

215 South Cascade Street  
PO Box 496  
Fergus Falls, Minnesota 56538-0496  
218 739-8200  
[www.otpc.com](http://www.otpc.com) (web site)

March 21, 2014



Mr. Darrell Nitschke  
Director of Administration/Executive Secretary  
North Dakota Public Service Commission  
State Capitol  
600 East Boulevard, Dept. 408  
Bismarck, ND 58505-0480

Sent via electronic filing  
and UPS overnight mail

**RE: Post Construction Inspections – Case Nos. PU-07-766, PU-08-107/PU-09-388  
and PU-09-674**

Dear Mr. Nitschke:

Enclosed for filing in the above-referenced matters is a letter response to Public Utility Analyst Jerry Lein's letter dated February 11, 2014, which we received on February 21, 2014. Also enclosed is documentation requested by Mr. Lein.

Thank you for your attention to these matters. Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark B. Bring".

Mark B. Bring  
Associate General Counsel

MBB/cjk

Enclosures

cc: Jerry Lein

- 33 PU-09-674 Filed 03/21/2014 Pages: 216  
Response to letter regarding third-party post construction inspection report  
Otter Tail Power Company  
Mark Bring, Assoc. Gen. Counsel
- 28 PU-09-388 Filed 03/21/2014 Pages: 216  
Response to letter regarding third-party post construction inspection report  
Otter Tail Power Company  
Mark Bring, Assoc. Gen. Counsel
- 51 PU-08-107 Filed 03/21/2014 Pages: 216  
Response to letter regarding third-party post construction inspection report  
Otter Tail Power Company  
Mark Bring, Assoc. Gen. Counsel
- 33 PU-07-766 Filed 03/21/2014 Pages: 216  
Response to letter regarding third-party post construction inspection report  
Otter Tail Power Company  
Mark Bring, Assoc. Gen. Counsel



215 South Cascade Street  
PO Box 496  
Fergus Falls, Minnesota 56538-0496  
218 739-8200  
[www.otpco.com](http://www.otpco.com) (web site)

March 21, 2014



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

SENT VIA EMAIL  
TO [jlein@nd.gov](mailto:jlein@nd.gov)  
AND VIA UPS

**RE: Post Construction Inspections – Case Nos. PU-07-766, PU-08-107/PU-09-388  
and PU-09-674**

Dear Mr. Lein:

Thank you for your letter of February 11, 2014 regarding Commission siting orders in the above-referenced dockets. We received your letter on February 21, 2014.

The letter listed a number of compliance actions recommended by the Commission's vendor in the vendor's post-construction inspection reports. As you and I discussed on the telephone, where you have requested verification of compliance – our understanding is that you are not requiring the formality of an affidavit. Responsive information follows:

**PU-07-766, 230 kV Transmission Line Reroute Richland County Siting Application (near Sand (Grass) Lake)**

- The Company constructed and is operating the transmission line in the manner described in its application, and in accordance with all applicable safety requirements. (Order Point 7)
- The Company did not witness the presence, in the permit area, of any critical habitat of threatened or endangered species, or of bald or golden eagles. (Order Point 8)
- The Company did not discover during construction any cultural resource, paleontological site, archeological site, historical site, or gravesite. (Order Point 9)
- The Company has had no reports of increases in television and residential radio interference resulting from the transmission line reroute. (Order Point 17)
- The Company worked with landowners and determined that there were no necessary damage mitigation measures. (Order Point 18)
- The Company regularly monitors all of its transmission facilities, with special attention to those in or near flood-prone areas. (Order Point 7)
- The Company did not remove any trees or wooded vegetation during construction. (Order Point 15)

Mr. Jerry Lein  
March 21, 2014  
Page 2

**PU-08-107/PU-09-388 Luverne Wind Farm 230 kV Electric Transmission Line-Steele County Siting Application**

- **Enclosed** are copies of design specifications for construction of the transmission line showing the location as built. (Order Point 18)
- Copies of necessary approvals and permits for construction are **enclosed**. (Order Point 5)
- The Company constructed and is operating the transmission line in the manner described in its application, and in accordance with all applicable safety requirements. (Order Point 7)
- The Company did not discover during construction any cultural resource, paleontological site, archeological site, historical site, or gravesite. (Order Point 9)
- The Company did not witness the presence, in the permit area, of any critical habitat of threatened or endangered species, or of bald or golden eagles. (Order Point 8)
- The transmission line was constructed on agricultural land, such that noxious weeds are controlled by the landowners or their renters. (Order Point 13)

**PU-09-674, 230 kV Electric Transmission Line – Sargent County Siting Application (near Fiala Lake)**

- The Company did not witness the presence, in the permit area, of any critical habitat of threatened or endangered species, or of bald or golden eagles. (Order Point 8)
- The Company did not discover during construction any cultural resource, paleontological site, archeological site, historical site, or gravesite. (Order Point 9)
- **Enclosed** are copies of design specifications for construction of the transmission line reroute showing the location as built. (Order Point 16)

If you have technical questions or require additional information about the Richland or Sargent County reroutes, please contact Todd Langston at (218) 739-8679. If you have technical questions or require additional information about the Steele County transmission line, please contact Harvey McMahon at (218) 739-8444.

