



30 west superior street / duluth, minnesota 55802-2093 / fax: 218-723-3955 /www.allete.com

David R. Moeller
Senior Attorney
218-723-3963
dmoeller@allete.com

September 4, 2013

Mr. Darrel Nitschke
Executive Secretary
North Dakota Public Service Commission
600 E. Boulevard Avenue, Department 408
Bismarck, ND 58505-0480

RE: Minnesota Power's Application for a Corridor Certificate and Route Permit
250 kV Direct Current Line Re-route
Case No. PU-13-103

Dear Mr. Nitschke:

Enclosed are an original and 10 copies of supplemental information to Minnesota Powers Certificate of Corridor Compatibility and Rout Permit Application for the proposed 250 kV Direct Current Line Re-route Project. The documents are labeled as follows.

Appendix A- Agency correspondence received after the original application filing.

Appendix B- Class III Cultural Resources Inventory Report (non-privileged summary)

Appendix C - Stutsman County Building Permit Application/Permit

Appendix D - North Dakota State Historic Preservation Office Concurrence

Appendix E - Tree and Shrub Survey Report

Appendix F- Plan and Profile

Please do not hesitate to contact me at the number below should you have any questions.

Yours truly,

David R. Moeller

c: Dan McCourtney, Minnesota Power
Bryan Maslowski, Minnesota Power

***Supplemental Application to the
North Dakota Public Service Commission
for Certificate of Corridor Compatibility
and an Energy Transmission Facility Route
Permit for the
Minnesota Power
250 kV Direct Current Line Re-route***

***By
Minnesota Power, an operating division of ALLETE,
Inc.***

September 2013

Commission Case No. PU-13-103

Table of Contents

Appendix A – Agency Correspondence Received after the Original Application Filing on June 14, 2013

Appendix B – Class III Cultural Resources Inventory Report (non-privileged summary)

Appendix C – Stutsman County Building Permit

Appendix D – SHPO Concurrence

Appendix E – Tree and Shrub

Appendix F – Plan and Profile Drawing

Appendix A – Agency Correspondence Received after the Original Application Filing on June 14, 2013



Jack Dalrymple, Governor
Mark A. Zimmerman, Director

1600 East Century Avenue, Suite 3
Bismarck, ND 58503-0649
Phone 701-328-5357
Fax 701-328-5363
E-mail parkrec@nd.gov
www.parkrec.nd.gov

June 11, 2013

Mr. Mandy Bohnenblust
Barr Engineering
4700 West 77th Street
Suite 200
Minneapolis, MN 58435

Re: Minnesota Power 250kV Overhead Line Reroutes in Kidder and Stutsman Counties, North Dakota.

Dear Mr. Bohnenblust,

The North Dakota Parks and Recreation Department (the Department) has reviewed the above referenced proposed Minnesota Power 250kV Overhead Line Reroutes in Kidder and Stutsman Counties, North Dakota.

Our agency scope of authority and expertise covers recreation and biological resources (in particular rare plants and ecological communities). The project as defined does not affect state park lands that we manage or Land and Water Conservation Fund recreation projects that we coordinate.

The North Dakota Natural Heritage biological conservation database has been reviewed to determine if any plant or animal species of concern or other significant ecological communities are known to occur within an approximate one-mile radius of the project area. Based on this review, we several species of concern documented in adjacent sections to project area. Please see the attached spreadsheet and map for more information on these occurrences.

Because this information is not based on a comprehensive inventory, there may be species of concern or otherwise significant ecological communities in the area that are not represented in the database. The lack of data for any project area cannot be construed to mean that no significant features are present. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources.

Given the potential for not only habitat disturbance and disruption but the threat to nesting, feeding and migratory bird in the area we suggest that all efforts be made to avoid impacts to waterfowl and wildlife species and their habitats. In an effort to avoid or minimize impacts to waterfowl and wildlife and their habitats we encourage proper evaluation of all potential overhead line reroutes. To identify and assess adverse impacts to waterfowl and wildlife we suggest pre and post construction avian monitoring studies be conducted.

Regarding any reclamation efforts, we recommend that any impacted areas be revegetated with species native to the project area.

We appreciate your commitment to rare plant, animal and ecological community conservation, management and inter-agency cooperation to date. For additional information please contact me (701-328-5370 or kgduttenehfnr@nd.gov). Thank you for the opportunity to comment on this proposed project.

Sincerely,

A handwritten signature in black ink, appearing to read "Kathy Duttenehfnr".

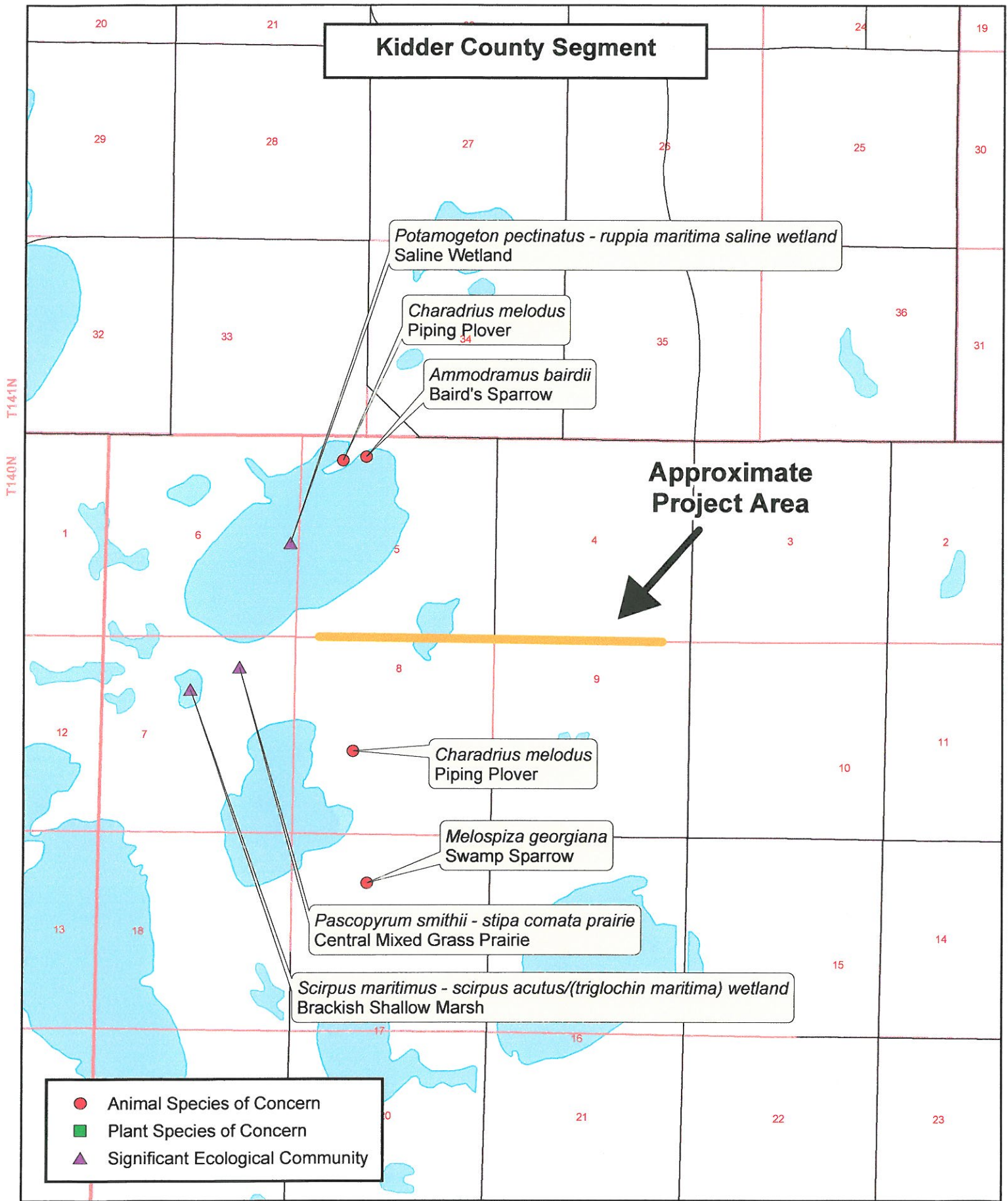
Kathy Duttenehfnr, Coordinator
Planning and Natural Resources Division

