STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215 Denver, Colorado 80203 Phone: (303) 866-3567 FAX: (303) 832-8106



May 21, 2012

Mr. Thomas O'Rourke O'Rourke Excavating, Inc. 2489 CR 15 South Fork, CO 81154 John W. Hickenlooper Governor

Mike King Executive Director

Loretta E. Piñeda Director

Re: File No. M-2012-007, O'Rourke Pit, 110c Decision Letter - Financial and Performance Warranty Request - Construction Material Operation

Dear Mr. O'Rourke:

On May 21, 2012, the Division of Reclamation, Mining and Safety approved your 110c mining permit application.

The amount of financial warranty set by the Division for this operation is \$15,491. You must submit a financial warranty in this amount and a performance warranty in order for us to issue a permit. In the event you have requested a financial warranty form, we have enclosed it in this letter. If you have not, please select a type of financial warranty from Rule 4.3. Then contact us so that we can provide you with the appropriate warranty form. We have enclosed a performance warranty form with this letter for your use.

PLEASE NOTE THAT MINING OPERATIONS MAY NOT COMMENCE UNTIL A PERMIT HAS BEEN ISSUED BY THE DIVISION <u>AFTER</u> RECEIPT OF YOUR FINANCIAL WARRANTY AND PERFORMANCE WARRANTY. A PERMIT WILL NOT BE ISSUED UNTIL WE VERIFY THE ADEQUACY OF BOTH YOUR FINANCIAL WARRANTY AND PERFORMANCE WARRANTY.

If you have any questions, please contact me at the Division's Durango Field Office: 970-247-5193.

Sincerely,

Bob Oswald

Environmental Protection Specialist

Enclosure: 5/21/12 bond estimate; performance warranty

Ec:

Steve Shuey, DRMS Grand Junction

Barbara Coria, DRMS Denver

(c:\12-05 docs\ORourke 110 appr-fw/rco)

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PERFORMANCE WARRANTY

Operator:	O'Rourke Ex	cavating, Inc.	
Operation:	O'Rourke Pit		
Permit No:	M-2012-007		
of the Minea Extraction of Board shall conjunction penalties for Reclamation	I Land Reclamation Act of Construction Material result in the financial w with such invalid financ r operating without a	Mined Land Reclamation Board purs and 34-32.5-117, C.R.S., of the Color s. Any alteration or modification of parranty being invalid and result in a ial warranty and subject the operator permit pursuant to sections 34-32- C.R.S., of the Colorado Land Recla	rado Land Reclamation Act for the finis form, without approval by the the voiding of any permit issued in r to cease and desist orders and civil -123, C.R.S., of the Mined Land
KNOW ALI	MEN BY THESE PRE	SENTS, THAT:	
amended, a C.R.S. 34-32 Mined Land	nd the Colorado Land 2.5-101 <u>et seq</u> . (the "Act") Reclamation Board (the '	fined Land Reclamation Act, C.R.S. Reclamation Act for the Extra as amended, provides that no permit 'Board'') receives a performance warre requirements of the Act.	ection of Construction Materials, may be issued under the Act until the
WHE	EREAS,	(the "	'Operator"), has applied for a permit to
conduct a mi	ining operation known as		(the "Operation") on certain
	i supplemented, and are r	_ County, Colorado. These lands are coreferred to herein as the "Affected Later and the country of the country	described in the permit application, as nds".
		for the permit, the Operator has agree gulations of the Board, as amended f	
reclamation v subject to the	with regard to those affect permit are those amount	determined, in accordance with the steed lands ins for the stated periods of time as set for time to reflect revised estimates	_County which are now or may become orth in the financial warranty, which
Office of Mined Land Rec		Denver • Grand Junction • Durango	Office of Active and Inactive Mines

WHEREAS, the Operator hereby gives the Board a performance warranty pursuant to Section 34-32-117(2) or Section 34-32.5-117(2) of the Act, and herein promises the Board that it will comply with all applicable requirements of the Act with regard to those Affected Lands.

NOW, THEREFORE, the Operator hereby promises the Board that it will comply with all applicable requirements of the Act and rules and regulations of the Board with respect to the Affected Lands.

FURTHER, the Operator hereby promises the Board that it will comply with all of the terms of the application for a permit, as amended and supplemented, as well as any conditions attached to the permit by the Board.

FURTHER, the Operator promises the Board, pursuant to 34-32-112(2)(d) or 34-32.5-112(1)(c)(iv) of the Act, that it has the lawful authority to enter upon the Affected Lands to conduct mining operations, including, but not limited to, reclamation. The Operator further recognizes the right of the Board to enter to reclaim lands affected by the operation.

