Badger Wind LLC

Amend-Badger Wind Project-Logan & McIntosh Counties

Case No. PU-24-87

Topsoil Removal Inspection Report

153 PU-22-86 Filed 10/16/2024 Pages: 23
Topsoil Removal Inspection Report
SEH - Short Elliot Hendrickson Inc.
Loretta Marshik, PE

77 PU-24-87 Filed 10/16/2024 Pages: 23
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October 10th, 2024

RE: Case No. PU-24-87
Badger Wind LLC
Amend-Badger Wind Project-Logan & McIntosh Counties
Topsoil Removal Inspection Report

Mr. Victor Schock
Public Utility Analyst
North Dakota Public Service Commission
600 East Boulevard Avenue, Dept. 408
Bismarck, ND 58505-0480

Dear Mr. Schock:

Attached is the Topsoil Removal Inspection Report for the above referenced project. This report includes the following:

1. Executive Summary
2. Inspection Report
3. Appendix A – Photo Location Maps
4. Appendix B - Photographs

Sincerely,

Loretta A Marshik

Loretta Marshik, PE
Short Elliot Hendrickson Inc.
905 Tacoma Ave., Suite 2
Bismarck, ND 58504

EXECUTIVE SUMMARY

Date: 10/10/2024

Project: Badger Wind Project

Topsoil Removal site visit included visual inspection of Blattner Energy's means and methods in the stripping and segregation of topsoils, as well as erosion control measures and installation methods. Inspector was on site to document existing conditions throughout the area of disturbance. Work included taking photos of construction area, edges of construction zone, and existing vegetation conditions. Documentation was conducted to verify contractor was able to successfully strip and segregate topsoil and correctly install silt fence in order to minimize damage to the disturbance area within reasonable means.

Issues needing remediation: Dry conditions and wind led to blowing dust on site 1.

Inspector worked with contractor to document conditions on each site, means and methods for removals and erosion control install, and then left site.

Given the evidence observed by the inspector while on site on October 2nd, 2024, Blattner Energy, and by Extension, Badger Wind LLC was in compliance with the Findings of Fact, Law, and Order put forth by the NDPSC.

Inspector's Signature

INSPECTOR'S DIARY

Project: Badger Wind Project			Contractor: Badger Wind LLC
Date: 10/02/2024	Day: Wednesday		Subcontractor: Blattner Energy
Weather: Sunny, winds 15-20 mph		Temp: 74 F	Inspector: Dalton Bruce

Work Activities:

Topsoil Removal
Silt Fence Installation
Access Road Construction

Labor Force:

1 Superintendent
1 foreman
4 operators
3 laborers

Contractor Correspondence:

*0950 I introduced myself to the Blattner crew, and Lee, the foreman, and I discussed the plan for the day as well as offered clarity on my role out on site.
*1015 While inspecting site 1, Lee had me show him what it was I was looking for while crews removed topsoil. I explained I was looking for a soil change.
*1035 I asked Lee how they're planning to stabilize segregated topsoil stockpile. He said they'll make a perimeter around the pile using fiber rolls.
*1100 Lee told me one of his crews was going to go put up silt fence on some other wind turbine sites on the project. I said I'd go check in on operations so I could document their work as well as the existing conditions for future reference.
*1315 I verified that structure 109 was going on site 5 with Lee.

Other Remarks:

*High winds and dry conditions led to blowing dust on site 1.

Inspector's Signature

INSPECTOR'S DIARY

Date: 10/02/2024

Project: Badger Wind Project	Contractor or Sub: Blattner Energy

Work Performed & Location:

Site 1: Crew used a CASE III tractor to pull a CAT scraper around the site in strips and stripped the topsoil to a depth of 12", verified by inspector (see P9), loading it into the scraper bucket. Once full, the tractor would pull the scraper bucket and dump it on the East side of the job site, creating a windrow of topsoil see(P10 & 19). Similarly, for access road construction, a blade was used to strip topsoil to a depth of 12" running from the East road shoulder to the construction site. A dozer was used to move topsoil along the steeper grades of the road shoulder, and material was windrowed along the sides of the access road (see P21, 23, & 24). From there, the tractor collected the material in its scraper bucket and moved it to the stockpile. In the afternoon when the wind really came up, dry conditions caused blowing dust to occur.

Sites 3 & 5: I followed the erosion control crew out to both sites to document erosion control installation means and methods. Tools and supplies were kept in the bed of one of the crew's work trucks. A skid steer followed behind them and once on site, the crew loaded a spool of silt fence onto the skid steer's trenching attachment. The skid steer would shove the blade of the attachment into the soil and back up, unfurling the silt fence and setting it below the soil surface at approximately 12" depth (see P12-14 & 16). The crew then set up stakes intermittently along the silt fence path, and then placed smaller stakes on the opposite side of the fence. Once the stakes were installed, they were stapled together using an air powered staple gun. A laborer would then measure the length of silt fence installed and mark it on the down slope side of the fence with purple spray paint.

