

April 10, 2023

Vic Girardi Hidden Mesa Ranch, LLC 3183 D Road Grand Junction, CO 81504

Steve Baker 3B Enterprises, LLC P.O. Box 1665 Craig, CO 81626

## Re: Hidden Pit, File No. M-2022-040, 112c Construction Materials Permit application

Dear Sirs:

On September 9, 2022, the Division of Reclamation, Mining and Safety (Division) received your 112c Construction Materials Reclamation Permit Application package for the Hidden Pit, File No. M-2022-040. The Division sent an adequacy letter on February 7, 2023, and we received Steve Baker's response to that letter on March 7, 2023. The Division sent a second adequacy letter on March 20, 2023, and we received Steve Baker's response to that letter on April 4, 2023.

*No additional adequacy responses are required*. But before we approve this application, I want to discuss the enclosed reclamation cost estimate with you. Let me know if you have any questions, comments, or objections to this estimate (720-601-2276 or Rob.zuber@state.co.us).

At this point, the Division is required to issue an approval or denial decision no later than April 14, 2023. If appropriate to allow more time for the discussion noted above, please request an extension of the deadline via email.

Sincerely,

Phot D. 7/

Robert D. Zuber, P.E. Environmental Protection Specialist

Enclosure

Cc: Michael Cunningham, DRMS

# COST SUMMARY WORK

Т	ask descrip	otion:						
Site:	Hidden P	Pit	Per	mit Action:	Application 2023	Permit/Job	o#: <u>M2022040</u>	
<u>P</u> ]		IDENTIFICAT 000 4/8/2023 RDZ	ION State: County:	Colorado Delta			None M040-000	

Agency or organization name: DRMS

## TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	~
Task	Description	Used	Size	Hours	Cost
010	Demo scale house, slabs, concrete blocks for scale,	DEMOLISH	1	0.00	\$3,197
	and tank				
02a	Haul subsoil to slopes of pit	TRUCK1	1	83.39	\$34,130
02B	Haul subsoil to pond at process area	TRUCK1	] 1	23.25	\$9,515
030	Compact soil on slopes of pit	COMPACT	2	1.58	\$739
040	Haul topsoil to slopes of pit	TRUCK1	] 1	22.99	\$9,408
050	Spread topsoil on slopes of pit	DOZER	2	2.10	\$1,210
060	Seed slopes around pit	REVEGE	] 1	2.00	\$8,330
070	Rip process area and footprint of soil piles	RIPPER	2	3.07	\$1,776
080	Haul topsoil to process area and pond	TRUCK1	] 1	10.13	\$4,147
090	Spread topsoil on slopes of pit	DOZER	2	1.08	\$625
100	Seed process area, pond, soil pile areas	REVEGE	] 1	2.00	\$8,543
110	Equip. mobilization from Delta (and demob)	MOBILIZE	1	1.10	\$4,100
		<u>SUBTO</u>	DTALS:	152.69	\$85,720

## **INDIRECT COSTS**

#### **OVERHEAD AND PROFIT:**

2.02	Total =	\$1,732
1.05	Total =	\$900
76.34	Total =	\$5,735
10.00	Total =	\$8,572
	TOTAL O & P =	\$16,939
	CONTRACT AMOUNT (direct + O & P) = $($	\$102,659
	1.05 76.34	1.05     Total =       76.34     Total =

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	0.00	Total =	\$0
Reclamation management and/or administration:	5.00		\$5,133
		-	
CONTINGENCY:	0.00	Total =	\$0
	TOTAL IN	DIRECT COST =	\$22,572
TOTAL BO	ND AMOUNT (d	irect + indirect) =	\$108,292

# **DEMOLITION WORK**

	Task description:	Demo scale	house, slabs, co	ncrete blocks for sc	ale, and tank	
Site:	Hidden Pit		Permit Action:	Application 2023	Permit	/Job#: <u>M2022040</u>
<u>PROJE</u>	CT IDENTIFICATION	Ī				
Task a	#: 010	State:	Colorado		Abbreviation:	None
Dat	e: 4/9/2023	County:	Delta		Filename:	M040-010
Use	r: RDZ					
	Agency or organizat	ion name:	DRMS			

# UNIT COSTS

# Location adjustment: 89.80 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Scale house	30' x 10'	Bldg. (SN) demo./off- site disposal in approved landfill - Max. 30 mile haul	3,000.00	CF	\$0.43	\$1,299.00
Scale slabs for approach	2 x 12' x 10'	Floor, concrete, demolition only, average reinforcing - 6 in. thick	240.00	SF	\$1.11	\$266.40
Blocks for scale	4 x 12'x4'x18"	Footing, concrete, average reinforcing - 2.0 ft. x 3 ft.	48.00	LF	\$13.36	\$641.28
Disposal of concrete	408 CF	Loading and 5 mile haul, salvage allowed - Concrete frame structures	15.00	CY	\$14.15	\$212.25
Dump fees for concrete	408 CF	Dump fees - Building construction materials.	15.00	CY	\$11.10	\$166.50
Fuel Tank	6000 gallons	Excavate and load tank onto trailer, non-leaking - 6,000 gal. to 8,000 gal.	1.00	EA	\$975.00	\$975.00

				<b>Total Cost</b>	
		Subtotal		(adjusted for	
Job Hours:	0.00	(unadjusted):	\$3,560.43	location):	\$3,197.27

Task description:	Haul su	bsoil to slop	es of	pit			
Site: Hidden Pit		Permit	Actio	on: Application	2023	Permit/Job#: <u>M</u>	2022040
PROJECT IDEN	TIFICATION	r					
	IIFICATION		7-1	. J.,	A 1-	hannistiana Na	
$\begin{array}{r} \text{Task #:}  \underline{02A} \\ \text{Date:}  \underline{4/8/20} \end{array}$	23		Colora Delta	100	A0	breviation: Nor Filename: M0	ne 140-02a
User: RDZ	23	<u> </u>	Jona				
Agency or	organization nar	ne: DRM	S				
	-				01.10.1	·	
<u>HOURLY EQUI</u>	PMENT COS	<u>L</u>				is: <u>1 per day</u>	
T	ruck Loader Tea	m -Truck		Equipment Descri heric 12-18 cy, 6x4			
1	ruek Louder Tea	-Loader:		T 966H high lift	r		
Suppo	ort Equipment -L	H	NA	¥			
Dood M	-Du aintenance –Mot	ump Area:	NA NA				
Koad Ma		or Grader: iter Truck:		ter Tanker, 3,500	Gal.		
		1					
Cost Breakdown:		ader Team			Equipment		ce Equipment
	Truck	Loader		Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100		100	NA	NA	NA	100
Ownership cost/hour:	\$24.21		9.15	NA	NA	NA	\$14.98
Operating cost/hour:	\$57.28	\$43	3.04	NA	NA	NA	\$33.32
%Utilization-riper:	NA		0	NA	NA	NA	NA
Ripper own. cost/hour:	NA		0.00	NA	NA	NA	\$0.00
Ripper op. cost/hour:	NA		0.00	NA	NA	NA	\$0.00
Operator cost/hour:	\$32.54	\$40		NA	NA	NA	\$0.00
Unit Subtotals: Number of Units:	\$114.03	\$132		NA 0	NA	NA 0	\$48.30
	Work:	\$360.96	1		0 \$0.00	Maint:	\$48.30
Group Subtotals:				Support:	\$0.00	Wiannt.	\$46.30
Total work team cos	t/hour: <u>\$409.26</u>						
MATERIAL QU	ANTITIES						
			aav	C .11	6		
Initial volume: Loose volume:	24,688 27,52		CCY LCY		factor: <u>1.115</u>		
	rce of estimated				n Mining & Sofe		
	of estimated swe			sion of Reclamatic	n, mining & Sare	ety	
	Material Purch		\$0.00				
	То	otal Cost:	\$0.00	)			
	DUCTION						
HOURLY PRO	DUCTION						
Truck Capacity:							
<u>Truck Payload (weig</u> Material w				Pounds/LCY			
Descri		Loam					
Rated Par	1			D 1.			
Payload Cap				Pounds LCY			

