



Minnesota Department of Natural Resources

Division of Ecological and Water Resources, Box 25

500 Lafayette Road

St. Paul, Minnesota 55155-4025

Phone: (651) 259-5091

E-mail: samantha.bump@state.mn.us

July 5, 2016

Correspondence # ERDB 20160322-0002

Mr. Michael Rutledge
Fagen Engineering, LLC
501 W Hwy 212; PO Box 159
Granite Falls, MN 54241

RE: Natural Heritage Review of the proposed Palmer's Creek Wind Farm

County	Township (N)	Range (W)	Section(s)
Chippewa	116	39	1,12,13
Chippewa	116	40	3-10,15-22,27,28

Dear Mr. Rutledge,

As requested, the Minnesota Natural Heritage Information System has been queried to determine if any rare species or other significant natural features are known to occur within an approximate one-mile radius of the proposed project. Based on this query, rare features have been documented within the search area (for details, please visit the Rare Species Guide at <http://www.dnr.state.mn.us/rsg/index.html> for more information on the biology, habitat use, and conservation measures of these rare species). Please note that the following **rare features may be adversely affected** by the proposed project:

Ecologically Significant Areas

- The proposed project overlaps with a Prairie Core Area as identified in the Minnesota Prairie Conservation Plan, a twenty-five year strategy for accelerating prairie conservation in the state. To meet the Plan's goals, approaches within Prairie Core Areas will need to include restoration. As such, any efforts toward prairie or grassland restoration after project construction are encouraged. For information on landowner incentive programs to protect prairie and for guidance on restoration, please visit <http://www.dnr.state.mn.us/prairierestoration/index.html>.
- The Minnesota Biological Survey (MBS) has identified several Sites of Moderate Biodiversity Significance within the proposed project boundary. Sites of Biodiversity Significance are areas with varying levels of native biodiversity that may contain high quality native plant communities, rare plants, rare animals, and/or animal aggregations. Sites ranked as Moderate contain occurrences of rare species and/or moderately disturbed native plant communities, and/or landscapes that have a strong potential for recovery. These particular sites contain known occurrences of state-listed birds and plants, native prairie remnants, and a rare wetland community (see enclosed map; GIS shapefiles of MBS Sites of Biodiversity Significance and DNR Native Plant Communities can be downloaded from the MN Geospatial Commons website at <https://gisdata.mn.gov/>). **Given the ecological significance of these areas, the DNR recommends that the MBS Sites ranked Moderate be considered avoidance areas.** Indirect impacts from surface runoff or the spread of invasive species should also be considered during project design and implementation.

The Minnesota Biological Survey considered the southern ½ of the SE ¼ of T116N 39W Section 4 for a Site of Biodiversity Significance, but this area was determined to be below the minimum biodiversity threshold for statewide significance. This area, however, may have conservation value at the local level as habitat for native plants and animals, corridors for animal movements, buffers surrounding higher quality natural areas, or as areas with high potential for restoration of native habitat.

Native Prairie

- As noted above, the Minnesota Biological Survey has identified several Dry Hill Prairie remnants within the project boundary. Missouri milk-vetch (*Astragalus missouriensis var. missouriensis*) a state listed plant species of special concern has been documented within these native prairie remnants. Sullivant's milkweed (*Asclepias sullivantii*), a state-listed threatened plant, has been documented in the vicinity of the proposed project and may also occur within the prairie remnants in the project boundary. In the mid-1800's, Minnesota had eighteen million acres of prairie. Less than 1% remains. Given that more than 99% of Minnesota's prairies have been destroyed, and more than one-third of Minnesota's endangered, threatened, and special concern species are now dependent on the remaining small fragments of Minnesota's prairie ecosystem, we feel that all prairie remnants merit protection. We also recommend that turbines and other infrastructure be distant enough from native prairies as to allow for prairie management, such as prescribed burning.

Additional prairie remnants may exist in the area. To ensure that prairie is avoided, I recommend that a desktop analysis of historical aerial photos and applicable GIS layers (see attached guidance) be conducted for any grassland areas that have the potential to be impacted by the project. Any on-site prairie surveys should be conducted by a qualified surveyor (see attached list) following the attached guidance.

Rare Wetlands

- If the Wetland Conservation Act (WCA) is applicable to this project, please note that Silver Maple – (Virginia Creeper) Floodplain Forest has a conservation status rank of S3 and may qualify as “rare natural community” under this Act. Minnesota Rules, part 8420.0515, subpart 3 states that a wetland replacement plan for activities that modify a rare natural community must be denied if the local government unit determines that the proposed activities will permanently adversely affect the natural community. If you have any questions regarding this provision of the WCA, please contact Doug Norris, DNR Wetlands Program Coordinator, at 651-259-5125.

