



\$250.00 \_\_\_\_\_ Minnehaha County  
\_\_\_\_\_ Sioux Falls Joint  
\_\_\_\_\_ Dell Rapids Joint

# CONDITIONAL USE PERMIT APPLICATION



Minnehaha County  
Office of Planning and Zoning  
Administration Building, 415 N. Dakota Ave.  
Sioux Falls, SD 57104  
Phone: 605-367-4204  
Website: www.minnehahacounty.gov/dept/pl/pl.php

Petition #: \_\_\_\_\_  
Date: \_\_\_\_\_  
Filing Fee: \_\_\_\_\_  
Receipt #: \_\_\_\_\_  
FILING FEE IS NON-REFUNDABLE

I/We, the undersigned, do hereby petition for approval of a conditional use permit on the following described property and authorize representatives of Minnehaha County to enter the property for inspection purposes.

Legal description (please print or type): See information on next page

Parcel Size 262.24 acres

Address or General Location 48231 259TH ST

Existing Zoning District A1/I1

Purpose Expansion of existing hard rock quarry

Petitioner (Print) Sweetman Construction Co. (dba Knife River)

Signature

Date 6/26/25 Phone (605) 336-5776

Address 1500 N Sweetman PL

Sioux Falls SD 57107

City State Zip

Email colin.chatterton@kniferiver.com



Owner (Print) \_\_\_\_\_

*If different than above*

Signature \_\_\_\_\_

Date \_\_\_\_\_ Phone \_\_\_\_\_

Address \_\_\_\_\_

City State Zip

*Office use only*

Location \_\_\_\_\_

Checked By \_\_\_\_\_

Given Signs \_\_\_\_\_

Site Plan \_\_\_\_\_

Add'l Reports \_\_\_\_\_

PC Date \_\_\_\_\_

PC Action \_\_\_\_\_

CC Date \_\_\_\_\_

CC Action \_\_\_\_\_

Effective Date \_\_\_\_\_

Purpose \_\_\_\_\_

1500 N Sweetman Place  
PO Box 84140  
Sioux Falls, SD 57117-4140  
(605) 336-5760  
(605) 334-6221 FAX

June 26, 2025

Minnehaha County  
Office of Planning & Zoning  
Administration Building, 415 N. Dakota Ave.  
Sioux Falls, SD 57104

RE: Knife River Conditional Use Permit Application, East Corson, Parcels 13848, 13942, 55302, 55303, 55304 and 55305

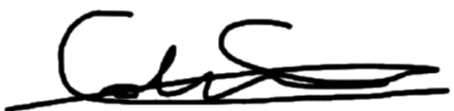
With this letter, please find the requirements of Additional Use Regulations for Rock, Sand, and Gravel Extraction, Section 12.08 of the Minnehaha County Zoning Ordinance. The following information is being provided to request expansion of a quartzite quarry on Knife River property. This property is adjacent to existing Knife River sand and gravel mining operations.

Knife River proposes the quarry encompass an additional 85.7 acres to the 39.7-acre area previously permitted for total quarry area of 125.4 acres. The legal description of the parcels to be impacted are:

SW1/4 (EX RY & H-1, H-2 & H-3) 14 102 48 BRANDON TOWNSHIP 102-48; PT NW1/4 NW1/4 LYING N OF TOWNSHIP ROAD 23 102 48 BRANDON TOWNSHIP 102-48; LOT 1 KUEHL'S ADDN NW1/4 23 102 48 BRANDON TOWNSHIP 102-48; TRACT 2 HUNTERS ADD NW 1/4 23 102 48 BRANDON TOWNSHIP 102-48; TRACT 3 HUNTERS ADD NW 1/4 23 102 48 BRANDON TOWNSHIP 102-48; ALL THAT PT NW1/4 LYING E OF RR ROW & E OF HY (EX HUNTERS ADD & EX KUEHL'S ADDN) 23 102 48 BRANDON TOWNSHIP 102-48

Operations at the site will see continuation of mining quartzite rock. Quartzite materials will be drilled and blasted. The resulting rock will be crushed and screened on site utilizing permanent infrastructure.

Thank you for your consideration. If you have any questions or require further information, please contact me at (605) 336-5776.



Colin Chatterton, CPESC, CPISM  
Environmental Manager

## 1. Maps (attached):

- Corson Quarry Mining Operations Plan Cover Page
- Corson Quarry Existing Conditions
- Corson Quarry Mined Conditions
- Corson Quarry Restoration

## 2. Surface Land Use and Vegetation

The area subject to this application is currently used for agricultural purposes (grazing or cropland). The subject parcels lie east of County Road 11 and north of 259<sup>th</sup> Street. The proposed quarry lies on 125 acres of parcels 13848, 13942, 55302, 55303, 55304 and 55305 east of the Burlington Northern (BN) rail line.

