

Department of Natural Resources

1313 Sherman St. Room 215 Denver, CO 80203

April 12, 2017

Mr. Jason Burkey Oldcastle SW Group, Inc. dba United Companies of Mesa County P.O. Box 3609 Grand Junction, CO 81502-3609

Re: Berry Pit, Permit No. M-1977-132, Financial Warranty Increase, Revision No. SI-6

Dear Mr. Burkey:

On April 12, 2017 the Division of Reclamation, Mining and Safety increased the required Financial Warranty for this permit to \$186,149.53, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$35,052.05 over the currently held \$151,097.48.

The Division ordered amendment of the current Financial Warranty, or submittal of a new Financial Warranty reflecting the increase, within 60 days from the date of this letter. If you wish to submit a different type of Financial Warranty, please contact me such that I may send you the applicable form.

If you have any questions, please contact me at (970) 241-2042.

Sincerely,

Travis H. Marshall

Environmental Protection Specialist

Enclosure: Updated Reclamation Cost Estimate

cc: Barbara J. Coria, DRMS

M-FW-14



COST SUMMARY WORK

: Berry Pi	t	Per	rmit Action:	SI-06]	Permit/Job#:	M1977132
PROJECT	DENTIFICA	<u> TION</u>					
Task #:	_001	State:	Colorado		Abbre	eviation:	None
Date:	4/12/2017	County:	Rio Blanco		Fi	lename:	M132-001
User:	THM					-	

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Regrade two new lease area strips to final grade	DOZER	1	61.75	\$11,845.00
02a	Replace overburden over 4.1 acres at 1' depth	SCRAPER1	1	5.84	\$8,421.00
03a	Replace topsoil from stockpile C on regraded strip	SCRAPER1	1	9.27	\$13,825.00
04a	Regrade old lease area	DOZER	1	24.66	\$5,095.00
05a	Regrade protection berm topsoil	DOZER	1	27.12	\$5,603.00
06a	Regrade protection berm topsoil	DOZER	1	27.12	\$5,603.00
07a	Revegetation	REVEGE	1	40.00	\$80,113.00
08a	Mobilization	MOBILIZE	1	10.24	\$15,522.00
		SUBTO	TALS:	206	\$146,027

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02 \$2,949.75 Total = Performance bond: 1.05 Total = \$1,533.28 Total = Job superintendent: 103.00 \$7,524.15 Profit: 10.00 Total = \$14,602.70

TOTAL O & P = \$26,609.88 CONTRACT AMOUNT (direct + O & P) = \$172,636.88

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 \$8,631.84

CONTINGENCY: 3.00 Total = \$4,380.81

TOTAL INDIRECT COST = \$40,122.53

TOTAL BOND AMOUNT (direct + indirect) = \$186,149.53

: Berry Pit		Permit Action:	SI-06	Permit/Job#:	M1977132
	VTIESCA TION	_		_	
PROJECT IDE	VIIFICATION	_			
Task #: 01A		State: Colorado		Abbreviation:	None
Date: 4/12/		County: Rio Blanco		Filename: _	M132-01a
User: THM	.Al				
Agency o	r organization nar	ne: DRMS			
HOURLY EQU	PMENT COS	<u>r</u>			
Basic Machine:	Cat D8T - 8SU	J			
Horsepower:	310				
Blade Type:	Semi-Universa	ıl			
Attachment:	NA		· 2		
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/H		\$83.81	NA		
Operating Cost/H		\$66.17	100		
Ripper own. Cost/I		\$0.00	NA		
Ripper op. Cost/I		\$0.00	0		
Operator Cost/F	Hour:	\$41.85	NA		
Total unit Cost/Hor	ır: \$191.83				
Total Fleet Cost/Ho					
Total Fleet Cost/IIC	our: \$191.83				
MATERIAL QU	ANTITIES				
Initial Volume:	16,500				
Swell factor:	1.090				
Loose volume:	17,985 LCY				
Source of estimated	l volume:	Division of Reclamation	n, Mining & Safety		
Source of estimated		Cat Handbook			
					
HOURLY PROI	DUCTION				
Average push dista	nce: 15	0 feet			
Unadjusted hourly		4.3 LCY/hr			
	· ·				
Materials consisten		Partly consolidated st	ockpile 1.1		
Average push gradi Average site altitud		et .			
· ·					
Material weight:	2,400 lbs			_	
Weight description		gravel - Dry			
Job Condition Corr			Source		
	rator Skill:	0.750	(AVG.)		
	onsistency:	1.100	(CAT HB)		
Dozi	ng method:	1.000	(GEN.)		
	Visibility:	1.000	(AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.958	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4592