The description of lands herein is for convenience of reference only, and no error in such description, nor any revision of the permitted mining area, nor the disturbance by the Warrantor of lands outside of the permitted mining area shall alter or diminish the Operator's obligation hereunder, which shall extend to the reclamation of all such lands disturbed.

The obligation of the Operator hereunder is such that, if the Operator shall successfully comply with the requirements of the Act, applicable rules and regulations, and the permit, then the Board, upon a finding that the Operator has so complied, shall release this performance warranty, and the Operator from its obligation hereunder, to the extent that the Board determines that such compliance has been accomplished. The obligation of the Operator hereunder shall continue until released in whole or in part by the Board in accordance with applicable law.

In further satisfaction of the requirements of the Act, the Operator promises to be responsible for the cost of reclamation up to the amount established by the Board and has attached hereto its financial warranty, which may be amended from time to time. The Operator agrees that it will maintain a financial warranty (or warranties) for the estimated costs of reclamation in good standing for the entire life of the permit. Please note that under the provisions of the Colorado Mined Land Reclamation Act and the Colorado Land Reclamation Act for the Extraction of Construction Materials, any Applicant or Operator that submits proof, acceptable to the Board or Division of Reclamation, Mining and Safety, that an Applicant or Operator is a unit of County or Municipal government, or is a department or division of State government, the Applicant or Operator is not required to submit or post any other instrument of financial responsibility but hereby promises to be responsible for the cost of reclamation up to the amount specified by the Board.

If the Board determines that the Operator is in default under this performance warranty and has failed to cure such default, although written notice of such default and ample time to cure such default have been given, the Operator's financial warranty shall be subject to forfeiture.

This performance warranty may be executed in multiple copies, each of which shall be treated as an original, but together they constitute only one agreement, the validity and interpretation of which shall be governed by the laws of the State of Colorado.

day of	٠ و
Operator	(SEAL)
Ву:	
Title:	
PERATOR'S ACKNOWLEDGEMENT	
ore me this day of	
NOTARY PUBLIC	
My Commission expires:	
Date:	<u></u>
ì	NOTARY PUBLIC My Commission expires:

M:\min\share\bondforms\Performance Warranty.doc (05/26/2004)

COST SUMMARY WORK

Task description:

Cost summary

Site: O'Rourke Pit

Permit Action: New 110

Permit/Job#: M2012007

PROJECT IDENTIFICATION

Task #:

000 5/21/2012 State:

Colorado

Abbreviation:

None

Date: User:

RCO

County: Rio Grande Filename:

M007-000

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Reduce highwalls to 3:1	DOZER	1	6.02	\$1,243.84
002	Dispose of debris	DEMOLISH	$_{1}$	1.00	\$9.88
003	Rip compaction on roads and pit floor	RIPPER	1	6.02	\$1,284.00
004	Carry topsoil from stockpile	LOADER	1	30.07	\$2,944.00
005	Spread topsoil on slopes	DOZER	1	0.79	\$162.48
006	Spread topsoil on pit floor	DOZER	1	4.26	\$907.16
007	Revegetation of disturbed areas	REVEGE	1	10.00	\$3,188.38
800	Haul reclamation equipment to and from site	MOBILIZE	1	3.44	\$2,886.87
		SUBTO	TALS:	61.6	\$ \$12,626.61

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02 Performance bond:

0.00 Job superintendent: 10.00 Profit:

1.05

Total =

\$255.06 Total = \$132.58

Total = \$0.00

Total = \$1,262.66 TOTAL O & P =\$1,650.30

CONTRACT AMOUNT (direct + O & P) = \$14,276.91

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 = 500.00 Total = \$0.00

\$713.85

CONTINGENCY:

0.00

Total = \$0.00

TOTAL INDIRECT COST = \$2,864.15

TOTAL BOND AMOUNT (direct + indirect) = \$15,490.76

BULLDOZER WORK

Task description:	Reduce highwalls to 3:1			
Site: O'Rourke Pit	Permit Action: New 110	Permit/Job#•	M2012007	

PROJECT IDENTIFICATION

Task #:001State:ColoradoAbbreviation:NoneDate:5/21/2012County:Rio GrandeFilename:M007-001

User: RCO

Agency or organization name: 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:

 Ownership Cost/Hour:
 \$65.28
 Utilization %

 Operating Cost/Hour:
 \$102.81
 100

 Ripper op. Cost/Hour:
 \$0.00
 0

 Operator Cost/Hour:
 \$38.49
 NA

Total unit Cost/Hour: \$206.58

Total Fleet Cost/Hour: \$206.58

MATERIAL QUANTITIES

 Initial Volume:
 2,333

 Swell factor:
 1.330

 Loose volume:
 3,103 LCY

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

Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 60 feet
Unadjusted hourly production: 1,246.9 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: -15 %
Average site altitude: 7,850 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.)