CONTRACTOR EQUIPMENT:

Blattner Energy: CAT CS56B steel drum roller (1), CAT CP12 Sheep's foot roller (1), Ashland 2411E scraper (1), CASE III Quadtrac (1), CAT 259D3 skid steer (1), CAT 872GP blade (1), CAT D6T LGP Dozer (1)

Inspector's Signature

INSPECTOR'S DIARY

Date: 10/02/2024

Project: Badger Wind Project	Contractor or Sub: Blattner Energy

Photo Description:

Photo Name: Description:

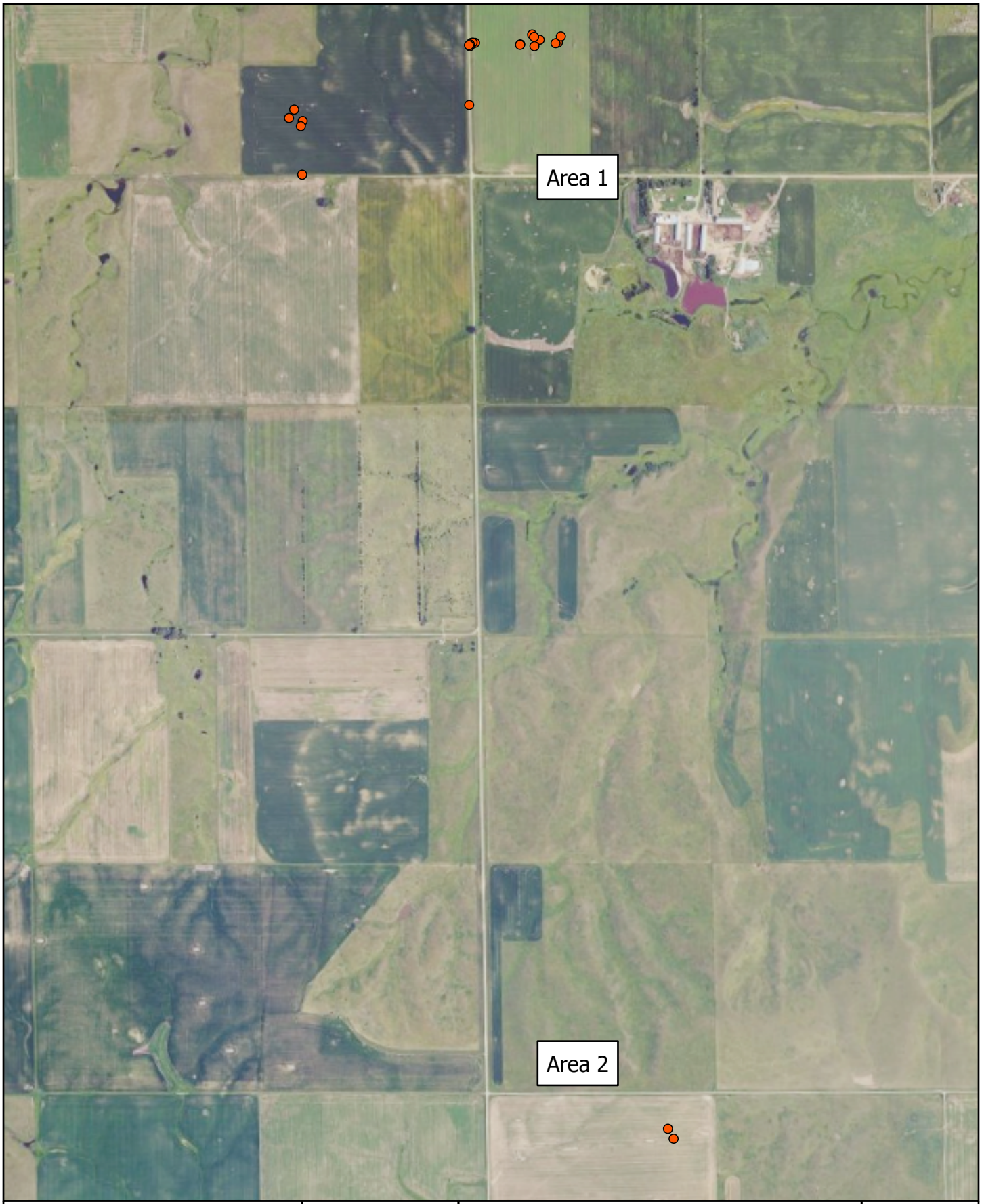
P1 - General Site Existing Conditions
P2 - Equipment
P3 - Equipment
P4 - General Site Existing Conditions
P5 - Equipment
P6 - Erosion Control
P7 - Site Conditions
P8 - Site Conditions
P9 - Existing Site Conditions
P10 - Erosion Control
P11 - Existing Conditions
P12- General Site Existing Conditions
P13 - Equipment
P14- Erosion Control
P15- Erosion Control
P16 - General Site Existing Conditions
P17 - Erosion Control
P18 - Erosion Control
P19 - Topsoil Stripping
P20 - Equipment
P21 - Topsoil Stripping
P22 - Equipment
P23 - Site Conditions
P24 - Site Conditions

