STATE OF MINNESOTA
MINNESOTA POLLUTION CONTROL AGENCY

IN THE MATTER OF THE DECISION ON THE PETITION REQUESTING THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT WORKSHEET FOR THE PROPOSED W. LORENTZ & SONS CONSTRUCTION, INC., SIOUX QUARTZITE QUARRY AMBOY TOWNSHIP, COTTONWOOD COUNTY, MINNESOTA

FINDINGS OF FACT CONCLUSIONS OF LAW AND ORDER

I. FINDINGS OF FACT

Pursuant to Minn. Statutes Chapter 116D and Minn. Rules Chapter 4410, the Minnesota Pollution Control Agency (MPCA) makes the following Findings of Fact, Conclusions of Law, and Order (Findings) on a March 17, 2022, petition requesting the preparation of an Environmental Assessment Worksheet (EAW).

A. Project Description

1. W. Lorentz & Sons Construction, Inc. d/b/a Lorentz & Sons Construction (Lorentz or project proposer) proposes activities at the Sioux Quartzite Quarry (Graff Quarry or Lorentz Quarry) in Northeast Quarter, Section 1, Township 107 North, Range 36 West, Amboy Township, Cottonwood County, Minnesota (Site).

2. Lorentz is a corporation with its main office located at 125 Kingswood Drive, Mankato, Minnesota 56001.

3. At the Site, Lorentz proposes the extraction of Sioux Quartzite and associated construction activities (Project). Specifically, Lorentz proposed the following activities:
    a. Construction of a 1,276-foot berm, 9.1 acres of stockpile, and 17.7 acres of excavation;
    b. Stripping and removal of at least two feet of topsoil to access the Sioux Quartzite;
    c. Mining, blasting, crushing, sawing, stockpiling and removing aggregate materials;
    d. At least 95 trucks per day hauling the quartzite out of the quarry on several local and county roadways, some of which are gravel roads;
    e. Use of a sprinkler system to wet and spray the roads with chloride in order to minimize dust;
    f. The creation of four drainage ponds to infiltrate stormwater on the Site, which requires installing several culverts to force the drainage into an established drainage swale; and
    g. Use of water on the Site for dust control on crushers, conveyors, associated equipment, stockpiles, and roadways.

4. On April 8, 2022, Lorentz confirmed to MPCA via email that:
    a. The Project would not result in the discharge of stormwater off-site nor result in stormwater entering surface water; and
    b. The Project would not include dewatering or aggregate washing on the Site.

5. The MPCA used geo-referencing of the drawing on page 14 of the Site Inventory Report Form submitted by Lorentz to MPCA on November 19, 2021, (Inventory Report Form) to determine that the total Site covers approximately 47 acres. The area within perimeter berms for mining activities (soil removal, mining, blasting, crushing, sawing, stockpiling) and stormwater management is approximately 36 acres (Mining Area). The Inventory Report Form is included as Appendix 1 to these Findings. The geo-referenced document prepared by MPCA is included as Appendix 2 to these Findings.

6. The Site was previously used for crop production until Lorentz undertook site preparation activities in December 2022 which included stripping and removal of topsoil and construction of perimeter berms from the topsoil. Photos of the Site from MPCA's Site visit on April 1, 2022, are included in Appendix 3 to these Findings.[1]

B. Procedural History

2020 Petition

7. On November 9, 2020, the Minnesota Environmental Quality Board (EQB) received a petition under Minn. R. 4410.1100 (2020 Petition), requesting an EAW for a project proposed by Lorentz at the same Site. The 2020 proposed project was an aggregate material removal project that included the removal of vegetation and soil, aggregate mining, blasting, crushing, sawing, and stockpiling of aggregate materials. The 2020 proposed project was substantially the same as the currently proposed Project. The 2020 Petition is included as Appendix 4 to these Findings.

8. On November 12, 2020, pursuant to Minn. R. 4410.1100, the EQB determined the 2020 Petition complied with the requirements for a valid petition. The EQB also determined, pursuant to Minn. R. 4410.0500, that Cottonwood County was the appropriate Responsible Governmental Unit (RGU) to decide whether an EAW should be prepared.

9. On November 30, 2020, using the MPCA e-service system, Lorentz applied for Site coverage under the MPCA National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Program General Permit for Discharge of Stormwater Associated with Industrial Activities, general permit number MNR050000 (ISW Permit).

10. On December 1, 2020, the MPCA e-service system automatically granted the ISW Permit based on application information provided by Lorentz in the MPCA e-service system.

11. On December 1, 2020, the Cottonwood County Board of Commissioners voted to deny the 2020 Petition based on the fact the County had already issued a Conditional Use Permit (CUP) to Lorentz

[1] Photos taken on Site visit on 4/1/2022 by Kim Grosenheider, MPCA Environmental Review Project Manager.

for the Site on August 18, 2020, and that no other permit was pending with the County. The Cottonwood County Board of Commissioners stated that "a resolution and findings of fact will be presented at the December 15, 2020 board meeting to further delineate the basis for the denial." The minutes of the December 1, 2020, Cottonwood County Board meeting are included as Appendix 5 to these Findings.

12. On December 7, 2020, the Cottonwood County Board of Commissioners informed the EQB that it denied the 2020 Petition based on the fact that there was no pending governmental approval in front of Cottonwood County. This communication is included as Appendix 6 to these Findings.

13. On December 11, 2020, the MPCA revoked the ISW Permit for the Site because Lorentz's November 30, 2020, ISW Permit application was submitted prior to both: Cottonwood County's final decision on the 2020 Petition which was originally scheduled to occur at its December 15, 2020, meeting; and the December 7, 2020, notice from Cottonwood County to EQB regarding the County's denial. In its application for the ISW Permit, Lorentz incorrectly indicated environmental review was complete. The MPCA revocation communication to Lorentz is included as Appendix 7 to these Findings.

14. On December 11, 2020, Cottonwood County called the EQB to ask that the notice of their decision on the 2020 Petition not be posted in the EQB Monitor until the official vote to approve the decision could take place on December 15, 2020. Documentation of this communication is included as Appendix 8 to these Findings.

15. Later on December 11, 2020, the Cottonwood County Attorney informed EQB that the County was returning the 2020 Petition to EQB, because Cottonwood County had no pending approval authority on the project. Documentation of this communication is included as Appendix 9 to these Findings.

16. On December 16, 2020, the EQB notified MPCA that EQB was transferring the 2020 Petition from Cottonwood County to the MPCA because Cottonwood County had no pending approvals for the Site. According to the provisions of Minn. R. 4410.0500, subp. 5, the EQB determined that instead of Cottonwood County, the MPCA was the appropriate RGU to decide whether an EAW should be prepared. The RGU transfer communication from EQB to MPCA is included as Appendix 10 to these Findings.

17. On December 17, 2020, pursuant to Minn. R. 4410.1100, subp. 7, the MPCA requested EQB to approve an additional 15 days to make the determination on the need to prepare an EAW. This request is included as Appendix 11 to these Findings.

18. On December 17, 2020, the EQB granted the extension, documentation of which is included as Appendix 12 to these Findings.

19. On December 17, 2020, the MPCA notified the Petitioners' Representative, Lorentz, and other interested parties, of the 2020 Petition and that no permits may be issued, or construction started, until a MPCA decision is reached on the need for an EAW. This communication is included as Appendix 13 to these Findings.

20. On February 3, 2021, the MPCA notified the EQB, the Petitioners Representative, and Lorentz that it was unable to make a decision on the 2020 Petition because there was no defined Project meeting the definition in Minn. R. 4410.0020, subp. 65. After the December 11, 2020, permit revocation

described in Finding 13, the MPCA had not received any other permit application from Lorentz. The MPCA notification is included as Appendix 14 to these Findings.

21. On November 9, 2021, one year after the 2020 Petition was filed, the 2020 Petition expired according to Minn. R. 4410.1100, subp. 9.

2022 Petition

22. On November 19, 2021, Lorentz submitted an Inventory Report Form (Appendix 1) to the MPCA that sought permission to mine at the Site under Lorentz' existing coverage (coverage identification number MNG490596) under the NPDES/SDS Nonmetallic Mining and Associated Activities General Permit (Nonmetallic Mining Permit), which Lorentz holds for several mining sites. The Nonmetallic Mining Permit is included as Appendix 15 to these Findings.

23. As an attachment to the November 19, 2021, Inventory Report Form, Lorentz included a Phase I Cultural Resource Investigation for the Graff Quarry Project (Phase I Investigation), dated May 5, 2021, completed by In Situ Archaeological Consulting, LLC (In Situ) for Lorentz' consultant Braun Intertec (Braun). The Phase I Investigation consisted of a desktop review as well as a field investigation. The Phase I Investigation is included as Appendix 16 to these Findings.

24. MPCA reviewed the Phase I Investigation and requested Lorentz develop an Archaeological Monitoring Plan and Unanticipated Discovery Plan for the Graff Quarry Project (MUD Plan) in consultation with the Lower Sioux Indian Community Tribal Historic Preservation Official (THPO). The draft MUD Plan, dated March 10, 2022, is attached as Appendix 17 to these Findings.

25. During the second week of March 2022, Lorentz submitted the MUD Plan to the THPO for review.

26. On March 17, 2022, the EQB received a second petition under Minn. R. 4410.1100, from the same Petitioner's Representative as in the 2020 Petition, requesting that an EAW be prepared for the Project (2022 Petition). The 2022 Petition is included as Appendix 18 to these Findings.

27. On March 18, 2022, pursuant to Minn. R. 4410.0500, the EQB determined that the MPCA was the RGU to decide whether an EAW should be prepared. The communication from the EQB to the MPCA is included as Appendix 19 to these Findings.

28. On March 18, 2022, pursuant to Minn. R. 4410.1100, subp. 7, the MPCA requested an additional 15 days to make the determination on the need to prepare an EAW. The request is included as Appendix 20 to these Findings.

29. On March 21, 2022, the EQB granted the extension for MPCA to make a determination on the petition to April 29, 2022. The extension approval is included as Appendix 21 to these Findings.

30. On March 24, 2022, the MPCA notified the Petitioners' Representative, Lorentz, and other interested parties, of the 2022 Petition and that no permits may be issued, or construction started until a decision is reached on the need for an EAW. The notification is included as Appendix 22 to these Findings.

31. On March 30, 2022, the MPCA requested review of the MUD Plan by the Minnesota Office of State Archeologist (OSA). The OSA submitted comments on the MUD Plan to MPCA on April 18, 2022. The OSA comments are included as Appendix 23 to these Findings.

32. Minn. R. 4410.1100, subp. 8, requires the RGU to notify, in writing, the Petitioners' Representative, Project Proposer, the EQB, and anyone who has requested to be notified, of its decision on the need for an EAW within five days of making the determination. The MPCA will notify the required parties as required after a decision on the need for an EAW is made and this order becomes effective.

C. Determination of Environmental Review Requirements

33. As required by Minn. R. 4410.4300, subp. 1, the MPCA finds that the Project does not require preparation of an EAW based on the mandatory EAW categories in Minn. R. 4410.4300, subp. 2 to 37; and the MPCA also finds that the Project does not require preparation of a mandatory Environmental Impact Statement (EIS) based on the thresholds in Minn. R. 4410.4400.

34. The MPCA finds that the Project is not exempt from environmental review as provided in Minn. R. 4410.4600.

Evaluation Criteria

35. As established in Minn. R. 4410.1100, subp. 6, to determine if an EAW shall be ordered, the MPCA reviews all evidence presented to determine if the Project "may have the potential for significant environmental effects."

36. In making its determination, the MPCA has reviewed all evidence presented by the Petitioners, Lorentz, or other persons, and other evidence known to the MPCA.

37. In considering the evidence of the potential for significant environmental effects, the MPCA must take into account the factors listed in Minn. R. 4410.1700, supb. 7. The following factors shall be considered:

    a. Type, extent, and reversibility of environmental effects.

    b. Cumulative potential effects. The RGU shall consider the following factors:

        - whether the cumulative potential effect is significant;
        - whether the contribution from the project is significant when viewed in connection with other contributions to the cumulative potential effect;
        - the degree to which the project complies with approved mitigation measures specifically designed to address the cumulative potential effect; and
        - the efforts of the proposer to minimize the contributions from the project.

    c. The extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority. The RGU may rely only on mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the project.

d. The extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other EISs.

D. MPCA Findings with Respect to Evaluation Criteria in Minn. R. 4410.1700, supb. 7

Type, Extent, and Reversibility of Environmental Effects

38. The first criterion that the MPCA must consider when determining if a project has the potential for significant environmental effects is the "type, extent, and reversibility of environmental effects" Minn. R. 4410.1700, subp. 7(A). The MPCA findings with respect to this criterion are set forth below.

39. The 2022 Petition raises the following areas of concern about the Project's potential to have significant environmental effects:

    a. Wetlands;

    b. Endangered and threatened rare plant species; and

    c. Historic and archaeological resources.

40. The MPCA finds the potential significant environmental effects identified in the 2022 Petition (wetlands, endangered and threatened rare plant species, and historic and archaeological resources) to fall within the definition of "environment" in Minn. R. 4410.0200 subp. 23:

    > "Environment" means physical conditions existing in the area that may be affected by a proposed project. It includes land, air, water, minerals, flora, fauna, ambient noise, energy resources, and artifacts or natural features of historic, geologic, or aesthetic significance."

41. With respect to the extent and reversibility of impacts that are reasonably expected to occur from the Project, the MPCA makes the following findings.

<u>Wetlands</u>

42. The 2022 Petition states concerns with the Project's potential for significant environmental effects to wetlands.

43. The Department of Natural Resources (DNR) Wetland Inventory Map[2] shows a National Wetland Inventory (NWI) freshwater emergent wetland along an unnamed creek on the north border of the Site. This creek supports seasonally flooded plant communities and flows northeast ultimately to the Mound Creek Reservoir approximately 1.5 miles away.

44. The DNR Wetland Inventory Map[3] also shows two NWI freshwater emergent wetlands, which support seasonally flooded plant communities, just to the southwest of the Site.

45. Lorentz does not propose to drain or excavate wetlands as part of the Project.

[2] https://arcgis.dnr.state.mn.us/ewr/wetlandfinder/ (accessed by MPCA on 3/25/2022)
[3] *Id.*

46. The area west of the Site contains grassy waterways that drain area excess water including from the two freshwater emergent wetlands southwest of the Site. Before Lorentz conducted earth moving activities and created perimeter berms on the Site, water from the Site flowed northeast and connected to the unnamed creek.[4]

47. The DNR's Minnesota Spring Inventory[5] did not contain any documented springs on or within 5 miles of the Site.

48. The Site is characterized by near surface deposits and outcrops of Sioux Quartzite.[6] Soils are shallow, less than 50 feet depth, and are composed of loams and clay loams. The drainage of the soils ranges from poorly drained to well drained. None of the soils are prone to ponding and only the Coland Clay Loam exhibits occasional flooding.[7]

49. According to the Inventory Report Form, Lorentz proposes the following at the Site:
    a. No dewatering (pages 1 and 3);
    b. No washing of aggregate (page 3);
    c. No removal of sediment or sludge from the Site (page 3);
    d. To contain stormwater on-Site by infiltration (pages 1 and 3);
    e. To maintain vegetation until mining is set to occur (page 3); and
    f. To store fuels, coolants, lubricants, and chemicals covered or within secondary containment structures (page 3).

50. Based on communication between MPCA and Lorentz, Lorentz plans to use water for dust control at the Site.

51. Based on drawings within the Inventory Report Form (pages 10 through 14), Lorentz proposes to install a perimeter berm and a series of ditches and culverts to prevent water from flowing into the Mining Area or off the Site.

52. Based on drawings within the Inventory Report Form (pages 13 and 14), Lorentz proposes to install an 18-inch culvert to transport stormwater from the grassy waterway west of the Site, through the Mining Area to an outfall roughly where the existing grassy waterway joins the unnamed creek near 490th Ave.

53. Based on drawings within the Inventory Report Form (pages 9, 10, and 14), Lorentz proposes to direct stormwater that falls on the Mining Area to a series of four on-Site ponds for sedimentation control and infiltration.

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[4] *Id.*
[5] https://arcgis.dnr.state.mn.us/portal/apps/webappviewer/index.html?id=560f4d3aaf2a41aa928a38237de291bc (accessed by MPCA on 3/25/2022)
[6] https://mrbdc.mnsu.edu/sites/mrbdc.mnsu.edu/files/public/gis/minnesota_geologic_atlas/cottonwood_county_geologic_atlas.pdf (July 1991)
[7] https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (accessed by MPCA on 3/25/2022)

54. Lorentz must comply with the Nonmetallic Mining Permit, which requires:

    a. Erosion and sediment control practices;

    b. The implementation and maintenance of best management practices;

    c. The development and implementation of spill prevention and response procedures;

    d. The development and implementation of a pollution prevention plan; and

    e. The development and implementation of an inspection schedule.

55. In addition, the Nonmetallic Mining Permit:

    a. Does not authorize the dredging or filling of wetlands or other surface waters of the state (paragraph 2.6.8);

    b. Prohibits the inundation of a wetland by Project activities (paragraph 2.6.39); and

    c. Requires minimization of all adverse impacts to wetlands from site discharges (paragraph 2.6.44).

56. The MPCA finds the information presented in the 2022 Petition and other information in the environmental review record does not demonstrate that the Project may have the potential for significant environmental effects to wetlands resources based on type, extent, and reversibility of environmental effects because: there are no wetlands present on the Site; Lorentz does not propose to drain or alter any wetlands as part of the Project; the Project as proposed will prevent stormwater from leaving the Site to nearby wetlands; and the environmental effects are subject to the Nonmetallic Mining Permit that includes specific stormwater management, other mitigation measures, and prohibitions on activities to prevent impacts to nearby wetlands.

Endangered and Threatened Rare Plant Species

57. The 2022 Petition states concerns with the Project's potential for significant environmental effects to endangered and threatened rare plant species.

58. The 2022 Petition includes a Rare Plant Survey conducted by Ruby, MacFarlane, and Sather Botanical Contractors, dated October 14, 2020, (Exhibit G to the 2020 Petition, Appendix 4 to these Findings). The Rare Plant Survey was conducted as part of an EAW for a nonmetallic mine expansion that is different than the Project that is the subject of these Findings. The Rare Plant Survey was focused on Section 12 of Township 107N, Range 36W, which is the section directly to the south of the Site. For the studied Section 12 site there was a previously documented presence of a federally and state-threatened plant, the Prairie Bush Clover (*Lespedeza leptostachya Engelm*).

59. Based on the Minnesota County Biological Survey for Cottonwood County, there are no known endangered or threatened rare plant species on the Site.[8]

60. According to figure 1 of the Rare Plant Survey, both Section 12 (the location of the studied site) and Section 1 (the location of the Project that is the subject of these Findings) of Township 107N, Range 36W are within an area known as the Red Rock Ridge. According to page 2 of the Rare Plant Survey,

[8] Personal communication between MPCA and Joanne Boettcher, Regional Ecologist at the DNR, on 3/29/2022.

the Red Rock Ridge encompasses an area 23 miles in east-west extent and 3 miles south-to-north in Cottonwood County, and is characterized by near surface deposits and outcrops of Sioux Quartzite.

61. According to page 2 of the Rare Plant Survey, weathering of exposed Sioux Quartzite may produce surficial microhabitats for rare plants, such as thin soil deposits at the edge of smooth table-like surfaces, crevices with pockets of soil, ephemeral rainwater pools in shallow bedrock surface depressions, and narrow ephemeral stream channels.

62. According to page 3 of the 2022 Petition, the Red Rock Ridge includes notable managed areas including the Rock Ridge Scientific and Natural Area, Jeffers Petroglyph historic site, the Nature Conservancy's Red Rock Preserve, Red Rock DNR Wildlife Management Area, Red Rock County Park (Cottonwood County), and Mound Creek County Park (Brown County), all which support native prairie and rare plant habitats.

63. The Cottonwood County Geological Atlas[9] shows bedrock outcropping within the NE Quarter of Section 1, Amboy Township.

64. A study[10] from South Dakota State University identifies the area around the unnamed stream just north of the Site, one of the wetlands to the SW of the Site, and a very small piece of the Site itself as potentially undisturbed land (PUL). PUL are areas with the highest probability of being truly native (virgin) sod.

65. Endangered and threatened rare plants are more likely to exist in areas that have been undisturbed.

66. On April 1, 2022, MPCA visited the Site and found no evidence of undisturbed land or bedrock outcroppings on the Site.

67. Based on the Site's history of use for row crop agriculture, and more recent earth moving activities, it is extremely unlikely that undisturbed land is present. Therefore, it is very unlikely that endangered and threatened rare plant species exist on the Site.

68. Lorentz must comply with the Nonmetallic Mining Permit, which requires protection of endangered and threatened species. Paragraph 2.6.11 of the permit states, "This permit does not authorize discharges that adversely impact or contribute to adverse impacts on a listed endangered or threatened species or adversely modify a designated critical habitat…The owner must conduct any required review and coordinate with appropriate agencies for any project with the potential of affecting endangered or threatened species, or their critical habitat."

69. The MPCA finds the information presented in the 2022 Petition and other information in the environmental review record does not demonstrate that the Project may have the potential for significant environmental effects to endangered and threatened rare plant species resources based on type, extent, and reversibility of environmental effects because: there are no known endangered or threatened rare plant species on the Site; there is no evidence of or likelihood of undisturbed

[9] https://mrbdc.mnsu.edu/sites/mrbdc.mnsu.edu/files/public/gis/minnesota_geologic_atlas/cottonwood_county_geologic_atlas.pdf (July 1991)
[10] https://resources.gisdata.mn.gov/pub/gdrs/data/pub/us_mn_state_dnr/env_potentially_undisturbed_land/metadata/metadata.html (accessed by MPCA on 3/29/2022)

land on the site; and the Nonmetallic Mining Permit requires protection of threatened and endangered species.

Historic and Archaeological Resources

70. The 2022 Petition states concerns with the Project's potential for significant environmental effects to historic and archaeological resources.

71. The 2022 Petition states concern that the Project is within the Red Rock Ridge, an active place of worship for Native Americans and visited by thousands from across the world each year; and, that the Site is surrounded by over 30 petroglyph, petroform, and lithic scatter sites.

72. Just over 2 miles to the southeast of the Site is the Jeffers Petroglyphs site, which is home to about 5,000 sacred rock carvings made by the ancestors of today's Native Americans. The earliest carvings at Jeffers Petroglyph site were created as long as 7,000 years ago and the most recent about 250 years ago, making the site one of the oldest continuously used sacred sites in the world.[11]

73. In a December 16, 2020, letter to Alex Shultz, Planning and Zoning Technician for Cottonwood County, Amanda Gronhovd, State Archaeologist, Minnesota Office of the State Archaeologist (OSA), states, "This landscape is considered sacred, as evidenced by the abundance of petroglyphs and petroforms in the vicinity to the Lorentz Quarry project. As such, there is a high probability of encountering cemeteries or burials in the area…" This communication is included as Appendix 24 to these Findings.

74. In a December 17, 2020, letter to Alex Shultz, Planning and Zoning Technician for Cottonwood County, Amy Spong, Division Director and Deputy, Minnesota State Historic Preservation Office (SHPO), states, "It has been known since the early twentieth century that other rock art sites were present in the vicinity of the Jeffers Petroglyphs, and within the last decade archaeological surveys in the area have begun to delineate a much larger area of significance, encompassing the Red Rock Ridge as a whole. The ridge is a geological outcrop of Sioux Quartzite where the petroglyphs were carved and is a prominent landscape feature in southwestern Minnesota. The archaeological surveys have identified camp or village sites where people lived while carving the rock art. Significantly, the surveys have also identified petroform sites, where boulders were placed centuries ago to form astronomical alignments or to create effigies." This communication is included as Appendix 25 to these Findings.

75. In a December 21, 2020, e-mail to the MPCA, Jeremy L. Nienow, Ph.D., RPA, President, Council for Minnesota Archaeology, states, "The two quarry development projects [the Project and the nearby Red Rock Quarry less than 1 mile to the south] are in the same cultural landscape where at least one burial cairn, three boulder outlines in the shape of a man, a buffalo head, and a kite-shaped astronomical observatory have been identified. The ultimate size of this cultural landscape and the Jeffers Petroglyphs Site are unknown and research in the last several years suggests it is far larger than previously thought. These sites are at least 8,000 years old and perhaps older, which could mean they span the entire human history in this part of North America. The potential of similar

[11] https://www.mnhs.org/jefferspetroglyphs/learn/rock (accessed by MPCA on 3/25/2022)

Native American cultural resources in these development areas is exceptionally high given the similar environmental settings." This communication is included as Appendix 26 to these Findings.

76. Lorentz's consultant Braun Intertec (Braun) contracted In Situ Archaeological Consulting, LLC (In Situ) to prepare a Phase I Cultural Resource Investigation for the Graff Quarry Project (Phase I Investigation), dated May 5, 2021. (Appendix 16).

77. Established in 2015, In Situ provides archaeological investigations throughout the Central United States. Craig Picka and Abraham Ledezma, In Situ's owners and authors of the Phase I Investigation, meet the requirements for the Secretary of the Interior's Guidelines for Professional Qualifications in Archaeology and its reports meet the guidelines for the U.S. Army Corps of Engineers, Bureau of Indian Affairs, and State Historic Preservation Offices.[12]

78. On page 4 of the Phase I Investigation the following observations are included based on In Situ's April 26, 2021, pedestrian survey and visual Site inspection:

    a. The Site is within an open area consisting of an agriculture field that has been subject to ground moving activities, as the topsoil has been graded/stripped, removed, and placed in piles;

    b. The Site consists of fairly flat topography; and

    c. The Site vegetation consists of tilled agriculture debris.

79. On page 4 of the Phase I Investigation, In Situ states it observed no cultural materials during its April 26, 2021, pedestrian survey and visual inspection. It noted, "there appears to be nominal potential for the intact presence of significant archaeological remains within the proposed project area, as the majority of the topsoil has been graded/stripped and removed in the project area."

80. The Phase I Investigation (page 3) included the following information based on an April 20,2021, and May 4, 2021, literature search by In Situ:

    a. Within 1 mile of the Site are five previously recorded archaeological sites and no previously recorded architectural resources;

    b. Of the five archaeological sites, one is a prehistoric lithic scatter site, three are prehistoric petroglyph sites, and one is a historic Euro-American military trail alpha site lead;

    c. All five sites are unevaluated for the Natural Registration of Historic Places;

    d. All five sites are located outside of the Site; and

    e. In Situ recommended a finding of No Historic Properties within the Project area.

[12] Information from In Situ Archaeological Consulting, LLC, website https://insitucrm.com/about-us/ (accessed by MPCA on 4/18/2020).

81. Lorentz, Braun, nor In Situ communicated with OSA[13], Minnesota Indian Affairs Council (MIAC)[14], SHPO[15], or THPO on the design, development, or implementation of the Phase I Investigation. Appendix 27 to these Findings includes communication from the THPO related to this Finding.

82. In addition to the Phase I Investigation, Lorentz and Braun contracted In Situ to prepare an Archaeological Monitoring Plan and Unanticipated Discovery Plan for the Graff Quarry Project (MUD Plan, Appendix 17), dated March 10, 2022.

83. Page 3 of the MUD Plan states, "The purpose of this monitoring [plan] is to make sure the Phase I survey did not miss any eligible archaeological sites or burials within the monitoring area." The MUD establishes a process for a contracted and licensed archaeologist monitor from In Situ to be on-Site to monitor excavated topsoil and overburden stripping, and to coordinate with OSA, MIAC, SHPO and the THPO, and law enforcement if any archeological items or burials are discovered.

84. According to page 4 of the MUD Plan, the archaeologist monitor will inspect all disturbed soils and all uncovered soils until the ground disturbances reach either bedrock, sterile subsoil (at least 10 centimeters under the topsoil), parent soil material, or 1 meter in depth. The archaeologist monitor will complete a daily monitoring form.

85. According to page 4 of the MUD Plan, on-Site monitoring will be conducted in accordance with the OSA Manual for Archaeological Projects in Minnesota,[16] and SHPO Manual for Archaeological Projects in Minnesota.[17]

86. According to page 4 of the MUD Plan, if the archaeologist monitor discovers cultural materials they will:
    a. Halt ground-disturbing activities within 100 feet of the edge of the discovery using flagging and/or fencing;
    b. Keep machinery in-place until the archaeologist monitor is able to carefully clean and inspect the machinery;
    c. Allow only essential personnel within the discovery area;
    d. Determine the age, location, and condition of discovered material; and
    e. Notify crew members to continue construction activities only if materials are found to be less than 50 years old.

[13] Personal communication between MPCA and Amanda Gronhovd, OSA, on 3/29/2022; and 3/31/2022 email.
[14] Personal communication between MPCA and Dylan Goetsch, Cultural Resource Specialist, MIAC, on 3/30/2022; and 3/31/2022 email.
[15] Email communication between MPCA and David Mather, National Register Archaeologist, SHPO, on 3/31/2022.
[16] https://mn.gov/admin/assets/OSAmanual_tcm36-186982.pdf (August 2011)
[17] https://mn.gov/admin/assets/archsurvey_tcm36-327672.pdf (July 2005)

87. According to page 4 of the MUD Plan, for found materials that are 50 years or older, the archaeologist monitor will:
    a. Conduct a detailed examination of the materials;
    b. Notify crew members to continue construction only if the materials lack significance or integrity (e.g., it is not intact);
    c. Submit a report documenting the discovery to OSA, MIAC, SHPO, and THPO; and
    d. Notify Lorentz and Braun immediately if the material appears to retain integrity and is potentially significant.

88. According to page 4 of the MUD Plan, after notifying Lorentz and Braun of the potentially significant material, the archaeologist monitor, Braun, and/or Lorentz will consult with OSA, MIAC, SHPO, and THPO to obtain the appropriate treatment of the discovery, which may include Phase II testing and National Register of Historic Places eligibility evaluation, or preparation and implementation of a data recovery plan.

89. According to page 5 of the MUD Plan, after treatment measures are completed, In Situ will consult with OSA, MIAC, SHPO, and THPO to determine if additional work is needed.

90. According to page 5 of the MUD Plan, if the archaeologist monitor discovers a burial site they will:
    a. Halt ground-disturbing activities within 100 feet of the edge of the burial site using flagging and/or fencing, and, if possible, stabilize, and/or cover the burial. At minimum, cover the human remains with a tarp to protect them from outdoor elements and prevent them from public display;
    b. Keep machinery in-place; and
    c. Immediately notify the local law enforcement, who will determine if the remains are associated with a crime scene and/or recent event (less than 50 years old).

91. According to page 5 of the MUD Plan, if law enforcement determines the burial remains are less than 50 years old and/or associated with a crime scene, future action will fall under the local law enforcement jurisdiction.

92. According to page 5 of the MUD Plan, if law enforcement determines the burial remains are 50 years or older and not a crime scene, the archaeologist will immediately notify the OSA following clearance from the local law enforcement agency.

93. According to page 5 of the MUD Plan, the OSA will authenticate the human remains/possible burial site, which will determine the presence of, or high possibility of human remains or human burials located in a discrete area. OSA will delineate burial or gravesite boundaries, and attempt to determine the ethnic, cultural, or religious affiliations of the individuals.

94. According to page 5 of the MUD Plan, the OSA may seek additional consultation and fieldwork if OSA does not have enough information to delineate and/or authenticate the burial site.

95. According to page 5 of the MUD Plan, if the human remains/burial site are determined to be Native American, the OSA will initiate a consultation with MIAC and other tribal representatives to

determine appropriate measures for the treatment of the remains. The lead tribe and/or MIAC will assist with the repatriation and reinternment of the human remains.

96. According to page 6 of the MUD Plan, if the human remains/burial site are determined to be non-Native American or the ancestry cannot be determined, the OSA will be responsible for appropriate treatment of the human remains.

97. According to page 6 of the MUD Plan, Lorentz will not conduct activity in the area of discovery until the OSA and MIAC complete their consultation and mitigation efforts. This includes keeping machinery on the Site until it is carefully cleaned off and examined by the archaeologist monitor.

98. According to page 6 of the MUD Plan, once the OSA and MIAC have completed their efforts and grant permission, Lorentz may proceed with ground disturbance activities.

99. Lorentz, Braun, nor In Situ consulted with OSA[18], MIAC[19], SHPO[20], or THPO (see Appendix 27) in the development of the MUD Plan as MPCA requested, which is described in Finding 24.

100. As stated in Finding 31, the MPCA shared the Phase I Investigation and MUD with OSA on March 30, 2022. OSA provided written comments on the documents to MPCA on April 18, 2022 (Appendix 23).

101. The OSA comments on the Phase I Investigation and the MUD Plan state:

    a. The Phase I Investigation does not appear to have included an investigation for cemetery/burial sites or related features;

    b. The Phase I Investigation does not appear to have included the entire area where impacts are planned;

    c. The Phase I Investigation and MUD Plan do not address how the previously disturbed topsoil will be assessed; and

    d. The MUD Plan does not clearly lay out who is in charge on the Site if materials of concern are identified.

102. On April 26, 2022, the THPO communicated to MPCA a concern that the Phase 1 Investigation was completed after ground stripping had occurred. See Appendix 27.

103. The MPCA finds that the MUD Plan describes a clear and detailed process for identification and handling of potentially significant archaeological materials and burial sites during proposed activities on the Site, such that these materials and sites will be preserved and managed appropriately. (See Findings 82 through 98.)

104. Prior to issuance of a Nonmetallic Mining Permit to Lorentz, the MPCA will require an opportunity for review and comment on the MUD Plan by the THPO (see Finding 25), and will require compliance with a final MUD Plan as part of MPCA's approval of the Nonmetallic Mining Permit.

[18] Personal communication between MPCA and Amanda Gronhovd, OSA, on 3/29/2022; and 3/31/2022 email.
[19] Personal communication between MPCA and Dylan Goetsch, Cultural Resource Specialist, MIAC, on 3/30/2022; and 3/31/2022 email.
[20] Email communication between MPCA and David Mather, National Register Archaeologist, SHPO, on 3/31/2022.

The final MUD Plan will become an integral and enforceable part of the Nonmetallic Mining Permit for the Project.

105. Lorentz must comply with the Nonmetallic Mining Permit, which requires protection of historic and archaeological sites. Paragraph 2.6.12 of the permit states, "This permit does not authorize discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered archeological sites…The owner must be in compliance with the National Historic Preservation Act and conduct all required review and coordination related to historic preservation, including significant anthropological sites and any burial sites, with the Minnesota Historic Preservation Officer."

106. The MPCA finds that Lorentz will be in compliance with paragraph 2.6.12 of the Nonmetallic Mining Permit through implementation of a final MUD Plan.

107. The MPCA finds the information presented in the 2022 Petition and other information in the environmental review record demonstrates that the Project may have the potential for significant environmental effects to historic and archaeological resources based on type, extent, and reversibility of environmental effects because: there are discrepancies between the reported total site, the Project site, and what the Phase I Investigation literature review and field survey covered in terms of content and aerial horizontal extent/footprint, i.e., the total Site is 47 acres, the Project site (from Finding 3) is 26.8 acres, the Phase I report covered 35.6 acres, and the MPCA's geo-referencing of the site drawings is approximately 36 Acres. Thus there is insufficient information to precisely determine what was investigated relative to the actual Project and total site acreage; the MUD Plan does not address previously disturbed topsoil; the MUD Plan does not clearly address how materials of concern be identified; that Lorentz, Braun, nor In Situ consulted with THPO in the development and design of the Phase I Investigation, or the MUD Plan as MPCA requested in Finding 24; and there are outstanding OSA concerns noted (Finding 101).

Cumulative Potential Effects

108. The second criterion that the MPCA must consider when determining if a project has the potential for significant environmental effects is the "cumulative potential effects." In making this determination, the MPCA must consider "whether the cumulative potential effect is significant; whether the contribution from the project is significant when viewed in connection with other contributions to the cumulative potential effect; the degree to which the project complies with approved mitigation measures specifically designed to address the cumulative potential effects; and the efforts of the proposer to minimize the contributions from the project." Minn. R. 4410.1700 subp. 7(B).

109. The MPCA evaluated the following areas for cumulative potential effects from the Project:

    a. Wetlands;

    b. Endangered and threatened rare plant species; and

    c. Historic and archaeological resources

<u>Wetlands</u>

110. Findings 42 through 56 are incorporated herein as part of MPCA's cumulative potential effects evaluation for wetlands.

111. The MPCA finds the information presented in the 2022 Petition and other information in the environmental review record does not demonstrate that the Project has the potential for significant environmental effects to wetlands based on significant cumulative potential effects because: there are no wetlands present on the Site; Lorentz does not propose to drain or alter any wetlands as part of the Project; the Project as proposed will prevent stormwater from leaving the Site to nearby wetlands; and the environmental effects are subject the Nonmetallic Mining Permit that includes specific stormwater management and other mitigation measures to prevent impacts to nearby wetlands.

Endangered and Threatened Rare Plant Species

112. Findings 57 through 69 are incorporated herein as part of MPCA's cumulative potential effects evaluation for endangered and threatened rare plant species.

113. The MPCA finds the information presented in the 2022 Petition and other information in the environmental review record does not demonstrate that the Project has the potential for significant environmental effects to endangered and threatened rare plant species based on significant cumulative potential effects because: there are no known endangered or threatened rare plant species on the Site; there is no evidence of or likelihood of undisturbed land on the site; and the Nonmetallic Mining Permit requires protection of threatened and endangered species.

Historic and Archaeological Resources

114. Findings 70 through 107 are incorporated herein as part of MPCA's cumulative potential effects evaluation for historic and archaeologic resources.

115. The MPCA finds the information presented in the 2022 Petition and other information in the environmental review record demonstrates that the Project has the potential for significant environmental effects to historic and archaeological resources based on significant cumulative potential effects because: the Petition provides evidence of multiple historic and archaeological features in the area of the Jeffers petroglyphs, including approximately 400 found on an 25 additional outcrops; five of Minnesota's seven petroforms are located on the Red Rock Ridge including two petroforms one mile south of the quarry with astronomical significance; the Site is between two documented Native American burial sites (a burial mound two miles to the north, and a burial cairn one-mile to the south); and there are two existing quarries in the area, the Red Rock Quarry (one-mile south) and the Sioux Rock Products quarry (two miles southeast) along with other activities in the area that may have a significant impact on the historic and archaeological resources in the area.

The Extent to Which the Environmental Effects Are Subject to Mitigation by Ongoing Public Regulatory Authority

116. The third criterion that the MPCA must consider when determining if a project has the potential for significant environmental effects is "the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority. The RGU may rely only on mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the project." Minn. R. 4410.1700, subp. 7(C). The MPCA findings with respect to this criterion are set forth below.

117. The following permits or approvals will be required for the Project:

Unit of Government	Permit or Approval Required
MPCA	NPDES/SDS Nonmetallic Mining and Associated Activities General Permit (Nonmetallic Mining Permit) (coverage identification number MNG490596) (See Appendix 15)
Cottonwood County	Conditional Use Permit

MPCA Nonmetallic Mining Permit

118. The Project activities require a Nonmetallic Mining Permit. A Nonmetallic Mining Permit includes construction and operational requirements to reduce pollutant levels in point source discharges including stormwater, and protect water quality in accordance with the federal Clean Water Act, Minnesota statutes and rules, and other federal laws and regulations.

119. Findings 42 through 107 are incorporated herein as part of MPCA's evaluation of the potential for significant environmental effects and the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority.

120. As described in Findings 54, 55, 68, and 105, the MPCA finds that the Nonmetallic Mining Permit includes mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the Project to wetlands, endangered and threatened rare plant species, and historic and archaeological resources.

121. As described in Findings 104 and 106, prior to issuance of a Nonmetallic Mining Permit to Lorentz, the MPCA will require compliance with a final MUD Plan as part of its approval of the Nonmetallic Mining Permit; and that MPCA finds that Lorentz will be in compliance with paragraph 2.6.12 of the Nonmetallic Mining Permit through implementation of a final MUD Plan.

122. The MPCA finds that the Nonmetallic Mining Permit includes general and specific requirements for mitigation of environmental effects of the Project on wetlands, threatened and endangered rare plant species, and historic and archaeological resources; and those requirements are reasonably expected to effectively mitigate the identified environmental impacts of the project. The MPCA finds that the environmental effects of the Project are subject to mitigation, as explained in these Findings, by ongoing public regulatory authority of the Nonmetallic Mining Permit.

Cottonwood County Conditional Use Permit

123. Lorentz is required to obtain all required building and conditional use permits required by local units of government to ensure compliance with local ordinances. The conditional use permit will address local zoning, environmental, regulatory, and other requirements that are needed to avoid adverse effects on adjacent land uses.

124. Cottonwood County issued a Conditional Use Permit (CUP) for mining activities to Lorentz for the Site on August 18, 2020.

125. Cottonwood County Ordinance Number 36 for Mining, Extraction, and Excavation requires all mining, extraction, and excavation operations to "restrict runoff from the site to lakes, rivers, streams, drainage ditches, tile intakes, other DNR Protected Waters and Wetlands, sensitive areas, and adjacent properties."[21]

126. The MPCA finds that the Cottonwood County Conditional Use Permit issued in compliance with Cottonwood County Ordinance Number 36 includes general and specific requirements for mitigation of wetland environmental effects of the Project and those requirements are reasonably expected to effectively mitigate wetland environmental impacts of the Project. The MPCA finds that the environmental effects on wetlands of the Project are subject to mitigation, as explained in these Findings, by ongoing public regulatory authority of the Cottonwood County Conditional Use Permit.

The Extent to Which Environmental Effects can be Anticipated and Controlled as a Result of Other Available Environmental Studies Undertaken by Public Agencies or the Project Proposer, Including Other EISs

127. The fourth criterion that the MPCA must consider is "the extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other EISs." Minn. R. 4410.1700, subp. 7(D). The MPCA Findings with respect to this criterion are set forth below.

128. Although not exhaustive, the MPCA reviewed the following documents as part of the analysis for the Project:

    a. 2020 Petition and all of its attachments;

    b. 2022 Petition and all of its attachments;

    c. Nonmetallic Mining Permit;

    d. November 19, 2021, Site Inventory Report Form;

    e. May 5, 2021, Phase I Cultural Resource Investigation of the Graff Quarry Project, Cottonwood County, Minnesota;

[21] Cottonwood County Ordinance Number 36 for Mining, Extraction, and Excavation, page 6, https://cms5.revize.com/revize/cottonwoodmn/Document_Center/Ordinances/Ordinance_36_Mining.pdf.

f. March 10, 2022, Archaeological Monitoring Plan and Unanticipated Discovery Plan (MUD Plan); and

g. Permits and environmental review of similar projects.

129. The MPCA also relies on information provided by Lorentz, petitioners, MPCA staff experience, and other available information obtained by staff.

130. The potential effects of the Project on historic and archaeological resources have been anticipated and addressed through the Phase I Investigation by Lorentz, and will be controlled through the Nonmetallic Mining Permit requirements, and the permit requirement for implementation of a final MUD Plan.

131. Based on the environmental review record, environmental studies by Lorentz, and staff expertise and experience on similar projects, the MPCA finds that the significant environmental effects of the Project have been anticipated and will be controlled.

II. CONCLUSIONS OF LAW

132. The EQB designated the MPCA as the RGU for this decision.

133. The MPCA followed all necessary procedures for the petition process.

134. The Commissioner has the authority to make a decision in this matter.

135. The evidence presented by the petitioners, Lorentz, and other persons, or otherwise known to the MPCA, demonstrates that the Project may have the potential for significant environmental effects.

136. The MPCA concludes, based on the above Findings, that the preparation of an EAW, as requested by the 2022 Petition, is warranted for the Sioux Quartzite Quarry proposed in Amboy Township, Cottonwood County, Minnesota.

137. Any Findings that might properly be termed conclusions and any conclusions that might properly be termed Findings are hereby adopted as such.

III. ORDER

138. The Minnesota Pollution Control Agency determines that there is the potential for significant environmental effects reasonably expected to occur from the Sioux Quartzite Quarry, and that there is sufficient basis to require the preparation of an EAW. The 2022 Petition is therefore granted.

Katrina Kessler

Katrina Kessler, Commissioner
Minnesota Pollution Control Agency

May 16, 2022

Appendix 1

Site Inventory Report Form

Submitted to MPCA by Lorentz on November 19, 2021

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

Site inventory report form

NPDES/SDS Permit Program

National Pollutant Discharge Elimination System (NPDES)/
State Disposal System (SDS)

Doc Type: Notifications

Directions: Instead of completing an application to add or delete sites from existing permit coverage, the Minnesota Pollution Control Agency (MPCA) is offering this *Site inventory report form* to existing Permittees to make these changes easier. For each new site to be covered or for each site that is inactive and you wish to terminate coverage, complete the information below. Make additional copies of this form as needed.

Submittal: Submit the completed form to the MPCA at MNG49.pca@state.mn.us at least 10 days prior to initiation of land disturbing activities at the new site(s). For the 'Special Waters' section, the MPCA has several documents and an interactive map called "Special Waters Search" available electronically on the MPCA's Stormwater website at https://www.pca.state.mn.us/water/stormwater-special-and-impaired-waters-search to help identify special waters near the proposed site. Listings of calcareous fens (Minn. R. 7050..0335, subp. 1e), trout streams (Minn. R. 6264.0050, subp. 2 and 4) and Outstanding Resource Value Waters (ORVWs) (Minn. R. 7050.0335) can be accessed electronically on the Office of the Revisor of Statutes' website at http://www.revisor.leg.state.mn.us.

Permittee name: W Lorentz & Sons Construction **Permit number:** MN G490596

Inventory of nonmetallic mining and associated sites by PLS coordinates

Let this list serve as an Inventory of all sites owned or operated. Include the activities and the Public Land Survey (PLS) coordinates for each site. Consider this a comprehensive listing of all the sites you want covered under this permit. For all sites listed below, you must complete pages 3-5 of this application. You only need to complete this inventory once.

Example: *JTs Aggregate owns and operates five pits and quarries throughout southern Minnesota. Three of the pits are construction sand and gravel pits, and one is a limestone quarry with a portable hot mix asphalt plant. The company dewaters from two pits in Fillmore County, but is unable to contain everything on site in one of the pits. The remaining pits are able to contain all stormwater on site. Coverage is being terminated on one pit. The chart below would be filled out as follows:*

		Dewatering			Stormwater				Treatment and disposal				
Site name, county PLS coordinate (Twp, range, section, Qtr-section)	**Station ID** (if applicable)	**Constr. sand/ gravel**	**Indl. sand**	**Sub. J2**	**J1**	**J2**	**D1**	**E2**	**Dewatering contained on site**	**Stormwater contained on site**	**Discharged dewatering to surface water**	**Discharged stormwater to surface water**	**Termination** (see page 5)
Sample S&G 1, Mower (TxxxN, RxxW, secxx, SE ½)					*X*					*X*			
Sample S&G 2, Fillmore (TxxxN, RxxW, secxx, NE ¼)		*X*			*X*						*X*	*X*	
Sample S&G 3, Fillmore (TxxxN, RxxW, secxx, NW ¼)		*X*			*X*				*X*	*X*			
Sample S&G 4, Olmsted (TxxxN, RxxW, secxx, SW ¼)						*X*	*X*			*X*			
Sample S&G 5, Olmsted (TxxxN, RxxW, secxx, NE ¼)													*X*
Drill Pit, Nicollet (T109N, R29W, Sec 9, W1/2, NW1/4)		X			X				X	X			
Brostrom Pit, Nicollet, (T111N, R26W, Sec 32. SE 1/4)		X			X				X	X			
Graff Quarry, Cottonwood (T107N, R36W, Sec 1, NE1/4)						X				X			

		Dewatering			Stormwater				Treatment and disposal				
Site name, county PLS coordinate (Twp, range, section, Qtr-section)	**Station ID** (if applicable)	**Constr. sand/ gravel**	**Indl. sand**	**Sub. J2**	**J1**	**J2**	**D1**	**E2**	**Dewatering contained on site**	**Stormwater contained on site**	**Discharged dewatering to surface water**	**Discharged stormwater to surface water**	**Termination** (see page 5)

Basic information

Complete the following for each site:

Site name: Graff Quarry

Facility site street/road address (not P.O. Box): Approx. 1100 Ft S of Int. Cnty Rd 10 & 490th Ave

City: Jeffers State: MN Zip code: 56145 Telephone: 5073408901

Activity information

1. **Select the Primary Activity and Secondary Activity (if applicable) at the site:**

Subsector J1	**Primary**	**Secondary**
Construction sand and gravel mining (Standard Industrial Classification [SIC] Code 1442)	☐	☐
Industrial sand mining (SIC Code 1446)[1]	☐	☐
Subsector J2		
Dimension stone (SIC Code 1411)	☐	☐
Crushed and broken limestone mining/quarry area (SIC Code 1422)	☐	☐
Crushed and broken granite mining/quarry area (SIC Code 1423)	☐	☐
Crushed and broken stone mining/quarry area (not elsewhere classified, SIC Code 1429)	☒	☐
Subsector D1		
Hot mix asphalt production areas also known as asphalt paving mixtures and blocks (SIC Code 2951). This includes portable hot mix asphalt plants.	☐	☐
Subsector E2		
Concrete block and brick (SIC Code 3271)	☐	☐
Concrete products other than block and brick (SIC Code 3272)	☐	☐
Ready-mix concrete (SIC Code 3273)	☐	☐

[1] *If using flotation or acid leaching process(es), you are not eligible for this general permit and must apply for an individual permit.*

2. **Describe completely your stormwater management systems used to control stormwater at this site:**
   Includes industrial stormwater ponds, sedimentation basins, and/or infiltration devices.

   All stormwater will be directed to the onsite multi-cell ponds for the stormwater to be infiltrated. The best line of defense is to maintain areas of existing areas of vegetation until mining is set to occur. Redundant or switching out a BMP's may be required if found to not be functioning properly. All inspections, repairs, and changes are to be documented in the SWPPP/Inspection Reports.

3. **Describe completely your wastewater treatment systems at this site:**

   The initial four (4) ponds, interconnected with equalizing culverts, will be used to catch all stormwater onsite. They are sized to collect all stormwater and hold for infiltration. No stormwater will be discharged offsite. No dewatering or washing is set to occur, if circumstances change this form will be updated if required by applicable laws and regulations. All Fuels, coolants, lubricants, chemicals are to be stored covered or stored within secondary containment structures. Onsite inspections will be conducted monthly as required by permit, as well as inspection during a storm water runnoff event-looking for discolorization or visible contaminations. Corrective actions are to be implimented and documented in the SWPPP/Inspection reports. Prevention of leaking contaminants is through storage and maintenance, of such materials and any necessary cleanup is to be initiated immediately.

4. **How and where are the sediments and sludge removed from the stormwater and/or wastewater treatment systems at the facility disposed?**

   No Sediments or sludge will be removed offsite

5. **Have you updated your Pollution Prevention Plan for this site?** ☒ Yes ☐ No
You must do so prior to submittal of this form.

6. List below all chemical additives that are used or proposed to be used at the facility.

*This must include all process reagents, flocculants, biocides, wastewater treatment chemical additives, chlorine or other disinfectants, detergents, cleaning products, freeze conditioning agents, etc. MPCA approval is required for any additives that are new, increasing in usage, or not previously approved. Go to the MPCA's Chemical additive webpage at: http://www.pca.state.mn.us/a6krka9 to find the documents necessary to complete the approval process. Your additives will **not** be approved for use until you complete this process.*

Product name	**Purpose**	**Location in process of chemical addition**	**Frequency of addition**	**Type of application** (slug dosing or continuous feed)	**Average rate of use** (weight or volume per day)	**Maximum rate of use** (weight or volume per day)	**Previously approved? Yes or no**	**Date of approval** (mm/dd/yyyy)
							☐ Yes ☐ No	
							☐ Yes ☐ No	
							☐ Yes ☐ No	
							☐ Yes ☐ No	

An Additional Chemical Additives attachment is available on the MPCA website at http://www.pca.state.mn.us/water/permits/index.html if more space is needed.

7. Do you use chemical dust suppressants at your facility? ☐ Yes ☒ No

If yes, fill out table below:

Product name	**Location of use**	**Frequency of use**	**Average rate of use** (weight or volume per day)	**Maximum rate of use** (weight or volume per day)

Attach the Material Safety Data Sheets, complete product labels and any other information on chemical composition, aquatic toxicity, human health, and environmental fate for each chemical dust suppressant. Chemical dust suppressants are approved separately from the process required in question 6.

8. *What is the source of the intake water supply for the facility?*

Intake water supply includes all make-up water supplied to the facility. ***(Choose one)***

☐ Municipal, include city name: _____

☐ Groundwater, intake location: _____

☒ Surface water, include name: surface waters from stormwater events

☐ No make-up water: _____

If this is a non-municipal water supply, have you already obtained a Minnesota Department of Natural Resources (DNR) water appropriations permit? ☐ Yes ☐ No ☒ Not applicable

If yes, what is the DNR permit number: _____ DNR permit expiration date (mm/dd/yyyy): _____

Is the intake water supply chlorinated or otherwise disinfected? ☐ Yes ☒ No

9. Has the facility been required to complete an Environmental Impact Statement (EIS) and/or Environmental Assessment Worksheet (EAW)?

☐ Yes ☒ No ☐ Not applicable

If yes, attach a copy of the completed EIS/EAW and note: _____ _____

(Title) *Date (mm/dd/yyyy)*

10. What is the fate of the sewage generated by the facility?
Examples are septic tank and drainfield, routing to municipal sanitary sewer, portable containment systems, etc.

N/A, portable toliets are used onsite, and maintained & emptied

Discharges from site

		Yes	No
11.	**Is stormwater leaving the site?**	☐	☒
12.	**Is water from the dewatering of a mine, pit or quarry from Subsector J1 and J2 facilities leaving the site?**	☐	☒
13.	**Do you dewater from a mine, pit, or quarry to a control device?**	☐	☒
	Control devices include settling ponds, sedimentation basins, and/or infiltration basins. Devices shall be designed consistent with accepted engineering practices to control the pollutants of concern.		
14.	**Do you have any of the following non-stormwater (also considered wastewater) activities conducted at your site?**	☒	☐

Check all that apply.

- ☐ a. Aggregate wash water from Subsector J1 and J2 facilities.
- ☐ b. Dredging operations from Subsector J1 and J2 facilities.
- ☐ c. Installation, construction, and operation of wet scrubbers at asphalt production areas, including portable asphalt plants (Subsector D1).
- ☐ d. Washing trucks, mixers, transport buckets, forms and/or other equipment at concrete block and brick, concrete products other than block and brick, and ready-mix concrete facilities (Subsector E2).
- ☐ e. Uncontaminated scale deck wash water that does not use detergents, solvents, or degreasers.
- ☐ f. Stormwater and deck wash water collected in holding tanks under scales.
- ☐ g. Wash water associated with cleaning of mobile equipment that does not use detergents, solvents, or degreasers.
- ☒ h. Waters used for sawing stone or dust control on crushers, conveyors, associated equipment, stockpiles, and site roadways.
- ☐ i. Boiler blowdown and reverse osmosis reject.
- ☐ j. Low or high pressure steam curing.
- ☐ k. Noncontact cooling water used for dryer, pump and air compressor cooling.

15.	**Is wastewater from any activities in question #14 discharged to surface waters of the state?**	☐	☒
	*If yes, you are **not** eligible for General Permit coverage and must apply for an individual permit.*		
16.	**Is water used for other purposes leaving the site?**	☐	☒
	Describe use of water if applicable. Depending on the type of water leaving the site, you may not be eligible for coverage under general permit MNG490000; contact MPCA permitting staff to appropriately permit this site.		

Surface water discharges location information

17. If you answered 'yes' to questions 11 and/or 12 above, please provide the discharge location along with receiving water name. This is the overflow point where water that has left the site is entering surface water. Discharge points may include pipes and culverts. An example of a route to receiving waters is "to unnamed wetlands adjacent to Black Lake", "to an unnamed ditch to the Cottonwood River", "to Twin Lakes" or "to an unnamed pond adjacent to Lake Cornelia via storm sewer."

Route to receiving water: _____ PLS coordinates: _____

Type of discharge: _____
(List all types, i.e., pit site dewatering, stormwater runoff, overflow from control device.)

Average discharge flow rate: _____ Maximum discharge flow rate: _____

(Flow rates are not necessary for discharges that solely consist of stormwater runoff.)

Flow duration and frequency:

Month of flow: _____ Days/week: _____ Hours/day: _____

Complete the table for each surface water discharge point. If this is an existing facility, refer to the current NPDES/SDS Permit for Station ID. For new facilities, enter as much information as available. If more space is needed for additional stations, attach additional pages.

Station ID: SD

Township (26-71 or 101-168)	Range (1-51)	Section (1-36)	¼ Section (NW, NE, SW, SE)	¼ of ¼ Section (NW, NE, SW, SE)
T N	R ☐E ☐W			
Latitude	**Longitude**	**Datum**	**Coordinate Collection Method**	**Date Coordinate Collected**

Receiving water name:

Special waters

		Yes	No
18.	**Is the outfall at any of the following receiving waters?**		
a.	Designated ORVW? Defined in Minn. R. 7050.0255 and listed in Minn. R. 7050.0335.	☐	☒
b.	DNR-posted fish-spawning areas (Minn. R. 6264.0125)?	☐	☒
c.	DNR-designated trout waters? Trout waters locations are listed in Minn. R. 6264.0050, subp. 1 and 3	☐	☒
	If yes, you are not eligible for a general permit and must apply for an individual permit.		
19.	**Is the outfall at any of the following?**		
a.	Within one mile of an ORVW?	☐	☒
b.	Within one mile of a DNR-designated Trout Steam?	☐	☒
c.	Within one mile of an impaired water?	☐	☒

If the answer is yes to any of the above, the permit has specific requirements for your discharge. See Sections 2.6.14 and 2.6.41 of the permit to insure you are able to meet these requirements. If not, an individual permit may be necessary.

Site map

20. Attach a site map showing:

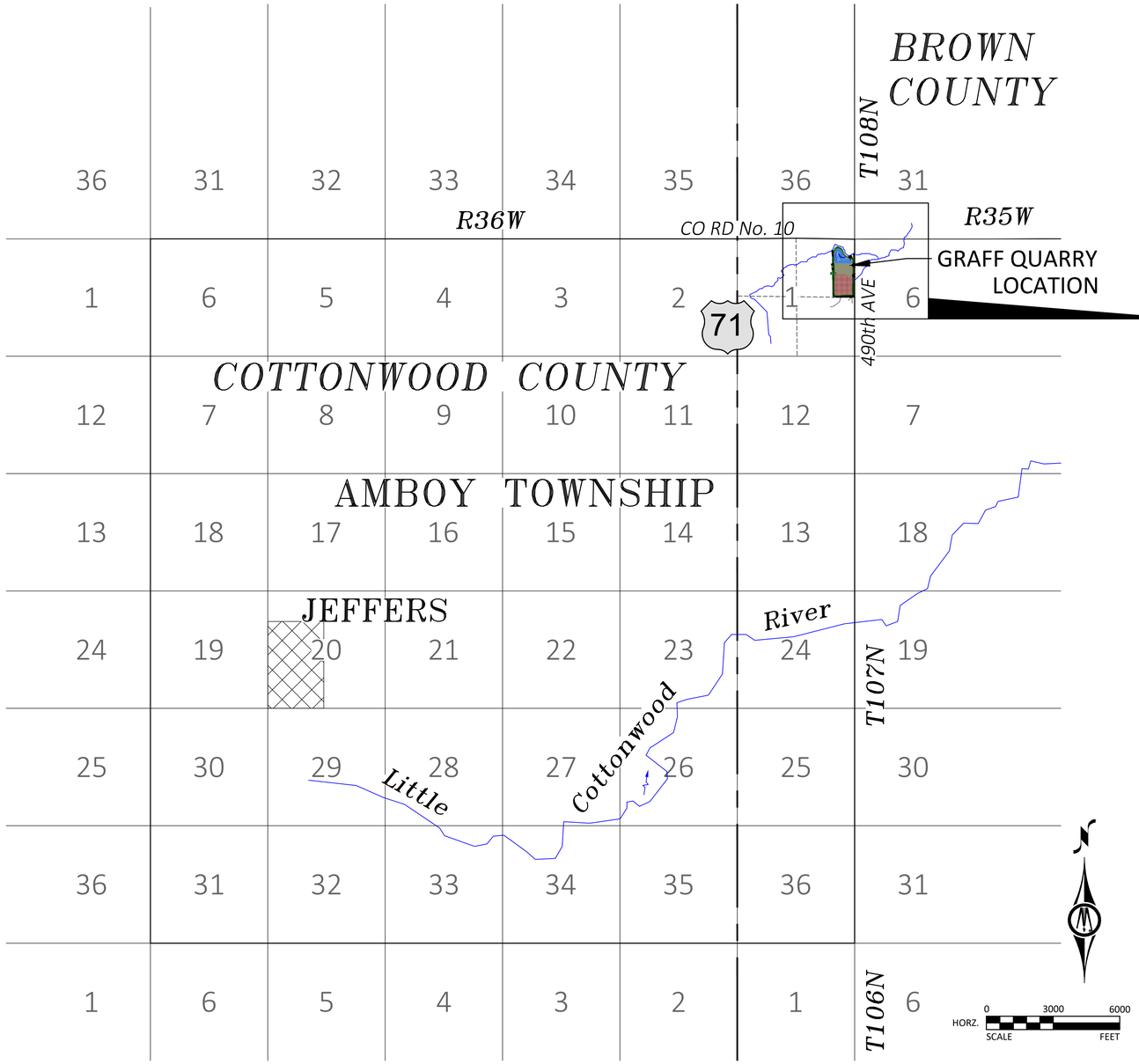
a. Location of all discharge points.
b. Location of all overflow points from control devices.
c. Directions of stormwater runoff (including stormwater that is contained/infiltrated on site).

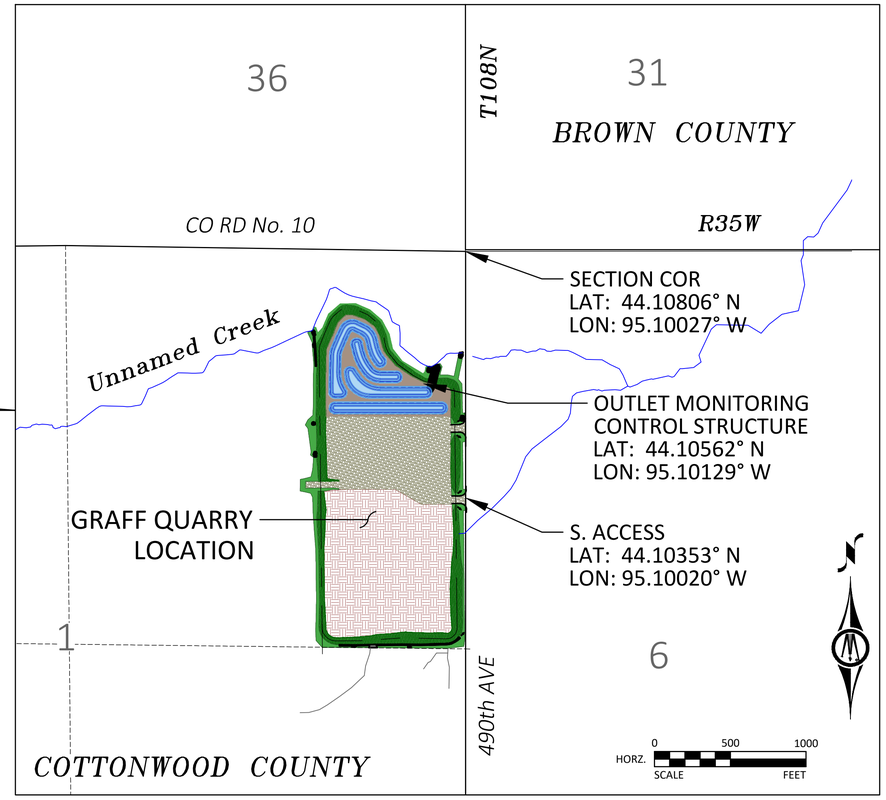
Coverage termination

21. In order to terminate coverage of a site, the Permittee must ensure:

a. The site closure achieves stabilization, or
b. There is no stormwater runoff associated with nonmetallic mining and/or mine dewatering from the site.

22. Provide the name and contact information for the new owner or operator that is responsible for the site, if applicable:





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David A Palm

DAVID A PALM, P.E..

LIC. NO. 22574 DATE 08/19/2020

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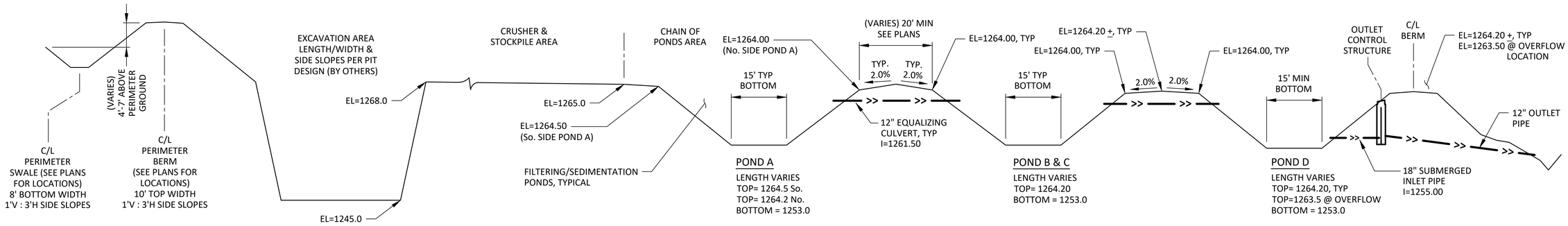
NO.	ISSUED FOR	DATE

WENDELL LORENTZ & SONS CONSTRUCTION

GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA

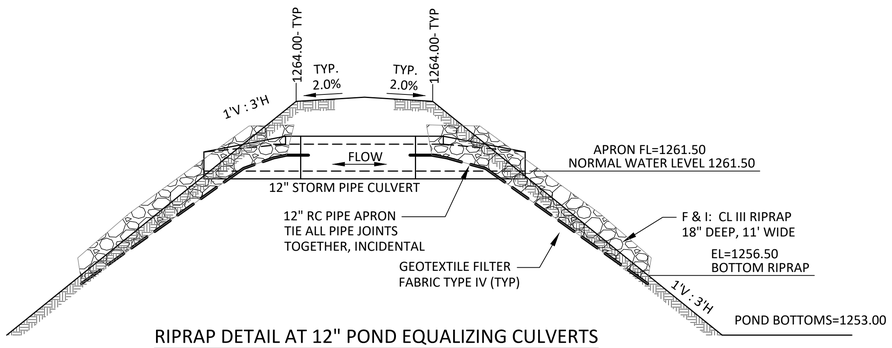
PROJECT LOCATION MAP

SHEET G0.01



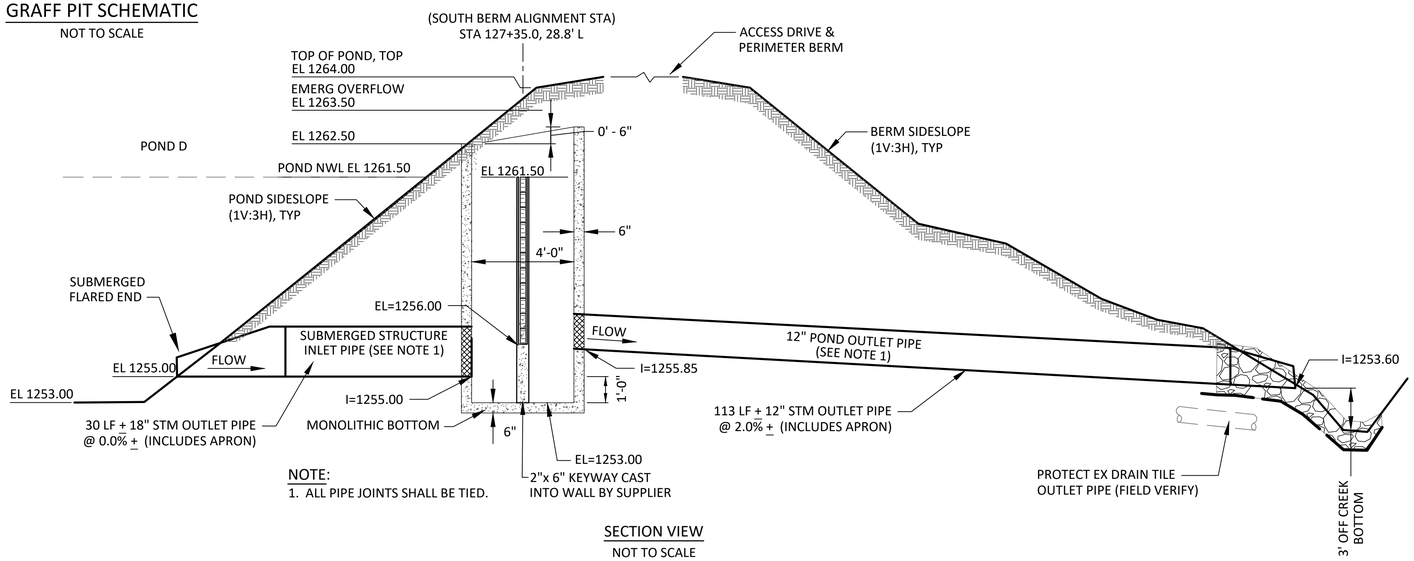
GRAFF PIT SCHEMATIC

NOT TO SCALE



RIPRAP DETAIL AT 12" POND EQUALIZING CULVERTS

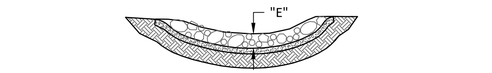
NOT TO SCALE



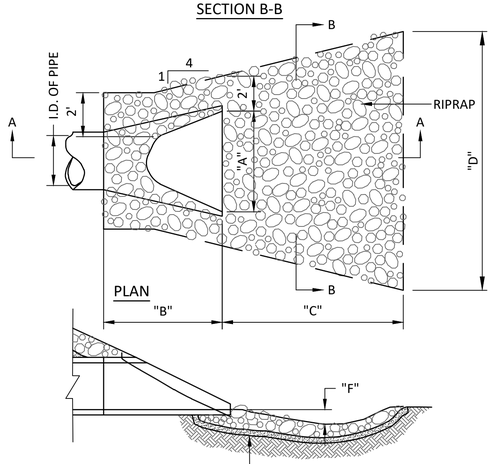
NOTE:
1. ALL PIPE JOINTS SHALL BE TIED.

SECTION VIEW

NOT TO SCALE



SECTION B-B



SECTION A-A

		CLASS II d50=6"	CLASS III d50=9"	CLASS IV d50=12"
DIA OF ROUND PIPE (IN)	L (FT)	12" DEPTH RIPRAP (CU YD)	18" DEPTH RIPRAP (CU YD)	24" DEPTH RIPRAP (CU YD)
12	8	5	8	10
18	10	5	8	10

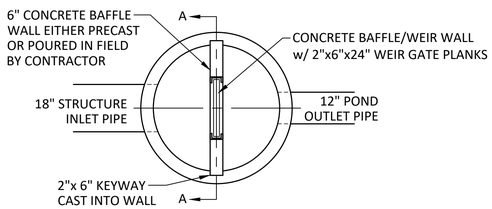
NOTE: RIP RAP DIMENSIONS IN TABLE ARE MINIMUM REQUIREMENTS. SEE DETAILS & PLANS FOR MODIFIED DIMENSIONS

RIPRAP TABLE

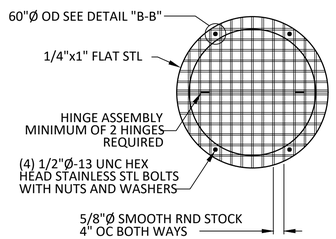
I.D. OF PIPE	A	B	C	D	E	F
12"	30"	6'	8'	11'	1'	1'
18"	36"	6'	10'	11'	1'	1'

RIPRAP AT STORM CULVERT END

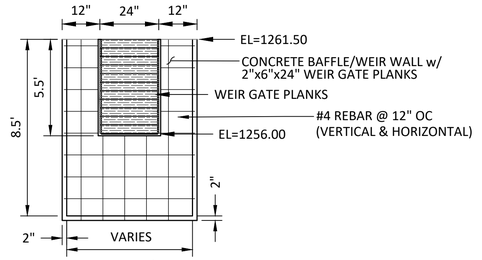
NOT TO SCALE



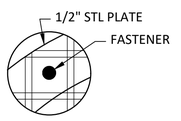
GRATE NOTES:
1) GRATE TO BE MADE IN TWO (2) PIECES
2) ALL METAL SHALL BE HOT-DIPPED GALVANIZED
3) POND SKIMMER GRATE IS INCLUDED WITH DRAINAGE STRUCTURE DESIGN SPECIAL 4



60"Ø (2) PIECE 5/8" ROD POND SKIMMER GRATE (SEE GRATE NOTES)



CONCRETE BAFFLE/WEIR WALL SECTION A-A



DETAIL "B-B"

POND "D" OUTLET CONTROL STRUCTURE (OCS 1)
SKIMMER STRUCTURE DRAINAGE STRUCTURE

NOT TO SCALE

NOTE: DETAILS ARE NOT TO SCALE

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LIC. NO. 22574 DATE 08/19/2020

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DRAWN	sml
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NO.	ISSUED FOR	DATE

WENDELL LORENTZ & SONS CONSTRUCTION
GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA
DETAILS

SHEET C1.01

COUNTY ROAD No.10

N 3°18'56" W 2643.25

SOUTH LINE OF THE NE 1/4

EAST LINE OF THE NE 1/4

N 89°46'09" W 2639.42

EDGE OF FIELD

EXISTING GRASS SWALE 3

EXISTING GRASS SWALE 2

FIELD ACCESS THROUGH BERM

12" CULVERT w/ APRONS

EXISTING GRASS SWALE 4

RAPID STABILIZATION OF LAST 200' PERIMETER SWALE REQUIRED, TYP.

5' R CL II RIP RAP w/ GEOTEXTILE FABRIC, TYPE 4

8' WIDE SWALE

RIP RAP END OF SWALE

RIP RAP APPRON

EXISTING UNNAMED CREEK

CENTERLINE PERIMETER BERM (WEST & NORTH)

10' WIDE TOP PERIMETER BERM (3:1 SIDE SLOPES)

INTAKE 1

CENTERLINE PERIMETER BERM (SOUTH & EAST)

EXCAVATION AREA (TO BE EXCAVATED TO EL=1245+)

CRUSHER & STOCK PILE AREA

CHAIN OF PONDS AREA (INCLUDES ACCESS ROADS) HWL = 1264.00 NWL = 1261.50

10' WIDE TOP (3:1 SIDE SLOPES) PERIMETER BERM

EXISTING GRASS SWALE 4

18" STORM CULVERT

10' WIDE TOP- PERIMETER BERM (3:1 SIDE SLOPES)

8' WIDE BOTTOM SWALE

DRAINAGE SWALE

EXISTING GRASS SWALE 1

CHAIN OF FILTERING/ RETENTION PONDS 81'-87' TOP WIDTH, 15' WIDE BOTTOM (3:1 SIDE SLOPES), SEE TYPICAL DETAIL

CHAIN OF PONDING EQUALIZING CULVERTS, TYP.

