




**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> Meadow Hollow Quarry	<b>MINE/PROSPECTING ID#:</b> M-2009-006	<b>MINERAL:</b> Sandstone (silica, stone, quartzite)	<b>COUNTY:</b> Larimer
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Amy Eschberger	<b>INSP. DATE:</b> January 16, 2020	<b>INSP. TIME:</b> 09:30
<b>OPERATOR:</b> Colorado Quarry I, LLC	<b>OPERATOR REPRESENTATIVE:</b> Deb Dorband	<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> \$16,000.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> January 28, 2020

**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:** Financial Warranty

**PROBLEM:** The financial warranty is not adequate to reclaim the site in accordance with the approved reclamation plan. This is a failure to maintain the proper financial warranty amount to complete reclamation of the affected lands pursuant to C.R.S. 34-32.5-117(4)(b) and Rule 4.2.1(1).

**CORRECTIVE ACTIONS:** The Division has re-evaluated the required financial warranty for reclaiming the site in accordance with the approved reclamation plan (see enclosed cost estimate). On the corrective action date, the Division will send the operator a notice of surety increase for the amount provided in the cost estimate. The operator will have 60 days from the date on the surety increase notice to post the additional financial warranty. If the operator wishes to reduce the required amount, the operator will need to complete reclamation on site and provide evidence to the Division this was done by the corrective action date. Such evidence should include photo documentation and a detailed description of the work that was completed.

**CORRECTIVE ACTION DUE DATE:** March 28, 2020

## **OBSERVATIONS**

This was a normal monitoring inspection of the Meadow Hollow Quarry (Permit No. M-2009-006) by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). The operator was represented by Deb Dorband during the inspection. The site is located approximately 10.5 miles west of Berthoud, CO in Larimer County, just two miles south of Carter Lake Reservoir. Access to the site is from the east off Co Rd 31. **Photos 1-18** taken during the inspection are included with this report.

This is a 110c operation permitted for 9.9 acres (see enclosed Google Earth image of site) to mine sandstone for building materials (dimension stone and flagstone). The site is situated on the east side of a ridge in Meadow Hollow, approximately 1.5 miles north of the Little Thompson River. The affected lands are owned by Wayne Dorband. A small pre-law quarry (now used for storage) is located directly adjacent to and north of the permit area, on land also owned by Wayne Dorband. Pre-law mining disturbances (extraction areas, overburden/topsoil stockpiles, waste rock stockpiles) also exist within the permit area, primarily in the southern half. Much of these pre-law areas have been redisturbed by the current operation either by continued quarrying, stockpiling, or equipment storage. Approximately 2-18 inches of topsoil/overburden is removed to reach the sandstone deposit. The sandstone deposit is approximately 20-60 feet thick. The sandstone is quarried by front end loaders, excavators, and hand tools. No explosives are used by the operation. The sandstone is processed with hand tools into flagstone, slabs, and blocks, and the remaining material is cut into strip-stone on a stone cutter. Salvaged topsoil and overburden will be incorporated into the work deck, used to reclaim previous disturbances, or stockpiled for future reclamation. No permanent structures will be constructed inside the permit area.

The approved post-mining land use for the site is general agriculture. Disturbed slopes will be graded to 3H:1V or flatter. If steeper slopes are required, the slopes will be stepped into terraces to accomplish the desired stability for the vegetation. The reclaimed slopes are expected to follow the general gradient of surrounding lands. Any waste rock not sold as rip rap will be used as reclamation backfill material. Topsoil will be replaced on disturbed land at a minimum depth of 6 inches. Disturbed land will be broadcast seeded with a grass seed mixture, and planted with Ponderosa Pine and Rocky Mountain Juniper, at 48 seedlings per acre and 12 seedlings per acre respectively. Existing roads will remain for continued use by the landowner.

At the time of the inspection, the weather was clear and dry. A permit sign was posted at the main site entrance. This sign includes four different mine permit numbers, one of which is the correct permit number for the site (M-2009-006), and the others are for permits that have been terminated (M-2006-056, M2006-052, and M-2003-036). It is not clear why the terminated permit numbers are listed on this sign. The Division recommends the operator revise the permit sign to remove or mark out the mine permit numbers that are not applicable to this site. The approved permit boundary was delineated with white posts. The site was not active during the inspection. However, according to annual reports submitted by the operator, the site is active every year (extracting, processing, and/or hauling off from stockpiled material) in accordance with its intermittent status.

The Division estimates approximately 5 acres have been disturbed at this time. The active quarry is located at the center of the permit area. Mining is proceeding in a north/northwestward direction. No highwalls were observed in the quarry area, as the exposed sandstone deposit has a natural slope of approximately 3H:1V or flatter. Numerous rubble piles are scattered throughout the site, the majority of which appears to be waste rock, while some appears to be product. A relatively flat area (work deck) located just south of the quarry is used for processing (cutting) the mined sandstone. A few stacks of cut stone are stored adjacent to the access road. The operator has backfilled, retopsoiled, and seeded the southern portion of the quarry, which the Division estimates to cover approximately 0.4 acres. Vegetative cover of this area is fairly sparse, but consists of grasses, some young pine trees, and weeds. The Division recommends the operator continue to monitor revegetation success in this area and reseed as necessary.

A conex box and temporary office building are present at the eastern edge of the site, adjacent to the access road. A small wooden shed is located at the southern edge of the work deck. The Division did not observe any permanent features (e.g., concrete foundations) associated with these structures. However, if any permanent structures are constructed within the permit area, the operator will need to submit a Technical Revision (see enclosed form) to revise the reclamation plan to address these structures. If any structures are to remain after reclamation, they will need to be shown on an updated reclamation plan map. For any structures that require demolition/removal for reclamation, the financial warranty will need to be updated to include costs for completing this task.

The operator is currently storing piles of wood pallets, empty barrels and other containers, tires, and various non-mining related items in the work deck area and in the pre-law disturbance area below the work deck (in the southeastern portion of the permit area). The Division informed Ms. Dorband during the inspection that all trash and refuse should be handled and disposed of in a manner that will control unsightliness in accordance with Rule 3. 1.5(5). The Division recommends the operator remove any items not associated with the mining operation to a location outside of the permit area. Ms. Dorband indicated they are in the process of relocating these items off site, mainly to the pre-law quarry located outside (and north) of the permit area. If these items are still present on site during the next inspection, the operator may be required to update the mining and reclamation plans to address the storage and reclamation of these items. Accordingly, the required financial warranty would need to be updated to include costs for removing/disposing of any items that will not remain as part of the approved post-mining land use.