R.USNDNHI*2013-062KD5/10/2013DL5.18.2013

.....
Play in our backyard!

North Dakota Parks and Recreation Department
 North Dakota Natural Heritage Inventory

Kidder County Segment



- Animal Species of Concern
- Plant Species of Concern
- ▲ Significant Ecological Community

North Dakota Natural Heritage Inventory
Rare Animal and Plant Species and Significant Ecological Communities

State Scientific Name	State Common Name	State Rank	Global Rank	Federal Status	Township Range Section	County	Last Observation	Estimated Representation Accuracy	Precision
<i>Ammodramus bairdii</i>	Baird's Sparrow	SU	G4		140N071W - 05	Kidder	1982-06-11		S
<i>Charadrius melodus</i>	Piping Plover	S1S2	G3	LE,LT	140N071W - 05; 141N071W - 33; 140N071W - 06; 141N071W - 34	Kidder	1991	Low	S
<i>Charadrius melodus</i>	Piping Plover	S1S2	G3	LE,LT	140N071W - 08; 140N071W - 05; 140N071W - 17; 140N071W - 18; 140N071W - 06; 140N071W - 09; 140N071W - 07; 140N071W - 16; 140N071W - 04	Kidder	1972	Low	M
<i>Melospiza georgiana</i>	Swamp Sparrow	S3	G5		140N071W - 17 ; 141N071W - 19; 141N071W - 36; 141N071W - 23; 140N072W - 10; 139N071W - 07; 140N072W - 26; 140N070W - 06; 140N070W - 18; 140N072W - 16; 141N071W - 33; 140N070W - 07; 140N072W - 09; 141N071W - 24; 141N071W - 32; 140N072W - 36; 141N070W - 32; 1	Kidder			G
<i>Pascopyrum smithii</i> - stipa comata prairie	Central Mixed Grass Prairie	S2	GNR		140N071W - 07	Kidder	1984-06-27		S
<i>Potamogeton pectinatus</i> - ruppia maritima saline wetland	Saline Wetland	S3	GNR		140N071W - 06; 140N071W - 05	Kidder	1982-06-11		S
<i>Scirpus maritimus</i> - scirpus acutus/ (triglochin maritima) wetland	Brackish Shallow Marsh	S3	GNR		140N071W - 07	Kidder	1984-06-27		S

North Dakota Natural Heritage Inventory Biological and Conservation Data Disclaimer

The quantity and quality of data collected by the North Dakota Natural Heritage Inventory are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in North Dakota have never been thoroughly surveyed, and new species are still being discovered. For these reasons, the Natural Heritage Inventory cannot provide a definite statement on the presence, absence, or condition of biological elements in any part of North Dakota. Natural Heritage data summarize the existing information known at the time of the request. Our data are continually upgraded and information is continually being added to the database. This data should never be regarded as final statements on the elements or areas that are being considered, nor should they be substituted for on-site surveys.

Estimated Representation Accuracy

Value that indicates the approximate percentage of the Element Occurrence Representation (EO Rep) that was observed to be occupied by the species or community (versus buffer area added for locational uncertainty). Use of estimated representation accuracy provides a common index for the consistent comparison of EO reps, thus helping to ensure that aggregated data are correctly analyzed and interpreted.

Very high (>95%)

High (>80%, <= 95%)

Medium (>20%, <= 80%)

Low (>0%, <= 20%)

Unknown

(null) - Not assessed

Precision

A single-letter code for the precision used to map the Element Occurrence (EO) on a U.S. Geological Survey (USGS) 7.5' (or 15') topographic quadrangle map, based on the previous Heritage methodology in which EOs were located on paper maps using dots.

S - Seconds: accuracy of locality mappable within a three-second radius; 100 meters from the centerpoint

M - Minute: accuracy of locality mappable within a one-minute radius; 2 km from the centerpoint

G - General: accuracy of locality mappable to map or place name precision only; 8 km from centerpoint

U - Unmappable



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Long Lake National Wildlife Refuge
12000 353 Street SE
Moffit, ND 58560

Phone: (701) 387-4397 FAX: (701) 387-4767



May 20, 2013

Ms. Mandy Bohnenblust
Barr Engineering Co.
4700 West 77th St. Suite 200
Minneapolis, MN 55453

Kidder County 76X

Dear Ms. Bohnenblust:

This letter is in reference to the June 18, 2013 letter and drawings I received regarding the Minnesota Power 250kV Overhead Line Reroute located in Kidder County, North Dakota. Seven aluminum mast towers will be relocated and replaced with four-foot diameter tubular weathering steel, self-supporting monopole structures. Four of the seven new structures are located within the boundary of Kidder County wetland easement 76X. This easement protects individual wetland basins in the south half of section 5 and portions of section 8, T. 140N., R. 71W. A map showing the protected wetland basins was sent to you on May 20, 2013 by Long Lake National Wildlife Refuge (LLNWR). Your drawings show the four new structures being placed in upland areas and not in the protected wetland basins. As long as the work is being conducted in the upland areas and no fill or material is being placed in the protected wetland basins, you will not need a permit from LLNWR. If plans change or you have questions regarding the protected wetland basins contact me at: 701-387-4397 x18