CHAIN OF PONDING OUTLET WATER QUALITY & MONITORING CONTROL STRUCTURE No 1

RIP RAP BERM OVERFLOW AREA BERM EL=1264.0 OVERFLOW EL=1263.5

1263.50 (OVERFLOW)

EXISTING TILE OUTLET (MAINTAIN) & CONNECT EX TILES INTO 18" STORM SEWER OR POND SYSTEM AS TILE IS ENCOUNTERED

RIP RAP END OF SWALE

CENTERLINE PERIMETER BERM (SOUTH & EAST)

GRADE ENTRANCE TO DRAIN TO ROAD DITCH, TYP

SOUTHERLY ENTRANCE

NORTHERLY ENTRANCE

66 FOOT RIGHT OF WAY ASSUMED TO EXIST PER PRESCRIPTIVE EASEMENT

12" CULVERT w/ APRONS, RIP RAP OUTLET

10' WIDE TOP (3:1 SIDE SLOPES) PERIMETER BERM

490TH AVENUE

EXISTING SWALE STORM SEWER DIVERSION 18" CULVERT OUTLET, RIPRAP OUTLET

100 FOOT RIGHT OF WAY ASSUMED TO EXIST PER PRESCRIPTIVE EASEMENT

COUNTY ROAD No. 10

BUILDING

GRAVEL SURFACE

CONCRETE SLAB UNDER GENERATOR

CONCRETE SLAB UNDER FEEDER TANKS

CONCRETE SLAB UNDER FEEDER TANKS

CONCRETE SLAB UNDER FEEDER TANKS

RENDERING SHED

SEPTIC TANK

EDGE OF GRAVEL

EDGE OF BITUMINOUS

DRAINAGE DITCH

GRASS AREA

HORZ. SCALE 0 100 200 FEET

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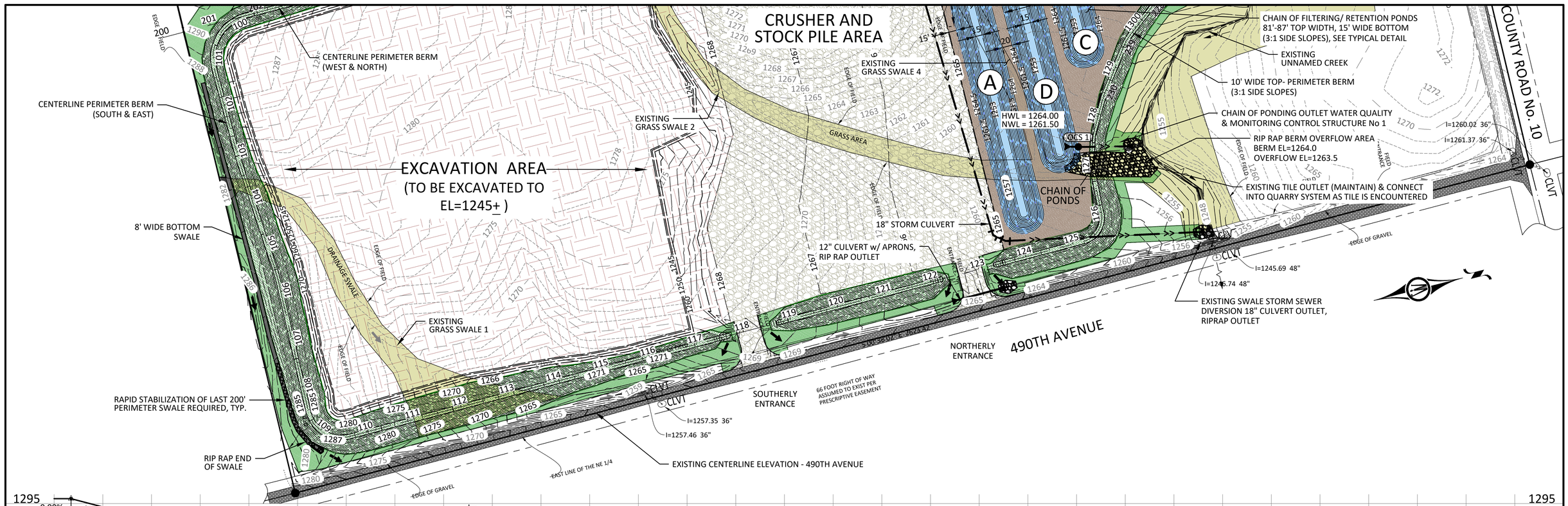
WENDELL LORENTZ & SONS CONSTRUCTION

GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA

GRADING PLAN

SHEET C3.01



HORZ. 0 100 200 SCALE FEET

VERT. 0 5 10 SCALE FEET

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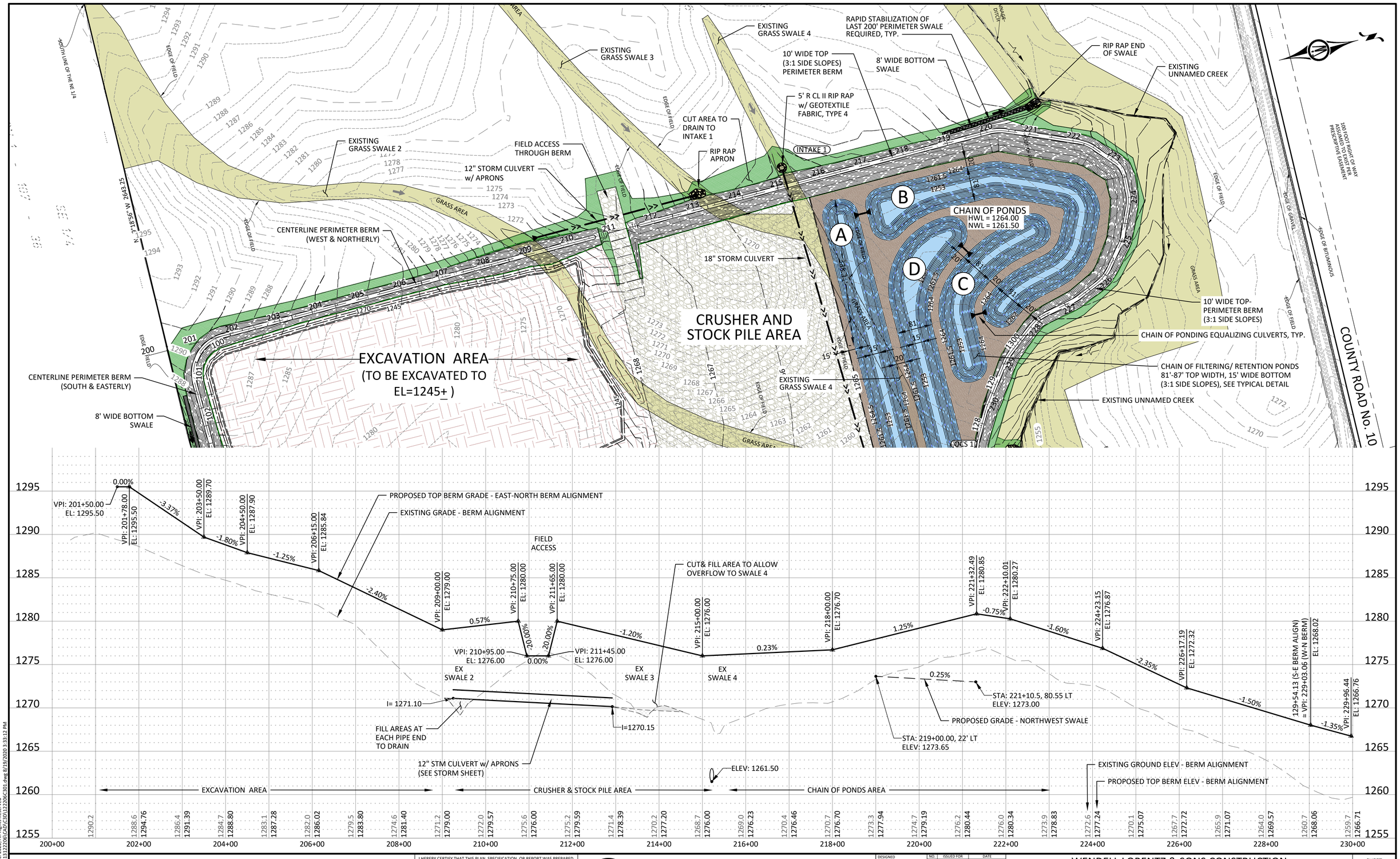
WENDELL LORENTZ & SONS CONSTRUCTION
GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA
GRADING PLAN
SOUTH AND EAST BERM ALIGNMENT

SHEET C3.02



HORZ. SCALE 0 100 200 FEET

VERT. SCALE 0 5 10 FEET

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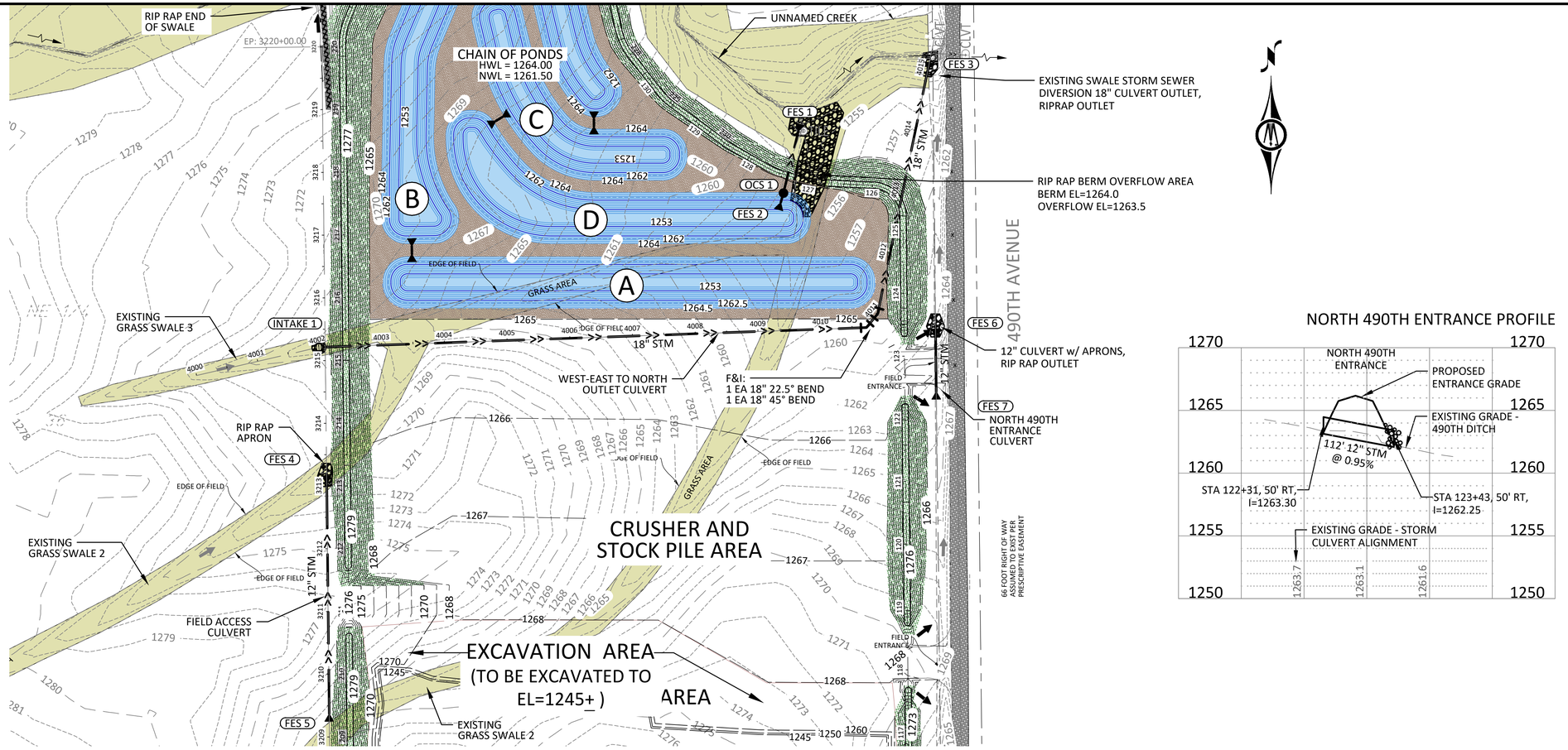
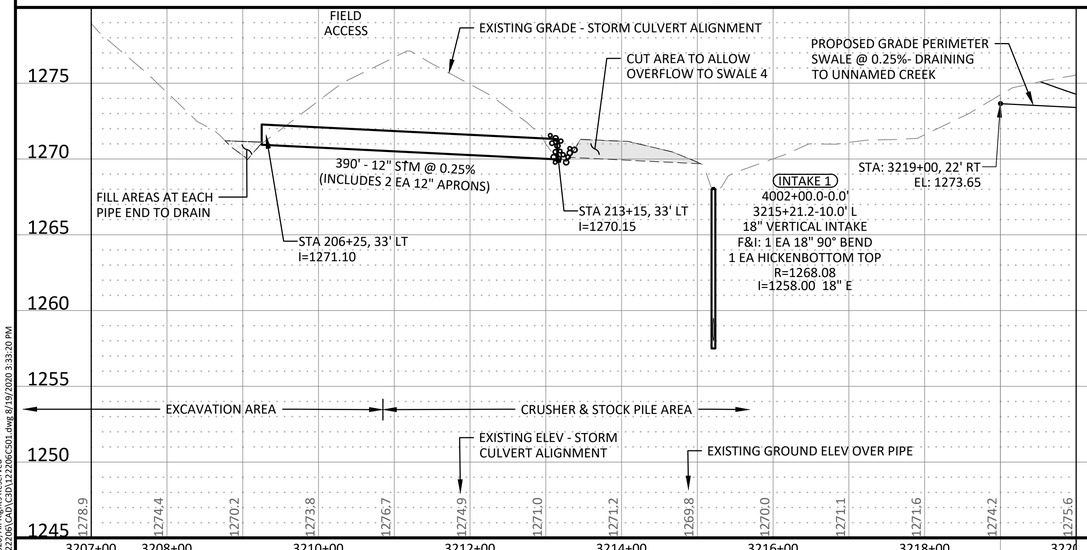
WENDELL LORENTZ & SONS CONSTRUCTION
GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA
GRADING PLAN
WEST AND NORTH BERM ALIGNMENT

SHEET C3.03

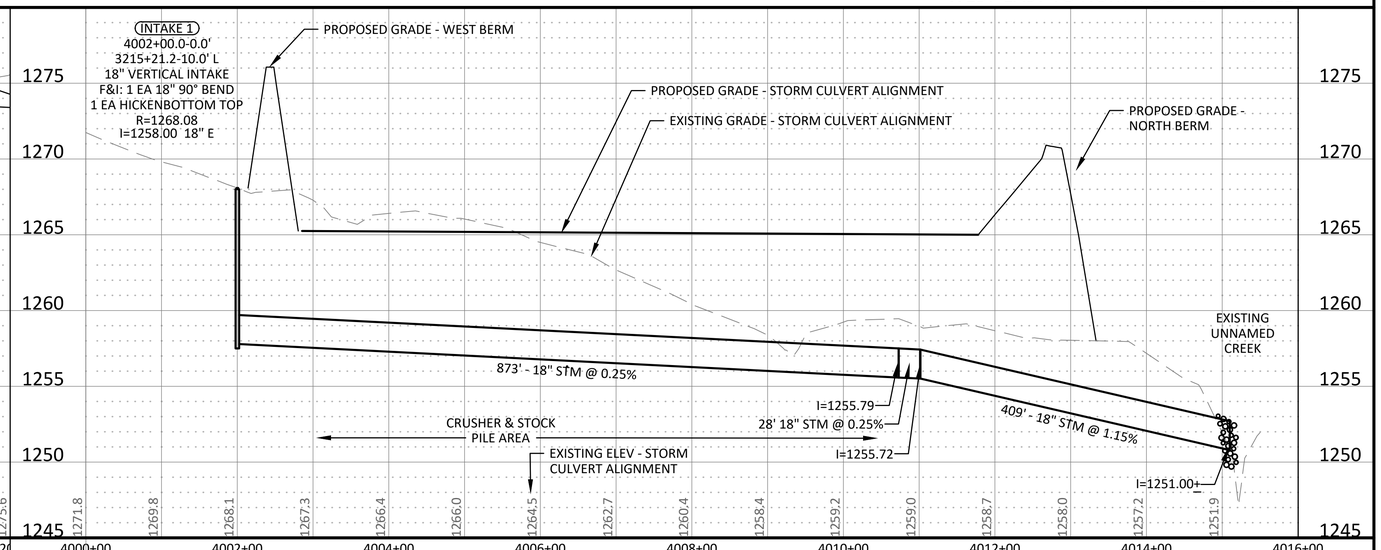


NORTH 490TH ENTRANCE PROFILE

FIELD ACCESS CULVERT PROFILE



WEST-EAST TO NORTH OUTLET PROFILE



HORZ. 0 100 200 SCALE FEET

VERT. 0 5 10 SCALE FEET

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WENDELL LORENTZ & SONS CONSTRUCTION
GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA
STORM SEWER PLAN & PROFILE
PERIMETER DITCH DIVERSION AND CULVERTS

SHEET C5.01

SEEDING & GROUND STABILIZATION CONSTRUCTION NOTES:

1. SEED & HYDROMULCH OR CONTROL BLANKET ALL BERM TOP & SLOPES NOT COVERED WITH GRAVEL BASE OR RIPRAP.
2. SEED & HYDROMULCH OR CONTROL BLANKET ALL POND SLOPES NOT COVERED WITH GRAVEL BASE OR RIPRAP.
3. SEED & HYDROMULCH OR CONTROL BLANKET ALL PERIMETER SLOPES.
4. USE OF EROSION CONTROL BLANKET IS REQUIRED LAST 200' OF SWALE BOTTOM BEFORE OUTLETTING TO UNNAMED CREEK OR 490TH AVE WEST DITCH.
5. DURING CONSTRUCTIONOF PERIMETER BERM & FILTERING/SEDIMENTATION PONDS, PERIMETER SILT FENCE & INLET PROTECTION SHALL BE FURNISHED, INSTALLED AND MAINTAINED UNTIL TURF ESTABLISHMENT IS COMPLETE ON ALL EXPOSED SURFACES & THE PONDS ARE IN-USE.

EXCAVATION AREA
17.7+ ACRES
CRUSHER AND
STOCK PILE AREA
9.7+ ACRES
AREA OF PONDING
8.2+ ACRES
(INCLUDES ACCESS ROADS)
CHAIN OF PONDS
HWL = 1264.00
NWL = 1261.50
COUNTY ROAD No.10
490TH AVENUE
EXISTING GRASS SWALE 1
EXISTING GRASS SWALE 2
EXISTING GRASS SWALE 3
EXISTING GRASS SWALE 4
FIELD ACCESS THROUGH BERM
12" STORM CULVERT
CENTERLINE PERIMETER BERM (WEST & NORTH)
12" CULVERT, RIP RAP OUTLET (TYPICAL)
INTAKE 1, 5' R CL II RIP RAP w/ GEOTEXTILE FABRIC, TYPE 4
10' WIDE TOP PERIMETER BERM (3:1 SIDE SLOPES)
RAPID STABILIZATION OF LAST 200' PERIMETER SWALE REQUIRED, TYP.
8' WIDE SWALE
RIP RAP END OF SWALE, TYP CLASS III w/ GEOTEXTILE FABRIC, TYPE 4
EXISTING UNNAMED CREEK
ACCESS ROAD AREAS
18" STORM CULVERT
CENTERLINE PERIMETER BERM (SOUTH & EAST)
10' WIDE TOP (3:1 SIDE SLOPES) PERIMETER BERM
PROPOSED 8' WIDE SOUTH SWALE
10' WIDE TOP- PERIMETER BERM (3:1 SIDE SLOPES)
CHAIN OF FILTERING/ RETENTION PONDS 81'-87' TOP WIDTH, 15' WIDE BOTTOM (3:1 SIDE SLOPES), SEE TYPICAL DETAIL
CHAIN OF PONDING OUTLET WATER QUALITY & MONITORING CONTROL STRUCTURE No 1
RIP RAP BERM OVERFLOW AREA BERM EL=1264.0 OVERFLOW EL=1263.5
RAPID STABILIZATION OF LAST 200' PERIMETER SWALE REQUIRED, TYP.
RIP RAP END OF SWALE, TYP CLASS III w/ GEOTEXTILE FABRIC, TYPE 4
ACCESS ROAD DOWN TO EXCAVATION AREA
SOUTHERLY ENTRANCE
NORTHERLY ENTRANCE
12" CULVERT, RIP RAP OUTLET
10' WIDE TOP (3:1 SLOPES) PERIMETER BERM
66 FOOT RIGHT OF WAY ASSUMED TO EXIST PER PRESCRIPTIVE EASEMENT
100 FOOT RIGHT OF WAY ASSUMED TO EXIST PER PRESCRIPTIVE EASEMENT
EXISTING SWALE STORM SEWER DIVERSION 18" CULVERT OUTLET, RIPRAP CLASS III w/ GEOTEXTILE FABRIC, TYPE 4, TYPICAL
EX 36" CULVERT
EX 48" CULVERT
EDGE OF GRAVEL
EDGE OF FIELD
EAST LINE OF THE NE 1/4
SOUTH LINE OF THE NE 1/4
BUILDING
GRAVEL SURFACE
SEPTIC TANK
N 89°18'56" W 2643.25
N 89°46'09" W 2639.42
977'
480'
840'
830'
815'
580'
100'
45'
55'
50'
50.5'
A
B
C
D

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LIC. NO. 22574 DATE 08/19/2020

HORZ. SCALE 0 100 200 FEET

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WENDELL LORENTZ & SONS CONSTRUCTION

GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA

SITE PLAN AND SWPPP NOTES

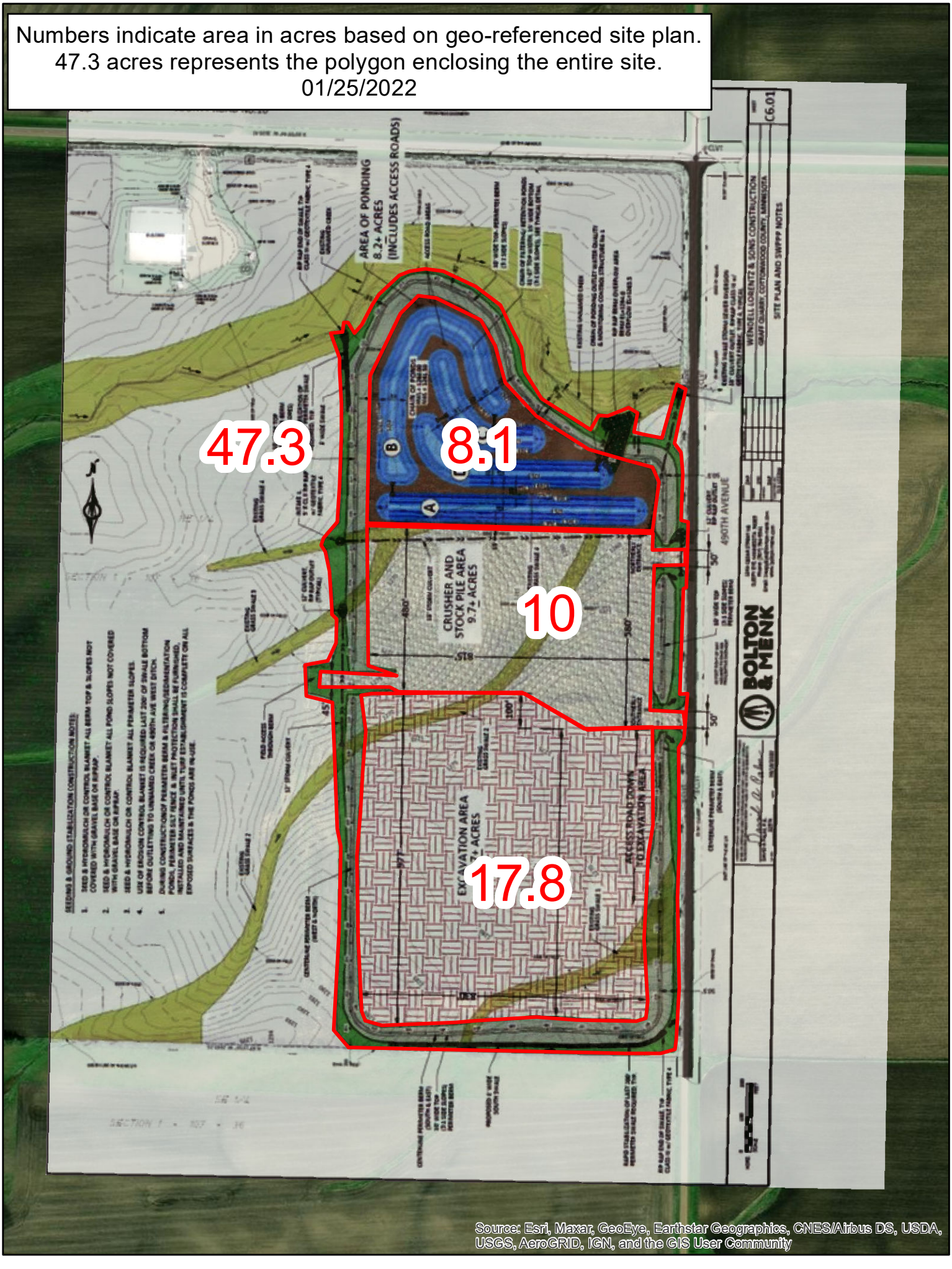
SHEET C6.01

Appendix 2

Geo-referenced Site Map

Prepared by MPCA on January 25, 2022

Numbers indicate area in acres based on geo-referenced site plan.
47.3 acres represents the polygon enclosing the entire site.
01/25/2022



Appendix 3

Photos from MPCA site visit taken on April 1, 2022

Appendix 4

2020 Petition

EQB received the 2020 Petition on November 9, 2020

November 9, 2020

Environmental Quality Board
520 Lafayette Road North
Saint Paul, Minnesota 55155

RE: Request for Environmental Assessment Worksheet regarding proposed Sioux Quartzite Quarry project on the Red Rock Ridge in Cottonwood County, Minnesota

Dear Sirs and Madams:

I am the representative submitting a petition on behalf of more than a hundred concerned citizens, including myself, who are requesting that the W. Lorentz Construction, P.O. Box 847, Mankato, Minnesota 56002, be required to perform an Environmental Assessment Work Sheet ("EAW") in connection with its application for a Conditional Use Permit for its Sioux Quartzite Quarry project on the Red Rock Ridge in Cottonwood County, Minnesota.

I. Description of Project.

On July 20, 2020, W. Lorentz Construction submitted its application for a Conditional Use Permit.[1] The location for the requested quarry development is legally described as the Northeast Quarter of Section 1, Amboy Township 107 North, Range 36 West, Cottonwood County, Minnesota (NE1/4, S1, T107N, R36W) (hereinafter, the "Property").[2]

The W. Lorentz Construction Sioux Quartzite Quarry Project (the "Project") proposes to use and excavate nearly 30 acres, which includes mining, blasting, crushing, washing, and removing aggregate materials and other construction activities that align with the mining activities on the Red Rock Ridge.[3] The Project plan includes creating a 1,276 feet berm, 9.1 acres of stockpile, and 17.7 acres of excavation. At least two feet of soil will need to be stripped and removed to get to the Sioux Quartzite.[4] The anticipated hours of the Project operation are from 7:30am to 5:30pm Monday through Friday and some Saturdays. And will engage at least 95 trucks per day hauling the quartzite out of the quarry on several local and county roadways, some of which are gravel roads.[5] It is also reported by W. Lorentz Construction, in an effort to minimize dust, a sprinkler system will be utilized to wet and spray the roads with chloride.[6]

---

[1] *See* W. Lorentz Construction's Condition Use Permit application ("CUP Application"), enclosed as Exhibit ("Ex.") A.
[2] *See* Ruby, MacFarlane, Sather Report ("RMS Report") dated October 14, 2020, enclosed as Ex. B.
[3] *See* CUP application.
[4] *See* Public Hearing Transcript, enclosed as Ex. C.
[5] *Id.*
[6] *Id.*

The proposal also includes creating four drainage ponds. These ponds require installing several culverts to force the drainage into an established drainage swale and the neighboring property's runoff.[7]

II. Environmental Impact of Proposed Development

The proposed stripping vegetation, blasting, crushing, dredging, and digging some 1,268 feet to extract the Sioux Quartzite creates several environmental impacts. This petition addresses the impacts of this Project to wetlands, endangered and threatened rare plant species, and the loss of significant and irreplaceable historic and archaeological resources.

A. Wetlands

The Minnesota Wetland Conservation Act (the "WCA") was initially enacted in 1991 as Minnesota Laws Chapter 354, as amended. The WCA's overall goal is "no net loss of wetlands" by regulating draining, filling, and excavating activities in or near wetlands.[8]

There are surface water and groundwater features near and downstream of the site of the Project protected by the WCA.[9] Several streams flow from Section 1 of Amboy Township to Mound Creek in Brown County's Mound Creek Park. This Project will impact the water flow in the area and the several wetlands found in this drainage system as noted in the maps in Exhibits D[10]. For example, there are intermittent springs and seeps that create small wetlands in the grasslands adjacent to the Project area. There are intermittent stream channels that flow from the wetlands to the Little Cottonwood River and an intermittent stream adjacent to north of the Project that flows into Mound Creek.

The typical extraction of quartz aggregate quarry operation requires dewatering by approximately 80 million gallons of water annually. The proposed dewatering, drainage ponds, berms, culverts, and forced drainage in such close proximity of protected wetlands support conducting an EAW of the Project area.

B. Endangered and Threatened Rare Plant Species

Red Rock Ridge is identified as a 10,192-acre Core Area in the Minnesota Prairie Conservation Plan.[11] It includes several notable managed areas including Rock Ridge Scientific and Natural Area, Jeffers Petroglyph historic site, TNC's Red Rock Preserve, Red Rock WMA, Red Rock Falls County

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[7] *Id.*
[8] *See* The Minnesota Wetland Conservation Act Manual, published by the MN Board of Water and Soil Resources, V.1.3 Last Updated: September 2004. https://www.leg.mn.gov/docs/2007/other/070605.pdf last visited October 28, 2020.
[9] *See* Minnesota DNR Wetland Inventory Map https://arcgis.dnr.state.mn.us/ewr/wetlandfinder/ last visited October 28, 2020.
[10] Minnesota DNR Wetland Inventory Maps. Retrieved October 27, 2020, from https://arcgis.dnr.state.mn.us/ewr/wetlandfinder/. Screenshot by author, enclosed as Ex. D.
[11] *See* RMS Report *citing* Minnesota Dept. of Natural Resources 2018 report.

Park (Cottonwood County), and Mound Creek County Park (Brown County), all of which support native prairie and rare plant habitats.[12]

Red Rock Ridge is also characterized by near surface deposits and out crops of Sioux Quartzite.[13] The properties of Sioux Quartzite contribute to a variety of surficial microhabitats for rare plants.[14] The RMS Report identifies and describes the many rare and endangered plant species on the Red Rock Ridge. The characteristic habitat on the Ridge creates an environment unique to rare plant species. The RMS Report identified numerous endangered and threatened rare plant species on the Red Rock Ridge, including the federally and state-threatened Prairie Bush Clover (*Lespedeza leptostachya* Engelm).

Although this project only encompasses slightly over 30 acres and therefore does not trigger a mandatory EAW, the documented threat of native plants on the Red Rock Ridge should require an EAW of the Project area.

C. Historic and Archaeological Resources

The Property lies on the Red Rock Ridge which harbors the largest concentration of prehistoric and historic Native American rock art in the Midwest, now known to be one of the most notable concentrations of rock art in the world.[15]

The sacred Red Rock Ridge is an active place of worship for Native Americans and visited by thousands from across the world each year. The proposed quarry site is embedded in and surrounded by an intensely archaeologically documented ancient sacred cultural landscape. Over 30 petroglyph, petroform and lithic scatter sites are found on the Ridge. Southwest Minnesota's Red Rock Ridge is one of the richest concentrations of ancient rock carving in the world. Sixteen miles of the Ridge contains 27 petroglyph sites on its 311 Sioux Quartzite outcrops, five petroform sites, numerous sacred springs, and countless lithic scatters. Located 2.5 miles east of the proposed quarry is Jeffers Petroglyphs Historic Site which contains 8,000 rock carvings. The site is on the National Historic Registry. Approximately 400 are found on the 25 other outcrops. The carvings were made over an estimated 11,000 years, with the most recent dated from the 1600s to the 1700s.

Many of the same carvings of the Ridge are found on other rock art sites found throughout North America. The Ridge is a unique destination site for ancient travelers from across North America who recorded cultural traditions otherwise lost to history. The rare five petroforms represent 5/7 of the recorded petroforms in Minnesota and provide unique insights into past sacred ceremonies still done today. The lithic scatters provide precious insights into the people who came to the Ridge to worship. The Ridge is a cultural and natural heritage site significant to our world's humanity and worthy of the top priorities of preservation. Petroforms and petroglyphs are sacred to Native Americans. They are

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[12] *See* RMS Report
[13] *Id.*
[14] *Id.*
[15] *Id. citing* Loathsome 1976, Callahan 2001.

rare and unique cultural artifacts that give us insight into artistic, spiritual, and communication practices.

One mile south of the proposed quarry are archaeological sites 21CO0029 and 21CO0092 that are extremely significant. 21CO0092 contains rare examples of petroforms with astronomical alignments as well as a formed pavement, and 21CO0029 contains unique examples of rock art, including one of the largest petroglyphs on the Ridge. These sites have been recommended to be placed on the National Register of Historic Places and given permanent protection. The proposed quarry site is between two documented Native American burial sites. Two miles north in the boundaries of Mound Creek Park is a burial mound and one-mile south is a burial cairn in section 12. The proposed quarry operation has a high potential to destroy Native American burials protected by Minnesota Statute 307.08.

Red Rock Ridge has significant cultural importance to many Native Americans. The archaeological description provided in this citizen petition explains landscape features and the surrounding environment which the Mdewakanton Dakota and many tribes outside Minnesota are actively culturally connected to and continue to utilize for traditional cultural practices. In accordance with the United States Department of the Interior, National Park Service *Guidelines for Evaluating and Documenting Traditional Cultural Properties*, the Red Rock Ridge is eligible for a Traditional Cultural Property designation because of its association with the cultural practices and importance in maintaining the continued cultural identity of many Native American Tribes, specifically, the Mdewakanton Dakota – Lower Sioux Indian Community in the State of Minnesota.

Additionally, Ojibwe and Dakota Tribes within the State of Minnesota actively use the site for traditional prayer and fasting, Assiniboine- Sioux Tribes (Montana) come to the Ridge for plant medicines, Ioway Tribes (Kansas and Nebraska) still visit the Ridge for prayer offerings and medicine.

Often these areas leave few traces of activity indicating historic use or continued use, as there are no portable items to identify which tribe has been present or which are returning. The Ridge is a culturally significant property, not only because of the archaeological record, but also due to the historic and cultural role this property still plays in many Tribes' beliefs, customs, and practices. The proposed project would impact viewshed, ambience, and access – all of which impact and disturb the historic and cultural significance of the Ridge.

III. Petitions

We have obtained the required one hundred petitions signed by Minnesota citizens, attached, requesting that any approvals of the proposed development of this Project be stayed pending the preparation and completion of an EAW.

IV. Conclusion

Based on the foregoing, we respectfully request that the Board require an EAW as a precondition of any potential approval of W. Lorentz Construction's proposed development of quarry on the Project.

Please feel free to contact me with any questions you may have regarding this matter.

Thank you,

Kevin O'Keefe

Enclosures

Signatures

Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Michael Ulen	702 So Ramsey	
2	STERNT COLUMBUS	39857 RC Hwy 3 MORTON, MN	
3	Dustin Arredondo	40061 Res Hwy 3 Morton MN.	
4	Travis Bouvier	919 E. 3rd St Redwood Falls, MN 56283	
5	Daniella Bidinger	100 Beachwood Lane Redwood Falls MN 56283	
6	Mark Bidinger	100 Beachwood Lane Redwood Falls, MN 56283	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Anika Peralta-Burnett	20 Eastwood Estates Redwood Falls MN 56283	
2	Tia Majors	181 quarry drive morton mn 56270	
3	Laurie Halder	331 S. 6th St Bird Island MN 55310	
4	Karen Midthun	122 Applewood Ln Redwood Falls Mn	
5	Lisa Landgraff	804 3rd St. Morgan, MN	
6	Dana Smith	1305 Birch St. Apt 5 Marshall, MN	
7			
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Andrea Okeefe	32941 Res Hwy 4 Morton MN 56270	Andrea Okeefe
2			
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Justice Wakanshaa	32857 Res Hwy 4 Morton MN 56270	
2	Mathew Pendleton	32494 Tatanka Rd Morton, MN 56270	
3	CYNTHIA ZIMMER	321 E 4th ST Redwood Falls, MN 56283	
4	Cecelia O'keefe	32941 Reservation hwy 4 Morton, MN 56270	Cecelia O'K
5	Earl Pendleton	30481 Dakota Trl Morton, MN 56270	Earl Pendleton
6	Alyss Blue	39921 Reservation hwy 3 Morton MN 56270	Alyss Blue
7	LANA LARSEN	39921 Res Hwy 3 Morton, Mn. 56270	Lana Larsen
8	Charlene Goodthunder	32665 co. Hwy 2. morton, MN. 56270	
9	Nizhoni Schoen	40102 Dakota Trl Morton MN 56270	
10	KRISTI SCHOEN	40102 Dakota Trl Morton, MN 56270	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Sidney Beran	32305 CO. HWY 13 Morton MN 56270	Sidney Beran
2	Dane Nelson	38947 Reservation Hwy 1 Morton, MN 56270	
3	Alexis Pendleton	38947 Res. Hwy 1. Morton MN 56270	
4	Lucille Rainey	32747 CO. Hwy 2 Morton, MN 56270	
5	Lori J. Nelson	40007 Res. Hwy. 3 Morton, MN 56270	
6	FURREST ST. JOHN	38987 RES. Hwy. 1 MORTON, MN 56270	
7	Michele Pendleton	32501 Tatanka Rd Morton MN	
8	RICHARD BURNES	32501 Tatanka Rd Morton MN	
9	Debbie Robertson	32609 CO HWY 2 Morton, MN 56270	
10	Jerome J. Schoen	113 N. Whittet ST Redwood FALLS MN 56283	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Kathy Blackwell	600 Elm Ave E Olivia MN 56277	Kathy K Blackwell
2	David D. Larson	32680 Co. Hwy. 2 Morton MN 56270	David D. Larson
3	Jerome Schoch	307 E 2nd St 56283 Redwood Falls MN	Jerome B. Schoch
4	Anna Benton	530 W Bridge St Redwood Falls 56283	
5	Patricia Leith	309 E. Flynn St Redwood Falls MN 56283	Patricia Leith
6	Anthony Jones	32600 Res Hwy 4 Morton, MN. 56270	
7	Theresa Larson	32600 Res Hwy 4 morton mn 56270	Theresa Larson
8	Casey Anderson	33241 JACKPOT AVE MORTON MN, 56270	
9	Lenore GreyEagle	33096 Jackpot Ave #3	Lenore GreyEagle
10	Myron Rainey Jr.	40217 Dakota Trail Morton, MN 56270	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Benjamin Pendleton	32506 Tateyapa Rd Morton MN 56270	
2	Angela Majors	32506 Tateyapa Rd. Morton, MN. 56270	
3	Emmett HolyBull	32504 Tateyapa Rd. Morton, MN 56270	
4	Regina Steay	32504 Tateyapa Rd. Morton, mn. 56270	
5	Veslinda Hall	39779 Reservation Hwy 1 Morton, MN 56270	
6	Matthew Marcus	27245 co. Hwy 1 Redwood Falls, MN 56283	
7	Carol Marcus	413 E 2nd St Redwood Falls MN 56283	
8	April Cochrane	411 West First Street MORTON MN 56270	
9	Maurice Berry	40182 ret hwy 3 Morton, MN, 56270	
10	Jeremy Swigart	32747 county Hwy 2	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Shane Pendleton	32365 County Hwy 13 Morton, MN 56270	
2	Dustin Hennen	285 N Main St Morton MN 56270	
3	Autumn Hennen	285 N. Main St. Morton MN 56270	
4	Ruby Mikl	40681-320th St Morton MN 56270	
5	Priscilla Gmuerdemann	29849 Hwy 3 Morton MN 56270	
6	Kelly Desjarlais	32990 Co Hwy 2 Morton, MN 56270	
7	Scott Blue	430 Valley dr. Morton MN	
8	Michelle Bauno	355 N. Main, Morton, MN	
9	Brooklyn Ball	171 North Quarry Dr Morton MN	
10	Rocky Olerud	203 E. 5th St. Redwood Falls MN	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Jo Bunting	412 S. MN Redwood falls, MN 56283	
2	CHUCK FARMER	927 E. 3RD ST REDWOOD FALLS, MN 56283	
3	Joel Read	201 Firewood Dr Redwood Falls MN 56283	Joel Read
4	Caleb Toney	607 S Mill St Apt 1 Redwood Falls MN 56283	Caleb Toney
5	Baylee Fischer	245 cardinal way Redwood Falls, MN 56283	Baylee Fischer
6	Taylor Hornung	902 Sunrise Blvd Redwood Falls, MN 56283	
7	Doug Kopischke	208 Tempel Drive Morgan MN 56266	
8	Mary Pendleton	35947 U.S. HWY 71 Redwood Falls, MN	
9	Brian Nott	30355 Omega Ave Morton MN 56270	
10	Jayne Nott	30355 Omega Ave Morton, MN 56270	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	John Rohman	[illegible]	[illegible]
2	Michael Kent	[illegible]	
3	Amber Nelson	371 Quarry Dr Amboy	[illegible]
4	John Gustafson	214 PO Box Fairmont	[illegible]
5	Michael Illeck	321 west 4th St Morton 56270	[illegible]
6	Hannah Elmer	321 S DeKalb St Redwood Falls 56283	[illegible]
7	Ashley Kirchoff	250 E Third St unit 1 Morton 56270	[illegible]
8	John Gallery	Morton MN 56270	John Gallery
9	Adrian Kjarnes	3155 250th Ave Ivanhoe, MN 56142	[illegible]
10	Steve Praymus	P.O. Box 226 Minneota Mn. 56264	[illegible]

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Robert Larsen	611 Fallwood Rd Redwood Falls, MN 56283	
2	Kevin O'Keefe	32941 Res Hwy 4 Morton, MN 56270	
3	Jesse Kodet	791 S. Main Morton, MN 56270	
4	Miranda Sem	381 E. Monument Dr. Morton, MN 56270	
5	Anne Okeefe-Jackson	38635 Res Hwy 1 Morton MN 56270	
6	Karen Swann	27315 Co Hwy 2 Morgan, MN 56266	Karen Swann
7	Marilyn Hesser	PO Box 232 Redwood Falls, MN 56283	Marilyn Hesser
8	Tabia Goodthunder	PO Box 362 Morton, MN 56270	
9	Richard C. Goodthunder	32665 County Hwy. 2 Morton, MN. 56270	Richard Goodthunder
10	Sophie Lund	32983 Rez Hwy 4 Morton MN 56270	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Rebecca Crooks-Stratton	5555 Tinta Lane Shakopee MN 55379	
2	Cole Miller	2330 Sioux Trail NW Prior Lake MN 55372	
3	Laurie mayglightnings	15219 Howard Lake Rd Shakopee MN 55372	
4	Christine Johnson	14260 Park View Lane NW Prior Lake, MN 55372	
5	Xenora Crowfeather	17088 Adelmann St SE #3/4 Prior Lake, MN 55372	
6	Sheila Breault	Shakopee MN 55379	
7	Josie Lenz	16896 Grommesch Circle Shakopee, MN 55379	
8	Dennis Hanson	13851 Maryland Ave. Savage, MN 55378	
9	Annette Krebsbach	28800 181st Ave N. Prague MN 56071	
10	Ruth Bourland	323 Murphy Ave Shakopee MN 55379	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Larry Swann	1116 Firewood Ln. Redwood Falls, MN 56283	
2	Linda Wabasha	32882 Co Hwy 2.	Linda Wabasha
3	Winona Brosseau	32882 Co. Hwy 2 Morton, MN 56270	
4	Logan Huber	505 E SPRING ST Redwood Falls MN 56283	
5	BETH O'KEEFE	38775 RES Hwy 1 Morton MN 56270	
6	Eileen O'Keefe	38639 Res. Hwy 1 Morton MN 56270	
7	KAteri OKeefe	38639 RED. Hwy 1 Morton. MN 56270	
8	Elias O'Keefe	38639 Res Hwy 1 Morton MN 56270	
9	Jane Steffen	33241 Jackpot Ave Morton, MN 56270	
10	Michael Audl	207 E Lightning St Redwood Falls, MN 56283	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Jean Stacy	33437 Jackpot Ave Morton MN 56270	Jean Stacy
2	Sandra Kuefler	608 E Spring St. Redwood Falls, MN 56283	
3	Mary King	727 E. 2nd St Redwood Falls	
4	Raina OBrien	102 Coon. St.e Redwood Falls, MN	
5	Callie Matray	108 coon st. Redwood Falls, MN 56283	Callie Matray
6	Taylor Rudolph	909 S Jefferson St New Ulm MN 56073	Taylor Rudolph
7	Delilah Robles	450 N. Quarry Dr. Morton, MN 56270	
8	Jesse Fox	33437 Jackpot Ave Morton MN 56270	Jesse Fox
9	Jason Somma	31018 349TH ST Redwood Falls	
10	Janesa Nez	919 Fallwood Rd redwood Falls MN 56283	janesa

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Anna V. Wurmnest	514 E 4th St, Redwood Falls MN 56283	
2	Carla Grosser	22 1st St NW #2 Fairfax MN 55332	
3	Bethany Gotfield	316 E Wyoming St Redwood Falls 56283	
4	Cheri Glasser	506 Prescott St NW Apt 10 S Sleepy Eye, MN 56085	
5	Katie Bedner	101 1st St N PO Box 233 Darfur MN 56022	
6	Dawn Parks	129 N. Whittet St RWF MN 56283	
7	MATHEW RAINEY	317 Sunrise Blvd Redwood Falls, MN 56283	
8	Renee Hvamstad	413 E. Cook St. RWF, MN 56283	
9	Cassie Tubbs	502 East Flynn St RWF MN 56283	
10		39251 Lewiston Blvd Winona MN 55987	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Iola Hernandez	39538 Co Hwy 24 Morton, MN 56270	
2	Lindsey Arredondo	32920 Res Hwy 4 Morton, MN 56270	
3	Shawn Kuecker	61182 Co. Rd 16 Fairfax MN 55332	
4	Michael Lamb Bill	32497 Tatey apa RD Morton MN 56270	
5	Audrey Haas	P.O. Box 301 Morton, MN 56270	
6	Bunnie Haas	P.O. Box 301 Morton, MN 56270	
7	Charles Leith	1020 Elm St Lot 30 Redwood Falls MN	
8	Margaret Lilly	104 elm Redwood	
9	Germaine	622 griffin Carver MN	
10	Angie Leith	622 griffin ST Carver MN 55315	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Kim Hewitt	38967 Red. Hwy. 1 Morton, MN 56270	Kimberly A Hewitt
2	Mitch Farmer	106 Driftwood Drive Redwood Falls, MN 56283	Mitch Farmer
3	Jeromy Pendleton	38821 Res Hwy 1 Morton, MN 56270	
4	Penny Arvedrude	40061 Reservation Hwy 3 Morton Mn 56270	Penny Arvedrude
5	JACKIE WIDMER	1177 DEWEY ST WABASSO 56293	Jackie Widmer
6	Maree Varner	32453 CoHwy2 Morton, MN 56270	M Varner
7	Tammy Lienc	32983 Res Hwy 4 Morton MN 56270	Tammy Lienc
8	Bill	33268 Oak Ridge Ave Redwood Falls MN 56283	Bill
9	Judi Waterfield	704 E Walnut St Redwood Falls MN 56283	Judi Waterfield
10	David Prescott	33028 Meadowlark Morton St Morton, MN 56270	

Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the project, Sioux Quartzite Quarry by W. Lorentz Construction, located on Red Rock Ridge in Amboy Township, Cottonwood County, Minnesota, and request that any county or governmental body refrain from considering any permit application related to the proposed Sioux Quartzite Quarry until an Environmental Assessment Worksheet is completed and available for review and consideration. This request for an EAW is based on the potential significant environmental impacts on historic and archaeological resources and endangered and threatened rare plant species.

Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Darren Sam	381 Maumment drive Morton MN 56270	
2	Marcades Leith	80 Vernon ave Morgan MN	
3	Mariah Heffner	379 June St. Wabasso, MN	
4	Cassi Gulde	34896 co rd 2 Morton MN	
5	Abby Berau	4016a Dakota Trail Morton MN	
6	Rozlyn Prescott	32693 CO HWY 2 Morton MN 56270	
7	Alicesa Cournayer	311 N. Drury St Redwood Falls MN 56283	
8	Britany Nelson	32982 CO HWY 2 Morton MN 56270	
9	Vanessa Goodthunder	32722 Reservation Highway 4, Morton, MN 56270	
10	Taylor Maguire	602 S Jefferson st Redwood falls, MN 56283	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Kelsey Jones	305 Oak St Seaforth, MN 56287	
2	Janell Schmidt	923 E 3rd RWF 56085	
3	Jenna Pendleton	32494 Tatejeapa Rd Morton MN 56270	
4	Zach Gertmenian	517 E 3rd St Redwood, MN 56283	
5	Arielle Aude	207 E Wyoming St Redwood Falls, MN	
6	Vincent Jackson	38635 Res Hwy 1	
7	Austin Kopp	32722 Res hwy 1	
8	Faidatte	69 Fallwood Rd Redwood Falls MN	
9	Nikki Berry	38661 Res Hwy 1 Morton, MN 56270	
10	Lanna Greenthunder	32722 Res Hwy 1 morton mn 56270	

Petition for an Environmental Assessment Worksheet
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Joyce Pendleton	33090 Jackpot Ave. Apt. 2 Morton, MN 56270	Joyce Pendleton
2	Elizabeth LaBlanc	602 S Jefferson St Redwood Falls MN 56283	
3	Donald Bawden	810 S. Lincoln St. Redwood Falls, MN 56283	
4	Joey OBrien	39600 Reservation Hwy 1 Morton, MN 56270	
5	Margarita Bawden	810 S. Lincoln St Redwood Falls MN 56283	Margarita Bawden
6	Phone Phone	651 2nd Ave Franklin MN 55333	
7	Sara Bidinger	40193 Dakota Trail Morton MN 56270	
8	Josh Larsen	311 E broadway Redwood falls	
9	Laura Wakasha	32909 Co. Hwy 1 Redwood Falls, MN.	Laura Wakasha
10	Dawan Jackson	[redacted] 38635 RCS HWY 1	

Exhibit A

APPLICATION FOR CONDITIONAL USE

Cottonwood County Planning & Zoning
339 9th St. Windom, MN 56101
Phone: 507-831-1153 ext. 102

OFFICE USE Fee $450.00 Zone _____ Hearing Date _____ Application Number _____
Date Received _____ County Board Date _____ Date Mailed _____

Property Owner Graff (Last) Corby (First) (MI)

Mailing Address 43764 110th St (Address) Comfrey (City) MN (State) 56019 (Zip)

Property Address 48485 10 CR Sanborn MN 56083

Applicant W. Lorentz Construction (507) 388-4182
(If different than owner) (Last) (First) (MI) (Daytime Phone)

PO BOX 847 (Address) Mankato (City) MN (State) 56002-0847 (Zip)

Shoreland _____ *Yes* _____ *No* X *Township* 107 *Section* 1

Parcel ID Number 01-001-0401 *Daytime Phone* (507) 920-5545

Legal Description The Northeast Quarter, Section 1, Township 107 North, Range 36 West, Cottonwood County, Minnesota.

Conditional Use Request Mining, blasting, crushing, washing, and removal of aggregate materials with the addition of any mining and construction activities that align with the listed tasks.

I have read the above Conditional Use request and I agree that it correctly states the nature and extent of the use I am requesting, and the legal description of the real property effected.

Signature of Property Owner (legal name) Corby Graff *Date* 7-2-20 *DOB* 6-30-1962

This Conditional Use must be enacted within two years.
This Conditional Use does not constitute a building permit, sewage system permit or the like. Separate permits may have to be applied for and obtained in order to accomplish all of the goals of your project.
The issuance of this conditional use does not negate the need to secure other permits from other local units of government, state agencies or federal agencies who may also have jurisdiction over portions of your project.
Contact the Cottonwood County Environmental Office to determine whether or not your proposed use is in the Shoreland District.

SITE PLAN

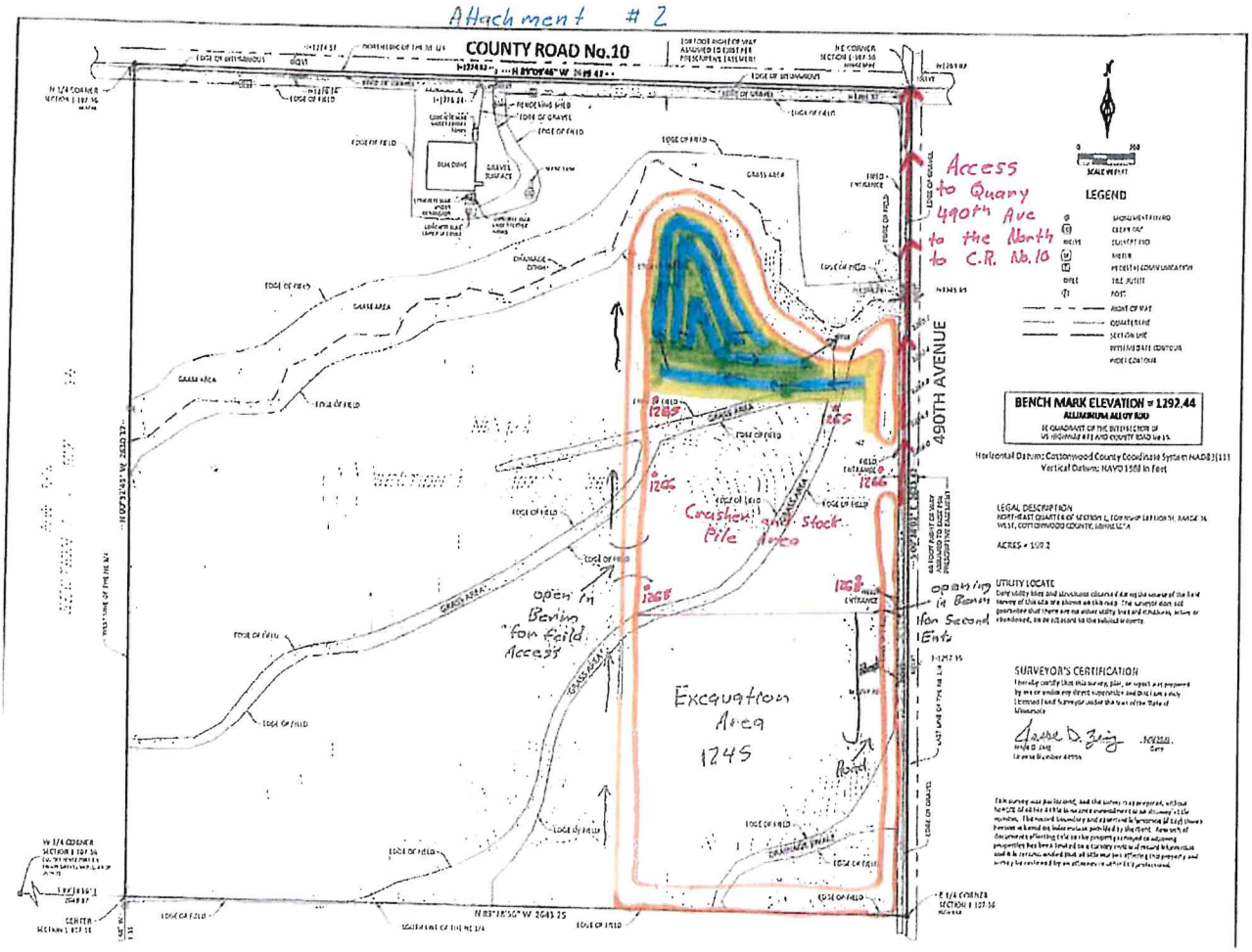
NAME W. Lorentz Construction *PARCEL NUMBER* 01-001-0401

Information to be included in site plan

_____ Location & size of **ALL** existing and proposed structures _____ Distance from lake, road(s), & property lines
_____ Location of well & septic _____ Total lot square footage
_____ Location of road(s) & driveway(s) _____ Total impermeable surface square footage
*Previous Variance/Conditional Use on the property? no

SITE PLAN

NORTH



1. The name, address and signature of the owner(s) of the property.

Name: Corby Graff
Mailing Address: 43764 110th St. Comfrey, MN 56019
Properly Address: 48485 10 CR Sanborn, MN 56083
Signature: Corby Graff 6-2-20

2. The name, address, and signature of the operator(s).

Name: W. Lorentz Construction
Mailing Address: PO BOX 847 Mankato, MN 56002-0847
Signature: Andrew L Lorentz 6/25/2020

3. An accurate legal description of the property where the mining, extraction, or excavation shall occur.

The Northeast Quarter, Section 1, Township 107 North, Range 36 West, Cottonwood County, Minnesota.

4. A map of the property where the mining, extraction, or excavation is to occur that clearly indicates the property lines and the limits of the proposed activity. Topographic data, including contours at 10-foot vertical intervals. Watercourses, marshes, floodplains, wooded areas, rock outcrops, power transmission poles and lines, existing wells, and other significant features shall also be shown.

See attachment 2

5. A narrative outlining the type of material to be mined, extracted, or excavated; mode of operation; and an estimate of the amount of material to be removed; plans for blasting; location of settling ponds and outlets; and other pertinent information to explain the request in detail.

Quarts

6. A narrative outlining the type of processing to be included in the operation.

Blasting, crushing, screening, and washing

7. A fee as established by the County Board.

N/A

8. A general location map showing the proposed site in relation to any city and/or sensitive area within one (1) mile.

See attachment 1

9. A map showing access routes between the property and the nearest arterial road.

See attachment 1

10. A map showing location and name of roads or streets, right-of-way width, railroads, and trails on or adjacent to the property.

See attachment 1

11. Easements: show widths and identify utility or other purposes on adjacent property.

See attachment 1

12. Natural land features showing locations of: watercourses and drainage ways; flood of record; wetlands; sinkholes; basins; and wooded areas.

See attachment 1

13. Man-made features: buildings and other structures, wells, dams, dikes, and impoundments of water.

See attachment 2

14. Processing areas shall be identified, and boundaries shown.

See attachment 1

15. Dust control plan.

Chloride the road

16. Access road to processing and mining areas shall be shown.

See attachment 2

17. Proposed location of principal service or processing buildings or enclosures shall be shown, as well as location of settling basins and process water ponds.

See attachment 2

18. The operator shall indicate if blasting is proposed as part of the operation and frequency of blasting.

Yes, 12 times a year

19. Any other information or reports the Zoning Administrator or Planning Commission deems necessary for purposes of evaluating environmental or aesthetic impacts.

N/A

20. Reclamation plan in conformance with Subdivision 11 of Ordinance No.36.

See attachment 3

Exhibit B

Rock Quarry Rare Plant Surveys
T107N R36W SE Section 12
May-September 2020

Ruby, MacFarlane,and Sather
Botanical Contractors

Rock Quarry Rare Plant Surveys
T107N R36W SE Section 12
May-September 2020

Janeen Ruby, Malcolm MacFarlane, and Nancy Sather
Report dated October 14, 2020

Introduction

Geology

The Red Rock Quarry project site in Section 12, T107N, R36W, (Amboy Township, Cottonwood County) is characterized by near surface deposits and outcrops of Sioux Quartzite, typical of area 23 miles in east-west extent and 3 miles south-to north in Cottonwood County, colloquially known as Red Rock Ridge This zone of southward-dipping outcrops generally lies at the northern edge of a more extensive area underlain by Sioux Quartzite that increases in depth southward. Figure 1 shows the local extent of this body of buried bedrock (Jirsa et al 2011).
A series of managed areas east of the site follows the outcrop zone at the north edge of this unit (Figure 2).

Sioux quartzite is a 16-17-million-year-old metamorphic rock whose reddish color comes from the iron oxide staining of sand grains that were reworked from older Precambrian rocks. The sediments that were to become Sioux Quartzite were deposited into an ancient basin by a braided stream that left rippled surfaces and beds of slightly differing composition and color that can still be seen on some of the outcrops at the study site. After the passage of millions of years over which these materials solidified, exposed outcrops were sculpted by periglacial winds during the most recent glacial times. (Southwick and Morey 1986. Minnesota Historical Society 2020). Differential weathering of materials comprising Sioux Quartzite contributes to a variety of surficial microhabitats for rare plants: thin soil deposits at the edges of smooth table-like surfaces, crevices with pockets of soil, ephemeral rainwater pools in shallow bedrock surface depressions, and narrow ephemeral stream channels with exposed bedrock cutting across the prairie (Appendix 1).

Because of the presence of joints, fractures, and loose sand zones in the below-ground formation, Sioux Quartzite is one of the major bedrock aquifers in the state. Nearby wells where the Sioux Quartzite aquifer underlies Cretaceous rocks or thick glacial deposits exhibit very high concentrations of calcium sulfate and other dissolved solids up to 2,300 mg/L where (Anderson 1986).

Surficial upwellings of calcium-rich groundwater are a major contributing factor to formation of rare calcareous seepage fen communities (OPp93b, Minnesota Department of Natural Resources 2005). At present no known areas of this community have been documented in direct contact with bedrock exposures on Red Rock Ridge, but one such community has been identified within a mile of a similar quarry operation in Section 20 of T107N R35W (Minnesota Department of Natural Resources n.d.). Well-developed calcareous fens have the potential to support a unique assemblage of rare vascular plants tolerant of high calcium concentrations and peat buildup due to the exclusion of oxygen by constant water flow.

Cultural resources

The outcrop complexes along Red Rock Ridge harbor the largest concentration of prehistoric and recent Native American rock art in the Midwest (Loathsome 1976, Callahan 2001), now known to be one of the most notable concentrations of rock art in the world.

> Sixteen miles of the Ridge contain 27 petroglyph sites on its 311 Sioux Quartzite outcrops, five petroform sites, numerous sacred springs, and countless lithic scatters. The petroglyph sites have over 8000 American Indian images carved into them. Many of the same carvings of the Ridge are found on other rock art sites found throughout North American. The Ridge is a unique destination site for ancient travelers from across North American who recorded cultural traditions otherwise lost to history. The rare five petroforms represent 5/7 of the recorded petroforms in Minnesota and provide unique insights into past scared ceremonies still done today. The lithic scatters provide precious insights into the people who came to the Ridge to worship. The Ridges is a cultural and natural heritage site significant to our world's humanity and worthy of the top priorities of preservation. (Sanders, personal communication. October 3, 2020)

Quarry expansion

Sioux Quartzite has proven to be a valuable source of crushed rock, largely used for road construction in the local area. Red Rock Quarry, presently mining approximately 90 acres in NE ¼ of Section 12, T107N, R36W, Cottonwood County, is one of two local operations mining this rock. Red Rock Quarry plans an open pit expansion that will include stripping vegetation, blasting, crushing, and dewatering to extract quartz aggregate from 30 to 120 feet below grade. This two-phase operation will impact approximately 103 acres in parts of E1/2 SW1/4 EX TR; SE1/4 EX TR Section 12, T107N, R36W. (Figure 3) The previously-documented presence of federally and state-threatened Prairie Bush Clover (*Lespedeza leptostachya* Engelm.) at the site triggered a mandatory EAW. The rare plant surveys reported in the present document fulfill a requirement of this process.

Native plant communities and previously documented rare plants

The site is embedded in a broader landscape of surficial materials formed during the retreat of the last glacier around 14,000 years ago (Lusardi 1994). Historically, the predominantly loam and clay-loam soils that developed on these glacial materials supported broad swards of dry mesic, mesic, and wet prairie. These prairie communities are influenced by topography, underlying soils, and local hydrology. Because the condition of native prairie is also a reflection of previous land use, areas between and south of major strings of outcrops at the project site reflect the history of recent grazing at the site.

Upland prairies along Red Rock Ridge support a significant number of the state's largest populations of Prairie Bush Clover (*Lespedeza leptostachya* Engelm.) See Appendix 1 for images of this species. This Midwestern endemic is both state and federally listed as a threatened plant (Minnesota Statute 84.0895; Minnesota Rules, Chapter 6134, Federal Register 52:781-784). The majority of populations on Red Rock Ridge occur in dry mesic prairies on Germantown clay loam (USFWS 1987). The first botanical surveys on Red Rock Ridge targeted this species between 1986 and 1988 (Sather 1989). The project area was first surveyed for this species on June 22, 1988 and again on September 14 of that year. At the time of 1988 surveys the prairie was heavily grazed and visually dominated by non-native species. Three surveyors were unable to locate Prairie Bush Clover but found Buffalo Grass (*Buchloe dactyloides* (Nutt.) Engelm.) and Tumblegrass (*Schedonnardus paniculatus* (Nutt.) Trel.). Both species typically occur on or at the edge of Sioux Quartzite outcrops in southwestern Minnesota prairies and were restricted in 1988 to the few rocks with ledges high enough to prevent trampling. In September 1997, Hageman and Sather found and vouchered approximately 200 flowering and 100 non-flowering Prairie bush clover plants concentrated in the west ditch of 490th Avenue extending into adjacent native prairie at the base of the pasture slope. Prairie Bush Clover plants were present on both sides of the east fence line in the mesic prairie ditch and adjoining pasture.

This population was reconfirmed by Sather in September 2003, with a total of 147 plants outside the fence. The pasture was too heavily grazed in 2003 for native species to be seen. The population at Amboy 12 is recorded in the Minnesota DNR's Natural Heritage Information System (NHIS) as Prairie bush clover occurrence 49.

The site was subsequently identified by the Minnesota Biological Survey (MBS) Cottonwood County Survey Site 6, (Amboy 12). The survey mapped approximately 80 acres of prairie and rock outcrop native plant communities, approximately 19 of which subsequently have been quarried (Figure 4). Because of access issues at later dates, the Southern Mesic Prairie (UPs23) was mapped based on conditions at the time of the 1988 survey. At that time the prairie was heavily grazed. The site's High Biodiversity Significance is based on the presence of Prairie bush clover, Buffalo grass, Tumble grass, and a distinctive subtype of rock outcrop vegetation (Crystalline Bedrock Outcrop, Sioux Quartzite subtype). This vegetation type is confined to sites in Rock, Pipestone, and Cottonwood Counties (Minnesota Department of Natural Resources 2005).

Red Rock Ridge is identified as a 10,192-acre Core Area in the Minnesota Prairie Conservation Plan (MN DNR 2018). It includes several notable managed areas including Rock Ridge Scientific and Natural Area, Jeffers Petroglyph historic site, TNC's Red Rock Preserve, Red Rock WMA, Red Rock Falls County Park (Cottonwood County), and Mound Creek County Park (Brown County), all of which support native prairie and rare plant habitats. See also Figure 2.

Factors influencing plant rarity and searches

The visibility of any species at any given time is linked to its preferred habitat, local hydrology and soils, previous land use, seasonal or erratic weather patterns and the time of year it emerges, flowers, and fruits. All these factors affect methods, timing, and results of rare plant searches.

Some plants are rare because they are tolerant of site conditions unfavorable for most species. These species may have wide geographic ranges but occur only in very specific microhabitats, which themselves may be very rare. Species associated with rock outcrops and species associated with calcareous seepage fens are examples of this situation.

The seeds of several rock pool specialists wait to germinate and complete their life cycles during periods when frequent rainfall fills depressions in outcrops to create ephemeral pools (Harris 2009). Thus, it is possible for a species to be present at a site, but only documented following periods of precipitation long enough to enable the species to sprout and reach maturity before the pools dry up. The weather of a given season and the ability of botanists to survey rock pools shortly after a period of precipitation both influence the known distribution of rock pool specialists.

Plants of calcareous fens (OPp93b) are tolerant of the mineral-rich, cold, oxygen-poor conditions that prevail in areas where diffuse groundwater seepage encourages peat development (Minnesota Department of Natural Resources 2005). Because these communities are nourished by groundwater, they respond to long term changes in groundwater availability, but not to precipitation within a given year. Calcareous fens can occur in small patches within wet meadow complexes but are less likely to develop in flowing springs. Most species of calcareous fens are short-statured and easy to miss. The community is most easily recognized by the presence of more robust indicators like Grass of Parnassus (*Parnassia glauca*). In southwestern Minnesota, wetlands lacking that indicator are unlikely to support calcareous fen rarities.

The majority of geographically widespread rare plants with wide environmental tolerances are associated with habitats subject to degradation or land use conversion. Prairie bush clover is a good example. Most of Minnesota's known populations occur on loamy soils on slopes that have been previously grazed but are too steep to plow.

Unlike rock specialist target species that are responsive to precipitation within the season of survey, prairie bush clover is a long-lived perennial capable of extended periods or dormancy (Menges and Quintana-Ascencio 2002, Rusterholz 2011). Seedling establishment and survival are essential to sustain populations of any species on a long-term basis. Previous analyses suggest that seedling survival is the most key factor that determines the future growth or decline of Prairie bush clover populations (Menges and Quintana-Ascencio 2002, Rusterholz 2011, Anderson 2016). Most rare plant surveys focus on highly visible mature plants and therefore do not inform a population's potential to persist or expand. However, when populations are repeatedly searched and the number of rare plants remains stable, it can be inferred that the population is more likely to persist into the future (Menges and Quintana-Ascencio 2002).

Surveys

Advance data acquisition and analyses

Prior to initiating field work, we submitted and received DNR approval for a site-specific work plan and rare plant collection permits 23208 (MacFarlane) and 28551 (Ruby and Sather). We used previous knowledge, an updated Natural Heritage Information System report, and DNR rare species fact sheets to hone our preliminary list of potential target species. Prior to commencing rare plant searches, we used satellite imagery to identify areas for reconnaissance spot checks.

We obtained a GIS cover of outcrops previously identified by the Red Rock Research Group, in conjunction with Hamline University to use as a framework for systematic survey of outcrops at the Quarry project site. (Figure 5). We searched the main area of outcrops on each visit, the western outlier rock 37 twice and rocks 33, 34,35 and 36 once.

Prairie bush clover in Minnesota typically occurs in slight concavities on the upper half of rolling hills. At the time the federal Recovery Plan was prepared, all populations then known on Red Rock Ridge occurred on soil series L83a , Germantown clay loam 1-8% slopes. (USFWS 1987). We used the Prairie Bush Clover Recovery Plan (USFWS 1987) and SoilWeb Earth to identify potential Prairie bush clover habitat (Figure 6). We found by comparing the satellite imagery with the soils that although this series is a member of L66B (Bechyn-Germantown-Rock complex), the majority of that complex within the project area is occupied by wetlands, verified by concurrent wetland delineations ongoing at the time of our surveys (Bolton and Menk 2020).

Field surveys

We visited the site eleven times over the 2020 growing season. Many of these visits were conducted by a single botanist for short periods of time to check for specific species or to ascertain the status of rock pools or phenology. The purpose of each visit reflected species' known habitat preferences, phenology, and weather conditions leading up to the date of the visit.

On May 31, Ruby and MacFarlane assessed the condition and habitat potential of the site to support species on our initial target species list. We evaluated rock surfaces to narrow subsequent search locations for species that favor fissures and rock pool specialists We investigated channels flowing through wetland complexes, noting the presence of iron-stained marl precipitate in some areas. This reconnaissance enabled us to eliminate portions of the prairie and wetlands dominated by introduced grasses. We eliminated the isolated wetland in the southeastern corner of the section because of its rank vegetation and outcrops 33,34,35, and 36 because of their disturbed condition. Figure 7 depicts areas eliminated and retained for further survey as a result of this site evaluation. Table 1 summarizes the habitat suitability and search status of each of our proposed target species. Table 2 summarizes the dates, personnel, purpose, and summary outcome of each visit

Rare rock plant surveys and results

We visited the majority of outcrops at least three times during the season. Because of their promising condition, we returned to outcrops We used the RRRG/Hamline rock numbers as a frame of reference to search for rare species associated with outcrops. We recorded GPS points for outcrops with the best development of pool depressions and crevices. Several of the species on our target list are closely resembled by common species. For this reason, we collected several similar species such as *Cyperus squarrosa,* which closely resembles the rare *Cyperus acuminatus* and several species of *Eleocharis* in hope of finding the rare *Eleocharis wolfii.*

Table 3 documents the first date each rare species was observed on which outcrop. Figure 8 presents a rapid overview of which numbered outcrops support rare rock species Figure 9 identifies which species were found on each numbered outcrop. The dots on this figure do not represent all patches of a species observed at the site except in the case of Mudwort (*Limosella aquatica).* This species was the most uncommon of our discoveries, found and vouchered on May 31st in a single rock pool Outcrop 7 (N44.05 171, W95.06 259). Although other rock pools appeared as promising early in the season, the pool supporting this population was the only one that held water continuously throughout the season (Appendix 2b). No other rare rock pool plants were documented in this or any other pools.

We re-confirmed the presence of both Buffalo grass and Tumble grass, both documented at the site in 1988. See Figure 9 and Appendices 2c and 2d. Buffalo grass was the most abundant of rare plants at the site. We observed Buffalo grass casually throughout the season but conducted our systematic surveys in September. The habitat preferences and leaves of Buffalo grass resemble those of Blue grama (*Bouteloua gracilis* (Kunth) Lag. Ex Griffiths) and Hairy grama (Bouteloua *hirsuta* Lag.) However, Buffalo grass can be reliably differentiated by checking for stolons that extend from plant to plant (Appendix 2c). Buffalo grass was widely distributed throughout the site, but best developed on outcrops 9,10,18,29, and 20. These outcrops are characterized by numerous fissures and irregularities (Appendices 1 and 2c).

The growth habit and brittleness of Tumblegrass (Appendix 2d) make it difficult to document with certainty. We first observed this species on June at the edges of rock 4 but did not conduct systematic searches and voucher it until late September (Appendix 3). This species is likely much more widely distributed at the edges of rocks throughout the site than our maps indicate.

Rare calcareous fen species searches

Notes from June 1988 comment on the presence of springs at the site. Because of these springs, we added several unlikely rare calcareous fen species to our target list. Calcareous fens are wetlands sustained by permanent discharge of calcium rich groundwater, typically developing a spongy peat surface because the constant flow of cold, oxygen-poor water prevents oxidation and decay of dead plant material. In southwestern Minnesota these communities tend to occur downslope of permeable sandy soils that overly less permeable clay layers. Calcareous seepage may occur repeatedly in small pockets of wet meadow or on domes surrounded by woody wetland plants. None of these typical situations occurs at the project site, but the prevalence of gently sloping wetlands and evidence of rivulets in rock channels suggest potential groundwater discharge. Calcareous fens tend to be dominated by shorter sedges and rushes, often with surficial deposits of white or iron-stained precipitated calcium carbonate, (marl).

After encountering iron stained marl in rock-lined channels in the vicinity of the gap between outcrops 11 and 12 on our first visit, we visually searched for potential fen habitat that might support *Rhynchospora capillacea* Torr. or other rare fen species. We examined the surfaces of rock channels for marl and attempted to find openings or common indicators of seepage in the large delineated wetlands that occur on the Bechyn-Germantown-Rock Complex (Figure 6, Bolton and Menk 2020). We examined the edges of channels for seepage-loving wetland species like sneezeweed *(Helenium autumnale* L.*)* and Great blue lobelia (*Lobelia siphilitica* L.). We searched carefully in the vicinity of a small patch of Great blue lobelia and in areas of obvious marl deposition for *easily*-identified fen indicators like Kalm's lobelia (*Lobelia kalmii* L.*)* and grass of Parnassus (*Parnassia glauca), We found no calcareous fen indicators or rare species.*

Prairie bush clover

Prairie bush clover in Minnesota typically occurs in slight concavities on the upper half of rolling hills. At the time the federal Recovery Plan was prepared, all populations then known on Red Rock Ridge occurred on soil series L83a, Germantown clay loam 1-8% slopes. (USFWS 1987). We used the Prairie Bush Clover Recovery Plan (USFWS 1987) and the California Soil Resource Lab's interactive SoilWeb App to generate a field map of soils polygons to identify potential Prairie bush clover habitat. Very little of the upslope native prairie at the site is on Germantown clay loam. The majority of topographically appropriate areas to search for Prairie bush clover in the native prairie are on soil unit L66B (Bechyn-Germantown-Rock complex). The majority of that complex within the project area is occupied by wetlands. (See also Bolton and Menk 2020).

We relocated the known population of Prairie Bush Clover on June 27. We searched the remainder of the native prairie when the species is typically in flower on August 9, the CRP north of the two isolated trees on September 12, and the remainder of the native prairie on September 13. We searched only for mature plants in fruit. Prairie bush clover is a perennial whose 7-17 cm tall seedlings and robust juvenile plants are nearly impossible to find without first finding mature plants. Populations of this species tend to expand directly downhill from an uphill source. Assuming that the non-wetland slopes west of the population comprise the Germantown member of the Bechyn-Germantown-Rock complex, we searched all potentially appropriate habitat between the outcrops upslope of the population. We gave special attention to the small area just southeast of outcrop 22 where native prairie grasses and Grass-leaved goldenrod *Euthamia graminifolia* indicate higher quality prairie. We found no mature plants outside the known population although we searched twice in the lower portion of the pasture just upslope of the ditch population. Both Prairie bush clover and the native forbs reported in 1997 were absent from that area.

This population occupies a very narrow body of Germantown clay loam that extends into the project site from across the road. Fidelity to this soil type may explain the limited extent of the population. The number of plants in this population has remained remarkably stable since 1988. The densest patch of around 200 plants occupies an area of 28 square meters . It extends in the ditch for approximately 10 meters north of the northernmost roadside Juniper and is approximately 4 meters wide from East to West. Scattered individual plants extend to north 77m and to a single plant ca 2 m south of southern most juniper. Figure 10 illustrates the location of the patch and outliers.

Overall prairie condition

With the exception of the CRP at the south end, the majority of the site that is not outcrop or wetlands is visually dominated by smooth brome. Visible dominance might change in response to prescribed fire. However, the overall flora is very depauperate in comparison with nearly all remaining native prairie on Red Rock Ridge.

Table 4 is a list of species casually encountered in the native part of the site during the survey. This list is not exhaustive, but it is notable for the common prairie species that are absent, including a number of species that are tolerant of grazing. With the exception of the forb-rich planted CRP, both upland and wetland communities are remarkably devoid of forbs (wildflowers). This condition also applies to the ditch supporting Prairie bush clover, which in 1997 was mesic prairie dominated by broadleaf Big bluestem (*Andropogon gerardii)* and Little bluestem (*Schizachyrium scoparium)*, with Purple prairie clover (*Daleas purpurea),* Stiff sunflower *(Helianthus pauciflorus), and* Prairie phlox *(Phlox pilosa).* As a result, the present Minnesota Biological Survey ranking is too high. The present condition of the mesic prairie that is not wetland is no higher than C rank. The few prairie wildflowers encountered outside the CRP occurred singly or in very small patches. This situation suggests a history of herbicide application to control broadleaf plants. Unlike changes in visible dominance of grasses, the near-absence of forbs is unlikely to respond to prescribed fire.

LIST OF TABLES, FIGURES, AND APPENDICES

TABLES

FIGURES

APPENDICES

TABLE 1. TARGET SPECIES SEARCH STATUS

Target vascular plant species previously documented in similar habitats in southwest Minnesota

*in Cottonwood and/or Stately Township, Brown County

Previously documented **(bold)** or observed (italics) by (M) MacFarlane (R) Ruby (S) Sather

Scientific name	**Common name**	**Protection status**	**Habitat suitability at Amboy 12**	**search status**
*Agalinis auriculata **(S)**	Eared false foxglove	endangered	not appropriate habitat	eliminated, too rank
*Aristida purpurea var longiseta	Red three-awn	special concern	not appropriate	not seen
*Bacopa rotundifolia **(***M***S)**	Water hyssop	threatened	appropriate	searched, not found
*Berula erecta **(***R***S)**	Stream parsnip	threatened	hydrology not appropriate	searched, not found
*Botrychium campestre (**M***S*)	Prairie moonwort	special concern	not appropriate habitat	eliminated
*Buchloe dactyloides **(***M***S)**	Buffalo Grass	special concern	appropriate	systematic search, many found
Callitriche heterophylla (*M*)	Larger Water Starwort	threatened	appropriate	searched, not found
Cladium mariscoides	Twig Rush	special concern	unlikely	not seen
Crassula aquatica	Water Pygmyweed	threatened	appropriate	searched, not found
*Cyperus acuminatus **(***M***R)**	Short-pointed Umbrella-sedge	threatened	appropriate	searched, not found
*Cypripedium candidum (*MRS*)	Small White Lady's-slipper	special concern	not appropriate habitat	eliminated, too rank
Elatine triandra **(R)**	Three-stamened Waterwort	special concern	hydrology not appropriate	searched, not found
Eleocharis quinqueflora	Few-flowered Spikerush	special concern	unlikely	searched, not found
*Eleocharis wolfii (*M*)	Wolf's Spikerush	endangered	appropriate	searched, not found
Heteranthera limosa **(***M***S)**	Mud plantain	threatened	appropriate	searched, not found
Isoetes melanopoda (**MR***S*)	Prairie Quillwort	endangered	appropriate	searched, not found

TABLE 1 CONTINUED

*Lespedeza leptostachya (*MR***S)**	Prairie Bush Clover	threatened	appropriate	known location verified
*Limosella aquatica **(***M***S)**	Mudwort	special concern	appropriate	searched, found, and collected
Marsilea vestita (*R***M***S*)	Hairy Water Clover	endangered	unlikely	searched, not found
*Opuntia macrorhiza (*M*)	Devil's Tongue	special concern	appropriate	none seen
*Orobanche ludoviciana (**M***S*)	Louisiana Broomrape	threatened	unlikely	none seen
*Plantago elongata (S)	Slender plantain	special concern	appropriate	searched not found
*Rhynchospora capillacea (*MR***S**)	Hair-like Beak Rush	threatened	unlikely	searched, not found
*Schedonnardus paniculatus (**S**)	Tumble Grass	special concern	appropriate	searched, found and collected
* Scleria verticillata (*M***S**)	Whorled Nutrush	threatened	unlikely	searched, not found
Verbena simplex	Narrow-leaved Vervain	special concern	unlikely	none seen
*Woodsia oregana ssp cathcartiana	Oregon Woodsia	special concern	unlikely	searched, not found

TABLE 2
DATES OF FIELD VISITS

Date	Botanists	Focus of visit	Rare plants found or collected	Outcome
5/31/2020	JR, MM	Reconnaissance, rock pool species	*Limosella aquatica* (MM)	*Limosella* found
6/19/2020	JR	Assess upwelling areas for potential fen indicators		*Limosella* persists
6/27/2020	JR, NS, MM	Rock pool and rock surface	*Buchloe dactyloides* (MM), *Lespedeza leptostachya, Schedonnardus paniculatus*	*Limosella* persists
7/4/2020	JR	Visit outlying outcrops and pool reassessments		*Limosella* persists
7/10/2020	MM	Revisit all outcrops where we previously noted pools or flowing water, particularly for *Bacopa* and *Callitriche*, and possibly *Heteranthera,* also searched for *Eleocharis wolfii.*		No rare plants found
8/9/2020	JR, NS, MM	Team reconnaissance	*Buchloe dactyloides, Lespedeza leptostachya*	
9/12/2020	JR, NS	Search for *Lespedeza leptostachya*		No new populations
9/13/2020	NS	Search for Lespedeza leptostachya, assess unsearched outcrops	*Buchloe dactyloides, Lespedeza leptostachya mapped*	*Limosella* persists
9/26/2020	JR, NS	Inventory outcrops for *Buchloe dactyloides*	*Schedonnardus paniculatus*	*Schedonnardus* confirmed
9/27/2020	NS	Inventory outcrops for *Buchloe dactyloides*		New *Buchloe* populations
9/29/2020	JR	Inventory remaining outcrops for *Buchloe dactyloides* and *Schedonnardus paniculatus*	*Buchloe dactyloides*	New *Buchloe* populations

MM – Malcolm MacFarlane, JR – Janeen Ruby, NS – Nancy Sather

TABLE 3 DATES OF FIRST OBSERVATION OF RARE SPECIES BY OUTCROP

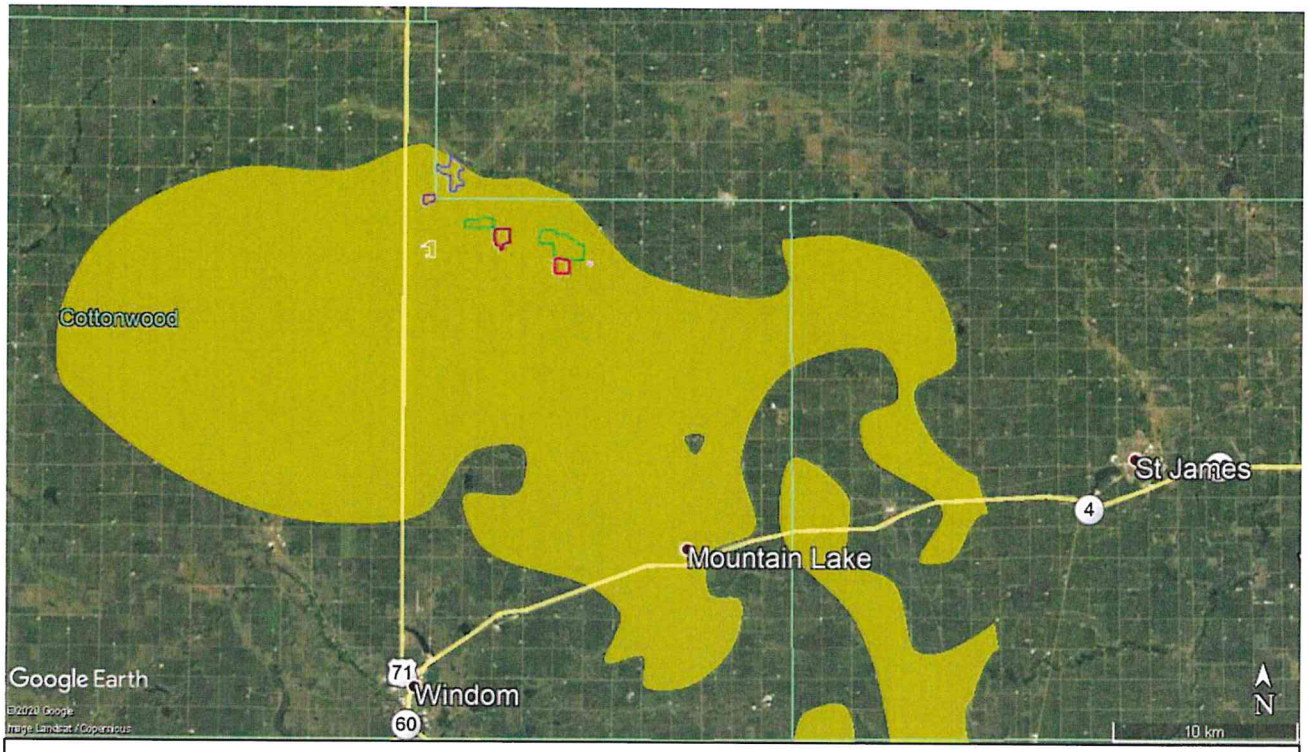
Outcrop	*Limosella aquatica*	*Buchloe dactyloides*	*Lespedeza leptostachya*	*Schedonnardus paniculatus*
1				9/26/2020
2				9/26/2020
4		9/26/2020		6/27/2020
7	5/31/2020	9/13/2020		
8		9/26/2020		
9		6/27/2020		9/26/2020
10		6/27/2020		
11		9/29/2020		
12		9/29/2020		
17		9/27/2020		
18		8/9/2020		
19		9/27/2020		
20		9/13/2020		
22		9/27/2020		
24		9/13/2020		
31		9/12/2020		
Non-Outcrop		9/27/2020	6/27/2020	9/29/2020

Scientific name	Common name
Amorpha canescens	Leadplant
Achillea millefolium	Yarrow
Agrostis gigantea	Redtop
Agrostis scabra	Rough bentgrass
Allium canadense	Wild garlic
Alopecurus carolinianus	Carolina foxtail
Ambrosia artemesiifolia	Common ragweed
Ambrosia psilostachya	Western ragweed
Andropogon gerardii	Big bluestem
Androsace occidentalis	Western rock jasmine
Bouteloua curtipendula	Side oats grama
Bouteloua gracilis	Blue grama
Bouteloua hirsuta	Hairy grama
Bromus inermis	Smooth brome
Buchloe dactyloides	Buffalo grass
Carex bicknellii	Bicknell's sedge
Carex duriuscula	Needleleaf sedge
Carex stricta	Upright sedge
Cerastium arvense	Field chickweed
Cerastium nutans (brachypodon)	Nodding chickweed
Cirsium flodmani	Flodman's thistle
Cyperus squarrosus	Bearded flatsedge
Digitaria cognata	False witch grass
Eleocharis acicularis	Needleleaf spikerush
Eleocharis compressa	Flatstem spikerush
Eragrostis pectinacea	Tufted lovegrass
Euphorbia maculata	Spotted spurge
Euthamia graminifolia	Grass-leaved goldenrod
Grindelia squarrosa	Gumweed
Hedeoma hispida	Rough false pennyroyal
Helianthus maximiliani	Maxmilian's sunflower
Heuchera richardsonii	Prairie alumroot
Hordeum jubatum	Foxtail barley
Hordeum pusillum	Little Barley

Houstonia longifolia	Longleaf bluets
Juniperus communis	Common juniper
Lepidium densiflorum	Green-flowered peppergrass
Limosella aquatica	Mudwort
Lobelia syphilitica	Great blue lobelia
Muhlenbergia cuspidata	Plains muhly
Oxalis dillenii	Southern wood sorrel
Panicum capillare	Witchgrass
Phalaris arundinacea	Reed canary grass
Phleum pratense	Timothy
Poa compressa	Canada bluegrass
Polygonum tenue	Slender knotweed
Portulaca oleracea	Common purslane
Rumex acetosella	Common sheep sorrel
Schizachyrium scoparium	Little bluestem
Selaginella rupestris	Rock spikemoss
Setaria viridis	Green foxtail
Shedonnardus paniculatus	Tumble grass
Silene antirrhina	Sleepy catchfly
Solidago nemoralis	Grey goldenrod
Sorghastrum nutans	Indiangrass
Spartina pectinata	Cordgrass
Sporobolus heterolepis	Prairie dropseed
Symphyotrichum ericoides	Heath aster
Talinum parviflorum	Small flowered fame flower
Tradescantia bracteata	Long-bracted spiderwortderwort
Trichostema brachiata	False pennyroyal
Verbena hastata	Blue vervain
Viola nephrophylla	Northern bog violet

FIGURES

Figure 1 . Local extent of Sioux Quartzite bedrock
in northeastern Cottonwood and western Watonwan Counties.



