June 28, 2016

Brian Watterson Peabody Williams Fork Mining, LLC 36600 Routt County Road #27 Hayden, CO 81639



1313 Sherman Street, Room 215 Denver, CO 80203

RE: Red Rock Pit, Permit No. M-1978-315, Reclamation Costs Update and Notice of Surety Increase (SI-1)

Dear Mr. Waterson:

In an effort to ensure the Financial Warranty for the above referenced site adequately reflects the actual current costs of fulfilling the requirements of the approved reclamation plan, the Colorado Division of Reclamation, Mining and Safety (Division) has updated the reclamation cost estimate (copy enclosed).

Division calculations estimate the cost to reclaim the above referenced site to be \$30,790 rounded up from \$30,789.20. This is an increase of \$5,847 over the \$24,943 currently required by the Division. This estimate is based on conditions observed during the June 16, 2016 inspection. It is noted that the Division currently holds an excess surety amount of \$6,607 for a total bond amount of \$31,550. Therefore no additional bond is required to be posted at this time.

Any questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Barbara Coria Mining and Safety Denver Office, phone no. 303.866.3567, ext. 8148.

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@ state.co.us

Sincerely,

Amy Yeldell

Environmental Protection Specialist Department of Natural Resources Division of Reclamation, Mining and Safety

Phone: (970) 254-8511

Amy Geldell

Ec: Russ Means, Senior EPS / Field Office Supervisor, Grand Junction DRMS

Enc: Financial Warranty Cost Estimate



# **COST SUMMARY WORK**

te: Red Rock Pit		Permit Action:2016-06	Permit/Job#: M1978315
PROJECT	TIDENTIFIC	<u>CATION</u>	
Task #:	000	State: Colorado	Abbreviation: None
Date:	6/22/2016	County: Routt	Filename: M315-000
	ACY	<del></del>	<del></del>

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Finish grade mined 1H:1V slopes, spread fines	DOZER	1	24.00	\$3,842.00
02a	Rip base area in Phase 2	RIPPER	1	6.06	\$1,056.00
03a	Spread topsoil over base area	DOZER	1	1.15	\$185.00
04a	Revegetate base area in Phase 2	REVEGE	1	3.00	\$4,265.00
04b	Revegetate slopes in Phase 2	REVEGE	1	5.00	\$9,687.00
05a	Initial mobilize reclamation crew and equipment	MOBILIZE	1	4.22	\$3,154.00
05b	Secondary mobilize reclamation crew and equipment	MOBILIZE	1	4.22	\$1,921.00
		SUBTO	TALS:	47.65	\$24,110

#### **INDIRECT COSTS**

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

Liability insurance:	2.02	Total =	\$487.02
Performance bond:	1.05	Total =	\$253.16
Job superintendent:	21.29	Total =	\$1,585.68
Profit:	10.00	Total =	\$2,411.00
		TOTAL O & $P =$	\$4,736.86

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	500.00	Total =	500.00
Engineering work and/or contract/bid preparation:	0.00	Total =	\$0.00
Reclamation management and/or administration:	5.00		\$1,442.34

