: 310		
Blade Type: Semi-Universal Attachment: NA		
Shift Basis: 1 per day		
Data Source: (CRG)		
Cost Breakdown:		
Utilization %		
Ownership Cost/Hour: \$124.85 NA		
Operating Cost/Hour: \$97.63 100	<u> </u>	
Ripper own. Cost/Hour: \$0.00 NA		
Ripper op. Cost/Hour: \$0.00		
Operator Cost/Hour: \$40.04 NA		
Total unit Cost/Hour: \$262.52		
MATERIAL QUANTITIES Initial Volume: 42,400		
Swell factor: 1.125		
Looga voluma: /I//IIII LCV		
Loose volume: 47,700 LCY	2020	
Source of estimated volume: Source of estimated swell factor: 600LF vertical backfill, 1500LF 1:1 cut/fill 3 Cat Handbook	30 D	
Source of estimated volume: 600LF vertical backfill, 1500LF 1:1 cut/fill 2	30°D	
Source of estimated volume: Source of estimated swell factor: 600LF vertical backfill, 1500LF 1:1 cut/fill 3 Cat Handbook Cat Handbook	30 ⁻ D	
Source of estimated volume: Source of estimated swell factor: 600LF vertical backfill, 1500LF 1:1 cut/fill 3 Cat Handbook	30°D	
Source of estimated volume: Source of estimated swell factor: 600LF vertical backfill, 1500LF 1:1 cut/fill 3 Cat Handbook	<u>30 D</u>	
Source of estimated volume: Source of estimated swell factor: 600LF vertical backfill, 1500LF 1:1 cut/fill 3 Cat Handbook	<u>30 D</u>	
Source of estimated volume: Source of estimated swell factor: 600LF vertical backfill, 1500LF 1:1 cut/fill 1	<u>30 D</u>	
Source of estimated volume: Source of estimated swell factor: 600LF vertical backfill, 1500LF 1:1 cut/fill 1	30 D	
Source of estimated volume: Source of estimated swell factor: 600LF vertical backfill, 1500LF 1:1 cut/fill in the content of the content o		
Source of estimated volume: Source of estimated swell factor: 600LF vertical backfill, 1500LF 1:1 cut/fill 1 Cat Handbook		
Source of estimated volume: Source of estimated swell factor: 600LF vertical backfill, 1500LF 1:1 cut/fill 3 Cat Handbook		

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: 203.60 LCY/hr
Adjusted fleet production: 203.6 LCY/hr

JOB TIME AND COST

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

Total job time: 234.28 Hours 561,503

BULLDOZER RIPPING WORK

	Task description:	Rip A	rea E				
Site	: D Road Grav	el Pit	Permit Action:	2023-05	Permit/	Job#: <u>M</u> 2	2002046
	PROJECT ID	ENTIFICATION ENTIF	<u>ON</u>				
	Task #: E0	2	State: Colorado		Abbreviat	ion: Non	ie
		0/2023	County: Mesa		Filena		46-E02
	User: AC	CY					
	Agency	or organization	name: DRMS				
	HOURLY EQ	UIPMENT CO	<u>OST</u>				
	Basic	Machine: Cat	D8T - 8SU		Horsepower:	310	
	Ripper Att		nank Ripper		Shift Basis:	1 per day	
					Data Source:	(CRG)	
	Cost Breakdown	<u>:</u>					
					Utilization %		
		Ownership Co		\$124.85	NA 100		
	Dinn	Operating Co er Ownership Co		\$97.63 \$13.10	100 NA		
		per Operating Co		\$7.30	100		
	Kip	Operator Co		\$40.04	NA		
		Total Unit Co		\$282.92			
		Total Fleet Co	st/Hour: \$28	32.92			
	MATERIAL (DUANTITIES	Sel	ected estimating	g method: Area		
	Alternate Method		501	ected estimating	s method: Thea		
Seismic:	NA	<u>*5</u>	Bank Volume:	NA	BCY	NA	
Area:	6.00	acres	Rip Depth (ft):	2.00	Volume: 19,360		BCY or CCY
		Source of estin	nated quantity: Staff	estimates			
	HOURLY PRO						
	Seismic:	020011					
	<u>Scisific.</u>	S	eismic Velocity:	NA	feet/second		
	A		, <u> </u>				
	Area:	Average	e Ripping Depth:	2.56	feet/pass		
			Ripping Width:	7.08	feet/pass		
			Ripping Length:	500.00	feet/pass		
		Avera	ge Dozer Speed:	88.00	feet/minute		
			Maneuver Time:	0.25	minutes/pass		
		Product	ion per unit area:	0.822	acres/hour		
	Job Condition Co	orrection Factors					
	Un	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		
		Adjusted l	Hourly Unit Production:	0.68	Acres/hr		
			Hourly Fleet Production:		Acres/hr		
	JOB TIME AN	ND COST					
	Fleet size:	1	Grader(s)	Total job tim	ne: 8.79		Hours
	Unit cost:	\$414.674	Per acre	Total job co	st: \$2,488		_

