COST SUMMARY WORK

Task description:		Update based on TR-2 Maps							
Site: Surface Rock Pit		Permit Action: TR-1			Permit/Job#: M1984001				
<u>P</u>	ROJECT	IDENTIFIC	CATION						
	Task #: Date: User:	ACY 4/12/2019 ACY	State: County:	Colorado Mesa			Abbreviation: Filename:	None M001-ACY	<u>—</u> —
	Age	ency or organi	zation name:DF	RMS					
<u>T</u>	ASK LIST	(DIRECT	COSTS)						
					Form	Floot	Tools		

Task		Form	Fleet	Task	
Task	Description	Used	Size	Hours	Cost
01a	Regrade stockpiles in Phase 1 & 2	DOZER	1	65.37	\$11,579
02a	Rip compacted pit floor phase 1 & 2	RIPPER	1	5.59	\$1,010
03a	Place overburden in Phase 1 & 2	DOZER	1	17.04	\$3,019
04a	Place topsoil in Phase 1 & 2	DOZER	1	10.02	\$1,775
05a	Reveg pit floor Phase 1 & 2	REVEGE	1	16.00	\$6,244
05b	Secondary Reveg Phase 2 (50% of 2.2 ac)	REVEGE	1	8.00	\$1,387
	unreleased areas				
06a	Initial Mobilization	MOBILIZE	1	3.95	\$3,027
06b	Secondary Mobilization	MOBILIZE	1	3.95	\$1,847
		GVID TO	NT 1 T G	129.92	\$29,888
		SUBTO	<u>)TALS:</u>	129.92	φ49,000

INDIRECT COSTS

OVERHEAD AND PROFIT:

\$604 Liability insurance: 2.02 Total = Performance bond: 1.05 Total = \$314 Job superintendent: 0.00 Total = \$0 Profit: 10.00 Total = \$2,989

 $TOTAL O \& P = \frac{\$3,906}{CONTRACT AMOUNT (direct + O \& P) = \$33,794}$

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$500 Total = \$500
Engineering work and/or contract/bid preparation: 4.25 Total = \$1,436
Reclamation management and/or administration: 5.00 \$1,690

CONTINGENCY: 0.00 Total = 0.00

TOTAL INDIRECT COST = \$7,532

TOTAL BOND AMOUNT (direct + indirect) = \$37,420

BULLDOZER WORK

Task description:	Regr	ade stockpiles in Ph	asc 1 cc 2			
Surface Rock Pi	t	Permit Actio	n: TR-1		Permit/Job#:	M1984001
PROJECT IDEN	NTIFICATION	<u>ON</u>				
Task #: 01A		State: Colora	do		Abbreviation:	None
Date: 4/12/	2019	County: Mesa			Filename:	M001-01a
User: ACY					-	
Agency or	organization	name: DRMS				
HOURLY EQUI	PMENT CO	OST				
Basic Machine:		S Series II LGP				
Horsepower:	240					
Blade Type:	Straight					
Attachment:	3-shank rip	per				
Shift Basis:	1 per day					
Data Source:	(CRG)					
Cost Breakdown:						
			<u>U</u>	tilization %		
Ownership Cost/H		\$66.1		NA		
Operating Cost/H		\$63.9		100		
Ripper own. Cost/H		\$6.0		NA		
	lour:	\$0.8		20		
Ripper op. Cost/H				3 T A		
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot	\$177. \$177.		23	NA		
Operator Cost/Hotal unit Cost/Hotal	\$177. \$177.	12	23	NA		
Operator Cost/F Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL OU Initial Volume:	\$177. \$177. \$177. \$1,000	12	23	NA		
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	### \$177. ### \$177.	12				
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	\$177. \$1	Est vol of stockpil Cat Handbook				
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	\$177. \$177.	12 12 Est vol of stockpil				
Operator Cost/F Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distat	\$177. \$1	Est vol of stockpil Cat Handbook 100 feet 496.4 LCY/hr	es, Mine map			
Operator Cost/F Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly	\$177. \$1	Est vol of stockpil Cat Handbook 100 feet 496.4 LCY/hr : Consolidated sto	es, Mine map			
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distat Unadjusted hourly Materials consisten Average push gradi	### \$177. ### \$177.	Est vol of stockpil Cat Handbook 100 feet 496.4 LCY/hr : Consolidated sto	es, Mine map			
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push dista. Unadjusted hourly Materials consisten Average push gradi Average site altitud	\$177. \$177.	Est vol of stockpil Cat Handbook 100 feet 496.4 LCY/hr : Consolidated sto	es, Mine map			
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distat Unadjusted hourly; Materials consisten Average push gradi Average site altitud Material weight: Weight description: Job Condition Corr	### \$177. ### \$177.	Est vol of stockpil Cat Handbook 100 feet 496.4 LCY/hr : Consolidated sto feet lbs/LCY mposed rock - 50% R	es, Mine map	th Source		
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot Total Fleet Cost/Hot MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly Materials consisten Average push gradit Average site altitude Material weight: Weight description: Job Condition Corr	### \$177. ### \$177.	Est vol of stockpil Cat Handbook 100 feet 496.4 LCY/hr : Consolidated sto feet lbs/LCY mposed rock - 50% R 0.750	es, Mine map	th Source (AVG.)		
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distat Unadjusted hourly; Materials consisten Average push gradi Average site altitud Material weight: Weight description: Job Condition Corr Oper Material c	### \$177. ### \$177.	Est vol of stockpil Cat Handbook 100 feet 496.4 LCY/hr : Consolidated sto feet lbs/LCY mposed rock - 50% R	es, Mine map	th Source		