Project site and managed areas that follow the line of Sioux Quartzite Outcrops

Red Rock Quarry

Cottonwood Dells County Park

Brown County Park

Rock Ridge SNA and Jeffers Petroglyph

Red Rock Preserve (TNC) and Red Rock WMA

Figure 2. Managed areas associated with Sioux Quartzite outcrops on Red Rock Ridge

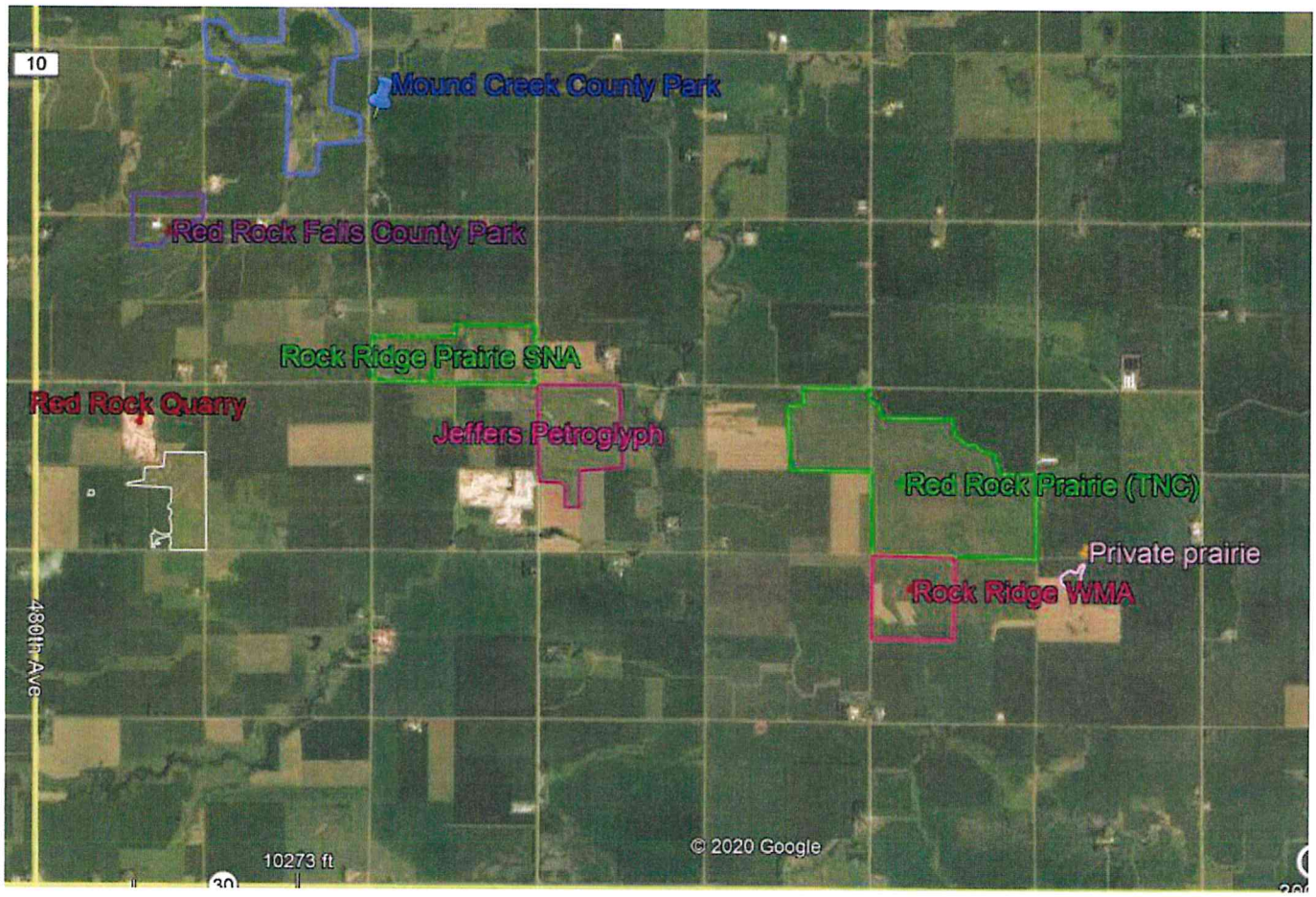


Figure 3. Map of Red Rock Quarry expansion from Draft EAW

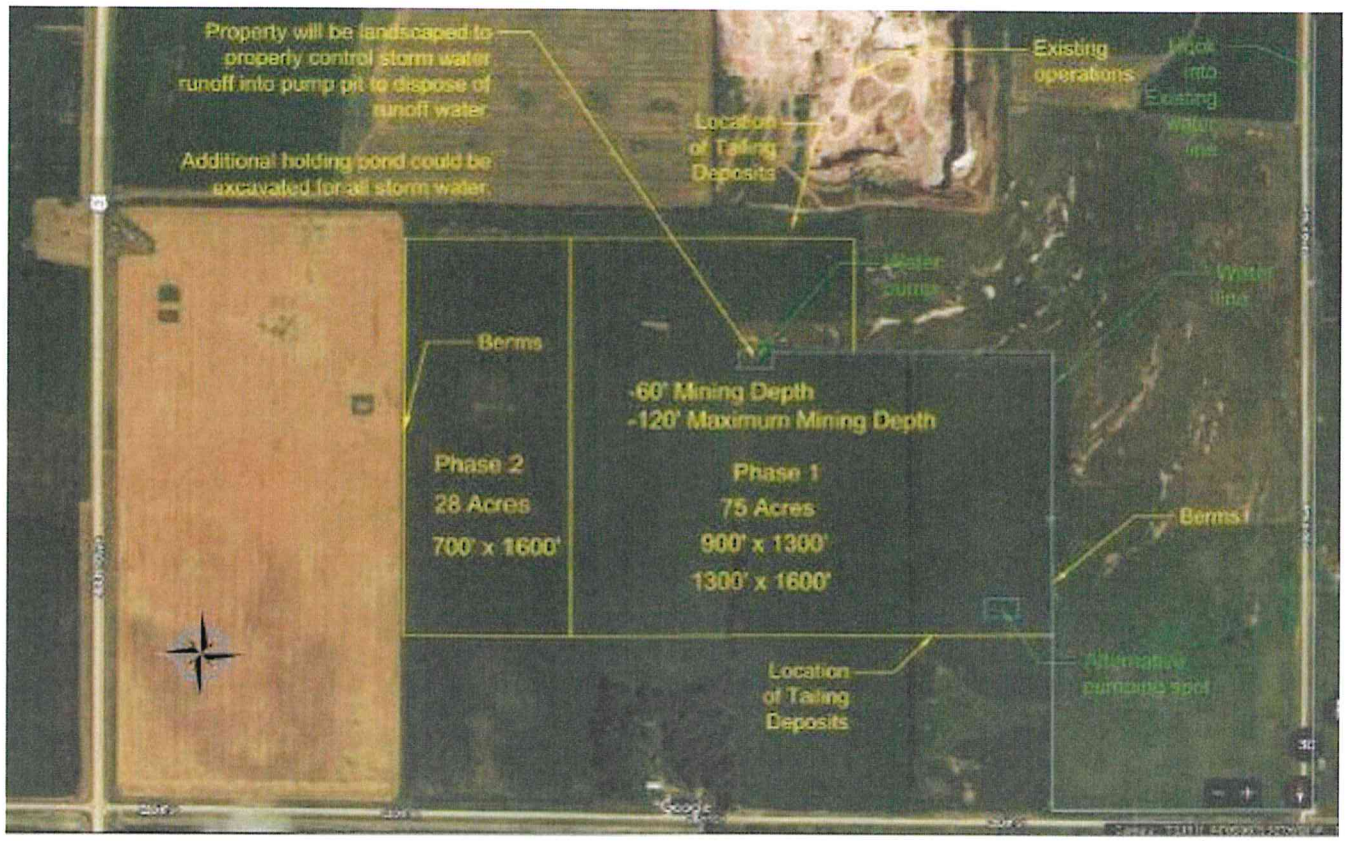


Figure 4. Minnesota Biological Survey Native plant communities (2005)

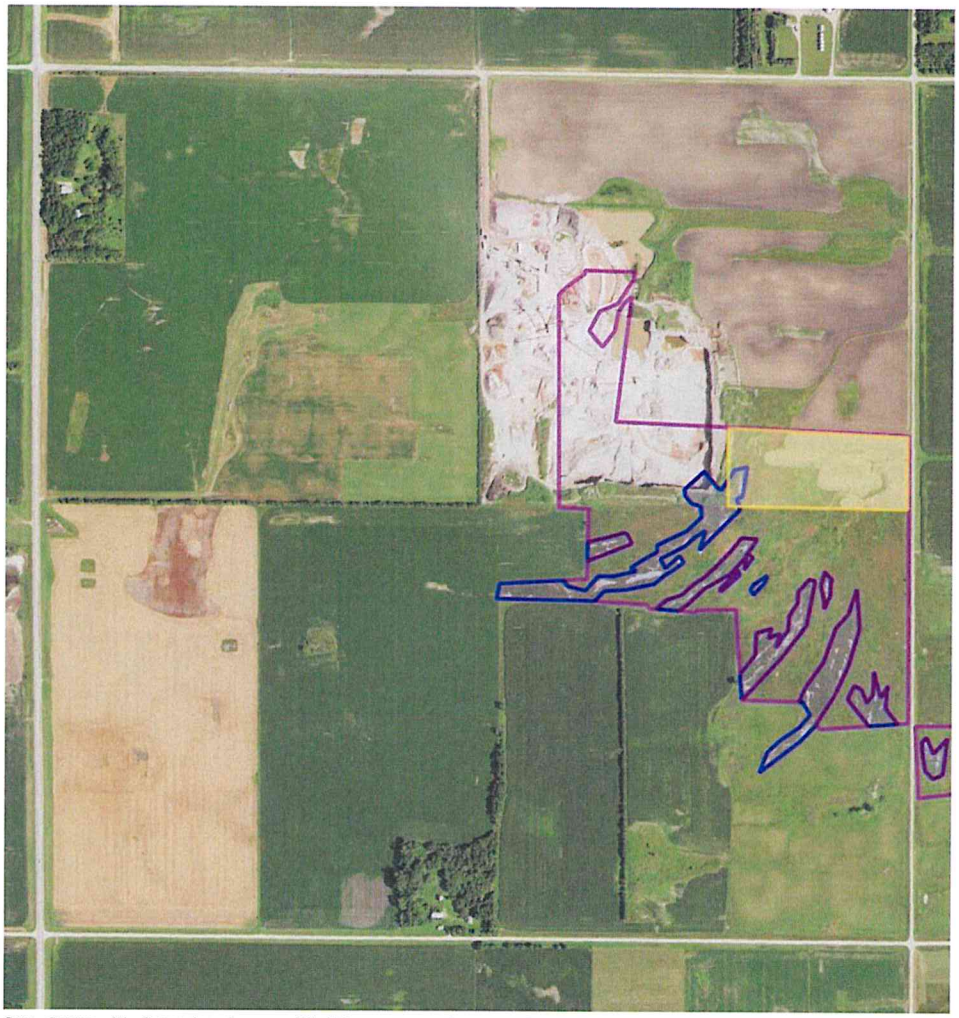
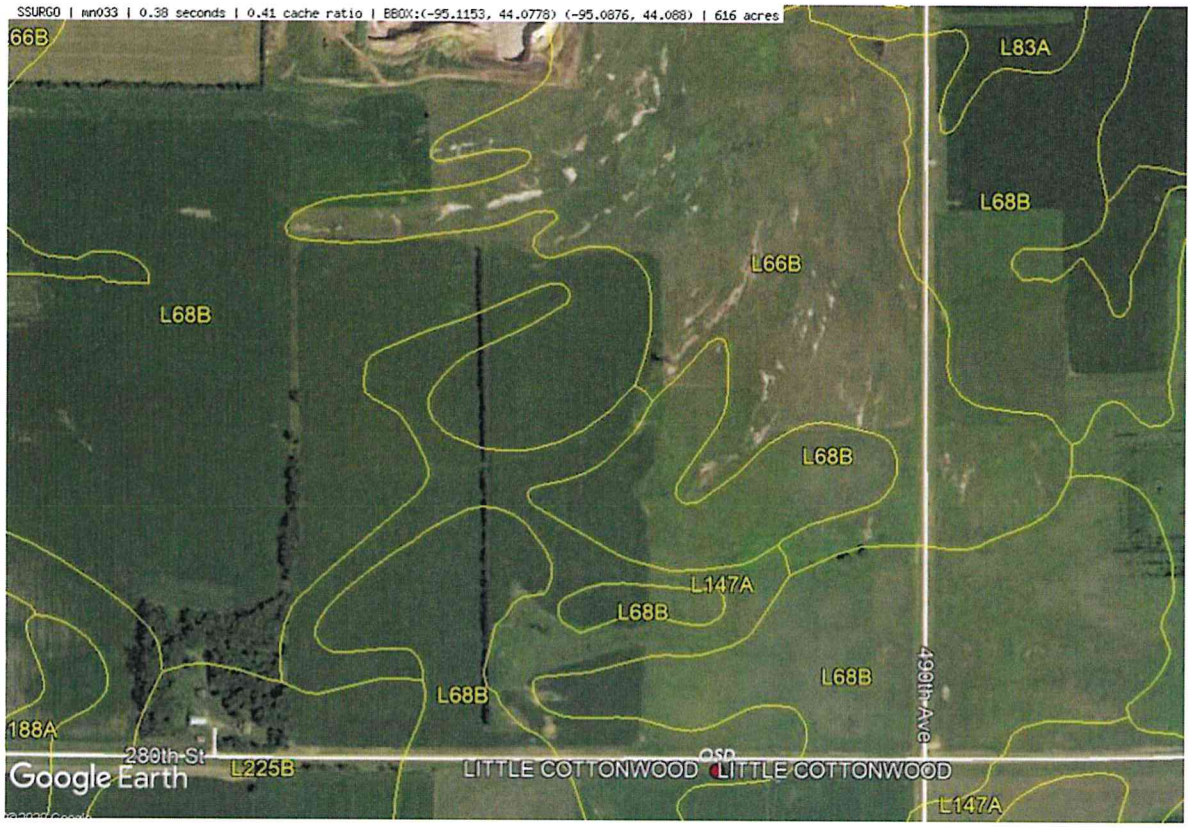


Figure 5 . Rock numbers assigned by RRRG/Hamline University in the contiguous part of survey area

Figure 6. Soils of the project area



LEGEND

L66B Bechyn-Germantown-Rock Complex

L68B Germantown clay loam

L83A Webster clay loam

L147A Little Cottonwood clay loam

Figure 7. Areas retained and eliminated from further survey by reconnaissance

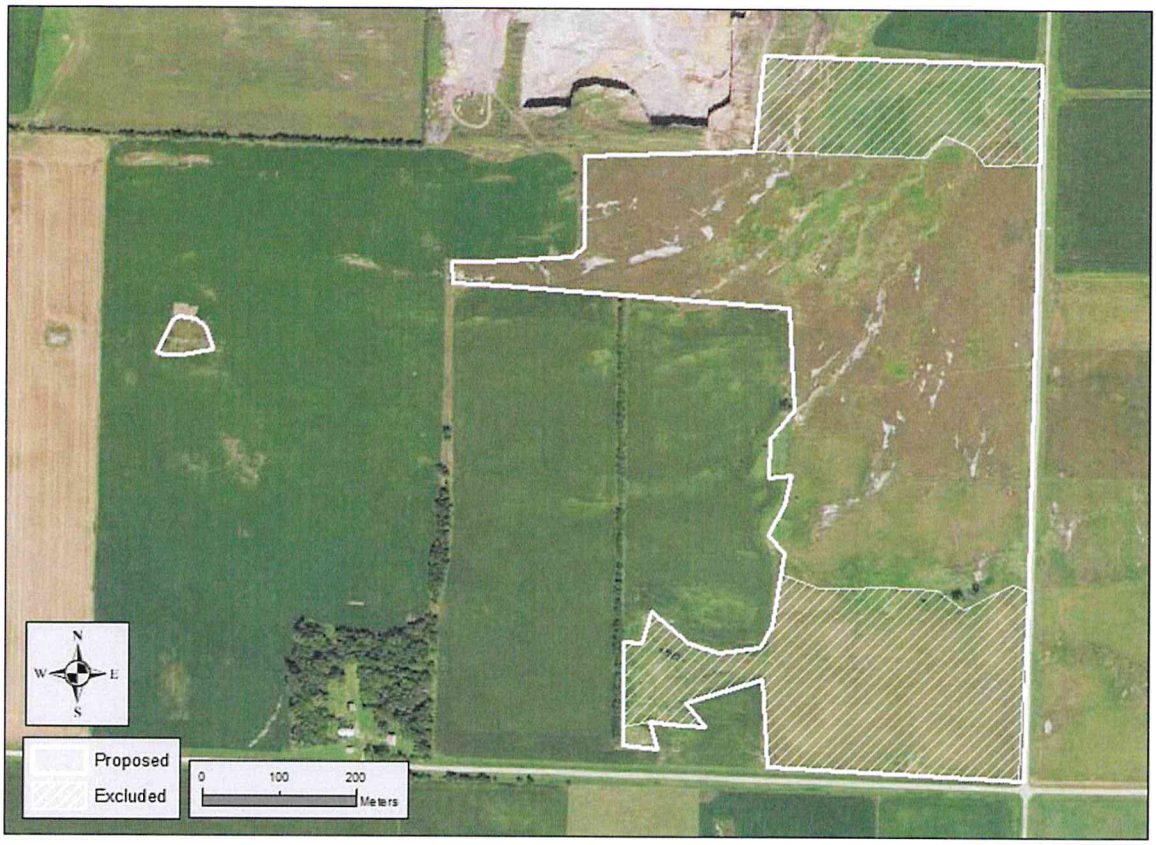


Figure 8. Rocks on which rare rock plants occurred or were absent

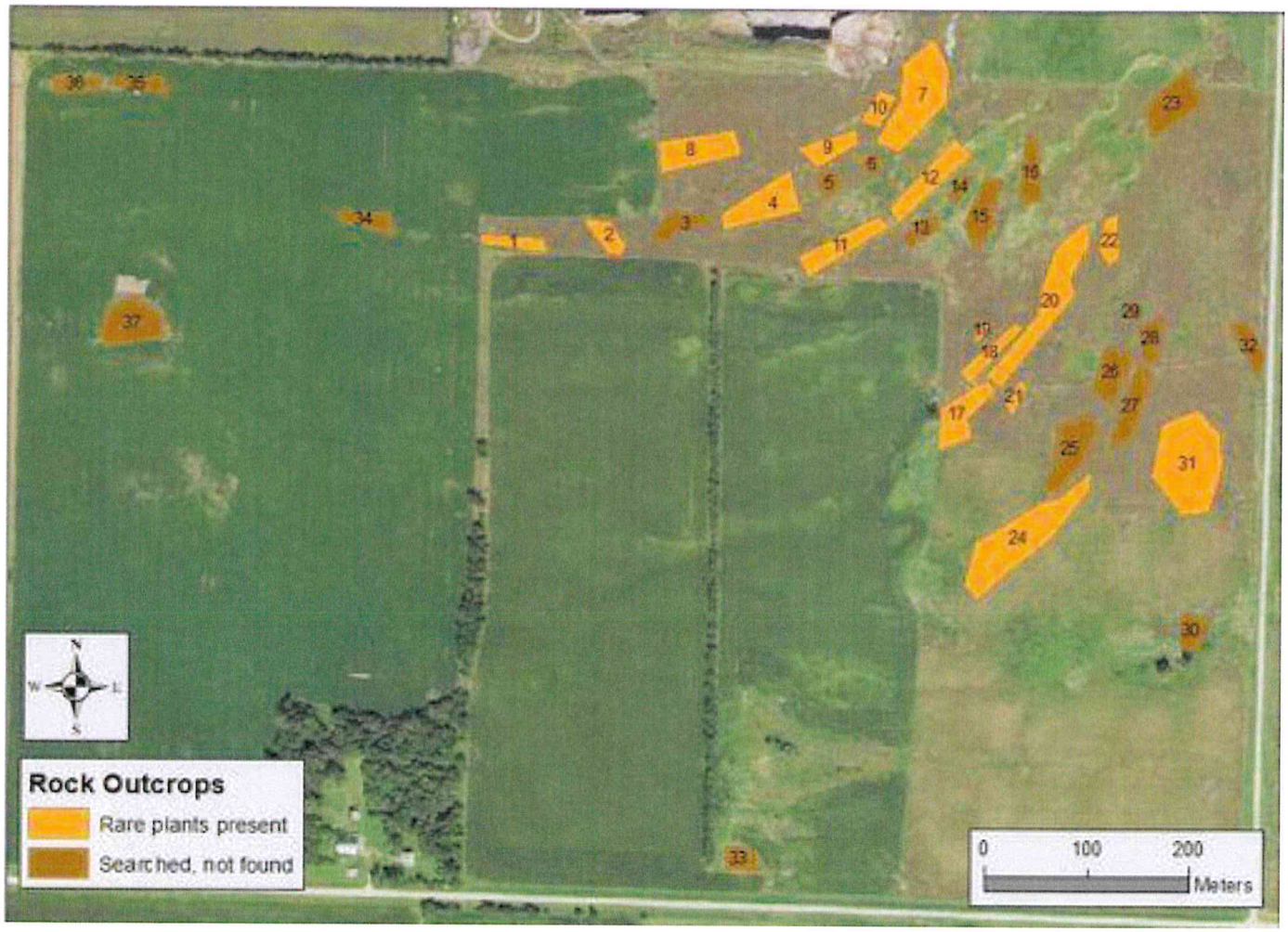
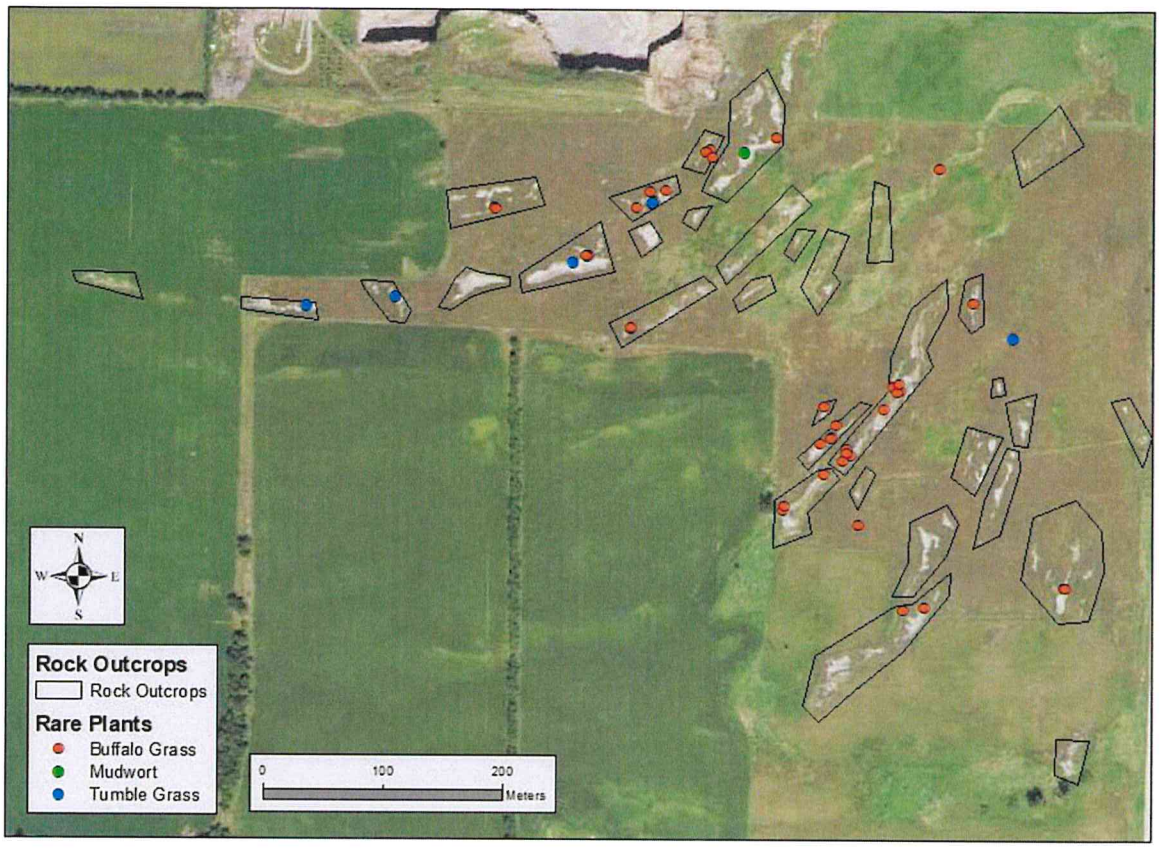
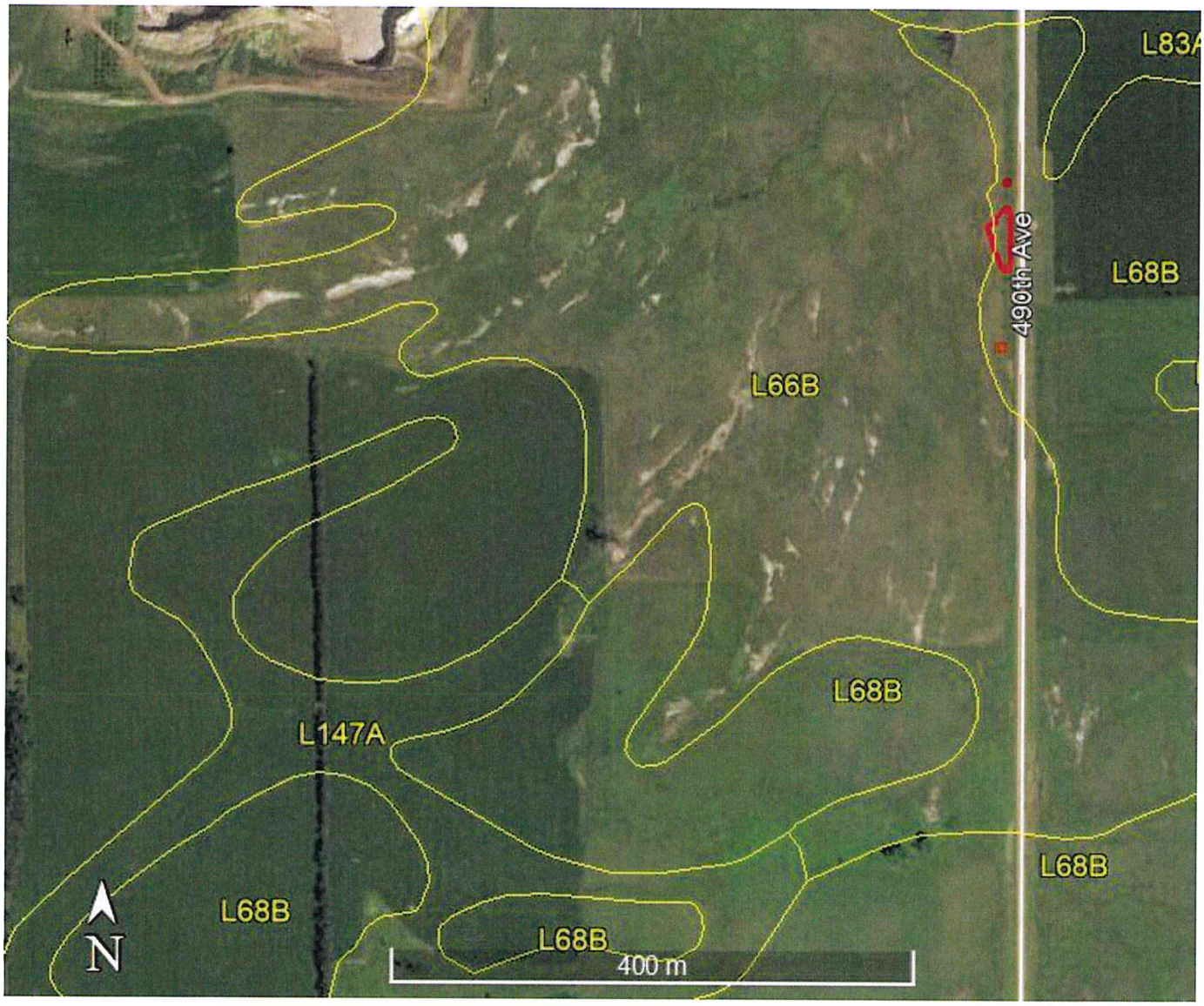


Figure 9. Species found on numbered rocks



Rocks 33,34,35, and 36 are not depicted. These outliers were surveyed. All were highly disturbed and dominated by Foxtail. Rock 37 supported some prairie species but no rare rock plants were found. Mudwort was found only in one pool on Outcrop 7.. Not all patches of Buffalo grass and Tumble grass are shown. Buffalo grass was almost continuous in fissures in rocks 9,10,18,19, and 20.

Figure 10 Prairie Bush Clover DNR Element Occurrence #49



Soils: Copyright Ca Soil Resource Lab, 2008.

L66 B	Bechyn-Germantown Rock outcrop complex 2-6 percent slopes
L68B	Germantown Clay Loam 1-8 percent slopes
L83A	Webster Clay Loam 0-2 percent slopes
L147B	Little Cottonwood Clay Loam 0-3 percent slopes

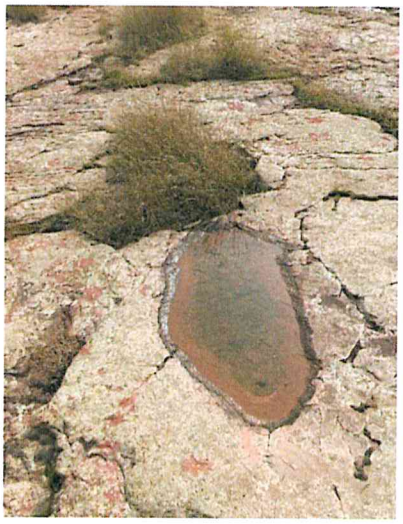
APPENDICES

APPENDIX 1

Microhabits afforded by Sioux Quartzite outcrops

Thin soil at rock margins

Fissures and cracks



APPENDIX 2a.

Lespedeza leptostachya (Engelm) Prairie bush clover

Prairie Bush Clover at Amboy 12
September 12, 2020
Janeen Ruby

Prairie bush clover in flower
Great Bend Township, Cottonwood County
July 8,2011
Nancy Sather

Nonflowering plant
Great Bend township, Cottonwood County, September 2010
Nancy Sather

APPENDIX 2b. *Limosella aquatica* L. Mudwort

Photos below show condition of rock pool on Outcrop 7, at Amboy 12,

5/31

Rubv

6/19

8/9

Rubv

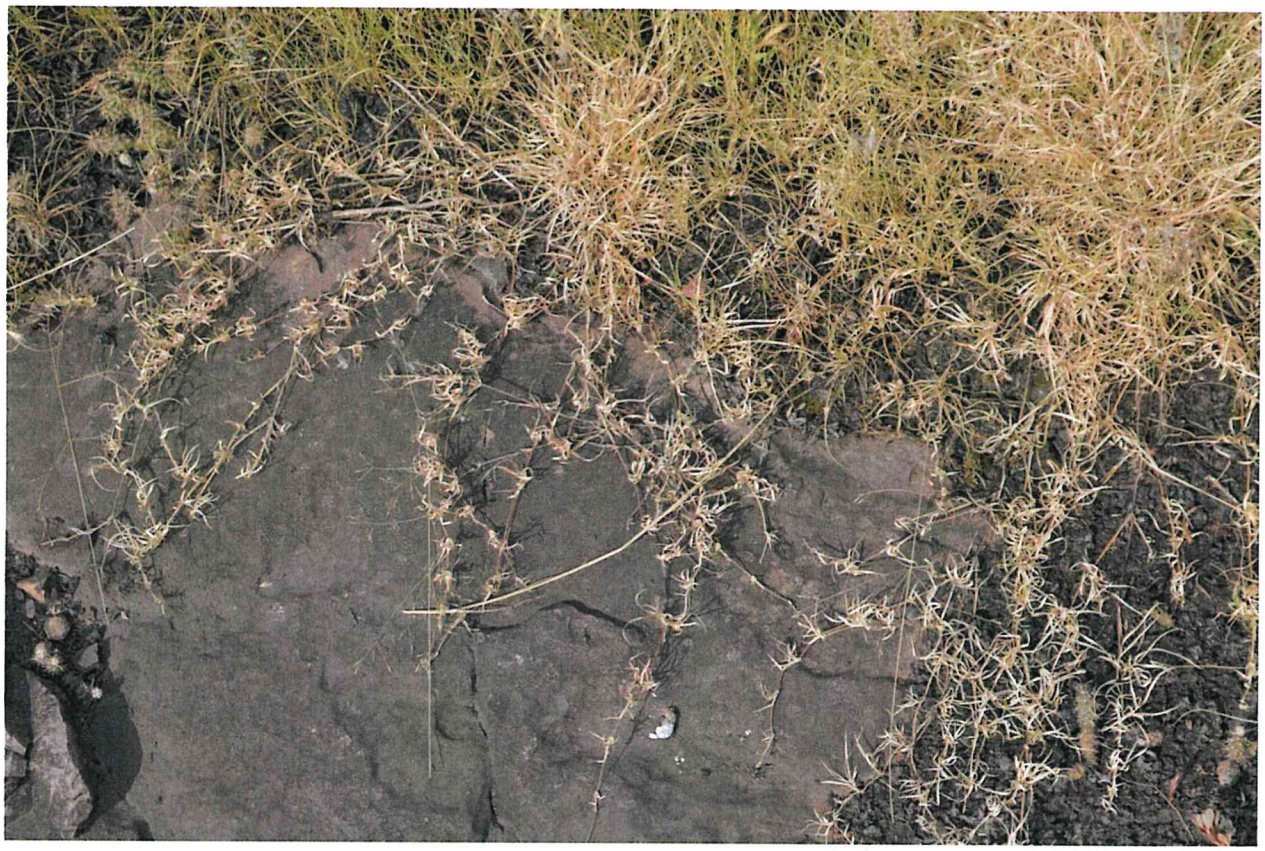
9/13

Sather

APPENDIX 2c

Buchloe dactyloides (Nutt.) Engelm. Buffalo grass

Robust plant from Pipestone National Monument, July, 2018 Photos: Malcolm MacFarlane



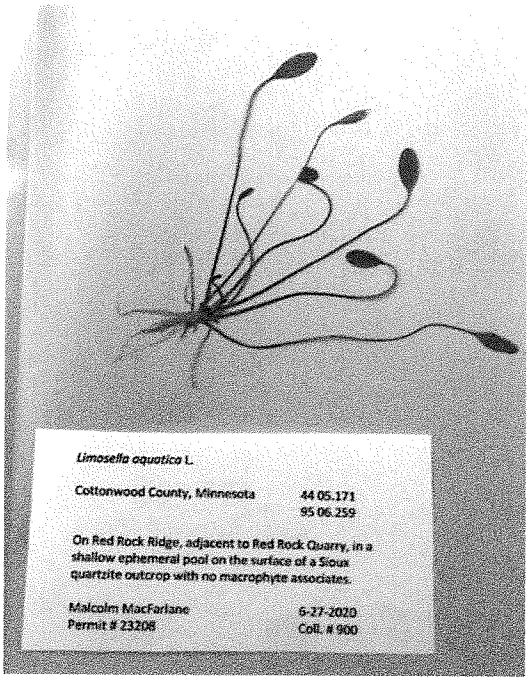
Appendix 2d

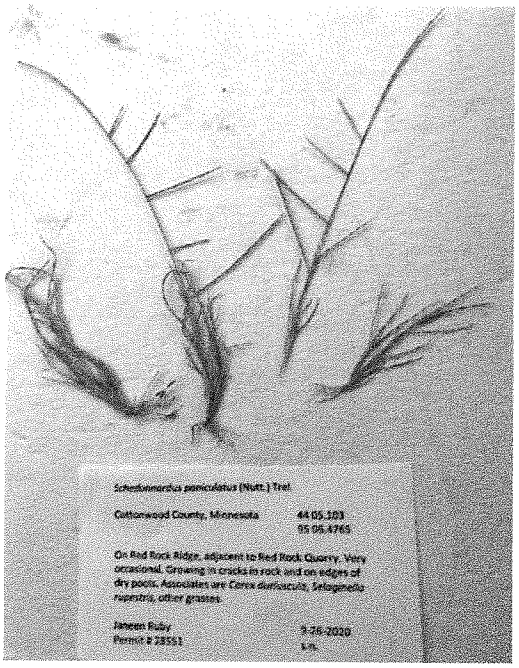
Sc*hedonnardus paniculatus* (Nutt.) Trel. Tumble grass

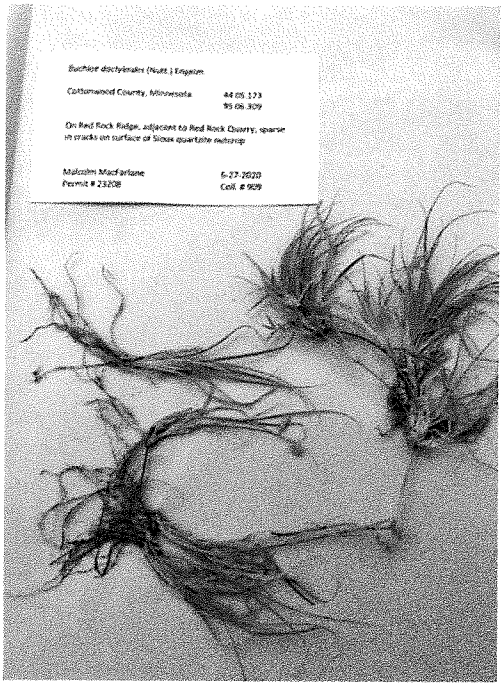
Photos: Janeen Ruby

APPENDIX 3

Voucher specimens of rare plants collected in 2020







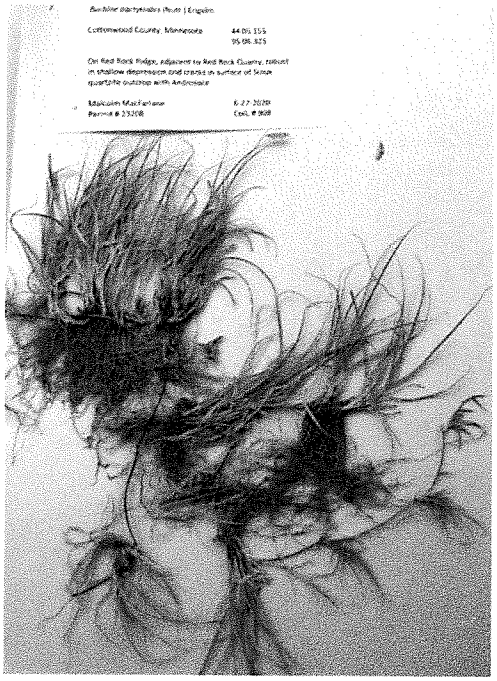


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Exhibit C

PUBLIC HEARING, LORENTZ CONSTRUCTION CONDITIONAL USE PERMIT

ROLL CALL

Phil Harder
Sharon
Jim Wolf

Heidi
Alex Schultz
Ashley Broussard

Tom Appel
Lorentz Construction (Nick/Andrew)

Meeting start 1:39 pm

ALEX SCHULTZ: reads legal notice regarding ordinance 28 & 36

PHIL HARDER: Explain the reasoning for your need of a conditional use permit

LORENTZ CONSTRUCTION: Looking to mine blast and crush rock for use of aggregate. Our Mankato location is currently running out of material. We're looking to expand our opportunity.

PHIL HARDER: What is the land currently?

LORENTZ CONSTRUCTION: Farmland. *Passes around engineering designs*

TOM APPEL: How tall is the berm going to be?

LORENTZ CONSTRUCTION: If you go to page 3c01, you'll find the station numbers. Then, in sec. 120, the berm is 1,276 feet.

PHIL HARDER: What is the above grade height?

LORENTZ CONSTRUCTION: An average of 10 feet taller than the working area.

HEIDI: How many acres will this be?

LORNETZ CONSTRUCTION: On page c601, the stockpile will be 9.1 acres, excavation area will be 17.7 acres for a total of just under 30.

HEIDI: The farmland now, is it currently producing crop?

LORENTZ CONSTRUCTION: Yes.

PHIL HARDER: How much soil will be removed to get to the rock?

LORENTZ CONSTRUCTION: 2 feet.

PHIL HARDER: How deep will you be digging?

LORENTZ CONSTRUCTION: For Phase 1, we will dig 1268 feet. We will get the total 17.7 acres on the same elevation before we start removing rock.

HEIDI: These ponds, will they be constructed first?

LORENTZ CONSTRUCTION: Yes. The ponds will be created first to control runoff downstream and allow them to slowly trickle into the creek. All of the water will go into Pond A. Culverts force the flow from Pond A to Ponds B-D, draining west, to get into the creek. The slow flow and multiple ponds will allow silt to settle so no sediment will go in.

PHIL HARDER: Water flows from the SW to the berm, where does that water go?

LORENTZ CONSTRUCTION: It drains west to east. Page C301, it runs along the berm as it normally would through the pipe and into a creek. Actually, the creek we are referring to isn't really a creek but a pre-established drainage swale. It also encompasses the neighboring property's runoff.

HEIDI: How much truck traffic would there be?

LORENTZ CONSTRUCTION: The pits would run from 7:30-5:30 but we're open to working with the County on run times if needed. We anticipate an average of 95 trucks a day.

TOM APPEL: What roads would you be using, county road 10?

LORENTZ CONSTRUCTION: Yes, it's already a 10-ton road.

TOM APPEL: Then where?

LORENTZ CONSTRUCTION: We'd use 71 and 30 to go east.

HEIDI: Would you be using 490th?

LORENTZ CONSTRUCTION: Yes, just a small part of it.

HEIDI: Is it paved?

LORENTZ CONSTRUCTION: No.

TOM APPEL: Is the township aware?

LORENTZ CONSTRUCTION: Yes *points to public members*.

TOM APPEL: Which entrance would you primarily use—the north or south?

LORENTZ CONSTRUCTION: The north, the south would only be used on exceptionally busy days.

HEIDI: There are no residents within ½ mile?

LORENTZ CONSTRUCTION: No.

PHIL HARDER: How close is the closest resident?

PUBLIC (JIM?): About 1-mile south.

TOM APPEL: How many years before you would be able to excavate?

LORENTZ CONSTRUCTION: About 1-2 years.

PHIL HARDER: Have we heard anything from the public?

ALEX SCHULTZ: I have received one call from the public and they are in attendance today. I called Tom Cresco from the DNR but he hasn't responded.

Amboy township concerns:

- Road maintenance
- Road size
- Extend culvert

TOM APPEL: How big is the culvert and what is the material?

PUBLIC/AMBOY TOWNSHIP(?): 4 or 5 feet and steel.

TOM APPEL: Has anyone inspected it?

PUBLIC/AMBOY TOWNSHIP(?): As far as we know, it's in fair condition.

PHIL HARDER: What's the current daily traffic? Would there be a big increase in road usage? Would it disrupt current flow?

PUBLIC/AMBOY TOWNSHIP(?): There's about 10 cars a day. Harvest time would be the only time a disruption could probably happen.

LORENTZ CONSTRUCTION: We also want to say that we would like a good road as well. We are willing to work with the township and county to keep the road safe for residents and our drivers.

SHARON: Would 490 have only empty or full trucks? Would it be a mix? How do you plan on ensuring drivers are only entering one entrance?

LORENTZ CONSTRUCTION: These are our drivers, we're not in a retail business so we have more control. Any drivers coming to the south entrance we would refuse to service like the Red Rock Quarry.

PUBLIC/AMBOY TOWNSHIP(?): That doesn't always work at Red Rock. If they came from the East, which road would they go?

LORENTZ CONSTRUCTION: Again, we aren't in the retail business so these drivers are our guys. We could directly shut off traffic. If they came from the east they would come from another gravel road so it's of no benefit to them.

PHIL HARDER: So it's almost all in-house?

LORENTZ CONSTRUCTION: Yes.

PUBLIC/AMBOY TOWNSHIP(?): What are you going to do for dust control?

LORENTZ CONSTRUCTION: We will use sprinkler systems and to keep it wet and spray the roads with chloride.

PUBLIC/AMBOY TOWNSHIP(?): We'll see; the other quarry does have a lot of dust.

LORENTZ CONSTRUCTION: It's an OSHA standard, legally we have to comply. We also want the best for our employees so we do our best to comply. A safe work environment is important. The chloride on the roads actually is beneficial and can help hold the road together overtime.

TOM APPEL: Any agreement with the township yet?

LORENTZ CONSTRUCTION: Not yet, we first wanted to see if it would even be possible to get the permit before consulting.

PUBLIC/AMBOY TOWNSHIP(?): What's the notification time before a blast and the distance the notifications get sent out?

LORENTZ CONSTRUCTION: It's a 48-hour notice via phone call or text. The day of, there is a reminder notification. The notification gets sent out 500 yards.

TOM APPEL: So, no one would be notified because there are no residents within 500-yards?

PHIL HARDER: Well 500-yards is roughly one mile.

LORENTZ CONSTRUCTION: We have the ability to expand the radius of notification alerts if residents outside the area would want to receive them.

PUBLIC/AMBOY TOWNSHIP(?): What about noise after hours?

LORENTZ CONSTRUCTION: Unless there is an emergency, which is rare, we never run 24/7.

PUBLIC/AMBOY TOWNSHIP(?): What about in the summer during busier periods? Weekends?

LORENTZ CONSTRUCTION: Even in the summer, it is rare we would run after hours. As for weekends, we run some Saturdays and never Sundays—unless a state of emergency. One emergency was in Le Sueur when a train derailed, they ran 24/7 to get enough aggregate to stabilize the train. Another emergency was in Sioux City when a nuclear power plant was at risk of going under, we ran 24/7 for 1.5 weeks to keep it going. Again, these are emergencies and do not happen often but we may need to run after hours for an extraordinary circumstance.

PHIL HARDER: Where will the water come from to fill the ponds?

LORENTZ CONSTRUCTION: It will naturally fill. It will need weeks of rain to fill.

PHIL HARDER: Where will the dredged material go?

LORENTZ CONSTRUCTION: It will be used for other projects or on-site.

TOM APPEL: Looking at all of these ponds, why are they the same elevation? Shouldn't they be sloped?

LORETNZ CONSTRUCTION: Yes, they are all the same elevation but in order for the silt to settle out, they must be the same elevation. If there is any force, the silt will be carried into the next ponds.

TOM APPEL: So the pipe would be dry?

LORENTZ CONSTRUCTION: Ideally, yes.

PHIL HARDER: What is the other township on the side of 490?

PUBLIC/AMBOY TOWNSHIP(?): Delton but it's maintained by Amboy.

PHIL HARDER: What is the long-term reclamation plan?

LORENTZ CONSTRUCTION: It's a 3:1, we submitted the plans to Alex. We will be turning it to natural grass.

PHIL HARDER: With how deep you're digging, won't there be a body of water at the bottom?

LORENTZ CONSTRUCTION: We have enough material we will be able to fill the excavation area in. We generate a lot of waste and are in a unique position that would allow us to do so.

PHIL HARDER: How long would you excavate, 15-20 years?

LORENTZ CONSTRUCTION: We plan on at least 20 years.

PHIL HARDER: Any other questions?

Alex: Are we ready for approval?

PHIL: Is there a *motion to approve the conditional use permit for Lorentz Construction?*

- Motion moved by Heidi
- Second from Sharon
- In favor: Tom, Heidi, Phil, and Sharon
- Opposed: None

Motion carries

PHIL: Is there a motion to accept the conditions?

- Motion moved by Sharon
- Second from Heidi
- In favor: Tom, Heidi, Phil, and Sharon
- Opposed: None

Motion carries

Public meeting for condition use permit for Lorentz Construction Adjourned at 2:58 pm.

NUISANCE REGULATIONS MEETING

ALEX: Inoperable vehicles was removed because it was repetitive and mentioned in other subdivisions.

PHIL: So, you can't park untabbed vehicles anywhere the public may see them?

ALEX: Correct.

HEIDI: Is it a certain amount? Even just one?

ALEX: Yes, any amount. It must be able to be declared a nuisance by a public health official. If it isn't declared a nuisance, it is okay. There will be a hearing made by the planning commission to say whether or not it is removed. If not, it will be billed to the property owner or assessed on their taxes.

HEIDI: There's only 48 hours? What if it is a big nuisance and takes the landowner more than 2 days to remove?

ALEX: Yeah, I didn't like that either. The 48 hours is more so for a move to get a response from the landowner.

HEIDI: Section 7, it says the maximum removal is 10 days.

ALEX: Yes, and then a public hearing.

PHIL: So, 10 days then commission meeting?

ALEX: Yes, 10 days. If they need any longer they can contact me.

PHIL: Section 3, shouldn't it say "official" over planning "commission"?

HEIDI: They all say commission?

ALEX: It was put in there so more than one person could take control.

SHARON: I was thinking official because if we see something, we can bring it to you [Alex].

HEIDI: I like that. Wouldn't we have to define planning official as well?

ALEX: I'll ask Nick.

PHIL: Is the environment officer Alex?

ALEX: Yeah, I have a lot of title. Planning and Zoning technician, health official, planning and zoning officer, etc. [...] Another thing that has changed is all enforcement was moved to section 10.

PHIL: Section 10, #4, shouldn't "city" employee read "county" employee? #5 also has city language.

ALEX: Yes.

Motion to present changes to the board

Moved: Heidi

Second: Sharon

Discussion:

In favor: Tom, Heidi, Phil, and Sharon

Opposed: none

Motion carries

Adjourned: 3:33pm

Exhibit D

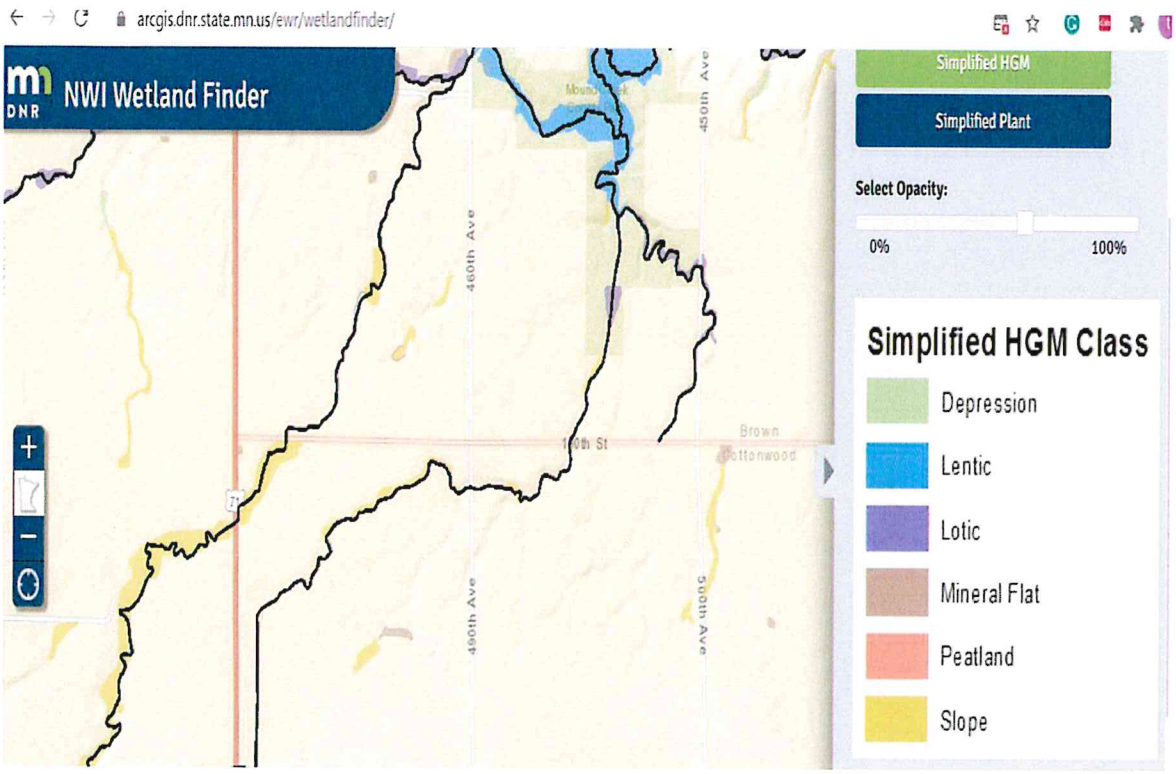

Exhibit D (1). Minnesota Wetland Inventory Map showing Lotic, Slop, and Mineral Flat wetlands in the drainage flowing from the project area.

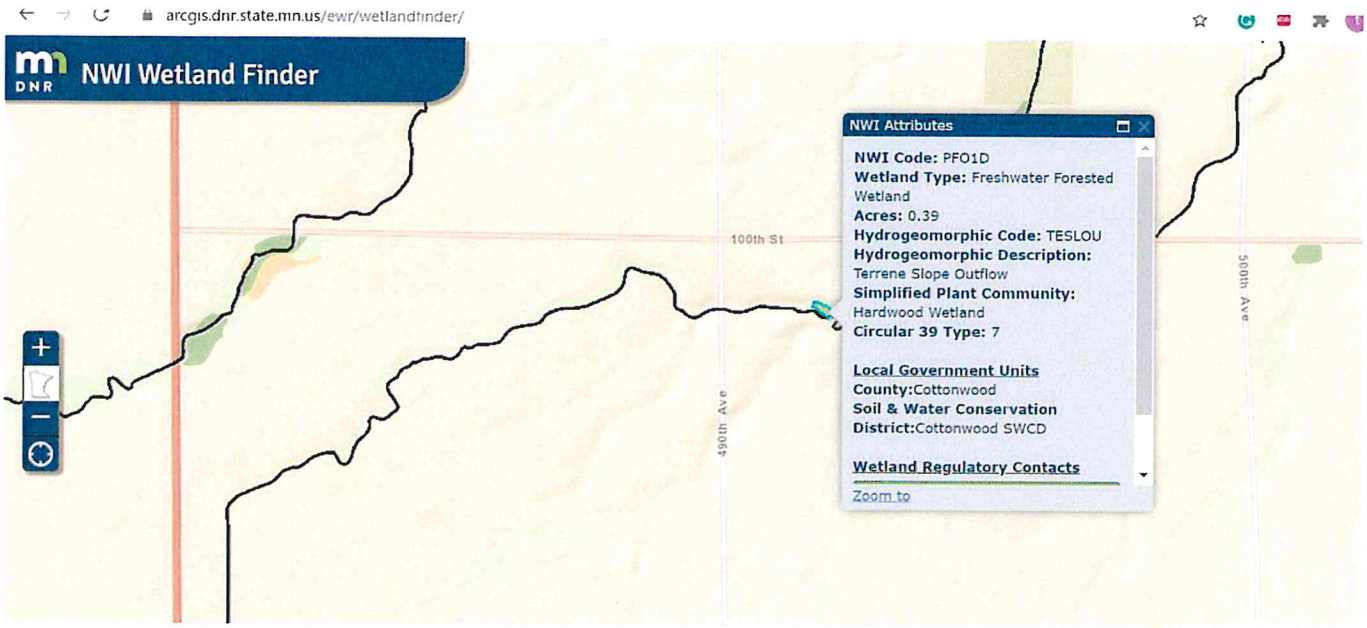

Exhibit D (2). Minnesota Wetland Inventory Map showing a wetlands in the drainage flowing from the project area.

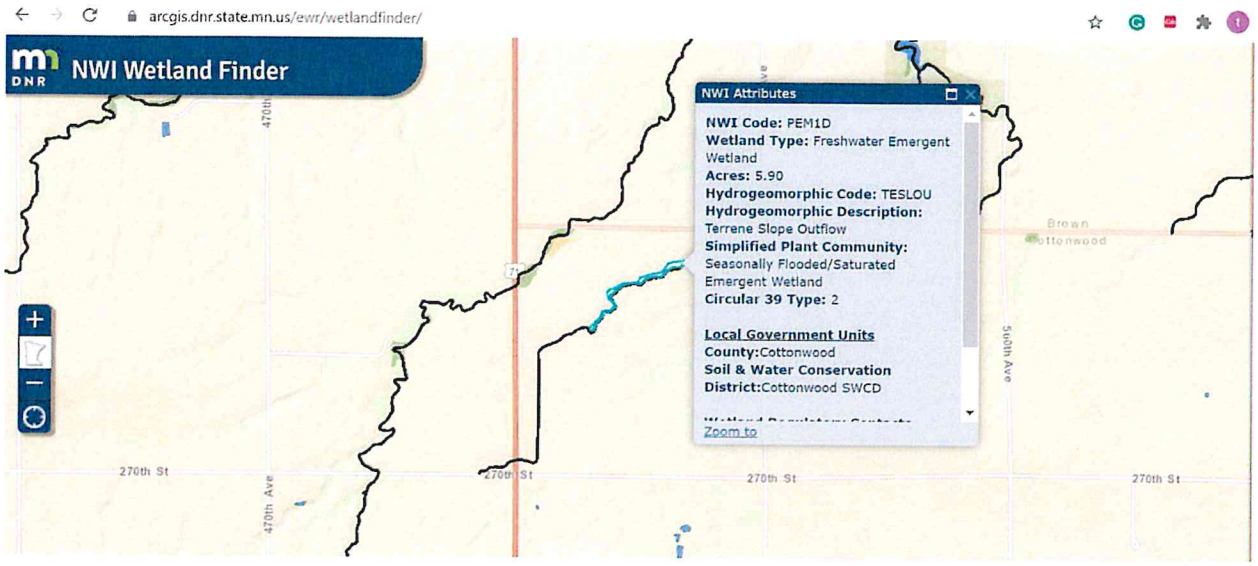

Exhibit D (3). Minnesota Wetland Inventory Map showing a wetlands in the drainage flowing from the project area.

Letter to Project Proposer

November 9, 2020

Mr. Bob Lorentz
W. Lorentz Construction
P.O. Box 847
Mankato, Minnesota 56002

Mr. Corby Graff
Property Owner
43764 110th Street
Comfrey, Minnesota 56019

RE: Request for Environmental Assessment Worksheet regarding proposed Sioux Quartzite Quarry project on the Red Rock Ridge in Cottonwood County, Minnesota

Dear Sirs:

You are hereby notified that a citizen petition has been submitted to the Minnesota Environmental Quality Board (EQB) requesting that an environmental review be considered for your proposed quarry project on the Red Rock Ridge in Cottonwood County, Minnesota.

Respectfully,

Kevin O'Keefe

CC: Environmental Quality Board

Appendix 5

Cottonwood County Board December 1, 2020

Meeting minutes

December 1, 2020
Cottonwood County Board of Commissioners
Regular Meeting
Minutes

The Cottonwood County Board of Commissioners met in regular session on Tuesday, December 1, 2020 at 4:30 p.m. at the Cottonwood County Law Enforcement Center in Windom, MN. Present in person or via teleconference for all or portions of the meeting were: Commissioners Kevin Stevens, Tom Appel, Norm Holmen, Larry Anderson, Donna Gravley; County Attorney Nick Anderson, County Coordinator Kelly Thongvivong, Auditor/Treasurer Donna Torkelson, Kathy Marsh, Nick Klisch, Alex Schultz, Gale Bondhus, Don Kalash, Andrew Lorentz, Mike Adrian, Kathy Peterson, and Joel Alvstad.

Chairman Stevens called the meeting to order. The Pledge of Allegiance was recited. Motion by Anderson, second by Appel, unanimous roll call vote to approve the agenda. Motion by Holmen, second by Gravley, unanimous roll call vote to approve the minutes of the November 17, 2020 regular meeting and the November 24, 2020 special meeting.

* * * *

Alex Schultz, Planning and Zoning Technician, met with the board to discuss a few items. Motion by Anderson, second by Holmen, unanimous roll call vote to approve the Conditional Use Permit for James Davidson to build a garage within shoreland in Rose Hill Township, Section 13, with the following conditions: (1) be compliant with Cottonwood County Zoning Ordinance #28; (2) shall obtain all necessary Federal/State/Local permits and fees; (3) have a waste container on site during construction; and (4) erosion control measures should be taken.

Motion by Gravley, second by Appel, unanimous roll call vote to approve the Conditional Use Permit for Certified Care Planner, LLC to operate a car dealership in Amboy Township, Section 1, with the following conditions: (1) be compliant with Cottonwood County Zoning Ordinance #28; (2) shall obtain all necessary Federal/State/Local permits and fees; (3) have MnDOT approval of the advertisement sign.

Schultz then led discussion regarding a petition for an Environmental Assessment Worksheet (EAW) that he received in regards to the Conditional Use Permit for a gravel pit in Amboy Township that was approved for W. Lorentz Construction on August 18, 2020. After much discussion, motion by Holmen, second by Anderson, unanimous roll call vote to deny the EAW because the project is exempt from an EAW due to final governmental approval and a resolution and findings of fact will be presented at the December 15, 2020 board meeting to further delineate the basis for the denial.

* * * *

Nick Klisch, Public Works Director, met with the board to discuss a few items. Klisch stated that Project 017-603-020 – CSAH 3 Bridge Replacement is complete and would like approval for final payment. Motion by Gravley, second by Appel, unanimous roll call vote to approve final payment of $9,661.16 to Midwest Contracting for Project 017-603-020 – CSAH 3 Bridge Replacement.

Klisch informed the board that the CSAH 7 shoulder widening, resurfacing, and curve realignment project will impact 0.34 acres of wetland. As a result the County must purchase wetland bank credits at a 2:1 ratio. The purchase of the

wetland credits will be an expense of $22,140.12. Motion by Anderson, second by Holmen, unanimous roll call vote to authorize the County Engineer to execute a purchase agreement for the purchase of wetland banking credits as required to meet permitting requirements for Project 017-607-021 – CSAH 7.

Klisch informed the board that he has yet to be notified regarding the grant application for improvements to CSAH 2. Klisch stated that he will notify the board when he receives notification.

* * * *

Kelly Thongvivong, County Coordinator, met with the board to discuss a few items. Thongvivong presented a revised Engineering Technician job description. Nick Klisch, Public Works Director, stated that the revision to the job description was the removal of the some of the minimum certification requirements due to the redundancy of certifications in the Public Works Department. After much discussion, no action was taken. The revised Engineering Technician job description and the proposed promotion of Todd Thurmer should be brought back to the December 15 board meeting for further discussion.

Motion by Anderson, second by Gravley, unanimous roll call vote to set holiday hours for county offices as follows: County offices will close at 12:00 p.m. on December 24, 2020 (Christmas Eve) and 3:00 p.m. on December 31, 2020 (New Year's Eve); and to pay employees on December 24, 2020 as December 25, 2020 is a holiday.

Thongvivong, on behalf of Kay Gross, SWCD District Administrator, presented the GBERBA Joint Powers Agreement for approval. Motion by Appel, second by Gravley, unanimous roll call vote to approve the Greater Blue Earth River Basin Alliance Joint Powers Agreement and allow the Board Chair to sign.

* * * *

Motion by Holmen, second by Anderson, unanimous roll call vote to approve December warrants as follows:

County Revenue Fund	$ 86,029.97
County Building Fund	$ 80.00
Ditch Fund	$ 35,174.52
Road & Bridge Fund	$ 92,770.24
Waste Abatement/SCORE	$ 5,622.23
Landfill Enterprise Fund	$ 5,172.92
	$224,849.88

* * * *

Commissioner Holmen informed the board of a couple of ditch projects he is dealing with and asked for the board's input.

Commissioner Appel informed the board that he would be attending the December 3 County Administrator budget virtual meeting, the December 7th AMC virtual conference, but would not be able to attend the December 11 MCIT virtual meeting, and would like to know if other Commissioners would be attending. Appel also stated he has started looking at the Commissioner Assignments for 2021 and stated he is thinking of removing the Intergovernmental Relations Board. Research has been done on what this board is and no one is sure as to its purpose.

Commissioner Stevens gave an update on the 2019 Audit and asked if the board would like Amy Thomas, State Auditor, to give a presentation. Consensus of the board is for Amy Thomas to give a presentation sometime during the beginning of the new year.

Commissioner Gravley stated that the Jail Inspection Report was sent to all the Commissioners but she would like the Jail Administrator to attend a board meeting and review the report.

* * * *

At 6:02 p.m., the Truth in Taxation meeting was held. A few members of the public were there to ask questions. Chairman Stevens stated that the final 2021 budget and 2021 levy will be set at the December 15 meeting.

* * * *

There being no further business, the meeting adjourned at 6:26 p.m.

_____ _____

Donna Torkelson, Auditor/Treasurer Kevin Stevens, Board Chair

_____

Kelly Thongvivong, County Coordinator

Appendix 6

Cottonwood County Board of Commissioners denial of the 2020 Petition

Letter to EQB from Cottonwood County Attorney on December 7, 2020

Cottonwood County Attorney

Nicholas A. Anderson, County Attorney
Kristi Meyeraan, Assistant County Attorney
220 10th Street, Windom, Minnesota 56101
Phone: 507-831-5040 FAX: 507-831-4839

Denise Wilson
Director, Environmental Review Program
Minnesota Environmental Quality Board
520 Lafayette Road
St. Paul, MN 55155

December 7, 2020

RE: Citizen Petition for EAW at Lorentz Quarry

Dear Ms. Wilson,

Please accept this letter as the official notice from Cottonwood County that the Cottonwood County Board of Commissioners denied the citizen petition for EAW at the Lorentz Quarry filed by Kevin O'Keefe. The petition was denied on December 1, 2020. The petition was denied because the project is exempt because there was final governmental approval of the project when the Conditional Use Permit for the project was granted on August 18, 2020.

Sincerely,

Nicholas Anderson
Cottonwood County Attorney

CC: Alex Shultz, Kevin O'Keefe, Andrew Lorentz

Appendix 7

Industrial Stormwater Permit Revocation

Letter to Lorentz from MPCA on December 11, 2020

MINNESOTA POLLUTION CONTROL AGENCY

Brainerd Office | 7678 College Road | Suite 105 | Baxter, MN 56425 | 218-828-2492

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

December 11, 2020

VIA EMAIL

Robert Lorentz
W Lorentz and Sons Construction
PO Box 847
Mankato, MN 56002-0847

Andrew Lorentz
W Lorentz and Sons Construction
PO Box 847
Mankato, MN 56002-0847

RE: Revocation of Industrial Stormwater Permit MNR053F72

Dear Robert Lorentz and Andrew Lorentz:

This letter is in response to your submitted General Permit Application for Industrial Stormwater coverage received by the Minnesota Pollution Control Agency (MPCA) on November 30, 2020.

Based on a complete evaluation of the information provided, MPCA staff has determined that your site (Facility) was the subject of an Environmental Review Petition (Petition) submitted to the Environmental Quality Board on November 9, 2020. When an Environmental Assessment Worksheet (EAW) has the potential of being required for a facility, the MPCA may not issue any permits until a negative declaration has been obtained in regards to the EAW or a complete denial of the petition. The denial of the Petition was not complete until December 7, 2020. The permit was issued on December 1, 2020, prior to the completion of the denial.

Effective December 11, 2020, Industrial Stormwater coverage for MNR053F72 is hereby revoked.

The information provided in the General Permit Application submitted on November 30, 2020, also had inaccurate information. The following specific information was identified as inaccurate or incorrect:

1. Industrial Activities Acreage: 160
2. Description of Business Activity: Blasting, rock mining and excavation, crushing, sieving, sorting, washing, and stockpiling of aggregates, dewatering, and equipment fueling.

The industrial activities acreage is to be a specific indicator of how many acres will have industrial activity occurring, not the property owned. The Industrial Stormwater General Permit prohibits, and does not authorize the activities, discharges, or releases of wash water, or the activity of dewatering of mine or quarry areas.

If your Facility intends to wash, or dewater a mine/quarry area, it will require different permit coverage. This means that you may not reapply for permit coverage under the Industrial Stormwater General permit. You would need to seek coverage under the MNG49 permit if you intend to wash or dewater. If you intend to discharge wash water or dewatering water to a surface water, then you would need to seek coverage under the Individual Industrial Wastewater permit. Please do not reapply for Industrial Stormwater coverage if your plans indicate either one of these activities will be conducted.

If you have any questions, please contact Samantha Adams at 218-820-4915 or samantha.adams@state.mn.us. Upon receipt of a negative declaration or a completion of a denial of a petition, W Lorentz and Sons Construction can reapply for the appropriate permit based on site needs.

Sincerely,

Jeff Udd

This document has been electronically signed.

Jeff Udd, P.E.
Manager
Water and Mining Section
Industrial Division

JU/SA:jmw

Enclosure/Attachment

cc: Laura Bishop, MPCA
Peter Tester, MPCA
Greta Gauthier, MPCA
Katrina Kessler, MPCA
Helen Waquiu, MPCA
Jeff Udd, MPCA
Tanya Maurice, MPCA
Kit Grayson, MPCA

Appendix 8

Delay of publishing 2020 Petition decision

Email to MPCA from EQB on December 11, 2020

From: Wilson, Denise (EQB)
To: Pratt, Katie (EQB); Tester, Peter (MPCA)
Subject: FW: Red Rock Quarry Petition Decision Status
Date: Friday, December 11, 2020 3:50:39 PM
Attachments: image001.jpg
Importance: High

Katie and Peter,

I wanted to let you know that I spoke with Alex Shultz from Cottonwood County this afternoon and he shared that he "may have been mistaken" when they sent their notice of decision. In response, I sent the email below to Alex and Nick Anderson, Cottonwood County attorney. I will let you know if I hear anything back from them.

[redacted]

Alex Shultz also mentioned that he spoke with Alex Lorentz and they agreed to stop construction until the issues related to the petition were better understood.

Thanks,
Denise

Denise Wilson

Director, Environmental Review Program

Minnesota Environmental Quality Board
520 Lafayette Road
St. Paul, MN, 55155
O: 651-757-2523
Denise.Wilson@state.mn.us

Environmental Quality Board logo

From: Wilson, Denise (EQB)
Sent: Friday, December 11, 2020 3:40 PM
To: alex.schultz@co.cottonwood.mn.us; Nick Anderson <nick.anderson@co.cottonwood.mn.us>
Cc: Person, Stacey <Stacey.Person@ag.state.mn.us>

Subject: Red Rock Quarry Petition Decision Status
Importance: High

Alex and Nick,

On December 7th, EQB received a notification that the Cottonwood County Board of Commissioners denied the petition for an Environmental Assessment Worksheet for Red Rock Quarry (Northeast Quarter of Section 1, Amboy Township 107 North, Range 36 West). However, in conversation with Alex this afternoon, he asked me to not include the notice of decision in the EQB Monitor until next week, as the vote to approve the decision on the petition won't take place until Tuesday, December 15th.

Since assigning the petition, we learned that Cottonwood County has no pending approvals. According to Minnesota Rules chapter 4410, the EQB may not designate as the RGU any governmental unit which has already made its final decisions to grant all permits or approvals required to construct the project. Therefore, Cottonwood County is not required to take any action on the petition.

EQB staff will re-evaluate the petition to determine if there are pending approvals, and assign the decision on this petition to the appropriate RGU.

Thank you for your time and consideration. Please let me know if you have any questions.

Denise

Denise Wilson

Director, Environmental Review Program

Minnesota Environmental Quality Board
520 Lafayette Road
St. Paul, MN, 55155
O: 651-757-2523
Denise.Wilson@state.mn.us
Environmental Quality Board logo

Appendix 9

Cottonwood County return of the 2020 Petition to EQB

Email to MPCA from EQB on December 11, 2020

From:	Pratt, Katie (EQB)
To:	Tester, Peter (MPCA); Sobotka, Suzanne (GOV)
Cc:	Gauthier, Greta (MPCA); Bishop, Laura (MPCA); Kessler, Katrina (MPCA)
Subject:	RE: AI 245732: Graff Quarry, Permit Revocation Letter, December 11, 2020
Date:	Friday, December 11, 2020 5:22:53 PM
Attachments:	image001.jpg

Hi everyone,

We have an update from the EQB end based on conversations with the County Attorney this afternoon. Cottonwood County is sending the Citizen Petition back to EQB because they realized they do not have approval authority on the project. EQB will then designate the appropriate RGU, based on any pending approvals on the project.

It is our understanding that the prohibition on construction is still in place because this is an active Citizen Petition.

Please call me at 651-757-2524 if you have any questions on this.
Katie

From: Tester, Peter (MPCA) <Peter.Tester@state.mn.us>
Sent: Friday, December 11, 2020 3:34 PM
To: Sobotka, Suzanne (GOV) <Suzanne.Sobotka@state.mn.us>
Cc: Gauthier, Greta (MPCA) <greta.gauthier@state.mn.us>; Bishop, Laura (MPCA) <Laura.Bishop@state.mn.us>; Kessler, Katrina (MPCA) <katrina.kessler@state.mn.us>; Pratt, Katie (EQB) <katie.pratt@state.mn.us>
Subject: FW: AI 245732: Graff Quarry, Permit Revocation Letter, December 11, 2020

fyi

Peter Tester |
Deputy Commissioner
Minnesota Pollution Control Agency (MPCA)
520 Lafayette Road | St. Paul, MN | 55155

651-757-2013 Ofc
612-368-9358 Cell
Peter.tester@state.mn.us | www.pca.state.mn.us

Our mission is to protect and improve the environment and human health.

From: Wanous, Jill (MPCA) <jill.wanous@state.mn.us>
Sent: Friday, December 11, 2020 3:28 PM

To: bob@wlorentzco.com; andrew@wlorentzco.com
Cc: Bishop, Laura (MPCA) <Laura.Bishop@state.mn.us>; Tester, Peter (MPCA) <Peter.Tester@state.mn.us>; Gauthier, Greta (MPCA) <greta.gauthier@state.mn.us>; Kessler, Katrina (MPCA) <katrina.kessler@state.mn.us>; Waquiu, Helen (MPCA) <helen.waquiu@state.mn.us>; Udd, Jeff (MPCA) <jeff.udd@state.mn.us>; Maurice, Tanya (MPCA) <tanya.maurice@state.mn.us>; Grayson, Kit (MPCA) <kit.grayson@state.mn.us>; Adams, Samantha (MPCA) <samantha.adams@state.mn.us>
Subject: AI 245732: Graff Quarry, Permit Revocation Letter, December 11, 2020

You are listed as the recipient or as a cc on the attached documents who have requested to receive an electronic copy via email.
If you have any questions, please contact Samantha Adams by email at samantha.adams@state.mn.us.
Thank you.

Jill Wanous | Supervisor
Minnesota Pollution Control Agency (MPCA)
Watershed Division
7678 College Road, Suite 105 | Baxter, MN | 56425
218-316-3867
jill.wanous@state.mn.us | www.pca.state.mn.us

Our mission is to protect and improve the environment and human health.

Appendix 10

2020 Petition RGU reassignment

Letter to MPCA from EQB on December 16, 2020

MINNESOTA
ENVIRONMENTAL QUALITY BOARD

Minnesota Environmental Quality Board
520 Lafayette Road North
Saint Paul, MN 55155

VIA E-MAIL (cover letter & petition)

December 16, 2020

Mr. Dan Card
Environmental Review Unit Supervisor
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155

RE: Petition for an Environmental Assessment Worksheet for W. Lorentz Construction Sioux Quartzite Quarry Project (Northeast Quarter of Section 1, Amboy Township 107 North, Range 36 West)

Dear Mr. Card,

The Environmental Quality Board (EQB) has received a petition requesting that an Environmental Assessment Worksheet (EAW) be prepared for the project described in the petition. On November 12, 2020, the EQB designated Cottonwood County as the RGU for the petition. Based on additional information, and in accordance with Minnesota Rules, chapter 4410.0500 Subp. 5, the EQB has determined the Pollution Control Agency is the appropriate governmental unit to decide the need for an EAW.

The requirements for environmental review, including the preparation of an EAW, can be found in Minnesota Rules, chapter 4410. The procedures to be followed in making the EAW decision are set forth in part 4410.1100. Key points in the procedures include:

1. No final governmental approvals may be given to the project named in the petition, nor may construction on the project be started until the need for an EAW has been determined. Project construction includes any activities which directly affect the environment, including preparation of land. If the decision is to prepare an EAW, final governmental approval must be withheld until either a negative declaration on the need for an Environmental Impact Statement (EIS) is issued or an EIS is determined adequate. See part 4410.3100, subparts 1 and 2 for the prohibitions on final governmental decisions.

2. To make the decision on the need for an EAW, compare the project to the mandatory EAW, EIS, and exemption categories listed in parts 4410.4300, 4410.4400, and 4410.4600, respectively. If the project should fall under any of these categories, environmental review is automatically required or prohibited. If this should be the case, proceed accordingly:
    a. If the project meets or exceeds the thresholds of any mandatory EAW or EIS category, then environmental review is required for the project. Please see the guidance documents on the EQB website for preparing an EAW or EIS.
    b. If the project is exempt from environmental review, please document the reason for the exemption in writing and notify both the petitioners' representative and EQB of your conclusion.

3. If preparation of an EAW is neither mandatory nor exempted, the Pollution Control Agency has the option to prepare a discretionary EAW in accordance with part 4410.1000, subpart 3, item B. The standard for making the decision on the need for an EAW is provided in part 4410.1100, subpart 6. When considering the evidence provided by the petitioners, proposers, or other persons, the Pollution Control Agency must take into account the factors listed in part 4410.1700, subpart 7. Note that this requires that a record of decision, including specific findings of fact, be maintained.

4. You are allowed up to 30 working days (Saturdays, Sundays and holidays do not count) for your decision if it will be made by a council, board, or other body which meets only periodically, or 15 working days if the decision will be made by a single individual. If the decision will be made by an individual, the individual may request an additional 15 working days from the EQB in accordance with part 4410.1100, subpart 7.

5. You must provide written notification of your decision to the proposer, the petitioners' representative, and the EQB, within 5 working days as described in part 4410.1100, subpart 8. Please provide written notification to these parties even in cases where an EAW or EIS will be prepared according to part 4410.1000, subparts 2 or 3, or the project is found to be exempt from environmental review.
    a. To notify the EQB of your decision on the need for an EAW, complete the EQB *Monitor* submission form found on the EQB website. The EQB requests that you upload a copy of your record of decision using the same electronic submission form, including instances where environmental review is mandatory, voluntary, or exempt.

