August 8, 2016

Jay Wagner Wagner Construction, Inc. 1850 E 1st St Craig. CO 81625

1313 Sherman Street, Room 215 Denver, CO 80203

COLORADO

Division of Reclamation, Mining and Safety

Department of Natural Resources

RE: Wagner Rock Pit, Permit No. M-1999-018, Reclamation Costs Update and Notice of Surety Increase (SI-2)

Dear Mr. Wagner:

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 <u>\$35,341</u> rounded up from <u>\$35,340.60</u>. This is an increase of <u>\$21,336</u> over the <u>\$14,005</u> currently held by the Division. This estimate is based on conditions observed during the July 19, 2016 inspection. *Therefore, pursuant to Section 34–32.5–117(4) of the Colorado Land Reclamation Act, adequate Financial Warranty must be submitted to the Division within 60 days of the mailing date of this letter.* The additional amount needs to be accepted prior to **Friday, October 07, 2016**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Please make arrangements with Barbara Coria at the Division of Reclamation, Mining and Safety Denver Office, phone no. 303.866.3567, ext. 8148 for submittal of the financial warranty. Any questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Barbara Coria.

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 Geldell

Amy Yeldell Environmental Protection Specialist Department of Natural Resources Division of Reclamation, Mining and Safety Phone: (970) 254-8511

Ec: Russ Means, Senior EPS, Grand Junction DRMS Enc: Financial Warranty Cost Estimate August 8, 2016

Jay Wagner Wagner Construction, Inc. 1850 E 1st St Craig, CO 81625

1313 Sherman Street, Room 215 Denver, CO 80203

COLORADO

Division of Reclamation, Mining and Safety

Department of Natural Resources

RE: Wagner Rock Pit, Permit No. M-1999-018, Explanation of Surety Increase (SI-2)

Dear Mr. Wagner:

On July 19, 2016 the Division of Reclamation Mining and Safety Inspected the above mentioned site. The last surety increase was issued in 2010 for a total bond amount of \$ 14,005 to be held. Making no changes and simply updating the 2010 calculation resulted in a \$10,000 increase.

Below is a table summarizing input values that were changed/updated as compared to the 2010 calculations. Changes were based off of field observations and the requirements of the approved reclamation plan including changes made under TR-1.

This table does not account for price changes resulting from inflation or other RS Means cost changes. Bond calculations are based on a combination of field observations and worst case scenario based on the approved reclamation permit.

Task	Form Used	Change	Justification
01a	Demolition	+	No input value changes
02a	Dozer	+	Volumes from 2010 calculations remain the same. A D10 Dozer is impractical for such a small site. Changed equipment to a D9
02b	Ripper	+	Soil under stockpiles will be highly compacted and require ripping. Added, not previously accounted for, estimated approximate 3 ac.
03a	Dozer	+	Under TR-1 maximum disturbance was increased to 6 ac. Based on field estimates it appears that more than 6 acres may be affected and will require reclamation. Will use 6 ac.
04a	Reveg	+	TR-1 maximum disturbance was increased to 6 ac. Based on field estimates it appears that more than 6 acres may be affected and will require reclamation. Will use 6 ac
04a	Reveg	+	No tilling of soil originally accounted for, added dick harrow
04a	Reveg	-	Decreased hours required for seeding 40 hrs to 20 hrs



06a	Reveg	+	Based on inspection wed treatments will be necessary throughout reclamation
05a	Mobilization	+	Revegetation equipment not accounted for. Added drill seeder and tractor combo and power mulcher
05a	Mobilization	+	Smaller dozer cheaper to mobilize
05b	Mobilization	+	Secondary mobilization needed for secondary seeding
Indirect			No changes. Note no superintendent hours factored in.