Thank you for writing me about these matters. If I can be of further assistance, please do not hesitate to contact me.

Sincerely,



Mark B. Bring  
Associate General Counsel

Enclosures

cc: Darrell Nitschke  
Todd Langston  
Harvey McMahon

**PU-08-107/PU-09-388**

**LUVERNE WIND FARM 230 KV LINE**

**OTTER TAIL POWER COMPANY**

**TO**

**PUBLIC SERVICE COMMISSION**

**STATE OF NORTH DAKOTA**

**MARCH 2014**

**PU-08-107/PU-09-388**

**LUVERNE WIND FARM 230 KV LINE**

**M-POWER, LLC**  
P.O. Box 335  
602 Lincoln Avenue South  
Finley, ND 58203

February 6, 2009

**VIA U.S. MAIL**

Jamie Smith  
Barnes County Highway Department  
P.O. Box 306  
Valley City, ND 58072

**Re: M-Power, LLC – Notice of Assignment**

Dear Jamie:

Reference is hereby made to that certain Barnes County Zoning Conditional Use Permit ("Permit") dated as of July 10, 2008 issued to M-Power, LLC ("M-Power").

M-Power hereby provides notice that M-Power has assigned all of its right, title and interest in the Permit to Otter Tail Corporation, a Minnesota corporation, d/b/a Otter Tail Power Company ("Otter Tail"), and, therefore, Otter Tail assumes responsibility for all conditions under the Permit.

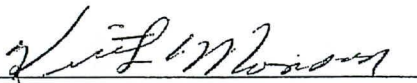
Please send all future notices regarding the Permit to Otter Tail at the following address:

Otter Tail Corporation, d/b/a Otter Tail Power Company  
215 Cascade Street  
Fergus Falls, Minnesota 56538-0496  
Attention: Land Management Department

Please let me know if you have any further questions.

Very truly yours,

**M-POWER, LLC**

By:   
Name: Keith Monson  
Title: President



# BARNES COUNTY

230 4<sup>TH</sup> St. NW  
VALLEY CITY, NORTH DAKOTA 58072  
[www.co.barnes.nd.us](http://www.co.barnes.nd.us)

## COUNTY OFFICERS

EDWARD R. MCGOUGH

Auditor  
845-8500  
Fax: 845-8548

VICKI ZINCK

Treasurer  
845-8505  
Fax: 845-8501

KERSTIN COCHRAN

Recorder  
845-8506  
Fax: 845-8538

WANDA AUKA

Clerk of District Court  
845-8512  
Fax: 845-1341

BRADLEY A. CRUFF

States Attorney  
845-8526  
Fax: 845-8543

EUGENE BJERKE

Sheriff  
845-8530  
Fax: 845-0002

CORRECTIONS

845-8532  
Fax: 845-2495

DR. JAMES B. BUHR

Coroner  
845-6000

BETTY KOSLOFSKY

Director of Tax Equalization  
845-8515

JAMES VERWEY

Veterans Service Officer  
845-8511

KIMBERLY FRANKLIN

Emergency Manager  
845-8510

KERRY JOHNSON

Highway Superintendent  
845-8508  
Fax: 845-8533

JASON THIEL

MIS Manager  
845-8545

## COUNTY COMMISSION

Dist. 1: CINDY SCHWEHR

Rogers  
845-8238

Dist. 2: RHEINHOLD WEBER

Valley City  
845-1656

Dist. 3: HARLAN OPDAHL

Litchville  
762-4254

Dist. 4: RODGER BERNTSON

Sanborn  
646-6159

Dist. 5: JOHN FROELICH

Valley City  
845-1371

February 2, 2009

M-Power, LLC

P.O. Box 335

602 Lincoln Avenue

Finley, ND 58203

Attention: Keith Monson, President

Re: Wind Project

Collection Line/Transmission Line Crossings

Conditional Use Permit

Dear Mr. Monson:

The application for a CUP submitted for the Wind Project contained the general plan for the Project, including the location of the wind turbines and the electrical transmission lines or underground collection lines between the wind turbines and the wind farm substation. The approval and issuance of a CUP dated July 10, 2008 and approved by the Barnes County Commission on July 14, 2008 for the project included the overhead/underground crossing of any Barnes County streets and roads by the overhead transmission lines or electrical collection lines between the wind turbines and the Minnkota-Pillsbury wind farm substation (in accordance with the terms and conditions set forth in the CUP). There are no further requirements by Barnes County for said crossings.

Sincerely,

Edward R. McGough

Barnes County Auditor

By Yvonne Pegg, Deputy Auditor

## BARNES COUNTY ZONING CONDITIONAL USE PERMIT

### Conditional Use Permit

Purpose: The development of this code is based upon division of the county into districts, within which district the use of land and building bulk and locations of building and structures are mutually compatible and substantially harmonious. However, there are certain uses which, because of their unique characteristics, cannot be properly classified as permitted uses upon neighboring premises. Such uses, nevertheless, maybe necessary or desirable to be allowed in a particular district provided that due consideration is given to location, development and operation of such uses. To obtain a conditional use permit, the request must be advertised twice two full weeks before the meeting. At the hearing, the public is allowed input. After the hearing, the zoning board makes a motion to approve or deny the proposed conditional use permit. Cost--\$100, plus advertising cost.