Struck Volume:	12.00 L	CY				
Heaped Volume:	18.00 L	CY				
Average Volume:	15.00 L	CY				
Adjusted Volume:	18.00 L	CY				
Final	Truck Volume B	Based on Number	of Loader Passes:	14.63	LCY	
Loading Tool Capacity						
	5 000			ket Size Class:	NA	
Rated Capacity:	5.000	LCY (heaped)			00() 0.075	
Bucket Fill Factor:	0.975 <b>4.875</b>	Loose materia	ıl - uniform aggreg	ates to $1/8^{10}$ (95-10	0%)0.975	
· · · -						
Job Condition Corrections			Site Altitude (ft.):			
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE	,		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.830				
Looding Teal Crub Th	NT1.	f I and a market	Decese Decesion 1	E:11 Tm1	2	
Loading Tool Cycle Time:		of Loading Tool F	Passes Required to	Fill I ruck:	3	passes
E 1 E 01						
Excavators and Front Shove						
Machine Cycle Time v	s. Job Condition					
Machine Cycle Time v Selected Value	s. Job Condition within this Basic	Rating: NA				
Machine Cycle Time v Selected Value Track Loaders –	s. Job Condition within this Basic Material Descrip	Rating: NA				
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.):	s. Job Condition within this Basic Material Descrip	Rating: NA		 	00	
Machine Cycle Time v Selected Value Track Loaders –	s. Job Condition within this Basic Material Descrip	Rating: NA		 Dump:0.10	00	
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.):	s. Job Condition within this Basic Material Descrip	Rating: NA ption:	ime (load, dump, 1	·		inutes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: <u>NA</u> Wheel and Track Loaders - Cycle Time Factors	s. Job Condition within this Basic Material Descrip Ma Unadjusted Basi	Rating: NA otion: neuver: NA ic Loader Cycle T		maneuver): Factor (min.)	0.500 m	inutes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders – <u>Cycle Time Factors</u> Material:	s. Job Condition within this Basic Material Descrip Ma Unadjusted Basi	Rating: NA tion:	cable 0.00	maneuver): Factor (min.) 0.000	0.500 m Source (Cat HB)	inutes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile:	s. Job Condition within this Basic Material Descrip Ma Unadjusted Basi No adjustment No adjustment	Rating: NA tion:	cable 0.00 cable 0.00	maneuver):	0.500 m Source (Cat HB) (Cat HB)	inutes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	s. Job Condition within this Basic Material Descrip Ma Unadjusted Basi No adjustment No adjustment No adjustment	Rating: NA tion:	cable 0.00 cable 0.00 cable 0.00	maneuver):	0.500 m Source (Cat HB) (Cat HB) (Cat HB)	inutes
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Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition within this Basic Material Descrip Ma Unadjusted Basi No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	cable 0.00 cable 0.00 cable 0.00 icable 0.00 cable 0.00 ime Adjustment:	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000	0.500 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	inutes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition within this Basic Material Descrip Ma Unadjusted Basi No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	cable 0.00 cable 0.00 cable 0.00 icable 0.00 cable 0.00 ime Adjustment: ader Cycle Time:	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.500	0.500 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	inutes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition within this Basic Material Descrip Ma Unadjusted Basi No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	cable 0.00 cable 0.00 cable 0.00 icable 0.00 cable 0.00 ime Adjustment:	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000	0.500 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	inutes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition within this Basic Material Descrip Ma Unadjusted Basi No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	cable 0.00 cable 0.00 cable 0.00 icable 0.00 cable 0.00 ime Adjustment: ader Cycle Time:	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.500	0.500 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	inutes
Machine Cycle Time v Selected Value 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 Basi No adjustment No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	cable 0.00 cable 0.00 cable 0.00 cable 0.00 cable 0.00 ime Adjustment: ader Cycle Time: Time per Truck:	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.500	0.500 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Machine Cycle Time v Selected Value 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 Basic No adjustment No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	cable 0.00 cable 0.00 cable 0.00 cable 0.00 cable 0.00 ime Adjustment: der Cycle Time: Time per Truck: Adjusted	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 1.100	0.500 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	    Minute
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time	s. Job Condition within this Basic Material Descrip Ma Unadjusted Basic No adjustment No adjustment No adjustment No adjustment No adjustment science No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	cable 0.00 cable 0.00 cable 0.00 cable 0.00 cable 0.00 ime Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 1.100 for site altitude:	0.500 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes 0.500	inutes Minutes Minutes Minutes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: <b>Truck Cycle Time:</b> Truck Exchange Time Truck Load Time	s. Job Condition within this Basic Material Descrip Ma Unadjusted Basic No adjustment No adjustment No adjustment No adjustment No adjustment e: 0.50 : 1.100 : 0.90	Rating: NA tion:	cable 0.00 cable 0.00 cable 0.00 cable 0.00 cable 0.00 ime Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 1.100 for site altitude: for site altitude: for site altitude:	0.500 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.500 1.100 0.900	    Minutes

Haul Rou	te:							
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	2400.0	00	0.50	3.00	3.50	2665	1.051	
					Haul Time:	1.051	minutes	
Return Re	oute:					1.001		
Seg #	Haul I	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	2400.0	00	-0.50	3.00	2.50	2905	0.862	
					Return Time:	0.862	minutes	
				Total Tru	ck Cycle Time:	4.413	minutes	
Loading Too								
	iction _	548.44	LCY/Hour		Adjusted for j	ob efficiency:	455.20	LCY/Hour
Truck Unit Produ		198.84	LCY/Hour		Adjusted for j	ob efficiency:	165.04	_ LCY/Hour
Optimal No. of Tr	ucks:	3	Truck(s)		Selected Num	ber of Trucks:	2	Truck(s)
			Adjuste	d hourly true	k team production	on: 330.	.08 LCY/H	Iour
					er team production			
			Adjusted multip	le truck/loade	er team production	on: 330.	.08 LCY/H	Iour
JOB TI	ME AN	D COST						
Fleet	size:	1	Team(s)	<b>-</b>	Fotal job time:	83.3	9 Hour	s
Unit	cost:	\$1.240	/LCY		Total job cost:	\$34,13	30	

Task description:	Haul su	bsoil to pond at	t process area			
Site: Hidden Pit		Permit Ac	tion: Application	2023	Permit/Job#: <u>M</u>	2022040
PROJECT IDEN	TIFICATION					
Task #: 02B			orado	Ab	breviation: No	
Date: $\frac{4}{8}/20$	23	County: Delt	a		Filename: MO	40-02B
User: RDZ						
	organization nan					
HOURLY EQUIE	PMENT COST	<u>[</u>		Shift bas	sis: <u>1 per day</u>	
			Equipment Descri			
T	ruck Loader Tea		eneric 12-18 cy, 6x	4		
Suppo	ort Equipment -L		AT 966H high lift A			
Suppo		imp Area: N.				
Road Ma	intenance – Mote					
	-Wa	ter Truck: W	ater Tanker, 3,500	Gal.		
Cost Breakdown:	Truck/Los	ader Team	Support	Equipment	Maintenan	ce Equipment
<u>Cost Dicakdown</u> .	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA NA	NA	100
Ownership cost/hour:	\$24.21	\$49.15		NA	NA	\$14.98
Operating cost/hour:	\$57.28	\$43.04		NA	NA	\$33.32
%Utilization-riper:	NA	φ <del>-3.04</del> 0		NA	NA	\$33.32 NA
Ripper own. cost/hour:	NA	\$0.00		NA	NA	\$0.00
Ripper op. cost/hour:	NA	\$0.00		NA	NA	\$0.00
Operator cost/hour:	\$32.54	\$40.71	NA	NA	NA	\$0.00
Unit Subtotals:	\$114.03	\$132.90	NA	NA	NA	\$48.30
Number of Units:	2	1		0	0	1
Group Subtotals:	Work:	\$360.96	Support:	\$0.00	Maint:	\$48.30
Total work team cost	t/hour: <u><b>\$409.26</b></u>					
MATERIAL QUA	ANTITIES					
Initial volume:	8,067	CC	Y Swell	factor: 1.115		
Loose volume:	8,995	5 LC	Y			
Sou	rce of estimated	volume: Div	vision of Reclamation	on, Mining & Safe	ety	
Source	of estimated swe		Handbook		•	
	Material Purcha					
	Te	otal Cost: \$0.	00			
HOURLY PRO	DUCTION					
Truck Capacity:						
Truck Payload (weig			Dound-/LOV			
Material w Descri	-	Loam	Pounds/LCY			
Rated Pay			D 1			
Kaltu Fav	yillau. 50,500		Pounds			

Struck Volume:		CY				
Heaped Volume:	18.00 LO	CY				
Average Volume:	15.00 LO	CY				
Adjusted Volume:	18.00 LO	CY				
	Truck Volume B	ased on Number o	of Loader Passes:	14.63	LCY	
Loading Tool Capacity				~ ~ ~		
Poted Conseitur	5.000	LCY (heaped)		ket Size Class:	NA	
Rated Capacity:	0.975			ates to 1/8" (95-10	00%) 0 075	
Adjusted Capacity:	4.875	LOOSE IIIaterial	i - uniform aggrega	ates to 1/8 (93-10	070)0.975	
		_				
Job Condition Corrections:	-		Site Altitude (ft.): <u>4</u>	<u>5600</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HB			
Job Efficiency:	0.830	0.830	(CAT HB	3)		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:	Number o	f Loading Tool P	asses Required to 1	Fill Truck:	3	passes
		1 Loading 10011	asses Required to h		5	pusses
Excavators and Front Shovel	<u>s.</u>					
Machine Cycle Time vs Selected Value v	s. Job Condition I vithin this Basic I					
-	vithin this Basic I	Rating: NA				
Selected Value v	vithin this Basic I Material Descript	Rating: NA				
Selected Value v Track Loaders –	vithin this Basic I Material Descript	Rating: NA		 Dump:0.10	00	
Selected Value v Track Loaders – 2 Cycle Time Elements (min.): Load: <u>NA</u>	vithin this Basic I Material Descript Mar	Rating: NA tion:		I		nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders -	vithin this Basic I Material Descript Mar	Rating: NA tion:	ime (load, dump, r	naneuver):	0.500 mi	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - Cycle Time Factors	vithin this Basic I Material Descript Mar – Unadjusted Basic	Rating: <u>NA</u> tion: neuver: <u>NA</u> c Loader Cycle Ti		naneuver): Factor (min.)	0.500 min Source	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - <u>Cycle Time Factors</u> Material:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment	Rating: <u>NA</u> tion: neuver: <u>NA</u> c Loader Cycle Ti - factor not applic	able 0.00	naneuver): Factor (min.) 0.000	0.500 min Source (Cat HB)	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment	Rating: <u>NA</u> tion: neuver: <u>NA</u> c Loader Cycle Ti <u>- factor not applic</u> - factor not applic	able 0.00 able 0.00	naneuver): Factor (min.) 0.000 0.000	0.500 min Source (Cat HB) (Cat HB)	nutes 
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment - No adjustment - No adjustment -	Rating: NA tion:	able 0.00 able 0.00 able 0.00	naneuver): Factor (min.) 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB)	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00	naneuver): Factor (min.) 0.000 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00 me Adjustment:	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00 me Adjustment: der Cycle Time:	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	nutes
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:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00 me Adjustment: der Cycle Time: Fime per Truck:	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
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:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 able 0.00 able 0.00 me Adjustment: der Cycle Time: Time per Truck:	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 1.100	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	    Minutes
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 Exchange Time:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment No adjustment No adjustment No adjustment No adjustment 0.50	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00 me Adjustment: der Cycle Time: Fime per Truck: Adjusted Adjusted	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 1.100 for site altitude:	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes 0.500	nutes — Minutes — Minutes — Minutes
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 Exchange Time: Truck Load Time: ck Maneuver and Dump Time:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment No adjustment No adjustment No adjustment No adjustment 0.50 1.100 0.90	Rating: NA tion:	able 0.00 able 0.00 able 0.00 able 0.00 able 0.00 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted Adjusted	naneuver):	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.500 1.100 0.900	    Minutes
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 Exchange Time: Truck Load Time:	vithin this Basic I Material Descript Mar Unadjusted Basic No adjustment No adjustment No adjustment No adjustment No adjustment 0.50 1.100 0.90	Rating: NA tion:	able 0.00 able 0.00 able 0.00 able 0.00 able 0.00 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted Adjusted	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 1.100 for site altitude: for site altitude:	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.500 1.100 0.900	    Minute