Adjusted unit production:

291.27 LCY/hr

Adjusted fleet production:

291.27 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.659/LCY

Total job time:

61.75 Hours

Total job cost:

\$11,845

SCRAPER TEAM WORK

Task description: Replace overburd	en over 4.1 acres at 1' depth	100	
Site: Berry Pit Perm	it Action: SI-06	Permit/Job#:	M1977132
PROJECT IDENTIFICATION			
Task #: 02A State:	Colorado	Abbreviation:	None
Date: 4/12/2017 County:	Rio Blanco	Filename:	M132-02a
User: THM			
Agency or organization name: DRM	MS		
HOURLY EQUIPMENT	COSTShift basis	: 1 per day	
	Equipment Description		
-Scraper:	Cat 637G w/push-pull		
-Dozer:	Cat D8T - 8SU	70.5	A-65-6
Support Equipment -Load Area:	Cat D8T - 8SU		
-Dump Area:	Cat D8T - 8SU		
Road Maintenance - Motor Grader:			
-Water Truck:	Water Tanker, 7,000 Gal.		

Cost Breakdown:	Scraper Worl	k Team	Support Equip	Support Equipment		Equipment
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	50	100	50
Ownership cost/hour:	\$152.84	\$83.81	\$83.81	\$83.81	\$54.68	\$38.58
Operating cost/hour:	\$158.39	\$66.17	\$66.17	\$33.09	\$46.99	\$30.56
%Utilization-ripper:	NA	NA	100	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$7.55	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$7.21	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$31.26	\$41.85	\$41.85	\$41.85	\$28.90	\$0.00
Unit Subtotals:	\$342.49	\$191.83	\$206.59	\$158.74	\$130.57	\$69.14
Number of Units:	2	1	1	1	1	1
Group Subtotals:	Work:	\$876.81	Support:	\$365.33	Maint:	\$199.71

Total work team cost/hour: \$1,441.85

MATERIAL QUANTITIES

Initial volume: 6,614 CCY Swell factor: 1.090

Loose volume: 7,209 LCY

Source of estimated volume: Division of Reclamation, Mining & Safety

Cat Handbook

HOURLY PRODUCTION

Scraper Bowl (volume) Basis:

Material weight:2,400 lbs/LCYStruck Volume:24.00LCYMaterial description:Clay and gravel - DryHeaped Volume:34.00LCYRated Payload:81,600 poundsAverage Volume:29.00LCYPayload Capacity:34.00 LCYAdjusted Capacity:29.00LCY

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time: 1.00 Minutes 0.60 Minutes

Job Condition Correction:

Site Altitude: 6350 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:

Poad Condition

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	500.00	1.50	3.00	4.50	2394	0.45

Haul Time: 0.45 minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	-1.50	3.00	1.50	2960	0.29

Return Time: 0.29 minutes

Total Scraper team cycle time:
Adjusted for job conditions:

2.34 minutes 1,234.36 LCY/Hour

Selected Number of Scrapers:
Adjusted single scraper team (unit) hourly production:

2 Scraper(s) 1,234.36 LCY/Hour

Adjusted multiple scraper team (fleet) hourly production:

1,234.36 LCY/Hour

Unadjusted unit production/hour: 1,487.18 LCY/Hour Optimal Number of Scrapers per push dozer:

JOB TIME AND COST

Fleet size: 1 Team(s)

Total job time: 5.84 Hours

Unit cost: \$1.168 /LCY

Total job cost: \$8,421

SCRAPER TEAM WORK

it	Per	mit Action: SI-06	Permit/Job#:	M1977132
<u> </u>	CATION			
03A 4/12/2017	State:	Colorado Rio Blanco	Abbreviation: Filename:	None 03a
	Γ IDENTIFIC	T IDENTIFICATION 03A State: 4/12/2017 County:	TIDENTIFICATION 03A State: Colorado 4/12/2017 County: Rio Blanco	TIDENTIFICATION O3A State: Colorado Abbreviation: 4/12/2017 County: Rio Blanco Filename:

	Equipment Description
-Scraper:	Cat 637G w/push-pull
-Dozer:	Cat D8T - 8SU
Support Equipment -Load Area:	Cat D8T - 8SU
-Dump Area:	Cat D8T - 8SU
Road Maintenance - Motor Grader:	CAT 14M
-Water Truck:	Water Tanker, 7,000 Gal.

