



MDU 345 kV Transmission Line near Ellendale, North Dakota TOPSOIL REMOVAL INSPECTION Report No. 3

Inspector Name:

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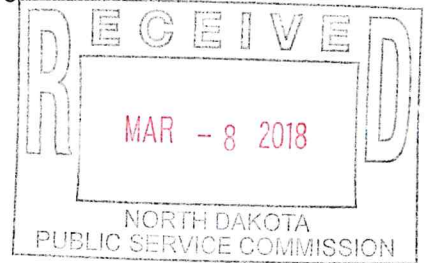
Weather:

Cloudy: 24 degrees F

Job Site Attendees:

Robert J. Youness, Ulteig

Keith Kelly, Otter Tail Power



GENERAL INFORMATION

Inspection Date:

2-05-2018

Precipitation:

0.00

**Job Site Construction Meeting
Top Soil Removal Storage and Replacement
Transmission Pole Foundations 1 thru 41**

Report Number: PU-13-840

Ulteig Project Number: R15.01328

Follow up to verify Top Soil Stock Piled - Jobsite Inspection:

In accordance with the executed contract between Ulteig and the PSC of ND, dated January 5, 2016, - Ulteig attended a job site meeting with Keith Kelly, Otter Tail Power. Ulteig reviewed the construction conditions at the job site for each of the 41 foundations verify that the TOPSOIL was being properly removed, stored and replace at the predetermined locations identified for the project. In accordance with the permitting conditions, the contractor is required to segregate the top soil and store the materials on site and use the top soil at the foundation location. Since this project consists primarily of constructing foundations for the transmission poles there was minimal disturbance to the top soil. The foundations were constructed during the winter months when the ground was frozen, resulting in negligible disturbance to the top soil between the foundations and in the adjacent fields.

The contractor used large heavy duty construction mats around the foundation in order to prevent damage to the surface conditions and for storing the top soil. The construction equipment also utilized the mats during operations.

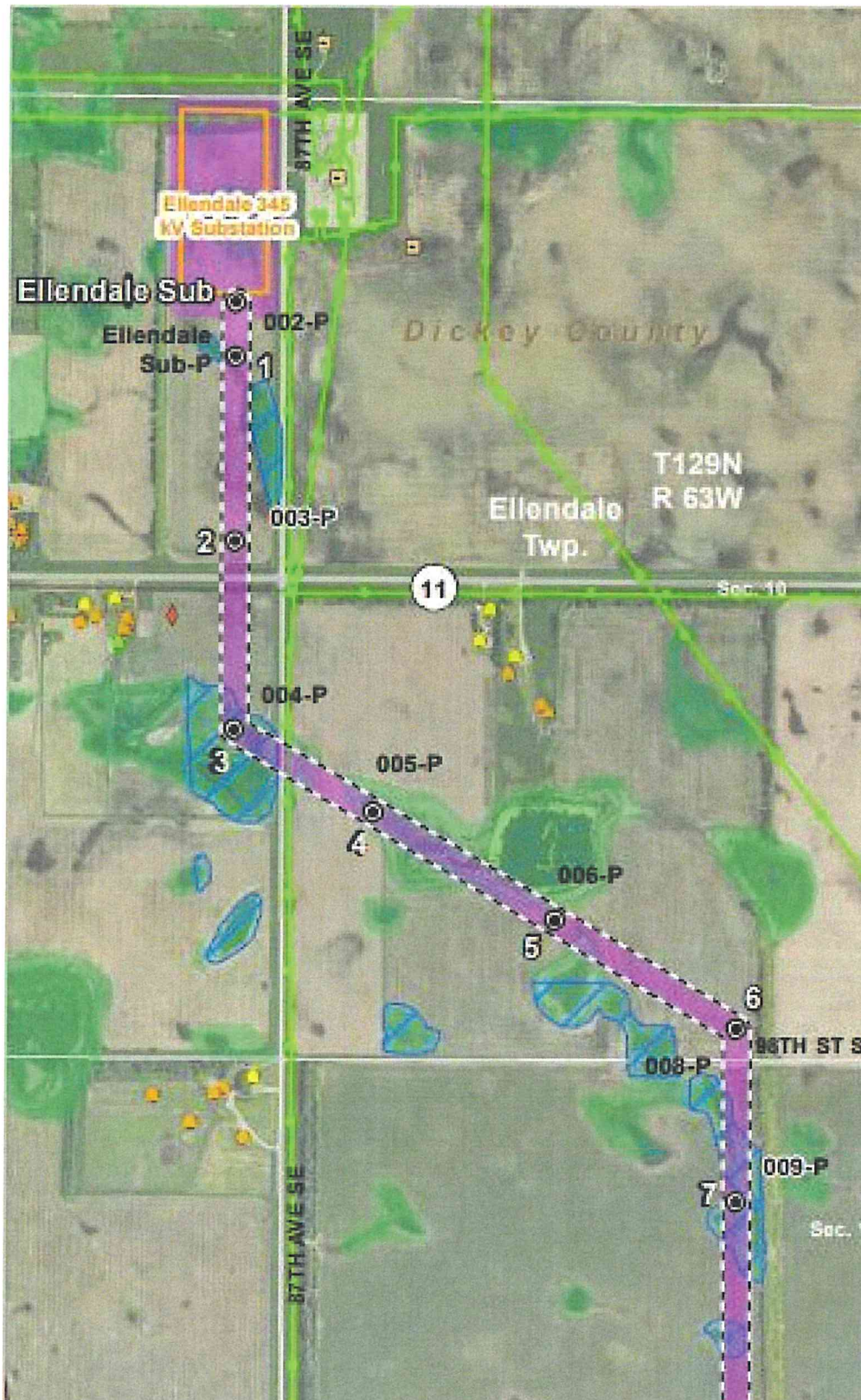
The topsoil was estimated to be between 8 inches to 18 inches in depth. The top soil was removed and stockpiled separate from the subsoil. Most of the top soil was used within the disturbed area of the foundations, the subsoil and excess top soil was removed from the site and transported to a location approved by the landowner. All work performed by the contractor was in accordance with the agreements and requirements identified by the PSC Order. for areas disturbed by construction and around the entrances to the jobsite.

