



RE: M2016-054 TR1 Adequacy Review 2

2 messages

Barb Brunk <barbb@dgmlc.com>

Thu, Mar 30, 2023 at 4:55 PM

To: "Lennberg - DNR, Patrick" <patrick.lennberg@state.co.us>

Cc: Wyatt WEBSTER <wyatt.webster@holcim.com>, Landon WILHITE <landon.wilhite@holcim.com>, Reggie Golden <reggieg@dgmlc.com>, Drew Golden <drewg@dgmlc.com>, Dale Rademacher <Dale.Rademacher@longmontcolorado.gov>, Glen Van Nimwegen <glen.vannimwegen@longmontcolorado.gov>

Patrick,

The applicant response to Adequacy Review 2 is attached. Let me know if you need any additional information to complete your review.

Thank you.

Barb

Barb Brunk

Resource Conservation Partners, LLC

P.O. Box 1522

Longmont, CO 80502

Fax (303)702-0585

Cell (303)775-6180

barbb@dgmlc.com



TR1_Irwin ThomasM-2016-054_ApplicantResponseAdequacyRev.2_3.30.2023.pdf
9774K

Lennberg - DNR, Patrick <patrick.lennberg@state.co.us>

Thu, Mar 30, 2023 at 5:00 PM

To: barbb@dgmlc.com

I will be out of the office from March 30th and 31 st. If this an urgent matter please call (303) 866-3567 and ask to speak with my supervisor or the supervisor on duty. My supervisor, Jared Ebert, can be reached at jared.ebert@state.co.us. Otherwise, I will respond to your email when I return April 3rd.

--

Patrick Lennberg

Environmental Protection Specialist

P 303.866.3567 x8114 | F 303.832.8106

Physical Address: 1313 Sherman Street, Room 215, Denver, CO 80203

<<https://www.google.com/maps/place/1313+Sherman+St,+Denver,+CO+80203/@39.7371051,-104.9876694,17z/data=!3m1!4b1!4m5!3m4!1s0x876c7ed5606fc05b:0x692da06e16039258!8m2!3d39.7371051!4d-104.9854807>>

*Address for FedEx, UPS, or hand delivery: *

1001 E 62nd Ave, Denver, CO 80216

Patrick.Lennberg@state.co.us | <https://drms.colorado.gov>



March 30, 2023

Colorado Department of Natural Resources
Division of Reclamation, Mining and Safety
ATTN: Patrick Lennberg
1313 Sherman Street; Room 215
Denver Colorado 80203

RE: Adequacy Review No. 2; Technical Revision (TR-1) – Revise Mining and Reclamation Plans and Maps to Account for Acreage Release Areas in AR-1; Irwin/Thomas Mine, Permit No. M-2016- 054

Dear Patrick,

Please accept this letter and the included attachments as our combined response to your Adequacy Review No. 1 letter dated March 14, 2023. Our response follows your response as outlined in your letter as follows:

1. The requested update to map C-5 did not reflect the nomenclature for the monitoring wells at the site. Please provide a Groundwater Monitoring Well map that shows the locations and names of the monitoring wells used for the collection of groundwater levels at the site. Please note if MW-2 and 4 can be included into the monitoring program the map will need to be updated accordingly.

Applicant Response: An updated Exhibit C-5, Water Resources Map is included as Attachment A. All ground water monitoring wells are labeled on the map including wells MW-2 and MW-4. MW-2 and MW-4 will be added to the site monitoring program going forward.

2. Please provide on a map the coordinates for all the permit boundary corners. The corners may be numbered on the map and a table provided listing the coordinates.

Applicant Response: The coordinates for the permit boundary are included as Attachment B, a Boundary Exhibit map. The Coordinates are numbered on the map and a table is provided listing the coordinates.

3. What order will the mine cells of MA-1 be mined? On map C-5 the mining sequence only notes that Cell 1A will be mined and backfilled prior to Cells 2 and 3.

Applicant Response: Please note an updated Exhibit C4-Mining Plan Map is included as Attachment C. The cells will be mined in sequence following the numbered cells on the map. Prior to proceeding to Cell 6 (located north of HWY 119) , Holcim will submit a technical revision .

4. Please clarify Note 2 on map C-5 that lists a permit area less than what the Division on file, 232.84 acres.

Applicant Response: The total land within the Permit boundary is 211.7 acres. This is also considered the area of disturbance. A table with the areas of each of the mining areas has been added to updated Exhibit C-4 – Mining Plan Map.

5. In the Division's Preliminary Adequacy Review item #13b the Division incorrectly listed the acreage associated with MA-1. The Division also notes the inspection report for AR-1 has the incorrect acreages listed. Please provide a table that lists the current total acreage for each mining area along with the anticipated total disturbed acreage. Include in the table a total that sums to current permit acreage.

Applicant Response: The total land within the Permit boundary is 211.7 acres. This is also considered the area of disturbance. A table with the areas of each of the mining areas has been added to updated Exhibit C-5. The total area within Mining Area 1 (MA-1) is 127.13 acres.

The mining area table included on the map is as follows:

MA-1	127.13 AC
MA-2	37.39 AC
MA-3	28.72 AC
MA-4	18.51 AC
TOTAL	211.57 AC

6. The Reclamation Plan Map needs to be updated to clearly reflect the installation of the perimeter underdrain along the southern portion of the MA-1 to mitigate the modeled groundwater mounding. The existing utility underdrains to the west of the side should also be reflected on this map.

Applicant Response: Exhibit F-Reclamation Plan Map has been updated to clearly reflect the installation of the perimeter underdrain along the southern portion of the MA-1 to mitigate the modeled groundwater mounding. The existing utility underdrains to the west of the side are also reflected on this map. The updated Exhibit F- Reclamation Plan Map is included as Attachment D.

7. What was the diameter the perimeter underdrain used in the model?

Applicant Response: The model was based on the capacity of the pipe as 50 Gallons per minute. The Design of the underdrain is being completed with the slurry wall. Preliminary pipe size used for the reclamation cost estimate is 8" Dual Wall N-12 Perf Pipe. Final design will be included with the slurry wall design at the time the design is submitted to the Division for review.

8. What is the estimated timing for the installation of the perimeter underdrain? Please commit to submitting the design drawings as a Technical Revision.

Applicant Response: The underdrain will be installed in concert with construction of the slurry wall, to prevent any mounding at well MW-E. The dewatering /mining / backfilling of Cells 4 & 5 in Scenario 4 will all take place after the underdrain is constructed.

We request that the design of the slurry wall and underdrain as referenced in this Technical Revision can be submitted as information for review and approval to the Division rather than an additional Technical Revision.

9. In Appendix H the model uses data from monitoring wells MW-2 and MW-4. Please clarify, as it is unclear to Division, who owns these wells and if they can be added to the site monitoring program.

Applicant Response: MW-2 and MW-4 are owned by Diamond G Concrete. These wells have been added to the maps and will be added to the site monitoring program going forward.



10. The utility underdrains constructed in September 2022 to the west of the site need to be shown on the Exhibit C and Final Reclamation Plan maps. Please clarify who owns these underdrains. How will mining at the site potentially impact these underdrains and has a signed structure agreement been obtained for them? If no structure agreement has been obtained, then one needs to be attempted. If one cannot be obtained then a geotechnical stability analysis needs to be performed for the underdrains.

Applicant Response: The utility underdrains constructed in September 2022 to the west of the site are shown on the updated Exhibit C-1 – Structure Owners, Exhibit C-4 – Mining Map and Exhibit F-Final Reclamation Plan maps. The updated Exhibit C-1 Existing Conditions and Surface Owners of Record is included as Attachment E. The utilities and underdrains constructed in September 2022 are located greater than 60 feet from the excavation within the mining cells.

There is an existing slope stability analysis for this property on file with the Division. The slope stability of the Irwin Thomas Mine development was investigated by Earth Engineering Consultants, LLC (EEC) in February 2018, as presented in their 'Subsurface Exploration and Slope Stability Evaluation' report. The report is included in file:

- 2018-08-02_PERMIT FILE -M2016054, “Response to Third Adequacy Review Comments for Irwin/Thomas Mine Permit No. M-2016-054— Aggregate Industries—WCR, Inc.” Dated July 30, 2018.

The information can be accessed in the DRMS on-line permit documents file for this mine. The slope stability results of EEC's investigation are summarized on pages 5 & 6 of the report.

Per the report:

“The stability analyses were evaluated using Morgenstern-Price method of slices modeled in SlopeW software provided by GeoStudio. Porewater pressures were modeled using SeepW software. Soil parameters used in the analyses were obtained from the conditions observed, the results of laboratory testing, and/or estimated from available geotechnical information. Shear strength parameters used for the sandy clay soils included a friction angle of 28° and cohesion of 500 psf; cohesion was neglected for the stockpile soils. For the sands and gravels, a friction angle of 33° and no cohesion was used. The shear strength parameters were conservatively reduced from those determined in the laboratory to account for some variation in the subgrades and, for the case of the soil stockpiles, the loss of apparent cohesion due to disturbing the soils when building the stockpiles. The results of the slope stability analyses are summarized in Table 1 below. The results for Section 1 are shown in Figures 1 through 3 with the results for Section 2 shown in Figures 4 through 6.

Table 1: Summary of Slope Stability Results

Section	Description of Geometry	(1) Distance from Cut to top of likely failure	(2) Distance from Cut to Factor of Safety = 1.3	(3) Distance from Cut to Factor of Safety = 1.5
1	Includes Stockpile	29 Feet	52 Feet	58 Feet
2	Includes Roadway	24 Feet	41 Feet	50 Feet



A minimum factor of safety of 1.3 to 1.5 is generally considered acceptable for slope stability of permanent improvements. Higher factors of safety would be developed with greater distances from the cut face."