Sincerely,

Ed Meendering
Refuge Officer

cc: Easement File Kidder 76X

Appendix B – Class III Cultural Resources Inventory Report (non-privileged summary)



250kv DC Line Reroute (East) Survey: A Class III Intensive Cultural Resource Inventory in Stutsman County, North Dakota

Prepared for: Barr Engineering
On behalf of: Minnesota Power

Prepared by: Christina Burns, RPA

Beaver Creek Archaeology, Inc.
Bismarck, North Dakota

BCA Project #: 2013 – 1020

June, 2013



Beaver Creek
ARCHAEOLOGY

WHERE PROGRESS MEETS PRESERVATION

1632 Capitol Way | Bismarck, ND 58501 | PH [701] 663.5521 | FX [701] 663.5509

www.bcarch.org | e-mail: info@bcarch.org



MANUSCRIPT DATA RECORD FORM

1. Manuscript Number:
2. SHPO Reference #:
3. Author(s) (List all authors names as they appear on the report title page):
Christina Burns
4. Title (Complete title as it appears on the report title page): **250kv DC Line Reroute (East) Survey: A Class III Intensive Cultural Resource Inventory in Stutsman County, North Dakota.**
5. Report Date (As is appears on the report title page): **June, 2013**
6. Number of Pages (Including front matter, references cited and appendices): **7**
7. Type – I = Inventory (Class 3 CRI), T – Test, E= Excavation, O = Other: **Type I**
8. Acres – Class 3 inventory only; project description specified only in report: **15**
9. Legal Location(s) (no quarter sections) with Historic Context Study Unit(s):
Consult township tables in The North Dakota Comprehensive Plan for Historic Preservation: Archaeological Component, (SHSND 1990) for Study Unit Assignments. Study Units: LM, CB, KN, HE, SM, GA, JA, GR, NR, SR, SO, SH, YE

COUNTY	TWP	R	SEC	SU
Stutsman	140	68	16	SM



Report Title: 250kv DC Line Reroute (East) Survey: A Class III Intensive Cultural Resource Inventory in Stutsman County, North Dakota

Author: Christina Burns

Report Date: June, 2013

Acres: 15

Land Status: Private

Survey Date: June 5, 2013

Project Sponsor: Barr Engineering

Historic Context: Southern Missouri River Study Unit (#5)

Legal Description/Location of Project Area: The proposed project is located in the S ½ NW ¼ SE ¼ & S ½ NE ¼ SW ¼ & NW ¼ NE ¼ SW ¼ & NE ¼ NW ¼ SW ¼ of section 16 in T140N, R68W, Stutsman County, North Dakota as depicted on the USGS 7.5' Medina quadrangle map. The proposed project is located on private property.

Description of Proposed Project: The project consists of an Area of Potential Effect (APE), comprised of a proposed reroute for a transmission line for Minnesota Power in Stutsman County, North Dakota. The APE is approximately 15 acres in size and was inventoried to Class III Standards.

Literature Search Results: Eric McCann conducted a literature search at the North Dakota State Historic Preservation office (SHPO) on April 18, 2013. A one-mile radius search surrounding the APE was implemented to provide an indication of the types, distribution, and density of cultural resources in the locality of the project area. The search revealed no sites, no site leads, and no isolated finds in a one-mile radius. There were no manuscripts on file for the section the APE is located in.



Project Personnel: Christina Burns (PI), Lindsey Reiners (Field Director), Kevin Mieras, Erica Kramer, and Tara Friend, Staff Archaeologist(s).

Field Methodology: The APE was inventoried by BCA archaeologist(s) walking parallel linear pedestrian transects between 10-20 meters apart based upon terrain probability for cultural resources. During the survey, field notes and overview pictures were taken and are on file at the BCA main office in Bismarck, ND.

Survey Conditions: Weather conditions consisted of overcast skies and the temperature was approximately 65°F. The APE is located within a plowed field. Vegetation in the area consists of wheat. The elevation of the APE is approximately 1,850 feet. During the course of the inventory the ground surface visibility (GSV) was approximately 50% on average. Areas of higher visibility, such as erosion features, areas of sparse vegetation and rodent burrows were also closely examined for cultural material.

Results and Recommendations: The file search revealed no sites, no site leads, and no isolated finds in a one-mile radius. The field investigation of the APE revealed no cultural resources. Consequently, *No Historic Properties Affected* is recommended and therefore, no further archaeological investigation is needed for the APE as mapped, photographed and described herein.

Appendix



Figure 1: Overview of the APE. View to the Southeast.



