

1313 Sherman St. Room 215 Denver, CO 80203

November 27, 2018

Kathy Stone Stone Sand & Gravel, LLC P.O. Box 1568 Cortez, CO 81321

# Re: Line Camp Pit, Permit No. M-2001-001, Financial Warranty Reduction Approval, Revision No. SR-3

Ms. Stone:

On November 27, 2018 the Division of Reclamation, Mining and Safety approved your request for a Financial Warranty Reduction to \$53,810.67. This is a reduction of \$38,106.33. This decision reduces the amount of the financial warranty, and does not approve any release of reclamation responsibility for the tasks associated with this request.

Please provide a rider to the current Financial Warranty, or submit a new Financial Warranty reflecting this reduction. If you wish to submit a different type of Financial Warranty, please contact our office for the applicable form.

If you have any questions, please contact me at 970-241-2042 or travis.marshall@state.co.us.

Sincerely. Travis Marshall

Travis Marshall Environmental Protection Specialist

ec: Barbara J. Coria, Division of Reclamation, Mining and Safety

M-FW-13



## COST SUMMARY WORK

Т	ask descrij	otion:	Final Reclamation	on Cost Esti	mate		
Site:	Line Can	np Pit	Per	mit Action:	SR-3	Permit/Jol	o#: M2001001
<u>PI</u>	<b>ROJECT</b> Task #:	IDENTIFIC	CATION State:	Colorado		Abbreviation:	None
	Date: User:	11/27/2018 THM	County:	Montezuma	a	Filename:	M001-001a
	Age	ency or organi	ization name: DR	MS			

## TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Slope reduction for sediment basin form 0.5H:1V to 3H:1V	DOZER	1	7.59	\$1,650.00
002	Slope reduction of pit inslopes form 0.5H:1V to 3H:1V	DOZER	1	7.07	\$1,538.00
003	Replace topsoil to 1' depth over 8 acres	SCRAPER1	1	12.44	\$14,366.00
004	Finish Grade 10 acres affected area for drainage control	DOZER	1	24.05	\$5,322.00
005	Revegetate 8 acres	REVEGE	1	10.00	\$15,131.00
006	Mobilize/Demobilize	MOBILIZE	1	2.88	\$5,249.00
		SUBTO	DTALS:	64.03	\$43,256

## **INDIRECT COSTS**

## **OVERHEAD AND PROFIT:**

Liability insurance:	2.02	Total =	\$873.77
Performance bond:	1.05	Total =	\$454.19
Job superintendent:	32.02	Total =	\$2,338.70
Profit:	10.00	Total =	\$4,325.60
		TOTAL O & P =	\$7,992.26
		CONTRACT AMOUNT (direct + O & P) =	\$51,248.26

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation: Reclamation management and/or administration:	0.00 0.00 5.00	Total = Total =	0.00 \$0.00 \$2,562.41
CONTINGENCY:	0.00	Total =	\$0.00
		TOTAL INDIRECT COST =	\$10,554.67
TOTAL BO	ND AN	IOUNT (direct + indirect) =	\$53,810.67

