Cost Summary April 17, 2020 Page **1** of **11**

COST SUMMARY WORK

Т	ask description	1:	Cost Summary					
Site:	Carrizo Ston	e North	Pe	rmit Action:	2020 Bond Cal	2	Permit/Jol	b#: <u>M2005067</u>
PF	ROJECT IDI	ENTIFIC	ATION					
	Task #: 00	00	State:	Colorado		A	bbreviation:	None
		3/2020	County:	Baca			Filename:	2020
	User: D	C1						
	Agency	or organiz	zation name:	RMS				
<u>T</u> A	ASK LIST (D	DIRECT	<u>COSTS)</u>					
Task	D				Form	Fleet	Task	Cast
	Description				Used	Size	Hours	Cost
001	Grading hig				DOZER		0.28	\$81
002	Spreading C		n		DOZER		16.51	\$4,679
003	Spreading 7				DOZER	1	17.01	\$4,820
004	Revegetatio	on of Affect	cted Land		REVEGE	1	12.00	\$20,353
005	Mobilizatio	n of Equip	oment		MOBILIZE	1	6.46	\$3,600
					<u>SUBTO</u>	DTALS:	52.26	\$33,533

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$677
Performance bond:	1.05	Total =	\$352
Job superintendent:	20.13	Total =	\$1,397
Profit:	10.00	Total =	\$3,353
		TOTAL O & P =	\$5,780
		CONTRACT AMOUNT (direct + O & P) = $($	\$39,313

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	4.25	Total =	\$1,671
Reclamation management and/or administration:	5.00		\$1,966
CONTINGENCY:	0.00	Total =	\$0
	TOTAL IN	NDIRECT COST =	\$9,916
TOTAL BO	\$43,449		

Cost Summary April 17, 2020 Page **2** of **11**

BULLDOZER WORK

Task description:	Grading highwall			
e: Carrizo Stone North	Permit Action:	: 2020 Bond Calc	Permit/Jo	b#: <u>M2005067</u>
PROJECT IDENTIFIC	ATION			
				N.
Task #: 001	State: Colorado		Abbreviation:	None
Date: $\frac{1/3}{2020}$	County: Baca		Filename:	2020
User: DC1				
Agency or organiz	zation name: DRMS			
HOURLY EQUIPMEN	T COST			
Basic Machine: Cat I	D9T - 9SU			
Horsepower: 405				
Blade Type: Semi	-Universal			
Attachment: 3-sha	ank ripper			
Shift Basis: 1 per	day			
Data Source: (CRC				
Cost Breakdown:				
		Utilization %		
Ownership Cost/Hour:	\$121.49	NA		
Operating Cost/Hour:	\$105.84	100		
Ripper own. Cost/Hour:	\$13.94	NA		
Ripper op. Cost/Hour:	\$4.48	50		
Operator Cost/Hour:	\$41.24	NA		
	· · · · · · · · · · · · · · · · · · ·	1111		
Total unit Cost/Hour:	\$286.98			
Total Fleet Cost/Hour:	\$286.98			
MATERIAL QUANTIT	<u>TIES</u>			
Initial Volume: 167				
Swell factor: 1.430	<u>CN</u>			
Loose volume: 238 L	CY			
Source of estimated volum	ne: Division of Reclamat	tion, Mining & Safety		
Source of estimated swell	Cat Handbook			
factor:				
HOURLY PRODUCTI	<u>ON</u>			
Average push distance:	50 feet			
Unadjusted hourly	2,110.5 LCY/hr			
production:	2,110.0 20171			
r				
Materials consistency	Compacted fill or e	embankment 0.9		
description:	×.			
L				
Average push	-30 %			
gradient:	4.020 5			
Average site altitude:	4,930 feet			

Cost Summary April 17, 2020 Page **3** of **11**

Material weight:	3,30	0 lbs/LCY			
Weight description:	Deco	omposed rock - 75	% Rock, 25%	Earth	
Job Condition Correction	n Factor			Source	
Operato		0.750		(AVG.)	
Material consi	stency:	0.900		(CAT HB))	
Dozing n	nethod:	1.000		(GEN.)	
Vis	ibility:	0.800		(POOR)	
Job efficient	ciency:	0.830		(1 SHIFT/DAY)	
Spo	oil pile:	0.800		(FND-RF)	
Push gr	adient:	1.601		(CAT HB)	
A	ltitude:	1.000		(CAT HB)	
Material V	Veight:	0.697		(CAT HB)	
Blad	e type:	1.000		(PAT)	
Net corr	ection:	0.4001			
Adjusted unit production:	84	4.41 LCY/hr			
Adjusted fleet production:	84	4.41 LCY/hr			
JOB TIME AND CO	<u>ST</u>				
Fleet size:	1 Doze	$\mathbf{r}(\mathbf{s})$			
Unit cost:	\$0.340	. ,			
Oline COSt.	φ 0.54 0				
Total job time:	0.28 H	ours			
Total job cost:	\$81				

