January 17, 2018

Via Electronic Filing
Mr. Daniel Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 Seventh Place East, Suite 350
St. Paul, MN 55101-2147

Re: ***In the Matter of the Application of Palmer's Creek Wind Farm LLC for a Large Wind Energy Conversion System Site Permit for the 44.6 MW Palmer's Creek Wind Project in Chippewa County, Minnesota.*** **Docket No. IP-6979/WS-17-265**

Dear Mr. Wolf:

In accordance with section 5.2.6 of the draft Site Permit for Palmer's Creek Wind Farm, Palmer's Creek respectfully submits the attached revised Storm Water Pollution Prevention Plan prepared by Fagen Engineering.

Sincerely,

Kate Carlton
Corporate Counsel
Fagen Incorporated
P.O. Box 159
Granite Falls, MN 56241

STORM WATER POLLUTION PREVENTION PLAN

Associated with Construction Activities

Multiple Wind Turbine Construction Sites
Palmer's Creek Wind Project
Chippewa County, Minnesota

Prepared by:

FAGEN ENGINEERING LLC

January, 2018

Revision No. _____ **Date:** _____
Revision No. _____ **Date:** _____
Revision No. _____ **Date:** _____
Revision No. _____ **Date:** _____

Storm Water Pollution Prevention Plan
Construction Site Activities
Palmer's Creek Wind Project
Chippewa County, Minnesota

TABLE OF CONTENTS

Storm Water Pollution Prevention Plan
Construction Site Activities
Palmer's Creek Wind Project
Chippewa County, Minnesota

TABLE OF CONTENTS
(continued)

APPENDICES:

LIST OF TABLES:

LIST OF FIGURES:

1.0 Introduction

Fagen Incorporated (Fagen), along with Palmer's Creek Wind Farm, LLC (PCWF), is constructing a large wind energy project near the city of Granite Falls, Yellow Medicine County, Minnesota. This project will include two (2) 2.3 MW GE wind turbines and sixteen (16) 2.5 MW GE wind turbines. The project will be constructed on approximately 6,150 acres of land north of Granite Falls in Chippewa County. Fagen Incorporated is the General Contractor on the project and will have overall control of the job sites until completion of construction.

This Storm Water Pollution Prevention Plan (SWPPP) complies with the provisions of the Minnesota Pollution Control Agency (MPCA) General Permit No. MN R 100001 Stormwater Runoff From Construction Activities, shown in Appendix 1. Information contained within this SWPPP includes implementation of site specific Best Management Practices (BMPs) to minimize erosion and sedimentation potentials associated with construction activities. Plans for implementing sediment and erosion control during construction activities are also included in this SWPPP. A Notice Of Intent for coverage under the General Permit (GP) has been submitted and a copy is included in Appendix 2.

This SWPPP has been adopted by Fagen and PCWF for construction activities at the wind farm project site. This SWPPP is company policy and will be adhered to by all Fagen and PCWF employees, representatives and on-site contractors. The SWPPP will be maintained at the Fagen onsite construction office, and will be readily accessible to all employees and Federal and State inspectors. The Project Manager is in charge of all aspects of the facility SWPPP and implementation as SWPPP Coordinator. The following table, Table 1-1, provides a facility organizational chart with respect to SWPPP responsibilities.

Table 1-1: SWPPP Chain-of-Command

Title	Reports to:
Project Manager SWPPP Coordinator	Fagen/PCWF Management
Project Engineer Assistant SWPPP Coordinator	Project Manager
On-Site Personnel	Project Manager
On-Site Contractors	Project Manager

1.1 Worker Health and Safety

Construction activities on-site require an acute attention to worker health and safety. No chemicals will be utilized or stored on-site that would cause significant concerns for worker health. The heavy equipment and site activities utilized have the potential to pose a threat to worker safety. Although this SWPPP has been prepared to address the prevention of environmental releases from storm water, worker health and safety is not meant to be compromised. Fagen, Inc. has Safety and Health (S&H) Procedures in place at the project site. The potential hazards for each situation should be assessed prior to conducting appropriate spill or release activities. Neither S&H assessments nor S&H requirements are

included in this SWPPP. Please refer to the Fagen, Inc. S&H Procedures Manual to determine hazards and acceptable work practices associated with construction activity.

1.2 Reporting Requirements

In the event of non-compliance with the MPCA General NPDES Permit, Fagen/PCWF will contact the MPCA in accordance with the permit requirements. Fagen/PCWF will provide relevant information regarding the non-compliance including, but not limited to:

- Description of the noncompliance;
- Cause of the noncompliance;
- Exact dates of the period of the noncompliance;
- If the noncompliance has not been corrected;
- The anticipated time it is expected to continue; and
- Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance

Fagen/PCWF will also notify the MPCA in the event soil contamination or hazardous substances are discovered at the site during construction activities. All reasonable steps will be taken to minimize the adverse impacts on human health, public drinking water supplies, or the environment.

Revisions to the SWPPP, as a result of noncompliance or newly discovered pollutant sources, will be in accordance with Section 5.0 to minimize storm water contamination potentials. A responsible official must sign all reports, applications and certifications associated with any actions related to the above. Any noncompliance instances or revisions will be documented and maintained with this SWPPP.

1.3 Site Access and Response

In accordance with 40 CFR 122.41(i), MPCA General Permit Section 10.4, Fagen/PCWF shall, upon request and presentation of proper credentials, grant access to Federal, State and Local government agency representatives at reasonable times. Site access will be granted to agencies with jurisdiction over the project. Access will include areas of the construction project and associated areas as well as to records required under the General Permit. In addition, Fagen/PCWF will allow for a regulatory representative to obtain samples of any discharge from this site to waters of the State and to inspect any site facilities or equipment (including BMPs). This SWPPP will be made available for review during any on-site inspection. Procedures for responding to MPCA and EPA requests are addressed in Sections 4.0 and 5.0.

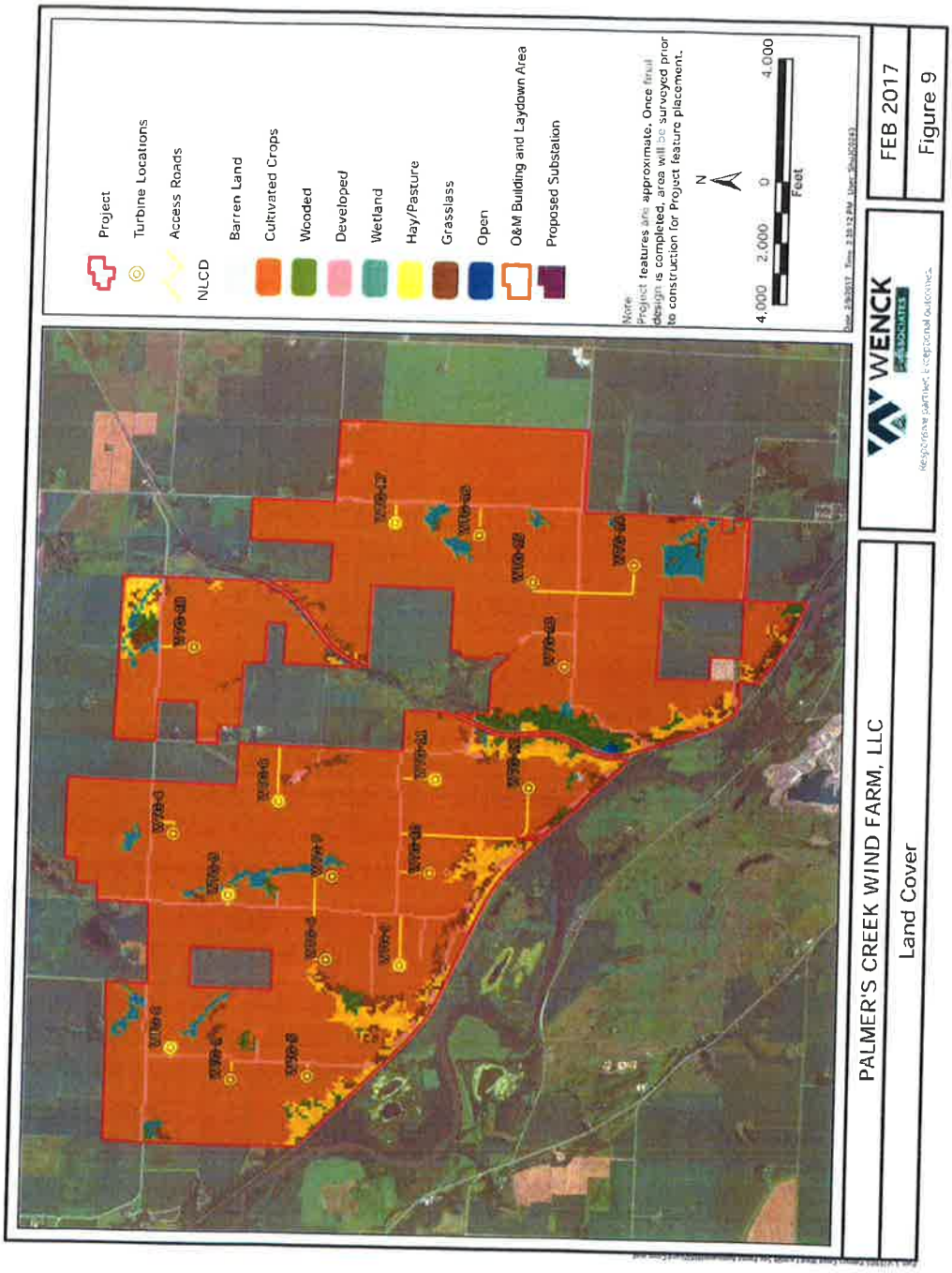
2.0 Site Information

The Bloom Wind Project turbines will be constructed at or near the following locations:

Table 2-1 Wind Turbine Locations

Turbine ID	Latitude (DMS)	Longitude (DMS)	Datum
WT-1	N44° 52' 09.46"	W95° 36' 24.75"	NAD 83
WT-2	N44° 52' 28.78"	W95° 36' 11.30"	NAD 83
WT-3	N44° 52' 09.81"	W95° 35' 01.78"	NAD 83
WT-4	N44° 52' 30.95"	W95° 34' 35.00"	NAD 83
WT-5	N44° 51' 45.49"	W95° 36' 21.96"	NAD 83
WT-6	N44° 51' 40.84"	W95° 35' 32.50"	NAD 83
WT-7	N44° 51' 40.15"	W95° 34' 51.62"	NAD 83
WT-8	N44° 51' 53.33"	W95° 34' 26.09"	NAD 83
WT-9	N44° 51' 17.73"	W95° 35' 30.41"	NAD 83
WT-10	N44° 51' 09.39"	W95° 34' 48.40"	NAD 83
WT-11	N44° 51' 09.29"	W95° 34' 09.18"	NAD 83
WT-12	N44° 50' 39.30"	W95° 34' 08.49"	NAD 83
WT-13	N44° 50' 29.63"	W95° 33' 13.53"	NAD 83
WT-14	N44° 50' 11.84"	W95° 32' 29.98"	NAD 83
WT-15	N44° 50' 40.67"	W95° 32' 36.08"	NAD 83
WT-16	N44° 50' 58.29"	W95° 32' 15.73"	NAD 83
WT-17	N44° 51' 24.86"	W95° 32' 14.92"	NAD 83
WT-18	N44° 52' 26.77"	W95° 33' 10.99"	NAD 83
Met Tower	N44° 52' 34.05"	W95° 30' 50.00"	NAD 83

Facility activities are categorized under the North American Industrial Classification System (NAICS) of 221119, Power Generation, Wind Electric. The area surrounding each wind turbine location can be generally characterized as rural agricultural. The SWPPP Map shown on the next page provides an illustration of the PCWF project site.



Palmer's Creek Wind Farm Project Layout

Site Characteristics, Drainage and Nearby Waterway

The individual turbine construction sites are spread out over approximately 6,150 acres in Chippewa County, Minnesota. All of the project sites are on cultivated cropland, primarily forage crops such as corn and soybeans.

The project area, as a whole is relatively level and flat. Several small ditches and streams (including tributaries of the Minnesota River) cross the site, collecting storm water run-off. Palmer's Creek is listed on the draft 2018 Section 303(d) list as impaired for e-coli. The section of the Minnesota River in Chippewa County is listed on the draft 2018 Section 303(d) list as impaired for mercury, turbidity and fecal coliform. Because of the extensive erosion control measures being employed at the construction sites, untreated stormwater runoff from the project area into waters of the U.S. will be considered negligible and therefore have no impact on the status of either Palmer's Creek or the Minnesota River.

2.1 On-site Soils

Due to the expansive nature of the project site, soil types and drainage may vary significantly from location to location. Information regarding specific soil types for each location was determined using the NRCS Web Soil Survey. The results can be found in Appendix 3.

There are virtually no impervious surfaces present within the pre-construction project area. Turbine foundations and transformer pads will be the only post-construction impervious surfaces and will total approximately 0.25 acres.

2.2 Proposed Construction Activities

Construction activities are anticipated to commence in February 2018, and be completed by January, 2019. The Project will generally will be constructed in the following sequence:

1. Preliminary erosion control Best Management Practices (BMPs)
2. Topsoil stripping, clearing, and stockpiling
3. Rough grading of roads and turbine sites
4. Construction of foundations
5. Construction of substation
6. Construction of electrical collection system and underground fiber optic communication system
7. Turbine erection
8. Turbine commissioning
9. Finish grading, topsoiling, and revegetation

With some exceptions, construction of roads will begin in May 2018. Foundation construction will begin in May 2018 and will be completed by July 2018. Construction of the underground collection system will begin in May 2018 and will be completed by August 2018. Construction of the substation will begin in February 2018 and will be

completed by July 2018. Turbine delivery and erection will begin in February 2018 and will be completed by August 2018. Commissioning of turbines will begin in August 2018 and will be completed by September 2018. Finish grading and revegetation will begin in August 2018 and will be completed in December 2018. This is a general schedule and may not reflect actual construction.

Total surface disturbance for the project will be approximately 172 acres of soil. This will be mainly for temporary and permanent access roads, temporary laydown areas, temporary road upgrades, towers and cable trenches. The majority of the disturbed surface area will be returned to its pre-construction state, with only the permanent access road, maintenance pad and foundation for each turbine being left in an impervious state after construction. The total increase in impervious area for the project is approximately 0.25 acres after completion.

2.3 Waste Disposal

Fagen/PCWF will dispose of all wastes generated at the site, in accordance with applicable requirements. Wastes composed of building materials will be removed from the site and disposed of at an approved facility. No building wastes, unused building materials, etc. will be buried, dumped, or discharged at/from the site. No on-site generated wastes will be destroyed via open fires, unless specifically allowed in permit from the local fire company is obtained.

2.4 Wastewater Generation

Portable toilets will be available on site during construction activities. To minimize any admixture with storm water, a licensed waste hauler will empty the portable toilets on a set schedule or on an as-needed basis. Coverage under this general permit prohibits the discharge of any material other than storm water.

2.5 Concrete Truck Washout

All liquid and solid wastes generated by concrete washout operations shall be contained in a leak-proof containment facility. The facility may be above ground or below grade and will be lined with an impermeable liner consisting of synthetic sheeting or a compacted clay layer. The liquid and solid wastes must not contact the ground, and there must not be runoff from the concrete washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA regulations. Site foremen shall direct concrete equipment operators to the washout facilities. A sign shall be installed adjacent to the washout facility to direct operators to utilize the proper facilities. Due to the expansive nature of wind projects, multiple washout locations may be used at the discretion of the SWPPP Coordinator.

3.0 Storm Water Generation and Controls

This plan is designed to include Erosion Prevention and Sediment Control Practices as applicable to this site and proposed construction activities. Construction activities result in the disturbance of vegetation and soil. These disturbances can result in increased erosion potentials if proper precautions are not implemented. Project construction activities will include excavation for foundation pad, leveling/addition of soil to construct roads and crane pads, and possible movement of site soils to other areas. Silt fencing around the soil stock piles and drainage swales along access roads will be constructed to prevent and direct stormwater run-off.

Clearing, excavation and grading will be limited to the minimum areas necessary for construction of the Project. Storm water runoff will be generated from each turbine location. Vegetation will be removed and soils exposed. In addition, construction activities will include the placement of impervious substrate and structures, including the foundation pad. In an effort to minimize storm water impacts, earthen berms, silt-fencing, filter logs and drainage swales will be installed to direct and control storm water on-site. Contractors and representatives on site will take all reasonable steps to minimize or prevent any discharge in violation of the General Permit.

The entire wind farm project will be designed to prevent, to the greatest extent practicable, the admixture of industrial contaminants with storm water. This is accomplished through various controls, including containment and diversionary structures. Fagen/PCWF employees and contractors will maintain pollution prevention control measures and devices in good working order to achieve compliance with terms of the General Permit. Specific information regarding pollution prevention at the construction site is described in Section 4.0.

Fagen/PCWF will implement appropriate construction phasing, horizontal slope grading and other construction practices to minimize erosion, in compliance with the inspection and maintenance requirements described in Section 5.0. The location of areas not to be disturbed shall be delineated (e.g. with flags, stakes, signs, silt fence, etc.) on the development site before work begins. Best Management Practices (BMPs) will be utilized at the site to minimize erosion and sedimentation potentials associated with construction activities. The following BMP information will include a physical description of the BMP, the site and physical conditions that must be met for BMP effectiveness, the installation/construction procedures as well as the operation and maintenance procedures for the BMP. The purpose of installing BMPs will be to prevent sediment from leaving the site. In the event this occurs, any off-site accumulations will be removed to minimize off-site impacts.

BMP methods selected were determined to be suitable for minimizing erosion and sedimentation potentials. However, in the event that storm water inspections and maintenance activities indicate that the selected BMPs are inadequate, this SWPPP will be updated and additional controls incorporated. All BMPs will be installed in an appropriate manner.

3.1 Common Best Management Practices (BMPs)

The BMPs described within this section will be conducted, to the greatest extent practicable, across the project area. Common actions include minimizing the area of disturbance, construction scheduling and duration, and minimizing the entrance of stormwater runoff generated off-site. These common BMPs are basically good engineering practices and will improve onsite performance of storm water control measures, by decreasing erosion and sedimentation potentials and enhancing the effectiveness of control devices and other BMPs. All of the common BMPs noted will be implemented as much as possible throughout the duration of the construction project. The nature of the common BMPs does not require installation, operation or maintenance procedures.

Minimize the Area of Disturbance

Minimizing the area of disturbance will decrease the area of exposed soils and decrease overall erosion and sedimentation potentials. In addition, undisturbed areas of the site will remain vegetated. Vegetation results in decreasing the velocity of overland flow. The result is in increase in storm water infiltration to site soils and a decrease in site runoff. This BMP will be utilized whenever practicable by leaving existing vegetation undisturbed, if possible, and establishing temporary and permanent seeding areas before, during and after construction activities. Vegetation will improve the overall effectiveness of other proposed erosion control devices and BMPs.

Construction Scheduling and Duration

It is important for construction activities to move quickly. By minimizing the extent of time construction activities are occurring, the length of time soils are left disturbed is minimized. Also, phased construction can minimize the total area of disturbance and/or areas not yet stabilized. Controls should be added prior to the commencement of construction activities in an effort to reduce the amount of storm water runoff and associated erosion and sedimentation potentials. Also, as turbine construction is completed at each location, reseeding will occur to minimize soil erosion potential. All exposed soil areas shall be stabilized as soon as possible to limit soil erosion but in no case later than 14 days after the construction activity in that portion of the site has temporarily ceased. If, for some reason, construction is interrupted or delayed, steps will be taken to prevent erosion from occurring on stock piles and/or exposed slopes. Special attention will be given to the slope of exposed soil area. Temporary soil stock piles will have BMPs and cannot be placed in storm water conveyance systems such as swales or ditches.

Sediment control practices will be established on all down-gradient perimeters before any up-gradient land disturbing activities begin. These practices shall remain in place until final stabilization has been established. The timing and installation of sediment control practices shall be adjusted to accommodate short-term activities such as clearing or grubbing, or passage of vehicles. Any short-term activity must be completed as quickly as possible and the sediment control practices must be installed immediately after the activity

is completed. However, sediment control practices shall be installed before the next precipitation event even if the activity is not complete.

Minimize the Entrance of Storm Water Runoff Generated from Off-Site

Minimizing the entrance of off-site runoff is another simple but highly effective practice for reducing storm water issues. The general site conditions and physical characteristics lend well to this BMP. Access roads will be constructed such that stormwater from existing roadways will not drain or collect at the entrances to turbine locations.

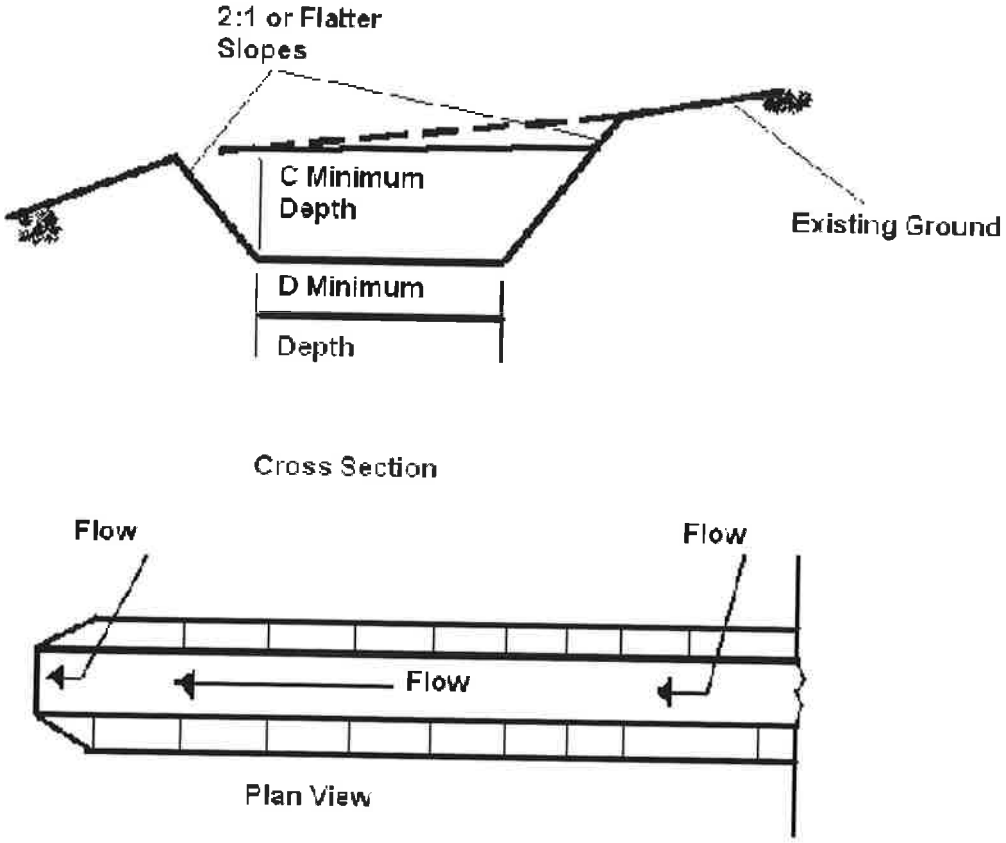
3.2 Drainage Swales and Berms

Construction of the roads and each wind turbine will result in the disturbance of soil. This will result in surface soil berms, windrows or stock piles at each turbine location. These windrows will provide erosion control protection by keeping untreated storm run-off on site. They will also prevent off-site runoff from coming in contact with exposed soils. All windrows/berms will be constructed to provide free drainage of surface water and will be protected by silt fencing or fiber logs, as necessary, to prevent erosion by wind and rain.

Drainage swales may also be utilized to direct storm water runoff at the project sites. Drainage swales will be placed primarily along access roads to convey stormwater away from turbine locations and allow infiltration in existing vegetated swales and ditches. All swales will be constructed to provide free drainage of surface water and will be protected by silt fence dams, fiber logs and/or blankets, as necessary, to prevent erosion by high velocity flows.

Stabilization of any temporary or permanent ditches or swales must be complete within 14 days after construction in that portion of the ditch has temporarily or permanently ceased. Temporary or permanent ditches or swales that are being used as a sediment containment system (with properly designed ditch checks, bio rolls, silt dikes etc.) do not need to be stabilized. However, these areas must be stabilized within 24 hours after no longer being used as a sediment containment system. See the engineering plans provided by Ulteig Engineers, Inc. in Appendix 3 for BMP installation locations and details.

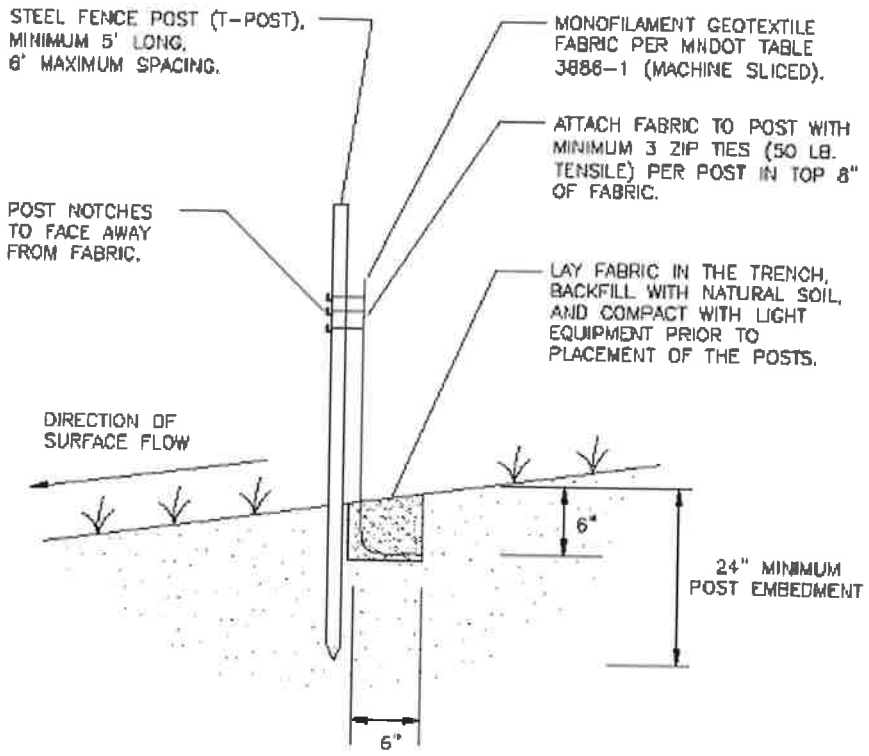
Figure 3-1
Typical Drainage Swale



3.3 Siltation Fencing and Fiber Log Silt Barriers

Silt fences and/or fiber logs will be utilized at the site as temporary erosion and sedimentation control and placed in areas to reduce or intercept overland flow. Siltation fencing will be placed, at a minimum, along limits of disturbance. As necessary, siltation fencing will be placed along construction/grading phase limits and excavated material storage piles, to further enhance storm water protection. Fiber logs will be installed at low areas and culvert outlets as temporary energy dissipaters. Trapped sediment will be removed from all siltation fences before the deposit reaches 1/3 of the above-ground fence height. Figure 3-2 shows a typical silt fence cross section. See the engineering plans in Appendix 3 for BMP installation locations and details.

Figure 3-2
Typical Silt Fence Cross Section



3.4 Rock Construction Entrance

Where construction vehicles enter/exit construction sites from paved roads, tracking of sediment from the site shall be minimized with the use of a rock construction entrance. In the event sediment escapes the site and accumulates on a paved road, Fagen/PCWF shall employ a street sweeper or skid loader with a sweeping attachment or the equivalent to remove the sediment within 24 hours of discovery.

3.5 Turbine Location Access Roads

Access roads will be constructed throughout the project site. These roads will provide turbine location ingress and egress as well as allow for movement of materials within turbine location. Approximately 13.45 miles of access roads will be constructed within the project site. The roads will be approximately 16 feet wide and will be covered with class 5 gravel or similar material. This will improve road stability and further reduce erosion and sedimentation potentials.

Due to the width of the crane used in the erection of the turbines, crane walks will be approximately 30 feet wide. Crane walks, consisting of compacted earth, will be constructed along some turbine access roads and between some turbine locations. Upon completion of the project, these will be tilled and seeded or returned to agricultural production.

Each turbine location will have a crane pad and laydown area graded in place and covered with road rock. Silt fencing, fiber logs and/or blankets will be utilized to control erosion on the down slope side of the crane pad areas. Near the foundation and crane pad areas of each turbine location, equipment, such as the blades, nacelles and tower sections will be transported and off-loaded. Re-seeding and back-sloping disturbed areas and crane pad staging areas will follow construction completion. See the engineering plans in Appendix 3 for more information and details.

3.6 Foundation Construction

Each wind turbine foundation will require significant excavation. These materials will be stored adjacent to the foundation holes until the forms, rebar and bolts are assembled and the concrete cast has cured in place. Each concrete foundation will be approximately 15 feet in diameter. The excavated materials will be used for backfilling. Silt fencing, fiber logs and/or blankets will be used on steeper down slopes near the storage piles. Rocks that are too large for backfilling will be disposed of off-site or used to support other on-site erosion control measures. Impacted areas adjacent to the pad will be re-seeded as necessary. A small permanent maintenance ring will encircle the turbine base and will be left covered in Class 5 gravel. The remaining crane pad and laydown areas for each turbine will be seeded and/or returned to agricultural production.

3.7 Underground Cable Trenching

Trenches will house underground electrical and communications cables along the length of each wind turbine string corridor. Depending on the underlying soil/rock conditions, the trenches may be excavated from 1.5 to 4 feet deep. Like foundation construction, the excavated materials will be stored alongside the trench and used for backfilling. Erosion control on the steeper down slopes will utilize silt fencing, hay bales or matting. Cobbles and rocks too large for backfilling will be disposed of off-site, used in rock check dams or to support other on-site erosion control measures. At construction completion, the area will be reseeded with a designated seed mix, as appropriate to the location.

4.0 Spill Prevention and Response

Fagen/PCWF requires that all representatives and contractors work to prevent spills, to the greatest extent practicable. When a spill occurs, on-site personnel will react promptly and responsibly to control spills and prevent releases from impacting the environment, including waterways. In addition, Fagen/PCWF forbids the illegal dumping of wastes, including but not limited to, construction wastes, used equipment oil, and garbage. The following provides information with respect to Fagen's spill prevention and response at the turbine construction sites.

