



## COLORADO

Division of Reclamation,  
Mining and Safety


Department of Natural Resources

### MINERALS PROGRAM INSPECTION REPORT

PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

<b>MINE NAME:</b> Buffalo Stone Quarry	<b>MINE/PROSPECTING ID#:</b> M-2007-050	<b>MINERAL:</b> Stone	<b>COUNTY:</b> Las Animas
<b>INSPECTION TYPE:</b> Monitoring	<b>WEATHER:</b> Cloudy	<b>INSP. DATE:</b> March 27, 2025	<b>INSP. TIME:</b> 10:05
<b>OPERATOR:</b> Yocam Stone LLP	<b>OPERATOR REPRESENTATIVE:</b> None	<b>TYPE OF OPERATION:</b> 110c - Construction Limited Impact	

<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> Complete Bond	<b>BOND AMOUNT:</b> \$33,544.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None
<b>INSPECTOR(S):</b> Amber M. Gibson	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> April 21, 2025

**The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.**

#### **INSPECTION TOPIC: Signs & Markers**

**PROBLEM:** The mine identification sign and affected area boundary markers were not observed per the requirements of Rule 3.1.12. The Operator shall, at the entrance of the mine site post a sign, which shall be clearly visible from the access road, with a minimum size equaling one hundred and eighty-seven (187) square inches, such as eleven (11) inches in height and seventeen (17) inches in width, with appropriate font size, with the following: the name of the Operator, a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board; and the permit number.

#### **CORRECTIVE ACTIONS:**

- The Operator must post a sign at the entrance to the mine site which shall be clearly visible from the access road and specify the following; the name of the Operator, indicate that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board, and the permit number.
- The boundaries of the affected area must be marked by monuments or other markers that are clearly visible and adequate to delineate such boundaries.

**CORRECTIVE ACTION DUE DATE: 6/20/25**

## **OBSERVATIONS**

The Buffalo Stone Quarry was inspected by Amber Gibson with the Division of Reclamation, Mining and Safety (Division/DRMS). The inspection was completed as part of the Division's routine monitoring inspection program. The site was previously inspected by the Division on August 28, 2020 as a routine monitoring inspection. The Permittee/Operator, Dale Yocam, was not present during the inspection. The sky was partly cloudy, and the weather was hot.

The Buffalo Stone Quarry is located in Las Animas County and is about 8 miles north of US 160 on CR 223 between Kim, CO and Pritchett, CO. The pit is a 9.6-acre 110c Limited Operation Construction Materials Reclamation Permit. The primary commodity mined at the site is limestone. The approved post-mining land use is rangeland.

### **Availability Of Records:**

There have been no revisions to the originally approved permit. The annual report, map, and fee are **past due** as of March 4, 2025. To avoid enforcement actions, the Operator shall submit the annual requirements **as soon as possible**.

The Division found that the recent **annual report maps were inadequate**.

1. For the 2025 submittal of the annual report map please refer to the Annual Report Form. The Annual Report Form states that as required by the Colorado Land Reclamation Act for the Extraction of Construction Materials (C.R.S. 34-32.5-116), the Permittee shall attach a map to the report that accurately depicts:
  - i. the permit boundary,
  - ii. the current affected area boundary and;
  - iii. the location of the acreages specified in Items no. 8-12 and 15.

*Items 8-12 and 15 on the Annual Report Form are listed below.*

#8. Number of acres currently affected (mining + incomplete and or unreleased reclamation).

#9. Number of acres that were newly affected during the current report year.

#10. Number of acres that were reclaimed during the current report year.

#11. Estimated new acreage to be affected in the next report year.

#12. Estimated acres to be reclaimed in the next report year.

#15. Is adequate topsoil reserved for reclamation, based on your approved permit?

2. Please also include the following features:
  - A google earth background image
  - A north arrow and scale
  - A legend indicating the polygons and/or lines for the features identified in items 8-12 and 15 on the form OR include clear labels for each feature.

### **Financial Warranty:**

The Division currently holds a reclamation bond in the amount of \$33,544 for this site. The Division has updated the estimate for the reclamation liability and found it to be \$48,468-- **a difference of \$14,924 from the bond currently held**. The Division's cost estimate is enclosed with this report. The Operator will have 14 days (May 5, 2025), from the issuance of this report to submit any questions on the cost estimate. If no questions are

received, the Division may issue a surety increase notice for the difference. The Operator will have 60 days from the date of the notice to submit and obtain acceptance of the increase in financial warranty from the Division in accordance with Rule 4.2.1(2).

#### General Compliance with the Mine Plan:

According to the original permit application, some pre-law mining had occurred at this site between the 1920s – 1930s (see area labeled as “previous mining” on Figure 1). Some of the pre-law mining disturbance was observed onsite and can be seen on aerial imagery. Since this site has been permitted, mining has primarily been conducted within the northeast side of the permitted area (see Map 1). The main pit is approximately 300’ x 240’ (Photo 1). The approved plan allows for the use of highwalls that are up to 15 feet deep that will move from the north to the south side of the site during the life of the operation. At the time of the inspection, there was one highwall on the west side of the pit that was about 2.5 feet deep by 125 feet long (Photo 2). There was also an about 2.5 foot dropped-down section, west of the pit, that has a slope of about 2H:1V (Photos 3-4). In addition to the main pit, there are three smaller depressions where the overlying sediment appears to have been pushed with a dozer (Photos 5-9).