The substation site is located west of Ellendale, North Dakota. The transmission line is located to the west and south of Ellendale and runs from the substation to the South Dakota border.

Location Map- Exhibit 1
Foundations F-1 thru F-7
Ellendale Transmission
Line Project - PU13-840

The power pole foundation construction activities are ongoing. Upon completion of the foundations, transmission poles and electric cable will be installed.

The locations maps were part of the report to the PSC, from the utility company. The number of the foundations are shown adjacent to the Pole Numbers.





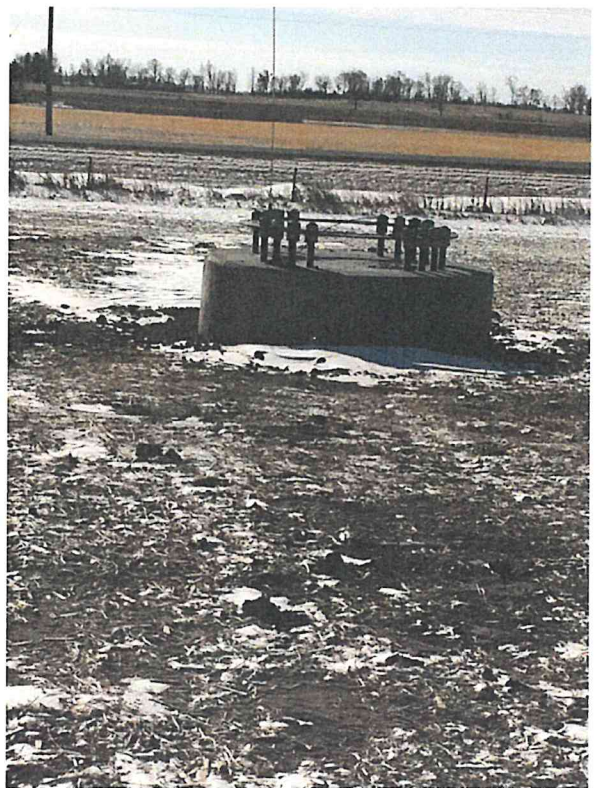
Foundation No. 1 Looking N.



Foundation No. 2 Looking S.



Foundation No. 3 Looking W.



