

October 1, 2024

Kevin Anderson Connell Resources, Inc. 7785 Highland Meadows Pkwy. Ste 100 Fort Collins, CO 80528

Re: Timnath Connell Pit - File No. M-1999-050 Connell Resources, Inc. Amendment (AM-1) Amendment Application

Dear Kevin Anderson:

On October 1, 2024 the Division of Reclamation, Mining and Safety concluded its review of the Amendment application submitted to the Division on April 30, 2024, addressing the following:

Change the final post-mining land use from Developed Water Resources to Residential, Industrial/Commercial, and Developed Water Resources.

The decision reached by the Division is: awaiting warranty.

The terms of Amendment No. 1 approved by the Division are hereby incorporated into Permit No. M-1999-050. All other conditions and requirements of Permit No. M-1999-050 remain in full force and effect.

The revised liability amount exceeds the financial warranty currently held (see below), please submit additional bond or a rider to your existing bond that equals or exceeds the Revised Liability. The revision will not be final until the bond is approved by the Division.

Bond Held:	\$532,504.72
Prior Liability:	\$532,504.72
Change in Liability:	\$947,437.28
Revised Liability:	\$1,479,942.00
Prior Permit Acreage:	151.30
Change in Permit Acreage:	0.00
Revised Permit Acreage:	151.30
Prior Affected Acreage:	151.30



Change in Affected Acreage:	0.00
Revised Affected Acreage:	151.30

If you have any questions, please contact me by telephone at (720) 812-2002, or by email at Joel.renfro@state.co.us.

Sincerely,

Alkinto

Joel Renfro Environmental Protection Specialist

cc: Bill Schenderlein

M-GR-04

COST SUMMARY WORK

Task description:AM-1 (AM-1 Cost Estir	nate					
Site:	Timnath	Connell Pit	Per	rmit Action:	AM-1	Permit/.	ob#: <u>M1999050</u>	
<u>P1</u>	ROJECT Task #: Date: User:	1DENTIFIC 000 9/17/2024 JR2	CATION State: County:	Colorado Larimer		Abbreviation Filename		

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Demolition	DEMOLISH	1	10.00	\$5,352
002	Phase 1 - Backfill and Grade	SCRAPER1	1	228.50	\$567,311
003	Phase 1 - Liner Construction	NA	1	100.00	\$81,000
004	Phase 1 - Cover Clay Liner	SCRAPER1	1	37.05	\$91,996
005	Phase 1 - Finish Backfill	SCRAPER1	1	6.52	\$16,185
006	Phase 1 - Revegetation of Affected Area	REVEGE	1	42.00	\$17,788
006a	Phase 1 - Reseed Reclamation areas	REVEGE	1	27.65	\$20,845
007	Phase 2 - Reseed Reclamation Area	REVEGE	1	15.00	\$11,346
008	Phase 3 - Backfill and Grade	SCRAPER1	1	117.34	\$291,322
009	Phase 3 - Finish Backfill	SCRAPER1	1	8.23	\$20,444
010	Phase 3 - Revegetation	REVEGE	1	14.00	\$5,929
011	Phase 3 - Reseed	REVEGE	1	3.00	\$2,111
012	Scarify Access and Haul Roads	RIPPER	1	3.89	\$1,346
013	Revegetation of Roads	REVEGE	1	3.50	\$1,482
014	Mob/Demob	MOBILIZE	1	5.12	\$13,515
		DTALS:	621.8	\$1,147,972	

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$23,189
Performance bond:	1.05	Total =	\$12,054
Job superintendent:	310.90	Total =	\$24,645
Profit:	10.00	Total =	\$114,797
		TOTAL O & P =	\$174,685
		CONTRACT AMOUNT (direct + O & P) = $\frac{1}{2}$	\$1,322,657

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	4.25	Total =	\$56,213
Reclamation management and/or administration:	5.00		\$66,133
CONTINGENCY:	3.00	Total =	\$34,439

TOTAL INDIRECT COST = ____\$331,970

TOTAL BOND AMOUNT (direct + indirect) = _____\$1,479,942

DEMOLITION WORK

Task description	on: Demol	ition						
Site: Timnath Cor	nnell Pit	Permit Action: A	M-1	P	Permit/Job#: <u>M1999050</u>			
PROJECT IDENTI	FICATION							
Task #: 001 State: Colorado Abbreviation: None Date: 9/25/2024 County: Larimer Filename: M050-001 User: JR2 Agency or organization name: DRMS DRMS								
<u>UNIT COSTS</u>				Location	n adjustment	t: 89.20 %		
Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost		
, , , , , , , , , , , , , , , , , , , ,		USER PROVIDED ITEM	12.00	Ea	\$500.00	\$6,000.00		
					·			

				Total Cost	
		Subtotal		(adjusted for	
Job Hours:	10.00 (1	unadjusted):	\$6,000.00	location):	\$5,352.00