On the west side of the pit, there are bundles of product (Photo 10), a couple structures (Photo 11), wooden pallets (Photos 12), as well as various piles of product material around and within the pit (Photos 1 and 13). Vegetation has grown over most of the pre-existing ranch road leading to the permit area (Photo 14). From aerial imagery, the extent of the disturbance onsite does not appear to have changed since at least 2011 (See Figure 2). The Operator has indicated on annual reports that some activity has occurred at the site within the past few years. Because the nature of this operation appears to be minimal, but consistent, the Operator may need to update the mining plan with a Technical Revision (TR) and request an intermittent operator status, as it does not appear that this site operates greater than 180 days per year.

Also, because the operation moves slowly, the Operator may want to consider submitting a TR to reduce the maximum affected area to be disturbed at any one time. This would help the Operator to reduce their Reclamation liability if approved. Currently, the Division estimates that approximately 2.87 acres have been affected at this site.

#### Hydrologic Balance and Sediment Control:

The area had experienced rainfall the night before the inspection. There was a small amount of standing water in the small dug out areas on the west side of the permit, but it appeared to have mostly evaporated by the time of the inspection. The Division’s 2020 inspection mentioned that there was some erosion near the north side of the permit boundary by the main pit area. Upon looking at the photos in that report, and making new observations at this inspection, it appears that the area of concern is located on the west side of the edge of the pit, and any water/sediment that is generated from it is trapped by the large sediment berms on the north side (Photos 3-4). This appears to be the area labeled as “sump” on the Operator’s Mining Plan Map (Figure 2). No signs of sediment or run-off leaving the site were observed during the inspection.

#### Topsoil:

The Mining Plan Map shows that topsoil would be piled in the southeast corner of the site (see Figure 1). However, topsoil is stockpiled on the north and south sides of the main pit area, as indicted on the Operator’s 2024 Annual Report Map (Photos 15-16, Figure 3). The pile on the southside appears to have more vegetative growth on it, but both piles appear stable. There also is crushed/overburden material along both sides of the topsoil piles that will be replaced in the pit upon reclamation (Photo 17).

Reclamation Success:

No reclamation has yet been conducted at this site.

Signs and Markers:

A post located on the south side of the ranch road leading to the permit area appears to have previously had the mine sign posted on it. During the inspection, the mine sign was observed damaged and on the ground (Photo 18). This **has been cited as a problem above**. The Operator shall re-post the sign and send a photo to the Division by the corrective actions date.

There are t-posts posted at the northeast, southeast, and northwest corners (Photos 19-20). It appears that the t-posts in the northeast and southeast corners are close to the correct locations. The t-post in the northwest corner does not seem related to the permit boundary, as it is approximately 160 feet northwest of the location of the northwest corner of the boundary (see the photo capture location #20 on Map 1). The northwest and southwest corner markers depicted on the Operator's 2024 annual report map (Figure 3) also appear to be in the incorrect locations, as the size of the permit would be too small. Map 1 included in this report depicts what the Division believes is the approximate permit boundary location, based off the dimensions provided in the approved Mining and Reclamation plan maps (See Figure 1). Due to these discrepancies, and the apparent absence of the northwest and southwest markers in the field, this **has been cited as a problem above**.

Conclusion:

This concludes the Division's Inspection Report; a map and a few figures displaying topics discussed during the inspection, and a subset of corresponding photographs that were taken during the time of the inspection, are included below. If you need additional information or have any questions, please contact me by email at [amber.gibson@state.co.us](mailto:amber.gibson@state.co.us) or by telephone at (720) 836-0967.

**GENERAL INSPECTION TOPICS**

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>N</u>
<b>(SM) SIGNS AND MARKERS----- <u>PB</u></b>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / **PB = Problem cited** / PV = Possible violation cited

**Inspection Contact Address**

Dale Yocam  
Yocam Stone LLP  
35600 County Rd 215.5  
Kim, CO 81049

*Enclosure: 2025 Reclamation Cost Estimate*

CC: Jared Ebert, DRMS



**PHOTOGRAPHS**



**Photo 1:** Looking east at the main pit area.



**Photo 2:** Looking west at the small highwall within the pit area.





**Photo 3:** Looking south along the drop-down section behind the small highwall. The red arrow points to the highwall. The yellow arrow points to the erosion area mentioned in the Division's 2020 inspection report.



**Photo 4:** Looking east along where there is a small drop-down area running east-west near the main pit. The arrows point to the erosion area mentioned in the Division's 2020 inspection report. The sediment that runs down from that area is contained within a designated sump area in the pit.