TRUCK/LOADER TEAM WORK

Task description:	Apply to	opsoil to Area	E					
Site: D Road Gravel	Pit	Permit A	ction:	2023-05		Permit/Job#:	M2002046	
PROJECT IDEN	NTIFICATION							
Task #: E03		-	lorado		Ah	breviation: N	None	
Date: $\frac{263}{5/9/2}$	023	County: Me					M046-E03	_
User: ACY		•						
Agency or	r organization nan	ne: DRMS						
HOURLY EQUI	IPMENT COST	<u>r</u>			Shift bas	is: 1 per day		
		T 1 6		ment Descri	ption			
	Fruck Loader Tea		Cat 740 CAT 972	Н				
Supp	ort Equipment -L		NA	,11				
			Cat D8T	- 8SU				
Road M	Iaintenance – Moto		NA NA					
-	- vv a	ici Truck.	NA.					
Cost Breakdown:	Truck/Loa	ader Team		Support l	Equipment	Mainten	ance Equipment	
	Truck	Loader	Loa	nd Area	Dump Area	Motor Grader	r Water Truck	
%Utilization-machine:	100	10	00	NA	100	NA.	A NA	
Ownership cost/hour:	\$104.55	\$53.9	6	NA	\$124.85	NA.	A NA	
Operating cost/hour:	\$73.81	\$50.7	'8	NA	\$97.63	NA.	A NA	
%Utilization-riper:	NA		0	NA	NA	NA	A NA	
Ripper own. cost/hour:	NA	\$0.0		NA	\$0.00	NA.	A NA	
Ripper op. cost/hour:	NA	\$0.0		NA	\$0.00	NA.		
Operator cost/hour:	\$24.82	\$35.9		NA	\$40.04	NA.		
Unit Subtotals:	\$203.18	\$140.7	1	NA	\$262.52	NA NA		
Number of Units:	2		1	0	1		0 0	
Group Subtotals:	Work:	\$547.07		Support:	\$262.52	Maint	t: \$0.00	
Total work team co	st/hour: \$809.59	<u> </u>						
MATERIAL QU	<u>JANTITIES</u>							
Initial volume			CY	Swell	factor: 1.125			
Loose volume	8,470) L(CY					
	ource of estimated		ac @7"`					
Source	e of estimated swe		at Handb	ook				
	Material Purcha		0.00					
	1		,,,,,					
HOURLY PRO	<u>DUCTION</u>							
Truck Capacity:								
Truck Payload (wei								
Material v		Derr engal 1		Pounds/LCY				
Descr Rated Pa		Dry packed	1	Pounds				
Payload Ca				LCY				

Truck Bed (volume) Basis Struck Volume:	24.20	LCY					
Heaped Volume:	31.40	— LCY					
Average Volume:	27.80	= LCT LCY					
Adjusted Volume:	31.40	= LCY					
Adjusted Volume.	31.40	LC1					
Fi	nal Truck Vol	ume Based o	n Number of	Loader Passes:	30.80	LCY	
Loading Tool Capacity							
				Bucl	ket Size Class:	NA	
Rated Capacity:			Y (heaped)				
Bucket Fill Factor:			ner - rock/dir	t mixtures (100	-120%) 1.100		
Adjusted Capacity:	6.16	D LC	Y				
Job Condition Correctio	ns:		Si	te Altitude (ft.): 4	4600 feet		
	Truck	I	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 Tin	ne: Nu	mber of Load	ling Tool Pas	sses Required to	Fill Truck:	5	_ passes
Loading Tool Cycle Tim Excavators and Front Sho		mber of Load	ling Tool Pas	sses Required to	Fill Truck:	5	_ passes
-	vels: e vs. Job Con	dition Rating	: <u>NA</u>	sses Required to	Fill Truck:	5	_ passes
Excavators and Front Sho Machine Cycle Tim Selected Valu	vels: e vs. Job Conce within this	lition Rating Basic Rating	: <u>NA</u>	sses Required to	Fill Truck:	5	_ passes
Excavators and Front Sho Machine Cycle Tim	vels: e vs. Job Conce within this s — Material D	lition Rating Basic Rating	: <u>NA</u>	sses Required to	Fill Truck:	5	_ passes
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader	vels: e vs. Job Conce within this s — Material D	lition Rating Basic Rating	: NA NA	sses Required to		100	_ passes
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min	vels: e vs. Job Conce within this s – Material D n.):	dition Rating Basic Rating escription: Maneuver	: NA : NA : NA	· 	Dump:0.	100	_ passes
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade	vels: e vs. Job Conce within this s – Material D n.): es - Unadjuste	dition Rating Basic Rating escription: Maneuver	: NA : NA : NA	· 	Dump: 0.	100 0.525 n	ninutes
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor	vels: e vs. Job Conce within this s – Material D n.): es - Unadjuste s	dition Rating Basic Rating escription: Maneuver d Basic Load	: NA : NA : NA	· 	Dump: 0. maneuver): Factor (min.)	100 0.525 n	ninutes
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia	vels: e vs. Job Conce within this s – Material D n.): es - Unadjuste s	dition Rating Basic Rating Pescription: Maneuver d Basic Loac	: NA : NA : NA : NA der Cycle Tin ameter 0.02	ne (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020	100 0.525 n Source (Cat HB	ninutes
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile	vels: e vs. Job Conce within this s – Material D n.): es - Unadjuste s	dition Rating Basic Rating Pescription: Maneuver d Basic Loac up to 1/8" di r or dozer pi	: NA : NA : NA der Cycle Tin ameter 0.02 led 10 ft. higl	ne (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020 0.000	100 0.525 n Source (Cat HB (Cat HB	ninutes
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership	vels: e vs. Job Conce within this s – Material D n.): es - Unadjuste s l: Material e: Conveyo	dition Rating Basic Rating escription: Maneuver d Basic Loac up to 1/8" di r or dozer pi	: NA : NA : NA der Cycle Tin ameter 0.02 ded 10 ft. high f trucks and	ne (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040	100 0.525 n Source (Cat HB (Cat HB (Cat HB	ninutes
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile	vels: e vs. Job Conce within this s – Material D n.): es - Unadjuste s l: Material e: Conveyo e: Common	dition Rating Basic Rating Pescription: Maneuver d Basic Load up to 1/8" di r or dozer pi ownership of operation -0	: NA : NA : NA der Cycle Time ameter 0.02 ded 10 ft. high ftrucks and	ne (load, dump, 1 h and up 0.00 loaders -0.04	Dump: 0. maneuver): Factor (min.) 0.020 0.000	100 0.525 n Source (Cat HB (Cat HB	ninutes
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Conce within this s – Material D n.): es - Unadjuste s l: Material e: Conveyo e: Common	dition Rating Basic Rating Pescription: Maneuver d Basic Load up to 1/8" di r or dozer pil ownership of operation -0 tment - facto	: NA : NA : NA : NA der Cycle Tin ameter 0.02 ded 10 ft. high of trucks and .04 r not applica	ne (load, dump, 1 h and up 0.00 loaders -0.04	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	100 0.525 n Source (Cat HB (Cat HB (Cat HB	ninutes)))))
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Conce within this s – Material D n.): es - Unadjuste s l: Material e: Conveyo e: Common	dition Rating Basic Rating Pescription: Maneuver d Basic Load up to 1/8" di r or dozer pi ownership of operation -0 tment - factor	: NA : NA : NA der Cycle Tin ameter 0.02 ded 10 ft. high ftrucks and .04 r not applica et Cycle Tim	ne (load, dump, r h and up 0.00 loaders -0.04 ble 0.00	Dump: _0. maneuver): Factor (min.)	0.525 n Source (Cat HB (Cat HB (Cat HB (Cat HB	ninutes)))))
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Conce within this s – Material D n.): es - Unadjuste s l: Material e: Conveyo e: Common	dition Rating Basic Rating Pescription: Maneuver d Basic Load up to 1/8" di r or dozer pi ownership of operation -0 tment - factor	: NA : NA : NA : NA der Cycle Tin ameter 0.02 led 10 ft. high f trucks and .04 r not applica fet Cycle Tin ljusted Loade	ne (load, dump, r h and up 0.00 loaders -0.04 ble 0.00 ne Adjustment:	Dump:0. maneuver): Factor (min.)	0.525 n Source (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB minutes	ninutes)))))) s
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Conce within this s – Material D n.): es - Unadjuste s l: Material e: Conveyo e: Common	dition Rating Basic Rating Pescription: Maneuver d Basic Load up to 1/8" di r or dozer pi ownership of operation -0 tment - factor	: NA : NA : NA : NA der Cycle Tin ameter 0.02 led 10 ft. high f trucks and .04 r not applica fet Cycle Tin ljusted Loade	ne (load, dump, r h and up 0.00 loaders -0.04 ble 0.00 ne Adjustment: er Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465	0.525 n Source (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB minutes minutes	ninutes)))))) s
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	vels: e vs. Job Conde within this s – Material Dan.): es - Unadjuste s l: Material e: Conveyo e: Common e: Constant e: No adjuste	dition Rating Basic Rating Basic Rating Basic Rating Basic Rating Description: Maneuver d Basic Load up to 1/8" di r or dozer pi n ownership of operation -0 tment - factor	: NA	h and up 0.00 loaders -0.04 ble 0.00 ne Adjustment: er Cycle Time: ime per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465	100 0.525 n Source (Cat HB (Cat HB (Cat HB (Cat HB minutes minutes minutes	ninutes)))))) S
Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	vels: e vs. Job Conce within this s — Material Date of the constant of the con	dition Rating Basic Rating Pescription: Maneuver d Basic Load up to 1/8" di r or dozer pi ownership o operation -0 tment - facto N Ad	: NA : NA :	ne (load, dump, render of the loaders of the loader	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465 1.960	100 0.525 n Source (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB minutes minutes minutes	ninutes))))) s