LAST NAME	FIRST NAME	MAILING ADDRESS	HOME PHONE NO.
M-Power (company)	Grady Wolf, KLS (contact)	128 Soo Line Drive, Bis. ND 58501	(701) 355-8726
LAND USE			CITY OR TOWNSHIP
Transmission Line			Ells bury
DATE INTRODUCED	DATE APPROVE	FEE - DATE PAID	LEGAL DESC. & 911 ADD.
7/14/08	7/14/08	\$150.00 6/24/08	Sections 6,7 T43N, R56W
HEARING DATE	CONDITIONS		
July 10 <sup>th</sup> 2008	max tower height 115 feet		# 2908

COPY TO APPLICANT

E-MAIL TO RECORDER OFF.

**SIGNATURE APPLICANT:**  
 X Grady Wolf  
 DATE 6-23-08

M-Power, LLC  
 602 Lincoln Ave S.  
 Finley ND.  
 58230

**SIGNATURE OFFICIAL:**  
 X James S. Stevens  
 DATE 7-10-08

06-27-2006 EXC DOC

No Warranty of Suitability

Barnes County, by approving a subdivision, auditor's lot, change of use, variance or by issuing a building permit, does NOT warrant that the property in question is suitable for any particular purpose, including but not limited to improvements to real property.

**GRIGGS COUNTY**  
**PETITION FOR CONDITIONAL USE PERMIT**

Conditional Use Permits are required when the use of a special nature is not automatically permitted in a zoning district. The fee for filing the Petition for Conditional Use Permit is one hundred dollars (\$100.00) plus publication costs (which will be assessed upon receipt of the statement from the publication source).

Completed Petition, all required information and the fee of \$100 is to be returned to the Griggs County Zoning Administrator, P.O. Box 541, Cooperstown ND 58425-0541. Questions? Please call Connie MacKenzie, Griggs County Zoning Administrator at 701-797-2413.

NAME OF PETITIONER: M-POWER

ADDRESS OF PETITIONER: 602 LINCOLN AVENUE SOUTH, FINLEY, ND 58230

NAME AND ADDRESS OF PROPERTY OWNER (if different from above): JAMES AND JOANNE WOLD TRUST  
11943 Co Rd 26 LUVERNE, ND 58056-9215

TELEPHONE #: 701-769-2275 CELL PHONE #: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_

STREET ADDRESS OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED (if different from above address): \_\_\_\_\_

LEGAL DESCRIPTION OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: \_\_\_\_\_  
W 1/2 SEC. 1, T144, R58N TOWNSHIP: BROADVIEW

CURRENT ZONING OF THE PROPERTY: AGRICULTURE

DESCRIBE USE OR ACTIVITY PROPOSED FOR THIS PROPERTY (please include all proposed activities for which this property may be used): CONSTRUCTION OF WIND TURBINES AND ASSOCIATED UNDERGROUND ELECTRICAL COLLECTOR LINES


DESCRIBE ALL USES OF PROPERTY WITHIN ONE (1) MILE OF THE SUBJECT PROPERTY/PARCEL(S): AGRICULTURE

WHAT EFFECT WILL THE CONDITIONAL USE HAVE ON PROPERTIES WITHIN ONE-HALF (1/2) MILE? (PLEASE DESCRIBE):  
NONE ANTICIPATED

PLEASE LIST ALL PROPERTY OWNERS ADJACENT TO PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: CRAIG LETVIN, T. LOREN VIGESAA ETAL. DENNIS HAUGEN, CLAY JACOBSON, GERALD JOHNSON

PROPOSED START DATE: 7/1/2008

*I HEREBY CERTIFY THAT I AM THE OWNER OR AUTHORIZED AGENT OF THE ABOVE PROPERTY AND, THAT, TO THE BEST OF MY KNOWLEDGE, ALL INFORMATION CONTAINED IN THIS PETITION IS TRUE AND CORRECT.*

SIGNATURE:  DATE: 05/15/08

**ATTACH SITE PLAN SHOWING LOCATION OF BUILDING(S) AND USE RELEVANT TO PROPERTY/PARCEL INVOLVED IN THE CONDITIONAL USE PERMIT.**

**(PLEASE RETURN ALL INFORMATION, INCLUDING THIS PETITION, TO THE GRIGGS COUNTY ZONING ADMINISTRATOR, P.O. BOX 541, COOPERSTOWN ND 58425-0541 AND INCLUDE PAYMENT OF \$100.00.)**

FOR USE BY ZONING ADMINISTRATOR ONLY

CONDITIONAL USE PERMIT:

APPLICATION WITH INFORMATION RECEIVED: DATE: 5/19/08

SITE PLANS/LOCATION/ELEVATIONS RECEIVED: DATE: 5/19/08

FEE PAID: \$100 DATE: 5/23/08

DATE OF PLANNING COMMISSION HEARING: Monday, June 2, 2008 7pm.  
Griggs County Courthouse

ACTION TAKEN BY GRIGGS COUNTY PLANNING COMMISSION: Commissioners Chambers

ACTION TAKEN FOR CONDITIONAL USE PERMIT:  APPROVED  DENIED

IF APPROVED, CONDITIONS: 1. Abide by landowner's lease.  
2. Any legal activity under North Dakota Law and  
in North Dakota Courts.  
3. All underground cable must comply with  
North Dakota standards and conditions.  
4. Pay publication costs within 30 days of billing.