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SCRAPER TEAM WORK

Site: Timnath Connell	Pit	Permit	Action:	AM-1	Peri	mit/Job#: <u>M199</u>	9050
PROJECT IDEN	<u>FIFICATION</u>						
Task #: 002	C.	tate: 0	Colorado		Abbro	viation: None	
Date: $9/25/20$			Larimer			ename: M050-	002
User: $JR2$		inty. <u>1</u>			111		002
Agency or o	organization name:	DRM	S				
HOURLY EQUIE	<u>PMENT</u>			COSTS	hift basis: <u>1 per d</u>	<u>ay</u>	
			Equipme	ent Description			
	-Se	craper:	Cat 631				
		Dozer:	Cat D8	Γ - 8SU			
Suppo	rt Equipment -Load Dump-		NA Cat D8				
Road Ma	intenance – Motor C		CAT 16				
	-Water			Tanker, 3,500 Gal	•		
<u>Cost Breakdown</u> :	Scraper Wor			Support Equi		Maintenance	Equipment Water Tr
	Scraper	Doz	zer	Load Area	Dump Area	Motor Grader	water 11
%Utilization-machine:	100		100	NA	100	50	
Ownership cost/hour:	\$442.19	\$	173.32	NA	\$173.32	\$179.39	\$1
Operating cost/hour:	\$252.89	\$	109.71	NA	\$109.71	\$59.82	\$1
%Utilization-ripper:	NA		NA	NA	NA	NA	
Ripper own. cost/hour:	NA		\$0.00	NA	\$0.00	\$0.00	\$
Ripper op. cost/hour:	NA		\$0.00	NA	\$0.00	\$0.00	\$
Operator cost/hour:	\$57.52		\$40.04	NA	\$40.04	\$56.70	\$
Unit Subtotals:	\$752.60	\$	323.07	NA	\$323.07	\$295.91	\$3
Number of Units:	2		1	0	1	1	
Group Subtotals:	Work:	\$1,82	8.27	Support:	\$323.07	Maint:	\$331.4
Total work team cost	t/hour: <u>\$2,482.76</u>						
MATERIAL QUA	ANTITIES						
Initial volume:	214,896		CCY	Swell fact	tor: 1.125		
Loose volume:	241,758		LCY				
Sou	rce of estimated vol	lume:	Operator	Estimate			
Source	of estimated swell fa	actor:	Cat Hand	lbook			
HOURLY PROD	UCTION						
				Scraper Be	owl (volume) Bas	<u>is:</u>	
Material weight:	2,650 lbs/LCY			Struck	Volume: 24.00	L	CY
Material description:	Decomposed rock 75% Earth	a - 25% I	Rock,		Volume: <u>21.00</u> 34.00		CY
Rated Payload:	81,600 pounds			Average	Volume: 29.00	L	CY
Payload Capacity:	30.79 LCY			-	Capacity: 29.00	L	

<u>0.80</u> Minutes

0.70 Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 4830 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	700.00	5.00	3.00	8.00	783	0.92

Haul Time: **0.92** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	700.00	-5.00	3.00	-2.00	2920	0.31

Return Time:	0.31	minutes
Total Scraper team cycle time:	2.73	minutes
Adjusted for job conditions:	529.01	LCY/Hour
Selected Number of Scrapers:	2	Scraper(s)
Adjusted single scraper team (unit) hourly production:	1,058.02	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	1,058.02	LCY/Hour
Unadjusted unit production/hour: 637.36 LCY/Hour Optimal Number of Scrapers per push dozer:		

optimal Number of berapers per push dozer.

Fleet size:	1	Team(s)	Total job time:	228.50	Hours
Unit cost:	\$2.347	_ /LCY	Total job cost:	\$567,311	_

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SCRAPER TEAM WORK

Site:	<u>Pit</u>	Permit	Action:	AM-1	Perr	nit/Job#: <u>M199</u>	9050
PROJECT IDEN	FIFICATION						
Task #: 004	S	State: 0	Colorado		Abbrev	viation: None	
Date: 9/25/20	024 Cor	unty: I	Larimer			ename: M050-	004
User: JR2							
Agency or o	organization name:	DRM	S				
HOURLY EQUIE	PMENT			COSTSI	nift basis: <u>1 per d</u>	ay	
			Equipm	ent Description			
	-S	craper:	Cat 63	1G			
		-Dozer:		ST - 8SU			
Suppo	rt Equipment -Loa -Dum	d Area: p Area:	NA Cat D8	T - 8SU			
Road Ma	intenance – Motor		CAT 1				
		Truck:		Tanker, 3,500 Gal.			
	a						- ·
Cost Breakdown:	Scraper Wo	rk Team Doz	ior	Support Equip Load Area	Dump Area	Maintenance Motor Grader	Equipmer Water
	Scraper	D02	zer	Load Area	Dump Area	Motor Grader	water
%Utilization-machine:	100	100		NA	100	50	
Ownership cost/hour:	\$442.19	\$	173.32	NA	\$173.32	\$179.39	
Operating cost/hour:	\$252.89	\$109.71		NA	\$109.71	\$59.82	5
%Utilization-ripper:	NA	NA		NA	NA	NA	
Ripper own. cost/hour:	NA		\$0.00	NA	\$0.00	\$0.00	
Ripper op. cost/hour:	NA		\$0.00	NA	\$0.00	\$0.00	
Operator cost/hour:	\$57.52		\$40.04	NA	\$40.04	\$56.70	
Unit Subtotals:	\$752.60	\$	323.07	NA	\$323.07	\$295.91	:
Number of Units:	2		1	0	1	1	
Group Subtotals:	Work:	\$1,82	8.27	Support:	\$323.07	Maint:	\$331
Total work team cost	/hour: <u>\$2,482.76</u>						
MATERIAL QUA	ANTITIES						
Initial volume: Loose volume:	34,848 39,204		CCY LCY	Swell fact	or: <u>1.125</u>		
Sou	rce of estimated vo	olume:	Operato	r Estimate			
Source	of estimated swell	factor:	Cat Han	dbook			
HOURLY PROD	UCTION						
				Scraper Bo	owl (volume) Basi	<u>s:</u>	
Material weight:	2,650 lbs/LCY			Struck	Volume: 24.00	L	CY
Material description:	Decomposed roc 75% Earth	k - 25% I	Rock,	Heaped Y			CY
Rated Payload:	81,600 pounds			Average	Volume: 29.00	L	CY
Payload Capacity:	30.79 LCY			Adjusted C	Capacity: 29.00		CY

<u>0.80</u> Minutes

0.70 Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 4830 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	700.00	5.00	3.00	8.00	783	0.92

Haul Time: **0.92** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	700.00	-5.00	3.00	-2.00	2920	0.31

Return Time:	0.31	minutes
Total Scraper team cycle time:	2.73	minutes
Adjusted for job conditions:	529.01	LCY/Hour
Selected Number of Scrapers:	2	Scraper(s)
Adjusted single scraper team (unit) hourly production:	1,058.02	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	1,058.02	LCY/Hour
Unadjusted unit production/hour: <u>637.36</u> LCY/Hour Optimal Number of Scrapers per push dozer:		