Cost Breakdown:	Scraper Wo	rk Team	Support Equipment		Maintenance Equipment	
Fe	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	100	100
Ownership cost/hour:	\$152.84	\$83.81	\$83.81	\$83.81	\$54.68	\$38.58
Operating cost/hour:	\$158.39	\$66.17	\$66.17	\$66.17	\$46.99	\$61.11
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$31.26	\$41.85	\$41.85	\$41.85	\$28.90	\$0.00
Unit Subtotals:	\$342.49	\$191.83	\$191.83	\$191.83	\$130.57	\$99.69
Number of Units:	2	1	1	1	1	1
Group Subtotals:	Work:	\$876.81	Support:	\$383.66	Maint:	\$230.26

Total work team cost/hour: \$1,490.73

MATERIAL QUANTITIES

Initial volume:	9,921	CCY	Swell factor:	1.000	
Loose volume:	9,921	LCY			
Source	ce of estimated volume:	Division of	Reclamation, Mini	ng & Safety	
Source of	estimated swell factor	Cat Handh	nok		

HOURLY PRODUCTION

Scraper Bowl (volume) Basis:

Material weight:	_1,600 lbs/LCY	Struck Volume:	24.00	LCY
Material description:	Top Soil	Heaped Volume:	34.00	LCY
Rated Payload:	81,600 pounds	Average Volume:	29.00	LCY
Payload Capacity:	51.00 LCY	Adjusted Capacity:	29.00	LCY

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time: 1.00 Minutes 0.60 Minutes

Job Condition Correction:

Site Altitude: 6350 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:

S	eg#	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res	Velocity (fpm)	Travel Time (min)
1		1100.00	-5.00	3.00	-2.00	2972	0.44

Haul Time: 0.44 minutes

Return Route:

Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res	Velocity (fpm)	Travel Time (min)
_1	1100.00	5.00	3.00	8.00	1931	0.66

0.66 minutes Total Scraper team cycle time: 2.70 minutes Adjusted for job conditions: 1,069.78 LCY/Hour Selected Number of Scrapers: 2 Scraper(s) LCY/Hour

Return Time:

Adjusted single scraper team (unit) hourly production: 1,069.78 Adjusted multiple scraper team (fleet) hourly production: 1,069.78 LCY/Hour

Unadjusted unit production/hour: __1,288.89 __ LCY/Hour Optimal Number of Scrapers per push dozer:

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 9.27 Hours

Unit cost: \$1.393 /LCY Total job cost: \$13,825

Task description:	Regrade old lease	area			
e: Berry Pit	Perm	nit Action: S	I - 06	Permit/Job#:	M1977132
PROJECT IDENTIF	<u>ICATION</u>				
Task #: 04A	State:	Colorado		Abbreviation:	None
Date: 4/6/2017	County:	Rio Blanco		Filename:	04a
User: THM				_	
Agency or organ	nization name: DRI	MS			
HOURLY EQUIPME					
	D8T - 8SU				
Horsepower: 310					
	ni-Universal				
	hank ripper				
The second secon	er day				
Data Source: (CF					
ites/					
Cost Breakdown:		ĵ?	T T4:1!4!- 04		
Ourmanshin Cost/Haum		CO2 01	Utilization %		
Ownership Cost/Hour: Operating Cost/Hour:		\$83.81	NA 100		
Ripper own. Cost/Hour:		\$66.17 \$7.55	100 NA		
Ripper op. Cost/Hour:		\$7.33	100		
Operator Cost/Hour:					
Operator Cost/Hour:		\$41.85	NA NA		
Total unit Cost/Hour:	\$206.59				
Total Fleet Cost/Hour:	\$206.59		_		
Total Troot Cossilion.	4200. 57				
MATERIAL QUANT	TTIES				
WATERCAL COANT	TTRES				
Initial Volume: 8,00		_			
Swell factor: 1.09		_			
Loose volume: 8,72	0 LCY	_			
Source of estimated volumes Source of estimated swell			Mining & Safety		
HOURLY PRODUCT	<u>rion</u>				
Average push distance:	100 feet				
Unadjusted hourly produc		r			
Materials consistency des	cription: Partly co	onsolidated sto	ckpile 1.1		
Average push gradient: Average site altitude:	5 % 6,350 feet				
Material weight:	2,400 lbs/LCY			_,	
Weight description:	Clay and gravel - D	ry	374		
Job Condition Correction			Source		
Operator S		50	(AVG.)		
Material consists		00	(CAT HB)		
Dozing me			(GEN.)		
Visib	ility:1.0	00	(AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.958	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4147

