



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, Colorado 80203

September 04, 2014

Todd Yee
J&T Consulting, Inc.
305 Denver Avenue, Suite D
Fort Lupton, CO 80621

Re: Technical Revision Request (TR-03), West Farm Pit, Permit No. M-2008-078, Adequacy Review-01

Mr. Yee,

The Division of Reclamation, Mining, and Safety (Division) has completed its preliminary adequacy review of your Technical Revision request (TR-03) and has the following comments:

- 1) It is our understanding that the Operator is proposing to be bonded for a maximum disturbed area of 59.81 acres, which includes:
 - a) 37.77 acres for mining Phases 1-4 (inside slurry wall)
 - b) 11.61 acres for stockpiling in Phase 13
 - c) 10.43 acres for stockpiling in southwestern corner

If this is correct, the maximum acreage allowed to be disturbed by the operation at any time will be 60 acres. If the Operator intends to disturb more than 60 acres within the permit area, a Technical Revision will need to be submitted to increase the maximum allowed disturbed acreage (which may require a surety increase).

- 2) The Operator requests the 20% bonding option for slurry wall installation around Phases 1-4. Because it is our understanding that groundwater has not yet been exposed in the pit, and because the Operator has provided adequate design documents, plans, specifications, and a quality assurance program, the Division will allow the 20% bonding option for slurry wall installation around Phases 1-4.

According to the Division's bond calculations (see enclosed), the total required bond for the 59.81 acres proposed to be disturbed (including 20% of costs for slurry wall installation around Phases 1-4), is in the amount of \$678,977.00. This required bond amount is \$570,977.00 more than the current bond amount for this site (\$108,000.00). Upon approval of this Technical Revision, the Operator will have 60 days to post the additional bond.

- 3) It is our understanding that post-construction testing of the installed slurry wall will be conducted by the State Engineer in the near future. The Operator will need to submit the results of these tests along with the as-built drawings of the slurry wall in a final construction report.
- 4) The Operator proposes a phased bonding plan for slurry wall installation, where a series of slurry wall enclosures are installed within the permit area, until ultimately, the final configuration of the slurry wall remains around the perimeter of the two primary mining areas (Mining North and Mining South).



The Division will not approve this phased bonding plan for slurry wall construction. The Division requires that slurry walls be installed according to the approved final configuration. In this case, the final configuration would have the slurry wall lining the perimeter of the permit boundary. However, because a slurry wall enclosure has already been installed around the current mining phase, at this time, the Division will require slurry wall bonding for only this enclosure (total length = 5,448 linear feet; average depth = 70 ft).

Prior to mining outside of Phases 1-4, the Division will require bonding for the remaining final slurry wall configuration (see enclosed map). The sections of slurry wall already installed will be credited toward the final configuration bond amount so that approximately 8,576 lf will require additional bonding (according to Division measurements of the map submitted; a more accurate total length and average depth will need to be submitted to the Division prior to the next bond calculation).

Therefore, approval of the submitted Technical Revision will require the following stipulation:

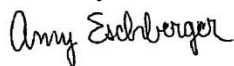
- a) Prior to mining outside of the current slurry wall enclosed area (Phases 1-4; 37.77 acres), the Operator will be required to post additional bond for the approved final configuration of the slurry wall.

Once the slurry wall has been installed in its final configuration, and the State Engineer's certification has been submitted to the Division, the Operator may submit a Surety Reduction request to eliminate the portion of the bond held for the slurry wall.

This concludes the Division's preliminary adequacy review of this application. The decision date for this Technical Revision is September 18, 2014. **Please be advised that if we do not receive responses to this review by the decision date, the Technical Revision will be approved with the stipulation listed above, and additional bond in the amount of \$570,977.00 will need to be submitted within 60 days. If you need more time to respond to this review, it will be your responsibility to request an extension of the review period.**

If you need additional information, please contact me at the Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at 303-866-3567, extension 8129, or by email at amy.eschberger@state.co.us.