Please feel free to contact me with any further questions. 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 Geldell

Amy Yeldell Environmental Protection Specialist Department of Natural Resources Division of Reclamation, Mining and Safety Phone: (970) 254-8511 Fax: (970) 241-1516

Ec: Russ Means, Senior EPS, Grand Junction DRMS

COST SUMMARY WORK

Т	ask descrip	otion:	Estimate based	on 7-19-16 in	spection		
Site:	Wagner	Rock	Pe	rmit Action:	2016-07	Permit/Job	#: <u>M1999018</u>
<u> PI</u>	ROJECT	IDENTIFIC	CATION				
	Task #:	ACY	State:	Colorado		Abbreviation:	None
	Date:	8/4/2016	County:	Moffat		Filename:	M018-ACY
	User:	ACY					
	Age	ency or organi	zation name:	RMS			

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Demolition of scale house	DEMOLISH	1	8.00	\$441.59
02a	Grade north slope to 3H:1V; backfill pit to create level	DOZER	1	59.95	\$14,385.00
02b	Rip compacted stockpile areas aprox. 3 ac	RIPPER	1	4.74	\$1,220.00
03a	Topsoil application over 6 acres (seeTR-1)	DOZER	1	4.53	\$1,158.00
04a	Revegetation of 6 acres (See TR-1)	REVEGE	1	20.00	\$7,965.00
05a	Initial mobilization of crew and equipment	MOBILIZE	1	2.57	\$2,623.00
05b	Secondary mobilization of crew and equipment	MOBILIZE	1	2.57	\$1,553.00
		<u>SUBTO</u>	DTALS:	102.36	\$29,346

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$592.79
Performance bond:	1.05	Total =	\$308.13
Job superintendent:	0.00	Total =	\$0.00
Profit:	10.00	Total =	\$2,934.60
		TOTAL O & P =	\$3,835.52
		CONTRACT AMOUNT (direct + O & P) = $($	\$33,181.52

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation: Reclamation management and/or administration:	500.00 0.00 5.00	Total = Total =	500.00 \$0.00 \$1,659.08
CONTINGENCY:	0.00	Total =	\$0.00
	TOTAL IN	DIRECT COST =	\$5,994.60
TOTAL BO	ND AMOUNT (d	irect + indirect) =	\$35,340.60

DEMOLITION WORK

Task description	on: Dem o	olition of scale house				
Site: Wagner Roc	k	Permit Action: 2016-	07	Pe	ermit/Job#	#: <u>M1999018</u>
PROJECT IDENTI	FICATION					
Task #:01ADate:8/4/2016User:ACYAgency		State: <u>Colorado</u> ounty: <u>Moffat</u> me: <u>DRMS</u>		Abbreviat Filena		one 1018-01a
<u>UNIT COSTS</u>				Location	adjustm	ent: 95.50 %
Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Scale house	8x10x20	Push demolished materials/rubble/debris into pit - Max. 50 ft. push	1,600.00	СҮ	\$0.29	\$462.40
			1	I	1	1

				Total Cost	
		Subtotal		(adjusted for	
Job Hours:	8.00	(unadjusted):	\$462.40	location):	\$441.59