Ms. Dorband informed the Division the previous operator of the quarry, John Holliday is no longer involved with the operation. In review of the permit file, the Division found the Performance Warranty and Financial Warranty posted for the permit to be signed by John E. Holliday, as managing member of Colorado Quarry I, LLC. While these warranties remain valid, if Colorado Quarry I, LLC is no longer associated with the operation, the permit may need to be transferred to another entity. This can be done by submitting a Succession of Operators application (see enclosed application). As it stands now, Colorado Quarry I, LLC is responsible for complying with all requirements of the permit, including maintaining an adequate financial warranty and completing final reclamation of the site in accordance with the approved plan.

After conducting the inspection, the Division recalculated the required financial warranty for completing reclamation of the site in accordance with the approved plan (see enclosed bond estimate). This estimate includes costs for grading the waste rock piles in the quarry area and in the two material/equipment storage areas (in the northeastern and southeastern portions of the site) to 3H:1V slopes, for replacing 6 inches of topsoil on disturbed land, and revegetating the land with grasses and trees per the approved revegetation plan. The Division estimates the required financial warranty to be in the amount of \$29,723.00, which is \$13,723.00 more than the currently held financial warranty of \$16,000.00. Therefore, a problem is cited in this report (see page 1) for failure to maintain the proper financial warranty amount to complete reclamation of the affected lands pursuant to C.R.S. 34-32.5-117(4)(b) and Rule 4.2.1(1). A separate notice of surety increase will be sent to the operator in 60 days. If the operator wishes to reduce the required financial warranty, the operator will need to complete reclamation on site and provide evidence to the Division this was done by the corrective action date. Such evidence should include photo documentation and a detailed description of the work that was completed. If the operator submits this information prior to the corrective action date, the required financial warranty will be reassessed and a new estimate provided to the operator.

*Any questions or comments regarding this inspection report should be forwarded to Amy Eschberger at the Colorado Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, via telephone at 303-866-3567, ext. 8129, or via email at [amy.eschberger@state.co.us](mailto:amy.eschberger@state.co.us).*



## PHOTOGRAPHS



**Photo 1.** View looking west from county road, showing entire quarry on side of ridge (in background). Note conex box (blue) stored at eastern edge of quarry.



**Photo 2.** View of permit sign posted at main site entrance off County Road 31. Note sign lists four different permit numbers, of which, only M-2009-006 is applicable.





**Photo 3.** View looking west, showing white post marking eastern permit boundary (adjacent to County Road 31).



**Photo 4.** View looking east across eastern portion of active quarry area.





**Photo 5.** View looking northeast across eastern edge of active quarry area. Note several rubble piles scattered across area and no highwalls present.



**Photo 6.** View looking north across center of active quarry area. Note several rubble piles scattered across area and no highwalls present.





**Photo 7.** View looking west across southern edge of active quarry area. Note several rubble piles scattered across area and no highwalls present.



**Photo 8.** View looking west across active quarry area. Note several rubble piles scattered across area and no highwalls present.





**Photo 9.** View looking south across work deck located south of active quarry. Note rubble piles scattered along southern edge of this area.



**Photo 10.** View looking south across rubble piles lining eastern edge of work deck. Note small shed and refuse pile in background.





**Photo 11.** View looking southeast across pre-law disturbed area located in southeastern portion of permit area (below work deck).



**Photo 12.** View looking east across pre-law disturbed area located in southeastern portion of permit area (below work deck), currently used as storage for non-mining related items.





**Photo 13.** View looking south across work deck located south of active quarry. Note small shed and refuse pile in background.



**Photo 14.** View looking north across small storage area located east of active quarry, adjacent to main access road.





**Photo 15.** View of conex box and temporary office present at eastern edge of quarry area. If any structures include permanent features (e.g., concrete foundations), a Technical Revision must be submitted to address reclamation of these structures.



**Photo 16.** View looking south across small storage area located near main site entrance, adjacent to county road.





**Photo 17.** View looking south across southern portion of quarry which was backfilled, retopsoiled, and seeded. The operator should continue to monitor revegetation success in this area and reseed if necessary.



**Photo 18.** View looking west at small pre-law quarry located directly north and outside of permit area. Note white posts (circled) delineating permit boundary around southern edge of this pit.



### 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----- <b>PB</b>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</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>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

#### Inspection Contact Address

Wayne Dorband  
Colorado Quarry I, LLC  
901 S CR 31  
Berthoud, CO 80513

Encls: Google Earth image of site showing approved permit area  
Technical Revision form  
Succession of Operators application  
Division's Bond Estimate