Sincerely,



Amy Eschberger
Environmental Protection Specialist

Enclosures: Division's cost summary work from 08/29/2014 for required bond amount
Map submitted with TR-03 including Division markings for clarification

CC: Mr. Karl Nyquist
GP Aggregates, LLC
7991 Shaffer Parkway, Suite 200
Littleton, CO 80127

Tom Kaldenbach, DRMS



COST SUMMARY WORK

Task description: Total Costs

Site: West Farm Pit

Permit Action: TR-03 Bond

 Calculation 2014

Permit/Job#: M2008078

PROJECT IDENTIFICATION

Task #: 111

State: Colorado

Abbreviation: None

Date: 8/29/2014

County: Prowers

Filename: M2008-078-111

User: AME

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

| Task | Description | Form Used | Fleet Size | Task Hours | Cost |
|--------------------------|--|-----------|------------|---------------|------------------|
| 112 | Rip Phase 13 - Stockpile Area, 11.61 acres | RIPPER | 1 | 16.74 | \$3,730.00 |
| 113 | Rip Stockpile Area - SW Corner, 10.43 acres | RIPPER | 1 | 15.07 | \$3,357.00 |
| 114 | Topsoil Ph-1-4 Area 37.77 ac @ 12 in, 2,600 ft haul | SCRAPER1 | 1 | 116.17 | \$110,815.00 |
| 115 | Topsoil Ph-13 Stockpile Area 11.61 ac @ 12 in, 1,400 ft haul | SCRAPER1 | 1 | 26.36 | \$25,148.00 |
| 116 | Topsoil Stockpile Area-SW Corn10.43 ac @ 12 in, 400 ft haul | SCRAPER1 | 1 | 16.79 | \$16,016.00 |
| 117 | Revegetation of 59.81 acres | REVEGE | 1 | 240.00 | \$65,810.00 |
| 118 | 20% Cost of Slurry Wall Construction | DEMOLISH | 1 | 1.00 | \$305,088.00 |
| 119 | Mob/Demob | MOBILIZE | 1 | 10.64 | \$13,592.00 |
| <u>SUBTOTALS:</u> | | | | 442.77 | \$543,556 |

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02%

Total = \$10,979.83

Performance bond: 1.05%

Total = \$5,707.34

Job superintendent: 265.56 hrs

Total = \$19,959.49

Profit: 10.00%

Total = \$54,355.60

TOTAL O & P = \$91,002.26

CONTRACT AMOUNT (direct + O & P) = \$634,558.26

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 0.00

Total = 0.00

Engineering work and/or contract/bid preparation: 2.00%

Total = \$12,691.17

Reclamation management and/or administration: 5.00%

 \$31,727.91

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$135,421.34

TOTAL BOND AMOUNT (direct + indirect) = \$678,977.34

BULLDOZER RIPPING WORK

Task description: Rip Phase 13 - Stockpile Area, 11.61 acres

Site: West Farm Pit Permit Action: TR-03 Bond Permit/Job#: M2008078
Calculation 2014

PROJECT IDENTIFICATION

Task #: 112 State: Colorado Abbreviation: None
Date: 8/29/2014 County: Prowers Filename: M078-112
User: AME

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU Horsepower: 310
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

| | | Utilization % |
|-----------------------------|-----------------|---------------|
| Ownership Cost/Hour: | \$69.05 | NA |
| Operating Cost/Hour: | \$108.22 | 100 |
| Ripper Operating Cost/Hour: | \$7.46 | 100 |
| Operator Cost/Hour: | \$38.01 | NA |
| Total Unit Cost/Hour: | \$222.73 | |
| Total Fleet Cost/Hour: | \$222.73 | |

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 11.61 acres Rip Depth (ft): 1.00 Volume: 18,731 BCY or CCY

Source of estimated quantity: Operator provided in TR-03

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.56 mph
Average Ripping Width: 7.08 degrees
Average Ripping Length: 800.00 feet
Average Dozer Speed: 88.00 feet
Average Maneuver Time: 0.25 feet
Production per unit area: 0.835 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.835 Acres/hr
Site Altitude: 3,600 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.69 Acres/hr
Adjusted Hourly Fleet Production: **0.69** Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **16.75** Hours