IF DENIED, REASON(S): \_\_\_\_\_

SIGNED: Bonnie M. MacKenzie DATE: 6/2/08  
CONNIE M. MACKENZIE, GRIGGS COUNTY ZONING ADMINISTRATOR

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY PLANNING COMMISSION CHAIRMAN

ACTION TAKEN BY GRIGGS COUNTY COMMISSION:

APPROVED:  
ADDITIONAL CONDITIONS, (IF ANY): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DENIED:  
REASON(S): \_\_\_\_\_  
\_\_\_\_\_

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY COMMISSION CHAIRMAN

No Warranty of Suitability  
Griggs County, by approving a subdivision, auditor's lot, change of use, variance or by issuing a building permit, does NOT warrant that the property in question is suitable for any particular purpose, including, but not limited to, improvements to real property.

*Proposed Wind Farm Development Area  
M-Power, LLC & National Wind, LLC  
Griggs County, North Dakota*

T145N

T144N

36

34

2

6

5

4

11

12

7

8

9

Study Area

14

13

18

17

16

23

24

19

20

21

26

25

30

29

28

35

36

31

Griggs County

⊕ Clipper 96 Wind Turbines

⊕ Suzlon 88 Wind Turbines



R58W

R57W

**GRIGGS COUNTY**  
**PETITION FOR CONDITIONAL USE PERMIT**

Conditional Use Permits are required when the use of a special nature is not automatically permitted in a zoning district. The fee for filing the Petition for Conditional Use Permit is one hundred dollars (\$100.00) plus publication costs (which will be assessed upon receipt of the statement from the publication source).  
Completed Petition, all required information and the fee of \$100 is to be returned to the Griggs County Zoning Administrator, P.O. Box 541, Cooperstown ND 58425-0541. Questions? Please call Connie MacKenzie, Griggs County Zoning Administrator at 701-797-2413.

NAME OF PETITIONER: M-POWER

ADDRESS OF PETITIONER: 602 LINCOLN AVENUE SOUTH, FINLEY, ND 58230

NAME AND ADDRESS OF PROPERTY OWNER (if different from above): CRAIG AND CHRISTINE LETVIN  
3797 RUEMMLE ROAD GRAND FORKS, ND 58201

TELEPHONE #: 701-599-2897 CELL PHONE #: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_

STREET ADDRESS OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED (if different from above address): \_\_\_\_\_

LEGAL DESCRIPTION OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: \_\_\_\_\_  
NE 1/4 SEC. 1, T144N, R58W TOWNSHIP: BROADVIEW

CURRENT ZONING OF THE PROPERTY: AGRICULTURE

DESCRIBE USE OR ACTIVITY PROPOSED FOR THIS PROPERTY (please include all proposed activities for which this property may be used): CONSTRUCTION OF WIND TURBINES AND ASSOCIATED UNDERGROUND ELECTRICAL COLLECTOR LINES


DESCRIBE ALL USES OF PROPERTY WITHIN ONE (1) MILE OF THE SUBJECT PROPERTY/PARCEL(S): AGRICULTURE

WHAT EFFECT WILL THE CONDITIONAL USE HAVE ON PROPERTIES WITHIN ONE-HALF (1/2) MILE? (PLEASE DESCRIBE):  
NONE ANTICIPATED

PLEASE LIST ALL PROPERTY OWNERS ADJACENT TO PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: GERALD JOHNSON, JAMES AND JOANNE WALD TRUST, CLAY JACOBSON, FAY HILLERSON

PROPOSED START DATE: 7/1/2008

I HEREBY CERTIFY THAT I AM THE OWNER OR AUTHORIZED AGENT OF THE ABOVE PROPERTY AND, THAT, TO THE BEST OF MY KNOWLEDGE, ALL INFORMATION CONTAINED IN THIS PETITION IS TRUE AND CORRECT.

SIGNATURE:  DATE: 07/15/08

**ATTACH SITE PLAN SHOWING LOCATION OF BUILDING(S) AND USE RELEVANT TO PROPERTY/PARCEL INVOLVED IN THE CONDITIONAL USE PERMIT.**

(PLEASE RETURN ALL INFORMATION, INCLUDING THIS PETITION, TO THE GRIGGS COUNTY ZONING ADMINISTRATOR, P.O. BOX 541, COOPERSTOWN ND 58425-0541 AND INCLUDE PAYMENT OF \$100.00.)