**Photo 5:** Looking southwest at a smaller disturbance area, northeast of the main pit.



**Photo 6:** Looking west at a smaller disturbance area, west of the main pit.





**Photo 7:** Looking west at a smaller disturbance area, west of the main pit, and west of the area in Photo 6.



**Photo 8:** Looking east at the backside of the disturbance in Photo 6.





**Photo 9:** Looking east at the backside of the disturbance in Photo 7. Erosion is seen cutting through the permit area, but it starts outside of the permit area.



**Photo 10:** Blocks of stockpiled product.





**Photo 11:** Structures near where product had been stored.



**Photo 12:** Wood pallets.





**Photo 13:** Stockpiled stone within the pit.



**Photo 14:** Looking east along the ranch road leading to the pit.





**Photo 15:** Looking east at the pit. The arrows point to the north and south topsoil piles as shown on the Operator's 2024 annual report map (Figure 3).



**Photo 16:** Looking along the backside of one of the topsoil piles where vegetation has helped stabilize the piles.





**Photo 17:** Looking at some unconsolidated material that will need to be backfilled into the pit before it is topsoiled.



**Photo 18:** Looking east at the post where the sign had been posted.



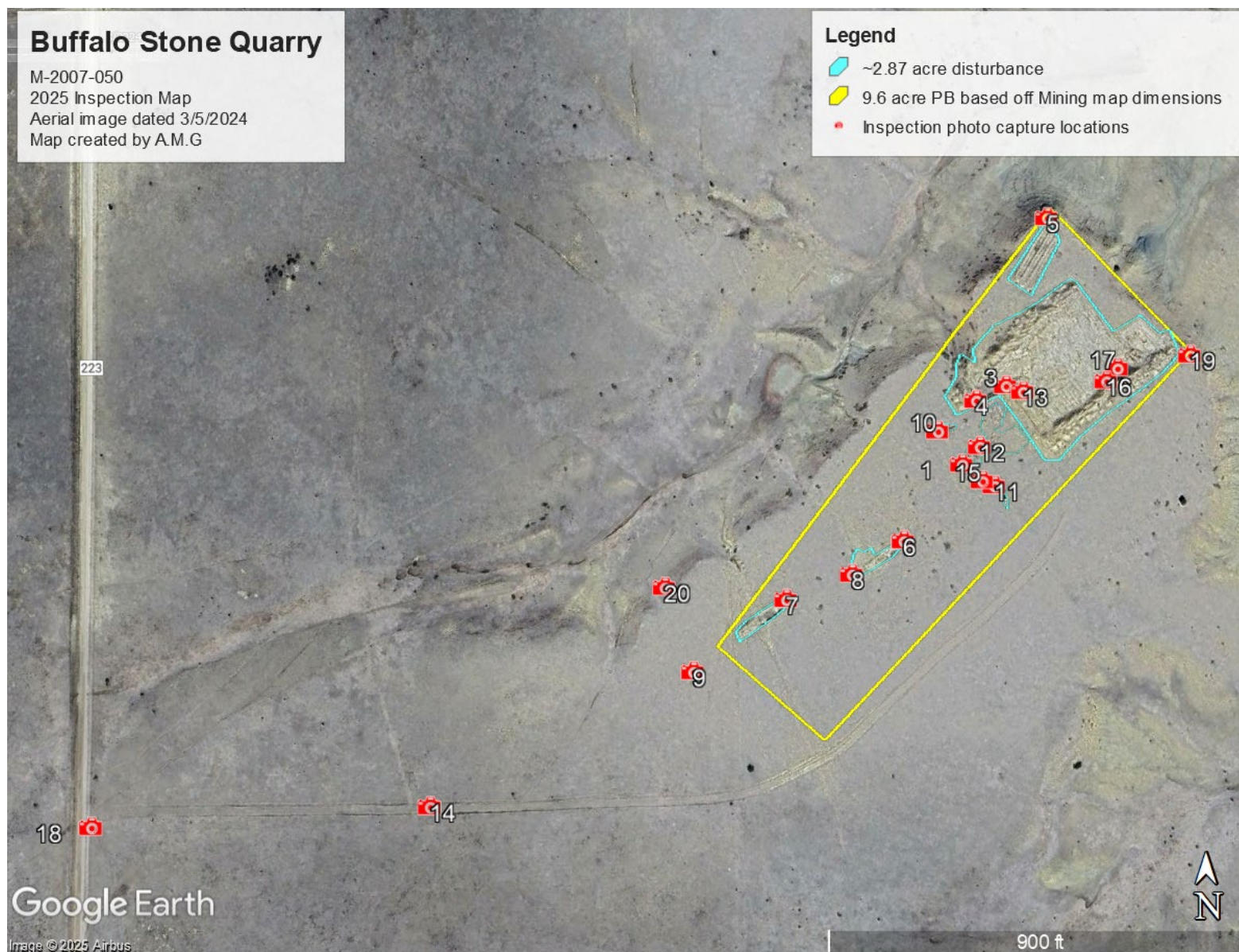


**Photo 19:** Looking north along the east side of the permit boundary at the southeast permit boundary marker. There was also another t-post marking the northeast side.