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:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3949

Adjusted unit production: 196.03 LCY/hr
Adjusted fleet production: 196.03 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.904/LCY

Total job time: 65.37 Hours
Total job cost: \$11,579

BULLDOZER RIPPING WORK

Note		Task description:	Rip c	ompacted pit floor pha	se 1 & 2							
Task #:	Site	: Surface Rock	Pit	Permit Action:	TR-1	I	Permit/Job#:	M198	4001			
Date: 4/12/2019		PROJECT ID	ENTIFICATION ENTIF	<u>ON</u>								
Date: 4/12/2019		Task #: 02	Δ	State: Colorado		Ahl	hreviation:	None				
User: ACY						710			02a			
HOURLY EQUIPMENT COST									<u></u>			
Basic Machine: Cat D7R D8 Series II LGP		Agency	or organization	name: DRMS								
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day Data Source: (CRG)		HOURLY EQ	UIPMENT CO	<u>OST</u>								
Data Source: (CRG)		Basic	Machine: Cat	D7R DS Series II LGP		Horsepower:		240				
Cost Breakdown: Utilization % NA Operating Cost/Hour: \$66.14 NA NA Operating Cost/Hour: \$66.92 NA S69.91 100 NA S69.91 NA S69.91 NA S69.91 NA S69.91 NA S69.91 S69.91 NA S69.91 S69.		Ripper Att	achment: 3-Sl	nank Ripper		Shift Basis:	1 p	er day				
Ownership Cost/Hour: S66.14 NA						Data Source:	((CRG)				
Ownership Cost/Hour		Cost Breakdown:	<u>:</u>									
Operating Cost/Hour: \$63.91 100 Ripper Ownership Cost/Hour: \$6.02 NA Ripper Operating Cost/Hour: \$40.23 NA Total Unit Cost/Hour: \$180.41						Utilization %						
Ripper Ownership Cost/Hour: \$4.02 NA					·		_					
Ripper Operating Cost/Hour: \$40.23 NA Total Unit Cost/Hour: \$40.23 NA Total Unit Cost/Hour: \$180.41 Total Fleet Cost/Hour: \$180.41 Tot					· · · · · · · · · · · · · · · · · · ·		_					
Operator Cost/Hour:					· ·		_					
Total Unit Cost/Hour: \$180.41 Total Fleet Cost/Hour: \$180.41 Total Fleet Cost/Hour: \$180.41 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: Alternate Methods: Area Alternate Methods: Seismic: NA		Rıpı					_					
MATERIAL QUANTITIES Selected estimating method: Area						NA	_					
MATERIAL QUANTITIES Selected estimating method: Area												
NA				st/Hour: \$180	<u>).41</u>							
Seismic NA		MATERIAL (<u>)UANTITIES</u>	Sele	ected estimating	g method: Are	ea					
Area: 3.00		Alternate Method	<u>ls:</u>									
Source of estimated quantity: Staff estimate current pit floor HOURLY PRODUCTION Seismic: Seismic Velocity: NA feet/second Area: Average Ripping Depth: 2.45 feet/pass Average Ripping Width: 6.50 feet/pass Average Ripping Length: 100.00 feet/pass Average Ripping Length: 100.00 feet/pass Average Dozer Speed: 88.00 feet/minute Average Maneuver Time: 0.25 minutes/pass Production per unit area: 0.646 acres/hour Job Condition Correction Factors Unadjusted Hourly Unit Production: 0.646 Acres/hr Site Altitude: 6,600 feet Altitude Adj: 1.00 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.83 multiplier Adjusted Hourly Unit Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr JOB TIME AND COST Fleet size: 1 Grader(s) Total job time: 5.60 Hours	Seismic:			-				NA				
NA feet/second	Area:	3.00	acres	Rip Depth (ft):	2.00	Volume:	9,680		BCY or CC			
Seismic: Seismic Velocity: NA feet/second Area: Average Ripping Depth: 2.45 feet/pass Average Ripping Width: 6.50 feet/pass Average Ripping Length: 100.00 feet/pass Average Dozer Speed: 88.00 feet/minute Average Maneuver Time: 0.25 minutes/pass Production per unit area: 0.646 acres/hour Job Condition Correction Factors Unadjusted Hourly Unit Production: 0.646 Acres/hr Site Altitude: 6,600 feet Altitude Adj: 1.00 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.83 multiplier Adjusted Hourly Unit Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr JOB TIME AND COST Fleet size: 1 Grader(s) Total job time: 5.60 Hours			Source of estin	nated quantity: Staff ex	stimate current	pit floor			<u></u>			
Area: Average Ripping Depth: 2.45 feet/pass Average Ripping Width: 6.50 feet/pass Average Ripping Length: 100.00 feet/pass Average Maneuver Time: 0.25 minutes/pass Production per unit area: 0.646 acres/hour Job Condition Correction Factors Site Altitude: Altitude Adj: 1.00 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.54 Acres/hr Adjusted Hourly Unit Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Acres/hr Acres/hr Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr		HOURLY PRO	ODUCTION									