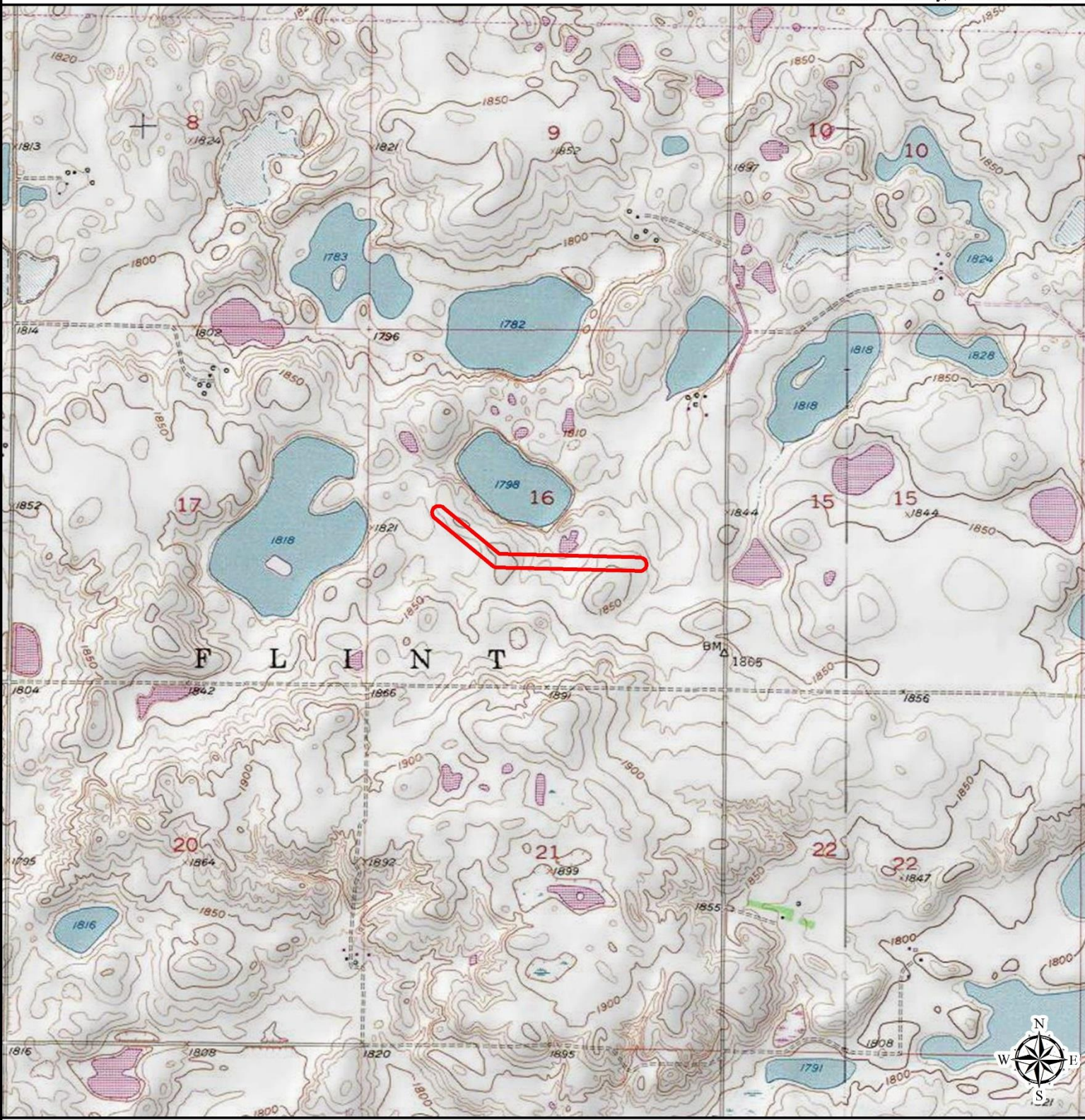
Figure 2: Overview of the APE. View to the West.



Beaver Creek

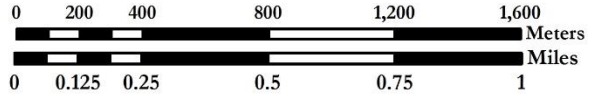
ARCHAEOLOGY

DC Line Reroute (East)
Minnesota Power
T140N R68W Sec.16
Medina Quad. Map
Apple Creek Drainage
Stutsman County, North Dakota



Legend

 APE (15 acres)



Base Map: USGS 7.5'
Scale: 1:24,000
UTM NAD83 Zone 14

Appendix C – Stutsman County Building Permit



Application for Permit

Dustin Bakken - Director of Tax Equalization / Zoning Administrator
Phone: (701) 252-9035 / Fax: (701) 251-6325
E-mail: dubakken@nd.gov

COPY

Application For: Building Permit Variance Conditional Use Permit Other

Name Phone #

Address City, State, ZIP

Project Location

OR

Lot Block Subdivision

Section Township Range

Describe in detail, the plans that you have for the property and why you feel a permit or variance should be granted. Please provide as much detail as possible and attach maps, sketches, and any other supporting documents of the site and all structures as it currently exists along with any proposed changes. (A lack of information could constitute a denial of this application.) A permanent copy of the project blueprints is also required and will be kept on file in the Zoning Administrator's office along with a copy of this application.

Minnesota Power is planning to reroute a 0.7 mile long segment of 250 kV overhead power line in Stutsman County, North Dakota. The exact location can be viewed in Figure 1 - Project Location Map. Due to changes in the area's hydrology, the utility reroute is needed to move the existing structures (aluminum mast towers) out of standing water and maintain adequate ground clearance. In addition to being in the best interest of structural integrity, the reroute would provide upland access to allow for easier maintenance. The rerouted segment would tie back into existing Minnesota Power facilities and would continue to provide utility service. Construction of the reroute is anticipated to take place in Fall 2013.

This reroute would involve the removal of 8 existing aluminum mast towers and their relocation and replacement with 8 tubular weathering steel, self-supporting, monopole structures. Design, construction, and operation of the transmission line would be completed in accordance with the North American Electric Reliability (NAER) corporation standards. Design details can be viewed in Figure 3 - engineering drawings. It is the intention of Minnesota Power to remove the poles from the standing water by cutting them off 1-2 feet above the surface of the water and removing them by crane. The construction of the new poles would commence once the utility easement has been acquired and cleared. Construction components would be delivered to the site, where they would be assembled and erected using mobile cranes or other appropriate construction equipment. The realigned structures would be directly embedded into the ground by excavating a hole for each structure. Once the structures have been set, the excavated holes would be backfilled with native soils or crushed rock. All structures are anticipated to be placed at existing grade levels. Minor grading may be required to provide level, stable working surfaces for construction activities. Once construction is complete, the leveled areas would be re-graded to match original contours to the extent practicable.

Have you discussed your plans with any owners of adjoining property? Yes No

If so, list their names and where they may be contacted:

(1) Mark Staloch - 3169 57th Ave. SE, Medina, ND, 58467; (701) 486-3490
(2) Gerald and Sandra Eissinger - P.O. Box 425, Medina, ND, 58467-0425; (701) 486-3368

List dimensions of any structure to be added to the site:

Length Width Height

Describe to the best of your ability, the soil conditions at the site:

Native soil within the project area mainly consists of Barnes-Buse loams; slopes are between 6 and 15%, and the project area is considered to be well drained. Please see Figure 2 - Soils Map.

Provide or attach a sketch of, and describe the type of surface, width of all roads, alleys and sidewalks providing access to the site:

Access paths and a construction work area, anticipated to be approximately a 100-foot radius, around each structure would be required; however, impacts within these areas would be temporary in nature and only for the duration of construction. Areas will be allowed to revert to agricultural use.

Sketch:

See Figure 3.

Applicant's Signature: Date:

Blueprints and printed materials shall be submitted to the Zoning Administrator's office located at 511 2nd Ave SE Suite 102, Jamestown, ND 58401.

FOR OFFICE USE ONLY

Application is: Approved Denied Permit # 2013-05

Additional Actions Required:



Building Permit

Date June 25, 2013 Permit # 2013-05

Permit Issued To:

Name Minnesota Power Phone # 218-355-3515
Address 30 West Superior Street Contact Dan McCartney
City, State, Zip Duluth, MN 55802

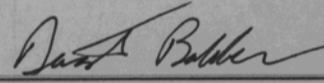
For Construction of: Reroute of .7 mile long segment of 250Kv overhead powerline in Stutsman County. Removal of 8 existing aluminum mast towers and relocation and replacement with 8 tubular weathering steel, self supporting monopole structures.

