



STATE OF
COLORADO

Eschberger - DNR, Amy <amy.eschberger@state.co.us>

M-2021-009; Third Adequacy Response

Katie Todt <katie@lewicki.biz>

Tue, Apr 26, 2022 at 10:21 AM

To: "Eschberger - DNR, Amy" <amy.eschberger@state.co.us>

Cc: Robert Young <youngranchresource@gmail.com>, Ben Miller <ben@lewicki.biz>, Ben Langenfeld <benl@lewicki.biz>

Good afternoon, Amy:

On behalf of the Young Ranch Resource, LLC, please find the attached and below listed files as the YRR's Third Adequacy Response. Thank you for accepting a digital submittal. I'll forward you the County and City clerk receipt letters ASAP.

Attached:

- YRR Third Adequacy Response 220426.pdf
- Map G-1 Surface Hydrology 220418.pdf
- Central City letter signed 220414.pdf
- Clear Creek clerk letter signed 220411.pdf
- Gilpin clerk letter signed 220411.pdf

Please don't hesitate to contact me at any point.

Cheers,

Katie Todt

Senior Consultant

Lewicki and Associates, PLLC

(314) 704-4505



5 attachments

YRR Third Adequacy Response 220426.pdf
3023K

Central City letter signed 220414.pdf

313K

 **Clear Creek clerk letter signed 220411.pdf**
45K

 **Gilpin clerk letter signed 220411.pdf**
62K

 **Map G-1 Surface Hydrology 220418.pdf**
3974K

April 26, 2022

Amy Eschberger
Environmental Protection Specialist
Colorado Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, Colorado 80203
(303) 866-3567

Delivered Via Email and Fedex/Hand Delivery

RE: Young Ranch Resource Quarry (M-2021-009), Third Adequacy Response

Ms. Eschberger:

On behalf of the Young Ranch Resource, LLC, please allow this letter to serve as response to your April 14, 2022 dated Adequacy Review No. 3 for the Young Ranch Resource quarry, Colorado Division of Reclamation, Mining and Safety (CDRMS) File No. M-2021-009.

Exhibit D – Mining Plan (Rule 6.4.4):

- 1. In the event that potentially acid-generating materials are encountered during mining, the applicant has committed to isolating such rocks from the main production and disposing of them off site at the appropriate licensed facility (if the event area is small in nature), or to ceasing mining in that area until the issue can be safely and appropriately resolved (if the event area is large in nature). There was no mention of notifying the Division in either of these situations. Please commit to immediately notifying the Division in the event that potentially acid-generating materials are encountered at the site so the appropriate permitting action, if any, can be determined.*

The Applicant commits to notifying the Division in the event that acid-generating materials are encountered during mining. Notification will be sent whether a small or large event area is encountered.

Exhibit E – Reclamation Plan (Rule 6.4.5):

- 2. Due to the absence of sufficient topsoil on site to complete reclamation, the applicant is proposing to create a growth medium with onsite materials, by combining partially decomposed plant material, sandy loam, and tree mulch with crusher fines. Nutrient testing will be conducted on the initial mixed growth medium to determine whether any fertilizers are needed prior to application. The growth medium will be placed on all disturbed lands at a minimum depth of 6 inches. Additionally, backfilled highwalls and waste rock landform slopes will receive a 3-12 inch layer of “rock mulch” (coarse blasted rock) in order to reduce erosion and provide micro-climates for seed germination. Retopsoiled areas will be planted with a dry rangeland grass mixture or a tree and shrub mixture, depending on slope orientation (grasses on south- and west-facing slopes and*

trees/shrubs on north- and east-facing slopes). Flatter reclaimed areas will be drill-seeded and mulched with wood mulch derived from onsite trees. Steeper reclaimed areas will be hydroseeded and receive the rock mulch layer described above. The Division has the following comments regarding the proposed revegetation plan:

- a. Please commit to performing baseline soil testing of an undisturbed area prior to moving into that area and comparing these results with the nutrient testing results for the prepared growth medium to determine whether any amendments and/or fertilizers are needed. Please keep in mind, any changes to the revegetation plan approved in this application could be proposed through the Technical Revision process.*

The Applicant commits to completing baseline soil testing in undisturbed phases prior to moving into that area. These results will be used to determine if soil amendments and/or fertilizers are required. In the event that soil testing requires changes to the permit as it is currently written, the Applicant will follow the technical revision process prior to opening a new phase.

