



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

October 30, 2020

Mr. Andy Kagan
Rockbottom, LLC
555 Ernest Avenue
Westcliffe, CO 81252

Re: Spotted Burro Pit, Permit No. M-1979-192, Amendment Approval, Revision No. AM-1

Dear Mr. Kagan:

On October 30, 2020 the Division of Reclamation, Mining and Safety (DRMS) approved the Amendment application submitted to the Division on June 26, 2020, addressing the following:

Add 33.6 acres and a phased mine plan. The revised bond is for the existing allowed 15 acres of disturbance plus the 12.3 acres for Phase 1 for a maximum allowed phased disturbance of 27.3 acres. 11 acres along Eight Mile Creek will not be affected. The total affected area is 76.5 acres, including 2 acres of graveled road to remain post reclamation. The permit area is 87.5 acres.

The terms of the Amendment No. 1 approved by the Division are hereby incorporated into Permit No. M-1979-192. All other conditions and requirements of Permit No. M-1979-192 remain in full force and effect.

The revised liability amount exceeds the performance bond currently held (see below). Please submit additional bond (DRMS estimate is attached). The revision will not be final until the bond is approved by the Division.

| | |
|---------------------------|---------------------|
| Bond Held: | \$45,978.00 |
| Change in Liability: | \$66,427.00 |
| Revised Liability: | \$112,405.00 |

If you have any questions, please contact me.

Sincerely,

Timothy A. Cazier, P.E.
Environmental Protection Specialist

Enclosure: Bond Estimate

cc: Jeff Thompson, DRMS
DRMS file
Rebecca Kagan, Rockbottom



COST SUMMARY WORK

Task description: Cost Summary - Pre-AM-01 & Phase 1

Site: Spotted Burro Pit

Permit Action: AM-01

Permit/Job#: M1979192

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 10/29/2020

County: Fremont

Filename: M192-000

User: TC1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

| Task | Description | Form Used | Fleet Size | Task Hours | Cost |
|--------------------------|--|-----------|------------|---------------|-----------------|
| 003 | Backfill Slope with Overburden (~500 L.F.) Pre-AM-1 Area | SCRAPER1 | 1 | 11.07 | \$9,535 |
| 005 | Push Topsoil (~7.5 acres) Pre-AM-1 Area | DOZER | 1 | 9.17 | \$2,990 |
| 006 | Prep and seed site Pre-AM-1 Area (15 Acres) | REVEGE | 1 | 30.00 | \$22,471 |
| 007 | Mob/Demob | MOBILIZE | 1 | 0.93 | \$3,228 |
| 103 | Push 3 Ft Phase 1 Overburden (12.3 Ac) | DOZER | 1 | 74.74 | \$24,369 |
| 105 | Push Topsoil (12.3 acres) Phase1 Area | DOZER | 1 | 15.04 | \$4,903 |
| 106 | Prep and seed Phase 1 area (12.3 Acres) | REVEGE | 1 | 24.00 | \$18,426 |
| <u>SUBTOTALS:</u> | | | | 164.95 | \$85,922 |

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$1,736

Performance bond: 1.05

Total = \$902

Job superintendent: 82.47

Total = \$5,736

Profit: 10.00

Total = \$8,592

TOTAL O & P = \$16,966

CONTRACT AMOUNT (direct + O & P) = \$102,888

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$0

Engineering work and/or contract/bid preparation: 4.25

Total = \$4,373

Reclamation management and/or administration: 5.00

\$5,144

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$26,483

TOTAL BOND AMOUNT (direct + indirect) = \$112,405

SCRAPER TEAM WORKTask description: **Backfill Slope with Overburden (~500 L.F.) Pre-AM-1 Area**Site: **Spotted Burro Pit**Permit Action: AM-01Permit/Job#: M1979192**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 10/29/2020County: FremontFilename: VvvvUser: TC1Agency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

| Equipment Description | |
|---------------------------------|-------------------------|
| -Scraper: | Cat 623G |
| -Dozer: | NA |
| Support Equipment -Load Area: | NA |
| -Dump Area: | Cat D7R DS XR Series II |
| Road Maintenance -Motor Grader: | NA |
| -Water Truck: | NA |