CC: John E. Holliday, Colorado Quarry I, LLC  
Michael Cunningham, DRMS



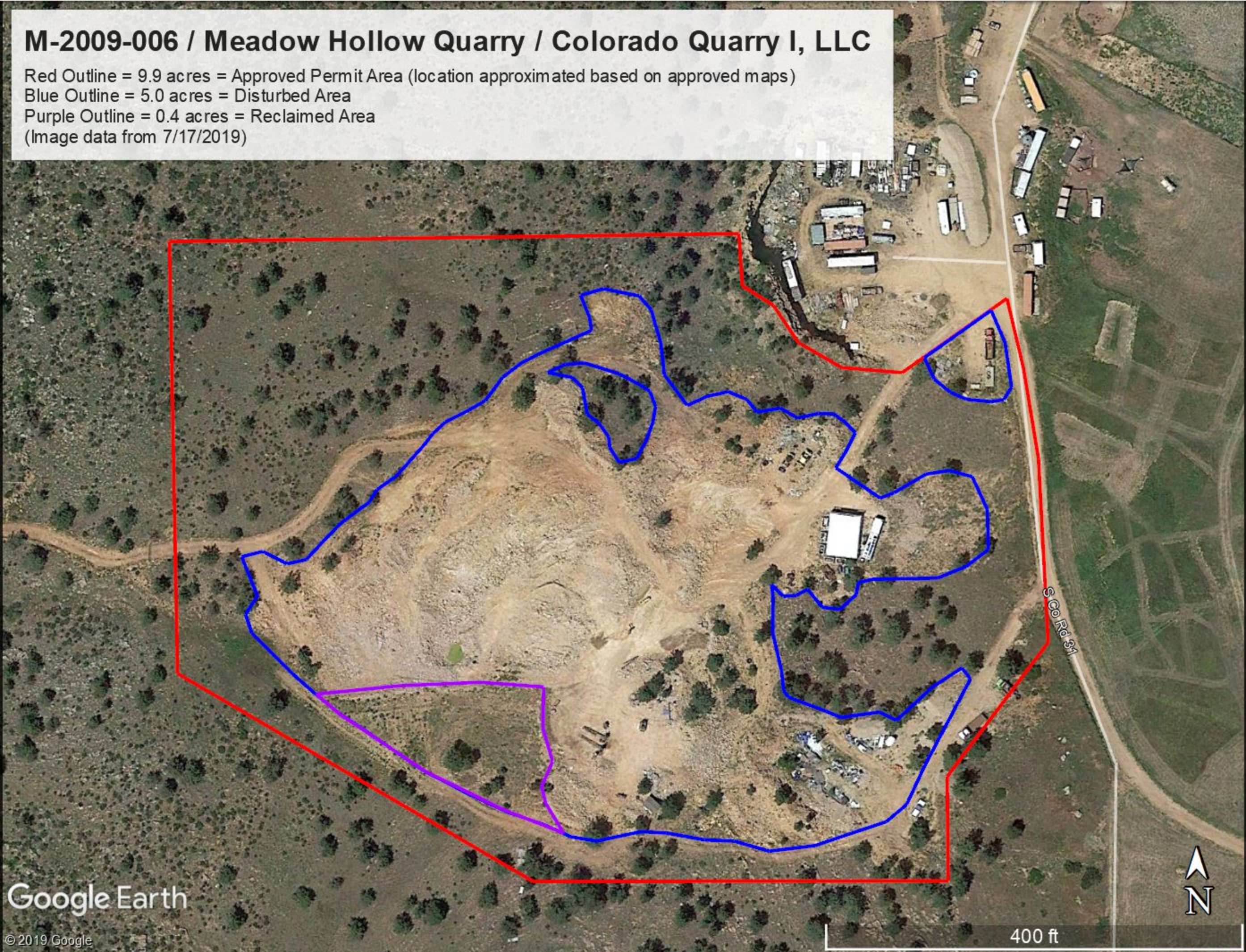
# M-2009-006 / Meadow Hollow Quarry / Colorado Quarry I, LLC

Red Outline = 9.9 acres = Approved Permit Area (location approximated based on approved maps)

Blue Outline = 5.0 acres = Disturbed Area

Purple Outline = 0.4 acres = Reclaimed Area

(Image data from 7/17/2019)







## COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

### REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- \_\_\_\_\_ Site Name: \_\_\_\_\_

County \_\_\_\_\_ TR# \_\_\_\_\_ (DRMS Use only)

Permittee: \_\_\_\_\_

Operator (If Other than Permittee): \_\_\_\_\_

Permittee Representative: \_\_\_\_\_

Please provide a brief description of the proposed revision: \_\_\_\_\_

As defined by the Minerals Rules, a Technical Revision (TR) is: “a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan.” The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered “filed for review” until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

<u>Permit Type</u>	<u>Required TR Fee</u>	<u>Submitted</u> (mark only one)
110c, 111, 112 construction materials, and 112 quarries	\$216	<input type="checkbox"/>
112 hard rock (not DMO)	\$175	<input type="checkbox"/>
110d, 112d(1, 2 or 3)	\$1006	<input type="checkbox"/>





## REQUEST FOR TRANSFER OF MINERAL PERMIT AND SUCCESSION OF OPERATORS APPLICATION PACKET

*The Mined Land Reclamation Board ("Board") has approved this Transfer of a Mineral Permit and Succession of Operators Application Packet pursuant to the Mined Land Reclamation Act (C.R.S. § 34-32-101 et. seq.) ("Hard Rock Act") and associated Rules (2 C.C.R. 407-1) ("Hard Rock Rules") and the Land Reclamation Act for the Extraction of Construction Materials (C.R.S. § 34-32.5-101 et. seq.) ("Construction Materials Act") and associated Rules (2 C.C.R. 407-4) ("Construction Materials Rules"). This Application Packet cannot be altered without the consent of the Board.*

### Applicability

This Transfer of a Mineral Permit and Succession of Operators Application Packet applies to mining operations where the current permitted mine operator ("Permittee") wishes to transfer the Reclamation Permit ("Permit"), along with all associated reclamation responsibilities and liabilities, to a Successor Operator ("Successor"). This process is referred to as a Succession of Operators ("SO").

### Filing Requirements for SO Application

An SO Application is not complete until the Division of Reclamation, Mining and Safety ("Division") has received each of the six items listed below. The Board has authorized the Division to review SO Applications and to issue approvals and denials based on its review. The Division will not review incomplete Applications.

- 1) **Application Form:** An Application Form is included in this Application Packet. Please note that the Application Form must be fully completed, and must bear the original notarized signature of an authorized representative of BOTH the Permittee and the Prospective Successor.
- 2) **Application Fee:** If an Application concerns a Hard Rock or Designated Mining Operation, then a filing fee of \$115.00 must be submitted to the Division. *See* C.R.S. § 34-32-127(2)(a)(I)(L). If an Application concerns a Construction Materials operation, then a filing fee of \$144.00 must be submitted to the Division. *See* C.R.S. § 34-32.5-125(1)(a)(X). Make all checks payable to the "Colorado Division of Reclamation, Mining and Safety."



- 3) **Performance Warranty Form:** The party wishing to become Successor (“Prospective Successor”) must agree to assume all liability for the reclamation of affected land, and must provide a Performance Warranty covering the same. *See* C.R.S. §§ 34-32-119 and 34-32.5-119. A Performance Warranty Form is included in this Application Packet. The Performance Warranty Form must bear the original notarized signature of an authorized representative of the Prospective Successor.
- 4) **Financial Warranty:** The Prospective Successor must provide Financial Warranties sufficient to cover the cost of completing reclamation in compliance with the Permit, the applicable Act and Rules. *See* C.R.S. §§ 34-32-119 and 34-32.5-119. In order to ensure the adequacy of the Financial Warranties, the Division must recalculate the required Financial Warranty whenever it receives an SO Application. Depending upon the state of the operation and the outstanding reclamation work, the Successor may be required to post a higher (sometimes significantly) or lower Financial Warranty than the Permittee currently has in place.