Unit cost: \$321.294 Per acre Total job cost: **\$3,730**

BULLDOZER RIPPING WORK

Task description: Rip Stockpile Area - SW Corner, 10.43 acres

Site: West Farm Pit Permit Action: TR-03 Bond Calculation 2014 Permit/Job#: M2008078

PROJECT IDENTIFICATION

Task #: 113 State: Colorado Abbreviation: None
Date: 8/29/2014 County: Prowers Filename: M078-113
User: AME

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU Horsepower: 310
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

| | | Utilization % |
|-----------------------------|-----------------|---------------|
| Ownership Cost/Hour: | <u>\$69.05</u> | <u>NA</u> |
| Operating Cost/Hour: | <u>\$108.22</u> | <u>100</u> |
| Ripper Operating Cost/Hour: | <u>\$7.46</u> | <u>100</u> |
| Operator Cost/Hour: | <u>\$38.01</u> | <u>NA</u> |
| Total Unit Cost/Hour: | <u>\$222.73</u> | |
| Total Fleet Cost/Hour: | <u>\$222.73</u> | |

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 10.43 acres Rip Depth (ft): 1.00 Volume: 16,827 BCY or CCY

Source of estimated quantity: Operator provided in TR-03

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.56 mph
Average Ripping Width: 7.08 degrees
Average Ripping Length: 750.00 feet
Average Dozer Speed: 88.00 feet
Average Maneuver Time: 0.25 feet
Production per unit area: 0.834 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.834 Acres/hr
Site Altitude: 3,600 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.69 Acres/hr
Adjusted Hourly Fleet Production: 0.69 Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 15.07 Hours

Unit cost: \$321.868 Per acre Total job cost: \$3,357

SCRAPER TEAM WORKTask description: Topsoil Ph-1-4 Area 37.77 ac @ 12 in, 2,600 ft haulSite: West Farm PitPermit Action: TR-03 Bond
Calculation 2014Permit/Job#: M2008078**PROJECT IDENTIFICATION**Task #: 114State: ColoradoAbbreviation: NoneDate: 8/29/2014County: ProwersFilename: M078-114User: AMEAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

| Equipment Description | |
|---------------------------------|--------------------------|
| -Scraper: | Cat 627G |
| -Dozer: | Cat D6T LGP |
| Support Equipment -Load Area: | NA |
| -Dump Area: | Cat D6T LGP |
| Road Maintenance -Motor Grader: | CAT 14M |
| -Water Truck: | Water Tanker, 3,500 Gal. |

Cost Breakdown:

| | Scraper Work Team | | Support Equipment | | Maintenance Equipment | |
|-----------------------|-------------------|----------|-------------------|-----------|-----------------------|-------------|
| | Scraper | Dozer | Load Area | Dump Area | Motor Grader | Water Truck |
| %Utilization-machine: | 100 | 50 | NA | 50 | 50 | 50 |
| Ownership cost/hour: | \$69.99 | \$38.47 | NA | \$38.47 | \$42.03 | \$10.57 |
| Operating cost/hour: | \$184.31 | \$33.58 | NA | \$33.58 | \$34.94 | \$18.21 |
| Ripper op. cost/hour: | NA | \$0.00 | NA | \$0.00 | \$0.00 | \$0.00 |
| Operator cost/hour: | \$33.56 | \$38.01 | NA | \$38.01 | \$24.47 | \$27.88 |
| Unit Subtotals: | \$287.87 | \$110.05 | NA | \$110.05 | \$101.43 | \$56.67 |
| Number of Units: | 2 | 1 | 0 | 1 | 1 | 1 |
| Group Subtotals: | Work: | \$685.79 | Support: | \$110.05 | Maint: | \$158.10 |

Total work team cost/hour: **\$953.94****MATERIAL QUANTITIES**Initial volume: 60,935