BULLDOZER WORK

Task description:		/	; backfill pit to create lev		
Wagner Rock	Peri	mit Action:	2016-07	Permit/Job#:	M1999018
PROJECT IDENTIFI	CATION				
Task #: 02A Date: 8/4/2016 User: ACY	State: County:	Colorado Moffat		Abbreviation: Filename:	None M018-02a
Agency or organ	nization name: DR	RMS			
HOURLY EQUIPME	NT COST				
	D9T - 9SU				
Horsepower: 405					
,	ni-Universal				
Attachment: NA					
	er day				
Data Source: (CR	(0)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$97.48	NA		
Operating Cost/Hour:		\$103.60	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$38.89	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT	\$239.97 \$239.97 ITIES				
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000	\$239.97 ITIES 70 0				
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000	\$239.97 <u>ITIES</u> 70				
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3'	\$239.97 ITIES 70 0 70 LCY	 umes still acc	surate, see attached		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000	\$239.97 ITIES 70 0 70 LCY ne:2010 volu		curate, see attached		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur	\$239.97 ITIES 70 0 70 LCY ne:2010 volu		curate, see attached		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur Source of estimated swell	\$239.97 ITIES 70 0 70 LCY ne: 2010 volu factor: Cat Hand		curate, see attached		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur Source of estimated swell HOURLY PRODUCT	\$239.97 ITIES 70 0 70 LCY ne: <u>2010 volu</u> factor: <u>Cat Hand</u> <u>CION</u>		curate, see attached		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance:	\$239.97 ITIES 70 0 70 LCY ne: 2010 volu factor: Cat Hand CION 60 feet	book	curate, see attached		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur Source of estimated swell HOURLY PRODUCT	\$239.97 ITIES 70 0 70 LCY ne: 2010 volu factor: Cat Hand CION 60 feet	book	curate, see attached		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance:	\$239.97 ITIES 70 0 70 LCY ne: 2010 volu factor: Cat Hand CION 60 feet ction: 1,872.0 LCY	book Y/hr	curate, see attached		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc	\$239.97 ITIES 70 0 70 LCY ne: 2010 volu factor: Cat Hand CION 60 feet ction: 1,872.0 LCY	book Y/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient:	\$239.97 ITIES 70 70 70 CO 70 CO 70 Cat Hand CION CION CION Cion: 60 feet 1,872.0 LC cription: Compa 0 %	book Y/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude:	\$239.97 ITIES 70 0 70 LCY ne: 2010 volu factor: Cat Hand CION cription: 1,872.0 LCY cription: Compa 0 % 6,485 feet	book Y/hr 			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight:	\$239.97 ITIES 70 0 70 LCY ne: 2010 volu factor: Cat Hand CION cription: Compa 0 % 6,485 feet 2,550 lbs/LCY Earth - Dry packed	book Y/hr 			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S	\$239.97 ITIES 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 CY ne: 2010 volu Cat Hand CION 60 feet 1,872.0 LCY cription: Compa 0 % 6,485 feet 2,550 lbs/LCY Earth - Dry packed Factor Skill: 0.	book Y/hr cted fill or er	mbankment 0.9 <u>Source</u> (AVG.)		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: <u>Iob Condition Correction</u> Operator S Material consistency	\$239.97 ITIES 70 1 70 CY ne: 2010 volu factor: Cat Hand CION 60 feet 1,872.0 LCY cription: Compa 0 % 6,485 feet 2,550 lbs/LCY Earth - Dry packed Factor Skill: 0. ency: 0.	book Y/hr cted fill or er 1 750 900	<u>Source</u> (AVG.) (CAT HB))		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 45,3' Swell factor: 1.000 Loose volume: 45,3' Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S	\$239.97 ITIES 70 CY factor: 60 feet 1. 60 feet 1. 0 60 60 60 60 60 60 60 60 6485 1. 0. 6485 1. 0. 6485 1.	book Y/hr cted fill or er	mbankment 0.9 <u>Source</u> (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:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.4043	
Adjusted unit production: 75	56.85 LCY/hr	
Adjusted fleet production: 75	56.85 LCY/hr	

JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.317/LCY

Total job time:	59.95 Hours
Total job cost:	\$14,385

annual reports submitted by the operator. The maximum mining depth allowed by DRMS permit Approximate pit dimensions derived from observations made during a June 2010 inspection and M-1999-018 is 40 feet, pursuant to TR1.

