



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

November 7, 2024

Frank Leone Jr.
Leone Sand & Gravel LLC
2400 E Main Street
Trinidad, CO 81082

**RE: Leone Huerfano Gravel Pit - File No. M-2010-004, Technical Revision No. 2 (TR2),
Adequacy Review No. 1**

Dear Frank Leone Jr:

The Division of Reclamation, Mining and Safety (Division) is in the process of reviewing the above referenced Technical Revision in order to ensure that it adequately satisfies the requirements of the Colorado Mined Land Reclamation Act (§ § 34-32.5-101-34-32.5-125) (Act) and the Rules and Regulations for the Extraction of Construction Materials (Rules). During review of the material submitted, the Division determined that the following issues of concern need to be adequately addressed before the Technical Revision can be considered for approval:

1. Please clarify for the record that the processing area is currently within the east side of the “current operation site” labeled on the Mine Plan Map submitted with the TR2 application. Also please clarify whether the processing area will remain in its current location for the foreseeable future; and commit to submitting a new mine plan narrative and map if the processing area location is planned to change.
2. Please clarify for the record that only the portions of County Road 611.1 that are located adjacent to the current disturbance onsite have been moved at this time.
3. Enclosed is an updated cost estimate to account for the highwall and disturbance acreage changes proposed in the TR2 application. If you have any questions or comments, please send them by November 14, 2024 to amber.gibson@state.co.us or call me at 720-836-0967. If no questions are received, the Division may issue a surety increase notice for the difference in amount from what is currently held by the Division. The Operator will have 60 days from the date of the surety increase notice to submit and obtain acceptance of the increase in financial warranty from the Division in accordance with Rule 4.2.1(2).



Please submit your responses to the above listed issues at least three days prior to the decision date in order to allow the Division sufficient time for review. If you cannot address the above issues by this date, please request an extension to the decision due date to ensure adequate time for the Division to review materials. If any adequacy issues remain by the decision due date the Division may deny your request.

If you have any questions, please send me an email at amber.gibson@state.co.us, or call me at 720-836-0967.

Sincerely,



Amber M. Gibson
Environmental Protection Specialist

Enclosures: 2024 TR2 Updated Reclamation Cost Estimate

COST SUMMARY WORK

Task description: Reclamation Cost Summary

Site: Leone Huerfano Gravel Pit

Permit Action: 2024 Inspection & TR2

Permit/Job#: M2010004

PROJECT IDENTIFICATION

Task #: 000
Date: 11/7/2024
User: AMG

State: Colorado
County: Huerfano

Abbreviation: None
Filename: M004-000

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

| Task | Description | Form Used | Fleet Size | Task Hours | Cost |
|--------------------------|--|-----------|------------|---------------|-----------------|
| 001 | Grade out shorter highwalls to 3H:1V | DOZER | 1 | 0.12 | \$25 |
| 002 | Grade out highwalls to 3H:1V | DOZER | 1 | 27.97 | \$6,085 |
| 003 | Spread Topsoil 6-in over 26.05 acres | DOZER | 1 | 71.46 | \$15,526 |
| 004 | Revegetation of 27 acres | REVEGE | 1 | 27.00 | \$57,293 |
| 004b | Re-seeding and weed control on 5 acres | REVEGE | 1 | 5.00 | \$3,932 |
| 005 | Mob/Demob | MOBILIZE | 1 | 5.56 | \$4,139 |
| <u>SUBTOTALS:</u> | | | | 137.11 | \$87,000 |

INDIRECT COSTS

OVERHEAD AND PROFIT:

| | | | |
|----------------------|-------|---------|---------|
| Liability insurance: | 2.02 | Total = | \$1,757 |
| Performance bond: | 1.05 | Total = | \$914 |
| Job superintendent: | 68.56 | Total = | \$5,434 |
| Profit: | 10.00 | Total = | \$8,700 |