- b. The Division is unfamiliar with the proposed technique of applying a layer of rock mulch on top of replaced topsoil as part of the revegetation plan for disturbed slopes. The Division is not aware of this technique having been utilized at comparable quarry sites in Colorado, and therefore, has some concerns about whether this technique could produce successful revegetation of disturbed slopes. Unless the applicant is able to provide multiple reference sites and/or literature supporting this unconventional technique, the Division will need to apply a failure rate of at least 50% to the proposed seed mixtures. This failure rate could be adjusted once the applicant demonstrates successful establishment of vegetation on reclaimed slopes. The Division encourages the applicant to utilize traditional reclamation methods for the site when practicable.*

To further illustrate the anticipated successful use of rock mulch on reclamation slopes, members of Lewicki and Associates visited the site on April 21, 2022 to collect and provide photographic examples of mature vegetation across two reclamation slope orientations. Two locations were chosen: first along the east-northeast facing fill slope of the Central City Parkway (CCP; Figure 1) and second on the southwest facing slope near where the central mine access road meets the CCP (Figure 3).

The CCP was finished in 2004 with no vegetation planted on the resultant fill slopes. All vegetation on the east-northeast facing fill slope of the WRL drainage is, therefore, volunteer and has been unirrigated for ~18 years. Vegetation observed includes dormant grasses, evergreen trees, and juniper trees. Additionally, wild rose and raspberry are abundant throughout the fill slope (Figure 2). As the YRR will plant tubelings and shrubs, it is expected that mature tree growth can be achieved much sooner than the CCP volunteer reclamation.

The southwest facing slope very near the southern extent of the central mine access road alignment hosts different vegetation and was not disturbed as a result of CCP construction (Figures 3 and 4). Therefore, vegetation shown features an intact vegetative community characteristic of a dominantly sunny slope within the YRR. While rock sizing is overall smaller than that of the CCP fill slope, rock and bare ground continues to cover the majority of the ground surface. Mature grasses, cacti, and wildflowers exist across the slope during peak summer months.

Percent coverage of rock and bare ground versus organic material (vegetation and/or woody debris) for the east-northeast facing is conservatively estimated to be between 60-80% rock coverage across the entire slope. Percent coverage of rock and bare ground versus organic matter of the southwest facing slope is estimated to be between 50-70%. Therefore, final reclamation rock mulch coverage at the YRR will be applied at a rate of 50-80% across all slopes.

The Applicant has already included a 50% failure rate for all seed mixes and a 100% failure rate for shrubs and tree tubelings in the Exhibit L bond calculation. While the YRR does not necessarily anticipate these failure levels, as vegetation will not be irrigated, it was deemed fair to prepare for a scenario of such losses.



Figure 1. East-northeast facing CCP fill slope approximately 170 feet below the Parkway. Tape measuring = 5' in length; total 25 square feet area. View looking west up towards the CCP.



Figure 2. Broader view of the east-northeast facing CCP fill slope. Notice the junction with undisturbed ground and mature evergreens to the volunteer reclaimed CCP fill slope. View looking south.



Figure 3. Southwest facing CCP fill slope approximately 170 feet below the Parkway. Tape measuring = 5' in length; total 25 square feet area. View looking east up the slope.



Figure 4. Broader view of the southwest facing undisturbed slope near the central mine access road alignment. View looking east.

- c. *While the applicant is proposing to place a 3-12 inch layer of rock mulch on reclaimed slopes, it is the Division's understanding this layer will not be placed as a continuous layer given that some interstitial space (between the rocks) will be necessary to allow for successful revegetation. If the applicant chooses to keep the proposed rock mulch technique in the reclamation plan, please commit to a range in percent "rock mulch" cover (e.g., 10%-20%) to be applied on backfilled highwalls and waste rock landform slopes. The Division understands there may be some overall variation in percent rock cover throughout reclaimed slopes. However, a targeted range will ensure sufficient rock mulch is placed to control erosion and create micro-climates for seed germination (as intended), but that adequate interstitial space (between the rocks) remains for successful revegetation.*

Rock mulch will cover between 50-80% of the final reclaimed sloped surface.