Area: Average Ripping Depth: 2.45 feet/pass Average Ripping Width: 6.50 feet/pass Average Ripping Length: 100.00 feet/pass Average Maneuver Time: 0.25 minutes/pass Production per unit area: 0.646 acres/hour Job Condition Correction Factors Site Altitude: Altitude Adj: 1.00 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.54 Acres/hr Adjusted Hourly Unit Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Acres/hr Acres/hr Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr		Seismic:										
Average Ripping Depth: Average Ripping Width: Average Ripping Length: Average Ripping Length: Average Ripping Length: Average Dozer Speed: Average Maneuver Time: Average Maneuver Time: O.25 minutes/pass Production per unit area: O.646 acres/hour Job Condition Correction Factors			S	Seismic Velocity:	NA	feet/se	cond					
Average Ripping Depth: Average Ripping Width: Average Ripping Length: Average Ripping Length: Average Ripping Length: Average Dozer Speed: Average Maneuver Time: Average Maneuver Time: O.25 minutes/pass Production per unit area: O.646 acres/hour Job Condition Correction Factors		Aron										
Average Ripping Width: 6.50 feet/pass Average Ripping Length: 100.00 feet/pass Average Dozer Speed: 88.00 feet/minute Average Maneuver Time: 0.25 minutes/pass Production per unit area: 0.646 acres/hour Job Condition Correction Factors		Alea.	Average	e Rinning Denth	2.45	feet/na	cc					
Average Ripping Length: Average Dozer Speed: Average Maneuver Time: Production per unit area: Unadjusted Hourly Unit Production: Altitude Adj: Altitude Adj: Altitude Adj: Altitude Adj: Net Correction: Adjusted Hourly Unit Production: Adjusted Hourly Unit Production: O.646 Acres/hr Site Altitude: Altitude Adj: 1.00 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: Adjusted Hourly Unit Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr JOB TIME AND COST Fleet size: I Grader(s) Total job time: 5.60 Hours												
Average Dozer Speed: 88.00 feet/minute minutes/pass acres/hour Job Condition Correction Factors Unadjusted Hourly Unit Production: 0.646 Acres/hr Site Altitude: 6,600 feet Altitude Adj: 1.00 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.83 multiplier Adjusted Hourly Unit Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr JOB TIME AND COST Fleet size: 1 Grader(s) Total job time: 5.60 Hours			_									
Average Maneuver Time:			_	11 0 0								
Unadjusted Hourly Unit Production: Site Altitude:												
Unadjusted Hourly Unit Production: 0.646 Acres/hr Site Altitude: 6,600 feet Altitude Adj: 1.00 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.83 multiplier Adjusted Hourly Unit Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 hourly Acres/hr Total job time: 5.60 Hours			Product	ion per unit area:	0.646	acres/h	nour					
Site Altitude: 6,600 feet Altitude Adj: 1.00 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.83 multiplier Adjusted Hourly Unit Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr												
Altitude Adj: 1.00 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.83 multiplier Adjusted Hourly Unit Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Hours Fleet size: 1 Grader(s) Total job time: 5.60 Hours		Un	adjusted Hourly	Unit Production:	0.646	Acres/	hr					
Altitude Adj: 1.00 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.83 multiplier Adjusted Hourly Unit Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Hours Fleet size: 1 Grader(s) Total job time: 5.60 Hours				Site Altitude:	6,600	feet						
Net Correction: 0.83 multiplier Adjusted Hourly Unit Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Adjusted Hourly Fleet Production: 0.54 Acres/hr Acres/hr Fleet size: 1 Grader(s) Total job time: 5.60 Hours				Altitude Adj:	•	(CAT	HB)					
Adjusted Hourly Unit Production: Adjusted Hourly Fleet Production: O.54 Acres/hr Acres/hr JOB TIME AND COST Fleet size: 1 Grader(s) Total job time: 5.60 Hours							•					
Adjusted Hourly Fleet Production: 0.54 Acres/hr JOB TIME AND COST Fleet size: 1 Grader(s) Total job time: 5.60 Hours				Net Correction:	0.83	multip	lier					
Adjusted Hourly Fleet Production: 0.54 Acres/hr JOB TIME AND COST Fleet size: 1 Grader(s) Total job time: 5.60 Hours			Adjusted 1	Hourly Unit Production:	0.54	Acres/hr						
Fleet size:1 Grader(s) Total job time: 5.60 Hours												
Fleet size:1 Grader(s) Total job time: 5.60 Hours		· ———										
Unit cost: \$336.576 Per acre Total job cost: \$1,010			1_	Grader(s)	Total job tin	ne:	5.60]	Hours			
		Unit cost:	\$336.576	Per acre	Total job co	ost:	*1,010					