Haul Rou	te:							
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	1500.0	00	0.50	3.00	3.50	2665	0.713	
					Haul Time:	0.713	minutes	
Return Ro	oute:					00710		
Seg #	Haul I	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	1500.0	00	-0.50	3.00	2.50	2905	0.552	
					Return Time:	0.552	minutes	
				Total Tru	ck Cycle Time:	3.765	minutes	
Loading Too	ol unit							
Produ		548.44	LCY/Hour		Adjusted for j	ob efficiency:	455.20	LCY/Hour
Truck Unit Produ		233.07	LCY/Hour		Adjusted for j	ob efficiency:	193.45	_ LCY/Hour
Optimal No. of Tr	ucks:	2	Truck(s)		Selected Num	per of Trucks:	2	Truck(s)
			Adjuste	d hourly true	k team production	on: 386	.89 LCY/H	Iour
					er team production		.89 LCY/H	Iour
			Adjusted multip	le truck/loade	er team production	on: 386	.89 LCY/H	Iour
JOB TI	ME AN	D COST						
Fleet	size:	1	Team(s)	]	Fotal job time:	23.25	5 Hour	S
Unit	cost:	\$1.058	/LCY	,	Total job cost:	\$9,51	5	

# COMPACTION WORK

Task description:	Compact soil o	n slopes of pit				
e: Hidden Pit	Pe	ermit Action: _	Application 2	2023 Pe	rmit/Job#:	M2022040
PROJECT IDENTI	FICATION					
Task #: 030	State				eviation:	None
Date: <u>4/9/2023</u>	County	: Delta		F	ilename:	M040-030
User: RDZ						
Agency or org	anization name: <u>I</u>	ORMS				
HOURLY EQUIPM	ENT COST					
Basic Machin	ne: CAT 815F			Horsepower:		240
Compactor Typ	be: Soil - tamping	foot	_	Shift Basis:		er day
				Data Source:	(0	CRG)
Cost Breakdown:						
~		<b>4110</b>	16	Utilization %		
	ership Cost/Hour: erating Cost/Hour:	\$110 \$96.		NA 100		
	berator Cost/Hour:	\$96. \$26.		NA		
-	al Unit Cost/Hour:	\$232				
	-	`		J		
I ota	l Fleet Cost/Hour:	\$465	.57			
MATERIAL QUAN	TITIES					
Loose volu		4,688	LCY	Shri	inkage fact	tor: 0.905
Compacted volu		<b>2,343</b>	- CCY	5111	llikage laei	0.905
-		,			6.4	
	ource of estimated ve estimated shrinkage		andbook	nation, Mining & S	arety	
Source of	estimated similage		landbook			
HOURLY PRODUC	<u>CTION</u>		Unadjust	ed hourly production	on = (W x)	<u>S x L x C) / P</u>
Co	mpacted width per p	bass (W):	6.50	feet		
	verage Compactor S		8.00	mph		
Compac	ted thickness of each		10.00	inches		
	Conversion Cons	· · ·	16.3		/12in./27c	u.ft.)
1	umber of machine pa sted Hourly Unit Pro		1 8,476.00	passes CCY/ho	11 <b>r</b>	
Job Condition Correction	•			ude: 5,600 feet	uı	
<u> </u>		Source		<u></u>		
Altitude Adj:	1.00	(CAT HB	)			
Job Efficiency:	0.83	(1 shift/day	<u></u>			
Net Correction:	0.8300	multiplier				
	Adjusted Hourly Un	it Production:	7,035.08	CCY/Hour		
	Adjusted Hourly Fle		14,070.10			
	-			—		
JOB TIME AND CO	<u>DST</u>					
Fleet size:	2 Compac	ctor(s)	Te	otal job time:	1.59	Hours
Unit cost: \$0	0.033 per CCY	Y	Т	otal job cost:	\$739	

Site: Hidden Pit		Permit	Actio	on: Application	2023	Permit/Job#: <u>M</u>	2022040
PROJECT IDENT	TFICATION	-					
Task #: 040 Date: 4/8/202	3		Colora Delta	ado	Ab	breviation: No Filename: M0	ne 40-040
User: RDZ			Vita				
Agency or o	rganization nar	ne: DRMS	S				
rigeney or o	-guillation nui						
HOURLY EQUIP	MENT COST	<u> </u>			Shift bas	is: <u>1 per day</u>	
				Equipment Descri			
Tr	uck Loader Tea	m -Truck: -Loader:		eric 12-18 cy, 6x4 Γ 966H high lift	1		
Suppor	rt Equipment -I		NA	1 900H lligh llit			
	-Di	ump Area:	NA				
Road Mai	ntenance – Mot		NA	T 1 2 500	0.1		
	- W 8	ter Truck:	wai	ter Tanker, 3,500	Jal.		
Cost Breakdown:	Truck/Loa	ader Team		Support I	Equipment	Maintenan	ce Equipment
	Truck	Loader		Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	1	100	NA	NA	NA	10
Ownership cost/hour:	\$24.21	\$49		NA	NA	NA	\$14.9
Operating cost/hour:	\$57.28	\$43	.04	NA	NA	NA	\$33.3
%Utilization-riper:	NA		0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0	.00	NA	NA	NA	\$0.0
Ripper op. cost/hour:	NA	\$0	.00	NA	NA	NA	\$0.0
Operator cost/hour:	\$32.54	\$40		NA	NA	NA	\$0.0
Unit Subtotals:	\$114.03	\$132		NA	NA	NA	\$48.3
Number of Units:	2		1	0	0	0	
Group Subtotals:	Work:	\$360.96		Support:	\$0.00	Maint:	\$48.30
Total work team cost	/hour: <u>\$409.26</u>	j					
<u>MATERIAL QUA</u>	<u>NTITIES</u>						
Initial volume:	6,245		CCY		factor: <u>1.215</u>		
Loose volume:	7,58	8	LCY				
	ce of estimated			tion of Reclamation	on, Mining & Safe	ety	
	f estimated swe Material Purch		<u>Cat F</u> \$0.00	Handbook			
			\$0.00 \$0.00				
HOURLY PROI	DUCTION						
Truck Capacity:							
Truck Payload (weigh							
Material we Descrip		,il		Pounds/LCY			
				<b>D</b> 1			
Rated Pay	load: 50,300			Pounds			

