



**COLORADO**  
Division of Reclamation,  
Mining and Safety  
Department of Natural Resources

August 29, 2019

Steve Wright  
Arboles Sand & Stone, LLC  
12577 Highway 151  
Pagosa Springs, CO 81147

**RE: Lob Lolly Pit, Permit No. M-2013-066, Reclamation Costs Update and Notice of Surety Increase (SI-1)**

Dear Mr. Wright:

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). **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 **Monday, October 28, 2019**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Staff calculations estimate the cost to reclaim the above referenced site to be \$129,688.00. This is an increase of \$82,859.68 over the \$46,828.32 currently held by the Division. This estimate is based on conditions observed during the May 14, 2019 inspection.

Please make arrangements with Gabriel Benvenuti 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 Gabriel Benvenuti. If you require additional information, have questions or concerns, please contact me at the DRMS Grand Junction Field Office, by phone at 970-243-6368 or by email at [lucas.west@state.co.us](mailto:lucas.west@state.co.us).

Sincerely,

**Lucas West**  
Environmental Protection Specialist  
Division of Reclamation, Mining and Safety

Cc: Gabriel Benvenuti, DRMS Bonding Specialist  
Ec: Nathan Barton, Wasteline Inc.



## COST SUMMARY WORK

Task description: Cost Summary

Site: Lob Lolly Pit

Permit Action: 2019 Update

Permit/Job#: M2013066

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 8/28/2019

County: Archuleta

Filename: M066-000

User: LJW

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Relax Highwalls of Pond F2	EXCAVATE	1	11.36	\$1,789
001a	Verify Depth of Ponds	SITEMAINT ENANCE	1	16.00	\$3,500
002	Relax Highwalls of Pond F3	EXCAVATE	1	9.09	\$1,432
003	Rip compacted areas of the North Parcel	RIPPER	1	21.75	\$5,355
004a	Distribute topsoil on North Area	SCRAPER1	1	19.77	\$22,624
005	Spread topsoil across affected lands	DOZER	1	33.49	\$7,963
006a	Revegetate North Area, semi-irrigated mix	REVEGE	1	16.00	\$8,141
006b	Revegetate North Area, Grazing Mix	REVEGE	1	16.00	\$14,816
007a	seeding of South Area, Grazing Mix	REVEGE	1	16.00	\$17,254
007b	Seeding of South Area, Semi irrigated mix	REVEGE	1	16.00	\$1,768
008	Haul reclamation equipment to and from jobsite	MOBILIZE	1	10.32	\$18,893
<b><u>SUBTOTALS:</u></b>				<b>185.78</b>	<b>\$103,535</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02  
Performance bond: 1.05  
Job superintendent: 92.89  
Profit: 10.00

Total = \$2,091

Total = \$1,087

Total = \$6,446

Total = \$10,354

TOTAL O & P = \$19,978

CONTRACT AMOUNT (direct + O & P) = \$123,513

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0

Total = \$0

Engineering work and/or contract/bid preparation: 0.00

Total = \$0

Reclamation management and/or administration: 5.00

\$6,176

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$26,153

**TOTAL BOND AMOUNT (direct + indirect) = \$129,688**

## HYDRAULIC EXCAVATOR WORK

Task description: Relax Highwalls of Pond F2

Site: Lob Lolly Pit

Permit Action: 2019 Update

Permit/Job#: M2013066

### PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 8/28/2019

County: Archuleta

Filename: M066-001

User: LJW

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat 336D L 10'-6" Stick

Attachment 1: ROPS Cab

Horsepower: 268

Weight (MT): 29.30

Shift Basis: 1 per day

Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$55.49	NA
Operating Cost/Hour:	\$64.62	100
Operator Cost/Hour:	\$37.27	NA
Total Unit Cost/Hour:	\$157.37	
Total Fleet Cost/Hour:	\$157.37	

### MATERIAL QUANTITIES

Initial volume: 4,858

CCY

Swell factor: 1.330

Loose volume: 6,461

LCY

Source of estimated volume: Height= 25' Lenght 583' relax to 3:1

Source of estimated swell factor: Cat Handbook

### HOURLY PRODUCTION

Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):

Basic Job Condition Description: AVERAGE  
Secondary Job Condition within Basic Description: AVERAGE  
Cycle Time Value: 0.321 minutes

#### Load Bucket Capacity

Rated Capacity: 3.33 LCY (heaped)  
Bucket Fill Factor: 1.100 Other - rock/dirt mixtures (100-120%) 1.100  
Adjusted Capacity: 3.66 LCY