CONTINGENCY: 0.00 Total = \$0.00

CONTRACT AMOUNT (direct + O & P) =  $\frac{$28,846.86}{}$ 

TOTAL INDIRECT COST = \$6,679.20

TOTAL BOND AMOUNT (direct + indirect) = \$30,789.20

# **BULLDOZER WORK**

PROJECT IDENTIFICATION   Task #: 01A	Task description:	Finis	h grade mir	ned 1H:1V s	lopes, spread fines		
Task #: 01A	Red Rock Pit		Per	mit Action:	2016-06	Permit/Job#:	M1978315
Date: 6/22/2016   County: Routt   Filename: M315-01a	PROJECT IDEN	TIFICATION	<u>ON</u>				
DRMS	Task #: 01A		State:	Colorado		Abbreviation:	None
Agency or organization name:   DRMS	Date: 6/22/2	2016	County:	Routt		Filename:	M315-01a
Basic Machine:   Cat D8T - 8U	User: ACY						
Basic Machine:   Cat D8T - 8U   305   30	Agency or	organization	name: DF	RMS			
Basic Machine:   Cat D8T - 8U   305   30	HOURLY EQUI	PMENT CO	OST				
Blade Type:			<u></u>				
Attachment:	Horsepower:	305			<del></del>		
Shift Basis:   Ter day   (CRG)   CRG    CR					<del></del> -		
Data Source:   CRG   CRS   C					<u> </u>		
Cost Breakdown:							
Ownership Cost/Hour:   \$52.86   NA	Data Source:	(CRG)			_		
Ownership Cost/Hour:         \$52.86         NA           Operating Cost/Hour:         \$68.35         100           Ripper own. Cost/Hour:         \$0.00         NA           Ripper op. Cost/Hour:         \$38.89         NA           Total unit Cost/Hour:         \$160.10           Total Fleet Cost/Hour:         \$160.10           MATERIAL QUANTITIES           Initial Volume:         \$13,875           Swell factor:         \$1.000           Loose volume:         \$38.89           Source of estimated volume:         Grade upper 1 foot of material in Phase 2 (8.6 ac.)           Cott Handbook         Cat Handbook    HOURLY PRODUCTION  Average push distance:  Unadjusted hourly production:  Materials consistency description:  Compacted fill or embankment 0.9  Average push gradient: Average push gradient: Average site altitude:  6,300 feet  Material weight:  2,900 lbs/LCY  Weight description:  Decomposed rock - 50% Rock, 50% Earth  Lob Condition Correction Factor Operator Skill: 0,750  Operator Skill: 0,750  Operator Skill: 0,750  Operator Skill: 0,090  (CAT HB)) Dozing method: 1,000  GEN.)	Cost Breakdown:						
Separating Cost/Hour:   \$68.35   100				<b>***</b> • • •	· · · · · · · · · · · · · · · · · · ·		
Source of estimated volume: Source of estimated swell factor: Source of estimated swell factor: Inadjusted hourly production: Source of estimated swell factor: Source of esti							
Ripper op. Cost/Hour:  Operator Cost/Hour:  S180.00  Operator Cost/Hour:  S180.10  Total unit Cost/Hour:  S160.10  MATERIAL OUANTITIES  Initial Volume:  Swell factor:  Loose volume:  13,875  Swell factor:  Loose volume:  13,875  Source of estimated volume:  Source of estimated swell factor:  Cat Handbook  HOURLY PRODUCTION  Average push distance:  Unadjusted hourly production:  Materials consistency description:  Materials consistency description:  Compacted fill or embankment 0.9  Average push gradient:  Average site altitude:  Operator Skill:  Operator Skill:  Operator Skill:  Material consistency:  Operator Skill:  Material consistency:  Operator Skill:  Material consistency:  Operator Skill:  Operator Skill							
Operator Cost/Hour:    \$160.10	* *						
Total unit Cost/Hour:    \$160.10   \$160.10							
State   Stat							
Loose volume: Grade upper 1 foot of material in Phase 2 (8.6 ac.)  Source of estimated swell factor: Cat Handbook  HOURLY PRODUCTION  Average push distance: 50 feet Unadjusted hourly production: Compacted fill or embankment 0.9  Average push gradient: 0 % Average push gradient: 6,300 feet  Material weight: 2,900 lbs/LCY  Weight description: Decomposed rock - 50% Rock, 50% Earth  Job Condition Correction Factor Operator Skill: 0.750 (AVG.) Material consistency: 0.900 (CAT HB)) Dozing method: 1.000 (GEN.)	Initial Volume:	13,875		<u> </u>			