Located at: _____

Lot _____ Block _____ Subdivision _____
or
Section 16 Township 140N Range 68W

Construction plans submitted, approved by and on file with the Zoning Administrator.

Fee Paid \$ 160



Zoning Administrator

Notice: This building must not be occupied until final inspection has been made and a *CERTIFICATE OF COMPLIANCE* issued.

This building permit shall be displayed in a prominent place on the premises where the building is to be erected.

Dustin D Bakken
Stutsman County Zoning Administrator
511 2nd Ave SE
Jamestown, ND 58401

Phone 701-252-9035 Fax 701-251-6325

Appendix D – SHPO Concurrence



**STATE
HISTORICAL
SOCIETY
OF NORTH DAKOTA**

Jack Dalrymple
Governor of North Dakota

July 26, 2013

North Dakota
State Historical Board

Ms. Christina Burns
Beaver Creek Archaeology
1632 Capitol Way
Bismarck, ND 58501

Calvin Grinnell
New Town - President

A. Ruric Todd III
Jamestown - Vice President

ND SHPO Ref.:13-1169 RUS "250 Kv DC Line Reroute (East) Survey: A Class III Intensive Cultural Resources Inventory in Stutsman County, North Dakota"

Margaret Puetz
Bismarck- Secretary

Dear Ms. Burns,

Albert I. Berger
Grand Forks

We reviewed ND SHPO Ref.:13-1169 RUS "250 Kv DC Line Reroute (East) Survey: A Class III Intensive Cultural Resources Inventory in Stutsman County, North Dakota," and find the report acceptable. We concur with a "No Historic Properties Affected" determination, provided the project remains as described and mapped in the above-captioned report.

Gereld Gerntholz
Valley City

Diane K. Larson
Bismarck

Chester E Nelson, Jr.
Bismarck

Thank you for the opportunity to review this project. If you have any questions please contact Susan Quinnell, Review and Compliance Coordinator at (701) 328-3576, e-mail squinnell@nd.gov

Sara Otte Coleman
*Director
Tourism Division*

Kelly Schmidt
State Treasurer

Sincerely,

Alvin A. Jaeger
Secretary of State

Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)
and Director, State Historical Society of North Dakota

Mark Zimmerman
*Director
Parks and Recreation
Department*

Grant Levi
*Director
Department of Transportation*

Merlan E. Paaverud, Jr.
Director

*Accredited by the
American Alliance
of Museums since 1986*

Appendix E – Tree and Shrub

Technical Memorandum

To: Jerry Lien, North Dakota Public Service Commission
From: Barr Engineering Company
Subject: Minnesota Power
250 kV Direct Current Line Re-route
Stutsman County, North Dakota
Tree and Shrub Survey Results
Date: July 19, 2013
c: Dan McCourtney, Minnesota Power

This memorandum describes the purpose, methods, and results of a tree and shrub survey conducted for Minnesota Power's (MP's) proposed 0.7-mile long 250 kV, direct current (DC) line re-route in Stutsman County, North Dakota. Construction is scheduled for fall, 2013. The line requires a 120-foot wide right of way, or 60-feet on both sides of the centerline. However, the tree and shrub survey covered a 200-foot wide corridor centered on the 0.7-mile long re-route alignment. A larger area was surveyed to provide flexibility in routing in case a significant number of trees were encountered.

As described below, there is one wind row in the project area, and a summary of the trees observed within the 120 foot corridor are included in a table below. These trees can be regularly trimmed in order to maintain safety clearances; therefore, MP does not plan to remove any trees during construction.

The purpose of this survey is to quantify the tree and shrub removal expected to occur as part of the proposed project's construction as well as the likely mitigation required. Woody vegetation can conflict with overhead power facilities. In order to maintain safe, reliable operation of the re-routed DC line, the right-of-way would be perpetually maintained to clear any volunteer woody vegetation species that would reach a mature height of 15 feet or taller. Any identified trees and shrubs over 15-feet would need to be removed as part of construction or regularly trimmed to maintain safe clearances.

Barr reviewed aerial photographs to determine the potential locations of trees and shrubs within the corridor. We then visited the site on June 24, 2013 to verify, quantify, and qualify the trees within the corridor.

The guidelines used to distinguish a tree from a shrub for the purposes of this survey are as follows (USACE 2010):

- Trees were defined as woody plants having one or multiple erect perennial stems (trunk(s)) at least three inches in diameter at breast height (approximately 4.5 feet above ground), a definitively formed crown of foliage, and a mature height of at least 13 feet.
- Shrubs were defined as woody plants with several perennial stems that may be erect or may lie close to the ground. Shrubs are typically less than 13 feet tall and have stems no more than three inches in diameter at breast height.

Nearly all of the trees or shrubs located within the project corridor consist of one large wind row shown in Figure 1. Due to the large size of the row (approximately 1,110 feet long), an extrapolated linear method was used to generate the tree count. Barr staff identified a 30-foot long representative sample and individually counted trees and shrubs within the representative sample area. This number was then extrapolated across the length of the tree row to derive final tree and shrub counts. One additional small clump of trees was also identified.

A total of three woody vegetation species were identified as part of the tree and shrub survey. Table 1 summarizes the survey results. Photos of this area are also included at the end of this memo. Most of trees in the wind row are Russian olive, and the shrubs are common lilac.

Table 1. Approximate Tree and Shrub Count Within Proposed Right-of-Way

Type	Common Name	Scientific Name	Typical Mature Height	Count
Tree	Russian Olive	<i>Elaeagnus angustifolia</i>	15 – 25 feet	48
Shrub	Common Lilac	<i>Syringa vulgaris</i>	8 – 12 feet	56
Total				104*

*None of these trees will be removed as part of this project, but will likely require periodic trimming to maintain acceptable safety clearance.

If some of these trees do need to be cut down, mitigation for tree and shrub removal will be provided at a 2:1 ratio for each species. The affected landowner would be given the first opportunity to have replacement trees or shrubs planted on their property either on or off the right-of-way. If the affected landowner does not want mitigation placed on their property, they will be provided the opportunity to

waive it in writing, allowing MP to perform mitigation off the affected property. A final tree and shrub mitigation plan will be submitted to the North Dakota Public Service Commission prior to construction.

If you have any questions about the findings of this survey, please contact Barr Engineering. Thank you.