**Photo 20:** Looking south at what appeared to be a misplaced northwest permit boundary marker.





**Map 1:** 2025 Inspection Map generated in Google Earth Pro. The yellow polygon indicates the approximate permit boundary, based off the dimensions provided in the approved Mining Plan Map (see Figure 1 below). The numbers correspond with the inspection report photos. Icon #20 indicates the location of a t-post in the field that appears to be incorrectly marking the northwest corner of the permit boundary.

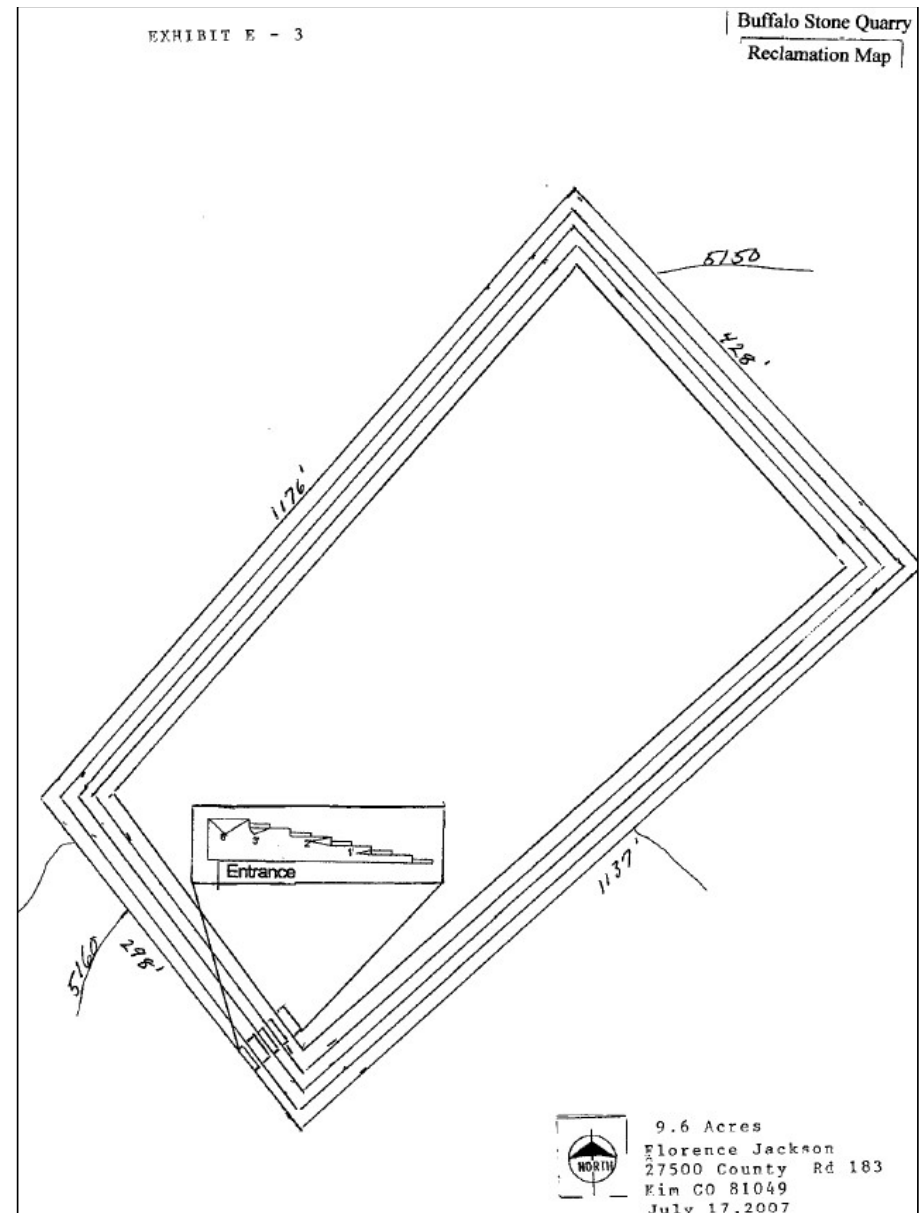
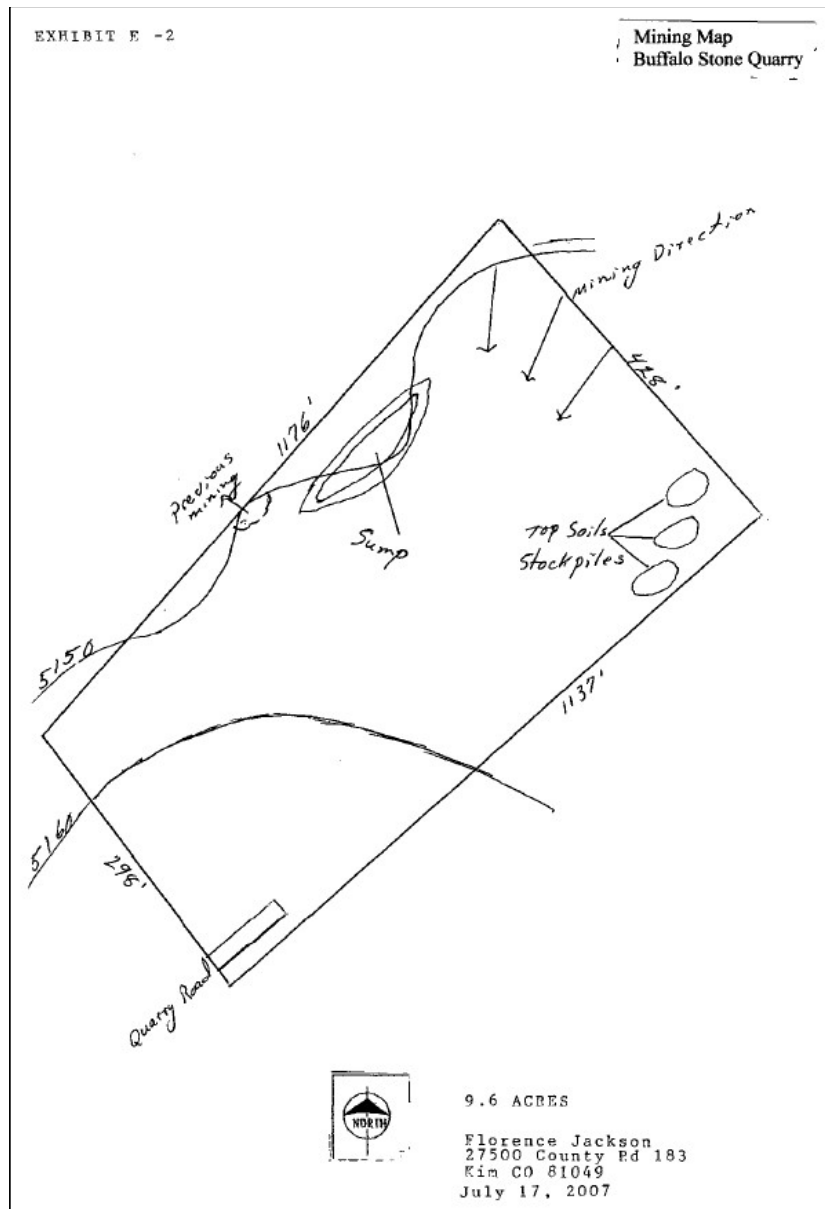
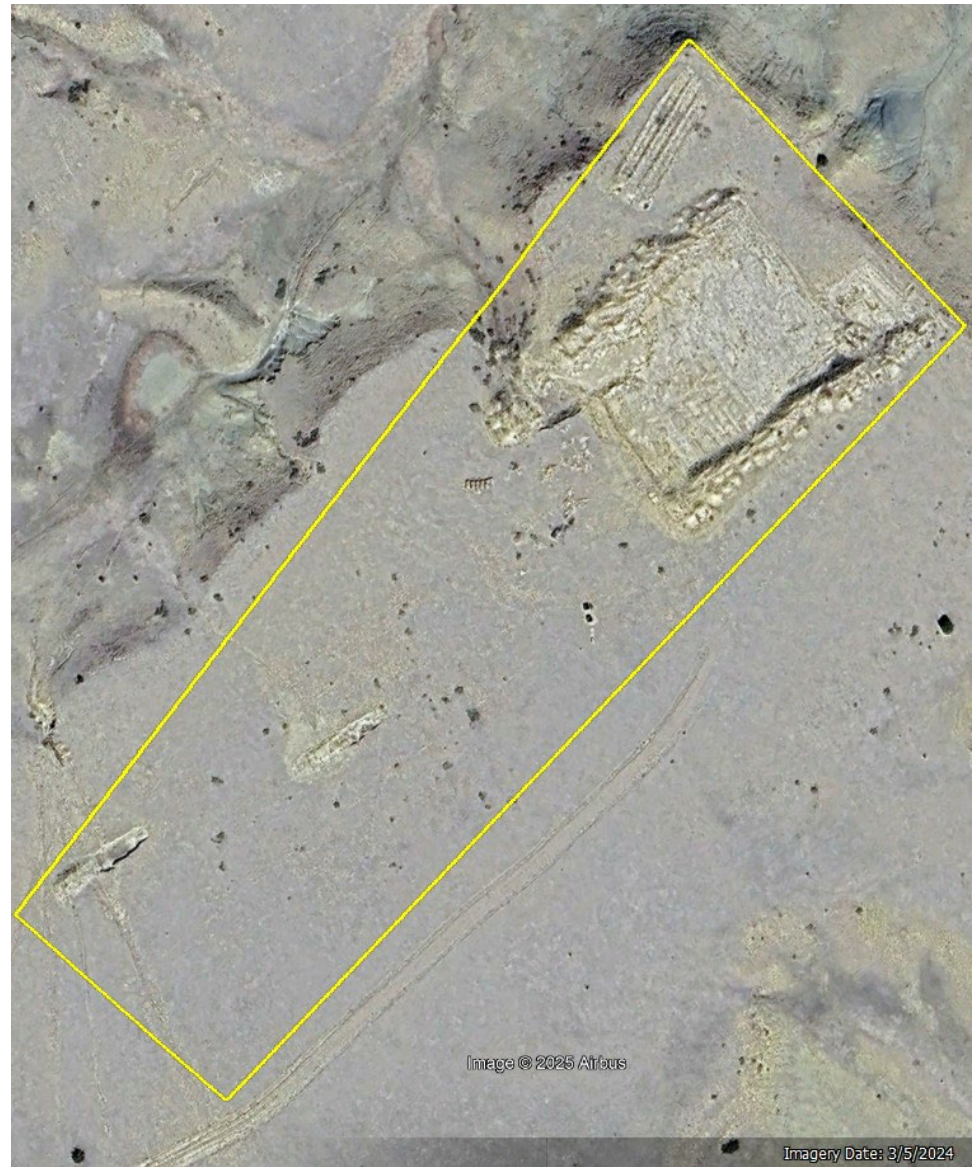