<u>Truck Travel (Haul & Return) Time:</u> Road Condition: <u>Rutted dirt, little maintenance, no water, 2" tire penetration 5.0</u>

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1500.00	0.00	5.00	5.00	1845	1.141

Haul Time: 1.141 minutes

Return Route:

rectarii rec	ate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1500.00	0.00	5.00	5.00	3005	0.738

Return Time: 0.738 minutes
Total Truck Cycle Time: 5.439 minutes

Selected Number of Trucks: 2 Truck(s)

Loading Tool unit

Production 721.88 LCY/Hour Adjusted for job efficiency: 599.16 LCY/Hour Truck Unit Production 339.77 LCY/Hour Adjusted for job efficiency: 282.01 LCY/Hour

Adjusted hourly truck team production: 564.02 LCY/Hour Adjusted single truck/loader team production: 564.02 LCY/Hour Adjusted multiple truck/loader team production: 564.02 LCY/Hour

JOB TIME AND COST

Optimal No. of Trucks: 2

Fleet size: _____1 Team(s) Total job time: _____15.02 Hours

Unit cost: \$1.435 /LCY Total job cost: **\$12,158**

Truck(s)

REVEGETATION WORK

	Peri	mit Action: 2023-	-05	Permit/Job#	#: <u>M2002046</u>
ROJECT IDENTIFICA	TION				
Task #: E04	State:	Colorado		Abbreviation:	None
Date: 5/9/2023	County:	Mesa			M046-E04
User: ACY					
Agency or organiza	tion name: DR	MS			
ERTILIZING					
aterials					
Description		Units /	T.T:4	Cost / Unit	Cost /Acre
Description		Acre	Unit		
Composted manure DRM	S Survey	1,000.00	pound	\$0.02	\$23.70
				Total Fertilizer	
				Materials	
				Cost/Acre	\$23.70
		Total	Fertilizer A	pplication Cost/Acre	\$71.00
<u>ILLING</u>		Total	Fertilizer A	pplication Cost/Acre	\$71.00
		Total	Fertilizer A	pplication Cost/Acre	\$71.00 Cost /Acre
Description Disc harrowing, 6" deep (MEANS 32 91 13		Fertilizer A	pplication Cost/Acre	
Description	MEANS 32 91 13		Fertilizer A	pplication Cost/Acre	Cost /Acre
Description	MEANS 32 91 13			pplication Cost/Acre	Cost /Acre
Description Disc harrowing, 6" deep (MEANS 32 91 13				Cost /Acre \$117.18
Description Disc harrowing, 6" deep (MEANS 32 91 13		То	tal Tilling Cost/Acre	Cost /Acre \$117.18
Description Disc harrowing, 6" deep (MEANS 32 91 13		То	tal Tilling Cost/Acre	Cost /Acre \$117.18 \$117.18
Description Disc harrowing, 6" deep (MEANS 32 91 13		To	tal Tilling Cost/Acre Rate – Seeds	Cost /Acre \$117.18
Description Disc harrowing, 6" deep (MEANS 32 91 13		To	tal Tilling Cost/Acre Rate – PLS Beeds per SQ. ET	Cost /Acre \$117.18 \$117.18
Description Disc harrowing, 6" deep (EEDING Seed Mix			To	tal Tilling Cost/Acre Rate – PLS LBS / Acre Seeds per SQ. FT	Cost /Acre \$117.18 \$117.18 Cost /Acre
Description Disc harrowing, 6" deep (EEDING Seed Mix Indian Ricegrass - Paloma			To	tal Tilling Cost/Acre Rate – PLS Seeds per SQ. FT 3.00 9.71	Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38
Description Disc harrowing, 6" deep (EEDING Seed Mix Indian Ricegrass - Paloma Galleta			To	Rate – PLS Seeds per SQ. FT 3.00 9.71 2.00 7.30	Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38 \$44.70
Description Disc harrowing, 6" deep (EEDING Seed Mix Indian Ricegrass - Paloma Galleta Saltbush, Four Wing	ì		To	Rate – PLS Seeds per SQ. FT 3.00 9.71 2.00 7.30 2.00 2.75	Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38 \$44.70 \$25.00
Disc harrowing, 6" deep (EEDING Seed Mix Indian Ricegrass - Paloma Galleta	ì		To	Rate – PLS Seeds per SQ. FT 3.00 9.71 2.00 7.30	Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38 \$44.70