Truck Bed (volume) Basis:						
Struck Volume:		LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:	18.00 I	LCY				
Final	Truck Volume l	Based on Number	of Loader Passes:	14.63	LCY	
Loading Tool Capacity						
			Buc	ket Size Class:	NA	
Rated Capacity:	5.000	LCY (heaped				
Bucket Fill Factor:	0.975		al - uniform aggreg	ates to 1/8" (95-10	00%) 0.975	
Adjusted Capacity:	4.875	LCY				
Job Condition Corrections:	_		Site Altitude (ft.):	<u>5600</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HI	3)		
Job Efficiency:	0.830	0.830	(CAT HI	3)		
Net Correction:	0.830	0.830				
• • • • • • • • • • • • • • • • • • •					2	
Loading Tool Cycle Time:	Number	of Loading Tool	Passes Required to	Fill Truck:	3	passes
Excavators and Front Shovel		Doting NA				
Excavators and Front Shovel Machine Cycle Time vs Selected Value v	s. Job Condition					
Machine Cycle Time v	s. Job Condition within this Basic	Rating: NA				
Machine Cycle Time v Selected Value v	s. Job Condition vithin this Basic Material Descrij	Rating: NA				
Machine Cycle Time v Selected Value v Track Loaders –	s. Job Condition vithin this Basic Material Descrij	Rating: NA		  Dump: 0.10	00	
Machine Cycle Time vs Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u>	s. Job Condition vithin this Basic Material Descrij 	e Rating: NA ption: aneuver: NA	Time (load, dump, -	1		ninutos
Machine Cycle Time vs Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders -	s. Job Condition vithin this Basic Material Descrij 	e Rating: NA ption: aneuver: NA	 Time (load, dump, r	maneuver):	0.500 n	ninutes
Machine Cycle Time vs Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - Cycle Time Factors	s. Job Condition vithin this Basic Material Descrij  Unadjusted Bas	e Rating: <u>NA</u> ption: aneuver: <u>NA</u> sic Loader Cycle '	· •	maneuver): Factor (min.)	0.500 n Source	
Machine Cycle Time vs Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - <u>Cycle Time Factors</u> Material:	s. Job Condition vithin this Basic Material Descrij  Unadjusted Bas	e Rating: <u>NA</u> ption: aneuver: <u>NA</u> sic Loader Cycle ' t - factor not appli	icable 0.00	maneuver): Factor (min.) 0.000	0.500 n Source (Cat HB	)
Machine Cycle Time vs Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile:	s. Job Condition vithin this Basic Material Descrij Ma Unadjusted Bas No adjustment No adjustment	e Rating: <u>NA</u> ption: <u></u> aneuver: <u>NA</u> sic Loader Cycle ' <u>t - factor not appli</u> t - factor not appli	icable 0.00 icable 0.00	maneuver): Factor (min.) 0.000 0.000	0.500 n Source (Cat HB (Cat HB	)
Machine Cycle Time vs Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	s. Job Condition vithin this Basic Material Descrip Ma Unadjusted Bas No adjustment No adjustment No adjustment	e Rating: NA ption:	icable 0.00 icable 0.00 icable 0.00	maneuver): Factor (min.) 0.000 0.000 0.000	0.500 n Source (Cat HB (Cat HB (Cat HB	) ) )
Machine Cycle Time vs Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition vithin this Basic Material Descrip Ma MA _	e Rating: NA ption:	icable 0.00 icable 0.00 icable 0.00 licable 0.00	maneuver): Factor (min.) 0.000 0.000	0.500 n Source (Cat HB (Cat HB (Cat HB (Cat HB	) ) )
Machine Cycle Time vs Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	s. Job Condition vithin this Basic Material Descrip Ma MA _	e Rating: NA ption:	icable 0.00 icable 0.00 icable 0.00 licable 0.00	maneuver): Factor (min.) 0.000 0.000 0.000 0.000	0.500 n Source (Cat HB (Cat HB (Cat HB	) ) ) )
Machine Cycle Time vs Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition vithin this Basic Material Descrip Ma MA _	e Rating: NA ption: aneuver: NA sic Loader Cycle 7 t - factor not appli t - factor not appli t - factor not appli t - factor not appli t - factor not appli Net Cycle 7	icable 0.00 icable 0.00 icable 0.00 licable 0.00 icable 0.00	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000	0.500 n Source (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB	) ) ) ) )
Machine Cycle Time vs Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition vithin this Basic Material Descrip Ma MA _	e Rating: NA ption:	icable 0.00 icable 0.00 icable 0.00 licable 0.00 icable 0.00 Fime Adjustment:	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.500 n Source (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB	) ) ) ) S
Machine Cycle Time vs Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition vithin this Basic Material Descrip Ma MA _	e Rating: NA ption:	icable 0.00 icable 0.00 icable 0.00 icable 0.00 icable 0.00 Fime Adjustment: ader Cycle Time:	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.500 m Source (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB minutes minutes	) ) ) ) S
Machine Cycle Time ver Selected Value ver 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 vithin this Basic Material Descrip Ma Unadjusted Bas No adjustment No adjustment No adjustment No adjustment	e Rating: NA ption:	icable 0.00 icable 0.00 licable 0.00 licable 0.00 fime Adjustment: ader Cycle Time: I Time per Truck:	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.500 m Source (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB minutes minutes	) ) ) ) ; ;
Machine Cycle Time vs 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 vithin this Basic Material Descrip Ma Unadjusted Bas No adjustment No adjustment No adjustment No adjustment No adjustment	e Rating: NA ption:	icable 0.00 icable 0.00 icable 0.00 icable 0.00 icable 0.00 Fime Adjustment: ader Cycle Time: I Time per Truck: Adjusted	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.500 1.100	0.500 m Source (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB minutes minutes	) ) ) ) ; ; ; ; ; ;
Machine Cycle Time vs 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 Exchange Time:	s. Job Condition vithin this Basic Material Descrip Ma Unadjusted Bas No adjustment No adjustment No adjustment No adjustment No adjustment So adjustment No adj	e Rating: NA ption: aneuver: NA sic Loader Cycle ' t - factor not appli t - factor not appli t - factor not appli t - factor not appli nt - factor not appli Net Cycle T Adjusted Lo Net Load	icable 0.00 icable 0.00 icable 0.00 icable 0.00 fime Adjustment: ader Cycle Time: 1 Time per Truck: Adjusted Adjusted	maneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.500 1.100	0.500 m Source (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB minutes minutes 0.500	) ) ) ) ;
Machine Cycle Time vs 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 Exchange Time: Truck Load Time:	s. Job Condition vithin this Basic Material Descrip Ma Unadjusted Bas No adjustment No adjustment No adjustment No adjustment No adjustment 0.50 :0.50 :0.90	e Rating: NA ption:	icable 0.00 icable 0.00 icable 0.00 icable 0.00 fime Adjustment: ader Cycle Time: 1 Time per Truck: Adjusted Adjusted	maneuver):	0.500 m Source (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB (Cat HB 0.500 1.100 0.900	) ) ) ) Minute Minute

Haul Rou	ite:							
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	2400.0	00	0.50	3.00	3.50	2665	1.051	
					Haul Time:	1.051	minutes	
Return Re	oute:					1.001		
Seg #	Haul I	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	2400.0	00	-0.50	3.00	2.50	2905	0.862	
					Return Time:	0.862	minutes	
				Total Tru	ck Cycle Time:	4.413	minutes	
Loading Too	ol unit							
	uction _	548.44	LCY/Hour		Adjusted for j	ob efficiency:	455.20	LCY/Hour
Truck Unit Produ	uction _	198.84	LCY/Hour		Adjusted for j	ob efficiency:	165.04	_ LCY/Hour
Optimal No. of T	rucks:	3	Truck(s)		Selected Numl	ber of Trucks:	2	Truck(s)
			Adjuste	d hourly truc	k team production	on: 330	.08 LCY/I	Iour
					er team production			
			Adjusted multip	le truck/loade	er team production	on: <u>330</u>	.08 LCY/I	Hour
JOB TI	ME AN	D COST						
Fleet	size:	1	Team(s)	]	Fotal job time:	22.9	9 Hou	rs
Unit	cost:	\$1.240	/LCY	,	Total job cost:	\$9,40	08	

# BULLDOZER WORK

Task description:	Spread topsoil or				
Hidden Pit	Peri	mit Action:	Application 2023	Permit/Job#:	M2022040
PROJECT IDENTI	FICATION				
Task #: 050	State:	Colorado		Abbreviation:	None
Date: $\frac{4/9}{2023}$	County:	Delta		Filename:	M040-050
User: RDZ					11010000
Agency or org	anization name: DR	RMS			
HOURLY EQUIPM	ENT COST				
	at D8T - 8SU				
·	10				
••	emi-Universal				
	-shank ripper				
	per day				
Data Source: (C	CRG)				
Cost Breakdown:		i	TT:11 /1 0/		
Ourmanshire Crat/II		¢104.05	Utilization %		
Ownership Cost/Hours		\$124.85 \$97.63	NA 100		
Operating Cost/Hour: Ripper own. Cost/Hour:		\$97.63	100 NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour:		\$16.38	100		
Operator Cost/Hours		\$8.00	NA		
operator Cost/Hours	·	\$41.50	NA		
-		φ <del>+</del> 1.50	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$288.76 <b>\$577.52</b>	φ41.30			
Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUAN</u> Initial Volume: <u>6,2</u> Swell factor: <u>1.2</u>	\$288.76 \$577.52 TITIES 445 115	φ <del>1</del> 1.50			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.2 Loose volume: 7,5	\$288.76 \$577.52 TITIES 45 15 88 LCY				
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,2         Swell factor:       1.2         Loose volume:       7,5         Source of estimated vol	\$288.76 \$577.52 TITIES 45 15 88 LCY ume:Division 6	 of Reclamati	on, Mining & Safety		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.2 Loose volume: 7,5	\$288.76 \$577.52 TITIES 45 15 88 LCY ume:Division 6	 of Reclamati			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,2         Swell factor:       1.2         Loose volume:       7,5         Source of estimated vol	\$288.76 \$577.52 TITIES 45 45 45 45 88 LCY ume: Division of Cat Hand	 of Reclamati			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,2         Swell factor:       1.2         Loose volume:       7,5         Source of estimated vol         Source of estimated sweet         HOURLY PRODUCE	\$288.76 \$577.52 TITIES 45 45 45 15 88 LCY ume: Division of Cat Hand CTION	 of Reclamati			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.2 Loose volume: 7,5 Source of estimated vol Source of estimated vol Source of estimated swe HOURLY PRODUC Average push distance:	\$288.76 \$577.52 TITIES 45 45 45 45 45 45 45 45 45 45	of Reclamati book			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,2         Swell factor:       1.2         Loose volume:       7,5         Source of estimated vol         Source of estimated sweet         HOURLY PRODUC         Average push distance:         Unadjusted hourly prod	\$288.76 \$577.52 TITIES 45 15 88 LCY ume: Division of Cat Hand CTION uction: 50 feet 1,400.0 LC	of Reclamati book			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,2 Swell factor: 1.2 Loose volume: 7,5 Source of estimated vol Source of estimated vol Source of estimated swe HOURLY PRODUC Average push distance:	\$288.76 \$577.52 TITIES 45 15 88 LCY ume: Division of Cat Hand CTION uction: 50 feet 1,400.0 LC	of Reclamati book			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,2         Swell factor:       1.2         Loose volume:       7,5         Source of estimated vol         Source of estimated sweet         HOURLY PRODUC         Average push distance:         Unadjusted hourly prod	\$288.76 \$577.52 TITIES 45 15 88 LCY ume: Division of Cat Hand CTION uction: 50 feet 1,400.0 LC	of Reclamati book			
Total unit Cost/Hour:         Total Fleet Cost/Hour: <b>MATERIAL QUAN</b> Initial Volume:       6,2         Swell factor:       1.2         Loose volume:       7,5         Source of estimated vol         Source of estimated sweet         HOURLY PRODUCE         Average push distance:         Unadjusted hourly prod         Materials consistency destination	\$288.76 \$577.52 TITIES 45 15 88 LCY ume: Division ell factor: Cat Hand CTION uction: 50 feet 1,400.0 LC escription: Loose s	of Reclamati book			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,2         Swell factor:       1.2         Loose volume:       7,5         Source of estimated vol       Source of estimated sweet         HOURLY PRODUC         Average push distance:       Unadjusted hourly prod         Materials consistency de         Average push gradient:	\$288.76 \$577.52 TITIES 45 45 45 45 45 45 45 45 45 45	of Reclamati book			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,2         Swell factor:       1.2         Loose volume:       7,5         Source of estimated vol       Source of estimated sweet         HOURLY PRODUC         Average push distance:       Unadjusted hourly prod         Materials consistency de         Average push gradient:         Average site altitude:	\$288.76 \$577.52 TITIES 45 45 45 15 88 LCY ume: Division of Cat Hand CTION uction: 1,400.0 LC escription: Loose s -5 % 5,600 feet	of Reclamati book			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,2         Swell factor:       1.2         Loose volume:       7,5         Source of estimated vol         Source of estimated sweet         HOURLY PRODUCE         Average push distance:         Unadjusted hourly prod         Materials consistency de         Average site altitude:         Material weight:	\$288.76 \$577.52 TITIES 45 45 45 15 <b>88</b> LCY ume: Division of Cat Hand CTION uction: 50 feet 1,400.0 LCY escription: Loose s -5 % 5,600 feet 1,600 lbs/LCY Top Soil	of Reclamati book			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,2         Swell factor:       1.2         Loose volume:       7,5         Source of estimated vol         Source of estimated vol         Source of estimated vol         Source of estimated sweet         HOURLY PRODUC         Average push distance:         Unadjusted hourly prod         Materials consistency de         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction         Operato	$ \begin{array}{c} \$288.76 \\ \$577.52 \\ \hline \\ $	of Reclamati book Y/hr stockpile 1.2	on, Mining & Safety		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,2         Swell factor:       1.2         Loose volume:       7,5         Source of estimated vol         Source of estimated vol         Source of estimated sweet         HOURLY PRODUCE         Average push distance:         Unadjusted hourly prod         Materials consistency de         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction         Operato         Material consist	$\begin{array}{c c} \$288.76 \\ \$577.52 \\ \hline \\ \hline \\ \$577.52 \\ \hline \\ \hline \\ 15 \\ \$8 \\ LCY \\ \hline \\ ume: \\ \hline \\ 15 \\ \hline \\ \$8 \\ LCY \\ \hline \\ \hline \\ \hline \\ \hline \\ \$8 \\ LCY \\ \hline \\ \$8 \\ LCY \\ \hline \\ $		 on, Mining & Safety     		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,2         Swell factor:       1.2         Loose volume:       7,5         Source of estimated vol       Source of estimated sweet         HOURLY PRODUC         Average push distance:         Unadjusted hourly prod         Materials consistency de         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction         Operato         Material consistency         Dozing m	$\begin{array}{r c c c c c c c c c c c c c c c c c c c$	of Reclamati book Y/hr stockpile 1.2	on, Mining & Safety		