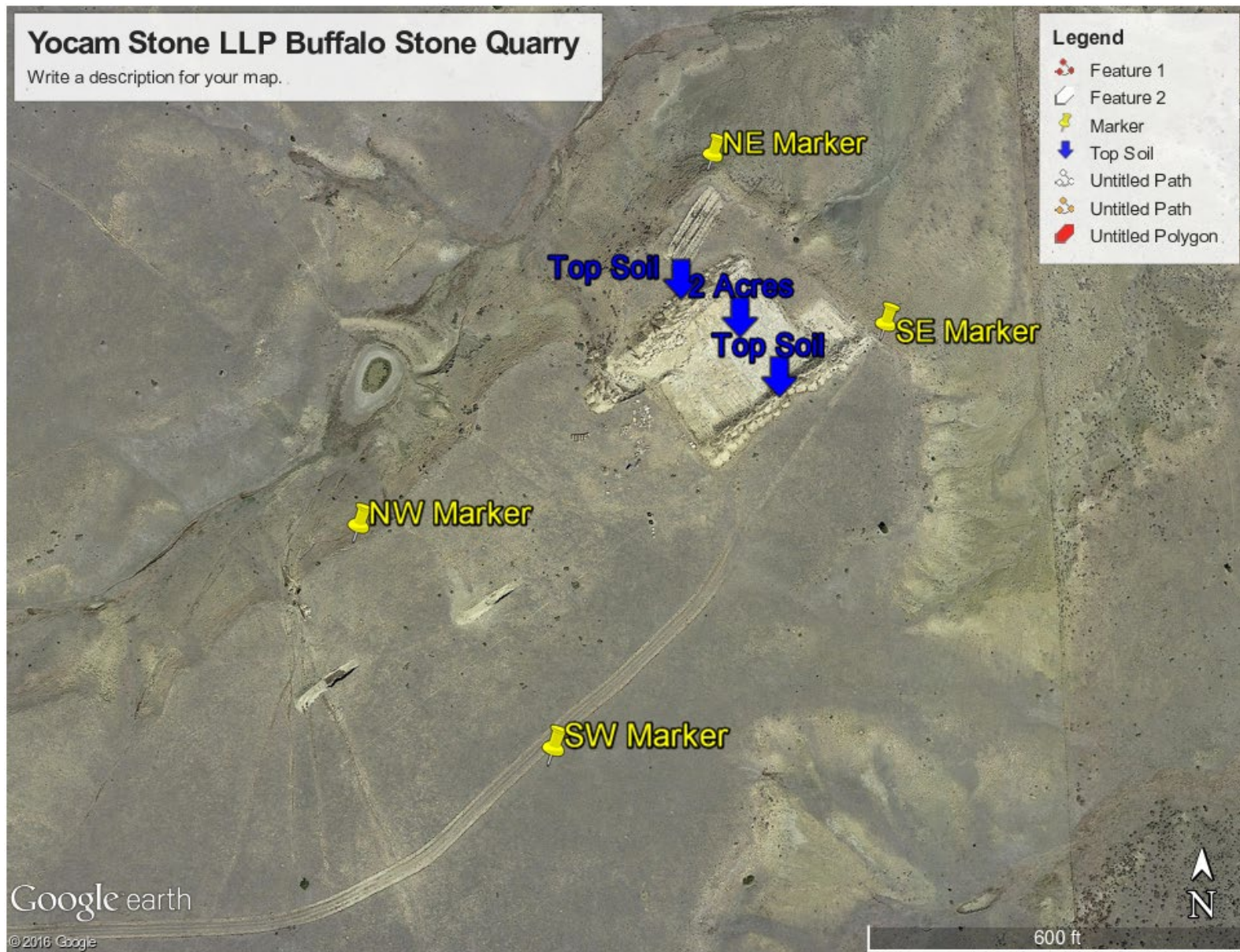
Figure 1: (Left) Picture of the approved Mining Plan Map. (Right) Picture of the approved Reclamation Plan Map.





**Figure 2:** (Left) Earliest aerial imagery available in Google Earth Pro, dated 10/23/2011. (Right) Most recent aerial imagery available in Google Earth Pro, dated 3/5/2024.