Pit is approximately 40 ft. depth X 100 ft. wide X 700 ft. length. Bottom 20 ft. of pit is sloped at approximately 1H:1V. Top 20 ft. is near vertical.



are to be graded to 2H:1V. the pit must be graded to 3H:1V, and a level area created southwest of the pit. All other slopes Per the approved reclamation plan the reclaimed southwest facing slope on the north side of

the north pit slope to 3H:1V is estimated at 45,370 yds.³ An approximate volume of material necessary to backfill the pit to create a level area and grade

Calculation: $(60 \text{ ft. x } 20 \text{ ft.}) + (20^2 \text{ ft.}) + .5(10 \text{ ft. x } 30 \text{ ft.}) = 1,750 \text{ ft.}^2$

1,750 ft.² x 700 ft. = 1,225,000 ft.³ = 45,370 yds.³







BULLDOZER RIPPING WORK

	Task description	Rip compacted sto	ockpile area	as aprox. 3 ac			
Site	: Wagner Rock	Perm	it Action:	2016-07	Permit/	Job#: <u>M199901</u>	8
	PROJECT ID	ENTIFICATION					
	Task #: 02 Date: 8/2 User: AC	County:	Colorado Moffat		Abbreviat		
	Agency	or organization name: DR	MS				
	HOURLY EO	UIPMENT COST					
		Machine: Cat D9T - 9SU			Horsepower: Shift Basis: Data Source:	405 1 per day (CRG)	
	Cost Breakdown	:					
		Ownership Cost/Hour: Operating Cost/Hour:		\$97.48 \$103.60	Utilization % NA 100		
		er Ownership Cost/Hour: per Operating Cost/Hour:		\$10.74 \$6.60	<u>NA</u> 100		
	Tup.	Operator Cost/Hour:		\$38.89	NA		
		Total Unit Cost/Hour:		\$257.31			
		Total Fleet Cost/Hour:	\$257	.31			
	MATERIAL (DUANTITIES	Sele	cted estimating	method: Area		
	Alternate Metho		2010	erea estimating	<u> </u>		
Seismic:	NA		Volume:	NA	BCY	NA	
Area:	3.00			2.00	Volume: 9,680		BCY or CO
		Source of estimated quantity	r: Field es	stimates and goo	 ogle earth		
	HOURLY PR			Sector and Box			
		ODUCTION					
	Seismic:	Seismic Veloc	itv	NA	feet/second		
	A #200			1.111			
	<u>Area:</u>	Average Ripping Dep	oth:	2.63	mph		
		Average Ripping Wie	dth:	7.67	degrees		
		Average Ripping Leng		100.00	feet		
		Average Dozer Spe		88.00	feet		
		Average Maneuver Time Production per unit an		0.25 0.762	feet acres/hour		
		-	ica	0.702			
		orrection Factors					
	Ur	nadjusted Hourly Unit Producti	on:	0.762	Acres/hr		
		Site Altitu		6,485	feet		
		Altitude A		1.00	(CAT HB)		
		Job Efficier Net Correcti		0.83	(1 shift/day) multiplier		
		Adjusted Hourly Unit F		0.63	Acres/hr		
		Adjusted Hourly Fleet F		0.63	Acres/hr		
	JOB TIME AN	ND COST					
	Fleet size:	1 Grader(s)		Total job time	e: 4.74	Hou	rs
	Unit cost:	\$406.815 Per acre		Total job cos	st: \$1,220		