BULLDOZER WORK

Task description:	Place ov	erburde	n in Phase 1	& 2			
Surface Rock Pit	<u>i</u>	Peri	mit Action:	TR-1		Permit/Job#:	M1984001
PROJECT IDEN	TIFICATION						
Task #: 03A		State:	Colorado			Abbreviation:	None
Date: $\frac{0.5A}{4/12/2}$	<u></u>	County:	Mesa			Filename:	M001-03a
User: $\frac{4/12/2}{ACY}$.017	county.	TVICSA			Thename.	141001 03u
		-					
Agency or	organization nan	ne: DR	RMS				
HOURLY EQUI	PMENT COST	<u>r</u>					
Basic Machine:	Cat D7R DS Se	eries II L	GP				
Horsepower:	240						
Blade Type: Attachment:	Straight			_			
Shift Basis:	3-shank ripper						
Data Source:	1 per day (CRG)						
	(CKU)						
Cost Breakdown:				İ			
0 1: 0 ~~			.	<u>U</u> 1	tilization %		
Ownership Cost/H			\$66.14		NA 100		
Operating Cost/H			\$63.91		100 NA		
Ripper own. Cost/H Ripper op. Cost/H			\$6.02 \$0.82		NA 20		
			•				
Operator Cost/H	our:		\$40.23		NA		
Total unit Cost/Hou	r: \$177.12						
Total Fleet Cost/Hor							
MATERIAL QU Initial Volume: Swell factor:	1,331 1.165						
Loose volume:	1,551 LCY						
_							
Source of estimated	_		3" depth, Re	c Map			
Source of estimated	swell factor:	Cat Hand	book				
HOURLY PROD	MICTION						
	<u></u>	0.0					
Average push distan		0 feet	a				
Unadjusted hourly p	roduction: 23	0.4 LCY/	hr				
Materials consistence	y description:	Consol	idated stock	oile 1.0			
Average push gradie Average site altitude		t					
Material weight:	2,900 lbs/	/LCY				<u> </u>	
Weight description:	Decompo	sed rock	- 50% Rock	, 50% Ear	th		
Job Condition Corre		0	750	I	Source		
	rator Skill:		750		(AVG.)		
Material co			000		(CEN.)		
	ng method:		000		(GEN.)		
	Visibility:	1.	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:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3949