CCY

Swell factor: 1.115Loose volume: **67,943**

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

| | | | | |
|-----------------------|----------------------|--------------------|---------------------|-----|
| Material weight: | <u>2,100 lbs/LCY</u> | Struck Volume: | <u>15.70</u> | LCY |
| Material description: | <u>Earth - Loam</u> | Heaped Volume: | <u>22.00</u> | LCY |
| Rated Payload: | <u>52,800 pounds</u> | Average Volume: | <u>18.85</u> | LCY |
| Payload Capacity: | <u>25.14 LCY</u> | Adjusted Capacity: | <u>18.85</u> | LCY |

Cycle Time:Scraper Loading Time: 0.50 MinutesManeuver and Spread Time: 0.60 MinutesJob Condition Correction:

Site Altitude: 3600 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 | 2600.00 | -1.00 | 3.00 | 2.00 | 2868 | 1.07 |

Haul Time: 1.07 minutesReturn Route:

| Seg # | Haul Distance (Ft) | Grade (%) | Roll. Res (%) | Total Res (%) | Velocity (fpm) | Travel Time (min) |
|-------|--------------------|-----------|---------------|---------------|----------------|-------------------|
| 1 | 2600.00 | 1.00 | 3.00 | 4.00 | 2849 | 1.04 |

Return Time: 1.04 minutesTotal Scraper team cycle time: 3.21 minutesAdjusted for job conditions: 292.44 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 584.88 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 584.88 LCY/HourUnadjusted unit production/hour: 352.34 LCY/Hour

Optimal Number of Scrapers per push dozer: _____

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 116.17 HoursUnit cost: \$1.631 /LCYTotal job cost: \$110,815

SCRAPER TEAM WORKTask description: Topsoil Ph-13 Stockpile Area 11.61 ac @ 12 in, 1,400 ft haul

Site: West Farm Pit Permit Action: TR-03 Bond Calculation 2014 Permit/Job#: M2008078
 User: AME

PROJECT IDENTIFICATION

Task #: 115 State: Colorado Abbreviation: None
 Date: 8/29/2014 County: Prowers Filename: M078-115
 User: AME

Agency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

| Equipment Description | |
|---------------------------------|--------------------------|
| -Scraper: | Cat 627G |
| -Dozer: | Cat D6T LGP |
| Support Equipment -Load Area: | NA |
| -Dump Area: | Cat D6T LGP |
| Road Maintenance -Motor Grader: | CAT 14M |
| -Water Truck: | Water Tanker, 3,500 Gal. |

| Cost Breakdown: | Scraper Work Team | | Support Equipment | | Maintenance Equipment | |
|------------------------|-------------------|----------|-------------------|-----------|-----------------------|-------------|
| | Scraper | Dozer | Load Area | Dump Area | Motor Grader | Water Truck |
| %Utilization-machine: | 100 | 50 | NA | 50 | 50 | 50 |
| Ownership cost/hour: | \$69.99 | \$38.47 | NA | \$38.47 | \$42.03 | \$10.57 |
| Operating cost/hour: | \$184.31 | \$33.58 | NA | \$33.58 | \$34.94 | \$18.21 |
| Ripper op. cost/hour: | NA | \$0.00 | NA | \$0.00 | \$0.00 | \$0.00 |
| Operator cost/hour: | \$33.56 | \$38.01 | NA | \$38.01 | \$24.47 | \$27.88 |
| Unit Subtotals: | \$287.87 | \$110.05 | NA | \$110.05 | \$101.43 | \$56.67 |
| Number of Units: | 2 | 1 | 0 | 1 | 1 | 1 |
| Group Subtotals: | Work: | \$685.79 | Support: | \$110.05 | Maint: | \$158.10 |

Total work team cost/hour: **\$953.94****MATERIAL QUANTITIES**

Initial volume: 18,730 CCY Swell factor: 1.115
 Loose volume: 20,884 LCY

Source of estimated volume: Division of Reclamation, Mining & Safety
 Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION**Scraper Bowl (volume) Basis:**

| | | | | |
|-----------------------|----------------------|--------------------|--------------|-----|
| Material weight: | <u>2,100 lbs/LCY</u> | Struck Volume: | <u>15.70</u> | LCY |
| Material description: | <u>Earth - Loam</u> | Heaped Volume: | <u>22.00</u> | LCY |
| Rated Payload: | <u>52,800 pounds</u> | Average Volume: | <u>18.85</u> | LCY |
| Payload Capacity: | <u>25.14 LCY</u> | Adjusted Capacity: | <u>18.85</u> | LCY |