Based on the information outlined above and the planned setbacks to the improvements from the face of the mining, the utilities and underdrains will not be impacted by the mining. Holcim also offered Structure Agreement for these improvements as follows:

- The utilities and associated underdrains included in the public right of way for Harvest Moon Drive will be owned by the City of Longmont. Holcim offered Structure Agreements to the City of Longmont for all of the public improvements located within 200' of the permit boundary.
- The underdrains associated with the storm drainage improvements on the property owned by Diamond G Concrete and Golden Farm, LLLP are currently located in a drainage easement and owned by those entities. Holcim offered Structure Agreements to Diamond G Concrete and Golden Farm, LLLP for the storm drainage and private irrigation lateral ditch improvements located within 200' of the permit boundary including the underdrains associated with the drainage improvements.

Copies of the agreements and certified mail receipts were included with our response to Adequacy Review 1 for this application. Copies of the return receipts confirming delivery of the certified mail are included at Attachment F.

11. The Division acknowledges the following: Section 21 of the 2018 City of Longmont PUD states, "The mind portion of any mining pod in any phase shall be limited to that shown on the approved plan. If mining is underway in more than one pod at a time, the combined mining area shall not exceed 35 acres. For purposes of interpreting this condition, "combined mining area" shall mean any area that has been disturbed in preparation of mining, or in which mining is underway, or in which grading for reclamation for is underway. Once grading of a reclaimed mining pod is completed, it will no longer be considered as part of the combined mining area. ". The PUD limits the disturbed mining area to 35 acres at any one time in MA-1. Does the Operator want to revise the bonding and Mining Plan to account for this stipulation?

Applicant Response: Holcim's proposal currently reflects this stipulation. Aspect A1 of the proposed bond summary table includes an allowance for backfilling and grading 735,200 cubic yards of fill, which they calculated to be the maximum volume that could be required to backfill the 35-acre disturbance limit back to grade. An Updated Exhibit L – Reclamation Cost is included as Attachment G. Please note: this estimate was provided to the Division via email on March 9, 2023 and is included with this response so that all of the information referenced in this response is included herewith.

12. The reclamation plan for MA-1 consists of a constructed slurry wall around Cells 2 and 3 with the remaining cells being backfilled to ground surface. What is the total volume of material that will be generated onsite that will be available for backfilling, not including topsoil material? What is the estimated volume of material that will need to be imported to complete backfilling? Has a potential source for backfill material been identified? Under the current Mining Plan the Division requires a cost estimate for importing this material in order to calculate maximum potential reclamation liability to the State. However if the Operator were to use a phased bonding approach, see previous



comment, the maximum liability at any one time would be limited to 35 acres. Attachment D will need to be updated or revised to account for importing material.

Applicant Response: The total volume of stripped overburden material south of Ken Pratt Blvd that Holcim calculated will be available for backfilling is approximately 786,000 loose cubic yards. This on-site material will be used to completely backfill Cells 1A & 1, and to backfill approximately 70% of the volume of Cell 4. The remaining 30% of Cell 4 and the entire excavated volume of Cell 5 will require backfilling with clean fill brought from off-site. Approximately 527,000 loose cubic yards of imported material will be required. Various sources for this fill have been identified, including Holcim's Tull pit, the City of Longmont, as well as other 3rd-party demolition and excavation projects in the region. Critically, the mining & backfilling of Cells 4 & 5 will take place after the slurry wall and underdrain have been constructed. Therefore, Holcim agrees with the phased bonding approach. Following substantial completion of the slurry wall and underdrain, Holcim will apply for a revised bond which replaces the current Aspect B (Slurry Wall) with an aspect which accounts for required imported fill in Cells 4 & 5.

Thank you for your assistance with completion of this request for a Technical Revision. Please let us know if you need any additional information to complete your review.

RESOURCE CONSERVATION PARTNERS, LLC

Barbara Brunk, mgr.

Landscape Architect

CC:

Landon Wilhite, Holcim – WCR, Inc., landon.wilhite@holcim.com

Wyatt Webster, Holcim – WCR, Inc., wyatt.webster@holcim.com

Neil Whitmer, Holcim – WCR, Inc., neil.whitmer@holcim.com

Chance Allen, Holcim – WCR, Inc., chance.allen@holcim.com

City of Longmont - Glen Van Nimwegen, glen.vannimwegen@longmontcolorado.gov

City of Longmont – Dale Rademacher, Dale.Rademacher@longmontcolorado.gov

Golden Farm, LLLP - Reggie Golden, reggieg@dgmllc.com



ATTACHMENT A

Revised EXHIBIT C-5 - Water Resources Map

K:\1241\0001\05 Drawings\Sheets LA\1241.0001 DRMS C-5.dwg: 3/30/2023 4:17:48 PM



NOTES

1. ST. VRAIN CREEK BISECTS THE PROPOSED PERMIT AREA FROM EAST TO WEST NEAR ITS CONFLUENCE WITH LEFT HAND CREEK.
2. A PORTION OF THE BONUS DITCH AND ITS DIVERSION FROM LEFT HAND CREEK ARE LOCATED ADJACENT TO THE WEST SIDE OF THE PERMIT AREA.
3. CONCRETE IRRIGATION LATERALS AND RETURN FLOW DITCHES ASSOCIATED WITH AGRICULTURAL PRODUCTION ARE LOCATED IN THE PERMIT AREA SOUTH OF ST. VRAIN CREEK.
4. NORTH OF ST. VRAIN CREEK, A HISTORIC DRAINAGE POND FROM THE GREAT WESTERN SUGAR FACILITY REMAINS WITH ASSOCIATED INLET AND OUTLETS FROM AND TO ST. VRAIN CREEK.
5. ALTHOUGH WELLS EXIST WITHIN 600 FEET OF THE PROPOSED PERMIT AREA IMPACTS TO HISTORIC USE FROM THE PROPOSED MINING OPERATION ARE NOT EXPECTED.
6. A WELL PERMIT FOR EXPOSED GROUNDWATER WILL BE OBTAINED FROM THE COLORADO DIVISION OF WATER RESOURCES, OFFICE OF THE STATE ENGINEER.
7. A TEMPORARY SUBSTITUTE WATER SUPPLY PLAN IS IN PLACE FOR THE MINING OPERATIONS.
8. ALL WORK PERFORMED IN THE REGULATORY FLOOD PLAIN WILL CONFORM TO THE CITY OF LONGMONT FLOODPLAIN DEVELOPMENT REGULATIONS.

FLOOD PLAIN NOTES

FLOODPLAIN INFORMATION PER FIRM FLOOD INSURANCE RATE MAP NO 08013C0287J DATED DECEMBER 18, 2012 AND FIRM FLOOD INSURANCE RATE MAP NO 08013C0289I DATED DECEMBER 18, 2012.

- THIS PROPERTY LIES IN AREAS DETERMINED TO BE WITHIN OTHER AREAS - AREAS OUTSIDE THE 2% ANNUAL CHANCE FLOOD
- ZONE X - AREAS OF 25 % ANNUAL CHANCE OF FLOOD OR AREAS WITH 1% ANNUAL CHANCE OF FLOOD WITH AVERAGE DEPTHS OF LESS THAN ONE FOOT OR WITHIN DRAINAGE AREAS LESS THAN ONE SQUARE MILE AND AREAS PROTECTED BY LEVES FROM THE 100 YEAR FLOOD.
- ZONE AE - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL FLOOD CHANCE, BASE FLOOD ELEVATIONS DETERMINED.
- ZONE AH - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL FLOOD CHANCE, FLOOD DEPTHS OF 1 TO 3 FEET, (USUALLY AREAS OF PONDING) BASE FLOOD ELEVATIONS DETERMINED.

THE ADDITIONAL FLOODPLAINS SHOWN ARE BASED ON PRELIMINARY FEMA FIRM MAP 08013C0289K FROM SEPTEMBER 30, 2019 AND LONGMONT'S APPEAL OF FEMA'S PRELIMINARY FIRM MAP. THESE MAPS ARE NOT FINAL AND ARE EXPECTED TO BE REVISED, THESE ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

WELL INFORMATION

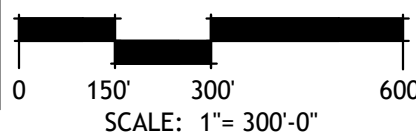
Owner	Permit No.	Current Status	Use 1	Use 2
JOSEPH PLUMLEY	305037	Well Constructed	DOMESTIC	WELL
CLIFFORD E. & KATHRYN D. SMITH	244958	Well Constructed	DOMESTIC	WELL
BILLINGS DENNIS	244988	Well Constructed	DOMESTIC	WELL
GOLDEN GRAVEL CO.	37575	Well Constructed	OTHER	WELL
LONGMONT CITY OF	67883	Well Constructed	OTHER	WELL
READ ARNOLD & JOSEPHINE C&J ENTERPRISES LLC	80996	Well Constructed	DOMESTIC	WELL
	124818	Well Constructed	DOMESTIC	WELL

LEGEND

- PERMIT BOUNDARY
- 600' OFFSET OF PERMIT BOUNDARY
- MW

MONITORING WELL LOCATION
- EXISTING PARCELS
- EXISTING DITCH
- EXISTING GAS LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING SANITARY SEWER
- EXISTING 5 FOOT CONTOUR
- EXISTING 25 FOOT CONTOUR
- 100 YR EFFECTIVE FLOOD PLANE
- W

WELL (SEE TABLE)
- 100 YR PRELIMINARY FLOOD PLANE
- 100 YR PROPOSED FLOOD PLANE
- UNDERDRAIN



IRWIN/THOMAS MINE M2016-054 TECHNICAL REVISION 1
EXHIBIT C-5

WATER RESOURCE MAP

TST

TST, INC.