Fleet size:	1	Team(s)	Total job time:	37.05	Hours
Unit cost:	\$2.347	/LCY	Total job cost:	\$91,996	_

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SCRAPER TEAM WORK

Model result Dotal Dotal result Dotal result Dotal result Dotal result %Utilization-machine: 100 100 NA 100 50 Ownership cost/hour: \$442.19 \$173.32 NA \$173.32 \$179.39 \$1 Operating cost/hour: \$252.89 \$109.71 NA \$109.71 \$59.82 \$1 %Utilization-ripper: NA NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$\$ Operator cost/hour: NA \$0.00 NA \$0.00 \$\$ \$\$ Unit Subtotals: \$752.60 \$323.07 NA \$\$ \$\$ \$\$ Number of Units: 2 1 0 1 1 \$\$ Group Subtotals: Work: \$1,828.27 Support: \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	Site: Timnath Connell	Pit	Permit	Action:	AM-1	Perr	mit/Job#: <u>M199</u>	9050
Date: 9/25/2024 County: Larimer Filename: M050-005 Agency or organization name: DRMS Agency or organization name: DRMS HOURLY EQUIPMENT CoSTShift basis: 1 per day Equipment Description -Scraper: Cat 631G -Dozer: Cat DST - 8SU Support Equipment - Load Area: NA -Dump Area: CAT 16M	PROJECT IDENT	TIFICATION						
User: IR2	Task #: 005	Sta	te: (Colorado		Abbrev	viation: None	
Agency or organization name: DRMS HOURLY EQUIPMENT COSTShift basis: Equipment Description -	Date: 9/25/20					File		005
CostShift basis: 1 per day Equipment Description -Scraper: Cat 631G -Dozer: Cat DST - 8SU Support Equipment -Load Area: NA -Dump Area: Cat DST - 8SU Road Maintenance –Motor Grader: CAT 16M -Water Truck: Water Tanker, 3,500 Gal. Cost Breakdown: Scraper Work Team Support Equipment Maintenance Equipment %Utilization-machine: 100 100 NA 100 50 Ownership cost/hour: \$442.19 \$173.32 NA \$173.32 \$179.39 \$1 Operating cost/hour: \$252.89 \$109.71 NA \$109.71 \$59.82 \$1 %Utilization-ripper: NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$323.07 \$295.91 \$33 Unit Subtotals: \$752.60 \$323.07 NA \$323.07 \$40.01 1 Grape Work: \$1,828.27 \$upport: \$331.4 Graper Work: \$1,828.27 \$upport: \$323.07 \$331.4	User: JR2							
Equipment Description Scraper: Cat 631G Dozer: Cat D8T - 8SU Support Equipment -Load Area: NA -Dump Area: Cat D8T - 8SU Road MaintenanceMotor Grader: CAT 16M Support Equipment MaintenanceMotor Grader: CAT 16M Water Truck: Water Tanker, 3,500 Gal. Cost Breakdown: Scraper Work Team Support Equipment Maintenance Equipment MaintenanceMotor Grader: CAT 16M Support Equipment Maintenance Equipment Support Equipment Maintenance Equipment Support Equipment 100 NA Support Equipment Maintenance Equipment %Utilization-machine: 100 NA 100 50 Ownership cost/hour: \$\$442.19 \$173.32 NA \$173.32 \$179.39 \$11 Operating cost/hour: \$\$252.89 \$109.71 NA \$109.71 \$59.82 \$1 %utilization-ripper: NA NA NA NA NA NA NA NA Support	Agency or o	organization name: _	DRM	S				
-Scraper: Cat 631G -Dozer: Cat D8T - 8SU Support Equipment -Load Area: NA -Dump Area: Cat D8T - 8SU Road Maintenance -Motor Grader: CAT 16M -Water Truck: Water Tanker, 3,500 Gal. Cost Breakdown: Scraper Work Team Support Equipment Maintenance Equipment %Utilization-machine: 100 100 NA 100 50 Ownership cost/hour: \$442.19 \$173.32 NA \$173.32 \$179.39 \$1 Operating cost/hour: \$252.89 \$109.71 NA \$100.71 \$59.82 \$1 %Utilization-ripper: NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$\$ Operator cost/hour: NA \$0.00 NA \$0.00 \$\$ \$\$ \$\$ Group Subtotals: \$75.52 \$40.04 NA \$\$ \$\$ \$\$ \$\$ Muther Subtotals: \$\$75.260 \$\$23.07 NA \$\$323.07 \$\$ \$\$ \$\$ \$\$	HOURLY EQUIP	MENT_			COSTSI	nift basis: <u>1 per da</u>	ay	
-Dozer: Cat D8T - 8SU Support Equipment -Load Area: NA -Dump Area: Cat D8T - 8SU Road Maintenance - Motor Grader: CAT 16M -Water Truck: Water Tanker, 3,500 Gal. Cost Breakdown: Scraper Work Team Support Equipment Maintenance Equipment %Utilization-machine: 100 100 NA 100 50 Ownership cost/hour: \$442.19 \$173.32 NA \$173.32 \$179.39 \$1 %Utilization-machine: 100 100 NA \$100 50 \$109.71 \$173.32 \$179.39 \$1 Operating cost/hour: \$252.89 \$109.71 NA \$109.71 \$59.82 \$1 %Utilization-ripper: NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$3 Operator cost/hour: \$57.52 \$40.04 NA \$40.04 \$56.70 \$3 Unit Subtotals: \$752.60 \$323.07 NA \$323.07 \$331.4 Group Subtotals: Work: \$1,828.27								
Support Equipment -Load Area: -Dump Area: Road Maintenance -Motor Grader: Water Truck: NA Cat D8T - 8SU CAT 16M Cost Breakdown: Scraper Work Team Support Equipment Maintenance Equipment Cost Breakdown: Scraper Work Team Support Equipment Maintenance Equipment %Utilization-machine: 100 100 NA 100 50 Ownership cost/hour: \$442.19 \$173.32 NA \$173.32 \$179.39 \$1 Operating cost/hour: \$252.89 \$109.71 NA \$109.71 \$59.82 \$1 %Utilization-ripper: NA NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0 \$3 Operator cost/hour: NA \$0.00 NA \$0.00 \$3 \$3 \$3 Operator cost/hour: NA \$1.828.27 \$upport 1 \$3 \$3 \$3 Mumber of Units: 2 1 0 1 1 \$3 Goroup Subtotals: Work: \$1.828.27 Support: \$33.07 Maint: \$331.4			-					
-Dump Area: Cat D8T - 8SU Road Maintenance – Motor Grader: CAT 16M -Water Truck: Water Tanker, 3,500 Gal. Cost Breakdown: Scraper Work Team Support Equipment Maintenance Equipment %Utilization-machine: 100 100 NA 100 50 Ownership cost/hour: \$442.19 \$173.32 NA \$173.32 \$179.39 \$1 Operating cost/hour: \$252.89 \$109.71 NA \$109.71 \$59.82 \$1 %Utilization-mipper: NA NA NA NA NA NA Ripper own.cost/hour: \$175.20 \$40.00 NA \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00	Suppo				T - 8SU			
Road MaintenanceMotor Grader: Water Truck: CAT 16M Water Tanker, 3,500 Gal. Cost Breakdown: Scraper Work Team Support Equipment Maintenance Equipment % Utilization-machine: 100 100 NA 100 50 % Utilization-machine: 100 100 NA 100 50 Ownership cost/hour: \$442.19 \$173.32 NA \$173.32 \$179.39 \$1 Operating cost/hour: \$252.89 \$109.71 NA \$109.71 \$59.82 \$1 % Utilization-ripper: NA NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$\$ Ripper op. cost/hour: NA \$0.00 NA \$0.00 \$\$ \$\$ \$\$ Unit Subtotals: \$75.52 \$40.04 NA \$\$ \$\$ \$\$ \$\$ Group Subtotals: \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$	Suppo				T - 8SU			