Adjusted unit production: 353.57 LCY/hr

Adjusted fleet production: 353.57 LCY/hr

JOB TIME AND COST

Fleet size: _1 Dozer(s)

Unit cost: \$0.584/LCY

Total job time: 24.66 Hours

Total job cost: \$5,095

Permit/Job#:	M1977132
	14117771132
hbraviation:	None
-	M132-05a
r nename.	W1132-03a
_	
<u></u>	
	bbreviation: Filename:

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.852	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3448

Adjusted unit production: 267.84 LCY/hr
Adjusted fleet production: 267.84 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.771/LCY

Total job time: 27.12 Hours
Total job cost: \$5,603

	Permit Action: S	I-06	Permit/Job#:	M1977132
PROJECT IDENTIFICATION				
Task #: 06A	State: Colorado		Abbreviation:	None
	ounty: Rio Blanco		Filename:	06a
User: THM	ounty. Rio Dianeo		r nename.	UUa
Agency or organization name	e: DRMS			
HOURLY EQUIPMENT COST				
Basic Machine: Cat D8T - 8SU				
Horsepower: 310				
Blade Type: Semi-Universal				
Attachment: 3-shank ripper				
Shift Basis: 1 per day				
Data Source: (CRG)				
Cost Breakdown:				
Cost Breakdown.	T .	Utilization %		
Ownership Cost/Hour:	\$83.81	NA		
Operating Cost/Hour:	\$66.17	100		
Ripper own. Cost/Hour:	\$7.55	NA		
Ripper op. Cost/Hour:	\$7.21	100		
Operator Cost/Hour:	\$41.85	NA		
•	7.1.00	1171		
Total unit Cost/Hour: \$206.59				
Total Fleet Cost/Hour: \$206.59				
		 .		
MATERIAL QUANTITIES				
I-:4:-1 W-1 6 400				
Initial Volume: 6,400				
Swell factor: 1.135				
Swell factor: 1.135 Loose volume: 7,264 LCY	ivision of Reclamation	Mining & Safety		
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D	ivision of Reclamation	, Mining & Safety		
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D		, Mining & Safety		
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D		, Mining & Safety —		
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D C HOURLY PRODUCTION	at Handbook	, Mining & Safety		
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115	at Handbook feet	, Mining & Safety		
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115	at Handbook	, Mining & Safety —		
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115	at Handbook feet			
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115 Unadjusted hourly production: 776 Materials consistency description:	at Handbook feet 8 LCY/hr			
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115 Unadjusted hourly production: 776 Materials consistency description: Average push gradient: 5 %	at Handbook feet 8 LCY/hr			
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115 Unadjusted hourly production: 776 Materials consistency description:	at Handbook feet 8 LCY/hr			
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115 Unadjusted hourly production: 776 Materials consistency description: Average push gradient: 5 % Average site altitude: 6,350 feet	at Handbook feet 8 LCY/hr Compacted fill or emb			
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115 Unadjusted hourly production: 776 Materials consistency description: Average push gradient: 5 % Average site altitude: 6,350 feet Material weight: 2,700 lbs/I	at Handbook feet 8 LCY/hr Compacted fill or emb			
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115 Unadjusted hourly production: 776 Materials consistency description: Average push gradient: 5 % Average site altitude: 6,350 feet Material weight: 2,700 lbs/L Weight description: Sand and c	feet 8 LCY/hr Compacted fill or emb	ankment 0.9		
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115 Unadjusted hourly production: 776 Materials consistency description: Average push gradient: 5 % Average site altitude: 6,350 feet Material weight: 2,700 lbs/I Weight description: Sand and c Job Condition Correction Factor	feet 8 LCY/hr Compacted fill or emb	ankment 0.9		
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115 Unadjusted hourly production: 776 Materials consistency description: Average push gradient: 5 % Average site altitude: 6,350 feet Material weight: 2,700 lbs/I Weight description: Sand and c Job Condition Correction Factor Operator Skill:	feet 8 LCY/hr Compacted fill or emb	ankment 0.9 Source (AVG.)		
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115 Unadjusted hourly production: 776 Materials consistency description: Average push gradient: 5 % Average site altitude: 6,350 feet Material weight: 2,700 lbs/I Weight description: Sand and c Job Condition Correction Factor Operator Skill: Material consistency:	feet 8 LCY/hr Compacted fill or emb CCY lay - Loose 0.750 0.900	Source (AVG.) (CAT HB))		
Swell factor: 1.135 Loose volume: 7,264 LCY Source of estimated volume: D Source of estimated swell factor: C HOURLY PRODUCTION Average push distance: 115 Unadjusted hourly production: 776 Materials consistency description: Average push gradient: 5 % Average site altitude: 6,350 feet Material weight: 2,700 lbs/I Weight description: Sand and c Job Condition Correction Factor Operator Skill:	feet 8 LCY/hr Compacted fill or emb	ankment 0.9 Source (AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.852	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3448