Application

Description

Cost /Acre

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

MULCHING and MISCELLANEOUS

Materials

Reveg Worksheet Cont'd

	Units /			
Description	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
	T	
	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 1	Nursery Stoc	k Cost / Acre	\$0.00

JOB TIME AND COST

 No. of Acres:
 8
 Cost /Acres:
 \$2,020.46

 Estimated Failure Rate:
 40%
 Cost /Acre*:
 \$1,808.58

*Selected Replanting Work Items: SEEDING, MULCHING

Initial Job Cost: \$16,163.68

Reseeding Job Cost: \$5,787.46

Total Job Cost: \$21,951

12.00

BULLDOZER WORK

Task description:	Grade highwalls				
D Road Gravel Pit	Per	mit Action:	2023-05	Permit/Job#:	M2002046
PROJECT IDENTI	FICATION				
Task #: F01	State:	Colorado		Abbreviation:	None
Date: 5/9/2023	County:	Mesa		Filename:	M046-F01
User: ACY				-	
Agency or org	ganization name: DF	RMS			
HOURLY EQUIPM					
	Cat D8T - 8SU				
	10		<u></u>		
	emi-Universal				
	IA.				
	per day				
Data Source: (0	CRG)		<u> </u>		
Cost Breakdown:					
			<u>Utilization %</u>		
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/Llour		$\Phi A \cap A A$	NT A		
Total Fleet Cost/Hour:	\$262.52 \$262.52	\$40.04	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume:19	\$262.52 \$262.52	\$40.04	INA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 19 Swell factor: 1.1	\$262.52 \$262.52 \$TITIES	\$40.04	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 19 Swell factor: 1.1	\$262.52 \$262.52 XTITIES ,167 125 ,563 LCY	1:1 cut/fill 30			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 19 Swell factor: 1.1 Loose volume: 21 Source of estimated vol	\$262.52 \$262.52 XTITIES ,167 125 ,563 LCY lume: 2300LF 1 Cat Hand	1:1 cut/fill 30			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 19. Swell factor: 1.1 Loose volume: 21. Source of estimated vol Source of estimated swe	\$262.52 \$262.52 ***TITIES ,167 125 ,563 LCY Lume: 2300LF 1 Cat Hand	1:1 cut/fill 30 lbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 19 Swell factor: 1.1 Loose volume: 21 Source of estimated vol Source of estimated swell HOURLY PRODUC Average push distance:	\$262.52 \$262.52 \$77771ES ,167 125 ,563 LCY dume: 2300LF 1 Cat Hand CTION 100 feet 852.6 LCY	1:1 cut/fill 30 lbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 19 Swell factor: 1.1 Loose volume: 21 Source of estimated vol Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly prod	\$262.52 \$262.52 **TITIES ,167 125 ,563 LCY dume: 2300LF 1 Cat Hand **CTION** 100 feet 852.6 LCY description: Compa	1:1 cut/fill 30 lbook	'D		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 19. Swell factor: 1.1 Loose volume: 21. Source of estimated vol Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient:	\$262.52 \$262.52 **TITIES ,167 125 ,563 LCY dume: 2300LF 1 Cat Hand **CTION** 100 feet 852.6 LCY description: Compa	1:1 cut/fill 30 lbook	'D		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 19 Swell factor: 1.1 Loose volume: 21; Source of estimated vol Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient: Average site altitude:	\$262.52 \$262.52 **TITIES ,167 125 ,563 LCY lume: 2300LF 1 Cat Hand **CTION** 100 feet 852.6 LCY lescription: Compared 0 %	1:1 cut/fill 30 lbook /hr	'D		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 19 Swell factor: 1.1 Loose volume: 21; Source of estimated vol Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$262.52 \$262.52 \$TITIES ,167 125 ,563 LCY lume: 2300LF 1	l:1 cut/fill 30 lbook /hr acted fill or ed	mbankment 0.9		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 19. Swell factor: 1.1 Loose volume: 21. Source of estimated vol Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correctic Operato	\$262.52 \$262.52 **TITIES .,167 .125 .,563 LCY lume:	1:1 cut/fill 30 lbook /hr acted fill or end d	"D" mbankment 0.9 Source (AVG.)		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 19 Swell factor: 1.1 Loose volume: 21; Source of estimated vol Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$262.52 \$262.52 ***TITIES ,167 125	l:1 cut/fill 30 lbook /hr acted fill or ed	mbankment 0.9		