Cost Breakdown: Scraper Work Team Support Equipment Maintenance Equipment %Utilization-machine: 100 100 NA 100 50 %Utilization-machine: 100 100 NA 100 50 Ownership cost/hour: \$442.19 \$173.32 NA \$173.32 \$179.39 \$1 Operating cost/hour: \$252.89 \$109.71 NA \$109.71 \$59.82 \$1 %Utilization-ripper: NA NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$\$ Ripper op. cost/hour: NA \$0.00 NA \$0.00 \$\$ \$\$ Operator cost/hour: \$\$75.52 \$40.04 NA \$\$ \$\$ \$\$ Unit Subtotals: \$752.60 \$\$23.07 NA \$\$ \$\$ \$\$ Mumber of Units: 2 1 0 1 1 \$\$ Group Subtotals: Work:	Road Ma	intenance – Motor Gr	ader:	CAT 1	6M			
Scraper Dozer Load Area Dump Area Motor Grader Water Tr %Utilization-machine: 100 100 NA 100 50 Ownership cost/hour: \$442.19 \$173.32 NA \$173.32 \$179.39 \$1 Operating cost/hour: \$252.89 \$109.71 NA \$109.71 \$59.82 \$1 %Utilization-ripper: NA NA NA \$109.71 \$59.82 \$1 %Utilization-ripper: NA NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$\$ Operator cost/hour: NA \$0.00 NA \$\$ \$\$ \$\$ \$\$ Unit Subtotals: \$752.60 \$323.07 NA \$\$ \$\$ \$\$ \$\$ \$\$ Mumber of Units: 2 1 0 1 1 \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$		-Water T	ruck:	Water '	Tanker, 3,500 Gal.			
Scraper Dozer Load Area Dump Area Motor Grader Water Tr %Utilization-machine: 100 100 NA 100 50 Ownership cost/hour: \$442.19 \$173.32 NA \$173.32 \$179.39 \$11 Operating cost/hour: \$252.89 \$109.71 NA \$109.71 \$59.82 \$11 %Utilization-ripper: NA NA NA \$109.71 \$59.82 \$11 %Utilization-ripper: NA NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$\$ Operator cost/hour: NA \$0.00 NA \$\$ \$\$ \$\$ \$\$ Unit Subtotals: \$752.60 \$\$323.07 NA \$\$ \$\$ \$\$ \$\$ Number of Units: 2 1 0 1 1 \$\$ \$\$ Total work team cost/hour: \$2,482.76 \$\$ \$\$ \$\$ <	Cost Breakdown:	Scraper Work	Team		Support Equir	oment	Maintenance	Equipment
Ownership cost/hour: \$442.19 \$173.32 NA \$173.32 \$179.39 \$1 Operating cost/hour: \$252.89 \$109.71 NA \$109.71 \$59.82 \$1 %Utilization-ripper: NA NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$\$ Operator cost/hour: NA \$0.00 NA \$0.00 \$\$ \$\$ Operator cost/hour: \$\$75.52 \$40.04 NA \$\$ \$\$ \$\$ Unit Subtotals: \$\$752.60 \$\$323.07 NA \$\$ \$\$ \$\$ Number of Units: 2 1 0 1 1 \$\$ Group Subtotals: Work: \$1,828.27 Support: \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	<u> </u>	· · · · · ·		zer				Water Truck
Operating cost/hour: \$252.89 \$109.71 NA \$109.71 \$59.82 \$1 %Utilization-ripper: NA NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$\$ Ripper op. cost/hour: NA \$0.00 NA \$0.00 \$\$ \$\$ Operator cost/hour: NA \$\$0.00 NA \$\$ \$\$ \$\$ Operator cost/hour: \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ Unit Subtotals: \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ Number of Units: 2 1 0 1 1 \$\$ Group Subtotals: Work: \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ <td>%Utilization-machine:</td> <td>100</td> <td></td> <td>100</td> <td>NA</td> <td>100</td> <td>50</td> <td>5</td>	%Utilization-machine:	100		100	NA	100	50	5
%Utilization-ripper: NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$ Ripper op. cost/hour: NA \$0.00 NA \$0.00 \$ \$ Operator cost/hour: NA \$0.00 NA \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Ownership cost/hour:	\$442.19	\$173.32		NA	\$173.32	\$179.39	\$17.1
Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$ Ripper op. cost/hour: NA \$0.00 NA \$0.00 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Operating cost/hour:	\$252.89	\$	109.71	NA	\$109.71	\$59.82	\$18.4
N1 NA \$0.00 NA \$0.00 \$0.00 \$ Ripper op. cost/hour: NA \$0.00 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	%Utilization-ripper:	NA	NA		NA	NA	NA	N
Operator cost/hour: \$57.52 \$40.04 NA \$40.04 \$56.70 \$ Unit Subtotals: \$752.60 \$323.07 NA \$323.07 \$295.91 \$3 Number of Units: 2 1 0 1 1 Group Subtotals: Work: \$1,828.27 Support: \$323.07 Maint: \$331.4 Total work team cost/hour: \$2,482.76	Ripper own. cost/hour:	NA		\$0.00	NA	\$0.00	\$0.00	\$0.0
Unit Subtotals: \$752.60 \$323.07 NA \$323.07 \$295.91 \$3 Number of Units: 2 1 0 1 1 Group Subtotals: Work: \$1,828.27 Support: \$323.07 Maint: \$331.4 Total work team cost/hour: \$2,482.76	Ripper op. cost/hour:	NA		\$0.00	NA	\$0.00	\$0.00	\$0.0
Number of Units: 2 1 0 1 1 Group Subtotals: Work: \$1,828.27 Support: \$323.07 Maint: \$331.4 Total work team cost/hour: \$2,482.76	Operator cost/hour:	\$57.52		\$40.04	NA	\$40.04	\$56.70	\$0.0
Group Subtotals: Work: \$1,828.27 Support: \$323.07 Maint: \$331.4 Total work team cost/hour: \$2,482.76	Unit Subtotals:	\$752.60	\$	323.07	NA	\$323.07	\$295.91	\$35.5
Total work team cost/hour: \$2,482.76 MATERIAL QUANTITIES Initial volume:	Number of Units:	2		1	0	1	1	
MATERIAL QUANTITIES Initial volume: 6,131 CCY Swell factor: 1.125	Group Subtotals:	Work:	\$1,82	8.27	Support:	\$323.07	Maint:	\$331.42
Initial volume:6,131 CCY Swell factor:1.125	Total work team cost	/hour: \$2,482.76						
	MATERIAL QUA	NTITIES						
	Initial volume:	6,131		CCY	Swell fact	or: 1.125		
Loose volume: 6,897 LCY	Loose volume:	6,897		LCY				
Source of estimated volume: Operator Estimate	Source of	of estimated swell fac	tor:	Cat Han	dbook			
Source of estimated swell factor: Cat Handbook	HOURLY PROD	UCTION						
					Scraper Bo	owl (volume) Basi	<u>s:</u>	
Source of estimated swell factor: Cat Handbook	Material weight:	2,650 lbs/LCY			Struck V	Volume: 24.00	L	CY
Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Scraper Bowl (volume) Basis:	Material description:		- 25% I	Rock,				
Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Scraper Bowl (volume) Basis: Material weight: 2,650 lbs/LCY Struck Volume: 24.00 LCY Material description: Decomposed rock - 25% Rock, Heaped Volume: 34.00 LCY	Rated Payload:	81,600 pounds			-			
Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Scraper Bowl (volume) Basis: Material weight: 2,650 lbs/LCY Struck Volume: 24.00 LCY Material description: Decomposed rock - 25% Rock, Heaped Volume: 34.00 LCY Rated Payload: 81,600 pounds Average Volume: 29.00 LCY	Payload Capacity:	30.79 LCY			Adjusted C	Capacity: 29.00	L	CY