Foundation No. 4 Looking W.



Foundation No. 5 Looking S.

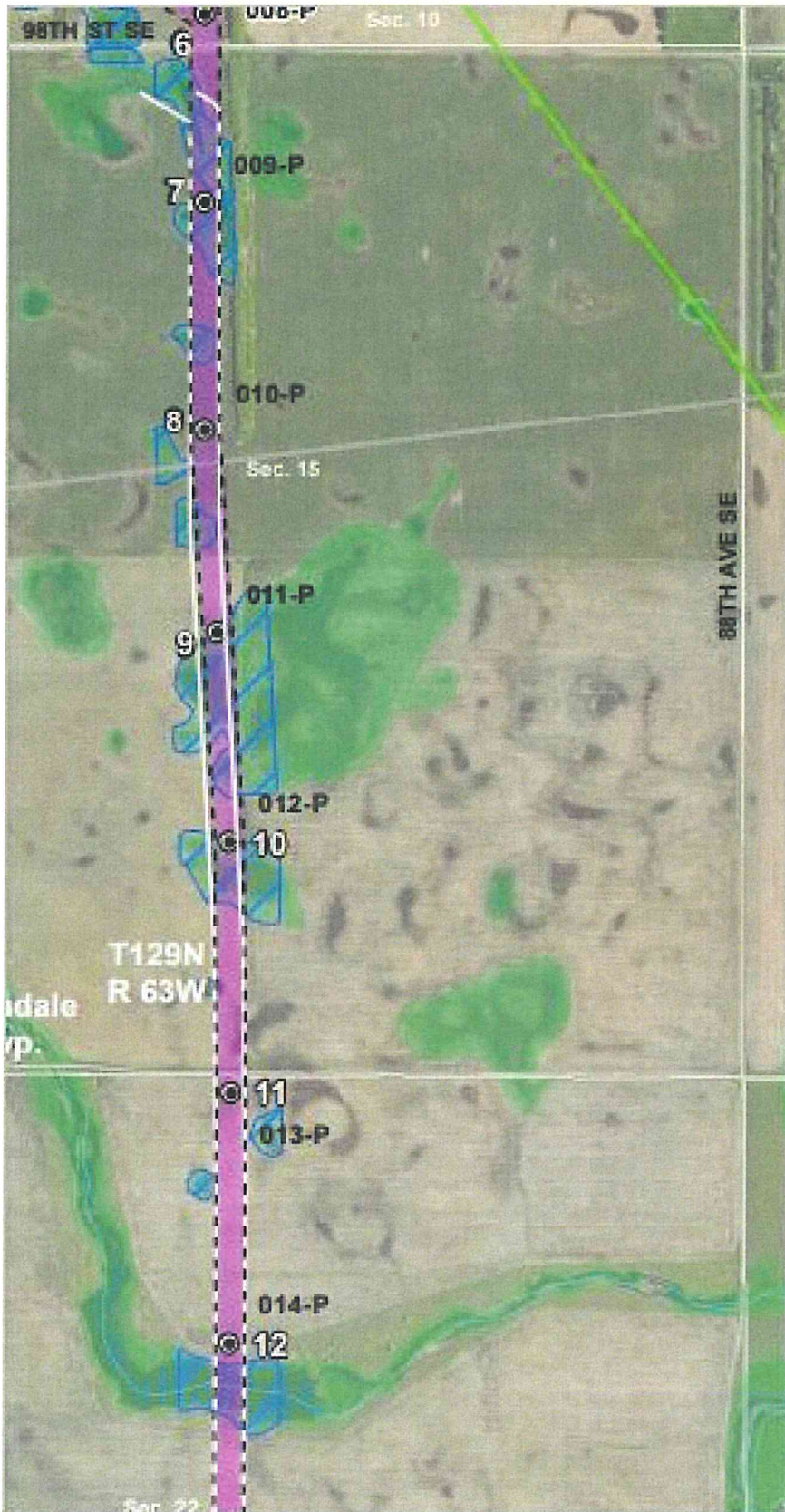


Example of Mats placed around the foundation
Foundation No. 6 Looking E.



Thermal blankets placed over the foundation to prevent freezing.
Foundation No. 7 Looking S.