FOR USE BY ZONING ADMINISTRATOR ONLY

CONDITIONAL USE PERMIT:

APPLICATION WITH INFORMATION RECEIVED: DATE: 5/19/08

SITE PLANS/LOCATION/ELEVATIONS RECEIVED: DATE: 5/19/08

FEE PAID: \$100 DATE: 5/23/08

DATE OF PLANNING COMMISSION HEARING: Monday, June 2, 2008 7pm.  
Griggs County Courthouse

ACTION TAKEN BY GRIGGS COUNTY PLANNING COMMISSION: Commissioners Chambers

ACTION TAKEN FOR CONDITIONAL USE PERMIT:  APPROVED  DENIED  
1. Abide by landowner's lease.

IF APPROVED, CONDITIONS: 2. Any legal activity under North Dakota Law  
and in North Dakota Courts.

3. All underground cable must comply with  
North Dakota standards and conditions.

4. Pay publication costs within 30 days of  
billing.

IF DENIED, REASON(S): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SIGNED: Connie M. Mackenzie DATE: 6/2/08  
CONNIE M. MACKENZIE, GRIGGS COUNTY ZONING ADMINISTRATOR

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY PLANNING COMMISSION CHAIRMAN

ACTION TAKEN BY GRIGGS COUNTY COMMISSION:

APPROVED:  
ADDITIONAL CONDITIONS, (IF ANY): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DENIED:  
REASON(S): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY COMMISSION CHAIRMAN

No Warranty of Suitability  
Griggs County, by approving a subdivision, auditor's lot, change of use, variance or by issuing a building permit, does NOT warrant that the property in question is suitable for any particular purpose, including, but not limited to, improvements to real property.

**Proposed Wind Farm Development Area**  
**M-Power, LLC & National Wind, LLC**  
**Griggs County, North Dakota**

T145N

T144N

36

34

2

6

5

4

11

12

7

8

9

14

13

18

17

16

23

24

19

20

21

26

25

30

29

28

35

36

31

Study Area

Griggs County

⊕ Clipper 96 Wind Turbines

⊕ Suzlon 88 Wind Turbines



R58W

R57W

**GRIGGS COUNTY**  
**PETITION FOR CONDITIONAL USE PERMIT**

Conditional Use Permits are required when the use of a special nature is not automatically permitted in a zoning district. The fee for filing the Petition for Conditional Use Permit is one hundred dollars (\$100.00) plus publication costs (which will be assessed upon receipt of the statement from the publication source).

Completed Petition, all required information and the fee of \$100 is to be returned to the Griggs County Zoning Administrator, P.O. Box 541, Cooperstown ND 58425-0541. Questions? Please call Connie MacKenzie, Griggs County Zoning Administrator at 701-797-2413.

NAME OF PETITIONER: M-POWER

ADDRESS OF PETITIONER: 602 LINCOLN AVENUE SOUTH, FINLEY, ND 58230

NAME AND ADDRESS OF PROPERTY OWNER (if different from above): CLAY JACOBSON  
PO BOX 172 LUVERNE, ND 58056-0172

TELEPHONE #: 701-769-2335 CELL PHONE #: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_

STREET ADDRESS OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED (if different from above address): \_\_\_\_\_

LEGAL DESCRIPTION OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: \_\_\_\_\_  
SE ¼ SEC. 1, NE ¼ SEC. 12, E ½ OF NW ¼ SEC. 12, T144N, R58W . TOWNSHIP: BROADVIEW

CURRENT ZONING OF THE PROPERTY: AGRICULTURE

DESCRIBE USE OR ACTIVITY PROPOSED FOR THIS PROPERTY (please include all proposed activities for which this property may be used): CONSTRUCTION OF WIND TURBINES AND ASSOCIATED UNDERGROUND ELECTRICAL COLLECTOR LINES


DESCRIBE ALL USES OF PROPERTY WITHIN ONE (1) MILE OF THE SUBJECT PROPERTY/PARCEL(S): AGRICULTURE

WHAT EFFECT WILL THE CONDITIONAL USE HAVE ON PROPERTIES WITHIN ONE-HALF (1/2) MILE? (PLEASE DESCRIBE):  
NONE ANTICIPATED

PLEASE LIST ALL PROPERTY OWNERS ADJACENT TO PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: CRAIG LETVIN, ALLAN JACOBSON, DENNIS HAUGEN, JORGEN PEDERSEN, FAY HILLERSON  
JAMES AND JOANNE WOLD TRUST

PROPOSED START DATE: 7/1/2008

*I HEREBY CERTIFY THAT I AM THE OWNER OR AUTHORIZED AGENT OF THE ABOVE PROPERTY AND, THAT, TO THE BEST OF MY KNOWLEDGE, ALL INFORMATION CONTAINED IN THIS PETITION IS TRUE AND CORRECT.*

SIGNATURE:  DATE: 05/15/08

**ATTACH SITE PLAN SHOWING LOCATION OF BUILDING(S) AND USE RELEVANT TO PROPERTY/PARCEL INVOLVED IN THE CONDITIONAL USE PERMIT.**

**(PLEASE RETURN ALL INFORMATION, INCLUDING THIS PETITION, TO THE GRIGGS COUNTY ZONING ADMINISTRATOR, P.O. BOX 541, COOPERSTOWN ND 58425-0541 AND INCLUDE PAYMENT OF \$100.00.)**