Cost Breakdown:

| | Scraper Work Team | | Support Equipment | | Maintenance Equipment | |
|------------------------|-------------------|----------|-------------------|-----------|-----------------------|-------------|
| | Scraper | Dozer | Load Area | Dump Area | Motor Grader | Water Truck |
| %Utilization-machine: | 100 | NA | NA | 100 | NA | NA |
| Ownership cost/hour: | \$168.20 | NA | NA | \$74.64 | NA | NA |
| Operating cost/hour: | \$137.66 | NA | NA | \$71.55 | NA | NA |
| %Utilization-ripper: | NA | NA | NA | NA | NA | NA |
| Ripper own. cost/hour: | NA | NA | NA | \$0.00 | NA | NA |
| Ripper op. cost/hour: | NA | NA | NA | \$0.00 | NA | NA |
| Operator cost/hour: | \$30.90 | NA | NA | \$41.30 | NA | NA |
| Unit Subtotals: | \$336.76 | NA | NA | \$187.49 | NA | NA |
| Number of Units: | 2 | 0 | 0 | 1 | 0 | 0 |
| Group Subtotals: | Work: | \$673.52 | Support: | \$187.49 | Maint: | \$0.00 |

Total work team cost/hour: **\$861.01****MATERIAL QUANTITIES**Initial volume: 10,185

CCY

Swell factor: 1.000Loose volume: **10,185**

LCY

Source of estimated volume: See Task #003.1 worksheetSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight: 2,650 lbs/LCY
 Material description: Decomposed rock - 25% Rock, 75% Earth
 Rated Payload: 55,200 pounds
 Payload Capacity: 20.83 LCY

Struck Volume: 18.00 LCY
 Heaped Volume: 23.00 LCY
 Average Volume: 20.50 LCY
 Adjusted Capacity: **20.50** LCY

Cycle Time:Scraper Loading Time: 0.90 MinutesManeuver and Spread Time: 0.70 MinutesJob Condition Correction:

Site Altitude: 5500 feet

| | Scraper | Push Dozer | Source |
|-----------------|---------|------------|----------|
| Altitude Adj: | 1.000 | NA | (CAT HB) |
| Job Efficiency: | 0.830 | NA | (CAT HB) |
| Net Correction: | 0.830 | NA | |

Travel Time:Road Condition: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0Haul Route:

| Seg # | Haul Distance (Ft) | Grade (%) | Roll. Res (%) | Total Res (%) | Velocity (fpm) | Travel Time (min) |
|-------|--------------------|-----------|---------------|---------------|----------------|-------------------|
| 1 | 250.00 | 5.00 | 5.00 | 10.00 | 659 | 0.40 |

Haul Time: 0.40 minutesReturn Route:

| Seg # | Haul Distance (Ft) | Grade (%) | Roll. Res (%) | Total Res (%) | Velocity (fpm) | Travel Time (min) |
|-------|--------------------|-----------|---------------|---------------|----------------|-------------------|
| 1 | 250.00 | -5.00 | 5.00 | 0.00 | 2732 | 0.22 |

Return Time: 0.22 minutesTotal Scraper team cycle time: 2.22 minutesAdjusted for job conditions: 459.86 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 919.73 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 919.73 LCY/HourUnadjusted unit production/hour: 554.05 LCY/Hour

Optimal Number of Scrapers per push dozer: _____

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 11.07 HoursUnit cost: \$0.936 /LCYTotal job cost: \$9,535

BULLDOZER WORKTask description: **Push Topsoil (~7.5 acres) Pre-AM-1 Area**Site: **Spotted Burro Pit**Permit Action: **AM-01**Permit/Job#: **M1979192****PROJECT IDENTIFICATION**Task #: **005**State: **Colorado**Abbreviation: **None**Date: **10/29/2020**County: **Fremont**Filename: **Xxxx**User: **TC1**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D9T - 9SU**Horsepower: **405**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

| | | <u>Utilization %</u> |
|---------------------------|----------|----------------------|
| Ownership Cost/Hour: | \$156.88 | NA |
| Operating Cost/Hour: | \$127.87 | 100 |
| Ripper own. Cost/Hour: | \$0.00 | NA |
| Ripper op. Cost/Hour: | \$0.00 | 0 |
| Operator Cost/Hour: | \$41.30 | NA |

Total unit Cost/Hour: **\$326.04**Total Fleet Cost/Hour: **\$326.04****MATERIAL QUANTITIES**Initial Volume: **12,100**Swell factor: **1.000**Loose volume: **12,100 LCY**Source of estimated volume: **~7.5 acres w/ 1ft of topsoil**Source of estimated swell
factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**Unadjusted hourly
production: **1,243.2 LCY/hr**Materials consistency description: **Partly consolidated stockpile 1.1**Average push
gradient: **-10 %**Average site altitude: **5,500 feet**Material weight: **1,600 lbs/LCY**Weight description: **Top Soil**