Additional Items:

- 3. *Please review and respond to the adequacy review letter provided by Rob Zuber, DRMS (see enclosed letter, dated March 31, 2022).*
 - a. *Item 3f. The comment related to access for sediment removal was not addressed. If sediment removal will not be needed, please state that in response.*

Access to all sumps and other stormwater control structures will be maintained to allow for clean out and any other as needed maintenance.

- b. Item 12. The response does not include details on how water will be fanned across the working lift of the WRL. More detail should be included within Exhibit C maps and/or the text of Exhibit D. For example, will this be done with perforated pipe or by some other means?*

Fanning of water across the slope of the WRL during operations will take place using a perforated irrigation pipe or similar means. As the working area of the current lift will change, the exact location of the perforated irrigation pipe will also change as it is moved across the lift; therefore, its location is not shown on any Appendix 1 maps. This movement will also serve to mitigate any erosion along the active lift. Heavy equipment access will be maintained to facilitate the movement of the perforated pipe.

- c. Item 12. Regarding discrepancies between the Mining Runoff tables and the maps, there are still apparent errors. For example, the curve numbers on Map G-1 (CN = 89) do not match the tables for basins 1 and 2 (CN = 79), for the reclaimed condition. Please explain this, or revise the map or tables, and check all of the values.*

Map G-1 has been corrected to show the curve numbers that match the runoff tables.

- 4. All adequacy items identified by Zach Trujillo, DRMS have been addressed (see enclosed letter, dated April 6, 2022).*

Thank you and noted.

- 5. Pursuant to Rule 1.6.2(1)(c) and (2), any changes or additions to the application on file in our office must also be reflected in the public review copy which was placed with the local County Clerk and Recorder. Pursuant to Rule 6.4.18, you must provide our office with an affidavit or receipt indicating the date this was done. Please ensure the revised application submitted to the Gilpin and Clear Creek County Clerk and Recorder offices includes all revised materials submitted to the Division, including the revised materials submitted on March 25, 2022 and April 4, 2022 (and any additional revised materials submitted in response to this adequacy letter).*

Please see the attached returned records of receipt letters from Clear Creek and Gilpin Counties as well as Central City for the Second Adequacy Response – Part B submitted to the Division on April 4, 2022. This response and attachments will be filed with the Clear Creek and Gilpin County Clerks the week of April 25, 2022. A signed receipt will be forward to the Division as soon as it is received.

Please do not hesitate to contact me with questions.

Cheers,



Katie Todt
Geologist and Senior Consultant
Lewicki & Associates, PLLC
(303) 346-5196
katie@lewicki.biz

Cc:

Robert Young Jr., Young Ranch Resource, LLC
Ben Miller, Lewicki and Associates, PLLC
Ben Langenfeld, Lewicki and Associates, PLLC

Attached:

- Map G-1 Surface Hydrology 220418.pdf
- Central City letter signed 220414.pdf
- Clear Creek clerk letter signed 220411.pdf
- Gilpin clerk letter signed 220411.pdf

LEGEND

BOUNDARIES

State or territorial
County or equivalent
Incorporated city or equivalent

BUILDINGS AND RELATED STRUCTURES

Building
Well (other than water)
Airport, paved landing strip,
runway, taxiway, or apron
Unpaved landing strip
Tanks
Located or landmark object
Retaining wall, jetty, or wall
Fence

LAND SURVEYS

Public Land Survey System
Range or Township line
Location approximate
Location doubtful
Range or Township labels
Section line
Location approximate
Location doubtful
Protracted
Section numbers
Found section corner
Found closing corner
Witness corner
Meander corner
Mining claim or property boundary
Mining claim or property monument

ROADS AND RELATED FEATURES

Highway
Light duty road, paved
Light duty road, gravel
Unimproved road
Trail
Road block, berm, or barrier
Gate on road
Cattle crossing guard
Railroad