Cycle Time:Scraper Loading Time: 0.50 MinutesManeuver and Spread Time: 0.60 MinutesJob Condition Correction:

Site Altitude: 3600 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 | 1400.00 | -1.00 | 3.00 | 2.00 | 2868 | 0.65 |

Haul Time: 0.65 minutesReturn Route:

| Seg # | Haul Distance (Ft) | Grade (%) | Roll. Res (%) | Total Res (%) | Velocity (fpm) | Travel Time (min) |
|-------|--------------------|-----------|---------------|---------------|----------------|-------------------|
| 1 | 1400.00 | 1.00 | 3.00 | 4.00 | 2849 | 0.62 |

Return Time: 0.62 minutesTotal Scraper team cycle time: 2.37 minutesAdjusted for job conditions: 396.09 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 792.18 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 792.18 LCY/HourUnadjusted unit production/hour: 477.22 LCY/Hour

Optimal Number of Scrapers per push dozer: _____

JOB TIME AND COSTFleet size: 1 Team(s) Total job time: 26.36 HoursUnit cost: \$1.204 /LCY Total job cost: \$25,148

SCRAPER TEAM WORKTask description: Topsoil Stockpile Area-SW Corn10.43 ac @ 12 in, 400 ft haulSite: West Farm PitPermit Action: TR-03 Bond
Calculation 2014Permit/Job#: M2008078**PROJECT IDENTIFICATION**Task #: 116State: ColoradoAbbreviation: NoneDate: 8/29/2014County: ProwersFilename: M078-116User: AMEAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

| | Equipment Description |
|---------------------------------|--------------------------|
| -Scraper: | Cat 627G |
| -Dozer: | Cat D6T LGP |
| Support Equipment -Load Area: | NA |
| -Dump Area: | Cat D6T LGP |
| Road Maintenance -Motor Grader: | CAT 14M |
| -Water Truck: | Water Tanker, 3,500 Gal. |

Cost Breakdown:

| | Scraper Work Team | | Support Equipment | | Maintenance Equipment | |
|-----------------------|-------------------|----------|-------------------|-----------|-----------------------|-------------|
| | Scraper | Dozer | Load Area | Dump Area | Motor Grader | Water Truck |
| %Utilization-machine: | 100 | 50 | NA | 50 | 50 | 50 |
| Ownership cost/hour: | \$69.99 | \$38.47 | NA | \$38.47 | \$42.03 | \$10.57 |
| Operating cost/hour: | \$184.31 | \$33.58 | NA | \$33.58 | \$34.94 | \$18.21 |
| Ripper op. cost/hour: | NA | \$0.00 | NA | \$0.00 | \$0.00 | \$0.00 |
| Operator cost/hour: | \$33.56 | \$38.01 | NA | \$38.01 | \$24.47 | \$27.88 |
| Unit Subtotals: | \$287.87 | \$110.05 | NA | \$110.05 | \$101.43 | \$56.67 |
| Number of Units: | 2 | 1 | 0 | 1 | 1 | 1 |
| Group Subtotals: | Work: | \$685.79 | Support: | \$110.05 | Maint: | \$158.10 |

Total work team cost/hour: **\$953.94****MATERIAL QUANTITIES**Initial volume: 16,827

CCY

Swell factor: 1.115Loose volume: **18,762**

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

| | | | | |
|-----------------------|----------------------|--------------------|---------------------|-----|
| Material weight: | <u>2,100 lbs/LCY</u> | Struck Volume: | <u>15.70</u> | LCY |
| Material description: | <u>Earth - Loam</u> | Heaped Volume: | <u>22.00</u> | LCY |
| Rated Payload: | <u>52,800 pounds</u> | Average Volume: | <u>18.85</u> | LCY |
| Payload Capacity: | <u>25.14 LCY</u> | Adjusted Capacity: | <u>18.85</u> | LCY |