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4133

Adjusted unit production: 515.34 LCY/hr
Adjusted fleet production: 515.34 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.401/LCY

Total job time: 6.02 Hours
Total job cost: \$1,243.84

Assumes 15-foot depth, with a 0.5:1 highwall reduced to a 3:1 slope. Reduction by balanced cut and fill. Maximun 900-foot long highwall.

DEMOLITION WORK

Site: _	O'Rourke Pit		Permit Action:	New 110	Permit/	Job#: _	M2012007
<u> ROJEC</u>	CT IDENTIFICATI	<u>ON</u>					
ask#:	002	State:	Colorado		Abbreviation:	None	
Date:	5/21/2012	County:	Rio Grande		Filename:	M00'	7-002
Date.		-					

UNIT COSTS

Location adjustment: 99.50 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Misc debris	5 cy	Excavate disposal pit with dozer (includes completed pit backfilling/grading)	5.00	CY	\$1.53	\$7.64
Bury debris in pit	5 cy	Push demolished materials/rubble/debris into pit - Max. 100 ft. push	5.00	CY	\$0.46	\$2.29

Total Cost
Subtotal (adjusted for
Job Hours: 1.00 (unadjusted): \$9.93 location): \$9.88

BULLDOZER RIPPING WORK

Task description: Rip	compaction on roads and	l pit floor			
Site: O'Rourke Pit	Permit Action:	New 110	Permit/.	Job#: M2012007	
PROJECT IDENTIFICAT	<u>ION</u>				
Task #: 003	State: Colorado		Abbreviati	on: None	
Date: 5/21/2012	County: Rio Grande	;	Filena		
User: RCO	2				_
Agency or organizatio	n name: DRMS				
HOURLY EQUIPMENT O	COST				
Basic Machine: C	 at D8T - 8SU	I	Horsepower:	310	
	Shank Ripper		Shift Basis:	1 per day	
		_	Data Source:	(CRG)	
Cost Breakdown:					
		Ut	tilization %		
Ownership (Cost/Hour: \$65.	28	NA		
Operating (100		
Ripper Operating (100		
Operator (NA		
Total Unit (Cost/Hour: \$213	.07			
Total Fleet (Cost/Hour: \$213	.07			
MATERIAL QUANTITIE	Sele	cted estimating me	ethod: Area		
Alternate Methods:		_		_	-
ismic: NA	Bank Volume:	NA	BCY	NA	
Area: 4.00 acres	Rip Depth (ft):	1.00	Volume: 6,453		Y or C
Source of est	imated quantity: New 11	O plan and maps			
HOURLY PRODUCTION		o piuri una maps	_		
Seismic:	Seismic Velocity:	NA	feet/second		
	Seisine velocity.	III	ices second		
Area:					
	ge Ripping Depth:	2.56	mph		
	ge Ripping Width:	7.08	degrees		
	ge Ripping Length: rage Dozer Speed:	300.00 88.00	feet feet		
	e Maneuver Time:	0.25	feet		
	ction per unit area:	0.800	acres/hour		
Job Condition Correction Factor	-		====		
Unadjusted Hourl	y Unit Production:	0.800	Acres/hr		
·	Site Altitude:	7,850	feet		
	Altitude Adj:	1.00	(CAT HB)		
	Job Efficiency:	0.83	(1 shift/day)		
	Net Correction:	0.83	multiplier		
Adjusted	l Hourly Unit Production:	0.66	Acres/hr		
Adjusted	Hourly Fleet Production:	0.66	Acres/hr		
JOB TIME AND COST					
Fleet size: 1	Grader(s)	Total job time:	6.03	Hours	
Unit cost: \$321.070	Per acre	Total job cost:	\$1,284.00)	