BULLDOZER WORK

Task description:	Topsoil application over 6 ac	cres (seeTR-1)		
Wagner Rock	Permit Action:	2016-07	Permit/Job#:	M1999018
PROJECT IDENTIFIC	ATION			
Task #: 03A	State: Colorado		Abbreviation:	None
Date: 8/4/2016	County: Moffat		Filename:	M018-03a
User: ACY				
Agency or organization	ation name: DRMS			
HOURLY EQUIPMEN	<u>T COST</u>			
	9T - 9SU			
Horsepower: 405	r r · 1			
	Universal			
	nk ripper			
Shift Basis: <u>1 per c</u>				
Data Source: (CRG))			
Cost Breakdown:				
		Utilization %		
Ownership Cost/Hour:	\$97.48	NA		
Operating Cost/Hour:	\$103.60	100		
Ripper own. Cost/Hour:	\$10.74	NA		
Ripper op. Cost/Hour:	\$4.95	75		
Operator Cost/Hour:	\$38.89	NA		
1				
	1755 66			
Total unit Cost/Hour:	\$255.66			
Total unit Cost/Hour:	\$255.66 \$ 255.66			
Total unit Cost/Hour:	\$255.66			
Total unit Cost/Hour:	\$255.66			
Total unit Cost/Hour: 5 Total Fleet Cost/Hour: 5 MATERIAL QUANTIT Initial Volume: 4,839	\$255.66			
Total unit Cost/Hour:	1ES			
Total unit Cost/Hour: 5 Total Fleet Cost/Hour: 5 MATERIAL QUANTIT Initial Volume: 4,839	1ES			
Total unit Cost/Hour:	255.66 TES .CY :6 acres x .5 ft			
Total unit Cost/Hour: 9 Total Fleet Cost/Hour: 9 MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839	255.66 IES .CY			
Total unit Cost/Hour: S Total Fleet Cost/Hour: S MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 L Source of estimated volume: Swell factor: Source of estimated swell factor: 1.000	S255.66 'IES .CY .CY : 6 acres x .5 ft .ctor: Cat Handbook			
Total unit Cost/Hour: S Total Fleet Cost/Hour: S MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 I Source of estimated volume: Source of estimated swell fa HOURLY PRODUCTION S	S255.66 IES .CY : 6 acres x .5 ft ctor: Cat Handbook ON			
Total unit Cost/Hour: S Total Fleet Cost/Hour: S MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 L Source of estimated volume: Source of estimated swell fa HOURLY PRODUCTIC Average push distance:	255.66 TES .CY .CY .cores x .5 ft .cores x .5 ft <t< td=""><td></td><td></td><td></td></t<>			
Total unit Cost/Hour: S Total Fleet Cost/Hour: S MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 I Source of estimated volume: Source of estimated swell fa HOURLY PRODUCTION S	255.66 TES .CY .CY .cores x .5 ft .cores x .5 ft <t< td=""><td></td><td></td><td></td></t<>			
Total unit Cost/Hour: S Total Fleet Cost/Hour: S MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 L Source of estimated volume: Source of estimated swell fa HOURLY PRODUCTIC Average push distance:	S255.66 TES .CY : 6 acres x .5 ft ctor: Cat Handbook DN 100 feet on: 1,243.2 LCY/hr			
Total unit Cost/Hour: 9 Total Fleet Cost/Hour: 9 MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 Source of estimated volume: Source of estimated swell fa HOURLY PRODUCTIO Average push distance: Unadjusted hourly productio Materials consistency description	S255.66 TES .CY : 6 acres x .5 ft ctor: Cat Handbook DN : 100 feet : 1,243.2 LCY/hr ption: Loose stockpile 1.2			
Total unit Cost/Hour: 9 Total Fleet Cost/Hour: 9 MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 L Source of estimated volume: 50 Source of estimated swell fa 16 HOURLY PRODUCTION 100 Average push distance: 10 Unadjusted hourly production 10 Materials consistency description 10 Average push gradient: 0	$\begin{array}{c} \textbf{S255.66} \\ \hline \textbf{TES} \\ \hline \textbf{.CY} \hline \textbf{.cy} \\ \hline \textbf{.cy} \\ \hline \textbf{.cy} \hline \textbf{.cy} \hline \textbf{.cy} \\ \hline \textbf{.cy} \hline $			