Cost Summary April 17, 2020 Page **4** of **11**

BULLDOZER WORK

: Carrizo Stone Nortl	L 7		2020 Day 1 Col	D	ьщ. MO0050/7
	<u>n</u> Pe	ermit Action:	2020 Bond Calc	Permit/Jo	b#: <u>M2005067</u>
PROJECT IDENTIF	ICATION				
Task #: 002	State:	Colorado		Abbreviation:	None
Date: $\frac{1/3}{2020}$	County:	Baca		Filename:	2020
User: DC1					
Agency or orga	anization name: DI	RMS			
HOURLY EQUIPMI	ENT COST				
Basic Machine: Ca	at D9T - 9SU				
Horsepower: 40					
	emi-Universal				
	-shank ripper				
	per day				
	CRG)				
Cost Breakdown:					
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			Utilization %		
Ownership Cost/Hour:		\$121.49	NA		
Operating Cost/Hour:		\$105.84	100		
Ripper own.					
Cost/Hour:		\$13.94	NA		
Ripper op. Cost/Hour:		\$0.90	10		
Operator Cost/Hour:	•	\$41.24	NA		
Total unit Cost/Hour:	\$283.40				
Total Fleet Cost/Hour:	\$283.40 \$283.40				
1 otur 1 1001 C050 11001.	Ψ ΔΟΟ1 ΤΟ				
MATERIAL OUANT	FITIES				
MATERIAL QUANT					
Initial Volume:4,8	340				
Initial Volume: 4,8 Swell factor: 1.0	340				
Initial Volume: 4,8 Swell factor: 1.0	340				
Initial Volume: 4,8 Swell factor: 1.0	340 000 340 LCY	— — — of Reclamatic	on, Mining & Safety		
Initial Volume:4,8Swell factor:1.0Loose volume:4,8	340 000 340 LCY Jume: Division		on, Mining & Safety		
Initial Volume: $4,8$ Swell factor: 1.0 Loose volume: $4,8$ Source of estimated vo	340 000 340 LCY Jume: Division		on, Mining & Safety		
Initial Volume: 4,8 Swell factor: 1.0 Loose volume: 4,8 Source of estimated vo Source of estimated sw	340 000 340 LCY Jume: Division		on, Mining & Safety		
Initial Volume: 4,8 Swell factor: 1.0 Loose volume: 4,8 Source of estimated vo Source of estimated sw	340 000 340 LCY Jume: Division Jell Cat Hand		on, Mining & Safety		
Initial Volume: 4,8 Swell factor: 1.0 Loose volume: 4,8 Source of estimated vo Source of estimated sw factor: HOURLY PRODUCC	340 000 340 LCY Jume: Division Jell Cat Hand TION		on, Mining & Safety		
Initial Volume: 4,8 Swell factor: 1.0 Loose volume: 4,8 Source of estimated vo Source of estimated sw factor: HOURLY PRODUC	340 000 340 LCY Jume: Division /ell Cat Hance TION 220 feet	lbook	on, Mining & Safety 		
Initial Volume: 4,8 Swell factor: 1.0 Loose volume: 4,8 Source of estimated vo Source of estimated sw factor: HOURLY PRODUC	340 000 340 LCY Jume: Division Jell Cat Hand TION	lbook	on, Mining & Safety 		
Initial Volume: 4,8 Swell factor: 1.0 Loose volume: 4,8 Source of estimated vo Source of estimated sw factor: HOURLY PRODUC	340 000 340 LCY Jume: Division /ell Cat Hance TION 220 feet	lbook	on, Mining & Safety 		
Initial Volume: 4,8 Swell factor: 1.0 Loose volume: 4,8 Source of estimated vo Source of estimated sw factor: HOURLY PRODUCC Average push distance: Unadjusted hourly production:	340 340 LCY Jume: Division rell Cat Hance TION : 220 feet 633.3 LCY	lbook /hr			
Initial Volume: 4,8 Swell factor: 1.0 Loose volume: 4,8 Source of estimated vo Source of estimated sw factor: HOURLY PRODUCC Average push distance: Unadjusted hourly production: Materials consistency	340 340 LCY Jume: Division rell Cat Hance TION : 220 feet 633.3 LCY	lbook			
Initial Volume: 4,8 Swell factor: 1.0 Loose volume: 4,8 Source of estimated vo Source of estimated sw factor: HOURLY PRODUCC Average push distance: Unadjusted hourly production:	340 340 LCY Jume: Division rell Cat Hance TION : 220 feet 633.3 LCY	lbook /hr			
Initial Volume: 4,8 Swell factor: 1.0 Loose volume: 4,8 Source of estimated vo Source of estimated sw factor: HOURLY PRODUC Average push distance: Unadjusted hourly production: Materials consistency description:	340 340 LCY Jume: Division rell Cat Hance TION : 220 feet 633.3 LCY	lbook /hr			
Initial Volume: 4,8 Swell factor: 1.0 Loose volume: 4,8 Source of estimated vo Source of estimated sw factor: HOURLY PRODUCC Average push distance: Unadjusted hourly production: Materials consistency	340 900 940 LCY Jume: Division 7ell Cat Hand 7ell Cat Hand TION : 220 feet 633.3 LCY Partly	lbook /hr			