*See attached Photo Layout Map with location of each photo (P1-P24), and attached pages of photos.

Inspector's Signature

Appendix A

Photo Location Map



Path: X:\KO\N\NDPSC\171771\5-final-dsgn\51-drawings\90-GIS\NDPSC171771_InspectionReport.aprx

SEH

N

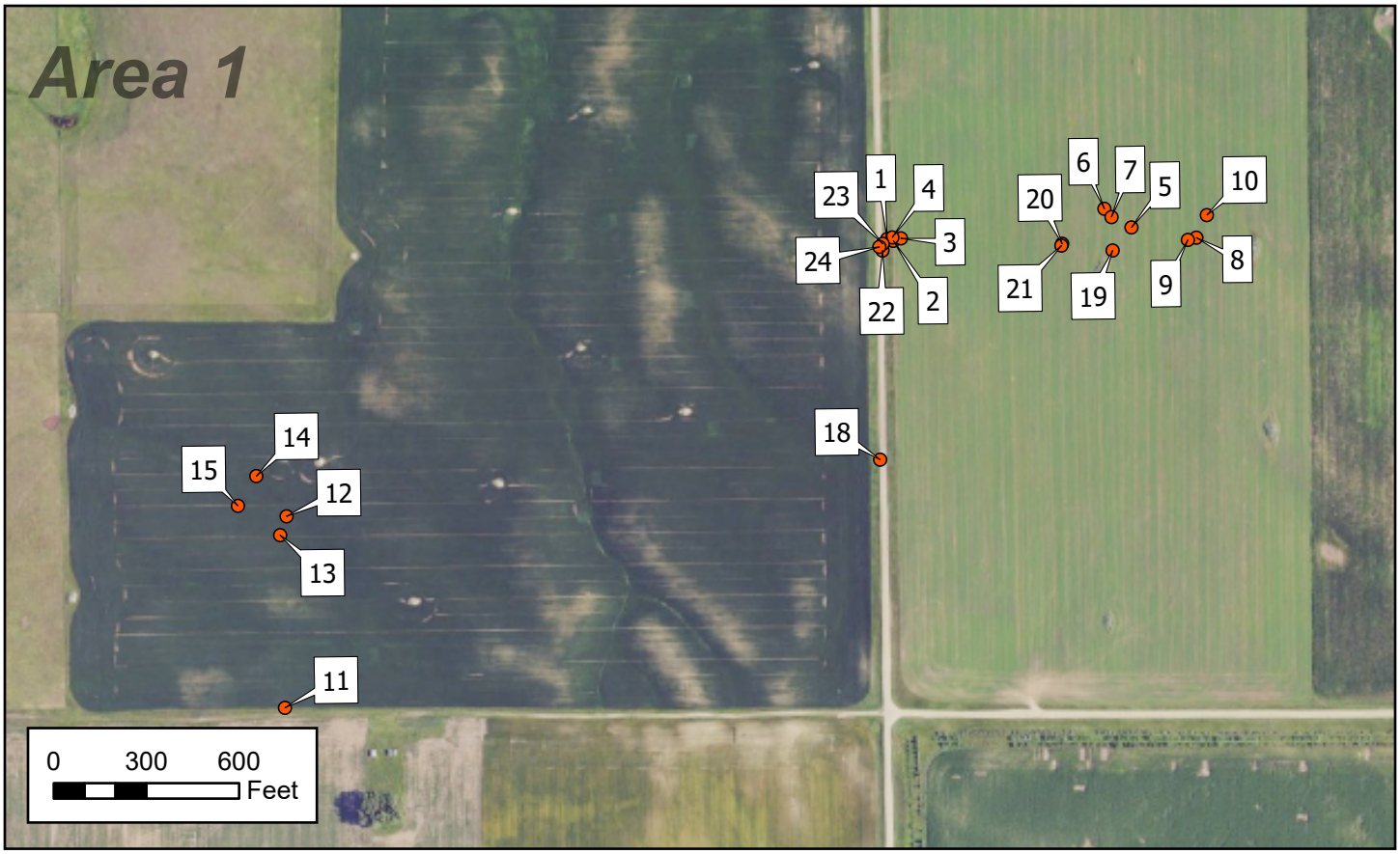
0 1,500 Feet

Project: NDPSC 171771
Print Date: 10/10/2024

Map by: tschwarz
Projection: NAD 1983 State Plane North Dakota North
Source: USDA-FSA Aerial Photography Field Office, SEH, Inc