6. If for any reason you are unable to act on the petition at this time (e.g., no application has yet been filed or the application has been withdrawn or denied), the petition will remain in effect for a period of one year, and must be acted upon prior to any final decision concerning the project identified in the petition. It is recommended that you notify in writing both the petitioners' representative and the EQB if you are unable to act on the petition at the time it is received.

Notice of the petition and its assignment to your unit of government will be published in the *EQB Monitor* on December 21, 2020.

If you have any questions or need any assistance, please do not hesitate to contact us at env.review@state.mn.us or 651-757-2873.

Sincerely,

Katrina Hapka

Katrina Hapka
Environmental Review Program, Environmental Quality Board

cc: Kevin O'Keefe, Petitioner's Representative
Katie Pratt, EQB Executive Director
Denise Wilson, Director of Environmental Review Program

Appendix 11

Request for 15-day extension on 2020 Petition decision

Email to EQB from MPCA on December 17, 2020

From:	"Peterson, Charles V \(MPCA\)"
To:	"Hapka, Katrina (EQB)" <Katrina.Hapka@state.mn.us>
Date:	12/17/2020 11:19:51 AM
Subject:	W. Lorentz Construction Sioux Quartzite Quarry Project Petition deadline extension request

Katrina,

Per Minn. R. 4410.1100, subp. 7, the MPCA is requesting an additional 15 days to make the decision on the need for the EAW on the November 9, 2020, W. Lorentz Construction Sioux Quartzite Quarry Project petition request for an EAW received by the MPCA on December 16, 2020, from the EQB.

Charles Peterson
Planner
Resource Management and Assisitance Division
Minnesota Pollution Control Agency
651-757-2856

Appendix 12

15-day extension granted

Letter to MPCA from EQB on December 17, 2020

MINNESOTA
ENVIRONMENTAL QUALITY BOARD

Environmental Quality Board
520 Lafayette Road
St. Paul, MN 55155

December 17, 2020

Charles Peterson
Planner
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, Minnesota 55155

VIA E-MAIL ONLY

RE: W. Lorentz Construction Sioux Quartzite Quarry Petition – Request for Extension in Time for EAW Decision

Dear Mr. Peterson,

On December 17th, 2020, the Environmental Quality Board received your request for a 15-day extension for the decision on the need for an Environmental Assessment Worksheet (EAW) on the above-mentioned project. The request is respectfully granted in accordance with *Minnesota Rules*, 4410.1100 Subpart 7.

Thank you,

Katrina Hapka

Environmental Review Program Coordinator
Environmental Quality Board

CC:
Katie Pratt, EQB Executive Director
Denise Wilson, EQB Environmental Review Program Director
Kevin O'Keefe, Petitioner's Representative

Appendix 13

Communication of receipt of 2020 Petition and explanation of next steps

Letter to Petitioner's Representative and Lorentz from MPCA on December 17, 2020

MINNESOTA POLLUTION CONTROL AGENCY

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

December17,2020

Kevin O'Keefe, Petitioners Representative
32941 Res Highway 4
Morton, MN 56270

Mr. Andrew Lorentz, Field Operations Manager
W. Lorentz Construction
P.O. Box 847
Mankato, MN 56002-0847

RE Petition for Environmental Assessment Worksheet on the Proposed
Sioux Quartzite Quarry (aka: Graff Quarry; aka: Lorentz Quarry) project
Amboy Township, Cottonwood County

Dear Mr. O'Keefe and Mr. Lorentz:

On December 16, 2020, the Minnesota Environmental Quality Board (EQB) forwarded a petition requesting the preparation of an Environmental Assessment Worksheet (EAW) on the proposed Sioux Quartzite Quarry (aka: Graff Quarry; aka Lorentz Quarry) project. The proposed project is to excavate nearly 30 acres, which includes mining, blasting, crushing, washing, and removing aggregate materials in the northeast quarter of Section 1, Amboy Township (T107N, R36W), Cottonwood County. The Minnesota Pollution Control Agency (MPCA) will review the petition and related information and determine if an EAW should be prepared.

The project may not receive any permits, nor can the project be started, until this decision is made.

Once the decision is made, the MPCA Commissioner will issue findings of fact outlining the agency's decision whether to grant or deny the petition. The MPCA will then notify the petitioner's representative, the project proposer, and other parties of the result of the petition review within five days of the decision, as directed by EQB rules.

If you have any questions about this letter, please contact Charles Peterson of the Environmental Review Unit at 651-757-2856.

Sincerely,

Dan R. Card, P.E.

DanR.Card,P.E.
Supervisor
Environmental Review Unit
Resource Management and Assistance Division

DRC bt

cc Alex Shultz,Cottonwood County
Amanda Gronhovd, Minnesota Department of Administration
Peter Tester, MPCA
Katherine Jardine, MPCA
Samantha Adams, MPCA
Dan Card, MPCA
Melissa Kuskie, MPCA
Charles Peterson, MPCA

Appendix 14

Inability to make a determination on 2020 Petition

Email to EQB, Petitioner's Representative, Lorentz, and others from MPCA on February 3, 2021

From:	Peterson, Charles V (MPCA)
To:	Env Review (EQB); kevin.okeefe@lowersioux.com; andrew@wlorentzco.com; alex.schultz@co.cottonwood.mn.us
Cc:	Tester, Peter (MPCA); Kessler, Katrina (MPCA); Peter Farrell; Coleman, Jean (MPCA); Wetzstein, Doug (MPCA); Udd, Jeff (MPCA); Kuskie, Melissa (MPCA); Card, Dan (MPCA); Maurice, Tanya (MPCA); Adams, Samantha (MPCA)
Subject:	EAW Petition Request for proposed Sioux Quartzite Quarry - Cottonwood County
Date:	Wednesday, February 3, 2021 10:53:00 AM

As the Environmental Quality Board (EQB) designated Responsible Governmental Unit (RGU), the Minnesota Pollution Control Agency (MPCA) is hereby notifying EQB, the Petitioner's Representative, W. Lorentz and Sons Construction (Proposer), and Cottonwood County that at this time the MPCA cannot act on the proposed W. Lorentz Construction Sioux Quartzite Quarry (aka: Graff Quarry; aka: Lorentz Quarry) (Project) petition request received on December 16, 2020, for the following reason:

On December 11, 2020, the MPCA revoked the general Industrial Stormwater (ISW) Permit issued for the Project on December 1, 2020, without reissuing it. To date, the MPCA has not received an application for coverage under the general ISW permit for a Project. Thus without a submitted permit application, there is no active "project" (as defined in MR 4410.4300, subp. 65) on which to complete environmental review at this time.

However, the petition will remain in effect for a period of one year (November 9, 2021) as specified in Minn. R. 4410.1100 subp. 9. If the Proposer of the Project applies to the MPCA for coverage under the general ISW permit within the year, the MPCA will then determine whether an Environmental Assessment Worksheet must be prepared based on the conditions and criteria found in Minn. Stat. chapter 116D and Minn. R. chapter 4410.

I can be contacted at: 651-757-2856 or by email at charles.peterson@state.mn.us

Charles Peterson
Planner
Resource Management and Assisitance Division
Minnesota Pollution Control Agency
651-757-2856

Appendix 15

National Pollutant Discharge Elimination System, State Disposal System, Nonmetallic Mining and Associated Activities General Permit

Minnesota Pollution Control Agency

National Pollutant Discharge Elimination System/State Disposal System

MNG490000

Permittee:	Multiple
Facility name:	Nonmetallic Mining/Associated Activities General Permit
Issuance date:	June 15, 2017
Expiration date:	May 31, 2022

The Permittee is an owner or operator of facilities within the boundary of the state of Minnesota that:

a. Discharge stormwater to waters of the state, including groundwater, from the construction sand and gravel, industrial sand, dimension stone, crushed and broken limestone, crushed and broken granite, crushed and broken stone (not elsewhere classified) mining and quarrying areas, asphalt production areas, (including portable asphalt plants), concrete block and brick, concrete products (other than block and brick), and ready- mix concrete, as well as aggregate dredging operations and uncontaminated asphalt and concrete rubble recycling at sites already listed.

b. Discharge mine site dewatering to waters of the state, including groundwater, from construction sand and gravel, industrial sand, dimension stone, crushed and broken limestone, crushed and broken granite, and crushed and broken stone (not elsewhere classified) mining and quarrying areas.

c. Non-stormwater discharges that meet the requirements of this permit and occur at the above-mentioned facilities.

The state of Minnesota, on behalf of its citizens through the Minnesota Pollution Control Agency (MPCA), authorizes the Permittee to construct, install and operate a disposal system at the facilities named above and to discharge to a receiving water of the state of Minnesota in accordance with the requirements of this permit.

The goal of this permit is to reduce pollutant levels in point source discharges and protect water quality in accordance with the U.S. Clean Water Act, Minnesota statutes and rules, and federal laws and regulations.

This permit is effective on the issuance date identified above. This permit expires at midnight on the expiration date identified above.

Signature: Jeff Udd

This document has been electronically signed

Jeff Udd, P.E.
Supervisor, Water Quality Permits Unit
Water Section
Industrial Division

for The Minnesota Pollution Control Agency

Submit eDMRs
Submit via the MPCA Online Services Portal at
https://netweb.pca.state.mn.us/private/

Submit other WQ reports to:
Attention: WQ Submittals Center
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Questions on this permit?
For eDMR and other permit reporting issues, contact:
Sheri Woitalewicz, 507-476-4271

For specific permit requirements please refer to:
Contact the appropriate MPCA regional office below.

Wastewater Permit Program general questions, contact:
MPCA, 651-282-6143 or 1-800-657-3938.

MPCA Offices

Toll Free Number: 800-657-3864
To report emergencies, call the Minnesota State Duty Officer at 651-649-5451
or toll free at 800-422-0798
24-hour emergency number: 651-297-5353 or 800-627-3529

Brainerd/Baxter Office 7678 College Road, Suite 105 Baxter, Minnesota 56425 Phone: 218-828-2492 Fax: 218-828-2594	**Mankato Office** 12 Civic Center Plaza, Suite 2165 Mankato, Minnesota 56001 Phone: 507-389-5977 Fax: 507-389-5422
Detroit Lakes Office 714 Lake Avenue, Suite 220 Detroit Lakes, Minnesota 56501 Phone: 218-847-1519 Fax: 218-846-0719	**Marshall Office** 504 Fairgrounds Road, Suite 200 Marshall, Minnesota 56258 Phone: 507-537-7146 Fax: 507-537-6001
Duluth Office 525 Lake Avenue South, Suite 400 Duluth, Minnesota 55802 Phone: 218-723-4660 Fax: 218-723-4727	**Rochester Office** 18 Wood Lake Drive SE Rochester, Minnesota 55904 Phone: 507-285-7343 Fax: 507-280-5513
St. Paul Office 520 Lafayette Road North St. Paul, Minnesota 55155-4194 Phone: 651-296-6300 Fax: 651-297-8676	**Willmar Office** 1601 Highway 12 East, Suite 1 Willmar, Minnesota 56201-5817 Phone: 320-214-3786 Fax: 320-214-3787

Table of Contents

Page

1. Summary of stations and station locations

Station	Type of station	Local name	PLS location
SD 001	MNG49 Stormwater, Non-specific	ISW D1, J1 and J2	T29N, R22W, S32
SD 002	MNG49 Stormwater, Non-specific	ISW E2	T29N, R22W, S32
SD 003	MNG49 Stormwater, Non-specific	SIC 1442	T29N, R22W, S32
SD 004	MNG49 Dewatering	SIC 1446	T29N, R22W, S32
SD 005	MNG49 Dewatering	SUBSECTOR J2	T29N, R22W, S32

2. Permit requirements

SD 001	**MNG49 Stormwater, Non-specific**	
		Surface Discharge: MNG49 Subsectors D1, J1, J2
	2.1.1	The Permittee shall submit an annual DMR : Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 002	**MNG49 Stormwater, Non-specific**	
		Surface Discharge: MNG49 Subsector E2
	2.2.1	The Permittee shall submit an annual DMR : Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 003	**MNG49 Stormwater, Non-specific**	
		Surface Discharge: MNG49 Dewatering from Construction Sand and Gravel (1442)
	2.3.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	2.3.2	The Permittee shall submit an annual DMR : Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 004	**MNG49 Dewatering**	
		Surface Discharge: MNG49 Dewatering from Industrial Sand Mining (1446)
	2.4.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	2.4.2	The Permittee shall submit an annual DMR : Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 005	**MNG49 Dewatering**	
		Surface Discharge: MNG49 Dewatering from Subsector J2 (1411, 1422, 1423, 1429)
	2.5.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	2.5.2	The Permittee shall submit an annual DMR : Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
MNG490000	**Nonmetallic Mining/Associated Activities General Permit**	
		Non-Metallic Mining and Associated Activities General Permit Requirements
	2.6.1	**Applicability**. [Minn. R. 7001]
	2.6.2	This permit authorizes stormwater discharges associated with the following industrial activities: a. Construction sand and gravel (Standard Industrial Classification [SIC] Code 1442) and industrial sand mining areas (SIC Code 1446) - hereinafter Subsector J1. b. Dimension stone (SIC Code 1411), crushed and broken limestone (SIC Code 1422), crushed and broken granite (SIC Code 1423), crushed and broken stone (not elsewhere classified, SIC Code 1429) mining and quarrying areas - Subsector J2.

		c. Asphalt production areas, also known as asphalt paving mixtures and blocks (SIC Code 2951), including portable asphalt plants - Subsector D1. d. Concrete block and brick (SIC Code 3271), concrete products other than block and brick (SIC Code 3272), and ready-mix concrete (SIC Code 3273), including portable concrete plants - Subsector E2. e. Recycling and storage of materials approved in Minn. R. 7035.2860 (Beneficial Use of Solid Waste) at sites engaged in facility activities associated with all SIC Codes listed in a. through d. above. f. Activities associated with the above facilities noted, including maintenance activities and facilities, unless otherwise prohibited in this permit. This Permit authorizes stormwater discharges associated with construction activity and small construction activity, as defined in 40 CFR parts 122.26(b)(14)(x) and (b)(15), respectively. The Permittee shall comply with the "Stormwater Discharge Design Requirements" chapter and the "Construction Activity Requirements" chapter of the MPCA Construction Stormwater (CSW) NPDES general permit (https://www.pca.state.mn.us/sites/default/files/wq-strm2-68a.pdf) when conducting construction activity and small construction activity. Earth disturbing activities conducted as a normal part of post-construction use of the permitted facility do not trigger the need for CSW permit coverage. The earth disturbing activity has to be part of a project to build, demolish, or replace a structure (e.g., building, road, pad, pipeline, transmission line) to trigger the need to comply with the CSW permit. Earth disturbance that is a normal part of the long-term use or maintenance of the property is not "active construction" and does not trigger the need for CSW permit coverage. [Minn. R. 7001]
	2.6.3	This permit authorizes non-stormwater discharges to surface waters of the state from dewatering of mine or quarry areas at J1 and J2 Subsectors that meet the effluent limits and requirements in this permit. [Minn. R. 7001]
	2.6.4	This permit authorizes non-stormwater discharges that do not discharge to a surface water of the state provided these discharges are not already authorized in a separate NPDES/SDS permit. Non-stormwater that co-mingles with stormwater is considered a non-stormwater discharge (wastewater) and must be managed compliant with this Permit. To be authorized under this permit, the following discharges must be collected, contained or infiltrate into the ground and Best Management Practices must be implemented to prevent contamination of groundwater: a. Aggregate wash water from Subsector J1 and J2 facilities. b. Dredging operations from Subsector J1 and J2 facilities. c. Installation, construction, and operation of wet scrubbers at asphalt production areas, including portable asphalt plants (Subsector D1). d. Washing trucks, mixers, transport buckets, forms and/or other equipment at concrete block and brick, concrete products other than block and brick, and ready-mix concrete facilities (Subsector E2). e. Uncontaminated scale deck wash water that does not use detergents, solvents, or degreasers. f. Stormwater and deck wash water collected in holding tanks under scales. g. Wash water associated with cleaning of mobile equipment that does not use detergents, solvents, or degreasers. h. Waters used for sawing stone or dust control on crushers, conveyors, associated equipment, stockpiles, and site roadways. i. Boiler blowdown and reverse osmosis reject. j. Low or high pressure steam curing. k. Noncontact cooling water used for dryer, pump and air compressor cooling.

		For wastewater discharges listed above, see the Technology Based Effluent Limits - Non-Stormwater Discharges section of this permit for Wastewater Basin Design and Construction Requirements for newly constructed basins as of the issuance date of this permit. [Minn. R. 7001]
	2.6.5	This permit authorizes non-stormwater discharges provided these discharges are not already authorized in a separate NPDES/SDS permit and that appropriate Best Management Practices are utilized to minimize erosion and the discharges of sediment when necessary: a. Emergency fire-fighting activities. b. Fire hydrant and fire suppression system flushing. c. Potable water line flushing. d. Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids. e. Landscape watering provided all pesticides, herbicides and fertilizers have been applied in accordance with manufacturer's instructions. f. Pavement wash waters where no detergents are used and no spills or leaks of potential pollutants such as fertilizers, salts, or toxic and hazardous materials have occurred unless all spilled material has been removed. g. Routine external building wash down that does not use detergents, solvents, or degreasers. h. Uncontaminated groundwater or spring water. i. Foundation or footing drains where flows are not contaminated. j. Incident windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g. 'piped' cooling tower blowdown or drains). [Minn. R. 7001]
	2.6.6	Not all activities covered by this permit will be conducted at each site covered under this permit. Therefore, only those provisions of this permit that address activities occurring at a particular site are applicable to that site. [Minn. R. 7001]
	2.6.7	**Activities Not Covered/Limitations on Coverage**. [Minn. R. 7001]
	2.6.8	This permit does not authorize the discharge from the following activities except as authorized in the Applicability Section of this permit: a. Dewatering of mine or quarry areas other than those under Subsector J1 and J2. b. Surface water discharges of scrubber or other air emissions control wastewater, cooling or boiler wastewater, floor drains from process areas, equipment/vehicle washing, cleaning and maintenance wastewaters, and sewage. c. Contaminated groundwater discharges. d. Petroleum refinement. e. Manufacturing of asphalt or asphalt emulsions. f. Industrial sand mines (SIC 1446) that utilize HF flotation. g. Dredging or filling of wetlands or other surface waters of the state. h. Discharges of hazardous substances, lubricants, fuel leaks, or fuel spills. i. Sites for which Environmental Assessment Worksheets or Environmental Impact Statements are required by Minn. R. ch. 116D and/or 42 U.S.C. Sec 4321 - 4370f, until that environmental review is completed. [Minn. R. 7001]
	2.6.9	This permit does not authorize new or expanded discharges that may cause or contribute to a violation of water quality standards unless it meets the requirements of 40 CFR 122.4(i). [40 CFR 122.4(i)]
	2.6.10	This permit does not authorize existing discharges that the MPCA determines will cause or contribute to a violation of water quality standards unless it meets the requirements of 40 CFR 122.44. [40 CFR 122.44]
	2.6.11	This permit does not authorize discharges that adversely impact or contribute to adverse impacts on a listed endangered or threatened species or adversely modify a

		designated critical habitat. This permit does not replace or satisfy any review requirements for endangered or threatened species, from new or expanded discharges that adversely impact or contribute to adverse impacts on a listed endangered or threatened species or adversely modify a designed critical habitat. The owner must conduct any required review and coordinate with appropriate agencies for any project with the potential of affecting endangered or threatened species, or their critical habitat. [Minn. R. 7001]
	2.6.12	This permit does not authorize discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered archeological sites. This permit does not replace or satisfy any review requirements for historic places or archeological sites, from new or expanded discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered archeological sites. The owner must be in compliance with the National Historic Preservation Act and conduct all required review and coordination related to historic preservation, including significant anthropological sites and any burial sites, with the Minnesota Historic Preservation Officer. [Minn. R. 7001]
	2.6.13	This permit does not authorize discharges to calcareous fens listed in Minn. R. 7050.0335. [Minn. R. 7050.0335]
	2.6.14	Mine site dewatering discharges from Subsectors J1 and J2 to the following receiving waters are not authorized by this permit: a. Outstanding Resource Value Waters (ORVWs) as defined by Minnesota Rules 7050.0335 and as listed in Minnesota Rules 7050.0470; b. Department of Natural Resources (DNR)-designated trout waters (trout waters are designated in Minn. R. 6264.0050, subp. 2 and 4); and c. DNR-posted fish-spawning areas. [Minn. R. 6264.0125]
	2.6.15	**Authorization**. [Minn. R. 7001]
	2.6.16	Permit Application. Owners and operators of a site or sites with covered facility activities identified in this permit, and who provide a complete and approvable application for a permit, are eligible for coverage under this permit for those activities. [Minn. R. 7001]
	2.6.17	**Notice of Coverage**. [Minn. R. 7001]
	2.6.18	Permittees requesting initial coverage are covered under this permit when the MPCA notifies them in writing of this coverage. [Minn. R. 7001]
	2.6.19	Additional sites may be covered under this permit provided that the new site(s) meet all applicability criteria in of this permit and that all information required by the Site Inventory Report Form is submitted to the MPCA at least 10 days prior to initiation of land-disturbing activities at the new site(s) or initiation of operation at a previously developed site. [Minn. R. 7001]
	2.6.20	**Requiring an Individual Permit**. [Minn. R. 7001]
	2.6.21	If the MPCA finds that the facility site of a permit applicant or a Permittee covered under this permit would be more appropriately covered under an individual permit, the MPCA may require an individual permit for the applicant or the Permittee, in accordance with Minn. R. 7001.0210, subp. 6. In considering whether it is appropriate to issue an individual permit for a site, the MPCA will consider whether the site is contributing, or may contribute, to a water quality standard violation. [Minn. R. 7001]
	2.6.22	This general permit does not cover activities or discharges covered under a pre-existing individual permit unless the MPCA has specifically revoked or terminated that individual permit. [Minn. R. 7001]
	2.6.23	This general permit does not cover industrial sand mining activities (SIC Code 1446) that: a. Meet or exceed the thresholds for mandatory environmental review and the agency

		determines the operations, emissions, activities, discharges, or facilities of the permit applicant or permittee have characteristics creating the potential for significant environmental effects; or b. The agency determines the need for site-specific permit requirements including, but not limited to, groundwater monitoring, additional surface discharge monitoring, hydrogeological study, etc. which are beyond those contained in this permit in order to protect waters of the state. If the agency determines that a or b apply, a permit applicant or Permittee shall obtain coverage under an individual permit for the facility site. Sites that are required to obtain individual permit coverage, at the Permittee's request, may be reviewed for general permit eligibility following the first full term of individual permit coverage. [Minn. R. 7001]
	2.6.24	**Notice of Temporarily Inactive Site(s)**. [Minn. R. 7001]
	2.6.25	The Permittee(s) must ensure that permanent stormwater BMPs are in place if the site is temporarily inactive. [Minn. R. 7001]
	2.6.26	During the temporarily inactive period, intervention limit monitoring is not required, but the Permittee must indicate on the Comments field of the Discharge Monitoring Report the inactivity. Should the site become active, the Permittee is required to sample in accordance with the Monitoring Requirements section of the permit for the calendar year the site becomes active. [Minn. R. 7001]
	2.6.27	**Notice of Inactive Site(s)**. [Minn. R. 7001]
	2.6.28	The Permittee(s) must ensure stabilization of the site upon cessation of mining activities. Stabilization shall be initiated immediately after the termination of the mining operation and upon completion the area shall be restored to its intended state. [Minn. R. 7001]
	2.6.29	The Permittee(s) must complete the following to achieve final stabilization: a. The drainage ways that leave the site must be stabilized to prevent erosion with riprap or other protective material. b. All soils must be stabilized by a uniform perennial vegetative cover with a density of 70 percent over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions. c. Temporary BMPs for erosion prevention, such as synthetic liners and silt fences, must be removed. BMPs designed to decompose on site (such as some compost logs) may be left in place. d. All sediment must be removed from conveyances and from temporary sedimentation basins that are to be used as permanent water quality management basins in order to sufficiently return the basin to design capacity. Sediment must be stabilized to prevent it from being washed back into the basin, conveyances or drainage-ways discharging off-site or to surface waters. e. Other BMPs as necessary must be implemented so as to prevent erosion from the site excavation areas and stockpiles that have been used by the Permittee. [Minn. R. 7001]
	2.6.30	In order to have permit coverage terminated and have the Permittee released from inspection, recording and reporting requirements, the Permittee shall ensure and certify on the Site Inventory Form for site(s) where the Permittee no longer conducts the activities authorized by this permit that: a. The site closure achieves final stabilization requirements, or b. There is no longer a discharge of pollutants to waters of the state, including groundwater, from activities covered by this permit; or c. The Permittee supplies the name and contact information for the new owner or operator that is responsible for the site. [Minn. R. 7001]

	2.6.31	**Water Quality Based Effluent Limits**. [Minn. R. 7001]
	2.6.32	A wastewater discharge shall not cause or contribute to a violation of water quality standards unless the discharge meets all requirements of 40 CFR 122.44. [40 CFR 122.44]
	2.6.33	The Permittee shall operate and maintain the facility and shall control runoff, including stormwater, from the facility to prevent the exceedance of water quality standards specified in Minnesota Rules, chs. 7050 and 7060. [Minn. R. 7050, Minn. R. 7060]
	2.6.34	The Permittee shall limit and control the use of materials at the facility that may cause exceedances of surface water and groundwater standards specified in Minnesota Rules, chs. 7050 and 7060. These materials include, but are not limited to, detergents and cleaning agents, solvents, chemical dust suppressants, lubricants, fuels, drilling fluids, oils, fertilizers, explosives and blasting agents. [Minn. R. 7050, Minn. R. 7060]
	2.6.35	The MPCA may modify this permit, require corrective actions or take other actions if it determines that a discharge authorized by this permit is causing or contributing to a violation of water quality standards. [Minn. R. 7001]
	2.6.36	Floating solids or visible foam shall not be discharged in other than trace amounts. [Minn. R. 7001]
	2.6.37	Oil or other substances shall not be discharged in amounts that create a visible color film. [Minn. R. 7001]
	2.6.38	Any outlet pipe, culvert or hose outlets for the discharge shall be located on the ground. The Permittee shall install and maintain outlet protection measures, such as properly sized riprap, splash pads or gabions at the discharge stations (outlets) to prevent erosion. [Minn. R. 7001]
	2.6.39	All water from dewatering or basin draining activities must be discharged in a manner that does not cause nuisance conditions, flooding on nearby properties, erosion in receiving channels or on downslope properties, or inundation in a wetland causing adverse impact to the wetland. [Minn. R. 7001]
	2.6.40	**Special Requirements**. [Minn. R. 7001]
	2.6.41	For stormwater discharges with a discharge location that flows to and is within one mile of Outstanding Resource Value Waters (ORVWs) as defined in Minn. R. 7050.0335, subp. 1, 2, 3, and 4 (not including calcareous fens listed in Minn. R. 7050.0335 & Minn. R. 7050.0470) and trout waters as listed in Minn. R. 6264.0050, subp. 2 and 4: a. the Permittee shall develop and implement stormwater control measures, including BMPs that restrict the facility industrial stormwater discharges to the extent necessary to preserve the existing high quality, or to preserve the wilderness, scientific, recreational, or other special characteristics that make the water an Outstanding Resource Value Water. In addition, a stormwater intervention limit value of 65 mg/L for Solids, Total Suspended (TSS) applies to the discharge at a stormwater monitoring location, instead of 100 mg/L as specified in the 'Stormwater Limits and Monitoring Intervention Limits' section of this Permit. If the Permittee has a waiver from the requirements to conduct benchmark monitoring in accordance with the Technology Based Effluent Limits - Stormwater Discharges section of this permit, the benchmark value does not apply. b. if the discharge is to a trout stream, BMPs shall also be designed and implemented to protect the water quality from excess temperature increases. c. if the discharge is to a trout lake, BMPs shall also be designed and implemented to protect the water quality from excess phosphorus increases. d. if the discharge is to a wetland, the Permittee shall also comply with the requirements of Minn. R. 7050.0186 WETLAND STANDARDS AND MITIGATION. [Minn. R. 7050]
	2.6.42	If the site has any stormwater discharges with the potential for significant adverse

		impacts to a wetland (e.g., conversion of a natural wetland to a stormwater pond), the Permittee must demonstrate that the wetland mitigative sequence has been followed. [Minn. R. 7001]
	2.6.43	If the potential adverse impacts to a wetland on a specific site have been addressed by permits or other approvals from an official statewide program (U.S. Army Corps of Engineers 404 program, Minnesota Department of Natural Resources, or the State of Minnesota Wetland Conservation Act) specifically for the site, the Permittee may use that permit or other determination issued by these agencies to show that the potential adverse impacts have been addressed. For the purposes of this permit, de minimis actions are determinations by the permitting agency that address the site impacts, whereas a non-jurisdictional determination does not address site impacts. [Minn. R. 7001]
	2.6.44	If there are impacts from the site that are not addressed in one of the permits addressed in the Special Requirements section of this permit or other determinations (e.g., permanent inundation or flooding of the wetland, significant degradation of water quality, excavation, filling, draining), the Permittee must minimize all adverse impacts to wetlands by utilizing appropriate measures. Measures used must be based on the nature of the wetland, its vegetative community types and the established hydrology. These measures include in order of preference: a. Avoid all significant adverse impacts to wetlands from site discharges. b. Minimize any unavoidable impacts to wetlands from site discharges. c. Provide compensatory mitigation when the Permittee determines that there is no reasonable and practicable alternative to having a significant adverse impact on a wetland. For compensatory mitigation, wetland restoration or creation shall be of the same type, size and whenever reasonable and practicable in the same watershed as the impacted wetland. [Minn. R. 7001]
	2.6.45	If a site discharges to a water of the state that appears on the current U.S. Environmental Protection Agency (USEPA) approved list of impaired waters under Section 303 (d) of the Clean Water Act (33 U.S.C. Sec 303 (d)), the Permittee must review whether changes may be warranted in the site's Pollution Prevention Plan (Plan) to reduce the impact of the discharge. If an USEPA approved Total Maximum Daily Load (TMDL) has been developed, the Permittee must review the adequacy of the Plan to meet the TMDLs Waste Load Allocation. [Minn. R. 7001]
	2.6.46	**Technology Based Effluent Limits - Stormwater Discharges**. [Minn. R. 7001]
	2.6.47	**Stormwater Management Devices**. [Minn. R. 7001]
	2.6.48	The Permittee is authorized to use industrial stormwater ponds, sedimentation basins and/or infiltration devices for stormwater management. [Minn. R. 7001]
	2.6.49	Industrial stormwater ponds, sedimentation basins and/or infiltration devices shall not be located in areas that receive direct discharges from permanent or stationary vehicle fueling tanks (aboveground or underground storage tanks) and maintenance activity areas (shops), except where adequate secondary containment is provided as required under the SPCC Rule, and/or the basin is designed specifically to satisfy the federal SPCC Rule. Spill prevention and response BMPs shall be implemented in areas where mobile refuelers transfer product. [Minn. R. 7001]
	2.6.50	When wastewater from authorized activities is co-mingled with stormwater, it is considered wastewater, and a surface water discharge is not authorized under this permit. This does not include stormwater co-mingling with mine dewatering from Subsector J1 and J2 facilities, which is approved for a surface water discharge under this permit. [Minn. R. 7001]
	2.6.51	If the Permittee provides documentation to MPCA that the stormwater management device was designed by a registered professional engineer to control a 10-year, 24-hour storm event (based on National Oceanic and Atmospheric Administration Atlas 14, Volume 8 (NOAA Atlas 14, Volume 8)), then no sampling of a discharge is required

		upon MPCA approval. If the stormwater management device is already in place at an existing facility, the sizing of the device shall be confirmed by a registered professional engineer before the sampling requirement is waived. This does not include unauthorized non-stormwater discharges to surface waters. This waiver is for monitoring only; effluent limits still apply to the discharge and Permittees must maintain compliance with the limits. This waiver is only effective for the term of the permit. Permittees must reapply for the waiver every permit term. [Minn. R. 7001]
	2.6.52	**Erosion and Sediment Control Practices**. [Minn. R. 7001]
	2.6.53	Sediment control practices must be established on all down-gradient perimeters and be located up-gradient of any buffer zones. The perimeter sediment control practice must be in place before any up-gradient land disturbing activities begin. Use a range of erosion controls within the broad categories of flow diversion (e.g. swales, berms) and structural controls (e.g. sediment traps, dikes, silt fences). These practices shall remain in place until the site has been stabilized. [Minn. R. 7001]
	2.6.54	The Permittee shall re-install all sediment control practices that have been adjusted or removed to accommodate short-term activities such as clearing or grubbing, or passage of vehicles, immediately after the short-term activity has been completed. Short-term activities shall be completed as quickly as possible. Re-installation of sediment control practices shall be completed no later than the next precipitation event, even if the short-term activity is not complete. [Minn. R. 7001]
	2.6.55	The Permittee(s) shall plan for and implement appropriate BMPs such as construction phasing, vegetative buffer strips, horizontal slope grading, and other construction practices that minimize erosion. The location of areas not to be disturbed shall be delineated (e.g. with flags, stakes, signs, silt fence etc.) on the project site before work begins. [Minn. R. 7001]
	2.6.56	Temporary stockpiles or stripping/overburden stored outside the pit shall have sediment control mechanisms in place until the material is completely removed. Materials shall not be placed in any natural buffers, surface water, or stormwater conveyances such as curb and gutter systems, or conduits and ditches. [Minn. R. 7001]
	2.6.57	Vehicle Tracking. Vehicle tracking of sediment onto paved surfaces from the site or operation must be minimized by BMPs such as stone pads, concrete or steel wash racks, or equivalent systems. Street sweeping must be used if such BMPs are not adequate to prevent sediment from being tracked onto the street. The MPCA Vehicle Tracking factsheet may be used as guidance in BMP development: http://www.pca.state.mn.us/index.php/view-document.html?gid=7419. [Minn. R. 7001]
	2.6.58	Good Housekeeping. Permittees conducting the industrial activities described in this permit shall keep exposed areas that may contribute pollutants to stormwater sufficiently clean to reduce or eliminate contaminated stormwater runoff. [Minn. R. 7001]
	2.6.59	**BMP Maintenance**. [Minn. R. 7001]
	2.6.60	The Permittee shall maintain all BMPs identified in the Pollution Prevention Plan (Plan) and implemented at the facility, to ensure BMP effectiveness. [Minn. R. 7001]
	2.6.61	The Permittee shall develop a schedule for preventive maintenance of all BMPs. The schedule shall be stored with the Plan. [Minn. R. 7001]
	2.6.62	If the Permittee identifies BMPs that are not functioning properly, the Permittee shall replace, maintain, or repair the BMPs within seven (7) calendar days of discovery. If BMP replacement, maintenance, or repair cannot be completed within seven (7) calendar days, the Permittee shall implement effective backup BMPs (temporary or permanent) until effectiveness of the original BMPs can be restored. The Permittee shall document the justification for an extended replacement, maintenance, or repair schedule of the failed BMPs, and store it with the Plan. [Minn. R. 7001]
	2.6.63	The Permittee shall record dates of all maintenance and repairs. The Permittee shall store these records with the Plan. [Minn. R. 7001]

	2.6.64	All silt fences must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/2 of the height of the device. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access. [Minn. R. 7001]
	2.6.65	If sediment escapes the facility, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in streets could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets). [Minn. R. 7001]
	2.6.66	Temporary and permanent sedimentation basins must have the sediment removed once the depth of sediment collected in the basin reaches 1/2 the storage volume. Removal must be completed within 72 hours of discovery, or as soon as field conditions allow access. [Minn. R. 7001]
	2.6.67	**Spills and Leaks**. [Minn. R. 7001]
	2.6.68	The Permittee shall develop and implement a spill prevention and response procedure. If the site already has a separate plan (e.g. Prevention and Response Plan as required by Minn. Stat. 115E, or Spill Prevention Control and Countermeasure Plan as required by Federal Law), that plan can be incorporated by reference into the Pollution Prevention Plan (Plan). In either case, a minimum of the following components shall be included with the Plan, or in a separate document: a. The Permittee shall report and document spills or leaks (as defined in Minn. Stat. Section 115.061) that occur in exposed areas, or that drain to a monitoring location. b. Material handling procedures, storage requirements, and cleanup equipment/materials and procedures necessary to recover as rapidly and thoroughly as possible spills or leaks pursuant to Minn. Stat. Section 115.061. All methods and procedures must be made available to appropriate site personnel. c. Contact information for individuals and emergency and regulatory agencies that must be notified in the event of a spill. When a spill or discharge of a potentially polluting material occurs, the Permittee shall immediately notify the Minnesota Department of Public Safety Duty Officer at 1-800-422-0798 (toll free) or 651-649-5451 (metro area) per Minn. Stat. Section 115.061. [Minn. Stat. ch. 115]
	2.6.69	**Subsector D1 - Asphalt Production - Additional Spills and Leaks Requirements**. [Minn. R. 7001]
	2.6.70	In addition to the requirements in this Section, the Permittee shall use drip pans and splash guards where spills frequently occur at Subsector D1 facilities. [Minn. R. 7001]
	2.6.71	**Subsector E2 - Ready-Mix and Other Concrete Operations - Additional Spills and Leaks Requirements**. [Minn. R. 7001]
	2.6.72	In addition to the requirements in this Section, the Permittee shall prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), kiln dust, fly ash, or settled dust from paved portions of the facility that are exposed to stormwater at Subsector E2 facilities. [Minn. R. 7001]
	2.6.73	The Permittee shall determine the frequency of sweeping or equivalent by the amount of industrial activity occurring at Subsector E2 facilities and the frequency of exposure to stormwater, but it shall be performed at least once per week if cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed and materials are present on paved surfaces. [Minn. R. 7001]
	2.6.74	The Permittee shall also prevent the exposure of fine granular solids (cement, fly ash, kiln dust, etc.) to stormwater, where practicable, by storing these materials in enclosed silos, hoppers, buildings, and under other coverings. [Minn. R. 7001]
	2.6.75	The Permittee shall include measures in the Plan to ensure that process wastewater resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with applicable parts of this permit for Subsector E2 facilities. [Minn. R. 7001]
	2.6.76	**Technology Based Effluent Limits - Non-Stormwater Discharges**. [Minn. R. 7001]

	2.6.77	**Wastewater Basin Design and Construction Requirements**. [Minn. R. 7001]
	2.6.78	When constructing new (as of the issuance date of this permit) containment basins to infiltrate authorized non-stormwater discharges, not including uncontaminated scale deck wash water that does not use detergents, solvents, or degreasers, wash water associated with cleaning of mobile equipment that does not use detergents, solvents, or degreasers and/or waters used for sawing stone or dust control on crushers, conveyors, associated equipment, stockpiles, and site roadways, of this permit from Subsector J1 and J2 activities, it shall: a. Have at least sufficient capacity to contain all wastewater discharges so as to prevent overflow. b. Be constructed to contain the bounce from precipitation and stormwater runoff resulting from a 10-year, 24 hour storm event. Any overflow of the basin shall not discharge to surface water or any storm sewer system. c. Not be constructed in areas that receive direct discharges from permanent or stationary vehicle fueling tanks (underground or aboveground storage tanks) and maintenance activity areas (shops). Spill prevention and response BMPs shall be implemented in areas where mobile refuelers transfer product. [Minn. R. 7001]
	2.6.79	When constructing new (as of the issuance date of this permit) containment basins to infiltrate authorized non-stormwater discharges from Subsector E2 activities, it shall: a. Be designed consistent with accepted engineering practices. Designs shall be approved by a professional engineer or other licensed professional. b. Be constructed and maintained to allow for infiltration of wastewater. Long term soil infiltration rates for new infiltration devices shall not be greater than 1.63 inches per hour unless pretreatment practices are implemented prior to infiltration. c. Be constructed to allow for maximum separation distance from groundwater with a minimum of 3 feet between the bottom of the impoundment and the seasonal high water table. d. Have at least sufficient capacity to contain all wastewater discharges so as to prevent overflow. e. Be constructed to contain the bounce from precipitation and stormwater runoff resulting from a 10-year, 24 hour storm event. Any overflow of the basin shall not discharge to surface water or any storm sewer system. f. Not be constructed in areas with standing water or areas that receive direct discharges from permanent or stationary vehicle fueling tanks (underground or aboveground storage tanks) and maintenance activity areas (shops). Spill prevention and response BMPs shall be implemented in areas where mobile refuelers transfer product. The Permittee shall maintain design documentation to demonstrate containment basins meet the requirements of a-f. [Minn. R. 7001]
	2.6.80	When constructing new (as of the issuance date of this permit) containment basins to infiltrate authorized non-stormwater discharges from Subsector E2 activities, it shall: a. Be designed consistent with accepted engineering practices. Designs shall be approved by a professional engineer or other licensed professional. b. Be constructed and maintained to allow for infiltration of wastewater. Long term soil infiltration rates for new infiltration devices shall not be greater than 1.63 inches per hour unless pretreatment practices are implemented prior to infiltration. c. Be constructed to allow for maximum separation distance from groundwater with a minimum of 3 feet between the bottom of the impoundment and the seasonal high water table. d. Have at least sufficient capacity to contain all wastewater discharges so as to

		prevent overflow. e. Be constructed to contain the bounce from precipitation and stormwater runoff resulting from a 10-year, 24 hour storm event. Any overflow of the basin shall not discharge to surface water or any storm sewer system. f. Not be constructed in areas with standing water or areas that receive direct discharges from permanent or stationary vehicle fueling tanks (underground or aboveground storage tanks) and maintenance activity areas (shops). Spill prevention and response BMPs shall be implemented in areas where mobile refuelers transfer product. The Permittee shall maintain design documentation to demonstrate containment basins meet the requirements of a-f. [Minn. R. 7001]
	2.6.81	**Karst Topography**. [Minn. R. 7001]
	2.6.82	New Basins. New infiltration devices for authorized non-stormwater discharges are prohibited within 1000 feet up-gradient or 100 feet downgradient of active karst features. [Minn. R. 7001]
	2.6.83	Existing Basins. The design and construction of containment basins shall include additional or different measures as necessary (e.g. impervious liner in pond bottom) to assure compliance with surface and groundwater standards in Minn. R. chs. 7050 and 7060 and to ensure protection of drinking water supply management areas (see Minn. R. 4720.5100, subp. 13). These measures shall be identified in the Pollution Prevention Plan. [Minn. R. 7001]
	2.6.84	**Subsector J1 and J2 - Mine Pit Dewatering to Surface Waters**. [Minn. R. 7001]
	2.6.85	Permittees are authorized to discharge mine site dewatering flow to surface waters if the following conditions are met: a. Discharges only from Subsector J1 and J2 facilities. b. Discharges meet the effluent limits applied in this permit. c. The dewatering discharges do not co-mingle with other process wastewater. d. The dewatering discharges are not to ORVWs, DNR-designated trout waters, and/or DNR-posted fish-spawning areas. e. The Permittee has documented in their Pollution Prevention Plan location and initial flow estimates for surface discharge stations. [Minn. R. 7001]
	2.6.86	Dewatering or basin draining must be discharged to a control device on the project site whenever possible, such as a temporary or permanent sedimentation basin or infiltration device. Discharge from the control device must be visually checked to ensure adequate treatment is obtained and that nuisance conditions (see Minn. R. 7050.0210, subp. 2) will not result from the discharge. [Minn. R. 7001]
	2.6.87	If the Permittee provides documentation to MPCA that the control device was designed by a registered professional engineer to control a 10-year, 24-hour storm event, then no sampling of a discharge is required upon MPCA approval. If the control device is already in place at an existing facility, the sizing of the control device shall be confirmed by a registered professional engineer before the sampling requirement is waived. This includes overflows caused solely by direct rainfall and groundwater seepage. This does not include unauthorized non-stormwater discharges to surface waters. This waiver is for monitoring only; effluent limits still apply to the discharge and Permittees must maintain compliance with the limits. This waiver is only effective for the term of the permit. Permittees must reapply for the waiver every permit term. [Minn. R. 7001]
	2.6.88	If the water cannot be discharged to a control device prior to entering the surface water, it must be treated with the appropriate BMPs, such that the discharge does not adversely affect the receiving water or downstream landowners. [Minn. R. 7001]
	2.6.89	The Permittee(s) must ensure that discharge points are adequately protected from erosion and scour. The discharge must be dispersed over natural riprap, sand bags,

		plastic sheeting, or other accepted energy dissipation measures. Adequate sedimentation control measures are required for discharge water that contains suspended solids. [Minn. R. 7001]
	2.6.90	Any inlet pipe, culvert or hose for the discharge shall be raised above the ground so that the discharge flow does not draw in and transport solids from the sump area. [Minn. R. 7001]
	2.6.91	**Subsector D1 -Asphalt - BMPs for Wet Scrubber Wastewater**. [Minn. R. 7001]
	2.6.92	This permit authorizes stormwater discharges from asphalt production areas (SIC Code 2951) and/or stormwater discharges from the installation, construction, and/or operation of wet scrubbers at asphalt production plants. This permit does not authorize the discharge of asphalt production wet scrubber wastewater to surface waters or to groundwater. Any discharge to surface water will require an individual NPDES permit. [Minn. R. 7001]
	2.6.93	Wastewater from asphalt production wet scrubbers shall be held within pipes, aboveground tanks or lined impoundments. Pipes and tanks shall be operated and maintained to prevent leaks. Cracks or other failures in pipes or tanks shall be repaired immediately. If pipes are buried, or pipes or tanks are in contact with the land surface, they shall be inspected at least once before each operating year to locate and repair cracks or other failures. [Minn. R. 7001]
	2.6.94	An impoundment for containment of wet scrubber wastewater shall meet the design criteria specified in this section. Impoundments that do not meet the criteria in this part may be authorized if requested in writing by the Permittee, and approved in writing by the MPCA, at least 90 days before construction of the impoundment begins. [Minn. R. 7001]
	2.6.95	Construction of impoundments in close proximity to drinking water supplies and other areas subject to contamination should be avoided. A minimum separation of four feet between the top of the impoundment seal and the seasonal high water table shall be maintained. Drain tile under the impoundment shall not be used to permanently lower the water table. A minimum separation of ten feet between the top of the impoundment seal and bedrock formations shall be maintained. Impoundments shall not be constructed on locations with karst topography. [Minn. R. 7001]
	2.6.96	Impoundments shall be constructed utilizing at least a 30-mil-thick continuous Polyvinyl Chloride (PVC) or High Density Polyethylene (HDPE) liner, or a reinforced Portland cement concrete liner. A PVC or HDPE liner, not replaced on an annual basis, shall be covered with at least one-foot depth of finely textured soil. Liquid depths for impoundments shall be designed for a maximum of six feet. [Minn. R. 7001]
	2.6.97	PVC and HDPE liner systems shall be designed and installed in general accordance with the most recent version of MPCA guidance documents High Density Polyethylene Liner Guidance (June 2011) or Polyvinyl Chloride Liner Guidelines (May 2011). [Minn. R. 7001]
	2.6.98	No PVC or HDPE liner panels shall be used at more than one site without the prior written approval of the MPCA. The Permittee shall remove and properly dispose of used PVC and HDPE liner materials in accordance with applicable solid waste statutes and rules. [Minn. R. 7001]
	2.6.99	The subsoil bed for a PVC or HDPE liner shall be sufficiently prepared to ensure that all holes, rocks, stumps and other debris are eliminated. The subsoil shall be sieved or the area raked after grading to provide a smooth, flat surface free of stones and other sharp objects. The subsoil bed shall be sloped at least 1% upward toward the dike, so as to reduce gas and hydrostatic pressures, and to facilitate pumping of the impoundment. [Minn. R. 7001]
	2.6.100	PVC and HDPE liner panels shall be laid out to minimize seams, with an overlap of four to size inches. The PVC or HDPE liner anchor trench shall have a minimum six inch depth and be placed at least nine to twelve inches beyond the slope break at the dike.

		PVC and HDPE liners shall be installed under the direct supervision of a person experienced in the proper installation of such liners. This person shall inspect all seams on-site for their acceptability prior to the construction certification. [Minn. R. 7001]
	2.6.101	The design of a reinforced Portland cement concrete liner shall be in accordance with the American Concrete Institute (ACI) Manual of Concrete Practice. [Minn. R. 7001]
	2.6.102	The Permittee shall inspect each impoundment for cracks or other failures, at least once each operating year. This inspection shall be conducted after the spring thaw and before the start of the asphalt plant operating season. In addition: a. PVC and HDPE lined impoundments shall complete a water balance test annually after the spring thaw and before the start of the asphalt plant operating season. The water balance test shall be completed in accordance with the MPCA "Prefill and Water Balance Criteria" (December 2010). b. Concrete lined impoundments shall complete water tightness testing at least once per 5 years (once per permit cycle). Water tightness testing for concrete impoundments shall be completed in accordance with the most recent version of ACI 350.1 "Specification for Tightness Testing of Environmental Engineering Concrete Containment Structures." Impoundments that do not pass the water balance or tightness testing may not be placed into service until a passing result is achieved; this may require identifying and repairing problem areas of the impoundment and repeating the testing. The inspector shall prepare a written report of each water balance and inspection. Any cracks or other failures shall be repaired immediately, and certified by an engineer registered in Minnesota. [Minn. R. 7001]
	2.6.103	The Permittee shall keep signed copies of the impoundment design plans and specifications, construction certifications, water balance and inspection reports, and repair certifications with the asphalt plant at all times. [Minn. R. 7001]
	2.6.104	The Permittee shall divert surface water runoff around impoundments, prevent erosion, and protect the structural integrity of exterior embankments from failure. [Minn. R. 7001]
	2.6.105	The Permittee shall maintain impoundments during the winter so that ice layers and frost action do not damage the liner effectiveness and integrity. [Minn. R. 7001]
	2.6.106	Sediments that accumulate in asphalt production wet scrubber wastewater containment structures shall be removed in a manner so as to not damage the integrity and effectiveness of the containment structure. The Permittee may dispose of these sediments at a permitted sanitary landfill, through use as road base or subgrade, or through blending into the paving asphalt mixture. The Permittee may use one of the following options for sediment disposal if the MPCA authorizes this specific in writing: a. Leave in-place, b. Use as clean fill, or c. Land spread. The Permittee shall record in writing the volume of sediments removed from asphalt production scrubber disposal systems, and the method and location of the disposal of such materials. [Minn. R. 7001]
	2.6.107	The Permittee may dispose of asphalt production wet scrubber wastewater for the purposes of roadbed preparation or dust control, and in accordance with the following requirements: a. Wastewater may be applied to the surface of unpaved roads or roadbeds only if the

		asphalt plant is in the process of relocating, has ceased operation for the remainder of the year, or if alterations to the impoundment are needed. b. Wastewater may be applied to the surface of unpaved roads or roadbeds only if that road or roadbed is dry. c. Application to haul roads shall be conducted in such a manner to prevent runoff or prolonged ponding. d. Only the amount of water needed to control or prevent a dust problem may be applied. e. Wastewater used for dust control shall not enter any road ditch, surface water, or wetland. f. Wastewater shall not be applied at a rate greater than one gallon per square yard per year. [Minn. R. 7001]
	2.6.108	Asphalt Ingredients, Burner Fuels and Chemical Additives. If the Permittee proposes to use asphalt ingredients, burner fuels and/or chemical additives other than those designated below, at an asphalt production plant with a wet scrubber, the Permittee shall apply in writing to the MPCA for such approval, no later than 60 days before the planned date of utilization of the non-designated material. The Permittee may use these non-designated materials only with the written approval of the MPCA. The designated materials are: a. Clay, silt, sand, gravel and crushed stone produced from naturally occurring geologic formations, and without chemical additives. b. Recycled asphalt. c. Recycled asphalt saturated felt materials. d. Natural gas, butane, propane and methane. e. Gasoline, kerosene, diesel fuel, jet fuel and fuel oils (No. 1, No. 2, No. 3, No. 4, No. 5, No. 6). f. Petroleum derived waste oil as defined in Minn. R. 7045.0020. g. On-specification used oil fuel, as defined in Minn. R. pt. 7045.0020, except that total halogens shall not exceed 1,000 parts per million in the used oil fuel. h. Asphalt cement (AC). i. Hydrated lime. j. Anti-stripping agents approved by the MPCA under this permit. k. Aluminum chloride flocculants. l. Freemont 8201 and anionic polyacrylamide flocculants of similar chemical composition. m. Any mixture of the materials listed in subitems (a) through (l). n. Portland cement concrete. o. Recycled sediments from asphalt plant scrubber operations. p. Fines from asphalt fabric filter operations. q. Silicone. [Minn. R. 7001]
	2.6.109	**Subsector E2 - Ready-Mix and Other Concrete Operations Discharges to Groundwater**. [Minn. R. 7001]
	2.6.110	This permit section is intended to cover process wastewater discharges from concrete product operations. Authorized discharges to groundwater specified in the Applicability Section of this permit are covered under this permit. Any discharge to surface water will require an individual NPDES permit. Wastewater discharges from facilities described by the following Standard Industrial Classification (SIC) codes are authorized: a. Concrete Block and Brick (SIC 3271) b. Concrete Products, N.E.C. (Not Elsewhere Covered) (SIC 3272) c. Ready-Mix Concrete (SIC 3273). [Minn. R. 7001]
	2.6.111	Containment basins shall be constructed in compliance with this permit. [Minn. R.

		7001]
	2.6.112	Authorized E2 activity discharge to new containment basins (as of the issuance date of this permit) must meet the following conditions: a. be constructed to allow for maximum separation distance from groundwater with a minimum of 3 feet between the bottom of the impoundment and the seasonal high water table. b. If the wastewater pH of authorized discharges from E2 activities is outside the range of 6.0-9.0 Standard Units (SU), the wastewater must also be passed through an extra soil zone, mixed with other authorized process waters or rinse waters, or held in a lined or sealed basin to prevent infiltration in order to bring the pH within the range of 6.0-9.0 SU before the wastewater mixes with groundwater. [Minn. R. 7001]
	2.6.113	Authorized E2 activity discharge to existing containment basins must meet the following conditions: a. If the wastewater pH of authorized discharges from E2 activities is outside the range of 6.0-9.0 Standard Units (SU), the wastewater must also be passed through a soil zone, mixed with other authorized process waters or rinse waters, or held in a lined or sealed basin to prevent infiltration in order to bring the pH within the range of 6.0-9.0 SU before the wastewater mixes with groundwater. [Minn. R. 7001]
	2.6.114	**Pollution Prevention Plan (Plan)**. [Minn. R. 7001]
	2.6.115	The Permittee shall develop and implement a Pollution Prevention Plan (Plan) to address the specific conditions at the site. The goal of the Plan is to eliminate or minimize contact of stormwater with significant materials that may result in pollution of the runoff, as well as identify and correctly manage non-stormwater discharges. [Minn. R. 7001]
	2.6.116	A Plan shall be developed, implemented, and maintained for each site authorized by this permit. A Plan shall be prepared and maintained in an appropriate and functional manner in accordance with relevant manufacturer specifications and accepted engineering practices. [Minn. R. 7001]
	2.6.117	A Plan shall be completed prior to submitting the permit application for authorization of activities by this permit. Permittees authorized under the previous version of this permit shall modify the Plan to comply with the requirements of this permit prior to submitting the permit application. [Minn. R. 7001]
	2.6.118	A Plan shall be used by the Permittee to document all BMPs used to comply with all control measures required in the Technology Based Effluent Limits sections of this permit. BMPs shall be designed and implemented to address the potential pollutants associated with the activities and materials identified by the Permittee. The documentation shall include a list of all structural and non-structural BMPs designed and implementation at the site. [Minn. R. 7001]
	2.6.119	The Plan shall include documentation of an assessment and inventory/list of materials handled and activities conducted at the site that can potentially be a source of pollutants to stormwater discharges. The assessment shall include but is not limited to the materials and activities identified below: a. Excavation. b. Crushing/Screening. c. Overburden, waste and products stockpiles. d. Raw material and final product storage. e. Waste products. f. Sediment washing. g. Material loading/unloading. h. Areas where spills and leaks may potentially contribute pollutants to stormwater. i. Vehicle and equipment maintenance, washing, and fueling.

		j. Chemical additives/dust suppressant use. [Minn. R. 7001]
	2.6.120	The Plan for each site shall include an inventory of all chemical additives currently used to treat wastewater and/or stormwater including chemical dust suppressants. This inventory shall include: a. The name of the additive. b. The process for which the additive will be used. c. The proposed method of application, application frequency, and daily average and maximum rates of use. d. The date of MPCA approval. MPCA approval is required for any additives that are new, increasing in usage, or not previously approved. See the Total Facilities Requirements section of this permit and go to the chemical additive webpage at http://www.pca.state.mn.us/index.php/water/water-types-and-programs/wastewater/wastewater-technical-assistance/chemical-additive-approvals.html to find the documents necessary to complete the approval process. [Minn. R. 7001]
	2.6.121	The Plan for each site shall include a site map, which does not need to be a surveyed map, at least to the level of detail indicated on a 7.5-minute U. S. Geological Survey quadrangle map, which identifies: a. Location of the site in relation to surface waters (including the name of the surface water; if the name is not known, indicate that on the map). b. Location of all impaired waters within one mile. The Permittee shall include the name of the impaired water and the impairment (e.g. impaired for biota fish, turbidity, nutrients, etc.). c. Location of all ORVWS, designated trout waters, and wetlands within one mile of the site (Minn. R. 7050.0335, 6264.0050, and 7050.0420). d. Directions of stormwater flow indicated by arrows (including stormwater that is contained/infiltrated on site). e. Location of all discharge points. f. Location of all overflow points from control devices. g. Topography of the area. h. Location of all activities and materials. i. Location of all structural BMPs. j. Location and description of any non-stormwater discharges. k. Dewatering points. l. Water supply wells. m. Surface water supply intakes. Portable sites can meet the requirements of g. through m. above by developing general plant configuration maps. [Minn. R. 7001]
	2.6.122	The Plan for each site shall include a site map, which does not need to be a surveyed map, at least to the level of detail indicated on a 7.5-minute U.S. Geological Survey quadrangle map, which identifies: a. Location of the site in relation to surface waters (including the name of the surface water; if the name is not known, indicate that on the map). b. Location of all impaired waters within one mile. The Permittee shall include the name of the impaired water and the impairment (e.g. impaired for biota fish, turbidity, nutrients, etc.). c. Location of all ORVWs, designated trout waters, and wetlands within one mile of the site (Minn. R. 7050.0335, 6264.0050, and 7050.0420).

		d. Directions of stormwater flow indicated by arrows (including stormwater that is contained/infiltrated on site). e. Location of all discharge points. f. Location of all overflow points from control devices. g. Topography of the area. h. Location of all activities and materials. i. Location of all structural BMPs. j. Location and description of any non-stormwater discharges. k. Dewatering points. l. Water supply wells. m. Surface water supply intakes. Portable sites can meet the requirements of g. through m. above by developing general plant configuration maps. [Minn. R. 7001]
	2.6.123	The Permittee shall review the Plan at least annually and modify the Plan, if: a. There is construction or a change in design, operation, or maintenance at the facility that affects stormwater and wastewater management or compliance with this permit. b. The Permittee has identified a monitoring location from which the discharge flows to, and is within one mile of, an impaired water. c. A routine inspection, compliance evaluation, or visual inspection identified deficiencies in the Plan and/or BMP. d. Additional stormwater and/or wastewater control measures and BMPs are necessary to meet applicable water quality standards or to address exceedances of intervention limits. e. There is an unauthorized discharge from the facility. If the Plan modification is based on a release or unauthorized discharge, include in the modified Plan a description and date of the release, the circumstances leading to the release, actions taken in response to the release, and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements in the Total Facilities Requirements section of this permit. [Minn. R. 7001]
	2.6.124	The Plan must be kept at the site when the site is Active. If there is no office located on-site, electronic access of the Plan is acceptable. The Plan must be available to the Agency within 72 hours of a request for review. [Minn. R. 7001]
	2.6.125	The Plan shall identify the individual(s) responsible for managing, implementing, maintaining, modifying, and ensuring compliance with the site's Plan, as well as personnel responsible for managing and implementing the Plan. [Minn. R. 7001]
	2.6.126	The Permittee must develop and implement an employee training program to inform appropriate personnel of the components and goals of the Plan. The Plan must also identify periodic dates for such training. [Minn. R. 7001]
	2.6.127	Records of all inspections conducted in accordance with permit requirements shall be maintained within the Plan. [Minn. R. 7001]
	2.6.128	**Subsector D1 - Asphalt - Additional Plan Requirements**. [Minn. R. 7001]
	2.6.129	Asphalt facilities (Subsector D1) must also identify: a. Petroleum storage. b. Fuel Storage. c. Recycled Asphalt Pavement Storage. d. Aggregate Storage. e. Recycled concrete, concrete block and brick crushing and storage. f. Cold Patch Storage. g. Release agent storage and application. [Minn. R. 7001]
	2.6.130	**Subsector E2 - Ready-Mix Operations - Additional Plan Requirements**. [Minn. R.

		7001]
	2.6.131	Ready-Mix Operations (Subsector E2) must also identify: a. Bag house or other dust control device. b. Recycle/sediment pond, clarifier, or other device used for the treatment of process wastewater. c. The areas that drain to the treatment device. d. Description of multiple locations of ready-mix and other concrete operations, if applicable. [Minn. R. 7001]
	2.6.132	**Inspection Reports**. [Minn. R. 7001]
	2.6.133	The Permittee shall develop and implement an inspection schedule that includes a minimum of one site inspection per calendar month that the site is an Active Site and staffed. A minimum of one inspection per calendar year shall be conducted during a runoff event. [Minn. R. 7001]
	2.6.134	If the site is Inactive and unstaffed, Temporarily Inactive and unstaffed as defined, or is a site undergoing final stabilization, the Permittee is waived from the requirement to conduct monthly site inspections, but BMPs must be maintained. [Minn. R. 7001]
	2.6.135	All inspections and resulting maintenance must be recorded and retained within the Plan. Records of each inspection and maintenance activity shall include: a. Date and time of inspections. b. Name of person(s) conducting inspections. c. An evaluation of the facility to determine that the Plan accurately reflects conditions as described in the Pollution Prevention Plan. At a minimum, the Permittee shall inspect storage tank areas, waste disposal areas, maintenance areas, loading/unloading areas, and raw material, intermediate product, by-product and final product storage areas. d. An evaluation of all structural and non-structural BMPs to determine effectiveness and proper function. e. An evaluation of the facility to determine whether new exposed significant materials or activities have been added to the site since completion of the Plan. f. Findings of inspections, including recommendations for corrective actions. g. Corrective actions taken (including dates, times, and party completing maintenance activities). [Minn. R. 7001]
	2.6.136	In addition to the inspection requirements of this Section, separately from the required annual runoff event inspection, the Permittee shall ensure that one of the required monthly inspections occurs during a snow melt event. The inspection shall include a visual assessment of the runoff to identify any visible sheens or films that indicate the presence of oil or grease in the discharge. If sheens are present in surface discharges, corrective actions to prevent sheen shall be implemented and documented in the Plan. [Minn. R. 7001]
	2.6.137	**Subsector D1 - Asphalt - Additional Inspection Reports Requirements**. [Minn. R. 7001]
	2.6.138	The operator of an Asphalt Facility shall also inspect the following areas: a. Material storage and handling areas; b. Liquid storage tanks; c. Hoppers and silos; d. Vehicle and equipment maintenance, cleaning, and fueling areas; and e. Material handling vehicles, equipment, and processing areas. Ensure that appropriate action is taken in response to the inspection by using follow-up procedures. Document in the Plan the inspections and follow up actions. [Minn. R. 7001]

	2.6.139	**Subsector E2 - Ready-Mix and Other Concrete Operations - Additional Inspection Reports Requirements**. [Minn. R. 7001]
	2.6.140	Dust collection and containment systems shall be included in the site inspections. [Minn. R. 7001]
	2.6.141	**Monitoring Requirements**. [Minn. R. 7001]
	2.6.142	**Stormwater Monitoring**. [Minn. R. 7001]
	2.6.143	Stormwater Monitoring. [Minn. R. 7001]
	2.6.144	The Permittee shall monitor each outfall for all parameters specified in the Limits and Monitoring Section of this permit during stormwater runoff from active site operations. The Permittee shall submit the results of intervention limit monitoring required by this permit on the Discharge Monitoring Report form provided by the Agency. The information must be recorded in the specified areas on the form and in the unit specified. [Minn. R. 7001]
	2.6.145	Two samples shall be collected at each monitoring outfall and analyzed for each intervention limit parameter in a calendar year in order to determine an annual average concentration for each intervention limit parameter. The two samples shall be collected on two separate runoff events, one in the spring and one in the fall, if possible, each calendar year the Permittee is authorized to discharge under this permit. At the Permittee's discretion, more than two samples may be taken during separate runoff events and used to determine the annual average intervention limit(s). For averaging purposes, use a value of zero for any individual sample parameter which is determined to be less than the method detection limit. [Minn. R. 7001]
	2.6.146	If the Permittee is unable to obtain a minimum of two samples, less than two samples may be used to determine the annual average intervention limit(s) for the discharges during the year. However, for each sample that could not be obtained due to weather conditions and/or soil characteristics, the Permittee shall provide an explanation in the Comments section of the Discharge Monitoring Report and submit it to the Agency. [Minn. R. 7001]
	2.6.147	Samples shall be collected during the first 30 minutes of a measurable runoff event at a monitoring outfall and sampling events shall be at least 72 hours apart, to the extent feasible. [Minn. R. 7001]
	2.6.148	The intervention limit monitoring location(s) selected by the Permittee shall be in a location that: a. Is below the most down-gradient BMP from the source of industrial activity or significant materials, but prior to discharging from the Permittee's operational control. b. Minimizes or eliminates sampling of stormwater from off-site sources (run-on). c. Yields a sample that best represents the contribution of pollutants the Permittee is required to monitor for in accordance with this permit and that receives discharge from an area of industrial activities, processes, and significant materials exposed to stormwater. [Minn. R. 7001]
	2.6.149	If the Permittee has identified multiple, but separate, stormwater discharges and each area of discharge is substantially similar in terms of exposure, BMPs, and pollutants discharged, the Permittee may choose one intervention limit monitoring location that is most representative and best allows for obtaining a sample. This is applicable to a single site only. Multiple sites may only choose a substantially similar outfall at a single site. [Minn. R. 7001]
	2.6.150	An exceedance of an applicable annual average intervention limit does not constitute a violation under this permit. However, the Permittee is required to perform any necessary corrective action(s) to address stormwater control measures, including the maintenance or implementation of BMPs, when an exceedance of an applicable intervention limit occurs as described below. Failure to respond to an intervention limit exceedance is a violation of the permit.

		If an exceedance of an intervention limit occurs, modify the Plan and document all corrective actions, including improvements to BMPs, necessary to meet the applicable intervention limits. Modifications and upgrades of the Plan and BMPs shall be initiated immediately, but no later than 14 days beyond discovery of an intervention limit exceedance. The Permittee must install a new or modified control and make it operational as soon as possible. If it is infeasible to complete the installation of a new or modified BMP within 14 calendar days, the Permittee must document why it is infeasible to complete the installation or repair within the 14-day timeframe. The Permittee must also outline a schedule for completing the work, and documentation must be completed as soon as practicable after the 14-day timeframe but no longer than 45 days after discovery. If 45 days is infeasible, the Permittee must complete the installation or repair as soon as practicable and document the reason for delay. All documentation shall be contained within or as an attachment to the Plan. [Minn. R. 7001]
	2.6.151	If the site is Temporarily Inactive during a monitoring permit, intervention limit monitoring is not required, but the Permittee shall indicate on their DMR the inactivity and indicate that permanent stormwater BMPs remain in place. Should the site become active, the Permittee is required to sample in accordance with this Section of the permit for the year the site became active. [Minn. R. 7001]
	2.6.152	If stormwater does not discharge to surface waters, no monitoring is required. If there is no discharge during the sampling period, the Permittee shall check the "No Flow" box and note the conditions on the Discharge Monitoring Report Form. [Minn. R. 7001]
	2.6.153	If the Permittee submits documentation in compliance with this permit and receives approval from MPCA, discharges from the mine dewatering control devices are not required to be sampled. This shall include overflows caused solely by direct rainfall and groundwater seepage. [Minn. R. 7001]
	2.6.154	Stormwater Limits and Monitoring Intervention Limits a. Subsectors J1, J2, D1, and E2: Total Suspended Solids, 100 mg/L. b. Subsector E2: Iron, 1.0 mg/L. [Minn. R. 7001]
	2.6.155	**Mine Dewatering to Surface Waters - Effluent Limit Monitoring**. [Minn. R. 7001]
	2.6.156	If dewatering flows do not discharge to surface waters, no monitoring will be required. If there is no discharge during the sampling period, the Permittee shall check the "No Flow" box and note the conditions on the Discharge Monitoring Report Form. [Minn. R. 7001]
	2.6.157	If the Permittee submits documentation in compliance with this permit and receives approval from MPCA, overflows from the mine pit dewatering control devices are not required to be sampled. This shall include overflows caused solely by direct rainfall and groundwater seepage. [Minn. R. 7001]
	2.6.158	One sample shall be collected quarterly from each monitoring outfall identified and analyzed for each required effluent limit parameters specified in the Limits and Monitoring Section of this permit. The sample(s) shall be collected each calendar quarter the Permittee is authorized to discharge under this permit. [Minn. R. 7001]
	2.6.159	For active mine dewatering, samples shall be representative of the discharge and collected during any measurable event at an outfall. Flow monitoring shall be monitored using a continuous flow monitor or pump-run times. [Minn. R. 7001]
	2.6.160	If the discharge event is an overflow caused by a rainfall event, the sample(s) shall be collected within the first 30 minutes of the measurable runoff event. If it is not possible to collect the sample(s) within the first 30 minutes, the sample(s) shall be collected as soon as practicable after the first 30 minutes and documentation must be included with the Comments field of the Discharge Monitoring Report Form that

		explains why it was not possible to collect the sample(s) within the first 30 minutes. [Minn. R. 7001]
	2.6.161	Mine Dewatering to Surface Waters - Monitoring for Permit Reissuance. The following parameters shall be sampled and analyzed prior to permit expiration and submitted with the application for permit re-issuance. Samples shall be representative of mine dewatering discharge activity, and must comply with the Total Facilities Requirements section of this permit: a. Total Dissolved Solids. b. Hardness. c. Oil & Grease and surfactants. d. Antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc. e. Aluminum, barium, boron, cobalt, iron, magnesium, manganese, molybdenum, total tin, and total aluminum. [Minn. R. 7001]
	2.6.162	**Total Facilities Requirements**. [Minn. R. 7001]
	2.6.163	Definitions. Refer to the 'Permit Users Manual' found on the MPCA website (www.pca.state.mn.us) for standard definitions. [Minn. R. 7001]
	2.6.164	Incorporation by Reference. The following applicable federal and state laws are incorporated by reference in this permit, are applicable to the Permittee, and are enforceable parts of this permit: 40 CFR pts. 122.41, 122.42, 136, 403 and 503; Minn. R. pts. 7001, 7041, 7045, 7050, 7052, 7053, 7060, and 7080; and Minn. Stat. ch. 115 and 116. [Minn. R. 7001]
	2.6.165	Permittee Responsibility. The Permittee shall perform the actions or conduct the activity authorized by the permit in compliance with the conditions of the permit and, if required, in accordance with the plans and specifications approved by the Agency. [Minn. R. 7001]
	2.6.166	Toxic Discharges Prohibited. Whether or not this permit includes effluent limitations for toxic pollutants, the Permittee shall not discharge a toxic pollutant except according to Code of Federal Regulations, Title 40, sections 400 to 460 and Minnesota Rules 7050, 7052, 7053 and any other applicable MPCA rules. [Minn. R. 7001]
	2.6.167	Nuisance Conditions Prohibited. The Permittee's discharge shall not cause any nuisance conditions including, but not limited to: floating solids, scum and visible oil film, acutely toxic conditions to aquatic life, or other adverse impact on the receiving water. [Minn. R. 7050.0210, Subp. 2]
	2.6.168	Property Rights. This permit does not convey a property right or an exclusive privilege. [Minn. R. 7001]
	2.6.169	Liability Exemption. In issuing this permit, the state and the MPCA assume no responsibility for damage to persons, property, or the environment caused by the activities of the Permittee in the conduct of its actions, including those activities authorized, directed, or undertaken under this permit. To the extent the state and the MPCA may be liable for the activities of its employees, that liability is explicitly limited to that provided in the Tort Claims Act. [Minn. R. 7001]
	2.6.170	The MPCA's issuance of this permit does not obligate the MPCA to enforce local laws, rules, or plans beyond what is authorized by Minnesota Statutes. [Minn. R. 7001]
	2.6.171	Liabilities. The MPCA's issuance of this permit does not release the Permittee from any liability, penalty or duty imposed by Minnesota or federal statutes or rules or local ordinances, except the obligation to obtain the permit. [Minn. R. 7001]
	2.6.172	The issuance of this permit does not prevent the future adoption by the MPCA of pollution control rules, standards, or orders more stringent than those now in existence and does not prevent the enforcement of these rules, standards, or orders against the Permittee. [Minn. R. 7001]
	2.6.173	Severability. The provisions of this permit are severable and, if any provisions of this permit or the application of any provision of this permit to any circumstance are held

		invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. [Minn. R. 7001]
	2.6.174	Compliance with Other Rules and Statutes. The Permittee shall comply with all applicable air quality, solid waste, and hazardous waste statutes and rules in the operation and maintenance of the facility. [Minn. R. 7001]
	2.6.175	Inspection and Entry. When authorized by Minn. Stat. ch. 115.04; 115B.17, subd. 4; and 116.091, and upon presentation of proper credentials, the agency, or an authorized employee or agent of the agency, shall be allowed by the Permittee to enter at reasonable times upon the property of the Permittee to examine and copy books, papers, records, or memoranda pertaining to the construction, modification, or operation of the facility covered by the permit or pertaining to the activity covered by the permit; and to conduct surveys and investigations, including sampling or monitoring, pertaining to the construction, modification, or operation of the facility covered by the permit or pertaining to the activity covered by the permit. [Minn. R. 7001]
	2.6.176	Control Users. The Permittee shall regulate the users of its wastewater treatment facility so as to prevent the introduction of pollutants or materials that may result in the inhibition or disruption of the conveyance system, treatment facility or processes, or disposal system that would contribute to the violation of the conditions of this permit or any federal, state or local law or regulation. [Minn. R. 7001]
	2.6.177	**Sampling**. [Minn. R. 7001]
	2.6.178	Representative Sampling. Samples and measurements required by this permit shall be conducted as specified in this permit and shall be representative of the discharge or monitored activity. [40 CFR 122.41(j)(1)]
	2.6.179	Additional Sampling. If the Permittee monitors more frequently than required, the results and the frequency of monitoring shall be reported on the Discharge Monitoring Report (DMR) or another MPCA-approved form for that reporting period. [Minn. R. 7001]
	2.6.180	Certified Laboratory. A laboratory certified by the Minnesota Department of Health and/or registered by the MPCA shall conduct analyses required by this permit. Analyses of dissolved oxygen, pH, temperature, specific conductance, and total residual oxidants (chlorine, bromine) do not need to be completed by a certified laboratory but shall comply with manufacturers specifications for equipment calibration and use. [Minn. R. 4740.2010, Minn. R. 4740.2050 through 2120]
	2.6.181	Sample Preservation and Procedure. Sample preservation and test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and Minn. R. 7041.3200. [40 CFR 136, Minn. R. 7041.3200]
	2.6.182	Equipment Calibration: Flow meters, pumps, flumes, lift stations or other flow monitoring equipment used for purposes of determining compliance with permit shall be checked and/or calibrated for accuracy at least twice annually. [Minn. R. 7001]
	2.6.183	Maintain Records. The Permittee shall keep the records required by this permit for at least three years, including any calculations, original recordings from automatic monitoring instruments, and laboratory sheets. The Permittee shall extend these record retention periods upon request of the MPCA. The Permittee shall maintain records for each sample and measurement. The records shall include the following information: a. the exact place, date, and time of the sample or measurement; b. the date of analysis; c. the name of the person who performed the sample collection, measurement, analysis, or calculation; d. the analytical techniques, procedures and methods used; and e. the results of the analysis. [Minn. R. 7001]
	2.6.184	Completing Reports. The Permittee shall submit the results of the required sampling

		and monitoring activities on the forms provided, specified, or approved by the MPCA. The information shall be recorded in the specified areas on those forms and in the units specified. Required forms may include DMR Supplemental/Sample Value Form Individual values for each sample and measurement shall be recorded on the DMR Supplemental/Sample Value Form which, if required, will be provided by the MPCA. DMR Supplemental/Sample Value Forms shall be submitted with the appropriate DMRs. You may design and use your own supplemental form; however it shall be approved by the MPCA. Note: Required summary information shall also be recorded on the DMR. Summary information that is submitted ONLY on the DMR Supplemental/Sample Value Form does not comply with the reporting requirements. [Minn. R. 7001]
	2.6.185	Submitting Reports. DMRs, DMR supplemental forms and related attachments must be electronically submitted via the MPCA Online Services Portal after authorization is approved. DMRs and DMR Supplemental Forms shall be electronically submitted by the 21st day of the month following the sampling period or as otherwise specified in this permit. Electronic DMR submittal shall be complete on or before 11:59 PM of the 21st day of the month following the sampling period or as otherwise specified in this permit. A DMR shall be submitted for each required station even if no discharge occurred during the reporting period. Other reports required by this permit shall be postmarked by the date specified in the permit to: MPCA, Attn: WQ Submittals Center, 520 Lafayette Road North, St Paul Minnesota 551554194. [Minn. R. 7001]
	2.6.186	Incomplete or Incorrect Reports. The Permittee shall immediately submit an electronically amended report or DMR to the MPCA upon discovery by the Permittee or notification by the MPCA that it has submitted an incomplete or incorrect report or DMR. The amended report or DMR shall contain the missing or corrected data along with a cover letter explaining the circumstances of the incomplete or incorrect report. If it is impossible to electronically amend the report or DMR, the Permittee shall immediately notify the MPCA and the MPCA will provide direction for the amendment submittals. [Minn. R. 7001]
	2.6.187	Required Signatures. All DMRs, forms, reports, and other documents submitted to the MPCA shall be signed by the Permittee or the duly authorized representative of the Permittee. Minn. R. 7001.0150, subp. 2, item D. The person or persons that sign the DMRs, forms, reports or other documents shall certify that he or she understands and complies with the certification requirements of Minn. R. 7001.0070 and 7001.0540, including the penalties for submitting false information. Technical documents, such as design drawings and specifications and engineering studies required to be submitted as part of a permit application or by permit conditions, shall be certified by a registered professional engineer. [Minn. R. 7001]
	2.6.188	Detection Level. The Permittee shall report monitoring results below the reporting limit (RL) of a particular instrument as "<" the value of the RL. For example, if an instrument has a RL of 0.1 mg/L and a parameter is not detected at a value of 0.1 mg/L or greater, the concentration shall be reported as "<0.1 mg/L." "Non-detected," "undetected," "below detection limit," and "zero" are unacceptable reporting results, and are permit reporting violations. Where sample values are less than the level of detection and the permit requires reporting of an average, the Permittee shall calculate the average as follows:

		a. If one or more values are greater than the level of detection, substitute zero for all nondetectable values to use in the average calculation. b. If all values are below the level of detection, report the averages as "<" the corresponding level of detection. c. Where one or more sample values are less than the level of detection, and the permit requires reporting of a mass, usually expressed as kg/day, the Permittee shall substitute zero for all nondetectable values. [Minn. R. 7001]
	2.6.189	Records. The Permittee shall, when requested by the Agency, submit within a reasonable time the information and reports that are relevant to the control of pollution regarding the construction, modification, or operation of the facility covered by the permit or regarding the conduct of the activity covered by the permit. [Minn. R. 7001]
	2.6.190	Confidential Information. Except for data determined to be confidential according to Minn. Stat. ch. 116.075, subd. 2, all reports required by this permit shall be available for public inspection. Effluent data shall not be considered confidential. To request the Agency maintain data as confidential, the Permittee shall follow Minn. R. 7000.1300. [Minn. R. 7000.1300]
	2.6.191	**Noncompliance and Enforcement**. [Minn. R. 7001]
	2.6.192	Subject to Enforcement Action and Penalties. Noncompliance with a term or condition of this permit subjects the Permittee to penalties provided by federal and state law set forth in section 309 of the Clean Water Act; United States Code, title 33, section 1319, as amended; and in Minn. Stat. ch. 115.071 and 116.072, including monetary penalties, imprisonment, or both. [Minn. R. 7001]
	2.6.193	Criminal Activity. The Permittee may not knowingly make a false statement, representation, or certification in a record or other document submitted to the Agency. A person who falsifies a report or document submitted to the Agency, or tampers with, or knowingly renders inaccurate a monitoring device or method required to be maintained under this permit is subject to criminal and civil penalties provided by federal and state law. [Minn. R. 7001.0150, Subp. 3(G), Minn. R. 7001.1090, Subp. 1(G and H), Minn. Stat. ch. 609.671, Subp. 1]
	2.6.194	Noncompliance Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [40 CFR 122.41(c)]
	2.6.195	Effluent Violations. If sampling by the Permittee indicates a violation of any discharge limitation specified in this permit, the Permittee shall immediately make every effort to verify the violation by collecting additional samples, if appropriate, investigate the cause of the violation, and take action to prevent future violations. If the permittee discovers that noncompliance with a condition of the permit has occurred which could endanger human health, public drinking water supplies, or the environment, the Permittee shall within 24 hours of the discovery of the noncompliance, orally notify the commissioner and submit a written description of the noncompliance within 5 days of the discovery. The written description shall include items a. through e., as listed below. If the Permittee discovers other non-compliance that does not explicitly endanger human health, public drinking water supplies, or the environment, the non-compliance shall be reported during the next reporting period to the MPCA with its Discharge Monitoring Report (DMR). If no DMR is required within 30 days, the Permittee shall submit a written report within 30 days of the discovery of the noncompliance. This description shall include the following information: a. a description of the event including volume, duration, monitoring results and receiving waters; b. the cause of the event; c. the steps taken to reduce, eliminate and prevent reoccurrence of the event; d. the exact dates and times of the event; and

		e. steps taken to reduce any adverse impact resulting from the event. [Minn. R. 7001]
	2.6.196	Upset Defense. In the event of temporary noncompliance by the Permittee with an applicable effluent limitation resulting from an upset at the Permittee's facility due to factors beyond the control of the Permittee, the Permittee has an affirmative defense to an enforcement action brought by the Agency as a result of the noncompliance if the Permittee demonstrates by a preponderance of competent evidence: a. the specific cause of the upset; b. that the upset was unintentional; c. that the upset resulted from factors beyond the reasonable control of the Permittee and did not result from operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or increases in production which are beyond the design capability of the treatment facilities; d. that at the time of the upset the facility was being properly operated; e. that the Permittee properly notified the Commissioner of the upset in accordance with Minn. R. 7001.1090, subp. 1, item I; and f. that the Permittee implemented the remedial measures required by Minn. R. 7001.0150, subp. 3, item J. [Minn. R. 7001]
	2.6.197	**Release**. [Minn. R. 7001]
	2.6.198	Unauthorized Releases of Wastewater Prohibited. Except for discharges from outfalls specifically authorized by this permit, overflows, discharges, spills, or other releases of wastewater or materials to the environment, whether intentional or not, are prohibited. However, the MPCA will consider the Permittee's compliance with permit requirements, frequency of release, quantity, type, location, and other relevant factors when determining appropriate action. [40 CFR 122.41, Minn. Stat. ch. 115.061]
	2.6.199	Discovery of a release. Upon discovery of a release, the Permittee shall: a. Take all reasonable steps to immediately end the release. b. Notify the Minnesota Department of Public Safety Duty Officer at 1(800)422-0798 or (651)649-5451 (metro area) immediately upon discovery of the release. You may contact the MPCA during business hours at 1(800)657-3864 or (651)296-6300 (metro area). c. Recover as rapidly and as thoroughly as possible all substances and materials released or immediately take other action as may be reasonably possible to minimize or abate pollution to waters of the state or potential impacts to human health caused thereby. If the released materials or substances cannot be immediately or completely recovered, the Permittee shall contact the MPCA. If directed by the MPCA, the Permittee shall consult with other local, state or federal agencies (such as the Minnesota Department of Natural Resources and/or the Wetland Conservation Act authority) for implementation of additional clean-up or remediation activities in wetland or other sensitive areas. [Minn. R. 7001]
	2.6.200	Sampling of a release. Upon discovery of a release, the Permittee shall: a. Collect representative samples of the release. The Permittee shall sample the release for parameters of concern immediately following discovery of the release. The Permittee may contact the MPCA during business hours to discuss the sampling parameters and protocol. In addition, Fecal Coliform Bacteria samples shall be collected where it is determined by the Permittee that the release contains or may contain sewage. If the release cannot be immediately stopped, the Permittee shall consult with MPCA regarding additional sampling requirements. Samples shall be collected at least, but not limited to, two times per week for as long as the release continues. b. Submit the sampling results on the Release Sampling Form (http://www.pca.state.mn.us/index.php/view-document.html?gid=18867). The