FOR USE BY ZONING ADMINISTRATOR ONLY

CONDITIONAL USE PERMIT:

APPLICATION WITH INFORMATION RECEIVED: DATE: 5/19/08

SITE PLANS/LOCATION/ELEVATIONS RECEIVED: DATE: 5/19/08

FEE PAID: \$100 DATE: 5/23/08

DATE OF PLANNING COMMISSION HEARING: Monday, June 2, 2008 7pm.  
Griggs County Courthouse

ACTION TAKEN BY GRIGGS COUNTY PLANNING COMMISSION: Commissioners Chambers

ACTION TAKEN FOR CONDITIONAL USE PERMIT:  APPROVED  DENIED

IF APPROVED, CONDITIONS: 1. Abide by landowner's lease,  
2. Any legal activity under North Dakota Law  
and in North Dakota Courts,  
3. All underground cable must comply with  
North Dakota standards and conditions.  
4. Pay publication costs within 30 days of billing.

IF DENIED, REASON(S): \_\_\_\_\_

SIGNED: Connie M. Mackenzie DATE: 6/2/08  
CONNIE M. MACKENZIE, GRIGGS COUNTY ZONING ADMINISTRATOR

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY PLANNING COMMISSION CHAIRMAN

ACTION TAKEN BY GRIGGS COUNTY COMMISSION:

APPROVED:  
ADDITIONAL CONDITIONS, (IF ANY): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DENIED:  
REASON(S): \_\_\_\_\_  
\_\_\_\_\_

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY COMMISSION CHAIRMAN

No Warranty of Suitability  
Griggs County, by approving a subdivision, auditor's lot, change of use, variance or by issuing a building permit, does NOT warrant that the property in question is suitable for any particular purpose, including, but not limited to, improvements to real property.

*Proposed Wind Farm Development Area  
M-Power, LLC & National Wind, LLC  
Griggs County, North Dakota*