TOTAL O & P =

CONTRACT AMOUNT (direct + O & P) =

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

| | | | |
|--|-------|---------|---------|
| Financial warranty processing (legal/related costs): | \$500 | Total = | \$500 |
| Engineering work and/or contract/bid preparation: | 4.25 | Total = | \$4,412 |
| Reclamation management and/or administration: | 5.00 | | \$5,190 |

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$26,907

TOTAL BOND AMOUNT (direct + indirect) = \$113,907

BULLDOZER WORKTask description: **Grade out shorter highwalls to 3H:1V**

Site: **Leone Huerfano Gravel Pit** Permit Action: **2024 inspection & TR2** Permit/Job#: **M2010004**

PROJECT IDENTIFICATION

Task #: **001** State: **Colorado** Abbreviation: **None**
 Date: **11/7/2024** County: **Huerfano** Filename: **1**
 User: **AMG**

Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**

Basic Machine: **Cat D7R DS XR Series II**
 Horsepower: **240**
 Blade Type: **Semi-Universal**
 Attachment: **3-shank ripper**
 Shift Basis: **1 per day**
 Data Source: **(CRG)**

Cost Breakdown:

| | | <u>Utilization %</u> |
|------------------------|-----------------------|-----------------------------|
| Ownership Cost/Hour: | <u>\$90.24</u> | <u>NA</u> |
| Operating Cost/Hour: | <u>\$78.95</u> | <u>100</u> |
| Ripper own. Cost/Hour: | <u>\$9.25</u> | <u>NA</u> |
| Ripper op. Cost/Hour: | <u>\$0.52</u> | <u>10</u> |
| Operator Cost/Hour: | <u>\$38.59</u> | <u>NA</u> |

Total unit Cost/Hour: **\$217.55**
 Total Fleet Cost/Hour: **\$217.55**

MATERIAL QUANTITIES

Initial Volume: **68**
 Swell factor: **1.124**
 Loose volume: **76 LCY**

Source of estimated volume: **Highwall 130' long x 8' high north side**
 Source of estimated swell factor: **Cat Handbook**

HOURLY PRODUCTION

Average push distance: **50 feet**
 Unadjusted hourly production: **1,022.9 LCY/hr**

Materials consistency description: **Compacted fill or embankment 0.9**

Average push gradient: **-15 %**
 Average site altitude: **6,200 feet**

Material weight: **2,900 lbs/LCY**Weight description: **Sand and gravel - Dry**

| <u>Job Condition Correction Factor</u> | | <u>Source</u> |
|---|---------------------|-------------------------|
| Operator Skill: | <u>0.750</u> | <u>(AVG.)</u> |
| Material consistency: | <u>0.900</u> | <u>(CAT HB))</u> |
| Dozing method: | <u>1.200</u> | <u>(SLOT)</u> |
| Visibility: | <u>1.000</u> | <u>(AVG.)</u> |

| | | |
|------------------|-------|---------------|
| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
| Spoil pile: | 0.900 | (SSD-FC) |
| Push gradient: | 1.329 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 0.793 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |

Net correction: 0.6377

Adjusted unit production: 652.30 LCY/hr

Adjusted fleet production: **652.3** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.334/LCY

Total job time: **0.12** Hours

Total job cost: **\$25**

BULLDOZER WORKTask description: **Grade out highwalls to 3H:1V**

Site: **Leone Huerfano Gravel Pit** Permit Action: 2024 inspection & TR2 Permit/Job#: M2010004

PROJECT IDENTIFICATION

Task #: 002 State: Colorado Abbreviation: None
 Date: 11/7/2024 County: Huerfano Filename: 2
 User: AMG

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine: Cat D7R DS XR Series II
 Horsepower: 240
 Blade Type: Semi-Universal
 Attachment: 3-shank ripper
 Shift Basis: 1 per day
 Data Source: (CRG)