		Release Sampling Form shall be submitted to the MPCA with the next DMR or within 30 days whichever is sooner. [Minn. R. 7001]
	2.6.201	**Bypass**. [Minn. R. 7001]
	2.6.202	Anticipated bypass. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if the bypass is for essential maintenance to assure efficient operation of the facility. The permittee shall submit prior notice, if possible at least ten days before the date of the bypass to the MPCA. The notice of the need for an anticipated bypass shall include the following information: a. the proposed date and estimated duration of the bypass; b. the alternatives to bypassing; and c. a proposal for effluent sampling during the bypass. Any bypass wastewater shall enter waters of the state from outfalls specifically authorized by this permit. Therefore, samples shall be collected at the frequency and location identified in this permit or two times per week for as long as the bypass continues, whichever is more frequent. [40 CFR 122.41(m)(2 and 3), Minn. R. 7001.1090, 1(J)]
	2.6.203	All other bypasses are prohibited. The MPCA may take enforcement action against the Permittee for a bypass, unless the specific conditions described in Minn. R. Ch. 7001.1090 subp. 1, K and 122.41(m)(4)(i) are met. In the event of an unanticipated bypass, the permittee shall: a. Take all reasonable steps to immediately end the bypass. b. Notify the Minnesota Department of Public Safety Duty Officer at 1(800)422-0798 or (651)649-5451 (metro area) immediately upon commencement of the bypass. You may contact the MPCA during business hours at 1(800)657-3864 or (651)296-6300 (metro area). c. Immediately take action as may be reasonably possible to minimize or abate pollution to waters of the state or potential impacts to human health caused thereby. If directed by the MPCA, the Permittee shall consult with other local, state or federal agencies for implementation of abatement, clean-up, or remediation activities. d. Only allow bypass wastewater as specified in this section to enter waters of the state from outfalls specifically authorized by this permit. Samples shall be collected at the frequency and location identified in this permit or two times per week for as long as the bypass continues, whichever is more frequent. The permittee shall also follow the reporting requirements for effluent violations as specified in this permit. [40 CFR 122.41(m)(4)i, Minn. R. 7001.1090, 1(K), Minn. Stat. ch. 115.061]
	2.6.204	**Operation and Maintenance**. [Minn. R. 7001]
	2.6.205	The Permittee shall at all times properly operate and maintain the facilities and systems of treatment and control, and the appurtenances related to them which are installed or used by the Permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall install and maintain appropriate backup or auxiliary facilities if they are necessary to achieve compliance with the conditions of the permit and, for all permits other than hazardous waste facility permits, if these backup or auxiliary facilities are technically and economically feasible Minn. R. 7001.0150. subp. 3, item F. [Minn. R. 7001]
	2.6.206	In the event of a reduction or loss of effective treatment of wastewater at the facility, the Permittee shall control production or curtail its discharges to the extent necessary to maintain compliance with the terms and conditions of this permit. The Permittee

		shall continue this control or curtailment until the wastewater treatment facility has been restored or until an alternative method of treatment is provided. [Minn. R. 7001]
	2.6.207	Solids Management. The Permittee shall properly store, transport, and dispose of biosolids, septage, sediments, residual solids, filter backwash, screenings, oil, grease, and other substances so that pollutants do not enter surface waters or ground waters of the state. Solids should be disposed of in accordance with local, state and federal requirements. [40 CFR 503, Minn. R. 7041]
	2.6.208	Scheduled Maintenance. The Permittee shall schedule maintenance of the treatment works during non-critical water quality periods to prevent degradation of water quality, except where emergency maintenance is required to prevent a condition that would be detrimental to water quality or human health. [Minn. R. 7001]
	2.6.209	Control Tests. In-plant control tests shall be conducted at a frequency adequate to ensure compliance with the conditions of this permit. [Minn. R. 7001]
	2.6.210	**Changes to the Facility or Permit**. [Minn. R. 7001]
	2.6.211	Permit Modifications. Except as provided under Minnesota Statutes, section 115.07, subdivisions 1 and 3, no person required by statute or rule to obtain a permit may construct, install, modify, or operate the facility to be permitted, nor shall a person commence an activity for which a permit is required by statute or rule until the agency has issued a written permit for the facility or activity. Permittees that propose to make a change to the facility or discharge that requires a permit modification shall follow Minn. R. 7001.0190. If the Permittee cannot determine whether a permit modification is needed, the Permittee shall contact the MPCA prior to any action. It is recommended that the application for permit modification be submitted to the MPCA at least 180 days prior to the planned change. [Minn. R. 7001]
	2.6.212	Plans, specifications and MPCA approval are not necessary when maintenance dictates the need for installation of new equipment, provided the equipment is the same design size and has the same design intent. For instance, a broken pipe, lift station pump, aerator, or blower can be replaced with the same design-sized equipment without MPCA approval. If the proposed construction is not expressly authorized by this permit, it may require a permit modification. If the construction project requires an Environmental Assessment Worksheet under Minn. R. 4410, no construction shall begin until a negative declaration is issued and all approvals are received or implemented. [Minn. R. 7001]
	2.6.213	Report Changes. The Permittee shall give advance notice as soon as possible to the MPCA of any substantial changes in operational procedures, activities that may alter the nature or frequency of the discharge, and/or material factors that may affect compliance with the conditions of this permit. [Minn. R. 7001]
	2.6.214	Chemical Additives. The Permittee shall receive prior written approval from the MPCA before increasing the use of a chemical additive authorized by this permit, or using a chemical additive not authorized by this permit, in quantities or concentrations that have the potential to change the characteristics, nature and/or quality of the discharge. The Permittee shall request approval for an increased or new use of a chemical additive at least 60 days, or as soon as possible, before the proposed increased or new use. This written request shall include at least the following information for the proposed additive: a. The process for which the additive will be used; b. Safety Data Sheet (SDS) which shall include aquatic toxicity, human health, and

		environmental fate information for the proposed additive. The aquatic toxicity information shall include at minimum the results of: a) a 48-hour LC50 or EC50 acute study for a North American freshwater planktonic crustacean (either Ceriodaphnia or Daphnia sp.) and b) a 96-hour LC50 acute study for rainbow trout, bluegill or fathead minnow or another North American freshwater aquatic species other than a planktonic crustacean; c. a complete product use and instruction label; d. the commercial and chemical names and Chemical Abstract Survey (CAS) number for all ingredients in the additive (If the MSDS does not include information on chemical composition, including percentages for each ingredient totaling to 100%, the Permittee shall contact the supplier to have this information provided); and e. The proposed method of application, application frequency, concentration, and daily average and maximum rates of use. Upon review of the information submitted regarding the proposed chemical additive, the MPCA may require additional information be submitted for consideration. This permit may be modified to restrict the use or discharge of a chemical additive and include additional influent and effluent monitoring requirements. Approval for the use of an additive shall not justify the exceedance of any effluent limitation nor shall it be used as a defense against pollutant levels in the discharge causing or contributing to the violation of a water quality standard. [Minn. R. 7001]
	2.6.215	MPCA Initiated Permit Modification, Suspension, or Revocation. The MPCA may modify or revoke and reissue this permit pursuant to Minn. R. 7001.0170. The MPCA may revoke without reissuance this permit pursuant to Minn. R. 7001.0180. [Minn. R. 7001]
	2.6.216	TMDL Impacts. Facilities that discharge to an impaired surface water, watershed or drainage basin may be required to comply with additional permits or permit requirements, including additional restriction or relaxation of limits and monitoring as authorized by the CWA 303(d)(4)(A) and 40 CFR 122.44.l.2.i., necessary to ensure consistency with the assumptions and requirements of any applicable US EPA approved wasteload allocations resulting from Total Maximum Daily Load (TMDL) studies. [40 CFR 122.44(l)(2)i]
	2.6.217	Permit Transfer. The permit is not transferable to any person without the express written approval of the Agency after compliance with the requirements of Minn. R. 7001.0190. A person to whom the permit has been transferred shall comply with the conditions of the permit. [Minn. R. 7001]
	2.6.218	Facility Closure. The Permittee is responsible for closure and post-closure care of the facility. The Permittee shall notify the MPCA of a significant reduction or cessation of the activities described in this permit at least 180 days before the reduction or cessation. The MPCA may require the Permittee to provide to the MPCA a facility Closure Plan for approval. Facility closure that could result in a potential long-term water quality concern, such as the ongoing discharge of wastewater to surface or ground water, may require a permit modification or reissuance. The MPCA may require the Permittee to establish and maintain financial assurance to ensure performance of certain obligations under this permit, including closure, post-closure care and remedial action at the facility. If financial assurance is required, the amount and type of financial assurance, and proposed modifications to previously MPCA-approved financial assurance, shall be approved by the MPCA. [Minn. Stat. ch. 116.07, Subp. 4]
	2.6.219	Permit Reissuance. If the Permittee desires to continue permit coverage beyond the date of permit expiration, the Permittee shall submit an application for permit

		reissuance : Due by 180 days prior to permit expiration. If the Permittee does not intend to continue the activities authorized by this permit after the expiration date of this permit, the Permittee shall notify the MPCA in writing at least 180 days before permit expiration. If the Permittee has submitted a timely application for permit reissuance, the Permittee may continue to conduct the activities authorized by this permit, in compliance with the requirements of this permit, until the MPCA takes final action on the application, unless the MPCA determines any of the following (Minn. R. 7001.0040 and 7001.0160): a. The Permittee is not in substantial compliance with the requirements of this permit, or with a stipulation agreement or compliance schedule designed to bring the Permittee into compliance with this permit; b. The MPCA, as a result of an action or failure to act by the Permittee, has been unable to take final action on the application on or before the expiration date of the permit; c. The Permittee has submitted an application with major deficiencies or has failed to properly supplement the application in a timely manner after being informed of deficiencies. [Minn. R. 7001]
	2.6.220	**Permit Specific Definitions**. [Minn. R. 7001]
	2.6.221	"Active Facility" means a place where work or other activity related to the production of asphalt and ready-mix / concrete products and extraction, removal, or recovery of nonmetallic minerals is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to desired contour and stabilization has begun. This definition is derived from the definition of 'active mining area' found at 40 CFR pt. 440.132(a). [40 CFR 440.132(a), State Definitions]
	2.6.222	"Asphalt cement" means fluxed or unfluxed asphalt specially prepared for direct use in the manufacture of asphalt pavements. [State Definitions]
	2.6.223	"Asphalt Emulsion" means a mixture of asphalt cement, chemical, and water solution. Asphalt emulsions are produced by adding an emulsifying agent to asphalt and water. [State Definitions]
	2.6.224	"Asphalt pavement" means a mixture of asphalt cement (asphalt binder), aggregate, and other additives; may also be referred to as asphalt concrete (AC), bituminous mix (BM), and sometimes asphaltic concrete (HMAC). [State Definitions]
	2.6.225	"Effluent Monitoring Location" for the purposes of this permit means the location(s) within the boundary of the facility where the Permittee will collect mine dewatering and/or authorized non-stormwater discharges. The effluent monitoring location(s) selected by the Permittee shall be in a location that: a. Is immediately below the most down-gradient BMP from the specific industrial activity that has a numeric effluent limit, but prior to where the discharge co-mingles with stormwater from other sources. b. Yields a sample that represents the contribution of the pollutants for which the Permittee is required to monitor. [State Definitions]
	2.6.226	"Energy Dissipation" means methods employed at pipe outlets to prevent erosion. Examples include, but are not limited to: concrete aprons, riprap, splash pads, and gabions that are designed to prevent erosion. [State Definitions]
	2.6.227	"Facility" for the purposes of this permit, means land that shares a common border and that has a stormwater discharge associated with industrial activity as defined by 40 CFR Part 122.26(b)(14) with the discharge having a common owner/operator. [40 CFR 122.26(b)(14), State Definitions]
	2.6.228	"Impaired Water" means waters identified as impaired by the Agency, and approved by the USEPA, pursuant to section 303(d) of the Clean Water Act (33 U.S.C. Section 303(d)). [CWA Sect. 303.d, State Definitions]
	2.6.229	"Impoundments" mean topographic depressions designed to hold liquid. [State Definitions]
	2.6.230	"Inactive Facility" means a site or portion of a site where nonmetallic mineral mining and/or milling, asphalt reduction and ready-mix concrete production occurred in the

		past but is not an Active Facility. The Permittee does not anticipate mining and/or associated activities to occur in the foreseeable future, has requested the permit coverage at this inactive portion be terminated, and the inactive portion is no longer covered by an active mining permit. [State Definitions]
	2.6.231	"Infeasible" means not technologically possible or not economically practicable and achievable in light of the best industry practices. [State Definitions]
	2.6.232	"Infiltration Device" for purposes of this permit, means a device to which industrial stormwater runoff is diverted, collected, or conveyed for the purpose of infiltration. This includes all man-made and natural infiltration areas to which runoff are diverted. An infiltration device does not include the parts of the system that diverts, collects, or conveys stormwater. Incidental infiltration from conveyances such as swales or ditches, including those with erosion prevention devices such as vegetation, silt fence, or fiber bails, is not an infiltration device. However, swales, ditches, or similar devices constructed with stop logs, ditch excavation for storage or other retention devices, which are for the purpose of increased infiltration, are infiltration devices. Wetlands (including types 1 through 8) and other natural surface water bodies are not infiltration devices or parts of infiltration device systems, and cannot be used as infiltration devices, unless mitigated in accordance with applicable state rules. [State Definitions]
	2.6.233	"Karst topography" means an area underlain by fractured carbonate bedrock in which erosion has produced geological characteristics such as: sinkholes; springs, subsurface drainage; caves; sinking streams; dissolutionally enlarged joints (grikes) or bedding planes, and bedrock surface channels (karren). Counties known for karst features include parts of Dakota, Rice, Dodge, and Mower, and most of Goodhue, Olmsted, Winona, Wabasha, Houston and Fillmore. [State Definitions]
	2.6.234	"Mine Pit Dewatering" means any water that is impounded or that collects in the mine and is pumped, drained or otherwise removed from the mine through the efforts of the mine operator. Uncontaminated groundwater and stormwater collecting in a low area in which there is already an existing stormwater outlet for stormwater/seepage by gravity overflow shall not be considered mine pit dewatering. However, if a mine is also used for treatment of process generated wastewater, discharges of commingled water from the facilities shall be deemed discharge of process generated wastewater. [State Definitions]
	2.6.235	"Non-Stormwater Discharge" means any discharge not comprised entirely of stormwater. [State Definitions]
	2.6.236	"Operator" is the person responsible for the overall operation of an industrial facility under Minn. R. pt. 7090.3000. [Minn. R. 7090.3000, State Definitions]
	2.6.237	"Owner" is the person who owns an industrial facility or part of an industrial facility under Minn. R. pt. 7090.3000. [Minn. R. 7090.3000, State Definitions]
	2.6.238	"Person" means any human being, any municipality or other governmental or political subdivision or public agency, any public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing, or any other legal entity, but does not include the MPCA. [State Definitions]
	2.6.239	"Pipes" mean hollow cylinders or tubes constructed of non-earthen materials. [State Definitions]
	2.6.240	"Pollution Prevention Plan" (Plan) means a plan for stormwater and non-stormwater discharges that include facility-specific activities and actions to, first, identify sources of pollution or contamination at the facility, and second, select and implement BMPs to eliminate or reduce contact of stormwater with significant materials and non-stormwater discharges that may result in polluted runoff from the facility. [State Definitions]
	2.6.241	"Primary Standard Industrial Classification (SIC) Code" for the purposes of this permit, is the SIC code associated with the industrial activity that generates the greatest

		revenue. If revenue data is not available, the owner/operator shall base the determination on the number of employees engaged in the industrial activity. If it is not possible to determine the primary SIC code using either of these two methods, the owner/operator shall base the determination on the SIC code with the greatest production. The industrial activity that generates the greatest revenue, employs the most personnel, or has the greatest production, is the industrial activity assigned the primary SIC code. [State Definitions]
	2.6.242	"Reclamation" means activities undertaken in compliance with applicable mined land reclamation requirements following the cessation of activities associated with extraction, removal and recovery of nonmetallic minerals, intended to return the land to an appropriate post-mining land use. [State Definitions]
	2.6.243	"Seasonal High Water Table" means the highest level the water table reaches during a given year. Methods of determining the seasonal high water table are given in part 7041.3400, subpart 3. [Minn. R. 7041.0100, Subp. 48]
	2.6.244	"Sediment Control" means methods employed to prevent sediment from leaving the site. Sediment control practices include silt fences, sediment traps, earth dikes, drainage swales, check dams, subsurface drains, pipe slope drains, storm drain inlet protection, and temporary or permanent sedimentation basins. [Minn. R. 7041.0100, Subp. 48, Minn. R. 7041.3400, Subp. 3, State Definitions]
	2.6.245	"Significant Materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA); fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with stormwater discharges. When determining whether a material is significant, the physical and chemical characteristics of the material should be considered (e.g. the material's solubility, transportability, and toxicity characteristics) to determine the material's pollution potential. [40 CFR 122.26(b)(12)]
	2.6.246	"Small Construction Activity" means small construction activity as defined in 40 C.F.R. part 122.26(b)(15). Small construction activities include clearing, grading and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. [State Definitions]
	2.6.247	"Stormwater Pond" for purposes of this permit means constructed detention or retention facilities for the treatment of stormwater runoff under the requirements of this permit. This includes permanent ponds, dry ponds, flow equalization ponds (followed by other BMPs), and constructed wetlands. However, natural wetlands (including types 1-8) and other natural surface water bodies are not industrial stormwater ponds, parts of ponds or pond systems, and cannot be used as BMPs for stormwater treatment unless mitigated in accordance with applicable state rules. [State Definitions]
	2.6.248	"Structural BMPs" refers to the installation of devices that will reduce or eliminate pollutants to stormwater through installation of permanent structural devices to treat or control runoff. Examples of structural BMPs include but are not limited to installation of stormwater diversion berms or channels; sedimentation basins (retention or detention basins); oil/water separators; grit chambers; roofs, awnings, or buildings to cover significant material. [State Definitions]
	2.6.249	"Tanks" means a container, vessel, or enclosure designed to contain substances and is constructed of materials such as concrete, steel, plastic, or fiberglass reinforced

		plastic, and provides structural support. [State Definitions]
	2.6.250	"Temporarily Inactive Facility" means a site or portion of a site where nonmetallic mineral mining and/or milling, asphalt production and ready-mix concrete production occurred in the past but currently are not being actively undertaken and permit coverage is being maintained for the possibility of mining and/or associated activities in the foreseeable future. [State Definitions]
	2.6.251	"Treatment Works" means any plant, disposal field, lagoon, dam, pumping station, constructed drainage ditch or surface water intercepting ditch, or other works not specifically mentioned herein, installed for the purpose of treating, stabilizing or disposing of sewage, industrial waste, or other wastes. For the purposes of this permit, this includes stormwater ponds, sedimentation basins and/or infiltration devices for stormwater management. [Minn. Stat. ch. 115.01, Subd. 21, State Definitions]
	2.6.252	"Water Quality Standards" means those provisions contained in Minn. R Chapters 7050 and 7052. [Minn. R. 7050, Minn. R. 7052, State Definitions]
	2.6.253	"Wetlands" means those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. Wetlands must have the following attributes: a. a predominance of hydric soils; b. inundated or saturated by surface water or groundwater at a frequency and duration to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and, c. under normal circumstances support a prevalence of such vegetation. [Minn. R. 7050.0186, Subp. 1(a)B, State Definitions]

3. Submittal action summary

SD 001	MNG49 Stormwater, Non-specific	
		Surface Discharge: MNG49 Subsectors D1, J1, J2
	3.1.1	The Permittee shall submit an annual DMR : Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 002	MNG49 Stormwater, Non-specific	
		Surface Discharge: MNG49 Subsector E2
	3.2.1	The Permittee shall submit an annual DMR : Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 003	MNG49 Stormwater, Non-specific	
		Surface Discharge: MNG49 Dewatering from Construction Sand and Gravel (1442)
	3.3.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	3.3.2	The Permittee shall submit an annual DMR : Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 004	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Industrial Sand Mining (1446)
	3.4.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	3.4.2	The Permittee shall submit an annual DMR : Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 005	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Subsector J2 (1411, 1422, 1423, 1429)

	3.5.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	3.5.2	The Permittee shall submit an annual DMR : Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
MNG490000	Nonmetallic Mining/Associated Activities General Permit	
		Non-Metallic Mining and Associated Activities General Permit Requirements
	3.6.1	Permit Reissuance. If the Permittee desires to continue permit coverage beyond the date of permit expiration, the Permittee shall submit an application for permit reissuance : Due by 180 days prior to permit expiration. If the Permittee does not intend to continue the activities authorized by this permit after the expiration date of this permit, the Permittee shall notify the MPCA in writing at least 180 days before permit expiration. If the Permittee has submitted a timely application for permit reissuance, the Permittee may continue to conduct the activities authorized by this permit, in compliance with the requirements of this permit, until the MPCA takes final action on the application, unless the MPCA determines any of the following (Minn. R. 7001.0040 and 7001.0160): a. The Permittee is not in substantial compliance with the requirements of this permit, or with a stipulation agreement or compliance schedule designed to bring the Permittee into compliance with this permit; b. The MPCA, as a result of an action or failure to act by the Permittee, has been unable to take final action on the application on or before the expiration date of the permit; c. The Permittee has submitted an application with major deficiencies or has failed to properly supplement the application in a timely manner after being informed of deficiencies. [Minn. R. 7001]

4. Limits and monitoring

		Discharge limitations						Monitoring requirements				
Subject item	**Parameter**	**Quantity /Loading avg.**	**Quantity /Loading max.**	**Quantity /Loading units**	**Quality /Conc. min.**	**Quality /Conc. avg.**	**Quality /Conc. max.**	**Quality/ Conc. units**	**Frequency**	**Sample type**	**Effective period**	**Notes**
SD 001 ISW D1, J1 and J2	Solids, Total Suspended (TSS)					Monitor only. calendar year average intervention		milligrams per liter	twice per year	Grab	Jan-Dec	Any reported value >100 mg/L exceeds the intervention limit. If the discharge is within 1 mile of an ORVW, trout stream, or trout lake, the intervention limit is 65 mg/L.
SD 002 ISW E2	Iron, Total (as Fe)					Monitor only. calendar year average intervention		milligrams per liter	twice per year	Grab	Jan-Dec	Any reported value >1.0 mg/L exceeds the intervention limit.
SD 002 ISW E2	Solids, Total Suspended (TSS)					Monitor only. calendar year average intervention		milligrams per liter	twice per year	Grab	Jan-Dec	Any reported value >100 mg/L exceeds the intervention limit. If the discharge is within 1 mile of an ORVW, trout stream, or trout lake, the intervention limit is 65 mg/L.
SD 003 SIC 1442	Flow		Monitor only. calendar quarter total	million gallons		Monitor only. calendar quarter average		million gallons per day	once per quarter	Measurement, Continuous	Jan-Dec	
SD 003 SIC 1442	Nitrite Plus Nitrate, Total (as N)					Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec	
SD 003 SIC 1442	Nitrogen, Kjeldahl, Total					Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec	

		Discharge limitations						Monitoring requirements				
Subject item	**Parameter**	**Quantity /Loading avg.**	**Quantity /Loading max.**	**Quantity /Loading units**	**Quality /Conc. min.**	**Quality /Conc. avg.**	**Quality /Conc. max.**	**Quality/ Conc. units**	**Frequency**	**Sample type**	**Effective period**	**Notes**
SD 003 SIC 1442	pH				6.5 calendar quarter minimum		8.5 calendar quarter maximum	standard units	once per quarter	Grab	Jan-Dec	
SD 003 SIC 1442	Phosphorus, Total (as P)					Monitor only. calendar quarter average		milligrams per liter	once per quarter	Grab	Jan-Dec	
SD 003 SIC 1442	Solids, Total Suspended (TSS)						30 daily maximum	milligrams per liter	once per quarter	Grab	Jan-Dec	
SD 004 SIC 1446	Flow		Monitor only. calendar quarter total	million gallons		Monitor only. calendar quarter average		million gallons per day	once per quarter	Measurement, Continuous	Jan-Dec	
SD 004 SIC 1446	Nitrite Plus Nitrate, Total (as N)					Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec	
SD 004 SIC 1446	Nitrogen, Kjeldahl, Total					Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec	
SD 004 SIC 1446	pH				6.5 calendar quarter minimum		8.5 calendar quarter maximum	standard units	once per quarter	Grab	Jan-Dec	
SD 004 SIC 1446	Phosphorus, Total (as P)					Monitor only. calendar quarter average		milligrams per liter	once per quarter	Grab	Jan-Dec	
SD 004 SIC 1446	Solids, Total Suspended (TSS)					25 calendar quarter average	45 daily maximum	milligrams per liter	once per quarter	Grab	Jan-Dec	
SD 005 SUBSECTOR j2	Flow		Monitor only. calendar quarter total	million gallons		Monitor only. calendar quarter average		million gallons per day	once per quarter	Measurement, Continuous	Jan-Dec	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**Quantity /Loading avg.**	**Quantity /Loading max.**	**Quantity /Loading units**	**Quality /Conc. min.**	**Quality /Conc. avg.**	**Quality /Conc. max.**	**Quality/ Conc. units**	**Frequency**	**Sample type**	**Effective period**	**Notes**
SD 005 SUBSECTOR j2	Nitrite Plus Nitrate, Total (as N)					Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec	
SD 005 SUBSECTOR j2	Nitrogen, Kjeldahl, Total					Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec	
SD 005 SUBSECTOR j2	pH				6.5 calendar quarter minimum		8.5 calendar quarter maximum	standard units	once per quarter	Grab	Jan-Dec	
SD 005 SUBSECTOR j2	Phosphorus, Total (as P)					Monitor only. calendar quarter average		milligrams per liter	once per quarter	Grab	Jan-Dec	
SD 005 SUBSECTOR j2	Solids, Total Suspended (TSS)						30 daily maximum	milligrams per liter	once per quarter	Grab	Jan-Dec	

Appendix 16

Phase I Cultural Resource Investigation for the Graff Quarry Project

In Situ's Phase I Investigation of the Site is dated May 5, 2021

Phase I Cultural Resource Investigation of the Graff Quarry Project, Cottonwood County, Minnesota

Craig Picka
Abraham Ledezma

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Eden Prairie, MN 55344
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Website: www.insitucrm.com

May 5, 2021

IN SITU
Archaeological Consulting

Negative Cultural Resource Survey Report

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Report Title: Phase I Cultural Resource Investigation of the Graff Quarry Project, Cottonwood County, Minnesota

Report Date: May 5, 2021

Author(s): Craig Picka and Abraham Ledezma

Principal Investigator: Abraham Ledezma

Project Client: Braun Intertec
11001 Hampshire Avenue South
Minneapolis, MN 55438

Survey Date: April 26, 2021

Acres: 35.6 acres

Legal Description: The project area is located in Cottonwood County, Minnesota in the NE¼ of Section 1 of Township (T) 107 North (N), Range (R) 36 West (W).

Location Description: The project area is located on privately-owned land approximately 5.5 miles northeast of the City of Jeffers, Minnesota (Figures 1-2). The project area includes an approximate 35.6-acre area. The project area is within an open area consisting of an agricultural field that has been subject to ground moving activities, as the topsoil in the area has been graded/stripped, removed, and placed in piles across the project area. The topography consisted of fairly flat topography. Vegetation consisted of tilled agricultural debris.

Project Description: The survey was for the proposed Graff Quarry Project. The survey consisted of a 35.6-acre area located on private property in Cottonwood County, Minnesota. The proposed project is for a proposed rock quarry. The project area is within an open area consisting of an agricultural field that has been subject to ground moving activities, as the topsoil in the area has been graded/stripped, removed, and placed in piles across the project area. The cultural resource assessment is subject to review by the Minnesota State Historic Preservation Office (SHPO). Currently, there is no federal undertaking associated with this project, therefore, this cultural resource literature review and Phase I archaeological survey is an act of due diligence.

Literature Search Results: A literature search within a 1-mile study area surrounding the proposed project area was conducted on April 20 and May 4, 2021, by In Situ staff (Figures 3-5). This task was completed using site data files and previous inventory files maintained at the Minnesota SHPO and Minnesota OSA. The literature search revealed five previously recorded archaeological sites and no previously recorded architectural resources within the 1-mile study area.

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Due to the implementation of Emergency Executive Order 20-20 in response to the Novel Coronavirus (COVID-19) Pandemic, at the time of this project's completion, the Minnesota SHPO and OSA offices were closed. Due to this, information regarding previous surveys and reports could not be obtained for this report, as most reports were not available at the time. However, for the purpose of this Phase I investigation, the information regarding previous surveys and reports would only serve as context for the broad research area and is not directly related to the outcome of the current project.

There are five previously recorded archaeological resources within the 1-mile study area (Table 1). The previously recorded archaeological resources include one prehistoric lithic scatter site (21BW0077), three prehistoric petroglyph sites (21BW0084, 21BW0085, and 21CO0031), and one historic Euro-American military trail alpha site lead (21Cod). All five resources are *unevaluated* for the NRHP and are located outside of the project area. No further work is recommended for these resources for this project.

Table 1: Previously Recorded Archaeological Resources within the One-Mile Study Area

Site Number	Site Type	Location	NRHP Eligibility	Within Project Area
21BW0077	Prehistoric Archaic and Early Woodland Lithic Scatter	not for public disclosure	Unevaluated	No
21BW0084	Prehistoric Petroglyphs	not for public disclosure	Unevaluated	No
21BW0085	Prehistoric Petroglyphs	not for public disclosure	Unevaluated	No
21CO0031	Prehistoric Petroglyphs	not for public disclosure	Unevaluated	No
21COd	Alpha Site – Historic Euro-American Military Trail Site Lead	not for public disclosure	Unevaluated	No

Field Personnel: The field survey crew consisted of In Situ archaeologists Craig Picka and Claire Witt.

Field Methods and Conditions: The Phase I Cultural Resource Investigation was conducted using pedestrian survey and visual inspection. These methods were conducted in accordance with the following Minnesota SHPO guidelines:

- *Visual Inspection* – Locations where cultural resources were not expected, such as disturbed areas, areas with a slope greater than 20 degrees, and low/wet areas were walked over and visually inspected. This method was used to verify the absence or likelihood of any cultural resources within these areas. This method was also utilized to document the general terrain and the surrounding area.
- *Pedestrian Survey* – this method was used to survey landforms with slopes that are greater than 20 degrees, or landforms with slopes that are less than 20 degrees and have

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a surface visibility greater than 25% (e.g., plowed field). The pedestrian survey transect interval ranged between was 5-15 m.

The topography of the project area consisted of fairly flat topography. Little to no vegetation was present, but there was some tilled agricultural field debris present in the project area, providing excellent (90-100%) ground surface visibility (Figure 7). The majority of the project area (approximately 95%) has been subject to ground moving activities, as the topsoil in the area has been graded/stripped, removed, and placed in piles across the project area, causing the area to be disturbed. The project area was subject to visual inspection and pedestrian survey (Figure 6). Pedestrian survey took place across the entire project area and the topsoil piles were visually inspected for any cultural material. The weather was warm and partly cloudy during the survey. Impacts to the project area include agricultural practices, rural development, and soil clearing/ground disturbing activities (Figure 8). No cultural materials were observed or recorded during the assessment of this project area.

For this project, based on the ground moving activities that took place within the project area, there is an apparent level of disturbance documented at the project area. Due to this, there appears to be nominal potential for the intact presence of significant archaeological remains within the proposed project area, as the majority of the topsoil has been graded/stripped and removed in the project area.

The crew was directly supervised in the field by an MA-level archaeologist who meets the requirements for the Secretary of the Interior's Guidelines for Professional Qualifications in Archaeology. A sub-meter GPS unit utilizing Geographic Information System (GIS) data as well as field maps were used to collect spatial data. This ensured that field personnel did not survey outside the project area. All field data, notes, and photographs are on file at In Situ's Eden Prairie, Minnesota office. A map of the inventoried project area is attached to this report, as well as photographs of the project area (Figures 9-14).

Results and Recommendations: During the field survey, a total of 35.6 acres were inventoried for the proposed Graff Quarry Project, Cottonwood County, Minnesota. No cultural resources were observed during this inventory of the proposed project. Due to the negative findings within the project area and the level of disturbance present, In Situ recommends a finding of *No Historic Properties* within the project area and *no further work* is recommended.

For In Situ Archaeological Consulting, LLC.

Signed: 

Name: Abraham Ledezma, M.S., RPA
Position: Principal Investigator, Archaeology

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FIGURES

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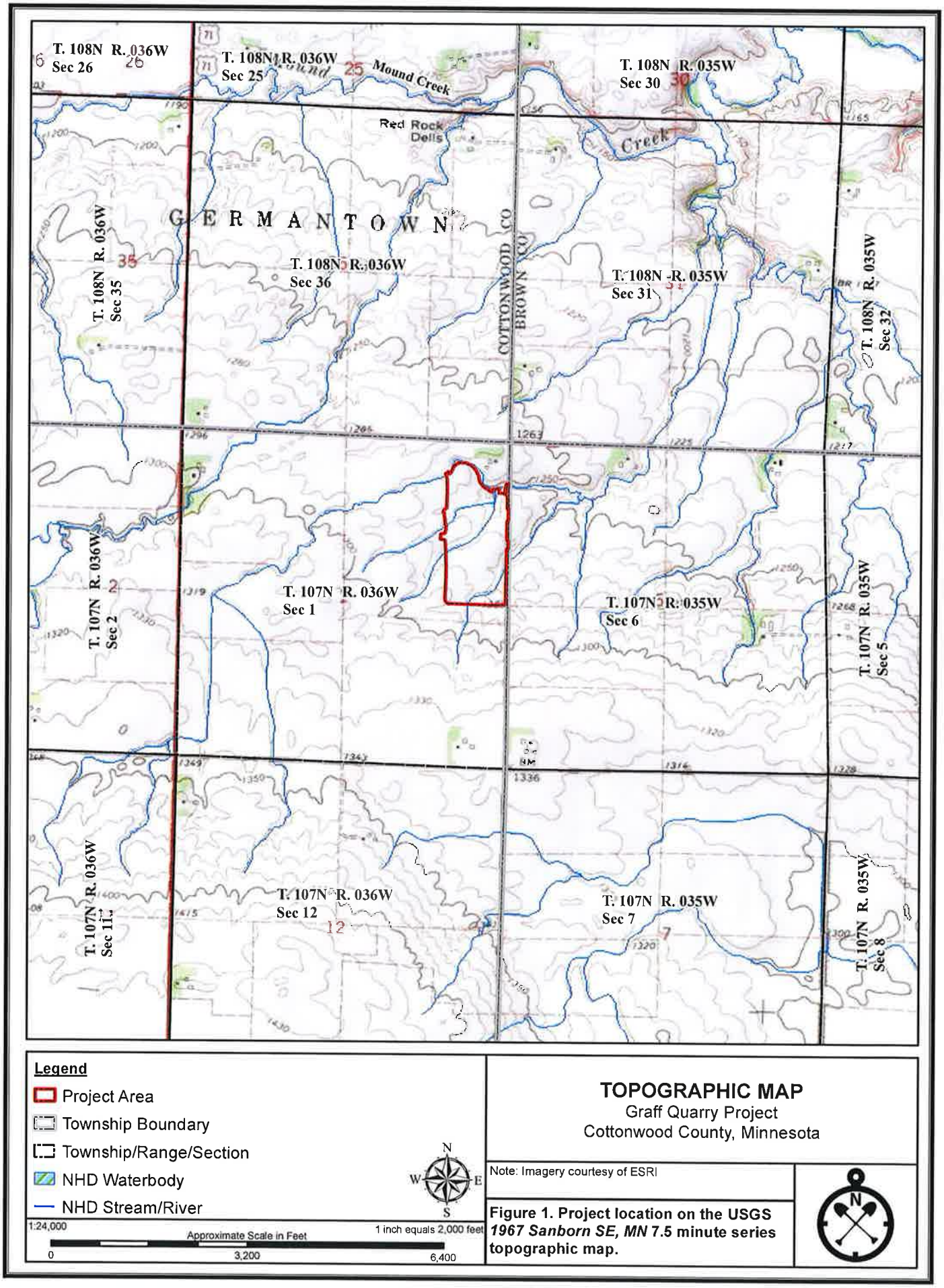
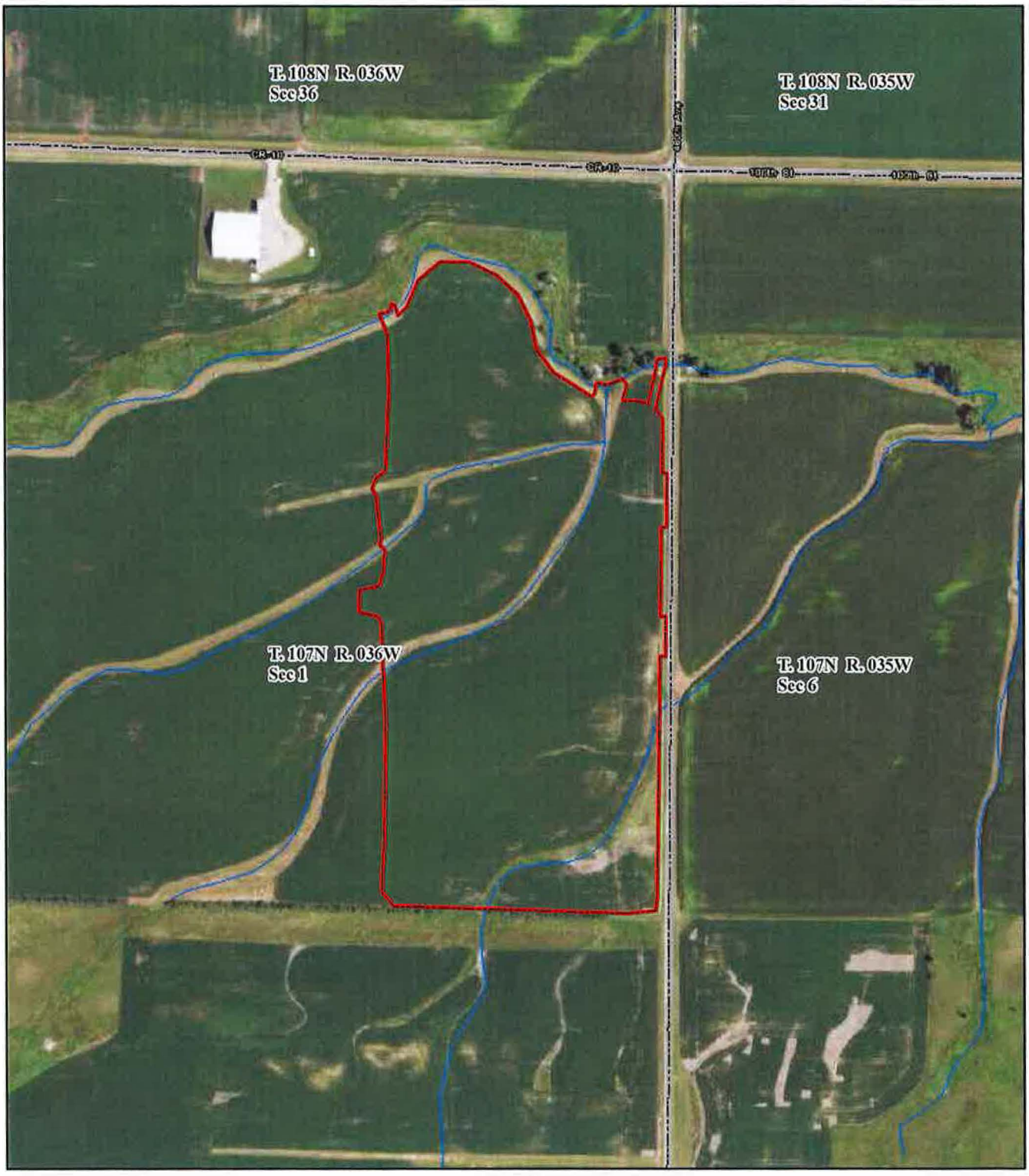


TOPOGRAPHIC MAP

Graff Quarry Project
Cottonwood County, Minnesota

Note: Imagery courtesy of ESRI

Figure 1. Project location on the USGS *1967 Sanborn SE, MN* 7.5 minute series topographic map.



Legend

- Project Area
- Township Boundary
- Township/Range/Section
- NHD Waterbody
- NHD Stream/River

N
W E
S

1:6,000 1 inch equals 500 feet

Approximate Scale in Feet

0 800 1,600

AERIAL MAP

Graff Quarry Project
Cottonwood County, Minnesota

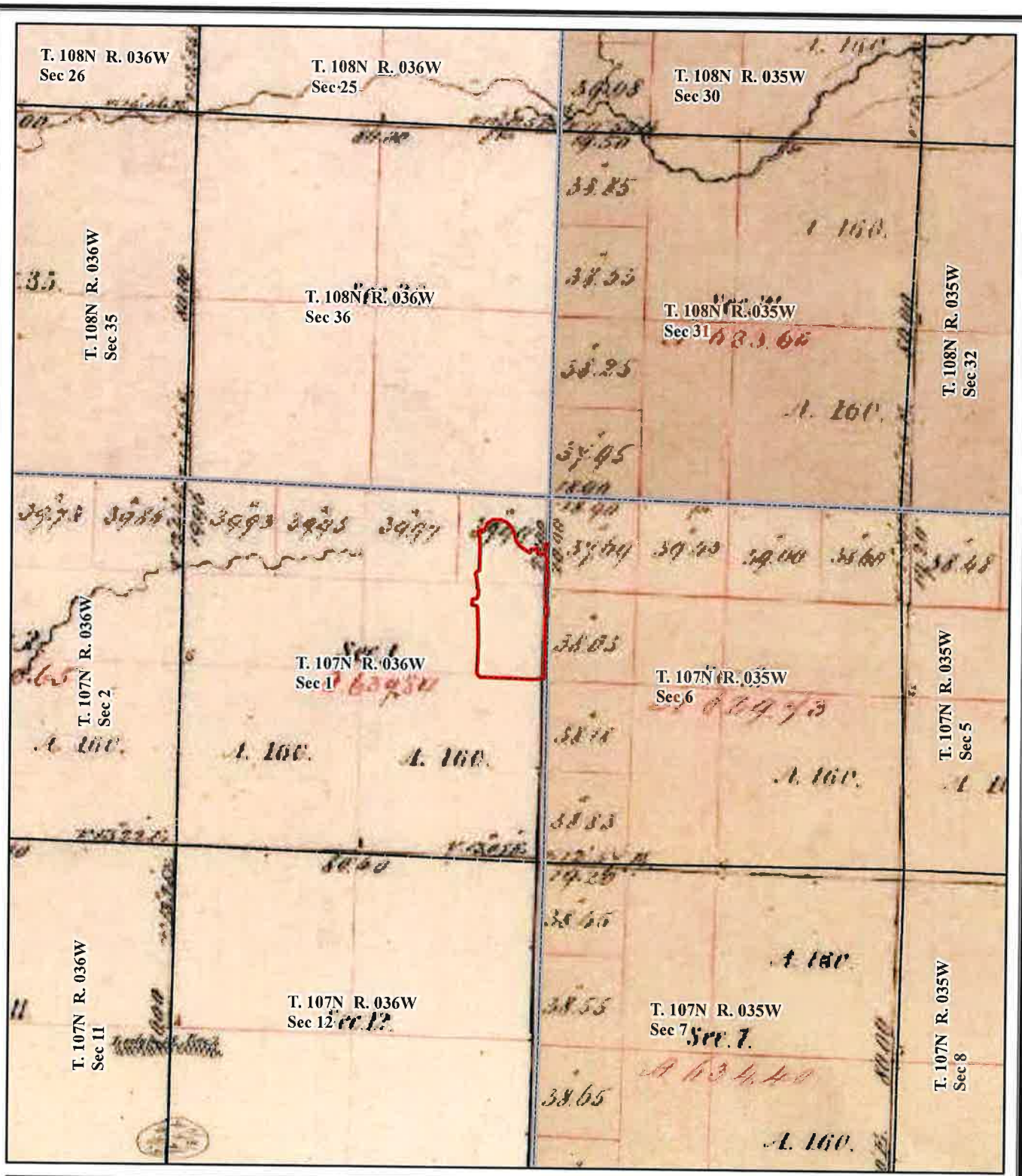
Note: Imagery courtesy of ESRI

N

Figure 2. Project location on an aerial map.

LITERATURE REVIEW TOPOGRAPHIC MAP
Graff Quarry Project

Archaeological Site Location Not for Public Disclosure



Legend

- Project Area
- Township Boundary
- Township/Range/Section

N
W E
S

1:24,000 Approximate Scale in Feet 1 inch equals 2,000 feet

0 3,200 6,400

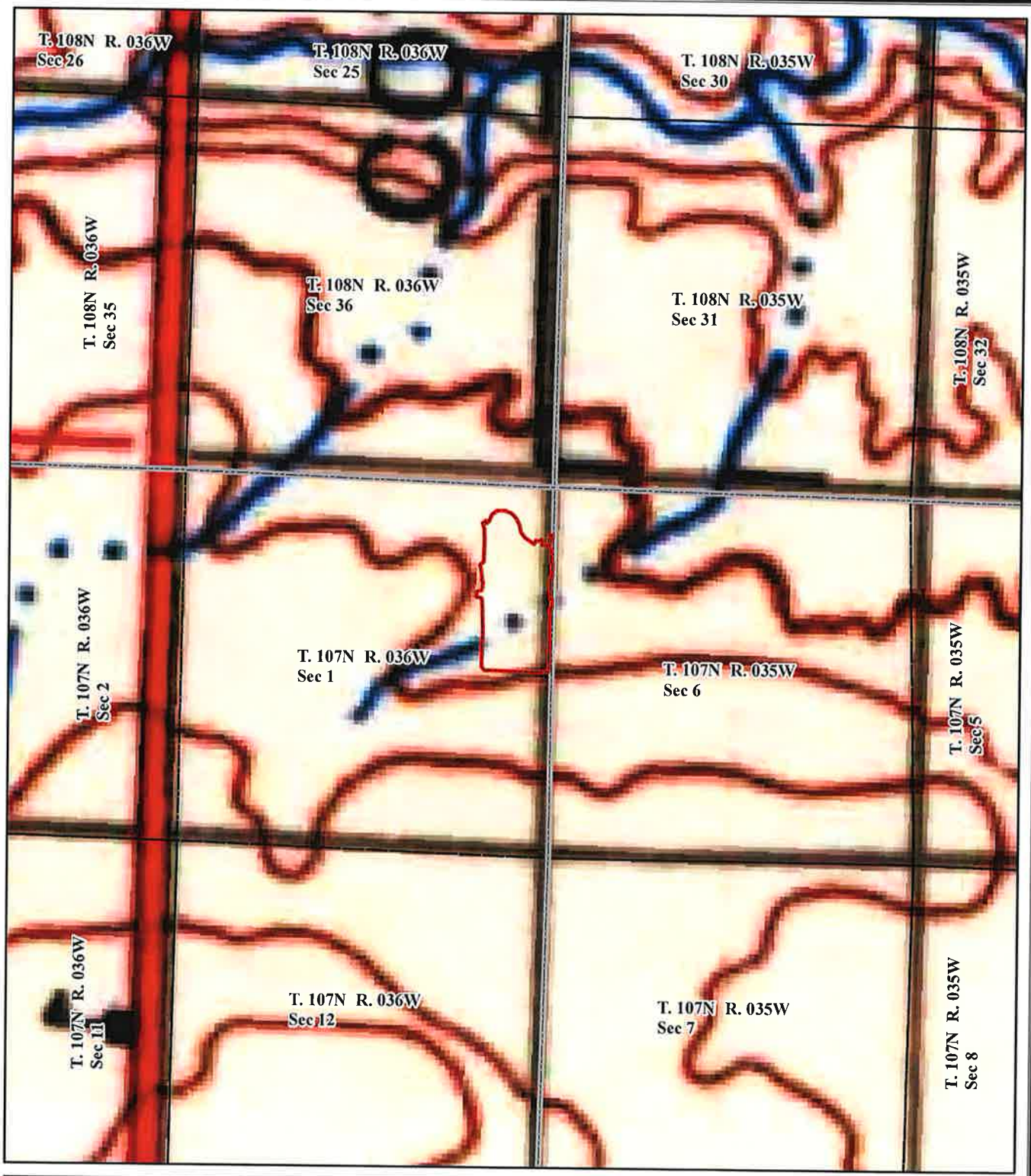
HISTORICAL BLM GLO PLAT MAP

Graff Quarry Project
Cottonwood County, Minnesota

Note: Imagery courtesy of the U.S. Department of the Interior Bureau of Land Management.

Figure 4. Project location on the 1859 BLM GLO Plat map.

N



Legend

- Project Area
- Township Boundary
- Township/Range/Section

N
W E
S

1:24,000

Approximate Scale in Feet

1 inch equals 2,000 feet

0 3,200 6,400

HISTORICAL TOPOGRAPHIC MAP

Graff Quarry Project
Cottonwood County, Minnesota

Note: Imagery courtesy of the USGS.

Figure 5. Project location on the *1953 New Ulm, MN* 250,000 series topographic map.

N

Legend

- Project Area
- Pedestrian Survey/Visual Inspection
- Township Boundary
- Township/Range/Section
- NHD Waterbody
- NHD Stream/River
- Photographic Orientation

N
W E
S

1:6,000 — 1 inch equals 500 feet

Approximate Scale in Feet

0 — 810 — 1,620

FIELDWORK MAP

Graff Quarry Project
Cottonwood County, Minnesota

Note: Imagery courtesy of ESRI

Figure 6. Fieldwork map of the project indicating the results of testing and photo orientations.

N

Figure 7: View of typical surface visibility within the project area (DSCN2346/2365).

Figure 8: View of typical ground moving activities/disturbances within the project area, including graded soil piles (top, DSCN 2383) and the exposed subsoil from grading activities (bottom, DSCN2388).

Figure 9: Overview facing southwest of the project area from the northeast corner of the project area (DSCN2348).

Figure 10: Overview facing southeast of the project area from the northwest corner of the project area (DSCN2359).

Figure 11: Overview facing northeast of the project area from the southwest corner of the project area (DSCN2362).

Figure 12: Overview facing northwest of the project area from the southeast corner of the project area (DSCN2371).

Figure 13: Overview facing west of the project area from within the project area (DSCN2390).

Figure 14: Overview facing south of the project area from within the project area (DSCN2397).

Appendix 17

Archaeological Monitoring Plan and Unanticipated Discovery Plan for the Graff Quarry Project

In Situ's MUD Plan is dated March 10, 2022

Archaeological Monitoring Plan and Unanticipated Discovery Plan for the Graff Quarry Project, Cottonwood County, Minnesota

Prepared by:
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11001 Hampshire Avenue South,
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and

W Lorentz Construction
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Mankato, Minnesota 56001

Regulatory Agencies:
Minnesota State Historic Preservation Office
Minnesota Office of the State Archaeologist

March 10, 2022

TABLE OF CONTENTS

INTRODUCTION

In the Spring of 2021, In Situ Archaeological Consulting, LLC (In Situ) was contracted by Braun Intertec (Braun) to conduct a Phase I Reconnaissance Survey for the Graff Quarry Project (Project) in Cottonwood County, Minnesota. The proposed project is for a proposed rock quarry within a previous agricultural field. A previous cultural resource investigation by In Situ included an approximate 35.6-acre area for the project. Currently, there is no federal undertaking associated with this project, therefore, this cultural resource literature review and Phase I archaeological survey was an act of due diligence.

Legal Location of the Project Area.

County	Township (N)	Range (W)	Section	Quarter Section
Cottonwood	107	36	1	NE¼

During the original cultural resource survey, the majority of the topsoil had already been graded/stripped and removed in the Project area pursuant to valid permits that were in place at the time of such work. Based on the ground moving activities that took place within the Project area, there was an apparent level of disturbance documented at the project area. Due to this, there appeared to be nominal potential for the intact presence of significant archaeological remains within the proposed Project area. In addition, the original cultural resource survey yielded negative results for cultural resources for the proposed Project. Due to the negative findings within the project area and the level of disturbance present, In Situ recommended a finding of No Historic Properties within the project area and no further work was recommended.

As part of on-going settlement discussions related to pending litigation with the Minnesota Pollution Control Agency regarding permits for the Project, the State of Minnesota is requesting that an archaeological monitor be present during the initial ground-disturbing activities for the Project in case there is an unanticipated discovery (i.e. artifacts, burial).

During the spring/summer of 2022, In Situ will conduct the archaeological monitoring for the initial ground disturbing activities (topsoil and overburden stripping) of the Project. A total of 35.6 acres of the Project will be monitored by In Situ. It is anticipated that the initial ground disturbing operations in the monitoring area will take no more than five weeks. The initial depth will likely vary in depth (up to 1 meter below ground surface), which will provide an opportunity to observe any potential findings in the area. Following initial ground disturbing activities, additional excavations for the quarry will take place, however, this work will not be monitored by In Situ since the area will be observed during the mass grading only, as any potential archaeological sites would be located closer to the ground surface. The purpose of this monitoring is to make sure the Phase I survey did not miss any eligible archaeological sites or burials within the monitoring area. This Monitoring Plan will be outlined in this report.

MONITORING PLAN

The Monitoring Plan will be conducted in accordance with the OSA's State Archaeologist's Manual for Archaeological Projects in Minnesota (Anfinson 2011) and Minnesota State Historic Preservation Office's (SHPO) Manual for Archaeological Projects in Minnesota (Anfinson 2005).

CULTURAL RESOURCE MONITORING

A qualified professional archaeologist from In Situ will observe the initial ground disturbance activities (topsoil and overburden stripping as noted above) within the Project area in order to identify any archeological material remains, including artifacts, associated materials, and features. The archaeologist monitor will inspect all disturbed soils and visually inspect all uncovered soils. In Situ will monitor the initial topsoil and overburden stripping until the ground disturbances reaches either bedrock, sterile subsoil (at least 10 cm past the topsoil), parent soil material, or 1 meter in depth. The determinations of terminations of monitoring may vary across the Project area. After which, a monitor would not be recommended in these areas that reach these thresholds, as any potential archaeological sites would be located closer to the ground surface.

If cultural material is identified, the ground-disturbing activities will be halted in the surrounding area, and the Unanticipated Discovery Plan procedures would be followed (see *Unanticipated Discovery Procedures* section below). The archaeologist will document all of their observations by maintaining field notes, photographs, and any GPS data taken during the monitoring. Also, the archaeologist will fill out a daily monitoring form as part of their record-keeping (Appendix B).

ARCHAEOLOGICAL MATERIAL RESOURCES DISCOVERY (NON-BURIAL)

If archaeological material resources are observed, the on-site archaeologists will initiate the following procedures:

1. Halt all ground disturbance activities within 100 ft of the edge of the discovery (using flagging and/or fencing) and keep the machinery in the area as items could be stuck on it. The machinery is to be carefully cleaned and inspected by the archaeologist before it can be moved away from the discovery area. Only essential personnel should be allowed within the discovery area. The on-site archaeologist will assess the material remains to determine its age, location, and condition within the area of ground disturbance.
2. If found to be less than 50 years old**,** the on-site archaeologist will notify the crew members to continue the construction activities.
3. If found to be at least 50 years or older**,** the on-site archaeologist will conduct a more detailed examination of the discovery. If it is determined that the discovery lacks significance or integrity (e.g. it is not intact), the on-site archaeologist will notify the crew that construction may continue and will submit a report documenting the discovery that is suitable to submit to OSA, Minnesota Indian Affairs Council (MIAC), SHPO, and Lower Sioux Indian Community Tribal Historic Preservation Office (THPO).
4. If the on-site archaeologist finds that the discovery appears to retain integrity and is potentially significant, the archaeologist will notify W Lorentz Construction (Lorentz) and Braun immediately. The archaeologist, Braun, and/or Lorentz will consult with OSA, THPO, MIAC, and SHPO to obtain the appropriate treatment of the discovery. These may

include:

a. Phase II testing and National Register of Historic Places eligibility evaluation.

b. Prepare and implement a data recovery plan (such as mitigation efforts).

5. When the treatment measures are completed, In Situ will consult with OSA, THPO, MIAC, and SHPO to determine if additional work is needed, or if no additional work is needed, to obtain approval for the continuation of the construction activities. Upon completion of data recovery, the archeologist shall, if requested by Lorentz, prepare a report detailing findings and recommendations of the material recovered.

BURIAL SITE DISCOVERY

A burial site will include human remains, associated and/or unassociated funerary objects, sacred objects, or objects of cultural patrimony. All actions pertaining to human remains shall be done to comply with federal and state regulations such as the National Historic Preservation Act (NHPA), the Native American Graves Protection and Repatriation Act (NAGPRA), the Minnesota Field Archaeology Act (Minn. Stat. § 138.31-138.42), and the Minnesota Private Cemeteries Act (Minn. Stat. § 307.08). If a burial site is discovered, the on-site archaeologist will initiate the following procedures:

1. Halt all ground disturbance activities within 100 ft of the edge of the burial site (using flagging and/or fencing) and, if possible, stabilize, and/or cover the burial. Any machinery that unearthed the burial must not be moved from the area in case human remains became stuck to the outside parts of the machinery. At a minimum, the human remains will be covered with a tarp to protect them from the outdoor elements and prevent them from public display. This will help prevent additional disturbance and any burial items are to be respected at times.

2. Immediately notify the local law enforcement who will be able to determine if the possible burial site/human remains are associated with a crime scene and/or a recent event (less than 50 years old). If the area is determined to be associated with a crime scene and/or are less than 50 years old, further action will fall under the local law enforcement jurisdiction.

3. If the burial is found to be more than 50 years or older and not a crime scene, the on-site archaeologist will immediately notify the State Archaeologist following clearance from the local law enforcement agency. The State Archaeologist will authenticate the human remains/possible burial site, which will determine the presence of, or high possibility of human remains or human burials located in a discrete area, boundaries will be delineated around the burial or gravesite, and an attempt will be made to determine the ethnic, cultural, or religious affiliation of the individuals.

a. If the State Archaeologist does not have enough information to delineate and/or authenticate the burial site, then additional consultation and fieldwork will be required.

b. If the human remains/burial site is determined to be Native American, the State Archaeologist will initiate a consultation with the MIAC and other tribal representatives to determine the appropriate measures for the treatment of the remains. The lead tribe and/or the MIAC will assist with the repatriation and re-internment of human remains.

c. If the burial site/human remains are determined to be non-Native American or their ancestry cannot be determined, then the appropriate measures for their treatment will be the responsibility of the State Archaeologist.

4. **No further activity shall be allowed in the area of the discovery** until the OSA and MIAC complete their consultation and mitigation efforts. This includes keeping the machinery on the Project until it is carefully cleaned off and examined by archaeologists as human remains may become stuck to it.

Once the OSA and MIAC have completed their efforts and granted permission, the ground disturbance activities may proceed.

ARTIFACT ANALYSIS AND CURATION

Laboratory methods and artifact analyses will be conducted in accordance with the Guidelines for Archaeological Investigations in Minnesota (Anfinson 2005). Artifacts were prepared in the field for curation and transferred to our laboratory facilities where they were cleaned and analyzed by qualified cultural resource specialists. The artifacts are then returned to the landowner.

UNANTICIPATED DISCOVERY PROCEDURES

This Unanticipated Discoveries Plan ("UDP") sets forth the guidelines to be used in the event archaeological resources or human skeletal remains are discovered during construction activities. These measures were developed by In Situ in accordance with applicable state and federal guidelines. Early and frequent communications are essential in meeting both the spirit and law of those guidelines; therefore, Appendix A shows the most current list of relevant contacts in the event of an unanticipated discovery during construction.

Construction activities have the potential to uncover unknown archaeological sites and human skeletal remains, as well as many other cultural and natural elements such as modern refuse and faunal remains. While the Phase I Reconnaissance Survey can effectively eliminate most discoveries during construction, Lorentz and Braun are aware that project planning should anticipate even the remote possibility of a discovery. In the event a discovery is made, the construction contractor will:

1. Halt all ground disturbance activities in the area of the discovery.
2. Establish a 100 ft buffer around the edge of the discovery (using flagging and/or fencing).
3. Notify Lorentz and Braun of the discovery.
4. Lorentz and Braun will then notify In Situ, who will conduct a preliminary assessment of the area.

ARCHAEOLOGICAL MATERIAL RESOURCES DISCOVERY (NON-BURIAL)

If archaeological material resources are observed, In Situ will initiate the following procedures:

1. If found to be less than 50 years old**,** In Situ will notify the crew members to continue the construction activities.
2. If found to be at least 50 years or older**,** In Situ will conduct a more detailed examination of the discovery. If it is determined that the discovery lacks significance or integrity (e.g. it is not intact), the archaeologist will notify the crew that construction may continue and will submit a report documenting the discovery to Braun to submit to the OSA, MIAC, SHPO, and THPO.
3. If In Situ finds that the discovery appears to retain integrity and is potentially significant, the archaeologist will notify Lorentz and Braun immediately. The archaeologist or Braun will consult with OSA, THPO, MIAC, and SHPO to obtain the appropriate treatment of the discovery. These may include:
    a. Phase II testing and National Register of Historic Places eligibility evaluation.
    b. Prepare and implement a data recovery plan (such as mitigation efforts)
4. When the treatment measures are completed, In Situ will consult with OSA, MIAC, SHPO, and THPO to determine if additional work is needed, or if no additional work is needed, to obtain approval for the continuation of the construction activities. Upon completion of data recovery, the archeologist shall prepare a report detailing findings and recommendations of the material recovered.

BURIAL SITE DISCOVERY

A burial site will include human remains, associated and/or unassociated funerary objects, sacred objects, or objects of cultural patrimony. All actions pertaining to human remains shall be done to comply with federal and state regulations such as the NHPA, the Native American Graves Protection and Repatriation Act (NAGPRA), the Minnesota Field Archaeology Act (Minn. Stat. § 138.31-138.42), and the Minnesota Private Cemeteries Act (Minn. Stat. § 307.08). If a burial is discovered, the Archaeologist Consultant will initiate the following procedures:

1. Immediately notify the local law enforcement. They will be able to determine if the possible burial site/human remains are associated with a crime scene and/or a recent event (less than 50 years old). If the area is determined to be associated with a crime scene and/or are less than 50 years old, further action will fall under the local law enforcement jurisdiction.
2. If the burial is found to be more than 50 years or older and not a crime scene, In Situ will immediately notify the OSA following clearance from the local law enforcement agency. The State Archaeologist will authenticate the human remains/possible burial site, which will determine the presence of, or high possibility of human remains, or human burials located in a discrete area, boundaries will be delimited around the burial or gravesite, and an attempt will be made to determine the ethnic, cultural, or religious affiliation of the individuals.
    - **a.** If the State Archaeologist does not have enough information to delineate and/or authenticate the burial site, then additional consultation and fieldwork will be required.
    - **b.** If the human remains/burial site is determined to be Native American, the State Archaeologist will initiate a consultation with the Minnesota Indian Affairs Council (MIAC) and other tribal representatives to determine the appropriate measures for the treatment of the remains. The lead tribe and/or the MIAC will assist with the repatriation and re-internment of human remains.
    - **c.** If the burial site/human remains are determined to be non-Native American or their ancestry cannot be determined, then the appropriate measures for their treatment will be the responsibility of the State Archaeologist.

No further activity shall be allowed in the area of the discovery until the OSA and MIAC complete their consultation/mitigation efforts, and given further instructions to Lorentz and Braun on how to proceed. This includes keeping the machinery on site until it is carefully cleaned off and examined by archaeologists as human remains may become stuck to it.

QUALIFICATIONS

In Situ is a cultural resource consulting company that specializes in archaeological surveys and artifact analysis. In Situ archaeologists Abraham Ledezma and Craig Picka have experience conducting surveys and writing reports that meet or exceed federal and state agency requirements for various states. Abraham Ledezma has over 16 years of experience and he received an M.S. in Applied Anthropology from Missouri State University in 2012 and a B.A. in Anthropology, with an emphasis on Archaeology from Minnesota State University Moorhead in 2008. Craig Picka has over 16 years of experience and he received an M.S. in Applied Anthropology from Missouri State University in 2012 and a B.A. in Anthropology, with an emphasis on Archaeology from Minnesota State University Moorhead in 2009.

In Situ staff has nationwide experience and is qualified to lead and conduct archaeological investigations in multiple states, including, but not limited to, Minnesota, North Dakota, South Dakota, Iowa, Illinois, Indiana, Missouri, Michigan, Ohio, Texas, West Virginia, and Wisconsin. In addition, Abraham Ledezma and Craig Picka each meet the requirements for the Secretary of the Interior's Guidelines for Professional Qualifications in Archaeology (48 FR 44739).

REFERENCES CITED

Anfinson, Scott

2005 *SHPO Manual for Archaeological Projects in Minnesota*. Minnesota State Historic Preservation Office. St. Paul, Minnesota.

2011 *State Archaeologist's Manual for Archaeological Projects* in Minnesota. Minnesota Office of the State Archaeologist. St. Paul, Minnesota.

APPENDIX A:
CONTACT INFORMATION

CONTACT LIST	
Entity	**Contact Information**
W Lorentz Construction	Nicolas Lorentz Operations Manager 125 Kingswood Drive Mankato, Minnesota 56001 Telephone: (507) 388-4182 Cell: (507) 420-4840 Email: Nicolas@wlorentz.com
Braun Consulting Services Inc.	Travis Fristed Group Manager, Principal Scientist 11001 Hampshire Avenue S Minneapolis, MN 55438 Cell: (952) 500-1180 Email: TFristed@braunintertec.com
In Situ Archaeological Consulting, LLC	Abraham Ledezma Principal Investigator/Archaeological Consultant 7630 Executive Drive Eden Prairie, Minnesota 55344 Telephone: (952) 658-8891 Cell: (218) 658-0690 Email: ALedezma@insitucrm.com
Minnesota State Historic Preservation Office (SHPO)	David Mather National Register Archaeologist State Historic Preservation Office Administration Building #203 50 Sherburne Ave. Saint Paul, MN 55155 Telephone: (651) 201-3289 Email: David.mather@state.mn.us
Cottonwood County Coroner	Rod Dynes M.D., Coroner PO Box 338, 820 2nd Avenue Windom, Minnesota, 56101 Telephone: (507) 831-3388 Email: rod.dynes@gmail.com
Cottonwood County Sheriff	Jason Purrington Cottonwood County Sheriff 902 5th Avenue Windom, MN 56101 Telephone: (507) 831-1957 Email: Jason.purrington@co.cottonwood.mn.us

CONTACT LIST	
Entity	**Contact Information**
Office of the State Archaeologist (OSA)	Amanda Gronhovd State Archaeologist 328 W Kellogg Blvd, St Paul, MN 55102 Telephone: (612) 670-6431 Email: Amanda.gronhovd@state.mn.us
Minnesota Indian Affairs Council (MIAC)	Dylan Goetsch Cultural Resource Specialist 161 St. Anthony Avenue, Ste. 919 St Paul, MN 55103 Telephone: (651) 724-3325 Email: Dylan.Goetsch@state.mn.us
Lower Sioux Indian Community Tribal Historic Preservation Office (THPO)	Cheyanne St. John Tribal Historic Preservation Officer 39527 Res. Hwy 1 Morton, MN 56270 Telephone: (507) 697-8672 Email: Cheyanne.stjohn@lowersioux.com

APPENDIX B:

Daily Monitoring Form

IN SITU
Archaeological Consulting

7630 Executive Drive
Eden Prairie, MN 55344
Ph: 952-658-8891
Web: www.insitucrm.com

DAILY MONITORING FORM

(Form should be filled each day of Monitoring)

Name of Monitor: _____ Project Name: _____

Site Number: _____ Date: _____

Please describe a brief overview of the site condition.

Please describe the location of monitoring work being done today, if different than the previous day. If work remains the same as the previous day, write a continuation.

If project work differs from the previous day, please describe.

Have prehistoric materials or artifacts been discovered? (Yes / No)

If yes, please check all that apply,

Ceramics	☐ Type: _____
Projectile Points	☐ Type: _____
Copper	☐
Shell	☐
Bone Tools	☐ Type: _____
Stone Tools	☐ Type: _____
Flake/Debitage	☐
Animal Remains	☐ Type: _____
Ornaments	☐ Type: _____
Beads	☐ Type: _____
Pipe	☐ Type: _____
European trade items	☐ Type: _____
Other	☐ Describe: _____

If yes, please describe:

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Archaeological Consulting

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Eden Prairie, MN 55344
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Web: www.insitucrm.com

Has historic material been discovered? (Yes / No)
If yes, please describe material and context:

Has a potential of burial been discovered? (Yes / No)
If yes, please describe potential burial along with accurate measurements and orientation.

Have human remains, unidentifiable remains, cultural materials, or artifacts been identified? (Yes / No)

If yes, please check all burial types that apply describe.

Primary burial ☐
Secondary burial ☐
Cremated remains ☐
Undetermined ☐

If yes, please describe the nature and context of the find (with attention paid to orientation, depth, affiliated soils, etc.).

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If yes and enough information is presently attainable, please check all burial structure elements that apply.

Red Ocher ☐
Other Pigments or color stains in the soil ☐
Pebbles or small rocks ☐
Middle to large rock (two hands needed to move) ☐
Slabs or Limestone ☐
Birch Bark ☐
Wood ☐
Charcoal ☐
Ash ☐
Other, please describe:

If yes, please provide context.

Please describe any changes to the soil matrix.

If nothing was disturbed, please describe any archaeological techniques that were done as part of the monitoring.

Please describe any additional findings or relevant observations.

Appendix 18

2022 Petition

EQB received the 2022 Petition on March 17, 2022

March 16, 2022

Environmental Quality Board
520 Lafayette Road North
Saint Paul, Minnesota 55155

RE: Request for Environmental Assessment Worksheet regarding proposed Sioux Quartzite Quarry project on the Red Rock Ridge in Cottonwood County, Minnesota

Dear Sirs and Madams:

I am the representative submitting a petition on behalf of more than a hundred concerned citizens, including myself, who are requesting that the W. Lorentz & Sons Construction, P.O. Box 847, Mankato, Minnesota 56002, be required to perform an Environmental Assessment Work Sheet ("EAW") in connection with its Site inventory report form for its Sioux Quartzite Quarry project (also known as the Graff Quarry) on the Red Rock Ridge in Cottonwood County, Minnesota.

I. Description of Project and Procedural History.

W. Lorentz & Sons Construction is an existing MN649 permit holder. On or around November 19, 2021, W. Lorentz & Sons Construction submitted a site inventory report form to the MPCA requesting permit coverage for new pits under its MNG490596 permit. One of the new pits referenced in the Site Inventory Report Form is the Graff Quarry. [1] However, the Graff Quarry (hereinafter, the "Property") has the same coordinates (T107N, R36W, Sec 1, NE1/4) as the Property referenced in an application for a Conditional Use Permit submitted by W. Lorentz Construction in July 2020, with a legal description of the following: "the Northeast Quarter, Section 1, Township 107 North, Range 36 West, Cottonwood County, Minnesota"[2]

As noted in the Site inventory report form, W. Lorentz & Sons Construction proposes to use the Property and use and excavate approximately 35.6 acres[3] for a proposed project as a crushed and broken stone mining/quarry area (hereinafter referred to as the "Project").[4]

The Project proposes to use an excavate approximately 35.6 acres, which includes the primary activity of crushed and broken stone mining/quarry area (not elsewhere classified, SIC Code 1429).[5] The Project plan includes creating 9.7 acres of stockpile, 8.2 cares of ponding and 17.7 acres of excavation. [6] It also includes creating four drainage ponds and 1,271 feet berm.[7]

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[1] *See* Site inventory report from and corresponding documents, enclosed as Exhibit (Ex.) A.
[2] *See* CUP application, Ex. B, p. 1.
[3] *See* Ex. A., p. 14.
[4] *Id.*, p. 3.
[5] *Id.*, p. 3.
[6] *Id.*, p. 14.
[7] *Id.*, p. 9-10.

On or around November 9, 2020, this representative submitted a Citizens petition to the aforementioned application for a Conditional Use Permit, requesting an Environmental Assessment Worksheet to be completed on the Project.

On December 17, 2020, the MPCA noticed this representative and W. Lorentz Construction that the Project may not receive any permits, nor can the project be started, until their decision regarding the Petition for an Environmental Assessment Worksheet has been made.[8]

The W. Lorentz Construction's Project from the 2020 CUP application proposed to use and excavate nearly 30 acres, which includes mining, blasting, crushing, washing, and removing aggregate materials and other construction activities that align with the mining activities on the Red Rock Ridge.[9] The Project plan included creating a 1,276 feet berm, 9.1 acres of stockpile, and 17.7 acres of excavation. At least two feet of soil would need to be stripped and removed to get to the Sioux Quartzite.[10] The anticipated hours of the Project operation were reported from 7:30am to 5:30pm Monday through Friday and some Saturdays. And would engage at least 95 trucks per day hauling the quartzite out of the quarry on several local and county roadways, some of which are gravel roads.[11] It was also reported by W. Lorentz Construction, in an effort to minimize dust, a sprinkler system will be utilized to wet and spray the roads with chloride.[12]

Similar to the Site inventory report form submitted by W. Lorentz & Sons Construction, the 2020 proposal also included creating four drainage ponds. These ponds would require installing several culverts to force the drainage into an established drainage swale and the neighboring property's runoff.[13]

Despite the same coordinates referenced in the 2020 Application for Conditional Use and the Site inventory report from November 2021, we would like clarity as to how many acres are really part of the Project. During the public hearing for the 2020 CUP application, W. Lorentz Construction referenced the total acres at "just under 30."[14] However, the site inventory report and supplemental information submitted by W. Lorentz & Sons Construction reference approximately 35.6 acres. The total area disturbed appears to be closer to fifty-six (56) acres[15].

II. Environmental Impact of Proposed Development

The proposed stripping vegetation, blasting, crushing, dredging, and digging some 1,261 feet to extract the Sioux Quartzite creates several environmental impacts.[16] This petition addresses the

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[8] *See* MPCA letter, enclosed as Ex. C.
[9] *See* CUP application, Ex. B.
[10] *See* Public Hearing Transcript (regarding the CUP application), enclosed as Ex. D.
[11] *Id.*
[12] *Id.*
[13] *Id.*
[14] *See* Public Hearing Transcript, Ex. D.
[15] *See* Google map, Ex. E.
[16] *See* Ex. A, p. 9.

impacts of this Project to wetlands, endangered and threatened rare plant species, and the loss of significant and irreplaceable historic and archaeological resources.

A. Wetlands

The Minnesota Wetland Conservation Act (the "WCA") was initially enacted in 1991 as Minnesota Laws Chapter 354, as amended. The WCA's overall goal is "no net loss of wetlands" by regulating draining, filling, and excavating activities in or near wetlands.[17]

There are surface water and groundwater features near and downstream of the site of the Project protected by the WCA.[18] Several streams flow from Section 1 of Amboy Township to Mound Creek in Brown County's Mound Creek Park. This Project will impact the water flow in the area and the several wetlands found in this drainage system as noted in the maps in Exhibits D[19]. For example, there are intermittent springs and seeps that create small wetlands in the grasslands adjacent to the Project area. There are intermittent stream channels that flow from the wetlands to the Little Cottonwood River and an intermittent stream adjacent to north of the Project that flows into Mound Creek.

The typical extraction of quartz aggregate quarry operation requires dewatering by approximately 80 million gallons of water annually. The proposed dewatering, drainage ponds, berms, culverts, and forced drainage in such close proximity of protected wetlands support conducting an EAW of the Project area.

B. Endangered and Threatened Rare Plant Species

Red Rock Ridge is identified as a 10,192-acre Core Area in the Minnesota Prairie Conservation Plan.[20] It includes several notable managed areas including Rock Ridge Scientific and Natural Area, Jeffers Petroglyph historic site, TNC's Red Rock Preserve, Red Rock WMA, Red Rock Falls County Park (Cottonwood County), and Mound Creek County Park (Brown County), all of which support native prairie and rare plant habitats.[21]

Red Rock Ridge is also characterized by near surface deposits and out crops of Sioux Quartzite.[22] The properties of Sioux Quartzite contribute to a variety of surficial microhabitats for rare plants.[23] The RMS Report identifies and describes the many rare and endangered plant species on the Red Rock Ridge. The characteristic habitat on the Ridge creates an environment unique to rare plant

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[17] *See* The Minnesota Wetland Conservation Act Manual, published by the MN Board of Water and Soil Resources, V.1.3 Last Updated: September 2004. https://www.leg.mn.gov/docs/2007/other/070605.pdf.
[18] *See* Minnesota DNR Wetland Inventory Map https://arcgis.dnr.state.mn.us/ewr/wetlandfinder/ last visited January 24, 2022.
[19] Minnesota DNR Wetland Inventory Maps. Retrieved January 24, 2022, from https://arcgis.dnr.state.mn.us/ewr/wetlandfinder/. Screenshots enclosed as Ex. F.1 and F.2.
[20] *See* Ruby, MacFarlane, Sather Report ("RMS Report") dated October 14, 2020 related to the CUP Application, enclosed as Ex. G, *citing* Minnesota Dept. of Natural Resources 2018 report.
[21] *See* RMS Report, Ex. G.
[22] *Id.*
[23] *Id.*

species. The RMS Report identified numerous endangered and threatened rare plant species on the Red Rock Ridge, including the federally and state-threatened Prairie Bush Clover (*Lespedeza leptostachya* Engelm).

Although this project claims to encompass approximately 35.6 acres and would not trigger a mandatory EAW, the documented threat of native plants on the Red Rock Ridge should require an EAW of the Project area.

C. Historic and Archaeological Resources

The Phase I report by In Situ indicates more than ninety-five percent (95%) of the project area has already been subject to ground moving activities.[24] This is concerning as it is difficult to confirm the presence of a cultural site from observing ground already disturbed and lack of input from the Office of the State Archaeologist (OSA) and State Historic Preservation Office (SHPO). While the OSA and SHPO offices may have been closed as In Situ states, it is our understanding that staff have been available remotely. In an area that is already heavily disturbed and covered with mounded dirt,[25] the petitioner is concerned about the accuracy of In Situ's report of finding no cultural resources observed.[26]

The Property lies on the Red Rock Ridge which harbors the largest concentration of prehistoric and historic Native American rock art in the Midwest, now known to be one of the most notable concentrations of rock art in the world.[27]

The sacred Red Rock Ridge is an active place of worship for Native Americans and visited by thousands from across the world each year. The proposed quarry site is embedded in and surrounded by an intensely archaeologically documented ancient sacred cultural landscape. Over 30 petroglyph, petroform and lithic scatter sites are found on the Ridge. Southwest Minnesota's Red Rock Ridge is one of the richest concentrations of ancient rock carving in the world. Sixteen miles of the Ridge contains 27 petroglyph sites on its 311 Sioux Quartzite outcrops, five petroform sites, numerous sacred springs, and countless lithic scatters. Located 2.5 miles east of the proposed quarry is Jeffers Petroglyphs Historic Site which contains 8,000 rock carvings. The site is on the National Historic Registry. Approximately 400 are found on the 25 other outcrops. The carvings were made over an estimated 11,000 years, with the most recent dated from the 1600s to the 1700s.