CONSULTING ENGINEERS

748 Whalers Way

Suite 200 Fort Collins

Colorado 80525

Phone: 970.226.0557

JOB NO. 1241.0001.04

SCALE 1"=300'

DATE MARCH 29 2023

SHEET

5 of 5

REVISIONS	
DATE	DESCRIPTION

DRAWN	BW
CHECKED	BW
DESIGNED	BW
FILENAME	1241.0001 DRMS C-5

ATTACHMENT B
Boundary Exhibit Map

[illegible]

TST, INC.
CONSULTING ENGINEERS
748 Whalers Way
Suite 200 Fort Collins
Colorado 80525
Phone: 970.226.0557

1 of 1

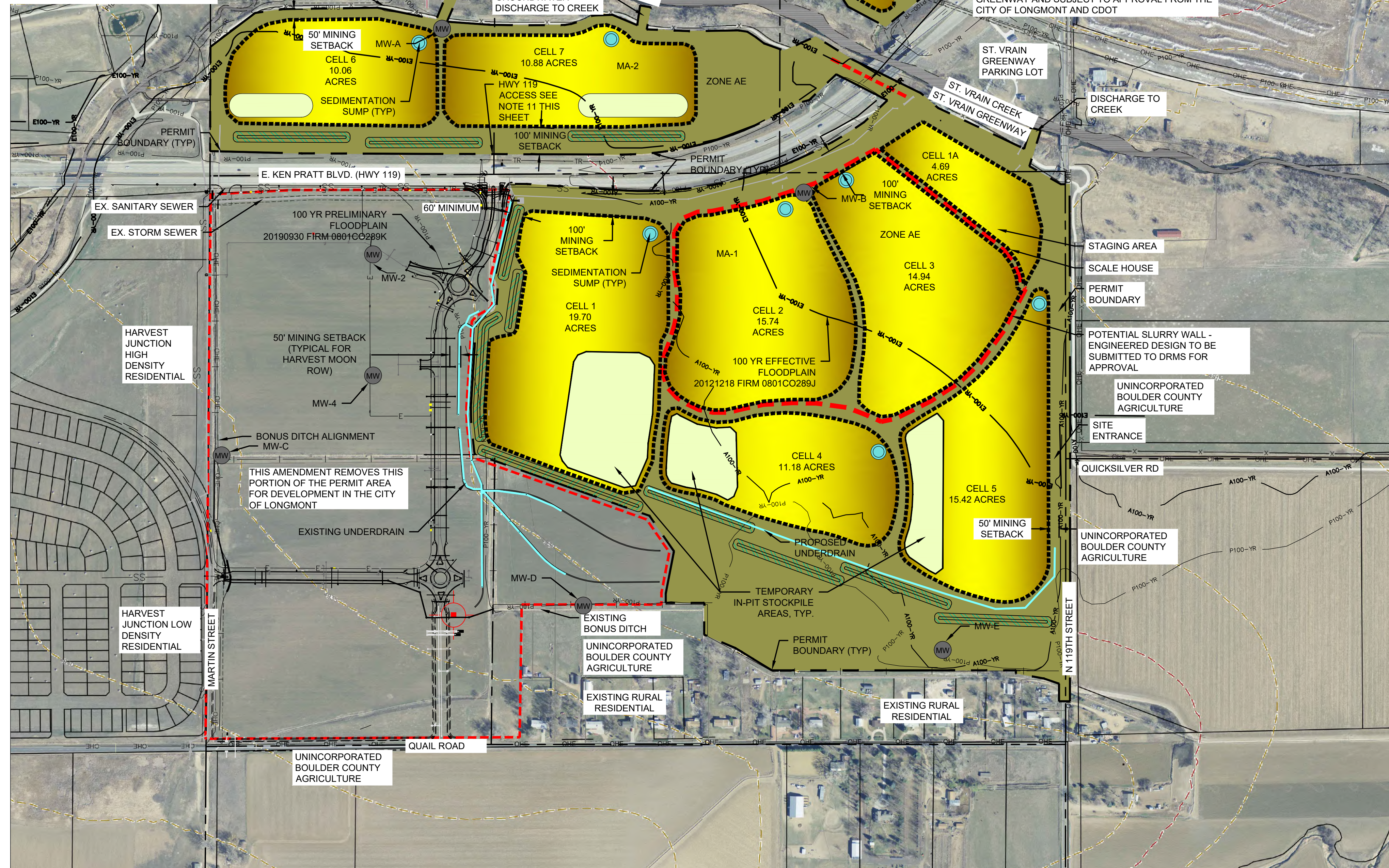
ATTACHMENT C

Revised EXHIBIT- C4 Mining Plan Map

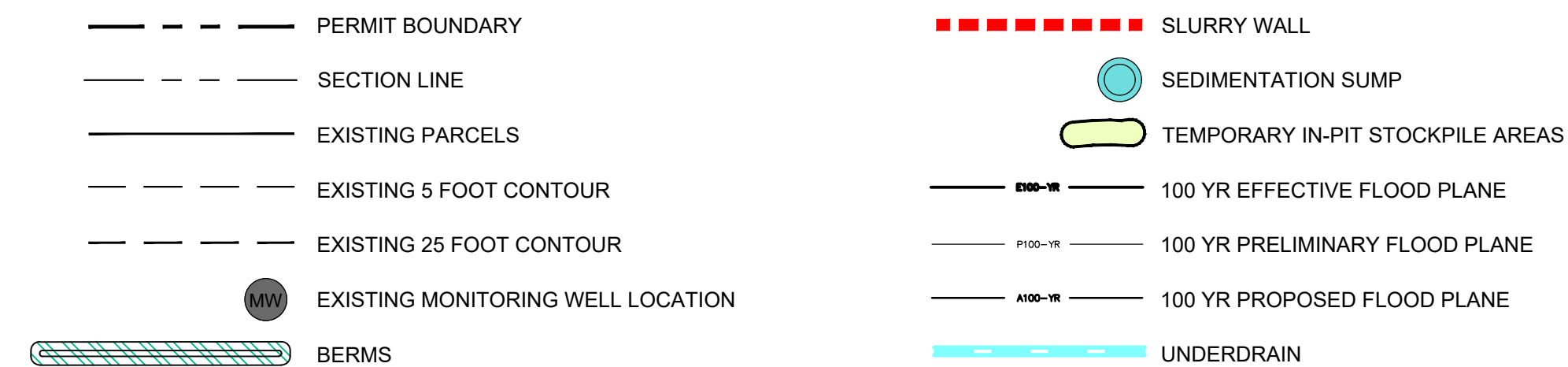
IRWIN/THOMAS MINE

NOTE:

- A. WHERE UNDERGROUND ELECTRIC CABLES THAT RUN NEAR THE PROJECT WORK AREA, THEY CANNOT BE DE-ENERGIZED FOR CROSSING PURPOSES. THE CONTRACTOR MUST TAKE ALL PRECAUTION NECESSARY TO PREVENT DAMAGE TO THE CABLES OR INJURY TO THE CONSTRUCTION CREW. SHOULD THE CONTRACTOR DAMAGE THESE FACILITIES, CONTACT LONGMONT POWER & COMMUNICATIONS IMMEDIATELY AT 651-8386. LONGMONT POWER & COMMUNICATIONS WILL REPAIR THE FACILITIES AND BILL THE DEVELOPER FOR ALL ASSOCIATED COSTS.
- B. WHERE LONGMONT POWER & COMMUNICATIONS OVERHEAD FACILITIES EXIST IN THE DEVELOPMENT AREA, THE CONTRACTOR MUST KEEP ALL EQUIPMENT OPERATION A MINIMUM OF 10 FEET FROM EXISTING OVERHEAD ELECTRIC LINES. IF THIS IS NOT FEASIBLE, OR CONDITIONS WARRANT ADDITIONAL PROTECTION OR POLE STABILIZATION, THE CONTRACTOR MUST CONTACT THE LPC OPERATIONS CONSTRUCTION COORDINATOR AT 651-8386. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE PROTECTIVE COVERING AND OR POLE STABILIZATION, 48 HOURS IN ADVANCE. SHOULD THE ELECTRIC FACILITIES BE DAMAGED, THE CONTRACTOR MUST CONTACT LPC AT 651-8386. ADDITIONALLY, ALL COSTS ASSOCIATED WITH REPAIRS WILL BE THE RESPONSIBILITY OF THE DEVELOPER.