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

Net correction: 0.4043

Adjusted unit production: 344.71 LCY/hr
Adjusted fleet production: 344.71 LCY/hr

JOB TIME AND COST

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

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

BULLDOZER RIPPING WORK

	Task description:	Rip A	rea F					
Site:	: D Road Gravel l	Pit	Per	mit Action:	2023-05	Permit/.	Job#: <u>M2</u>	002046
	PROJECT IDEN	NTIFICATIO	<u>N</u>					
	Task #: F02		State:	Colorado		Abbreviati	on: Non	e
	Date: 5/9/20	023	County:	Mesa		Filena		l6-F02
	User: ACY		•					
	Agency or	organization n	ame: DF	RMS				
	HOURLY EQUI	PMENT CO	<u>ST</u>					
	Basic Ma	achine: Cat I	08T - 8SU			Horsepower:	310	
	Ripper Attacl	hment: 3-Sha	ank Ripper			Shift Basis:	1 per day	7
						Data Source:	(CRG)	
	Cost Breakdown:							
						Utilization %		
	(Ownership Cos			\$124.85	NA		
		Operating Cos			\$97.63	100		
		Ownership Cos			\$13.10	NA		
	Ripper	Operating Cos Operator Cos			\$7.30	100		
		Total Unit Cos			\$40.04 \$282.92	NA		
		Total Unit Cos	UHOUIT:		\$282.92			
	,	Total Fleet Cos	t/Hour:	\$28	2.92			
	MATERIAL QU	ANTITIES		Sel	ected estimating	g method: Area		
	Alternate Methods:				·			
eismic:	NA		Ban	k Volume:	NA	BCY	NA	
Area:	6.20	acres		Depth (ft):	2.00	Volume: 20,005		BCY or C
		— Source of estima	_		stimates			
			ated quantit	y. Starr C	sumacs			<u></u>
	HOURLY PROD	<u>DUCTION</u>						
	Seismic:							
		Se	eismic Velo	city:	NA	feet/second		
	Area:							
			Ripping De		2.56	feet/pass		
			Ripping W		7.08	feet/pass		
			Ripping Ler		500.00	feet/pass		
			ge Dozer Sp		88.00	feet/minute		
			Maneuver Ton per unit		0.25 0.822	minutes/pass acres/hour		
	Lab Com Prima Com		on per unit	area	0.622	acres/flour		
	Job Condition Corre	.	Init Doc 1	4:	0.022	A /I		
	Unad	justed Hourly U			0.822	Acres/hr		
			Site Altit		4,600	feet		
			Altitude	Adj:	1.00	(CAT HB)		
						(1 1 °C / 1)		
			Job Efficie	•	0.83	(1 shift/day)		
				•		(1 shift/day) multiplier		
		Adjusted H	Job Efficie Net Correctourly Unit	tion: Production:	0.83 0.83 0.68	multiplier Acres/hr		
		Adjusted H	Job Efficie Net Correctourly Unit	tion:	0.83 0.83 0.68	multiplier		
	JOB TIME AND	Adjusted H	Job Efficie Net Correctourly Unit	tion: Production:	0.83 0.83 0.68	multiplier Acres/hr		
	JOB TIME AND Fleet size:	Adjusted H	Job Efficie Net Correctourly Unit	tion: Production:	0.83 0.83 0.68	multiplier Acres/hr Acres/hr		Hours

TRUCK/LOADER TEAM WORK

Task description:	Apply t	opsoil to Area F				
Site: D Road Grave	el Pit	Permit Action	on: 2023-05		Permit/Job#: M	[2002046
PROJECT IDI	ENTIFICATION	1				
Task #: F03	}	State: Colora	ıdo	Ab	breviation: No	
Date: $\frac{5/9}{4}$ User: AC		County: Mesa			Filename: MO	046-F03
		DDMC				
Agency	or organization nai	me: DRMS				
HOURLY EQU	JIPMENT COS	<u>——</u>			is: <u>1 per day</u>	
	Truck Loader Tea		Equipment Descri 740	ption		
		-Loader: CAT	Г 972Н			
Su	pport Equipment -I		D8T - 8SU			
Road	Maintenance –Mot	1	D01 - 03U			
	-Wa	ater Truck: NA				
Cost Breakdown	: Truck/Lo	ader Team	Support 1	Equipment	Maintenar	nce Equipment
Cost Dicardown	Truck	Loader	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:	\$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/hour: \$809.5 9)				
MATERIAL Q	<u>UANTITIES</u>					
Initial volum		CCY	Swell	factor: 1.125		
Loose volun						
	Source of estimated		c @7"`			
Sour	ce of estimated swo Material Purch		landbook			
		otal Cost: \$0.00				
HOURLY PR	ODUCTION					
Truck Capacity:						
Truck Payload (w	eight) Basis:					
	l weight: 2,550	D 1 1	Pounds/LCY			
	Scription: Earth - 87,000	Dry packed	Pounds			
Payload (,	LCY			