## BULLDOZER WORK

Task description:		Slope rec	luction for sedimen	u Dasin Iorm 0.5H:	1 V to 5H:1 V	
: Line Camp Pit			Permit Action:	SR-3	Permit/Job#:	M2001001
PROJECT IDEN	NTIFI	<b>CATION</b>				
Task #: 001			State: Colorado		Abbreviation:	None
Date: 11/27	7/2018	C	County: Montezur	na	Filename:	01a
User: THM	[					
Agency of	r organi	ization nam	e: DRMS			
HOURLY EQUI	PME	NT COST				
Basic Machine:		D8T - 8SU				
Horsepower:	310					
Blade Type:		i-Universal				
Attachment: Shift Basis:		ank ripper				
Data Source:		r day				
	(CR	u)				
Cost Breakdown:						
<b>A 11 - -</b>				Utilization	%	
Ownership Cost/H			\$93.62	NA		
Operating Cost/H			\$73.35	100		
Ripper own. Cost/H			\$8.93	NA		
Ripper op. Cost/H			\$0.00	0		
Operator Cost/H	JOURS					
	10ш.		\$41.52	NA		
Total unit Cost/Hou	-	\$217.42	\$41.52	NA		
Total unit Cost/Hou Total Fleet Cost/Ho	ır: our:	\$217.42 \$217.42	541.52	NA		
Total Fleet Cost/Ho <u>MATERIAL OU</u> Initial Volume:	ur: our: J <b>ANTI</b> 3,757	\$217.42 TIES	541.52	NA		
Total Fleet Cost/Hc	ur: Dur:	\$217.42 TIES		NA		
Total Fleet Cost/Ho MATERIAL QU Initial Volume: Swell factor:	ur: Dur: <u>3,757</u> 1.050 <b>3,945</b> 1 volum 1 swell : <b>DUCT</b> : nce:	\$217.42 THES LCY te: E factor: C ION	Division of Reclamat Pat Handbook	ion, Mining & Safet	ty	
Total Fleet Cost/Ho MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distant	ur: Dur: <u>3,757</u> <u>1.050</u> <u>3,945</u> 1 volum 1 swell : DUCT: product	\$217.42      TTIES      LCY      le:    E      factor:    C      ION      tion:    1,40	Division of Reclamat Pat Handbook	ion, Mining & Safet	t <u>y</u>	
Total Fleet Cost/Ho MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distant Unadjusted hourly p	ur: Dur: 3,757 1.050 3,945 1 volum 1 swell : DUCT: product cy desc ient:	\$217.42      TTIES      LCY      le:    E      factor:    C      ION      tion:    1,40	Division of Reclamat Pat Handbook Feet D0.0 LCY/hr	ion, Mining & Safet	ty	
Total Fleet Cost/Ho MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distan Unadjusted hourly p Materials consistent Average push gradi	ur: Dur: 3,757 1.050 3,945 1 volum 1 swell : DUCT: product cy desc ient:	\$217.42 TIES LCY te: E factor: C ION tion: 1,40 tription:	Pivision of Reclamat Pivision	ion, Mining & Safet	t <u>y</u>	
Total Fleet Cost/Ho MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distant Unadjusted hourly p Materials consistent Average push gradi Average site altitud	ur: Dur: 3,757 1.050 3,945 1 volum 1 swell bucct product cy desc ient: ent: -	\$217.42 TTIES LCY le: E factor: C ION ion: 1,40 ription: - -10 % 7,200 feet 3,400 lbs/J	Pivision of Reclamat Pivision	ion, Mining & Safet	ty	
Total Fleet Cost/Ho MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distant Unadjusted hourly p Materials consistent Average push gradi Average site altitud Material weight: Weight description: Job Condition Correct	ur: Dur: <u>JANTI</u> <u>3,757</u> <u>1.050</u> <u>3,945</u> <u>1 volum</u> <u>1 swell</u> <u>1 swell <u>1 swell</u> <u>1 swell</u> <u>1 swell</u> <u>1 swell</u> <u>1 swell</u> <u>1 swell</u></u>	\$217.42 TIES LCY te: E factor: C ION tion: 1,40 ription:	Division of Reclamat Pivision of Reclamat Pivision of Reclamat Ceet Do.0 LCY/hr Compacted fill or e	ion, Mining & Safet		
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Total Fleet Cost/Ho MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distant Unadjusted hourly p Materials consistent Average push gradi Average site altitud Material weight: Weight description: Job Condition Corre Ope Material consistent	ar: Dur: Dur: <u>JANTI</u> <u>3,757</u> <u>1.050</u> <u>3,945</u> d volum d swell swell swell to <u>DUCT</u> product cy desc cy desc cy desc cy desc <u>i</u> <u>i</u> <u>i</u> <u>i</u> <u>i</u> <u>i</u> <u>i</u> <u>i</u>	\$217.42 TIES LCY e: E factor: C ION ion: 1,40 ription: -10 % 7,200 feet 3,400 lbs/1 Sand and g Factor kill: ncy: nod:	Division of Reclamat Pivision of Reclamat Pivision of Reclamat Ceet Do.0 LCY/hr Compacted fill or e Compacted fill or e LCY gravel - Wet 0.750	ion, Mining & Safet 	<u>ce</u> 3.) <u>HB))</u> N.)	