References

United States Army Corps of Engineers (USACE). Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0). March 2010



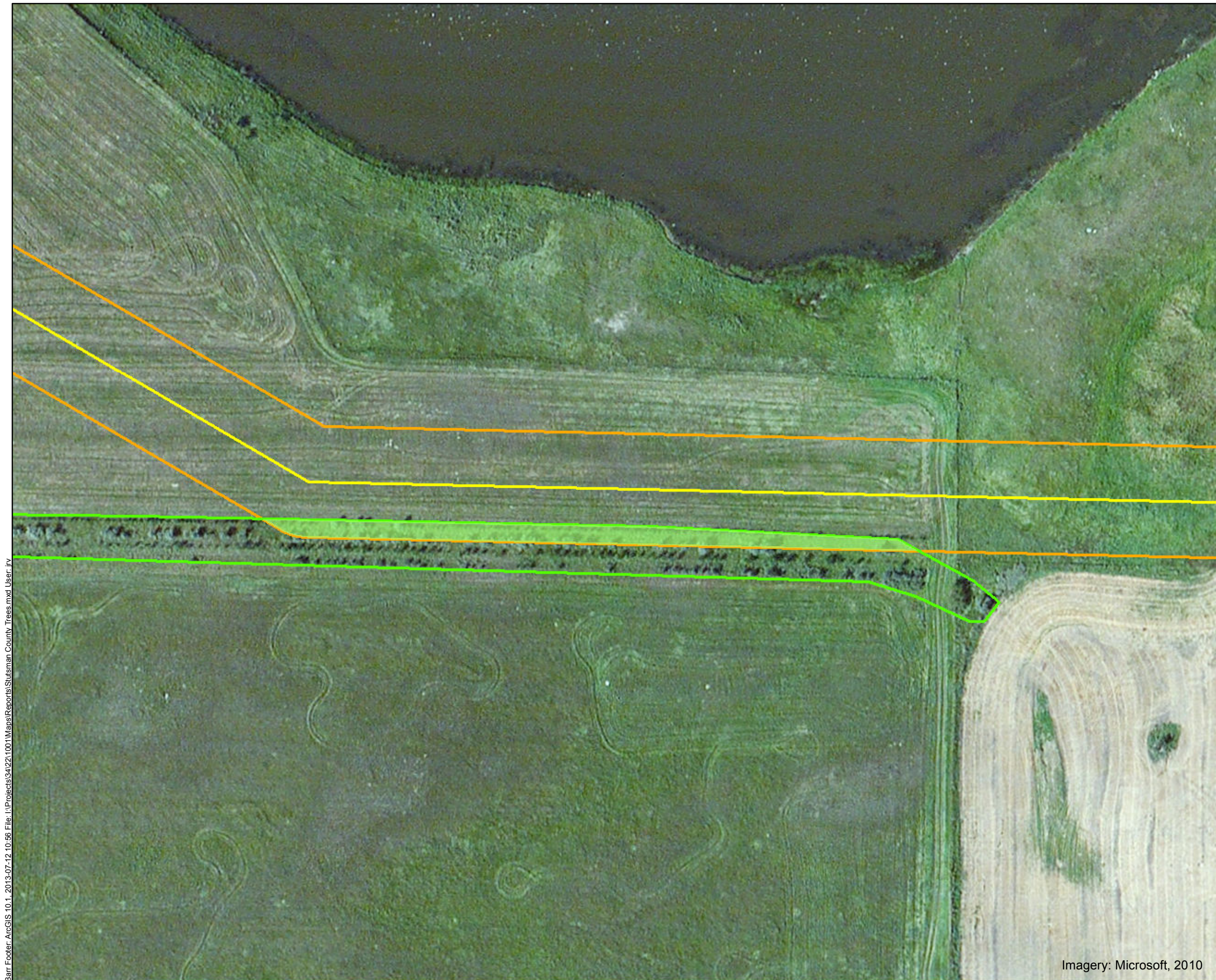
Tree Row Overview




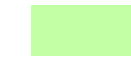


Tree Row, View West



Tree Row, View East



-  Reroute Centerline
-  Identified Trees
-  120 ft ROW
-  Treed Area Within Right-of-Way

Impacted Treed Area
~ 0.28 Acres

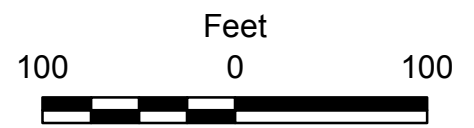
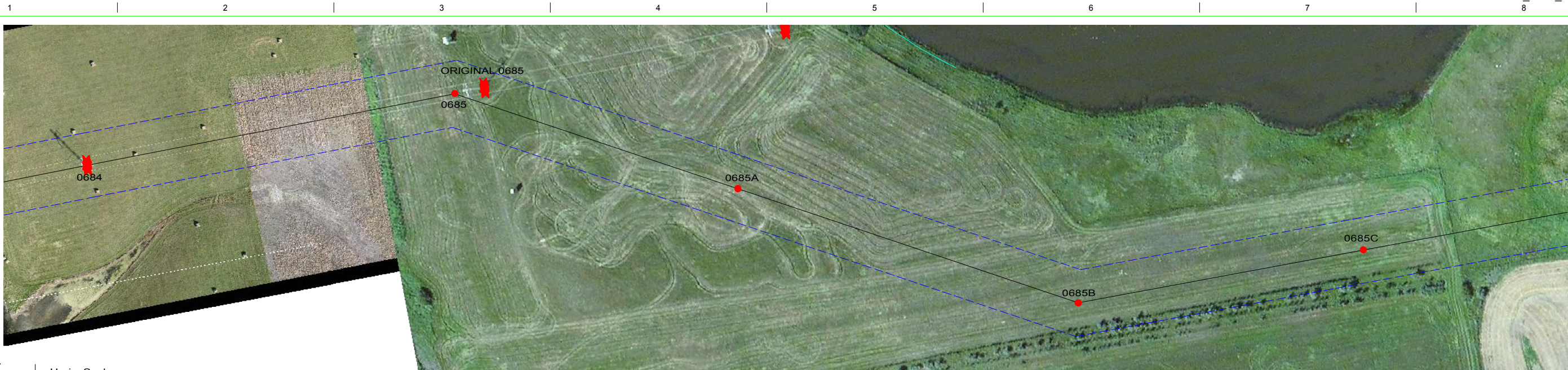