Adjusted unit production:

267.84 LCY/hr

Adjusted fleet production:

267.84 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost:

\$0.771/LCY

Total job cost: \$5,603

Total job time: 27.12 Hours

REVEGETATION WORK

Task description: Revegetation

Site: Berry Pit Permit Action: SI-06 Permit/Job#: M1977132

PROJECT IDENTIFICATION

Task #:07AState:ColoradoAbbreviation:NoneDate:4/12/2017County:Rio BlancoFilename:07a

User: THM

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /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
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$144.62
	Total Fertilizer Application Cost/Acre	\$144.62

TILLING

Description		Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$106.29
Weed control spraying (MEANS 31 31 16.13 3100)		\$242.00
	Total Tilling Cost/Acre	\$348.29

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	2.50	8.09	\$19.38
Beardless Wheatgrass - Whitmar	2.40	7.82	\$20.40
Russian Wildrye - Vinal	2.00	8.03	\$12.06
Streambank Wheatgrass - Sodar	2.20	7.17	\$13.40
Western Wheatgrass - Arriba	3.20	8.08	\$25.86
Sagebrush, Mountain or Big	1.00	52.80	\$19.75
Totals Seed Mix	13.30	92.00	\$110.84

Application

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

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$261.00	\$522.00
Total Mulch Materials Cost/Acre				\$522.00

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$66.02
Power mulcher (MEANS 32 91 13.16 0350)		\$99.32
Weed spray, truck, non-aquatic area, nox. [DMG]		\$71.50
	Total Mulch Application Cost/Acre	\$236.84

NURSERY STOCK PLANTING

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

JOB TIME AND COST

No. of Acres: 44.8

Cost / Acre: \$1,430.59 Cost / Acre*: \$1,430.59

Estimated Failure Rate: 25% Cost /Acres *Selected Replanting Work Items: FERTILIZING, TILLING, SEEDING, MU

LCHING

Initial Job Cost: \$64,090.43

Reseeding Job Cost: \$16,022.61

Total Job Cost: \$80,113

Job Hours: 40.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:

Mobilization

Site: Berry Pit

Permit Action: SI-06

Permit/Job#: M1977132

PROJECT IDENTIFICATION

Task #: 08A Date: 4/12/2017

State: County: Colorado

Abbreviation:

None

Rio Blanco

Filename:

08a

User:

THM

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis:

1 per day

Cost Data Source:

CRG Data

Truck Tractor Description:

GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description:

GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (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
Total Unit Cost/Hour:	\$88.67	\$117.55	\$125.45

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8R Series II - 8SU (2005)	52.55	\$45.97	\$125.45	2	\$342.83	\$250.90	\$500.00
Cat 637G w/push- pull	59.08	\$91.74	\$125.45	2	\$434.37	\$250.90	\$500.00
CAT 143H	16.56	\$27.56	\$88.67	1	\$116.23	\$88.67	\$250.00
Water Tanker, 7,000 Gal.	29.65	\$35.00	\$117.55	1	\$152.55	\$117.55	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Power Mulcher (Reinco M90)	6.00	\$7.03	\$88.67	1	\$95.70	\$88.67	\$250.00

Subtotals:

\$1,269.94

\$24.82

\$885.36

\$2,000.00

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.	\$12.41	2	\$24.82	\$24.82

Subtotals:

\$24.82

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:
Total one-way travel distance:
Average Travel Speed:

GRAND JUNCTION
miles
50.00
mph

Total Non-Roadable Mob/Demob Cost *

'* two round trips with haul rig:

Total Roadable Mob/Demob Cost **

** one round trip, no haul rig:

\$15,419.72

\$102.26

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	2.06	2.06
Return Time (Hours):	2.06	2.06
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	5.12	4.12

JOB TIME AND COST

Total job time: _	10.24	_ Hours
Total job cost:	\$15,522	