Location Map- Exhibit 2
Foundations F-8 thru F-12
Ellendale Transmission Line
Project - PU13-840





Foundation No. 8 Looking E.



Foundation No. 9 Looking S.



Foundation No. 10 Looking SW.



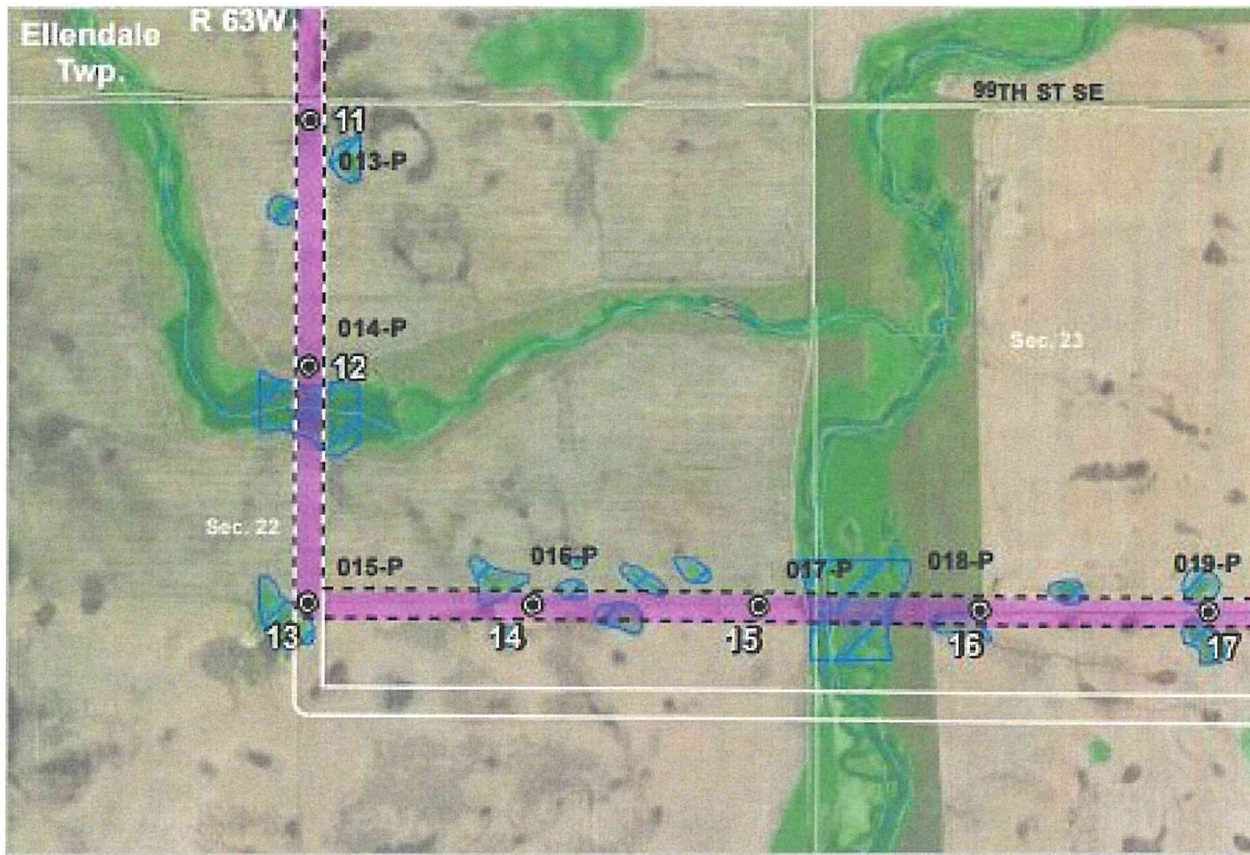
Foundation No. 11 Looking SW.



Foundation No. 12 Looking W.



Foundation No. 13 Looking W.