All on-site personnel are expected to report, as soon as possible, any spill or release at the site and initiate spill containment and control activities as appropriate, regardless of Department or Job Title. Site employees and contractors are expected to report to on-site supervisors and/or the Project Manager, as necessary. Further, in the unlikely event of a spill or release, the SWPPP will be assessed to determine if additional measures must be implemented to prevent the spill/release from recurring.

4.1 Good Housekeeping Practices

Good housekeeping practices will be utilized in part for the prevention of accidents and releases to the environment. Good housekeeping is primarily common sense actions that maintain a safe, clean workplace, which results in improved spill prevention. Good housekeeping is also equated with utilizing the right equipment for the job. Examples of good housekeeping practices include, but are not limited to:

- Prompt cleanup and removal of any spillage;
- Restricting vehicle travel to access roads;
- Regular pickup and disposal of garbage and rubbish; and
- Proper storage of containers

It is particularly important to properly control all waste (solid or hazardous) generated on-site. This includes collected sediment, floating debris, paper, plastic, oil, gasoline, or any other potentially hazardous substances.

Vehicles and equipment should be inspected to ensure no oil or oil substance is leaking from vehicles where the oil can mix with runoff or storm water. On-site personnel and contractors are expected to provide notification to supervisors regarding necessary repairs and maintenance activities to prevent continued or future leakage of on-site equipment.

4.2 Facility Inspections

Construction operations require periodic inspections to verify the effectiveness and integrity of storm water pollution prevention devices. Site construction activities are conducted 5 to 6 days per week, weather permitting, during available daylight. Routine inspections of the construction site are conducted on a regular basis, but a minimum of every 14 days and will be undertaken in all cases within 24 hours after a significant rain

event (greater than 0.5 inches in 24 hours). Erosion Prevention and Sediment Control BMPs must be inspected to ensure their integrity and effectiveness.

4.3 Spill Response

Material of concern at these turbine locations will consist of maintenance oils found in machinery. If a release would occur, employees should stop the flow or place a container under the leak. The container must be of a material compatible with the product. A berm should be created using on-site equipment to stop the movement of the material. Absorbent material should be used and disposed of properly as soon as possible. Any spill cleanup equipment must be cleaned, stored and/or disposed of properly.

4.4 Spill Notification

Spills and releases of oil, chemicals, hazardous substances, and sewage must be reported to the appropriate agencies. On-site personnel and contractors will conduct spill notification in accordance with the General Permit and Minnesota Administrative Code. The appropriate procedures are generally described below. In addition, a Spill Report Form, Appendix D, must be completed and maintained in accordance with Section 5.4.

State Notification

Minnesota Statute §115.061, which has been in effect since 1969, describes the duty of people to notify the Minnesota Pollution Control Agency (MPCA) when spills and leaks occur:

115.061 — Duty to Notify and Avoid Water Pollution
(a) Except as provided in paragraph (b), it is the duty of every person to notify the agency immediately of the discharge, accidental or otherwise, of any substance or material under its control which, if not recovered, may cause pollution of waters of the state, and the responsible person shall recover as rapidly and thoroughly as possible such substance or material and take immediately such other action as may be reasonably possible to minimize or abate pollution of waters of the state caused thereby.

(b) Notification is not required under paragraph (a) for a discharge of five gallons or less of petroleum, as defined in section 115C.02, subdivision 10. This paragraph does not affect the other requirements of paragraph (a).

The law provides penalties of up to $10,000 per day for violations.

The Minnesota Department of Public Safety, Bureau of Criminal Apprehension, operates a 24-hour service, establishing a one-call system for all state reporting requirements. Reportable spills should be directed to the Minnesota Duty Officer by calling (651) 649-5451 or (800) 422-0798. The duty officer will record all pertinent information and then make the appropriate notifications to the state agencies.

Report spills that may cause pollution, such as spills of toxic, flammable, corrosive and dangerous industrial chemicals. Also report spills of environmentally damaging materials, including milk, coal, animal parts, batteries, etc.

Reportable quantities

Minnesota has a reporting threshold of greater than five-gallons for petroleum spills. Spills of any quantity of all other chemicals or materials should be reported. If in doubt, report.

Anyone who spills is required to report.

Evey person who has "any substance or material under its control" must report spills and leaks. This includes:

- property owners who discover contamination;
- individuals, partnerships, companies and corporations;
- governmental subdivisions, including officers of these entities;
- owners of substances being stored or transported by another company; and
- contractors who are in physical control of a discharged substance.

Sometimes a fire department, police agency or other local or state agency that responds to a spill or leak chooses to report the incident to the MPCA. In some circumstances, the entity may be required to report the spill. However, in no case does a report from someone else stand in lieu of your responsibility to report to the MPCA by calling the Minnesota Duty Officer if a substance is under your control.

Be aware that there may be other reporting requirements imposed by local ordinances, state or federal law, or permits. Understanding all reporting requirements is the responsibility of those who handle substances which can pollute.

It is the responsibility of the spiller to ensure an effective cleanup and proper management of all wastes generated. With the exception of used oil, waste generated from petroleum spills that have been reported and cleaned up immediately are exempt from Minnesota's Hazardous Waste Rules. Waste from used oil spills must be sent to a facility for energy recovery.

In the event that Fagen/PCWF personnel know, or have reason to believe, that oil or hazardous substances were released at the site with the potential to enter waters of the State of the site's outfall discharges, Fagen will immediately notify the Minnesota Duty Officer at (651) 649-5451 or (800) 422-0798.

A report will be submitted to the EPA Region V within seven calendar days following a release. The report will provide a description of the release, the circumstances leading up to the release, the date of the release, and measures that were implemented to prevent reoccurrence of such releases. Copies of submitted reports shall be maintained with facility records.

Federal Notification

Certain releases of oil containing products to waters of the U.S. are reportable to the National Response Center (NRC). Waters of the U.S. have been interpreted to include wetlands, municipal sewer systems, storm water drainage, and any tributary that may lead to a navigable waterway.

In accordance with 40 CFR 112.4, if the spill incident(s) meet either of the following criteria, a report must be filed with the NRC:

1. A discharge of more than 1,000 gallons of oil into navigable waters in a single spill event occurs; or
2. A discharge of more than 42 gallons of oil in two spill events within any consecutive 12-month period.

(Note: the amounts (1,000 or 42) refers to the amount of oil that actually reaches navigable waters or adjoining shorelines, not the total amount of oil spilled)

Within 60 days of the occurrence of either of these conditions, the following report will be submitted to the Regional Administrator (Region 5) of the Environmental Protection Agency (EPA). Reports will also be submitted to NRC or over the internet through their website at http:/www.nrc.uscg.mil/report/html. The following information will be included:

1. Name of the facility;
2. Name(s) of the owner or operator of the facility;
3. Location of the facility;
4. Name and address of the registered agent of the owner or operator, if any;
5. Date and year of initial facility operation;
6. Maximum storage or handling capacity of the facility and normal daily throughput;
7. Description of the facility, including maps, flow diagrams, and topographical maps;
8. A complete copy of the Plan with any amendments;
9. The cause(s) of such spill, including a failure analysis of the system or subsystem in which the failure occurred;
10. The material and quantity spilled or released;
11. The corrective actions and/or countermeasures taken, including an adequate description of equipment repairs and/or replacements;
12. Additional preventive measures taken or considered to minimize the possibility of recurrence; and
13. Other information the EPA Regional Administrator may require pertinent to the Plan or spill event.

Reports should be sent to:

US EPA Region 5 SPCC Coordinator
77 West Jackson Blvd.
Chicago, IL 60604-3590

5.0 SWPPP Maintenance and Documentation

In accordance with General Permit MN R 100001, a complete copy of this SWPPP will be maintained on-site and readily available for review during normal working hours. If requested by MPCA, Fagen/PCWF and/or the contractors will provide a copy of this SWPPP as required by the General Permit. If it is proven that Fagen/PCWF has failed to implement the procedures set forth in this plan, Fagen/PCWF may become subject to effluent monitoring requirements and procedures.

5.1 Inspections

Routine inspections are necessary for maintaining an effective SWPPP. Therefore inspections of BMPs and related site conditions are required to maintain compliance with this Plan. BMP inspection forms are provided in Appendix 6. Inspections shall be conducted at least once every fourteen (14) calendar days and within 24 hours of each precipitation event of at least 0.5 inches in a 24 hour period.

Inspection frequency can be reduced to once per calendar month in areas where;

- temporary stabilization has been completed but where construction continues,
- runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice or the ground is frozen),
- construction is occurring during seasonal arid periods in arid or semi-arid areas.

A trained person designated by the SWPPP Coordinator must complete all inspections. Inspection and maintenance activities shall be documented in writing and records shall be retained on-site. Refer to Section 5.4 for details on recordkeeping. Training will be conducted in accordance with Section 5.3.

5.2 SWPPP Updates and Reviews

During the term of the construction activities, Fagen, Inc. will amend and update this SWPPP as necessary. Reviews of the SWPPP will be conducted periodically in response to inspection findings or in association with construction site or schedule changes. A current copy of this SWPPP will be kept available on-site at all times. Amendments to the SWPPP will be completed by or under the supervision of the SWPPP Coordinator. The following list provides examples of reasons for completing SWPPP updates and/or amendments:

- there is a change in design, operation, or maintenance of BMPs, pollution controls, or pollution prevention measures;
- there is a change in the design or scope of the construction project which could significantly affect the quality of the stormwater runoff or the use of designated BMPs or pollution controls;
- the construction site inspections indicate deficiencies in the SWPPP plan or any BMP;
- MPCA or EPA notifies the permittee of deficiencies in the SWPPP plan, BMP's, and/or pollution controls;

- the SWP2 plan is determined to be ineffective in significantly minimizing or controlling erosion and sedimentation (e.g. there is evidence, such as excessive site erosion, excessive sediment leaving the site, or excessive sediment deposits in drainage channels, streams, or lakes);
- MPCA determines violations of Surface Water Quality Standards may occur or have occurred, or
- MPCA determines the activities at the site constitute a significant pollution potential which the current SWPPP plan does not adequately address.

Depending on weather conditions, construction activities at the PCWF site will be completed approximately 10 months after commencement.

5.3 Training

All affected workers responsible for carrying out requirements under the plan will be properly trained and informed of their responsibilities, especially those individuals in charge of inspecting BMPs. Ideally, proper training should improve the chances for this Plan to be effective. Training will consist of the SWPPP Coordinator verifying that each designated pollution prevention measure inspector understands what he/she is inspecting. The SWPPP Training Attendance Log shall be completed for each SWPPP training session and maintained with this SWPPP. A copy can be found in Appendix 4.

Each inspector should have detailed knowledge about the on-site storm water controls. In particular, each inspector should know:

- Location and type of control measures;
- The construction requirements for each control measures;
- Spill prevention and cleanup measures; and
- Inspection and maintenance recordkeeping requirements.

5.4 Recordkeeping

All records, including but not limited to inspections and SWPPP reviews and changes, General Application, document submissions, etc. must be maintained on-site (field office or on-site vehicle) until coverage under the permit has been terminated. Fagen/PCWF shall provide the MPCA with access and copies of these records upon request. Original documentation may be attached to or filed with the on-site SWPPP copy. According to the General Permit, the information noted below shall be included as part of recordkeeping, at a minimum;

- Name of person(s) conducting the inspections or maintenance;
- When inspections or maintenance are conducted;
- The findings of the inspections or maintenance;
- Any corrective actions taken (including dates, times, an the responsible part for completing maintenance);
- Date and amount of rainfall events greater than 0.5 inches in 24 hours; and
- Document changes to this SWPPP as required by regulation.

These records will be kept on-site for at least three years. Additionally, in accordance with EPA guidance, other records such as inspection/maintenance records, operation agreements, and all required calculations for the design of the storm water management system will be maintained.

6.0 Transfer of Ownership

In the event of a transfer of ownership of the project site, coverage under the General Permit is also transferable. For storm water discharges from construction projects where the owner of operator changes after an application has been submitted, the new owner or operator must submit an application for permit transfer/modification within at least two weeks in advance of transfer. Late submittals will not be rejected; however, the MPCA reserves the right to take enforcement for any unpermitted discharges or permit noncompliance for the new registered party that has assumed control of the site. For storm water discharges from construction activities where the owner of operator changes, the new owner or operator can implement the original SWPPP created for the project or develop and implement their own SWPPP. Permittee(s) shall ensure either directly or through coordination with other Permittee(s) that their SWPPP meets all terms and conditions of this permit and that their activities do not render another party's erosion prevention and sediment control best management practices (BMPs).

7.0 Project Construction Completion

The General Permit requires that Fagen/PCWF notify MPCA regarding project completion. Fagen/PCWF must submit a Notice of Termination (NOT) to the MPCA within 30 days after the site has undergone final stabilization or another owner/operator has assumed control of the project site that has not been finally stabilized. A date for termination should also be provided. Compliance with the permit is required until the NOT is submitted. Authorization to discharge continues until midnight of the day the NOT is signed by the former owner or contractor.

Final stabilization can be achieved by following these protocols.

The Permittee(s) must ensure Final Stabilization of the site per Part IV of the General Permit, specifically:

1. Final Stabilization requires that all soil disturbing activities at the site have been completed and all soils must be stabilized by a uniform perennial vegetative cover with a density of 70% over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions.

2. The Permittee(s) must ensure that the permanent stormwater management system (if applicable) meets all requirements in Part III.C. This includes but is not limited to, a final clean out of temporary or permanent sedimentation basins that are to be used as permanent water quality management basins and final construction or maintenance of infiltration basins. All sediment must be removed from conveyance systems and ditches must be stabilized with permanent cover.

3. Prior to submission of the NOT, all temporary synthetic and structural erosion prevention and sediment control BMPs (such as silt fence) must be removed on the portions of the site for which the Permittee is responsible. BMPs designed to decompose on site (such as some compost logs) may be left in place.

4. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land) Final Stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use.

Stabilization activities in each area shall commence no later than 14 days after construction has temporarily or permanently ceased in that area. Sediment must be stabilized to prevent it from being washed back into the basin, conveyances, or drainageways discharging off-site or to surface waters. The cleanout of permanent basins must be sufficient to return the basin to design capacity. A copy of the applicable form (NOT) is provided in Appendix 8.

APPENDIX 1

Minnesota Pollution Control Agency (MPCA)
General Permit No. MN R 100001
Authorization to Discharge Stormwater Associated with Construction Activity Under the National Pollutant Discharge Elimination System (NPDES)

GENERAL PERMIT
AUTHORIZATION TO DISCHARGE
STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY
UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM/STATE DISPOSAL SYSTEM PERMIT PROGRAM

ISSUANCE DATE: **August 1, 2008** **EXPIRATION DATE:** **August 1, 2013**

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et seq.), 40 CFR 122, 123, and 124, as amended, et seq.; Minn. Stat. chs. 115 and 116, as amended, Minn. R. chs. 7001 and 7090:

This permit regulates the discharges of **stormwater** to the **waters of the state** of Minnesota associated with **construction activity**. This permit covers the **stormwater** discharges identified in Part I.A. of this permit. The limitations on permit coverage are identified in Part I.B. of this permit.

This permit requires the development and implementation of a **Storm Water Pollution Prevention Plan (SWPPP)**. No person shall commence **construction activity** covered by Part I.A. until permit coverage under this permit is effective or, if applicable, until the Minnesota Pollution Control Agency (MPCA) has issued an individual **National Pollutant Discharge Elimination System (NPDES)**/State Disposal System (SDS) construction **stormwater** permit for the project. The **SWPPP** must be completed prior to submitting any permit application and prior to conducting any **construction activity** by any required **Permittee**.

Unless notified by the MPCA to the contrary, applicants who submit a complete and accurate application (including permit fee) in accordance with the requirements of this permit are authorized to discharge **stormwater** from construction sites under the terms and conditions of this permit as described in Part II.B.

Signature: _____

Brad Moore
Commissioner
Minnesota Pollution Control Agency

If you have questions on this permit, including the specific permit requirements, permit reporting or permit compliance status, please contact the appropriate MPCA offices.

Minnesota Pollution Control Agency
Municipal Division
Construction Stormwater Program
520 Lafayette Road North
St. Paul, MN 55155-4194
Telephone: 651-296-6300
Toll free in MN 800-657-3864

TABLE OF CONTENTS

PART I. PERMIT COVERAGE AND LIMITATIONS

A. PERMIT COVERAGE

1. This permit is required for **construction activity** and **small construction activity** as defined in 40 CFR pt. 122.26(b)(14)(x) and (b)(15), respectively.

2. This permit authorizes, subject to the terms and conditions of this permit, the discharge of **stormwater** associated with **construction activity** and **small construction activity.**

   Construction activity includes clearing, grading and excavation, that disturbs land of equal to or greater than five (5) acres and includes the disturbance of less than five (5) acres of total land area that is a part of a larger **common plan of development or sale** if the larger common plan will ultimately disturb five (5) acres or more.

   Small construction activity includes clearing, grading and excavation, that disturbs land of equal to or greater than one (1) acre, and includes the disturbance of less than one (1) 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 (5) acres. **Small construction activity** does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

3. This permit covers all areas of the State of Minnesota.

4. For Parts I.B through Appendix A of this permit, all reference to **construction activity** includes both **small construction activity** and **construction activity**.

5. Coverage under this permit is not required when all runoff from **construction activity** or **small construction activity** is routed directly to and treated by a "treatment works", as defined in Minn. Stat. § 115.01, subd. 21, that is operated under an individual NPDES/SDS permit with a Total Suspended Solids effluent limit for all treated runoff.

6. Previously Permitted Ongoing Projects. **Permittee(s)** of ongoing projects covered initially under the previous MPCA-issued NPDES/SDS Construction Stormwater General Permit (issuance date August 1, 2003) must continue coverage under this reissued permit. The **Permittee(s)** of those ongoing projects shall amend the **SWPPP** for the project to meet the requirements of this reissued permit no later than 18 months after the issuance date of this reissued permit if the termination-of-coverage requirements in Part II.C. will not be met within 18 months of the issuance date of this reissued permit. Any additional permanent treatment in Appendix A. Part C.2 is not required for previously permitted projects that have discharges to impaired waters or if the project is located between 2000 feet and one mile of, and discharges to, a special water.

   a. If the previously permitted ongoing project will meet the termination-of-coverage requirements in Part II.C within 18 months of the issuance date of this reissued permit, the **Permittee(s)** shall comply with the 2003 construction general permit until the project is complete and a **Notice of Termination** consistent with Part II.C. of this reissued permit is submitted.

   b. If the previously permitted ongoing project will not be able to meet the terms and conditions of this reissued permit, an individual permit will be required in accordance with Minn. R. ch. 7001.

B. LIMITATIONS OF COVERAGE

This permit does not cover the following activities:

1. Discharges or releases that are not **stormwater** except those non-**stormwater** discharges authorized under Part IV.D.

2. The placement of fill into **waters of the state** requiring local, state, or federal authorizations (such as U.S. Army Corps of Engineers Section 404 permits, Minnesota Department of Natural Resources Public Waters Work Permits or Local Governmental Unit Wetland Conservation Act replacement plans or determinations).

3. **Stormwater** discharges associated with industrial activity that originate from the site after construction activities have been completed and the site has undergone **Final Stabilization**. Post-construction, industrial **stormwater** discharges may need to be covered by a separate NPDES/SDS permit.

4. Non-point source agricultural and silvicultural discharges excluded from **NPDES** permit requirements under 40 CFR pt. 122.3(e).

5. Discharges to the waters identified below unless the requirements of Appendix A. are complied with:

   a. Discharges into **outstanding resource value waters** as listed in Minn. R. 7050.0180, subp. 3, 4, 5, 6 and 6a, except calcareous fens listed in Minn. R. 7050.0180, subp. 6b.

   b. Discharges into Trout waters as listed in Minn. R. 6264.0050, subp. 2 and 4.

   c. Discharges into **wetlands** as defined in Minn. R. 7050.0130, item F.

   d. Discharges from projects that have not met applicable Environmental Review requirements under state or federal laws.

   e. Discharges that adversely impact or contribute to adverse impacts on a state or federal listed endangered or threatened species or adversely modify a designated critical habitat.

   f. Discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered archeological sites.

6. Discharges to calcareous fens listed in Minn. R. 7050.0180, subp. 6b, without a letter of approval from the Minnesota Department of Natural Resources (DNR). If the DNR does not respond to the permittee's request for approval within 30 calendar days, the application can be submitted.

7. Discharges to waters identified as impaired pursuant to section 303 (d) of the federal Clean Water Act (33 U.S.C. § 303(d)) where the identified pollutant(s) or stressor(s) are phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen, or biotic impairment (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment), and with or without a U.S. Environmental Protection Agency (USEPA) approved Total Maximum Daily Load (TMDL) for any of these identified pollutant(s) or stressor(s), unless the applicable requirements of Part III.A.9 are met.

PART II. SUBMITTING THE APPLICATION

A. PREREQUISITE FOR SUBMITTING A PERMIT APPLICATION

The **owner** must develop a **SWPPP** in accordance with Part III (Storm Water Discharge Design Requirements) of this permit. The plans are not to be submitted to the MPCA (unless the project size is 50 acres or more and will discharge to certain waters as described in Part II.B.1.b.) but are to be retained by the **owner** in accordance with Part III.D (Record Retention). The applicants' failure to complete the **SWPPP** prior to submitting the application will result in the application being returned and the **stormwater** discharges associated with **construction activity** will not be authorized by this permit.

B. APPLICATION AND DURATION OF COVERAGE

1. Application Required.

   a. The **owner** and **operator** shall submit a complete and accurate application form (or a photocopy thereof) with the appropriate fee for project size (see application form) to the MPCA for each project which disturbs one (1) or more acres of land. The **owner** and **operator** of a **common plan of development or sale** that will ultimately disturb one (1) or more acres must submit a complete and accurate application to the MPCA.

   b. For certain projects or **common plans of development or sale** disturbing 50 acres or more, the application must be submitted at least 30 days before the start of construction activity. This requirement pertains to projects that have a discharge point on the project that is within one mile of, and flows to, a special water listed in Appendix A, Part B. or waters listed as impaired under section 303(d) of the federal Clean Water Act (see the MPCA's web site) where the identified pollutant(s) or stressor(s) are phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen, or biotic impairment (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment). Applicants must submit a complete and accurate application form and **SWPPP** including all calculations for the Permanent **Stormwater** Management System (see Part III.A – C).

2. The **Owner** and **Operator** are **Permittee(s)**. The **owner** who signs the application is a **Permittee** and is responsible for compliance with all terms and conditions of this permit. The **operator** (usually the **general contractor**) who signs the application is a **Permittee** for Parts II.B., Part II.C., Part IV. and applicable construction activity requirements found in Appendix A. Part C. of this permit and is jointly responsible with the **owner** for compliance with those portions of the permit.

3. Permit Coverage. The commencement of any **construction activity** (e.g., land disturbing activities) covered under Part I.A. of this permit is prohibited until permit coverage under this permit is effective or, if applicable, until the MPCA has issued an individual NPDES/SDS construction **stormwater** permit for the project.

   a. Except as provided in subp. 3.b., 3.c. and 3.d below, permit coverage will become effective seven (7) calendar days after the postmarked date of the completed application form.

b. For projects disturbing 50 acres or more, that have a discharge point on the project that is within one mile of, and flows to, a special water listed in Appendix A, Part B. or waters listed as impaired under section 303(d) of the federal Clean Water Act, the applicants must submit a complete application and **SWPPP** to the MPCA at least thirty (30) calendar days prior to the commencement of **construction activity**. MPCA staff will review the **SWPPP** submitted with the complete application and permit coverage will become effective 30 calendar days after the postmarked date or MPCA date stamp (whichever is first) of the complete application or on the effective date identified within a permit coverage letter issued by the MPCA. For incomplete applications (e.g. lack of fees or signature) or incomplete **SWPPPs** (e.g. missing calculations, **Best Management Practice (BMP)** specifications or timing of **BMP** installation narrative), the 30 calendar day review period begins on the date that all required information is submitted.

c. For proposals to use Alternative Method(s) for the Permanent Stormwater Management System under Part III.C.5, the applicants must submit a complete application and **SWPPP**, including the Alternative Method documentation under Part III.C.5, to MPCA for review and approval at least 90 days prior to the proposed starting date of **construction activity**.

   i. The MPCA will notify the applicant within the 90-day period, in writing, whether the alternative method is approved or not approved and, if applicable, the basis for denial.

   ii. The applicant may re-submit the alternative method after addressing the MPCA's basis for denial. The MPCA will respond within 30 days.

   iii. Permit coverage will become effective upon receipt of an alternative treatment method approval letter from MPCA. Any **construction activity** on the project is not covered under this permit until receiving the alternative treatment approval letter.

d. Except as provided in parts 3.b. and 3.c., for, projects that apply online, permit coverage will become effective two (2) calendar days after the online application process is complete.

4. Coverage Letter. For projects under subpart 3.a. of this part, the **Permittee(s)** will receive a permit letter and certificate acknowledging permit coverage, usually within 30 days of the postmarked date of the complete application.

5. Change of Coverage. For construction projects where the **owner** or **operator** changes, (e.g., an original developer sells portions of the property to various homebuilders or sells the entire site to a new owner):

   a. The original/current **owner** shall provide a copy of the complete notice of termination/permit modification form (as required in Part II.C.2.b) to the new **owner**. The original/current **owner** shall provide a **SWPPP** to the new **owner** and **operator** that specifically addresses the remaining **construction activity**. Note: The notice of termination/permit modification form replaces the subdivision registration, permit transfer/modification and notice of termination forms.

   b. The new **owner** or **operator** shall submit a complete and signed permit modification portion (permit modifications include subdivision registration or permit transfer) of the notice of termination/permit modification form to the MPCA prior to commencing **construction activity** on site or in no case later than seven (7) days after taking ownership of the property. The new **Permittee(s)** are responsible for compliance with all terms and conditions of this permit as described in Part II.B.2.

c. If an **operator** or **general contractor** has completed their portion of work on the site, is no longer in operational control of the project, and all contractual obligations between the **owner** and **operator** or **general contractor** relating to compliance with the terms and conditions of this permit have been met, the **operator** or **general contractor**, may transfer permit coverage back to the **owner** or to a new **operator** using the notice of termination/permit modification form. A signature from both the owner and operator is required.

C. TERMINATION OF COVERAGE

1. **Permittee(s)** wishing to terminate coverage under this permit must submit a **Notice of Termination (NOT)** to the MPCA. Compliance with this permit is required until a **NOT** is submitted. The **Permittee(s)** coverage under this permit terminates at midnight on the postmark date of the **NOT**, or on the date an online **NOT** is submitted to the MPCA.

2. Termination of coverage scenarios:

   a. Termination of coverage for the entire project.

      i. All **Permittee(s)** must submit a **NOT** within 30 days after **Final Stabilization** (see Part IV.G.) has been completed on all portions of the site for which the **Permittee** is responsible and all **construction activity** has been completed. If the site includes permanent stormwater management systems, the requirements for final cleanout/maintenance must be performed as required in **Final Stabilization**, Part IV.G.2.

      ii. **Permittee(s)** must submit a **NOT** within 30 days after selling the entire site including roads and stormwater infrastructure, and coverage is transferred to another owner as described in Part II.B.5.

   b. Termination of coverage for a portion of the entire project.

      All **Permittee(s)** must submit a **NOT** within seven (7) days after selling or otherwise legally transferring portions of the site to another party and they are no longer the **owner** or **operator**. The portions of the site being sold to another party must be in compliance with the permit (e.g. all **temporary erosion protection** and **sediment control** measures must be in place). The form must include signatures from the original **Permittee(s)** and contact information for the new **owner** of the property.

   c. Termination of coverage obtained using a subdivision registration.

      If permit coverage was obtained using the subdivision registration process, **Permittee(s)** are required to submit a **NOT** within 30 days after achieving **Final Stabilization** (see Part IV.G.).

3. **Permittee(s)** that use an alternative method for the Permanent **Stormwater** Management System as described in Part III.C.5, are prohibited from terminating this permit until **Final Stabilization** has been achieved on site and either:

a. The two years of monitoring data required in Part III.C.5 has been submitted to the MPCA and the MPCA has determined that the required treatment has been achieved. The **Permittee** will be notified in writing within 30 days after the monitoring data has been submitted. If the **Permittee** has not heard from the MPCA within 30 days after submitting the required data, the Permittee can submit a **NOT**.

b. The Permittee can submit a **NOT**, even if the timeframe is less than two years, if the MPCA determines that the alternative method is achieving the required treatment.

During the monitoring and evaluation of the alternative method, the **Permittee** is not responsible for other permit requirements that have been transferred as described in Part II.B.5.

PART III. STORMWATER DISCHARGE DESIGN REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN

The **owner** must develop a Storm Water Pollution Prevention Plan (**SWPPP).** The **SWPPP** shall be completed prior to submitting any permit application and prior to conducting any **construction activity** by any required **Permittee(s)**. The plan must be a combination of narrative, plan sheets and if appropriate standard detail sheets that address the foreseeable conditions, at any stage in the construction or post construction activities. The plan must include a description of the nature of the **construction activity**. The plan must address the potential for discharge of sediment and/or other potential pollutants from the site. For **stormwater** discharges from **construction activity** where the **owner** or **operator** changes, the new **owner** or **operator** can implement the original **SWPPP** created for the project, modify the original SWPPP, or develop and implement their own **SWPPP**. **Permittee(s)** shall ensure either directly or through coordination with other **Permittee(s)** that their **SWPPP** meets all terms and conditions of this permit and that their activities do not render another party's **erosion prevention** and **sediment control BMPs** ineffective.

1. As part of the **SWPPP** the **owner** must identify a person knowledgeable and experienced in the application of **erosion prevention** and **sediment control BMPs** who will oversee the implementation of the **SWPPP**, and the installation, inspection and maintenance of the **erosion prevention** and **sediment control BMPs** before and during construction. The **owner** must identify who will have the responsibility for long term operation and maintenance of the Permanent **Stormwater** Management System (see Part III.C.). The **owner** shall develop a chain of responsibility with all **operators** on the site to ensure that the **SWPPP** will be implemented and stay in effect until the construction project is complete, the entire site has undergone **Final Stabilization**, and a **NOT** has been submitted to the MPCA.