Cost Breakdown:

| | | <u>Utilization %</u> |
|------------------------|-----------------|----------------------|
| Ownership Cost/Hour: | <u>\$90.24</u> | <u>NA</u> |
| Operating Cost/Hour: | <u>\$78.95</u> | <u>100</u> |
| Ripper own. Cost/Hour: | <u>\$9.25</u> | <u>NA</u> |
| Ripper op. Cost/Hour: | <u>\$0.52</u> | <u>10</u> |
| Operator Cost/Hour: | <u>\$38.59</u> | <u>NA</u> |
| Total unit Cost/Hour: | <u>\$217.55</u> | |
| Total Fleet Cost/Hour: | <u>\$217.55</u> | |

MATERIAL QUANTITIES

Initial Volume: 18,041
 Swell factor: 1.124
 Loose volume: 20,271 LCY

Source of estimated volume: Highwall 1370' long x 40' throughout pit
 Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 50 feet
 Unadjusted hourly production: 1,022.9 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: -15 %
 Average site altitude: 6,200 feet

Material weight: 2,900 lbs/LCYWeight description: Sand and gravel - Dry

| <u>Job Condition Correction Factor</u> | | <u>Source</u> |
|--|--------------|------------------|
| Operator Skill: | <u>0.750</u> | <u>(AVG.)</u> |
| Material consistency: | <u>0.900</u> | <u>(CAT HB))</u> |
| Dozing method: | <u>1.200</u> | <u>(SLOT)</u> |
| Visibility: | <u>1.000</u> | <u>(AVG.)</u> |

| | | |
|------------------|-------|---------------|
| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
| Spoil pile: | 1.000 | (DOZ-OC) |
| Push gradient: | 1.329 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 0.793 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |

Net correction: 0.7085

Adjusted unit production: 724.72 LCY/hr

Adjusted fleet production: 724.72 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.300/LCY

Total job time: 27.97 Hours

Total job cost: \$6,085

BULLDOZER WORKTask description: Spread Topsoil 6-in over 26.05 acresSite: Leone Huerfano Gravel Pit Permit Action: 2024 inspection & TR2 Permit/Job#: M2010004**PROJECT IDENTIFICATION**Task #: 003 State: Colorado Abbreviation: None
Date: 11/7/2024 County: Huerfano Filename: 3
User: AMGAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D7R DS XR Series II
Horsepower: 240
Blade Type: Semi-Universal
Attachment: 3-shank ripper
Shift Basis: 1 per day
Data Source: (CRG)**Cost Breakdown:**

| | | <u>Utilization %</u> |
|------------------------|----------------|----------------------|
| Ownership Cost/Hour: | <u>\$90.24</u> | <u>NA</u> |
| Operating Cost/Hour: | <u>\$78.95</u> | <u>100</u> |
| Ripper own. Cost/Hour: | <u>\$9.25</u> | <u>NA</u> |
| Ripper op. Cost/Hour: | <u>\$0.26</u> | <u>5</u> |
| Operator Cost/Hour: | <u>\$38.59</u> | <u>NA</u> |

Total unit Cost/Hour: \$217.29
Total Fleet Cost/Hour: \$217.29**MATERIAL QUANTITIES**Initial Volume: 21,014
Swell factor: 1.000
Loose volume: 21,014 LCYSource of estimated volume: 26.05 acres of 35.27 acre total dist. needs topsoil
Source of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 300 feet
Unadjusted hourly production: 311.1 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: 0 %
Average site altitude: 6,200 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil

| <u>Job Condition Correction Factor</u> | | <u>Source</u> |
|--|--------------|-----------------|
| Operator Skill: | <u>0.750</u> | <u>(AVG.)</u> |
| Material consistency: | <u>1.100</u> | <u>(CAT HB)</u> |
| Dozing method: | <u>1.200</u> | <u>(SLOT)</u> |
| Visibility: | <u>1.000</u> | <u>(AVG.)</u> |

| | | |
|------------------|-------|---------------|
| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
| Spoil pile: | 0.800 | (FND-RF) |
| Push gradient: | 1.000 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 1.438 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |

Net correction: 0.9453

Adjusted unit production: 294.08 LCY/hr

Adjusted fleet production: **294.08** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.739/LCY

Total job time: **71.46** Hours

Total job cost: **\$15,526**

REVEGETATION WORKTask description: **Revegetation of 27 acres**Site: **Leone Huerfano Gravel Pit**Permit Action: 2024 inspection &
TR2Permit/Job#: M2010004**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 11/7/2024County: HuerfanoFilename: M004-004User: AMGAgency or organization name: DRMS**TILLING**

| Description | Cost /Acre |
|--|-----------------|
| Disc harrowing, 6" deep (MEANS 32 91 13.23 6100) | \$117.61 |
| Weed control spraying (MEANS 31 31 16.13 3100) | \$338.80 |
| Total Tilling Cost/Acre | \$456.41 |

SEEDING

| Seed Mix | Rate – PLS LBS / Acre | Seeds per SQ. FT | Cost /Acre |
|-----------------------------|--------------------------------|------------------------|-----------------|
| Blue Grama - Native | 0.90 | 14.69 | \$19.19 |
| Indian Ricegrass - Native | 0.60 | 1.94 | \$10.38 |
| Little Bluestem - Native | 0.40 | 2.39 | \$6.16 |
| Sideoats Grama - Vaughn | 1.10 | 3.61 | \$27.05 |
| Galleta | 0.20 | 0.73 | \$11.09 |
| Needle and Thread | 1.10 | 2.90 | \$89.57 |
| Western Wheatgrass - Native | 4.80 | 12.12 | \$43.23 |
| Needlegrass, Green - Lodorm | 0.50 | 2.08 | \$4.32 |
| Totals Seed Mix | 9.60 | 40.46 | \$210.98 |

Application

| Description | Cost /Acre |
|---|-----------------|
| Drill Seeding (DRMS Survey Cost) | \$236.64 |
| Total Seed Application Cost/Acre | \$236.64 |

MULCHING and MISCELLANEOUS**Materials**

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|---|-----------------|------|-------------|-----------------|
| Hay, delivered {MEANS 31 25 14.16 1200} | 2.00 | TON | \$492.78 | \$985.56 |
| Total Mulch Materials Cost/Acre | | | | \$985.56 |

Application

| Description | Cost /Acre |
|--|-------------------|
| Crimping, with tractor {DMG survey data} | \$85.37 |
| Power mulcher (MEANS 32 91 13.16 0350) | \$157.25 |
| Total Mulch Application Cost/Acre | \$242.63 |

JOB TIME AND COST

No. of Acres: 26.05
Estimated Failure Rate: 15%
*Selected Replanting Work Items: SEEDING

Cost /Acre: \$2,132.22
Cost /Acre*: \$447.62

Initial Job Cost: **\$55,544.33**
Reseeding Job Cost: **\$1,749.08**
Total Job Cost: **\$57,293**
Job Hours: **27.00**

REVEGETATION WORKTask description: **Re-seeding and weed control on 5 acres**Site: **Leone Huerfano Gravel Pit**Permit Action: 2024 inspection &
TR2Permit/Job#: M2010004**PROJECT IDENTIFICATION**Task #: 004BState: ColoradoAbbreviation: NoneDate: 11/7/2024County: HuerfanoFilename: 4bUser: AMGAgency or organization name: DRMS**TILLING**

| Description | Cost /Acre |
|--|-------------------|
| Weed control spraying (MEANS 31 31 16.13 3100) | \$338.80 |
| Total Tilling Cost/Acre | \$338.80 |