Location Map- Exhibit 3 Foundations F-13 thru F-17
Ellendale Transmission Line Project - PU13-840



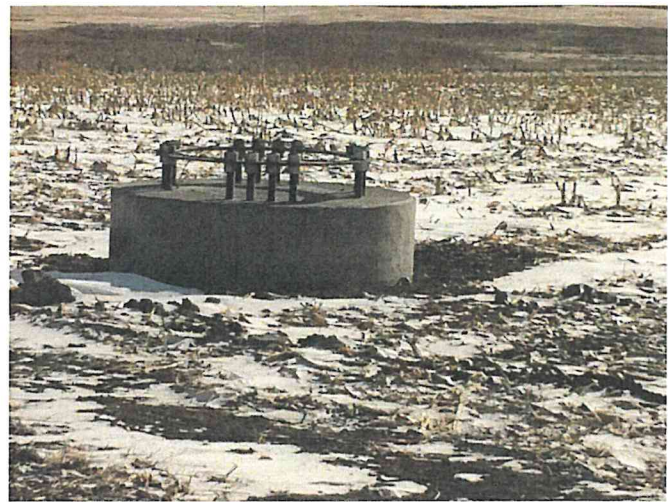
Foundation No. 14 Looking SW.



Foundation No. 15 Looking S.



Foundation No. 16 Looking W.



Foundation No. 17 Looking S.



Location Map- Exhibit 4 Foundations F-17 thru F-23
Ellendale Transmission Line Project - PU13-840



Foundation No. 18 Looking E.



Foundation No. 19 Looking S.



Foundation No. 20 Looking E.



Foundation No. 21 Looking E.



Foundation No. 22 Looking S.



Foundation No. 23 Looking S.



**Location Map- Exhibit 5 Foundations F-24 thru F-33
Ellendale Transmission Line Project - PU13-840**



Foundation No. 24 Looking S.



Foundation No. 25 Looking E.



Foundation No. 26 Looking S.



Foundation No. 27 Looking E.



Foundation No. 29 Looking E.



Foundation No. 30 Looking S.



Foundation No. 31 Looking E.



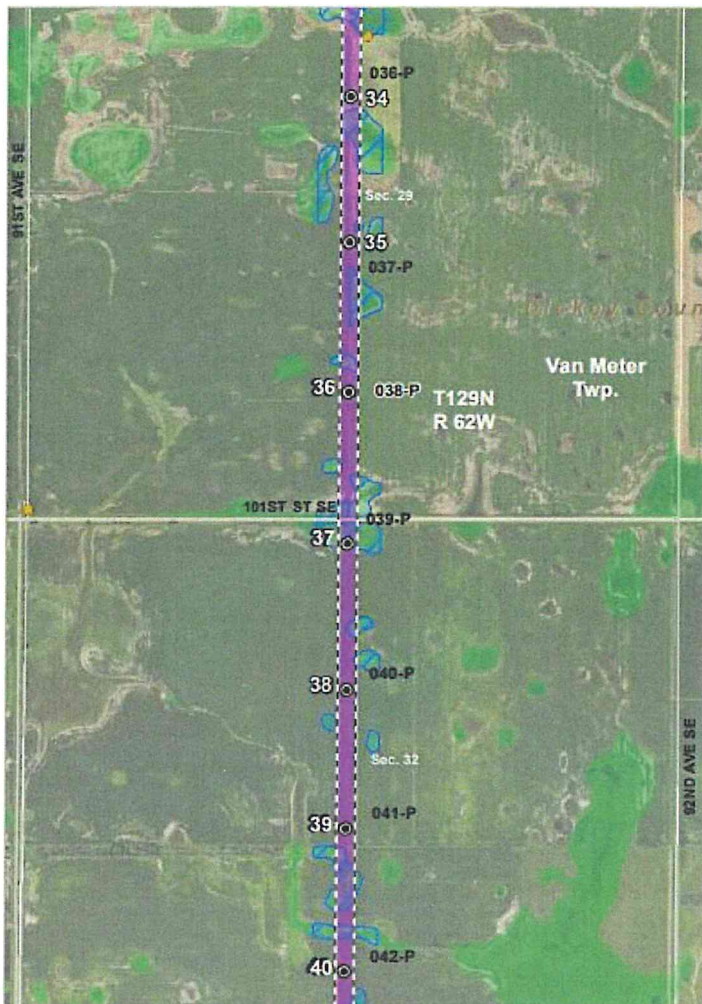
Foundation No. 32 Looking E.