Bucket Size Class: Large

#### Job Condition Correction Factors

Site Altitude: 6200 feet

Altitude Adj: 1.00 Source (CAT HB)  
Job Efficiency: 0.83 (1 shift/day)  
Net Correction: 0.83 multiplier

Unadjusted Hourly Unit Production: 684.67 LCY/Hour  
Adjusted Hourly Unit Production: 568.28 LCY/Hour  
Adjusted Hourly Fleet Production: 568.28 LCY/Hour

### JOB TIME AND COST

Fleet size: 1 Excavator Total job time: 11.37 Hours

Unit cost: \$0.277 /LCY Total job cost: \$1,789

## SITE MAINTENANCE

Task description: Verify Depth of Ponds

Site: Lob Lolly Pit

Permit Action: 2019 Update

Permit/Job#: M2013066

### PROJECT IDENTIFICATION

Task #: 001A

State: Colorado

Abbreviation: None

Date: 8/28/2019

County: Archuleta

Filename: M066-001a

User: LJW

Agency or organization name: DRMS

### UNIT COSTS

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Verify Depth of Pond F3	8.00	USER PROVIDED ITEM	1.00	EA	\$1,750.00	\$1,750.00
Verify Depth of Pond F2	8.00	USER PROVIDED ITEM	1.00	EA	\$1,750.00	\$1,750.00

Job Hours: 16.00

Total Cost: \$3,500.00

## HYDRAULIC EXCAVATOR WORK

Task description: Relax Highwalls of Pond F3

Site: Lob Lolly Pit

Permit Action: 2019 Update

Permit/Job#: M2013066

### PROJECT IDENTIFICATION

Task #: 002

State: Colorado

Abbreviation: None

Date: 8/28/2019

County: Archuleta

Filename: M066-002

User: LJW

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat 336D L 10'-6" Stick

Horsepower: 268

Attachment 1: ROPS Cab

Weight (MT): 29.30

Shift Basis: 1 per day

Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$55.49	NA
Operating Cost/Hour:	\$64.62	100
Operator Cost/Hour:	\$37.27	NA
Total Unit Cost/Hour:	\$157.37	
Total Fleet Cost/Hour:	\$157.37	

### MATERIAL QUANTITIES

Initial volume: 3,400

CCY

Swell factor: 1.330

Loose volume: 4,522

LCY

Source of estimated volume: Height 20', Length 918 LF to 3:1

Source of estimated swell factor: Cat Handbook

### HOURLY PRODUCTION

Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):

Basic Job Condition Description: BELOW AVERAGE

Secondary Job Condition within Basic Description: AVERAGE

Cycle Time Value: 0.367 minutes

#### Load Bucket Capacity

Bucket Size Class: Large

Rated Capacity: 3.33 LCY (heaped)

Bucket Fill Factor: 1.100 Other - rock/dirt mixtures (100-120%) 1.100

Adjusted Capacity: 3.66 LCY

#### Job Condition Correction Factors

Site Altitude: 6200 feet

Altitude Adj:	1.00	Source (CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.83	multiplier

Unadjusted Hourly Unit Production: 598.86 LCY/Hour

Adjusted Hourly Unit Production: 497.05 LCY/Hour

Adjusted Hourly Fleet Production: 497.05 LCY/Hour

### JOB TIME AND COST

Fleet size: 1 Excavator Total job time: 9.10 Hours

Unit cost: \$0.317 /LCY Total job cost: \$1,432

## BULLDOZER RIPPING WORK

Task description: Rip compacted areas of the North Parcel

Site: Lob Lolly Pit

Permit Action: 2019 Update

Permit/Job#: M2013066

### PROJECT IDENTIFICATION

Task #: 003

State: Colorado

Abbreviation: None

Date: 8/28/2019

County: Archuleta

Filename: M066-003

User: LJW

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU  
Ripper Attachment: 3-Shank Ripper

Horsepower: 310  
Shift Basis: 1 per day  
Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$103.86	NA
Operating Cost/Hour:	\$82.26	100
Ripper Ownership Cost/Hour:	\$10.43	NA
Ripper Operating Cost/Hour:	\$8.38	100
Operator Cost/Hour:	\$41.24	NA
Total Unit Cost/Hour:	\$246.17	
Total Fleet Cost/Hour:	<b>\$246.17</b>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA  
Area: 12.70 acres Rip Depth (ft): 1.00 Volume: 20,489 BCY or CCY