Job Condition Correction Factor

| | | <u>Source</u> |
|-----------------------|-------|---------------|
| Operator Skill: | 0.750 | (AVG.) |
| Material consistency: | 1.100 | (CAT HB) |
| Dozing method: | 1.100 | (50% SL) |
| Visibility: | 1.000 | (AVG.) |
| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
| Spoil pile: | 0.800 | (FND-RF) |
| Push gradient: | 1.225 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 1.438 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |

Net correction: 1.0615

Adjusted unit
production: 1,319.66 LCY/hr
Adjusted fleet
production: **1319.66 LCY/hr**

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.247/LCY

Total job time: **9.17 Hours**
Total job cost: **\$2,990**

REVEGETATION WORKTask description: Prep and seed site Pre-AM-1 Area (15 Acres)Site: Spotted Burro PitPermit Action: AM-01Permit/Job#: M1979192**PROJECT IDENTIFICATION**Task #: 006State: ColoradoAbbreviation: NoneDate: 10/29/2020County: FremontFilename: XzzxzUser: TC1Agency or organization name: DRMS**FERTILIZING****Materials**

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|--------------------------|-----------------|-------|---|----------------|
| 10-34-0, 18-46-0, 5-10-5 | 30.00 | pound | \$0.34 | \$10.20 |
| | | | Total Fertilizer Materials Cost/Acre | \$10.20 |

Application

| Description | Cost /Acre |
|---|----------------|
| Tractor towed spreader (MEANS 32 01 90.13 0120) | \$37.03 |
| Total Fertilizer Application Cost/Acre | \$37.03 |

TILLING

| Description | Cost /Acre |
|--------------------------------|----------------|
| Chisel plowing {DMG} | \$94.63 |
| Total Tilling Cost/Acre | \$94.63 |

SEEDING

| Seed Mix | Rate – PLS LBS / Acre | Seeds per SQ. FT | Cost /Acre |
|------------------------------|--------------------------------|------------------------|-----------------|
| Switchgrass - Blackwell | 3.12 | 27.86 | \$35.88 |
| Sideoats Grama - Vaughn | 5.64 | 18.52 | \$47.24 |
| Smooth Brome - Lincoln | 7.50 | 24.97 | \$24.94 |
| Yellow Sweet Clover - Madrid | 2.00 | 11.94 | \$5.65 |
| Western Wheatgrass - Arriba | 10.00 | 25.25 | \$65.00 |
| Totals Seed Mix | 28.26 | 108.53 | \$178.70 |

Application

| Description | Cost /Acre |
|---|-----------------|
| Broadcast seeding [DMG] | \$267.22 |
| Total Seed Application Cost/Acre | \$267.22 |

MULCHING and MISCELLANEOUS**Materials**

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|---|-----------------|------|-------------|-----------------|
| Straw, delivered {MEANS 31 25 14.16 1200} | 2.00 | TON | \$301.00 | \$602.00 |
| Total Mulch Materials Cost/Acre | | | | \$602.00 |

Application

| Description | Cost /Acre |
|--|-----------------|
| Crimping, with tractor {DMG survey data} | \$70.17 |
| Power mulcher (MEANS 32 91 13.16 0350) | \$101.93 |
| Total Mulch Application Cost/Acre | \$172.10 |

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: 15 Cost /Acre: \$1,361.88
 Estimated Failure Rate: 10% Cost /Acre*: \$1,361.88
 *Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,
MULCHING

Initial Job Cost: \$20,428.20
 Reseeding Job Cost: \$2,042.82
 Total Job Cost: \$22,471
 Job Hours: 30.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob/Demob**Site: **Spotted Burro Pit**Permit Action: AM-01Permit/Job#: M1979192**PROJECT IDENTIFICATION**Task #: 007State: ColoradoAbbreviation: NoneDate: 10/29/2020County: FremontFilename: MmmmUser: TC1Agency 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:**

| Available Rig Capacities | 0-25 Tons | 26-50 Tons | 51+ Tons |
|---------------------------------|------------------|-------------------|-----------------|
| 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 623G | 41.35 | \$168.20 | \$123.81 | 2 | \$584.02 | \$247.62 | \$500.00 |
| Cat D9T - 9SU | 60.01 | \$156.88 | \$141.54 | 1 | \$298.42 | \$141.54 | \$250.00 |
| Drill/Broadcast Seeder with Tractor | 25.00 | \$6.72 | \$67.39 | 1 | \$74.11 | \$67.39 | \$250.00 |
| Power Mulcher (Bowie LD-90) | 6.00 | \$11.19 | \$67.39 | 1 | \$78.58 | \$67.39 | \$250.00 |