RIVERS, LAKES, SHORELINES, AND CANALS

Perennial stream/ditch
Perennial river
Intermittent stream/ditch
Intermittent river
Dam
Perennial lake/pond
Intermittent lake/pond
Dry lake/pond
Elevated aqueduct, flume, or conduit
Buried aqueduct, flume, or conduit
Waterwell
Spring or seep
Drainage Basin
Flood Plain

VEGETATION

Woodland
Shrubland
Orchard
Vineyard

TRANSMISSION LINES AND PIPELINES

Power transmission line, pole, tower
Power transmission line, buried
Telephone/data line, above ground
Telephone/data line, buried
Pipeline (non-water), above ground
Pipeline (non-water), buried

MINING FEATURES

DRMS Permit Boundary
200' Offset of DRMS Permit Boundary
Fixed Structures
Mobile Structures
Mining Phases
Berm/window

BASELINE CONTOURS

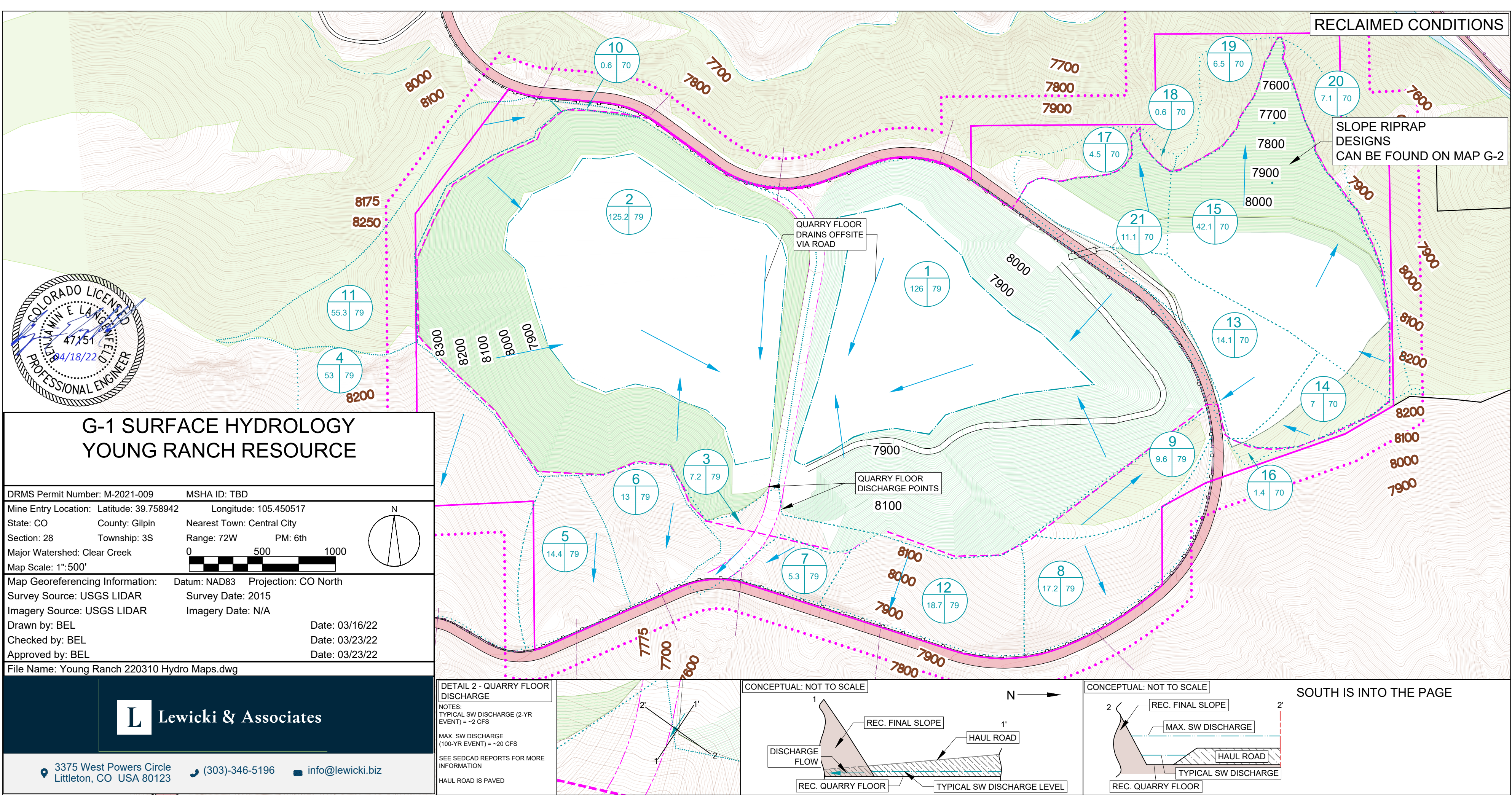
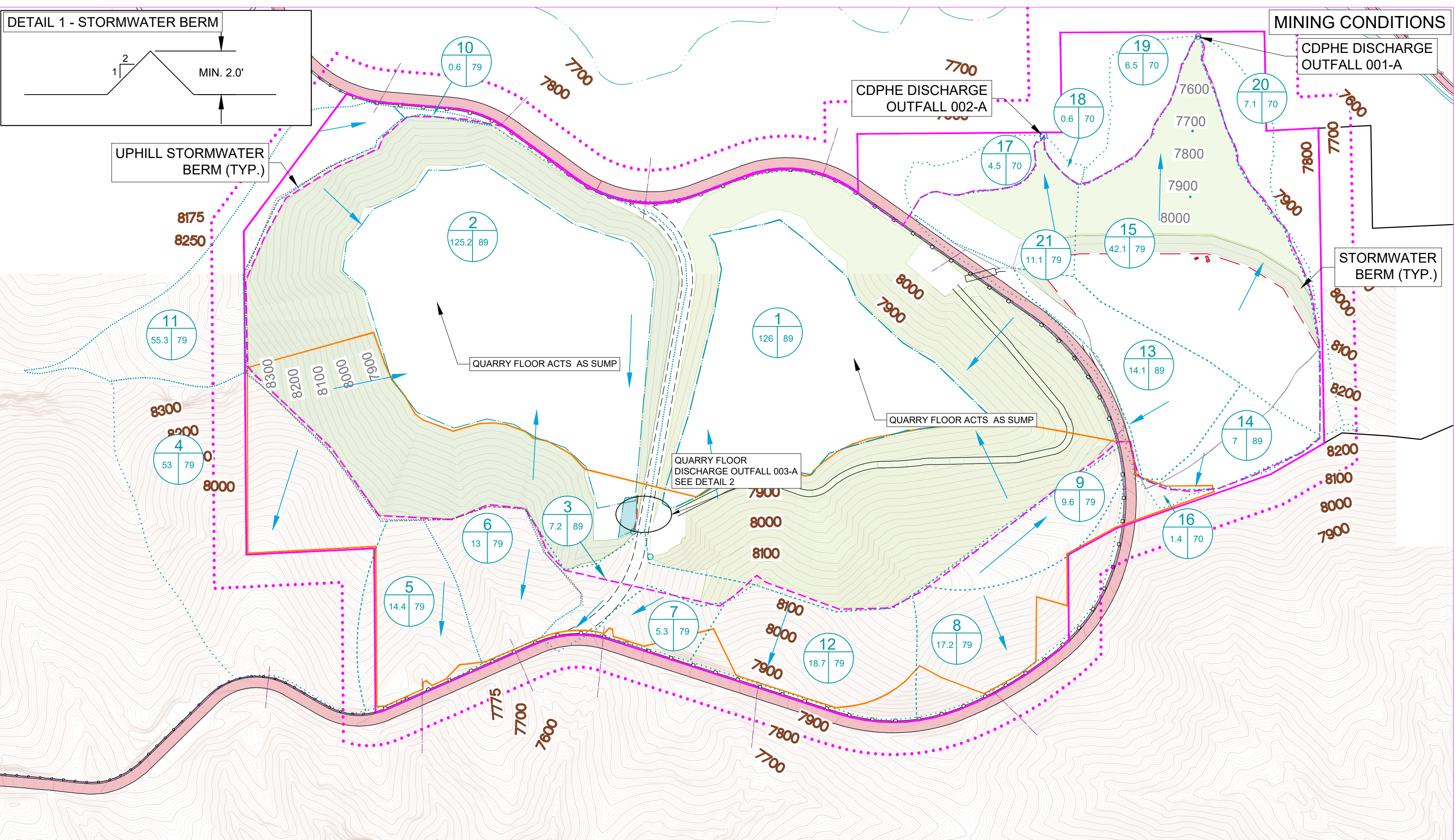
Index
Approximate of indefinite
Intermediate
Approximate of indefinite
Supplementary