Please contact me if avoidance of MBS Sites and/or native prairie is not feasible, as surveys for rare species may be needed. We will need to discuss potential surveyors, survey protocol, and other requirements before any survey work for rare species is initiated. Project planning should also take into account that surveys (if needed) will need to be done during the appropriate time of the year, which may be limited. For your information, I have attached a document outlining the Rare Species Survey Process.

Mussels

The Minnesota River provides habitat for several state-listed mussels. As mussels are particularly vulnerable to deterioration in water quality especially increased siltation, it is important that effective erosion prevention and sediment control practices be implemented and maintained during construction and be incorporated into any stormwater management plans.

Snakes

The gopher snake (*Pituophis catenifer*), a state-listed species of special concern, and the western foxsnake (*Pantherophis vulpina*) a Species in Greatest Conservation Need as identified in Minnesota's State Wildlife Action Plan, have been documented in the vicinity of the proposed project and may be encountered on site. For more information about these rare snakes please visit http://dnr.state.mn.us/reptiles_amphibians/index.html. Given the presence of these rare snakes, the DNR recommends that the use of erosion control mesh, if any, be limited to wildlife-friendly materials (see enclosed fact sheet).

Bats

The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Although there are no NHIS records for bats in the vicinity of the proposed project, all seven of Minnesota's bats can be found throughout Minnesota. The northern long-eared bat (*Myotis septentrionalis*), tricolored bat (*Perimyotis subflavus*), big brown bat (*Eptesicus fuscus*), and little brown bat (*Myotis lucifugus*) are all state-listed species of special concern. Given the proximity to the river corridor which likely provides bat habitat and the potential for turbines to cause bat fatalities, measures to minimize impacts should be considered. Actions to minimize impacts may include, but are not limited to, the following recommendations:

- place turbines an adequate distance from the river corridor and forested areas,
- feather turbine blades below cut-in speeds, and
- conduct post-construction fatality monitoring.

The DNR looks forward to receiving the results of the acoustic bat surveys and may have additional comments regarding state-listed bats at that time. As the U.S. Fish and Wildlife Service (USFWS) has listed the northern long-eared bat as threatened under the Endangered Species Act (ESA), please coordinate with the USFWS regarding this species.

Birds

- A bald eagle (*Haliaeetus leucocephalus*) nest has been documented in T116N R40W Section 11 just outside of the project boundary. This nest was active when checked in 2000, 2001, and 2005. It is unknown whether the nest is still active or whether there are additional nests in the area. Bald eagles are federally protected under the Migratory Bird Treaty Act and under the Bald and Golden Eagle Protection Act. Both acts prohibit killing, selling, or otherwise harming eagles, their nests, or eggs. Please visit the USFWS website at <http://www.fws.gov/midwest/eagle/> for more information regarding conservation measures, [management guidelines](#), and [permitting](#).

- The proposed project overlaps with the Upper Minnesota River Valley Important Bird Area (IBA). Important Birds Areas, identified by Audubon Minnesota in partnership with the DNR, are part of an international conservation effort aimed at conserving critical bird habitats. They are voluntary and non-regulatory, but the designation does demonstrate the biological value of this area. This particular IBA incorporates the riparian corridor and adjacent river valley and upland communities along the Minnesota River and provides excellent habitat for a wide variety of bird species. This IBA contains significant bird habitat in an intensely agricultural area and is a natural corridor for migrating birds. Over 200 species, including state-listed species and Species in Greatest Conservation Need (SGCN; as identified in Minnesota's State Wildlife Action Plan - <http://www.dnr.state.mn.us/cwcs/index.html>) are known to use the IBA.

The Natural Heritage Information System contains breeding season observations of two rare grassland birds: the lark sparrow (*Chondestes grammacus*), a state-listed species of concern, and the upland sandpiper (*Bartramia longicauda*), a Species in Greatest Conservation Need (SGCN). A minimum of 20 SGCN are known to use grassland habitat within the Minnesota River Prairie Ecological Subsection (where the project is located). Potential impacts to grassland birds are a concern because many of these species are declining in number nationwide.

Please note that the Minnesota Biological Survey has not conducted surveys in this area in over fifteen years, so data on state-listed species in this area is incomplete. It should also be noted that many SGCN are not tracked in the NHIS and that the NHIS does not include records of migrating birds. The DNR looks forward to receiving the results of the avian point count surveys and may have additional comments regarding rare birds at that time.