Total unit Cost/Hour: 9 Total Fleet Cost/Hour: 9 MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 L Source of estimated volume: 50 Source of estimated swell fa 16 HOURLY PRODUCTION 100 Average push distance: 10 Unadjusted hourly production 10 Materials consistency description 10 Average push gradient: 0	S255.66 TES .CY : 6 acres x .5 ft ctor: Cat Handbook DN : 100 feet : 1,243.2 LCY/hr ption: Loose stockpile 1.2			
Total unit Cost/Hour: 9 Total Fleet Cost/Hour: 9 MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 I Source of estimated volume: 50 Source of estimated swell fa HOURLY PRODUCTION Average push distance: Unadjusted hourly production Materials consistency description Average push gradient: 0 Average site altitude: 0	$\begin{array}{c} \textbf{S255.66} \\ \hline \textbf{TES} \\ \hline \textbf{.CY} \hline \textbf{.cy} \\ \hline \textbf{.cy} \\ \hline \textbf{.cy} \hline \textbf{.cy} \hline \textbf{.cy} \\ \hline \textbf{.cy} \hline $			
Total unit Cost/Hour: 9 Total Fleet Cost/Hour: 9 MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 Source of estimated volume: Source of estimated swell fa HOURLY PRODUCTIO Average push distance: Unadjusted hourly productio Materials consistency description Average site altitude: 0 Average site altitude: 0 Material weight: 1	$\begin{array}{c} \textbf{S255.66} \\ \hline \textbf{TES} \\ \hline \hline \\ \textbf{.CY} \\ \hline \hline \\ \textbf{.cy} \\ \hline \\ \textbf{.cy} \\ \hline \\ \textbf{.cy} \\ \hline \hline \hline \\ \textbf{.cy} \\ \hline \hline \hline \\ \textbf{.cy} \\ \hline \hline \hline \hline \\ \textbf{.cy} \\ \hline \hline \hline \hline \\ \textbf{.cy} \\ \hline $			
Total unit Cost/Hour: 9 Total Fleet Cost/Hour: 9 MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 Source of estimated volume: Source of estimated swell fa HOURLY PRODUCTIO Average push distance: Unadjusted hourly productio Materials consistency description Average site altitude: 0 Average site altitude: 0 Material weight: 1	S255.66 IES .CY .CY ctor: 6 acres x .5 ft Ctor: Cat Handbook DN 00 feet 00 feet 00 feet 00 feet 00 feet 00 feet 000 feet 0000 feet 0000 feet 00000 feet $000000000000000000000000000000000000$			
Total unit Cost/Hour: 9 Total Fleet Cost/Hour: 9 MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 L Source of estimated volume: 50 Source of estimated volume: 50 Source of estimated swell fa 6 HOURLY PRODUCTIC 10 Average push distance: 10 Unadjusted hourly production 10 Average push gradient: 0 Average site altitude: 6 Material weight: 1 Weight description: 7	XES .CY .CY : 6 acres x .5 ft ctor: Cat Handbook DN in: 1,243.2 LCY/hr ption: Loose stockpile 1.2 0 %			
Total unit Cost/Hour: 9 Total Fleet Cost/Hour: 9 MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 L Source of estimated volume: 50 Source of estimated volume: 50 Source of estimated swell fa 100 HOURLY PRODUCTIC 4 Average push distance: 10 Unadjusted hourly production 4 Average push gradient: 0 Average site altitude: 6 Material weight: 1 Weight description: 7 Job Condition Correction Fa	x255.66 YES .CY .CY ctor: 6 acres x .5 ft .Ctor: Cat Handbook DN			
Total unit Cost/Hour: 9 Total Fleet Cost/Hour: 9 MATERIAL QUANTIT Initial Volume: 4,839 Swell factor: 1.000 Loose volume: 4,839 Source of estimated volume: 50 Source of estimated volume: 50 Source of estimated swell fa 6 HOURLY PRODUCTIO 4 Average push distance: 10 Unadjusted hourly production 6 Average push gradient: 6 Average site altitude: 6 Material weight: 1 Weight description: 7 Job Condition Correction Fa 0 Operator Ski 1	S255.66 TES			