Adjusted unit production: 90.98 LCY/hr
Adjusted fleet production: 90.98 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.947/LCY

Total job time: 17.04 Hours
Total job cost: \$3,019

BULLDOZER WORK

Task description:	Place topsoil in Phase 1 & 2			
: Surface Rock Pit	Permit Action:	TR-1	Permit/Job#:	M1984001
PROJECT IDENTIFI	<u>ICATION</u>			
Task #: 04A	State: Colorado		Abbreviation:	None
Date: 4/12/2019	County: Mesa		Filename:	M001-04a
User: ACY			-	
Agency or organ	nization name: DRMS			
HOURLY EQUIPME	NT COST			
•	<u> </u>			
	D7R DS Series II LGP	_		
<u> </u>	ight			
	nank ripper	_		
	er day	<u>—</u>		
Data Source: (CR	·			
	,	_		
<u>Cost Breakdown</u> :	I	TT/!!! - 4' - 0/		
Ownership Cost/Hour:	\$66.14	<u>Utilization %</u> NA		
-	\$63.91	100		
Operating Cost/Hour: Ripper own. Cost/Hour:	\$6.02	NA		
Ripper op. Cost/Hour:	\$0.82	20		
Operator Cost/Hour:	\$40.23			
Operator Cost/Hour.	\$40.23	NA		
Total unit Cost/Hour:	\$177.12			
Total Fleet Cost/Hour:	\$177.12			
MATERIAL QUANT	<u>ITIES</u>			
Initial Volume: 887				
Swell factor: 1.125	<u> </u>			
Loose volume: 008 l				
Loose volume: 998 l				
Source of estimated volum	LCY ane: 3.3 @ 2" depth, Rec n	пар		
	ne: 3.3 @ 2" depth, Rec n	nap		
Source of estimated volum	ne: 3.3 @ 2" depth, Rec n factor: Cat Handbook	nap 		
Source of estimated volum Source of estimated swell HOURLY PRODUCT	ne: 3.3 @ 2" depth, Rec n factor: Cat Handbook	nap 		
Source of estimated volum Source of estimated swell	3.3 @ 2" depth, Rec n Cat Handbook	nap		
Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance:	3.3 @ 2" depth, Rec n Cat Handbook			
Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency described	ne: 3.3 @ 2" depth, Rec n factor: Cat Handbook CION 250 feet 230.4 LCY/hr cription: Consolidated stockp			
Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product	3.3 @ 2" depth, Rec n Cat Handbook			
Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency descarded and the state of the st	re: factor: 3.3 @ 2" depth, Rec n Cat Handbook CION 250 feet 230.4 LCY/hr cription: Consolidated stocks			
Source of estimated volumes Source of estimated swells. HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency dest Average push gradient: Average site altitude:	3.3 @ 2" depth, Rec n Cat Handbook	pile 1.0		
Source of estimated volumes Source of estimated swells. HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency dest Average push gradient: Average site altitude: Material weight: Weight description:	3.3 @ 2" depth, Rec n Cat Handbook	oile 1.0 75% Earth		
Source of estimated volumes Source of estimated swells. HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency dest Average push gradient: Average site altitude: Material weight:	3.3 @ 2" depth, Rec n Cat Handbook	pile 1.0		
Source of estimated volumes Source of estimated swells. HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency dest Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	Signature	oile 1.0 75% Earth Source		
Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency dest Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S	3.3 @ 2" depth, Rec n Cat Handbook	75% Earth Source (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:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4323

Adjusted unit production: 99.60 LCY/hr
Adjusted fleet production: 99.6 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.778/LCY