Source of estimated volume: Source of estimated swell factor:  Grade upper 1 foot of material in Phase 2 (8.6 ac.)  Cat Handbook  HOURLY PRODUCTION  Average push distance: Unadjusted hourly production:  Materials consistency description:  Compacted fill or embankment 0.9  Average push gradient: 6,300 feet  Material weight:  2,900 lbs/LCY  Weight description:  Decomposed rock - 50% Rock, 50% Earth  Job Condition Correction Factor Operator Skill: 0,750 (AVG.)  Material consistency: 0,900 (CAT HB)) Dozing method: 1,000 (GEN.)							
Average push distance: 50 feet Unadjusted hourly production: Compacted fill or embankment 0.9  Average push gradient: 0 % Average push gradient: 6,300 feet  Material weight: 2,900 lbs/LCY  Weight description: Decomposed rock - 50% Rock, 50% Earth  Job Condition Correction Factor Operator Skill: 0.750 (AVG.) Material consistency: 0.900 (CAT HB)) Dozing method: 1.000 (GEN.)	Source of estimated	volume:			material in Phase 2 (8.6 a	ac.)	
Average push distance: 50 feet Unadjusted hourly production: 1,627.0 LCY/hr  Materials consistency description: Compacted fill or embankment 0.9  Average push gradient: 0 % Average site altitude: 6,300 feet  Material weight: 2,900 lbs/LCY  Weight description: Decomposed rock - 50% Rock, 50% Earth  Job Condition Correction Factor Operator Skill: 0.750 (AVG.)  Material consistency: 0.900 (CAT HB)) Dozing method: 1.000 (GEN.)			<u>Cut Hund</u>	.cook			
Unadjusted hourly production: 1,627.0 LCY/hr  Materials consistency description: Compacted fill or embankment 0.9  Average push gradient: 0 %  Average site altitude: 6,300 feet  Material weight: 2,900 lbs/LCY  Weight description: Decomposed rock - 50% Rock, 50% Earth  Job Condition Correction Factor Source Operator Skill: 0.750 (AVG.)  Material consistency: 0.900 (CAT HB)) Dozing method: 1.000 (GEN.)	'		<b>7</b> 0.0				
Materials consistency description: Compacted fill or embankment 0.9  Average push gradient: 0 % Average site altitude: 6,300 feet  Material weight: 2,900 lbs/LCY  Weight description: Decomposed rock - 50% Rock, 50% Earth  Job Condition Correction Factor Source Operator Skill: 0.750 (AVG.)  Material consistency: 0.900 (CAT HB)) Dozing method: 1.000 (GEN.)				V/h			
Average push gradient: 0 % Average site altitude: 6,300 feet  Material weight: 2,900 lbs/LCY  Weight description: Decomposed rock - 50% Rock, 50% Earth  Job Condition Correction Factor Operator Skill: 0.750 (AVG.)  Material consistency: 0.900 (CAT HB)) Dozing method: 1.000 (GEN.)	Unadjusted nourly p	production: _	1,627.0 LC	<u>Y/nr</u>			
Average site altitude: 6,300 feet  Material weight: 2,900 lbs/LCY  Weight description: Decomposed rock - 50% Rock, 50% Earth  Job Condition Correction Factor Operator Skill: 0.750 (AVG.)  Material consistency: 0.900 (CAT HB)) Dozing method: 1.000 (GEN.)	Materials consistence	cy description:	_ Compa	cted fill or e	mbankment 0.9		
Weight description:  Decomposed rock - 50% Rock, 50% Earth  Source Operator Skill: Operator Sk			feet				
Job Condition Correction FactorSourceOperator Skill:0.750(AVG.)Material consistency:0.900(CAT HB))Dozing method:1.000(GEN.)	Material weight:	2,900	lbs/LCY			<u></u>	
Operator Skill:         0.750         (AVG.)           Material consistency:         0.900         (CAT HB))           Dozing method:         1.000         (GEN.)	Weight description:	Decor	nposed rock	- 50% Rock	, 50% Earth		
Material consistency: 0.900 (CAT HB)) Dozing method: 1.000 (GEN.)			0	750			
Dozing method: 1.000 (GEN.)							
, 10101111, 11000   (11101)		Visibility:			(AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3554