Task # 005

<u>0.80</u> Minutes

0.70 Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 4830 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	700.00	5.00	3.00	8.00	783	0.92

Haul Time: **0.92** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	700.00	-5.00	3.00	-2.00	2920	0.31

Return Time:	0.31	minutes
Total Scraper team cycle time:	2.73	minutes
Adjusted for job conditions:	529.01	LCY/Hour
Selected Number of Scrapers:	2	Scraper(s)
Adjusted single scraper team (unit) hourly production:	1,058.02	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	1,058.02	LCY/Hour
Unadjusted unit production/hour: 637.36 LCY/Hour		

Optimal Number of Scrapers per push dozer:

Fleet size:	1	Team(s)	Total job time:	6.52	Hours
Unit cost:	\$2.347	/LCY	Total job cost:	\$16,185	

REVEGETATION WORK

Г	Task descrip	otion:	Phase 1 - Revegetation of Af	fected Area		
Site:	Timnath	Connell Pit	Permit Action:	AM-1	Permit/Job	#: <u>M1999050</u>
<u>P</u>]	ROJECT	IDENTIFIC	CATION			
	Task #:	006	State: <u>Colorado</u>		Abbreviation:	None None
	Date: User:	9/25/2024 JR2	County: Larimer		Filename:	M050-006
	Age	ency or organi	zation name: DRMS			

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer	
			Materials Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$456.41

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	1.00	16.32	\$21.33
Intermediate Wheatgrass - Rush	5.00	10.67	\$23.66
Triticale	1.25	0.72	\$3.13
Totals Seed Mix	7.25	27.71	\$48.11

Application

Description	Cost /Acre

Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS

Materials

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

Application

Description		Cost /Acre
		\$
	Total Mulch Application Cost/Acre	\$0.00

NURSERY STOCK PLANTING

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

	No. of Acres:	24	Cost /Acre:	\$741.16
Estimated Failure Rate:		0%	Cost /Acre*:	\$284.75
*Selected Replanti	ng Work Items:	SEEDING		
Initial Job Cost:	\$17,787.84			
Reseeding Job Cost:			_	
Total Job Cost:	\$17,788		_	
Job Hours:	42.00		_	