LEGEND



NOTES

1. THE PROPOSED IRWIN/THOMAS MINE PERMIT AREA IS COMPRISED OF 4 DISTINCT MINING AREAS SEPARATED BY COLORADO HIGHWAY 119, ST. VRAIN CREEK, AND THE BURLINGTON NORTHERN AND SANTA FE (BNSF) RAILROAD. MINING AREA 1 (MA1) IS LOCATED SOUTH OF HWY 119, MINING AREA 2 (MA2) IS NORTH OF HWY 119 AND SOUTH OF ST. VRAIN CREEK, MINING AREA 3 IS NORTH OF ST. VRAIN CREEK AND SOUTH OF THE BNSF RAILROAD, AND MINING AREA 4 IS NORTH OF THE RAILROAD.
2. THE PROPOSED PERMIT BOUNDARY ENCOMPASSES APPROXIMATELY 211.75 ACRES WITH ONLY ABOUT 128.1 ACRES CURRENTLY PLANNED FOR MINING. HOWEVER, THE AFFECTED LAND BOUNDARY ESSENTIALLY FOLLOWS THE PERMIT BOUNDARY TO ALLOW FOR RECLAMATION ACTIVITIES AND FUTURE POTENTIAL MINING OPERATIONS. AREAS NOT DISTURBED BY MINING MAY BE DISTURBED BY ACCESS ROADS, MATERIAL CONVEYING, STOCKPILES, OR OTHER MINING RELATED ACTIVITIES. THE REMAINING AREA WILL CONSIST OF SETBACKS AND ROAD AND UTILITY RIGHT-OF-WAYS.
3. IN ADDITION TO AREAS DISTURBED BY MINING, ACCESS ROADS, MATERIAL CONVEYING, STOCKPILES, OR OTHER MINING RELATED ACTIVITIES MAY OCCUR IN AREAS NOT SUBJECT TO MINING AND RIPARIAN SETBACKS AND BUFFERS. AREAS NOT DISTURBED BY MINING MAY BE DISTURBED BY ACCESS ROADS, MATERIAL CONVEYING, STOCKPILES, OR OTHER MINING RELATED ACTIVITIES. THE REMAINING AREA WILL CONSIST OF SETBACKS AND ROAD AND UTILITY RIGHT-OF-WAYS
4. SETBACKS FROM THE MINE PIT TOP OF SLOPE TO THE PROPOSED PERMIT BOUNDARY OR MAN-MADE STRUCTURES NOT OWNED BY THE APPLICANT WILL BE 50 FEET OR GREATER.
5. ITEMS OWNED BY THE APPLICANT OR PROPERTY OWNER LOCATED WITHIN THE PERMIT AREA SUCH AS UN-IMPROVED ROADS, IRRIGATION LATERALS, FENCES, WATER WELLS AND ASSOCIATED PUMPS, AND OTHER STRUCTURES MAY BE REMOVED OR RELOCATED DURING MINING AND RECLAMATION.
6. TEST PITS HAVE VERIFIED THAT COMMERCIAL DEPOSITS OF SAND AND GRAVEL EXIST UP TO 25 FEET BELOW THE SURFACE OF THE GROUND.
7. MINING IS EXPECTED TO ENCOUNTER GROUNDWATER WITHIN FIVE FEET OF THE GROUND SURFACE. THE DEPOSIT WILL BE DRY MINED USING DEWATERING TRENCHES, PUMPS, SUMPS, & RECHARGE PONDS.
8. DURING MINING ADJACENT TO THE ST. VRAIN CREEK RIPARIAN AREA, PRECAUTIONS WILL BE TAKEN TO NOT DISTURB THE CREEK CHANNEL AND DESIRABLE VEGETATION.
9. A MINE OFFICE/SCALE HOUSE TRAILER MAY BE ESTABLISHED NEAR SITE ENTRANCES BOTH NORTH AND SOUTH OF ST. VRAIN CREEK.
10. BEST MANAGEMENT PRACTICES WILL BE USED TO LIMIT DISCHARGE OF STORMWATER AND SEDIMENT ONTO ADJACENT PROPERTIES AND WATERWAYS.
11. THE EXISTING HWY 119 ACCESS WILL CONTINUE TO FUNCTION FOR AGRICULTURE ACCESS AND MAINTENANCE. ONCE MINING AND RECLAMATION BEGINS, ACTIVITY ASSOCIATED WITH THE HWY 119 ACCESS WILL INCLUDE BRINGING EQUIPMENT INTO THE SITE, THE EQUIPMENT OPERATORS VEHICLE, ANY REQUIRED MAINTENANCE OF THE EQUIPMENT AND VEGETATION MANAGEMENT. MINED MATERIAL MAY BE TRANSPORTED VIA THE CONVEYOR AS SHOWN ON THE MINING PLAN OR VIA HAUL TRUCKS UTILIZING DIRECT ACCESS ONTO HWY 119 AT THE CONTROLLED INTERSECTION. SPECIFIC DETAILS REGARDING TRANSPORT OF MATERIAL FROM THE HWY 119 ACCESS OR VIA THE CONVEYOR SHALL BE REVIEWED AND APPROVED BY CDOT AND THE CITY OF LONGMONT.
12. ACCESS TO CELLS 8, 9 AND 10 WILL BE VIA AN EXISTING ACCESS EASEMENT TO NORTH 119TH ST. SPECIFIC CONFIGURATION, REQUIRED IMPROVEMENTS AND AN APPROVED HAUL ROUTE TO BE APPROVED BY THE CITY PRIOR TO MINING THESE CELLS. THE OPERATOR WILL ENTER INTO A ROAD MAINTENANCE AGREEMENT WITH THE CITY PRIOR TO MINING THOSE CELLS.
13. THE EXISTING SWALE ON THE WEST SIDE OF CELL 8 IS A MAJOR DRAINAGE CONVEYANCE AND DISCHARGE FOR THE WATER TREATMENT PLANT. THE CHANNEL CANNOT BE IMPACTED AND MUST REMAIN OPERATIONAL AT ALL TIMES. FIELD VERIFY PRIOR TO ANY MINING ACTIVITIES THAT THE 50' PROPOSED BUFFER IS ADEQUATE TO PROTECT THE EXISTING SWALE, AND IF IT IS NOT, INCREASE THE BUFFER AMOUNT TO ENSURE PROPER OPERATION OF THE SWALE.

MINING SEQUENCE NOTES:

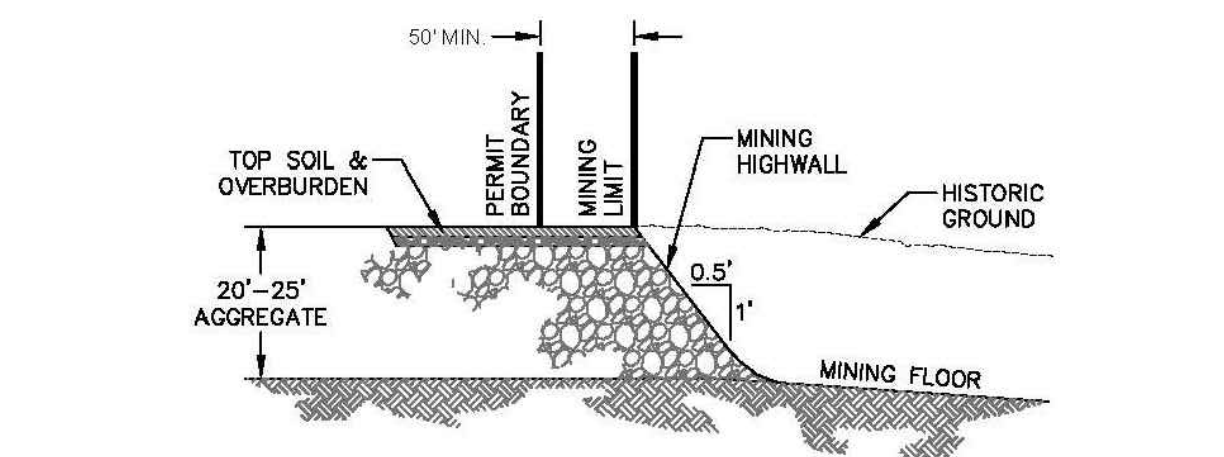
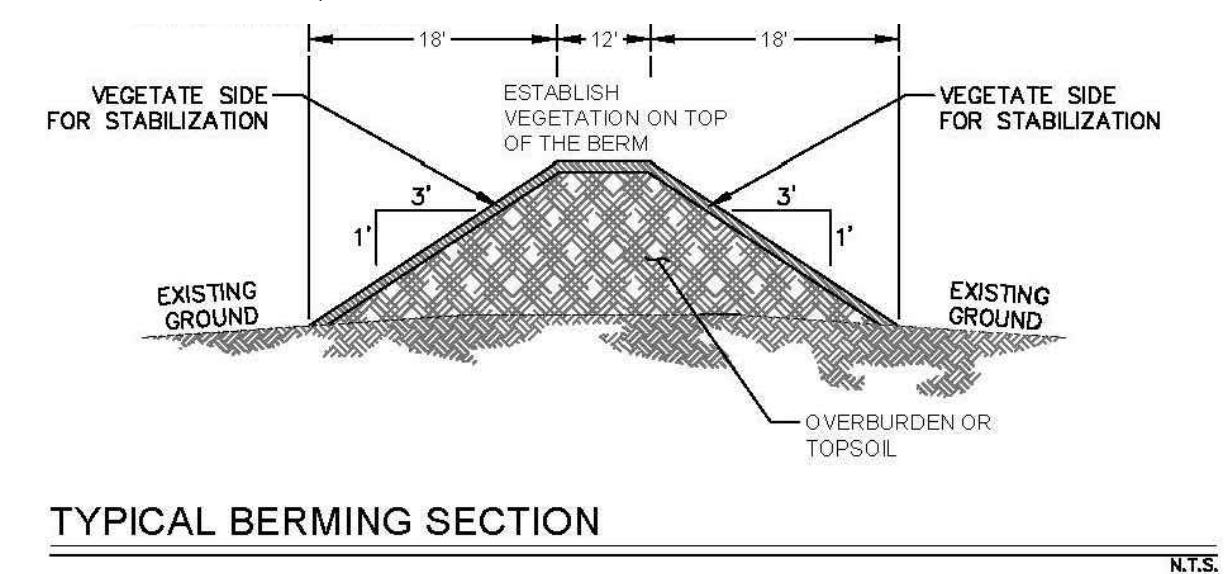
1. IN MA1, MINING CELL 1A SHALL BE MINED FIRST. MINING AND BACKFILL OF CELL 1A SHALL OCCUR DURING THE NON-FLOOD PRONE SEASON OF OCTOBER THROUGH APRIL. PRIOR TO MINING IN CELLS 2 AND 3, CELL 1A SHALL BE BACKFILLED.
2. THE SCALE HOUSE AND STAGING AREA IN MA1 MAY BE ESTABLISHED ON THE MINED AND BACKFILLED AREA OF CELL 1A.
3. IN MA2 AND MA3, THE AREAS OF THE MINING CLOSEST TO ST. VRAIN CREEK SHALL BE MINED FIRST. THE MINE CELLS WITHIN 200 FEET OF THE CREEK SHALL BE MINED AND BACKFILLED DURING THE NON-FLOOD PRONE SEASON OF OCTOBER THROUGH APRIL.
4. PRIOR TO AFFECTING LAND WITHIN MA2, MA3 OR MA4 THE DIVISION OF RECLAMATION, MINING AND SAFETY (THE DIVISION) SHALL BE NOTIFIED IN WRITING.
5. IF COMPLETED MINE CELL SLOPES ARE TO BE WITHIN A RESERVOIR OR POND, THE DIVISION SHALL BE NOTIFIED FOR INSPECTION PRIOR TO FILLING THE RESERVOIR/POND WITH WATER.
6. IF SOIL TESTING IS NECESSARY FOR RECLAMATION, TEST RESULTS AND ANY PROPOSED SOIL AMENDMENTS SHALL BE SUBMITTED TO THE DIVISION.
7. PRIOR TO MINING MA3 AND MA4, MONITORING WELLS SHALL BE INSTALLED AND MONITORED FOR FIVE QUARTERS TO ESTABLISH BASELINE GROUND WATER ELEVATIONS .
8. IF OFF SITE STRUCTURAL FILL IS TO BE IMPORTED, THE DIVISION SHALL BE NOTIFIED ACCORDING TO THE MINERAL RULES AND REGULATIONS RULE 3.1.5(9)
9. A TEMPORARY ABOVE GROUND FUEL STORAGE FACILITY MAY BE PLACED IN MA1 DURING MINING.