Foundation No. 33 Looking E



Foundation No. 34 Looking S



Map- Exhibit 6 Foundations F-34 thru F-40
Ellendale Transmission Line Project - PU13-840



Foundation No. 35 Looking S. Location



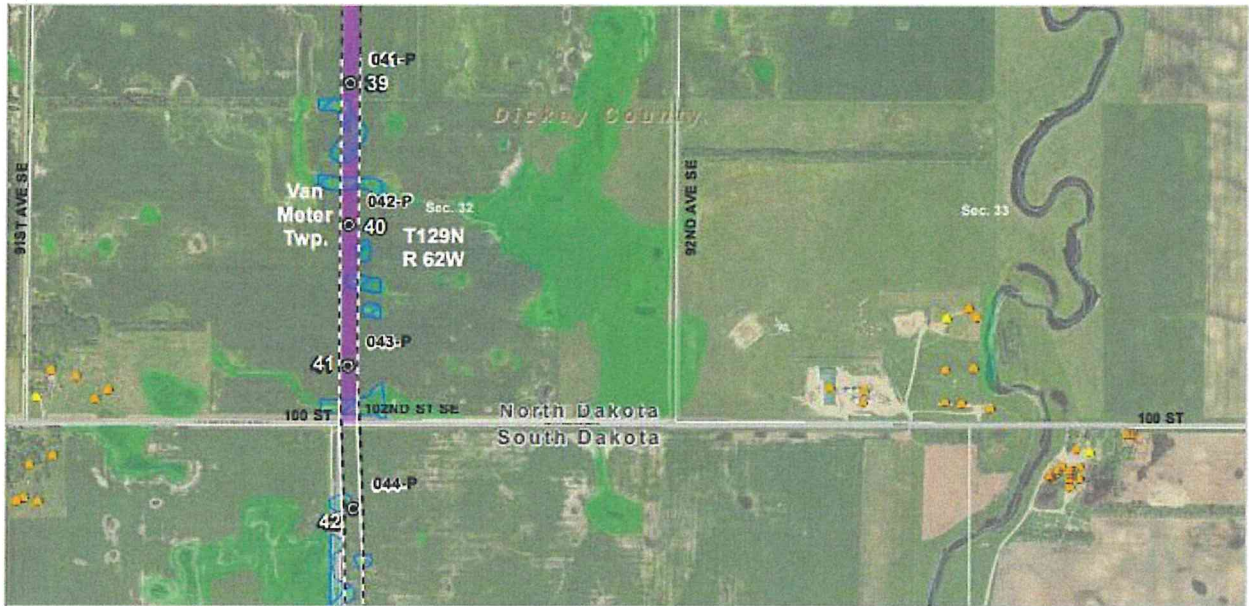
Foundation No. 36 Looking S.



Foundation No. 37 Looking E.



Foundation No. 38 Looking E.



Location Map- Exhibit 7 Foundations F-39 thru F-41
Ellendale Transmission Line Project - PU13-840



Foundation No. 39 Looking E.



Foundation No. 40 Looking E.



Foundation No. 41 Looking S.

CONCLUSIONS OF TOP SOIL CONDITIONS

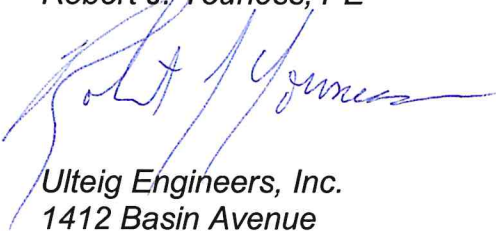
Inspection Conclusion:

The contractor is performing all top soil removal and replacement in accordance with the requirements established in the Order from the North Dakota Public Service Commission. The construction is not completed, therefore a follow up inspection will be scheduled, accordingly.

Inspector per this report, has perform and documented TOPSOIL REMOVAL INSPECTION(S) during the topsoil removal phase(s) of the project and verified that topsoil has been properly removed and kept segregated from subsoil. Per this report, the inspector has provided and maintain personnel at this construction site to verify that the topsoil and subsoil removal and segregation activities were properly completed in compliance with the Commission's Order.

In accordance with the executed contract between Ulteig and the Public Service Commission, dated April 20, 2016, all reports must be approved and signed by the lead project manager responsible for this project.

Robert J. Youness, PE



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