Task # 001

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.676	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production:	519.68 LCY/hr	
Adjusted fleet production:	519.68 LCY/hr	

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.418/LCY	
Total job time:	7.59 Hours	
Total job cost:	\$1,650	

## BULLDOZER WORK

			es form 0.5H:1V to 3H:		
Line Camp Pit		Permit Action:	SR-3	Permit/Job#:	M2001001
PROJECT IDEN	TIFICATIC	<u>DN</u>			
Task #: 002		State: Colorado		Abbreviation:	None
Date: $11/27$	/2018	County: Montezun	19	Filename:	02a
User: THM	2010	County. Montezun	14	Filename.	024
Agency or	organization n	ame: DRMS			
HOURLY EQUI	PMENT CO	<u>ST</u>			
Basic Machine:	Cat D8T - 85	SU			
Horsepower:	310				
Blade Type:	Semi-Univer				
Attachment:	3-shank ripp	er			
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/H	our:	\$93.62	NA		
Operating Cost/H		\$73.35	100		
Ripper own. Cost/H	our:	\$8.93	NA		
Ripper op. Cost/H	our:	\$0.00	0		
Operator Cost/H	our:	\$41.52	NA		
m . 1					
	00104	•			
Total unit Cost/Hour					
Total unit Cost/Hou Total Fleet Cost/Hou					
	ur: \$217.4				
Total Fleet Cost/Hor	ur: \$217.4 ANTITIES				
Total Fleet Cost/Hou MATERIAL OU Initial Volume:	ur: <b>\$217.4</b> ANTITIES 3,500		 		
Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor:	ur: <b>\$217.4</b> ANTITIES 3,500 1.050		 		
Total Fleet Cost/Hou MATERIAL OU Initial Volume:	ur: <b>\$217.4</b> ANTITIES 3,500				
Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated	ur: \$217.4 ANTITIES 3,500 1.050 3,675 LCY volume:	2 Division of Reclamati	ion, Mining & Safety		
Total Fleet Cost/Hou MATERIAL OU Initial Volume: Swell factor: Loose volume:	ur: \$217.4 ANTITIES 3,500 1.050 3,675 LCY volume:	2	ion, Mining & Safety		
Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated	ur: \$217.4 ANTITIES 3,500 1.050 3,675 LCY volume:	2 Division of Reclamati	ion, Mining & Safety		
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Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD	ur:  \$217.4    ANTITIES  3,500    1.050  3,675 LCY    volume:  swell factor:    UCTION  ce:	2 Division of Reclamati Cat Handbook	ion, Mining & Safety		
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Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p Materials consistence	S217.4      ANTITIES      3,500      1.050      3,675 LCY      volume:      swell factor:      UCTION      ce:      roduction:      y description:	2 Division of Reclamati Cat Handbook 50 feet 1,400.0 LCY/hr			
Total Fleet Cost/Hon MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie	ur:  \$217.4    ANTITIES  3,500    1.050  3,675 LCY    volume:  swell factor:    volume:  swell factor:    vUCTION  ce:    roduction:	2 Division of Reclamati Cat Handbook 50 feet 1,400.0 LCY/hr Compacted fill or e			
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Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie Average site altitude	ur:  \$217.4    ANTITIES  3,500    1.050  3,675 LCY    volume:  swell factor:    volume:     y description:     ent:  -10 %     7,200 f    3,400 I	2 Division of Reclamati Cat Handbook 50 feet 1,400.0 LCY/hr Compacted fill or e eet			
Total Fleet Cost/Hon MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight:	ur:  \$217.4    ANTITIES  3,500    1.050  3,675 LCY    volume:  swell factor:    volume:	2 Division of Reclamati Cat Handbook 50 feet 1,400.0 LCY/hr Compacted fill or e eet bs/LCY	mbankment 0.9		
Total Fleet Cost/Hon MATERIAL OU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Corre	ur:  \$217.4    ANTITIES  3,500    1.050  3,675 LCY    volume:  swell factor:    volume:	2 Division of Reclamati Cat Handbook 50 feet 1,400.0 LCY/hr Compacted fill or e eet bs/LCY	mbankment 0.9		
Total Fleet Cost/Hon MATERIAL OU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Corre	ur:  \$217.4    ANTITIES  3,500    1.050  3,675 LCY    volume:  swell factor:    WCTION	2 Division of Reclamati Cat Handbook 50 feet 1,400.0 LCY/hr Compacted fill or e eet bs/LCY hd gravel - Wet	mbankment 0.9		
Total Fleet Cost/Hor MATERIAL OU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Corre Oper Material co	ur:  \$217.4    ANTITIES  3,500    1.050  3,675 LCY    volume:  swell factor:    WCTION	2 Division of Reclamati Cat Handbook 50 feet 1,400.0 LCY/hr Compacted fill or e eet bs/LCY nd gravel - Wet 0.750	mbankment 0.9		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.676	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production:	519.68 LCY/hr	
Adjusted fleet production:	519.68 LCY/hr	