Topsoil Removal & Construction Inspection Photo Location Map
Amend-Badger Wind Project
Logan & McIntosh

Figure 1



Path: X:\KO\N\NDPSC\171771\5-final-dsgn\51-drawings\90-GIS\NDPSC171771_InspectionReport.aprx

N

Photo Location

Project: NDPSC 171771
Print Date: 10/10/2024

Map by: tschwarz
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Topsoil Removal & Construction Inspection Photo Location Map

Amend-Badger Wind Project
Logan & McIntosh

Figure 2

Appendix B

Photos

Point 1 Access road to first site existing conditions

Point 2 CAT CS56B

Point 3 CAT CP12 Sheep’s foot roller

Point 4 Field Haul road existing conditions

Point 5 Wind turbine site 1 Ashland 2411E scraper pulled by a CASE III Quadtrac

Point 6 Wind turbine site 1 Silt fence installed on downslope of site.

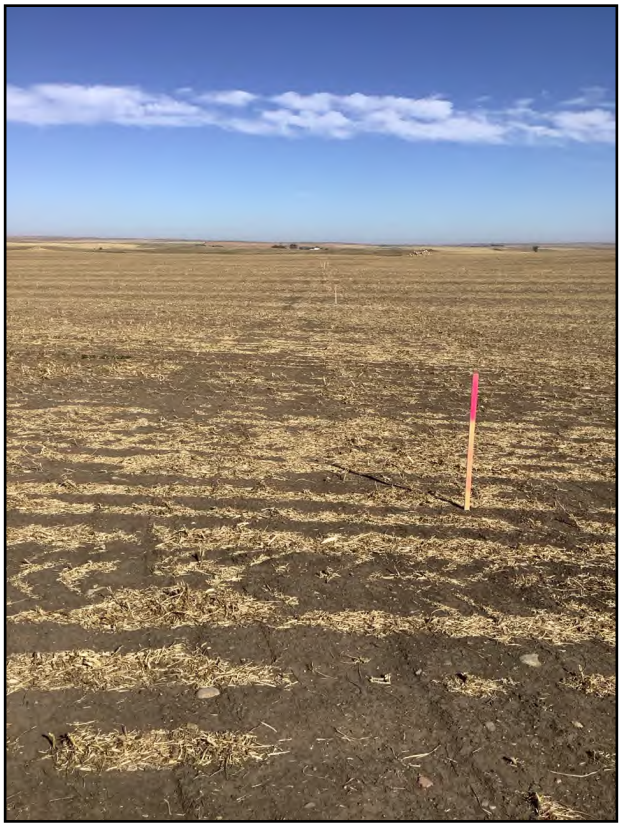
Point 7 Wind turbine site 1 Topsoil is a light brown, silty loam

Point 8 Wind turbine site 1 Topsoil left, subsoil right

Point 9 Wind turbine site 1 Topsoil depth ~12inches

Point 10 Wind turbine site 1 Windrow of excavated topsoil placed on eastern border of site 1

Point 11 Structure 3 access road and site Existing conditions for site 3 (structure 65)



Point 12 Site 3 (structure 65) Existing conditions for site 3 (structure 65). Soybean field.

Point 13 Site 3 (structure 65) CAT 259D3 skid steer with silt fence installation attachment.

Point 14 Site 3 (structure 65) Crew installing silt fence along NW edge of site.

Point 15 Site 3 (structure 65) Crew installing silt fence posts

Point 16 Site 5 (structure 109) Wheat field existing conditions

Point 17 Site 5 (structure 109) Crew installing silt fence on Eastern edge of site, downslope from construction operations

Point 18 Site 2 Silt fence installed on site 2.

Point 19 Site 1 Progress of site 1 topsoil stripping. No issues noted.

Point 20 Site 1 CAT 872GP blade which is being used to strip topsoil along site 1 access road. Topsoil is being windrowed on both sides of access road.

Point 21 Site 1 Access road for site 1 progress.

Point 22 Access road to site 1 CAT D6T LGP dozer to be used on access road

Point 23 Access road to site 1 Access road conditions after topsoil stripping.

Point 24 Site 1 access road Crew is knocking down subsoil and using it to grade and level access road.

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