Figure 1

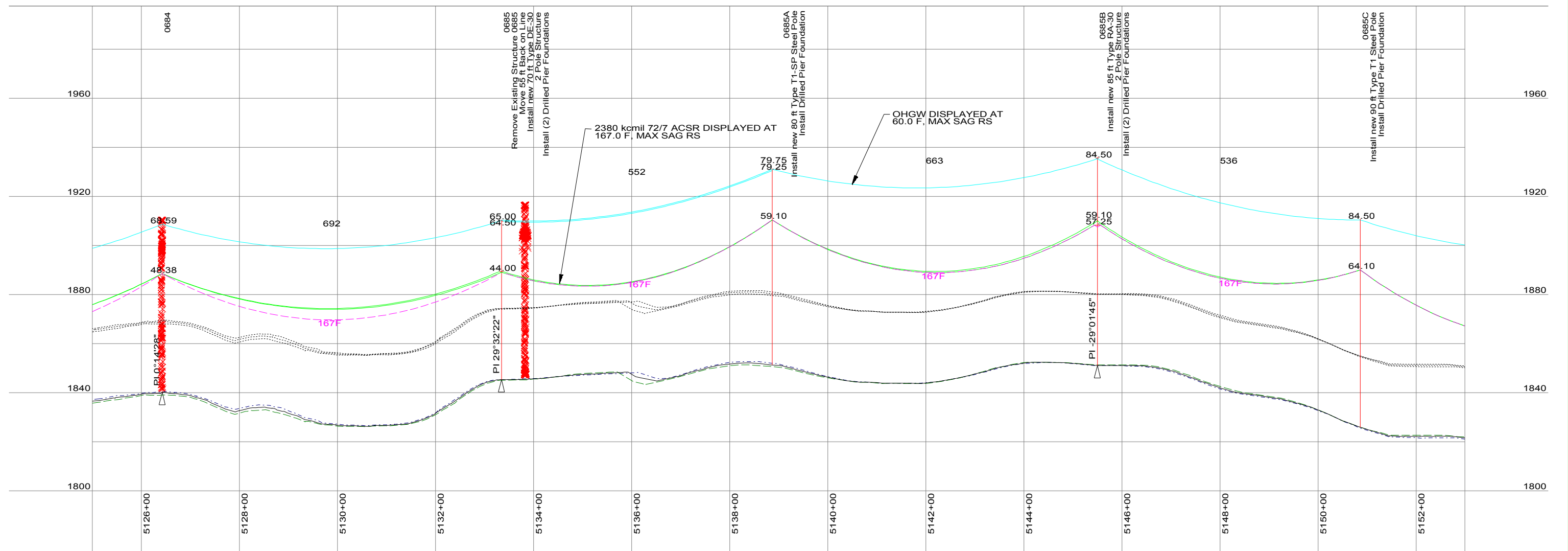
TREE/SHRUB COUNT RESULTS
Proposed 250kV Reroute
Minnesota Power
Stutsman County, ND

Imagery: Microsoft, 2010

Appendix F – Plan and Profile Drawing



200.0 ft. Horiz. Scale
40.0 ft. Vert. Scale



THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWER'S CLIENT IS GRANTED.

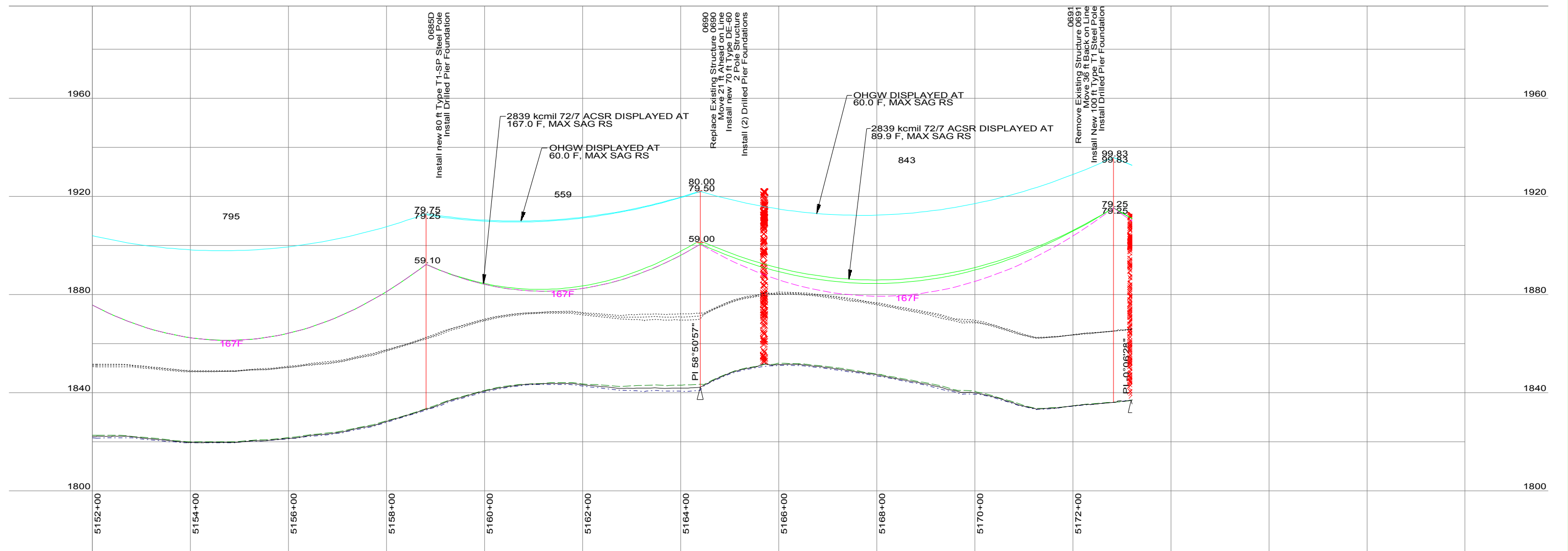
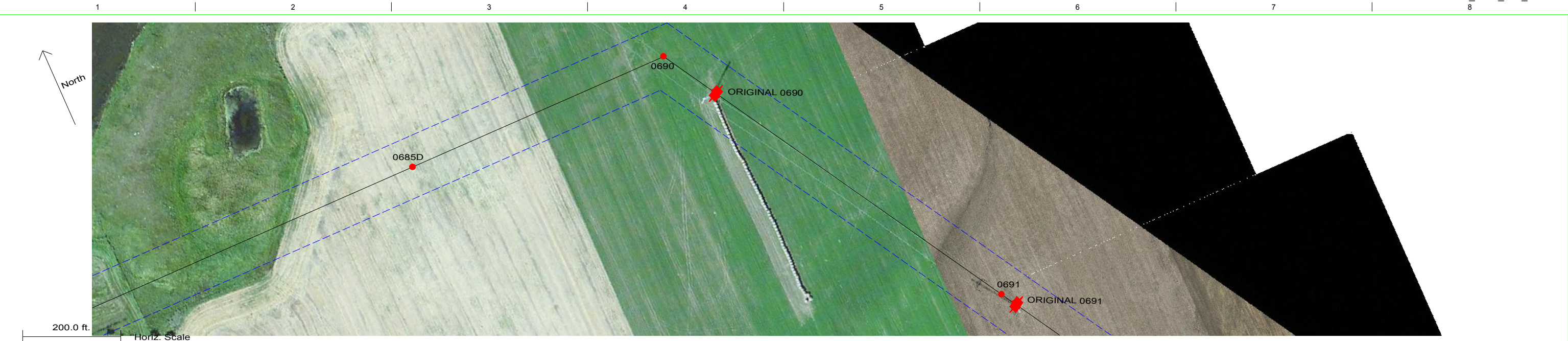
GROUND CLEARANCE DISPLAYED @ 29FT