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.418/LCY	
Total job time:	7.07 Hours	
Total job cost:	\$1,538	

## SCRAPER TEAM WORK

Site: Line Camp Pit		Permit	t Action:	SR-3	Perr	nit/Job#: <u>M200</u>	1001
PROJECT IDEN	TIFICATION						
Task #: 003	Sta	ite: (	Colorado		Abbrev	viation: None	
	/2018 Coun	ity: 🗍	Montezun	na	Fil	ename: M001-	003
User: THM							
Agency or	organization name:	DRM	IS				
HOURLY EQUI	PMENT_			COSTS	hift basis: <u>1 per d</u>	ay	
				ent Description			
		aper: ozer:		/G w/push-pull T - 8SU			
Supp	ort Equipment -Load		NA	1 - 850			
	-Dump A	Area:	Cat D8	T - 8SU			
Road M	aintenance –Motor Gr -Water T		NA NA				
	-water 1	ruck:	NA				
Cost Breakdown:	Scraper Work	Team		Support Equi	oment	Maintenance	Equipment
	Scraper	Doz	zer	Load Area	Dump Area	Motor Grader	Water Ti
%Utilization-machine:	100		100	NA	100	NA	
Ownership cost/hour:	\$165.84		\$93.62	NA	\$93.62	NA	
Operating cost/hour:	\$172.14		\$73.35	NA	\$73.35	NA	
%Utilization-ripper:	NA		NA	NA	NA	NA	
Ripper own. cost/hour:	NA		\$0.00	NA	\$0.00	NA	
Ripper op. cost/hour:	NA		\$0.00	NA	\$0.00	NA	
Operator cost/hour:	\$31.05		\$41.52	NA	\$41.52	NA	
Unit Subtotals:	\$369.02	\$	208.49	NA	\$208.49	NA	
Number of Units:	2		1	0	1	0	
Group Subtotals:	Work:	\$946	5.53	Support:	\$208.49	Maint:	\$0.00
	ANTITIES 14,256 16,038 urce of estimated volu		CCY LCY Division	Swell fact			
Source HOURLY PROI	of estimated swell fac	tor:	Cat Hand	ibook			
				Scraper Be	owl (volume) Basi	<u>is:</u>	
Material weight: Material description: Rated Payload:	Earth - Dry packed			Struck Heaped Average		L	CY CY CY
Payload Capacity:					Capacity: 29.00	L(	

1.00 Minutes

0.60 Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 7200 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: <u>Rutted dirt, little maintenance, no water, 2" tire penetration 5.0</u>

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	2.00	5.00	7.00	1362	0.36

Haul Time: 0.36 minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	-2.00	5.00	3.00	2949	0.28
				Return Time:	0.28	minutes
			Total Scra	per team cycle time:	2.24	minutes
			Adjuste	d for job conditions:	1,289.46	LCY/Hour
			Selected 1	Number of Scrapers:	2	Scraper(s)
	Adjuste	d single scra	per team (unit	) hourly production:	1,289.46	LCY/Hour
	Adjusted n	ultiple scrap	per team (fleet	) hourly production:	1,289.46	LCY/Hour
Optim	Unadjusted unit pro al Number of Scrapers pe		-	LCY/Hour		
JOB T	IME AND COST					
Flee	t size: 1	_ Team(s)		Total job time:	12.44	Hours
Uni	t cost: \$0.896	_ /LCY		Total job cost:	\$14,366	