Wind farms can affect birds due to collision mortality, displacement due to disturbance, habitat fragmentation, and habitat loss. Even if collision mortality rates are low, the additional mortality may be significant for rare species.

Given the known occurrences of state-listed species and the proximity of the proposed project to a significant migration corridor, post-construction avian fatality monitoring is recommended. Post-construction monitoring may provide information regarding unexpected impacts, if any, to rare birds. Knowledge of these types of extraordinary events would allow for the implementation of additional measures to minimize impacts.

Environmental Review and Permitting

- Please address potential impacts to the above rare features in the Public Utilities Commission (PUC) Site Permit Application. The Avian and Bat Protection Plan should also include measures to minimize impacts to rare birds and bats.
- The DNR may have additional comments regarding rare species once pre-construction surveys are completed.
- Please include a copy of this letter in any state or local license or permit application. **Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.**

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. **If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.**

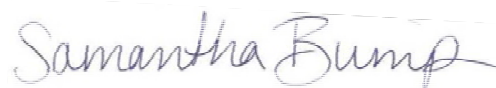
The enclosed results include an Index Report of records in the Rare Features Database, the main database of the NHIS. To control the release of specific location data, the report is copyrighted and only provides rare features locations to the nearest section. The Index Report may be reprinted, unaltered, in any environmental review document (e.g., EAW or EIS), municipal natural resource plan, or report compiled by your company for the project listed above. If you wish to reproduce the Index Report for any other purpose, please contact me to request written permission.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location (noted above) and the project description provided on the NHIS Data Request Form. Please contact me if project details change or for an updated review if construction has not occurred within one year.

The Natural Heritage Review does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. To determine whether there are other natural resource concerns associated with the proposed project, please contact your DNR Regional Environmental Assessment Ecologist (contact information available at http://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html). Please be aware that additional site assessments or review may be required.

Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources. An invoice will be mailed to you under separate cover.

Sincerely,



Samantha Bump
Natural Heritage Review Specialist

enc. Rare Features Database: Index Report
Map
Prairie Mapping and Ranking Guidance
DNR List of Surveyors
Rare Species Survey Process
Wildlife Friendly Erosion Control

Links: Minnesota Prairie Conservation Plan
http://files.dnr.state.mn.us/eco/mcbs/mn_prairie_conservation_plan.pdf
MN State Wildlife Action Plan
<http://www.dnr.state.mn.us/cwcs/index.html>

MBS Sites of Biodiversity Significance

http://www.dnr.state.mn.us/eco/mcbs/biodiversity_guidelines.html

DNR Native Plant Communities

<http://www.dnr.state.mn.us/npc/index.html>

USFWS Key to the Northern Long-Eared Bat 4(d) Rule for Non-Federal Activities

<http://www.fws.gov/midwest/angered/mammals/nleb/KeyFinal4dNLEB.html>

USFWS Key to the Northern Long-Eared Bat 4(d) Rule for Federal Actions

<http://www.fws.gov/midwest/angered/mammals/nleb/KeyFinal4dNLEBFedProjects.html>

USFWS Northern Long-eared Bat Website

<http://www.fws.gov/midwest/angered/mammals/nleb/index.html>

USFWS Northern Long-eared Bat Fact Sheet

<http://www.fws.gov/midwest/angered/mammals/nleb/nlebFactSheet.html>

cc: Jamie Schrenzel, Cynthia Warzecha, Kevin Mixon, Mike Worland, Megan Benage, DNR
Richard Davis, DOC
Mags Rheude, USFWS

From: [Michael Rutledge](#)
To: [Amy J. Denz](#)
Cc: [Justin D. Askim](#)
Subject: Fw: Historic Properties
Date: Thursday, September 22, 2016 7:58:29 AM
Attachments: [Archaeology.rtf](#)
[Historic.rtf](#)

FYI

Mike Rutledge
Environmental Services Dept. Head
FAGEN ENGINEERING, LLC
P.O. Box 159
Granite Falls, MN 56241
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www.fageninc.com

----- Forwarded by Michael Rutledge/Eng on 09/22/2016 07:57 AM -----

From: Thomas Cinadr <thomas.cinadr@mnhs.org>
To: Michael Rutledge <MRutledge@fageneng.com>,
Date: 09/22/2016 07:04 AM
Subject: Re: Fw: Historic Properties

THIS EMAIL IS NOT A PROJECT CLEARANCE.

This message simply reports the results of the cultural resources database search you requested. The database search produced results for only previously known archaeological sites and historic properties. Please read the note below carefully.

Archaeological sites and historic properties were identified in a search of the Minnesota Archaeological Inventory and Historic Structures Inventory for the search area requested. Reports containing the results of the searches are attached.