SEEDING

| Seed Mix | Rate – PLS LBS / Acre | Seeds per SQ. FT | Cost /Acre |
|-----------------------------|--|---------------------------------|-------------------|
| Blue Grama - Native | 0.90 | 14.69 | \$19.19 |
| Indian Ricegrass - Native | 0.60 | 1.94 | \$10.38 |
| Little Bluestem - Native | 0.40 | 2.39 | \$6.16 |
| Sideoats Grama - Vaughn | 1.10 | 3.61 | \$27.05 |
| Galleta | 0.20 | 0.73 | \$11.09 |
| Needle and Thread | 1.10 | 2.90 | \$89.57 |
| Western Wheatgrass - Native | 4.80 | 12.12 | \$43.23 |
| Needlegrass, Green - Lodorm | 0.50 | 2.08 | \$4.32 |
| Totals Seed Mix | 9.60 | 40.46 | \$210.98 |

Application

| Description | Cost /Acre |
|---|-------------------|
| Drill Seeding (DRMS Survey Cost) | \$236.64 |
| Total Seed Application Cost/Acre | \$236.64 |

JOB TIME AND COSTNo. of Acres: 5Cost /Acre: \$786.42Estimated Failure Rate: 10%Cost /Acre*: \$0.00*Selected Replanting Work Items: NONEInitial Job Cost: **\$3,932.10**Reseeding Job Cost: **\$0.00**Total Job Cost: **\$3,932**Job Hours: **5.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob/Demob**Site: **Leone Huerfano Gravel Pit**Permit Action: **2024 Inspection & TR2**Permit/Job#: **M2010004****PROJECT IDENTIFICATION**

Task #: **005** State: **Colorado** Abbreviation: **None**
 Date: **11/7/2024** County: **Huerfano** Filename: **5**
 User: **AMG**

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: | \$10.44 | \$22.18 | \$23.94 |
| Operating Cost/Hour: | \$26.48 | \$54.55 | \$55.65 |
| Operator Cost/Hour: | \$22.52 | \$22.52 | \$22.52 |
| Helper Cost/Hour: | \$0.00 | \$23.53 | \$23.53 |
| Total Unit Cost/Hour: | \$59.44 | \$122.78 | \$125.64 |

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 D7R DS Series II LGP | 38.49 | \$99.49 | \$122.78 | 1 | \$222.27 | \$122.78 | \$250.00 |
| Drill/Broadcast Seeder with Tractor | 25.00 | \$41.02 | \$59.44 | 2 | \$200.92 | \$118.88 | \$250.00 |
| Power Mulcher (Bowie LD-90) | 6.00 | \$27.21 | \$59.44 | 1 | \$86.65 | \$59.44 | \$250.00 |

Subtotals: **\$509.84** **\$301.10** **\$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. | \$97.64 | 1 | \$97.64 | \$97.64 |

Subtotals: **\$97.64** **\$97.64**

EQUIPMENT HAUL DISTANCE and Time

| | | |
|--|---------------|-------|
| Nearest Major City or Town within project area region: | <u>PUEBLO</u> | |
| Total one-way travel distance: | <u>49.00</u> | miles |
| Average Travel Speed: | <u>55.00</u> | mph |

| | |
|-------------------------------------|-------------------|
| Total Non-Roadable Mob/Demob Cost * | <u>\$3,964.63</u> |
| ** two round trips with haul rig: | |
| Total Roadable Mob/Demob Cost ** | <u>\$173.98</u> |
| ** one round trip, no haul rig: | |

Transportation Cycle Time:

| | Non-Roadable Equipment | Roadable Equipment |
|-------------------------|------------------------|--------------------|
| Haul Time (Hours): | <u>0.89</u> | <u>0.89</u> |
| Return Time (Hours): | <u>0.89</u> | <u>0.89</u> |
| Loading Time (Hours): | <u>0.50</u> | <u>NA</u> |
| Unloading Time (Hours): | <u>0.50</u> | <u>NA</u> |
| Subtotals: | <u>2.78</u> | <u>1.78</u> |

JOB TIME AND COST

| | | |
|-----------------|-------------|-------|
| Total job time: | <u>5.56</u> | Hours |
|-----------------|-------------|-------|

| | |
|-----------------|----------------|
| Total job cost: | <u>\$4,139</u> |
|-----------------|----------------|