Cost Summary April 17, 2020 Page **5** of **11**

Material weight:	3,40	0 lbs/LCY	
Weight description:	Grav	vel - Wet (1/4""-2""dian	n.)
Job Condition Correction	n Factor		Source
Operato		0.750	(AVG.)
Material consis	stency:	1.100	(CAT HB)
Dozing m	nethod:	1.000	(GEN.)
Vis	ibility:	1.000	(AVG.)
Job effic	ciency:	0.830	(1 SHIFT/DAY)
Spc	oil pile:	1.000	(DOZ-OC)
Push gr	adient:	1.000	(CAT HB)
A	ltitude:	1.000	(CAT HB)
Material V	Veight:	0.676	(CAT HB)
Blad	e type:	1.000	(PAT)
Net corr	ection:	0.4629	
Adjusted unit production:	29	93.15 LCY/hr	
Adjusted fleet production:	29	93.15 LCY/hr	
JOB TIME AND CO	<u>ST</u>		
Fleet size:	1 Doze	er(s)	
Unit cost:	\$0.967	<u> </u>	
-			
Total job time:	16.51	Hours	
Total job cost:	\$4,679		

Cost Summary April 17, 2020 Page **6** of **11**

BULLDOZER WORK

Task description: Carrizo Stone North	Spreading Tops		2020 Bond Calc	Permit/Jo	b#: M2005067
PROJECT IDENTIFI	CATION				
Task #: 003	State:	Colorado		Abbreviation:	None
Date: $\frac{1/3}{2020}$	County:	Baca		Filename:	2020
User: $DC1$	County.	Ducu		T nonume.	
Agency or organ	ization name: DI	RMS			
HOURLY EQUIPME	NT COST				
	D9T - 9SU				
1	ni-Universal				
· · ·	hank ripper				
	* *				
Data Source: (CF	er day				
Data Source: (CF					
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$121.49	NA		
Operating Cost/Hour:		\$105.84	100		
Ripper own.		\$13.94	NA		
Cost/Hour:		\$13.94	NA		
Ripper op. Cost/Hour:		\$0.90	10		
Operator Cost/Hour:		\$41.24	NA		
	¢202.40				
Total unit Cost/Hour:	\$283.40				
Total Fleet Cost/Hour:	\$283.40				
MATERIAL QUANT	<u>TTIES</u>				
Initial Volume: 7,26	0				
Swell factor: 1.00					
	0 LCY				
Source of estimated volu			on, Mining & Safety		
Source of estimated swe	ll Cat Hand	lbook			
factor:	. <u></u>				
HOURLY PRODUCT	ION				
Average push distance:	280 feet	4			
Unadjusted hourly	476.8 LCY	/hr			
production:					
	~		1 1 0		
Materials consistency	Consol	idated stockpi	lle 1.0		
description:					
, .	0.04				
Average push	0 %				
gradient:					
Average site altitude:	4,930 feet				