Source of estimated quantity: \_\_\_\_\_

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth: 2.56 feet/pass  
Average Ripping Width: 7.08 feet/pass  
Average Ripping Length: 100.00 feet/pass  
Average Dozer Speed: 88.00 feet/minute  
Average Maneuver Time: 0.25 minutes/pass  
Production per unit area: 0.703 acres/hour

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.703 Acres/hr  
Site Altitude: 6,200 feet  
Altitude Adj: 1.00 (CAT HB)  
Job Efficiency: 0.83 (1 shift/day)  
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.58 Acres/hr  
Adjusted Hourly Fleet Production: 0.58 Acres/hr

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 21.75 Hours

Unit cost: \$421.636 Per acre Total job cost: \$5,355

**SCRAPER TEAM WORK**Task description: Distrubute topsoil on North AreaSite: Lob Lolly PitPermit Action: 2019 UpdatePermit/Job#: M2013066**PROJECT IDENTIFICATION**Task #: 004AState: ColoradoAbbreviation: NoneDate: 8/28/2019County: ArchuletaFilename: M066-004aUser: LJWAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

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

**Cost Breakdown:**

	Scraper Work Team		Support Equipment		Maintenance Equipment	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	100
Ownership cost/hour:	\$174.06	\$103.86	NA	NA	NA	\$44.05
Operating cost/hour:	\$190.35	\$82.26	NA	NA	NA	\$71.83
%Utilization-ripper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$10.43	NA	NA	NA	\$0.00
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	\$0.00
Operator cost/hour:	\$30.86	\$41.24	NA	NA	NA	\$0.00
Unit Subtotals:	\$395.26	\$237.79	NA	NA	NA	\$115.88
Number of Units:	2	1	0	0	0	1
Group Subtotals:	Work:	\$1,028.31	Support:	\$0.00	Maint:	\$115.88

Total work team cost/hour: \$1,144.19**MATERIAL QUANTITIES**Initial volume: 25,611

CCY

Swell factor: 1.000Loose volume: 25,611

LCY

Source of estimated volume: 15" deep across 12.7 ACSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**

Scraper Bowl (volume) Basis:

Material weight: 1,600 lbs/LCY  
 Material description: Top Soil  
 Rated Payload: 81,600 pounds  
 Payload Capacity: 51.00 LCY

Struck Volume: 24.00 LCY  
 Heaped Volume: 34.00 LCY  
 Average Volume: 29.00 LCY  
 Adjusted Capacity: 29.00 LCY

Cycle Time:

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

Job Condition Correction:

Site Altitude: 6200 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 3.0Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	0.00	3.00	3.00	2800	0.35

Haul Time: 0.35 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	0.00	3.00	3.00	2949	0.28

Return Time: 0.28 minutesTotal Scraper team cycle time: 2.23 minutesAdjusted for job conditions: 1,295.25 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 1,295.25 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 1,295.25 LCY/HourUnadjusted unit production/hour: 1,560.54 LCY/Hour

Optimal Number of Scrapers per push dozer: \_\_\_\_\_

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 19.77 HoursUnit cost: \$0.883 /LCYTotal job cost: \$22,624



**BULLDOZER WORK**Task description: Spread topsoil across affected landsSite: Lob Lolly PitPermit Action: 2019 UpdatePermit/Job#: M2013066**PROJECT IDENTIFICATION**Task #: 005State: ColoradoAbbreviation: NoneDate: 8/28/2019County: ArchuletaFilename: M066-005User: LJWAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$103.86	NA
Operating Cost/Hour:	\$82.26	100
Ripper own.		
Cost/Hour:	\$10.43	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.24	NA

Total unit Cost/Hour: \$237.79Total Fleet Cost/Hour: \$237.79**MATERIAL QUANTITIES**Initial Volume: 25,611Swell factor: 1.000Loose volume: 25,611 LCYSource of estimated volume: 15" deep across 12.7 acresSource of estimated swell  
factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 75 feetUnadjusted hourly  
production: 1,017.1 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push  
gradient: 0 %Average site altitude: 6,200 feetMaterial weight: 1,600 lbs/LCYWeight description: Top SoilJob Condition Correction FactorSource

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: 764.76 LCY/hr

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Adjusted fleet  
production: 764.76 LCY/hr

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### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.311/LCY