REVEGETATION WORK

Tas	sk descrip	tion:	Phase 2 - Reseed Reclamatio	n Area		
Site: 1	Fimnath	Connell Pit	Permit Action:	AM-1	Permit/Job	o#: <u>M1999050</u>
<u>PR(</u>	<u>OJECT :</u>	IDENTIFIC	CATION			
,	Task #:	007	State: Colorado		Abbreviation:	None
	Date:	9/25/2024	County: Larimer		Filename:	M050-007
	User:	JR2				

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer	
			Materials Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$456.41

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	1.00	16.32	\$21.33
Intermediate Wheatgrass - Rush	5.00	10.67	\$23.66
Triticale	1.25	0.72	\$3.13
Totals Seed Mix	7.25	27.71	\$48.11

Application

Description	Cost /Acre

Drill Seeding (DRMS Survey Cost)		\$236.64
	Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$492.78	\$492.78
Total Mulch Materials Cost/Acre				\$492.78

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$85.37
	Total Mulch Application Cost/Acre	\$85.37

NURSERY STOCK PLANTING

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

No. of Acres:	8.6	Cost /Acre:	\$1,319.31
Estimated Failure Rate:	0%	Cost /Acre*:	\$284.75
*Selected Replanting Work Items:	SEEDING		

\$11,346.07
\$0.00
\$11,346
15.00

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SCRAPER TEAM WORK

Site: Connell	Pit	Permit	Action:	AM-1	Perr	nit/Job#: <u>M199</u>	9050
PROJECT IDEN	FIFICATION						
Task #: 008	S	State: C	olorado		Abbrev	viation: None	
Date: 9/25/20	024 Cor	unty: L	arimer		File	ename: M050-	008
User: JR2							
Agency or o	organization name:	DRMS	5				
HOURLY EQUIE	<u>MENT</u>			COSTS	nift basis: <u>1 per da</u>	ay	
			Equipme	ent Description			
		craper:	Cat 631				
Sunna	rt Equipment -Loa	Dozer:	Cat D8 NA	T - 8SU			
Suppo		p Area:		T - 8SU			
Road Ma	intenance – Motor		CAT 10	6M			
	-Water	Truck:	Water 7	Fanker, 3,500 Gal.			
Cost Breakdown:	Scraper Wor	rk Team		Support Equip	oment	Maintenance	Equipment
	Scraper	Doz	er	Load Area	Dump Area	Motor Grader	Water Tr
%Utilization-machine:	100		100	NA	100	50	
Ownership cost/hour:	\$442.19	\$173.32		NA	\$173.32	\$179.39	\$1
Operating cost/hour:	\$252.89	\$109.71		NA	\$109.71	\$59.82	\$1
%Utilization-ripper:	NA		NA	NA	NA	NA	
Ripper own. cost/hour:	NA		\$0.00	NA	\$0.00	\$0.00	\$
Ripper op. cost/hour:	NA		\$0.00	NA	\$0.00	\$0.00	\$
Operator cost/hour:	\$57.52	\$	640.04	NA	\$40.04	\$56.70	\$
Unit Subtotals:	\$752.60	\$3	323.07	NA	\$323.07	\$295.91	\$3
Number of Units:	2		1	0	1	1	
Group Subtotals:	Work:	\$1,828	3.27	Support:	\$323.07	Maint:	\$331.4
Total work team cost	/hour: \$2,482.76						
MATERIAL QUA	NTITIES						
Initial volume:	110,352	(CCY	Swell fact	or: 1.125		
Loose volume:	124,146		LCY				
Sou	rce of estimated vo	lume:	Operator	r Estimate			
Source	of estimated swell f		Cat Han				
HOURLY PROD	UCTION						
noondrinop				Scraper Bo	owl (volume) Basi	s:	
Motorial mainte	2 650 lbs/I CV				Volume: 24.00		CY
Material weight: Material description:	2,650 lbs/LCY Decomposed rock 75% Earth	k - 25% R	ock,	Heaped V			CY CY
Rated Payload:	81,600 pounds		<u> </u>	Average V	Volume: 29.00	L	CY

<u>0.80</u> Minutes

0.70 Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 4830 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	700.00	5.00	3.00	8.00	783	0.92

Haul Time: **0.92** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	700.00	-5.00	3.00	-2.00	2920	0.31

Return Time:	0.31	minutes
Total Scraper team cycle time:	2.73	minutes
Adjusted for job conditions:	529.01	LCY/Hour
Selected Number of Scrapers:	2	Scraper(s)
Adjusted single scraper team (unit) hourly production:	1,058.02	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	1,058.02	LCY/Hour
Unadjusted unit production/hour: 637.36 LCY/Hour Optimal Number of Scrapers per push dozer:		

Fleet size:	1	Team(s)	Total job time:	117.34	Hours
Unit cost:	\$2.347	/LCY	Total job cost:	\$291,322	