Many of the same carvings of the Ridge are found on other rock art sites found throughout North America. The Ridge is a unique destination site for ancient travelers from across North America who recorded cultural traditions otherwise lost to history. The rare five petroforms represent 5/7 of the recorded petroforms in Minnesota and provide unique insights into past sacred ceremonies still done today. The lithic scatters provide precious insights into the people who came to the Ridge to worship.

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[24] *See* Exhibit A, Phase I Cultural Resource Investigation of the Graff Quarry Project, Cottonwood County, Minnesota, In Situ report.
[25] *See* Cottonwood County Ditch Photo, Ex. H.
[26] *Id.*
[27] *See* RMS Report. Ex. G, *citing* Loathsome 1976, Callahan 2001.

The Ridge is a cultural and natural heritage site significant to our world's humanity and worthy of the top priorities of preservation. Petroforms and petroglyphs are sacred to Native Americans. They are rare and unique cultural artifacts that give us insight into artistic, spiritual, and communication practices.

One mile south of the proposed quarry are archaeological sites 21CO0029 and 21CO0092 that are extremely significant. 21CO0092 contains rare examples of petroforms with astronomical alignments as well as a formed pavement, and 21CO0029 contains unique examples of rock art, including one of the largest petroglyphs on the Ridge. These sites have been recommended to be placed on the National Register of Historic Places and given permanent protection. The proposed quarry site is between two documented Native American burial sites. Two miles north in the boundaries of Mound Creek Park is a burial mound and one-mile south is a burial cairn in section 12. The proposed quarry operation has a high potential to destroy Native American burials protected by Minnesota Statute 307.08.

Red Rock Ridge has significant cultural importance to many Native Americans. The archaeological description provided in this citizen petition explains landscape features and the surrounding environment which the Mdewakanton Dakota and many tribes outside Minnesota are actively culturally connected to and continue to utilize for traditional cultural practices. In accordance with the United States Department of the Interior, National Park Service *Guidelines for Evaluating and Documenting Traditional Cultural Properties*, the Red Rock Ridge is eligible for a Traditional Cultural Property designation because of its association with the cultural practices and importance in maintaining the continued cultural identity of many Native American Tribes, specifically, the Mdewakanton Dakota – Lower Sioux Indian Community in the State of Minnesota.

Additionally, Ojibwe and Dakota Tribes within the State of Minnesota actively use the site for traditional prayer and fasting, Assiniboine- Sioux Tribes (Montana) come to the Ridge for plant medicines, Ioway Tribes (Kansas and Nebraska) still visit the Ridge for prayer offerings and medicine.

Often these areas leave few traces of activity indicating historic use or continued use, as there are no portable items to identify which tribe has been present or which are returning. The Ridge is a culturally significant property, not only because of the archaeological record, but also due to the historic and cultural role this property still plays in many Tribes' beliefs, customs, and practices. The proposed project would impact viewshed, ambience, and access – all of which impact and disturb the historic and cultural significance of the Ridge.

III. Petitions

We have obtained the required one hundred petitions signed by Minnesota citizens, attached, requesting that any approvals of the proposed development of this Project be stayed pending the preparation and completion of an EAW.

We also would like clarification of the total Project area as recent Google Earth maps indicate its closer to approximately 56 acres.[28]

IV. Conclusion

Based on the foregoing, we respectfully request that the Board require an EAW as a precondition of any potential approval of W. Lorentz Construction's proposed development of quarry on the Project.

Please feel free to contact me with any questions you may have regarding this matter.

Thank you,

Kevin O'Keefe
32941 Res. Hwy 4
Morton, MN 56270
507-430-0824
kevokeefe78@gmail.com

Enclosures

[28] *See* Google map, Ex. E.

Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the project, Sioux Quartzite Quarry by W. Lorentz & Sons Construction, located on Red Rock Ridge in Amboy Township, Cottonwood County, Minnesota, and request that any county or governmental body refrain from considering any permit application or related permit process to the proposed Sioux Quartzite Quarry until an Environmental Assessment Worksheet is completed and available for review and consideration. This request for an EAW is based on the potential significant environmental impacts on historic and archaeological resources and endangered and threatened rare plant species.

Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Kevin O'Keefe	32941 Res Hwy 4 Morton, MN 56270	Kevin O'Keefe
2	Robert Prescott	32729 CO Hwy 2 Morton, MN 56270	
3	Nizhoni Smith	221 Cardinal Way Redwood Falls MN 56283	NSmith
4	Joyce Pendleton	33090 Jackpot Ave. Apt 2 Morton, MN 56270	Joyce Pendleton
5	Takota Goodthunder	211 West Fourth St. Morton, MN 56270	
6	Lawrence Swann III	116 Firewood Ln. Redwood Falls, MN 56283	
7	Elliot Christensen	600 S Ramsey Redwood Falls, MN 56283	Elliot C
8	CYNTHIA ZIMMER-ROBINSON	321 E 4th St Redwood Falls 56283	
9	Eileen O'Keefe	38639 Res Hwy 1 Morton, MN 56270	Eileen O'Keefe
10		38835 Res Hwy 1 Morton MN 56270	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Kateri O'Keefe	38639 Res. Hwy. 1 Morton, MN 56270	
2	Leandra O'Keefe	38631 Res. Hwy. 1 Morton, Mn 56270	LEANDRA A. O'KEEFE
3	Andrea O'Keefe	32941 Res Hwy 4 Morton MN 56270	
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Petition for an Environmental Assessment Worksheet
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Janelle Kaye	1153 5th Ave Windom, MN 56101	
2	Tom Sanders	26950 ~~Cty~~ Rd 45 Comfrey MN 56019	
3	~~BETHO'KEEFE~~	38775 Res Hwy 1 Morton MN 56270	
4	Chris LEE	38775 Res Hwy 1 Morton MN 56270	
5	Jeff Reynolds	111 E. Flynn St Redwood Falls Mn	
6	Robert Reynolds	308 Gallagher St Morgan MN 56266	
7	Earl Pendleton	40381 Dakota Trl Morton, MN 56270	
8	Tyrone Hernandez	40150 Reservation Highway 3 Morton, Mn. 56270	
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	FOREST SEABERG-WOOD	4618 BLAISDELL AVE MINNEAPOLIS, MN 55419	
2	DAVID TENNESSEN	4141 YORK AVE N. ROBBINSDALE MN 55422	
3	BRIAN HOFFMAN	1574 Chelsea St St. Paul, MN 55108	
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Jake Sanders	215 4th St NW. Glenwood, MN 56334	
2	Megan Sanders	215 4th St NW Glenwood MN 56334	Megan Sanders
3			
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Petition for an Environmental Assessment Worksheet
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature LaVonne Johnson
1	LaVonne Johnson	33100 Jackpot Ave Apt 1 Morton, Mn -56270	
2	STEVE JOHNSON	33100 JACKPOT AVE APT 1 MORTON MN 56270	
3	LYLE ANN WILSON	39777 Res Hwy 3 Morton, Minn 56270	
4		39251 Reservation Hwy 1 Morton Mn 56270	
5	Hope Two Hearts	38731 Res. Hwy. 1 Morton, Mn. 56270	
6	Beverly K. Kosin	33251 Ocean Ave Redwood Falls, MN	
7	Ellen L. Scott	235 S. Mill St. Apt 2 Redwood Falls, MN 56283	
8	RUBY MINKEL	40681 - 320TH ST Morton MN 56270	
9	Pam Halverson	40081 Res Hwy 3 Morton Mn, 56270	
10	Lenore GreyEagle	33096 Jackpot Ave, #3 Morton, Mn. 56270	

Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	HEATHER MCNABNAY	201 NEVADA ST. Northfield MN 55057	Heather McNabnay
2	Martin Pansch	201 Nevada Street Northfield, MN 55057	
3			
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Petition for an Environmental Assessment Worksheet
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Sara Upadhyay	4889 191st St W Farmington, MN 55024	
2	Sonam Upadhyay	4889 191st St W Farmington, MN 55024	
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Timothy Bardell	2333 Parkwoods Road Saint Louis Park 55416	Timothy Bardell
2			
3			
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Petition for an Environmental Assessment Worksheet
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	MATTHEW FLODING	4300 W RIVER PKWY, #438 MINNEAPOLIS, MN 55406	
2	Marcia Floding	4300 West River Parkway #438 Minneapolis, Minnesota, 5540	
3			
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Petition for an Environmental Assessment Worksheet
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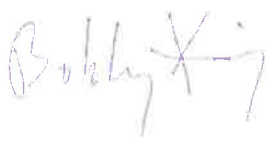
Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Bobby King	3140 43rd Ave South Minneapolis MN 55406	
2	Christina Schmitt	3140 43rd Ave South Minneapolis, MN 55406	
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Joseph Reid	45 Griggs St. N. 55104	Joseph Reid
2	Michael Pleasants	1145 Ashland Ave St. Paul, MN 55104	Michael Pleasants
3	David Schultz	4857 CLINTON Mpls MN 55419	David Schultz
4	Paul C. Ernst	294 Irvine Ave St. Paul, MN 55102	Paul C. Ernst
5	Rollin Gates	2595 Fernwood Ct. Roseville, MN 55113	Rollin Gates
6	Michael Darger	3455 Hayes St NE Mpls, MN 55418	Michael Darger
7	Sharon Reid	45 No. Griggs St. St. Paul, MN 55104	Sharon Reid
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Candice Jackson	6911 Gleason Circle Edina, MN 55439-1600	Candice Jackson
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Clare Ritter	4108 Sheridan Ave S Minneapolis, MN 55410	Clare Ritter
2	JEROME AND RITTER	4108 SHERIDAN AVE SO. MINNEAPOLIS MN 55410	
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City (completely spelled out), and Zip Code)	Signature
1	Mary Lahners	6867 Hallmark Dr. Eden Prairie, Mn. 55346	Mary Lahners
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	BUFF GRACE	722 EVERETT STREET S STILLWATER MN 55082	
2	Amy Grace	722 Everett ST S Stillwater, MN 55082	
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Jane Bacon	1493 N. Birch Lk. Blvd. White Bear Lk, MN 55110	Jane Bacon
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Harold S. Berman	**Harold Berman** 601 Radisson Rd. Minneapolis, MN 55416	Harold Berman
2	Lillian Berman	Lillian Berman 601 Radisson Rd Golden Valley, MN 55416	Lillian D. Berman
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Petition for an Environmental Assessment Worksheet
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Tuomas Sivula	227 ½ 6TH St S Virginia, MN 55792	
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Petition for an Environmental Assessment Worksheet
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Gina Washburn	1910 Roosevelt Dr. #28 Northfield, MN 55057	Gina Washburn
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	MICHAEL SMITH	13001 ORCHARD ROAD MINNETONKA, MN 55305	Michael Smith
2	Veronica Smith	13001 Orchard Rd Mtka, Mn 55305	Veronica Smith
3	Lawrence Wede	15524 Day Pl. Minnetonka MN 55345	Lawrence Wede
4	[illegible]	[illegible] Minnetonka MN 55345	[illegible]
5	Eric Wickiser	5631 Anthony Ave Excelsior Minn 55331	Eric Wickiser
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Petition for an Environmental Assessment Worksheet
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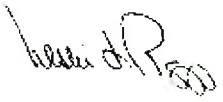
Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Leslie Rapp	4204 Garfield Ave. Minneapolis MN 55409	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Marjorie Kostouros	3324 Emerson Av So Minneapolis, MN 55408	Marjorie Kostouros
2	John Kostouros	3324 Emerson Av S. Mpls MN 55408	John Kostouros
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For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Jean DeGross	5737 Pillsbury Ave S Minneapolis MN 55419	Jean DeGross
2	Tony DeGross	5737 Pillsbury Ave S Minneapolis Mn 55419	Tony DeGross
3	Lydia DeGross	5737 Pillsbury Ave S Minneapolis MN 55419	Lydia DeGross
4	Jacob DeGross	5737 Pillsbury Ave S Minneapolis MN 55419	Jacob DeGross
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Michael F. Miller	17929 Liv Lane Eden Prairie, MN 55346	Michael F Miller
2	Nancy C. Miller	17929 Liv Lane Eden Prairie, MN 55346	Nancy Miller
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Dan Burr	4853 Sky View Court Fayan, MN 55122	
2	RHONDA OLSON	5109 BEARD AVENUE SOUTH MINNEAPOLIS, MN 55410	
3	Hope Hutchison	2515 Fillmore St NE #2 Minneapolis, MN 55418	
4	Jen Paczya	6500 Woodlake Dr #311 Richfield MN 55423	
5	Sharon Hall	8100 Russell Ave S #325 Bloomington, MN 55431	Sharon K. Hall
6	Rev. Nate Melcher	6118 Oliver Avenue S. Minneapolis, MN 55419	
7	Wayne Albertson	6326 12th Ave. S, Richfield, MN 55423	Wayne Albertson
8	Fern Albertson	6326 12th ave S. Richfield MN 55423	Fern Albertson
9	Nicholas Dewey	1567 Oregon Ave N. Golden Valley MN 55427	
10	Grover Dodds	2448 Portland Ave #14 Minneapolis, MN	

Petition for an Environmental Assessment Worksheet
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Jerry Wilson	5129 Pack Avenue Mpls MN 55419	
2	Rexanne Warner	10800 Xerxes Ave S Bloomington MN 55431	
3	Martha Butler	7072 Lyndale Ave S. Richfield, Mn	M. Butler
4	Sue Johnson	5900 Red Cherry Lane Minnetonka, MN	
5	Beverly Crandall	3643 Longfellow Av. Mpls., Minn. 55407	Beverly Crandall
6	Promise Williams	422 Baker St. West, St. Paul Minnesota, 55117	Promise Williams
7	Calvin Kaskey	6831 Newton Ave South 55423	
8	Nick Olson	7239 Clinton ave South 55423	
9	Kenzie Lambert	6053 Kentworth Ave S 55419	
10	Kent Johnson	5900 Red Cherry La. Mtka MN 55345	

Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Becca Whitaker	15430 Founders Lane Apple Valley MN 55124	
2	Michele Wegscheid	916 W 61st St Minneapolis, MN 55419	
3	GAIL JOHNSON	4500 58th Ave N #304 Brooklyn Center MN 55429	
4	H. Ann Johnson	14441 Village Walk Dr. Eden Prairie, MN 55347	
5	WILLIAM R JOHNSON	1331 LAKE DR APT 115 CHANHASSEN, MN 55317	
6	Nancy Dieraner	6072 Whited Ave Minnetonka 55345	
7	Sarah Callahan	422 Baker Street W St Paul MN 55107	
8	Dale Olson	5109 Beard Ave South Mpls 55410	
9	Wayne Johnson	9348 Russell Ave So. Bloomington, MN 55437	
10	John Dieraner	6072 Whited Ave Mtka MN 55345	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Kay Bergeland	15517 Willowood Drive Minnetonka, MN 55345	Kay Bergeland
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Maureen McCarter	1931 17th St. South St. Cloud, MN 56301	Maureen McCarter
2	[illegible]	8715 116th St SE Clearlake Twp 55319	[illegible]
3	Julie Mische	44362 Loon Cabin Lane, Cre, Eagle, MN 56336	[illegible]
4	Thomas Baron	1358 Cleveland Ave S Saint Paul MN 55116	[illegible]
5	JEROME McCARTER	1931 17th St So St Cloud MN 56301	[illegible]
6	Richard Baron	9685 320TH ST St. Joseph, MN 56374	[illegible]
7	Debra Baron	9685 320th St St Joseph MN 56374	[illegible]
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Petition for an Environmental Assessment Worksheet
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Michael May	243 Maria Avenue Saint Paul 55106	Michael May
2	Diane May	243 Maria Avenue Saint Paul 55106	Diane M. May
3	David May	243 Maria AVE Saint Paul 55106	David May
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Maria Klein	1425 W. 28th Street, #301 Minneapolis MN 55408	Maria K
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Mark Lanners	6867 Hallmark Drive Eden Prairie, MN 55346	
2	Claudine Fasching	10472 Wimbledon Ct Eden Prairie MN 55347	
3	Donna M. Williams	4640 W 139th St Savage, MN 55378	
4	teagan Groenke	17649 Evener Way Eden Prairie, MN 55346	
5	Cono Groenke	17649 Evener Way Eden Prairie, MN 55346	
6	Troy Groenke	3839 Garfield Ave Minneapolis, MN 55409	
7	Deloras Thelen	1265 Marschall Rd #329 Shakopee MN 55379	Deloras Thelen
8	Sheila + Tom Heller	9024 Preserve Blvd Eden Prairie, MN 55347	Sheila Heller
9	JAMES STURDEVANT	11100 OREGON AVE BLOOMINGTON 55438	
10	Bernie Jaspers	16413 Eldedale Lane Eden Prairie MN 55346	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Peg Musegades	8977 Preserve Blvd. Eden Prairie, MN 55347	Peg Musegades
2	Megen Musegades	4351 Grand Ave S Minneapolis, MN 55409	
3	Paul Wade	4956 Morgan Ave S Minneapolis MN 55419	
4	Todd Nelson	569 Mendota St Saint Paul, MN 55106	Nelson
5	Tim Megan	7664 Superior Ter	
6	Maureen Carney	9128 Preserve Blvd Eden Prairie 55347	Maureen P Carney
7	Carole Britta	11101 Oregon Circle 55438	Carole Britta
8	Stephen Allen	8111 W. Park Hills Dr Bloomington MN 55438	
9	Mary Turke	2010 Lancaster St Mtka MN 55305	
10	Patricia Barnes	7136 Arba Glen Drive Eden Prairie, Mn 55346	Patricia Hughes Barnes

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Phyllis Olson	9550 Collegeview Rd #229 Bloomington MN 55437	Phyllis Olson
2	Wayne Olson	9550 Collegeview Rd #229 Bloomington, MN 55437	Wayne Olson
3	Tom Sampson	9530 Ridgewood Cir Eden Prairie	Tom Sampson
4	DAWN McGovern	8036 Northridge TRAIL E. Pra	Dawn McGovern
5	Richard Brumbaugh	14044 Virginia Way Savage	R Brumbaugh
6	Paul Cress	8143 Pennsylvania Cir Bloomington, MN 55438	Paul M Cress
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Ferolyn Angell	331 Jefferson Avenue Hancock, Minnesota 56244	Ferolyn Angell
2	DAN ALLENSPACH	331 JEFFERSON AV. HANCOCK, MN. 56244	DAN ALLENSPACH
3	Sally Finzel	109 Colorado Ave Morris, MN 56267	
4	Maeve Maron	501 Atlantic ave Morris, mn 56267	
5	Athena Kildegaard	548 E. 5th St. Morris MN 56267	
6	Arne Kildegaard	548 E 5th St Morris MN 56267	
7	Margaret Kuchenreuther	905 West 4th St. Morris MN 56267	
8	Matthew sheets	105 East 3rd Street Morris. MN. 56267	
9	Samantha Clear	704 Imperial Drive, Apt. 309, Morris, MN, 56267	Samantha Clear
10	Kern Ramsdell	118 W. 5th St. Morris MN 56267	

Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the project, Sioux Quartzite Quarry by W. Lorentz & Sons Construction, located on Red Rock Ridge in Amboy Township, Cottonwood County, Minnesota, and request that any county or governmental body refrain from considering any permit application or related permit process to the proposed Sioux Quartzite Quarry until an Environmental Assessment Worksheet is completed and available for review and consideration. This request for an EAW is based on the potential significant environmental impacts on historic and archaeological resources and endangered and threatened rare plant species.

Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	LIAN PARTLOW	4309 40th AVE. S. MINNEAPOLIS, MN 55406	Lian Partlow
2	GAYLE F. LEWIS	74 BIRNAMWOOD DR. BURNSVILLE, MN 55337	Gayle F. Lewis
3	Brian Satrom	4309 40th Ave. S. Minneapolis, MN 55406	Brian Satrom
4	Pamela Joern	5111 Irving Ave S Minneapolis, MN 55419	Pamela Joern
5	Bradley Joern	5111 Irving Ave. So. Minneapolis, MN 55419	Bradley Joern
6	MONICA LEWIS	1423 26th Ave NE Minneapolis MN 55418	Monica Lewis
7	DOUG WEATHERHEAD	1423 26th Ave NE Minneapolis MN 55418	
8	RICHARD ISELMAN	3205 Betty's Bch Ave New Hope MN 55427	
9	Scott Simpson	14924 Highland Tr. Minnetonka MN 55345	
10	Tim Simpson	11	

JIM TEN BENSEL - 3438 ST PAUL AVE MPLS MN 55416

Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City (completely spelled out), and Zip Code)	Signature
1	Lynne C. Hesse	5726 Pleasant Ave, Minneapolis MN 55419	Lynne C. Hesse
2	Jon F Hesse	5726 PLEASANT, MPLS MN 55419	
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Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	John Wozniak	7070 153rd ST W, Unit 105 APPLE VALLEY, MN 55124	John Wozniak
2	Doris Wozniak	7070 153rd St W, Unit 105 Apple Valley MN 55124	Doris Wozniak
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Petition for an Environmental Assessment Worksheet
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	DON ANDREW ZATROCH	2366 17TH AV NW NEW BRIGHTON MN 55112-5204	Don Andrew Zatroch
2	DEBORAH Douglas	2110 14th ST NW #3 NB 55112	Deborah Douglas
3	Randy Edinger	5855 Royal Oaks Dr Shoreview, MN 55126	Randy Edinger
4	Nancy Hite	800 Cnty Rd I Shoreview MN 55126	
5	Marie Nemandt	2360 Hillview Shoreview 55112	M Nemandt
6	Shannon Perry	5958 Highview Place Shoreview, MN 55126	Shannon Perry
7	Shawn Phillips	8683 Xenia Rock Rd Brooklyn Park 55443	
8	Diane Greve	4300 W River Pkwy Mpls MN 55406 #469	Diane K Greve
9	Lyn Pegg	"	Lyn Pegg
10	Rachel Barth	~~6014~~ 6014 E 24th St Minneapolis, MN 55404	
11.	ART Stoeberl	2470 Lydia Ave N Roseville MN 55112	

Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Rich Spingl	7502 Hinton Park Ave, S. (Cottage Grove	Rich Spingl
2	Susan Jendro	3412 35th Ave So Mpls MN 55406	Susan A. Jendro
3	MICHAEL JENDRO	3412 - 35TH AV MPLS. MN. 55406	Michael Jendro
4	Isaac Velasquez	1927th Ave SE, Apt 206 Mpls, MN 55406	Isaac Velasquez
5	Kate Shields	1834 Miss. Riv. Blvd St Paul MN 55116	Kathleen Shields
6	Judy Ross	2720 Mayfair Ct. White Bear Lake 55110	Judy Ross
7	STEVEN M. LUKAS	170 BANK ST, MPLS, MN 55414	
8	Rose ~~Buzzy~~ Vennewitz	30 Windsor Rd # 214 New Brighton 55112	Rose Vennewitz
9	Buzzy Vennewitz	" "	Buzzy Vennewitz
10	Katie Sandstedt	2315 Benjamin St NE Minneapolis, MN 55418	Katie Sandstedt

Petition for an Environmental Assessment Worksheet
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Peter M Koenig	1601 Penn Ave N Minneapolis, MN 55411	Peter M Koenig
2	Kile NT Koenig	1619 Irving Ave N Minneapolis, MN 55411	
3	PETER K. KOENIG	1619 IRVING Ave N Minneapolis, MN 55411	
4	John L Hartman	887 19th Ave Minneapolis MN 55414	
5	Jody Ebert	2804 37th Ave S MPLS, MN 55406	Jody A. Ebert
6	Kathy Krasky	3436 41st Ave So Mpls MN 55406	Kathleen M Krasky
7	Mike Gude	215 McKnight Rd. S. #M201 St Paul, MN 55119	
8	Rick Ahton	167 Duke St St Paul, 55102	
9	Matt Palkert	3550 Van Buren St NE Mpls, MN 55418	
10	Chris Kasowski	3739 Sheridan Av North Minneapolis, MN 55412	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Mary Beth Stein	5596 Royal Oaks Dr Shoreview, Minnesota 55126	Mary Beth Stein
2	Julia Earl	372 Macalester St. St. Paul, MN 55105	J. Earl
3	Kathleen Grimm	506-5 Lovell Avenue Roseville, Minnesota 55103	Kathleen M. Grimm
4	Jerry Blume	1730 JULIET Ave ST PAUL MN 55105	JERRY
5	hannah wegner-dzik	530 Dodge Lane Mendota Hts, MN	Hannah Wegner-dzik
6	ANTHONY POHLEN	29 16th AVEN HOPKINS, MN 55343	Anthony Pohlen
7	Glenn Thomas	506-5 Lovell Ave. Roseville, MN 55113	Glenn Thomas
8	Cathy Corrigan	4504 - 46th Ave So. Mpls 55406	Cathy Corrigan
9	Suzanne Reedy	5230 Dupont Ave. N. Minneapolis, MN 55430	Suzanne Reedy
10	Michael Fitzsimons	1145 Ashland Ave St Paul MN 55104	Michael Fitzsimons

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Susan Rengstorf	590 Suzanne Avenue Shoreview, Mn. 55126	Susan Rengstorf
2	Suzanne Markham-Kocurek	1876 Bluestem Ln. Shoreview, MN 55126	S Markham
3	K. Darlene Guy	1305 Oakcrest Ave Roseville MN 55113	K Darlene Guy
4	Hallie Finucane	2447 Chatsworth St N Roseville MN 55113	Hallie A Finucane
5	MICHAEL KRENIK	215 S 8th St MINNEAPOLIS MN 55402	Michael Krenik
6	Craig Hoffmann	3326 E 26TH MINNEAPOLIS MN 55406	
7	Steven Pope	256 Spring St, unit 415 St. Paul, MN 55102	Steven Pope
8	Amanda Co.mn	256 Spring St #415 St Paul mn 55102	
9	marietta Booth	2220 Midland Grove Rd Roseville, MN	marietta Booth
10	Kim Hoffmann	3326 E 26th St Mpls. MN 55406	

Petition for an Environmental Assessment Worksheet
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Paul Baker	1294 Edgehill Ct Maplewood, MN 55109	
2	Lee Bucher	5029 Garfield Ave Mpls 55419	
3	Greg Bucher	5029 Garfield Ave Mpls MN 55419	
4	Jeanne Cornish	521 Fairmount Ave St. Paul MN 55105	
5	Jim Pilakowski	25 SEYMOUR AVE MPLS, MN 55414	
6	BETSY POLAKOWSKI	3331-39TH AVS MPLS MN 55406	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Joelle Imholte	924 Lawson Ave E St. Paul, MN 55106	Joelle Imholte
2	Lorena Klinnert	300 Marshall Ave. #3 St. Paul, Mn. 55102	Lorena Klinnert
3	Margaret Voller	1531 E. RIVER TERRACE MPLS. MN. 55414	Margaret Voller
4	Mary Schultz	4557 Clinton Ave MPLS MN 55419	Mary Schultz
5	Rosemary Ruffenach	1181 Edgcumbe Rd #212 St. Paul MN 55105	Rosemary Ruffenach
6	Joy DeHarpporte	Mpls., Mn.	Joy DeHarpporte
7	Kay Jones	66 Melbourne Ave SE Mpls, Mn. 55414	Kathleen J Jones
8	Karla Michels Boyce	5509 Columbus Ave Mpls MN 55417	Karla Michels Boyce
9	Nancy Parsons	4911 Stewart Ave WBL, MN 55110	Nancy Parsons
10	Margo Casey	1111 ELway St #506 St. Paul, MN. 55116	Margo Casey

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	JYOTHIRADITYA NELLAKRA	300N COLLEGE STREET NORTHFIELD, MN 55057	Jyothiraditya Nellakra
2	Harley Bates	300 College Street Northfield MN, 55057	Harley Bates
3	Alex Rowell	300 N College St Northfield MN, 55057	
4	Jaren Yambing	14785 Crestview Ave. W. Rosemount, MN 55068	
5	Lucas Sass	300 N college St. Northfield MN. 55057	
6	Fatima Reyes	300 N College St Northfield MN, 55057	
7	Bella Thomas	300 N college St. Northfield MN. 55057	
8	Tiffan Nyamuo	300 N College St. Northfield MN 55057	
9	Bryan Le	300 N college St. Northfield MN 55057	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Emma Dubinsky	615 2nd St E 55057 Northfield, MN	
2	Eloïse Cowan	300 N College St. Northfield, MN 55057	
3	Cas Roland	300 North College St Northfield, MN 55057	
4	Julia Nicole Dunn	300 North College Street, Northfield, MN, 55057	J. Dunn
5	Yuki Nagaoka	300 North College St Northfield, Mn 55057	
6	Arlo Kettle	504 Division St S Northfield MN 55057	
7	Lindsay Boettger	300 N. college st. Northfield, MN 55057	
8	Lydia DiDulio	300 N College St. Northfield, MN 55057	
9	Kinga Hope Csikszentmihalyi	300 N college st. Northfield, MN 55057	
10	Elise Lehman	300 N. College St Northfield, MN 55057	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Erica Zweifel	406 Highland Ave Northfield, MN	
2	Anna Schumacher	313 Middle St W Cannon Falls, MN 55009	
3	Lucy Shapiro	300 N college st Northfield, MN 55057	
4	Anna Itori	300 N College St Northfield, MN 55057	
5	Abby Banks	300 N. College St. Northfield MN, 55057	
6	Francine Legba	300 N College St. Northfield, Mn 55057	
7	Eliza Lox	300 N College St Northfield, MN 55057	
8	Annabella Strathman	300 N college St. Northfield, MN, 55057	
9	David Ahrens	300 N college St. Northfield, MN, 55057	
10	John Eichelberger	300 N College St, Northfield MN 55057	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Sean Smith	300 N. College Street, Northfield, MN 55057	
2	Keon Staples	300 N. College street, Northfield MN 55057	
3	Julia Johnston	300 N College St, Northfield, MN 55057	
4	Peter Blanchfield	300 N College St., Northfield, MN 55057	
5	Gabriel Kaplan	300 N College St, Northfield, MN 55057	
6	Georgre Walker	300 N college St, Northfield MN 55057	
7	Margo Lewis	300 N College St. Northfield MN 55057	
8	Abi Sutcliffe	300 N college st	
9	Mimi Rapoport	300 N college street Northfield MN 55057	
10	William Kelly	~~Keep Georgia~~ 300 N College St, Northfield MN 55057	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Palina Buchanan	300 N College St Northfield MN 55057	
2	Mattison Shreeve	300 N College St. Northfield, MN 55057	
3	Maya Feldberg-Bannatyne	" "	
4	Kou Okada	300 N COLLEGE ST. NORTHFIELD, MN 55057	
5	Tyrone Quigley	300 N college ST Northfield, MN 55057	
6	CLAIRE JAMES	300 N COLLEGE ST NORTHFIELD, MN 55057	
7	Anders Brownr	300 N College St Northfield, MN 55057	
8	Paul Ready	615 2nd St. east Northfield MN 55057	
9	Emily Hazell	615 2nd St E. Northfield, MN 55057	
10	Anna Gwin	300 N. College St. Northfield, MN 55057	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Jeanne M. Heer	8400 West River Rd Brooklyn Park, MN 55444	Jeanne M. Heer
2	Benjamin Masters	[redacted] 35W 14th Ave S Unit # 1 Minneapolis, MN 55407	
3	Rio Morales	2320 Ellis Ave MPLS MN 5540[illegible]	
4	Jim Erickson	13327 44th Draw NE St. Michael, MN 55376	
5	Sheryl M. Mennicke	584 Marshall Ave St Paul MN 55102	
6	Martha Bardwell	2622 Plymouth Ave Minneapolis, MN 55411	M S Bardwell
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Daniel Swenson-Klatt	4034 Blaisdell Ave S. Minneapolis, MN 55409	Daniel Swenson-Klatt
2	Linda Thorson	8400 West River Road Brooklyn Park, MN 55444	Linda Thorson
3	Elaine Johnson	1775 Rosedale Ave W Roseville MN 55113	Elaine Johnson
4	Lucy Selander	3921 - 27 Av. S, Mpls, MN 55406	Lucy Selander
5	Kim Guessford	3744 21st Ave S Mpls. MN 55407	Kim Guessford
6	Susan Eriksson	13327 - 44th Drive NE St. Michael, MN 55376	Susan Eriksson
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	La Rae Ringlaube	101 Promenade Ave #405 Wayzata 55391	LaRae Ringlaube
2	James M. Ringlaube	101 Promenade Ave #405 Wayzata, MN 55391	James M. Ringlaube
3	Harmon Abrahamson	3307 Edinbrook Ct Brooklyn Park MN 55443	Harmon B Abrahamson
4	Mary Bargen	5015 35th Ave. S. Apt. 214 Minneapolis, MN 55417	Mary K. Bargen
5	Maryellen Skan	428 - 3rd Ave NE Minneapolis, MN 55413	MS
6	Jane Feuer	700 Oneida Av	Jane Feuer
7	Sheldon Feuer	Mpls MN 55364	Sheldon Feuer
8	Mary Preus	2416 E. 22nd St. Mpls. MN 55406	Mary Preus
9	Jonathon Ecker	2207 Grand Ave. S Minneapolis, MN 55405	Jonathon Ecker
10	Pam Wurster	3508 Tyler St. NE Mpls., MN 55418	Pamela L Wurster
~~11~~	~~Lucy Selander~~	~~3921 - 27 Av. S. Mpls MN 55406~~	~~Lucy Selander~~

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Joel Abrahamson	2710 24th Ave. S., Minneapolis, MN 55406	
2	Dorea Ruggles	2110 24th Ave S Minneapolis MN 55406	
3	Julie Abrahamson	3307 Edinbrook Ct Brooklyn Park, MN 55443	
4	Esther Goodell	3711 Dupont Ave MPLS, MN 55412	
5	Nancy Johnston	2445 Regent Ave N Golden Valley MN 55422	
6	Rebekah Fergus	920 Feltl Ct #154 Hopkins, MN 55343	
7	Lynn Bargen	5015 35th Ave S Apt 214 Minneapolis MN 55417	
8	Jeanne Asp	8704 Aldrich Ave So Bloomington MN 55407	
9	Cynthia Devereaux	5015 35th Ave S Apt 428 Mpls, MN 55417	
10	Kathleen Olsen	2104 28th Ave. So. Mpls. MN 55406	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Sonja Walker	4300 W. River Pkwy # 278 Minneapolis MN 55406	Sonja H. Walker
2	Lois Hamilton	4300 W River Pkwy #318 Minneapolis, MN 55406	Lois Hamilton
3	Joy Nelson	4300 W. River Pkwy #430 Minneapolis, MN 55406	Joy Nelson
4	[illegible]	" apt 520	[illegible]
5	Ruth Halvorson	" apt. 369	Ruth Halvorson
6	Monica Foley	4032 Pleasant Ave. Minneapolis, MN	Monica Foley
7	Rick Rakstad	4032 Pleasant Ave Mpls 55409	[signature]
8	Loretta Flicker	4300 W River Parkway #225 mpls, MN 55406	Loretta Flicker
9	Loren Flicker	" " "	Loren Flicker
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Emailed to: Jessica@Intermillconsulting.com
March 11, 2022

Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the project, Sioux Quartzite Quarry by W. Lorentz & Sons Construction, located on Red Rock Ridge in Amboy Township, Cottonwood County, Minnesota, and request that any county or governmental body refrain from considering any permit application or related permit process to the proposed Sioux Quartzite Quarry until an Environmental Assessment Worksheet is completed and available for review and consideration. This request for an EAW is based on the potential significant environmental impacts on historic and archaeological resources and endangered and threatened rare plant species.

Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Dorothea Hossouc	8020 90th St. E Northfield, MN. 55057	Dorothea Hossouc
2	CRAIG HOLDEN	8020 90TH ST. EAST NORTHFIELD, MN 55057	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Jo Anne Rohricht	2301 Como Ave #205 St. Paul, MN 55108	Jo Anne Rohricht
2	Nancy Intermill	4017 Lake Dr. N. Robbinsdale, MN 55422	Nancy Intermill
3	Jessica Intermill	2631 Lincoln St NE Minneapolis, MN 55418	
4	Mark Intermill	4017 Lake Dr Ave N Robbinsdale MN 55422	
5	Tyler Candee	2631 Lincoln Street NE Minneapolis, MN 55418	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Judith Sperling	9 Parkview Terrace Golden Valley, MN 55416	
2	FREDERICK LANGENDORF	4917 FREMONT AV S MINNEAPOLIS, MN 55419	
3	MARIAN RUBENFELD	4917 Fremont Ave S Mpls MN 55419	
4	Susan Carlson	3933 39th Ave S Minneapolis, MN 55406	Susan Carlson
5	Joshua Langendorf	929 monroe st NE, 55413	
6	Polly Mccormack	716 Valley Way Hopkins MN 55305	
7	KEITH ENGEL	716 valley Way Hopkins, MN 55305	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Rachel Thibault	15545 17th Pl N, Plymouth MN 55447	Rachel Thibault
2	Sarah Thibault	15545 17th Pl N Plymouth MN 55447	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Nancy Carpenter	1112 Nevada St Northfield 55057	
2	Cheryl Rempel	1112 Nevada Street Northfield 55057	
3	Nancy Barbour	2107 Erie Drive Northfield 55057	
4	James C. Barbour	2107 Erie Drive Northfield 55057	
5	James Gillis	1204 Peterson Dr Northfield Mn 55057	
6	Gretchen Gillis	1204 Peterson Dr. Northfield, MN 55057	
7	Susan Evans	2011 Grant Drive Northfield, MN 55057	
8	Ruth Kramer	2011 Grant Drive Northfield MN 55057	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Katherine Erickson	2500 Pleasant Ave Apt 6 Minneapolis, MN 55404	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Leta Miller	14804 County Road 5, apt 4, Burnsville, MN 55306	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Marilyn J. Benson	1495 Raymond Avenue St. Paul, MN 55108	Marilyn J. Benson
2	Thomas E. Willing	1495 Raymond Ave St. Paul, MN 55108	Thomas E. Willing
3	Sally Anne Benson	26461 320th St Bigelow MN 56117	Sally Anne Benson
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Christopher C CLAUSON	4715 15TH AVENUE SOUTH MINNEAPOLIS MINNESOTA 55407	
2	Karen Jeffords-Brown	1928 Berkeley Ave St Paul, MN 55105	Karen Jeffords-Brown
3	Chante wolf	4845 15th Ave. S. minneapolis, MN 55417	Chante Wolf
4	DIANE J. PETERSON	1520 LEXINGTON PARKWAY N. ST. PAUL, MN. 55117	Diane J. Peterson
5	Dave Crawford	1520 Lexington Parkway N. Saint Paul, MN 55117	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Carol Krush	4300 W River Pkwy #441 Minneapolis MN 55406	Carol Krush
2	Susan DeVries	4300 W. River Pkwy, #612 MPLS MN 55406	
3	Janet Kinney	111 Kellogg Blvd E. #3001 St. Paul Mn 55101	
4	Christine Curtiss	4300 W. River Parkway #612 mpls MN 55406	Christine Curtiss
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Lydia Caros	1760 Eleanor Ave St Paul MN 55116	Lydia Caros
2	Linda Kusserow	4300 W. River Pkwy. #321 Minneapolis, MN 55406	
3	PHYLLIS BECKMA	746 Crescent Curve St Paul, MN 55127	Phyllis Beckman
4	Tina Karelson	5179 St. Imier Drive Fridley, MN 55421	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Casey Mueller	300 N College St Northfield MN 55057	
2	Isabel Ramelow	" "	
3	Mauricio Bulnes Moreno	"300 N College"	
4	GEORGE LEFKOWICZ	" " "	
5	Leander Cohen	"	
6	Isabella Widrow	" "	
7	Benjamin Scott-Lewis	College	
8	Ella Peoples	" "	
9	Lydia Montgomery	" "	
10	Elvis Agueknie	✓ ✓	
11	Micah Williams	218 Ames St Northfield MN 55057	

Number	Name	Address	Signature
12	Abigail Marks	300 North College Street Northfield MN 55057	
13	Isabelle Riley	300 North College street Northfield MN 55057	
14	Amer Said	300 N College St	
15	Reagan Wills	300 N college St	
16	Etta Humes	300 N college St	
17	JoJo Zhang	" "	
18	Karl Olson	" "	
19	Kai [illegible]	" "	
20	Meredith Klay	300 N College St	
21	Riley Gudgel	" "	
22	Kendra Winkler	300 N college St	
23	Jake Armstrong	" "	
24	Eddie Haynes	" "	
25	Carolina Cabanela	" "	
26	Amy Chen	" "	
27	Chris Melo	" 300 N College St	
28	Hana Monsendikk	" "	
29	Will Josowitz	" "	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Susan Jacobsen	515 Fifth Ave SE, #1 Minneapolis MN 55414	Susan Jacobsen
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Carol A. Overland	1110 West Ave. Red Wing, MN 55066 Goodhue County	Carol A Overland
2	Alan Muller	1110 West Ave. Red Wing, MN 55066 Goodhue County	Alan J Muller
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Elliot Stork	119 North College Street Northfield, MN 55057	Elliot N Stork
2	Eva Hadjiyanis	119 N. College St. Northfield, MN, 55057	
3	Sadhana Mandala	119 N. College St. Northfield, MN, 55057	
4	Aashutosha Lele	119 N. College St Northfield, MN 55057	
5	Maya Stovall	208 N. College St Northfield, MN 55057	
6	Katherine McFerrin	119 North College Street Northfield, MN 55057	Katherine McFerrin
7	Sagal Ahmed	119 North College Street Northfield, MN 55057	
8	Greta Hardy-Mitchell	119 North College Street Northfield, MN 55057	
9	Diana V. De La Paz	119 North College Street Northfield, MN 55057	Diana V. De La Paz
10	Liora Newman	119 North College Street Northfield, MN, 55057	Liora Newman

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Carsten Finkbeiner	119 North college st Northfield, MN 55057	
2	Minneh Song	119 N. College St. Northfield, MN 55057	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Naomi Hochman	300 N College St, Northfield, MN 55057	
2	Lauren Bundy	300 N College St, Northfield, MN 55057	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Molly Andrews	306 Saint Olaf Avenue, Northfield, 55057	Molly Andrews
2	JONAS McCluggage	804 Saint Olaf Avenue Northfield, MN 55057	Jonas McCluggage
3	cliff Martin	306 St. olaf ave Northfield MN 55057	
4	Helen Forsythe	306 St. Olaf Ave Northfield, MN 55057	Helen Forsythe
5	Grace Brosnan	306 Saint Olaf Ave. Northfield, MN 55057	
6	Abby Becker	801 Water Street South Northfield MN 55057	Abby Becker
7	Emily Fulton-Foley	310 St. Olaf Ave Northfield, MN 55057	
8	Kermira Beeby	308 Saint Olaf Ave Northfield, MN, 55057	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	WIN WEN OOI	210 East First Street, Northfield, MN, 55057	
2	Emma Chin	300 N College St, Northfield, MN 55057	
3	Youngho Choi	300 N College St, Northfield, MN, 55057	
4	Mira Stephens	210 East First Street, Northfield MN, 55057	
5	Clarissa Guzman	300 N College St. Northfield, MN 55057	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	[illegible]	205 E College St Northfield, MN, 55057	
2	Jacob Dyck	610 Memorial Pkwy SW Rochester, MN, 55902	
3	Katie Rose Kimball	300 N College St Northfield, MN, 55057	
4	Walter Boyko	300 N College St Northfield MN 55057	
5	Daria Palenova	300 N college St Northfield MN 55057	
6	Zimri Leisher	300 N College St Northfield MN 55057	
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Alex Mazur	205 College St, Northfield, 55057	
2	Bryn Battani	205 College St, Northfield 55057	
3	Maddie Fry	205 College St. Northfield, MN 55057	
4	GRACE BASSEKLE	205 COLLEGE ST, NORTHFIELD 55057	
5	Blake Tran	~~205~~ College St., Northfield MN 300 N. 55057	
6	Siena Leone-Gethen	205 College St. Northfield MN 55057	
7	Eko Manson	205 College St, Northfield, MN, 55057	
8	Gabriel Driscoll	205 College St, Northfield MN 55057	
9	Maddie Thall	205 college St. northfield. MN 55057	
10	Riley Pohlman	300 N. College St Northfield, MN 55057	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Anja Madsen	300 N College St Northfield, MN 55057	
2	Jadie Luo	300 N College St Northfield, MN 55057	
3	Sam Zimmerman	300 N College St Northfield, MN 55057	
4	Erin Watson	300 N College St Northfield, MN 55057	
5	Cavyn Jensen-Schneider	34220 Hale Avenue North Branch, MN, 55056	
6	Alec Leonetti	300 N College St Northfield MN 55057	
7	Ammy Lin	300 N college St. Northfield, MN 55057	
8	Jimmy Lin	300 N College St. Northfield, MN 55057	
9	Ellis Kondrashov	300 N College St. Northfield, MN 55057	
10	Ella Peeples	300 N College St. Northfield, MN 55057	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Gabriela Lazo	300 N College St. Northfield, MN 55057	
2	Wes Curtis	300 N. College St. Northfield MN 55057	
3	Indigo Bishop Peterson	300 N. College St. Northfield MN, 55057	
4	Alexandra Uttley	300 N. College St. Northfield MN 55057	
5	Sonya Davidson	300 N. College st Northfield MN 55057	
6	Annanya Sinha	300 N. College St. Northfield M 55057	
7	Eunice Guo	"300 N. College St." Northfield MN 55057	
8	Sandy. Ramirez	300 N. College St. Northfield MN 55057	
9	Hannah Piper	300 N College St. Northfield MN 55057	
10	Graci Huff	~~300 N. College St.~~ 105 1st Ave SE. Pine City, MN 55063	

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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	Melissa Thomas	1018 Minn. St Cannon Falls, MN 55009	Melissa Thomas
2	Nhi Luong	300 N College St Northfield, MN 55057	
3	Linda Nichols	906 Division St S Northfield, MN 55057	
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Send by March 14 to Jessica Intermill

Petition for an Environmental Assessment Worksheet
For the Sioux Quartzite Quarry Project by W. Lorentz Construction

We, the undersigned, live in and/or own property in the state of Minnesota and have concerns about the potential environmental effects of the project, Sioux Quartzite Quarry by W. Lorentz & Sons Construction, located on Red Rock Ridge in Amboy Township, Cottonwood County, Minnesota, and request that any county or governmental body refrain from considering any permit application or related permit process to the proposed Sioux Quartzite Quarry until an Environmental Assessment Worksheet is completed and available for review and consideration. This request for an EAW is based on the potential significant environmental impacts on historic and archaeological resources and endangered and threatened rare plant species.

Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	THOMAS G Weaver (Weaver)	6131 Aldrich Ave N Brooklyn Park MN 55430	Thomas G. Weaver
2	John Yust	256 Goodrich Ave, St Paul, MN. 55102	John H. Yust
3	Brigid Shields	4365 Arden View Ct. Arden Hills MN 55112	Brigid Shields
4			
5			
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Number	Name (print)	Address (Full Street, City [completely spelled out], and Zip Code)	Signature
1	CAROL D. ROGERS-TANNER	1000 STAGECOACH TR. SO. AFTON, MN, 55001	Carol D Rogers
2	DAVIDSON ROGERS-TANNER	1000 STAGECOACH TR. SO. AFTON, MN, 55001	Davidson Rogers
3			
4			
5			
6			
7			
8			
9			
10			

March 16, 2022

Mr. Robert W. Lorentz
W. Lorentz & Sons Construction, Inc.
125 Kingswood Drive
Mankato, Minnesota 56001

Mr. Corby Graff
Property Owner
43764 110th Street
Comfrey, Minnesota 56019

RE: Request for Environmental Assessment Worksheet regarding proposed Sioux Quartzite Quarry project on the Red Rock Ridge in Cottonwood County, Minnesota

Dear Sirs:

You are hereby notified that a citizen petition has been submitted to the Minnesota Environmental Quality Board (EQB) requesting that an environmental review be considered for your proposed quarry project on the Red Rock Ridge in Cottonwood County, Minnesota.

Respectfully,

Kevin O'Keefe

CC: Environmental Quality Board

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

Exhibit A

Site inventory report form

NPDES/SDS Permit Program

National Pollutant Discharge Elimination System (NPDES)/
State Disposal System (SDS)

Doc Type: Notifications

Directions: Instead of completing an application to add or delete sites from existing permit coverage, the Minnesota Pollution Control Agency (MPCA) is offering this *Site inventory report form* to existing Permittees to make these changes easier. For each new site to be covered or for each site that is inactive and you wish to terminate coverage, complete the information below. Make additional copies of this form as needed.

Submittal: Submit the completed form to the MPCA at MNG49.pca@state.mn.us at least 10 days prior to initiation of land disturbing activities at the new site(s). For the 'Special Waters' section, the MPCA has several documents and an interactive map called "Special Waters Search" available electronically on the MPCA's Stormwater website at https://www.pca.state.mn.us/water/stormwater-special-and-impaired-waters-search to help identify special waters near the proposed site. Listings of calcareous fens (Minn. R. 7050..0335, subp. 1e), trout streams (Minn. R. 6264.0050, subp. 2 and 4) and Outstanding Resource Value Waters (ORVWs) (Minn. R. 7050.0335) can be accessed electronically on the Office of the Revisor of Statutes' website at http://www.revisor.leg.state.mn.us.

Permittee name: W Lorentz & Sons Construction **Permit number:** MN G490596

Inventory of nonmetallic mining and associated sites by PLS coordinates

Let this list serve as an Inventory of all sites owned or operated. Include the activities and the Public Land Survey (PLS) coordinates for each site. Consider this a comprehensive listing of all the sites you want covered under this permit. For all sites listed below, you must complete pages 3-5 of this application. You only need to complete this inventory once.

Example: *JTs Aggregate owns and operates five pits and quarries throughout southern Minnesota. Three of the pits are construction sand and gravel pits, and one is a limestone quarry with a portable hot mix asphalt plant. The company dewaters from two pits in Fillmore County, but is unable to contain everything on site in one of the pits. The remaining pits are able to contain all stormwater on site. Coverage is being terminated on one pit. The chart below would be filled out as follows:*

		Dewatering			Stormwater				Treatment and disposal				
Site name, county PLS coordinate (Twp, range, section, Qtr-section)	**Station ID** (if applicable)	**Constr. sand/ gravel**	**Indl. sand**	**Sub. J2**	**J1**	**J2**	**D1**	**E2**	**Dewatering contained on site**	**Stormwater contained on site**	**Discharged dewatering to surface water**	**Discharged stormwater to surface water**	**Termination** (see page 5)
Sample S&G 1, Mower (TxxxN, RxxW, secxx, SE ¼)					X					X			
Sample S&G 2, Fillmore (TxxxN, RxxW, secxx, NE ¼)		X			X						X	X	
Sample S&G 3, Fillmore (TxxxN, RxxW, secxx, NW ¼)		X			X				X	X			
Sample S&G 4, Olmsted (TxxxN, RxxW, secxx, SW ¼)						X	X			X			
Sample S&G 5, Olmsted (TxxxN, RxxW, secxx, NE ¼)													X
Drill Pit, Nicollet (T109N, R29W, Sec 9, W1/2, NW1/4)		X			X				X	X			
Brostrom Pit, Nicollet, (T111N, R26W, Sec 32. SE 1/4)		X			X				X	X			
Graff Quarry, Cottonwood (T107N, R36W, Sec 1, NE1/4)						X				X			

		Dewatering			Stormwater				Treatment and disposal				
Site name, county PLS coordinate (Twp, range, section, Qtr-section)	**Station ID** (if applicable)	**Constr. sand/ gravel**	**Indl. sand**	**Sub. J2**	**J1**	**J2**	**D1**	**E2**	**Dewatering contained on site**	**Stormwater contained on site**	**Discharged dewatering to surface water**	**Discharged stormwater to surface water**	**Termination** (see page 5)

Basic information

Complete the following for each site:

Site name: Graff Quarry

Facility site street/road address (not P.O. Box): Approx. 1100 Ft S of Int. Cnty Rd 10 & 490th Ave

City: Jeffers State: MN Zip code: 56145 Telephone: 5073408901

Activity information

1. **Select the Primary Activity and Secondary Activity (if applicable) at the site:**

Subsector J1	Primary	Secondary
Construction sand and gravel mining (Standard Industrial Classification [SIC] Code 1442)	☐	☐
Industrial sand mining (SIC Code 1446)[1]	☐	☐
Subsector J2		
Dimension stone (SIC Code 1411)	☐	☐
Crushed and broken limestone mining/quarry area (SIC Code 1422)	☐	☐
Crushed and broken granite mining/quarry area (SIC Code 1423)	☐	☐
Crushed and broken stone mining/quarry area (not elsewhere classified, SIC Code 1429)	☒	☐
Subsector D1		
Hot mix asphalt production areas also known as asphalt paving mixtures and blocks (SIC Code 2951). This includes portable hot mix asphalt plants.	☐	☐
Subsector E2		
Concrete block and brick (SIC Code 3271)	☐	☐
Concrete products other than block and brick (SIC Code 3272)	☐	☐
Ready-mix concrete (SIC Code 3273)	☐	☐

[1] *If using flotation or acid leaching process(es), you are not eligible for this general permit and must apply for an individual permit.*

2. **Describe completely your stormwater management systems used to control stormwater at this site:**
Includes industrial stormwater ponds, sedimentation basins, and/or infiltration devices.

   All stormwater will be directed to the onsite multi-cell ponds for the stormwater to be infiltrated. The best line of defense is to maintain areas of existing areas of vegetation until mining is set to occur. Redundant or switching out a BMP's may be required if found to not be functioning properly. All inspections, repairs, and changes are to be documented in the SWPPP/Inspection Reports.

3. **Describe completely your wastewater treatment systems at this site:**

   The initial four (4) ponds, interconnected with equalizing culverts, will be used to catch all stormwater onsite. They are sized to collect all stormwater and hold for infiltration. No stormwater will be discharged offsite. No dewatering or washing is set to occur, if circumstances change this form will be updated if required by applicable laws and regulations. All Fuels, coolants, lubricants, chemicals are to be stored covered or stored within secondary containment structures. Onsite inspections will be conducted monthly as required by permit, as well as inspection during a storm water runnoff event-looking for discolorization or visible contaminations. Corrective actions are to be implimented and documented in the SWPPP/Inspection reports. Prevention of leaking contaminants is through storage and maintenance, of such materials and any necessary cleanup is to be initiated immediately.

4. **How and where are the sediments and sludge removed from the stormwater and/or wastewater treatment systems at the facility disposed?**

   No Sediments or sludge will be removed offsite

5. **Have you updated your Pollution Prevention Plan for this site?** ☒ Yes ☐ No
You must do so prior to submittal of this form.

6. **List below all chemical additives that are used or proposed to be used at the facility.**

*This must include all process reagents, flocculants, biocides, wastewater treatment chemical additives, chlorine or other disinfectants, detergents, cleaning products, freeze conditioning agents, etc. MPCA approval is required for any additives that are new, increasing in usage, or not previously approved. Go to the MPCA's Chemical additive webpage at: http://www.pca.state.mn.us/a6krka9 to find the documents necessary to complete the approval process. Your additives will **not** be approved for use until you complete this process.*

Product name	**Purpose**	**Location in process of chemical addition**	**Frequency of addition**	**Type of application** (slug dosing or continuous feed)	**Average rate of use** (weight or volume per day)	**Maximum rate of use** (weight or volume per day)	**Previously approved? Yes or no**	**Date of approval** (mm/dd/yyyy)
							☐ Yes ☐ No	
							☐ Yes ☐ No	
							☐ Yes ☐ No	
							☐ Yes ☐ No	

An Additional Chemical Additives attachment is available on the MPCA website at http://www.pca.state.mn.us/water/permits/index.html if more space is needed.

7. **Do you use chemical dust suppressants at your facility?** ☐ Yes ☒ No

If yes, fill out table below:

Product name	**Location of use**	**Frequency of use**	**Average rate of use** (weight or volume per day)	**Maximum rate of use** (weight or volume per day)

Attach the Material Safety Data Sheets, complete product labels and any other information on chemical composition, aquatic toxicity, human health, and environmental fate for each chemical dust suppressant. Chemical dust suppressants are approved separately from the process required in question 6.

8. ***What is the source of the intake water supply for the facility?***

Intake water supply includes all make-up water supplied to the facility. ***(Choose one)***

☐ Municipal, include city name: _____

☐ Groundwater, intake location: _____

☒ Surface water, include name: surface waters from stormwater events

☐ No make-up water: _____

If this is a non-municipal water supply, have you already obtained a Minnesota Department of Natural Resources (DNR) water appropriations permit? ☐ Yes ☐ No ☒ Not applicable

If yes, what is the DNR permit number: _____ DNR permit expiration date (mm/dd/yyyy): _____

Is the intake water supply chlorinated or otherwise disinfected? ☐ Yes ☒ No

9. **Has the facility been required to complete an Environmental Impact Statement (EIS) and/or Environmental Assessment Worksheet (EAW)?**

☐ Yes ☒ No ☐ Not applicable

If yes, attach a copy of the completed EIS/EAW and note: _____ (*Title*) _____ *Date (mm/dd/yyyy)*

10. **What is the fate of the sewage generated by the facility?**
Examples are septic tank and drainfield, routing to municipal sanitary sewer, portable containment systems, etc.

N/A, portable toliets are used onsite, and maintained & emptied

Discharges from site

		Yes	No
11.	**Is stormwater leaving the site?**	☐	☒
12.	**Is water from the dewatering of a mine, pit or quarry from Subsector J1 and J2 facilities leaving the site?**	☐	☒
13.	**Do you dewater from a mine, pit, or quarry to a control device?** *Control devices include settling ponds, sedimentation basins, and/or infiltration basins. Devices shall be designed consistent with accepted engineering practices to control the pollutants of concern.*	☐	☒
14.	**Do you have any of the following non-stormwater (also considered wastewater) activities conducted at your site?** *Check all that apply.*	☒	☐

- ☐ a. Aggregate wash water from Subsector J1 and J2 facilities.
- ☐ b. Dredging operations from Subsector J1 and J2 facilities.
- ☐ c. Installation, construction, and operation of wet scrubbers at asphalt production areas, including portable asphalt plants (Subsector D1).
- ☐ d. Washing trucks, mixers, transport buckets, forms and/or other equipment at concrete block and brick, concrete products other than block and brick, and ready-mix concrete facilities (Subsector E2).
- ☐ e. Uncontaminated scale deck wash water that does not use detergents, solvents, or degreasers.
- ☐ f. Stormwater and deck wash water collected in holding tanks under scales.
- ☐ g. Wash water associated with cleaning of mobile equipment that does not use detergents, solvents, or degreasers.
- ☒ h. Waters used for sawing stone or dust control on crushers, conveyors, associated equipment, stockpiles, and site roadways.
- ☐ i. Boiler blowdown and reverse osmosis reject.
- ☐ j. Low or high pressure steam curing.
- ☐ k. Noncontact cooling water used for dryer, pump and air compressor cooling.

15.	**Is wastewater from any activities in question #14 discharged to surface waters of the state?** *If yes, you are **not** eligible for General Permit coverage and must apply for an individual permit.*	☐	☒
16.	**Is water used for other purposes leaving the site?** *Describe use of water if applicable. Depending on the type of water leaving the site, you may not be eligible for coverage under general permit MNG490000; contact MPCA permitting staff to appropriately permit this site.*	☐	☒

Surface water discharges location information

17. **If you answered 'yes' to questions 11 and/or 12 above, please provide the discharge location along with receiving water name. This is the overflow point where water that has left the site is entering surface water. Discharge points may include pipes and culverts. An example of a route to receiving waters is "to unnamed wetlands adjacent to Black Lake", "to an unnamed ditch to the Cottonwood River", "to Twin Lakes" or "to an unnamed pond adjacent to Lake Cornelia via storm sewer."**

Route to receiving water: _____ PLS coordinates: _____

Type of discharge: _____
(List all types, i.e., pit site dewatering, stormwater runoff, overflow from control device.)

Average discharge flow rate: _____ Maximum discharge flow rate: _____

(Flow rates are not necessary for discharges that solely consist of stormwater runoff.)

Flow duration and frequency:

Month of flow: _____ Days/week: _____ Hours/day: _____

Complete the table for each surface water discharge point. If this is an existing facility, refer to the current NPDES/SDS Permit for Station ID. For new facilities, enter as much information as available. If more space is needed for additional stations, attach additional pages.

Station ID: SD

Township (26-71 or 101-168)	**Range (1-51)**	**Section (1-36)**	**¼ Section (NW, NE, SW, SE)**	**¼ of ¼ Section (NW, NE, SW, SE)**
T N	R ☐E ☐W			
Latitude	**Longitude**	**Datum**	**Coordinate Collection Method**	**Date Coordinate Collected**

Receiving water name:

Special waters

		Yes	No
18.	**Is the outfall at any of the following receiving waters?**		
a.	Designated ORVW? Defined in Minn. R. 7050.0255 and listed in Minn. R. 7050.0335.	☐	☒
b.	DNR-posted fish-spawning areas (Minn. R. 6264.0125)?	☐	☒
c.	DNR-designated trout waters? Trout waters locations are listed in Minn. R. 6264.0050, subp. 1 and 3	☐	☒
	If yes, you are not eligible for a general permit and must apply for an individual permit.		
19.	**Is the outfall at any of the following?**		
a.	Within one mile of an ORVW?	☐	☒
b.	Within one mile of a DNR-designated Trout Steam?	☐	☒
c.	Within one mile of an impaired water?	☐	☒
	If the answer is yes to any of the above, the permit has specific requirements for your discharge. See Sections 2.6.14 and 2.6.41 of the permit to insure you are able to meet these requirements. If not, an individual permit may be necessary.		

Site map

20. Attach a site map showing:

a. Location of all discharge points.

b. Location of all overflow points from control devices.

c. Directions of stormwater runoff (including stormwater that is contained/infiltrated on site).

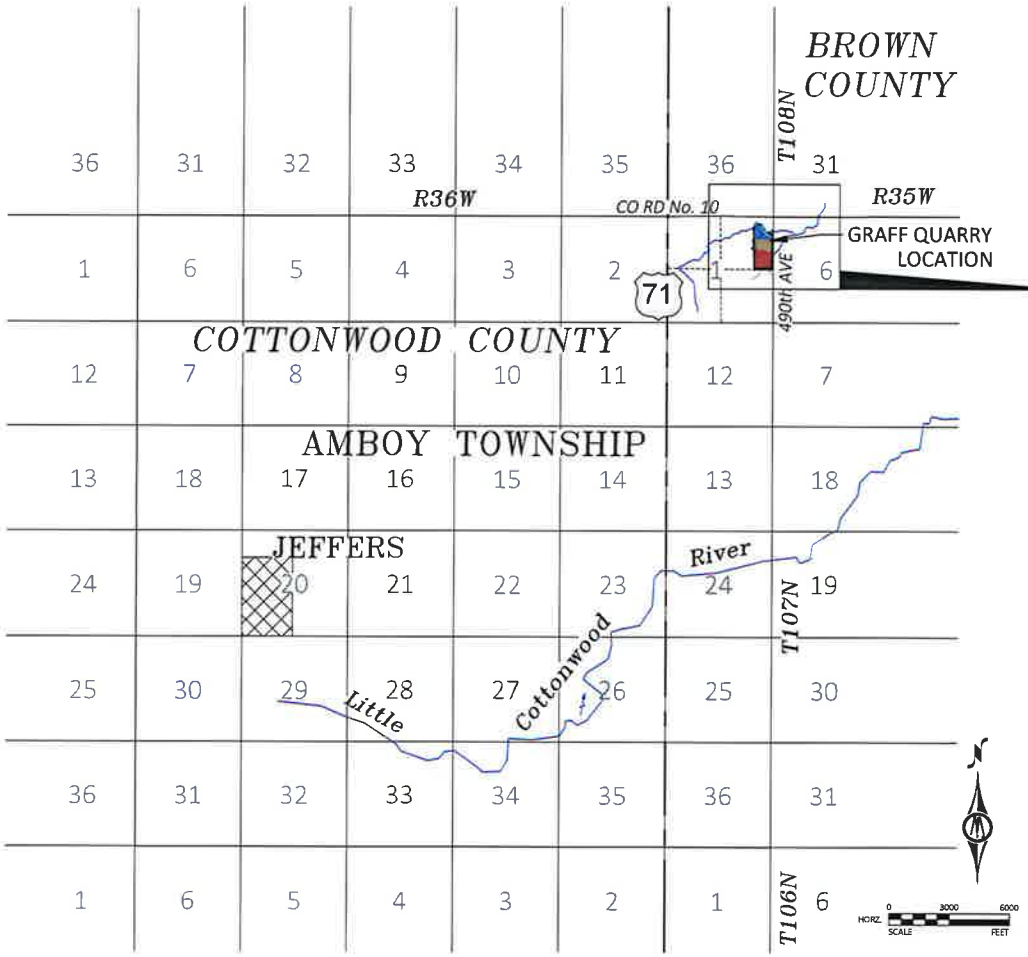
Coverage termination

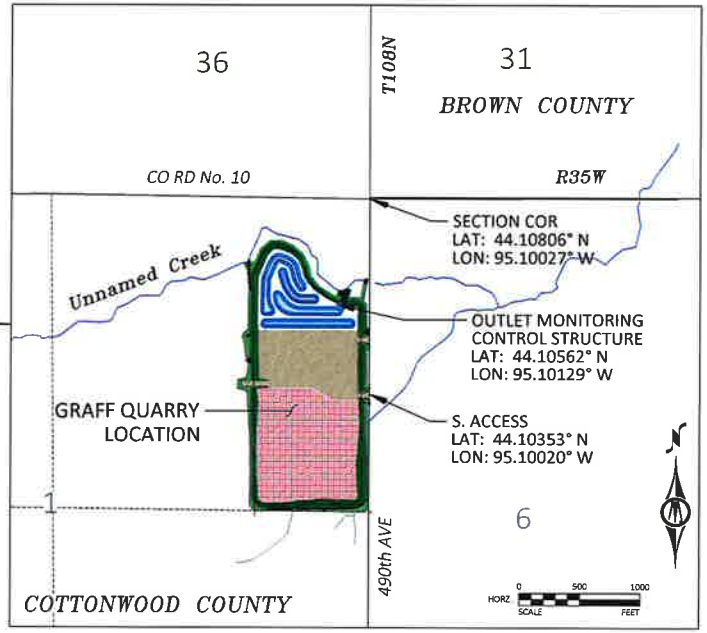
21. In order to terminate coverage of a site, the Permittee must ensure:

a. The site closure achieves stabilization, or

b. There is no stormwater runoff associated with nonmetallic mining and/or mine dewatering from the site.

22. Provide the name and contact information for the new owner or operator that is responsible for the site, if applicable:





I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

David A Palm

DAVID A PALM, P.E.
22574
08/19/2020

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Email: SleepyEye@bolton-menk.com
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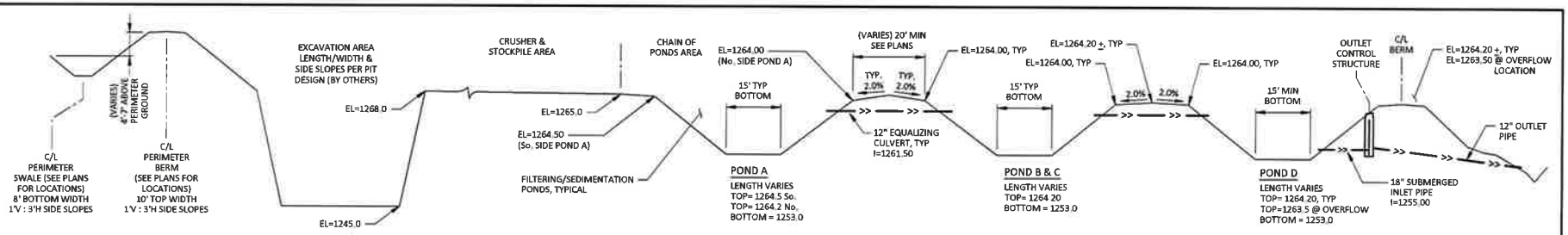
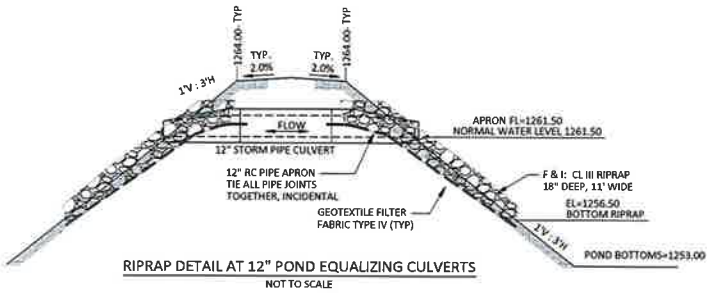
DMP
DMP
513122206

WENDELL LORENTZ & SONS CONSTRUCTION
GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA
PROJECT LOCATION MAP

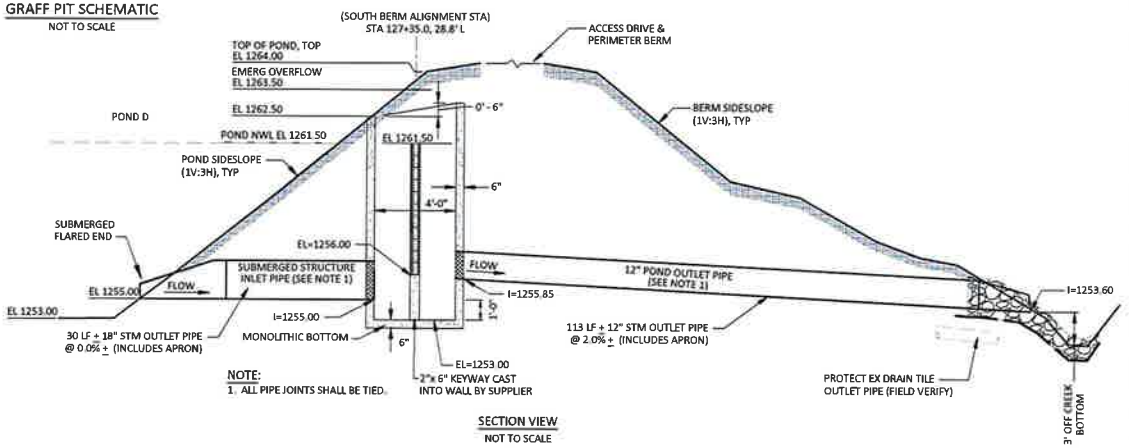
SHEET
G0.01



GRAFF PIT SCHEMATIC
NOT TO SCALE

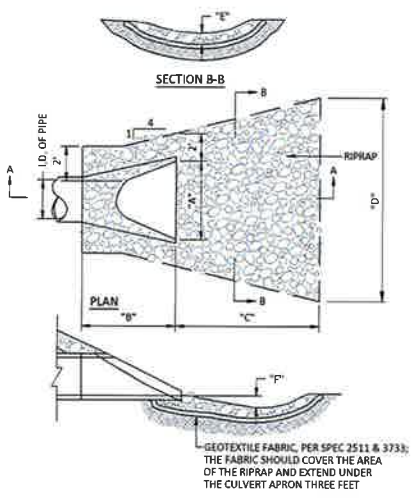


RIPRAP DETAIL AT 12" POND EQUALIZING CULVERTS
NOT TO SCALE



NOTE:
1. ALL PIPE JOINTS SHALL BE TIED.