T145N

T144N

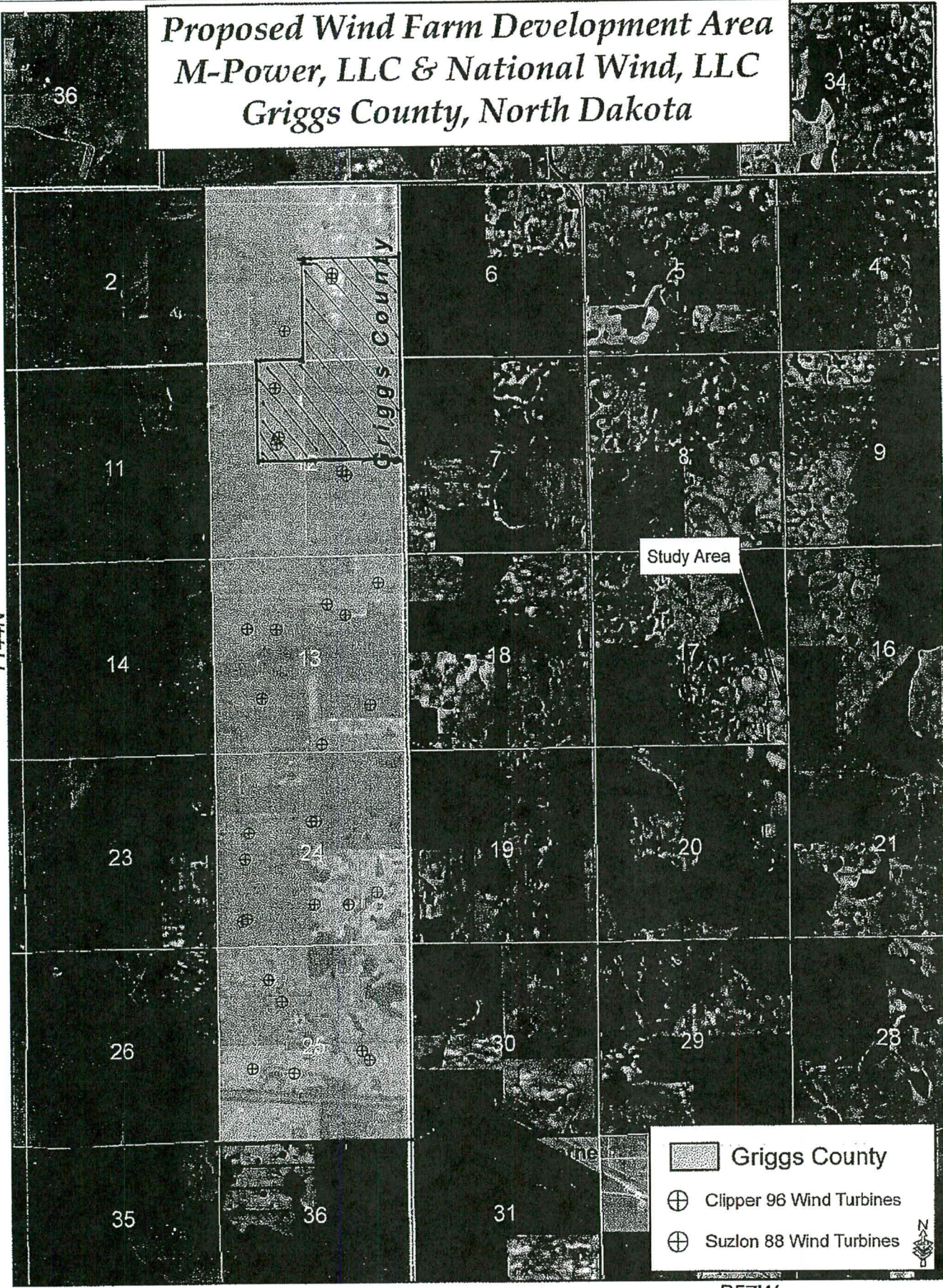
R58W

R57W

Griggs County

Study Area

- Griggs County
- ⊕ Clipper 96 Wind Turbines
- ⊕ Suzlon 88 Wind Turbines



**GRIGGS COUNTY**  
**PETITION FOR CONDITIONAL USE PERMIT**

Conditional Use Permits are required when the use of a special nature is not automatically permitted in a zoning district. The fee for filing the Petition for Conditional Use Permit is one hundred dollars (\$100.00) plus publication costs (which will be assessed upon receipt of the statement from the publication source).

Completed Petition, all required information and the fee of \$100 is to be returned to the Griggs County Zoning Administrator, P.O. Box 541, Cooperstown ND 58425-0541. Questions? Please call Connie MacKenzie, Griggs County Zoning Administrator at 701-797-2413.

NAME OF PETITIONER: M-POWER

ADDRESS OF PETITIONER: 602 LINCOLN AVENUE SOUTH, FINLEY, ND 58230

NAME AND ADDRESS OF PROPERTY OWNER (if different from above): DENNIS HAUGEN  
761 111TH AVE. SE HANNAFORD, ND 58448-9462

TELEPHONE #: 701-769-2226, 701-769-2300 CELL PHONE #: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_

STREET ADDRESS OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED (if different from above address): \_\_\_\_\_

LEGAL DESCRIPTION OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: \_\_\_\_\_  
W 1/2 OF W 1/2 SEC. 12, T144N, R58W TOWNSHIP: BROADVIEW

CURRENT ZONING OF THE PROPERTY: AGRICULTURE

DESCRIBE USE OR ACTIVITY PROPOSED FOR THIS PROPERTY (please include all proposed activities for which this property may be used): CONSTRUCTION OF WIND TURBINES AND ASSOCIATED UNDERGROUND ELECTRICAL COLLECTOR LINES

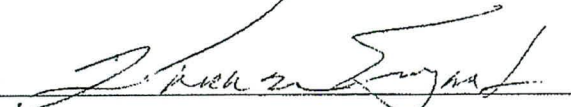
DESCRIBE ALL USES OF PROPERTY WITHIN ONE (1) MILE OF THE SUBJECT PROPERTY/PARCEL(S): AGRICULTURE

WHAT EFFECT WILL THE CONDITIONAL USE HAVE ON PROPERTIES WITHIN ONE-HALF (1/2) MILE? (PLEASE DESCRIBE):  
NONE ANTICIPATED

PLEASE LIST ALL PROPERTY OWNERS ADJACENT TO PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: CLAY JACOBSON, JORGEN PEDERSON, JAMES AND JOANNE WOLD TRUST

PROPOSED START DATE: 7/1/2008

*I HEREBY CERTIFY THAT I AM THE OWNER OR AUTHORIZED AGENT OF THE ABOVE PROPERTY AND, THAT, TO THE BEST OF MY KNOWLEDGE, ALL INFORMATION CONTAINED IN THIS PETITION IS TRUE AND CORRECT.*

SIGNATURE: 

DATE: 05/15/08

**ATTACH SITE PLAN SHOWING LOCATION OF BUILDING(S) AND USE RELEVANT TO PROPERTY/PARCEL INVOLVED IN THE CONDITIONAL USE PERMIT.**

**(PLEASE RETURN ALL INFORMATION, INCLUDING THIS PETITION, TO THE GRIGGS COUNTY ZONING ADMINISTRATOR, P.O. BOX 541, COOPERSTOWN ND 58425-0541 AND INCLUDE PAYMENT OF \$100.00.)**

FOR USE BY ZONING ADMINISTRATOR ONLY

CONDITIONAL USE PERMIT:

- APPLICATION WITH INFORMATION RECEIVED: DATE: 5/19/08
- SITE PLANS/LOCATION/ELEVATIONS RECEIVED: DATE: 5/19/08
- FEE PAID: \$100 DATE: 5/23/08
- DATE OF PLANNING COMMISSION HEARING: Monday, June 2, 2008 7pm.

