

North Park Engineering & Consulting, Inc.

Civil/Environmental/Petroleum Engineering – Land Surveying

July 14, 2023

Corner Properties, LLC
2900 E Apache Street
Tulsa, OK 74110

Attn: Tristan Koch

Subject: Geotechnical Stability Report
Fairbanks Pit (M-2003-058)
Gould, CO

To whom it may concern:

As requested, North Park Engineering & Consulting, Inc (NPE) has completed this Geotechnical Stability Report on the Fairbanks Pit located in Gould, CO. The pit is located adjacent to Colorado Highway 14 in Section 33, Township 7 North, Range 77 West, of the 6th Principal Meridian in Jackson County, Colorado.

Geologic Setting and Conditions: The existing gravel pit presently consists of approximately 20 acres and extends to a maximum depth of 25 feet below the ground surface. Geologic mapping (Tweto, 1979) indicates the site bedrock contains gravels and alluviums of the Pinedale and Bull Lake Age, including Broadway and Louviers Alluviums. The pit location is in an outwash gravel of glaciation about 20 feet above the stream level of the Michigan River (West of the Pit).

The pit is located approximately 128 feet West from the traveled road surface for Colorado State Highway 14. The depth of the pit adjacent to the highway is approximately 15 feet below the ground surface and the side slope from the bottom of the excavation is approximately 3:1 (horizontal:vertical). The topsoil from the pit area is also placed between the edge of the pit and the pit boundary. See Figure 1 for more detail.

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Geologic Hazard Evaluation: NPE's review of Jackson County Geologic Hazard maps indicate the is not located within mapped Un-Stable (US) slopes, Potentially Unstable Slopes (PUS), Land-Slide (LS) or Rock Fall (RF) areas.

NPE agrees with this assessment. Slope failures or evidence of creep were not observed within or adjacent to the pit/quarry areas or on the East side of the Pit adjacent to Highway 14; however, some minor rockfall was observed in active cut mining areas.

Conclusions: Based on our recent observations made at the pit, our discussions with the client regarding the existing and past mining operations, and our experience with similar gravel pit excavations and subsurface conditions in this area of Jackson County, it is NPE's opinion that the cut slopes constructed along the edges of the pit will be stable as constructed at a 3 (horizontal) to 1 (vertical) slope configuration, as it currently exists along the Eastern edge of the pit, adjacent to Colorado State Highway 14. The current condition of the slopes do not present any higher factor of safety than the natural conditions on the site.

If you have any questions regarding this report or recommendations, please contact this office.

Sincerely,

North Park Engineering & Consulting, Inc.

Randall R. Miller, P.E.



Encl: Figure 1

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FIGURE 1

Fairbanks Pit
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