Adjusted unit production: 578.24 LCY/hr
Adjusted fleet production: 578.24 LCY/hr

# **JOB TIME AND COST**

Fleet size: 1 Dozer(s)
Unit cost: \$0.277/LCY

Total job time: 24.00 Hours
Total job cost: \$3,842

# **BULLDOZER RIPPING WORK**

	Task description:	Rip b	pase area in Phase 2					
Site	: Red Rock Pit		Permit Action:	2016-06	I	Permit/Job#:	M197	8315
	PROJECT ID	ENTIFICATION ENTIF	<u>ON</u>					
	Task #: 02.	Δ	State: Colorado		Δhl	breviation:	None	
		2/2016	County: Routt			Filename:	M315-	02a
	User: AC		County. Koutt			i nename.	141313	02 <b>u</b>
	Agency	or organization	name: DRMS					
	HOURLY EQ	UIPMENT CO	OST					
	Basic	Machine: Cat	D8T - 8U		Horsepower:		305	
	Ripper Att	achment: 3-Sl	nank Ripper	<del></del>	Shift Basis:	1 p	er day	
			**		Data Source:	((	CRG)	
	Cost Breakdown:	<u>.</u>						
					Utilization %			
		Ownership Co		\$52.86	NA	<u> </u>		
		Operating Co		\$68.35	100	_		
		er Ownership Co		\$8.40	NA	_		
	Ripp	per Operating Co		\$5.62	100	_		
		Operator Co		\$38.89	NA	=		
		Total Unit Co	st/Hour:	\$174.12				
		Total Fleet Co	st/Hour: \$174	4.12				
	MATERIAL (	<u>UANTITIES</u>	Sele	ected estimating	g method: Are	ea		
	Alternate Method	<u>ls:</u>						
Seismic:	NA		Bank Volume:	NA	BCY		NA	
Area:	3.00	acres	Rip Depth (ft):	2.00	Volume:	9,680		BCY or CC
		Source of estim	nated quantity: Mine/F	Rec. Plan Maps				
	HOURLY PRO	ODUCTION						
	Seismic:							
		S	eismic Velocity:	NA	feet/sec	cond		
	<b>A</b>		· ——		<del></del>			
	Area:	A	Dinning Donth	2.56	h			
			e Ripping Depth:  E Ripping Width:	7.08	mph degree	c		
		_	Ripping Length:	50.00	feet	S		
			ge Dozer Speed:	88.00	feet			
			Maneuver Time:	0.25	feet			
			ion per unit area:	0.596	acres/h	our		
	Job Condition Co	orrection Factors						
	Un	adjusted Hourly	Unit Production:	0.596	Acres/	hr		
		·	Site Altitude:	6,300	feet			
			Altitude Adj:	1.00	(CAT	HB)		
			Job Efficiency:	0.83	(1 shift			
			Net Correction:	0.83	multip	•		
		Adjusted 1	Hourly Unit Production:	0.49	Acres/hr			
			Hourly Fleet Production:	0.49	Acres/hr			
	JOB TIME AN	ND COST						
	Fleet size:	1	Grader(s)	Total job tin	ne:	6.06	I	Hours
	_	\$252,000		•				
	Unit cost:	\$352.009	Per acre	Total job co	ost:	\$1,056		