Truck Bed (volume) Bas Struck Volume:		4.20 L	CY						
Heaped Volume:			CY						
Average Volume:			CY						
Adjusted Volume:		1.40 Lo	CY						
·									
F	inal Tru	ck Volume B	ased on Numbe	er of Loader Pa	sses:	30.8	30	_ LCY	
Loading Tool Capacity									
					Bucket	Size Clas	s: NA		
Rated Capacity	y:	5.600	LCY (heape	d)			-		
Bucket Fill Facto		1.100		dirt mixtures	(100-12	0%) 1.10	0		
Adjusted Capacity	y:	6.160	LCY			· · · · · · · · · · · · · · · · · · ·			
Job Condition Correcti	ons:			Site Altitude	(ft.): <u>460</u>	<u>0</u> feet			
	Tr	ruck	Loader	Sc	ource				
Altitude Adj:		.000	1.000		T HB)				
Job Efficiency:		.830	0.830		T HB)				
-									
Net Correction:	0.	.830	0.830						
Excavators and Front Sh Machine Cycle Tir Selected Va	n <u>ovels:</u> ne vs. Jo			Passes Requir	ed to Fill	Truck:		5	_ passes
Excavators and Front Sh Machine Cycle Tir Selected Va	novels: ne vs. Jo lue withi rs – Mat	bb Condition l	Rating: NA NA	Passes Requir	ed to Fill	Truck:		5	_ passes
Excavators and Front Sh Machine Cycle Tir Selected Va Track Loade	novels: ne vs. Jo lue withi rs – Mat	ob Condition lin this Basic leterial Descript	Rating: NA NA	Passes Requir	ed to Fill	Truck:	0.100	5	_ passes
Excavators and Front Sh Machine Cycle Tir Selected Va Track Loade Cycle Time Elements (m	ne vs. Jo lue withing a Mat in.):	ob Condition l in this Basic l terial Descrip Mai	Rating: NA Rating: NA tion: NA			Dump:	0.100		_ passes
Excavators and Front Sh Machine Cycle Tir Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Factor	ne vs. Jo lue withi rs – Mat in.): ers - Una	ob Condition l in this Basic l terial Descrip Mar adjusted Basi	Rating: NA Rating: NA tion: NA tion: NA c Loader Cycle	Time (load, du	ımp, mar	Dump:	0.100 0.5	25 1 Source	minutes
Excavators and Front She Machine Cycle Tire Selected Va Track Loade Cycle Time Elements (machine Load: NA Wheel and Track Load Cycle Time Factor Materi	ne vs. Jo lue withi rs – Mat in.): ers - Una ors al: M	ob Condition lin this Basic lerial Descript Mar adjusted Basic	Rating: NA Rating: NA tion: NA tion: NA c Loader Cycle 1/8" diameter 0.	Time (load, du	ımp, mar	Dump: neuver): Factor (m 0.020	0.100 0.5 nin.)	Source (Cat HE	minutes
Excavators and Front Shadchine Cycle Tire Selected Va Track Loade Cycle Time Elements (magenta Load: NA Wheel and Track Load Cycle Time Factor Materic Stockpi	ne vs. Jo lue withi rs – Mat in.): ers - Una ors al: M. le: Co	ob Condition lin this Basic laterial Description Manadjusted Basic laterial up to laterial up t	Rating: NA Rating: NA tion: neuver: NA c Loader Cycle 1/8" diameter 0. ozer piled 10 ft.	Time (load, du	ımp, mar	Dump: neuver): Factor (m 0.020 0.000	0.100 0.5 nin.)	Source (Cat HE (Cat HE	minutes
Excavators and Front Sharmachine Cycle Tire Selected Va Track Loade Cycle Time Elements (magentum Load: NA Wheel and Track Load Cycle Time Factor Materi Stockpi Truck Ownersh	ne vs. Jo lue withi rs – Mat in.): ers - Una ors al: Ma le: Co ip: Co	ob Condition lin this Basic laterial Description Manadjusted Basic laterial up to laterial up t	Rating: NA Rating: NA tion: NA tion: NA c Loader Cycle 1/8" diameter 0. ozer piled 10 ft. rship of trucks a	Time (load, du	ımp, mar	Dump: neuver): Factor (m 0.020 0.000 -0.040	0.100 0.5 nin.)	Source (Cat HE (Cat HE	minutes
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Excavators and Front Sharmachine Cycle Tire Selected Va Track Loade Cycle Time Elements (magentum Load: NA Wheel and Track Load Cycle Time Factor Materi Stockpi Truck Ownersh	me vs. Jo lue withi rs – Mat in.): ers - Una ors al: Mal le: Co ip: Co on: Co	ob Condition lin this Basic laterial Description Manadjusted Basic laterial up to laterial up t	Rating: NA Rating: NA tion: NA tion: NA c Loader Cycle 1/8" diameter 0. ozer piled 10 ft. rship of trucks a tion -0.04 - factor not app	Time (load, du 02 high and up 0.0 and loaders -0.0	00 04	Dump:	0.100 0.5 nin.)	Source (Cat HE (Cat HE (Cat HE (Cat HE (Cat HE	minutes
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Excavators and Front Shanne Cycle Tire Selected Va Track Loade Cycle Time Elements (magnetic Load: NA Wheel and Track Load Cycle Time Factor Materi Stockpi Truck Ownersh Operation	me vs. Jo lue withi rs – Mat in.): ers - Una ors al: Mal le: Co ip: Co on: Co	ob Condition lin this Basic laterial Description Manadjusted Basic laterial up to laterial up t	Rating: NA Rating: NA Ition: NA tion: NA c Loader Cycle 1/8" diameter 0. ozer piled 10 ft. rship of trucks atton -0.04 - factor not app Net Cycle Adjusted Lo	Time (load, du 02 high and up 0.0 and loaders -0.0	00 04 ent:	Dump:	0.100 0.5 nin.)	Source (Cat HE (Cat HE (Cat HE (Cat HE (Cat HE	minutes 3) 3) 3) 3) 5) 5) 5 5 5 5 5 5 5 5 5 5
Excavators and Front Shanne Cycle Tire Selected Va Track Loade Cycle Time Elements (magnetic Load: NA Wheel and Track Load Cycle Time Factor Materi Stockpi Truck Ownersh Operation	me vs. Jo lue withi rs – Mat in.): ers - Una ors al: Mal le: Co ip: Co on: Co	ob Condition lin this Basic laterial Description Manadjusted Basic laterial up to laterial up t	Rating: NA Rating: NA Ition: NA tion: NA c Loader Cycle 1/8" diameter 0. ozer piled 10 ft. rship of trucks atton -0.04 - factor not app Net Cycle Adjusted Lo	Time (load, du 02 high and up 0.0 and loaders -0.0 licable 0.00 Time Adjustmo	00 04 ent:	Dump: Factor (m 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465	0.100 0.5 nin.)	Source (Cat HE (Cat HE (Cat HE (Cat HE (Cat HE minute:	minutes 3) 3) 3) 3) 5) 5) 5 5 5 5 5 5 5 5 5 5
Excavators and Front Shandshine Cycle Tire Selected Va Track Loade Cycle Time Elements (material Load: NA Wheel and Track Load Cycle Time Factor Material Stockpite Truck Ownersh Operation Dump Targ	me vs. Jo lue withi rs – Mat in.): ers - Una ors al: Mat le: Co ip: Co et: No	ob Condition I in this Basic I terial Descrip Man adjusted Basic aterial up to I conveyor or do common owner on adjustment	Rating: NA Rating: NA tion: neuver: NA c Loader Cycle 1/8" diameter 0. ozer piled 10 ft. rship of trucks atton -0.04 - factor not app Net Cycle Adjusted Loa	Time (load, du 02 high and up 0.0 and loaders -0.0 licable 0.00 Time Adjustmo	oo	Dump: Factor (m 0.020 0.000 -0.040 0.000 -0.060 0.465 1.960	0.100 0.5 nin.)	Source (Cat HE (Cat HE (Cat HE (Cat HE (Cat HE minute: minute:	minutes (3) (3) (3) (3) (3) (3) (5) (5) (6) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7
Excavators and Front Shandshine Cycle Tire Selected Va Track Loade Cycle Time Elements (material Load: NA Wheel and Track Load Cycle Time Factor Material Stockpite Truck Ownersh Operation Dump Targe Truck Cycle Time: Truck Exchange Truck Exchange Truck Exchange Truck Exchange Truck Ownersh Truck Exchange Truck Exchange Truck Exchange Truck Exchange Truck Exchange Truck Ownersh Truck Exchange Truck Exchange Truck Exchange Truck Exchange Truck Ownersh Truck Exchange Truck Exchange Truck Exchange Truck Ownersh Owner	me vs. Jo lue withi rs – Mat in.): ers - Una ors al: M. le: Cc ip: Cc on: Cc et: No	Manadjusted Basic laterial up to laterial up to laterial up to laterial up to laterial on adjustment of adjustment	Rating: NA Rating: NA tion: neuver: NA c Loader Cycle 1/8" diameter 0. ozer piled 10 ft. rship of trucks a tion -0.04 - factor not app Net Cycle Adjusted Lo Net Loa Minutes	Time (load, du 02 high and up 0.0 and loaders -0.0 licable 0.00 Time Adjustme oader Cycle Tid d Time per Tru Adj	ump, mar	Dump: Factor (m 0.020 0.000 -0.040 -0.060 0.465 1.960	0.100 0.5 nin.)	Source (Cat HE (Cat HE (Cat HE (Cat HE minute: minute: minute:	minutes
Excavators and Front Shandshine Cycle Tire Selected Va Track Loade Cycle Time Elements (material Load: NA Wheel and Track Load Cycle Time Factor Material Stockpite Truck Ownersh Operation Dump Targ	me vs. Jo lue withi rs – Mat in.): ers - Una ors al: M le: Cc ip: Cc on: Cc et: No	ob Condition I in this Basic I terial Descrip Man adjusted Basic aterial up to I conveyor or do common owner on adjustment	Rating: NA Rating: NA tion: neuver: NA c Loader Cycle 1/8" diameter 0. ozer piled 10 ft. rship of trucks atton -0.04 - factor not app Net Cycle Adjusted Loa	Time (load, du 02 high and up 0.0 and loaders -0.0 licable 0.00 Time Adjustme oader Cycle Tid d Time per Tru Adj Adj	on on one of the control of the cont	Dump: Factor (m 0.020 0.000 -0.040 0.000 -0.060 0.465 1.960	0.100 0.5 nin.)	Source (Cat HE (Cat HE (Cat HE (Cat HE (Cat HE minute: minute:	minutes (3) (3) (3) (3) (3) (3) (5) (5) (6) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7