2. Training requirements. **Permittee(s)** must comply with these training requirements no later than 18 months after the issuance date of this permit. The **Permittee(s)** shall ensure the individuals identified in this part have been trained in accordance with this Permit's training requirements. The **Permittee(s)** shall ensure the training is recorded in or with the **SWPPP** before the start of construction or as soon as the personnel for the project have been determined.

   a. Who must be trained:

      i. Individual(s) preparing the **SWPPP** for the project.

      ii. Individual(s) overseeing implementation of, revising, and amending the **SWPPP** and individual(s) performing inspections as required in Part IV.E. One of these individual(s) must be available for an on site inspection within 72 hours upon request by the MPCA.

iii. Individual(s) performing or supervising the installation, maintenance and repair of **BMPs**. At least one individual on a project must be trained in these job duties.

b. Training content. The content and extent of training must be commensurate with the individual's job duties and responsibilities with regard to activities covered under this permit for the project. At least one individual present on the permitted project site (or available to the project site in 72 hours) must be trained in the job duties described in Part III.A.2.a.ii and Part III.A.2.a.iii.

c. Training documentation.

i. Documentation must be in or with the **SWPPP** or be available within 72 hours upon request.

ii. Names of the personnel associated with this project that are required to be trained per Part III.A.2.a. of this permit.

iii. Dates of training and name of instructor(s) and entity providing training.

iv. Content of training course or workshop (including number of hours of training).

d. The **Permittee(s)** shall ensure that the individuals are trained by local, state, federal agencies, professional organizations, or other entities with expertise in **erosion prevention**, **sediment control** or permanent **stormwater** management such as the University of Minnesota, Minnesota Erosion Control Association, Soil and Water Conservation Districts or the MPCA.

3. The **SWPPP** must incorporate the requirements of Part III (Stormwater Discharge Design Requirements), Part IV (Construction Activity Requirements) and Appendix A for the project. A narrative describing the timing for installation of all **erosion prevention** and **sediment control BMPs** required in Part III, Part IV and Appendix A must also be included in the **SWPPP**.

4. The **SWPPP** requirements must be incorporated into the project's final plans and specifications and/or project documentation, as appropriate, and must include:

a. Location and type of all temporary and permanent **erosion prevention** and **sediment control BMPs** along with procedures to be used to establish additional temporary **BMPs** as necessary for the site conditions during construction. **Standard plates** and/or specifications for the **BMPs** used on the project must be included in the final plans and specifications for the project.

b. Estimated preliminary quantities tabulation anticipated at the start of the project for the life of the project must be included for all **erosion prevention** and **sediment control BMPs** in the **SWPPP**.

c. The **SWPPP** must include the number of acres of impervious surface for both pre- and post-construction.

d. A site map with existing and final grades, including dividing lines and direction of flow for all pre-and post-construction **stormwater** runoff drainage areas located within the project limits. The site map must also include **impervious surfaces** and soil types.

e. Locations of areas not to be disturbed. Buffer zones, if required in Appendix A. Part C.3, must be described and identified on plan sheets or project maps in the **SWPPP**.

f. Location of areas where construction will be phased to minimize duration of exposed soil areas.

g. All **surface waters** and existing **wetlands**, which can be identified on maps such as United States Geological Survey 7.5 minute quadrangle maps or equivalent maps within one mile from the project boundaries, which will receive **stormwater** runoff from the construction site, during or after construction. Where **surface waters** receiving runoff associated with **construction activity** will not fit on the plan sheet, they must be identified with an arrow, indicating both direction and distance to the **surface water**. The **SWPPP** must identify if the **surface water** is a special or impaired water.

h. Methods to be used for **Final Stabilization** of all exposed soil areas.

5. The **Permittee(s)** must amend the **SWPPP** as necessary to include additional requirements, such as additional or modified **BMPs**, designed to correct problems identified or address situations whenever:

a. There is a change in design, construction, operation, maintenance, weather or seasonal conditions that has a significant effect on the discharge of pollutants to **surface waters** or **underground waters**;

b. Inspections or investigations by site **operators**, local, state or federal officials indicate the **SWPPP** is not effective in eliminating or significantly minimizing the discharge of pollutants to **surface waters** or **underground waters** or that the discharges are causing water quality standard exceedances (e.g. nuisance conditions as defined in Minn. R. 7050.0210, subp. 2); or

c. The **SWPPP** is not achieving the general objectives of minimizing pollutants in **stormwater** discharges associated with **construction activity**, or the **SWPPP** is not consistent with the terms and conditions of this permit.

d. At any time after permit coverage is effective, the MPCA may determine that the project's **stormwater** discharges may cause, have reasonable potential to cause, or contribute to non-attainment of any applicable water quality standard, or that the **SWPPP** does not incorporate the applicable requirements in Part III.A.9, Discharges to Impaired Waters and TMDLs. If MPCA makes such determination(s) or any of the determinations in Parts III.A.5.a.-.c., MPCA will notify the **Permittee(s)** in writing. In response, the **Permittee(s)** must develop a supplemental **BMP** action plan or appropriate **SWPPP** amendments describing **SWPPP** modifications to address the identified concerns and submit information requested by MPCA, which may include an individual permit application. If MPCA's written notification requires a response, failure to respond within the specified timeframe constitutes a permit violation.

6. The **SWPPP** must factor in any findings of and include any **stormwater** mitigation measures required as the result of any environmental, archeological or other required local, state or federal review conducted for the project. For the purposes of this permit provision, mitigation measures mean avoiding, minimizing, rectifying (e.g., repairing, rehabilitating, restoring), reducing, eliminating or compensating for impacts related to: (1) **stormwater** discharges associated with the project's **construction activity**; and (2) **erosion prevention**, **sediment control** and the Permanent **Stormwater** Management System for the project.

7. The **SWPPP** must provide additional measures as necessary to assure compliance with **surface and ground water** standards in Minn. R. chs. 7050 and 7060 in karst areas and to ensure protection of drinking water supply management areas (see Minn. R. 4725.4450).

8. If runoff from the site discharges to a calcareous fen listed in Minn. R. 7050.0180, subp. 6b, and a letter of approval from the Minnesota Department of Natural Resources (DNR) has been obtained, this must be documented in the **SWPPP** for the project. Any additional **stormwater** mitigation measures contained in the DNR approval letter must be incorporated into the **SWPPP** for the project. If the DNR does not respond to the request for a letter of approval within 30 calendar days, this must be documented in the SWPPP for the project.

9. Discharges to Impaired Waters and TMDLs

   This part describes the requirements for projects that have a discharge point on the project that is within one mile of, and flows to, an impaired water that is identified on the most recent USEPA approved list of impaired waters. Impaired waters for the purposes of this permit are those waters identified as impaired pursuant to section 303(d) of the Clean Water Act where the identified pollutant(s) or stressor(s) are phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen, or biotic impairment (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment), and a TMDL is either required, or complete and USEPA approved, for any of the identified pollutant(s) or stressor(s).

   a. Requirements for Discharges to Impaired Waters

      For projects that have a discharge point on the project that is within one mile of, and flows to, an impaired water, the **Permittee(s)** must identify the impaired water(s) in the **SWPPP**, and whether there is a USEPA approved TMDL for the pollutant(s) or stressor(s) identified in this part. Unless otherwise notified by the MPCA in writing, the **Permittee(s)** identification of impaired waters must be based on the most recent USEPA approved section 303(d) Clean Water Act list of impaired waters and USEPA approved TMDLs at the time a complete permit application is submitted. The **Permittee(s)** identification must include those TMDLs applicable to the project's **stormwater** discharge that were approved at any time prior to permit application submittal and are still in effect.

   b. Impaired Water Without an Approved TMDL or With an Approved TMDL and No Waste Load Allocation

      If runoff from the site discharges to an impaired water, and a TMDL has not been approved by USEPA or there is a USEPA approved TMDL that does not establish a Waste Load Allocation (WLA) for construction **stormwater**, the **Permittee(s)** must incorporate into their **SWPPP**, and implement, the additional **BMPs** in Appendix A, Part C.1 and C.2.

c. Impaired Water With an Approved TMDL and WLA

If runoff from the site discharges to an impaired water for which there is a USEPA approved TMDL that establishes a WLA for construction **stormwater**, and the TMDL does not identify any specific implementation activities that would apply to the site discharges, the **Permittee(s)** must incorporate into their **SWPPP**, and implement, the additional BMPs in Appendix A, Part C.1 and C.2. If the TMDL identifies specific implementation activities regarding construction stormwater that would apply to the site discharges, the Permittee(s) must include the following in the **SWPPP**:

i. Identify the receiving water, the areas of the site discharging to it, and the pollutant(s) identified in the TMDL; and

ii. **BMPs** identified in the TMDL and any other specific construction stormwater related implementation activities identified in the TMDL.

B. TEMPORARY SEDIMENT BASINS

Where ten (10) or more acres of disturbed soil drain to a common location, a temporary (or permanent) sediment basin must be provided prior to the runoff leaving the construction site or entering **surface waters**. The **Permittee** is encouraged, but not required, to install temporary sediment basins where appropriate in areas with steep slopes or highly erodible soils even if less than ten (10) acres drains to one area. The basins must be designed and constructed according to the following requirements:

1. The basins must provide storage below the outlet pipe for a calculated volume of runoff from a two (2) year, 24 hour storm from each acre drained to the basin, except that in no case shall the basin provide less than 1800 cubic feet of storage below the outlet pipe from each acre drained to the basin.

2. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage below the outlet pipe per acre drained to the basin, shall be provided where attainable until **permanent cover** is established for the entire drainage area of the temporary basin.

3. Temporary basin outlets must be designed to prevent short-circuiting and the discharge of floating debris. The basin must be designed with the ability to allow complete basin drawdown (e.g., perforated riser pipe wrapped with filter fabric and covered with crushed gravel, pumps or other means, see Part IV.D.) for maintenance activities, and provide a **stabilized** emergency overflow to prevent failure of pond integrity. **Energy dissipation** must be provided for the basin outlet (see Part IV.B.4).

4. The temporary (or permanent) basins must be constructed and made operational concurrent with the start of soil disturbance that is upgradient of the area and contributes runoff to the pond.

5. Where the temporary sediment basin is not attainable due to site limitations, equivalent **sediment controls** such as smaller sediment basins, and/or sediment traps, silt fences, vegetative buffer strips, or any appropriate combination of measures are required for all down slope boundaries of the construction area and for those side slope boundaries deemed appropriate as dictated by

individual site conditions. In determining whether installing a sediment basin is attainable, the **Permittee** must consider public safety and may consider factors such as site soils, slope, and available area on site. This determination must be documented in the **SWPPP**.

C. PERMANENT STORMWATER MANAGEMENT SYSTEM

All **stormwater** must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on downslope properties, or inundation in **wetlands** causing a significant adverse impact to the **wetlands**.

Where a project's ultimate development replaces vegetation and/or other pervious surfaces with one or more acres of cumulative **impervious surface**, a **water quality volume** of ½ inch of runoff from the new **impervious surfaces** created by the project must be treated by one of the methods outlined in Part III.C.1 through Part III.C.5 prior to the runoff leaving the construction site or entering **surface waters** (excluding man made drainage systems that convey **stormwater** to a constructed permanent **stormwater** management facility designed to treat the **water quality volume** from the project).

For those areas of a project where there is no feasible way to meet the treatment requirement for the **water quality volume**, other treatment such as grassed swales, smaller ponds or grit chambers is required prior to discharge to **surface waters**. A cumulative maximum of three (3) acres or 1% of project size whichever is larger can be treated in this manner.

Where the proximity to bedrock precludes the installation of any of the permanent **stormwater** management practices outlined in Part III.C., other treatment, such as grassed swales, smaller ponds, or grit chambers, is required prior to discharge to **surface waters**.

For work on linear projects where the lack of right of way precludes the installation of any of the permanent **stormwater** management practices outlined in Part III.C., other treatment such as grassed swales, smaller ponds, or grit chambers, is required prior to discharge to **surface waters**. A reasonable attempt must be made to obtain right of way during the project planning process. Documentation of these attempts must be in the **SWPPP** for the project or made available upon request within 72 hours.

1. Wet Sedimentation Basin

   a. The basin must have a permanent volume of 1800 cubic feet of storage below the outlet pipe for each acre that drains to the basin. The basin's permanent volume must reach a minimum depth of at least 3 feet and must have no depth greater than 10 feet. The basin must be configured such that scour or resuspension of solids is minimized.

   b. The basin's **water quality volume** is calculated as ½ inch of runoff from the new **impervious surfaces** created by the project.

   c. Basin outlets shall be designed such that the **water quality volume** is discharged at no more than 5.66 cubic feet per second (cfs) per acre of surface area of the pond.

   d. Basin outlets must be designed to prevent short-circuiting and the discharge of floating debris. Basin outlets must have **energy dissipation**.

e. The basin must provide a **stabilized** emergency overflow to accommodate storm events in excess of the basin's hydraulic design.

f. Adequate maintenance access must be provided (typically 8 ft. wide) along with a maintenance plan identifying whom will be performing future maintenance of the basin.

2. Infiltration/Filtration

Infiltration/Filtration options include but are not limited to: infiltration basins, infiltration trenches, rainwater gardens, sand filters, organic filters, bioretention areas, enhanced swales, dry storage ponds with underdrain discharge, off-line retention areas, and natural depressions. Infiltration must be used only as appropriate to the site and land uses. Settleable solids, floating materials, oils and grease should be removed from the runoff to the maximum extent practicable before runoff enters the infiltration/filtration system. Filtration systems must have a reasonable chance of achieving approximately 80% removal of total suspended solids. The **Permittee(s)** must evaluate the impact of constructing an infiltration practice on existing hydrologic features (e.g., existing **wetlands**) and try to maintain pre-existing conditions (e.g., do not breach a perched water table which is supporting a **wetland**). For a discussion of potential stormwater hotspots, ground water warnings, design measures, maintenance considerations or other retention, detention, and treatment devices, see the **Minnesota Stormwater Manual** or MPCA's **Protecting Water Quality in Urban Areas** found on the MPCA's web-site.

a. Infiltration systems should not be excavated to final grade until the contributing drainage area has been constructed and fully **stabilized**.

b. During construction of an infiltration system, rigorous **erosion prevention** and **sediment controls** (e.g., diversion berms) should be used to keep sediment and runoff completely away from the infiltration area. The area must be staked off and marked so that heavy construction equipment will not compact the soil in the proposed infiltration area.

c. To prevent clogging of the infiltration or filtration system, a pretreatment device such as a vegetated filter strip, small sedimentation basin, or water quality inlet (e.g., grit chamber) must be used to settle particulates before the **storm water** discharges into the infiltration or filtration system.

d. Infiltration or filtration systems shall be sufficient to infiltrate or filter a **water quality volume** of ½ inch of runoff from the new **impervious surfaces** created by the project.

e. The **water quality volume** shall discharge through the soil surface or filter media in 48 hours or less. Additional flows that cannot be infiltrated or filtered in 48 hours should be routed to bypass the system through a **stabilized** discharge point. A way to visually verify that the system is operating as designed must be provided.

f. Appropriate on-site testing consistent with the recommendations found in the **Minnesota Stormwater Manual** shall be conducted to ensure a minimum of 3 feet of separation from the seasonally **saturated soils** (or from bedrock) and the bottom of the proposed infiltration system. Calculations or computer model results that demonstrate the design adequacy of the infiltration system must be included as part of the **SWPPP**.

g. Adequate maintenance access must be provided (typically 8 ft. wide) along with a maintenance plan identifying whom will be performing future maintenance of the infiltration or filtration system.

h. Use of designed infiltration systems receiving runoff from vehicle fueling and maintenance areas is prohibited.

3. Regional Ponds

Regional ponds can be used provided that they are constructed ponds, not a natural **wetland** or water body, (**wetlands** used as regional ponds must be mitigated for, see Appendix A) and designed in accordance with this permit's design requirements (see Part III.C.1) for all water from **impervious surfaces** that reach the pond. **Permittee(s)** shall not construct regional ponds in **wetlands**, regardless of their condition, quality or designation by local plans, unless the mitigative sequence in Appendix A. D. of this permit has been completed. There must be no significant degradation of the waterways between the project and the regional pond. The **owner** must obtain written authorization from the applicable local governmental unit (LGU) or private entity that owns and maintains the regional pond. The LGU's or private entity's written authorization must identify that the regional pond will discharge the **water quality volume** (½ inch of runoff from the impervious watershed area) at no more than 5.66 cfs per acre of surface area of the pond. The **owner** must include the LGU's or private entities' written authorization in the **SWPPP**. The LGU's or private entity's written authorization must be obtained before the **owner** finalizes the **SWPPP** and before any application for this permit is made to the MPCA.

4. Combination of Practices

A combination of practices, including those required by a LGU, which meet the requirements of Part III.C.1, 2 and 3 respectively, (i.e., wet sedimentation basins, infiltration/filtration, and regional ponds) may be used such that the **water quality volume** of ½ inch of runoff from the new **impervious surfaces** created by the project is accounted for in the **owner's** permanent **storm water** management system (e.g., ¼ inch infiltrated and ¼ inch treated through a wet sedimentation basin). If any combination of these practices is used, the **SWPPP** must contain documentation (e.g., LGU or private entity's authorization, infiltration computer model results or calculations, etc.) identifying the volume that each practice addresses.

5. Alternative Method

Where an alternative, innovative treatment system is proposed and demonstrated by calculation, design or other independent methods to achieve approximately 80% removal of total suspended solids on an annual average basis, the **Commissioner** will approve the method if the process outlined in Part II.B.3.c. is completed, and the following information is submitted:

a. All calculations, drainage areas, plans, and specifications for the proposed alternative method and a graphic representation of the area to be served by the method. These items must be included in the **SWPPP** and submitted to the MPCA at least 90 days prior to the proposed starting date of the **construction activity**.

b. A two (2) year monitoring plan to sample runoff from the proposed method. The plan must include a discussion of the methods used to collect samples, location where samples will be taken (upstream and downstream of the proposed method), frequency of samples (minimum of six runoff events sampled), identify lab used to analyze the samples and quality assurance and quality control methods to be used. The plan must include a schedule for submitting the monitoring data annually.

c. A mitigation plan that addresses how the **water quality volume** will be treated in the event that the monitoring data shows the proposed alternative treatment method does not function as designed.

d. The alternative method must achieve approximately 80% removal of total suspended solids on an average annual basis for the conditions expected at the site. The design must also consider public safety, health and water quality concerns. Proprietary information on effectiveness will not be considered for alternative treatment method review and approval.

No **construction activity** on the project is covered under this permit until the applicant receives an alternative treatment approval letter from the MPCA as described in Part II.B.3.c.

D. RECORD RETENTION

The **SWPPP** (original or copies) including, all changes to it, and inspections and maintenance records must be kept at the site during construction by the **Permittee** who has operational control of that portion of the site. The **SWPPP** can be kept in either the field office or in an on site vehicle during normal working hours.

All **owner(s)** must keep the **SWPPP**, along with the following additional records, on file for three (3) years after submittal of the **NOT** as outlined in Part II.C. This does not include any records after submittal of the **NOT**.

1. Any other permits required for the project;

2. Records of all inspection and maintenance conducted during construction (see Part IV.E. Inspections and Maintenance);

3. All permanent operation and maintenance agreements that have been implemented, including all right of way, contracts, covenants and other binding requirements regarding perpetual maintenance; and

4. All required calculations for design of the temporary and Permanent **Stormwater** Management Systems.

PART IV. CONSTRUCTION ACTIVITY REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN

The **Permittee(s)** must implement the **SWPPP** and the requirements of this part. The **BMPs** identified in the **SWPPP** and in this permit must be selected, installed, and maintained in an appropriate and functional manner that is in accordance with relevant manufacturer specifications and accepted engineering practices.

B. EROSION PREVENTION PRACTICES

1. The **Permittee(s)** must plan for and implement appropriate construction phasing, vegetative buffer strips, horizontal slope grading, and other construction practices that minimize erosion, so that the inspection and maintenance requirements of Part IV.E. are complied with. The location of areas not to be disturbed must be delineated (e.g. with flags, stakes, signs, silt fence etc.) on the development site before work begins.

2. All exposed soil areas must be **stabilized** as soon as possible to limit soil erosion but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) and the constructed base components of roads, parking lots and similar surfaces are exempt from this requirement but must comply with Part IV.C.5.

3. The **normal wetted perimeter** of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts water around the site, must be **stabilized** within 200 lineal feet from the property edge, or from the point of discharge into any **surface water**. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a **surface water**.

   Stabilization of the remaining portions of any temporary or permanent ditches or swales must be complete within 14 days after connecting to a **surface** water and construction in that portion of the ditch has temporarily or permanently ceased.

   Temporary or permanent ditches or swales that are being used as a sediment containment system (with properly designed rock ditch checks, bio rolls, silt dikes etc.) do not need to be **stabilized**. These areas must be **stabilized** within 24 hours after no longer being used as a sediment containment system.

4. Pipe outlets must be provided with temporary or permanent **energy dissipation** within 24 hours after connection to a **surface water**.

C. SEDIMENT CONTROL PRACTICES

1. **Sediment control** practices must minimize sediment from entering **surface waters**, including curb and gutter systems and storm sewer inlets.

   a. Temporary or permanent drainage ditches and sediment basins that are designed as part of a sediment containment system (e.g., ditches with rock check dams) require **sediment control** practices only as appropriate for site conditions.

   b. If the down gradient treatment system is overloaded, additional upgradient **sediment control** practices or redundant BMPs must be installed to eliminate the overloading, and the **SWPPP** must be amended to identify these additional practices as required in Part III.A.4, a. through c.

   c. In order to maintain sheet flow and minimize rills and/or gullies, there shall be no unbroken slope length of greater than 75 feet for slopes with a grade of 3:1 or steeper.

2. **Sediment control** practices must be established on all down gradient perimeters before any upgradient land disturbing activities begin. These practices shall remain in place until **Final Stabilization** has been established in accordance with Part IV.G.

3. The timing of the installation of **sediment control** practices may be adjusted to accommodate short-term activities such as clearing or grubbing, or passage of vehicles. Any short-term activity must be completed as quickly as possible and the **sediment control** practices must be installed immediately after the activity is completed. However, **sediment control** practices must be installed before the next precipitation event even if the activity is not complete.

4. All storm drain inlets must be protected by appropriate **BMPs** during construction until all sources with potential for discharging to the inlet have been **stabilized**. Inlet protection may be removed for a particular inlet if a specific safety concern (street flooding/freezing) has been identified and the **Permittee(s)** have received written correspondence from the jurisdictional authority (e.g. city/county/township/MnDOT engineer) verifying the need for removal. The written correspondence must be documented in the **SWPPP** or available within 72 hours upon request. When written correspondence can not be obtained in a timely manner, the specific inlet protection can be removed to alleviate the immediate safety concern. However, efforts to obtain written correspondence must be documented in the SWPPP and available within 72 hours upon request. Permission to remove inlet protection based on a specific safety concern must still be obtained from the jurisdictional authority within 30 days of removal.

5. Temporary soil stockpiles must have silt fence or other effective **sediment controls**, and cannot be placed in **surface waters**, including **stormwater** conveyances such as curb and gutter systems, or conduits and ditches unless there is a bypass in place for the stormwater.

6. Vehicle tracking of sediment from the construction site (or onto streets within the site) 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 (see Part IV.E.4.d.).

7. The **Permittee** must install temporary sedimentation basins as required in Part III.B. of this permit.

D. DEWATERING AND BASIN DRAINING

1. **Dewatering** or basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) related to the **construction activity** that may have turbid or sediment laden discharge water must be discharged to a temporary or permanent sedimentation basin on the project site whenever possible. Discharge from the temporary or permanent sedimentation basin must be visually checked to ensure adequate treatment is obtained in the basin and that nuisance conditions (see Minn. R. 7050.0210, subp. 2) will not result from the discharge. If the water cannot be discharged to a sedimentation basin 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. The **Permittee(s)** must ensure that discharge points are adequately protected from erosion and scour. The discharge must be dispersed over natural rock riprap, sand bags, plastic sheeting, or other accepted **energy dissipation** measures. Adequate sedimentation control measures are required for discharge water that contains suspended solids.

2. All water from **dewatering** or basin draining activities must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on downslope properties, or inundation in **wetlands** causing significant adverse impact to the **wetland.**

E. INSPECTIONS AND MAINTENANCE

1. The **Permittee(s)** (either the **owner** or **operator**, whoever is identified in the **SWPPP**) must routinely inspect the entire construction site at least once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours. Following an inspection which occurs within 24 hours after a rainfall event, the next inspection must be conducted within seven (7) days after that.

2. All inspections and maintenance conducted during construction must be recorded in writing and these records must be retained with the **SWPPP** in accordance with Part III.D. Records of each inspection and maintenance activity shall include:

   a. Date and time of inspections;

   b. Name of person(s) conducting inspections;

   c. Findings of inspections, including recommendations for corrective actions;

   d. Corrective actions taken (including dates, times, and party completing maintenance activities);

   e. Date and amount of all rainfall events greater than 1/2 inch (0.5 inches) in 24 hours;

   f. Documentation of changes made to the **SWPPP** as required in Part III.A.4; and

3. Where parts of the construction site have **permanent cover**, but work remains on other parts of the site, inspections of the areas with **permanent cover** may be reduced to once per month. Where construction sites have **permanent cover** on all exposed soil areas and no construction activity is occurring anywhere on the site, the site must be inspected for a period of twelve (12) months (the inspections may be ceased during frozen ground conditions). Following the twelfth month of **permanent cover** and no **construction activity**, inspections may be terminated until construction activity is once again initiated or sooner if notified in writing by the MPCA. Where work has been suspended due to frozen ground conditions, the required inspections and maintenance schedule must begin within 24 hours after runoff occurs at the site or prior to resuming construction, whichever comes first.

4. All **erosion prevention** and **sediment control BMPs** must be inspected to ensure integrity and effectiveness. All nonfunctional **BMPs** must be repaired, replaced, or supplemented with functional **BMPs** within 24 hours after discovery, or as soon as field conditions allow access unless another time frame is specified below. The **Permittee(s)** must investigate and comply with the following inspection and maintenance requirements:

   a. All silt fences must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/3 of the height of the fence. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access.

   b. Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches 1/2 the storage volume. Drainage and removal must be completed within 72 hours of discovery, or as soon as field conditions allow access (see Part IV.D.).

   c. **Surface waters**, including drainage ditches and conveyance systems, must be inspected for evidence of erosion and sediment deposition. The **Permittee(s)** must remove all deltas and sediment deposited in **surface waters**, including drainage ways, catch basins, and other drainage systems, and restabilize the areas where sediment removal results in exposed soil. The removal and stabilization must take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints. The **Permittee** shall use all

reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) calendar days of obtaining access. The **Permittee** is responsible for contacting all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work.

d. Construction site vehicle exit locations must be inspected for evidence of off-site sediment tracking onto paved surfaces. Tracked sediment must be removed from all paved surfaces, within 24 hours of discovery, or if applicable, within a shorter time to comply with Part IV.C.6.

e. The **Permittee(s)** are responsible for the operation and maintenance of temporary and permanent water quality management **BMPs**, as well as all **erosion prevention** and **sediment control BMPs**, for the duration of the construction work at the site. The **Permittee(s)** are responsible until another **Permittee** has assumed control according to Part II.B.5 over all areas of the site that have not been finally **stabilized** or the site has undergone **Final Stabilization**, and a **NOT** has been submitted to the MPCA.

f. If sediment escapes the construction site, 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).

5. All infiltration areas must be inspected to ensure that no sediment from ongoing **construction activity** is reaching the infiltration area and these areas are protected from compaction due to construction equipment driving across the infiltration area.

F. POLLUTION PREVENTION MANAGEMENT MEASURES

The **Permittee(s)** shall implement the following pollution prevention management measures on the site:

1. Solid Waste: Collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other wastes must be disposed of properly and must comply with MPCA disposal requirements.

2. Hazardous Materials: Oil, gasoline, paint and any hazardous substances must be properly stored, including secondary containment, to prevent spills, leaks or other discharge. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with MPCA regulations.
3. External washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff must be contained and waste properly disposed of. No engine degreasing is allowed on site.

4. Concrete washout onsite: All liquid and solid wastes generated by concrete washout operations must be contained in a leak-proof containment facility or impermeable liner. A compacted clay liner that does not allow washout liquids to enter ground water is considered an impermeable liner. The liquid and solid wastes must not contact the ground, and there must not be runoff from the concrete washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA regulations. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.

G. FINAL STABILIZATION

The **Permittee(s)** must ensure **Final Stabilization** of the site. **Final Stabilization** requires all of Parts IV.G.1-5 or Part IV.G.6:

1. **Final Stabilization** requires that all soil disturbing activities at the site have been completed and all soils must be **stabilized** by a uniform perennial vegetative cover with a density of 70% over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions.

2. The **Permittee(s)** must ensure that the permanent **stormwater** treatment system meets all requirements in Part III, C. This includes but is not limited to, a final clean out of temporary or permanent sedimentation basins that are to be used as permanent water quality management basins and final construction or maintenance of infiltration basins. All sediment must be removed from conveyance systems and ditches must be **stabilized** with **permanent cover**.

3. Prior to submission of the **NOT**, all temporary synthetic and structural **erosion prevention** and **sediment control BMPs** (such as silt fence) must be removed on the portions of the site for which the **Permittee** is responsible. **BMPs** designed to decompose on site (such as some compost logs) may be left in place.

4. For residential construction only, individual lots are considered finally **stabilized** if the structure(s) are finished & **temporary erosion protection** and downgradient perimeter control has been completed and the residence has been sold to the homeowner. Additionally, the **Permittee** must distribute the MPCA's "**Homeowner Fact Sheet**" to the homeowner to inform the homeowner of the need for, and benefits of, **permanent cover**.

5. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land) **Final Stabilization** may be accomplished by returning the disturbed land to its preconstruction agricultural use.

6. A **Permittee** may terminate permit coverage prior to completion of all **construction activity** if all of the following conditions are met in addition to Part IV.G.2 through Part IV.G.3 and where applicable, Part IV.G.4 or Part IV.G.5.

   a. **Construction activity** has ceased for at least 90 days.

   b. At least 90% (by area) of all originally proposed **construction activity** has been completed and **permanent cover** established on those areas.

   c. On areas where **construction activity** is not complete, **permanent cover** has been established.

