



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

October 7, 2020

Russ Larsen
Elam Construction, Inc.
556 Struthers Ave
Grand Junction, CO 81501

***RE: 23 ¼ West Pit, File No. M-2020-035, 112c Construction Materials Reclamation Permit
Application Adequacy Review #1***

Dear Mr. Larsen:

The Division of Reclamation, Mining and Safety (Division) is in the process of reviewing the above referenced application in order to ensure that it adequately satisfies the requirements of the Colorado Land Reclamation Act for the Extraction of Construction Materials (Act) and the associated Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials (Rules). During review of the material submitted, the Division determined that the following issue(s) of concern shall be adequately addressed before the application can be considered for approval.

Exhibit A

1. Pursuant to Rule 6.4.1(1)(a) list the nearest quarter-quarter section.

Exhibit C

2. Map C-2, Clarify the number of disturbed acres at each mining area that makes up the 41.4 total acres. The maps only shows the total permitted acreage by area $31.8 \text{ ac} + 17.7 = 49.5 \text{ ac}$.
3. A truck scale and scale house is mentioned on page D-3. Please depict the location of the scale and scale house on your map(s).

Exhibit D

The Division discourages storing topsoil in piles taller than 4 feet high due to lack of soil aeration. Short long windrows is preferred over tall consolidated piles if at all possible. Additionally the Division would encourage you to consider storing topsoil in the backfilled portions of Area 2 until needed to reduce the need to bond for trucking soil.



4. What is the maximum length (LF) of vertical slope that will require cut and fill grading at any given time? This would be the perimeter mining walls of Area 1, plus the interior active mining high wall that will progressively be moved north.
5. Volumes necessary for backfilling Area 2 were not provided. What is the total backfill amount necessary? Also at any given time what is the maximum amount of material that will needed to backfilled Area 2 and where will that material be stored?
6. It is unclear how the relation of mining Area 1 and Area 2 will interact. It is logical that overburden from Area 1 will be used as backfill for Area 2. The timing and interaction of these simultaneous operations is not discussed in enough detail.
7. Several different setback distances from various features are listed on Map C-2. Will mining occur vertically up to the setback or at a 3H: 1V up to these setbacks. What setback distance will slopes transition from vertical to be knocked back down to a 3H: 1V to achieve the various setback distances?
8. Provide additional information regarding the scale and scale house mentioned on page D-3. Will any sort of foundations be installed, what type of building, etc.?
9. Does table D-2 include material handled in support of Area 2? Clarify if the volume described in D-2 is excess material after the completion of Area 2 backfill and topsoil. Describe the amount of topsoil and overburden handled per mining area. (Page D-4)
10. It is unclear when mining of Area 2 specifically will take place. Table D-3 states mining progressing south to north but Area 2 involves mining east to west.
11. Regarding the Disturbed area or size to be worked at any one time. The maximum disturbance as described appears to only take into account 5 acres at Area 1. Will Area 2 be completely reclaimed prior to Area 1 and limited to no more than 5 acres unreclaimed? Or if at least half of the reclamation is to take place by the end of completing Area 2 approximately 8 acres would require reclamation in addition to Area 1.
12. Will any material be imported for backfill?

Exhibit E

The Division would advise against the use of irrigation in support of vegetation establishment for reclamation, Rule 3.1.10(1). Irrigation can lead to salt accumulation in the soils, leach out soil nutrients leading to the need for fertilizer, and favor less drought tolerant species which are unable to sustain once irrigation ceases and outcompete those species that would have naturally thrived in the arid climate. A potential alternative may be an upland dry rangeland mix then a less arid rangeland mix for the fringe areas.

13. Typo on page E-1. Should it be 31.8 acres?
14. Page E-2 states overburden volumes are based on 5 feet. Section 3 and 7.2 of Exhibit D assumes 6 feet of overburden for calculations. The same volumes are given but different input values are utilized.
15. Provide the total overburden and topsoil volumes needed for Area 1 and Area 2 individually rather than the project total amount. Table E-2
16. Section 2.2 on page E-3. Clarify how many acres of each land type will exist in each mining area.

17. The Division does not feel that the seed mix provided in table E-2 is appropriate for the site. Please contact the NRCS for guidance. Specifically Common reedgrass is listed as a 'watch species' on the Colorado Department of Agriculture Noxious Weed Lists. Also Snowberry is not an appropriate species for the site. Pursuant to Rule 3.1.10(1) a variety of warm and cool season with an emphasis on natives species is necessary to achieve diverse, robust and long lasting reclamation.
18. Page E-2 be more explicit as to what is a "favorable season" for seeding.
19. Provide more detail on the reclamation phases and schedule. And address the timing of reclamation of Areas 1 and 2.
20. State that no trees/nursery stock will be used.
21. State that no fertilizer will be used.
22. State the maximum reclaimed slope.