The Division must act on all SO Applications within 30 days. *See* Hard Rock and Construction Materials Rule 1.12.1(2)(a). Since the Division cannot typically review the amount of the required Financial Warranty within this 30-day period, applicants have the following two options:

Applicants may waive their right to receive a decision within 30 days. If the applicants waive their right to a decision within 30 days, the Division will recalculate the required Financial Warranty *before* issuing its decision on the Application. As a result, the Prospective Successor will know, prior to becoming Successor, whether the current Financial Warranty is adequate to cover the reclamation liability, or if the Financial Warranty must be increased. In this case, the Prospective Successor must submit the full Financial Warranty as part of the Application.

Applicants may decide not to waive their right to a decision within 30 days. If the applicants choose not to waive their right to a 30-day review, the Division will review the Financial Warranty *after* issuing its decision on the Application. In this case, the Prospective Successor must submit a conditional replacement Financial Warranty in the amount of the Permittee’s current Financial Warranty as part of the Application.

If the Application is approved, the Division will conduct an inspection within 60 days to assess the amount of the reclamation liability. If the inspection reveals that the reclamation liability exceeds the amount of the conditional replacement Financial Warranty, the Successor must submit the difference within sixty days. Failure to meet this deadline may result in an enforcement action. If the inspection reveals that the reclamation liability is less than the conditional replacement Financial Warranty, the Successor may request a Financial Warranty reduction for release of the difference.



*It is the applicants' right to receive a decision on their complete Application within 30 days. The applicants are free to choose whichever option they decide is best. Permittee and Prospective Successor must designate their decision on the attached Application Form.*

- 5) **Demonstration of Legal Right to Enter:** All Permittees must provide a description of the basis for legal right of entry to the site and to conduct mining and reclamation. *See Hard Rock and Construction Materials Rules 6.3.7 and 6.4.14.* To comply with this requirement, the Prospective Successor must demonstrate that he/she/it has obtained a legal right of entry from any and all surface and mineral rights owners in the affected lands, independent of the current Permittee. *See Hard Rock and Construction Materials Rules 6.3.7, 6.4.14, and 1.6.2(1)(e)(i).* This may be a copy of an access lease, deed, abstract of title, current tax receipt, or a signed and notarized statement by the property owners stating that the Prospective Successor has a legal right to enter. *See Hard Rock and Construction Materials Rule 6.3.7.*
- 6) **Structure Agreements:** In many cases, operators must provide the Division copies of agreements to compensate the owners of any significant, valuable, and permanent man-made structures and utilities within 200 feet of the affected land ("Structure Agreements"). *See Hard Rock Rules 6.3.12 and 6.4.20; Construction Materials Rules 6.3.12 and 6.4.19.* If the Permittee was required to provide Structure Agreements, the Prospective Successor must obtain *new* Structure Agreements from each owner and provide copies of the same to the Division with the Application.

### **Application Review Process**

The Division will grant an Application if it finds that all required information has been submitted, that the Prospective Successor is capable of assuming all responsibility for original permit by virtue of acceptable performance and Financial Warranties, and that the Prospective Successor has no outstanding violations. *See C.R.S. §§ 34-32-119 and 34-32.5-119.* If the Division does not act within 30 days from the date that a complete Application has been filed, the Application will be considered automatically approved. *See Hard Rock and Construction Materials Rule 1.12.1(2).* If an Application is denied, the Division will notify the Permittee and Prospective Successor no later than 10 days from the date it renders its decision. Both the Permittee and Prospective Successor may appeal a denial of an Application to the Board by submitting a written request for an administrative appeal hearing to the Board within 30 days of final decision date. *See Hard Rock and Construction Materials Rule 1.4.11.*



### **Application Checklist**

- ☐ **Application Form:** Complete the form located on page 5.
- ☐ **Application Fee:** Include check payable to Colorado Division of Reclamation, Mining and Safety.
- ☐ **Performance Warranty:** Complete the form located on page 11.
- ☐ **Financial Warranty:** Submit the appropriate Financial Warranties or conditional replacement Financial Warranties using the forms posted on the Division's website (available online at <http://mining.state.co.us/Mineral%20Forms.htm>).
- ☐ **Demonstration of Legal Right to Enter:** Identify the owners of all surface and mineral rights, obtain the documentation described above, and submit to the Division.
- ☐ **Structure Agreements:** Obtain new Structure Agreements if Permittee had been required to do so.



# STATE OF COLORADO

## DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215

Denver, Colorado 80203

Phone: (303) 866-3567

FAX: (303) 832-8106



## APPLICATION FORM FOR TRANSFER OF MINERAL PERMIT AND SUCCESSION OF OPERATORS

### ADMINISTRATIVE INFORMATION

#### Permit Information

Permit Number: \_\_\_\_\_

Operation Name: \_\_\_\_\_

#### Permittee Information

Contact Person: \_\_\_\_\_

Company Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: (       ) \_\_\_\_\_

Email (optional): \_\_\_\_\_

#### Prospective Successor Information

Contact Person: \_\_\_\_\_

Company Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: (       ) \_\_\_\_\_

Email (optional): \_\_\_\_\_



Other Reclamation Permits held by Prospective Successor (if applicable):

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### **DESIGNATION OF REVIEW TIMELINE**

As explained above, the Permittee and Prospective Successor may waive their right to receive a decision on an Application within 30 days in order to allow the Division to calculate the required Financial Warranty before issuing its decision. Permittee and Prospective Successor must initial one of the following two options to designate their choice. If Permittee and Prospective Successor cannot agree, the Division will render its decision within 30 days.

	I have reviewed the information provided in this Application
Permittee	Packet, as well as the applicable Act and Rules. Having been fully
	informed, I wish to <u>WAIVE MY RIGHT TO A DECISION ON</u>
Prospective Successor	MY APPLICATION WITHIN 30 DAYS.

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	I have reviewed the information provided in this Application
Permittee	Packet, as well as the applicable Act and Rules. Having been fully
	informed, I wish to <u>MAINTAIN MY RIGHT TO A DECISION</u>
Prospective Successor	ON MY APPLICATION WITHIN 30 DAYS.