FLOOD PLAIN NOTES

FLOODPLAIN INFORMATION PER FIRM FLOOD INSURANCE RATE MAP NO 08013C0287J DATED DECEMBER 18, 2012 AND FIRM FLOOD INSURANCE RATE MAP NO 08013C0289J DATED DECEMBER 18, 2012.

- THIS PROPERTY LIES IN AREAS DETERMINED TO BE WITHIN OTHER AREAS - AREAS OUTSIDE THE 2% ANNUAL CHANCE FLOOD.
 - ZONE X - AREAS OF 25% ANNUAL CHANCE OF FLOOD OR AREAS WITH 1% ANNUAL CHANCE OF FLOOD WITH AVERAGE DEPTHS OF LESS THAN ONE FOOT OR WITHIN 100 FEET OF AREAS OF 25% ANNUAL CHANCE OF FLOOD OR AREAS PROTECTED BY LEVES FROM THE 100 YEAR FLOOD.
 - ZONE AE - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL FLOOD CHANCE, BASE FLOOD ELEVATIONS DETERMINED.
 - ZONE AH - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL FLOOD CHANCE, FLOOD DEPTHS OF 1 TO 3 FEET, (USUALLY AREAS OF PONDING) BASE FLOOD ELEVATIONS DETERMINED.
- THE ADDITIONAL FLOODPLAINS SHOWN ARE BASED ON PRELIMINARY FEMA FIRM MAP 080130289K FROM SEPTEMBER 30, 2019 AND LONGMONT'S APPEAL OF FEMA'S PRELIMINARY FIRM MAP. THESE MAPS ARE NOT FINAL AND ARE EXPECTED TO BE REVISED. THESE ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

MA-1	127.13 AC
MA-2	37.39 AC
MA-3	28.72 AC
MA-4	18.51 AC
TOTAL	211.75 AC



TYPICAL MINING SECTION
AT PERMIT BOUNDARY

[illegible]

DRAWN PDB

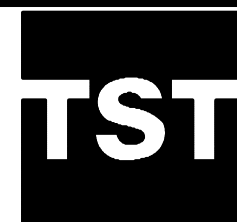
CHECKED BW

BW

1241.0001 DRM

**M2016-054 TECHNICAL REVISION 1
EXHIBIT C-4**

MINING MAP



CONSULTING ENGINEERS
748 Whalers Way
Suite 200 Fort Collins
Colorado 80525
Phone: 970.226.0557

JOB NO. 1241.0001.04

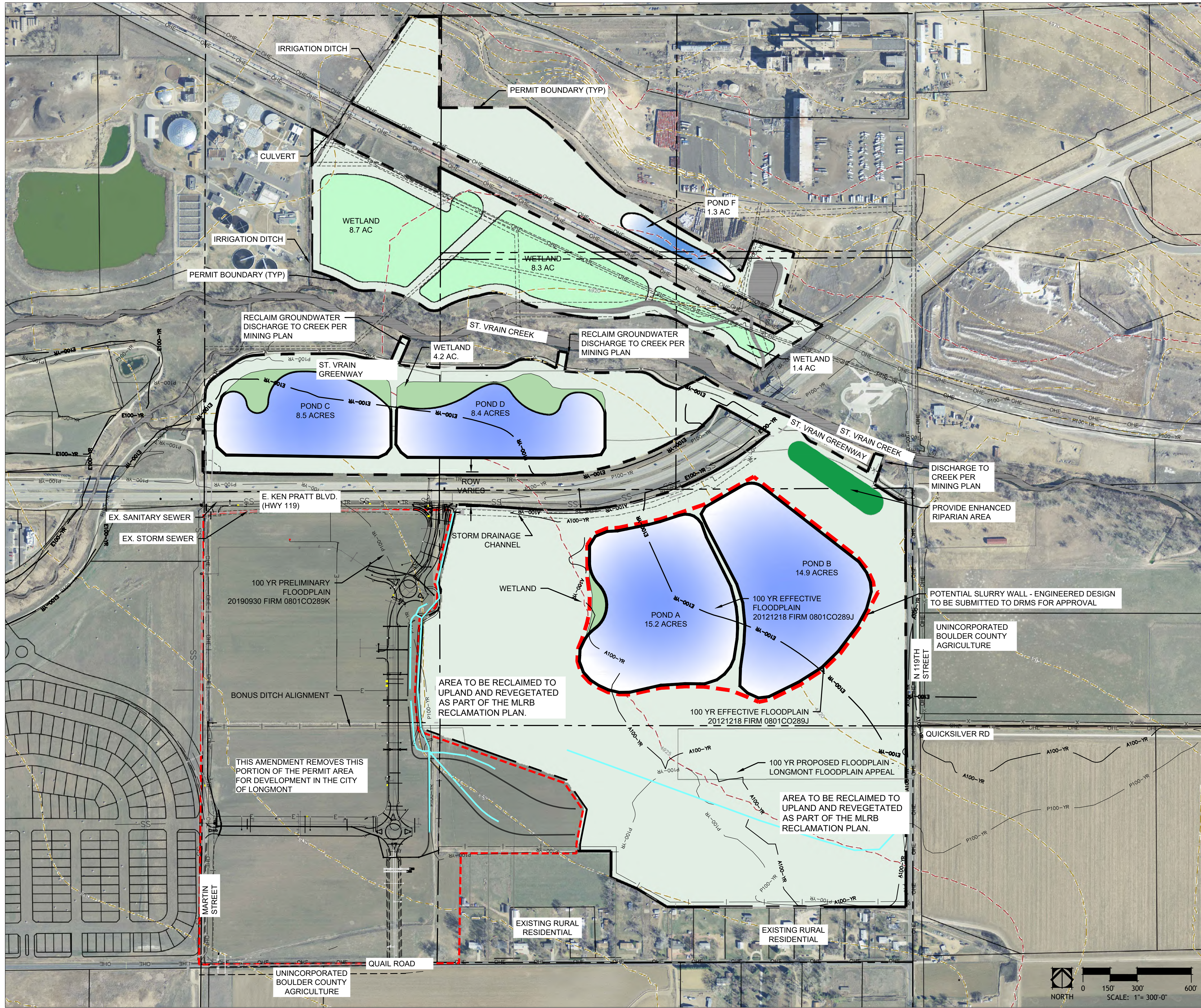
SCALE 1"=300'

DATE MARCH 29 2023

SHEET

ATTACHMENT D

Revised EXHIBIT F - Reclamation Plan Map



LEGEND

---	PERMIT BOUNDARY	SS	EXISTING SANITARY SEWER
=====	PROPOSED HAUL ROAD	----	EXISTING 5 FOOT CONTOUR
---	PROPOSED MINING LIMITS	----	EXISTING 25 FOOT CONTOUR
---	EXISTING PARCELS	----	SLURRY WALL
---	EXISTING DITCH	----	100 YR EFFECTIVE FLOOD PLANE
---	EXISTING GAS LINE	----	100 YR PRELIMINARY FLOOD PLANE
---	EXISTING OVERHEAD ELECTRIC	----	100 YR PROPOSED FLOOD PLANE
		----	UNDERDRAIN