# **BULLDOZER WORK**

Task description:					
Red Rock Pit		Permit Action:	2016-06	Permit/Job#:	M1978315
PROJECT IDEN	TIFICATION	<u>ON</u>			
Task #: 03A		State: Colorado		Abbreviation:	None
Date: $\frac{6/22}{2}$	2016	County: Routt		Filename:	M315-03a
User: ACY		-		-	
Agency or	organization	name: DRMS			
HOURLY EQUI					
Basic Machine:	Cat D8T - 8	<del></del>			
Horsepower:	305		<u></u>		
Blade Type:	Universal				
Attachment:	NA				
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/H		\$52.86	NA		
Operating Cost/H		\$68.35	100		
Ripper own. Cost/H		\$0.00	NA		
Ripper op. Cost/H		\$0.00	0		
		\$38.89	NA		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Ho	\$160.1 ur: \$160.1	10	TVA		
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU  Initial Volume: Swell factor:	r: \$160 yr: \$160 <b>ANTITIES</b> 1,613  1.000	10			
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU Initial Volume:	r: \$160.3 ur: \$160.3 ANTITIES	10			
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU  Initial Volume: Swell factor:	r: \$160.3 <b>ANTITIES</b> 1,613  1.000 <b>1,613</b> LCY  volume:	10			
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU  Initial Volume: Swell factor: Loose volume: Source of estimated	r: \$160.3  ANTITIES  1,613 1.000 1,613 LCY  volume: swell factor:	Approx. 3 ac. @ 4" d			
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	r: \$160.3  ANTITIES  1,613 1.000 1,613 LCY  volume: swell factor:  DUCTION	Approx. 3 ac. @ 4" d Cat Handbook			
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD	r: \$160.3  ANTITIES  1,613 1.000 1,613 LCY  volume: swell factor:  DUCTION nce:	Approx. 3 ac. @ 4" d			
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated  HOURLY PROD  Average push distant	r: \$160.3  ANTITIES  1,613 1.000 1,613 LCY  volume: swell factor:  DUCTION  nce: production:	Approx. 3 ac. @ 4" d Cat Handbook  50 feet 1,627.0 LCY/hr	lepth		
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU  Initial Volume:    Swell factor:    Loose volume:    Source of estimated Source of estimated  HOURLY PROD  Average push distant Unadjusted hourly p	r: \$160.3  ANTITIES  1,613 1.000 1,613 LCY  volume: swell factor:  DUCTION  nce: production: cy description: cy description:	Approx. 3 ac. @ 4" d Cat Handbook  50 feet 1,627.0 LCY/hr Loose stockpile 1.2	lepth		
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated  HOURLY PROD  Average push distar Unadjusted hourly publication  Materials consistence  Average push gradie	\$160.3     \$160.3	Approx. 3 ac. @ 4" d Cat Handbook  50 feet 1,627.0 LCY/hr Loose stockpile 1.2	lepth		
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated  HOURLY PROD  Average push distant Unadjusted hourly publication  Materials consistence  Average push gradie Average site altitude	### ##################################	Approx. 3 ac. @ 4" d Cat Handbook  50 feet 1,627.0 LCY/hr Loose stockpile 1.2	lepth		
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated  HOURLY PROD  Average push distant Unadjusted hourly push distant Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Corre	r: \$160.3  and \$160.3  ANTITIES  1,613 1.000 1,613 LCY  volume: swell factor:  DUCTION  nce: production:	Approx. 3 ac. @ 4" d Cat Handbook  50 feet 1,627.0 LCY/hr Loose stockpile 1.2  feet lbs/LCY oil	lepth		
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated  HOURLY PROD  Average push distant Unadjusted hourly p  Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Correct Open	r: \$160.3  In: \$160.3  ANTITIES  1,613 1.000 1,613 LCY  volume: swell factor:  DUCTION  nce: production: 2  extra description: 2  extra description: 2  for Section Factor rator Skill: 2  1,600	Approx. 3 ac. @ 4" d Cat Handbook  50 feet 1,627.0 LCY/hr Loose stockpile 1.2  feet lbs/LCY oil  0.750	Source (AVG.)		
Total unit Cost/Hou Total Fleet Cost/Ho  MATERIAL QU  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated  HOURLY PROD  Average push distant Unadjusted hourly p  Materials consistence Average site altitude  Material weight: Weight description: Job Condition Corre Oper Material co	r: \$160.3  In: \$160.3  ANTITIES  1,613 1.000 1,613 LCY  volume: swell factor:  DUCTION  nce: production: 2  extra description: 2  extra description: 2  for Section Factor rator Skill: 2  1,600	Approx. 3 ac. @ 4" d Cat Handbook  50 feet 1,627.0 LCY/hr Loose stockpile 1.2  feet lbs/LCY oil	lepth		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.8593

Adjusted unit production: 1,398.08 LCY/hr
Adjusted fleet production: 1398.08 LCY/hr

# **JOB TIME AND COST**

Fleet size: 1 Dozer(s)
Unit cost: \$0.115/LCY

Total job time: 1.15 Hours \$185

# **REVEGETATION WORK**

Task description:	Revegetate base area	a in Phase 2				
Red Rock Pit	Permit Action: 2016-06 Permit/Job#:			: M1978315		
PROJECT IDENTIH	FICATION					
Task #: 04A	State: Co	olorado		Abb	oreviation:	None
Date: 6/22/201		outt				M315-04a
User: ACY						
Agency or org	anization name: DRMS					
<b>ERTILIZING</b>						
Materials						T
Description		Units / Acre	Unit	Cost	t / Unit	Cost /Acre
				\$		\$
				Tota	al Fertilizer Materials Cost/Acre	\$0.00
Description						Cost /Acre
		Total	Fertilizer A	Application	n Cost/Acre	\$0.00
TILLING						
Description						Cost /Acre
Chisel plowing {DM	[G}					\$88.76
			T	otal Tillin	g Cost/Acre	\$88.76
EEDING						
				Rate –		
Seed Mix				PLS	Seeds per SO	Cost /Acre
				LBS /	per SQ. FT	
Dittomburgh Autol				Acre		\$20.67
Bitterbrush, Antelop Indian Ricegrass - N				1.00 2.50	0.31 8.09	\$20.67 \$16.88
Intermediate Wheatg				3.00	6.40	\$6.57
miermediate wneatg	rass - Oane			5.00	0.40	\$0.57