Subtotals: **\$1,035.13** **\$523.94** **\$1,250.00****ROADABLE EQUIPMENT:**

| Machine Description | Total Cost/hr/ unit | Fleet Size | Haul Trip Cost/hr/ fleet | Return Trip Cost/hr/ fleet |
|---------------------|------------------------|------------|-----------------------------|-------------------------------|
|---------------------|------------------------|------------|-----------------------------|-------------------------------|

Subtotals: **\$0.00** **\$0.00**

EQUIPMENT HAUL DISTANCE and Time

| | | |
|--|------------|-------|
| Nearest Major City or Town within project area region: | CAÑON CITY | |
| Total one-way travel distance: | 7.00 | miles |
| Average Travel Speed: | 30.00 | mph |

| | |
|-------------------------------------|------------|
| Total Non-Roadable Mob/Demob Cost * | \$3,227.57 |
| ** two round trips with haul rig: | |
| Total Roadable Mob/Demob Cost ** | \$0.00 |
| ** one round trip, no haul rig: | |

Transportation Cycle Time:

| | Non-Roadable Equipment | Roadable Equipment |
|-------------------------|------------------------|--------------------|
| Haul Time (Hours): | 0.23 | 0.23 |
| Return Time (Hours): | 0.23 | 0.23 |
| Loading Time (Hours): | 0.00 | NA |
| Unloading Time (Hours): | 0.00 | NA |
| Subtotals: | 0.47 | 0.47 |

JOB TIME AND COST

| | | |
|-----------------|------|-------|
| Total job time: | 0.93 | Hours |
|-----------------|------|-------|

| | |
|-----------------|---------|
| Total job cost: | \$3,228 |
|-----------------|---------|

BULLDOZER WORKTask description: **Push 3 Ft Phase 1 Overburden (12.3 Ac)**Site: **Spotted Burro Pit**Permit Action: **AM-01**Permit/Job#: **M1979192****PROJECT IDENTIFICATION**Task #: **103**State: **Colorado**Abbreviation: **None**Date: **10/29/2020**County: **Fremont**Filename: **M192-103**User: **TC1**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D9T - 9SU**Horsepower: **405**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

| | | <u>Utilization %</u> |
|-----------------------|----------|----------------------|
| Ownership Cost/Hour: | \$156.88 | NA |
| Operating Cost/Hour: | \$127.87 | 100 |
| Ripper own. | | |
| Cost/Hour: | \$0.00 | NA |
| Ripper op. Cost/Hour: | \$0.00 | 0 |
| Operator Cost/Hour: | \$41.30 | NA |

Total unit Cost/Hour: **\$326.04**Total Fleet Cost/Hour: **\$326.04****MATERIAL QUANTITIES**Initial Volume: **59,532**Swell factor: **1.000**Loose volume: **59,532 LCY**Source of estimated volume: **12.3 acres w/ 3ft (avg) overburden**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**Unadjusted hourly production: **1,243.2 LCY/hr**Materials consistency description: **Partly consolidated stockpile 1.1**Average push gradient: **-10 %**Average site altitude: **5,500 feet**Material weight: **2,650 lbs/LCY**Weight description: **Decomposed rock - 25% Rock, 75% Earth**

Job Condition Correction Factor

| | | <u>Source</u> |
|-----------------------|-------|---------------|
| Operator Skill: | 0.750 | (AVG.) |
| Material consistency: | 1.100 | (CAT HB) |
| Dozing method: | 1.100 | (50% SL) |
| Visibility: | 1.000 | (AVG.) |
| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
| Spoil pile: | 0.800 | (FND-RF) |
| Push gradient: | 1.225 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 0.868 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |

Net correction: 0.6407

Adjusted unit
production: 796.52 LCY/hr
Adjusted fleet
production: **796.52** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.409/LCY

Total job time: **74.74** Hours
Total job cost: **\$24,369**

BULLDOZER WORKTask description: **Push Topsoil (12.3 acres) Phase1 Area**Site: **Spotted Burro Pit**Permit Action: **AM-01**Permit/Job#: **M1979192****PROJECT IDENTIFICATION**Task #: **105**State: **Colorado**Abbreviation: **None**Date: **10/29/2020**County: **Fremont**Filename: **M192-105**User: **TC1**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D9T - 9SU**Horsepower: **405**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

| | | <u>Utilization %</u> |
|-----------------------|----------|----------------------|
| Ownership Cost/Hour: | \$156.88 | NA |
| Operating Cost/Hour: | \$127.87 | 100 |
| Ripper own. | | |
| Cost/Hour: | \$0.00 | NA |
| Ripper op. Cost/Hour: | \$0.00 | 0 |
| Operator Cost/Hour: | \$41.30 | NA |