WHEEL LOADER - LOAD AND CARRY WORK

Task description: Carry topsoil from stockpile Site: O'Rourke Pit Permit Action: New 110 Permit/Job#: M2012007 PROJECT IDENTIFICATION Task #: 004 State: Colorado Abbreviation: None 5/21/2012 Date: County: Rio Grande Filename: M007-004 **RCO** User: Agency or organization name: DRMS HOURLY EQUIPMENT COST Basic Machine: **CAT 938H** Horsepower: Attachment 1: ROPS Cab Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: **Utilization** % Ownership Cost/Hour: \$22.07 NA Operating Cost/Hour: \$37.34 100 Operator Cost/Hour: NA \$38.49 Total Unit Cost/Hour: \$97.90 Total Fleet Cost/Hour: \$97.90 MATERIAL QUANTITIES CCY Initial volume: Swell factor: 1.215 Loose volume: 3.920 LCY Source of estimated volume: Division of Reclamation, Mining & Safety Source of estimated swell factor: Cat Handbook **HOURLY PRODUCTION** Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.483 minutes Cycle Time Factors Factor (min.) Source Material 1/8" to 3/4" diameter -0.02 Material: -0.020 (Cat HB) Stockpile: No adjustment - factor not applicable 0.00 0.000 (Cat HB) Truck Ownership: No adjustment - factor not applicable 0.00 0.000 (Cat HB) Operation: Constant operation -0.04 -0.040 (Cat HB) Dump Target: Nominal target 0.00 0.000 (Cat HB) Net Cycle Time Adjustment: -0.060 minutes Adjusted Basic Cycle Time: 0.423 minutes Rolling Resistance – Road Conditions Haul: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0 Return: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0 Haul and Return Time Length Grade Res. Rolling Total Res. Travel Time Source (feet) (%) Res. (%) (%) (minutes) Haul Route: 700 0.00 5.00 5.00 0.6414 (Cat HB) Return Route: 700 0.00 5.00 5.00 0.5752 (Cat HB)

			Total Travel Ti Total Cycle Ti		minutes minutes
Load Bucket Capacity					
Rated Capacit	ty: 3.90	LCY (hear	ped)		
Bucket Fill Facto	or: 1.100	Other - roo	ck/dirt mixtures	(100-120%) 1.100	
Adjusted Capacit	ty: 4.29	LCY			
Job Condition Correction Site Altitude: 7850 feet	n Factors				
		Source			
Altitude Adj:	1.00	(CAT HB))		
Job Efficiency:	0.83	(1 shift/day	7)		
Net Correction:	0.83	multiplier			
Ur	adjusted Hourly Unit P	roduction:	157.04	LCY/Hour	
	Adjusted Hourly Unit P		130.34	LCY/Hour	
	Adjusted Hourly Fleet P		130.34	LCY/Hour	
JOB TIME AND CO	<u>ost</u>				
Fleet size:	1 Loader(s)		Total job time:	30.07	Hours
Unit cost:\$0	.751 /LCY		Total job cost:	\$2,944.00	

Topsoil is carried from stockpiles in northern end of site, and distributed along top of graded slopes and across pit floor, where it will be spread evenly by dozer.

	BULLDOZ	<u>ER WORK</u>		
Task description:	Spread topsoil on slopes			
Site: O'Rourke Pit	Permit Action:	New 110	Permit/Job#:	M2012007
PROJECT IDENTIF	ICATION			
Task #: 005	State: Colorado		Abbreviation:	None
Date: 5/21/2012	County: Rio Grand	e	Filename:	M007-005
User: RCO		1.0		
Agency or organ	nization name:DRMS			
HOURLY EQUIPME	NT COST			
Basic Machine: Cat	D8T - 8SU			
Horsepower: 310	• • • • • • • • • • • • • • • • • • • •			
Blade Type: Sen	ni-Universal	_		
Attachment: 3-sl	ank ripper			
	er day	_		
Data Source: (CR	(G)			
Cost Breakdown:				
		Utilization %		
Ownership Cost/Hour:	\$65.28	NA NA		
Operating Cost/Hour:	\$102.81	100		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$38.49	NA		
Total unit Cost/Hour:	\$206.58			
Total Fleet Cost/Hour:	\$206.58			
10411100 00011041	9200.00			
MATERIAL QUANT	<u>ITIES</u>			
Initial Volume: 980				
Swell factor: 1.000)			
Loose volume: 980 l				
G	District of CD and a confi	34' ' 0 C C .		
Source of estimated volum		on, Mining & Safety		
Source of estimated swell	lactor: Cat Handbook			
HOLDI V BRODICA	TON			
HOURLY PRODUCT	ION			
Average push distance:	60 feet			
Unadjusted hourly produc	tion: 1,246.9 LCY/hr			
Materials consistency des	cription: Loose stockpile 1.2			
A	15.0/			
Average push gradient:	-15 % -7.850 form			
Average site altitude:	7,850 feet			
Material weight:	1,600 lbs/LCY		=0	
Weight description:	Top Soil			
Job Condition Correction	Factor_	Source		

Operator Skill:

Dozing method:

Material consistency:

0.750

1.200 1.000 (AVG.)

(CAT HB)

(GEN.)