Bluebunch Wheatgrass - Goldar

Slender Wheatgrass - Native

Western Wheatgrass - Arriba

Sagebrush, Mountain or Big

\$6.75

\$9.23

\$8.60

\$27.55

\$96.24

6.31

10.95

13.20

16.07

61.34

3.00

2.50

0.25

5.00

17.25

**Totals Seed Mix** 

Application

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

# **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	2.00	ACRE	\$1.25	\$2.50
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$246.00	\$492.00
Total Mulch Materials Cost/Acre				\$494.50

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$66.02
Power mulcher (MEANS 32 91 13.16 0350)		\$97.14
Weed spray, truck, non-aquatic area, nox. [DMG]		\$62.72
	<b>Total Mulch Application Cost/Acre</b>	\$225.88

### **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	Cost /Acre:	\$1,137.38	
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,137.38	

\*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost:
Reseeding Job Cost:
Total Job Cost:
Job Hours:

\$3,412.14

\$853.04

\$4,265

3.00

# **REVEGETATION WORK**

Task description:	Revegetate slope	es in Phase 2				
Red Rock Pit	Per	Permit Action: 2016-06			Permit/Job#	: M1978315
ROJECT IDENTII	FICATION					
Task #: 04B	State:	Colorado				None
Date: 6/22/201	6 County:	Routt		_	Filename:	M315-04b
User: ACY						
Agency or org	ganization name: DR	RMS				
ERTILIZING						
<b>Laterials</b>						
		Units /		0	4 / TI *4	C = =4 /A ====
Description		Acre	Unit	Cos	t / Unit	Cost /Acre
				\$		\$
				Tot	al Fertilizer	
					Materials Cost/Acre	\$0.00
Application						
Description						Cost /Acre
						\$
		Total	l Fertilizer A	pplicatio	n Cost/Acre	\$0.00
<u> </u>						
Description						Cost /Acre
Chisel plowing {DM	IG}					\$88.76
				. 1 (50)	<b>a</b>	
			То	tal Tillin	g Cost/Acre	\$88.76
SEEDING						
a				Rate –	G 1	G 4/A
Seed Mix				PLS	Seeds per SQ.	Cost /Acre
				LBS / Acre	FT SQ.	
Bitterbrush, Antelop	e			2.00	0.62	\$41.34
Indian Ricegrass - N	ative			5.00	16.18	\$33.75

Intermediate Wheatgrass - Oahe

Bluebunch Wheatgrass - Goldar

Slender Wheatgrass - Native

Western Wheatgrass - Arriba

Sagebrush, Mountain or Big

\$13.14

\$13.50

\$18.45

\$17.19

\$55.10

\$192.47

6.00

6.00

5.00

0.50

**Totals Seed Mix** 

10.00

34.50

12.81

21.90

12.63

26.40

32.14

122.68

**Application** 

Description		Cost /Acre
Broadcast seeding [DMG]		\$261.80
	<b>Total Seed Application Cost/Acre</b>	\$261.80

#### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	2.00	ACRE	\$1.25	\$2.50
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$246.00	\$492.00
Total Mulch Materials Cost/Acre				\$494.50

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$66.02
Power mulcher (MEANS 32 91 13.16 0350)		\$97.14
Weed spray, hand, non-aquatic area, nox. [DMG]		\$183.16
	<b>Total Mulch Application Cost/Acre</b>	\$346.32