Total job time: 10.02 Hours
Total job cost: \$1,775

REVEGETATION WORK

Task des	scription:	Reveg pit floor Phase	1 & 2				
Surfa	ce Rock Pit	Permit A	ction: TR-1			Permit/Job#:	M1984001
PROJEC	CT IDENTIFICA	TION					
Task Da Use	#: 05A te: 4/12/2019	<u> </u>	orado a				None M001-05a
	Agency or organiza	tion name: DRMS					
FERTIL	LIZING						
Materials	S						
Descr	iption		Units / Acre	Unit	Cost	t / Unit	Cost /Acre
					\$		\$
					Tota	al Fertilizer Materials Cost/Acre	\$0.00
Applicati	on						
Descr	iption						Cost /Acre
			Total	Fertilizer	Application	n Cost/Acre	\$0.00
TILLIN	<u>G</u>						
Descr		MEANS 32 91 13.23 6	100)				Cost /Acre \$106.29
D150 1	autowing, o deep (Total Tillin	g Cost/Acre	\$106.29
SEEDIN							
Seed I	Mix				Rate – PLS LBS /	Seeds per SQ. FT	Cost /Acre

Indian Ricegrass - Paloma

Intermediate Wheatgrass - Oahe

Blue Grama - Native

Sand Dropseed

Winter Fat

Sainfoin - Remont

Saltbush, Four Wing

CIRCES Cost Estimating Software	

Acre

1.50

0.50

0.80

4.50

5.00

0.80

0.50

13.60

Totals Seed Mix

4.86

8.16

95.50

9.61

2.18

1.10

1.27

122.68

\$14.63

\$7.43

\$8.88

\$17.69

\$16.20

\$10.24

\$10.50

\$85.55

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 - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$2.81	\$2.81
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$288.00	\$576.00
Total Mulch Materials Cost/Acre				\$578.81

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$68.78
Power mulcher (MEANS 32 91 13.16 0350)		\$92.78
Weed spray, truck, non-aquatic area, nox. [DMG]		\$73.22
	Total Mulch Application Cost/Acre	\$234.78

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Pine, Pinyon	5	Tubling, 10 cu. in. container {(MEANS)	\$4.78	\$2.40	\$23.90
	\$23.90				

JOB TIME AND COST

 No. of Acres:
 3.3
 Cost /Acre:
 \$1,261.33

 Estimated Failure Rate:
 50%
 Cost /Acre*:
 \$1,261.33

*Selected Replanting Work Items: TILLING, SEEDING, NURSERY, MULC

HING

Initial Job Cost: \$4,162.39

Reseeding Job Cost: \$2,081.19

Total Job Hours: \$6,244

16.00

REVEGETATION WORK

Task description:	Secondary Reveg	Phase 2 (50% of	2.2 ac) unre	eleased are	eas	
Surface Rock Pit	Permit Action: TR-1 Permit			Permit/Job#	: <u>M1984001</u>	
PROJECT IDENTIFI	CATION					
Task #: 05B Date: 4/12/2019	State: County:	Colorado Mesa				None M001-05b
User: ACY	sization name: DD	MC		_		
Agency or organ	nization name: DR	WIS				
<u>FERTILIZING</u>						
Materials Description		Units / Acre	Unit	Cost	t / Unit	Cost /Acre
-				\$		\$
				Tota	al Fertilizer Materials Cost/Acre	\$0.00
Application Description						Cost /Acre
-						\$
		Total	Fertilizer A	Application	n Cost/Acre	\$0.00
<u> </u>						
Description						Cost /Acre
Disc harrowing, 6" dee	ep (MEANS 32 91 13	.23 6100)				\$106.29
			Т	otal Tilling	g Cost/Acre	\$106.29
SEEDING						
Seed Mix				Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Palo	oma			1.50	4.86	\$14.63

Blue Grama - Native

Intermediate Wheatgrass - Oahe

Sand Dropseed

Winter Fat

Sainfoin - Remont

Saltbush, Four Wing

\$7.43

\$8.88

\$17.69

\$16.20

\$10.24

\$10.50

\$85.55

0.50

0.80

4.50

5.00

0.80

0.50

13.60

Totals Seed Mix

8.16

95.50

9.61

2.18

1.10

1.27

122.68

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 - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$2.81	\$2.81
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$288.00	\$576.00
Total Mulch Materials Cost/Acre				\$578.81

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$68.78
Power mulcher (MEANS 32 91 13.16 0350)		\$92.78
Weed spray, truck, non-aquatic area, nox. [DMG]		\$73.22
	Total Mulch Application Cost/Acre	\$234.78

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Pine, Pinyon	5	Tubling, 10 cu. in. container {(MEANS)	\$4.78	\$2.40	\$23.90
Totals Nursery Stock Cost / Acre					\$23.90

JOB TIME AND COST

No. of Acres:	1.1	Cost /Acre:	\$1,261.33
Estimated Failure Rate:	0%	Cost /Acre*:	\$0.00
*Selected Replanting Work Items:	NONE		