NOTES

- THE PROPOSED FINAL LAND USES FOR THE IRWIN/THOMAS MINE ARE GENERAL AGRICULTURE OR LAND USE APPROVED BY THE CITY OF LONGMONT. AGRICULTURAL USES SHALL BE LIMITED TO CROP PRODUCTION AND MAY NOT INCLUDE ANY LIVESTOCK.
- RECLAMATION PLAN MAP ILLUSTRATES CONDITIONS WHEN ADEQUATE QUANTITIES OF OFF-SITE BACKFILL MATERIAL ARE AVAILABLE AND A PERMANENT SOURCE OF WATER FOR LONG TERM AUGMENTATION OF EXPOSED GROUNDWATER HAS BEEN OBTAINED. MINED CELLS WILL BE BACKFILLED TO CREATE UPLANDS, OPEN WATER PONDS AND LIMITED WETLAND AREAS.
- ALL SLOPES SHALL BE GRADED TO 3H:1V OR FLATTER. SLOPES WITHIN THE ST. VRAIN CREEK DELINEATED F100 YEAR FLOODPLAIN SHALL BE GRADED TO 4:1 OR FLATTER. ROUGH GRADING WILL ESTABLISH FINAL ELEVATIONS, SLOPES, AND TRANSITIONS. TRANSITIONS BETWEEN UPLANDS, WETLANDS, AND POND SLOPES SHALL BE GRADED WITH A SMOOTH, GRADUAL TOPOGRAPHY.
- FINAL GRADING WILL INCLUDE ADDITION OF TOPSOIL AND SURFACE PREPARATION FOR REVEGETATION. SPECIAL ATTENTION SHALL BE GIVEN TO TRANSITIONS FROM RECLAIMED AREAS TO UNDISTURBED LAND.
- ALL AVAILABLE AND OVERBURDEN MATERIAL WILL BE USED FOR BACKFILLING AND RECLAMATION.
- THE GROWTH MEDIUM FOR REVEGETATION WILL BE A COMBINATION OF OVERBURDEN AND TOPSOILS.
- TWO DIFFERENT MIXES OF UPLAND GRASSES WILL BE USED IN AREAS THAT WILL NOT EXPERIENCE PERIODIC FLOODING, SEASONAL GROUNDWATER, OR OTHER MOIST SOIL CONDITIONS. ONE SEED MIX WILL BE USED SIMPLY FOR QUICK SOIL STABILIZATION AND EROSION CONTROL. THIS MIX WILL MAINLY BE USED IN MA1 WHERE FURTHER AGRICULTURAL OR OTHER DEVELOPMENT IS EXPECTED TO OCCUR FOLLOWING PERMIT RELEASE. THE SECOND GRASS SEED MIX FOR AREAS LEFT AS OPEN SPACE IS COMPOSED OF A LONG LASTING AND REGENERATING NATIVE UPLAND SEED MIXTURE

Upland Grass Seed - Soil Stabilization	Application Rate" (HPLS/acre)
Intermediate Wheatgrass	3
Blue Grama	0.75
Alfalfa	0.75
TOTAL	4.5
*Application rate is for drill seeding. If seed is to be broadcast. The application rate will be doubled.	

Upland Grass Seed - Native Open Space	Application Rate" (HPLS/acre)
Western Wheatgrass	4
Blue grama	1
Side-oats grama	1.5
Switchgrass	1
Sand dropsseed	0.5
Indian Ricegrass	1
TOTAL	9
*Application rate is for drill seeding. If seed is to be broadcast. The application rate will be doubled.	

- IN AREAS WHERE WETLANDS COULD POTENTIALLY BE DEVELOPED, THE SEED MIXTURE WILL BE MODIFIED TO INCLUDE MORE TRANSITION AND WETLAND GRASSES AND GRASS-LIKE SPECIES. THESE SEED MIXES, ESPECIALLY IF STANDING WATER OR SATURATED SOILS EXIST DURING PLANTING, WILL LIKELY NEED TO BE BROADCAST.
- | Wetland/Transition Grass Seed | Application Rate" (HPLS/acre) |
|---|-------------------------------|
| Western Wheatgrass | 2.5 |
| Switchgrass | 2.5 |
| Bottlebrush squirreltail | 1.5 |
| Alkali sacaton | 1.5 |
| Colorado rush | 1.5 |
| Meadow sedge | 1.5 |
| Total | 11 |
| *Application rate is for drill seeding. If seed is to be broadcast. The application rate will be doubled. | |
- UPLAND GRASS SEED WILL BE PLANTED WITH A DRILL EQUIPPED WITH DEPTH BANDS AND PRESS WHEELS. THE SEEDED AREA WILL THEN BE COVERED WITH CERTIFIED WEED-LESS STRAW MULCH AT A RATE OF 2,000 POUNDS PER ACRE. THE STRAW WILL BE CRIMPED INTO THE SOIL TO CONTROL EROSION UNTIL THE GRASS BECOMES ESTABLISHED.
 - DRILL SEEDING IS THE PREFERRED METHOD FOR REVEGETATION. IF BROADCAST SEEDING IS NECESSARY ON MOIST SOILS, STEEP SLOPES, OR IN EXCESSIVELY ROCKY AREAS, SUCCESS CAN BE ENCOURAGED BY BROADCASTING ONTO GROWTH MEDIUM THAT IS VERY LOOSE. IF THE SEED IS BROADCAST IN THOSE CIRCUMSTANCES, THEN THE SEEDED AREA WILL BE DRAGGED TO HELP BURY THE SEED.
 - PERIODIC INSPECTION FOR NOXIOUS WEEDS, AT LEAST ONCE A QUARTER, AND MORE FREQUENTLY AS NEEDED, WILL BE DONE AS PART OF A WEED MANAGEMENT PLAN.
 - THE MINE OFFICE/SCALE HOUSE TRAILER AND ANY OTHER STRUCTURES ASSOCIATED WITH MINING WILL BE REMOVED FROM THE SITE DURING FINAL RECLAMATION ACTIVITIES.
 - BEST MANAGEMENT PRACTICES WILL BE USED TO CONTROL EROSION AND STORMWATER SUSPENDED SEDIMENT RUNOFF FROM THE SITE DURING RECLAMATION ACTIVITIES.

POND LINER NOTES

- PRIOR TO CONSTRUCTION, OVERBURDEN AND CLAYSTONE MATERIAL TESTING SHALL BE PERFORMED FOR USE IN FINAL DESIGN. THE FOLLOWING SPECIFICATIONS AND PROCEDURES ARE PROVIDED AS A GENERAL GUIDELINE FOR PERMITTING PURPOSES. FINAL SPECIFICATIONS AND DESIGN CRITERIA WILL BE DEVELOPED DURING THE FINAL DESIGN PROCESS.
- EACH LAYER OF FILL SHALL BE SCARIFIED TO ALLOW PROPER BONDING BETWEEN LAYERS.
- DENSITY AND MOISTURE CONTENT TESTING SHALL BE PERFORMED AT A RATE OF 1 TEST FOR EACH 2,000 YARDS PLACED.
- ALL CLAY LINER MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% ASTM-D698-78 STANDARD PROCTOR AT +2% OF OPTIMUM MOISTURE CONTENT.
- NO LINER MATERIAL SHALL BE PLACED IN THE LINER SLOPE WHILE EITHER THE MATERIAL, EMBANKMENT, OR FOUNDATION IS FROZEN.
- NO ORGANIC MATERIAL SHALL BE PLACED IN THE LINER SLOPE.
- EACH LAYER OR LIFT SHALL BE CONSTRUCTED CONTINUOUSLY AND APPROXIMATELY HORIZONTAL FOR THE WIDTH AND LENGTH OF EACH LIFT.
- LINER MATERIAL SHALL BE COMPOSED OF CLAYEY OVERBURDEN AND WEATHERED CLAYSTONE THAT BREAKS DOWN DURING PROCESSING. BEDROCK CLAYSTONE MATERIAL MAY BE RIPPED, MOISTURE TREATED, AND ALLOWED TO AIR SLAKE FOR A MINIMUM OF ONE DAY PRIOR TO ITS PLACEMENT IN THE LINER. LINER MATERIAL IS DEFINED AS MATERIAL HAVING 4 INCH OR SMALLER COBBLE, A MINIMUM OF 50% FINES BY CLAY WEIGHT PASSING THE US STANDARD 200 SIEVE, AND A PLASTICITY INDEX OF 10% OR GREATER FOR THE PORTION OF MATERIAL FINER THAN THE US STANDARD 40 SIEVE.
- SUFFICIENT MOISTURE SHALL BE ADDED AT THE BORROW AREA SO NO MORE THAN 3% ADDITIONAL MOISTURE IS REQUIRED TO BRING ANY LINER MATERIAL TO SPECIFICATIONS ONCE PLACED IN THE FILL.
- LINER MATERIAL SHALL BE PLACED IN MAXIMUM OF 9-INCH LOOSE LIFTS PRIOR TO COMPACTION.
- A CATERPILLAR 815 OR 825 SHEEPSFOOT COMPACTOR (OR EQUIVALENT) WILL BE USED FOR COMPACTION EFFORTS.
- THE COMPLETED LINER SHALL BE PROTECTED FROM DAMAGE CAUSED BY DESICCATION OR FREEZING TEMPERATURES BY PLACING A MINIMUM OF 12-INCHES PIT RUN MATERIAL ON THE ENTIRE SLOPE.
- LINED PONDS SHALL PASS LEAK TEST AS REQUIRED BY THE COLORADO OFFICE OF THE STATE ENGINEER AND COLORADO DIVISION OF WATER RESOURCES