## BULLDOZER WORK

Task description:	Finis	sh Grade 10	acres affecta	eu area for d	ramage co	ntrol		
Line Camp Pit		Perr	nit Action:	SR-3		Permit/Job#:	M2001001	
PROJECT IDE	NTIFICATI	<u>ON</u>						
Task #: 004		State:	Colorado			Abbreviation:	None	
	7/2018	County:	Montezum	a		Filename:	M001-004	
User: THM						- Thomaine.	11001-004	
Agency	r organization	name' DR	MS					
	-	A-contract -	110					
HOURLY EQU	<u>IPMENT CO</u>	<u>DST</u>						
Basic Machine:	Cat D8T - 8	8SU						
Horsepower:	310							
Blade Type:	Semi-Unive	ersal						
Attachment:	3-shank rip	per						
Shift Basis:	1 per day							
Data Source:	(CRG)							
Cost Breakdown:								
			1		ation %			
Ownership Cost/H			\$93.62	]	NA			
Operating Cost/H			\$73.35		.00			
Ripper own. Cost/H			\$8.93		A			
	Iour:		\$3.89		50			
Ripper op. Cost/H								
Ripper op. Cost/H Operator Cost/H Total unit Cost/Ho Total Fleet Cost/Ho	Hour: 11: \$221.1	and the second se	\$41.52	1	NA			
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL OU	Hour: ur: \$221.: pur: \$221.: JANTITIES	and the second se	\$41.52	1	NA			
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL OU Initial Volume:	Hour: ur: \$221.: pur: \$221.: JANTITIES 12,100	and the second se	\$41.52	1	<u>NA</u>			
Operator Cost/H Total unit Cost/Ho Total Fleet Cost/Ho <u>MATERIAL OU</u> Initial Volume: Swell factor:	Hour: 11: \$221.: 5000 \$221.: 5221.:	31	\$41.52	1	<u>NA</u>			
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL OU Initial Volume:	Hour: ur: \$221.: pur: \$221.: JANTITIES 12,100	31	\$41.52	1	NA			
Operator Cost/H Total unit Cost/Ho Total Fleet Cost/Ho <u>MATERIAL OU</u> Initial Volume: Swell factor: Loose volume: Source of estimated	Hour: ur: \$221. pur: \$221. <b>JANTITIES</b> 12,100 1.125 <b>13,613</b> LCY H volume:	31 		1				
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL OU Initial Volume: Swell factor: Loose volume:	Hour: ur: \$221. pur: \$221. <b>JANTITIES</b> 12,100 1.125 <b>13,613</b> LCY H volume:	31						
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou <b>MATERIAL OU</b> Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	Hour: ur: \$221.: pur: \$221.: JANTITIES 12,100 1.125 13,613 LCY I volume: I swell factor:	31 						
Operator Cost/H Total unit Cost/Ho Total Fleet Cost/Ho MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated	Hour: ur: \$221.: pur: \$221.: JANTITIES 12,100 1.125 13,613 LCY I volume: I swell factor:	31 						
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou <b>MATERIAL OU</b> Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	Hour: Jur: \$221.3 JANTITIES 12,100 1.125 13,613 LCY I volume: I swell factor: DUCTION	31 Division o Cat Handl						
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou <b>MATERIAL OU</b> Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	Hour: ur: \$221.: pur: \$221.: JANTITIES 12,100 1.125 13,613 LCY I volume: I swell factor: DUCTION nce:	31 	of Reclamatio					
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou <b>MATERIAL OU</b> Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated <b>HOURLY PROI</b> Average push dista	Hour: 11: \$221. 2017: \$221.	Division of Cat Handl			Safety			
Operator Cost/H Total unit Cost/Ho Total Fleet Cost/Ho MATERIAL OL Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly Materials consisten	Hour:  \$221.    Jur:  \$221.    JANTITIES  \$221.    JANTITIES  \$221.    12,100  1.125    13,613 LCY  13,613 LCY    I volume:  swell factor:    DUCTION  nce:    production:	Division of Cat Handl		on, Mining &	Safety			