The Prospective Successor must provide an adequate Financial Warranty or *conditional* replacement Financial Warranty, consistent with the designation above. Hard Rock and Construction Materials Rule 4.3 describes the various acceptable types of Financial Warranties. Each Financial Warranty must be submitted on the Board's approved forms (available online at <http://mining.state.co.us/Mineral%20Forms.htm>).



## **DUE DILIGENCE CERTIFICATION**

The Board wishes to ensure that Prospective Successors are fully informed of their duties and obligations should they become Successor to the Permit. Accordingly, the Prospective Successor must carefully review the items below and must initial indicating its agreement and understanding.

- \_\_\_\_\_ If the Application is approved, the Prospective Successor will assume all liability for the reclamation of the affected land, and for compliance with the Hard Rock Act and Rules or the Construction Materials Act and Rules, as applicable (available online at <http://mining.state.co.us/Rules%20and%20Regs.htm>). Successor will be liable for any pre-existing conditions or violations, whether known or unknown at the time of the SO. It is the Prospective Successor's sole responsibility to investigate the operation prior to filing an Application.
  
- \_\_\_\_\_ If the Application is approved, the Successor will be solely responsible for maintaining the mining and reclamation operations in compliance with the Reclamation Permit. The Permit includes the original approved Application, along with any and all subsequent revisions, amendments, and conversions thereto. It is not uncommon for a Permit to include dozens of documents that span many years. It is the Successor's sole responsibility to obtain a full and complete copy of the Permit and to understand the extent of his/her/its obligations thereunder. Permit documents may be purchased from the Division of Reclamation, Mining and Safety (the "Division") upon request or viewed on the Division's website at <http://drmsweblink.state.co.us/drmsweblink/search.aspx?dbid=0>
  
- \_\_\_\_\_ If the Application is approved, the Successor must submit Annual Fees and Annual Reports to the Division on the anniversary date of the Reclamation Permit. For hard rock and designated mining operations, consult C.R.S. § 34-32-127(2) for the amount of the Annual Fee. For construction materials operations, consult the C.R.S. § 34-32.5-125 for the amount of the Annual Fee. Required annual reporting information is described in Hard Rock and Construction Materials Rule 1.15 and in the Annual Report Form provided by the Division. Failure to submit Annual Fees or Annual Reports may result in enforcement action.

**APPLICANTS' AGREEMENT TO REQUEST TRANSFER  
OF MINERAL PERMIT AND SUCCESSION OF OPERATORS**

WHEREAS, on \_\_\_\_\_, \_\_\_\_\_ Permit Number \_\_\_\_\_ ("Permit") was granted to \_\_\_\_\_ ("Permittee"), pursuant to which Permit, Permittee has engaged in a mining operation located in \_\_\_\_\_ County, Colorado.

WHEREAS, The Permit includes and incorporates any and all subsequent Amendments, Technical Revisions and/or Conversions.

WHEREAS, Permittee wishes to assign the entire Permit, along with all associated rights and responsibilities to \_\_\_\_\_ ("Prospective Successor"), and Prospective Successor wishes to become Successor Permittee under the Permit.

WHEREAS, Prospective Successor has inspected the mining and reclamation operations and is fully aware of the conditions thereof.

WHEREAS, Prospective Successor understands that the Reclamation Plan (the "Plan") is an integral part of the Permit and is required by law. Prospective Successor has had an opportunity to thoroughly review the Plan, understands that the Plan has not been completed and that, if Prospective Successor becomes Successor, he/she/it will assume full responsibility for the completion of the Plan.

NOW THEREFORE, Permittee and Prospective Successor hereby agree, for their own benefit and for the benefit of the State, as follows:

Prospective Successor agrees to accept all of the conditions of the Permit, including the condition that the operation remains in compliance with all applicable laws and regulations, and to perform all of the obligations of the Permittee under the Permit.

Prospective Successor agrees to complete the Plan, and to assume all liability for the same, as to all areas presently disturbed, as well as to all areas hereafter disturbed.

Prospective Successor agrees to submit to the Division of Reclamation, Mining and Safety ("Division"), Performance and Financial Warranties, as required by applicable law and regulations, which will be substituted for the Performance and Financial Warranties previously filed by the Permittee, if and when the Division approves a Transfer of Mineral Permit and Succession of Operators ("SO") and releases the latter Warranties.

Prospective Successor represents to the State that, to the best of its knowledge, information and belief, it is not in violation of any of the provisions of the Mined Land Reclamation Act (C.R.S. § 34-32-101 *et. seq.*) ("Hard Rock Act") and associated Rules (2 C.C.R. 407-1) ("Hard Rock Rules") or the Land Reclamation Act for the Extraction of



Construction Materials (C.R.S. § 34-32.5-101 *et. seq.*) (“Construction Materials Act”) and associated Rules (2 C.C.R. 407-4) (“Construction Materials Rules”), with respect to any other operation conducted by the Prospective Successor in the State of Colorado.

Permittee and Prospective Successor hereby request that the Mined Land Reclamation Board (“Board”) approves their SO Application, recognizes the Prospective Successor as Successor Operator under the Permit, accepts the Prospective Successor’s Performance and Financial Warranties, and releases the current Permittee’s Performance and Financial Warranties.

SIGNED, SEALED AND DATED this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

**PERMITTEE**

\_\_\_\_\_  
Name of Permittee

By \_\_\_\_\_  
Signature of Officer

\_\_\_\_\_  
Title of Officer

**PROSPECTIVE SUCCESSOR**

\_\_\_\_\_  
Name of Prospective Successor

By \_\_\_\_\_  
Signature of Officer

\_\_\_\_\_  
Title of Officer

**NOTARY FOR PERMITTEE**

STATE OF \_\_\_\_\_ )  
 ) ss.:  
COUNTY OF \_\_\_\_\_ )

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_,  
by \_\_\_\_\_ as \_\_\_\_\_ of \_\_\_\_\_.

Notary Public \_\_\_\_\_

My Commission Expires \_\_\_\_\_

**NOTARY FOR PROSPECTIVE SUCCESSOR**

STATE OF \_\_\_\_\_ )  
 ) ss.:  
COUNTY OF \_\_\_\_\_ )

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_,  
by \_\_\_\_\_ as \_\_\_\_\_ of \_\_\_\_\_.