SECTION VIEW
NOT TO SCALE



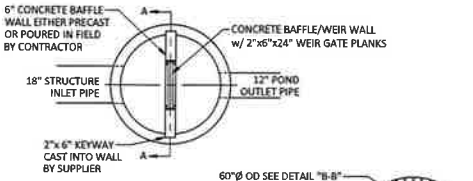
DIA OF ROUND PIPE (IN)	L (FT)	CLASS II ≤50=6" 12" DEPTH RIPRAP (CU YD)	CLASS III ≤50=9" 18" DEPTH RIPRAP (CU YD)	CLASS IV ≤50=12" 24" DEPTH RIPRAP (CU YD)
12	8	5	8	10
18	10	5	8	10

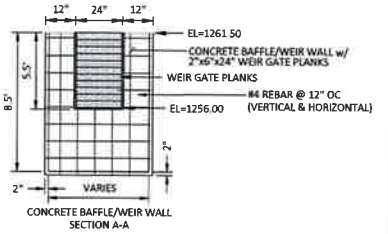
NOTE: RIP RAP DIMENSIONS IN TABLE ARE MINIMUM REQUIREMENTS. SEE DETAILS & PLANS FOR MODIFIED DIMENSIONS

RIPRAP TABLE

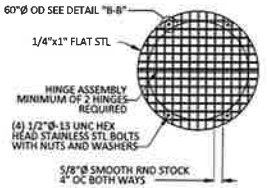
I.D. OF PIPE	A	B	C	D	E	F
12"	30"	6'	8'	11'	1'	1'
18"	36"	6'	10'	11'	1'	1'

RIPRAP AT STORM CULVERT END
NOT TO SCALE





GRATE NOTES:
1) GRATE TO BE MADE IN TWO (2) PIECES
2) ALL METAL SHALL BE HOT-DIPPED GALVANIZED
3) POND SKIMMER GRATE IS INCLUDED WITH DRAINAGE STRUCTURE DESIGN SPECIAL 4



60"Ø (2) PIECE 5/8" ROD POND SKIMMER GRATE (SEE GRATE NOTES)

DETAIL "B-B"

POND "D" OUTLET CONTROL STRUCTURE (OCS 1)
SKIMMER STRUCTURE DRAINAGE STRUCTURE
NOT TO SCALE

NOTE: DETAILS ARE NOT TO SCALE

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DAP		
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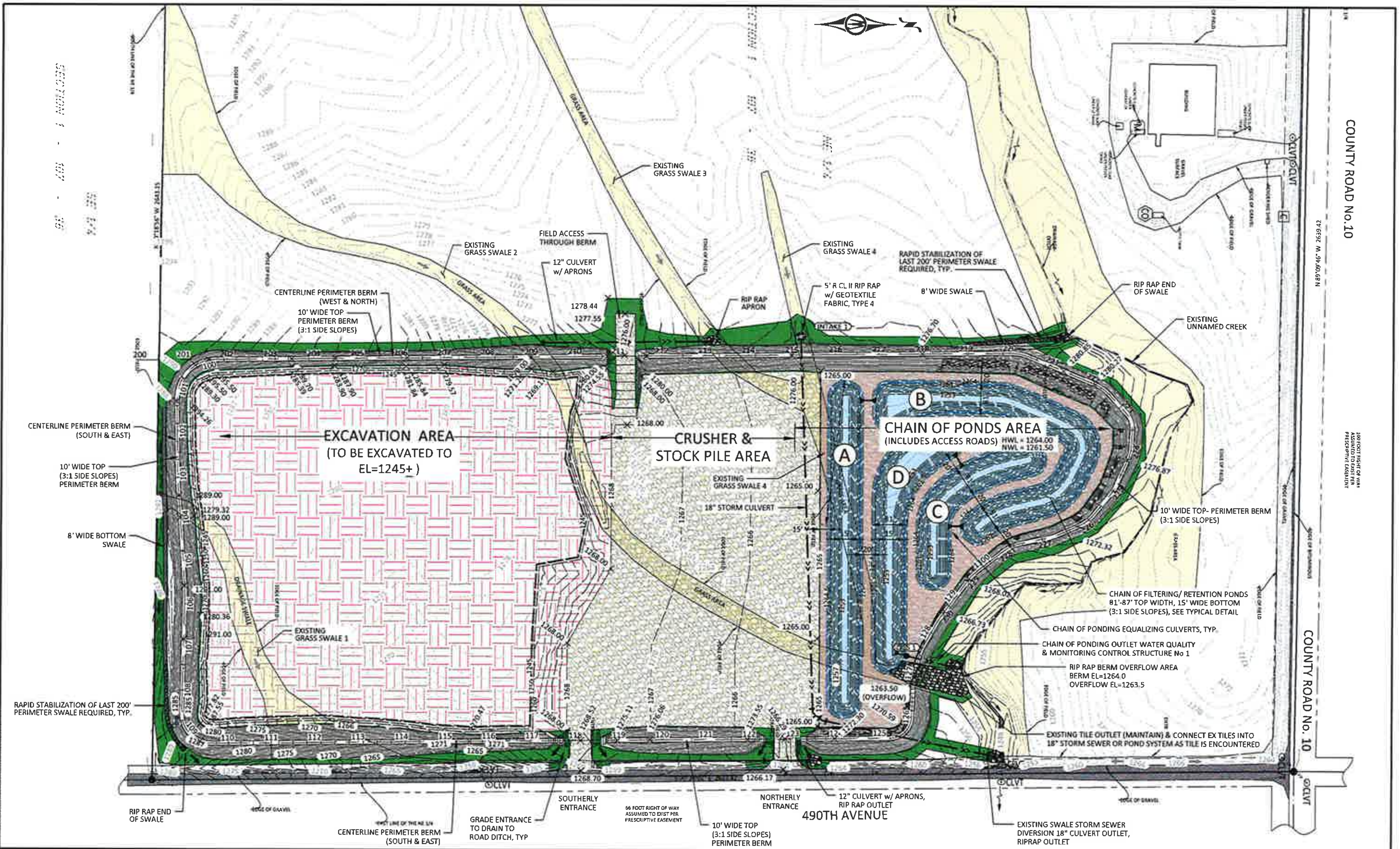
DAP		

WENDELL LORENTZ & SONS CONSTRUCTION
GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA
DETAILS

SHEET
C1.01



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DAP

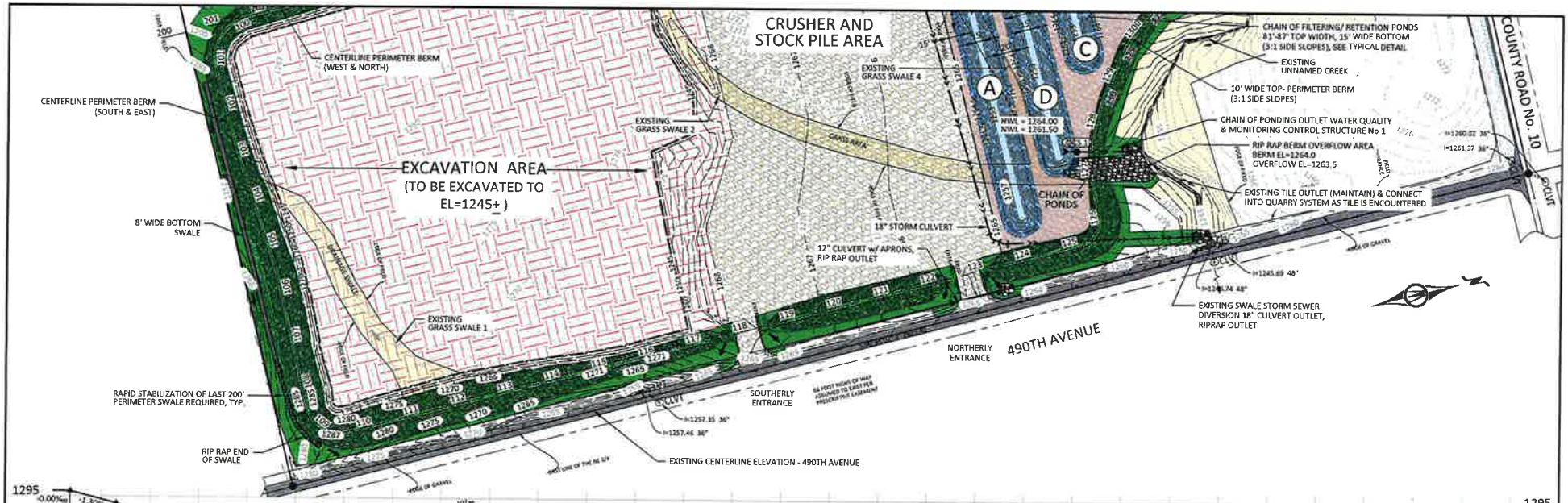
DAP

WENDELL LORENTZ & SONS CONSTRUCTION

GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA

GRADING PLAN

SHEET C3.01



HORZ. SCALE 0 100 200 FEET
VERT. SCALE 0 5 10 FEET

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David A Palm

DAVID A PALM, P.E. 22574 08/18/2020

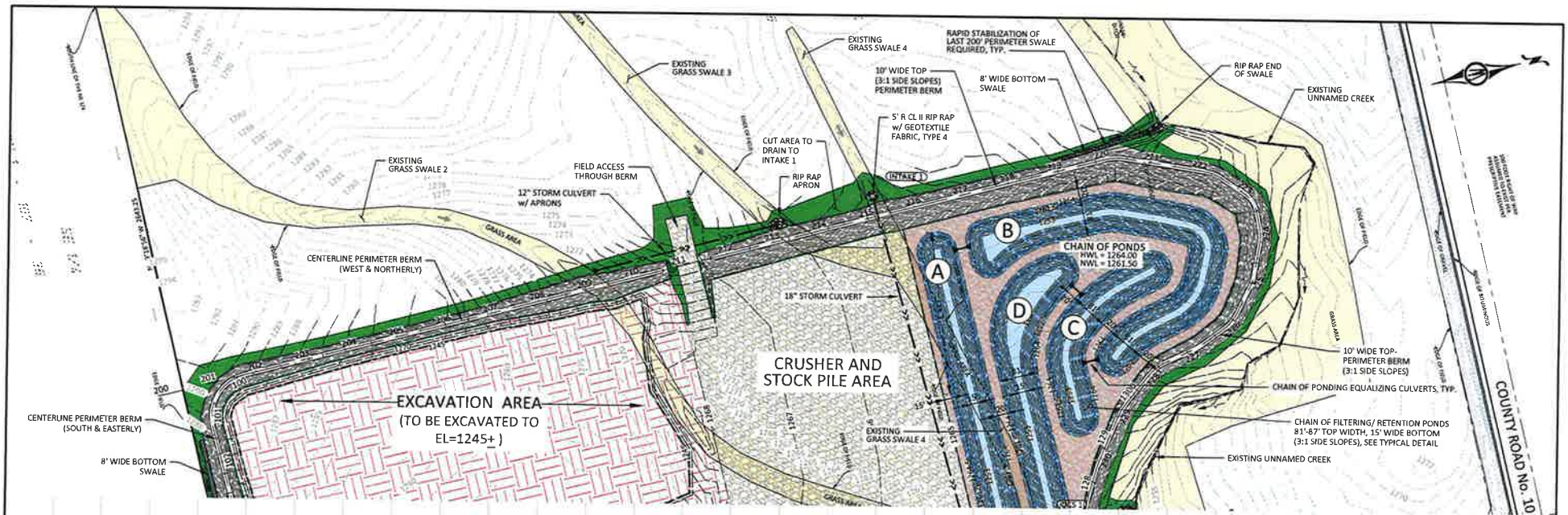
BOLTON & MENK

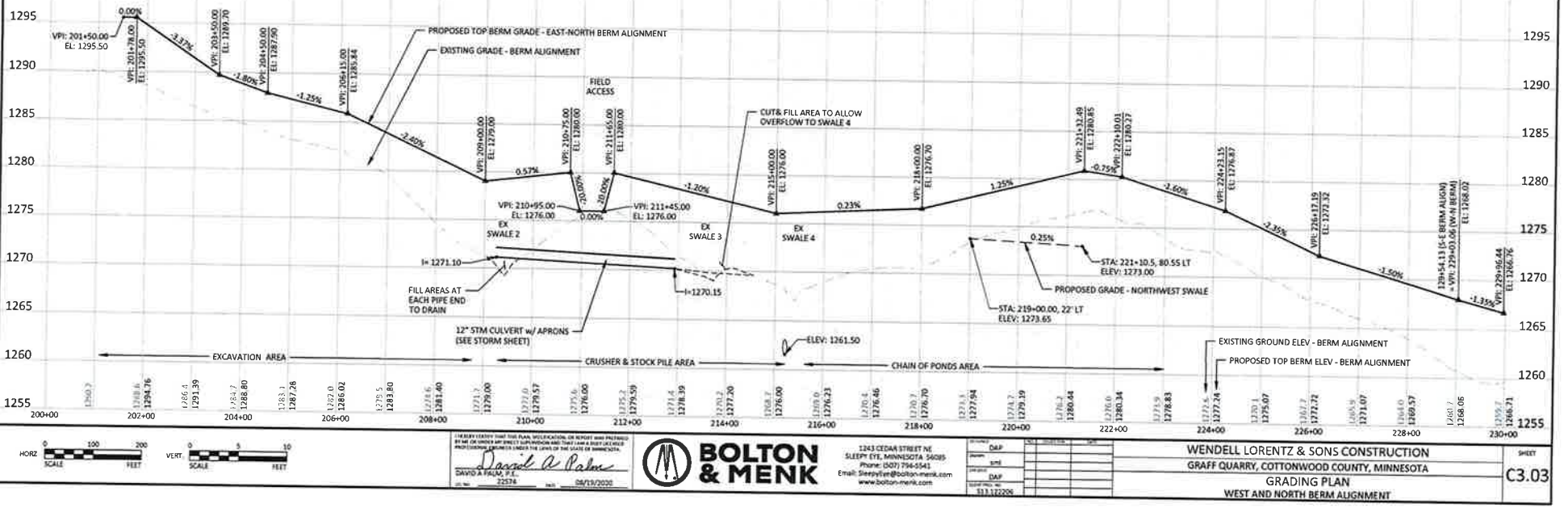
1243 CEDAR STREET NE SLEEPY EYE, MINNESOTA 56085 Phone: (507) 794-5541 Email: SleepyEye@bolton-menk.com www.bolton-menk.com

DAP | tml | DAP | S13.122206

WENDELL LORENTZ & SONS CONSTRUCTION
GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA
GRADING PLAN
SOUTH AND EAST BERM ALIGNMENT

SHEET C3.02





HORZ SCALE 0 100 200 FEET
VERT SCALE 0 5 10 FEET

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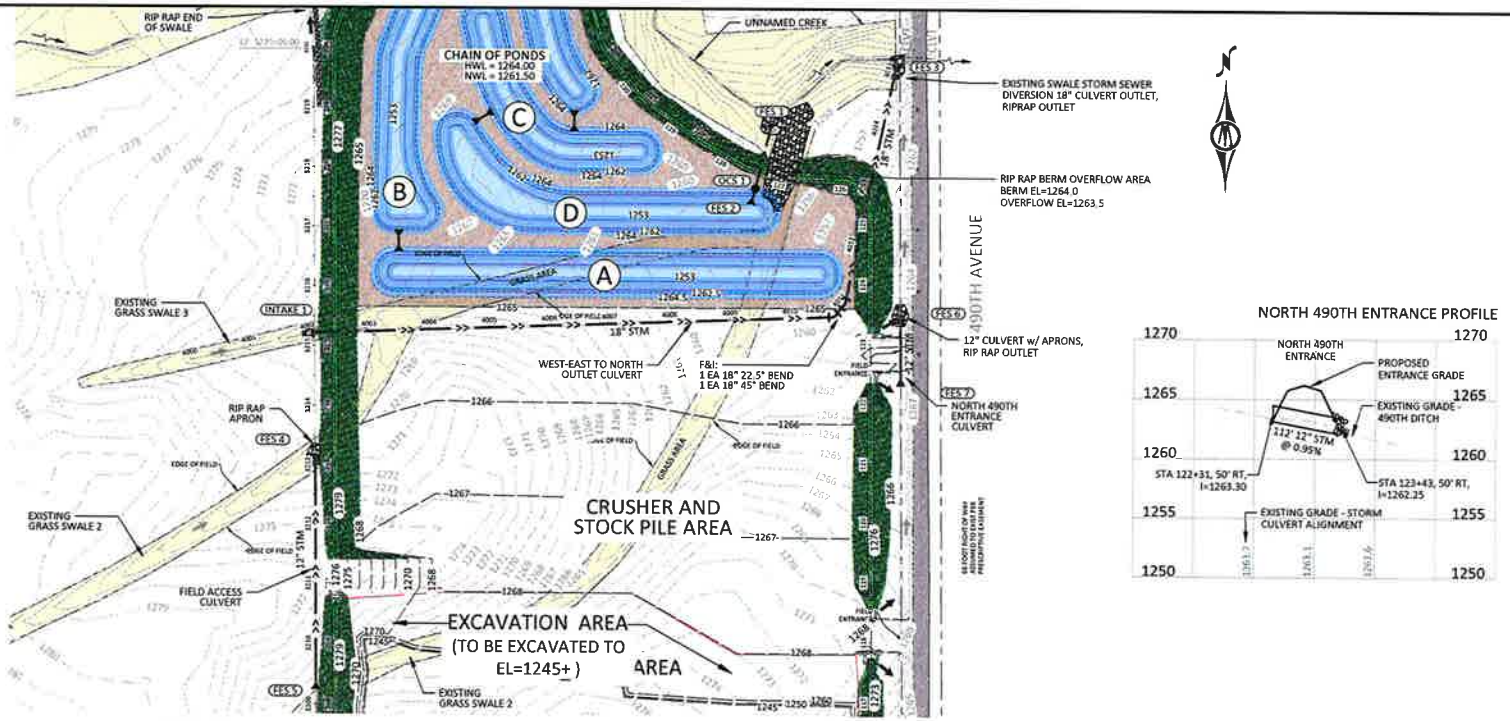
08/19/2020

BOLTON & MENK
1243 CEDAR STREET NE
SLEEPY EYE, MINNESOTA 56085
Phone: (507) 794-5541
Email: SleepyEye@bolton-menk.com
www.bolton-menk.com

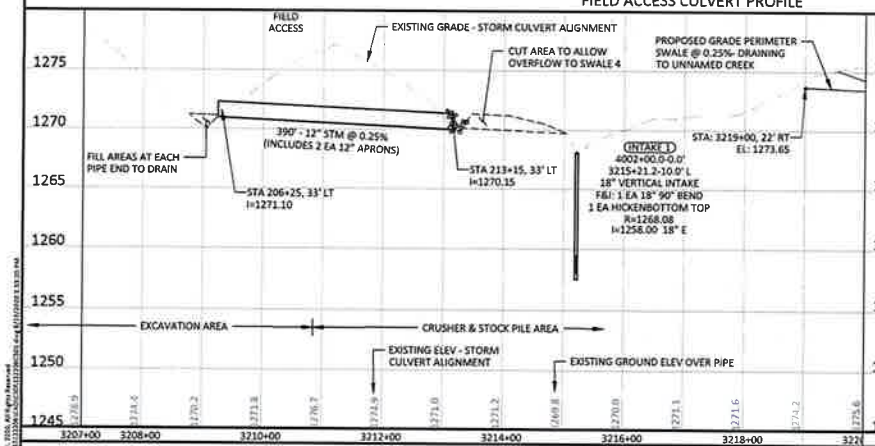
DAP | DAP | S13.122206

WENDELL LORENTZ & SONS CONSTRUCTION
GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA
GRADING PLAN
WEST AND NORTH BERM ALIGNMENT

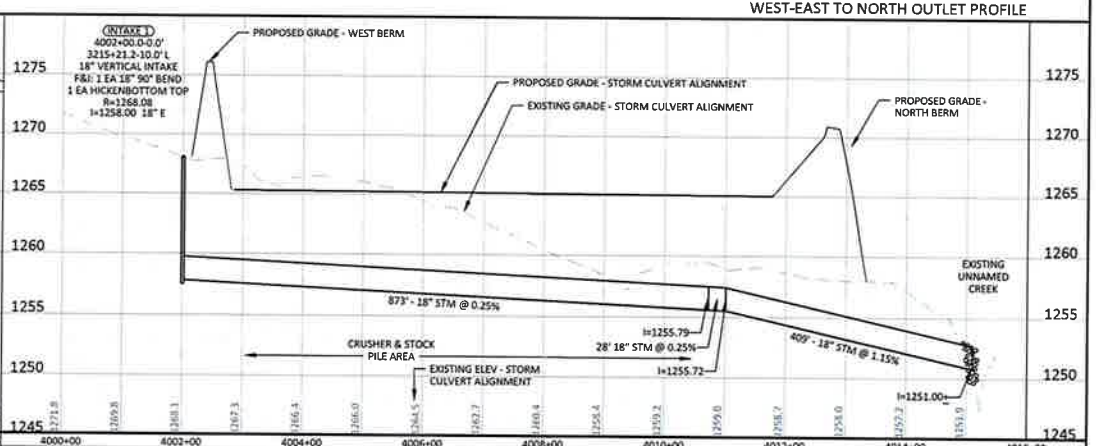
SHEET C3.03



FIELD ACCESS CULVERT PROFILE



WEST-EAST TO NORTH OUTLET PROFILE



HORZ. SCALE 0 100 200 FEET
VERT. SCALE 0 5 10 FEET

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

David A Palm

DAVID A PALM, P.E.
22576
08/19/2020

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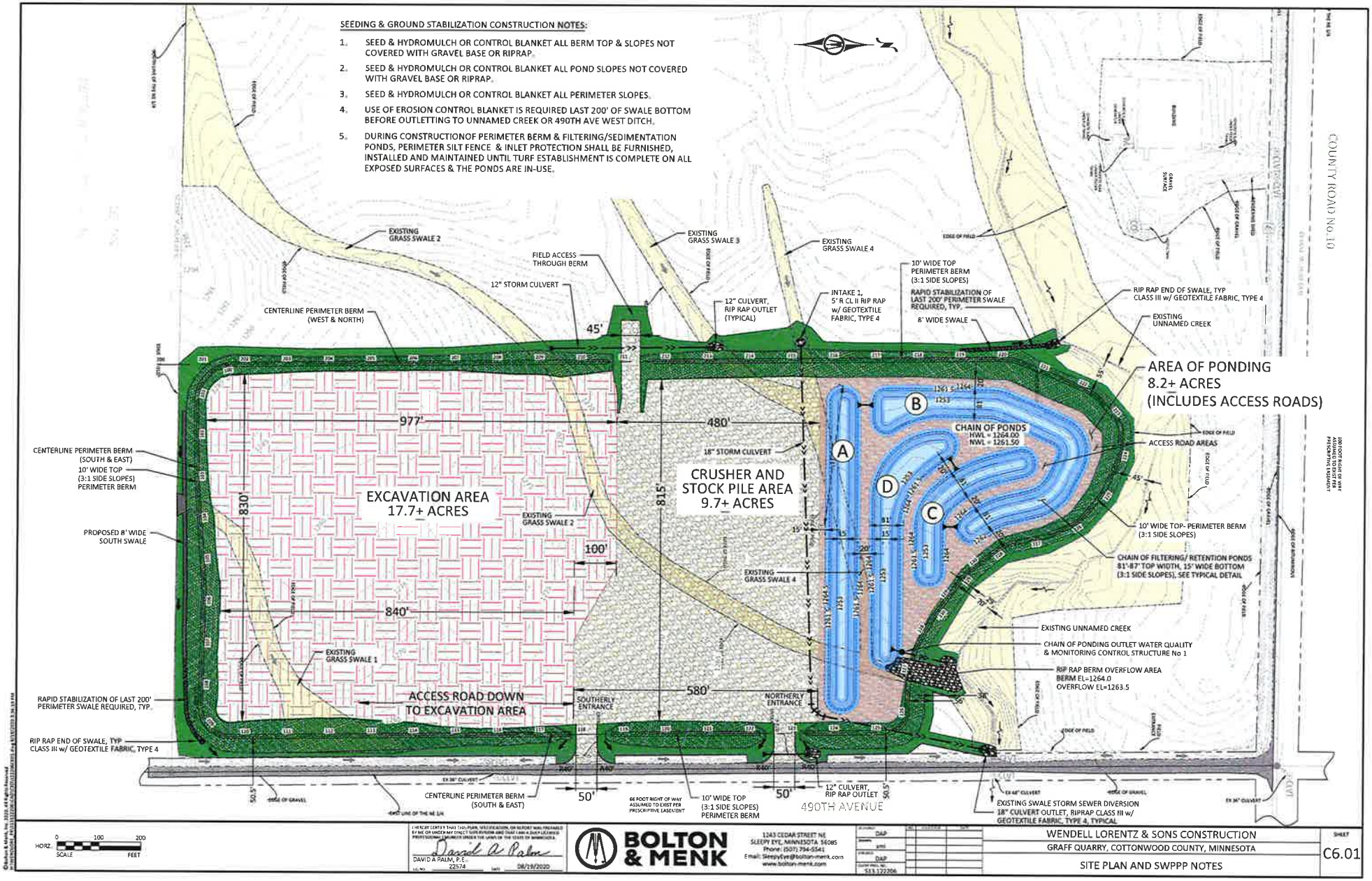
WENDELL LORENTZ & SONS CONSTRUCTION
GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA
STORM SEWER PLAN & PROFILE
PERIMETER DITCH DIVERSION AND CULVERTS

SHEET C5.01


SEEDING & GROUND STABILIZATION CONSTRUCTION NOTES:
1. SEED & HYDROMULCH OR CONTROL BLANKET ALL BERM TOP & SLOPES NOT COVERED WITH GRAVEL BASE OR RIPRAP.
2. SEED & HYDROMULCH OR CONTROL BLANKET ALL POND SLOPES NOT COVERED WITH GRAVEL BASE OR RIPRAP.
3. SEED & HYDROMULCH OR CONTROL BLANKET ALL PERIMETER SLOPES.
4. USE OF EROSION CONTROL BLANKET IS REQUIRED LAST 200' OF SWALE BOTTOM BEFORE OUTLETTING TO UNNAMED CREEK OR 490TH AVE WEST DITCH.
5. DURING CONSTRUCTIONOF PERIMETER BERM & FILTERING/SEDIMENTATION PONDS, PERIMETER SILT FENCE & INLET PROTECTION SHALL BE FURNISHED, INSTALLED AND MAINTAINED UNTIL TURF ESTABLISHMENT IS COMPLETE ON ALL EXPOSED SURFACES & THE PONDS ARE IN-USE.
COUNTY ROAD No. 10
EXISTING GRASS SWALE 2
FIELD ACCESS THROUGH BERM
EXISTING GRASS SWALE 3
EXISTING GRASS SWALE 4
10' WIDE TOP PERIMETER BERM (3:1 SIDE SLOPES)
RAPID STABILIZATION OF LAST 200' PERIMETER SWALE REQUIRED, TYP.
RIP RAP END OF SWALE, TYP CLASS III w/ GEOTEXTILE FABRIC, TYPE 4
12" STORM CULVERT
12" CULVERT, RIP RAP OUTLET (TYPICAL)
INTAKE 1, 5' R CL II RIP RAP w/ GEOTEXTILE FABRIC, TYPE 4
8' WIDE SWALE
EXISTING UNNAMED CREEK
CENTERLINE PERIMETER BERM (WEST & NORTH)
45'
AREA OF PONDING
8.2+ ACRES
(INCLUDES ACCESS ROADS)
977'
480'
CHAIN OF PONDS
HWL = 1264.00
NWL = 1251.50
ACCESS ROAD AREAS
CENTERLINE PERIMETER BERM (SOUTH & EAST)
10' WIDE TOP (3:1 SIDE SLOPES) PERIMETER BERM
18" STORM CULVERT
CRUSHER AND STOCK PILE AREA
9.7+ ACRES
815'
830'
EXCAVATION AREA
17.7+ ACRES
EXISTING GRASS SWALE 2
10' WIDE TOP- PERIMETER BERM (3:1 SIDE SLOPES)
PROPOSED 8' WIDE SOUTH SWALE
100'
CHAIN OF FILTERING/ RETENTION PONDS 81'-87' TOP WIDTH, 15' WIDE BOTTOM (3:1 SIDE SLOPES), SEE TYPICAL DETAIL
EXISTING GRASS SWALE 4
840'
EXISTING UNNAMED CREEK
CHAIN OF PONDING OUTLET WATER QUALITY & MONITORING CONTROL STRUCTURE No 1
EXISTING GRASS SWALE 1
RIP RAP BERM OVERFLOW AREA BERM EL=1264.0 OVERFLOW EL=1263.5
RAPID STABILIZATION OF LAST 200' PERIMETER SWALE REQUIRED, TYP.
ACCESS ROAD DOWN TO EXCAVATION AREA
SOUTHERLY ENTRANCE
580'
NORTHERLY ENTRANCE
RIP RAP END OF SWALE, TYP CLASS III w/ GEOTEXTILE FABRIC, TYPE 4
CENTERLINE PERIMETER BERM (SOUTH & EAST)
50'
66 FOOT RIGHT OF WAY ASSUMED TO EXIST PER PRESCRIPTIVE EASEMENT
10' WIDE TOP (3:1 SIDE SLOPES) PERIMETER BERM
50'
12" CULVERT, RIP RAP OUTLET
490TH AVENUE
EXISTING SWALE STORM SEWER DIVERSION
18" CULVERT OUTLET, RIPRAP CLASS III w/ GEOTEXTILE FABRIC, TYPE 4, TYPICAL
HORZ. SCALE 0 100 200 FEET
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
DAVID A PALM, P.E.
LIC. NO. 22574
DATE 08/19/2020
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DAP
DAP
513.122206
WENDELL LORENTZ & SONS CONSTRUCTION
GRAFF QUARRY, COTTONWOOD COUNTY, MINNESOTA
SITE PLAN AND SWPPP NOTES
SHEET
C6.01

Phase I Cultural Resource Investigation of the Graff Quarry Project, Cottonwood County, Minnesota

Craig Picka
Abraham Ledezma

IN SITU
Archaeological Consulting
9717 Valley View Rd
Eden Prairie, MN 55344
Office: (952) 658-8891
Website: www.insitucrm.com

May 5, 2021

IN SITU
Archaeological Consulting

Negative Cultural Resource Survey Report

9717 Valley View Rd
Eden Prairie, MN 55344
Ph: 952-658-8891
Web: www.insitucrm.com

Report Title: Phase I Cultural Resource Investigation of the Graff Quarry Project, Cottonwood County, Minnesota

Report Date: May 5, 2021

Author(s): Craig Picka and Abraham Ledezma

Principal Investigator: Abraham Ledezma

Project Client: Braun Intertec
11001 Hampshire Avenue South
Minneapolis, MN 55438

Survey Date: April 26, 2021

Acres: 35.6 acres

Legal Description: The project area is located in Cottonwood County, Minnesota in the NE¼ of Section 1 of Township (T) 107 North (N), Range (R) 36 West (W).

Location Description: The project area is located on privately-owned land approximately 5.5 miles northeast of the City of Jeffers, Minnesota (Figures 1-2). The project area includes an approximate 35.6-acre area. The project area is within an open area consisting of an agricultural field that has been subject to ground moving activities, as the topsoil in the area has been graded/stripped, removed, and placed in piles across the project area. The topography consisted of fairly flat topography. Vegetation consisted of tilled agricultural debris.

Project Description: The survey was for the proposed Graff Quarry Project. The survey consisted of a 35.6-acre area located on private property in Cottonwood County, Minnesota. The proposed project is for a proposed rock quarry. The project area is within an open area consisting of an agricultural field that has been subject to ground moving activities, as the topsoil in the area has been graded/stripped, removed, and placed in piles across the project area. The cultural resource assessment is subject to review by the Minnesota State Historic Preservation Office (SHPO). Currently, there is no federal undertaking associated with this project, therefore, this cultural resource literature review and Phase I archaeological survey is an act of due diligence.

Literature Search Results: A literature search within a 1-mile study area surrounding the proposed project area was conducted on April 20 and May 4, 2021, by In Situ staff (Figures 3-5). This task was completed using site data files and previous inventory files maintained at the Minnesota SHPO and Minnesota OSA. The literature search revealed five previously recorded archaeological sites and no previously recorded architectural resources within the 1-mile study area.

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Due to the implementation of Emergency Executive Order 20-20 in response to the Novel Coronavirus (COVID-19) Pandemic, at the time of this project's completion, the Minnesota SHPO and OSA offices were closed. Due to this, information regarding previous surveys and reports could not be obtained for this report, as most reports were not available at the time. However, for the purpose of this Phase I investigation, the information regarding previous surveys and reports would only serve as context for the broad research area and is not directly related to the outcome of the current project.

There are five previously recorded archaeological resources within the 1-mile study area (Table 1). The previously recorded archaeological resources include one prehistoric lithic scatter site (21BW0077), three prehistoric petroglyph sites (21BW0084, 21BW0085, and 21CO0031), and one historic Euro-American military trail alpha site lead (21Cod). All five resources are *unevaluated* for the NRHP and are located outside of the project area. No further work is recommended for these resources for this project.

Table 1: Previously Recorded Archaeological Resources within the One-Mile Study Area

Site Number	Site Type	Location	NRHP Eligibility	Within Project Area
21BW0077	Prehistoric Archaic and Early Woodland Lithic Scatter	not for public disclosure	Unevaluated	No
21BW0084	Prehistoric Petroglyphs	not for public disclosure	Unevaluated	No
21BW0085	Prehistoric Petroglyphs	not for public disclosure	Unevaluated	No
21CO0031	Prehistoric Petroglyphs	not for public disclosure	Unevaluated	No
21COd	Alpha Site – Historic Euro-American Military Trail Site Lead	not for public disclosure	Unevaluated	No

Field Personnel: The field survey crew consisted of In Situ archaeologists Craig Picka and Claire Witt.

Field Methods and Conditions: The Phase I Cultural Resource Investigation was conducted using pedestrian survey and visual inspection. These methods were conducted in accordance with the following Minnesota SHPO guidelines:

- *Visual Inspection* – Locations where cultural resources were not expected, such as disturbed areas, areas with a slope greater than 20 degrees, and low/wet areas were walked over and visually inspected. This method was used to verify the absence or likelihood of any cultural resources within these areas. This method was also utilized to document the general terrain and the surrounding area.
- *Pedestrian Survey* – this method was used to survey landforms with slopes that are greater than 20 degrees, or landforms with slopes that are less than 20 degrees and have

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a surface visibility greater than 25% (e.g., plowed field). The pedestrian survey transect interval ranged between was 5-15 m.

The topography of the project area consisted of fairly flat topography. Little to no vegetation was present, but there was some tilled agricultural field debris present in the project area, providing excellent (90-100%) ground surface visibility (Figure 7). The majority of the project area (approximately 95%) has been subject to ground moving activities, as the topsoil in the area has been graded/stripped, removed, and placed in piles across the project area, causing the area to be disturbed. The project area was subject to visual inspection and pedestrian survey (Figure 6). Pedestrian survey took place across the entire project area and the topsoil piles were visually inspected for any cultural material. The weather was warm and partly cloudy during the survey. Impacts to the project area include agricultural practices, rural development, and soil clearing/ground disturbing activities (Figure 8). No cultural materials were observed or recorded during the assessment of this project area.

For this project, based on the ground moving activities that took place within the project area, there is an apparent level of disturbance documented at the project area. Due to this, there appears to be nominal potential for the intact presence of significant archaeological remains within the proposed project area, as the majority of the topsoil has been graded/stripped and removed in the project area.

The crew was directly supervised in the field by an MA-level archaeologist who meets the requirements for the Secretary of the Interior's Guidelines for Professional Qualifications in Archaeology. A sub-meter GPS unit utilizing Geographic Information System (GIS) data as well as field maps were used to collect spatial data. This ensured that field personnel did not survey outside the project area. All field data, notes, and photographs are on file at In Situ's Eden Prairie, Minnesota office. A map of the inventoried project area is attached to this report, as well as photographs of the project area (Figures 9-14).

Results and Recommendations: During the field survey, a total of 35.6 acres were inventoried for the proposed Graff Quarry Project, Cottonwood County, Minnesota. No cultural resources were observed during this inventory of the proposed project. Due to the negative findings within the project area and the level of disturbance present, In Situ recommends a finding of *No Historic Properties* within the project area and *no further work* is recommended.

For In Situ Archaeological Consulting, LLC.

Signed: 

Name: Abraham Ledezma, M.S., RPA
Position: Principal Investigator, Archaeology

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FIGURES

9717 Valley View Rd
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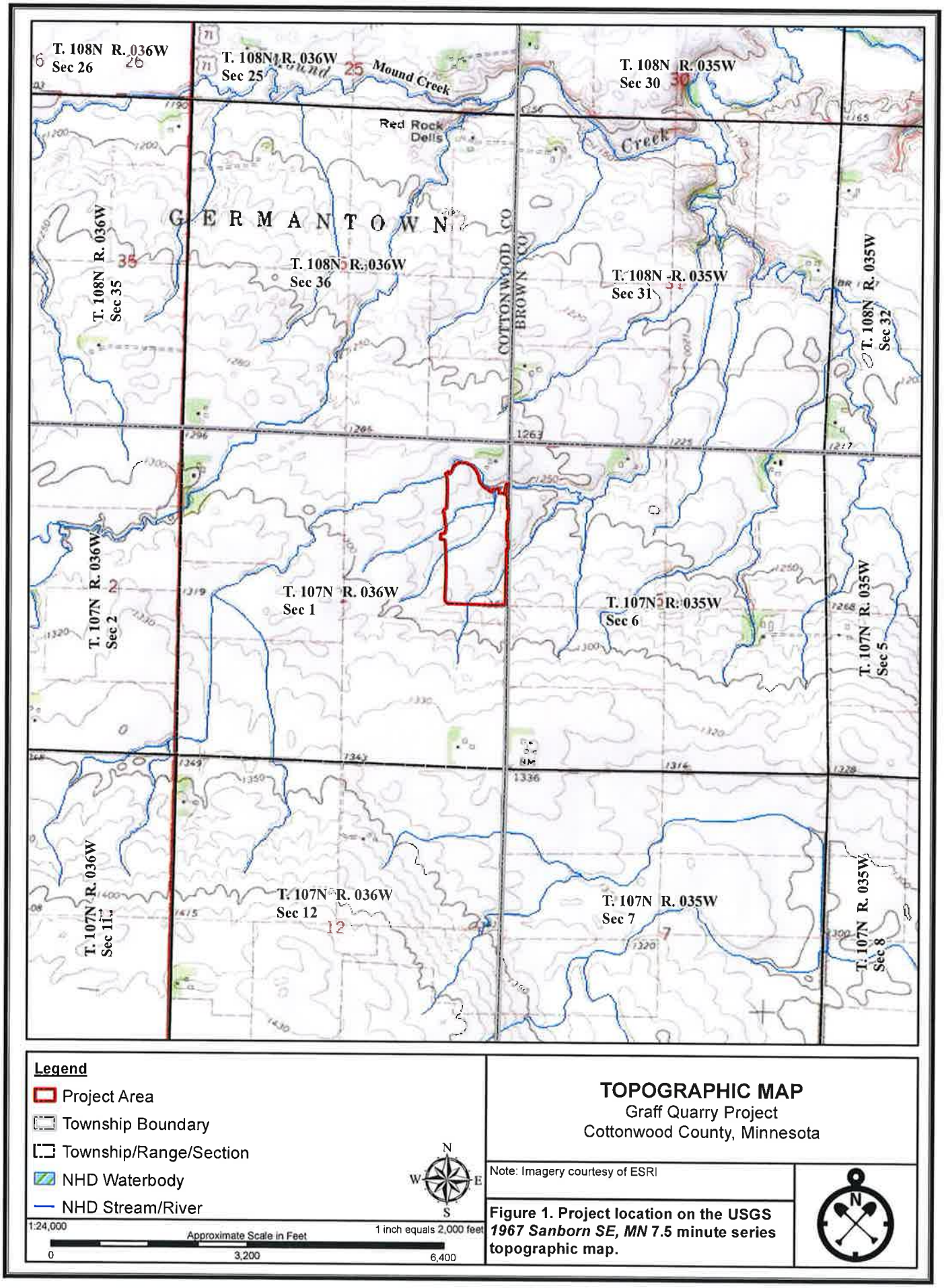
Web: www.insitucrm.com

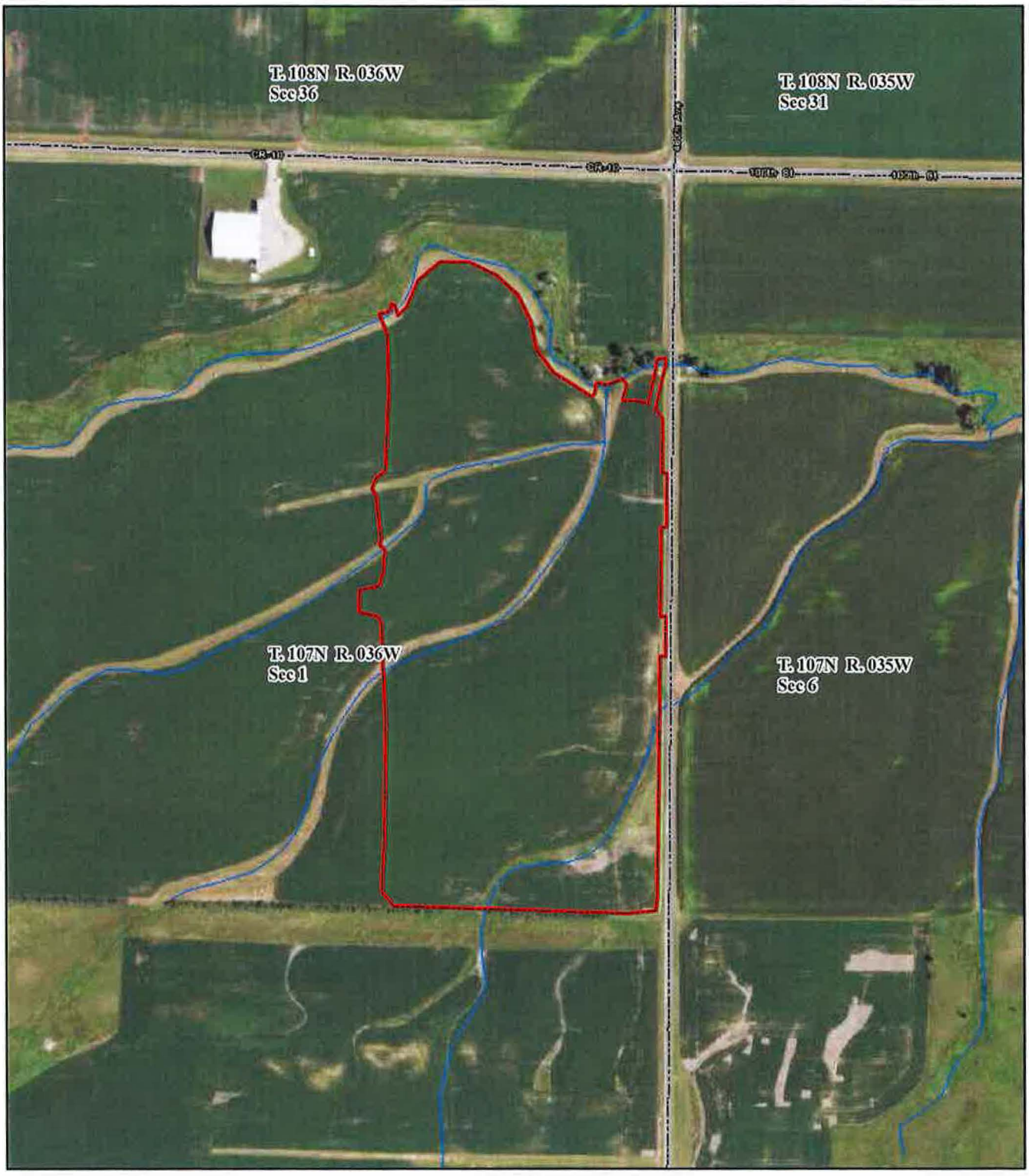


TOPOGRAPHIC MAP

Graff Quarry Project
Cottonwood County, Minnesota

Note: Imagery courtesy of ESRI

Figure 1. Project location on the USGS *1967 Sanborn SE, MN* 7.5 minute series topographic map.



Legend

- Project Area
- Township Boundary
- Township/Range/Section
- NHD Waterbody
- NHD Stream/River

N
W E
S

1:6,000 1 inch equals 500 feet

Approximate Scale in Feet

0 800 1,600

AERIAL MAP

Graff Quarry Project
Cottonwood County, Minnesota

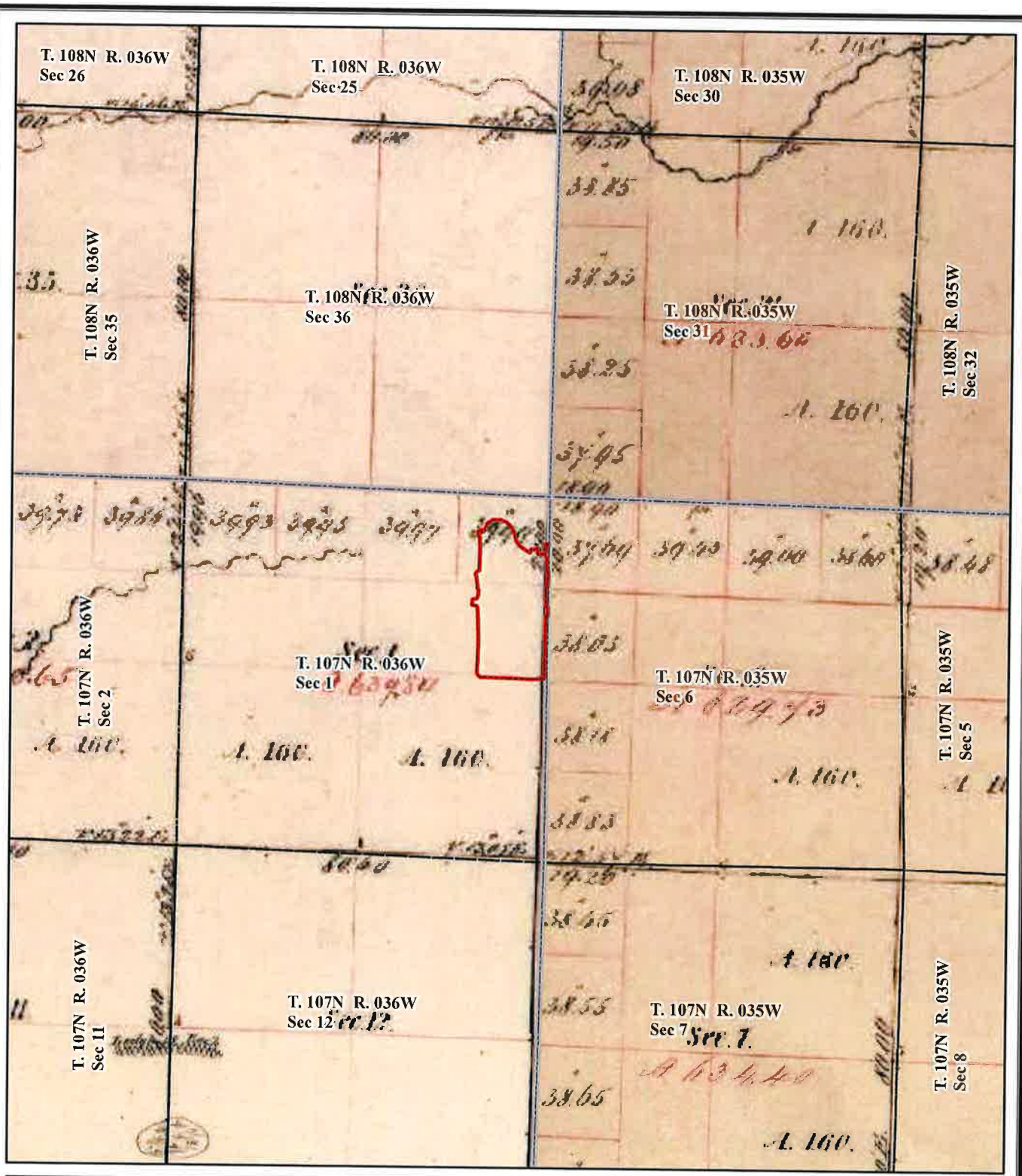
Note: Imagery courtesy of ESRI

N

Figure 2. Project location on an aerial map.

LITERATURE REVIEW TOPOGRAPHIC MAP
Graff Quarry Project

Archaeological Site Location Not for Public Disclosure



Legend

- Project Area
- Township Boundary
- Township/Range/Section

N
W E
S

1:24,000 Approximate Scale in Feet 1 inch equals 2,000 feet

0 3,200 6,400

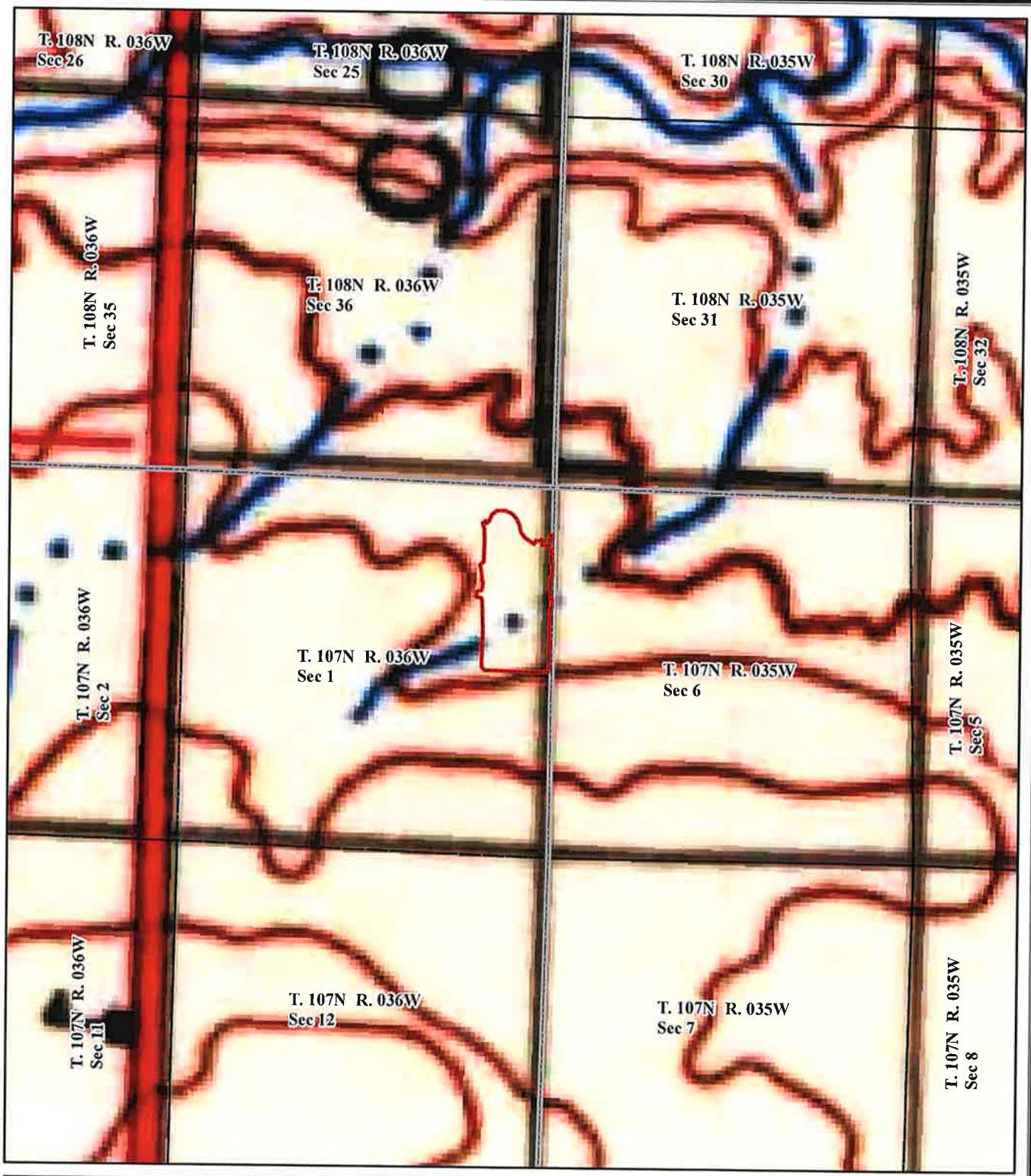
HISTORICAL BLM GLO PLAT MAP

Graff Quarry Project
Cottonwood County, Minnesota

Note: Imagery courtesy of the U.S. Department of the Interior Bureau of Land Management.

Figure 4. Project location on the 1859 BLM GLO Plat map.

N



Legend

- Project Area
- Township Boundary
- Township/Range/Section

N
W E
S

1:24,000

Approximate Scale in Feet

1 inch equals 2,000 feet

0 3,200 6,400

HISTORICAL TOPOGRAPHIC MAP

Graff Quarry Project
Cottonwood County, Minnesota

Note: Imagery courtesy of the USGS.

Figure 5. Project location on the *1953 New Ulm, MN* 250,000 series topographic map.

N

Legend

- Project Area
- Pedestrian Survey/Visual Inspection
- Township Boundary
- Township/Range/Section
- NHD Waterbody
- NHD Stream/River
- Photographic Orientation

N
W E
S

1:6,000 — 1 inch equals 500 feet

Approximate Scale in Feet

0 — 810 — 1,620

FIELDWORK MAP

Graff Quarry Project
Cottonwood County, Minnesota

Note: Imagery courtesy of ESRI

Figure 6. Fieldwork map of the project indicating the results of testing and photo orientations.

N

Figure 7: View of typical surface visibility within the project area (DSCN2346/2365).

Figure 8: View of typical ground moving activities/disturbances within the project area, including graded soil piles (top, DSCN 2383) and the exposed subsoil from grading activities (bottom, DSCN2388).

Figure 9: Overview facing southwest of the project area from the northeast corner of the project area (DSCN2348).

Figure 10: Overview facing southeast of the project area from the northwest corner of the project area (DSCN2359).

Figure 11: Overview facing northeast of the project area from the southwest corner of the project area (DSCN2362).

Figure 12: Overview facing northwest of the project area from the southeast corner of the project area (DSCN2371).

Figure 13: Overview facing west of the project area from within the project area (DSCN2390).

Figure 14: Overview facing south of the project area from within the project area (DSCN2397).

Exhibit B

APPLICATION FOR CONDITIONAL USE

Cottonwood County Planning & Zoning
339 9th St. Windom, MN 56101
Phone: 507-831-1153 ext. 102

OFFICE USE Fee $450.00 Zone _____ Hearing Date _____ Application Number _____
Date Received _____ County Board Date _____ Date Mailed _____

Property Owner Graff (Last) Corby (First) (MI)

Mailing Address 43764 110th St | Comfrey (City) | MN (State) | 56019 (Zip)

Property Address 48485 10 CR | Sanborn | MN | 56083

Applicant W. Lorentz Construction (507) 388-4182
(If different than owner) Last First MI Daytime Phone

PO BOX 847 | Mankato | MN | 56002-0847
Address City State Zip

Shoreland _____ *Yes* _____ *No* X *Township* 107 *Section* 1

Parcel ID Number 01-001-0401 *Daytime Phone* (507) 920-5545

Legal Description The Northeast Quarter, Section 1, Township 107 North, Range 36 West, Cottonwood County, Minnesota.

Conditional Use Request Mining, blasting, crushing, washing, and removal of aggregate materials with the addition of any mining and construction activities that align with the listed tasks.

I have read the above Conditional Use request and I agree that it correctly states the nature and extent of the use I am requesting, and the legal description of the real property effected.

Signature of Property Owner (legal name) Corby Graff *Date* 7-2-20 *DOB* 6-30-1962

This Conditional Use must be enacted within two years.
This Conditional Use does not constitute a building permit, sewage system permit or the like. Separate permits may have to be applied for and obtained in order to accomplish all of the goals of your project.
The issuance of this conditional use does not negate the need to secure other permits from other local units of government, state agencies or federal agencies who may also have jurisdiction over portions of your project.
Contact the Cottonwood County Environmental Office to determine whether or not your proposed use is in the Shoreland District.

SITE PLAN

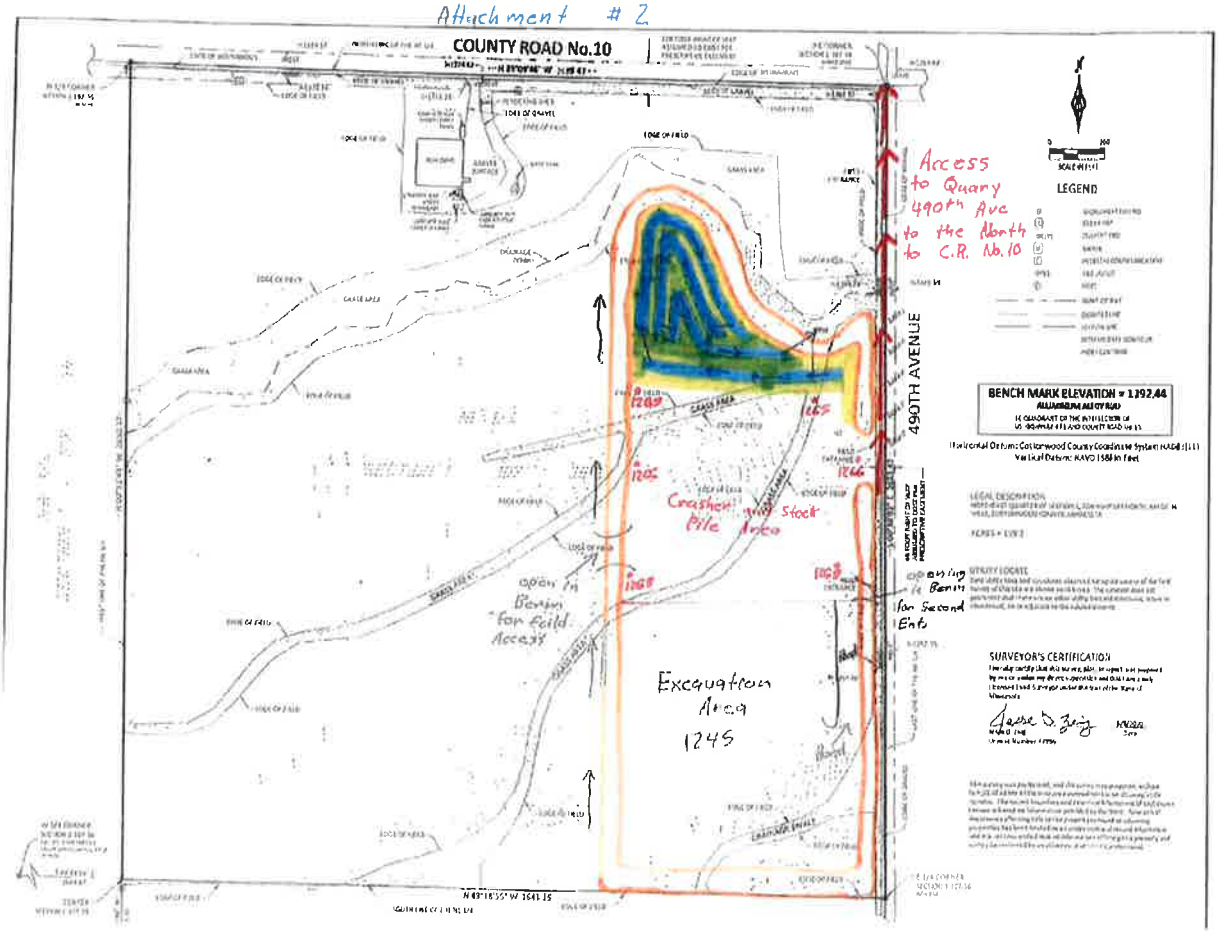
NAME W. Lorentz Construction *PARCEL NUMBER* 01-001-0401

Information to be included in site plan

_____ Location & size of **ALL** existing and proposed structures _____ Distance from lake, road(s), & property lines
_____ Location of well & septic _____ Total lot square footage
_____ Location of road(s) & driveway(s) _____ Total impermeable surface square footage
*Previous Variance/Conditional Use on the property? no

SITE PLAN
NORTH

Attachment # 2



1. The name, address and signature of the owner(s) of the property.

Name: Corby Graff
Mailing Address: 43764 110th St. Comfrey, MN 56019
Properly Address: 48485 10 CR Sanborn, MN 56083
Signature: Corby Graff 6-2-20

2. The name, address, and signature of the operator(s).

Name: W. Lorentz Construction
Mailing Address: PO BOX 847 Mankato, MN 56002-0847
Signature: Andrew L Lentz 6/25/2020

3. An accurate legal description of the property where the mining, extraction, or excavation shall occur.

The Northeast Quarter, Section 1, Township 107 North, Range 36 West, Cottonwood County, Minnesota.

4. A map of the property where the mining, extraction, or excavation is to occur that clearly indicates the property lines and the limits of the proposed activity. Topographic data, including contours at 10-foot vertical intervals. Watercourses, marshes, floodplains, wooded areas, rock outcrops, power transmission poles and lines, existing wells, and other significant features shall also be shown.

See attachment 2

5. A narrative outlining the type of material to be mined, extracted, or excavated; mode of operation; and an estimate of the amount of material to be removed; plans for blasting; location of settling ponds and outlets; and other pertinent information to explain the request in detail.

Quarts

6. A narrative outlining the type of processing to be included in the operation.

Blasting, crushing, screening, and washing

7. A fee as established by the County Board.

N/A

8. A general location map showing the proposed site in relation to any city and/or sensitive area within one (1) mile.

See attachment 1

9. A map showing access routes between the property and the nearest arterial road.

See attachment 1

10. A map showing location and name of roads or streets, right-of-way width, railroads, and trails on or adjacent to the property.

See attachment 1

11. Easements: show widths and identify utility or other purposes on adjacent property.

See attachment 1

12. Natural land features showing locations of: watercourses and drainage ways; flood of record; wetlands; sinkholes; basins; and wooded areas.

See attachment 1

13. Man-made features: buildings and other structures, wells, dams, dikes, and impoundments of water.

See attachment 2

14. Processing areas shall be identified, and boundaries shown.

See attachment 1

15. Dust control plan.

Chloride the road

16. Access road to processing and mining areas shall be shown.

See attachment 2

17. Proposed location of principal service or processing buildings or enclosures shall be shown, as well as location of settling basins and process water ponds.

See attachment 2

18. The operator shall indicate if blasting is proposed as part of the operation and frequency of blasting.

Yes, 12 times a year

19. Any other information or reports the Zoning Administrator or Planning Commission deems necessary for purposes of evaluating environmental or aesthetic impacts.

N/A

20. Reclamation plan in conformance with Subdivision 11 of Ordinance No.36.

See attachment 3

MINNESOTA POLLUTION CONTROL AGENCY

Exhibit C

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

December 17, 2020

Kevin O'Keefe, Petitioners' Representative
32941 Res Highway 4
Morton, MN 56270

Mr. Andrew Lorentz, Field Operations Manager
W. Lorentz Construction
P.O. Box 847
Mankato, MN 56002-0847

RE: Petition for Environmental Assessment Worksheet on the Proposed Sioux Quartzite Quarry (aka: Graff Quarry; aka: Lorentz Quarry) project
Amboy Township, Cottonwood County

Dear Mr. O'Keefe and Mr. Lorentz:

On December 16, 2020, the Minnesota Environmental Quality Board (EQB) forwarded a petition requesting the preparation of an Environmental Assessment Worksheet (EAW) on the proposed Sioux Quartzite Quarry (aka: Graff Quarry; aka: Lorentz Quarry) project. The proposed project is to excavate nearly 30 acres, which includes mining, blasting, crushing, washing, and removing aggregate materials in the northeast quarter of Section 1, Amboy Township (T107N, R36W), Cottonwood County. The Minnesota Pollution Control Agency (MPCA) will review the petition and related information and determine if an EAW should be prepared.

The project may not receive any permits, nor can the project be started, until this decision is made.

Once the decision is made, the MPCA Commissioner will issue findings of fact outlining the agency's decision whether to grant or deny the petition. The MPCA will then notify the petitioner's representative, the project proposer, and other parties of the result of the petition review within five days of the decision, as directed by EQB rules.

If you have any questions about this letter, please contact Charles Peterson of the Environmental Review Unit at 651-757-2856.

Sincerely,

Dan R. Card, P.E.

Dan R. Card, P.E.
Supervisor
Environmental Review Unit
Resource Management and Assistance Division

DRC:bt

cc: Alex Shultz, Cottonwood County
Amanda Gronhovd, Minnesota Department of Administration
Peter Tester, MPCA
Katherine Jardine, MPCA
Samantha Adams, MPCA
Dan Card, MPCA
Melissa Kuskie, MPCA
Charles Peterson, MPCA

Exhibit D

PUBLIC HEARING, LORENTZ CONSTRUCTION CONDITIONAL USE PERMIT

ROLL CALL

Phil Harder	Heidi	Tom Appel
Sharon	Alex Schultz	Lorentz Construction (Nick/Andrew)
Jim Wolf	Ashley Broussard	

Meeting start 1:39 pm

ALEX SCHULTZ: reads legal notice regarding ordinance 28 & 36

PHIL HARDER: Explain the reasoning for your need of a conditional use permit

LORENTZ CONSTRUCTION: Looking to mine blast and crush rock for use of aggregate. Our Mankato location is currently running out of material. We're looking to expand our opportunity.

PHIL HARDER: What is the land currently?

LORENTZ CONSTRUCTION: Farmland. *Passes around engineering designs*

TOM APPEL: How tall is the berm going to be?

LORENTZ CONSTRUCTION: If you go to page 3c01, you'll find the station numbers. Then, in sec. 120, the berm is 1,276 feet.

PHIL HARDER: What is the above grade height?

LORENTZ CONSTRUCTION: An average of 10 feet taller than the working area.

HEIDI: How many acres will this be?

LORNETZ CONSTRUCTION: On page c601, the stockpile will be 9.1 acres, excavation area will be 17.7 acres for a total of just under 30.

HEIDI: The farmland now, is it currently producing crop?

LORENTZ CONSTRUCTION: Yes.

PHIL HARDER: How much soil will be removed to get to the rock?

LORENTZ CONSTRUCTION: 2 feet.

PHIL HARDER: How deep will you be digging?

LORENTZ CONSTRUCTION: For Phase 1, we will dig 1268 feet. We will get the total 17.7 acres on the same elevation before we start removing rock.

HEIDI: These ponds, will they be constructed first?

LORENTZ CONSTRUCTION: Yes. The ponds will be created first to control runoff downstream and allow them to slowly trickle into the creek. All of the water will go into Pond A. Culverts force the flow from Pond A to Ponds B-D, draining west, to get into the creek. The slow flow and multiple ponds will allow silt to settle so no sediment will go in.

PHIL HARDER: Water flows from the SW to the berm, where does that water go?

LORENTZ CONSTRUCTION: It drains west to east. Page C301, it runs along the berm as it normally would through the pipe and into a creek. Actually, the creek we are referring to isn't really a creek but a pre-established drainage swale. It also encompasses the neighboring property's runoff.

HEIDI: How much truck traffic would there be?

LORENTZ CONSTRUCTION: The pits would run from 7:30-5:30 but we're open to working with the County on run times if needed. We anticipate an average of 95 trucks a day.

TOM APPEL: What roads would you be using, county road 10?

LORENTZ CONSTRUCTION: Yes, it's already a 10-ton road.

TOM APPEL: Then where?

LORENTZ CONSTRUCTION: We'd use 71 and 30 to go east.

HEIDI: Would you be using 490th?

LORENTZ CONSTRUCTION: Yes, just a small part of it.

HEIDI: Is it paved?

LORENTZ CONSTRUCTION: No.

TOM APPEL: Is the township aware?

LORENTZ CONSTRUCTION: Yes *points to public members*.

TOM APPEL: Which entrance would you primarily use—the north or south?

LORENTZ CONSTRUCTION: The north, the south would only be used on exceptionally busy days.

HEIDI: There are no residents within ½ mile?

LORENTZ CONSTRUCTION: No.

PHIL HARDER: How close is the closest resident?

PUBLIC (JIM?): About 1-mile south.

TOM APPEL: How many years before you would be able to excavate?

LORENTZ CONSTRUCTION: About 1-2 years.

PHIL HARDER: Have we heard anything from the public?

ALEX SCHULTZ: I have received one call from the public and they are in attendance today. I called Tom Cresco from the DNR but he hasn't responded.

Amboy township concerns:

- Road maintenance
- Road size
- Extend culvert

TOM APPEL: How big is the culvert and what is the material?

PUBLIC/AMBOY TOWNSHIP(?): 4 or 5 feet and steel.

TOM APPEL: Has anyone inspected it?

PUBLIC/AMBOY TOWNSHIP(?): As far as we know, it's in fair condition.

PHIL HARDER: What's the current daily traffic? Would there be a big increase in road usage? Would it disrupt current flow?

PUBLIC/AMBOY TOWNSHIP(?): There's about 10 cars a day. Harvest time would be the only time a disruption could probably happen.

LORENTZ CONSTRUCTION: We also want to say that we would like a good road as well. We are willing to work with the township and county to keep the road safe for residents and our drivers.

SHARON: Would 490 have only empty or full trucks? Would it be a mix? How do you plan on ensuring drivers are only entering one entrance?

LORENTZ CONSTRUCTION: These are our drivers, we're not in a retail business so we have more control. Any drivers coming to the south entrance we would refuse to service like the Red Rock Quarry.

PUBLIC/AMBOY TOWNSHIP(?): That doesn't always work at Red Rock. If they came from the East, which road would they go?

LORENTZ CONSTRUCTION: Again, we aren't in the retail business so these drivers are our guys. We could directly shut off traffic. If they came from the east they would come from another gravel road so it's of no benefit to them.

PHIL HARDER: So it's almost all in-house?

LORENTZ CONSTRUCTION: Yes.

PUBLIC/AMBOY TOWNSHIP(?): What are you going to do for dust control?

LORENTZ CONSTRUCTION: We will use sprinkler systems and to keep it wet and spray the roads with chloride.

PUBLIC/AMBOY TOWNSHIP(?): We'll see; the other quarry does have a lot of dust.

LORENTZ CONSTRUCTION: It's an OSHA standard, legally we have to comply. We also want the best for our employees so we do our best to comply. A safe work environment is important. The chloride on the roads actually is beneficial and can help hold the road together overtime.

TOM APPEL: Any agreement with the township yet?

LORENTZ CONSTRUCTION: Not yet, we first wanted to see if it would even be possible to get the permit before consulting.

PUBLIC/AMBOY TOWNSHIP(?): What's the notification time before a blast and the distance the notifications get sent out?

LORENTZ CONSTRUCTION: It's a 48-hour notice via phone call or text. The day of, there is a reminder notification. The notification gets sent out 500 yards.

TOM APPEL: So, no one would be notified because there are no residents within 500-yards?

PHIL HARDER: Well 500-yards is roughly one mile.

LORENTZ CONSTRUCTION: We have the ability to expand the radius of notification alerts if residents outside the area would want to receive them.

PUBLIC/AMBOY TOWNSHIP(?): What about noise after hours?

LORENTZ CONSTRUCTION: Unless there is an emergency, which is rare, we never run 24/7.

PUBLIC/AMBOY TOWNSHIP(?): What about in the summer during busier periods? Weekends?

LORENTZ CONSTRUCTION: Even in the summer, it is rare we would run after hours. As for weekends, we run some Saturdays and never Sundays—unless a state of emergency. One emergency was in Le Sueur when a train derailed, they ran 24/7 to get enough aggregate to stabilize the train. Another emergency was in Sioux City when a nuclear power plant was at risk of going under, we ran 24/7 for 1.5 weeks to keep it going. Again, these are emergencies and do not happen often but we may need to run after hours for an extraordinary circumstance.

PHIL HARDER: Where will the water come from to fill the ponds?

LORENTZ CONSTRUCTION: It will naturally fill. It will need weeks of rain to fill.

PHIL HARDER: Where will the dredged material go?

LORENTZ CONSTRUCTION: It will be used for other projects or on-site.

TOM APPEL: Looking at all of these ponds, why are they the same elevation? Shouldn't they be sloped?

LORETNZ CONSTRUCTION: Yes, they are all the same elevation but in order for the silt to settle out, they must be the same elevation. If there is any force, the silt will be carried into the next ponds.

TOM APPEL: So the pipe would be dry?

LORENTZ CONSTRUCTION: Ideally, yes.

PHIL HARDER: What is the other township on the side of 490?

PUBLIC/AMBOY TOWNSHIP(?): Delton but it's maintained by Amboy.

PHIL HARDER: What is the long-term reclamation plan?

LORENTZ CONSTRUCTION: It's a 3:1, we submitted the plans to Alex. We will be turning it to natural grass.

PHIL HARDER: With how deep you're digging, won't there be a body of water at the bottom?

LORENTZ CONSTRUCTION: We have enough material we will be able to fill the excavation area in. We generate a lot of waste and are in a unique position that would allow us to do so.

PHIL HARDER: How long would you excavate, 15-20 years?

LORENTZ CONSTRUCTION: We plan on at least 20 years.

PHIL HARDER: Any other questions?

Alex: Are we ready for approval?

PHIL: Is there a *motion to approve the conditional use permit for Lorentz Construction?*

- Motion moved by Heidi
- Second from Sharon
- In favor: Tom, Heidi, Phil, and Sharon
- Opposed: None

Motion carries

PHIL: Is there a motion to accept the conditions?

- Motion moved by Sharon
- Second from Heidi
- In favor: Tom, Heidi, Phil, and Sharon
- Opposed: None

Motion carries

Public meeting for condition use permit for Lorentz Construction Adjourned at 2:58 pm.

NUISANCE REGULATIONS MEETING

ALEX: Inoperable vehicles was removed because it was repetitive and mentioned in other subdivisions.

PHIL: So, you can't park untabbed vehicles anywhere the public may see them?

ALEX: Correct.

HEIDI: Is it a certain amount? Even just one?

ALEX: Yes, any amount. It must be able to be declared a nuisance by a public health official. If it isn't declared a nuisance, it is okay. There will be a hearing made by the planning commission to say whether or not it is removed. If not, it will be billed to the property owner or assessed on their taxes.

HEIDI: There's only 48 hours? What if it is a big nuisance and takes the landowner more than 2 days to remove?

ALEX: Yeah, I didn't like that either. The 48 hours is more so for a move to get a response from the landowner.

HEIDI: Section 7, it says the maximum removal is 10 days.

ALEX: Yes, and then a public hearing.

PHIL: So, 10 days then commission meeting?

ALEX: Yes, 10 days. If they need any longer they can contact me.

PHIL: Section 3, shouldn't it say "official" over planning "commission"?

HEIDI: They all say commission?

ALEX: It was put in there so more than one person could take control.

SHARON: I was thinking official because if we see something, we can bring it to you [Alex].

HEIDI: I like that. Wouldn't we have to define planning official as well?

ALEX: I'll ask Nick.

PHIL: Is the environment officer Alex?

ALEX: Yeah, I have a lot of title. Planning and Zoning technician, health official, planning and zoning officer, etc. [...] Another thing that has changed is all enforcement was moved to section 10.

PHIL: Section 10, #4, shouldn't "city" employee read "county" employee? #5 also has city language.

ALEX: Yes.

Motion to present changes to the board

Moved: Heidi

Second: Sharon

Discussion:

In favor: Tom, Heidi, Phil, and Sharon

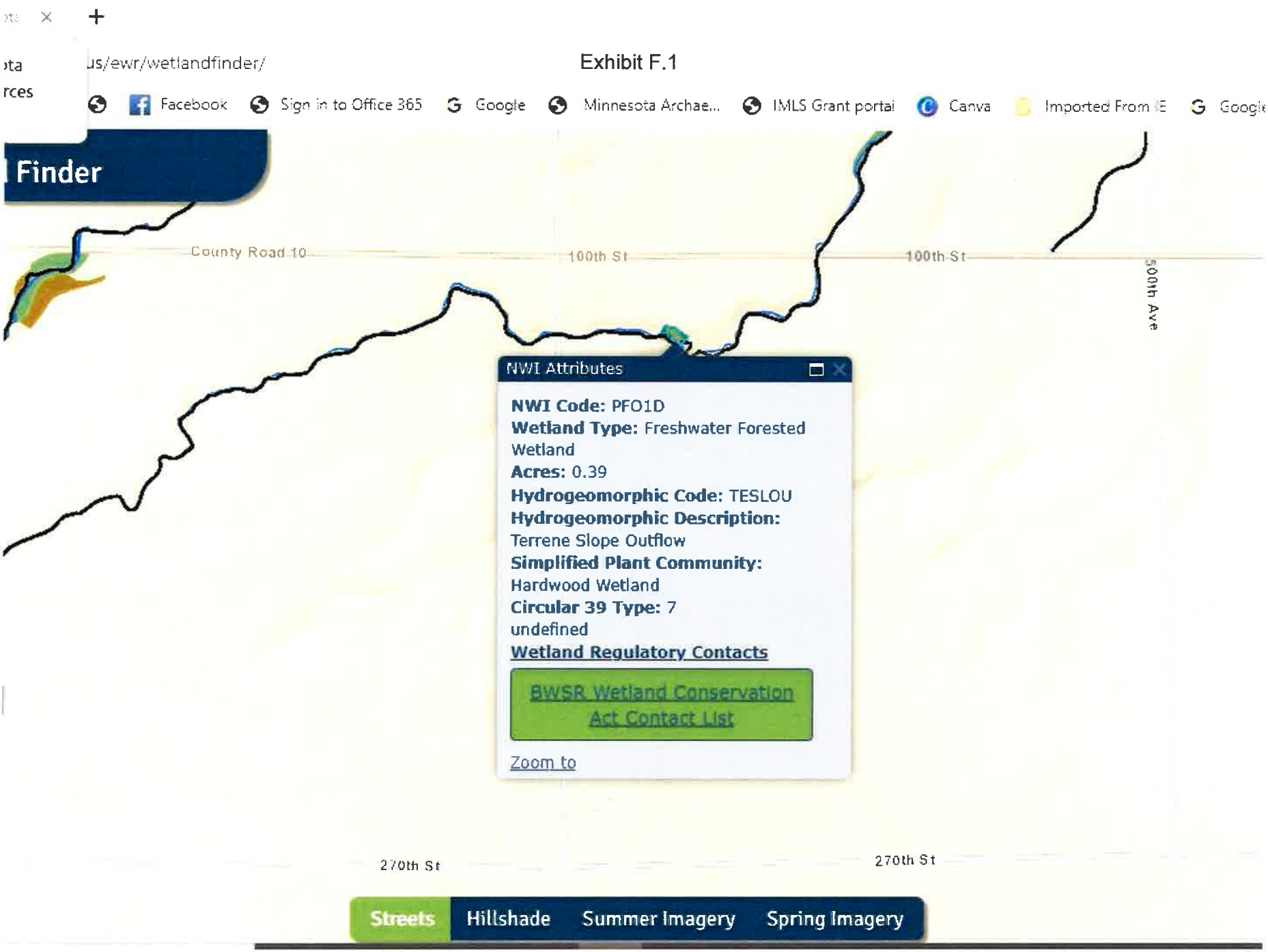
Opposed: none

Motion carries

Adjourned: 3:33pm


Ruler
Exhibit E
Line
Path
Polygon
Circle
3D path
3D polygon
Measure the distance or area of a geometric shape on the ground
Perimeter:
2,286.12
Yards
Area:
56.03
Acres
Mouse Navigation
Save
Clear
71
10
3424 ft

Exhibit F.1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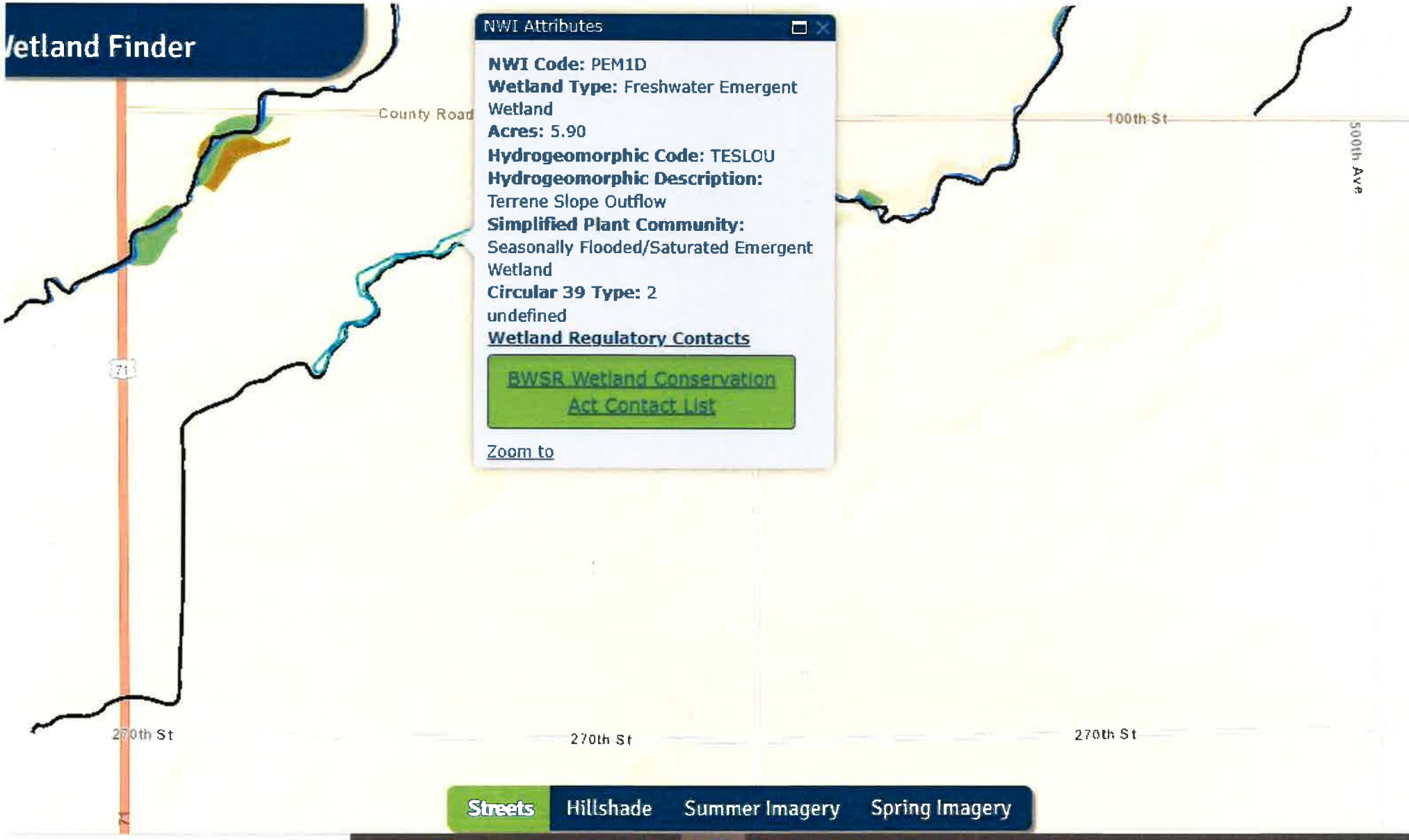
Facebook
Sign in to Office 365
Google
Minnesota Archae...
IMLS Grant portal
Canva
Imported From IE
Google
Finder
County Road 10
100th St
100th St
500th Ave
NWI Attributes
NWI Code: PFO1D
Wetland Type: Freshwater Forested Wetland
Acres: 0.39
Hydrogeomorphic Code: TESLOU
Hydrogeomorphic Description: Terrene Slope Outflow
Simplified Plant Community: Hardwood Wetland
Circular 39 Type: 7
undefined
Wetland Regulatory Contacts
BWSR Wetland Conservation Act Contact List
Zoom to
270th St
270th St
Streets
Hillshade
Summer Imagery
Spring Imagery

arcgis.dnr.state.mn.us/ewr/wetlandfinder/

Exhibit F.2

Morton, MN 56270... | Facebook | Sign in to Office 365 | Google | Minnesota Archae... | IMLS Grant portal | Canva | Imported From IE | Google



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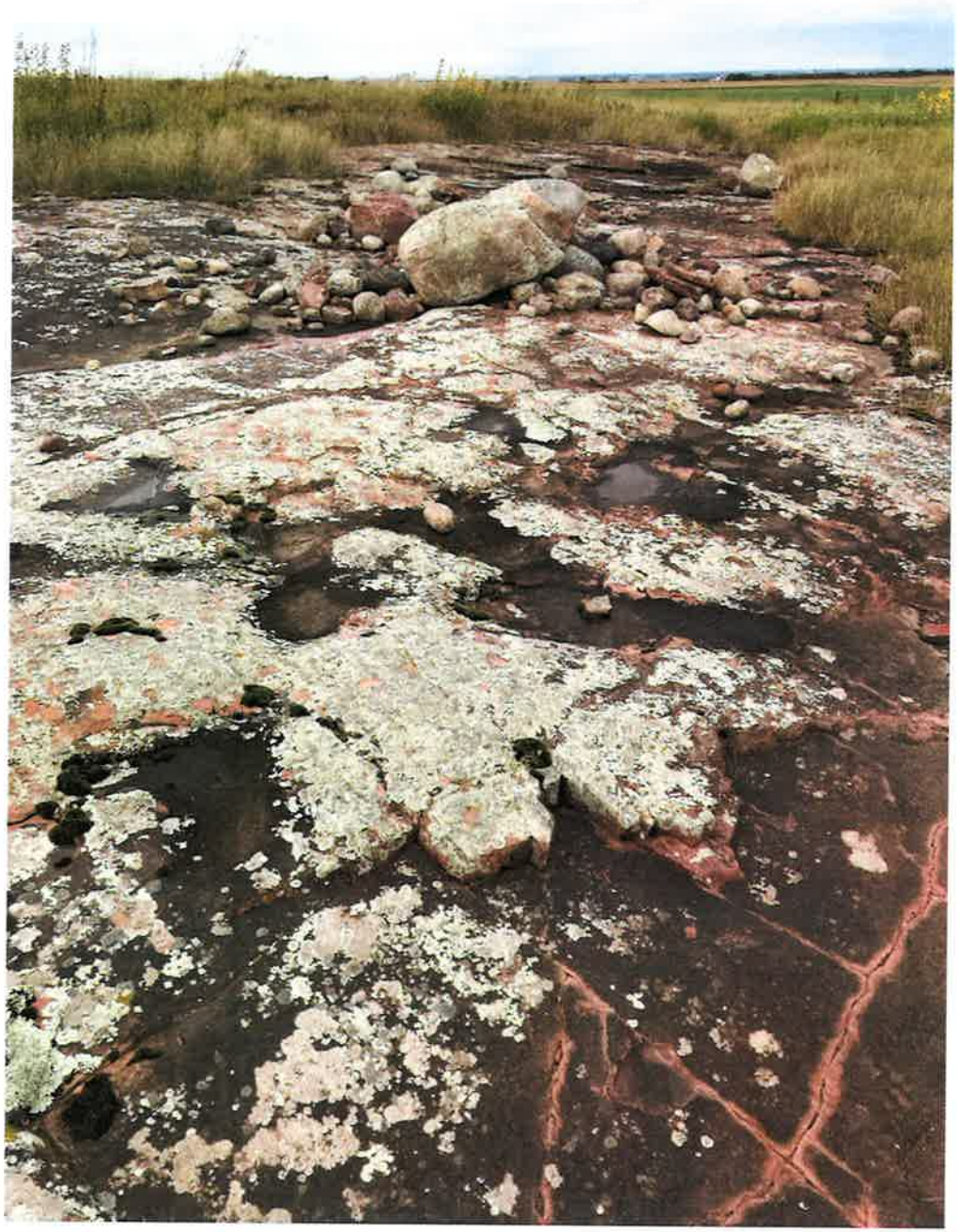


Exhibit G

Rock Quarry Rare Plant Surveys
T107N R36W SE Section 12
May-September 2020

Ruby, MacFarlane,and Sather
Botanical Contractors

Rock Quarry Rare Plant Surveys
T107N R36W SE Section 12
May-September 2020

Janeen Ruby, Malcolm MacFarlane, and Nancy Sather
Report dated October 14, 2020

Introduction

Geology

The Red Rock Quarry project site in Section 12, T107N, R36W, (Amboy Township, Cottonwood County) is characterized by near surface deposits and outcrops of Sioux Quartzite, typical of area 23 miles in east-west extent and 3 miles south-to north in Cottonwood County, colloquially known as Red Rock Ridge This zone of southward-dipping outcrops generally lies at the northern edge of a more extensive area underlain by Sioux Quartzite that increases in depth southward. Figure 1 shows the local extent of this body of buried bedrock (Jirsa et al 2011).
A series of managed areas east of the site follows the outcrop zone at the north edge of this unit (Figure 2).

Sioux quartzite is a 16-17-million-year-old metamorphic rock whose reddish color comes from the iron oxide staining of sand grains that were reworked from older Precambrian rocks. The sediments that were to become Sioux Quartzite were deposited into an ancient basin by a braided stream that left rippled surfaces and beds of slightly differing composition and color that can still be seen on some of the outcrops at the study site. After the passage of millions of years over which these materials solidified, exposed outcrops were sculpted by periglacial winds during the most recent glacial times. (Southwick and Morey 1986. Minnesota Historical Society 2020). Differential weathering of materials comprising Sioux Quartzite contributes to a variety of surficial microhabitats for rare plants: thin soil deposits at the edges of smooth table-like surfaces, crevices with pockets of soil, ephemeral rainwater pools in shallow bedrock surface depressions, and narrow ephemeral stream channels with exposed bedrock cutting across the prairie (Appendix 1).

Because of the presence of joints, fractures, and loose sand zones in the below-ground formation, Sioux Quartzite is one of the major bedrock aquifers in the state. Nearby wells where the Sioux Quartzite aquifer underlies Cretaceous rocks or thick glacial deposits exhibit very high concentrations of calcium sulfate and other dissolved solids up to 2,300 mg/L where (Anderson 1986).

Surficial upwellings of calcium-rich groundwater are a major contributing factor to formation of rare calcareous seepage fen communities (OPp93b, Minnesota Department of Natural Resources 2005). At present no known areas of this community have been documented in direct contact with bedrock exposures on Red Rock Ridge, but one such community has been identified within a mile of a similar quarry operation in Section 20 of T107N R35W (Minnesota Department of Natural Resources n.d.). Well-developed calcareous fens have the potential to support a unique assemblage of rare vascular plants tolerant of high calcium concentrations and peat buildup due to the exclusion of oxygen by constant water flow.

Cultural resources

The outcrop complexes along Red Rock Ridge harbor the largest concentration of prehistoric and recent Native American rock art in the Midwest (Loathsome 1976, Callahan 2001), now known to be one of the most notable concentrations of rock art in the world.