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
B	ISSUED FOR REVIEW	5/23/13	DO	MM	-	-	
A	ISSUED FOR REVIEW	12/13/12	BC	BC	-	-	

DSGN	
DRN	
CKD	
SCALE:	
FOR 11x17 DWG ONLY	



MINNESOTA POWER		JOB NUMBER	REV
250kV DC LINE		123845	B
PLAN AND PROFILE		DRAWING NUMBER	
		MILE 097-1	



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GROUND CLEARANCE DISPLAYED @ 29FT

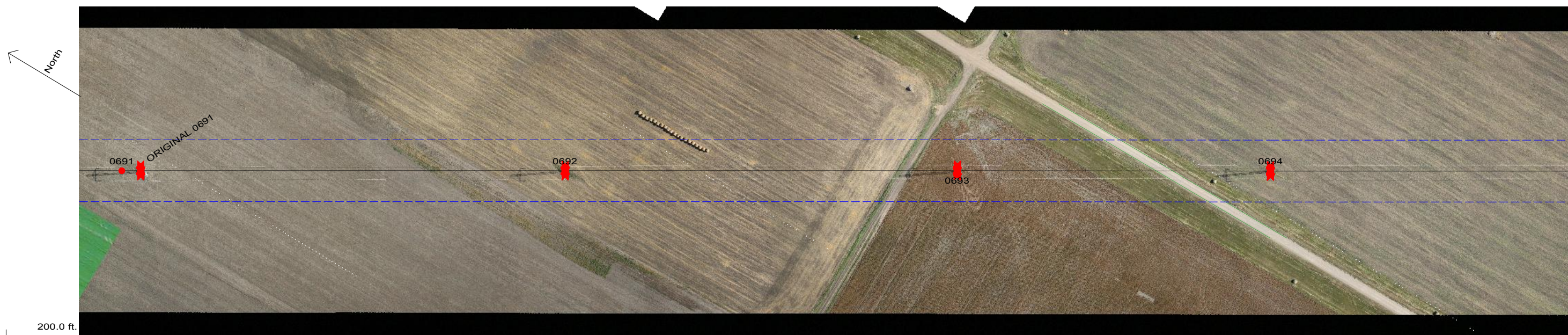
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
B	ISSUED FOR REVIEW	5/23/13	DO	MM	-	-	
A	ISSUED FOR REVIEW	12/13/12	BC	BC	-	-	

DSGN	
DRN	
CKD	
SCALE:	
FOR 11x17 DWG ONLY	

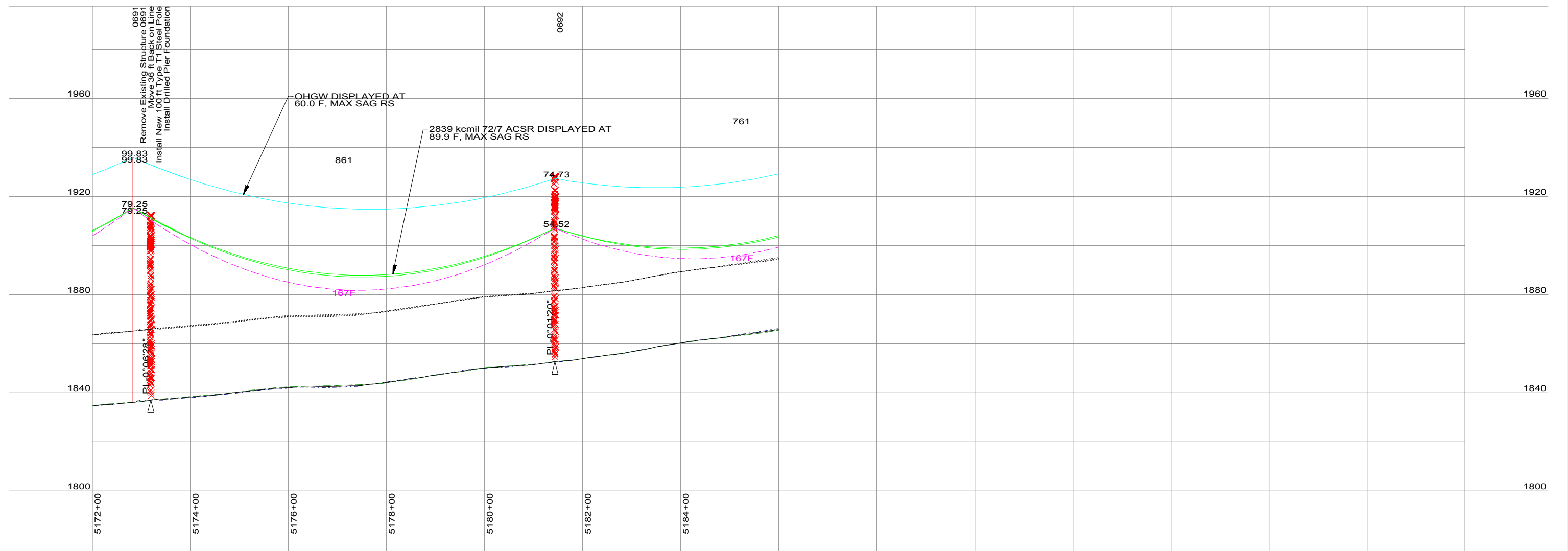


MINNESOTA POWER
250kV DC LINE
PLAN AND PROFILE

JOB NUMBER	123845	REV	B
DRAWING NUMBER	MILE 097-2		



40.0 ft. Vert. Scale



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GROUND CLEARANCE DISPLAYED @ 29FT

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
B	ISSUED FOR REVIEW	5/23/13	DO	MM	-	-	
A	ISSUED FOR REVIEW	12/13/12	BC	BC	-	-	

DSGN	
DRN	
CKD	
SCALE:	
FOR 11x17 DWG ONLY	



MINNESOTA POWER	JOB NUMBER	REV
250kV DC LINE	123845	B
PLAN AND PROFILE	DRAWING NUMBER	MILE 097-3