Notary Public \_\_\_\_\_

My Commission Expires \_\_\_\_\_

**STATE APPROVAL**  
**[for completion by Division]**

- (a) The Board hereby approves the transfer of permit number \_\_\_\_\_ from  
\_\_\_\_\_ to \_\_\_\_\_.
- (b) The Board hereby recognizes \_\_\_\_\_ as Successor Operator under  
such Permit.
- (c) The Board hereby accepts the Performance and Financial Warranties submitted by Successor and hereby  
releases \_\_\_\_\_, as former Permittee from all obligations under  
its Performance and Financial Warranties. The Board further releases all affected financial warrantors from  
obligations under Financial Warranties associated with the former Permittee.

STATE OF COLORADO  
DEPARTMENT OF NATURAL RESOURCES  
MINED LAND RECLAMATION BOARD  
DIVISION OF RECLAMATION, MINING AND SAFETY

By: \_\_\_\_\_  
Division Director

Date Executed: \_\_\_\_\_



# STATE OF COLORADO

## DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215

Denver, Colorado 80203

Phone: (303) 866-3567

FAX: (303) 832-8106



### PERFORMANCE WARRANTY

Operator: \_\_\_\_\_

Operation: \_\_\_\_\_

Permit Number: \_\_\_\_\_

*This form has been approved by the Mined Land Reclamation Board ("Board") pursuant to the Mined Land Reclamation Act (C.R.S. § 34-32-101 et. seq.) ("Hard Rock Act") and associated Rules (2 C.C.R. 407-1) ("Hard Rock Rules") and the Land Reclamation Act for the Extraction of Construction Materials (C.R.S. § 34-32.5-101 et. seq.) ("Construction Materials Act") and associated Rules (2 C.C.R. 407-4) ("Construction Materials Rules"). Any alteration or modification of this form, without approval by the Board shall result in the performance warranty being invalid and result in the voiding of any permit issued in conjunction with such invalid performance warranty and subject the operator to cease and desist orders and civil penalties for operating without a permit pursuant to sections 34-32-123, C.R.S. of the Hard Rock Act and 34-32.5-123, C.R.S. of Construction Materials Act.*

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, the Colorado Mined Land Reclamation Act, C.R.S. § 34-32-101 et seq. (the "Hardrock Act"), as amended, and the Colorado Land Reclamation Act for the Extraction of Construction Materials, C.R.S. § 34-32.5-101 et seq. (the "Construction Materials Act"), as amended (collectively the "Acts"), provide that no permit may be issued until the Mined Land Reclamation Board (the "Board") receives a performance warranty consisting of the Operator's written promise to comply with the requirements of the Hardrock or Construction Materials Act, whichever is applicable.

WHEREAS, \_\_\_\_\_ (the "Operator"), has applied for a permit to conduct a mining operation known as \_\_\_\_\_ (the "Operation") on certain lands in \_\_\_\_\_ County, Colorado. These lands are described in the permit application, as amended and supplemented, and are referred to herein as the "Affected Lands."

WHEREAS, in its application for the permit, the Operator has agreed to be bound by all requirements of the Hardrock or Construction Materials Act and all applicable rules and regulations of the Board, as amended from time to time.



WHEREAS, the Operator hereby gives the Board this performance warranty pursuant to C.R.S. §§ 34-32-117(2) or 34-32.5-117(2), and herein promises the Board that it will comply with all applicable requirements of the Hardrock or Construction Materials Act.

NOW, THEREFORE, The Operator hereby promises the Board that it will comply with all applicable requirements of the Hard Rock or Construction Materials Act and applicable rules and regulations of the Board.

The Operator hereby promises the Board that it will comply with all of the terms of the application for a permit, as amended and supplemented, as well as any conditions attached to the permit by the Board.

The Operator promises the Board, pursuant to C.R.S. §§ 34-32-112(1)(d) or 34-32.5-112(1)(b)(IV), that it has the lawful authority to enter upon the Affected Lands to conduct mining operations, including, but not limited to, reclamation. The Operator further recognizes the right of the Board to enter to reclaim lands affected by the Operation.

The description of lands herein is for convenience of reference only, and no error in such description, revision of the permitted mining area, or disturbance by the Operator of lands outside of the permitted mining area shall alter or diminish the Operator's obligation hereunder, which shall extend to the reclamation of all such lands disturbed.

The obligation of the Operator hereunder is such that, if the Operator shall successfully comply with the requirements of the Hardrock or Construction Materials Act, applicable rules and regulations, and the permit, then the Board, upon a finding that the Operator has so complied, shall release this performance warranty, and the Operator from its obligation hereunder. The obligation of the Operator hereunder shall continue until released by the Board in accordance with applicable law.

The Operator promises to be responsible for the cost of reclamation up to the amount established by the Board and has attached hereto its financial warranty, in accordance with C.R.S. §§ 34-32-117(3) or 34-32.5-117(3). The Operator agrees that it will maintain a financial warranty (or warranties) covering the Board's estimated costs of reclamation in good standing for the entire life of the permit. If the Operator is a unit of County or Municipal government, or is a department or division of State government, the Operator is not required to submit or post any other instrument of financial responsibility but hereby promises to be responsible for the cost of reclamation up to the amount specified by the Board.

If the Board determines that the Operator is in default under this performance warranty and has failed to cure such default, although written notice of such default and ample time to cure such default have been given, the Operator's financial warranty shall be subject to forfeiture.

This performance warranty may be executed in multiple copies, each of which shall be treated as an original, but together they constitute only one agreement, the validity and interpretation of which shall be governed by the laws of the State of Colorado. The provisions hereof shall bind and inure to the benefit of the parties hereto and their successors and assigns.



SIGNED, SEALED AND DATED this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Operator (SEAL)

By: \_\_\_\_\_

Title: \_\_\_\_\_

**NOTARIZATION OF OPERATOR'S ACKNOWLEDGEMENT**

STATE OF \_\_\_\_\_ )  
 ) ss.:  
COUNTY OF \_\_\_\_\_ )

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_,  
by \_\_\_\_\_ as \_\_\_\_\_ of \_\_\_\_\_.