Operator Cost/H Total unit Cost/Ho Total Fleet Cost/Ho MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly Materials consisten Average push gradi	Hour:  \$221.    Jur:  \$221.    JANTITIES  \$221.    12,100  1.125    13,613 LCY  \$13,613 LCY    I volume:  \$\$ swell factor:    DUCTION  \$\$ nce:    production:  \$\$ production:    cy description:  \$\$ 0 %	31 Division of Cat Handl 50 feet 1,400.0 LCY : Compace		on, Mining &	Safety			
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot <b>MATERIAL OL</b> Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated <b>HOURLY PROI</b> Average push dista Unadjusted hourly Materials consisten	Hour:  \$221.    Jur:  \$221.    JANTITIES  \$221.    12,100  1.125    13,613 LCY  \$13,613 LCY    I volume:  \$\$ swell factor:    DUCTION  \$\$ nce:    production:  \$\$ production:    cy description:  \$\$ 0 %	31 Division of Cat Handl 50 feet 1,400.0 LCY : Compace		on, Mining &	Safety			
Operator Cost/H Total unit Cost/Ho Total Fleet Cost/Ho MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly Materials consisten Average push gradi	Hour:  \$221.    Jur:  \$221.    Jur:  \$221.    JANTITIES  12,100    1.125  13,613 LCY    I volume:  1 swell factor:    DUCTION  nce:    production:     cy description:     ent:  0 %    e:  7,200	31 Division of Cat Handl 50 feet 1,400.0 LCY : Compace		on, Mining &	Safety			
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot Total Fleet Cost/Hot MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud	Hour:  \$221.    Jur:  \$221.    JANTITIES    12,100    1.125    13,613 LCY    I volume:    I swell factor:    DUCTION    nce:    production:    cy description:    ie:  0 %    2,550	31 Division of Cat Handl 50 feet 1,400.0 LCY : Compace feet		on, Mining &	Safety			
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot <b>MATERIAL OU</b> Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated <b>HOURLY PROI</b> Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud Material weight:	Hour:  \$221.    Jur:  \$221.    Jur:  \$221.    JANTITIES  12,100    1.125  13,613 LCY    I volume:  1 swell factor:    DUCTION  nce:    production:     cy description:     eent:  0 %    e.  7,200	31 Division of Cat Handl 50 feet 1,400.0 LCY :Compace feet lbs/LCY		on, Mining &	Safety			
Operator Cost/H Total unit Cost/Hon Total Fleet Cost/Hon Total Fleet Cost/Hon MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud Material weight: Weight description: Job Condition Corr	Hour:  \$221.    Jur:  \$221.    Jur:  \$221.    JANTITIES  12,100    1.125  13,613 LCY    I volume:  1 swell factor:    DUCTION  nce:    production:     cy description:     eent:  0 %    e.  7,200	31 		on, Mining &	. Safety .9			
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated Mourney PROI Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud Material weight: Weight description: Job Condition Corr Ope	Hour: ar: \$221. bur: \$221. <b>JANTITIES</b> 12,100 1.125 13,613 LCY H volume: H swell factor: DUCTION nce: production: cy description: fent: 0 % le: 7,200 2,550 Earth ection Factor brator Skill: onsistency:	31 Division of Cat Handl 50 feet 1,400.0 LCY : Compace feet lbs/LCY - Dry packed 0.1	of Reclamatic pook //hr cted fill or er	on, Mining &	. Safety .9			
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated Mourney PROI Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud Material weight: Weight description: Job Condition Corr Ope	Hour:  \$221.    Jur:  \$221.    JUR:  \$221.    JANTITIES  12,100    1.125  13,613 LCY    I volume:  13,613 LCY    I volume:  13,613 LCY    I volume:  1 swell factor:    DUCTION	31 Division of Cat Handle 50 feet 1,400.0 LCY : Compace feet lbs/LCY - Dry packed 0.7 0.9	of Reclamation	on, Mining &	.9 .9 <u>Source</u> (AVG.)			