Cycle Time:Scraper Loading Time: 0.50 MinutesManeuver and Spread Time: 0.60 MinutesJob Condition Correction:

Site Altitude: 3600 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 | 2824 | 0.33 |

Haul Time: 0.33 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 | 2874 | 0.25 |

Return Time: 0.25 minutesTotal Scraper team cycle time: 1.68 minutesAdjusted for job conditions: 558.77 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 1,117.54 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 1,117.54 LCY/HourUnadjusted unit production/hour: 673.21 LCY/Hour

Optimal Number of Scrapers per push dozer: _____

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 16.79 HoursUnit cost: \$0.854 /LCYTotal job cost: \$16,016

REVEGETATION WORKTask description: Revegetation of 59.81 acres

Site: West Farm Pit Permit Action: TR-03 Bond Calculation 2014 Permit/Job#: M2008078
 User: AME

PROJECT IDENTIFICATION

Task #: 117 State: Colorado Abbreviation: None
 Date: 8/29/2014 County: Prowers Filename: M078-117
 User: AME

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 |
|--------------------------------|---------------|
| | \$ |
| Total Tilling Cost/Acre | \$0.00 |

SEEDING

| Seed Mix | Rate – PLS LBS / Acre | Seeds per SQ. FT | Cost /Acre |
|-----------------------------|--------------------------------|------------------------|-----------------|
| Alkali Sacaton | 1.50 | 58.54 | \$34.22 |
| Switchgrass - Blackwell | 4.00 | 35.72 | \$21.24 |
| Blue Grama - Lovington | 3.00 | 48.97 | \$32.58 |
| Sideoats Grama - Vaughn | 9.00 | 29.55 | \$101.16 |
| Western Wheatgrass - Barton | 16.00 | 40.40 | \$58.88 |
| Totals Seed Mix | 33.50 | 213.18 | \$248.08 |

Application

| Description | Cost /Acre |
|---|----------------|
| Drill seeding (DRMS Cost Data) | \$88.20 |
| Total Seed Application Cost/Acre | \$88.20 |

MULCHING and MISCELLANEOUS**Materials**

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|---|-----------------|------|-------------|-----------------|
| Straw, delivered {MEANS 31 25 14.16 1200} | 2.00 | TON | \$265.00 | \$530.00 |
| Total Mulch Materials Cost/Acre | | | | \$530.00 |

Application

| Description | Cost /Acre |
|--|----------------|
| Crimping, with tractor {DMG survey data} | \$65.89 |
| Total Mulch Application Cost/Acre | \$65.89 |

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: | 59.81 | Cost /Acre: | \$932.17 |
| Estimated Failure Rate: | 50% | Cost /Acre*: | \$336.28 |
| *Selected Replanting Work Items: | SEEDING | | |
| Initial Job Cost: | \$55,753.09 | | |
| Reseeding Job Cost: | \$10,056.45 | | |
| Total Job Cost: | \$65,810 | | |
| Job Hours: | 240.00 | | |

DEMOLITION (SLURRY WALL) WORK

Task description: 20% Cost of Slurry Wall Construction

Site: West Farm Pit Permit Action: TR-03 Bond Permit/Job#: M2008078
Calculation 2014

PROJECT IDENTIFICATION

Task #: 118 State: Colorado Abbreviation: None
Date: 8/29/2014 County: Prowers Filename: M078-118
User: AME

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 100.00 %

| Structure or Item Description | Dimensions | Demolition Menu Selection | Quantity | Unit | Unit Cost | Total Cost |
|--|------------|---------------------------|----------|------|-----------|--------------|
| SlurryWall Installation (70 ft x \$4)(20%) | na | USER PROVIDED ITEM | 5,448.00 | ft | \$56.00 | \$305,088.00 |

Job Hours: 1.00 Subtotal (unadjusted): \$305,088.00 Total Cost (adjusted for location): \$305,088.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob/Demob**