Notary Public \_\_\_\_\_

My Commission Expires \_\_\_\_\_

STATE OF COLORADO  
DEPARTMENT OF NATURAL RESOURCES  
MINED LAND RECLAMATION BOARD  
DIVISION OF RECLAMATION, MINING AND SAFETY

By: \_\_\_\_\_  
Division Director

Date Executed: \_\_\_\_\_

Rev. 05/12

## COST SUMMARY WORK

Task description: Cost Summary

Site: Meadow Hollow Quarry

Permit Action: 1/16/2020 Inspection

Permit/Job#: M2009006

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 1/27/2020

County: Larimer

Filename: M006-000

User: AME

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Grade 4 acre pit area to 3H:1V	DOZER	1	27.79	\$6,689
002	Grade 0.5 acre storage area to 3H:1V	DOZER	1	3.09	\$743
003	Grade 0.1 acre storage area to 3H:1V	DOZER	1	0.33	\$80
004	Spread growth medium across 4.6 acres	SCRAPER1	1	8.32	\$5,147
005	Revegetate 5 acres	REVEGE	1	10.00	\$8,055
006	Mobilization/Demobilization	MOBILIZE	1	3.24	\$2,702
<b><u>SUBTOTALS:</u></b>				<b>52.77</b>	<b>\$23,416</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$473
Performance bond:	1.05	Total =	\$246
Job superintendent:	26.39	Total =	\$1,831
Profit:	10.00	Total =	\$2,342

TOTAL O & P = \$4,891

CONTRACT AMOUNT (direct + O & P) = \$28,307

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	<u>\$0</u>	Total =	<u>\$0</u>
Engineering work and/or contract/bid preparation:	<u>0.00</u>	Total =	<u>\$0</u>
Reclamation management and/or administration:	<u>5.00</u>		<u>\$1,415</u>

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$6,307

**TOTAL BOND AMOUNT (direct + indirect) = \$29,723**



**BULLDOZER WORK**Task description: **Grade 4 acre pit area to 3H:1V**Site: **Meadow Hollow Quarry**Permit Action: **1/16/2020 Inspection**Permit/Job#: **M2009006****PROJECT IDENTIFICATION**Task #: **001**  
Date: **1/27/2020**  
User: **AME**State: **Colorado**  
County: **Larimer**Abbreviation: **None**  
Filename: **M006-001**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:	\$103.86	NA
Operating Cost/Hour:	\$82.26	100
Ripper own. Cost/Hour:	\$10.43	NA
Ripper op. Cost/Hour:	\$4.19	50
Operator Cost/Hour:	\$39.98	NA
Total unit Cost/Hour:	\$240.72	
Total Fleet Cost/Hour:	<b>\$240.72</b>	

**MATERIAL QUANTITIES**Initial Volume: **38,720**  
Swell factor: **1.000**  
Loose volume: **38,720 LCY**Source of estimated volume: **4 acres x 6 ft high rubble piles**  
Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**  
Unadjusted hourly production: **852.6 LCY/hr**Materials consistency description: **Loose stockpile 1.2**Average push gradient: **-25 %**  
Average site altitude: **5,680 feet**Material weight: **2,550 lbs/LCY**Weight description: **Sandstone****Job Condition Correction Factor****Source**

Operator Skill:	1.000	(EXCL.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.6344

Adjusted unit  
production: 1,393.49 LCY/hr  
Adjusted fleet  
production: **1393.49** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.173/LCY

Total job time: **27.79** Hours  
Total job cost: **\$6,689**



**BULLDOZER WORK**Task description: **Grade 0.5 acre storage area to 3H:1V**Site: **Meadow Hollow Quarry**Permit Action: **1/16/2020 Inspection**Permit/Job#: **M2009006****PROJECT IDENTIFICATION**Task #: **002**State: **Colorado**Abbreviation: **None**Date: **1/27/2020**County: **Larimer**Filename: **M006-002**User: **AME**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:	\$103.86	NA
Operating Cost/Hour:	\$82.26	100
Ripper own. Cost/Hour:	\$10.43	NA
Ripper op. Cost/Hour:	\$4.19	50
Operator Cost/Hour:	\$39.98	NA
Total unit Cost/Hour:	\$240.72	
Total Fleet Cost/Hour:	<b>\$240.72</b>	

**MATERIAL QUANTITIES**

Initial Volume: **4,033**  
 Swell factor: **1.165**  
 Loose volume: **4,698 LCY**

Source of estimated volume: **0.5 acres x 5 ft high rubble piles**  
 Source of estimated swell factor: **Cat Handbook**

**HOURLY PRODUCTION**

Average push distance: **50 feet**  
 Unadjusted hourly production: **1,400.0 LCY/hr**

Materials consistency description: **Partly consolidated stockpile 1.1**

Average push gradient: **-25 %**  
 Average site altitude: **5,680 feet**

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

Operator Skill:	1.000	(EXCL.)
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:	0.900	(SSD-FC)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.0866

Adjusted unit  
production: 1,521.24 LCY/hr  
Adjusted fleet  
production: **1521.24** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.158/LCY

Total job time: **3.09** Hours  
Total job cost: **\$743**



**BULLDOZER WORK**Task description: **Grade 0.1 acre storage area to 3H:1V**Site: **Meadow Hollow Quarry**Permit Action: **1/16/2020 Inspection**Permit/Job#: **M2009006****PROJECT IDENTIFICATION**Task #: **003**  
Date: **1/27/2020**  
User: **AME**State: **Colorado**  
County: **Larimer**Abbreviation: **None**  
Filename: **M006-003**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:	\$103.86	NA
Operating Cost/Hour:	\$82.26	100
Ripper own. Cost/Hour:	\$10.43	NA
Ripper op. Cost/Hour:	\$4.19	50
Operator Cost/Hour:	\$39.98	NA
Total unit Cost/Hour:	\$240.72	
Total Fleet Cost/Hour:	<b>\$240.72</b>	

**MATERIAL QUANTITIES**Initial Volume: **320**  
Swell factor: **1.165**  
Loose volume: **373 LCY**Source of estimated volume: **0.1 acres x 2 ft high rubble piles**  
Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **50 feet**  
Unadjusted hourly production: **1,400.0 LCY/hr**Materials consistency description: **Partly consolidated stockpile 1.1**Average push gradient: **-5 %**  
Average site altitude: **5,680 feet**Material weight: **2,900 lbs/LCY**Weight description: **Decomposed rock - 50% Rock, 50% Earth****Job Condition Correction Factor****Source**