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

Adjusted unit production:	566.02 LCY/hr	
Adjusted fleet production:	566.02 LCY/hr	

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.391/LCY	
Total job time:	24.05 Hours	
Total job cost:	\$5,322	

## **REVEGETATION WORK**

: Line Car	np Pit	Pe	rmit Action: SR-3	Permit/Jol	o#: <u>M200100</u>
PROJECT	<b>IDENTIFIC</b>	ATION			
Task #:	005	State:	Colorado	Abbreviation:	None
Date:	11/27/2018	County:	Montezuma	Filename:	M001-005
User:	THM				

#### FERTILIZING

#### Materials Units / Cost / Unit Description Unit Cost /Acre Acre 10-34-0, 18-46-0, 5-10-5 200.00 pound \$0.34 \$68.00 **Total Fertilizer** Materials Cost/Acre \$68.00

## **Application**

Description	Cost /Acre
Truck whirlwind spreader (MEANS 32 01 90.13 0140)	\$111.94
Total Fortilizon Application Cost	
Total Fertilizer Application Cost	t/Acre \$111.94

## **TILLING**

weed condition of a minimum of a	Total Tilling Cost/Acre	\$299.89
Weed control spraying (MEANS 31 31 16.13 3100)		\$193.60
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$106.29
Description		Cost /Acre

#### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Orchardgrass - Latar	0.80	9.92	\$2.70
Meadow Brome - Regar	5.50	5.05	\$28.16
Intermediate Wheatgrass - Oahe	5.00	10.67	\$19.65
Milk Vetch, Cicer - Monarch	1.20	3.99	\$10.08
Timothy - Climax	0.30	8.61	\$0.48
Totals Seed Mix	12.80	38.25	\$61.07

#### Application

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

## **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$7.34	\$7.34
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$288.00	\$576.00
Total Mulch Materials Cost/Acre				\$583.34

## **Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$68.78
Weed spray, truck, aquatic area, nox. [DMG]	\$70.14
Total Mulch Application Cost/Acre	\$138.92

## NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Willow, Sandbar	20	Tubling, 3 cu. in. container (MEANS)	\$1.12	\$0.00	\$22.40
		Tota	ils Nursery Stoc	ek Cost / Acre	\$22.40

No. of Acres:	8 Co	st/Acre:	\$1,517.56
Estimated Failure Rate:	25% Cos	t/Acre*:	\$1,495.16
*Selected Replanting Work Items:	FERTILIZING,TILLING,SEEDING, LCHING	MU	
Initial Job Cost: \$12,140.48			

Initial Job Cost:	\$12,140.48	
Reseeding Job Cost:	\$2,990.32	
Total Job Cost:	\$15,131	
Job Hours:	10.00	

#### Page 1 of 2

## EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Line Camp Pit	Mo	bilize/Demobilize	Action: SR-3			) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )	2001001
Line Camp Fit		Periiit	Action: <u>SK-3</u>	1	ł	Permit/Job#:	2001001
PROJECT IDEN	TIFICATI	ON					
Task #: - 006		State: Co	lorado		Abbre	viation: None	
Date: 11/2 User: THM	7/2018 I		ontezuma			lename: M001	
Agency or	organization	n name: DRMS					
EQUIPMENT TH	RANSPOR	<u>T RIG COST</u>					
					Shift bas	sis: 1 per da	V
				C	Cost Data Sour		
Truck	Fractor Desc	ription: GENE	RIC ON-HIGH	WAY TRU	JCK TRACTC	R, 6X4, DIESEI	POWERED.
		•		400 HP	(2ND HALF,	2006)	
Truck	Trailer Desc	ription: G				OP DECK EQU	IPMENT
				TRAILER	(25T, 50T, AN	ID 100T)	
<u>Cost Breakdown:</u>							
Available Rig Ca	acities	0-25 Tons	26-50 Tons	51+	Tons		
Ownership (		\$16.63	\$18.37		2.33		
Operating (		\$44.38	\$46.13	and the second sec	0.07		
Operator (		\$27.66	\$27.66		7.66		
Helper (	Cost/Hour:	\$0.00	\$25.39	\$2	25.39		
Total Unit C	Cost/Hour:	\$88.67	\$117.55	\$12	25.45		
NON ROADABL	<u>E EQUIP</u> N	<u>MENT:</u>					
Machine Description	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
Cat D8T - 8SU	47.71	\$93.62	\$117.55	2	\$422.34	\$235.10	\$250.00
Cat 637G w/push- pull	59.59	\$165.84	\$125.45	2	\$582.58	\$250.90	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$8.33	\$88.67	1	\$97.00	\$88.67	\$250.00
				Subtotals:	\$1,206.13	\$663.34	\$1,000.00

## **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$12.23	1	\$12.23	\$12.23
		Subtotals:	\$12.23	\$12.23

## **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	CORTEZ	
Total one-way travel distance:	10.00	miles
Average Travel Speed:	45.00	mph
Total Non-Roadable Mob/Demob Cost *	\$5,243.14	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$5.44	

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.22	0.22
Return Time (Hours):	0.22	0.22
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.44	0.44

## JOB TIME AND COST

Total job time: **2.89** Hours

Total job cost: \_\_\_\_\_\$5,249\_\_\_\_\_