Job efficienc	ey: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradier	nt: 1.000	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weigl	ht: 1.438	(CAT HB)
Blade typ	be: 1.000	(PAT)
Net correctio	on: 0.8593	
Adjusted unit production:	1,068.28 LCY/hr	
Adjusted fleet production:	1068.28 LCY/hr	

JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.239/LCY

Total job time:	4.53 Hours
Total job cost:	\$1,158

REVEGETATION WORK

Wagner	Rock	Permit Action:	2016-07	Permit/Job	o#: <u>M1999018</u>
ROJECT	IDENTIFIC	CATION			
Task #:	04A	State: Colorado		Abbreviation:	None
Date:	8/4/2016	County: Moffat		Filename:	M018-04a
User:	ACY				

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
10-34-0, 18-46-0, 5-10-5	200.00	pound	\$0.33	\$66.00
			Total Fertilizer Materials	
			Cost/Acre	\$66.00

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$21.34
Total	Fertilizer Application Cost/Acre	\$21.34

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$107.59
Total Tilling Cost/Acre	\$107.59

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Rye, Perennial Tetraploid - Aubisque	2.40	13.61	\$4.15
Crested Wheatgrass - Ephraim	2.40	11.02	\$5.35
Intermediate Wheatgrass - Rush	2.40	5.12	\$5.38
Rocky Mountain Fescue	2.40	38.57	\$14.38
Pubescent Wheatgrass - Luna	2.40	4.96	\$5.38
Totals Seed Mix	12.00	73.28	\$34.63

Application

Drill Seeding (DRMS Survey Cost)		\$232.00
	Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$1.25	\$1.25
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$246.00	\$492.00
Total Mulch Materials Cost/Acre				\$493.25

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$66.02
Weed spray, truck, non-aquatic area, nox. [DMG]		\$62.72
	Total Mulch Application Cost/Acre	\$128.74

NURSERY STOCK PLANTING

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

JOB TIME AND COST

	No. of Acres:	6	Cost /Acre:	\$1,083.55
Estimate	ed Failure Rate:	25%	Cost /Acre*:	\$975.96
*Selected Replanti	ng Work Items:	FERTILIZING	SEEDING, MULCHING	
Initial Job Cost:	\$6,501.30			
Reseeding Job Cost:	\$1,463.94			
Total Job Cost:	\$7,965			
Job Hours:	20.00			

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: : <u>Wagner Rock</u>		tial mobilization of Permit	Action: 2016]	Permit/Job#: <u>N</u>	11999018
PROJECT IDE	NTIFICATI	ON					
Task #: 05.	A	State: Co	olorado		Abbre	eviation: None	2
Date: 8/4	/2016		offat		Fi	lename: M01	8-05a
User: AC	CY						
Agency	or organization	n name: DRMS					
	-						
EQUIPMENT 1	FRANSPOR	T RIG COST					
					Shift ba	sis: 1 per d	av
				C	lost Data Sour		
Tma	k Tractor Desc	rintion: CENE				DR, 6X4, DIESE	
Iruci	k Tractor Desc	Tipuoli: GENE			(2ND HALF,		L FUWEKED,
Truc	k Trailer Desc	rintion: G	ENERIC FOLI			ROP DECK EQU	IIPMENT
IIuc	K Hanel Dese				25T, 50T, AN		
					,,,	,	
Cost Breakdown:							
Available Rig C		0-25 Tons	26-50 Tons		Tons		
	o Cost/Hour:	\$16.63	\$18.37		2.33		
	g Cost/Hour:	\$44.38	\$46.13		0.07		
	r Cost/Hour:	\$27.66	\$27.66		7.66		
	r Cost/Hour:	\$0.00	\$25.39		5.39		
Total Uni	t Cost/Hour:	\$88.67	\$117.55	\$12	25.45		
NON ROADAB	<u>SLE EQUIP</u>	<u>VIENT:</u>					
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 D9T - 9SU	66.13	\$108.22	\$125.45	1	\$233.67	\$125.45	\$250.00
Drill/Broadcast	25.00	\$30.65	\$88.67	1	\$119.32	\$88.67	\$250.00
Seeder with							
Tractor Power Mulcher	6.00	\$6.72	\$88.67	1	\$95.39	\$88.67	\$250.00
(Reinco M90)	0.00	\$0.1Z	φοο.0 <i>1</i>	1	φ73.37	\$00.07	\$250.00
(100100100)	I	I	1				
					\$448.38	\$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	\$42.14	1	\$42.14	\$42.14
		Subtotals:	\$42.14	\$42.14