PART V. GENERAL PROVISIONS

A. APPLICABILITY CRITERIA

1. If the **Commissioner** determines that **stormwater** discharges associated with a **construction activity** are contributing to a violation of a water quality standard or would be more appropriately regulated by an individual permit, the **Commissioner** may require the **owner** to be covered by an individual **stormwater** discharge permit. The **Commissioner** may require the **owner** to develop and implement specific **BMPs** and monitor the discharge from the site. If applicable, upon issuance of an individual permit, this general permit would no longer apply.

2. If the terms and conditions of this general permit cannot be met, an **owner** may request an individual permit, in accordance with Minn. R. 7001.

3. Any interested person may petition the MPCA to require an individual NPDES/SDS permit in accordance with 40 CFR 122.28(b)(3).

B. RESPONSE

The **SWPPP**, including all certificates, reports, records, or other information required by this permit, must be made available to federal, state, and local officials within 72 hours upon request for the duration of the permit and for three years following the **NOT**. This does not include any records after submittal of the **NOT**.

C. PROHIBITIONS

This permit prohibits discharges of any material other than **stormwater,** and discharges from **dewatering** or basin draining activities in accordance with Part IV.D.1 and 2. For example, prohibited discharges include but are not limited to vehicle and equipment washing, maintenance spills, wash water, and discharges of oil and other hazardous substances.

D. TRANSFER OF OWNERSHIP OR CONTROL

This permit may not be assigned or transferred by the permit holder except when transfer occurs in accordance with the applicable requirements of Part II.B.5.

E. CIVIL AND CRIMINAL LIABILITY

Nothing in this permit must be construed to relieve the **Permittee(s)** from civil or criminal penalties for noncompliance with the terms and conditions provided herein. Nothing in this permit must be construed to preclude the initiation of any legal action or relieve the **Permittee(s)** from any responsibilities, liabilities, or penalties to which the **Permittee(s)** is or may be subject to under Section 311 of the Act and Minn. Stat. chs. 115 and 116, as amended. The **Permittee(s)** are not liable for permit requirements for activities occurring on those portions of a site where another party has submitted a notice of termination/permit modification form as described in Part II. B.5.b or the permittee has submitted the notice of termination/permit modification form as described in Part II.C.2.b except for monitoring responsibilities listed under Part III.C.5 if applicable.

F. SEVERABILITY

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit must not be affected thereby.

G. NPDES/SDS RULE STANDARD CONDITIONS

The **Permittee(s)** must comply with the provisions of Minn. R. 7001.0150, subp. 3 and Minn. R. 7001.1090, subp. 1(A), 1(B), 1(C), 1(H), and 1(I). This permit does not require the submittal of a data monitoring report, except where monitoring is required in Part III.C.5.

H. INSPECTION AND ENTRY

The **Permittee(s)** must comply with the provisions of 40 CFR 122.41(i), Minn. Stat. ch. 115.04 and Minn. Stat. ch. 115B.17. The **Permittee(s)** shall allow representatives of the MPCA or any member, employee or agent thereof, when authorized by it, upon presentation of credentials, to enter upon any property, public or private, for the purpose of obtaining information or examination of records or conducting surveys or investigations.

APPENDIX A

A. GENERAL REQUIREMENTS

All requirements in this Appendix are in addition to **BMPs** already specified in the permit. Where provisions of Appendix A conflict with requirements elsewhere in the permit, the provisions in Appendix A take precedence. All **BMPs** used to comply with this Appendix must be documented in the **SWPPP** for the project. If the terms and conditions of this Appendix cannot be met, an individual permit will be required in accordance with Minn. R. ch. 7001.

B. REQUIREMENTS FOR DISCHARGES TO SPECIAL WATERS AND IMPAIRED WATERS

Additional **BMPs** together with enhanced runoff controls are required for discharges to the following special waters (part B.1 through B.8 of Appendix A) and impaired waters (part B.9 of Appendix A). The **BMPs** identified for each special or impaired water are required for those areas of the project draining to a discharge point on the project that is within one mile of a special or impaired water and flows to that special or impaired water.

1. **Wilderness areas:** Boundary Waters Canoe Area Wilderness; Voyageurs National Park; Kettle River from the site of the former dam at Sandstone to its confluence with the Saint Croix River; Rum River from Ogechie Lake spillway to the northernmost confluence with Lake Onamia. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2, C.3 and C.4 of this Appendix.

2. **Mississippi River:** Those portions from Lake Itasca to the southerly boundary of Morrison County that are included in the Mississippi Headwaters Board comprehensive plan dated February 12, 1981. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2 and C.3 of this Appendix.

3. **Scenic or recreational river segments:** Saint Croix river, entire length; Cannon River from northern city limits of Faribault to its confluence with the Mississippi River; North Fork of the Crow River from Lake Koronis outlet to the Meeker-Wright county line; Kettle River from north Pine County line to the site of the former dam at Sandstone; Minnesota River from Lac qui Parle dam to Redwood County state aid highway 11; Mississippi River from county state aid highway 7 bridge in Saint Cloud to northwestern city limits of Anoka; and Rum River from state aid Highway 27 bridge in Onamia to Madison and Rice streets in Anoka. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2 and C.3 of this Appendix.

4. **Lake Superior:** (Prohibited and restricted.) Discharges to Lake Superior must incorporate the **BMPs** outlined in C.1, C.2 and C.3 of this Appendix.

5. **Lake Trout Lakes:** Identified in Minn. R. 7050.0470, including those inside the boundaries of the Boundary Waters Canoe Area Wilderness and Voyageurs National Park. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2, C.3 and C.4 of this Appendix.

6. **Trout Lakes:** Identified in Minn. R. 6264.0050, subp. 2. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2, C.3, and C.4 of this Appendix.

7. **Scientific and natural areas:** Boot Lake, Anoka County; Kettle River in sections 15, 22, 23, T 41 N, R 20, Pine County; Pennington Bog, Beltrami County; Purvis Lake-Ober Foundation, Saint Louis County; Waters within the borders of Itasca Wilderness Sanctuary, Clearwater County; Iron Springs Bog, Clearwater County; Wolsfeld Woods, Hennepin County; Green Water Lake, Becker County; Blackdog Preserve, Dakota County; Prairie Bush Clover, Jackson County; Black Lake Bog, Pine County; Pembina Trail Preserve, Polk County; and Falls Creek, Washington County. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2, C.3 and C.4 of this Appendix.

8. **Trout Streams:** Listed in Minn. R. 6264.0050, subp. 4. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2, C.3, and C.5 of this Appendix.

9. **Impaired Waters**: waters identified as impaired under section 303 (d) of the federal Clean Water Act for phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen or aquatic biota (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment). Discharges to these waters must incorporate the **BMPs** outlined in C.1 and C.2 of this Appendix.

Note on impaired waters listing terminology: The terms in parenthesis in Appendix A Part B.9 above are the most current terminology used to list waters as impaired at the time of permit issuance. These terms are subject to change. For example, at one time waters were listed as impaired for phosphorus and now those same waters are listed as impaired for nutrient eutrophication biological indicators. If the terminology changes for one of the pollutant(s) or stressor(s) identified in the permit, the MPCA will keep a list of the new terms on its construction **stormwater** web site.

C. ADDITIONAL BMPS FOR SPECIAL WATERS AND IMPAIRED WATERS

For the BMPs described in C.2, C.4 and C.5 of this Appendix:

Where the proximity to bedrock precludes the installation of any of the permanent **stormwater** management practices outlined in Appendix A, other treatment such as grassed swales, smaller ponds, or grit chambers is required prior to discharge to **surface waters**.

For work on linear projects where the lack of right of way precludes the installation of any of the permanent **stormwater** management practices outlined in Appendix A, other treatment such as grassed swales, smaller ponds, or grit chambers is required prior to discharge to **surface waters**.

1. During construction.

   a. All exposed soil areas must be **stabilized** as soon as possible to limit soil erosion but in no case later than seven (7) days after the **construction activity** in that portion of the site has temporarily or permanently ceased.

   b. Temporary sediment basin requirements described in Part III.B.1-5 must be used for common drainage locations that serve an area with five (5) or more acres disturbed at one time.

2. Post construction. The **water quality volume** that must be treated by the project's permanent **stormwater** management system described in Part III.C. shall be one (1) inch of runoff from the new **impervious surfaces** created by the project. Where site conditions allow, at least ½ inch of the **water quality volume** must be infiltrated. See Part III.C.2 for more information on infiltration design and appropriate site conditions. If it is determined that site conditions are not appropriate for infiltration (e.g. lack of 3 ft. of separation to seasonally saturated ground water, proximity to bedrock, contaminated soils) the reasons should be documented in the **SWPPP** for the project. Infiltration is not required in Hydrologic Soil Group D soils.

3. Buffer zone. An undisturbed buffer zone of not less than 100 linear feet from the special water (not including tributaries) shall be maintained at all times. Exceptions from this requirement for areas, such as water crossings, limited water access and restoration of the buffer are allowed if the **Permittee** fully documents in the **SWPPP** the circumstances and reasons that the buffer encroachment is necessary. Replacement of existing impervious surface within the buffer is allowed under this permit. All potential water quality, scenic and other environmental impacts of these exceptions must be minimized by the use of additional or redundant **BMPs** and documented in the **SWPPP** for the project.

4. Enhanced runoff controls. The Permanent **Stormwater** Management System must be designed such that the pre-and post-project runoff rate and volume from the 1 and 2-year 24-hour precipitation events remain the same or are reduced.

5. Temperature Controls. The Permanent **Stormwater** Management System must be designed such that the discharge from the project will minimize any increase in the temperature of trout stream receiving waters resulting from the 1-and 2-year 24-hour precipitation events. This includes all tributaries of designated trout streams within the section that the trout stream is located. Projects that discharge to trout streams must minimize the impact using one or more of the following measures, in order of preference:

   a. Minimize new **impervious surfaces**.

   b. Minimize the discharge from connected **impervious surfaces** by discharging to vegetated areas, or grass swales, and through the use of other non-structural controls.

   c. Infiltration or evapotranspiration of runoff in excess of pre-project conditions (up to the 2-year 24-hour precipitation event).

d. If ponding is used, the design must include an appropriate combination of measures such as shading, filtered bottom withdrawal, vegetated swale discharges or constructed **wetland** treatment cells that will limit temperature increases. The pond should be designed to draw down in 24 hours or less.

e. Other methods that will minimize any increase in the temperature of the trout stream.

D. REQUIREMENTS FOR DISCHARGING TO WETLANDS

If the project 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(s)** must demonstrate that the **wetland** mitigative sequence has been followed in accordance with D.1 or D.2 of this appendix.

1. If the potential adverse impacts to a **wetland** on a specific project site have been addressed by permits or other approvals from an official statewide program (U.S. Army Corps of Engineers 404 program, Minnesota DNR, or the State of Minnesota Wetland Conservation Act) that are issued specifically for the project and project site, the **Permittee** may use the permit or other determination issued by these agencies to show that the potential adverse impacts have been addressed. For the purposes of this permit, deminimus actions are determinations by the permitting agency that address the project impacts, whereas a non-jurisdictional determination does not address project impacts.

2. If there are impacts from the project that are not addressed in one of the permits or other determinations discussed in Appendix A, Part D.1 (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 the project and post-project discharge.

   b. Minimize any unavoidable impacts from the project and post-project discharge.

   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**.

E. DISCHARGES REQUIRING ENVIRONMENTAL REVIEW

This permit does not replace or satisfy any environmental review requirements, including those under the Minnesota Environmental Policy Act or the National Environmental Policy Act. The **owner** must verify that any environmental review required by law, including any required Environmental Assessment Work Sheets or Environmental Impact Statements, Federal environmental review, or other required review is complete, and the **owner** must incorporate any **stormwater** mitigation measures required as the result of any environmental review into the **SWPPP** for the project. If any part of your common plan of development or sale requires environmental review, coverage under this permit can not be obtained until such environmental review is complete.

F. DISCHARGES AFFECTING ENDANGERED OR THREATENED SPECIES

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 designated critical habitat. The **owner** must conduct any required review and coordinate with appropriate agencies for any project with the potential of affecting threatened or endangered species, or their critical habitat.

G. DISCHARGES AFFECTING HISTORIC PLACES OR 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 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.

APPENDIX B. - DEFINITIONS

1. "**Best Management Practices (BMPs)**" means **erosion prevention** and **sediment control,** and water quality management practices that are the most effective and practicable means of controlling, preventing, and minimizing degradation of **surface water**, including avoidance of impacts, construction-phasing, minimizing the length of time soil areas are exposed, prohibitions, and other management practices published by state or designated area-wide planning agencies.

   Individual **BMPs** found in this permit are described in the current version of **Protecting Water Quality in Urban Areas**, Minnesota Pollution Control Agency 2000. **BMPs** must be adapted to the site and can be adopted from other sources. However, they must be similar in purpose and at least as effective and stringent as MPCA's **BMPs**. (Other sources include manufacturers specifications, **Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices**, U.S. Environmental Protection Agency 1992, and **Erosion Control Design Manual**, Minnesota Department of Transportation, et al, 1993).

2. **"Commissioner"** means the **Commissioner** of the MPCA or the **Commissioner's** designee.

3. **"Common Plan of Development or Sale"** means a contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur.

4. "**Construction Activity**" includes **construction activity** as defined in 40 C.F.R. pt. 122.26(b)(14)(x) and **small construction activity** as defined in 40 C.F.R. pt. 122.26(b)(15). This includes a disturbance to the land that results in a change in the topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated **stormwater** runoff, leading to soil erosion and movement of sediment into **surface waters** or drainage systems. Examples of **construction activity** may include clearing, grading, filling, and excavating. **Construction activity** includes the disturbance of less than one acre of total land area that is a part of a larger **common plan of development or sale** if the larger common plan will ultimately disturb one (1) acre or more.

5. **"Dewatering"** means the removal of water for **construction activity**. It can be a discharge of appropriated surface or groundwater to dry and/or solidify a construction site. It may require Minnesota DNR permits to be appropriated and if contaminated may require other MPCA permits to be discharged.

6. "**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.

7. **"Erosion Prevention"** means measures employed to prevent erosion including but not limited to: soil stabilization practices, limited grading, mulch, temporary erosion protection or **permanent cover**, and construction phasing.

8. "**Final Stabilization**" See part IV.G.

9. "**General Contractor**" means the party who signs the construction contract with the **owner** or **operator** to construct the project described in the final plans and specifications. Where the construction project involves more than one contractor, the **general contractor** could be the party responsible for managing the project on behalf of the **owner** or **operator**. In some cases, the **owner** or **operator** may be the **general contractor**. In these cases, the **owner** may contract an individual as the **operator** who would become the Co-**Permittee**.

10. "**Homeowner Fact Sheet"** means a fact sheet developed by the MPCA to be given to homeowners at the time of sale by a builder to inform the homeowner of the need for, and benefits of, **Final Stabilization**.

11. "**Impervious Surface**" means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel roads.

12. "**National Pollutant Discharge Elimination System (NPDES)**" means the program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits under the Clean Water Act (Sections 301, 318, 402, and 405) and United States Code of Federal Regulations Title 33, Sections 1317, 1328, 1342, and 1345..

13. "**Normal Wetted Perimeter**" means the area of a conveyance, such as a ditch, channel, or pipe that is in contact with water during flow events that are expected to occur once every year.

14. "**Notice of Termination**" means notice to terminate coverage under this permit after construction is complete, the site has undergone **Final Stabilization**, and maintenance agreements for all permanent facilities have been established, in accordance with all applicable conditions of this permit.

15. **"Operator"** means the person (usually the **general contractor**), designated by the **owner**, who has day to day operational control and/or the ability to modify project plans and specifications related to the **SWPPP**. The person must be knowledgeable in those areas of the permit for which the **operator** is responsible, (Part II.B. and Part IV.) and must perform those responsibilities in a workmanlike manner.

16. "**Owner**" means the person or party possessing the title of the land on which the construction activities will occur; or if the **construction activity** is for a lease, easement, or mineral rights license holder, the party or individual identified as the lease, easement or mineral rights license holder; or the contracting government agency responsible for the **construction activity**.

17. "**Permanent Cover**" means surface types that will prevent soil failure under erosive conditions. Examples include: gravel, asphalt, concrete, rip rap, roof tops, perennial cover, or other landscaped material that will permanently arrest soil erosion. A uniform perennial vegetative cover (e.g., evenly distributed, without large bare areas) with a density of 70% of the native background vegetative cover for the area must be established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures. **Permanent cover** does not include the practices listed under temporary erosion protection.

18. "**Permittee**" means a person or persons, firm, or governmental agency or other institution that signs the application submitted to the MPCA and is responsible for compliance with the terms and conditions of this permit.

19. "**Public Waters**" means all water basins and watercourses that are described in Minn. Stat. 103G.005 subd. 15

20. **"Saturated Soil"** means the highest seasonal elevation in the soil that is in a reduced chemical state because of soil voids being filled with water. **Saturated soil** is evidenced by the presence of redoximorphic features or other information.

21. "**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.

22. "**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 (1) 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 (5) acres.

23. "**Stabilized**" means the exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, erosion control blanket, mats or other material that prevents erosion from occurring. Applying mulch, hydromulch, tackifier, polyacrylamide or similar **erosion prevention** practices is not acceptable stabilization in temporary or permanent drainage ditches or areas where concentrated overland flow occurs. Grass seeding is not stabilization.

24. "**Standard Plates**" means general drawings having or showing similar characteristics or qualities that are representative of a **construction activity** or practice.

25. "**Stormwater**" is defined under Minn. R. 7077.0105, subp. 41(b), and includes precipitation runoff, **stormwater** runoff, snowmelt runoff, and any other surface runoff and drainage.

26. **"Storm Water Pollution Prevention Plan"** means a plan for **stormwater** discharge that includes **erosion prevention** measures, **sediment controls** and Permanent **Stormwater** Management Systems that, when implemented, will decrease soil erosion on a parcel of land and decrease off-site nonpoint pollution.

27. **"Surface Water or Waters"** means all streams, lakes, ponds, marshes, **wetlands**, reservoirs, springs, rivers, drainage systems, waterways, watercourses, and irrigation systems whether natural or artificial, public or private.

28. "**Temporary Erosion Protection**" means methods employed to prevent erosion. Examples of temporary erosion protection include; straw, wood fiber blanket, wood chips, and erosion netting.

29. "**Underground Waters**" means water contained below the surface of the earth in the saturated zone including, without limitation, all waters whether under confined, unconfined, or perched conditions, in near surface unconsolidated sediment or regolith, or in rock formations deeper underground. The term ground water shall be synonymous with underground water.

30. **"Waters of the State"** (as defined in Minn. Stat. § 115.01, subd. 22) means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof.

31. **"Water Quality Volume"** means ½ inch of runoff from the new **impervious surfaces** created by this project and is the volume of water to be treated in the Permanent **Stormwater** Management System, as required by this permit except as provided in Appendix A.C.2.

32. **"Wetland" or "Wetlands**" is defined in Minn. R. 7050.0130, subp. F and includes those areas that are inundated or saturated by **surface water** or ground water 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 ground water at a frequency and duration sufficient 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.

APPENDIX 2

Completed Application for General Stormwater Permit for Construction Activity (MN R 100001)

Skip Navigation

e-Services for businesses, government and partners

MINNESOTA POLLUTION CONTROL AGENCY

My Workspace | Messages | User Profile | Electronic Signature | Documents and Forms

Version: 1.4
Currently logged in: (PALMERSCREEKWIND)

Help | Logout

Service Information

Service ID: 107643
Service Type: Construction Stormwater General Permit Application
Created On: 01/16/2018

Location

Address Line 1:
Intersection of 30th Street SE and Palmer Creek Road

Address Line 2:

Address Line 3:

State: Minnesota

County: Yellow Medicine

City: Granite Falls

Zip/Postal Code: 56241

Location Description:
The area bordered by Palmer Creek Road on the south, County Road 15 on the North, 30th Street SE on the east and a line 2500 feet west of 5th Avenue SW on the west.

Coordinate System:
Lat Long - degrees minutes seconds

Latitude: 44 51 24.8

Longitude: -95 34 15.9

Collection Method:
Digitized - Web Map Google / Yahoo / Microsoft

Contacts

Name: Palmer's Creek Wind Farm, LLC Palmer's Creek Wind Farm, LLC
Title: Owner
Contact Type: Owner
Organization Name: Palmer's Creek Wind Farm, LLC
E-Mail: kcarlton@fageninc.com
Phone: (320) 226-2236 (Mobile Phone Number)
Contact Address: 501 Highway 212 W
Granite Falls, Minnesota 56241-1308

Name:	Evan Fagen
Title:	Chief Operating Officer
Contact Type:	Contractor
Organization Name:	Fagen, Inc.
E-Mail:	efagen@fageninc.com
Phone:	(320) 564-3324 (Office Phone Number)
Contact Address:	501 West Highway 212 Granite Falls, Minnesota 56241

Name:	Matt Pesta
Title:	Project Manager \ Coordinator
Contact Type:	Construction Site Contact
E-Mail:	mpesta@fageninc.com
Phone:	(320) 269-1780 (Mobile Phone Number)

Name:	Mike Rutledge
Title:	Environmental Health and Safety Administrator
Contact Type:	Third-Party Applicant
Organization Name:	Fagen Engineering
E-Mail:	mrutledge@fageneng.com
Phone:	(507) 476-5752 (Mobile Phone Number)
Contact Address:	501 West Highway 212 Granite Falls, Minnesota 56241

SUBMITTAL DISPLAY

Application Readiness

I have read the permit and my project is eligible according to the permit	Yes
I understand that incomplete applications cannot be processed	Yes
I am ready to make payment	Yes
My project is not taking place within the boundary of an Indian reservation	Yes

Prevention Opportunities

Have you implemented any prevention activities in the past year?

How did you do it?

Would you like to be contacted to discuss prevention opportunities?

Environmental Review

Was an environmental review required for this project or any part of a common plan of development or sale that includes this project?	No

If Yes to #1, is the environmental review process complete?

If Yes to #2, please provide the following information:

- **Responsible governmental unit (e.g., city, township, county, state or federal agency)**
- **Type of environmental review document**
- **Completion date for environmental review**

If Yes to #2, has mitigation identified in the environmental review been incorporated into a stormwater pollution prevention plan (SWPPP)?

Stormwater Pollution Prevention Plan

Has a SWPPP been developed for this project and incorporated into the project's plans and specifications as required in the General Stormwater Permit Part III.A?	Yes
Does your project have a discharge point within one mile (aerial radius measurement) of a special water or a water that is impaired for sediment or a sediment related parameter (see Appendix A, Part B.10)?	No
If your project has a discharge point within one mile (aerial radius measurement) of a special water or a water that is impaired for sediment or a sediment related parameter (see Appendix A, Part B.10), does the SWPPP contain the additional requirements found in Appendix A, Parts A-C?	Not Applicable

Project Information

Project Name
Palmer's Creek Wind Farm

Stormwater Project Type	Commercial/Industrial
Other Project Description	
Construction Start Date	02/01/2018
Estimated Completion Date	02/01/2019
Disturbed area of project in acres	172
Existing area of impervious surface in acres within the disturbed area of the project	0
Post-construction area of impervious surface in acres within the disturbed area of the project	0.25

Permanent Stormwater Management

Infiltration

Filtration

Wet sedimentation basin

Regional Ponding

Stormwater harvest and reuse

Other

Waterbodies

Are there surface waters within one mile of the project boundary that will receive stormwater from the site or discharge from a permanent stormwater management system? No

Waterbody Name	Type	Special Water	Impaired Water
Palmer Creek		-1	-1

Electronic Signature

Signator:	
Signator ID:	PALMERSCREEKWIND
Challenge/Response Question:	What is your favorite sport?
Challenge/Response Answer:	******
eSignature PIN:	******
Date/Time of eSignature:	01/17/2018 06:44

I certify under penalty of law that

- I am the Owner or Contractor as defined on the application form and hold one of the following positions as applicable for my business organization:
  - Corporation: a principal executive officer of at least the level of vice-president or the duly authorized representative or agent of the executive officer if the representative or agent is responsible for the overall operation of the facility that is the subject of the permit application.
  - Partnership or Sole Proprietorship: a general partner or the proprietor.
  - Municipality, State, Federal or Other Public Agency: principal executive officer or ranking elected official.
- This document and all supporting documents, including those required to be maintained on-site, were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.
- Based on my inquiry of the person or persons who manage this system, or the persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
- I have read, understood, and accepted all terms and conditions of the NPDES/SDS General Stormwater Permit Construction Activity (MN R100001) that authorizes stormwater discharges associated with the construction site identified on this form.

When I have named a person other than myself as the Owner or Contractor as a compliment to my role, he or she has full knowledge of his or her inclusion on this application and the associated liabilities and responsibilities.

Certifier:
Date: 01/17/2018

Payment Charges

Total: $400

Submission

Date/Time of Submission:

Return

Payment Confirmation for Online Applications
State of Minnesota Pollution Control Agency
To: mrutledge

01/17/2018 06:48 AM

*** PLEASE DO NOT RESPOND TO THIS EMAIL ***

Thank you for your payment.

This email is to confirm your payment submitted on Jan-17-2018 for Online Applications.

Confirmation Number: MNPPCA000032368
Payment Amount: $400.00
Scheduled Payment Date: Jan-17-2018
Amount Due: $400.00

Payer Name: Michael Rutledge
Credit Card Number: *4529
Credit Card Type: MC
Approval Code: 68565E

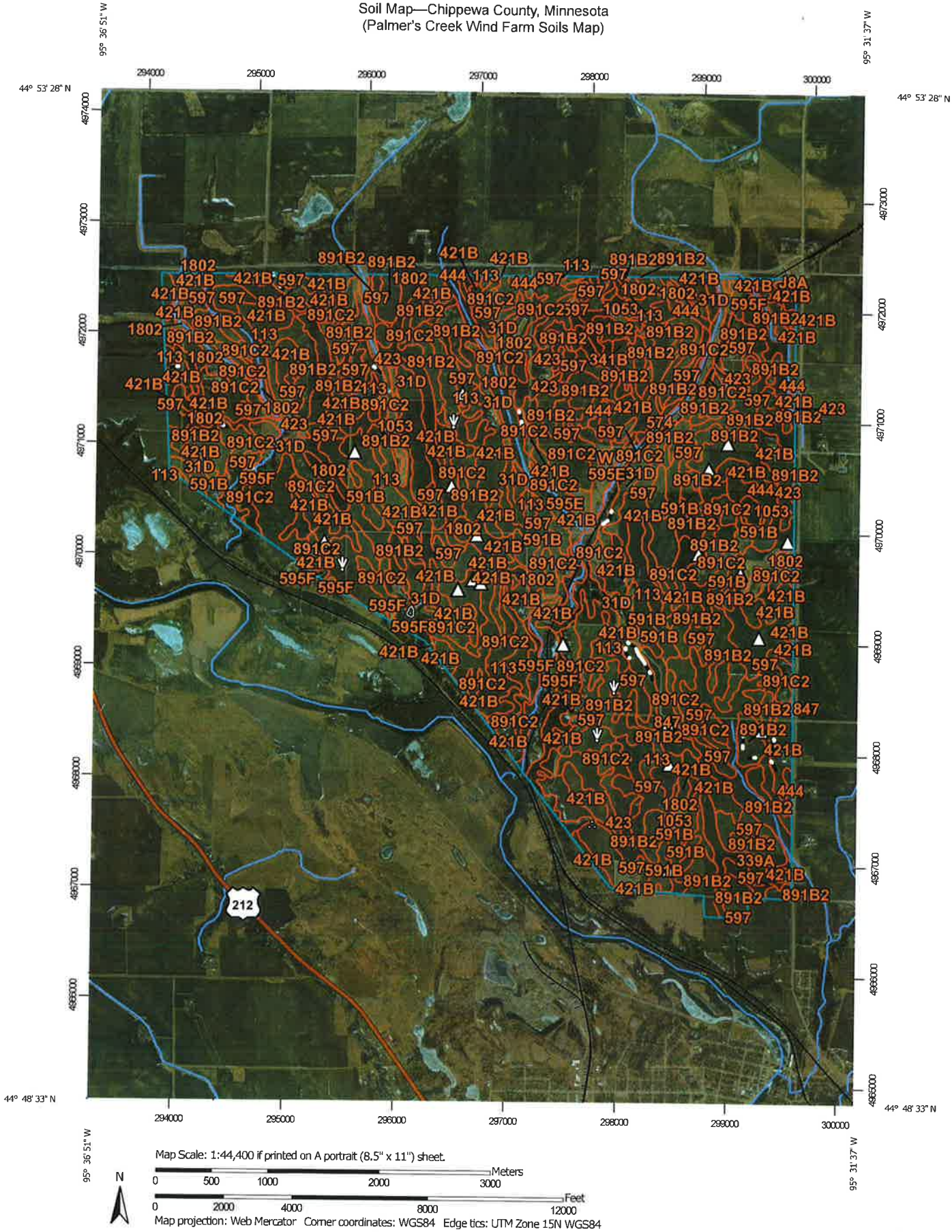
Merchant: MN Pollution Control Agency
Website: http://www.pca.state.mn.us/

If you have questions about this payment or need assistance, please view the payment online at N/A , or call Customer Service at (651)757-2182.

Thank you for using the Minnesota PCA electronic payment system.