Cost Summary April 17, 2020 Page **7** of **11**

Material weight:	1,60	0 lbs/LCY		
Weight description:	Тор	Soil		
Job Condition Correction F	actor		Source	
Operator S		0.750	(AVG.)	
Material consister	ncy:	1.000	(CAT HB)	
Dozing meth		1.000	(GEN.)	
Visibi	-	1.000	(AVG.)	
Job efficien	ncy:	0.830	(1 SHIFT/DAY)	
Spoil J	pile:	1.000	(DOZ-OC)	
Push gradi	ient:	1.000	(CAT HB)	
Altit	ude:	1.000	(CAT HB)	
Material Wei	ght:	1.438	(CAT HB)	
Blade t	ype:	1.000	(PAT)	
Net correct	ion:	0.8952	 _	
Adjusted unit production:	42	26.83 LCY/hr	_	
Adjusted fleet 426.83 LCY/hr			_	
JOB TIME AND COST	<u>[</u>			
Fleet size: 1	Doze	er(s)		
		/LCY		
5		Hours		
Total job cost:\$	4,820			

Cost Summary April 17, 2020 Page **8** of **11**

REVEGETATION WORK

Т	ask descrip	otion:	Revegetation of	Affected La	nd		
Site:	Carrizo S	Stone North	Pe	rmit Action:	2020 Bond Calc	Permit/Job	o#: M2005067
<u>PI</u>	ROJECT	IDENTIFIC	<u>CATION</u>				
	Task #:	004	State:	Colorado		Abbreviation:	None
	Date:	1/3/2020	County:	Baca		Filename:	2020
	User:	DC1				-	
	Age	ency or organiz	zation name:	RMS			

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
Chisel plowing {DMG}		\$94.63
Weed control spraying (MEANS 31 31 16.13 3100)		\$193.60
	Total Tilling Cost/Acre	\$288.23

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	3.00	48.97	\$41.18
Sand Dropseed	1.00	119.38	\$9.75
Sideoats Grama - Butte	8.00	26.26	\$72.00
Bottlebrush Squirreltail	9.00	39.67	\$146.03
Sorghum, Sudan - Arikaree	30.00	17.22	\$21.75
Western Wheatgrass - Rosanna	15.00	37.88	\$86.25

	Totals Seed Mix	66.00	289.37	\$376.95
Application				

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$295.00	\$590.00
Total Mulch Materials Cost/Acre				\$500.00
				\$590.00

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$70.17
	Total Mulch Application Cost/Acre	\$70.17

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals 2	Nursery Stoc	k Cost / Acre	\$0.00

JOB TIME AND COST

No. of Acres:	11	Cost /Acre:	\$1,592.57
Estimated Failure Rate:	40%	Cost /Acre*:	\$644.17
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$17,518.27
Reseeding Job Cost:	\$2,834.35
Total Job Cost:	\$20,353
Job Hours:	12.00

Cost Summary April 17, 2020 Page **10** of **11**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