Exhibit G

23. Commit to providing the Division with a copy of the wetland study and make permit revisions as necessary.
24. Section 7.1-Typo should be Area 1 described first then Area 2 described, not Area 2 twice
25. Typically one permit is not dependent on another. Explain the rational for using M-1900-094 to dewater Area 2 rather than pumping into Area 1.
26. De-watering of Area 2 is dependent on the neighboring Orchard Grove Industrial Pit (M-1990-094). Please provide documentation from CDPHE that this is an acceptable means of discharge. Additionally M-1990-094 will need a technical revision to make commitments to support the M-2020-035 operation with regards to dewatering through life of mine,
27. Section 7.1- does M-1990-094 also discharge into the Wilsea Drain? If not clarify the discharge point that Area 2 would ultimately use.
28. What are the units for Table G-1
29. What is the in-flow/recharge rates for Area 1 and Area 2?
30. What is the maximum volume of the Area 2 Pit/pond that could become inundated prior to being backfilled if pumping were to cease temporarily.
31. Clarify that two different pumps will be used to dewater Area 1 and Area 2 throughout life of mine. Depict the pump location for each area on Map G-1 and/or Mining Maps.
32. According to the Division of Water Resources records there are 10 abandoned wells on the southwest corner of Area 2. Please include these on your maps pursuant to Rule 6.4.7(2)(a). Are you able to mine through them or setbacks be required?
33. Pursuant to Rule 6.4.7(3) describe the water needs of this project.

Exhibit J

34. Area 2 is entirely rangeland and is a large area which could be grazed. Address Rule 6.4.10(1)(c)

Exhibit L

35. The list on page L-1 does not account for Area 2. Cost should include dewatering, backfill, and seeding of Area 2 as well.
- Clarify if the 800 ft. to place topsoil is accurate for Area 2 as well. If not provide the distances for each work area
 - Specify the distance to place overburden in Area 2
36. Table L-1.
- Table needs to include costs for Area 1 and Area 2 (list separately where possible)
 - Dewatering task is only for Area 1. What is the starting ac. ft. that needs dewatered and the inflow rates for both Area 1 and Area 2 (individually). Inflow rates may also be provided in Exhibit G
 - Include a cost and units for overburden placement to backfill Area 2.
 - Describe reclamation task such as topsoil, seedbed prep, seeding and mulching for each Area.

Given that Area 2 will be entirely backfilled, the Operator may wish to have a stockpile location in Area 2 to decrease bonding for hauling material from the west side of Area 1 to Area 2.

Exhibit N

37. 8c-states the use of concrete/rubble for backfill however there is no mention of importation of material in the mining or reclamation plans.

Exhibit O

38. Label/clarify which parcels are owned (surface and subsurface) by each party.

Exhibit S

39. 11 structure owners are listed on page S-1 but only 7 certified mail receipts for agreements sent out are included. Provide proof that agreements were sent to; City of Grand Junction, Grand Valley Drainage District, Union Pacific and Elam Construction.
40. Map C-1 shows a trail owned by City of Grand Junction but this structure is not listed on table S-1 for structures by that owner.
41. Map C-1 depicts a fence around a portion of Innovative Marketing Systems Inc. property. Update maps and lists accordingly
42. The general location descriptions of Table S-1 appear to be in reference to Area 1 only. Several utility features run down both 23 ½ Road and 23 ¼ Road.

GeoTech

43. Factor of Safety (FOS) applies to active slopes while mining as well as final reclaimed slopes. Slopes once knocked down to a 3H: 1V are acceptable however mining will occur with near vertical slopes. What is the required setback to maintain an acceptable FOS while mining with vertical slopes?
44. Table GS-1 appears to be more targeted towards the permanent (final reclaimed) slopes of Area 1. What about during rapid draw down of Area 2 and the northern slopes during active mining?

Public Notice

45. Pursuant to Rule 1.6.2(1)(a)(ii) provide the return receipts (green cards) for notices sent to the Mesa County Commissioners and the Mesa Conservation District.
46. Pursuant to Rule 1.6.2(1)(d) provide proof of newspaper publication
47. Pursuant to Rule 1.6.2(1)(e) provide proof that the newspaper publication notice was served to all Owners of Record (i) and (ii).

Please submit your response(s) to the above listed issue(s) by Friday, October 30, 2020 in order to allow the Division sufficient time for review. The decision date for this application is November 23, 2020.

The Division will continue to review your application and will contact you if additional information is needed.

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 303-866-3567 ext. 8183 or via email at amy.yeldell@state.co.us

Sincerely,



Amy Yeldell
Environmental Protection Specialist

Cc:
Travis Marshall, Senior EPS, Grand Junction DRMS
Jim Doody, Elam Construction
Ben Langenfeld, Greg Lewicki and Associates