Operator Skill:	1.000	(EXCL.)
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:	0.900	(SSD-FC)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7992

Adjusted unit  
production: 1,118.88 LCY/hr  
Adjusted fleet  
production: **1118.88** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.215/LCY

Total job time: **0.33** Hours  
Total job cost: **\$80**



**SCRAPER TEAM WORK**Task description: Spread growth medium across 4.6 acresSite: Meadow Hollow QuarryPermit Action: 1/16/2020 InspectionPermit/Job#: M2009006**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 1/27/2020County: LarimerFilename: M006-004User: AMEAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 637G
-Dozer:	NA
Support Equipment -Load Area:	Cat D8T - 8SU
-Dump Area:	NA
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	100	NA	NA	NA
Ownership cost/hour:	\$162.02	NA	\$103.86	NA	NA	NA
Operating cost/hour:	\$184.64	NA	\$82.26	NA	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	NA	NA	NA
Ripper op. cost/hour:	NA	NA	\$0.00	NA	NA	NA
Operator cost/hour:	\$45.58	NA	\$39.98	NA	NA	NA
Unit Subtotals:	\$392.24	NA	\$226.10	NA	NA	NA
Number of Units:	1	0	1	0	0	0
Group Subtotals:	Work: \$392.24		Support: \$226.10		Maint:	\$0.00

Total work team cost/hour: **\$618.34****MATERIAL QUANTITIES**Initial volume: 3,710

CCY

Swell factor: 1.125Loose volume: **4,174**

LCY

Source of estimated volume: 4.6 acres x 6 inch depthSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight:	<u>2,650 lbs/LCY</u>	Struck Volume:	<u>24.00</u>	LCY
Material description:	<u>Decomposed rock - 25% Rock, 75% Earth</u>	Heaped Volume:	<u>34.00</u>	LCY
Rated Payload:	<u>81,600 pounds</u>	Average Volume:	<u>29.00</u>	LCY
Payload Capacity:	<u>30.79 LCY</u>	Adjusted Capacity:	<b><u>29.00</u></b>	LCY

Cycle Time:Scraper Loading Time: 0.80 MinutesManeuver and Spread Time: 0.60 MinutesJob Condition Correction:

Site Altitude: 5680 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	300.00	25.00	5.00	30.00	267	1.12

Haul Time: 1.12 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	-25.00	5.00	-20.00	1201	0.36

Return Time: 0.36 minutesTotal Scraper team cycle time: 2.88 minutesAdjusted for job conditions: 501.46 LCY/HourSelected Number of Scrapers: 1 Scraper(s)Adjusted single scraper team (unit) hourly production: 501.46 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 501.46 LCY/HourUnadjusted unit production/hour: 604.17 LCY/Hour

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

**JOB TIME AND COST**Fleet size: 1 Team(s)Total job time: 8.32 HoursUnit cost: \$1.233 /LCYTotal job cost: \$5,147

**REVEGETATION WORK**Task description: Revegetate 5 acresSite: Meadow Hollow QuarryPermit Action: 1/16/2020 InspectionPermit/Job#: M2009006**PROJECT IDENTIFICATION**Task #: 005  
Date: 1/27/2020  
User: AMEState: Colorado  
County: LarimerAbbreviation: None  
Filename: M006-005Agency or organization name: DRMS**FERTILIZING****Materials**

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

**Application**

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

**TILLING**

Description	Cost /Acre
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Big Bluestem - Kaw	11.00	32.83	\$146.85
Blue Grama - Hachita	3.00	48.97	\$47.93
Indian Ricegrass - Paloma	12.00	38.84	\$133.50
Little Bluestem - Pastura	7.00	41.78	\$94.38
Sideoats Grama - Vaughn	9.00	29.55	\$75.38
Slender Wheatgrass - San Luis	11.00	40.15	\$46.75
Western Wheatgrass - Rosanna	16.00	40.40	\$92.00
<b>Totals Seed Mix</b>	<b>69.00</b>	<b>272.52</b>	<b>\$636.78</b>



**Application**

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

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

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

**Application**

Description	Cost /Acre
Weed spray, hand, non-aquatic area, nox. [DMG]	\$180.00
<b>Total Mulch Application Cost/Acre</b>	<b>\$180.00</b>

**NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Juniper, Rocky Mountain	12	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.31	\$0.00	\$27.72
Pine, Ponderosa	48	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.31	\$0.00	\$110.88
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$138.60</b>

**JOB TIME AND COST**

No. of Acres:	5	Cost /Acre:	\$1,222.60
Estimated Failure Rate:	30%	Cost /Acre*:	\$904.00
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	<b>\$6,113.00</b>
Reseeding Job Cost:	<b>\$1,356.00</b>
Total Job Cost:	<b>\$7,469</b>
Job Hours:	<b>10.00</b>

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mobilization/Demobilization**Site: **Meadow Hollow Quarry**Permit Action: **1/16/2020 Inspection**Permit/Job#: **M2009006****PROJECT IDENTIFICATION**Task #: **006**State: **Colorado**Abbreviation: **None**Date: **1/27/2020**County: **Larimer**Filename: **M006-006**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:**

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

**NON ROADABLE EQUIPMENT:**

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8SU	53.08	\$114.29	\$141.54	1	\$255.83	\$141.54	\$250.00
Cat 637G	57.28	\$162.02	\$141.54	1	\$303.56	\$141.54	\$250.00
Subtotals:					<b>\$559.39</b>	<b>\$283.08</b>	<b>\$500.00</b>

**ROADABLE EQUIPMENT:**

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

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>BERTHOUD</u>	
Total one-way travel distance:	<u>10.50</u>	miles
Average Travel Speed:	<u>50.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$2,696.37</u>
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$5.44</u>
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.21</u>	<u>0.21</u>
Return Time (Hours):	<u>0.21</u>	<u>0.21</u>
Loading Time (Hours):	<u>0.60</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.60</u>	<u>NA</u>
Subtotals:	<u>1.62</u>	<u>0.42</u>

**JOB TIME AND COST**

Total job time:	<u>3.24</u>	Hours
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Total job cost:	<u>\$2,702</u>
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