			lization of Equ	ipinent				
Carrizo	Stone North	l	Permit	Action: _2020	Bond Calo	2	Permit/Job#: <u>N</u>	12005067
PROJEC	<u>r identifi</u>	ICATIO	<u>N</u>					
Task #:	005		State: Co	olorado		Abbre	viation: None	
Date:	1/3/2020		County: Ba	ica		Fi	lename: M067	7-005
User:	DC1							
A	gency or organ	nization n	name: DRMS					
		abobe						
EQUIPM	ENT TRAN	<u>SPORT</u>	RIG COST					
						Shift ba	sis: 1 per da	ıy
					(Cost Data Sour		
		ъ .						
	Truck Tracto	or Descrip	ption: GENE	RIC ON-HIGH		JCK TRACTO	DR, 6X4, DIESEI	L POWERED.
					400 JID			,
	т 1 т · 1	р ·				(2ND HALF,	2006)	
	Truck Traile	er Descrip	otion: Gl		ING GOO	SENECK, DF	2006) ROP DECK EQU	
	Truck Traile	er Descrip	ption: Gl		ING GOO		2006) ROP DECK EQU	
Cost Breake		er Descrip	otion: Gl		ING GOO	SENECK, DF	2006) ROP DECK EQU	
	<u>lown:</u>		otion: Gl		ING GOO TRAILER	SENECK, DF	2006) ROP DECK EQU	
Available		ies			ING GOO TRAILER 51+	SENECK, DF (25T, 50T, AN	2006) ROP DECK EQU	-
Available Owr	<u>lown:</u> • Rig Capaciti	ies Hour:	0-25 Tons	26-50 Tons	ING GOO TRAILER 51+	SENECK, DF (25T, 50T, AN - Tons	2006) ROP DECK EQU	-
Available Own Op	<u>down:</u> • Rig Capaciti nership Cost/F	ies Hour: Hour:	0-25 Tons \$17.20	26-50 Tons \$29.63	ING GOO TRAILER 51+ \$3 \$5	SENECK, DF (25T, 50T, AN - Tons 38.69	2006) ROP DECK EQU	
Available Own Op O	down: Rig Capaciti nership Cost/F perating Cost/F perator Cost/F Helper Cost/F	ies Hour: Hour: Hour: Hour:	0-25 Tons \$17.20 \$26.56	26-50 Tons \$29.63 \$47.02	ING GOO TRAILER 51+ \$3 \$5 \$2 \$2	SENECK, DF (25T, 50T, AN - Tons 38.69 55.69	2006) ROP DECK EQU	-
Available Own Op O	down: Rig Capaciti nership Cost/F perating Cost/F perator Cost/F	ies Hour: Hour: Hour: Hour:	0-25 Tons \$17.20 \$26.56 \$23.63	26-50 Tons \$29.63 \$47.02 \$23.63	ING GOO TRAILER 51+ \$3 \$5 \$2 \$2 \$2 \$2	SENECK, DF (25T, 50T, AN - Tons 38.69 55.69 23.63	2006) ROP DECK EQU	-
Available Own Op O	down: Rig Capaciti nership Cost/F perating Cost/F perator Cost/F Helper Cost/F	ies Hour: Hour: Hour: Hour:	0-25 Tons \$17.20 \$26.56 \$23.63 \$0.00	26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53	ING GOO TRAILER 51+ \$3 \$5 \$2 \$2 \$2 \$2	SENECK, DF (25T, 50T, AN - Tons 38.69 55.69 23.63 23.53	2006) ROP DECK EQU	-
Available Own Op OO Tot	down: Rig Capaciti nership Cost/F perating Cost/F perator Cost/F Helper Cost/F	ies Hour: Hour: Hour: Hour: Hour:	0-25 Tons \$17.20 \$26.56 \$23.63 \$0.00 \$67.39	26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53	ING GOO TRAILER 51+ \$3 \$5 \$2 \$2 \$2 \$2	SENECK, DF (25T, 50T, AN - Tons 38.69 55.69 23.63 23.53	2006) ROP DECK EQU	
Available Own Op O Tot	down: Price Rig Capaciti nership Cost/F perating Cost/F perator Cost/F Helper Cost/F tal Unit Cost/F ADABLE E(ies Hour: Hour	0-25 Tons \$17.20 \$26.56 \$23.63 \$0.00 \$67.39	26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53 \$123.81	ING GOO TRAILER 51+ \$3 \$5 \$2 \$2 \$2 \$1	SENECK, DF (25T, 50T, AN - Tons 38.69 55.69 23.63 23.53 41.54	2006) ROP DECK EQU ND 100T)	IPMENT
Available Own Op O Tot NON ROA Machine	down: Rig Capaciti nership Cost/F perating Cost/F perator Cost/F Helper Cost/F tal Unit Cost/F ADABLE E(We	ies Hour: Hour: Hour: Hour: Hour: DUIPMI	0-25 Tons \$17.20 \$26.56 \$23.63 \$0.00 \$67.39	26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53	ING GOO TRAILER 51+ \$3 \$5 \$2 \$2 \$2 \$2	SENECK, DF (25T, 50T, AN - Tons 38.69 55.69 23.63 23.53	2006) ROP DECK EQU	
Available Own Op O Tot	down: Rig Capaciti nership Cost/F perating Cost/F perator Cost/F Helper Cost/F tal Unit Cost/F ADABLE E(We on Unit	ies Hour: Hour: Hour: Hour: Hour: DUIPMI	0-25 Tons \$17.20 \$26.56 \$23.63 \$0.00 \$67.39 ENT: Owner ship	26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53 \$123.81 Haul Rig	ING GOO TRAILER 51+ \$3 \$5 \$2 \$2 \$1 \$1	SENECK, DF (25T, 50T, AN - Tons 38.69 55.69 23.63 23.53 41.54 Haul Trip	2006) ROP DECK EQU ND 100T)	IPMENT DOT Permit

Subtotals: \$448.05 \$276.32 \$500.00

\$134.78

\$250.00

ROADABLE EQUIPMENT:

Drill/Broadcast

Seeder with Tractor

25.00

\$18.15

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
		Subtotals:	\$0.00	\$0.00

\$67.39

2

\$171.08

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	SPRINGFIELD, COLORADO	
Total one-way travel distance:	39.00	miles
Average Travel Speed:	45.00	mph
Total Non-Roadable Mob/Demob Cost *	\$3,599.72 \$0.00	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.87	0.87
Return Time (Hours):	0.87	0.87
Loading Time (Hours):	1.00	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.23	1.73

JOB TIME AND COST

Total job time:	6.47	Hours
Total job cost:	\$3,600	_