APPENDIX 3
Site Maps and Civil Engineering Plans

Soil Map—Chippewa County, Minnesota
(Palmer's Creek Wind Farm Soils Map)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Chippewa County, Minnesota
Survey Area Data: Version 20, Oct 4, 2017

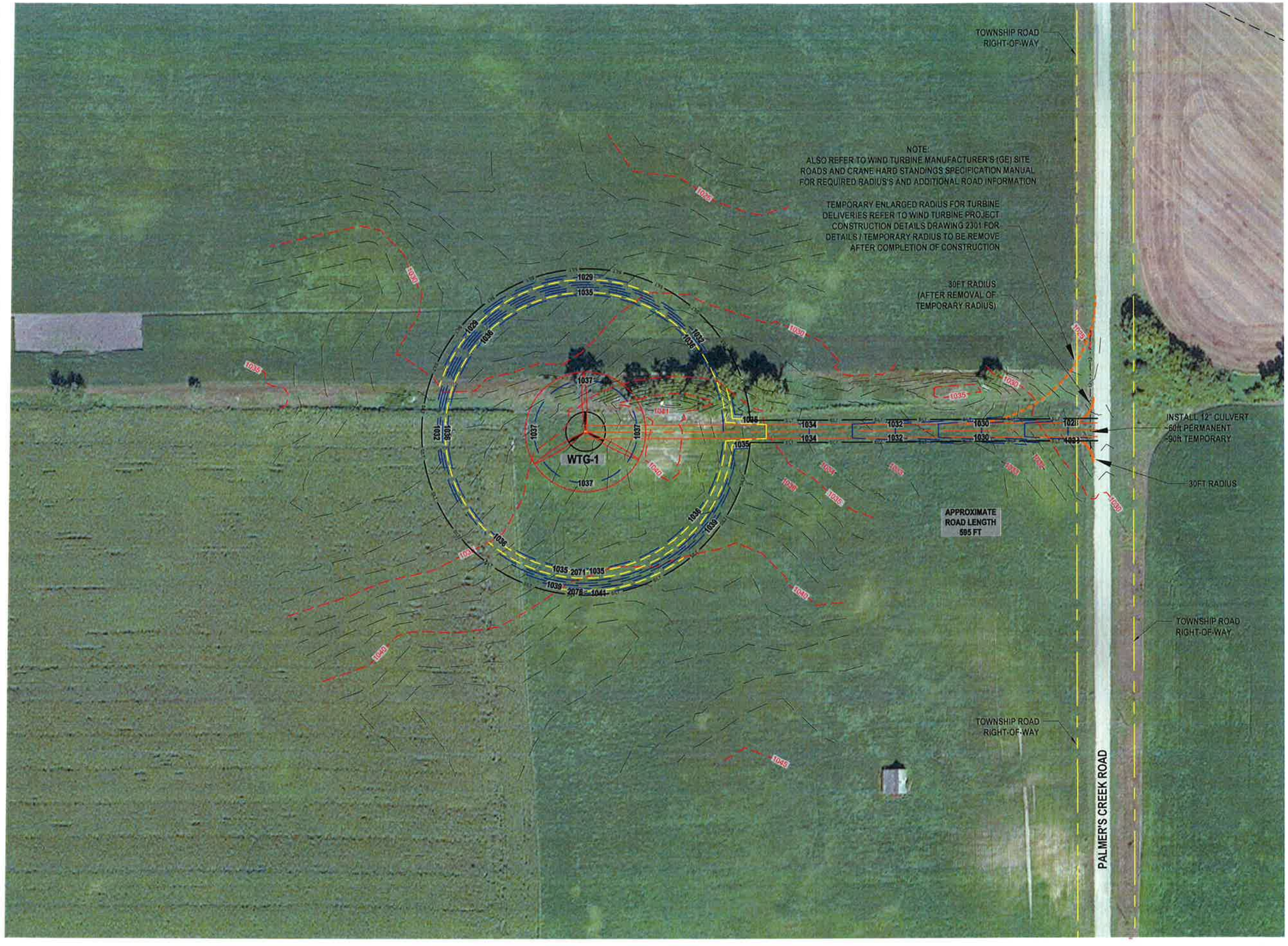
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 5, 2013—Nov 4, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
31D	Storden loam, 10 to 16 percent slopes, moderately eroded	189.0	3.4%
85	Calco silty clay loam, 0 to 2 percent slopes, occasionaly flooded	74.3	1.3%
94B	Terril loam, 2 to 6 percent slopes	4.2	0.1%
113	Webster clay loam, 0 to 2 percent slopes	889.4	15.8%
127A	Sverdrup fine sandy loam, 0 to 2 percent slopes	1.8	0.0%
127B	Sverdrup fine sandy loam, 2 to 6 percent slopes	16.9	0.3%
339A	Fordville silt loam, 0 to 2 percent slopes	12.5	0.2%
341B	Estherville sandy loam, 2 to 6 percent slopes	10.4	0.2%
421B	Amiret loam, 2 to 6 percent slopes	1,241.8	22.1%
423	Seaforth silt loam, 1 to 3 percent slopes	36.2	0.6%
444	Canisteo clay loam, 0 to 2 percent slopes	321.0	5.7%
574	Du Page loam	6.3	0.1%
591B	Doland silt loam, 2 to 6 percent slopes	169.9	3.0%
595E	Belview loam, 16 to 30 percent slopes	57.4	1.0%
595F	Belview loam, 22 to 40 percent slopes	137.6	2.4%
597	Tara silty clay loam	781.5	13.9%
610	Calco silty clay loam, 0 to 2 percent slopes, frequently flooded	76.9	1.4%
847	Colvin-Spicer silty clay loams	189.9	3.4%
891B2	Doland-Swanlake complex, 3 to 6 percent slopes, eroded	716.2	12.8%
891C2	Doland-Swanlake complex, 6 to 12 percent slopes, eroded	460.3	8.2%
1053	Aquolls and Aquents, ponded	45.2	0.8%
1802	Spicer-Quam silty clay loams	175.9	3.1%
J8A	Egeland sandy loam, 0 to 2 percent slopes	1.1	0.0%



NO.	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W — N — E
S

25 0 50
Scale 1"= 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 1,980 LF

PALMER'S CREEK
Wind Farm

FAGEN
ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS
501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #1
& ACCESS ROAD

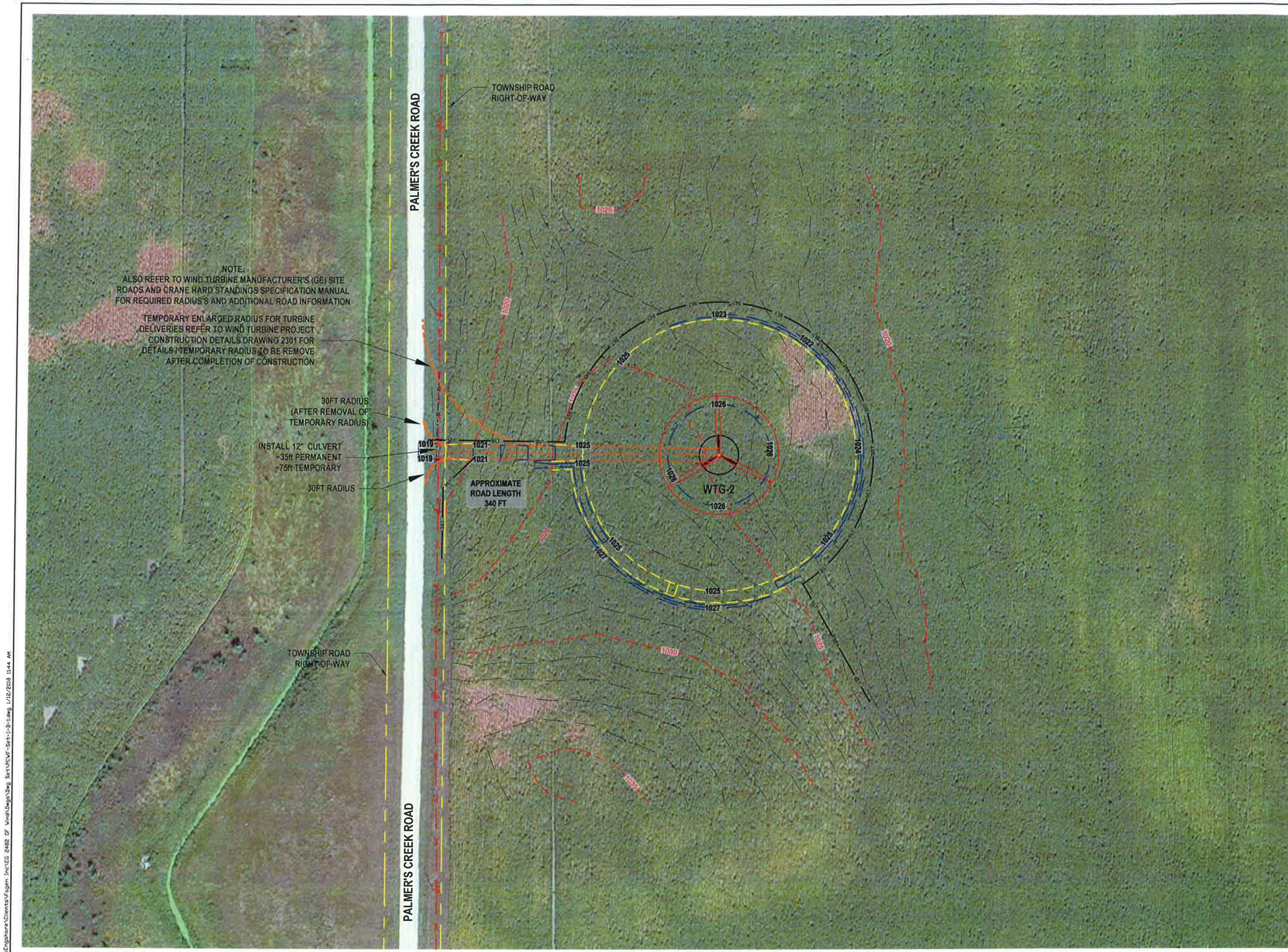
DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

SHEET NUMBER
2200

JOB NUMBER
EG2482

REVISION NUMBER A

N:\Eggshare\Clients\Fagen Inc\EG 2482 GF Wind\Dwgs\Dwg Set\PCWF-Set-1-B.dwg 1/18/2018 11:45 AM



NO.	REVISION	BY	CHK'D	DATE
A	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W N E S

25 0 50
Scale 1"= 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 1,185 LF

PALMER'S CREEK
Wind Farm

FAGEN
ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL
ENGINEERS

501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #2
& ACCESS ROAD

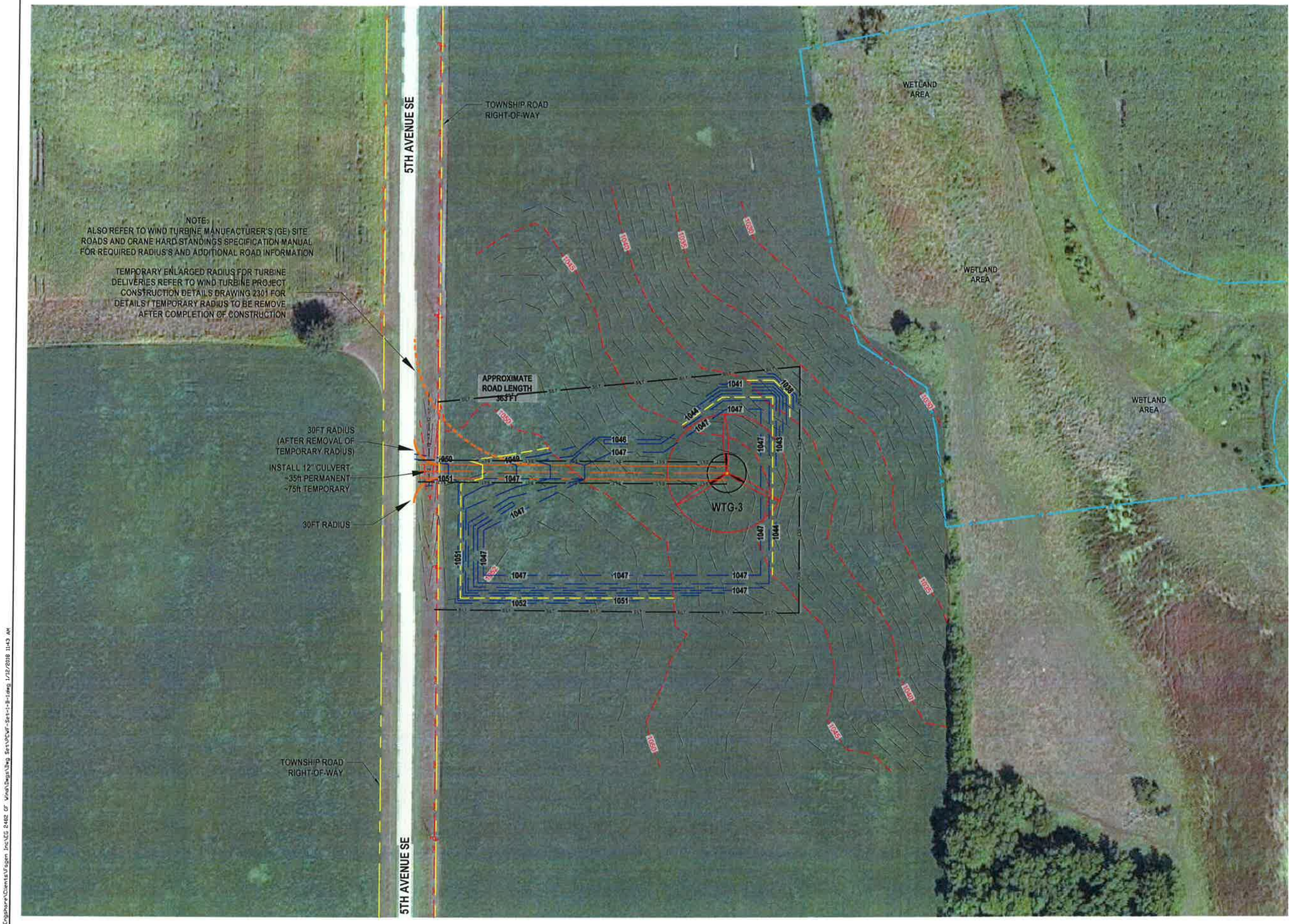
DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

JOB NUMBER
EG2482

SHEET NUMBER
2201

REVISION NUMBER A

N:\Engineer\Clients\Fagen Inc\EG 2482 GF Wind\Dwgs\Dwg Set\PCWF-Set-1-3-1.dwg 1/12/2018 11:44 AM



NO	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W — N — E
S

25 0 50
Scale 1"= 50'

Note: @
Architecturtal D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 1,150 LF

PALMER'S CREEK
Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS
501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #3
& ACCESS ROAD

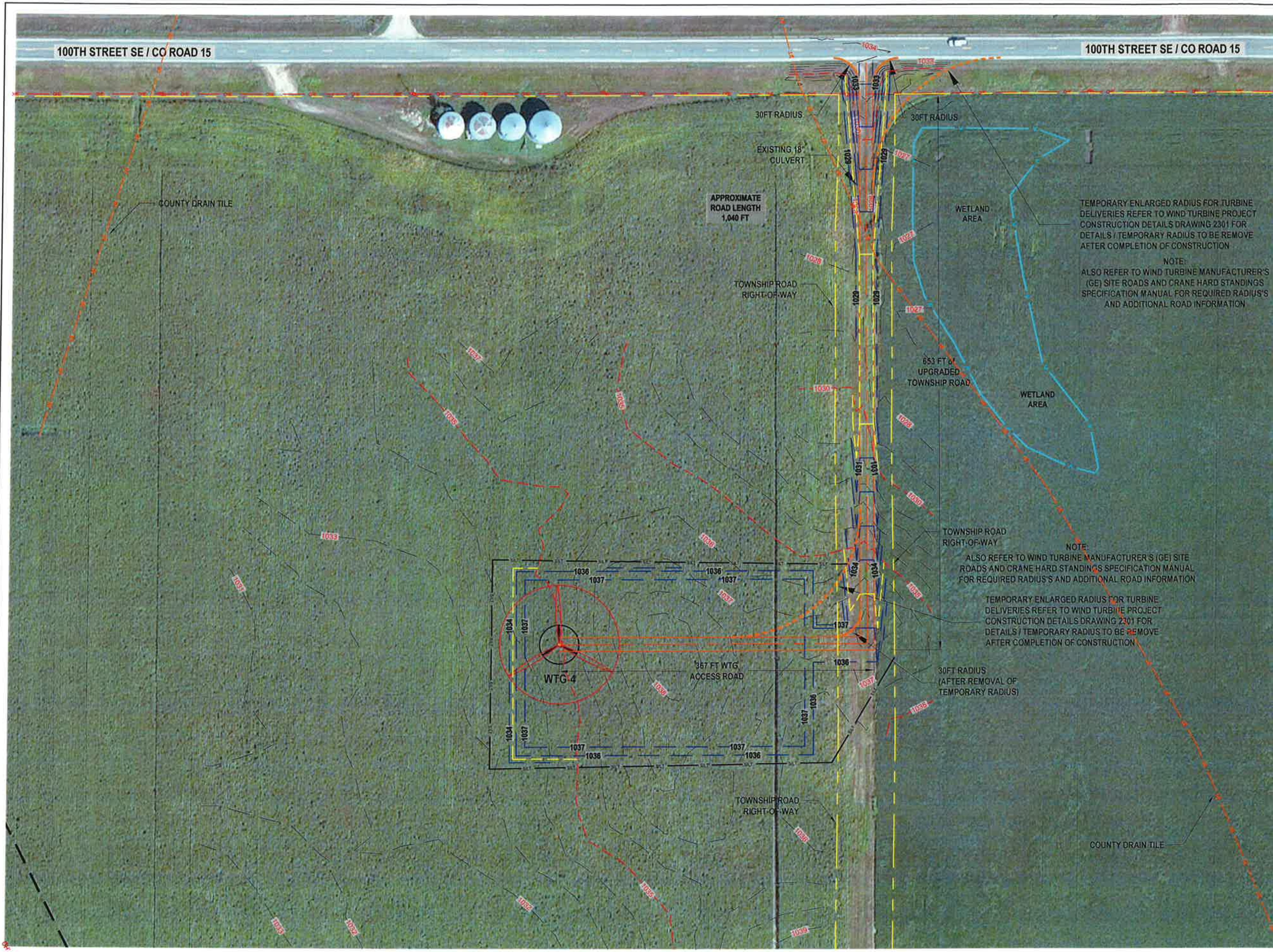
DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

SHEET NUMBER
2202

JOB NUMBER
EG2482

REVISION NUMBER A

N:\Cadpwrk\Clients\Fagen Inc\EG 2482 GF Wind\Dwgs\Dwg Sets\PCUP-Set-1-B.dwg 1/12/2018 11:43 AM



NO	REVISION	BY	CHK'D	DATE
A	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W N E S

25 0 50
Scale 1"= 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 1,200 LF

PALMER'S CREEK
Wind Farm

FAGEN
ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS

501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

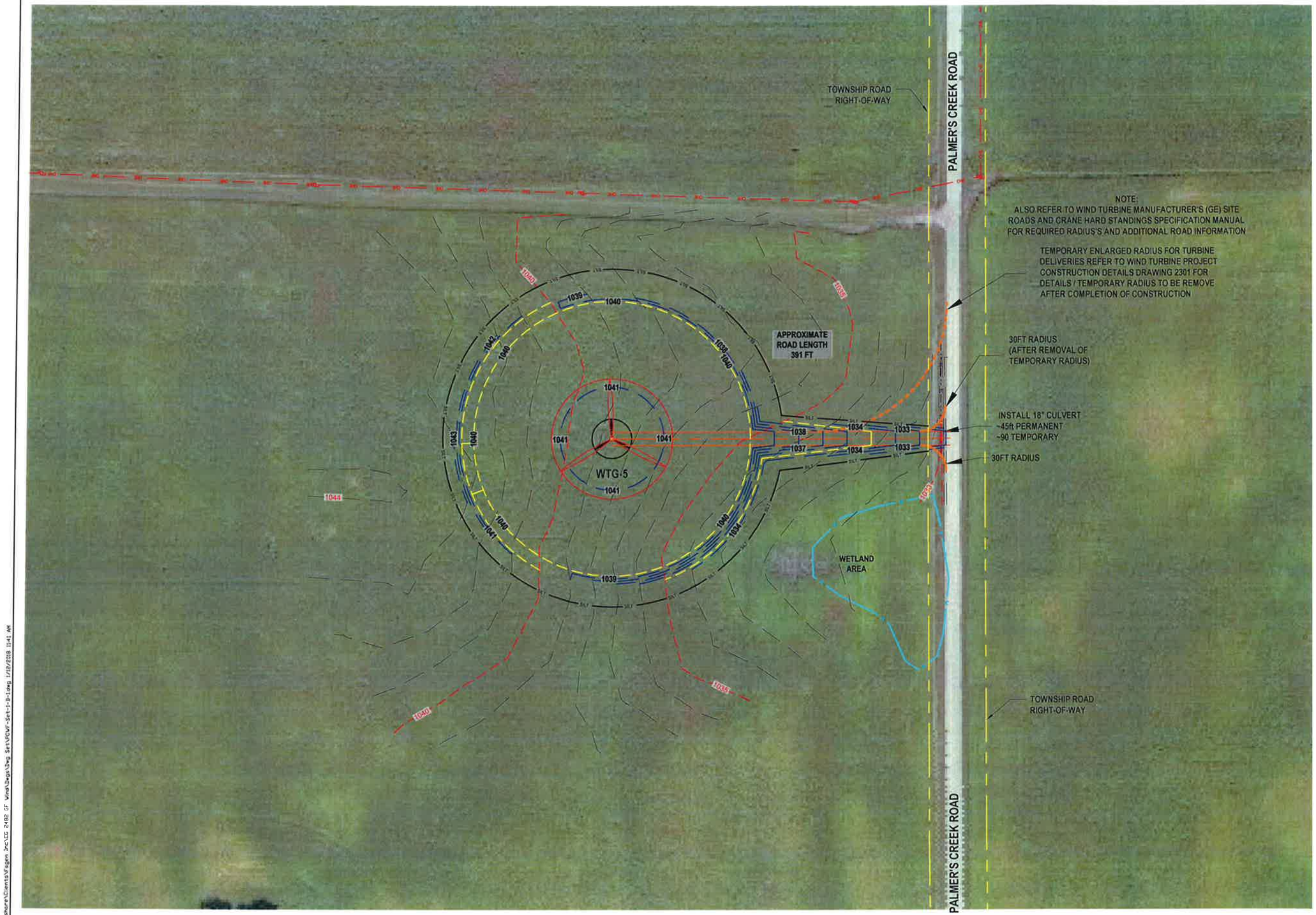
TOWNSHIP ROAD UPGRADE TO WIND TURBINE GENERATOR #4 & ACCESS ROAD

DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

JOB NUMBER
EG2482

SHEET NUMBER
2203

REVISION NUMBER A



NO.	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	TIH	09/15/2017

W N E S

25 0 50
Scale 1"= 50'

Note: @ Architectural D Size (24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN / OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 1,515 LF

PALMER'S CREEK Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS
501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #5
& ACCESS ROAD

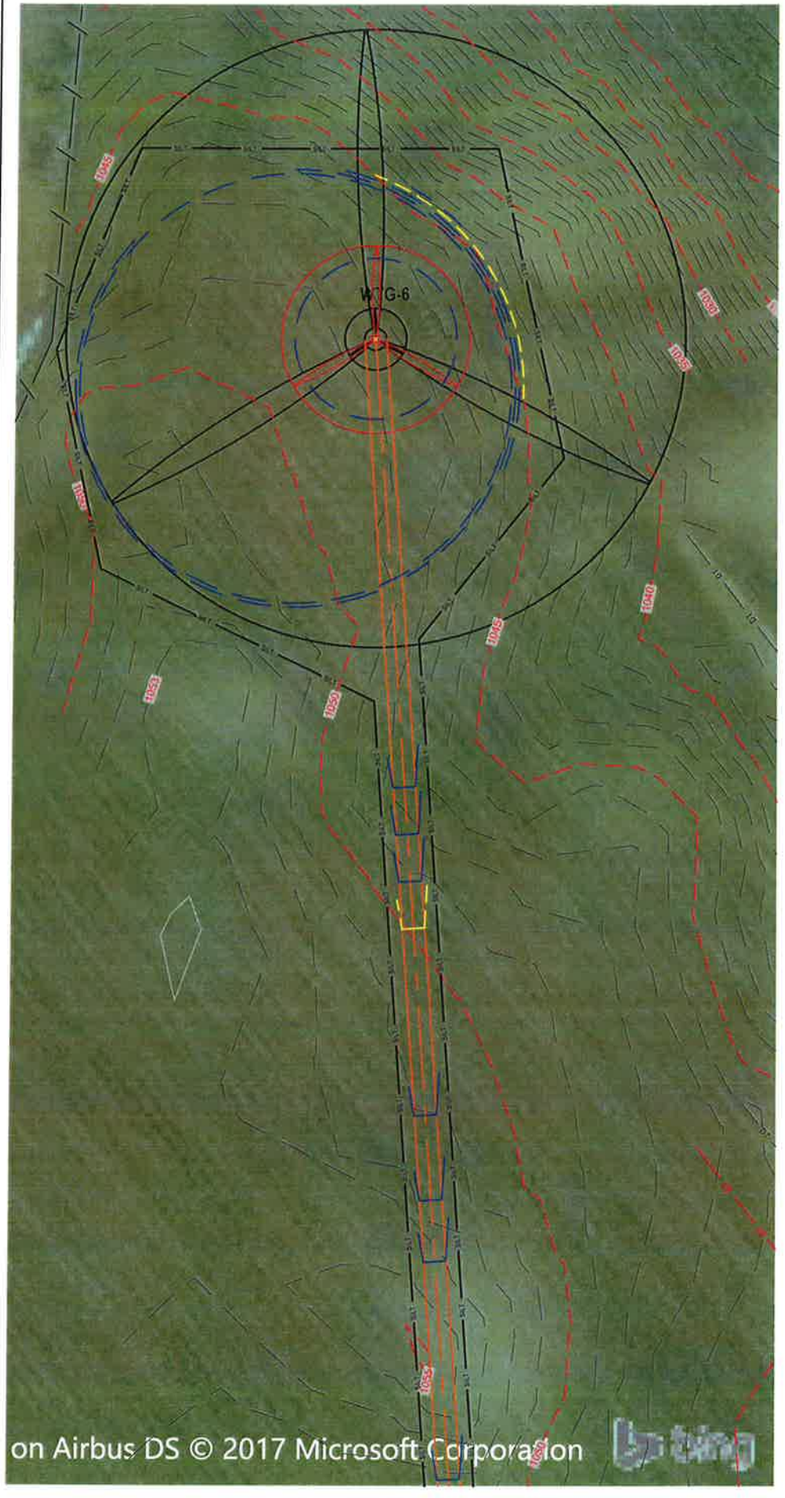
DRAWN: HEK
CHK'D: TIH
DATE: 09/15/2017
SCALE: 1"=50'

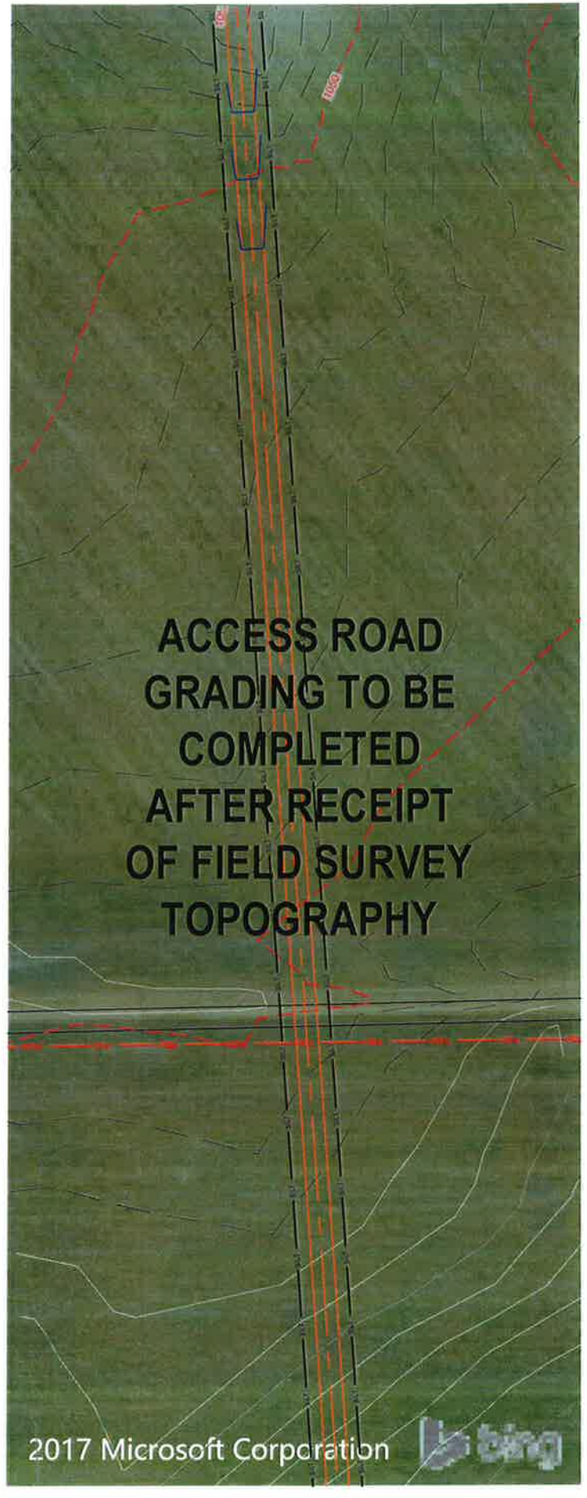
JOB NUMBER
EG2482

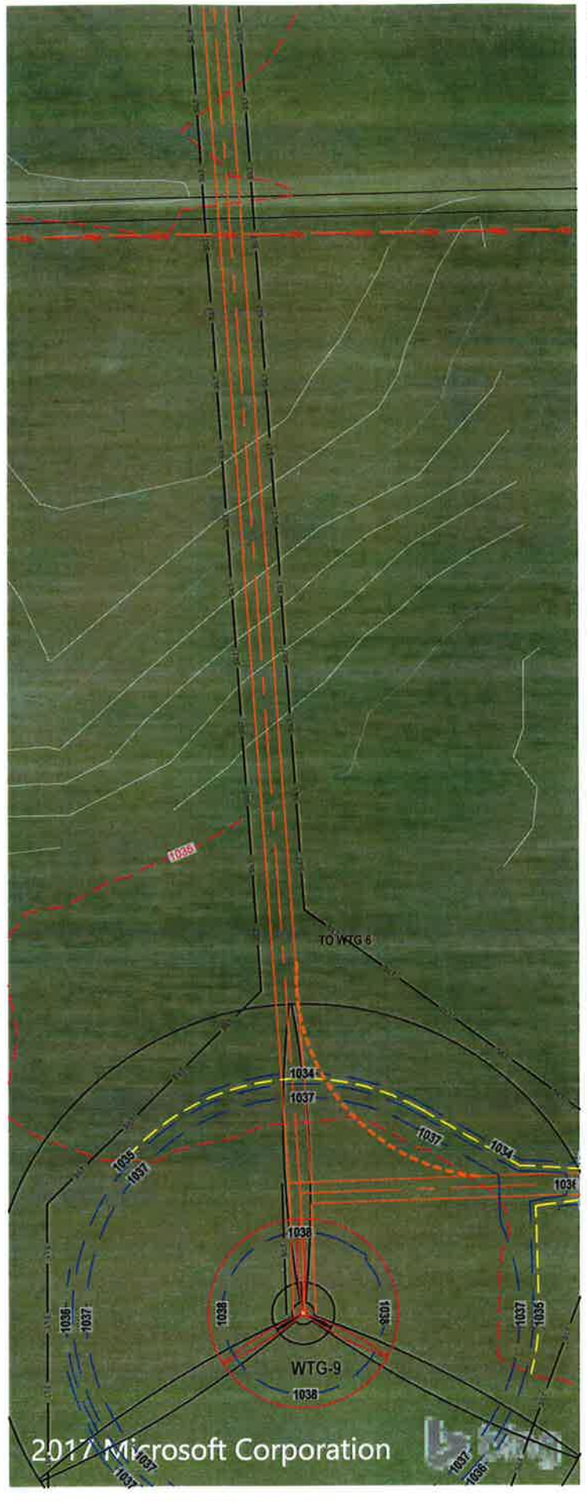
SHEET NUMBER
2204

REVISION NUMBER A

N:\Engineer\Clients\Fagen Inc\EG 2482 GF Wind\Dwgs\Dwg Set\PCWF-Set-1-B-1.dwg, 1/18/2018 11:41 AM