### **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:
 5.6
 Cost /Acre:
 \$1,383.85

 Estimated Failure Rate:
 25%
 Cost /Acre\*:
 \$1,383.85

\*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: \$7,749.56

Reseeding Job Cost: \$1,937.39

Total Job Cost: \$9,687

Job Hours: 5.00

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Ini	tial mobilize recl	amation crew an	d equipment	
e: Red Rock Pit	Permi	t Action:	06 Permit/Jo	ob#: <u>M1978315</u>
PROJECT IDENTIFICAT	<u>ION</u>			
Task #: 05A	State: C	colorado	Abbreviation:	None
Date: 6/22/2016 User: ACY	County: R	outt	Filename:	M315-05a
Agency or organizatio	n name: DRMS	S		
EQUIPMENT TRANSPOR	T RIG COST			
			Shift basis:	1 per day
			Cost Data Source:	CRG Data
Truck Tractor Desc	cription: GENI	ERIC ON-HIGHW	VAY TRUCK TRACTOR, 6X4, 400 HP (2ND HALF, 2006)	, DIESEL POWERED,
Truck Trailer Desc	cription: C	GENERIC FOLDI	NG GOOSENECK, DROP DE	CK EQUIPMENT
		T	RAILER (25T, 50T, AND 100T	")
Cost Breakdown:				
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	
Ownership Cost/Hour:	\$16.63	\$18.37	\$22.33	
Operating Cost/Hour:	\$44.38	\$46.13	\$50.07	
Operator Cost/Hour:	\$27.66	\$27.66	\$27.66	
Helper Cost/Hour:	\$0.00	\$25.39	\$25.39	

### **NON ROADABLE EQUIPMENT:**

Total Unit Cost/Hour:

\$88.67

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	(TONS)		t		fleet		
Cat D8T - 8U	53.70	\$65.28	\$125.45	1	\$190.73	\$125.45	\$250.00
Drill/Broadcast	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$6.72	\$88.67	1	\$95.39	\$88.67	\$250.00
(Reinco M90)							

\$117.55

\$125.45

Subtotals: \$414.38 \$302.79 \$750.00

### **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$25.30	1	\$25.30	\$25.30

Subtotals	\$25.30	\$25.30

### **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

CRAIG

miles

45.00

mph

#### **Transportation Cycle Time:**

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.56	0.56
Return Time (Hours):	0.56	0.56
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.11	1.11

#### **JOB TIME AND COST**

Total job cost: 4.22 Hours

Total job cost: \$3,154

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task des	scription:	Secondary mobiliz	e reclamatio	on crew	and equipment		
ite: Red I	Rock Pit	Perm	it Action:	2016-06		Permit/Jol	o#: M1978315
PROJEC	CT IDENTIFICA	<u>TION</u>					
Task Dat Use	te: 6/22/2016		Colorado Routt		A	bbreviation: Filename:	None M315-05b
	Agency or organizat	tion name: DRM	S				
EQUIPM	Truck Tractor De	escription: GEN		4	Cost Data AY TRUCK TRA 400 HP (2ND HA	Source:C CTOR, 6X4, LF, 2006)	1 per day CRG Data DIESEL POWERED,
	Truck Trailer Do	escription:	GENERIC F		G GOOSENECK AILER (25T, 50T		~
Cost Brea	kdown:			TK	. HEER (231, 301	, 1110 1001)	
Availab	le Rig Capacities	0-25 Tons	26-50 T	ons	51+ Tons	_	
0	wnership Cost/Hour	: \$16.63	\$18.3	37	\$22.33	_	
	Operating Cost/Hour		\$46.1	_	\$50.07	_	
	Operator Cost/Hour		\$27.6	56	\$27.66		
	Helper Cost/Hour	: \$0.00	\$25.3	39	\$25.39		
Т	Cotal Unit Cost/Hour	. \$88.67	\$117	55	\$125.45	_	

### **NON ROADABLE EQUIPMENT:**

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	(TONS)		t		fleet		
Drill/Broadcast	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$6.72	\$88.67	1	\$95.39	\$88.67	\$250.00
(Reinco M90)							

Subtotals: \$223.65 \$177.34 \$500.00

# **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$25.30	1	\$25.30	\$25.30

Subtotals:	\$25.30	\$25.30	
oudiotais.	m437U	D43.3U	

### **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

CRAIG

25.00

miles

mph

#### **Transportation Cycle Time:**

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.56	0.56
Return Time (Hours):	0.56	0.56
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.11	1.11

### **JOB TIME AND COST**

Total job cost: 4.22 Hours

Total job cost: \$1,921