Total unit Cost/Hour: **\$326.04**Total Fleet Cost/Hour: **\$326.04****MATERIAL QUANTITIES**Initial Volume: **19,844**Swell factor: **1.000**Loose volume: **19,844 LCY**Source of estimated volume: **12.3 acres w/ 1ft of topsoil**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**Unadjusted hourly production: **1,243.2 LCY/hr**Materials consistency description: **Partly consolidated stockpile 1.1**Average push gradient: **-10 %**Average site altitude: **5,500 feet**Material weight: **1,600 lbs/LCY**Weight description: **Top Soil**

Job Condition Correction Factor

| | | <u>Source</u> |
|-----------------------|-------|---------------|
| Operator Skill: | 0.750 | (AVG.) |
| Material consistency: | 1.100 | (CAT HB) |
| Dozing method: | 1.100 | (50% SL) |
| Visibility: | 1.000 | (AVG.) |
| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
| Spoil pile: | 0.800 | (FND-RF) |
| Push gradient: | 1.225 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 1.438 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |

Net correction: 1.0615

Adjusted unit
production: 1,319.66 LCY/hr
Adjusted fleet
production: **1319.66** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.247/LCY

Total job time: **15.04** Hours
Total job cost: **\$4,903**

REVEGETATION WORKTask description: Prep and seed Phase 1 area (12.3 Acres)Site: Spotted Burro PitPermit Action: AM-01Permit/Job#: M1979192**PROJECT IDENTIFICATION**Task #: 106State: ColoradoAbbreviation: NoneDate: 10/29/2020County: FremontFilename: M192-106User: TC1Agency or organization name: DRMS**FERTILIZING****Materials**

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|--------------------------|-----------------|-------|---|----------------|
| 10-34-0, 18-46-0, 5-10-5 | 30.00 | pound | \$0.34 | \$10.20 |
| | | | Total Fertilizer Materials Cost/Acre | \$10.20 |

Application

| Description | Cost /Acre |
|---|----------------|
| Tractor towed spreader (MEANS 32 01 90.13 0120) | \$37.03 |
| Total Fertilizer Application Cost/Acre | \$37.03 |

TILLING

| Description | Cost /Acre |
|--------------------------------|----------------|
| Chisel plowing {DMG} | \$94.63 |
| Total Tilling Cost/Acre | \$94.63 |

SEEDING

| Seed Mix | Rate – PLS LBS / Acre | Seeds per SQ. FT | Cost /Acre |
|------------------------------|--------------------------------|------------------------|-----------------|
| Switchgrass - Blackwell | 3.12 | 27.86 | \$35.88 |
| Sideoats Grama - Vaughn | 5.64 | 18.52 | \$47.24 |
| Smooth Brome - Lincoln | 7.50 | 24.97 | \$24.94 |
| Yellow Sweet Clover - Madrid | 2.00 | 11.94 | \$5.65 |
| Western Wheatgrass - Arriba | 10.00 | 25.25 | \$65.00 |
| Totals Seed Mix | 28.26 | 108.53 | \$178.70 |

Application

| Description | Cost /Acre |
|---|-----------------|
| Broadcast seeding [DMG] | \$267.22 |
| Total Seed Application Cost/Acre | \$267.22 |

MULCHING and MISCELLANEOUS**Materials**

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|---|-----------------|------|-------------|-----------------|
| Straw, delivered {MEANS 31 25 14.16 1200} | 2.00 | TON | \$301.00 | \$602.00 |
| Total Mulch Materials Cost/Acre | | | | \$602.00 |

Application

| Description | Cost /Acre |
|--|-----------------|
| Crimping, with tractor {DMG survey data} | \$70.17 |
| Power mulcher (MEANS 32 91 13.16 0350) | \$101.93 |
| Total Mulch Application Cost/Acre | \$172.10 |

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: 12.3 Cost /Acre: \$1,361.88
 Estimated Failure Rate: 10% Cost /Acre*: \$1,361.88
 *Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,
MULCHING

Initial Job Cost: **\$16,751.12**
 Reseeding Job Cost: **\$1,675.11**
 Total Job Cost: **\$18,426**
 Job Hours: **24.00**