**Figure 3:** The Operator's 2024 annual report map. The markers indicated on the report map do not appear to match the orientation on the approved map, nor the dimensions provided on the approved map.



## COST SUMMARY WORK

Task description: 2025 Reclamation Cost Summary - Buffalo Stone Quarry

Site: Buffalo Stone Quarry

Permit Action: 2025 Inspection

Permit/Job#: M2007050

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 3/17/2025

County: Las Animas

Filename: M050-000

User: AMG

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Backfill and grade highwall to 3H:1V	DOZER	1	4.24	\$1,457
002	Replace topsoil	DOZER	1	26.89	\$9,253
003	Break up limestone to aid in 3:1 slope	RIPPER	1	4.80	\$1,655
004	Revegetation of 9.6 acres	REVEGE	1	10.00	\$18,511
005	Mobilization and demobilization	MOBILIZE	1	10.60	\$5,974
<b><u>SUBTOTALS:</u></b>				<b>56.53</b>	<b>\$36,850</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$744

Performance bond: 1.05

Total = \$387

Job superintendent: 28.27

Total = \$2,241

Profit: 10.00

Total = \$3,685

TOTAL O & P = \$7,057

CONTRACT AMOUNT (direct + O & P) = \$43,907

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$500

Total = \$500

Engineering work and/or contract/bid preparation: 4.25

Total = \$1,866

Reclamation management and/or administration: 5.00

\$2,195

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$11,618

**TOTAL BOND AMOUNT (direct + indirect) = \$48,468**

**BULLDOZER WORK**Task description: **Backfill and grade highwall to 3H:1V**Site: **Buffalo Stone Quarry** Permit Action: **2025 Inspection** Permit/Job#: **M2007050****PROJECT IDENTIFICATION**

Task #: **001** State: **Colorado** Abbreviation: **None**  
 Date: **3/17/2025** County: **Las Animas** Filename: **1**  
 User: **AMG**

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

Basic Machine: **Cat D8T - 8SU**  
 Horsepower: **310**  
 Blade Type: **Semi-Universal**  
 Attachment: **3-shank ripper**  
 Shift Basis: **1 per day**  
 Data Source: **(CRG)**

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper own. Cost/Hour:	\$14.53	NA
Ripper op. Cost/Hour:	\$7.95	100
Operator Cost/Hour:	\$38.59	NA

Total unit Cost/Hour: **\$344.10**  
 Total Fleet Cost/Hour: **\$344.10**

**MATERIAL QUANTITIES**

Initial Volume: **1,099**  
 Swell factor: **1.165**  
 Loose volume: **1,280 LCY**

Source of estimated volume: **Highwall 15 ft deep by 500 ft long**  
 Source of estimated swell factor: **Cat Handbook**

**HOURLY PRODUCTION**

Average push distance: **70 feet**  
 Unadjusted hourly production: **1,093.7 LCY/hr**

Materials consistency description: **Rock, avg. ripped or blasted 0.7**

Average push gradient: **0 %**  
 Average site altitude: **5,170 feet**

Material weight: **2,900 lbs/LCY**Weight description: **Decomposed rock - 50% Rock, 50% Earth****Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.700	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)



Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.2764

Adjusted unit production: 302.30 LCY/hr

Adjusted fleet production: **302.3** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$1.138/LCY

Total job time: **4.24** Hours

Total job cost: **\$1,457**

**BULLDOZER WORK**Task description: Replace topsoilSite: Buffalo Stone Quarry Permit Action: 2025 Inspection Permit/Job#: M2007050**PROJECT IDENTIFICATION**

Task #: 002 State: Colorado Abbreviation: None  
 Date: 3/17/2025 County: Las Animas Filename: 2  
 User: AMG

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

Basic Machine: Cat D8T - 8SU  
 Horsepower: 310  
 Blade Type: Semi-Universal  
 Attachment: 3-shank ripper  
 Shift Basis: 1 per day  
 Data Source: (CRG)

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$173.32</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$109.71</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$14.53</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$7.95</u>	<u>100</u>
Operator Cost/Hour:	<u>\$38.59</u>	<u>NA</u>

Total unit Cost/Hour: \$344.10  
 Total Fleet Cost/Hour: \$344.10

**MATERIAL QUANTITIES**

Initial Volume: 7,744  
 Swell factor: 1.215  
 Loose volume: 9,409 LCY

Source of estimated volume: 6 inches over 9.6 acres  
 Source of estimated swell factor: Cat Handbook

**HOURLY PRODUCTION**

Average push distance: 200 feet  
 Unadjusted hourly production: 491.9 LCY/hr

Materials consistency description: Partly consolidated stockpile 1.1

Average push gradient: 5 %  
 Average site altitude: 5,170 feet

Material weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<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>1.000</u>	<u>(GEN.)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>



Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7113

Adjusted unit production: 349.89 LCY/hr

Adjusted fleet production: **349.89** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.983/LCY

Total job time: **26.89** Hours

Total job cost: **\$9,253**

## BULLDOZER RIPPING WORK

Task description: Break up limestone to aid in 3:1 slope

Site: Buffalo Stone Quarry Permit Action: 2025 Inspection Permit/Job#: M2007050

### PROJECT IDENTIFICATION

Task #: 003 State: Colorado Abbreviation: None  
Date: 3/17/2025 County: Las Animas Filename: 3  
User: AMG