> Sixteen miles of the Ridge contain 27 petroglyph sites on its 311 Sioux Quartzite outcrops, five petroform sites, numerous sacred springs, and countless lithic scatters. The petroglyph sites have over 8000 American Indian images carved into them. Many of the same carvings of the Ridge are found on other rock art sites found throughout North American. The Ridge is a unique destination site for ancient travelers from across North American who recorded cultural traditions otherwise lost to history. The rare five petroforms represent 5/7 of the recorded petroforms in Minnesota and provide unique insights into past scared ceremonies still done today. The lithic scatters provide precious insights into the people who came to the Ridge to worship. The Ridges is a cultural and natural heritage site significant to our world's humanity and worthy of the top priorities of preservation. (Sanders, personal communication. October 3, 2020)

Quarry expansion

Sioux Quartzite has proven to be a valuable source of crushed rock, largely used for road construction in the local area. Red Rock Quarry, presently mining approximately 90 acres in NE ¼ of Section 12, T107N, R36W, Cottonwood County, is one of two local operations mining this rock. Red Rock Quarry plans an open pit expansion that will include stripping vegetation, blasting, crushing, and dewatering to extract quartz aggregate from 30 to 120 feet below grade. This two-phase operation will impact approximately 103 acres in parts of E1/2 SW1/4 EX TR; SE1/4 EX TR Section 12, T107N, R36W. (Figure 3) The previously-documented presence of federally and state-threatened Prairie Bush Clover (*Lespedeza leptostachya* Engelm.) at the site triggered a mandatory EAW. The rare plant surveys reported in the present document fulfill a requirement of this process.

Native plant communities and previously documented rare plants

The site is embedded in a broader landscape of surficial materials formed during the retreat of the last glacier around 14,000 years ago (Lusardi 1994). Historically, the predominantly loam and clay-loam soils that developed on these glacial materials supported broad swards of dry mesic, mesic, and wet prairie. These prairie communities are influenced by topography, underlying soils, and local hydrology. Because the condition of native prairie is also a reflection of previous land use, areas between and south of major strings of outcrops at the project site reflect the history of recent grazing at the site.

Upland prairies along Red Rock Ridge support a significant number of the state's largest populations of Prairie Bush Clover (*Lespedeza leptostachya* Engelm.) See Appendix 1 for images of this species. This Midwestern endemic is both state and federally listed as a threatened plant (Minnesota Statute 84.0895; Minnesota Rules, Chapter 6134, Federal Register 52:781-784). The majority of populations on Red Rock Ridge occur in dry mesic prairies on Germantown clay loam (USFWS 1987). The first botanical surveys on Red Rock Ridge targeted this species between 1986 and 1988 (Sather 1989). The project area was first surveyed for this species on June 22, 1988 and again on September 14 of that year. At the time of 1988 surveys the prairie was heavily grazed and visually dominated by non-native species. Three surveyors were unable to locate Prairie Bush Clover but found Buffalo Grass (*Buchloe dactyloides* (Nutt.) Engelm.) and Tumblegrass (*Schedonnardus paniculatus* (Nutt.) Trel.). Both species typically occur on or at the edge of Sioux Quartzite outcrops in southwestern Minnesota prairies and were restricted in 1988 to the few rocks with ledges high enough to prevent trampling. In September 1997, Hageman and Sather found and vouchered approximately 200 flowering and 100 non-flowering Prairie bush clover plants concentrated in the west ditch of 490th Avenue extending into adjacent native prairie at the base of the pasture slope. Prairie Bush Clover plants were present on both sides of the east fence line in the mesic prairie ditch and adjoining pasture.

This population was reconfirmed by Sather in September 2003, with a total of 147 plants outside the fence. The pasture was too heavily grazed in 2003 for native species to be seen. The population at Amboy 12 is recorded in the Minnesota DNR's Natural Heritage Information System (NHIS) as Prairie bush clover occurrence 49.

The site was subsequently identified by the Minnesota Biological Survey (MBS) Cottonwood County Survey Site 6, (Amboy 12). The survey mapped approximately 80 acres of prairie and rock outcrop native plant communities, approximately 19 of which subsequently have been quarried (Figure 4). Because of access issues at later dates, the Southern Mesic Prairie (UPs23) was mapped based on conditions at the time of the 1988 survey. At that time the prairie was heavily grazed. The site's High Biodiversity Significance is based on the presence of Prairie bush clover, Buffalo grass, Tumble grass, and a distinctive subtype of rock outcrop vegetation (Crystalline Bedrock Outcrop, Sioux Quartzite subtype). This vegetation type is confined to sites in Rock, Pipestone, and Cottonwood Counties (Minnesota Department of Natural Resources 2005).

Red Rock Ridge is identified as a 10,192-acre Core Area in the Minnesota Prairie Conservation Plan (MN DNR 2018). It includes several notable managed areas including Rock Ridge Scientific and Natural Area, Jeffers Petroglyph historic site, TNC's Red Rock Preserve, Red Rock WMA, Red Rock Falls County Park (Cottonwood County), and Mound Creek County Park (Brown County), all of which support native prairie and rare plant habitats. See also Figure 2.

Factors influencing plant rarity and searches

The visibility of any species at any given time is linked to its preferred habitat, local hydrology and soils, previous land use, seasonal or erratic weather patterns and the time of year it emerges, flowers, and fruits. All these factors affect methods, timing, and results of rare plant searches.

Some plants are rare because they are tolerant of site conditions unfavorable for most species. These species may have wide geographic ranges but occur only in very specific microhabitats, which themselves may be very rare. Species associated with rock outcrops and species associated with calcareous seepage fens are examples of this situation.

The seeds of several rock pool specialists wait to germinate and complete their life cycles during periods when frequent rainfall fills depressions in outcrops to create ephemeral pools (Harris 2009). Thus, it is possible for a species to be present at a site, but only documented following periods of precipitation long enough to enable the species to sprout and reach maturity before the pools dry up. The weather of a given season and the ability of botanists to survey rock pools shortly after a period of precipitation both influence the known distribution of rock pool specialists.

Plants of calcareous fens (OPp93b) are tolerant of the mineral-rich, cold, oxygen-poor conditions that prevail in areas where diffuse groundwater seepage encourages peat development (Minnesota Department of Natural Resources 2005). Because these communities are nourished by groundwater, they respond to long term changes in groundwater availability, but not to precipitation within a given year. Calcareous fens can occur in small patches within wet meadow complexes but are less likely to develop in flowing springs. Most species of calcareous fens are short-statured and easy to miss. The community is most easily recognized by the presence of more robust indicators like Grass of Parnassus (*Parnassia glauca*). In southwestern Minnesota, wetlands lacking that indicator are unlikely to support calcareous fen rarities.

The majority of geographically widespread rare plants with wide environmental tolerances are associated with habitats subject to degradation or land use conversion. Prairie bush clover is a good example. Most of Minnesota's known populations occur on loamy soils on slopes that have been previously grazed but are too steep to plow.

Unlike rock specialist target species that are responsive to precipitation within the season of survey, prairie bush clover is a long-lived perennial capable of extended periods or dormancy (Menges and Quintana-Ascencio 2002, Rusterholz 2011). Seedling establishment and survival are essential to sustain populations of any species on a long-term basis. Previous analyses suggest that seedling survival is the most key factor that determines the future growth or decline of Prairie bush clover populations (Menges and Quintana-Ascencio 2002, Rusterholz 2011, Anderson 2016). Most rare plant surveys focus on highly visible mature plants and therefore do not inform a population's potential to persist or expand. However, when populations are repeatedly searched and the number of rare plants remains stable, it can be inferred that the population is more likely to persist into the future (Menges and Quintana-Ascencio 2002).

Surveys

Advance data acquisition and analyses

Prior to initiating field work, we submitted and received DNR approval for a site-specific work plan and rare plant collection permits 23208 (MacFarlane) and 28551 (Ruby and Sather). We used previous knowledge, an updated Natural Heritage Information System report, and DNR rare species fact sheets to hone our preliminary list of potential target species. Prior to commencing rare plant searches, we used satellite imagery to identify areas for reconnaissance spot checks.

We obtained a GIS cover of outcrops previously identified by the Red Rock Research Group, in conjunction with Hamline University to use as a framework for systematic survey of outcrops at the Quarry project site. (Figure 5). We searched the main area of outcrops on each visit, the western outlier rock 37 twice and rocks 33, 34,35 and 36 once.

Prairie bush clover in Minnesota typically occurs in slight concavities on the upper half of rolling hills. At the time the federal Recovery Plan was prepared, all populations then known on Red Rock Ridge occurred on soil series L83a , Germantown clay loam 1-8% slopes. (USFWS 1987). We used the Prairie Bush Clover Recovery Plan (USFWS 1987) and SoilWeb Earth to identify potential Prairie bush clover habitat (Figure 6). We found by comparing the satellite imagery with the soils that although this series is a member of L66B (Bechyn-Germantown-Rock complex), the majority of that complex within the project area is occupied by wetlands, verified by concurrent wetland delineations ongoing at the time of our surveys (Bolton and Menk 2020).

Field surveys

We visited the site eleven times over the 2020 growing season. Many of these visits were conducted by a single botanist for short periods of time to check for specific species or to ascertain the status of rock pools or phenology. The purpose of each visit reflected species' known habitat preferences, phenology, and weather conditions leading up to the date of the visit.

On May 31, Ruby and MacFarlane assessed the condition and habitat potential of the site to support species on our initial target species list. We evaluated rock surfaces to narrow subsequent search locations for species that favor fissures and rock pool specialists We investigated channels flowing through wetland complexes, noting the presence of iron-stained marl precipitate in some areas. This reconnaissance enabled us to eliminate portions of the prairie and wetlands dominated by introduced grasses. We eliminated the isolated wetland in the southeastern corner of the section because of its rank vegetation and outcrops 33,34,35, and 36 because of their disturbed condition. Figure 7 depicts areas eliminated and retained for further survey as a result of this site evaluation. Table 1 summarizes the habitat suitability and search status of each of our proposed target species. Table 2 summarizes the dates, personnel, purpose, and summary outcome of each visit

Rare rock plant surveys and results

We visited the majority of outcrops at least three times during the season. Because of their promising condition, we returned to outcrops We used the RRRG/Hamline rock numbers as a frame of reference to search for rare species associated with outcrops. We recorded GPS points for outcrops with the best development of pool depressions and crevices. Several of the species on our target list are closely resembled by common species. For this reason, we collected several similar species such as *Cyperus squarrosa,* which closely resembles the rare *Cyperus acuminatus* and several species of *Eleocharis* in hope of finding the rare *Eleocharis wolfii.*

Table 3 documents the first date each rare species was observed on which outcrop. Figure 8 presents a rapid overview of which numbered outcrops support rare rock species Figure 9 identifies which species were found on each numbered outcrop. The dots on this figure do not represent all patches of a species observed at the site except in the case of Mudwort (*Limosella aquatica).* This species was the most uncommon of our discoveries, found and vouchered on May 31st in a single rock pool Outcrop 7 (N44.05 171, W95.06 259). Although other rock pools appeared as promising early in the season, the pool supporting this population was the only one that held water continuously throughout the season (Appendix 2b). No other rare rock pool plants were documented in this or any other pools.

We re-confirmed the presence of both Buffalo grass and Tumble grass, both documented at the site in 1988. See Figure 9 and Appendices 2c and 2d. Buffalo grass was the most abundant of rare plants at the site. We observed Buffalo grass casually throughout the season but conducted our systematic surveys in September. The habitat preferences and leaves of Buffalo grass resemble those of Blue grama (*Bouteloua gracilis* (Kunth) Lag. Ex Griffiths) and Hairy grama (Bouteloua *hirsuta* Lag.) However, Buffalo grass can be reliably differentiated by checking for stolons that extend from plant to plant (Appendix 2c). Buffalo grass was widely distributed throughout the site, but best developed on outcrops 9,10,18,29, and 20. These outcrops are characterized by numerous fissures and irregularities (Appendices 1 and 2c).

The growth habit and brittleness of Tumblegrass (Appendix 2d) make it difficult to document with certainty. We first observed this species on June at the edges of rock 4 but did not conduct systematic searches and voucher it until late September (Appendix 3). This species is likely much more widely distributed at the edges of rocks throughout the site than our maps indicate.

Rare calcareous fen species searches

Notes from June 1988 comment on the presence of springs at the site. Because of these springs, we added several unlikely rare calcareous fen species to our target list. Calcareous fens are wetlands sustained by permanent discharge of calcium rich groundwater, typically developing a spongy peat surface because the constant flow of cold, oxygen-poor water prevents oxidation and decay of dead plant material. In southwestern Minnesota these communities tend to occur downslope of permeable sandy soils that overly less permeable clay layers. Calcareous seepage may occur repeatedly in small pockets of wet meadow or on domes surrounded by woody wetland plants. None of these typical situations occurs at the project site, but the prevalence of gently sloping wetlands and evidence of rivulets in rock channels suggest potential groundwater discharge. Calcareous fens tend to be dominated by shorter sedges and rushes, often with surficial deposits of white or iron-stained precipitated calcium carbonate, (marl).

After encountering iron stained marl in rock-lined channels in the vicinity of the gap between outcrops 11 and 12 on our first visit, we visually searched for potential fen habitat that might support *Rhynchospora capillacea* Torr. or other rare fen species. We examined the surfaces of rock channels for marl and attempted to find openings or common indicators of seepage in the large delineated wetlands that occur on the Bechyn-Germantown-Rock Complex (Figure 6, Bolton and Menk 2020). We examined the edges of channels for seepage-loving wetland species like sneezeweed *(Helenium autumnale* L.*)* and Great blue lobelia (*Lobelia siphilitica* L.). We searched carefully in the vicinity of a small patch of Great blue lobelia and in areas of obvious marl deposition for *easily*-identified fen indicators like Kalm's lobelia (*Lobelia kalmii* L.*)* and grass of Parnassus (*Parnassia glauca), We found no calcareous fen indicators or rare species.*

Prairie bush clover

Prairie bush clover in Minnesota typically occurs in slight concavities on the upper half of rolling hills. At the time the federal Recovery Plan was prepared, all populations then known on Red Rock Ridge occurred on soil series L83a, Germantown clay loam 1-8% slopes. (USFWS 1987). We used the Prairie Bush Clover Recovery Plan (USFWS 1987) and the California Soil Resource Lab's interactive SoilWeb App to generate a field map of soils polygons to identify potential Prairie bush clover habitat. Very little of the upslope native prairie at the site is on Germantown clay loam. The majority of topographically appropriate areas to search for Prairie bush clover in the native prairie are on soil unit L66B (Bechyn-Germantown-Rock complex). The majority of that complex within the project area is occupied by wetlands. (See also Bolton and Menk 2020).

We relocated the known population of Prairie Bush Clover on June 27. We searched the remainder of the native prairie when the species is typically in flower on August 9, the CRP north of the two isolated trees on September 12, and the remainder of the native prairie on September 13. We searched only for mature plants in fruit. Prairie bush clover is a perennial whose 7-17 cm tall seedlings and robust juvenile plants are nearly impossible to find without first finding mature plants. Populations of this species tend to expand directly downhill from an uphill source. Assuming that the non-wetland slopes west of the population comprise the Germantown member of the Bechyn-Germantown-Rock complex, we searched all potentially appropriate habitat between the outcrops upslope of the population. We gave special attention to the small area just southeast of outcrop 22 where native prairie grasses and Grass-leaved goldenrod *Euthamia graminifolia* indicate higher quality prairie. We found no mature plants outside the known population although we searched twice in the lower portion of the pasture just upslope of the ditch population. Both Prairie bush clover and the native forbs reported in 1997 were absent from that area.

This population occupies a very narrow body of Germantown clay loam that extends into the project site from across the road. Fidelity to this soil type may explain the limited extent of the population. The number of plants in this population has remained remarkably stable since 1988. The densest patch of around 200 plants occupies an area of 28 square meters . It extends in the ditch for approximately 10 meters north of the northernmost roadside Juniper and is approximately 4 meters wide from East to West. Scattered individual plants extend to north 77m and to a single plant ca 2 m south of southern most juniper. Figure 10 illustrates the location of the patch and outliers.

Overall prairie condition

With the exception of the CRP at the south end, the majority of the site that is not outcrop or wetlands is visually dominated by smooth brome. Visible dominance might change in response to prescribed fire. However, the overall flora is very depauperate in comparison with nearly all remaining native prairie on Red Rock Ridge.

Table 4 is a list of species casually encountered in the native part of the site during the survey. This list is not exhaustive, but it is notable for the common prairie species that are absent, including a number of species that are tolerant of grazing. With the exception of the forb-rich planted CRP, both upland and wetland communities are remarkably devoid of forbs (wildflowers). This condition also applies to the ditch supporting Prairie bush clover, which in 1997 was mesic prairie dominated by broadleaf Big bluestem (*Andropogon gerardii)* and Little bluestem (*Schizachyrium scoparium)*, with Purple prairie clover (*Daleas purpurea),* Stiff sunflower *(Helianthus pauciflorus}, and* Prairie phlox *(Phlox pilosa).* As a result, the present Minnesota Biological Survey ranking is too high. The present condition of the mesic prairie that is not wetland is no higher than C rank. The few prairie wildflowers encountered outside the CRP occurred singly or in very small patches. This situation suggests a history of herbicide application to control broadleaf plants. Unlike changes in visible dominance of grasses, the near-absence of forbs is unlikely to respond to prescribed fire.

LIST OF TABLES, FIGURES, AND APPENDICES

TABLES

FIGURES

APPENDICES

TABLE 1. TARGET SPECIES SEARCH STATUS

Target vascular plant species previously documented in similar habitats in southwest Minnesota

*in Cottonwood and/or Stately Township, Brown County

Previously documented **(bold)** or observed (italics) by (M) MacFarlane (R) Ruby (S) Sather

Scientific name	**Common name**	**Protection status**	**Habitat suitability at Amboy 12**	**search status**
*Agalinis auriculata **(S)**	Eared false foxglove	endangered	not appropriate habitat	eliminated, too rank
*Aristida purpurea var longiseta	Red three-awn	special concern	not appropriate	not seen
*Bacopa rotundifolia **(*M*S)**	Water hyssop	threatened	appropriate	searched, not found
*Berula erecta (*R*S)	Stream parsnip	threatened	hydrology not appropriate	searched, not found
*Botrychium campestre (M*S*)	Prairie moonwort	special concern	not appropriate habitat	eliminated
*Buchloe dactyloides (*M*S)	Buffalo Grass	special concern	appropriate	systematic search, many found
Callitriche heterophylla (*M*)	Larger Water Starwort	threatened	appropriate	searched, not found
Cladium mariscoides	Twig Rush	special concern	unlikely	not seen
Crassula aquatica	Water Pygmyweed	threatened	appropriate	searched, not found
*Cyperus acuminatus **(*M*R)**	Short-pointed Umbrella-sedge	threatened	appropriate	searched, not found
*Cypripedium candidum (*MRS*)	Small White Lady's-slipper	special concern	not appropriate habitat	eliminated, too rank
Elatine triandra **(R)**	Three-stamened Waterwort	special concern	hydrology not appropriate	searched, not found
Eleocharis quinqueflora	Few-flowered Spikerush	special concern	unlikely	searched, not found
*Eleocharis wolfii (*M*)	Wolf's Spikerush	endangered	appropriate	searched, not found
Heteranthera limosa **(*M*S)**	Mud plantain	threatened	appropriate	searched, not found
Isoetes melanopoda **(MR*S*)**	Prairie Quillwort	endangered	appropriate	searched, not found

TABLE 1 CONTINUED

*Lespedeza leptostachya (*MR***S**)	Prairie Bush Clover	threatened	appropriate	known location verified
*Limosella aquatica (*MS*)	Mudwort	special concern	appropriate	searched, found, and collected
Marsilea vestita (*R*M*S*)	Hairy Water Clover	endangered	unlikely	searched, not found
*Opuntia macrorhiza (*M*)	Devil's Tongue	special concern	appropriate	none seen
*Orobanche ludoviciana (**M***S*)	Louisiana Broomrape	threatened	unlikely	none seen
*Plantago elongata (S)	Slender plantain	special concern	appropriate	searched not found
*Rhynchospora capillacea (*MR***S**)	Hair-like Beak Rush	threatened	unlikely	searched, not found
*Schedonnardus paniculatus (**S**)	Tumble Grass	special concern	appropriate	searched, found and collected
* Scleria verticillata (*MS*)	Whorled Nutrush	threatened	unlikely	searched, not found
Verbena simplex	Narrow-leaved Vervain	special concern	unlikely	none seen
*Woodsia oregana ssp cathcartiana	Oregon Woodsia	special concern	unlikely	searched, not found

TABLE 2
DATES OF FIELD VISITS

Date	Botanists	Focus of visit	Rare plants found or collected	Outcome
5/31/2020	JR, MM	Reconnaissance, rock pool species	*Limosella aquatica* (MM)	*Limosella* found
6/19/2020	JR	Assess upwelling areas for potential fen indicators		*Limosella* persists
6/27/2020	JR, NS, MM	Rock pool and rock surface	*Buchloe dactyloides* (MM), *Lespedeza leptostachya, Schedonnardus paniculatus*	*Limosella* persists
7/4/2020	JR	Visit outlying outcrops and pool reassessments		*Limosella* persists
7/10/2020	MM	Revisit all outcrops where we previously noted pools or flowing water, particularly for *Bacopa* and *Callitriche*, and possibly *Heteranthera,* also searched for *Eleocharis wolfii.*		No rare plants found
8/9/2020	JR, NS, MM	Team reconnaissance	*Buchloe dactyloides*, *Lespedeza leptostachya*	
9/12/2020	JR, NS	Search for *Lespedeza leptostachya*		No new populations
9/13/2020	NS	Search for Lespedeza leptostachya, assess unsearched outcrops	*Buchloe dactyloides, Lespedeza leptostachya mapped*	*Limosella* persists
9/26/2020	JR, NS	Inventory outcrops for *Buchloe dactyloides*	*Schedonnardus paniculatus*	*Schedonnardus* confirmed
9/27/2020	NS	Inventory outcrops for *Buchloe dactyloides*		New *Buchloe* populations
9/29/2020	JR	Inventory remaining outcrops for *Buchloe dactyloides* and *Schedonnardus paniculatus*	*Buchloe dactyloides*	New *Buchloe* populations

MM – Malcolm MacFarlane, JR – Janeen Ruby, NS – Nancy Sather

TABLE 3 DATES OF FIRST OBSERVATION OF RARE SPECIES BY OUTCROP

Outcrop	*Limosella aquatica*	*Buchloe dactyloides*	*Lespedeza leptostachya*	*Schedonnardus paniculatus*
1				9/26/2020
2				9/26/2020
4		9/26/2020		6/27/2020
7	5/31/2020	9/13/2020		
8		9/26/2020		
9		6/27/2020		9/26/2020
10		6/27/2020		
11		9/29/2020		
12		9/29/2020		
17		9/27/2020		
18		8/9/2020		
19		9/27/2020		
20		9/13/2020		
22		9/27/2020		
24		9/13/2020		
31		9/12/2020		
Non-Outcrop		9/27/2020	6/27/2020	9/29/2020

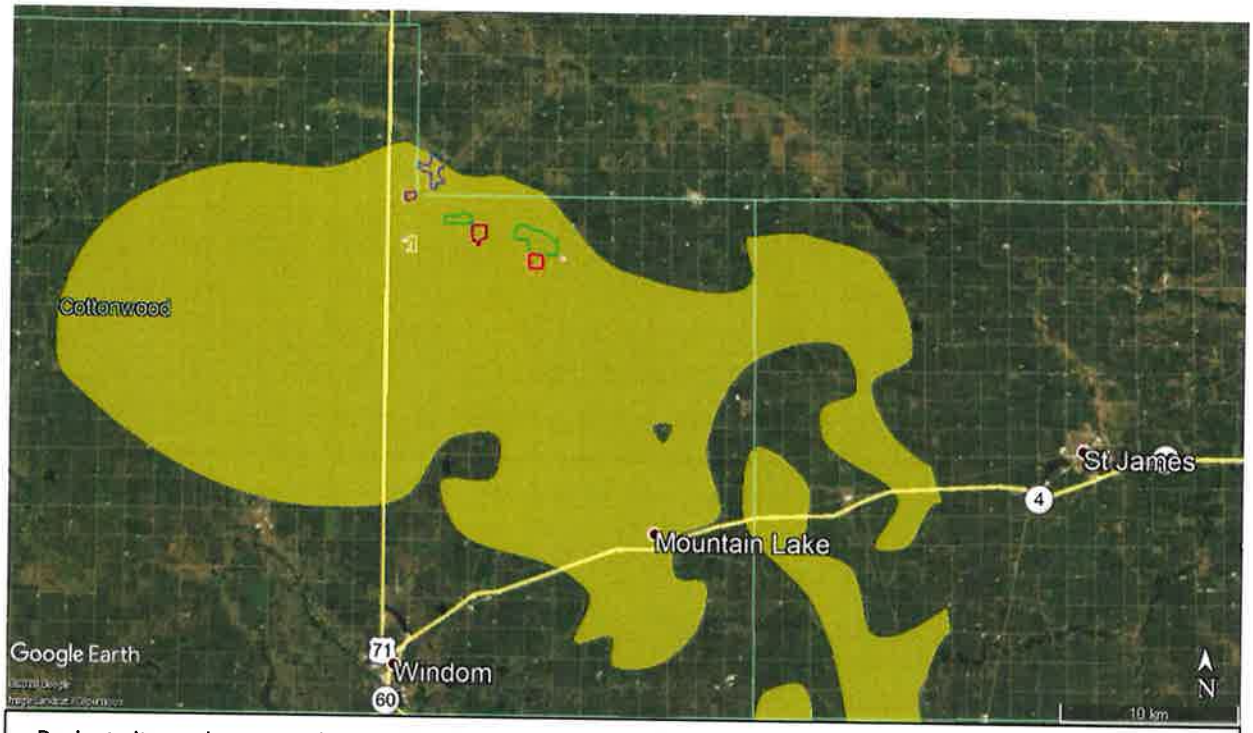
TABLE 4 Supplemental list of species observed

Scientific name	Common name
Amorpha canescens	Leadplant
Achillea millefolium	Yarrow
Agrostis gigantea	Redtop
Agrostis scabra	Rough bentgrass
Allium canadense	Wild garlic
Alopecurus carolinianus	Carolina foxtail
Ambrosia artemesiifolia	Common ragweed
Ambrosia psilostachya	Western ragweed
Andropogon gerardii	Big bluestem
Androsace occidentalis	Western rock jasmine
Bouteloua curtipendula	Side oats grama
Bouteloua gracilis	Blue grama
Bouteloua hirsuta	Hairy grama
Bromus inermis	Smooth brome
Buchloe dactyloides	Buffalo grass
Carex bicknellii	Bicknell's sedge
Carex duriuscula	Needleleaf sedge
Carex stricta	Upright sedge
Cerastium arvense	Field chickweed
Cerastium nutans (brachypodon)	Nodding chickweed
Cirsium flodmani	Flodman's thistle
Cyperus squarrosus	Bearded flatsedge
Digitaria cognata	False witch grass
Eleocharis acicularis	Needleleaf spikerush
Eleocharis compressa	Flatstem spikerush
Eragrostis pectinacea	Tufted lovegrass
Euphorbia maculata	Spotted spurge
Euthamia graminifolia	Grass-leaved goldenrod
Grindelia squarrosa	Gumweed
Hedeoma hispida	Rough false pennyroyal
Helianthus maximiliani	Maxmilian's sunflower
Heuchera richardsonii	Prairie alumroot
Hordeum jubatum	Foxtail barley
Hordeum pusillum	Little Barley

Houstonia longifolia	Longleaf bluets
Juniperus communis	Common juniper
Lepidium densiflorum	Green-flowered peppergrass
Limosella aquatica	Mudwort
Lobelia syphilitica	Great blue lobelia
Muhlenbergia cuspidata	Plains muhly
Oxalis dillenii	Southern wood sorrel
Panicum capillare	Witchgrass
Phalaris arundinacea	Reed canary grass
Phleum pratense	Timothy
Poa compressa	Canada bluegrass
Polygonum tenue	Slender knotweed
Portulaca oleracea	Common purslane
Rumex acetosella	Common sheep sorrel
Schizachyrium scoparium	Little bluestem
Selaginella rupestris	Rock spikemoss
Setaria viridis	Green foxtail
Shedonnardus paniculatus	Tumble grass
Silene antirrhina	Sleepy catchfly
Solidago nemoralis	Grey goldenrod
Sorghastrum nutans	Indiangrass
Spartina pectinata	Cordgrass
Sporobolus heterolepis	Prairie dropseed
Symphyotrichum ericoides	Heath aster
Talinum parviflorum	Small flowered fame flower
Tradescantia bracteata	Long-bracted spiderwortderwort
Trichostema brachiata	False pennyroyal
Verbena hastata	Blue vervain
Viola nephrophylla	Northern bog violet

FIGURES

Figure 1 . Local extent of Sioux Quartzite bedrock
in northeastern Cottonwood and western Watonwan Counties.



Project site and managed areas that follow the line of Sioux Quartzite Outcrops

Red Rock Quarry

Cottonwood Dells County Park

Brown County Park

Rock Ridge SNA and Jeffers Petroglyph

Red Rock Preserve (TNC) and Red Rock WMA

Figure 2. Managed areas associated with Sioux Quartzite outcrops on Red Rock Ridge

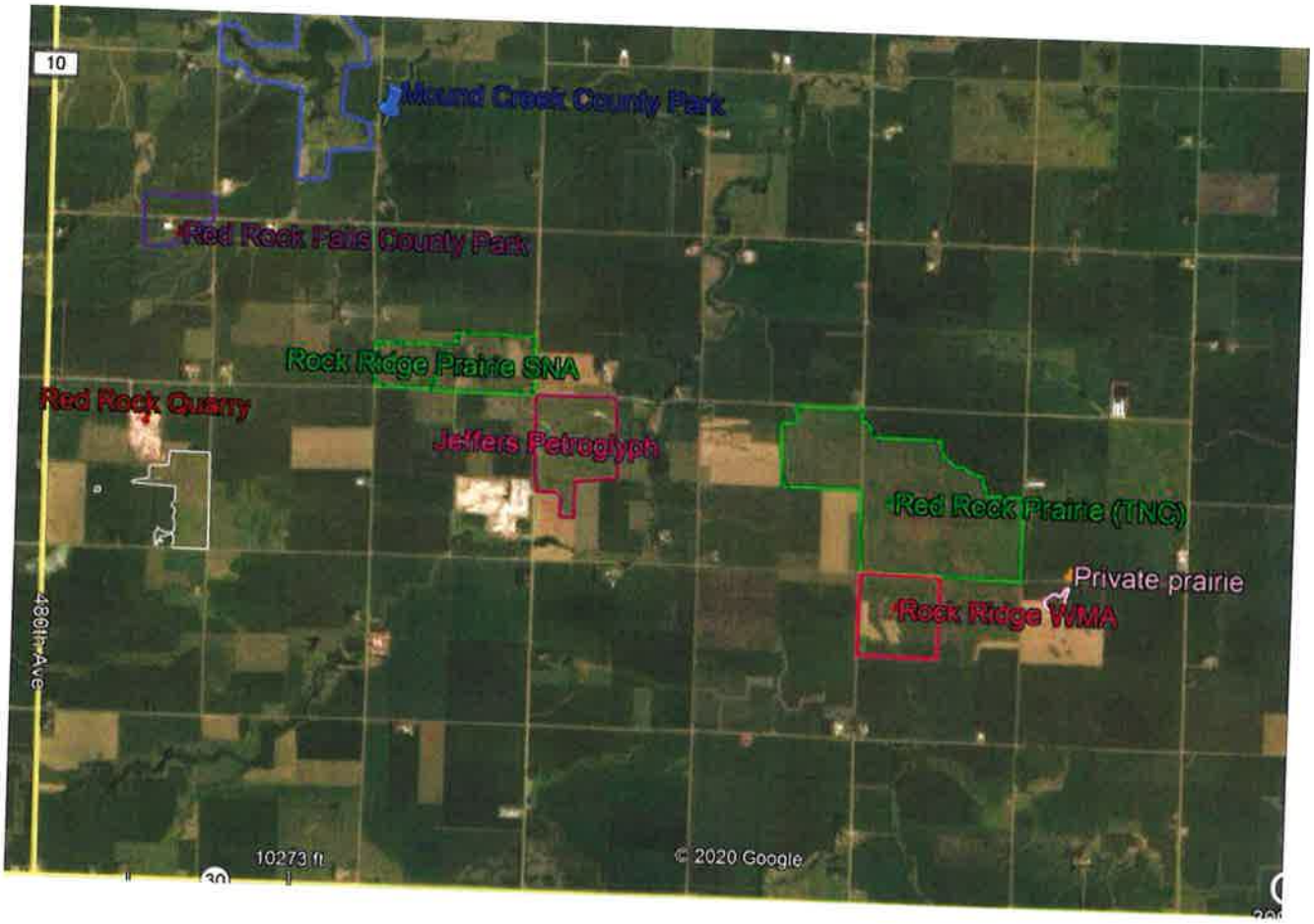
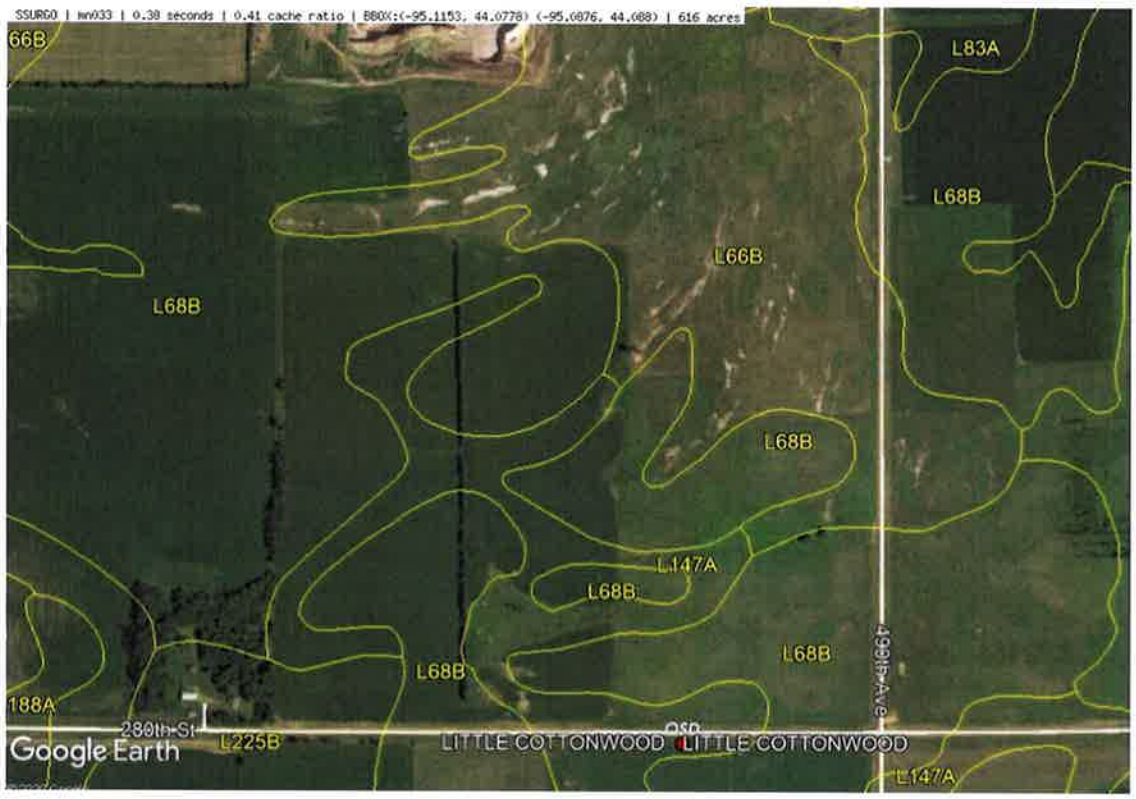


Figure 3. Map of Red Rock Quarry expansion from Draft EAW

Figure 4. Minnesota Biological Survey Native plant communities (2005)

Figure 5 . Rock numbers assigned by RRRG/Hamline University in the contiguous part of survey area

Figure 6. Soils of the project area



LEGEND
L66B Bechyn-Germantown-Rock Complex
L68B Germantown clay loam
L83A Webster clay loam
L147A Little Cottonwood clay loam

Figure 7. Areas retained and eliminated from further survey by reconnaissance

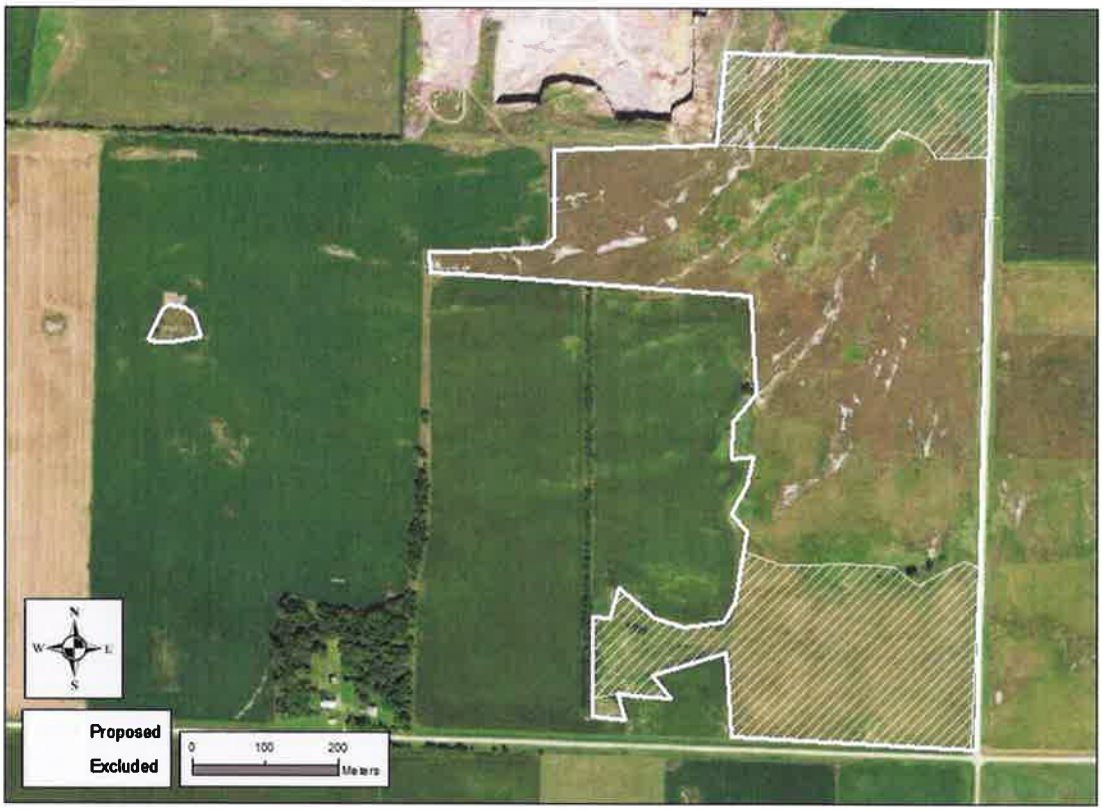


Figure 8. Rocks on which rare rock plants occurred or were absent

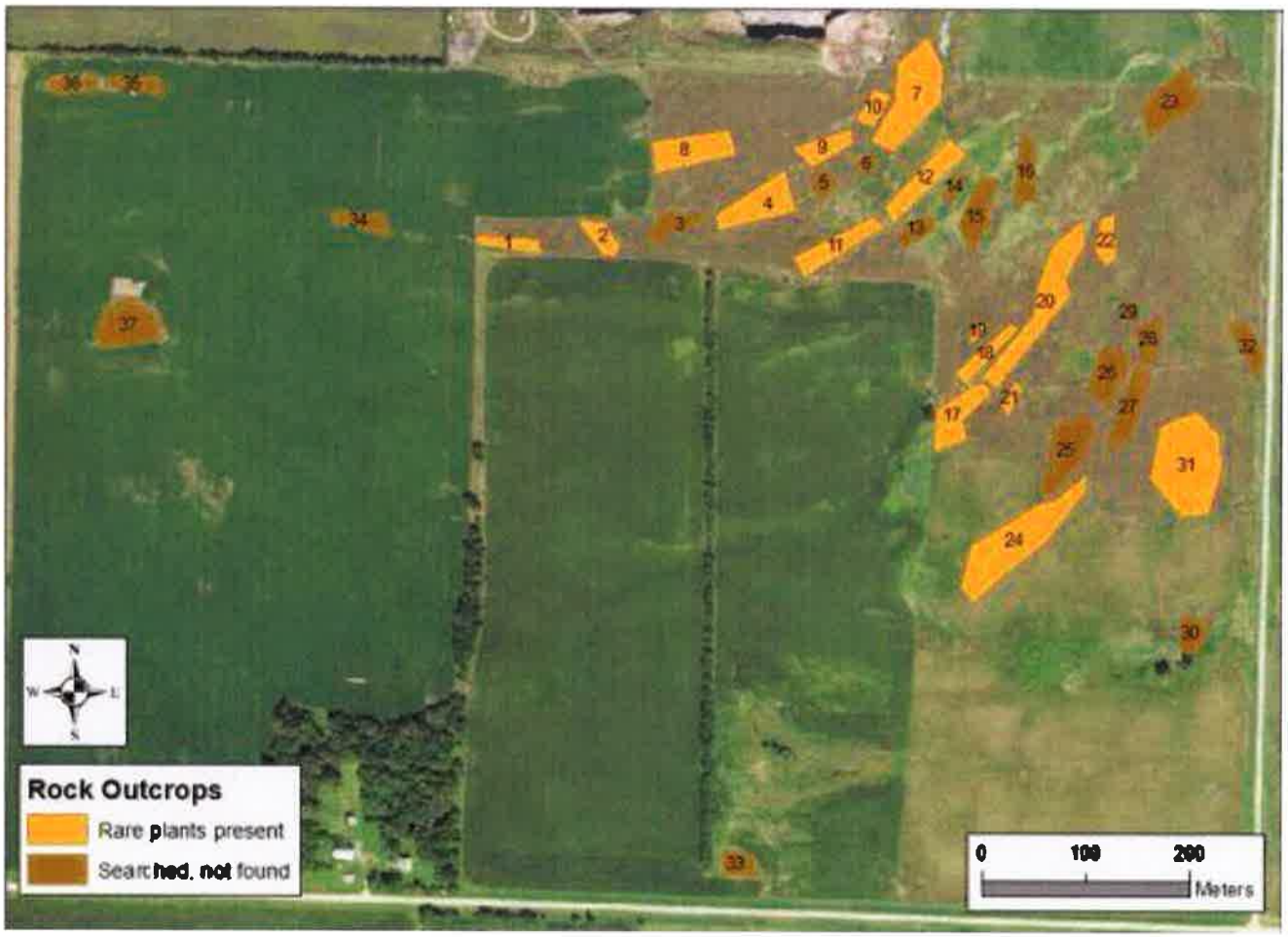
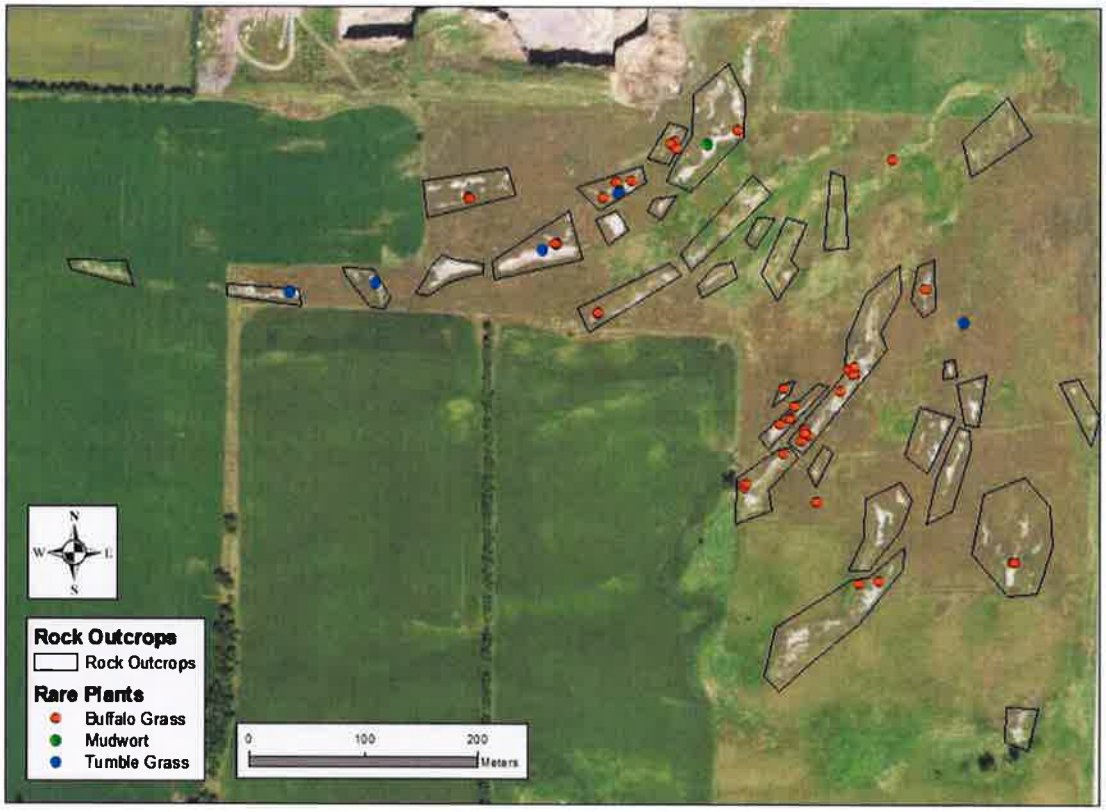
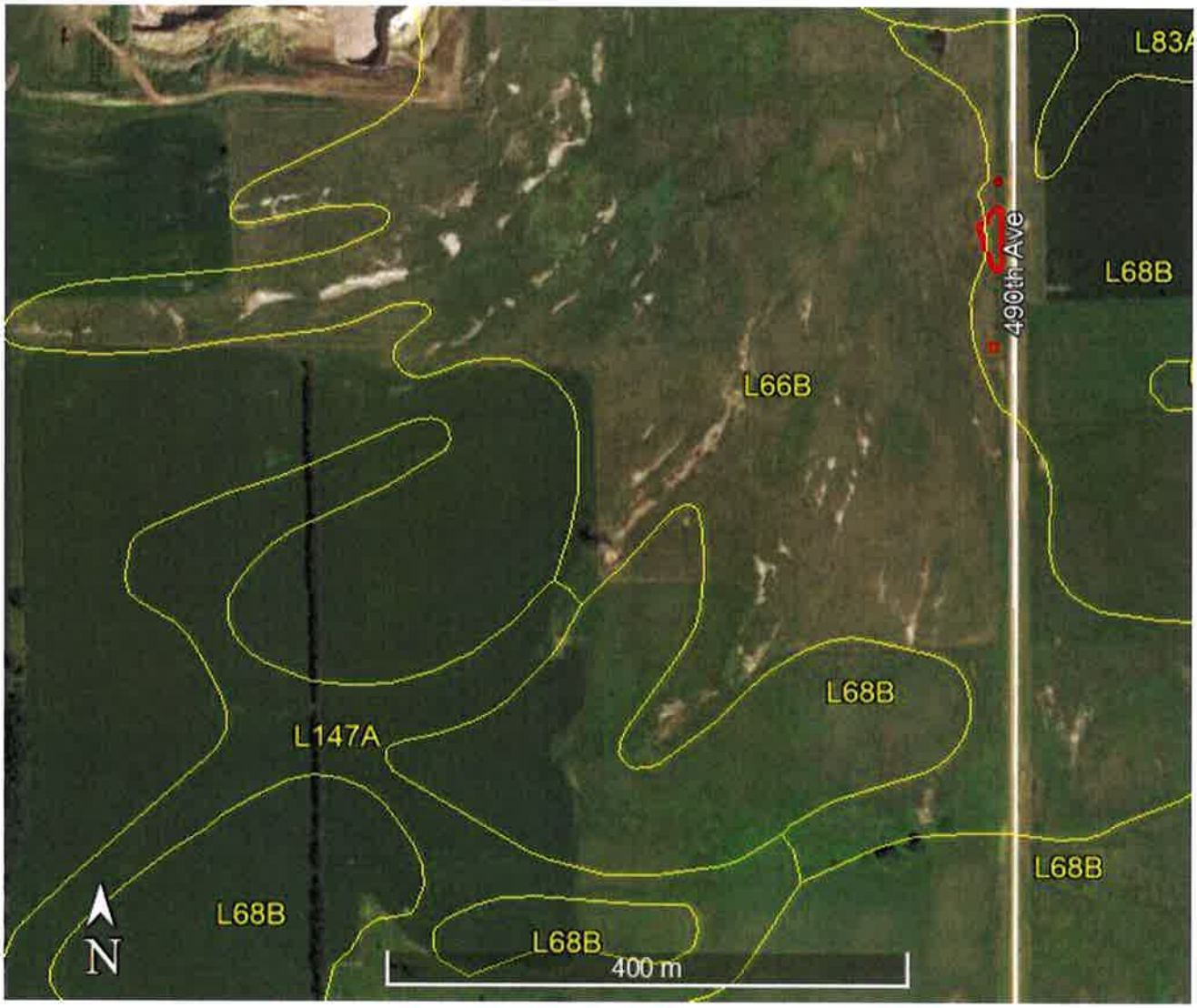


Figure 9. Species found on numbered rocks



Rocks 33,34,35, and 36 are not depicted. These outliers were surveyed. All were highly disturbed and dominated by Foxtail. Rock 37 supported some prairie species but no rare rock plants were found. Mudwort was found only in one pool on Outcrop 7.. Not all patches of Buffalo grass and Tumble grass are shown. Buffalo grass was almost continuous in fissures in rocks 9,10,18,19, and 20.

Figure 10 Prairie Bush Clover DNR Element Occurrence #49



Soils: Copyright Ca Soil Resource Lab, 2008.

L66 B	Bechyn-Germantown Rock outcrop complex 2-6 percent slopes
L68B	Germantown Clay Loam 1-8 percent slopes
L83A	Webster Clay Loam 0-2 percent slopes
L147B	Little Cottonwood Clay Loam 0-3 percent slopes

APPENDICES

APPENDIX 1

Microhabits afforded by Sioux Quartzite outcrops

Thin soil at rock margins

Fissures and cracks

APPENDIX 2a.

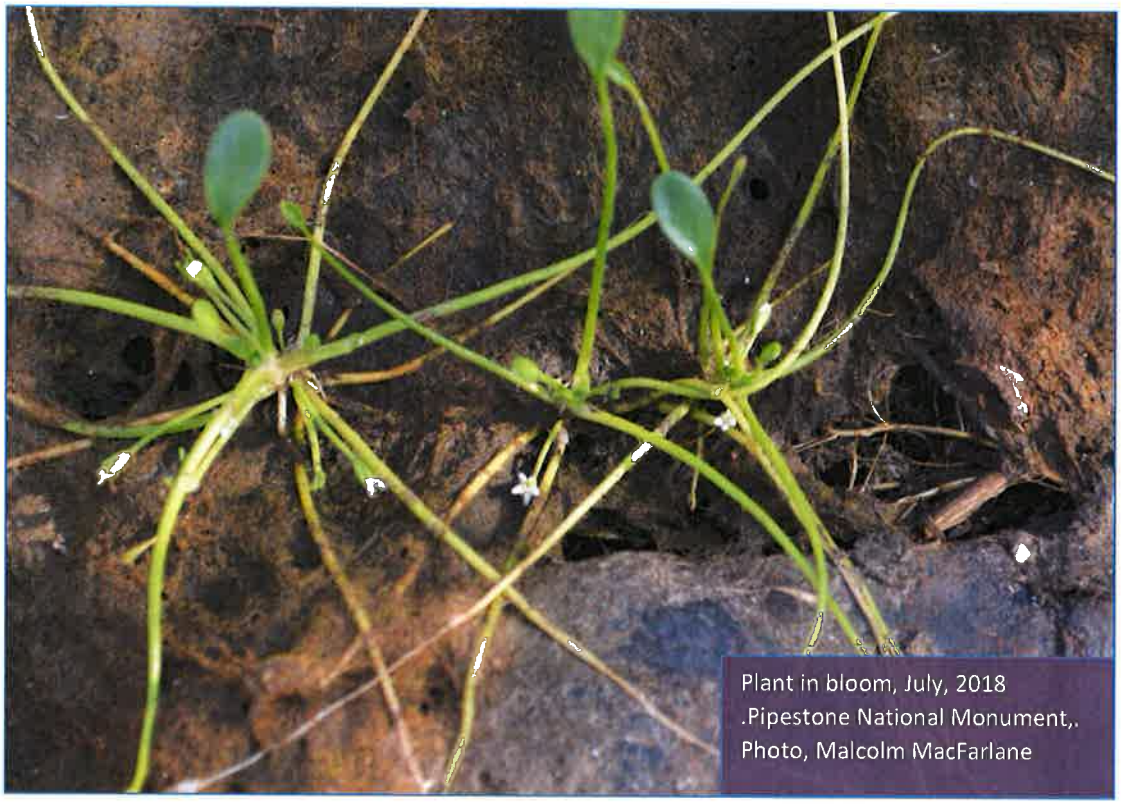
Lespedeza leptostachya (Engelm) Prairie bush clover

Prairie Bush Clover at Amboy 12
September 12, 2020
Janeen Ruby

Prairie bush clover in flower
Great Bend Township, Cottonwood County
July 8,2011
Nancy Sather

Nonflowering plant
Great Bend township, Cottonwood County, September 2010
Nancy Sather

APPENDIX 2b. *Limosella aquatica* L. Mudwort



Plant in bloom, July, 2018
.Pipestone National Monument,.
Photo, Malcolm MacFarlane

Photos below show condition of rock pool on Outcrop 7, at Amboy 12,

5/31 ⇦ Ruby

8/9 ⇦ Ruby

6/19 ⇨

9/13 ⇨ Sather

APPENDIX 2c

Buchloe dactyloides (Nutt.) Engelm. Buffalo grass

Robust plant from Pipestone National Monument, July, 2018 Photos: Malcolm MacFarlane

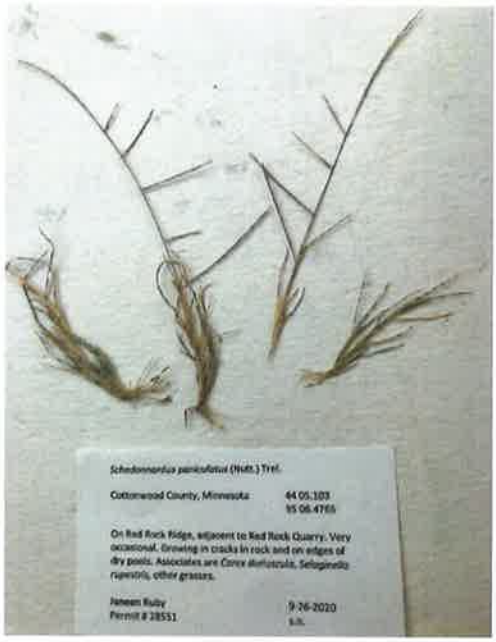
Appendix 2d

Schedonnardus paniculatus (Nutt.) Trel. Tumble grass

Photos: Janeen Ruby

APPENDIX 3

Voucher specimens of rare plants collected in 2020



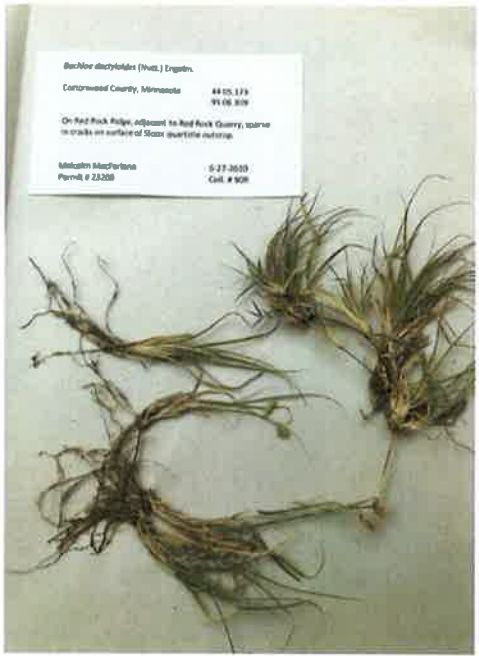


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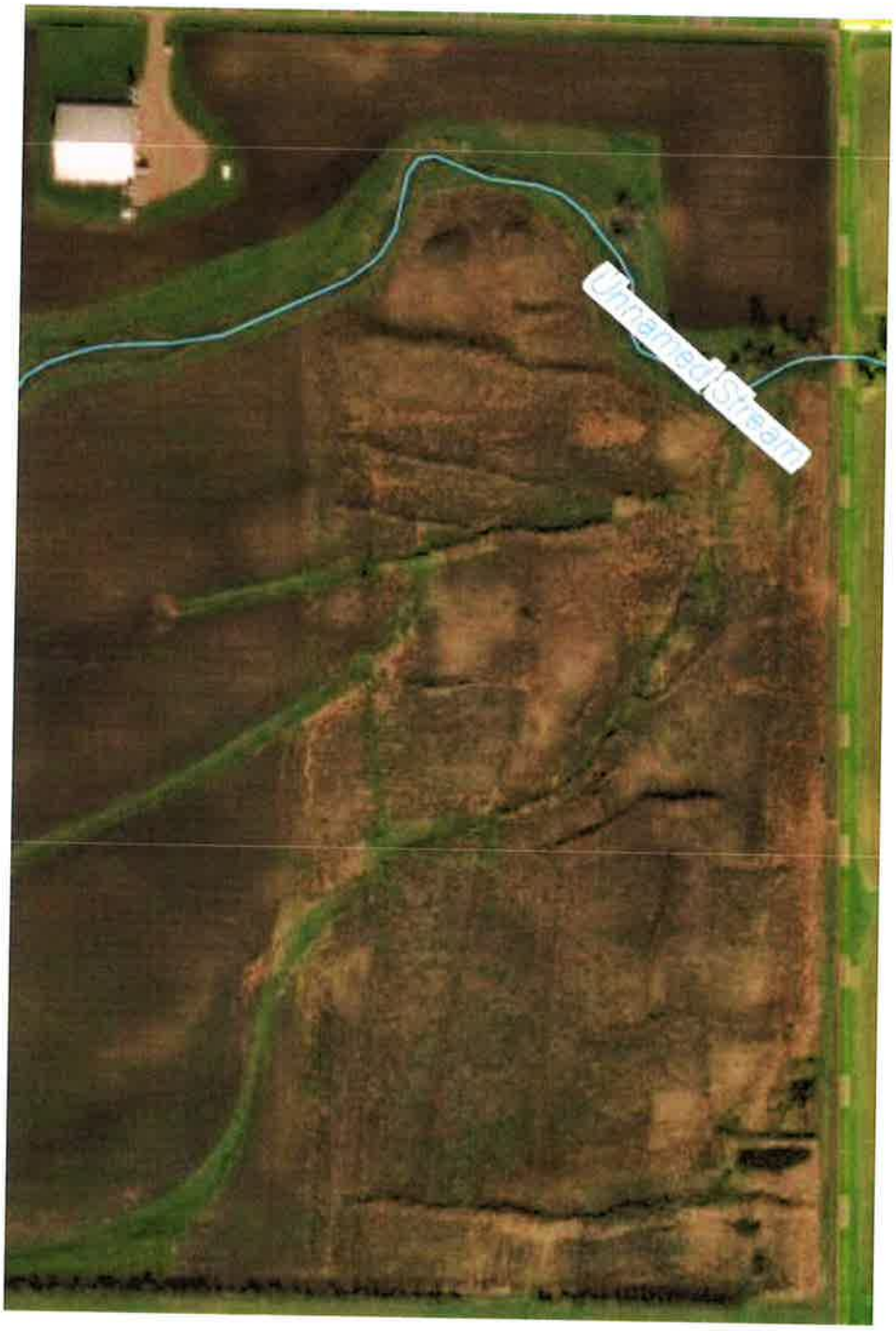
Exhibit H



Appendix 19

2022 Petition RGU assignment

Letter to MPCA from EQB on March 18, 2022

MINNESOTA
ENVIRONMENTAL QUALITY BOARD

Minnesota Environmental Quality Board
520 Lafayette Road North
Saint Paul, MN 55155

VIA E-MAIL (cover letter & petition)

March 18, 2022

Dan Card
Environmental Review Unit Supervisor
Minnesota Pollution Control Agency
Dan.Card@state.mn.us

RE: Petition for an Environmental Assessment Worksheet for Proposed W. Lorentz Construction Sioux Quartzite Quarry Project

Dear Mr. Card,

The Environmental Quality Board (EQB) received a complete petition on March 17, 2022 requesting that an Environmental Assessment Worksheet (EAW) be prepared for the project described in the petition. When a petition is filed, Minn. R. 4410.1100, Subp. 5 directs EQB to designate a Responsible Governmental Unit (RGU) pursuant to Minn. R. 4410.0500. EQB determined the Minnesota Pollution Control Agency is the appropriate responsible governmental unit to decide the need for an EAW (Minn. R. 4410.0500, Subp. 3).

The procedures to be followed in making the EAW decision are set forth in part Minn. R. 4410.1100.

1. Because a petition for an EAW has been filed that complies with the requirements of Minn. R. 4410.1100, a project may not be started and a final governmental decision may not be made to grant a permit, approve a project, or begin a project, until the petition for an EAW is dismissed. To start or begin a project includes taking any action or activity that directly alters the environment. It includes preparation of land or fabrication of facilities. It does not include surveying or mapping. See Minn. R. 4410.3100, Subparts 1 and 2 for the prohibitions on final governmental decisions.

2. Please notify EQB staff as soon as possible if the Minnesota Pollution Control Agency determines the following conditions apply:

    a. If the Minnesota Pollution Control Agency has already made its final decisions to grant all permits or approvals required from it to construct the project (Minn. R. 4410.0500); and/or

    b. If the Minnesota Pollution Control Agency cannot act on a petition because no permit application has been filed, the application has been withdrawn, or the application has been denied. In those cases, the petition remains in effect for no more than one year from the date on which it was filed with the EQB. While the petition remains in effect, Minn. R. 4410.3100, Subparts 1 and 2, apply to any proposed project for which the nature and location is substantially similar to the project identified in the petition (Minn.

R. 4410.1100). As a courtesy, a notification of this determination will appear in the *EQB Monitor*.

3. Compare the project to the mandatory EAW and mandatory Environmental Impact Statement (EIS) categories listed in Minn. R. 4410.4300 and 4410.4400.

4. Compare the project to the exemption categories in Minn. R. 4410.4600; if the project should fall under any of these categories, the project is exempt from environmental review.

5. The standard for making the decision on the need for an EAW is provided in Minn. R. 4410.1100, subpart 6. When considering the evidence provided by the petitioners, proposers, or other persons, the Minnesota Pollution Control Agency must take into account the factors listed in Minn. R. 4410.1700, subpart 7. The RGU shall maintain either as a separate document or contained within the records of the RGU, a record, including specific findings of fact, of its decision on the need for an EAW.

6. The Minnesota Pollution Control Agency has 15 days from the date of the receipt of the petition to decide on the need for an EAW; intermediate Saturdays, Sundays, and legal holidays shall be excluded in the counting of days (Minn. R. 4410.1100; Minn. R. 4410.0200).

    a. If the decision must be made by a board, council, or other body which meets only on a periodic basis, the time period may be extended for an additional 15 days.

    b. For all other RGUs, the EQB's chair shall extend the 15-day period by not more than 15 additional days upon request of the RGU.

7. Within 5 working days of a decision, the Minnesota Pollution Control Agency must provide written notification of the decision to the Proposer, the Petitioners' Representative, and the EQB as described in Minn. R. 4410.1100, subpart 8. Please provide written notification to these parties even in cases where an EAW or EIS will be prepared according to Minn. R. 4410.1000, subparts 2 or 3, or the project is found to be exempt from environmental review.

    a. To notify the EQB of the decision on the need for an EAW, complete the EQB *Monitor* submission form found on the EQB website. The EQB requests that you upload a copy of your record of decision using the same electronic submission form, including instances where environmental review is mandatory, voluntary, or exempt.

Notice of the petition and its assignment to your unit of government will be published in the *EQB Monitor* on March 22, 2022.

If you have any questions or need any assistance, please do not hesitate to contact us at env.review@state.mn.us or 651-757-2873.

Sincerely,

Katrina Hapka

Katrina Hapka
Environmental Review Program Coordinator
Environmental Quality Board

cc: Kevin O'Keefe, Petitioner's Representative
Katie Pratt, EQB Executive Director
Denise Wilson, Director of Environmental Review Program

Appendix 20

Request for 15-day extension on 2022 Petition decision

Email to EQB from MPCA on March 18, 2022

From:	Peterson, Charles V (MPCA)
To:	Grosenheider, Kim (MPCA)
Subject:	FW: Citizen Petition - Proposed W. Lorentz Construction Sioux Quartzite Quarry Project - Extension Request
Date:	Monday, March 21, 2022 11:08:44 AM

From: Peterson, Charles V (MPCA)
Sent: Friday, March 18, 2022 3:09 PM
To: Hapka, Katrina (EQB) <Katrina.Hapka@state.mn.us>
Cc: Card, Dan (MPCA) <dan.card@state.mn.us>; Kuskie, Melissa (MPCA) <melissa.kuskie@state.mn.us>; Coleman, Jean (MPCA) <jean.coleman@state.mn.us>
Subject: Citizen Petition - Proposed W. Lorentz Construction Sioux Quartzite Quarry Project - Extension Request

Katrina,

Per Minn. R. 4410.1100, subp. 7, the MPCA is requesting an additional 15 days to make the decision on the need for the EAW on the W. Lorentz Construction Sioux Quartzite Quarry Project petition for an EAW transmitted to the MPCA on March 18, 2022. This will extend the decision date on the need for an EAW from April 6, 2022 to April 29, 2022.

Charles Peterson
Planner Principal
Resource Management and Assistance Division
651-757-2856
charles.peterson@state.mn.us

Appendix 21

15-day extension granted

Letter from EQB to MPCA on March 21, 2022

MINNESOTA
ENVIRONMENTAL QUALITY BOARD

Environmental Quality Board
520 Lafayette Road
St. Paul, MN 55155

March 21, 2022

Charles Peterson
Principal Planner
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, Minnesota 55155

VIA E-MAIL ONLY

RE: Proposed W. Lorentz Construction Sioux Quartzite Quarry Project Petition – Request for Extension in Time for EAW Decision

Dear Mr. Peterson,

On March 21, 2022, the Environmental Quality Board received your request for a 15-day extension for the decision on the need for an Environmental Assessment Worksheet (EAW) on the above-mentioned project. The request is respectfully granted in accordance with *Minnesota Rules*, 4410.1100 Subpart 7.

Sincerely,

Katrina Hapka

Katrina Hapka
Environmental Review Program Coordinator
Environmental Quality Board

CC:
Katie Pratt, EQB Executive Director
Denise Wilson, Director, EQB Environmental Review Program
Kevin O'Keefe, Petitioner's Representative

Appendix 22

Communication of receipt of 2022 Petition and explanation of next steps

Letter to Petitioner's Representative and Lorentz from MPCA on March 24, 2022

MINNESOTA POLLUTION CONTROL AGENCY

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

March 24, 2022

Kevin O'Keefe, Petitioners' Representative
32941 Res Highway 4
Morton, MN 56270

Mr. Andrew Lorentz, Field Operations Manager
W. Lorentz Construction
P.O. Box 847
Mankato, MN 56002-0847

RE: Petition for Environmental Assessment Worksheet on the Proposed
Sioux Quartzite Quarry (aka: Graff Quarry; aka: Lorentz Quarry) project
Amboy Township, Cottonwood County

Dear Mr. O'Keefe and Mr. Lorentz:

On March 18, 2022, the Minnesota Environmental Quality Board (EQB) forwarded a petition requesting the preparation of an Environmental Assessment Worksheet (EAW) on the proposed Sioux Quartzite Quarry (aka: Graff Quarry; aka: Lorentz Quarry) project. The proposed project is to mine, blast, crush, wash, and remove aggregate materials in the northeast quarter of Section 1, Amboy Township (T107N, R36W), Cottonwood County. The Minnesota Pollution Control Agency (MPCA) will review the petition and related information and determine if an EAW should be prepared.

The project may not receive any permits, nor can the project be started, until this decision is made.

Once the decision is made, the MPCA Commissioner will issue findings of fact outlining the agency's decision whether to grant or deny the petition. The MPCA will then notify the petitioner's representative, the project proposer, and other parties of the result of the petition review within five days of the decision, as directed by EQB rules.

If you have any questions about this letter, please contact Kim Grosenheider of the Environmental Review Unit at 651-757-2170.

Sincerely,

Dan R. Card, P.E.

This document has been electronically signed.

Dan R. Card, P.E.
Supervisor, Environmental Review Unit
Resource Management and Assistance Division

DRC:rs

cc: David Bierman, Amboy Township
Peggy Hubley, Amboy Township
Loretta Halbur, Heron Lake Watershed District
Alex Shultz, Cottonwood County
Amanda Gronhovd, Minnesota Department of Administration
Katrina Hapka, Environmental Quality Board
Elise Doucette, MPCA
Kim Grosenheider, MPCA

p-ear2-189h

Appendix 23

OSA comments on the Phase I Cultural Resource Investigation for the Graff Quarry Project, and Archaeological Monitoring Plan and Unanticipated Discovery Plan for the Graff Quarry Project

Email to MPCA from OSA on April 18, 2022

From: Gronhovd, Amanda (ADM)
To: Grosenheider, Kim (MPCA)
Subject: Lorentz Quarry
Date: Monday, April 18, 2022 12:35:54 PM
Attachments: image001.png

Kim –

Here's a summary of my over-arching concerns regarding the Lorentz Quarry cultural resources, survey and Monitoring and Unanticipated Discoveries Plans (Plans).

- It does not appear as though the initial survey that was conducted included an investigation for cemetery/burial sites or related features
    - The OSA, MIAC, and the THPOs were not consulted regarding the initial archaeological survey
    - Was In Situ informed that the OSA expected that a cemetery/ burial sites survey be conducted, or were they asked to simply conduct an archaeological survey?
- The survey does not appear to have included the entire area where impacts are planned to occur
    - The area of impact appears to be larger than the approximately 35 acres that were surveyed
- The OSA, MIAC, and THPOs were not consulted during the development of the Plans
    - This lack of consultation has resulted in an incomplete and not necessarily appropriate Plans and associated procedures
- The Plans do not address how the previously disturbed topsoil will be assessed for any potential archaeological, cemetery, or burial-related materials
- The Plans do not clearly lay out who is in charge on the site if materials of concern are identified
- If human remains or presumed human remains are identified, law enforcement must be the first phone call

Please let me know if you have questions!
Amanda

Amanda Gronhovd (she, her, hers)
State Archaeologist
328 Kellogg Blvd W
Saint Paul, MN 55102
(651) 201-2263
Amanda.Gronhovd@state.mn.us
http://mn.gov/admin/archaeologist

DEPARTMENT OF ADMINISTRATION
STATE ARCHAEOLOGIST

Appendix 24

OSA comments

Letter to Cottonwood County from OSA on December 16, 2020

DEPARTMENT OF ADMINISTRATION
STATE ARCHAEOLOGIST

December 16, 2020

Alex Shultz
Planning and Zoning Technician
210 10th Street
Windom, Minnesota 56101
alex.schultz@co.cottonwood.mn.us

RE: Lorentz Quarry Excavations

Dear Alex Shultz:

It has been brought to the attention of the Office of the State Archaeologist (OSA) that extensive ground disturbing activities have been initiated at the site of the Lorentz Quarry, in section 1 of Amboy township. This landscape is considered sacred, as evidenced by the abundance of petroglyphs and petroforms in the vicinity to the Lorentz Quarry project. As such, there is a high probability of encountering cemeteries or burials in the area, therefore the project should be reviewed by our office and the Minnesota Indian Affairs Council (MIAC) per Minnesota State Statute 307.08 subd. 10, which states:

> *When human burials are known or suspected to exist, on public lands or waters, the state or political subdivision controlling the lands or waters or, in the case of private lands, the landowner or developer, shall submit construction and development plans to the state archaeologist for review prior to the time bids are advertised and prior to any disturbance within the burial area. If the known or suspected burials are thought to be Indian, plans shall also be submitted to the Indian Affairs Council.*

Therefore, work should cease *immediately*, and plans be submitted to the OSA and the MIAC for review. Additionally, per Minnesota Statute 307.08 subd. 2, it is a felony to intentionally, willfully, and knowingly: destroy, mutilate, or injure human burials or human burial grounds; or without the consent of the appropriate authority, disturb human burial grounds or remove human remains.

Furthermore, it is this office's understanding that an environmental assessment worksheet (EAW) has been petitioned for and granted for this project, thus the project should not proceed until the EAW process has been completed. Considering this, it is my strong recommendation that all ground disturbing activity associated with this project cease *immediately*, and a qualified archaeologist be contracted to conduct a survey of the property. If work is not stopped by the end of day tomorrow (December 17, 2020), a representative from the OSA will conduct its own survey of the property. The OSA has the power to enter private property if it is believed known or suspected burials are being disturbed, which is the case here.

Please note, since Cottonwood County allowed the excavation activities to proceed without consultation with the OSA and the MIAC, given the county has previously been informed of the strong possibility of burials or cemeteries in the area, if the Lorentz Quarry excavations disturb human remains or burials the county will be at least partially responsible for any potential burial recovery costs.

Please contact me when ground disturbing activities have ceased, or if you have any questions.

Sincerely,

Amanda Gronhovd
State Archaeologist
Kellogg Center
328 West Kellogg Blvd
St Paul, MN 55102
Office- 651.201.2263
Cell- 612.670.6431
amanda.gronhovd@state.mn.us

CC: Melissa Cerda, Minnesota Indian Affairs Council

Appendix 25

SHPO comments

Letter to Cottonwood County from SHPO on December 17, 2020

DEPARTMENT OF ADMINISTRATION
STATE HISTORIC PRESERVATION OFFICE

December 17, 2020 ***Via Email***

Mr. Alex Shultz
Planning and Zoning Technician
Cottonwood County
210 10th Street
Windom, MN 56101

Re: Lorentz Construction – Proposed Sioux Quartzite Quarry Project on the Red Rock Ridge
T107 R36 S1 NE, Amboy Twp, Cottonwood County
SHPO No. 2021-0578

Dear Mr. Shultz:

We are writing in response to a recent decision denying a citizen petition requesting that an Environmental Assessment Worksheet be completed for the Lorentz Quarry project located in Amboy Township, Cottonwood County. The proposed project is located in an area of great cultural and historical importance, and as an office tasked with preserving Minnesota's heritage, we are concerned that significant sites will be destroyed if the project proceeds without review. In our opinion, an archaeological survey should be completed, and tribal consultation should occur regarding the proposed quarry.

The Red Rock Ridge in Cottonwood and Brown counties is one of the most significant cultural areas in Minnesota. It is best known from the thousands of rock art images at Jeffers Petroglyphs Historic Site, which became part of the Minnesota State Historic Sites Network in 1965 and was listed in the National Register of Historic Places in 1970. The Jeffers Petroglyphs site is being considered for National Historic Landmark Status by the National Park Service. It has been known since the early twentieth century that other rock art sites were present in the vicinity of Jeffers Petroglyphs, and within the last decade archaeological surveys in the area have begun to delineate a much larger area of significance, encompassing the Red Rock Ridge as a whole. The ridge is a geological outcrop of Sioux Quartzite where the petroglyphs were carved and is a prominent landscape feature in southwestern Minnesota. The archaeological surveys have identified camp or village sites where people lived while carving the rock art. Significantly, the surveys have also identified petroform sites, where boulders were placed centuries ago to form astronomical alignments or to create effigies. These sites are clearly eligible for listing in the National Register of Historic Places. The surveys have also identified what appear to be ancient pipestone quarries, raising the likelihood of cultural and historical connections to Pipestone National Monument. Together, these findings show that Jeffers Petroglyphs is part of a much larger sacred landscape with at least 9,000 years of Native American history. It is still vitally important today, but we

do not have a full understanding of its scope. It is certain that many significant sites associated with the Red Rock Ridge have not yet been discovered and recorded.

Other quarry projects in recent years have struck a good balance between economic development and historic preservation, incorporating archaeological survey and consultation into their planning. New sites have been identified from some of these efforts and significant places have been preserved while the projects have proceeded. It is unfortunate that a different approach has been taken for the currently proposed Lorentz Quarry project, which is located in a high potential but unsurveyed area of the Red Rock Ridge. We ask that earthmoving activities stop within the project area so that consultation and environmental review can occur.

We look forward to consulting further on this proposal. Please contact David Mather, SHPO National Register Archaeologist, at david.mather@state.mn.us with any questions regarding our comments.

Sincerely,

Amy H. Spong
Director & Deputy State Historic Preservation Officer

Appendix 26

Council for Minnesota Archaeology comments

Email to MPCA from Council for Minnesota Archaeology on December 21, 2020

To:
Minnesota Pollution Control Agency
520 Lafayette Rd
St. Paul, MN 55155

Via Email

December 21, 2020

To Whom It May Concern,

The Council for Minnesota Archaeology has been apprised of two recent quarry development efforts, specifically the Red Rock Quarry and the Lorentz Quarry projects, within Southwest Minnesota's Red Rock Ridge near the Jeffers Petroglyphs Historic Site in Cottonwood County. Archaeological sites in this region are of great importance both to the Native Peoples who created, used, and still use them today, and to the archaeological community. The preservation of these sites represents good cultural resource stewardship and continued goodwill toward Native American communities. The two quarry development projects are in the same cultural landscape where at least one burial cairn, three boulder outlines in the shape of a man, a buffalo head, and a kite-shaped astronomical observatory have been identified. The ultimate size of this cultural landscape and the Jeffers Petroglyphs Site are unknown and research in the last several years suggests it is far larger than previously thought. These sites are at least 8,000 years old and perhaps older, which could mean they span the entire human history in this part of North America. The potential of similar Native American cultural resources in these development areas is exceptionally high given similar environmental settings.

The Council for Minnesota Archaeology is a non-profit organization comprised of archaeology professionals dedicated to promoting archaeological research and interpretation in Minnesota. As an organization, the Council rarely comments on development activities within the state of Minnesota; however, given the now ongoing development efforts in Cottonwood County, and the apparent limited concern given to known, important cultural resources, we find it necessary to register our concern for these invaluable cultural properties.

The Council for Minnesota Archaeology specifically requests archaeological examination of the Lorentz Quarry Project be immediately initiated, continued, and completed; and current development efforts be paused to give the archaeological community and related stakeholders a chance to complete their cultural resource work.

Sincerely,

Jeremy L. Nienow, Ph.D., RPA
President, Council for Minnesota Archaeology
328 W. Kellogg Blvd.
St. Paul, MN 55102
Cc: Cottonwood County
Minnesota State Historic Preservation Office
Minnesota Office of the State Archaeologist.

Appendix 27
Email from Lower Sioux on April 26, 2022

From: Cheyanne St. John <cheyanne.stjohn@lowersioux.com>
Sent: Tuesday, April 26, 2022 3:59 PM
To: Grosenheider, Kim (COMM) <kim.Grosenheider@state.mn.us>
Cc: Council Members <council@lowersioux.com>; Deb Dirlam <deb.dirlam@lowersioux.com> Subject: RE: Lorentz Quarry - Petition for EAW

Hi Kim,
I tried contacting you at the number provided in your signature line but it seems to be disconnected. I will respond to your questions by stating that In Situ did not reach out to Lower Sioux THPO regarding the development, design or implementation of the Arch Phase I survey work for the Lorentz Quarry project. However, In Situ has reached out (3/16 Craig Picka) for comments on a UDP for the Graff Quarry, that Phase Ia report was provided after ground stripping had already occurred.
If you would like to discuss more, please contact our office at 507-697-8672.
Thank-you.

Cheyanne St. John | THPO/Director
507.697.8672 office | 507.697.6321 wk cell
Lower Sioux Indian Comm. | 39527 Res. Hwy 1
Morton, MN 56270 | Cheyanne.stjohn@lowersioux.com

Lower Sioux INDIAN COMMUNITY
TRIBAL HISTORIC PRESERVATION OFFICE

From: Grosenheider, Kim (MPCA) <kim.grosenheider@state.mn.us>
Sent: Thursday, March 31, 2022 9:04 AM
To: Cheyanne St. John <cheyanne.stjohn@lowersioux.com>
Subject: RE: Lorentz Quarry - Petition for EAW

Cheyanne St. John,

I apologize for reaching out again so soon. Although, as I make progress in my evaluation of the petition, I don't think it is essential that we talk. However, if possible would you be able to respond to this questions so I may include it in the environmental review record?

Did Lorentz, Braun Intertec, or In Situ Archaeological Consulting, LLC reach out to you in their design

or implementation of the Phase I Investigation (attached) or in the development of the Archaeological Monitoring Plan and Unanticipated Discovery Plan (attached) for the Lorentz Quarry?

Thank you,
Kim

From: Grosenheider, Kim (MPCA)
Sent: Wednesday, March 30, 2022 9:18 AM
To: Cheyanne.stjohn@lowersioux.com
Subject: Lorentz Quarry - Petition for EAW

Hello Cheyanne St. John,
I am reviewing a 2022 petition for an EAW on the Lorentz Quarry in Amboy Township, Cottonwood County. In the attached document you are listed as a contact if artifacts/etc. are found during site earth moving activities.
I would like to talk with you about the document and any coordination you have done with the project proposer. If able, please give me a call. Thank you.

Kim Grosenheider
Environmental Review
Minnesota Pollution Control Agency
Phone: 651-757-2170

Our mission is to protect and improve the environment and human health.