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	CRAIG	
Total one-way travel distance:	5.00	miles
Average Travel Speed:	35.00	mph
Total Non-Roadable Mob/Demob Cost *	\$2,611.38	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$12.04	

Transportation Cycle Time:

Haul Time (Hours): Return Time (Hours): Loading Time (Hours): Unloading Time (Hours):	Non- Roadable Equipment 0.14 0.14 0.50 0.50	Roadable Equipment 0.14 0.14 NA NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.29	0.29

JOB TIME AND COST

Total job time: 2.57 Hours

Total job cost: **\$2,623**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Sec	condary mobilizat	ion of crew and	d equipme	ent		
e: Wagner Rock		Permit	Action: 2016-	-07		Permit/Job#:	M1999018
PROJECT IDE	NTIFICATI	<u>ION</u>					
Task #: 05H	3	State: Co	olorado		Abbre	eviation: No	one
Date: 8/4/	/2016	County: Mo	offat		Fi	ilename: M)18-05b
User: AC	Y	-					
Agency of	or organizatio	n name: DRMS					
EQUIPMENT 1	RANSPOR	<u>T RIG COST</u>					
					Shift ba	F	
				(Cost Data Sou	rce: CRG	Data
Truck	Tractor Desc	cription: GENE	RIC ON-HIGH	WAY TRU	UCK TRACTO	DR, 6X4, DIES	SEL POWERED,
					(2ND HALF,		
Truck	k Trailer Desc	cription: G	ENERIC FOLD				QUIPMENT
				RAILER	(25T, 50T, AN	ND 1001)	
Cost Breakdown:							
Available Rig C	apacities	0-25 Tons	26-50 Tons	51-	+ Tons		
	Cost/Hour:	\$16.63	\$18.37	\$2	22.33		
	Cost/Hour:	\$44.38	\$46.13		50.07		
	Cost/Hour:	\$27.66	\$27.66		27.66		
	Cost/Hour:	\$0.00	\$25.39		25.39		
Total Unit	Cost/Hour:	\$88.67	\$117.55	\$1	25.45		
NON ROADAB	LE EQUIPI	MENT:					
Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ flee	t Cost/ fleet
τ	(TONS)		t	_	fleet		
Drill/Broadcast Seeder with Tractor	25.00	\$30.65	\$88.67	1	\$119.32	\$88.67	\$250.00
Power Mulcher (Reinco M90)	6.00	\$6.72	\$88.67	1	\$95.39	\$88.67	\$250.00

Subtotals: **\$214.71 \$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	\$42.14	1	\$42.14	\$42.14
		Subtotals:	\$42.14	\$42.14

EQUIPMENT HAUL DISTANCE and Time

Ν	earest Major City or Town within project area region:	CRAIG	
	Total one-way travel distance:	5.00	miles
	Average Travel Speed:	35.00	mph
	Total Non-Roadable Mob/Demob Cost *	\$1,541.43	
	Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$12.04	
	Total Non-Roadable Mob/Demob Cost *	\$1,541.43	mp

Transportation Cycle Time:

Haul Time (Hours): Return Time (Hours): Loading Time (Hours): Unloading Time (Hours):	Non- Roadable Equipment 0.14 0.14 0.50 0.50	Roadable Equipment 0.14 0.14 NA NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.29	0.29

JOB TIME AND COST

Total job time: 2.57 Hours

Total job cost: **\$1,553**