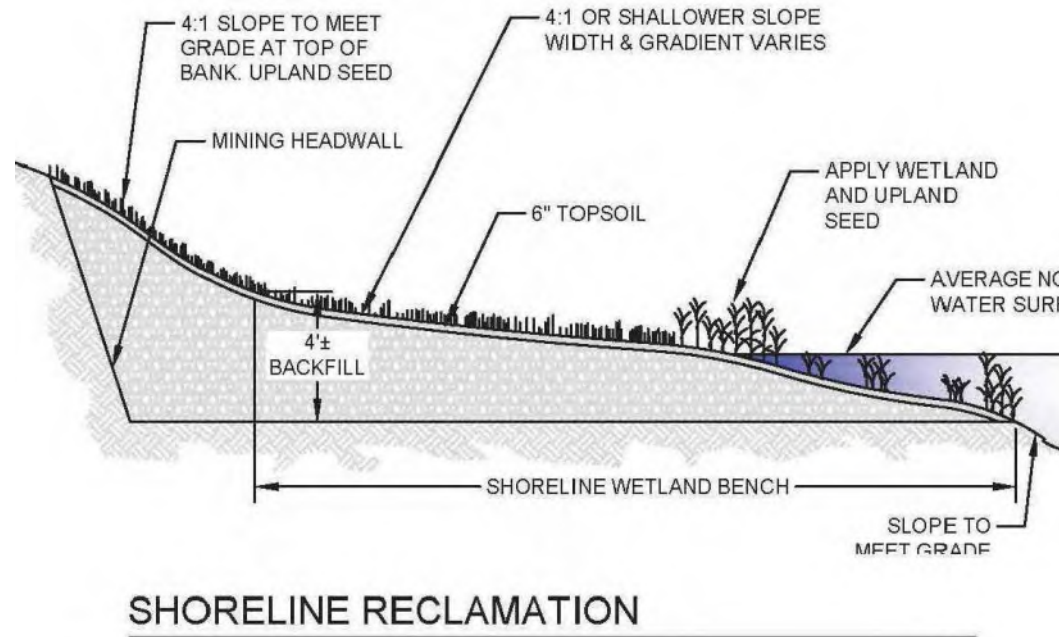
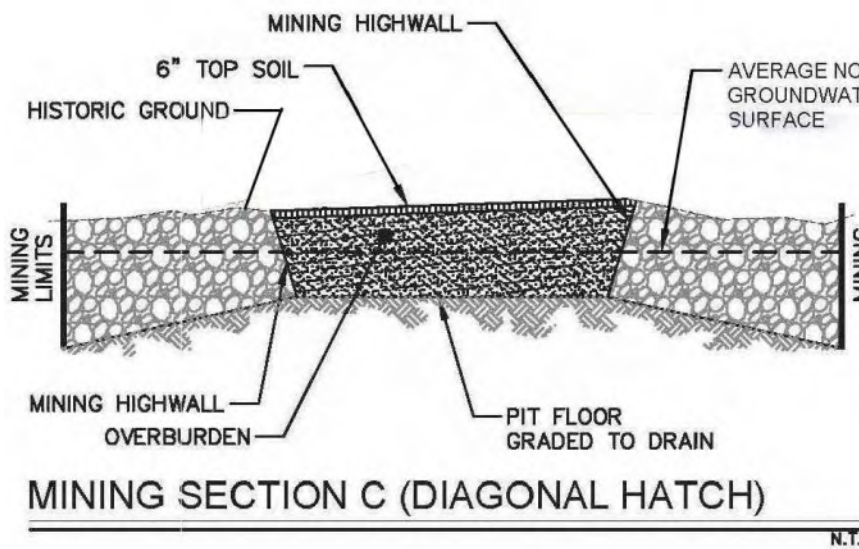
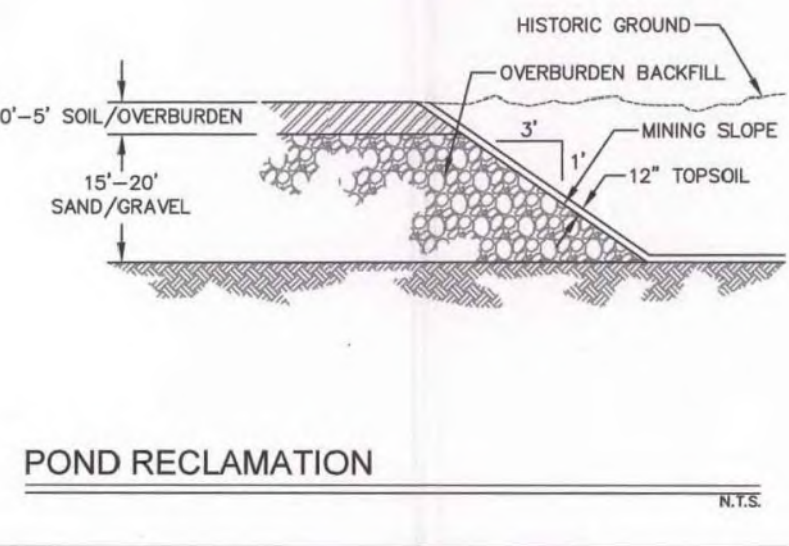
SLURRY WALL LINER NOTES

- PONDS 1 AND 2 MAY BE SEALED WITH A SLURRY WALL LINER AS AN ALTERNATIVE TO THE COMPACTED CLAY LINER AS DESCRIBED IN POND LINER NOTES 1-13.
- PRIOR TO INSTALLATION, SITE SPECIFIC ENGINEERED DESIGN AND SPECIFICATION FOR THE SLURRY WALL WILL BE SUBMITTED TO THE DIVISION FOR APPROVAL
- LINED PONDS SHALL PASS LEAK TEST AS REQUIRED BY THE COLORADO OFFICE OF THE STATE ENGINEER AND COLORADO DIVISION OF WATER RESOURCES.

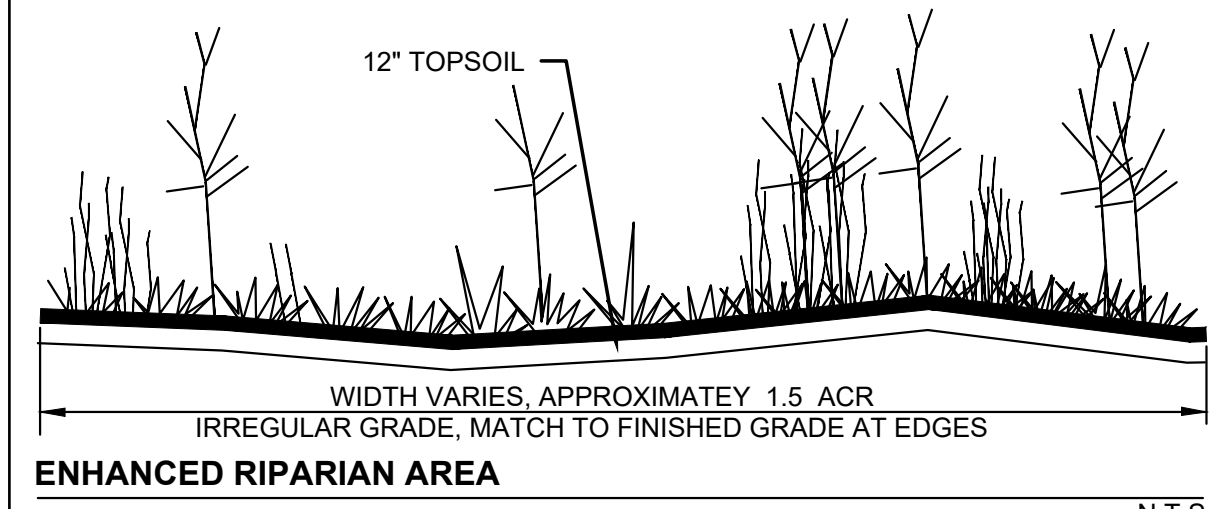
FLOOD PLAIN NOTES

- FLOODPLAIN INFORMATION PER FIRM FLOOD INSURANCE RATE MAP NO 08013C0287J DATED DECEMBER 18, 2012 AND FIRM FLOOD INSURANCE RATE MAP NO 08013C0289I DATED DECEMBER 18, 2012.
- THIS PROPERTY LIES IN AREAS DETERMINED TO BE WITHIN OTHER AREAS - AREAS OUTSIDE THE 2% ANNUAL CHANCE FLOOD
 - ZONE X - AREAS OF 25 % ANNUAL CHANCE OF FLOOD OR AREAS WITH 1% ANNUAL CHANCE OF FLOOD WITH AVERAGE DEPTHS OF LESS THAN ONE FOOT OR WITHIN DRAINAGE AREAS LESS THAN ONE SQUARE MILE AND AREAS PROTECTED BY LEVEES FROM THE 100 YEAR FLOOD.
 - ZONE AE - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL FLOOD CHANCE, BASE FLOOD ELEVATIONS DETERMINED.
 - ZONE AH - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL FLOOD CHANCE, FLOOD DEPTHS OF 1 TO 3 FEET, (USUALLY AREAS OF PONDING) BASE FLOOD ELEVATIONS DETERMINED.

THE ADDITIONAL FLOODPLAINS SHOWN ARE BASED ON PRELIMINARY FEMA FIRM MAP 08013C0289K FROM SEPTEMBER 30, 2019 AND LONGMONT'S APPEAL OF FEMA'S PRELIMINARY FIRM MAP. THESE MAPS ARE NOT FINAL AND ARE EXPECTED TO BE REVISED, THESE ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.