<u>Truck Travel (Haul & Return) Time:</u> Road Condition: <u>Rutted dirt, little maintenance, no water, 2" tire penetration 5.0</u>

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	950.00	0.00	5.00	5.00	1845	0.843

Haul Time: 0.843 minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	950.00	0.00	5.00	5.00	3005	0.555

Return Time: 0.555 minutes
Total Truck Cycle Time: 4.958 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

372.73 LCY/Hour Adjusted for job efficiency: 599.16 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:

Adjusted single truck/loader team production:

Adjusted multiple truck/loader team production:

599.16

LCY/Hour

599.16

LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 10.96
 Hours

 Unit cost:
 \$1.351
 /LCY
 Total job cost:
 \$8,870

REVEGETATION WORK

Γask description:	Revegetate Area	F				
D Road Gravel Pit	Per	mit Action: 2023-	-05		Permit/Job#	#: <u>M2002046</u>
ROJECT IDENTIFI	<u>ICATION</u>					
Task #: F04	State:	Colorado		Ab	breviation:	None
Date: 5/9/2023	County:	Mesa				M046-F04
User: ACY				_	_	
Agency or organ	nization name: <u>DR</u>	MS				
ERTILIZING						
laterials						
Description		Units / Acre	Unit	Cos	st / Unit	Cost /Acre
Composted manure Di	RMS Survey	1,000.00	pound	\$0.0		\$23.70
	INVIS Survey	1,000.00	pound		tal Fertilizer Materials	
					Cost/Acre	\$23.70
Description Manure, tractor spread	der (MEANS 32 91 13	3.23 4450)				Cost /Acre \$71.00
	der (MEANS 32 91 13		Fertilizer .	Applicatio	on Cost/Acre	\$71.00
	der (MEANS 32 91 13		Fertilizer .	Applicatio	on Cost/Acre	
Manure, tractor spread	der (MEANS 32 91 13		Fertilizer /	Applicatio	on Cost/Acre	\$71.00
Manure, tractor spread		Total	Fertilizer 2	Applicatio	on Cost/Acre	\$71.00 \$71.00
Manure, tractor spread ILLING Description		Total				\$71.00 \$71.00 Cost /Acre
Manure, tractor spread ILLING Description		Total			on Cost/Acre	\$71.00 \$71.00 Cost /Acre
Manure, tractor spread ILLING Description		Total				\$71.00 \$71.00 Cost /Acre \$117.18
Manure, tractor spread ILLING Description Disc harrowing, 6" december 1988 EEDING		Total		otal Tillin	ng Cost/Acre	\$71.00 \$71.00 Cost /Acre \$117.18
Manure, tractor spread ILLING Description Disc harrowing, 6" dec		Total		otal Tillin Rate – PLS	ng Cost/Acre	\$71.00 \$71.00 Cost /Acre \$117.18
Manure, tractor spread ILLING Description Disc harrowing, 6" december 1988 EEDING		Total		otal Tillir Rate – PLS LBS /	ng Cost/Acre Seeds per SQ.	\$71.00 \$71.00 Cost /Acre \$117.18
Manure, tractor spread ILLING Description Disc harrowing, 6" december 1988 EEDING Seed Mix	ep (MEANS 32 91 13	Total		otal Tillin Rate – PLS LBS / Acre	Seeds per SQ. FT	\$71.00 \$71.00 Cost /Acre \$117.18 \$117.18
Manure, tractor spread ILLING Description Disc harrowing, 6" december 19 de	ep (MEANS 32 91 13	Total		Rate – PLS LBS / Acre 3.00	Seeds per SQ. FT	\$71.00 \$71.00 \$71.00 Cost /Acre \$117.18 \$117.18 Cost /Acre
Manure, tractor spread ILLING Description Disc harrowing, 6" ded EEDING Seed Mix Indian Ricegrass - Pale Galleta	ep (MEANS 32 91 13	Total		Rate – PLS LBS / Acre 3.00 2.00	Seeds per SQ. FT 9.71 7.30	\$71.00 \$71.00 \$71.00 Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38 \$44.70
Manure, tractor spread ILLING Description Disc harrowing, 6" description EEDING Seed Mix Indian Ricegrass - Pale Galleta Saltbush, Four Wing	ep (MEANS 32 91 13	Total		Rate – PLS LBS / Acre 3.00 2.00 2.00	Seeds per SQ. FT 9.71 7.30 2.75	\$71.00 \$71.00 \$71.00 Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38 \$44.70 \$25.00
Manure, tractor spread ILLING Description Disc harrowing, 6" ded EEDING Seed Mix Indian Ricegrass - Pale Galleta	ep (MEANS 32 91 13	Total		Rate – PLS LBS / Acre 3.00 2.00	Seeds per SQ. FT 9.71 7.30	\$71.00 \$71.00 \$71.00 Cost /Acre \$117.18 \$117.18 Cost /Acre \$33.38 \$44.70