NO.	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

N

W E

S

25 0 50

Scale 1"= 50'

Note: @ Architectural D Size (24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 4,885 LF

PALMER'S CREEK
Wind Farm

FAGEN
ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS
501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

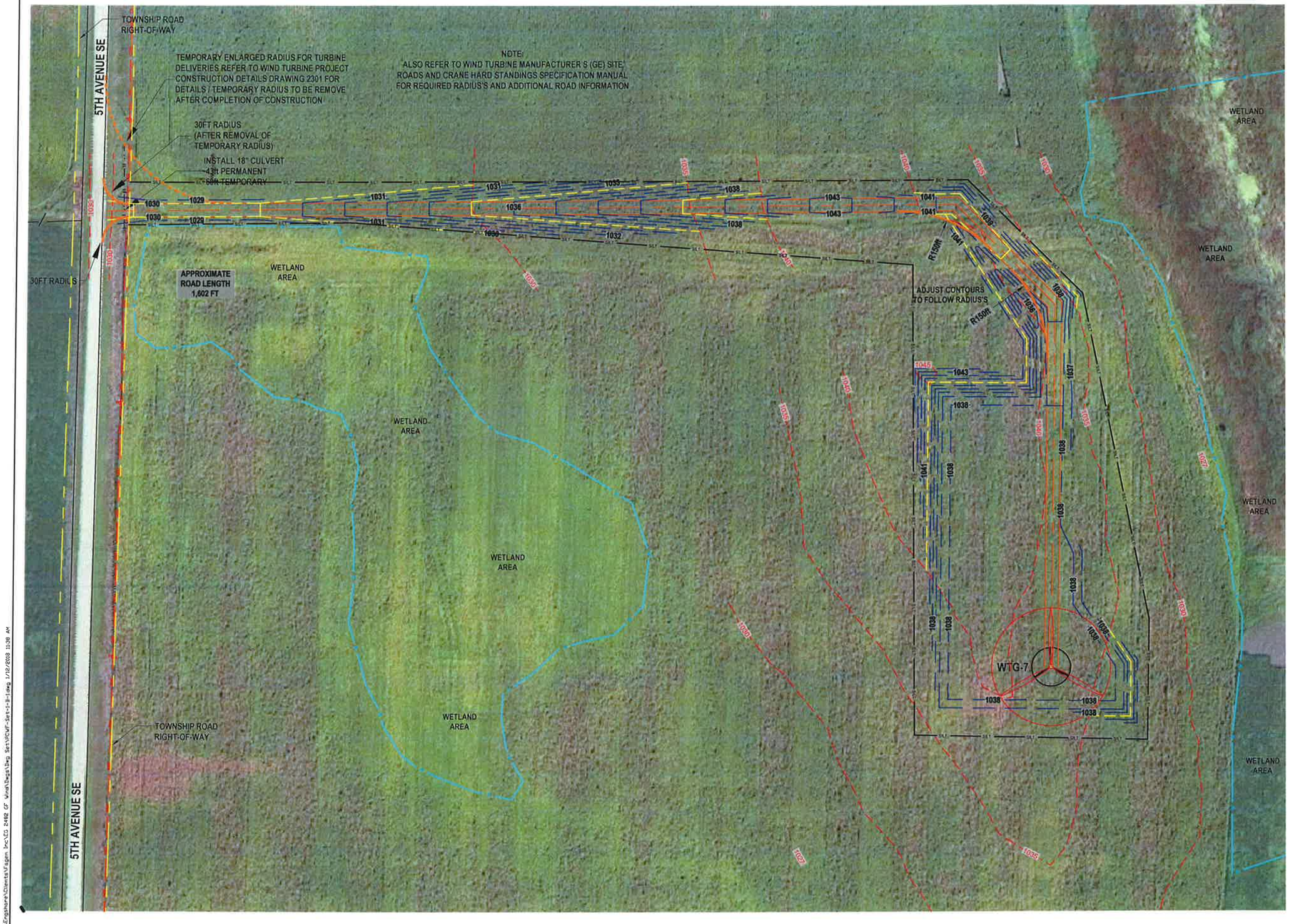
WIND TURBINE GENERATOR #6
& ACCESS ROAD

DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

JOB NUMBER
EG2482

SHEET NUMBER
2205

REVISION NUMBER A



NO.	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W — N — E — S

25 0 50

Scale 1"= 50'

Note: @ Architectural D Size (24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 3,485 LF

PALMER'S CREEK
Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS
501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #7
& ACCESS ROAD

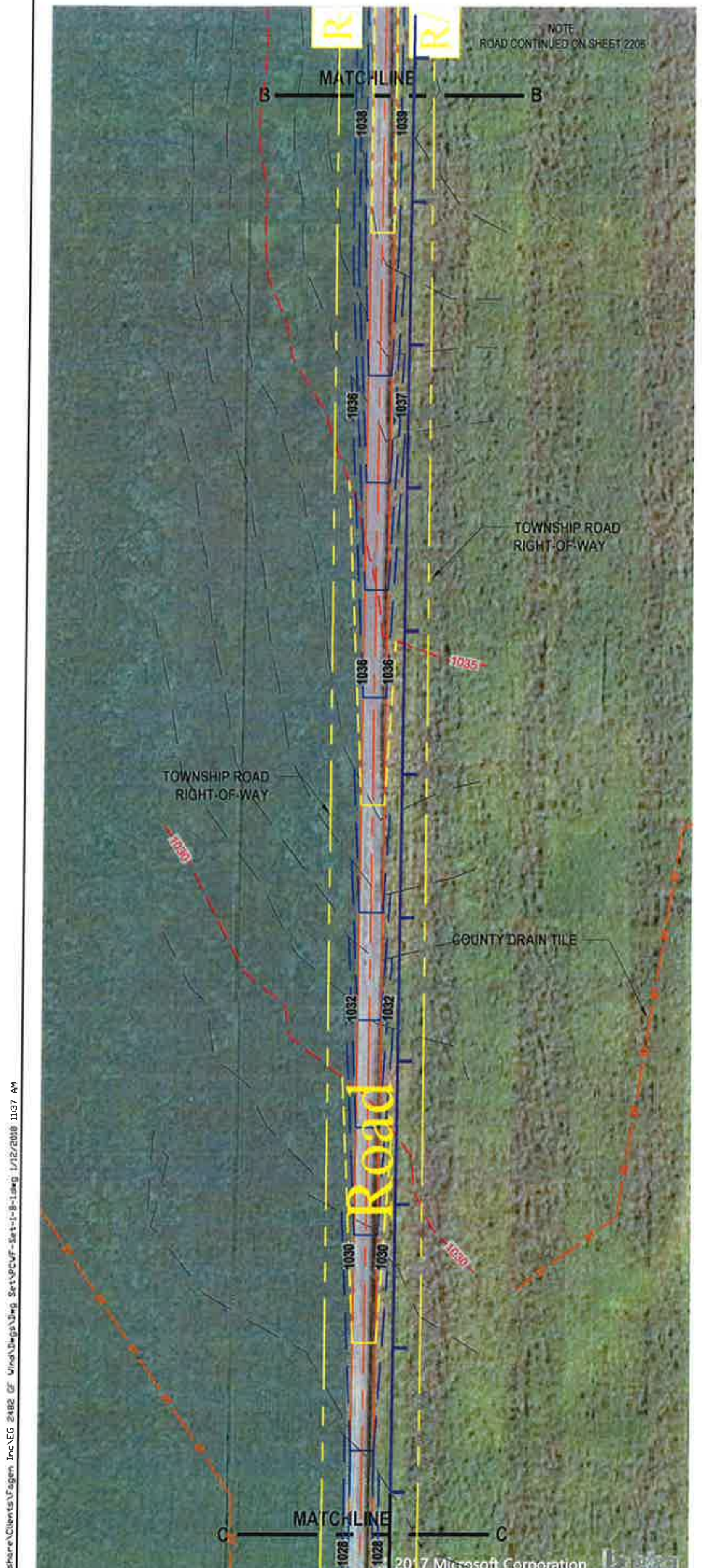
DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

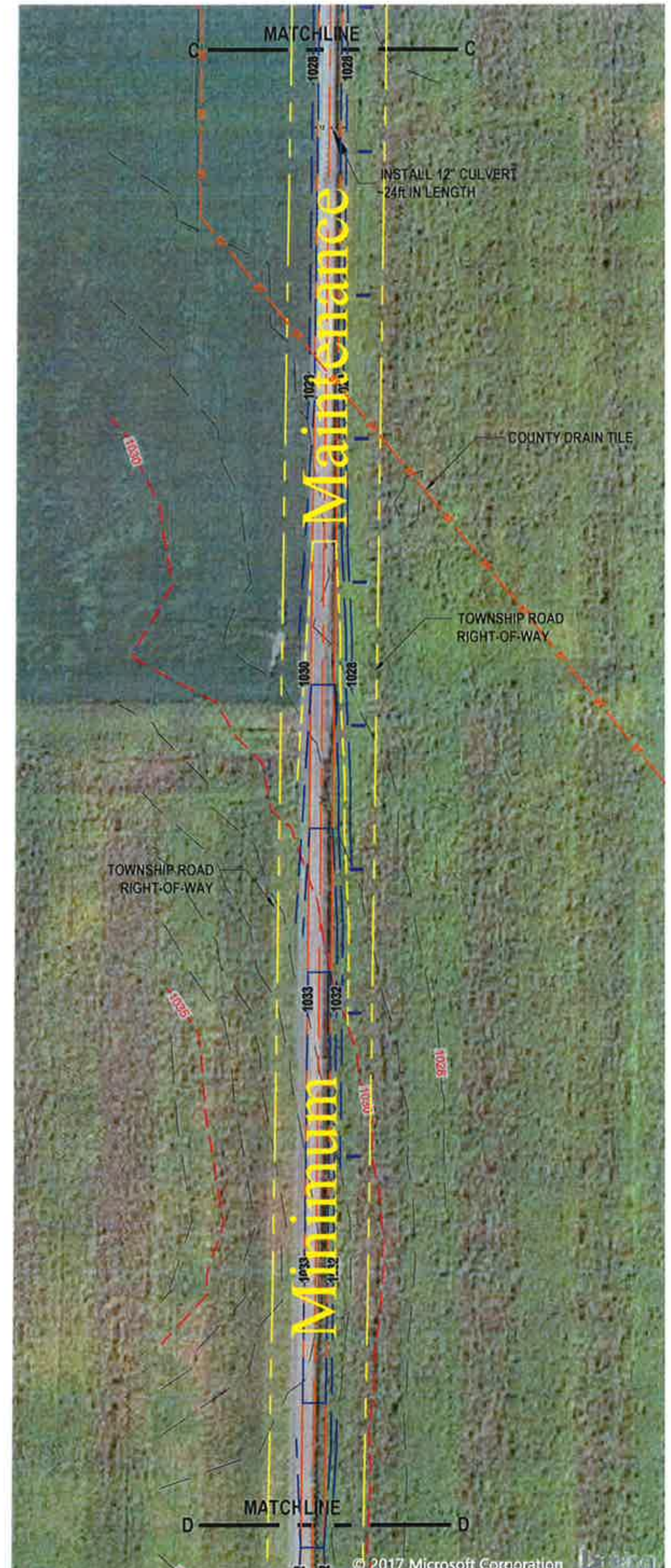
JOB NUMBER
EG2482

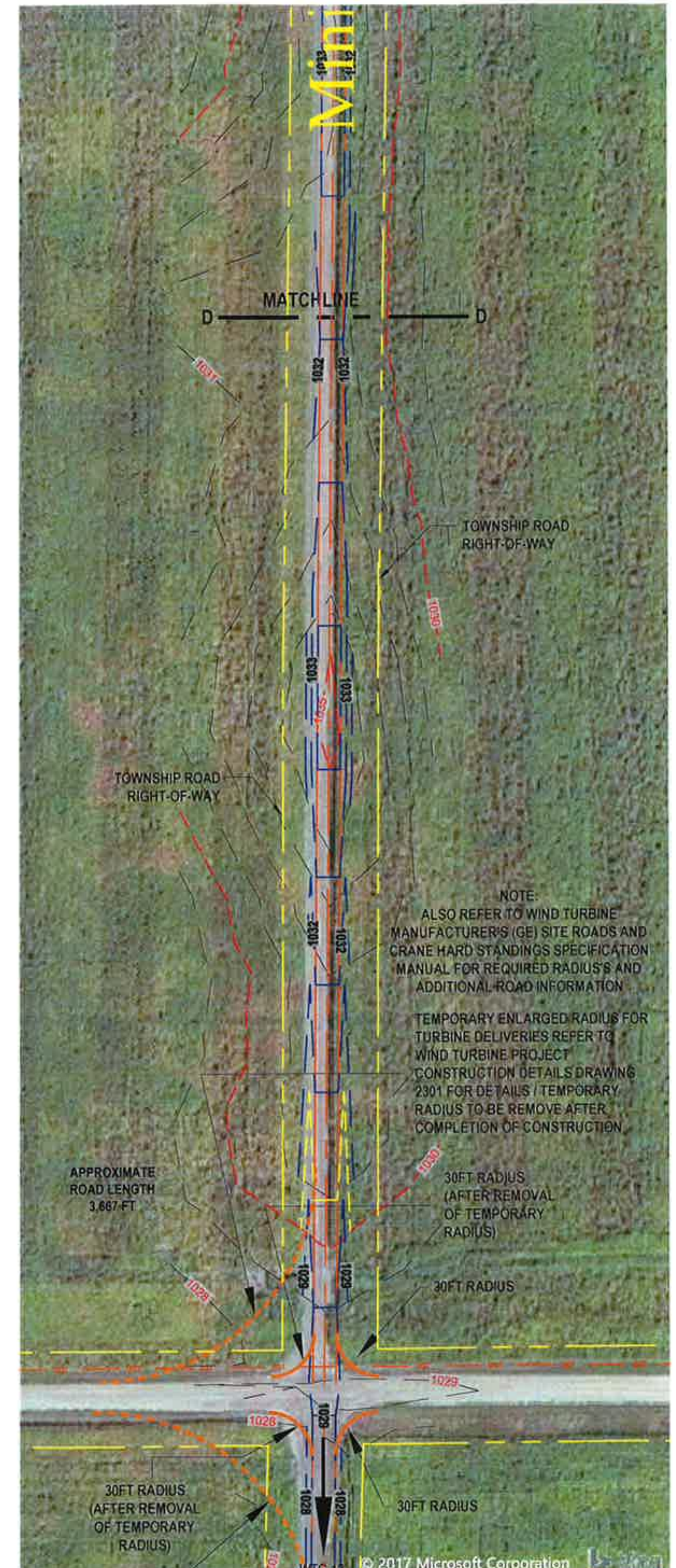
SHEET NUMBER
2206

REVISION NUMBER A

M:\Engshare\Clients\Fagen Inc\EG 2482 GF Wind\Dgn\Dwg Set\PCWF-Set-1-8-1.dwg 1/12/2018 11:38 AM







NO.	REVISION	BY	CHK'D	DATE
A	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W N E S

Scale 1"= 50'

Note: @ Architectural D Size (24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

PALMER'S CREEK
Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS

501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

TOWNSHIP ROAD UPGRADE TO
WIND TURBINE GENERATOR #8

DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

JOB NUMBER
EG2482

SHEET NUMBER
2207

REVISION NUMBER A

NO.	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W N E S

25 0 50

Scale 1"= 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 1,230 LF

PALMER'S CREEK
Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS
501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #8
& ACCESS ROAD

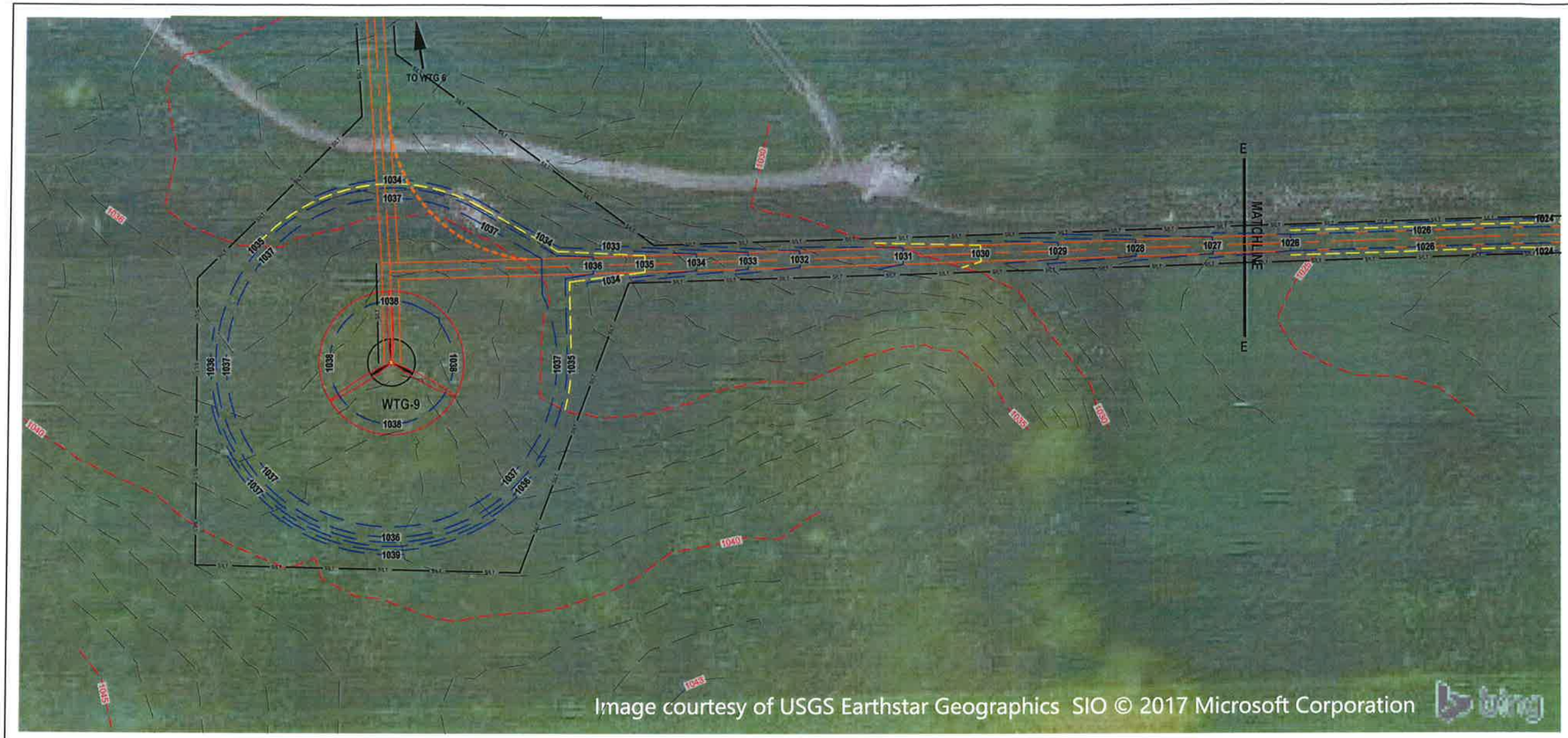
DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

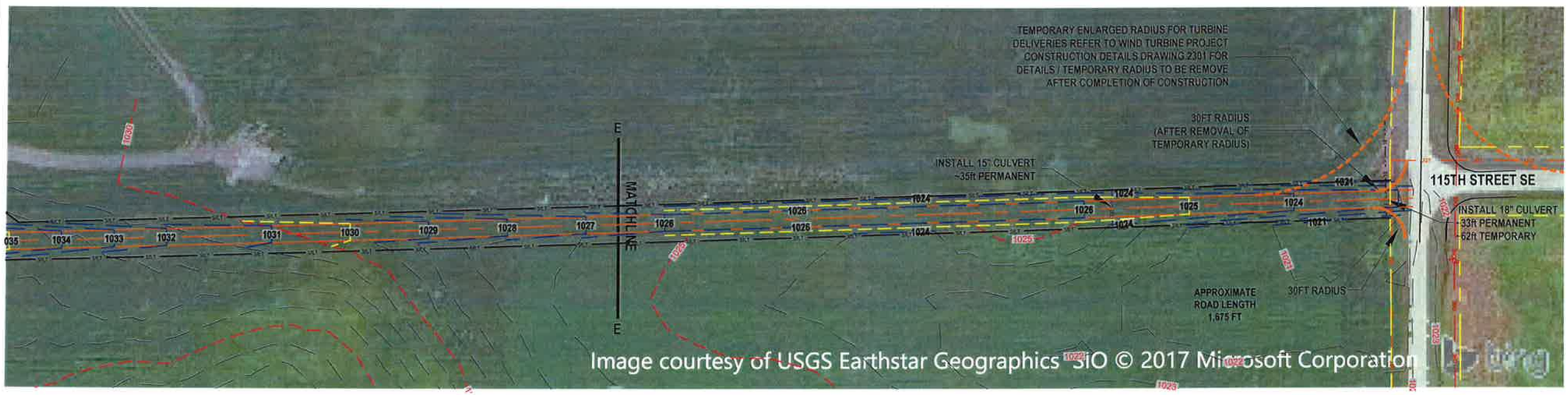
JOB NUMBER
EG2482

SHEET NUMBER
2208

REVISION NUMBER A

N:\Engineering\Clients\Fagen Inc\EG 2482 GF Wind\Dwgs\Dwg Set\PCUF-Set-1-B.dwg 1/12/2018 11:34 AM





NO.	REVISION	BY	CHK'D	DATE
A	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W N E S

25 0 50

Scale 1"= 50'

Note: @ Architectural D Size (24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 4,100 LF

PALMER'S CREEK Wind Farm

FAGEN ENGINEERING LLC

CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS

501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #9
& ACCESS ROAD

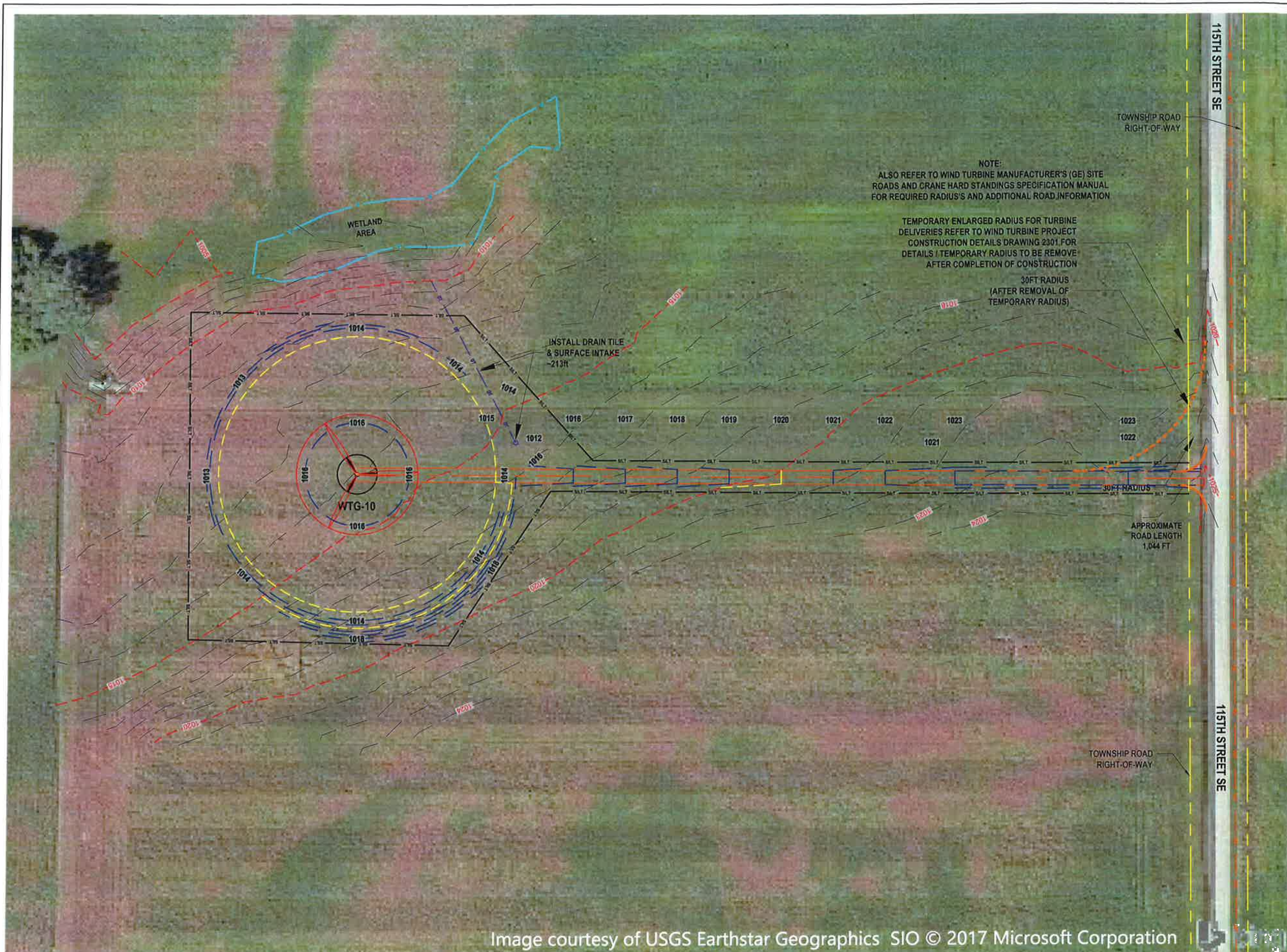
DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

SHEET NUMBER 2209

JOB NUMBER EG2482

REVISION NUMBER A

N:\Engshare\Clients\Fagen Inc\EG 2482 GF Wind\Dwg\Dwg Set\PCWF-Set-1-3-1.dwg 1/26/2018 11:32 AM



NO	REVISION	BY	CHK'D	DATE
A	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

S N E

Scale 1"= 50' (25 0 50)

Note: @ Architectural D Size (24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN / OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 2,860 LF

PALMER'S CREEK
Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS

501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

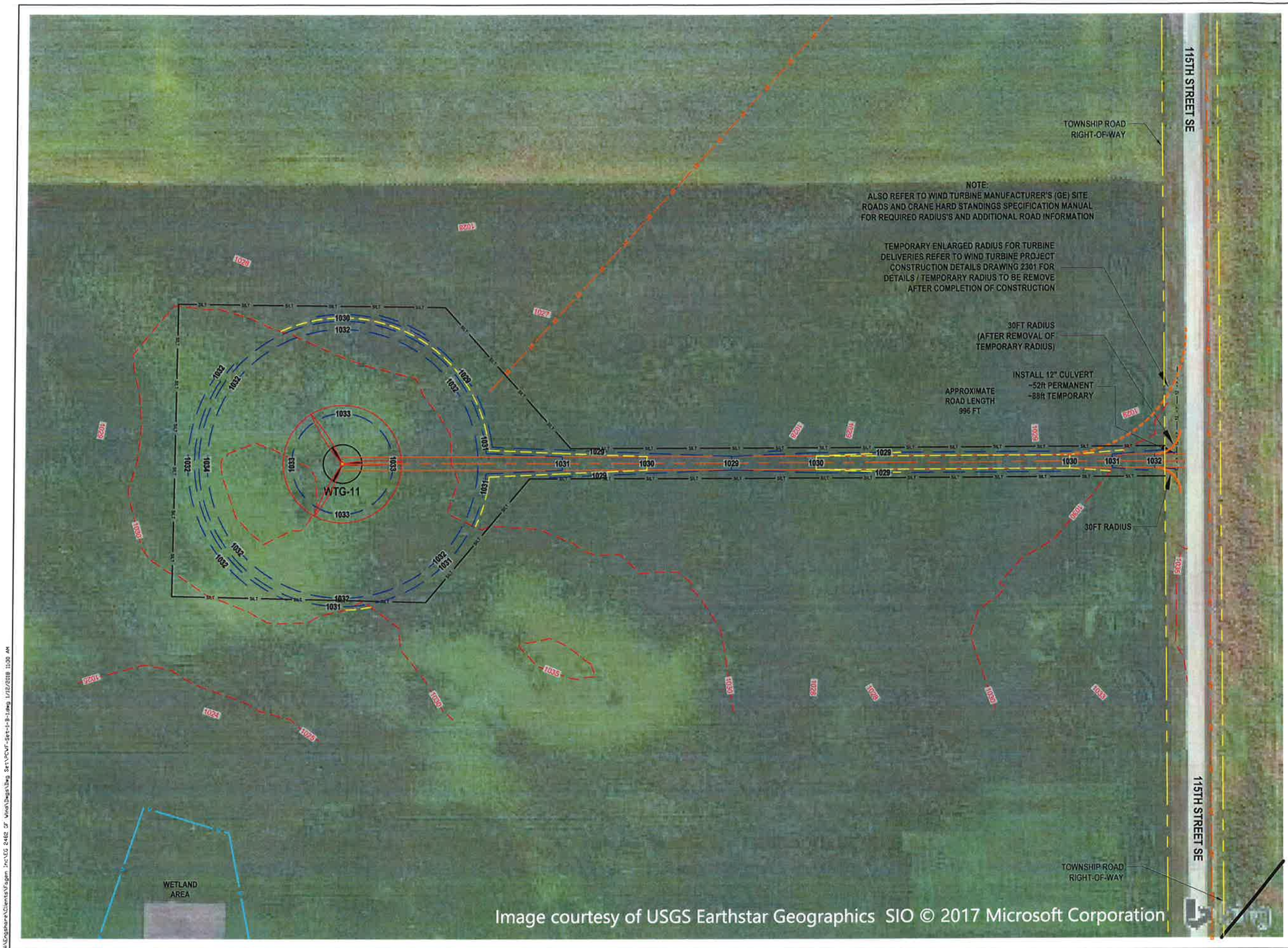
WIND TURBINE GENERATOR #10
& ACCESS ROAD

DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

JOB NUMBER
EG2482

SHEET NUMBER
2210

REVISION NUMBER A



NO.	REVISION	BY	CHKD	DATE
1	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W
S N E

25 0 50
Scale 1"= 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 2,830 LF

PALMER'S CREEK
Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS
501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #11
& ACCESS ROAD

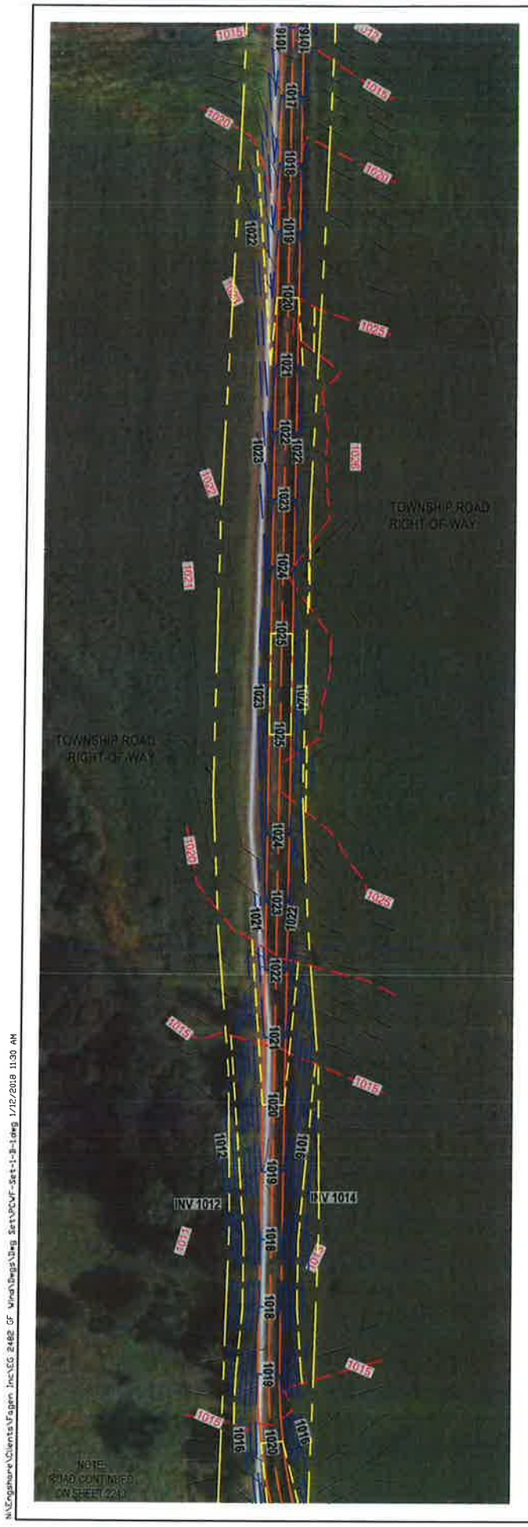
DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

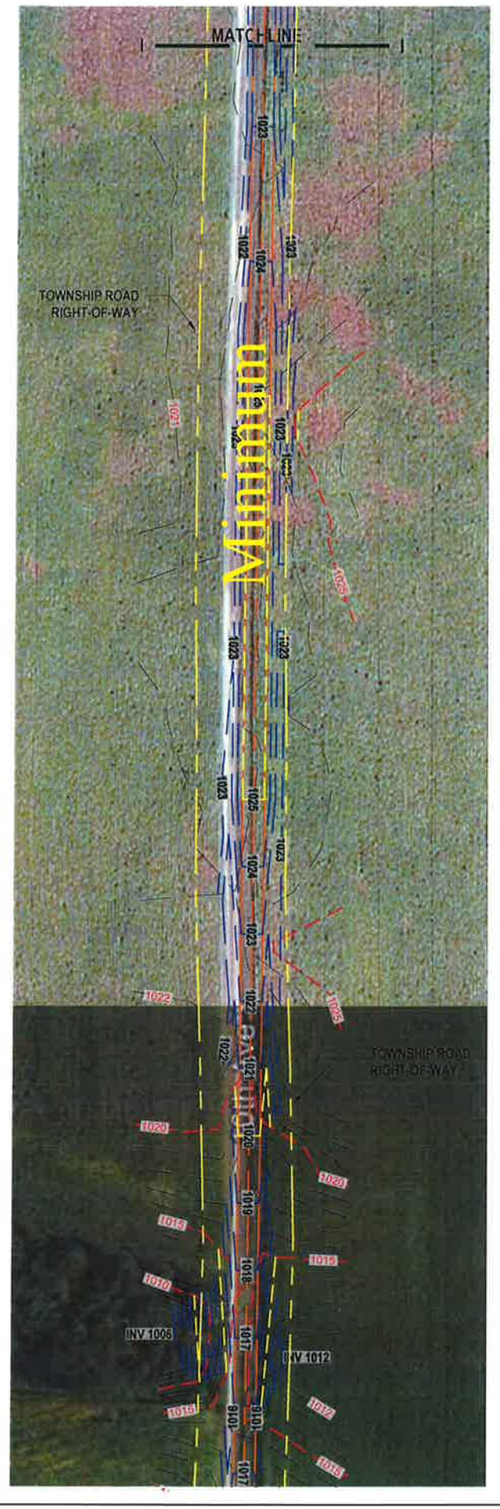
JOB NUMBER
EG2482

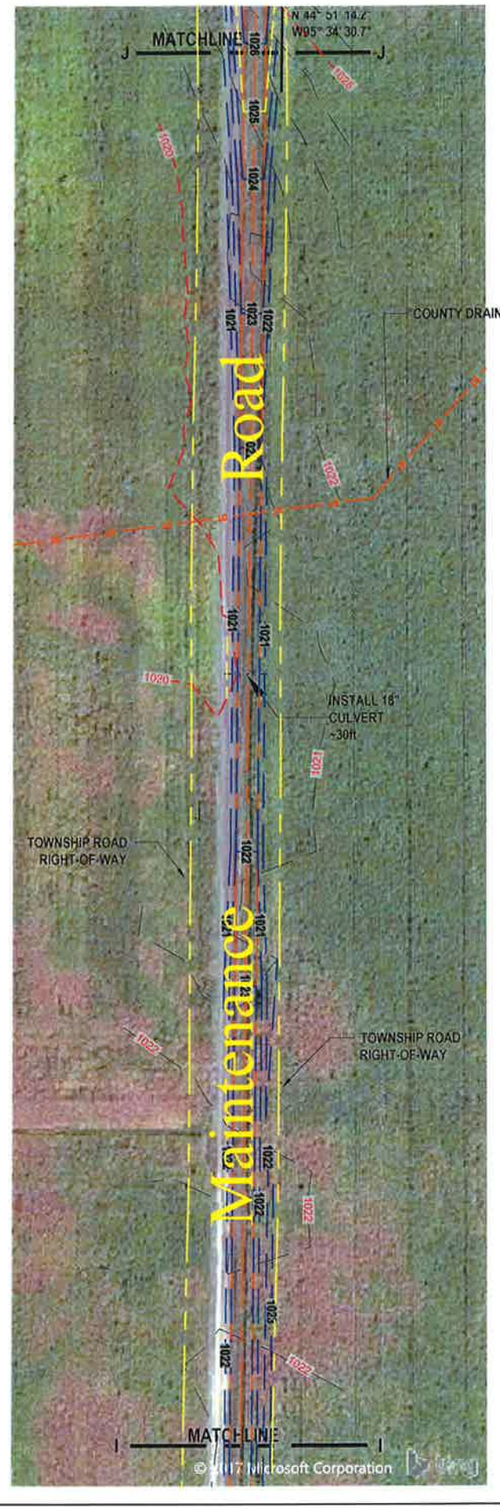
SHEET NUMBER
2211

REVISION NUMBER A

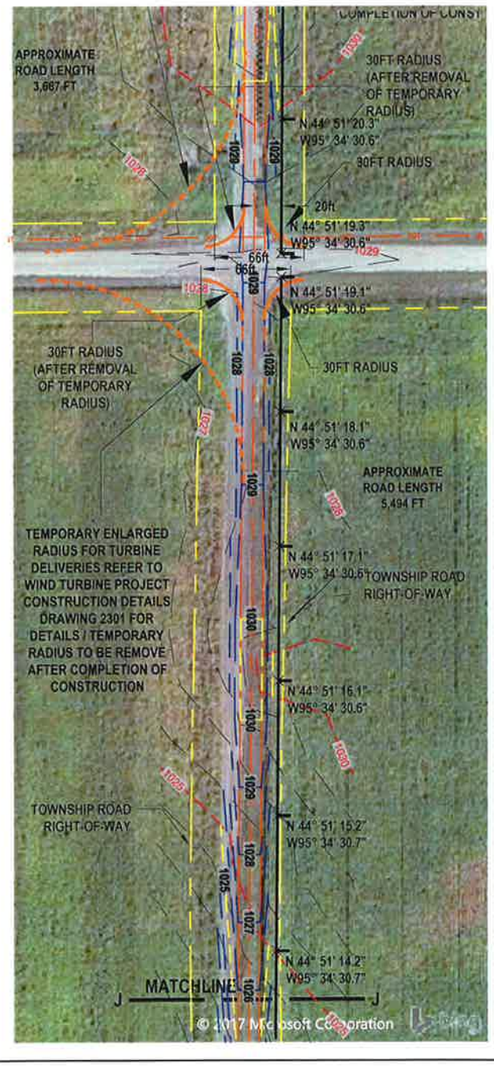
N:\Engshare\Clients\Fagen Inc\EG 2482 GF Windchaser\dwg Set\PCVF-Set-1-B-1.dwg 1/12/2018 11:00 AM







WTG-8



NO.	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W — N — E
S

25 0 50
Scale 1"= 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC, /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

PALMER'S CREEK
Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS

501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

TOWNSHIP ROAD UPGRADE TO
WIND TURBINE GENERATOR #12

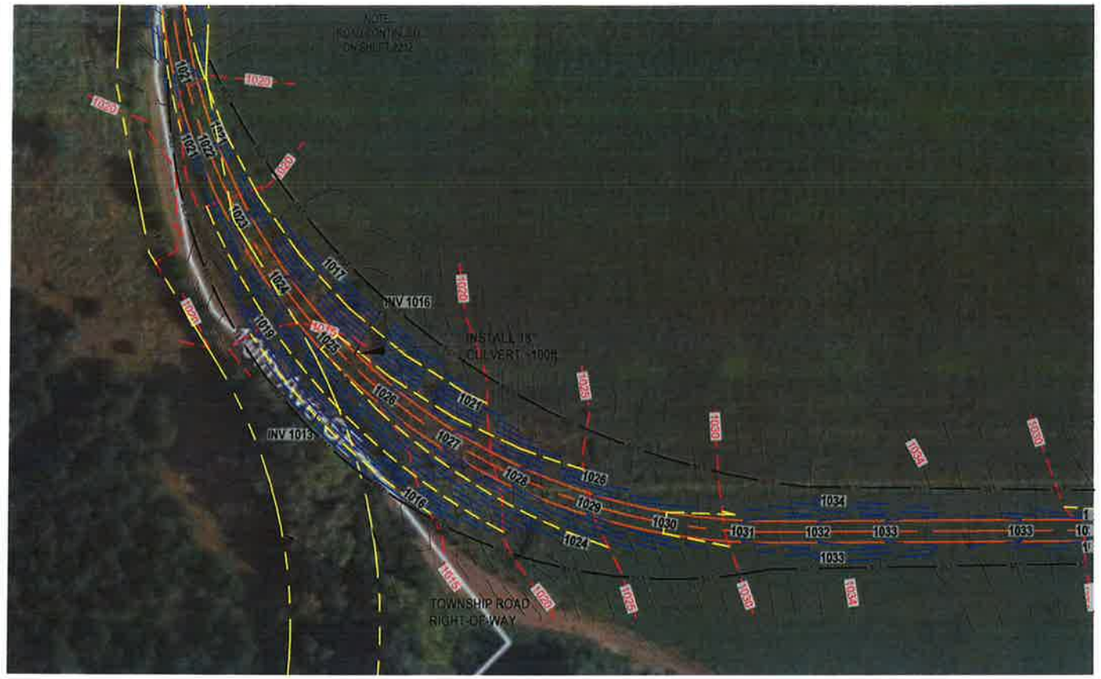
DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

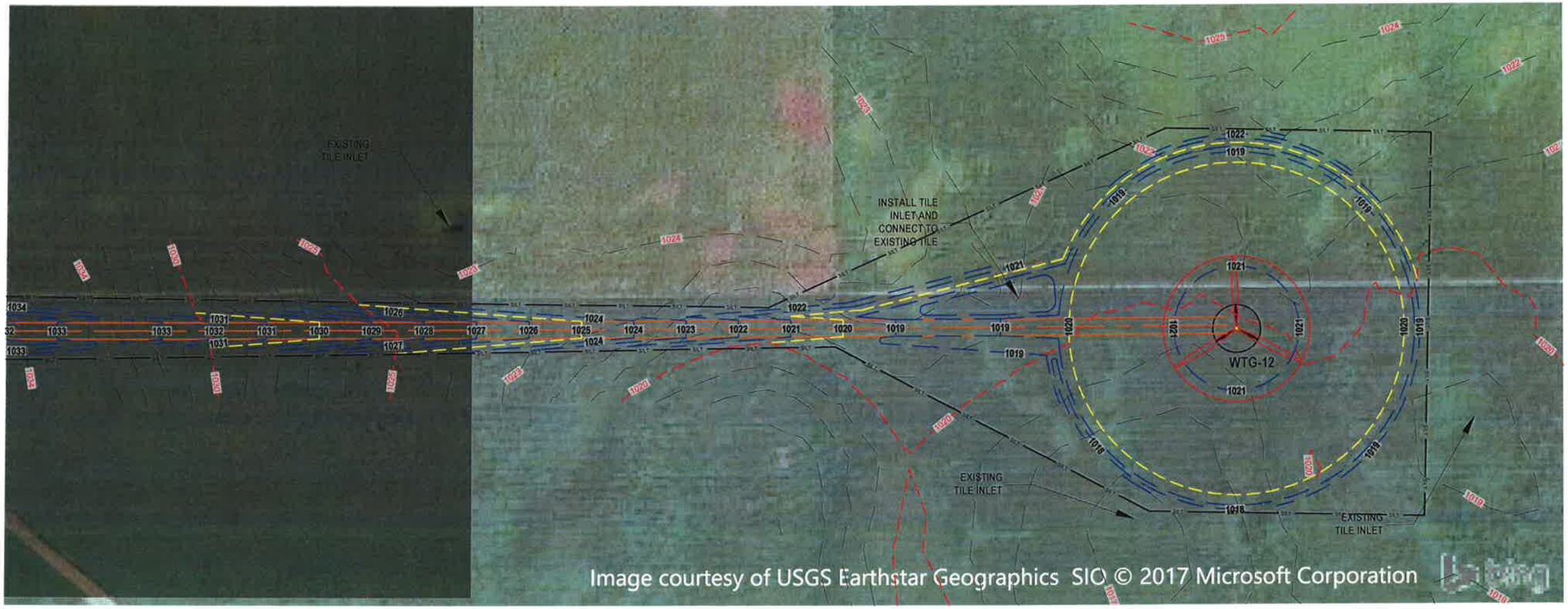
SHEET NUMBER
2212

JOB NUMBER
EG2482

REVISION NUMBER A

N:\Dropbox\Clients\Fagen Inc\EG 2482 GF Wind\Dwgs\Dwg Set\PCWF-Set-1-B-1.dwg 1/12/2018 11:30 AM





NO.	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W — N — E
S

25 0 50
Scale 1"= 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 4,430 LF

PALMER'S CREEK
Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS
501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel: 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #12
& ACCESS ROAD

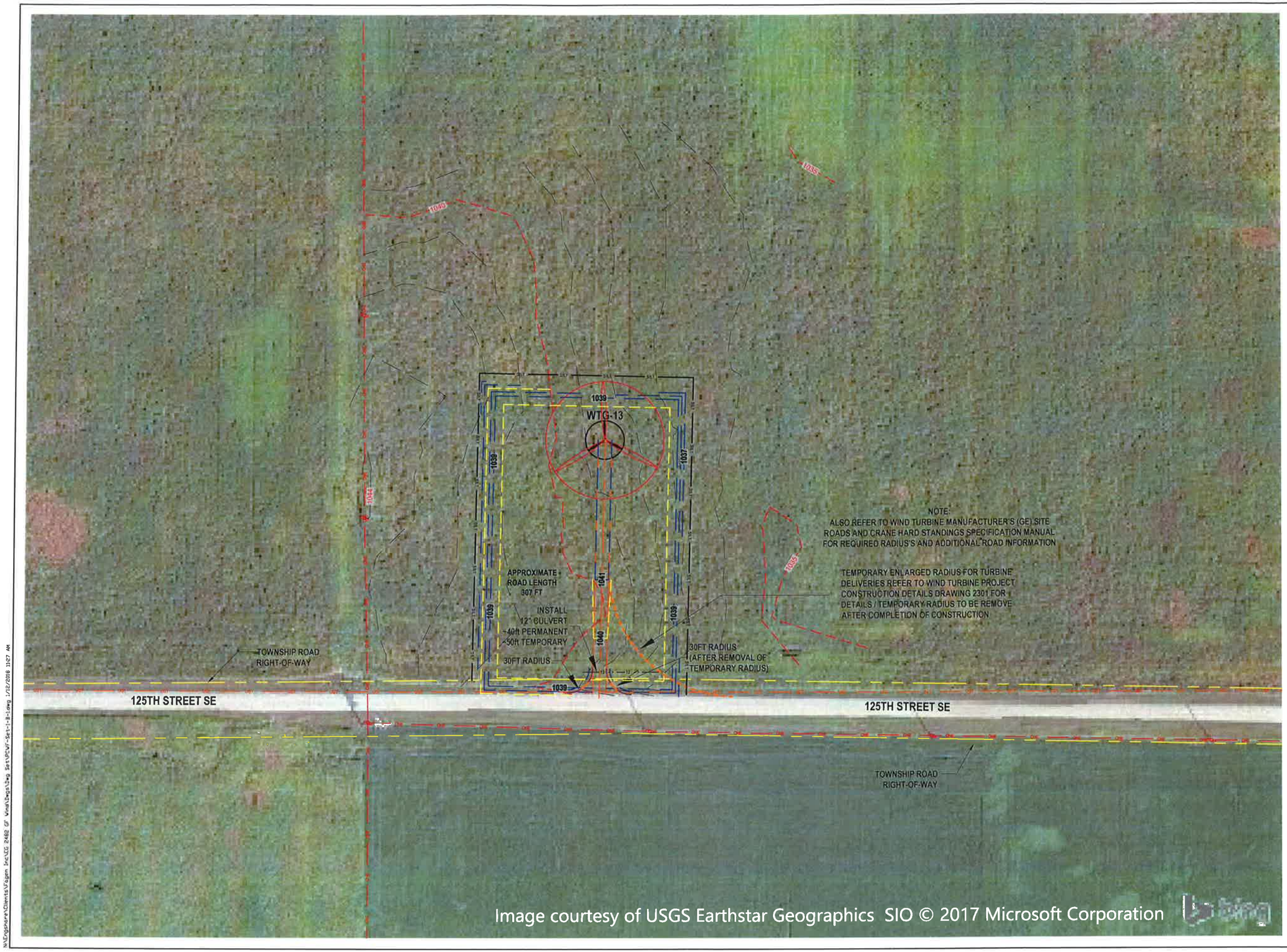
DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

SHEET NUMBER
2213

JOB NUMBER
EG2482

REVISION NUMBER A

N:\Engshare\Clients\Fagen Inc\EG 2482 GF Winds\Dwgs\Dwg Set\PCWF-Set-1-B-1.dwg 1/12/2018 11:08 AM



NO.	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W N E S

25 0 50

Scale 1"= 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 1,000 LF

PALMER'S CREEK
Wind Farm

FAGEN
ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL
ENGINEERS
501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #13
& ACCESS ROAD

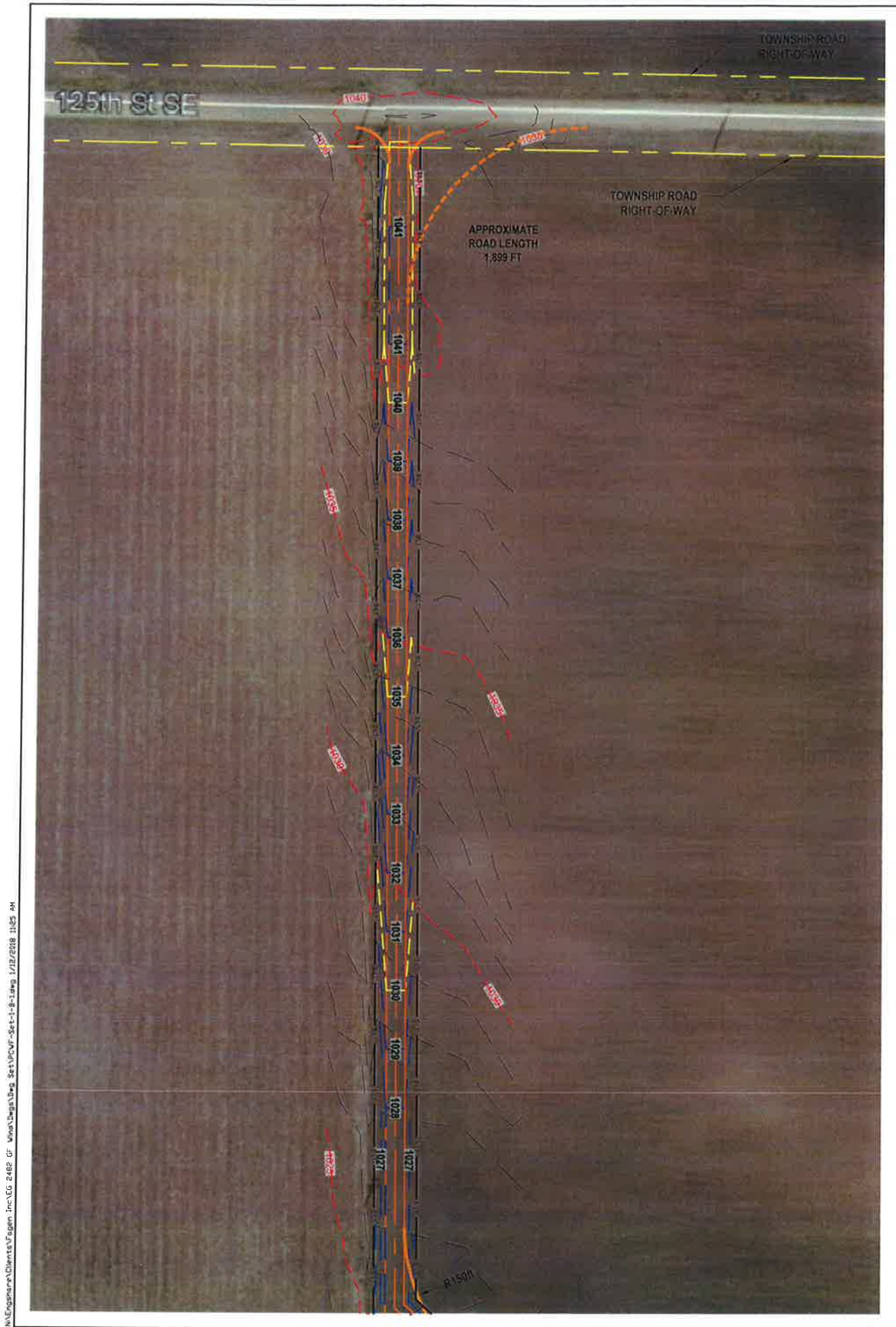
DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

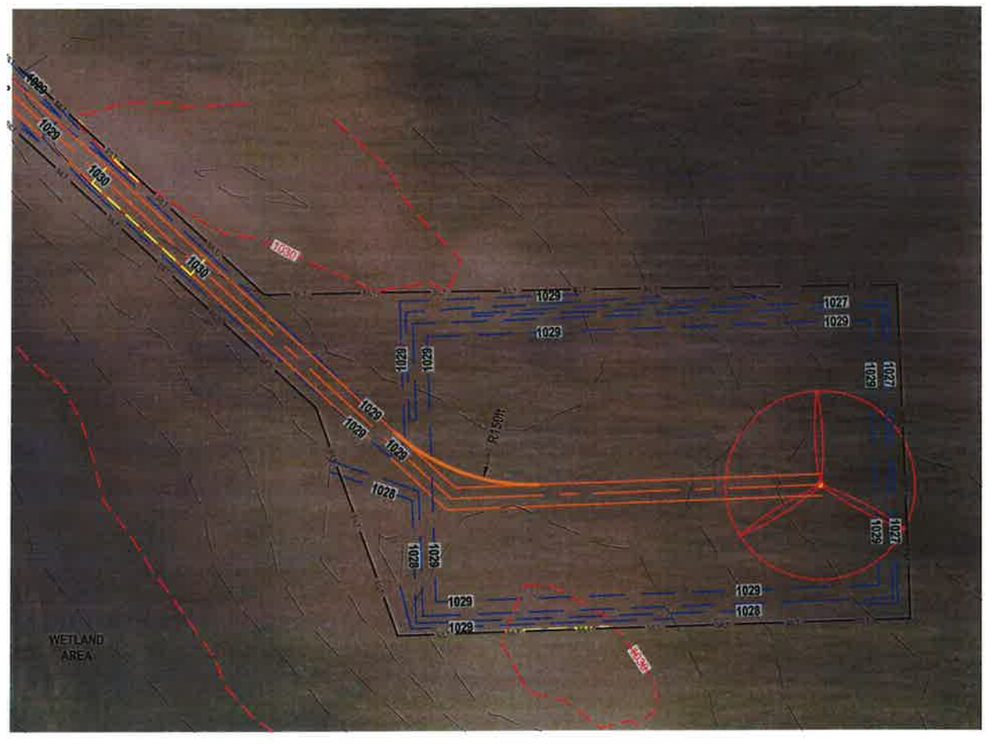
JOB NUMBER
EG2482

SHEET NUMBER
2214

REVISION NUMBER A

N:\Projects\Clients\Fagen Inc\EG 2482 GF Wind\Dwg\Dwg Set\PCWF-Set-1-B-1.dwg 1/12/2018 11:27 AM





NO.	REVISION	BY	CHK'D	DATE
A	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W N E S

25 0 50
Scale 1"= 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 4,165 LF

PALMER'S CREEK
Wind Farm

FAGEN
ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS

501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #14
& ACCESS ROAD

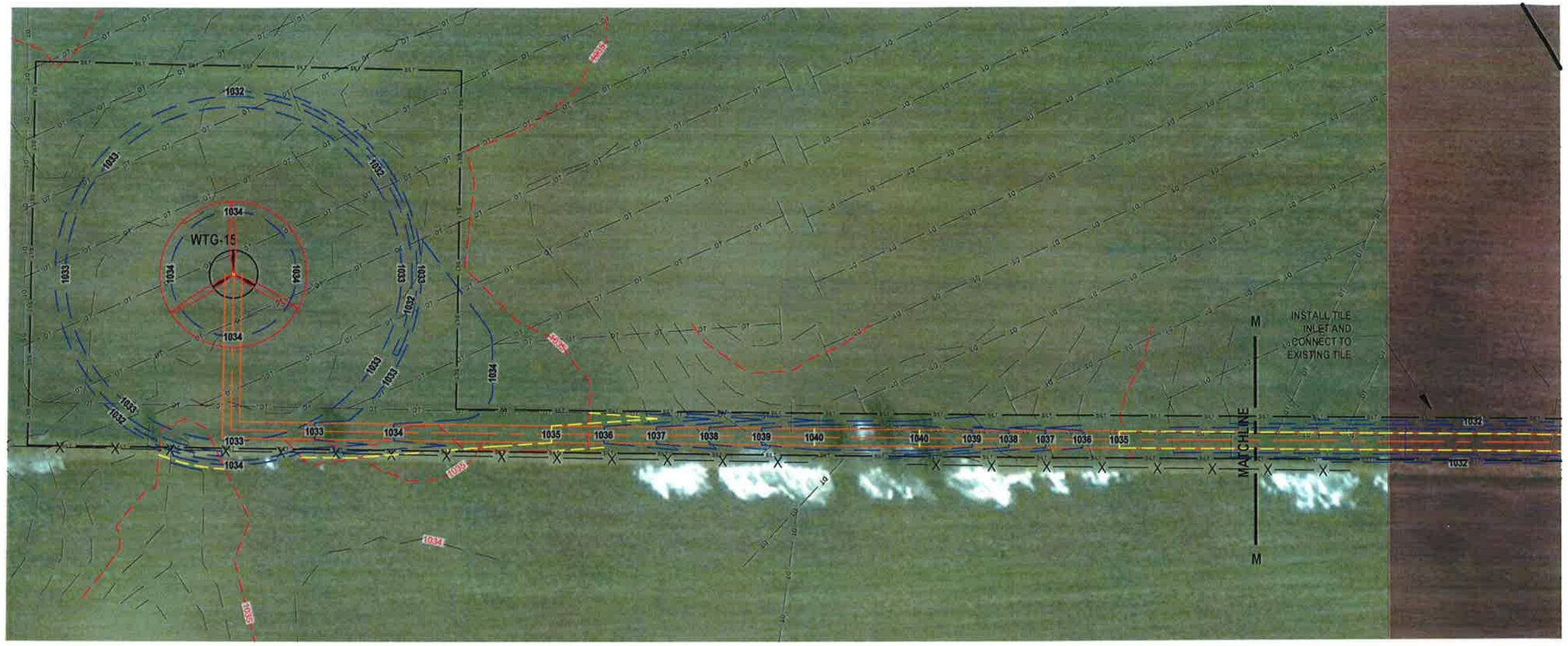
DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