Site: **West Farm Pit** Permit Action: **TR-03 Bond** Calculation 2014 Permit/Job#: **M2008078**

PROJECT IDENTIFICATION

Task #: **119** State: **Colorado** Abbreviation: **None**
 Date: **8/29/2014** County: **Prowers** Filename: **M078-119**
 User: **AME**

Agency or organization name: **DRMS****EQUIPMENT TRANSPORT RIG COST**

Shift basis: **1 per day**
 Cost Data Source: **CRG Data**

Truck Tractor Description: **GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED, 400 HP (2ND HALF, 2006)**Truck Trailer Description: **GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT TRAILER (25T, 50T, AND 100T)****Cost Breakdown:**

| Available Rig Capacities | 0-25 Tons | 26-50 Tons | 51+ Tons |
|---------------------------------|------------------|-------------------|-----------------|
| Ownership Cost/Hour: | \$16.63 | \$18.37 | \$22.33 |
| Operating Cost/Hour: | \$44.38 | \$46.13 | \$50.07 |
| Operator Cost/Hour: | \$27.66 | \$27.66 | \$27.66 |
| Helper Cost/Hour: | \$0.00 | \$25.39 | \$25.39 |
| Total Unit Cost/Hour: | \$88.67 | \$117.55 | \$125.45 |

NON ROADABLE EQUIPMENT:

| Machine Description | Weight/ Unit (TONS) | Owner ship Cost/hr/ unit | Haul Rig Cost/hr/unit | Fleet Size | Haul Trip Cost/hr/ fleet | Return Trip Cost/hr/ fleet | DOT Permit Cost/ fleet |
|-------------------------------------|---------------------|--------------------------|-----------------------|------------|--------------------------|----------------------------|------------------------|
| Cat D8T - 8SU | 53.08 | \$69.05 | \$125.45 | 1 | \$194.50 | \$125.45 | \$250.00 |
| Cat D6T XL | 23.25 | \$34.93 | \$88.67 | 2 | \$247.20 | \$177.34 | \$500.00 |
| Cat 627G | 41.80 | \$69.99 | \$117.55 | 2 | \$375.09 | \$235.10 | \$500.00 |
| CAT 14M | 23.57 | \$42.03 | \$88.67 | 1 | \$130.70 | \$88.67 | \$250.00 |
| Drill/Broadcast Seeder with Tractor | 25.00 | \$39.59 | \$88.67 | 1 | \$128.26 | \$88.67 | \$250.00 |

Subtotals: **\$1,075.75** **\$715.23** **\$1,750.00**

ROADABLE EQUIPMENT:

| Machine Description | Total Cost/hr/ unit | Fleet Size | Haul Trip Cost/hr/ fleet | Return Trip Cost/hr/ fleet |
|--------------------------|---------------------|------------|--------------------------|----------------------------|
| Water Tanker, 3,500 Gal. | \$46.99 | 1 | \$46.99 | \$46.99 |

Subtotals: **\$46.99** **\$46.99**

EQUIPMENT HAUL DISTANCE and Time

| | | |
|--|-----------------------|-------|
| Nearest Major City or Town within project area region: | <u>BURLINGTON, CO</u> | |
| Total one-way travel distance: | <u>108.00</u> | miles |
| Average Travel Speed: | <u>50.00</u> | mph |

| | |
|-------------------------------------|--------------------|
| Total Non-Roadable Mob/Demob Cost * | <u>\$13,388.53</u> |
| * two round trips with haul rig: | |
| Total Roadable Mob/Demob Cost ** | <u>\$203.00</u> |
| ** one round trip, no haul rig: | |