Task # 050

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	1.2935	
Adjusted unit production: 1,	810.90 LCY/hr	
Adjusted fleet production: 36	521.8 LCY/hr	

# JOB TIME AND COST

Fleet size:	2 Dozer(s)
Unit cost:	\$0.159/LCY

Total job time:	<b>2.10</b> Hours
Total job cost:	\$1,210

# **REVEGETATION WORK**

Task description:		Seed slopes arou	nd pit				
Site:	Hidden P	lit	Per	mit Action:	Application 2023	Permit/Job	t: <u>M2022040</u>
<u>PR</u>		IDENTIFIC	CATION				
	Task #:	060	State:	Colorado		Abbreviation:	None
	Date:	4/9/2023	County:	Delta		Filename:	M040-060
						_	

# **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
10-34-0, 18-46-0, 5-10-5	200.00	pound	\$0.38	\$76.00
			Total Fertilizer Materials	
			Cost/Acre	\$76.00

#### Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$39.64
	Total Fertilizer Application Cost/Acre	\$39.64

# **TILLING**

Description	Cost /Acre
Chisel plowing {DMG}	\$98.43
Weed control spraying (MEANS 31 31 16.13 3100)	\$290.40
Total Tilling Cost/Acre	\$388.83

## **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Orchardgrass - Elsie	0.30	3.72	\$0.93
Smooth Brome - Lincoln	1.60	5.33	\$5.32
Intermediate Wheatgrass - Oahe	2.50	5.34	\$7.00
Pubescent Wheatgrass - Greenleaf	2.25	4.65	\$8.21
Sainfoin - Shoshone	2.50	1.09	\$4.25
Totals Seed Mix	9.15	20.12	\$25.71

Application

Description		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 - Curtail @ 4.0 pt/ac	1.00	ACRE	\$7.94	\$7.94
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
Total Mulch Materials Cost/Acre				\$850.66

# Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$73.00
Weed spray, truck, non-aquatic areas, ann. [DMG]		\$22.81
	Total Mulch Application Cost/Acre	\$95.81

#### **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:	3.9	Cost /Acre:	\$1,708.65	
Estimate	ed Failure Rate:	25%	Cost /Acre*:	\$1,708.65	
*Selected Replanti	ng Work Items:	FERTILIZING,TII	LLING,SEEDING,MU		
		LCHING			
Initial Job Cost:	\$6,663.74				
Reseeding Job Cost:	\$1,665.93				
Total Job Cost:	\$8,330				

 Total Job Cost:
 \$8,330

 Job Hours:
 2.00

# BULLDOZER RIPPING WORK

Site							
	: Hidden Pit		Permit Action:	Application 20	023 Pe	rmit/Job#: <u>M2</u>	2022040
	PROJECT ID	ENTIFICATIO	<u>N</u>				
	Task #: 070	0	State: Colorado		Abbro	eviation: Non	ie
		0/2023	County: Delta		F	ilename: M04	40-070
	User: <u>RD</u>	DZ					
	Agency	or organization n	ame: DRMS				
	HOURLY EQ	UIPMENT COS	<u>ST</u>				
	Basic	Machine: Cat I			Horsepower:	310	
	Ripper Att	achment: 1-Sha	ank Ripper		Shift Basis:	1 per day	/
					Data Source:	(CRG)	
	Cost Breakdown:	<u>:</u>					
		-			Utilization %		
		Ownership Cos		\$124.85	NA		
	D.	Operating Cos		\$97.63	100		
		er Ownership Cos per Operating Cos		\$16.38 \$8.60	NA 100		
	Kipj	Operating Cos Operator Cos		\$8.60	<u> </u>		
		Total Unit Cos		\$288.76			
		Total Fleet Cos	t/Hour: \$577	.52			
	MATERIAL (	<u>)UANTITIES</u>	Selec	cted estimating	g method: Area		
	Alternate Method	ds:					
mia		<u></u>	Bank Volume:	ΝA	BCY	NA	
mic: .rea:	NA 3.00	acres		NA 1.00		NA .840	BCY or
ica.						,0+0	Der or
		Source of estimation	ated quantity: Applica	tion and DRM	S assumptions		
	HOUDI V DDA						
	<u>HOUKLI I K</u>	<b>ODUCTION</b>					
		<b>ODUCTION</b>					
	Seismic:		eismic Velocity:	NA	feet/seco	nd	
	<u>Seismic:</u>		eismic Velocity:	NA	feet/seco	nd	
		Se	·				
	<u>Seismic:</u>	Se Average	Ripping Depth:	3.71	feet/pass		
	<u>Seismic:</u>	Se Average Average	·				
	<u>Seismic:</u>	Se Average Average Average F Averag	Ripping Depth: Ripping Width: Ripping Length: ge Dozer Speed:	3.71 5.56	feet/pass		
	<u>Seismic:</u>	Se Average Average F Average J Average M	Ripping Depth: Ripping Width: Ripping Length: ge Dozer Speed: Maneuver Time:	3.71 5.56 150.00 88.00 0.25	feet/pass feet/pass feet/pass feet/mini minutes/	ite pass	
	<u>Seismic:</u>	Se Average Average F Average J Average M	Ripping Depth: Ripping Width: Ripping Length: ge Dozer Speed:	3.71 5.56 150.00 88.00	feet/pass feet/pass feet/pass feet/pass feet/min	ite pass	
	<u>Seismic:</u>	Se Average Average F Average M Average M Productio	Ripping Depth: Ripping Width: Ripping Length: ge Dozer Speed: Maneuver Time:	3.71 5.56 150.00 88.00 0.25	feet/pass feet/pass feet/pass feet/mini minutes/	ite pass	
	Seismic: Area: Job Condition Co	Se Average Average F Average M Average M Productio	Ripping Depth: Ripping Width: Ripping Length: ge Dozer Speed: Maneuver Time:	3.71 5.56 150.00 88.00 0.25	feet/pass feet/pass feet/pass feet/mini minutes/	ite pass ir	
	Seismic: Area: Job Condition Co	Se Average Average Average F Average Average M Production Diffection Factors	Ripping Depth: Ripping Width: Ripping Length: ge Dozer Speed: Aaneuver Time: on per unit area: Unit Production:	3.71 5.56 150.00 88.00 0.25 0.588 0.588	feet/pass feet/pass feet/pass feet/mini minutes/ acres/ho Acres/hr	ite pass ir	
	Seismic: Area: Job Condition Co	Se Average Average Average F Average Average M Production Diffection Factors	Ripping Depth:         Ripping Width:         Ripping Length:         ge Dozer Speed:         Maneuver Time:         on per unit area:         Unit Production:         Site Altitude:	3.71 5.56 150.00 88.00 0.25 0.588	feet/pass feet/pass feet/pass feet/mini minutes/ acres/hou	ite pass ir	
	Seismic: Area: Job Condition Co	Se Average Average Average M Average M Production <u>prrection Factors</u> hadjusted Hourly U	Ripping Depth: Ripping Width: Ripping Length: ge Dozer Speed: Aaneuver Time: on per unit area: Unit Production:	3.71 5.56 150.00 88.00 0.25 0.588 0.588 5,600	feet/pass feet/pass feet/pass feet/minutes/ acres/hout Acres/hr feet	ute pass ur 3)	
	Seismic: Area: Job Condition Co	Se Average Average F Average M Average M Production <u>prrection Factors</u> hadjusted Hourly U	Ripping Depth:         Ripping Width:         Ripping Length:         ge Dozer Speed:         Maneuver Time:         on per unit area:         Unit Production:         Site Altitude:         Altitude Adj:	3.71 5.56 150.00 88.00 0.25 0.588 0.588 5,600 1.00	feet/pass feet/pass feet/pass feet/mini minutes/ acres/ho Acres/hr feet (CAT Hi	ite pass ir 3) ay)	
	Seismic: Area: Job Condition Co	Se Average Average Average M Average M Production <u>prrection Factors</u> hadjusted Hourly U	Ripping Depth:         Ripping Width:         Ripping Length:         ge Dozer Speed:         Maneuver Time:         on per unit area:         Unit Production:         Site Altitude:         Altitude Adj:         Job Efficiency:         Net Correction:	3.71 5.56 150.00 88.00 0.25 0.588 0.588 5,600 1.00 0.83 0.83	feet/pass feet/pass feet/pass feet/mini minutes/ acres/ho Acres/hr feet (CAT Hi (1 shift/c multiplie	ite pass ir 3) ay)	
	Seismic: Area: Job Condition Co	Se Average Average Average M Average M Production <u>prrection Factors</u> hadjusted Hourly U Adjusted H	Ripping Depth:         Ripping Width:         Ripping Length:         ge Dozer Speed:         Maneuver Time:         on per unit area:         Unit Production:         Site Altitude:         Altitude Adj:         Job Efficiency:	3.71 5.56 150.00 88.00 0.25 0.588 0.588 5,600 1.00 0.83	feet/pass feet/pass feet/pass feet/mini minutes/ acres/hot Acres/hr feet (CAT Hi (1 shift/d	ite pass ir 3) ay)	
	Seismic: Area: Job Condition Co Un	Se Average Average Average M Average M Production <u>prrection Factors</u> hadjusted Hourly U Adjusted H	Ripping Depth:         Ripping Width:         Ripping Length:         ge Dozer Speed:         Maneuver Time:         on per unit area:         Unit Production:         Site Altitude:         Altitude Adj:         Job Efficiency:         Net Correction:         Lourly Unit Production:	3.71 5.56 150.00 88.00 0.25 0.588 0.588 5,600 1.00 0.83 0.83 0.49	feet/pass feet/pass feet/pass feet/mini minutes/ acres/ho Acres/hr feet (CAT Hi (1 shift/d multiplie Acres/hr	ite pass ir 3) ay)	
	Seismic: Area: Job Condition Co Un	Se Average Average Average Average Average Direction Factors hadjusted Hourly U Adjusted H Adjusted H	Ripping Depth:         Ripping Width:         Ripping Length:         ge Dozer Speed:         Maneuver Time:         on per unit area:         Unit Production:         Site Altitude:         Altitude Adj:         Job Efficiency:         Net Correction:         Iourly Unit Production:         Ourly Fleet Production:	3.71 5.56 150.00 88.00 0.25 0.588 0.588 5,600 1.00 0.83 0.83 0.83 0.49 0.98	feet/pass feet/pass feet/pass feet/min minutes/ acres/hou Acres/hr feet (CAT HI (1 shift/d multiplie Acres/hr Acres/hr	ite pass ir 3) ay) r	Hauss
	Seismic: Area: Job Condition Co Un	Se Average Average Average M Average M Production <u>prrection Factors</u> hadjusted Hourly U Adjusted H	Ripping Depth:         Ripping Width:         Ripping Length:         ge Dozer Speed:         Maneuver Time:         on per unit area:         Unit Production:         Site Altitude:         Altitude Adj:         Job Efficiency:         Net Correction:         Lourly Unit Production:	3.71 5.56 150.00 88.00 0.25 0.588 0.588 5,600 1.00 0.83 0.83 0.49	feet/pass feet/pass feet/pass feet/min minutes/ acres/hou Acres/hr feet (CAT HI (1 shift/d multiplie Acres/hr Acres/hr	ite pass ir 3) ay)	Hours