SHEET NUMBER
2215

JOB NUMBER
EG2482

REVISION NUMBER A

N:\Engineer\Clients\Fagen Inc\EG 2482 GF Wind\Dwgs\Dwg Set\PCVF-Set-1-8-1.dwg 1/18/2018 11:25 AM



NO.	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	TIH	09/15/2017

W N E S

25 0 50
Scale 1"= 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 4,760 LF

PALMER'S CREEK
Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS
501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #15
& ACCESS ROAD

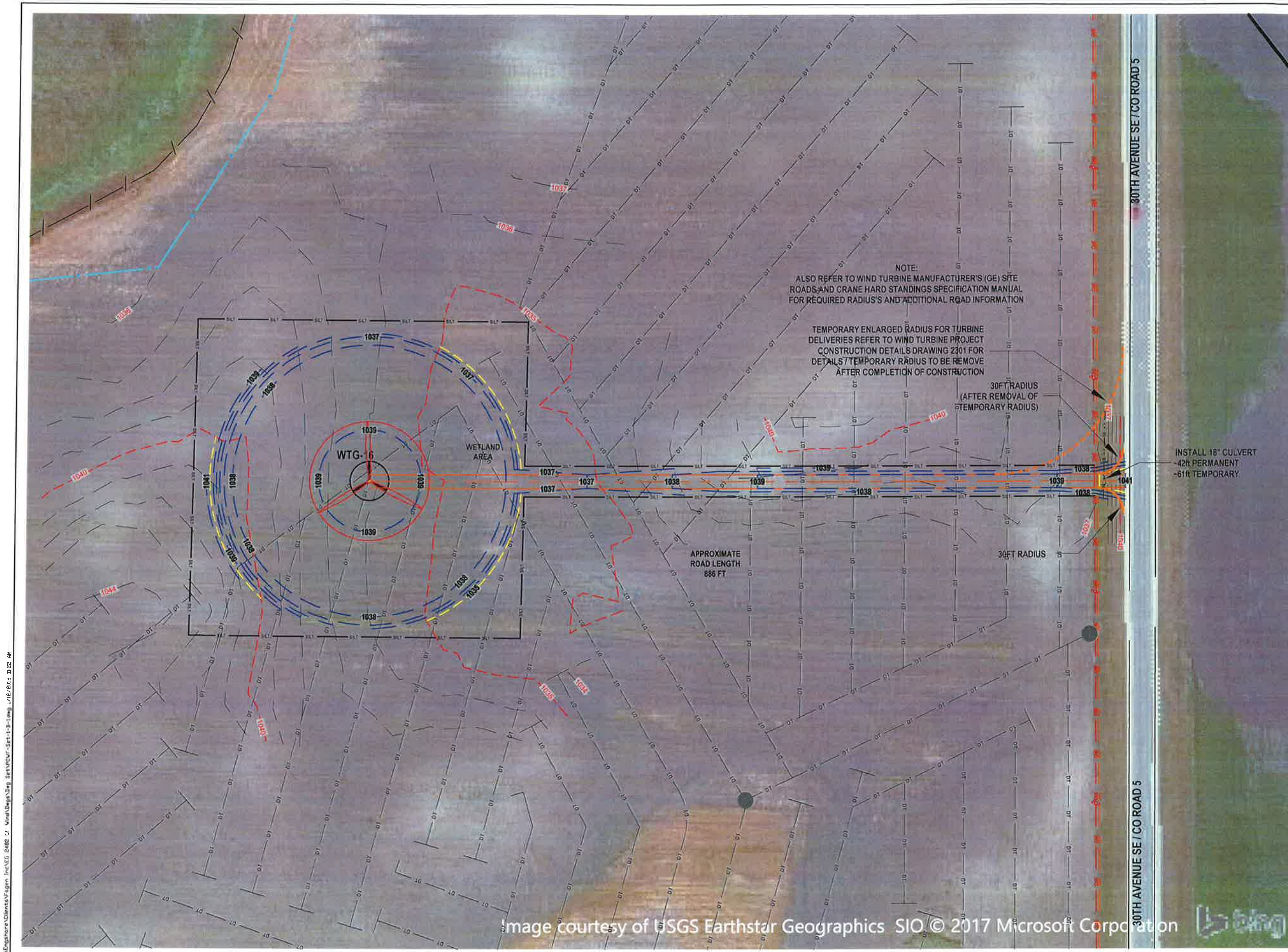
DRAWN: HEK
CHK'D: TIH
DATE: 09/15/2017
SCALE: 1"=50'

JOB NUMBER
EG2482

SHEET NUMBER
2216

REVISION NUMBER A

N:\Engshare\Clients\Fagen Inc\EG 2482 GF Windchaps\Dwg Set\PCWF-Set-1-R1.dwg 1/12/2018 11:23 AM



NO	REVISION	BY	CHK'D	DATE
A	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W – N – E, S

Scale 1"= 50'

Note: @ Architectural D Size (24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN: PROJECT BOUNDARY / EXISTING ROADS (MINNESOTA) / STREAMS / PARCELS / ETC. / ARE OBTAINED FROM SHAPE FILES (SHP) (PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN / OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 2,820 LF

PALMER'S CREEK Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS

501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK WIND FARM, LLC
GRANITE FALLS, MINNESOTA

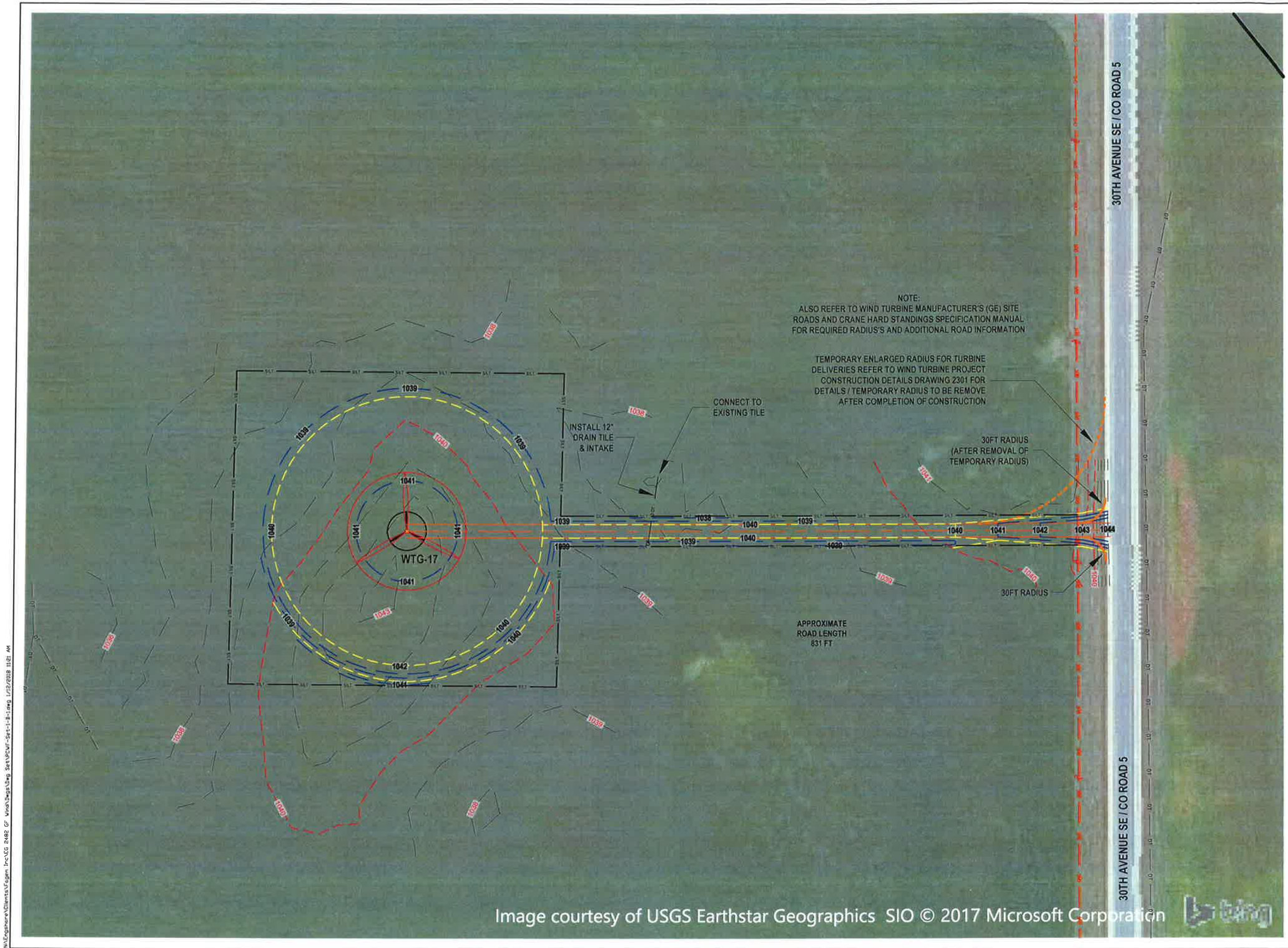
WIND TURBINE GENERATOR #16 & ACCESS ROAD

DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

JOB NUMBER: EG2482

SHEET NUMBER: 2217

REVISION NUMBER: A



NO.	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W N E S

25 0 50

Scale 1"= 50'

Note: @ Architectural D Size (24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN / OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 2,705 LF

PALMER'S CREEK Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS
501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #17
& ACCESS ROAD

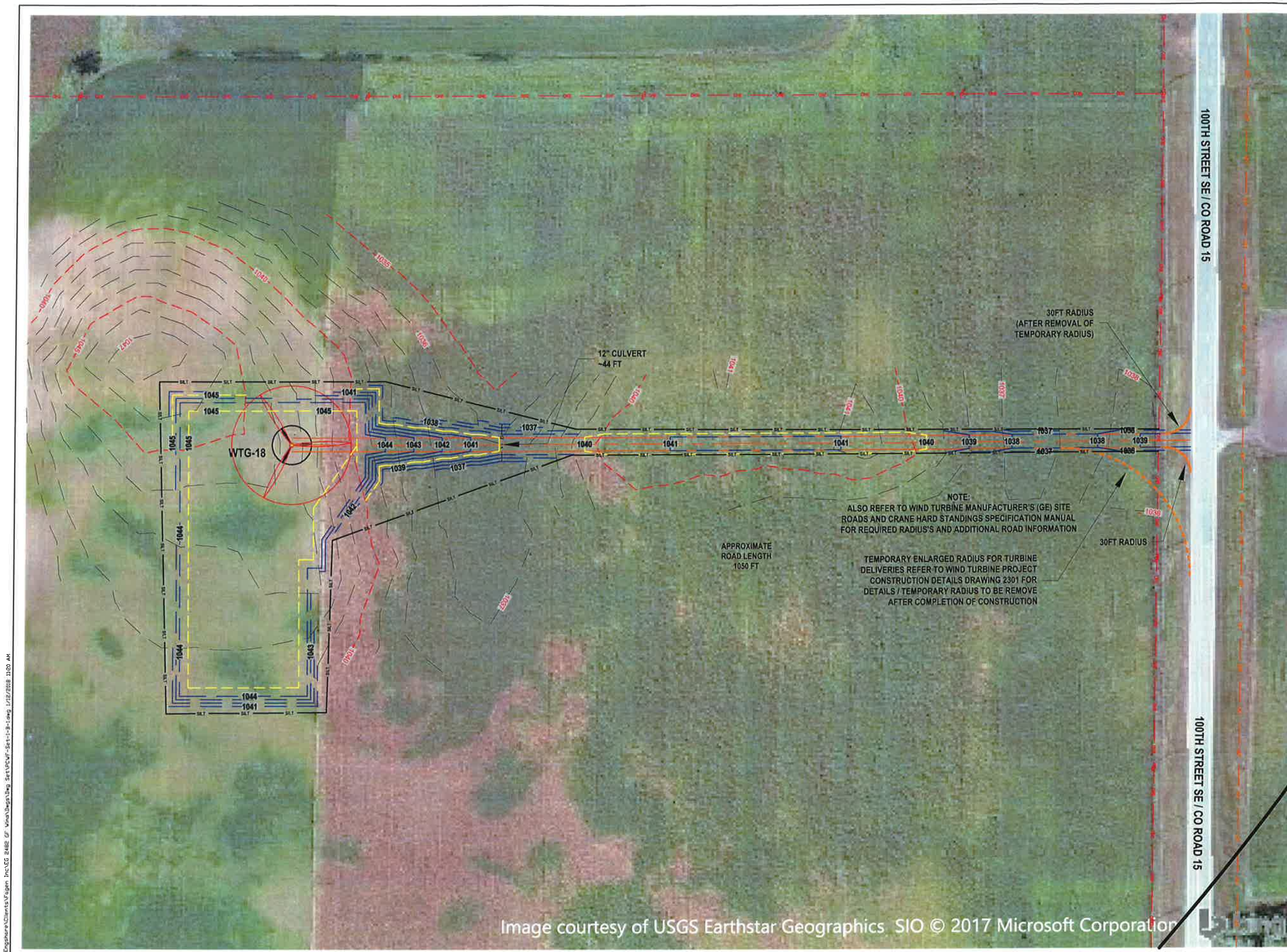
DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

JOB NUMBER
EG2482

SHEET NUMBER
2218

REVISION NUMBER A

N:\Engineer\Clients\Fagen Inc\EG 2482 GF Wind\Dwgs\Dwg Set\PCW-Set-1-B.dwg 1/18/2018 11:21 AM



NO.	REVISION	BY	CHK'D	DATE
A	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

Scale 1" = 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 2,940 LF

PALMER'S CREEK
Wind Farm

FAGEN
ENGINEERING LLC

CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS

501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

WIND TURBINE GENERATOR #18
& ACCESS ROAD

DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

JOB NUMBER
EG2482

SHEET NUMBER
2219

REVISION NUMBER A

NO.	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	TIH	09/15/2017

W — N — E
S

25 0 50
Scale 1"= 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 710 LF

PALMER'S CREEK
Wind Farm

FAGEN
ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS

501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

PALMER'S CREEK WIND FARM
PERMANENT MET TOWER ACCESS

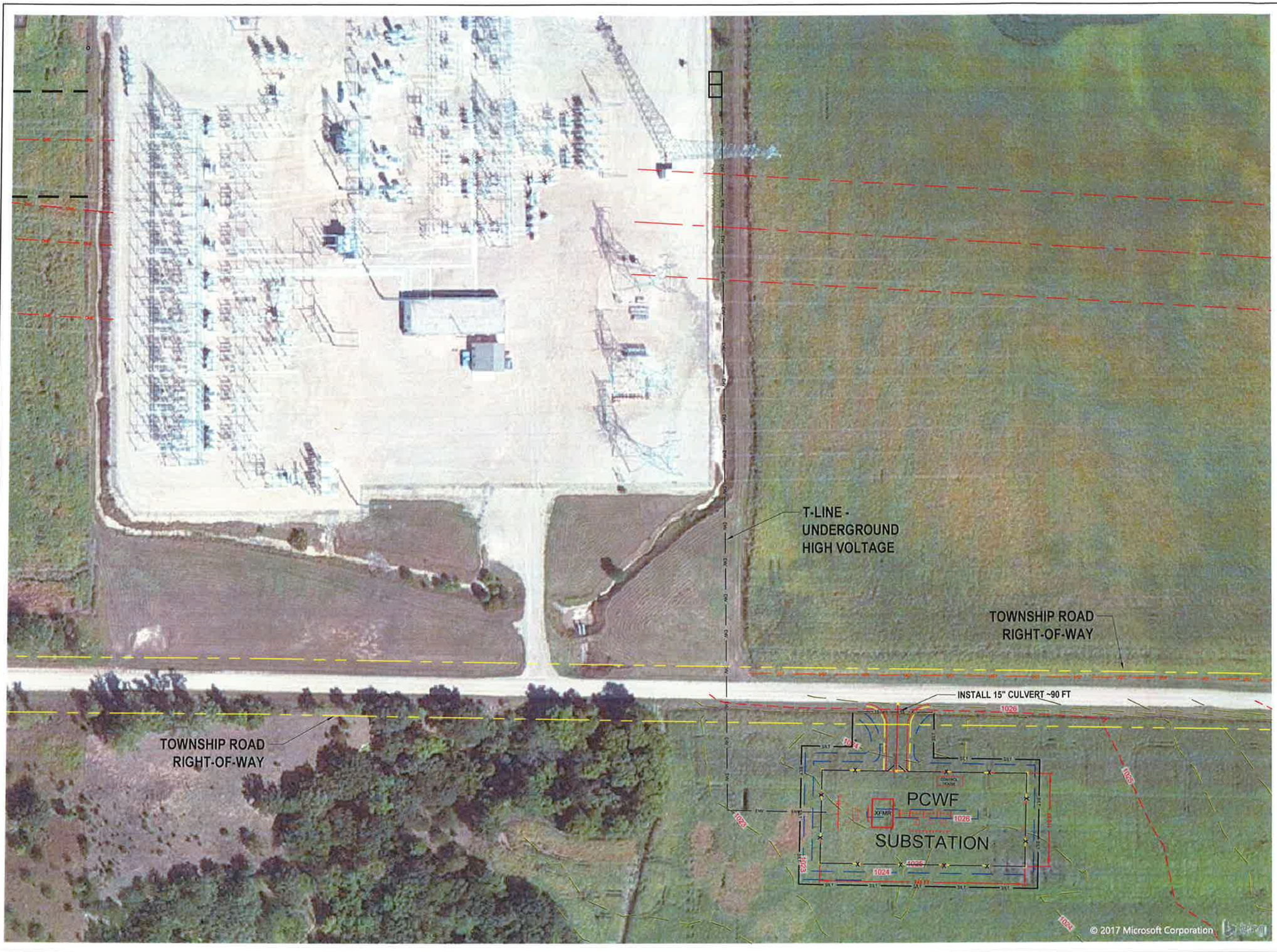
DRAWN: HEK
CHK'D: TIH
DATE: 09/15/2017
SCALE: 1"=50'

SHEET NUMBER
2220

JOB NUMBER
EG2482

REVISION NUMBER A

N:\Cogshare\Clients\Fagen Inc\EG 2482 GF Windchaser\Dwg Set\PCVF-Set-1-B-1.dwg 1/12/2018 11:19 AM



NO	REVISION	BY	CHK'D	DATE
1	RELEASED FOR FINAL REVIEW	HEK	THH	09/15/2017

W — N — E
S

25 0 50
Scale 1"= 50'

Note: @
Architectural D Size
(24"x36")

NOTE:
LOCATIONS OF ITEMS SHOWN:
PROJECT BOUNDARY /
EXISTING ROADS (MINNESOTA) /
STREAMS / PARCELS / ETC. /
ARE OBTAINED FROM SHAPE FILES (SHP)
(PROVIDED BY BONNEMA SURVEYING)

NOTE:
BACKGROUND REFERENCE IMAGES SHOWN /
OBTAINED FROM EARTHSTAR GEOGRAPHICS

QUANTITIES:
SILT FENCE - APPROX 870 LF

PALMER'S CREEK
Wind Farm

FAGEN ENGINEERING LLC
CIVIL – STRUCTURAL – MECHANICAL – ELECTRICAL ENGINEERS
501 HWY. 212 W., GRANITE FALLS, MN. 56241
Granite Falls, MN 56241 Tel. 320-564-4573

PALMER'S CREEK
WIND FARM, LLC
GRANITE FALLS, MINNESOTA

PALMER'S CREEK WIND FARM
SUBSTATION - INTERCONNECT

DRAWN: HEK
CHK'D: THH
DATE: 09/15/2017
SCALE: 1"=50'

SHEET NUMBER
2221

JOB NUMBER
EG2482

REVISION NUMBER A

N:\Engshare\Clients\Fagen Inc\EG 2482 GF Wind\Dwgs\Dwg Set\PCWF-Set-1-8-Long 1/12/2018 11:17 AM

APPENDIX 4
SWPPP Training Attendance Log

Palmer's Creek Wind Farm
Chippewa County, Minnesota

SWPPP TRAINING ATTENDANCE LOG

I have received a copy of the Fagen/PCWF "SWPPP Plan- Training Document." I have read the information and understand the objectives of this document.

Name	Title	Signature	Date
1)			
2)			
3)			
4)			
5)			
6)			
7)			
8)			
9)			
10)			
11)			
12)			
13)			
14)			
15)			

Person/Agency Performing Training: _____

Training Date & Length: _____

*Attach a copy of the SWPPP Plan - Training Document to this log.

APPENDIX 5
Spill Report Form

Facility Spill Report Form
Palmer's Creek Wind Farm
Chippewa County, Minnesota

DO NOT COMPROMISE HUMAN HEALTH AND SAFETY TO CONTROL OR REPORT ON A SPILL! FOLLOW ALL FACILITY H&S PROCEDURES AT ALL TIMES!

Directions: This Spill Report Form should be completed as soon as possible, in the event of a spill. The first priority of a spill is worker safety, second is stopping the flow, third is control, and last is completing this Spill Report Form. Please notify your supervisor or SWPPP/SPCC Coordinator or Assistant Coordinator as soon as possible. The signed original must be provided to the SWPPP/SPCC Coordinators as soon as possible. The Coordinators will finalize the form and file with the SWPPP/SPCC accordingly.

Spill Date/Time: _____
Spill Location: _____
Is the spill contained: _____
Material Spilled: _____
Quantity Spilled: _____
Was the release _____ toxic, _____ hazardous, _____ petroleum product?

Was the release below ground (i.e. underground pipe leak)?	YES/NO
Has the release impacted or is it threatening water?	YES/NO
Has the release impacted or is it threatening public welfare?	YES/NO

A release of oil or hazardous substance which threatens waters of the State must be reported to the Minnesota Duty Officer upon discovery. If you answered yes to any of the above questions, immediate notification to the National Response Center is also required. Please contact the SWPPP/SPCC Coordinator immediately for instructions.

What was the reason for the spill? Please describe: _____
What actions were taken to control the spill? Attach additional pages as necessary.

_____
_____
_____

Please print your name and title:

_____ _____
Signature Date

To be completed by the SWPPP/SPCC Coordinator or Assistant Coordinator:
Reason for spill:_____ Could this spill have been prevented?_____
Actions to prevent a spill of this nature in the future: _____
Did facility employees implement appropriate spill response and control activities? YES/NO
Does the SWPPP/SPCC need to be updated to prevent this from occurring in the future? YES/NO
Have all spill notifications been completed in compliance with applicable Federal, State and Local regulations: YES/NO/NA
Has all spill control equipment been cleaned or disposed of in accordance with applicable environmental regulations? YES/NO
Signature: _____ Date: _____

APPENDIX 6
BMP Inspection Forms

BEST MANAGEMENT PRACTICE (BMP) INSPECTION FORM
TEMPORARY EROSION AND SEDIMENTATION CONTROLS

Palmer's Creek Wind Farm
Chippewa County, Minnesota

Directions: Please complete as instructed and notify appropriate Fagen, Inc. representatives regarding any necessary corrective actions. Upon completion of inspection, please return original form to SWPPP file for documentation purposes.

This form must be completed within 24 hours of a precipitation event of 0.5 inches or more or once every fourteen (14) calendar days. All on-site temporary controls, siltation fencing and hay bale check dams must be inspected. Attach additional sheets as necessary.

Inspector: _____ Date: _____

Inspectors Qualifications:

_____

_____

_____

Days since last rainfall: _____ Amount of last rainfall: _____ inches

Offsite Discharge (sediment) during noted storm event(s)? Yes_____ No_____

Weather Conditions during inspection: _____

TEMPORARY STABILIZATION MEASURES

Location and name of temporary control?	Is control still properly installed?	Condition of control (fabric frayed or bale intact)?	Any evidence of sediment overloading?	Any breach in the control?

PLEASE DESCRIBE THE NATURE AND LOCATION OF ANY OFFSITE SEDIMENT DISCHARGES IDENTIFIED DURING THIS INSPECTION

_____
_____
_____
_____
_____

PLEASE DESCRIBE ADDITIONAL CONTROL MEASURES/BMP'S THAT ARE NEEDED BASED ON THIS INSPECTION.

_____
_____
_____
_____
_____

PLEASE DESCRIBE THE NECESSARY MAINTENANCE REQUIRED FOR THE TEMPORARY EROSION AND SEDIMENT CONTROLS. IF NONE IS REQURIED AT THIS TIME, PLEASE INDICATE.

_____
_____
_____
_____
_____

CORRECTIVE ACTIONS TO BE PERFORMED:

_____
_____
_____
_____

ON OR BEFORE: _____

PLEASE NOTE ANY RECOMMENDED CHANGES TO THE STORM WATER POLLUTION PREVENTION PLAN AND PROVIDE ADDITIONAL COMMENTS, AS NECESSARY, ON THE REVERSE SIDE OF THIS FORM.

APPENDIX 7
Construction Activity Dates

Construction Activity Dates
Palmer's Creek Wind Farm
Chippewa County, Minnesota

Dates when grading activities occur: _____

Dates when construction activities temporarily or permanently cease on a portion of the site: _____

Dates when stabilization measures are initiated: _____

APPENDIX 8
Notice of Termination of Construction Activities (NOT)

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

CSW Notice of Termination/ Permit Modification Form

NPDES Construction Stormwater (CSW) Permit Program

Doc Type: Notice of Termination/Permit Modification

Purpose: Transfer or terminate your National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit. Allowable changes are permit termination and permit transfer for all or a portion of the site.

Questions: If you have questions about the administrative details of the permit process go to: http://www.pca.state.mn.us/publications/wq-strm2-60i.pdf or call the Stormwater Hotline at **651-757-2119 or 800-657-3804** (non-metro only).

Form will be invalid and returned to sender unless the checkbox associated with the applicable actions is checked and the corresponding signature is provided in section A-1, A-2, A-3, and/or A-4.

Submittals: You may either e-mail a signed and scanned PDF copy to csw.pca@state.mn.us, or you may mail a hard copy to:

Construction Stormwater Permit Program
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Existing Permit Identification

a. Current permit ID: C000 _ _ _ _ _ or SUB00 _ _ _ _ _

b. Project name: _____

Project location: _____

_____

Briefly describe where the construction activity occurs (for example: Intersection of 45th St. and Irving Ave.). Include address if available.

Select Option 1, 2, or 3

☐ **1. Notice of Termination (NOT) for entire site by existing owner**

Select this option when a project has achieved Final Stabilization (according to Part IV.G of the Permit) with the existing owner/contractor and no part of the site is being transferred to a new owner and all construction activity is complete.

Owner and contractor currently authorized under the permit must sign under the "Current" Owner (A-1) and "Current" Contractor (A-2) sections respectively.

☐ **2. Transfer of entire site to new owner or contractor (Transfer/Modification)**

Select this option if the ***entire*** site (represented by the ID above) has either a new owner and/or new general contractor. *"Current" Owner must authorize and sign for any and all changes. The "Current" Contractor needs to sign only if there is a "New" Contractor for the site. After the "Current" parties have signed their sections respectively, proceed to fill out the "New" Parties information in Section A-3 and/or A-4.*

☐ **3. Transfer of a portion of a site to a new owner or contractor (Subdivision)**

Select this option if a ***portion*** of a site (permitted under the ID above) has either a new owner and/or new general contractor. *"Current" Owner must authorize and sign for any and all changes. The "Current" Contractor needs to sign only if there is a "New" Contractor for the site. After the "Current" parties have signed their sections respectively, proceed to fill out the "New" Parties information in Section A-3 and/or A-4.*

Describe the portion of the site being transferred: Lot: _____ Block: _____

Project location/address: _____

City, State, and Zip: _____

Example: SW quadrant of 45th Street and Irving Avenue or Lots 1-17 of block 20. Include list of addresses if available or include a map

New Owner/Contractor Information

"New" Owner (A-3)

Business/Firm name: _____

Last name: _____ First name: _____ Title: _____

E-mail address: _____ Telephone: ( ) _____ Ext. _____

Mailing address: _____

City: _____ State: _____ Zip code: _____

Alternate contact:

Last name: _____ First name: _____ Title: _____

E-mail address: _____ Telephone: ( ) _____ Ext. _____

"New" Contractor (A-4)

Business/Firm name: _____

Last name: _____ First name: _____ Title: _____

E-mail address: _____ Telephone: ( ) _____ Ext. _____

Mailing address: _____

City: _____ State: _____ Zip code: _____

Alternate contact:

Last name: _____ First name: _____ Title: _____

E-mail address: _____ Telephone: ( ) _____ Ext. _____

Certification - All Parties Involved

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or the persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify under penalty of law that I have read, understood, and accepted all terms and conditions of the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) General Stormwater Permit Construction Activity (MN R100001) that authorizes stormwater discharges associated with the construction site identified on this form.

This Application must be signed by: ***Corporation:*** *a principal executive officer of at least the level of vice-president or the duly authorized representative or agent of the executive officer if the representative or agent is responsible for the overall operation of the facility that is the subject of the permit application.* ***Partnership or Sole Proprietorship****: a general partner or the proprietor.* ***Municipality, State, Federal or Other Public Agency:*** *principal executive officer or ranking elected official.*

Current Owner Authorized Representative (A-1)

By signing here, I certify the above statements to be true.

Print name: _____

Company: _____

Signature: _____

Date (mm/dd/yyyy): _____

Current Contractor Authorized Representative (A-2)

By signing here, I certify the above statements to be true.

Print name: _____

Company: _____

Signature: _____

Date (mm/dd/yyyy): _____

New Owner Authorized Representative (A-3)

By signing here, I certify the above statements to be true.

Print name: _____

Company: _____

Signature: _____

Date (mm/dd/yyyy): _____

New Contractor Authorized Representative (A-4)

By signing here, I certify the above statements to be true.

Print name: _____

Company: _____

Signature: _____

Date (mm/dd/yyyy): _____