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Total job time: 33.49 Hours

Total job cost: \$7,963

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**REVEGETATION WORK**Task description: Revegetate North Area, semi-irrigated mixSite: Lob Lolly PitPermit Action: 2019 UpdatePermit/Job#: M2013066**PROJECT IDENTIFICATION**Task #: 006AState: ColoradoAbbreviation: NoneDate: 8/28/2019County: ArchuletaFilename: M066-006aUser: LJWAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$0.00</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$101.93
<b>Total Tilling Cost/Acre</b>	<b>\$101.93</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Rye, Annual Tetraploid - Barmultra	10.00	43.62	\$16.50
Meadow Brome - Paddock	5.00	4.59	\$19.88
Orchardgrass - Paiute	10.00	123.97	\$40.75
Smooth Brome - Manchar	5.00	16.64	\$16.63
Intermediate Wheatgrass - Rush	7.50	16.01	\$21.00
Burnett, Small (or Little) - Delar	5.00	6.31	\$12.50
Sainfoin - Remont	7.50	3.27	\$23.70
<b>Totals Seed Mix</b>	<b>50.00</b>	<b>214.42</b>	<b>\$150.95</b>

**Application**

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

**MULCHING and MISCELLANEOUS****Materials**

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

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$70.17
Weed spray, hand, non-aquatic area, nox. [DMG]	\$180.00
<b>Total Mulch Application Cost/Acre</b>	<b>\$250.17</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres: 4.5 Cost /Acre: \$1,360.27  
 Estimated Failure Rate: 33% Cost /Acre\*: \$1,360.27  
 \*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: \$6,121.22  
 Reseeding Job Cost: \$2,020.00  
 Total Job Cost: \$8,141  
 Job Hours: 16.00

**REVEGETATION WORK**Task description: Revegetate North Area, Grazing MixSite: Lob Lolly PitPermit Action: 2019 UpdatePermit/Job#: M2013066**PROJECT IDENTIFICATION**Task #: 006BState: ColoradoAbbreviation: NoneDate: 8/28/2019County: ArchuletaFilename: M066-006bUser: LJWAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$0.00</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$101.93
<b>Total Tilling Cost/Acre</b>	<b>\$101.93</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Rye, Annual Tetraploid - Barmultra	2.00	8.72	\$3.30
Orchardgrass - Paiute	8.00	99.17	\$32.60
Crested Wheatgrass - Standard	6.00	27.55	\$24.90
Russian Wildrye - VNS	4.00	16.07	\$23.68
Smooth Brome - Manchar	10.00	33.29	\$33.25
Pubescent Wheatgrass - VNS	10.00	20.66	\$31.50
<b>Totals Seed Mix</b>	<b>40.00</b>	<b>205.46</b>	<b>\$149.23</b>

**Application**

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

**MULCHING and MISCELLANEOUS****Materials**

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

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$70.17
Weed spray, hand, non-aquatic area, nox. [DMG]	\$180.00
<b>Total Mulch Application Cost/Acre</b>	<b>\$250.17</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres:	8.2	Cost /Acre:	\$1,358.55
Estimated Failure Rate:	33%	Cost /Acre*:	\$1,358.55
*Selected Replanting Work Items:	TILLING,SEEDING,MULCHING		
Initial Job Cost:	\$11,140.11		
Reseeding Job Cost:	\$3,676.24		
Total Job Cost:	\$14,816		
Job Hours:	16.00		

**REVEGETATION WORK**Task description: Seeding of South Area, Grazing MixSite: Lob Lolly PitPermit Action: 2019 UpdatePermit/Job#: M2013066**PROJECT IDENTIFICATION**Task #: 007AState: ColoradoAbbreviation: NoneDate: 8/28/2019County: ArchuletaFilename: M066-007aUser: LJWAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$0.00</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$101.93
<b>Total Tilling Cost/Acre</b>	<b>\$101.93</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Rye, Annual Tetraploid - Barmultra	2.00	8.72	\$3.30
Orchardgrass - Paiute	8.00	99.17	\$32.60
Crested Wheatgrass - Standard	6.00	27.55	\$24.90
Russian Wildrye - VNS	4.00	16.07	\$23.68
Smooth Brome - Manchar	10.00	33.29	\$33.25
Pubescent Wheatgrass - VNS	10.00	20.66	\$31.50
<b>Totals Seed Mix</b>	<b>40.00</b>	<b>205.46</b>	<b>\$149.23</b>