The result of this database search provides a listing of recorded archaeological sites and historic architectural properties that are included in the current SHPO databases. Because the majority of archaeological sites in the state and many historic architectural properties have not been recorded, important sites or structures may exist within the search area and may be affected by development or construction projects within that area. Additional research, including field survey, may be necessary to adequately assess the area's potential to contain historic properties.

Properties that are listed in the National Register of Historic Places

(NRHP) or have been determined eligible for listing in the NRHP are indicated on the reports you have received. The following codes on the reports you received are:

NR – National Register listed. The properties may be individually listed or may be within the boundaries of a National Register District.

CEF – Certified Eligible to the National Register findings are usually made during the federal review process, these properties have been evaluated as being eligible for listing in the National Register.

SEF – Staff eligible findings to the National Register are properties that have been determined eligible by SHPO staff.

DOE – Determination of Eligibility is made by the National Park Service and typically refers to properties deemed eligible but the owner objects to the listing.

CNEF – Certified Not Eligible to the National Register. SHPO has begun to record properties that have been evaluated as not eligible for listing in the National Register. If the box on the form has a check the property has been determined to be not eligible.

Properties without NR, CEF, SEF, DOE, or CNEF designations in the reports you received may not have been evaluated and therefore no assumption to their eligibility can be made.

If you require a comprehensive assessment of a project's potential to impact archaeological sites or historic architectural properties, you may need to hire a qualified archaeologist and/or historian. If you need assistance with a project review, please contact Kelly Gragg-Johnson in Review and Compliance @ 651-259-3455 or by email at kelly.graggjohnson@mnhs.org.

The Minnesota SHPO Survey Manuals and Database Metadata can be found at <http://www.mnhs.org/shpo/survey/inventories.htm>

SHPO research hours are 8:30 AM – 4:00 PM Tuesday-Friday.
The Office is closed on Mondays.

Tom Cinadr
Survey and Information Management Coordinator
Minnesota Historic Preservation Office
Minnesota Historical Society
345 Kellogg Blvd. West
St. Paul, MN 55102

651-259-3453

On Wed, Sep 21, 2016 at 12:49 PM, Michael Rutledge <MRutledge@fageneng.com> wrote:

Mr. Cinadr,

It appears that we gave you an erroneous project description below. The Townships should have been reversed. It should read:

Township #: 40 Range # 116 Sections 1,12, 13

Township #: 39 Range # 116 Sections 3,4,5,6,7,8,9,10,15, 16,
17, 18, 19,
20, 21, 22, 27, 28, 29

Unless you caught this error associated with the original request, can you please provide a new evaluation?

I apologize for this error.

Mike

Mike Rutledge
Environmental Services Dept. Head
FAGEN ENGINEERING, LLC
P.O. Box 159
Granite Falls, MN 56241
320-564-3324 Main
320-564-2625 Direct
320-564-4861 Fax
www.fageninc.com

----- Forwarded by Michael Rutledge/Eng on 09/21/2016 12:42 PM -----

From: Michael Rutledge/Eng
To: Thomas Cinadr <thomas.cinadr@mnhs.org>,
Date: 05/20/2016 09:51 AM
Subject: Re: Historic Properties

Tom,

Here they are:

County: Chippewa

Township #: 39 Range # 116 Sections: 1, 12, 13

Township #: 40 Range # 116 Sections: 3, 4, 5, 6, 7, 8,
9, 10, 15, 16,
17, 18, 19, 20, 21, 22, 27, 28, 29

Mike Rutledge

Environmental Services Dept. Head
FAGEN ENGINEERING, LLC
P.O. Box 159
Granite Falls, MN 56241
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From: Thomas Cinadr <thomas.cinadr@mnhs.org>
To: Michael Rutledge <MRutledge@fageneng.com>,
Date: 05/19/2016 08:37 AM
Subject: Re: Historic Properties

Mike,

Please send me a complete list of Township/Range/Section coordinates you wish to be searched.

Tom

Tom Cinadr
Survey and Information Management Coordinator
Minnesota Historic Preservation Office
Minnesota Historical Society
345 Kellogg Blvd. West
St. Paul, MN 55102

651-259-3453

On Wed, May 18, 2016 at 12:15 PM, Michael Rutledge <MRutledge@fageneng.com>
wrote:

Mr. Cinadr,

We are in the early stages of development for a wind farm near Granite Falls, MN. Does your office provide a preliminary listing or map of historic properties within a geographic area so that we can take those into consideration when siting turbines and access roads? I assume at some point we will need to have a "boots on the ground" survey done by an archaeologist, but any information you can provide from a records search would certainly be appreciated. Just let me know what information you will need.