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SCRAPER TEAM WORK

Site: Timnath Connell	Pit	Permit	Action:	AM-1	Perr	mit/Job#: <u>M199</u>	9050
PROJECT IDEN	FIFICATION						
Task #: 009	Stat	e: (Colorado		Abbrev	viation: None	
Date: 9/25/20	024 Count	y: I	Larimer		File	ename: M050-	009
User: JR2							
Agency or o	organization name: _	DRM	S				
HOURLY EQUIP	MENT			COSTSI	nift basis: <u>1 per d</u>	ay	
			Equipm	ent Description			
	-Scra	-	Cat 63	1G			
Sunno	-Do- rt Equipment -Load A	ozer:	Cat D8 NA	T - 8SU			
Suppo	-Dump A-Dump			T - 8SU			
Road Ma	intenance – Motor Gra	der:	CAT 1	6M			
	-Water Tr	uck:	Water '	Tanker, 3,500 Gal.			
Cost Breakdown:	Scraper Work	Team		Support Equip	oment	Maintenance	Equipmen
	Scraper	Doz	zer	Load Area	Dump Area	Motor Grader	Water 7
%Utilization-machine:	100		100	NA	100	50	
Ownership cost/hour:	\$442.19	\$173.32		NA	\$173.32	\$179.39	\$
Operating cost/hour:	\$252.89	\$109.71		NA	\$109.71	\$59.82	\$
%Utilization-ripper:	NA	NA		NA	NA	NA	
Ripper own. cost/hour:	NA		\$0.00	NA	\$0.00	\$0.00	
Ripper op. cost/hour:	NA		\$0.00	NA	\$0.00	\$0.00	
Operator cost/hour:	\$57.52		\$40.04	NA	\$40.04	\$56.70	
Unit Subtotals:	\$752.60	\$	323.07	NA	\$323.07	\$295.91	\$
Number of Units:	2		1	0	1	1	
Group Subtotals:	Work:	\$1,82	.8.27	Support:	\$323.07	Maint:	\$331
Total work team cost	/hour: <u>\$2,482.76</u>						
MATERIAL QUA	<u>NTITIES</u>						
Initial volume:	7,744		CCY	Swell fact	or: <u>1.125</u>		
Loose volume:	8,712		LCY				
	rce of estimated volu			r Estimate			
Source of	of estimated swell fac	tor:	Cat Han	dbook			
HOURLY PROD	UCTION						
				Scraper Bo	owl (volume) Basi	is:	
Material weight:	2,650 lbs/LCY			Struck	Volume: 24.00	L	CY
Material description:	Decomposed rock - 75% Earth	25% I	Rock,	Heaped			CY
Rated Payload:	81,600 pounds			Average			CY
Payload Capacity:	30.79 LCY			Adjusted C	Capacity: 29.00	L	CY

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 4830 fee

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	700.00	5.00	3.00	8.00	783	0.92

Haul Time: **0.92** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	700.00	-5.00	3.00	-2.00	2920	0.31

Return Time:	0.31	minutes
Total Scraper team cycle time:	2.73	minutes
Adjusted for job conditions:	529.01	LCY/Hour
Selected Number of Scrapers:	2	Scraper(s)
Adjusted single scraper team (unit) hourly production:	1,058.02	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	1,058.02	LCY/Hour
Unadjusted unit production/hour: 637.36 LCY/Hour		

JOB TIME AND COST

Optimal Number of Scrapers per push dozer:

Fleet size:	1	Team(s)	Total job time:	8.23	Hours
Unit cost:	\$2.347	/LCY	Total job cost:	\$20,444	

<u>0.80</u> Minutes

0.70 Minutes

REVEGETATION WORK

Task descr	iption:	Phase 3 - Revegetation			
Site: <u>Timnatl</u>	n Connell Pit	Permit Action:	AM-1	Permit/Jol	o#: <u>M1999050</u>
PROJEC1	<u>IDENTIFIC</u>	CATION			
Task #: Date:		State: <u>Colorado</u> County: Larimer		Abbreviation: Filename:	None M050-010
User:					

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer	
			Materials Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$456.41

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
			\$
Totals Seed Mix			\$

Application

Description	Cost /Acre

	\$
Total Seed Application Cost/Acre	\$

MULCHING and MISCELLANEOUS

Materials

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

Application

Description		Cost /Acre
		\$
	Total Mulch Application Cost/Acre	\$0.00

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

Estimate *Selected Replanti	No. of Acres: ed Failure Rate: ng Work Items:	0%	Cost /Acre: Cost /Acre*:	
Initial Job Cost:	\$5.929.28			
Reseeding Job Cost:				
Total Job Cost:	\$5,929			
Job Hours:	14.00		_	

REVEGETATION WORK

Task desc	ription:	Phase 3 - Reseed			
Site: <u>Timna</u>	th Connell Pit	Permit Action:	AM-1	Permit/Job	#: M1999050
PROJEC	<u>T IDENTIFIC</u>	CATION			
Task #	-	State: Colorado		Abbreviation:	None
Date	: 9/25/2024	County: Larimer		Filename:	M050-011
User	: JR2				
A	gency or organiz	zation name:DRMS			

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials	
			Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$456.41

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	1.00	16.32	\$21.33
Intermediate Wheatgrass - Rush	5.00	10.67	\$23.66
Triticale	1.25	0.72	\$3.13
Totals Seed Mix	7.25	27.71	\$48.11

Application

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

Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$492.78	\$492.78
Total Mulch Materials Cost/Acre				\$492.78

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$85.37
	Total Mulch Application Cost/Acre	\$85.37

NURSERY STOCK PLANTING

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

No. of Acres:	1.6	Cost /Acre:	\$1,319.31
Estimated Failure Rate:	0%	Cost /Acre*:	\$284.75
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$2,110.90
Reseeding Job Cost:	\$0.00
Total Job Cost:	\$2,111
Job Hours:	3.00