Site: Hidden Pit		Permit Acti	on: Application	2023	Permit/Job#: <u>M</u>	2022040
PROJECT IDENT Task #: 080	<b>FIFICATION</b>	State: Color	ado	At	breviation: No	ne
Date: 4/8/202	23	County: Delta				040-080
User: RDZ						
Agency or o	organization nar	ne: DRMS				
HOURLY EQUIP	MENT COST	<u>r</u>		Shift bas	sis: <u>1 per day</u>	
			Equipment Descri	iption		
Tr	uck Loader Tea		neric 12-18 cy, 6x	4		
Suppo	rt Equipment -L		T 966H high lift			
Suppo		imp Area: NA				
Road Ma	intenance – Mot			~ .		
	-Wa	ter Truck: Wa	ter Tanker, 3,500	Gal.		
Cost Breakdown:	Truck/Loa	ader Team	Support	Equipment	Maintenar	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	100
Ownership cost/hour:	\$24.21	\$49.15	NA	NA	NA	\$14.98
Operating cost/hour:	\$57.28	\$43.04	NA	NA	NA	\$33.32
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	NA	NA	\$0.00
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	\$0.00
Operator cost/hour:	\$32.54	\$40.71	NA	NA	NA	\$0.00
Unit Subtotals:	\$114.03	\$132.90	NA	NA	NA	\$48.30
Number of Units:	2	1	0	0	0	¢ 40.20
Group Subtotals:	Work:	\$360.96	Support:	\$0.00	Maint:	\$48.30
Total work team cost	<u>NTITIES</u>					
Initial volume: Loose volume:	3,227 3,92	CCY LCY		factor: <u>1.215</u>		
Sou	rce of estimated	volume: Divi	sion of Reclamation	on, Mining & Saf	ety	
Source of	of estimated swe		Handbook		•	
	Material Purch	ase Cost: \$0.0 otal Cost: \$0.0				
	10	nai Cost. <u><u></u> <del>0.0</del></u>	0			
HOURLY PROI	DUCTION					
<u>Truck Capacity:</u> <u>Truck Payload (weig</u> Material we			Pounds/LCY			
Descrip		pil				
Rated Pay			Pounds			
Payload Capa	acity: 31.44		LCY			

Struck Volume:		CY				
Heaped Volume:	18.00 L	CY				
Average Volume:	15.00 L	CY				
Adjusted Volume:	18.00 L	CY				
	Truck Volume B	ased on Number of	of Loader Passes:	14.63	LCY	
Loading Tool Capacity			_	~ ~ ~	<b>.</b>	
Poted Conseitur	5.000	LCY (heaped)		ket Size Class:	NA	
Rated Capacity:	0.975			ates to 1/8" (95-10	0%)0075	
Adjusted Capacity:	4.875	LOOSE Material	i - uniform aggrega	ates to 1/8 (95-10	070) 0.975	
		_				
Job Condition Corrections:	-		Site Altitude (ft.): 5	5600 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HB			
Job Efficiency:	0.830	0.830	(CAT HB	3)		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:	Number	of Loading Tool P	asses Required to	Fill Truck:	3	passes
		I Loading 10011	asses Required to I		5	passes
Excavators and Front Shovel	<u>s:</u>					
Machine Cycle Time vs Selected Value v						
-	within this Basic	Rating: NA				
Selected Value v	within this Basic	Rating: NA				
Selected Value v Track Loaders –	vithin this Basic I Material Descrip	Rating: NA		 Dump:0.10	0	
Selected Value v Track Loaders – 2 Cycle Time Elements (min.): Load: <u>NA</u>	vithin this Basic Material Descrip Man	Rating: <u>NA</u> tion: neuver: <u>NA</u>		I		nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders -	vithin this Basic Material Descrip Man	Rating: <u>NA</u> tion: neuver: <u>NA</u>	ime (load, dump, r	naneuver):	0.500 mii	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - Cycle Time Factors	vithin this Basic Material Descrip Mar - Unadjusted Basi	Rating: <u>NA</u> tion: neuver: <u>NA</u> c Loader Cycle Ti		naneuver): Factor (min.)	0.500 min Source	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - <u>Cycle Time Factors</u> Material:	vithin this Basic Material Descrip Man Unadjusted Basi No adjustment	Rating: <u>NA</u> tion: neuver: <u>NA</u> c Loader Cycle Ti - factor not applic	able 0.00	naneuver): Factor (min.) 0.000	0.500 min Source (Cat HB)	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile:	vithin this Basic Material Descrip Mar Unadjusted Basi <u>No adjustment</u> No adjustment	Rating: <u>NA</u> tion: neuver: <u>NA</u> c Loader Cycle Ti <u>- factor not applic</u> - factor not applic	able 0.00 able 0.00	naneuver): Factor (min.) 0.000 0.000	0.500 min Source (Cat HB) (Cat HB)	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	vithin this Basic Material Descrip Mar Unadjusted Basi No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00	naneuver): Factor (min.) 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB)	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vithin this Basic Material Descrip Mar Unadjusted Basi No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00	naneuver): Factor (min.) 0.000 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	nutes 
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	vithin this Basic Material Descrip Mar Unadjusted Basi No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00	naneuver):( Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vithin this Basic Material Descrip Mar Unadjusted Basi No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00 me Adjustment:	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	nutes 
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vithin this Basic Material Descrip Mar Unadjusted Basi No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00	naneuver):( Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	nutes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vithin this Basic Material Descrip Mar Unadjusted Basi No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00 me Adjustment: der Cycle Time:	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	nutes
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:	vithin this Basic Material Descrip Mar Unadjusted Basi No adjustment No adjustment No adjustment No adjustment No adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00 me Adjustment: der Cycle Time: Time per Truck:	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
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:	Vithin this Basic I Material Descrip Mar Unadjusted Basi No adjustment No adjustment No adjustment No adjustment No adjustment O adjustment	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00 me Adjustment: der Cycle Time: Time per Truck:	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 1.100	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	    Minutes
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 Exchange Time:	Vithin this Basic Material Descrip Mar Unadjusted Basi No adjustment No adjustment No adjustment No adjustment On adjustment No adjustment On adjustment No adjustment On adjustment No adjustment No adjustment On adjustment No adjustment On	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00 me Adjustment: der Cycle Time: Fime per Truck: Adjusted Adjusted	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 1.100 for site altitude:	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.500	Minutes Minutes Minutes Minutes
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 Exchange Time: Truck Load Time: ck Maneuver and Dump Time:	Vithin this Basic I Material Descrip Mar Unadjusted Basi No adjustment No adjustment No adjustment No adjustment No adjustment 0.50 1.100 0.90	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted Adjusted	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 1.100 for site altitude: for site altitude: for site altitude:	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.500 1.100 0.900	    Minutes
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 Exchange Time: Truck Load Time:	Vithin this Basic I Material Descrip Mar Unadjusted Basi No adjustment No adjustment No adjustment No adjustment No adjustment 0.50 1.100 0.90	Rating: NA tion:	able 0.00 able 0.00 able 0.00 cable 0.00 able 0.00 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted Adjusted	naneuver): Factor (min.) 0.000 0.000 0.000 0.000 0.000 0.000 0.000 1.100 for site altitude: for site altitude:	0.500 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.500 1.100 0.900	    Minute