Area approximately 1.5 acres. Install - 50 Plains Cottonwood (5 gallon). Install irregular clusters, with irregular open grass areas: 100 Western Sand Cherry (rooted cuttings), 100 American plum (rooted cuttings), 100 Three Leaf Sumac (rooted cuttings). Install plantings, seed and mulch area. Irrigate to establish plantings and employ comprehensive weed management to establish upland seed.



TST

TST, INC.
CONSULTING ENGINEERS
748 Whalers Way
Suite 200 Fort Collins
Colorado 80525
Phone: 970.226.0557

JOB NO. 1241.0001.04

SCALE 1"=300'

DATE MARCH 29 2023

SHEET

L1 of 1

ATTACHMENT E

EXHIBIT C-1 EXISTING CONDITIONS AND SURFACE OWNERS OF RECORD

ATTACHMENT F

Certified Mail Delivery Receipts

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Golden Farm LLLP
PO Box 54
Longmont CO 80503



9590 9402 2268 6225 0104 77

2. Article Number (Transfer from service label)

7016 2070 0000 3223 2908

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

Robin Engen

☐ Agent☐ Addressee

B. Received by (Printed Name)

Robin Engen

C. Date of Delivery

2/27/23

D. Is delivery address different from item 1? ☐ YesIf YES, enter delivery address below: ☐ No

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over \$500)

- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

Domestic Return Receipt

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Diamond G Concrete
PO Box 54.
Longmont, CO 80503 2



9590 9402 2268 6225 0104 84

2. Article Number (Transfer from service label)

7016 2070 0000 3223 2922

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

Robin Engen

☐ Agent☐ Addressee

B. Received by (Printed Name)

Robin Engen

C. Date of Delivery

2/27/23

D. Is delivery address different from item 1? ☐ YesIf YES, enter delivery address below: ☐ No

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over \$500)

- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

Domestic Return Receipt

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

City of Longmont Public Works and Natural
Resources Department
Attn: David Bell
7 South Sunset Street
Longmont, CO 80501



9590 9402 2268 6225 0104 39

2. Article Number (Transfer from service label)

7016 2070 0000 3223 2953

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

John Morgan

☐ Agent☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ YesIf YES, enter delivery address below: ☐ No

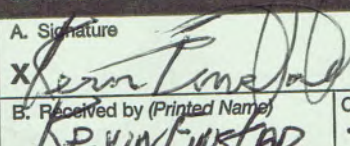
FEB 24 2023

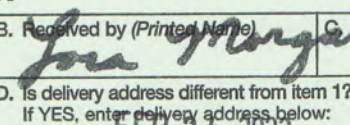
3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over \$500)

- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

Domestic Return Receipt

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> ■ Complete items 1, 2, and 3. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits. 		<p>A. Signature </p> <p>B. Received by (Printed Name) KEVIN FINSTAD</p> <p>C. Date of Delivery 2-27-23</p>	
<p>1. Article Addressed to:</p> <p>Xcel Energy 414 Nicollet Mall Minneapolis, MN 55401</p>		<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>	
<p>2. Article Number (Transfer from service label)</p> <p>9590 9402 2268 6225 0104 60</p> <p>7016 2070 0000 3223 2915</p>		<p>3. Service Type</p> <p><input type="checkbox"/> Adult Signature <input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Certified Mail® <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Insured Mail <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</p> <p><input type="checkbox"/> Priority Mail Express® <input type="checkbox"/> Registered Mail™ <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Signature Confirmation Restricted Delivery</p>	
PS Form 3811, July 2015 PSN 7530-02-000-9053		Domestic Return Receipt	

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> ■ Complete items 1, 2, and 3. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits. 		<p>A. Signature </p> <p>B. Received by (Printed Name) Jim Angstadt</p> <p>C. Date of Delivery FEB 24 2023</p>	
<p>1. Article Addressed to:</p> <p>City of Longmont Public Works Development Services Center Attn: Jim Angstadt 385 Kimbark St. Longmont, CO 80501</p>		<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>	
<p>2. Article Number (Transfer from service label)</p> <p>9590 9402 2268 6225 0104 46</p> <p>7016 2070 0000 3223 2946</p>		<p>3. Service Type</p> <p><input type="checkbox"/> Adult Signature <input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Certified Mail® <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Insured Mail <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</p> <p><input type="checkbox"/> Priority Mail Express® <input type="checkbox"/> Registered Mail™ <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Signature Confirmation Restricted Delivery</p>	
PS Form 3811, July 2015 PSN 7530-02-000-9053		Domestic Return Receipt	

Tracking Number:

70162070000032232939

 Copy  Add to Informed Delivery

Ren

Latest Update

Your item was delivered to an individual at the address at 10:47 am on February 23, 2023 in DENVER, CO 80231.

Get More Out of USPS Tracking:

 USPS Tracking Plus®

Delivered

Delivered, Left with Individual

DENVER, CO 80231

February 23, 2023, 10:47 am

Departed USPS Regional Facility

DENVER CO DISTRIBUTION CENTER

February 22, 2023, 9:11 am

Arrived at USPS Regional Facility

DENVER CO DISTRIBUTION CENTER

February 22, 2023, 1:28 am

Departed Post Office

HYGIENE, CO 80533

February 21, 2023, 4:30 pm

USPS in possession of item

HYGIENE, CO 80533

February 21, 2023, 2:52 pm

Hide Tracking History

7016 2070 0000 3223 2939

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com.

Denver, CO 80231

OFFICIAL USE

Certified Mail Fee	\$4.15	0243
Extra Services & Fees (check box, add fee as appropriate)	\$3.75	08
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$2.22	
Total	\$9.72	02/21/2023

Sent to:
Comcast Business Development
Attn: Chris DiRito,
8000 East Iliff Avenue
Denver, CO 80231

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

From: Bilobran - CDOT, Timothy <timothy.bilobran@state.co.us>
Sent: Thursday, March 30, 2023 8:54 AM
To: Barb Brunk <barbb@dgmllc.com>
Cc: Wyatt WEBSTER <wyatt.webster@holcim.com>; Landon WILHITE <landon.wilHITE@holcim.com>; Reggie Golden <reggieg@dgmllc.com>
Subject: Re: Can you help track down the contact people who need to write for this mine you mailed us?

Caution! This message was sent from outside your organization.

[Allow sender](#) | [Block sender](#)

Barb,

Yes, those are the files we received.

On the topic of "materials/subsurface comments", I followed up with the appropriate people on my end.

Hopefully I'll have the comments back soon but if nothing else, I'll have a timeline for you.

Tim

On Wed, Mar 29, 2023 at 10:32 AM Barb Brunk <barbb@dgmllc.com> wrote:

Tim,

I have not received the certified mail return receipt for the info I sent you on 2/21/2023.

Please confirm CDOT received the attached information and let me know if we can follow up to address the concerns raised by your colleagues.

Thank you.

Barb

Barb Brunk

Resource Conservation Partners, LLC

P.O. Box 1522

Longmont, CO 80502

Fax (303)702-0585

Cell (303)775-6180

barbb@dgmllc.com

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at www.usps.com ®.	
OFFICIAL USE	
Certified Mail Fee	\$4.15
Extra Services & Fees (check box, add fee as appropriate)	\$3.35
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00
Postage	\$2.22
Total	\$9.72
Colorado Department of Transportation	
Attn: Tim Bilobran	
10601 10th Street	
Greeley, Colorado 80634	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

ATTACHMENT G

Exhibit L – Reclamation Cost

Aspect	Reclamation Operation		Quantity	Units	Unit Costs (\$)	Costs (\$)
Active Mining Area						
A	1	Backfill and grade 35 disturbed acres of mining cells (maximum pdisturbance area allowed under PUD & DRMS permits)	735,200	CY	\$3.35	\$2,462,920
	2	Replace topsoil on backfilled mining cell areas	131,190	CY	\$2.60	\$341,094
Slurry Wall						
B	1	Slurry Wall Construction (4,800 linear ft x 20 ft avg depth, unit cost derived from 2022 as-built costs in Brighton CO)	96,000	Sq Ft	\$9.51	\$912,960
	2	Slurry Wall Underdrain Flow Line (length derived from Miller groundwater report, unit cost derived from 2022 as-built costs in Brighton CO)	2,300	Linear Ft	\$186	\$427,800
	3	Cell dewatering (three months assumed)	3	Months	\$15,000	\$45,000
	4	Replace Topsoil around active mining cells within slurry wall	2,500	CY	\$7.80	\$19,500
	5	Reseeding within slurry wall construction area	10	Ac	\$2,387	\$23,870
Miscellaneous Disturbed Areas						
C	1	Replace topsoil on internal haul roads	17,150	CY	\$2.45	\$42,018
	2	Reseeding / Restoration at main site entrance	1	Ac	\$2,387	\$2,387
	3	Remove privacy berms and reclaim topsoil	34,980	CY	\$2.85	\$99,693
Final Reclamation						
D	1	Seed all remaining disturbed areas	65.9	Ac	\$2,387	\$157,375
	2	Seed enhanced riparian area	4.7	Ac	\$2,387	\$11,195
	3	Plant 50 trees in riparian area, 5-gallon	50	Ea	\$450	\$22,500
	4	Plant 300 rooted cuttings in riparian area	300	Ea	\$60	\$18,000
Total Reclamation Costs						\$4,586,311
Contractor Mobilization/Demobilization Costs (8%)					0.08	\$366,905
Overhead (18.5%)					0.185	\$848,468
Administration (5%)					0.05	\$229,316
Total Proposed Financial Warrenty						\$6,031,000
Disturbed Acreage						65.9
Financial Warranty per Acre						\$91,476