Thank you, in advance, for your assistance.

Mike

Mike Rutledge
Environmental Services Dept. Head
FAGEN ENGINEERING, LLC
P.O. Box 159
Granite Falls, MN 56241
320-564-3324 Main
320-564-2625 Direct
320-564-4861 Fax

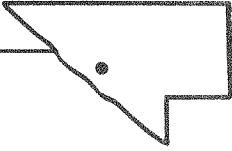
(See attached file: Archaeology.rtf)(See attached file: Historic.rtf)

History/Architecture Inventory

PROPERTY NAME	ADDRESS	Twp	Range	Sec	Quarters	USGS	Report	NRHP	CEF	DOE	Inventory Number
COUNTY: Chippewa											
CITY/TOWNSHIP: Granite Falls											
NSP Power Plant	off U.S. Hwy. 212	116	39	3	N-NE-NE	Granite Falls	CP-85-1H				CP-GRN-007
CITY/TOWNSHIP: Granite Falls Twp.											
Christian Haakenson Farmstead	off Co. Hwy. 15	116	39	4	SE	Asbury	CP-85-1H				CP-GRT-002
Olof Swennson Farmstead	Co. Hwy. 15 & Co. Hwy. 6	116	39	6	SE	Asbury	CP-85-1H	Y			CP-GRT-003
C.L. Berg Farmstead	off Co. Hwy. 6	116	39	6	SW-NE-SW	Asbury	CP-85-1H				CP-GRT-004
William Sandahl Farmstead	off Co. Hwy. 15	116	39	6	SE-SW	Asbury	CP-85-1H				CP-GRT-005
Sparta First Norwegian Baptist Church	Co. Hwy. 15 & Co. Hwy. 6	116	39	7	N-NW	Asbury	CP-85-1H				CP-GRT-006
Bridge 7247		116	39	10	SW-SW	Asbury					CP-GRT-008
Bridge L9162		116	39	16	NW-NW	Granite Falls					CP-GRT-009
COUNTY: Multiple											
CITY/TOWNSHIP: Granite Falls											
Minnesota River Channel northwest of Granite Falls	Minnesota River from west edge of S20 to south edge of S28	116	39	19		Granite Falls	XX-2010-5H		Y		XX-RVR-008
CITY/TOWNSHIP: Watson											
Minnesota River Channel northwest of Granite Falls	Minnesota River from west edge of S20 to south edge of S28	116	39	19		Granite Falls	XX-2010-5H		Y		XX-RVR-008

Archaeological Site Locations

Site Number	Site Name	Twp.	Range	Sec.	Quarter Sections	Acres	Phase	Site Description	Tradition	Context	Reports	NR	CEF	DOE
County: Chippewa														
21CP0009	Harold Schuler	116	39	18	NW-NW	0 0		EW						
21CP0060		116	39	16	SW-SW	0.1 1		SA						
21CP0061		116	39	16	SW-SW	0.1 1		SA						
21CP0062		116	39	16	SE-SW-SW	0.1 1		SA						
County: Yellow														
21YM0021		116	40	13	SW-SW	1		EW	W-1					



CHIPPEWA COUNTY
LAND AND RESOURCE MANAGEMENT

629 North 11th Street, Suite 16 • Montevideo, Minnesota 56265 • (320) 269-6231 • (320) 269-7412 Fax

March 16, 2017

Mr. Mike Rutledge
Palmer's Creek Wind Farm, LLC
501 W. Hwy 212
Granite Falls, MN 56241

RE: Palmer's Creek Wind Farm
Chippewa County Windpower Management Ordinance, Section 12
Deferral of Permitting and Regulation of the Wind Farm

Dear Mike:

Palmer's Creek Wind Farm informed the Chippewa County Board of Commissioners it is developing a wind generation facility in Chippewa County, Minnesota for the generation of approximately 44.6MW. On behalf of the Board, I am confirming Chippewa County shall defer permitting related to the construction and operation of the Palmer's Creek Wind Farm to the State of Minnesota, as the total electric generation output of the wind farm is greater than Chippewa County Wind power Management Ordinance, Section 12, upper production limit of 5MWs.

While we defer permitting on this project, we retain the right to make comments as the PUC provides public notice on this project. Further, Chippewa County will require permits for accessory buildings as they are developed at the generation sites.

If you have any questions, please feel free to contact me at the above address or by email at swilliams@co.chippewa.mn.us

Sincerely,

Scott Williams, Director
Chippewa County Land and Resource Management