**Application**

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

**MULCHING and MISCELLANEOUS****Materials**

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

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$70.17
Weed spray, hand, non-aquatic area, nox. [DMG]	\$180.00
<b>Total Mulch Application Cost/Acre</b>	<b>\$250.17</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres:	12.7	Cost /Acre:	\$1,358.55
Estimated Failure Rate:	33%	Cost /Acre*:	\$1,358.55
*Selected Replanting Work Items:	TILLING,SEEDING,MULCHING		
Initial Job Cost:	\$17,253.59		
Reseeding Job Cost:	\$5,693.68		
Total Job Cost:	\$22,947		
Job Hours:	16.00		



**REVEGETATION WORK**Task description: Seeding of South Area, Semi irrigated mixSite: Lob Lolly PitPermit Action: 2019 UpdatePermit/Job#: M2013066**PROJECT IDENTIFICATION**Task #: 007BState: ColoradoAbbreviation: NoneDate: 8/28/2019County: ArchuletaFilename: M066-007bUser: LJWAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$0.00</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$101.93
<b>Total Tilling Cost/Acre</b>	<b>\$101.93</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Rye, Annual Tetraploid - Barmultra	10.00	43.62	\$16.50
Meadow Brome - Paddock	5.00	4.59	\$19.88
Orchardgrass - Paiute	10.00	123.97	\$40.75
Smooth Brome - Manchar	5.00	16.64	\$16.63
Intermediate Wheatgrass - Rush	7.50	16.01	\$21.00
Burnett, Small (or Little) - Delar	5.00	6.31	\$12.50
Sainfoin - Remont	7.50	3.27	\$23.70
<b>Totals Seed Mix</b>	<b>50.00</b>	<b>214.42</b>	<b>\$150.95</b>

**Application**

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

**MULCHING and MISCELLANEOUS****Materials**

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

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$70.17
Weed spray, hand, non-aquatic area, nox. [DMG]	\$180.00
<b>Total Mulch Application Cost/Acre</b>	<b>\$250.17</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres: 1.3 Cost /Acre: \$1,360.27  
 Estimated Failure Rate: 33% Cost /Acre\*: \$1,360.27  
 \*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: \$1,768.35  
 Reseeding Job Cost: \$583.56  
 Total Job Cost: \$2,352  
 Job Hours: 16.00

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: Haul reclamation equipment to and from jobsiteSite: Lob Lolly PitPermit Action: 2019 UpdatePermit/Job#: M2013066**PROJECT IDENTIFICATION**Task #: 008State: ColoradoAbbreviation: NoneDate: 8/28/2019County: ArchuletaFilename: M066-008User: LJWAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck 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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
Ownership Cost/Hour:	\$17.20	\$29.63	\$38.69
Operating Cost/Hour:	\$26.56	\$47.02	\$55.69
Operator Cost/Hour:	\$23.63	\$23.63	\$23.63
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$67.39	\$123.81	\$141.54

**NON ROADABLE EQUIPMENT:**

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8SU	53.08	\$114.29	\$141.54	1	\$255.83	\$141.54	\$250.00
Cat 336D L 10'-6" Stick	32.23	\$55.49	\$123.81	1	\$179.30	\$123.81	\$250.00
Cat 637G w/push-pull	59.59	\$174.06	\$141.54	2	\$631.20	\$283.08	\$500.00
Water Tanker, 7,000 Gal.	29.65	\$44.05	\$123.81	1	\$167.86	\$123.81	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$18.15	\$67.39	2	\$171.08	\$134.78	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$9.74	\$67.39	2	\$154.26	\$134.78	\$250.00

Subtotals: **\$1,559.53** **\$941.80** **\$1,750.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$12.96	1	\$12.96	\$12.96

Subtotals: **\$12.96** **\$12.96**



**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>PAGOSA SPRINGS</u>	
Total one-way travel distance:	<u>29.00</u>	miles
Average Travel Speed:	<u>50.00</u>	mph
Total Non-Roadable Mob/Demob Cost *		
'* two round trips with haul rig:	<u>\$18,877.78</u>	
Total Roadable Mob/Demob Cost **		
** one round trip, no haul rig:	<u>\$15.03</u>	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.58</u>	<u>0.58</u>
Return Time (Hours):	<u>0.58</u>	<u>0.58</u>
Loading Time (Hours):	<u>2.00</u>	<u>NA</u>
Unloading Time (Hours):	<u>2.00</u>	<u>NA</u>
Subtotals:	<u>5.16</u>	<u>1.16</u>

**JOB TIME AND COST**

Total job time:	<u>10.32</u>	Hours
Total job cost:	<u>\$18,893</u>	