POST-MINING CONTOURS

Index
Approximate of indefinite
Intermediate
Approximate of indefinite
Dump

DRAINAGE BASINS

Basin
Area
Composite
Curve Number
Drainage Direction





Lewicki & Associates

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April 7, 2022

Sahari McCormick
County Clerk and Recorder
Gilpin County
203 Eureka Street
PO Box 429
Central City, CO 80427
(303) 582-5321

Dear Ms. McCormick:

Enclosed is an amended new quarry application to the Colorado Division of Reclamation, Mining, and Safety for the Regular 112 Construction Materials Reclamation Permit for the quarry known as the Young Ranch Resource, located approximately 3.2 miles east-northeast of Idaho Springs, CO off the Central City Parkway, Clear Creek and Gilpin Counties, CO. The applicant is Young Ranch Resource, LLC. Please refer to the enclosed "assembly letter" that details which hard copy appendices from the December 20, 2021 submittal must be transferred to this March 25, 2022 dated permit package.

The Colorado Division of Reclamation, Mining, and Safety (DRMS) requires evidence that the application has been filed with your office. Therefore, please sign and date the box below. Return via mail, email or fax your signed acknowledgement of this application and we will forward your acknowledgement to the DRMS. Thank you.

Sincerely,

Katie Todt
Senior Consultant
Greg Lewicki and Associates, PLLC
[\(303\) 346-5196](tel:(303)346-5196)
katie@lewicki.biz
Fax: (303) 346-6934

The application was received on the following date:

4/11/22

by:

Sahari McCormick

April 2022



Lewicki & Associates

**Lewicki & Associates**

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April 7, 2022

Brenda Corbett
County Clerk and Recorder
Clear Creek County
405 Argentine Street
PO Box 2000
Georgetown, CO 80444
(303) 679-2339

Dear Ms. Corbett:

Enclosed is an amended new quarry application to the Colorado Division of Reclamation, Mining, and Safety for the Regular 112 Construction Materials Reclamation Permit for the quarry known as the Young Ranch Resource, located approximately 3.2 miles east-northeast of Idaho Springs, CO off the Central City Parkway, Clear Creek and Gilpin Counties, CO. The applicant is Young Ranch Resource, LLC. Please refer to the enclosed "assembly letter" that details which hard copy appendices from the December 20, 2021 submittal must be transferred to this March 25, 2022 dated permit package.

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Sincerely,

Katie Todt
Senior Consultant
Greg Lewicki and Associates, PLLC
(303) 346-5196
katie@lewicki.biz
Fax: (303) 346-6934

The application was received on the following date:

4/11/2022

by:

Brenda Corbett

April 2022



Lewicki & Associates



Lewicki & Associates
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April 7, 2022

Reba Bechtel
City Clerk and Recorder
Central City
141 Nevada Street
PO Box 249
Central City, CO 80427
(303) 582-5251 ext.402

Dear Ms. Bechtel:

Enclosed is an amended new quarry application to the Colorado Division of Reclamation, Mining, and Safety for the Regular 112 Construction Materials Reclamation Permit for the quarry known as the Young Ranch Resource, located approximately 3.2 miles east-northeast of Idaho Springs, CO off the Central City Parkway, Clear Creek and Gilpin Counties, CO. The applicant is Young Ranch Resource, LLC. Please refer to the enclosed "assembly letter" that details which hard copy appendices from the December 20, 2021 submittal must be transferred to this March 25, 2022 dated permit package.

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Sincerely,

Katie Todt
Senior Consultant
Greg Lewicki and Associates, PLLC
[\(303\) 346-5196](tel:(303)346-5196)
katie@lewicki.biz
Fax: (303) 346-6934

The application was received on the following date:

4/12/2022

by:

Reba Bechtel

April 2022



Lewicki & Associates