Haul Rou	1				1			
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel Time	
	(Ft)			(%)	(%)	(fpm)	(min)	
1	1500.	.00	0.50	3.00	3.50	2665	0.713	
					Haul Time:	0.713	minutes	
Return R	oute:					0.710		
Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	1500.	.00	-0.50	3.00	2.50	2905	0.552	
					Return Time:	0.552	minutes	
				Total Tru	ck Cycle Time:	3.765	minutes	
Loading To								
	uction	548.44	LCY/Hour		Adjusted for j	ob efficiency:	455.20	LCY/Hour
Truck Unit Prod	uction	233.07	LCY/Hour		Adjusted for j	ob efficiency:	193.45	_ LCY/Hour
Optimal No. of T	rucks:	2	Truck(s)		Selected Numb	per of Trucks:	2	Truck(s)
			Adjuste	d hourly truc	k team production	on: 386	.89 LCY/H	Iour
					er team production			
			Adjusted multip	le truck/loade	er team production	on: 386	.89 LCY/H	Iour
JOB TI	ME AN	ND COST						
Fleet	size:	1	Team(s)	r	Fotal job time:	10.1.	3 Hour	S
Unit	cost: _	\$1.058	/LCY		Total job cost:	\$4,14	7	

# BULLDOZER WORK

Task description:	Spread topsoil		10		
Hidden Pit	F	Permit Action:	Application 2023	Permit/Job#:	M2022040
PROJECT IDENTI	FICATION				
Task #: 090	State	e: Colorado		Abbreviation:	None
Date: $\frac{4/9}{2023}$				Filename:	M040-090
User: RDZ					
A gancy or or	ganization name:	DRMS			
Agency of org		DRMS			
HOURLY EQUIPM	<u>IENT COST</u>				
	Cat D8T - 8SU				
1	10				
VI	emi-Universal				
	-shank ripper				
	per day				
Data Source: (0	CRG)				
Cost Breakdown:					
0 11 7 7-		<b>A1- 1 - - - -</b>	<u>Utilization %</u>		
Ownership Cost/Hour		\$124.85	NA		
Operating Cost/Hour		\$97.63	100		
Ripper own. Cost/Hour		\$16.38	NA		
Ripper op. Cost/Hour		\$8.60	100		
Operator Cost/Llaur		\$41.30	NA		
Operator Cost/Hour Total unit Cost/Hour: Total Fleet Cost/Hour:	\$288.76 <b>\$577.52</b>	φ-1.30			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume:3,2	\$288.76 <b>\$577.52</b>	ψ11.50			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>3,2</u> Swell factor: <u>1.2</u>	\$288.76 \$577.52 NTITIES 227	ψ <b>1</b> 1.50			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>3,2</u> Swell factor: <u>1.2</u> Loose volume: <u>3,5</u> Source of estimated vol	\$288.76 \$577.52 <b>NTITIES</b> 227 215 <b>921</b> LCY lume: Divisio	  on of Reclamati	on, Mining & Safety		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 3,2 Swell factor: 1.2 Loose volume: 3,9	\$288.76 \$577.52 <b>NTITIES</b> 227 215 <b>921</b> LCY lume: Divisio				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 3,2 Swell factor: 1.2 Loose volume: 3,9 Source of estimated vol Source of estimated swe	\$288.76 <b>\$577.52</b> <b>NTITIES</b> 227 215 <b>921</b> LCY lume: Division Cat Ha	  on of Reclamati			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 3,2 Swell factor: 1.2 Loose volume: 3,9 Source of estimated vol Source of estimated swe HOURLY PRODUC	\$288.76 <b>\$577.52</b> <b>NTITIES</b> 227 215 <b>921</b> LCY lume: Division cat Hat CTION	  on of Reclamati			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 3,2 Swell factor: 1.2 Loose volume: 3,9 Source of estimated vol Source of estimated swe HOURLY PRODUC	\$288.76 <b>\$577.52</b> <b>NTITIES</b> 227 215 <b>921</b> LCY lume: Division Cat Hat CTION 50 feet	on of Reclamati ndbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 3,2 Swell factor: 1.2 Loose volume: 3,9 Source of estimated vol Source of estimated swe HOURLY PRODUC	\$288.76 <b>\$577.52</b> <b>NTITIES</b> 227 215 <b>921</b> LCY lume: Division Cat Ha CTION 50 feet	on of Reclamati ndbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 3,2 Swell factor: 1.2 Loose volume: 3,9 Source of estimated vol Source of estimated swe HOURLY PRODUC	\$288.76 \$577.52 <b>VTITIES</b> 227 215 <b>921</b> LCY lume: Division cat Ha CTION 50 feet duction: 1,400.0 I	on of Reclamati ndbook			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       3,2         Swell factor:       1.2         Loose volume:       3,5         Source of estimated vol       3,5         Source of estimated swell       Source of estimated swell         HOURLY PRODUC       Average push distance:         Unadjusted hourly prod       Materials consistency d	\$288.76 <b>\$577.52</b> <b>NTITIES</b> 227 215 <b>921</b> LCY lume: Division rell factor: Cat Hat CTION thuction: 50 feet 1,400.0 I description: Loos	on of Reclamati undbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>3,2</u> Swell factor: <u>1,2</u> Loose volume: <u>3,9</u> Source of estimated vol Source of estimated vol Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient:	\$288.76 <b>\$577.52</b> <b>NTITIES</b> 227 215 <b>921</b> LCY lume: Division ell factor: Cat Hat CTION 50 feet luction: 1,400.0 I lescription: Loos 5%	on of Reclamati undbook			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       3,2         Swell factor:       1.2         Loose volume:       3,5         Source of estimated vol       3,5         Source of estimated swell       Source of estimated swell         HOURLY PRODUC       Average push distance:         Unadjusted hourly prod       Materials consistency d	\$288.76 <b>\$577.52</b> <b>NTITIES</b> 227 215 <b>921</b> LCY lume: Division 227 215 <b>921</b> LCY lume: Division Cat Hat CTION 50 feet 1,400.0 I description: Loos	on of Reclamati undbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>3,2</u> Swell factor: <u>1,2</u> Loose volume: <u>3,9</u> Source of estimated vol Source of estimated vol Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient:	\$288.76 <b>\$577.52</b> <b>NTITIES</b> 227 215 <b>921</b> LCY lume: Division ell factor: Cat Hat CTION 50 feet luction: 1,400.0 I lescription: Loos 5%	on of Reclamati undbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 3,2 Swell factor: 1.2 Loose volume: 3,9 Source of estimated vol 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:	\$288.76 <b>\$577.52</b> <b>NTITIES</b> 227 215 <b>921</b> LCY lume: Division Cat Hat CTION 50 feet duction: 1,400.0 I description: Loos 5,600 feet	on of Reclamati undbook			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       3,2         Swell factor:       1.2         Loose volume:       3,9         Source of estimated vol         Source of estimated swell         HOURLY PRODUC         Average push distance:         Unadjusted hourly prod         Materials consistency d         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	$\begin{array}{c c} \$288.76 \\ \$577.52 \\ \hline \\ \hline \\ $1000 lis/log \\ \hline \\ \hline \\ \hline \\ $1000 lis/log \\ \hline \\ $	on of Reclamati indbook	 on, Mining & Safety 		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>3,2</u> Swell factor: <u>1.2</u> Loose volume: <u>3,9</u> 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: Iob Condition Correction Operator	$\begin{array}{c c} \$288.76 \\ \$577.52 \\ \hline \\ \hline \\ $1000 lis/log \\ \hline \\ \hline \\ \hline \\ $1000 lis/log \\ \hline \\ \hline \\ \hline \\ $1000 lis/log \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ $1000 lis/log \\ \hline \\ $	 on of Reclamati indbook CY/hr se stockpile 1.2  0.750	on, Mining & Safety		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       3,2         Swell factor:       1.2         Loose volume:       3,5         Source of estimated vol       3,5         Source of estimated swell       3,5         MOURLY PRODUC       Average push distance:         Unadjusted hourly prod       Materials consistency d         Average push gradient:       Average site altitude:         Material weight:       Weight description:         Job Condition Correction       Operator         Material consi       Constant	$\begin{array}{c c} \$288.76 \\ \$577.52 \\ \hline \\ \hline \\ $1000 lbs/cmmodel{eq:second} \\ \hline \\ $1,600 lbs/LCY \\ \hline \\ \hline \\ $1,600 lbs/LCY \\ \hline \\ \hline \\ \hline \\ $1,600 lbs/LCY \\ \hline \\ \hline \\ \hline \\ \hline \\ $1,600 lbs/LCY \\ \hline \\ \hline \\ \hline \\ \hline \\ $1,600 lbs/LCY \\ \hline \\ $		 on, Mining & Safety  		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>3,2</u> Swell factor: <u>1,2</u> Loose volume: <u>3,5</u> Source of estimated vol 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: Lob Condition Correction Material consi Dozing m	$\begin{array}{c c} \$288.76 \\ \$577.52 \\ \hline \\ \hline \\ $1000 lbs/cmmodel{eq:second} \\ \hline \\ $1,600 lbs/LCY \\ \hline \\ \hline \\ $1,600 lbs/LCY \\ \hline \\ \hline \\ \hline \\ $1,600 lbs/LCY \\ \hline \\ \hline \\ \hline \\ \hline \\ $1,600 lbs/LCY \\ \hline \\ \hline \\ \hline \\ \hline \\ $1,600 lbs/LCY \\ \hline \\ $	 on of Reclamati indbook CY/hr se stockpile 1.2  0.750	on, Mining & Safety		