Application

Description

CIRCES Cost Estimating Software

\$190.83

Cost /Acre

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

MULCHING and MISCELLANEOUS

Materials

	Units /			
Description	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
	T	
	Total Mulch Application Cost/Acre	\$340.01

NURSERY STOCK PLANTING

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

JOB TIME AND COST

 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

10.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: In	itial Mobilization			
e: D Road Gravel Pit	Permit	Action: 2023-05	Permit/Jo	b#: <u>M2002046</u>
PROJECT IDENTIFICAT	<u>ION</u>			
Task #: X01	State: C	olorado	Abbreviation:	None
Date: 5/9/2023 User: ACY	County: M	Iesa	Filename:	M046-X01
Agency or organization EQUIPMENT TRANSPOR		S		
SQUIT MENT TRANSFOR	IT RIG COST		Shift basis: Cost Data Source:	1 per day CRG Data
Truck Tractor Des	cription: GENE		AY TRUCK TRACTOR, 6X4, 400 HP (2ND HALF, 2006)	DIESEL POWERED
Truck Trailer Des	cription: C		G GOOSENECK, DROP DEC AILER (25T, 50T, AND 100T	-
Cost Breakdown:				
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	
Ownership Cost/Hour:	\$15.25	\$23.06	\$37.58	
Operating Cost/Hour:	\$25.26	\$30.83	\$51.41	
Operator Cost/Hours	\$27.71	\$27.71	\$27.71	

NON ROADABLE EQUIPMENT:

Helper Cost/Hour:
Total Unit Cost/Hour:

\$0.00

\$68.22

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
	(TONS)		t		fleet		
Cat D8T - 8SU	53.08	\$137.95	\$136.92	1	\$274.87	\$136.92	\$250.00
Drill/Broadcast	25.00	\$6.25	\$68.22	1	\$74.47	\$68.22	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$14.79	\$68.22	1	\$83.01	\$68.22	\$250.00
(Bowie LD-90)							
Cat 740	36.49	\$104.55	\$101.82	2	\$412.74	\$203.64	\$500.00
CAT 972H	28.00	\$53.96	\$101.82	1	\$155.78	\$101.82	\$250.00

\$20.22

\$101.82

\$20.22

\$136.92

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:
Average Travel Speed:

GRAND JUNCTION
miles
45.00
mph

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.07	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 cost: 2.27 Hours

Total job cost: \$5,234

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Se	condary Mobiliza	ation			
ite: D Road Gravel Pit	Permi	t Action:2023	-05	Permit/Job	#: <u>M2002046</u>
PROJECT IDENTIFICAT	<u>ION</u>				
Task #: X02	State: C	Colorado	Al	breviation:	None
Date: 5/10/2023 User: ACY	County: N	1 esa		Filename:	M046-X02
Agency or organization	n name: DRMS	S			
EQUIPMENT TRANSPOR	RT RIG COST				
			Shif	t basis: 1	per day
			Cost Data S		RG Data
Truck Tractor Des	cription: GENI	ERIC ON-HIGH	WAY TRUCK TRAC 400 HP (2ND HA)		DIESEL POWERED,
Truck Trailer Des	cription:	GENERIC FOLD	ING GOOSENECK,		K EQUIPMENT
			ΓRAILER (25T, 50T,	AND 100T)	
Cost Breakdown:					
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	-	
Ownership Cost/Hour:	\$15.25	\$23.06	\$37.58	-	
Operating Cost/Hour:	\$25.26	\$30.83	\$51.41	=	
Operator Cost/Hour:	\$27.71	\$27.71	\$27.71	_	
Helper Cost/Hour:	\$0.00	\$20.22	\$20.22		

NON ROADABLE EQUIPMENT:

Total Unit Cost/Hour:

\$68.22

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
	(TONS)		t		fleet		
Drill/Broadcast	25.00	\$6.25	\$68.22	1	\$74.47	\$68.22	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$14.79	\$68.22	1	\$83.01	\$68.22	\$250.00
(Bowie LD-90)							

\$101.82

\$136.92

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.	\$80.76	2	\$161.52	\$161.52
Crew				

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
miles
45.00
mph

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.07	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 cost: 2.27 Hours

Total job cost: \$1,376