BULLDOZER RIPPING WORK

	Task description	Scar	rify Access and Haul Roa	ds			
Site	: <u>Timnath Con</u>	nell Pit	Permit Action:	AM-1	Permi	t/Job#: <u>M19</u>	999050
	PROJECT ID	ENTIFICATI	ION				
	Task #: 012 Date: 9/2 User: JR	25/2024	State: <u>Colorado</u> County: <u>Larimer</u>		Abbrevia Filen		0-012
	Agency	or organization	n name: DRMS				
	HOURLY EQ	UIPMENT C	OST				
	Basic		t D8T - 8SU		Horsepower: Shift Basis:		
	Ripper Au				Data Source:	1 per day (CRG)	
	Cost Breakdown	:					
		_			Utilization %		
		Ownership C	ost/Hour:	\$173.32	NA		
	Pinn	Operating C er Ownership C		\$109.71 \$13.69	100 NA		
		per Operating C		\$9.24	100		
	i (p)	Operator C		\$40.04	NA		
		Total Unit C		\$346.00			
		Total Fleet C	ost/Hour: \$346	5.00			
	MATERIAL (
	MATERIAL (<u>Sele</u>	cted estimating	method: Area		
	Alternate Method	<u>ds:</u>					
smic:	NA		Bank Volume:	NA	BCY	NA	
Area:	2.00	acres	Rip Depth (ft):	2.00	Volume:6,453	3	BCY or 0
		Source of esti	mated quantity: Operate	or Estimate			
	HOURLY PR	ODUCTION					
	Seismic:						
	<u>bershile.</u>		Seismic Velocity:	NA	feet/second		
	A #001		•				
	Area:	Avera	ge Ripping Depth:	3.71	feet/pass		
			ge Ripping Width:	5.56	feet/pass		
			e Ripping Length:	250.00	feet/pass		
			rage Dozer Speed:	88.00	feet/minute		
			e Maneuver Time:	0.25	minutes/pas	s	
		Produc	ction per unit area:	0.619	acres/hour		
	Job Condition Co	orrection Factor	<u>s</u>				
	Un	adjusted Hourly	y Unit Production:	0.619	Acres/hr		
		-	Site Altitude:	4,830	feet		
			Altitude Adj:	1.00	(CAT HB)		
			Job Efficiency:	0.83	(1 shift/day))	
			Net Correction:	0.83	multiplier		
		Δ diustod	Hourly Unit Production:	0.51	Acres/hr		
			Hourly Fleet Production:	0.51	Acres/hr		
	JOB TIME AN	·	-				
	Fleet size:	1	Grader(s)	Total job time	e: 3.89		Hours
	_			·			
	Unit cost:	\$672.986	Per acre	Total job cos	t: \$1,34	6	

REVEGETATION WORK

Task de	scription:	Revegetation of Roads			
ite: Timnath Connell Pit		Permit Action:	AM-1	Permit/Job	o#: <u>M1999050</u>
PROJE Task	CT IDENTIFI(#: 013	CATION State: Colorado		Abbreviation:	None
T ask Da		County: Larimer		Abbreviation: Filename:	M050-013
	,,,				

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer	
			Materials Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$456.41

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	1.00	16.32	\$21.33
Intermediate Wheatgrass - Rush	5.00	10.67	\$23.66
Triticale	1.25	0.72	\$3.13
Totals Seed Mix	7.25	27.71	\$48.11

Application

Description	Cost /Acre

Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/	Acre \$236.64

MULCHING and MISCELLANEOUS

Materials

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

Application

Description	Cost /Acre
	\$
Total Mulah Application Cost/Apr	
Total Mulch Application Cost/Acr	e \$0.00

NURSERY STOCK PLANTING

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

No. of Acres: Estimated Failure Rate: *Selected Replanting Work Items:		0%	Cost /Acre: Cost /Acre*:	
Initial Job Cost:	0			
Reseeding Job Cost:				
Total Job Cost:	\$1,482			
Job Hours:	3.50			

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task descri	ption: <u>M</u>	ob/Demob					
Timnath	Connell Pit	Permit	Action: <u>AM-</u>	l	·	Permit/Job#: <u>M</u>	1999050
PROJECT	IDENTIFICAT	<u>'ION</u>					
Task #: Date: User:	014 9/25/2024 JR2		olorado rimer			eviation: <u>None</u> ilename: <u>M050</u>	-014
Ag	ency or organization	on name: DRMS					
EQUIPME	NT TRANSPOL	<u>RT RIG COST</u>					
	Truck Tractor Des Truck Trailer Des	-		WAY TR 400 HI	P (2ND HALF,	rce: <u>CRG Da</u> DR, 6X4, DIESEI	ta L POWERED,
					(25T, 50T, A)		
Cost Breakdo	own: Rig Capacities	0-25 Tons	26-50 Tons	51	+ Tons		
	ership Cost/Hour:	\$10.44	\$22.18		23.94		
	erating Cost/Hour:	\$26.48	\$54.55		55.65		
	perator Cost/Hour:	\$22.52	\$22.52		22.52		
	Helper Cost/Hour:	\$0.00	\$23.53		23.53		
	al Unit Cost/Hour:	\$59.44	\$122.78		125.64		
NON ROA	DABLE EQUIP	<u>MENT:</u>					
Machine Description	n Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Drill/Broadc Seeder with Tractor		\$41.02	\$59.44	1	\$100.46	\$59.44	\$250.00
Power Mulc (Bowie LD-		\$27.21	\$59.44	1	\$86.65	\$59.44	\$250.00
~ ~ ~ ~	/						
Cat D8T - 8	SU 53.08	\$187.85	\$125.64	2	\$626.98	\$251.28	\$250.00
Cat D8T - 8 CAT 16M	/	\$187.85 \$179.39 \$442.19	\$125.64 \$122.78 \$125.64	2 1 2	\$626.98 \$302.17 \$1,135.66	\$251.28 \$122.78 \$251.28	\$250.00 \$250.00 \$250.00

Subtotals: \$2,251.92 \$744.22 \$1,250.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 3,500 Gal.	\$53.90	1	\$53.90	\$53.90
Light Duty Pickup, 4x4, 1 T.	\$24.60	1	\$24.60	\$24.60
Crew				
		Subtotals:	\$78.50	\$78.50

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	FORT COLLINS	
Total one-way travel distance:	9.00	miles
Average Travel Speed:	50.00	mph
Total Non-Roadable Mob/Demob Cost *	\$13,487.06	
[*] two round trips with haul rig:		
Total Roadable Mob/Demob Cost **	\$28.26	
** one round trip, no haul rig:		

Transportation Cycle Time:

	Non- Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.18	0.18
Return Time (Hours):	0.18	0.18
Loading Time (Hours):	1.10	NA
Unloading Time (Hours):	1.10	NA
Subtotals:	2.56	0.36

JOB TIME AND COST

Total job time: **5.12** Hours

Total job cost: ______\$13,515