Task # 090

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	1.2935	
Adjusted unit production: 1,	810.90 LCY/hr	
Adjusted fleet production: 36	521.8 LCY/hr	

# JOB TIME AND COST

Fleet size:	2 Dozer(s)
Unit cost:	\$0.159/LCY

Total job time:	<b>1.08</b> Hours
Total job cost:	\$625

# **REVEGETATION WORK**

Тι	ask descrip	tion:	Seed process are	ea, pond, soil	pile areas		
Site:	Hidden P	it	Per	rmit Action:	Application 2023	Permit/Jol	o#: M2022040
<u>PR</u>	OJECT	IDENTIFIC	ATION				
	Task #:	100	State:	Colorado		Abbreviation:	None
	Date:	4/9/2023	County:	Delta		Filename:	M040-100
	User:	RDZ					
	Age	ncy or organiz	zation name: DF	RMS			

# **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
10-34-0, 18-46-0, 5-10-5	200.00	pound	\$0.38	\$76.00
			Total Fertilizer Materials	
			Cost/Acre	\$76.00

#### Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$39.64
Tot	al Fertilizer Application Cost/Acre	\$39.64

# **TILLING**

Description		Cost /Acre
Chisel plowing {DMG}		\$98.43
Weed control spraying (MEANS 31 31 16.13 3100)		\$290.40
	<b>Total Tilling Cost/Acre</b>	\$388.83

## **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Orchardgrass - Elsie	0.30	3.72	\$0.93
Smooth Brome - Lincoln	1.60	5.33	\$5.32
Intermediate Wheatgrass - Oahe	2.50	5.34	\$7.00
Pubescent Wheatgrass - Greenleaf	2.25	4.65	\$8.21
Sainfoin - Shoshone	2.50	1.09	\$4.25
Totals Seed Mix	9.15	20.12	\$25.71

Application

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

## **MULCHING and MISCELLANEOUS**

#### Materials

	Units /			
Description	Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$7.94	\$7.94
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
Total Mulch Materials Cost/Acre				\$850.66

## **Application**

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$73.00
Weed spray, truck, non-aquatic areas, ann. [DMG]		\$22.81
	Total Mulch Application Cost/Acre	\$95.81

#### **NURSERY STOCK PLANTING**

Job Hours: **2.00** 

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

## JOB TIME AND COST

	No. of Acres:	4	Cost /Acre:	\$1,708.65	
Estimated Failure Rate:		25%	Cost /Acre*:	\$1,708.65	
*Selected Replanting Work Items:		FERTILIZING,TII	LING,SEEDING,MU		
		LCHING			
Initial Job Cost:	\$6,834.60				
Reseeding Job Cost:	\$1,708.65				
Total Job Cost:	\$8,543				

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

		uip. mobilization <b>i</b>	ii oin Deita (an	u ucinob)				
Hidden Pit		Permit	Permit Action:    Application 2023    Permit/Job#:    M202204				22040	
PROJECT IDEN	TIFICATI	ON						
Task #: 110		State: Co	olorado		Abbre	viation:	None	
Date: 4/10, User: RDZ	/2023	County: De	elta		Fi	lename:	M040-11	10
Agency or	organization	n name: DRMS						
EQUIPMENT TI	RANSPOR	<u>T RIG COST</u>						
					Shift ba Cost Data Sour	rce: Cl	per day RG Data	
Truck	Tractor Desc	ription: GENE	RIC ON-HIGH		ICK TRACTO (2ND HALF,		DIESEL P	OWERED,
Truck Trailer Description: GENERIC FOLDI					SENECK, DR (25T, 50T, AN		K EQUIPN	MENT
					(,,,,			
Cost Breakdown:								
Cost Breakdown: Available Rig Ca	pacities	0-25 Tons	26-50 Tons	51+	Tons			
Available Rig Ca Ownership	Cost/Hour:	\$15.25	\$23.06	\$3	7.58			
Available Rig Ca Ownership Operating	Cost/Hour: Cost/Hour:	\$15.25 \$25.26	\$23.06 \$30.83	\$3 \$5	7.58 1.41			
Available Rig Ca Ownership ( Operating ( Operator (	Cost/Hour: Cost/Hour: Cost/Hour:	\$15.25 \$25.26 \$27.71	\$23.06 \$30.83 \$27.71	\$3 \$5 \$2	7.58 1.41 7.71			
Available Rig Ca Ownership ( Operating ( Operator ( Helper (	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	\$15.25 \$25.26 \$27.71 \$0.00	\$23.06 \$30.83 \$27.71 \$20.22	\$3 \$5 \$2 \$2 \$2	7.58       1.41       7.71       0.22			
Available Rig Ca Ownership ( Operating ( Operator (	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	\$15.25 \$25.26 \$27.71	\$23.06 \$30.83 \$27.71	\$3 \$5 \$2 \$2 \$2	7.58 1.41 7.71			
Available Rig Ca Ownership ( Operating ( Operator ( Helper (	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22	\$23.06 \$30.83 \$27.71 \$20.22	\$3 \$5 \$2 \$2 \$2	7.58       1.41       7.71       0.22			
Available Rig Ca Ownership Operating Operator Helper Total Unit	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22 <b>MENT:</b>	\$23.06 \$30.83 \$27.71 \$20.22 \$101.82	\$3 \$5 \$2 \$2 \$1	7.58       1.41       7.71       0.22       36.92	Return T		DOT Permit
Available Rig Ca Ownership ( Operating ( Operator ( Helper ( Total Unit ( NON ROADABL Machine	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPM Weight/	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22 <b>MENT:</b> Owner ship	\$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig	\$3 \$5 \$2 \$2 \$1 \$1	7.58 1.41 7.71 0.22 36.92 Haul Trip	Return T Cost/hr/		DOT Permit Cost/ fleet
Available Rig Ca Ownership ( Operating ( Operator ( Helper ( Total Unit (	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/ Unit	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22 <b>MENT:</b>	\$23.06 \$30.83 \$27.71 \$20.22 \$101.82	\$3 \$5 \$2 \$2 \$1	7.58       1.41       7.71       0.22       36.92			
Available Rig Ca Ownership ( Operating ( Operator ( Helper ( Total Unit ( NON ROADABL Machine Description	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPM Weight/	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22 <b>MENT:</b> Owner ship Cost/hr/ unit	\$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni t	\$3 \$5 \$2 \$2 \$1 \$1	7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/ fleet	Cost/hr/	fleet	Cost/ fleet
Available Rig Ca Ownership ( Operating ( Operator ( Helper ( Total Unit ( NON ROADABL Machine	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/ Unit (TONS)	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22 <b>MENT:</b> Owner ship	\$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni	\$3 \$5 \$2 \$2 \$1 \$1 Fleet Size	7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/		fleet 0	
Available Rig Ca Ownership ( Operating ( Operator ( Helper ( Total Unit ( NON ROADABL Machine Description Cat D8T - 8SU CAT 966H high lift Hydroseeder with Tractor	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: <b>LE EQUIPN</b> Weight/ Unit (TONS) 52.21 25.80 28.00	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT: Owner ship Cost/hr/ unit \$141.23 \$49.15 \$11.91	\$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni t \$136.92	\$3 \$5 \$2 \$2 \$1 \$1 Fleet Size 2	7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/ fleet \$556.30 \$117.37 \$113.73	Cost/hr/ \$273.84		Cost/ fleet \$500.00
Available Rig Ca Ownership ( Operating ( Operator ( Helper ( Total Unit ( NON ROADABL Machine Description Cat D8T - 8SU CAT 966H high lift Hydroseeder with	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: <b>LE EQUIPN</b> Weight/ Unit (TONS) 52.21 25.80	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT: Owner ship Cost/hr/ unit \$141.23 \$49.15	\$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni t \$136.92 \$68.22	\$3 \$5 \$2 \$2 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1	7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/ fleet \$556.30 \$117.37	Cost/hr/ \$273.84 \$68.22	fleet (	Cost/ fleet \$500.00 \$250.00

# **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Generic 12-18 cy, 6x4	\$113.40	2	\$226.80	\$226.80
Water Tanker, 3,500 Gal.	\$48.30	1	\$48.30	\$48.30
		Subtotals:	\$275.10	\$275.10

# **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	DELTA	
Total one-way travel distance:	11.00	miles
Average Travel Speed:	40.00	mph
Total Non-Roadable Mob/Demob Cost *	\$3,948.79	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$151.31	

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.28	0.28
Return Time (Hours):	0.28	0.28
Loading Time (Hours):	0.00	NA
Unloading Time (Hours):	0.00	NA
Subtotals:	0.55	0.55

## JOB TIME AND COST

Total job time: **1.10** Hours

Total job cost: **\$4,100**