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>\$173.32</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$109.71</u>	<u>100</u>
Ripper Ownership Cost/Hour:	<u>\$14.53</u>	<u>NA</u>
Ripper Operating Cost/Hour:	<u>\$7.95</u>	<u>100</u>
Operator Cost/Hour:	<u>\$38.59</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$344.10</u>	
Total Fleet Cost/Hour:	<u><b>\$344.10</b></u>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA  
Area: 3.00 acres Rip Depth (ft): 2.00 Volume: 9,680 BCY or CCY

Source of estimated quantity: Ripping highwall areas to help aid in 3:1 slopes

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth:	<u>2.56</u>	<u>feet/pass</u>
Average Ripping Width:	<u>7.08</u>	<u>feet/pass</u>
Average Ripping Length:	<u>155.00</u>	<u>feet/pass</u>
Average Dozer Speed:	<u>88.00</u>	<u>feet/minute</u>
Average Maneuver Time:	<u>0.25</u>	<u>minutes/pass</u>
Production per unit area:	<u>0.752</u>	<u>acres/hour</u>

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production:	<u>0.752</u>	<u>Acres/hr</u>
Site Altitude:	<u>5,170</u>	<u>feet</u>
Altitude Adj:	<u>1.00</u>	<u>(CAT HB)</u>
Job Efficiency:	<u>0.83</u>	<u>(1 shift/day)</u>
Net Correction:	<u>0.83</u>	<u>multiplier</u>
Adjusted Hourly Unit Production:	<u>0.62</u>	<u>Acres/hr</u>
Adjusted Hourly Fleet Production:	<u><b>0.62</b></u>	<u>Acres/hr</u>

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **4.81** Hours

Unit cost: \$551.657 Per acre Total job cost: **\$1,655**



**REVEGETATION WORK**Task description: Revegetation of 9.6 acresSite: Buffalo Stone QuarryPermit Action: 2025 InspectionPermit/Job#: M2007050**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 3/17/2025County: Las AnimasFilename: M050-004User: AMGAgency or organization name: DRMS**TILLING**

Description	Cost /Acre
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
<b>Total Tilling Cost/Acre</b>	<b>\$338.80</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indiangrass - Cheyenne	1.00	3.05	\$12.30
Switchgrass - Blackwell	1.20	10.72	\$15.86
Blue Grama - Lovington	0.60	9.79	\$16.65
Little Bluestem - Pastura	1.10	6.57	\$17.45
Sideoats Grama - El Reno	1.80	5.91	\$43.96
Western Wheatgrass - Native	4.00	10.10	\$36.02
<b>Totals Seed Mix</b>	<b>9.70</b>	<b>46.13</b>	<b>\$142.26</b>

**Application**

Description	Cost /Acre
Broadcast seeding [DMG]	\$272.56
<b>Total Seed Application Cost/Acre</b>	<b>\$272.56</b>

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

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
<b>Total Mulch Materials Cost/Acre</b>				<b>\$985.56</b>

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37

<b>Total Mulch Application Cost/Acre</b>	<b>\$85.37</b>
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**JOB TIME AND COST**

No. of Acres:	<u>9.6</u>	Cost /Acre:	<u>\$1,824.55</u>
Estimated Failure Rate:	<u>25%</u>	Cost /Acre*:	<u>\$414.82</u>
*Selected Replanting Work Items:	<u>SEEDING</u>		
Initial Job Cost:	<u><b>\$17,515.68</b></u>		
Reseeding Job Cost:	<u><b>\$995.57</b></u>		
Total Job Cost:	<u><b>\$18,511</b></u>		
Job Hours:	<u><b>10.00</b></u>		



**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mobilization and demobilization**Site: **Buffalo Stone Quarry**Permit Action: **2025 Inspection**Permit/Job#: **M2007050****PROJECT IDENTIFICATION**Task #: **005**State: **Colorado**Abbreviation: **None**Date: **3/17/2025**County: **Las Animas**Filename: **M050-005**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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
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 D8T - 8SU	52.21	\$187.01	\$125.64	1	\$312.65	\$125.64	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$41.02	\$59.44	2	\$200.92	\$118.88	\$500.00

Subtotals: **\$513.57** **\$244.52** **\$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.	\$13.77	1	\$13.77	\$13.77

Subtotals: **\$13.77** **\$13.77**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>LAMAR</u>	
Total one-way travel distance:	<u>95.00</u>	miles
Average Travel Speed:	<u>50.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$5,921.45</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$52.33</u>
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>1.90</u>	<u>1.90</u>
Return Time (Hours):	<u>1.90</u>	<u>1.90</u>
Loading Time (Hours):	<u>0.75</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.75</u>	<u>NA</u>
Subtotals:	<u>5.30</u>	<u>3.80</u>

**JOB TIME AND COST**

Total job time:	<u>10.60</u>	Hours
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Total job cost:	<u>\$5,974</u>
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