The site is located in the US EPA's Ecoregion 47a, Loess Prairies of Iowa and South Dakota, which is part of the Western Corn Belt Plains. This area is described as follows:

*The high agricultural productivity of the Western Corn Belt Plains ecoregion is due to its fertile soil, temperate climate, and adequate precipitation during the growing season. This ecoregion has a relatively homogeneous topography of level to gently rolling glacial till plains with areas of morainal hills and loess deposits. The original tallgrass prairie vegetation has been converted to intensive row-crop agriculture of corn, soybeans, and feed grains to support livestock production.*

*The Loess Prairies of Iowa and South Dakota surround the perimeter of the Des Moines lobe of the Late Wisconsinan glaciation. Of the two areas in South Dakota, the northern one is distinguished from neighboring regions by its rock-free soil and a paucity of wetlands. The southern area is more highly dissected, with deciduous woodland and brush on the steeper slopes and in the draws.*

There are two intermittent streams that bisect the site from east to west. These streams drain small watersheds with ultimate discharge to the Split Rock Creek. A Wetland Delineation was completed for the site (see Appendix A). Wetlands are found along the edges of the intermittent streams and Knife River is currently working through the individual permit process with the USACE to reroute the tributaries flowing through the future mine site (see Appendix B)

A Level III Cultural Resource Inventory was completed for the site (see Appendix C). The railroad, a railroad bridge and culvert were considered eligible for the National Register of Historic Places. All noted artifacts are outside of the project area and will not be adversely affected. A determination of no adverse effects to historic properties was recommended.

### **3. Hydrologic Study**

The site is in the Split Rock Creek Watershed within the Central Big Sioux River Watershed. Natural drainage makes it way to Split Rock Creek and eventually the Big Sioux River. A Drainage Analysis was completed by Westwood Engineering (see Appendix D). From the hydrologic evaluation, it appears that the proposed Phase I mine development will not negatively impact Split Rock Creek since dewatering needs are expected at levels well below modeled 10-year flows that will travel through the creek diversion. For the floodplain evaluation, there will be no impact on 100-year flood levels based on HEC-RAS modeling that was performed. A floodplain development permit was obtained during this process as well.

A previous study by Barr evaluated potential groundwater inflow rates to the proposed mine pit (see Appendix E). From this study, it is predicted that between 21 and 136 gpm will enter the mine via groundwater flows (given quartzite as the dominant material), but with larger seeps the inflow may be closer to 500 - 800 gpm. As the mine is developed, it will be necessary to dewater the excavation with pumping, along with appropriate treatment. This dewatering discharge will be routed to Split Rock creek via either the tributary to the west or the newly constructed creek diversion.

Groundwater is estimated to be greater than 50 feet below grade in the mining area. No recorded wells (not owned by Sweetman) are identified as being within 300 feet of the area's boundaries. Surficial geology at the site shows 5 to 30 feet of glacial deposits overlay the Sioux Quartzite. Quartzite was present in all boreholes during exploratory drilling

### **4. Reclamation Plan**

See attached maps. The overburden will be reclaimed to maximum slopes of 3:1. The quarry will be reclaimed in part, based on depth, water table, and terrain. Reclamation will not be possible until all mining is completed and may require limited construction of temporary features including ponds, basins, roads, safety, and drainage features. It is anticipated the surrounding land will be returned to agricultural land, likely for grazing, while the quarry area will become a water filled reservoir.

### **5. Development Criteria**

- Buffer Areas

Buffer areas are shown on the Existing Conditions and Mining Conditions Maps. There are no residences (not owned by Sweetman Const. Co.) that will be in the 1,000-foot buffer area. Mining will stay at least 50 feet from township/county road rights of way. A minimum 10-foot-high berm will be placed along all sides of the new quarry extent and vegetated appropriately.

- Hours of Operation

Mining operations may occur on Monday through Friday from 7 A.M. to 6 P.M. and Saturday from 8 A.M. to 12 P.M. No operations will be allowed on legal holidays. Maintenance operations not creating off site noise may occur outside of the designated hours of operation.

- Visual Considerations

Actions to mitigate impacts to neighbors and highway travelers include:

- Berms will be placed and vegetated as necessary to alleviate visual concerns.
- Close coordination with Township, County, Municipal, and State agencies to identify and act to prevent problems.

- Blasting

All blasting will be done in compliance with U.S. Department of the Interior Office of Surface Mining standards. This will include monitoring ground vibration and air blast. An alert system is in place for impacted residents within 1 square mile of the current mine footprint (excluding some that have opted out). This alert is sent 24 hours prior to blasting occurring and will continue to be utilized moving forward.

- Noise

Noise levels will not exceed an average of 55 decibels recorded over a 10- minute period measured at the nearest residence of concern. Knife River will test and provide a noise survey if complaints arise.

- Air Quality

At the County's discretion, ambient air monitoring will occur according to State of South Dakota regulations. Impact on air quality will be minimized by following company procedures for controlling fugitive dust from mining and associated operations. Dust from traffic within the operational area will be controlled with water or applications of calcium chloride. Dust from the screening and conveying process is controlled by ensuring moisture is present in the material being processed. If visible dust can be observed leaving the crushing/conveying process, water is added to the aggregate material as it is fed into the process.

- Hydrology, Dewatering, and Drainage

See item 3 above. It is anticipated that dewatering will be required as mining progresses. This will be in accordance with SD DANR NPDES permitting and the site SWPPP. Drainage around the quarry area is routed as shown on the attached maps.

- Haul Roads

Materials from the quarry area will be conveyed south across land owned by Knife River. Quartzite material mined will be processed (crushed/screened) at the quarry. See attached maps for haul routes and proposed infrastructure. Material will be shipped from the Corson site utilizing existing truck and rail systems, with the addition of one new rail spur off the existing BNSF main line.

- Operator Surety

Sweetman Construction Co. (dba Knife River) will provide whatever surety is required by Minnehaha County.

- Reclamation

See item 4 above.