Initial Job Cost: \$1,387.46

Reseeding Job Cost: \$0.00

Total Job Cost: Job Hours: \$8.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: <u>Ini</u>	tial Mobilization	l			
te: Surface Rock Pit	Permi	t Action: TR-1		Permit/Job	o#: <u>M1984001</u>
PROJECT IDENTIFICAT	<u>ION</u>				
Task #: 06A	State: C	Colorado	Abb	reviation:	None
Date: 4/12/2019 User: ACY	County: N	1 esa	<u> </u>	Filename:	M001-06a
Agency or organizatio	n name:DRMS	S			
EQUIPMENT TRANSPOR	T RIG COST				
			Shift b	oasis:	l per day
			Cost Data So		CRG Data
Truck Tractor Desc	cription: GENI	ERIC ON-HIGHW	VAY TRUCK TRACT 400 HP (2ND HALI		DIESEL POWERED,
Truck Trailer Desc	cription:	GENERIC FOLDI	NG GOOSENECK, D	ROP DEC	K EQUIPMENT
		T	RAILER (25T, 50T, A	AND 100T)	
Cost Breakdown:					
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons		
Ownership Cost/Hour:	\$16.63	\$18.37	\$22.33		
Operating Cost/Hour:	\$44.38	\$46.13	\$50.07		
Operator Cost/Hour:	\$27.66	\$27.66	\$27.66		
Helper Cost/Hour:	\$0.00	\$25.39	\$25.39		

NON ROADABLE EQUIPMENT:

Total Unit Cost/Hour:

\$88.67

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 D7R DS	38.49	\$72.16	\$117.55	1	\$189.71	\$117.55	\$250.00
Series II LGP							
Drill/Broadcast	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$8.33	\$88.67	1	\$97.00	\$88.67	\$250.00
(Bowie LD-90)							

\$117.55

\$125.45

Subtotals: \$390.92 \$294.89 \$750.00

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	\$76.10	1	\$76.10	\$76.10

Subtotals:	\$76.10	\$76.10

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
mph

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.49	0.49
Return Time (Hours):	0.49	0.49
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.98	0.98

JOB TIME AND COST

Total job cost: 3.96 Hours

Total job cost: \$3,027

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	econdary Mobiliz	ation		
te: Surface Rock Pit	Permi	t Action: TR-1	Permit/Jo	b#: <u>M1984001</u>
PROJECT IDENTIFICATION	<u>TION</u>			
Task #: 06B Date: 4/12/2019 User: ACY		Colorado Aesa	Abbreviation: Filename:	None M001-06b
Agency or organizat	ion name: DRM	S		
Truck Tractor De			Shift basis: Cost Data Source: AY TRUCK TRACTOR, 6X4, 400 HP (2ND HALF, 2006)	1 per day CRG Data DIESEL POWERED,
Truck Trailer De	escription:		IG GOOSENECK, DROP DEC AILER (25T, 50T, AND 100T	~
Cost Breakdown:				
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	
Ownership Cost/Hour		\$18.37	\$22.33	
Operating Cost/Hour		\$46.13	\$50.07	
Operator Cost/Hour	\$27.66	\$27.66	\$27.66	
Helper Cost/Hour	\$0.00	\$25.39	\$25.39	
Total Unit Cost/Hour	\$88.67	\$117.55	\$125.45	

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni	Fleet Size	Haul Trip Cost/hr/	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Drill/Broadcast	(TONS) 25.00	\$15.54	\$88.67	1	fleet \$104.21	\$88.67	\$250.00
Seeder with Tractor	23.00	Ψ13.31	φοσ.σ7		Ψ101.21	ψοσ.σ7	Ψ230.00
Power Mulcher (Bowie LD-90)	6.00	\$8.33	\$88.67	1	\$97.00	\$88.67	\$250.00

Subtotals: \$201.21 \$177.34 \$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.	\$76.10	1	\$76.10	\$76.10
Crew				

Cultatalar	¢7.6 10	\$7C 10	
Subtotals:	\$76.10	\$76.10	

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

mph

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

\$1,772.56

\$74.41

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.49	0.49
Return Time (Hours):	0.49	0.49
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.98	0.98

JOB TIME AND COST

Total job cost: 3.96 Hours

Total job cost: \$1,847