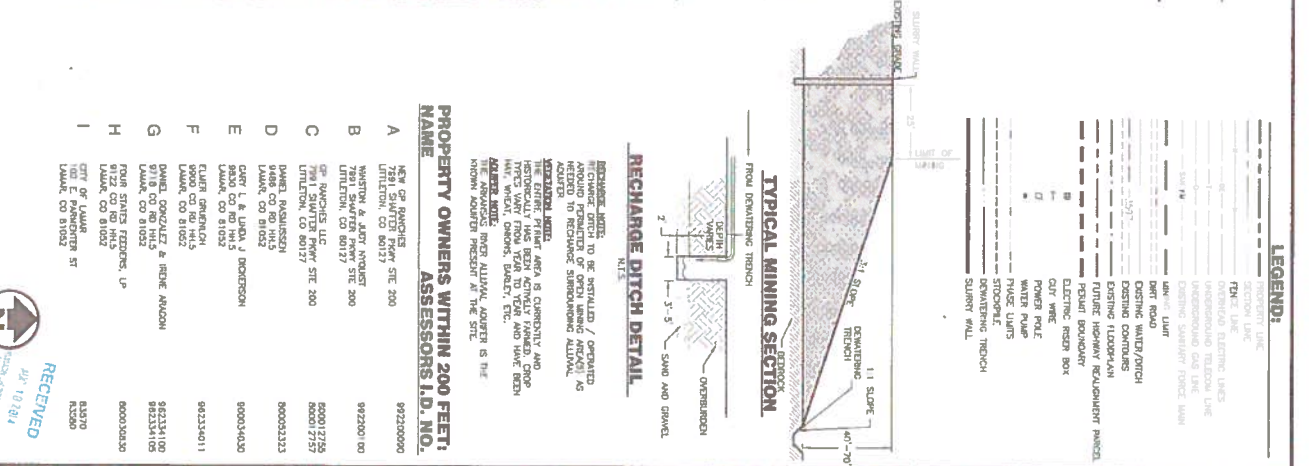
Transportation Cycle Time:

| | Non-Roadable Equipment | Roadable Equipment |
|-------------------------|---------------------------|-----------------------|
| Haul Time (Hours): | <u>2.16</u> | <u>2.16</u> |
| Return Time (Hours): | <u>2.16</u> | <u>2.16</u> |
| Loading Time (Hours): | <u>0.50</u> | <u>NA</u> |
| Unloading Time (Hours): | <u>0.50</u> | <u>NA</u> |
| Subtotals: | <u>5.32</u> | <u>4.32</u> |

JOB TIME AND COST

| | | |
|-----------------|--------------|-------|
| Total job time: | <u>10.64</u> | Hours |
|-----------------|--------------|-------|

| | |
|-----------------|-----------------|
| Total job cost: | <u>\$13,592</u> |
|-----------------|-----------------|



TOTAL MINING AREA = 185.26 AC

RECEIVED
JUL 10 2 11
FEDERAL BUREAU OF INVESTIGATION
U. S. DEPARTMENT OF JUSTICE

| | | |
|---|--|--------------------------|
| A | NEW SPAIN INC NEW SPAIN PAPER STG 200 LITTLETON, CO 80127 | 9823209090 |
| B | WESTERN & LLOYD AMERICA LTD LITTLETON, CO 80127 | 9822001001 |
| C | GP SERVICES LLC TRAIL SMITHS PAPER STG 200 LITTLETON, CO 80127 | 8000171258 8000170157 |
| D | WESTERN & LLOYD AMERICA LTD LITTLETON, CO 80127 | 9000033323 |
| E | DAVE L & DAVID S DICKERSON LITTLETON, CO 80127 | 8000340029 |
| F | FLUOR CORP 9000 CO RD 1414 LITTLETON, CO 81052 | 9823501101 |
| G | DANIEL GONZALEZ & HELEN MAXSON LITTLETON, CO 81052 | 9823341001 9823341003 |
| H | WILSON STATES PAPER CO 8122 CO RD 81052 LITTLETON, CO 81052 | 8000330030 |
| I | CITY OF LITTLETON 81220 LITTLETON, CO 81052 | 835701 835700 |

**PROPERTY OWNERS WITHIN 200 FEET:
NAME ASSESSORS I.D. NO.**

[illegible]

MTC

TYPICAL MINING SECTION

[illegible]

GP Ranches, LLC

West Farm Pit

M-2008-078

Exhibit C - Pre-Mining/Mining Plan

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