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: _ 0.9993

Adjusted unit production: 1,246.03 LCY/hr
Adjusted fleet production: 1246.03 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.166/LCY

Total job time: 0.79 Hours
Total job cost: \$162.48

Assumes topsoil is carried by loader to top of pit slopes, to be spread by dozer. Average 6" depth, over approx 1 acre of area.

BULLDOZER WORK

rask description:	Spread topson on pit moor	
OU OUT Y THE	5 1.1.1 37 440	

Site: O'Rourke Pit Permit Action: New 110 Permit/Job#: M2012007

PROJECT IDENTIFICATION

Task #:006State:ColoradoAbbreviation:NoneDate:5/21/2012County:Rio GrandeFilename:M007-006

Date: 5/21/2012 User: RCO

Agency or organization name: 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:

 Ownership Cost/Hour:
 \$65.28
 NA

 Operating Cost/Hour:
 \$102.81
 100

 Ripper op. Cost/Hour:
 \$6.49
 100

 Operator Cost/Hour:
 \$38.49
 NA

Total unit Cost/Hour: \$213.07
Total Fleet Cost/Hour: \$213.07

MATERIAL QUANTITIES

 Initial Volume:
 2,940

 Swell factor:
 1.000

 Loose volume:
 2,940 LCY

Source of estimated volume:

Division of Reclamation, Mining & Safety

Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 90 feet

Unadjusted hourly production: 918.4 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %

Average site altitude: 7,850 feet

Material weight: 1,600 lbs/LCY

Weight description: Top Soil

 Job Condition Correction Factor
 Source

 Operator Skill:
 0.750
 (AVG.)

 Material consistency:
 1.200
 (CAT HB)

 Dozing 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:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7519

Adjusted unit production: 690.54 LCY/hr

Adjusted fleet production: 690.54 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.309/LCY

Total job time: 4.26 Hours

Total job cost: \$907.16

Volume is for 3-acre pit floor covered with 6-inch average depth of topsoil. Topsoil has been carried from stockpile by wheel loader, to be spread by dozer.

REVEGETATION WORK

•	Task descri	ption:	Revegetation of o	listurbed areas			
Site:	O'Rourk	ke Pit	Pen	nit Action: New 110	Permit/Job#:	M2012007	
]	PROJECT	<u>r identifi</u>	<u>CATION</u>				
	Task #:	007	State:	Colorado	Abbreviation:	None	
	Date:	5/21/2012	County:	Rio Grande	Filename:	M007-007	
	User:	RCO					

Agency or organization name: DRMS

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
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
Total Tilling Cost/Acre	\$145.20

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	0.90	2.91	\$6.24
Crested Wheatgrass - Ephraim	1.50	6.89	\$3.27
Russian Wildrye - Bozoisky	0.50	2.01	\$3.06
Western Wheatgrass - Arriba	2.00	5.05	\$7.20
Totals Seed Mix	4.90	16.86	\$19.76

Application

Description	Cost /Acre
	\$90.11

Total Seed Application Cost/Acre	\$90.11

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

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

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:
 10
 Cost /Acre:
 \$255.07

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$255.07

*Selected Replanting Work Items: TILLING, SEEDING

Initial Job Cost: \$2,550.70

Reseeding Job Cost: \$637.68

Total Job Cost: \$3,188.38

Job Hours: 10.00

Tillage portion of task is weed control. Assumes weed control on area(s) requiring treatment(s), costs are equivalent to one-time treatment on 10 acres.

Drilling seed into recently-respread topsoil that is firm but not compacted does not require harrowing prior to seeding.

Disturbed acreage figure (10 acres) assumes that entire site has been disturbed, even though not all of it has been excavated, therefore all of site needs seeding. (Figure is from operator).

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Haul reclamation equipment to and from site

Site: O'Rourke Pit Permit Action: New 110 Permit/Job#: M2012007

PROJECT IDENTIFICATION

Task #: 008 State: Colorado Abbreviation: None

Date: 5/21/2012 County: Rio Grande Filename: M007-008

User: RCO

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	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/unit	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
_	(TONS)				fleet		
Cat D8T - 8SU	53.08	\$65.28	\$125.45	1	\$190.73	\$125.45	\$250.00
CAT 938H	16.34	\$22.07	\$88.67	I	\$110.74	\$88.67	\$250.00
Drill/Broadcast	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Seeder with Tractor							

Subtotals: \$429.73 \$302.79 \$750.00

ROADABLE EQUIPMENT:

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

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

MONTE VISTA

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:

\$2,886.87

\$0.00

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.36	0.36
Return Time (Hours):	0.36	0.36
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.72	0.72

JOB TIME AND COST

otal job time:	3.44	Hours

Total job cost: \$2,886.87