ACTION TAKEN BY GRIGGS COUNTY PLANNING COMMISSION: Griggs County Courthouse Commissioners Chambers

- ACTION TAKEN FOR CONDITIONAL USE PERMIT:  APPROVED  DENIED  
1. Abide by landowner's lease.
- IF APPROVED, CONDITIONS: 2. Any legal activity under North Dakota Law and in North Dakota Courts.  
3. All underground cable must comply with North Dakota Conditions and standards.  
4. Pay publication costs within 30 days of billing.
- IF DENIED, REASON(S): \_\_\_\_\_

SIGNED: Connie M. Mackenzie DATE: 6/2/08  
CONNIE M. MACKENZIE, GRIGGS COUNTY ZONING ADMINISTRATOR

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY PLANNING COMMISSION CHAIRMAN

ACTION TAKEN BY GRIGGS COUNTY COMMISSION:

- APPROVED:  
ADDITIONAL CONDITIONS, (IF ANY): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- DENIED:  
REASON(S): \_\_\_\_\_  
\_\_\_\_\_

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY COMMISSION CHAIRMAN

No Warranty of Suitability  
Griggs County, by approving a subdivision, auditor's lot, change of use, variance or by issuing a building permit, does NOT warrant that the property in question is suitable for any particular purpose, including, but not limited to, improvements to real property.

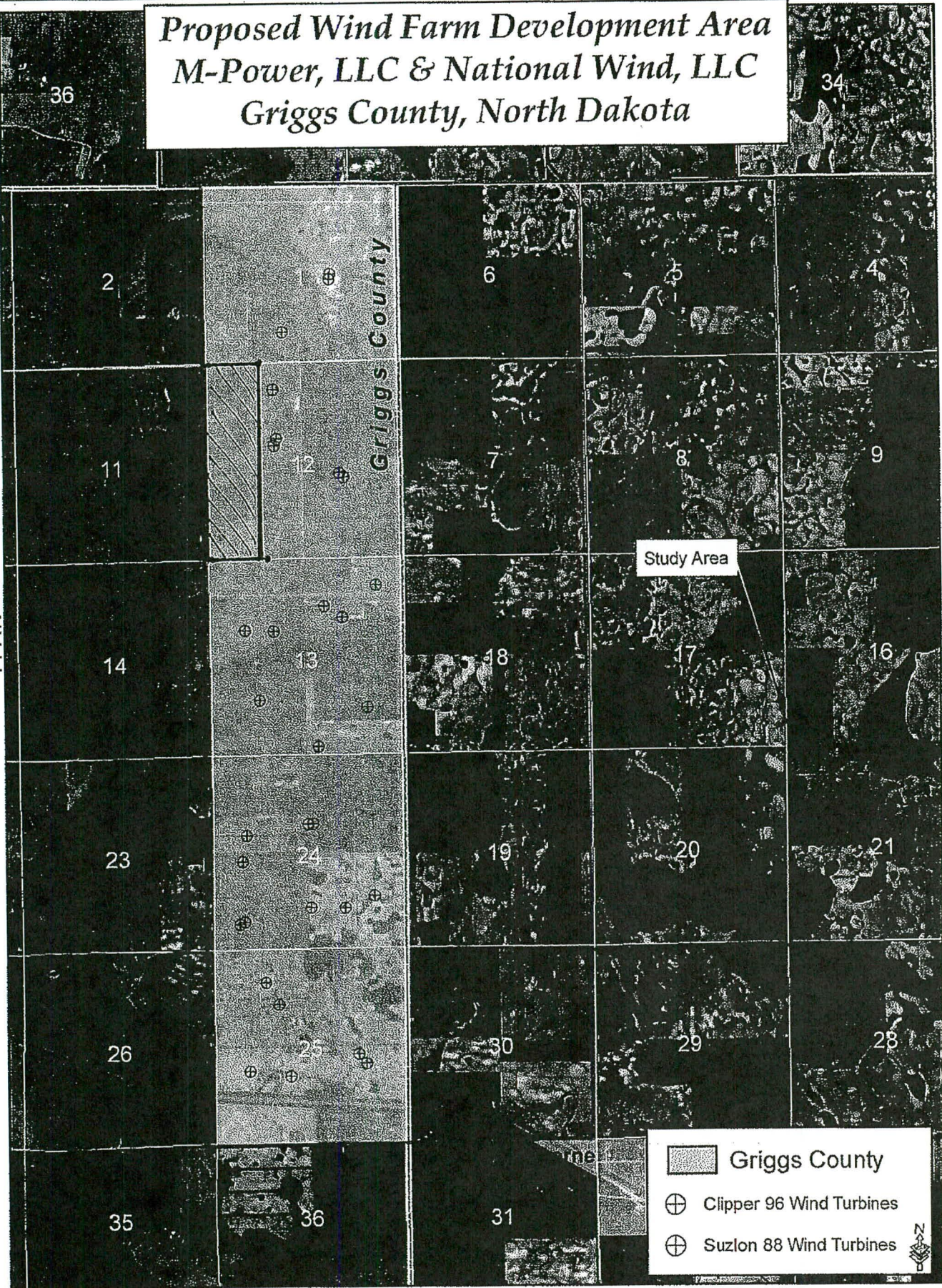
*Proposed Wind Farm Development Area  
M-Power, LLC & National Wind, LLC  
Griggs County, North Dakota*

T145N

T144N

R58W

R57W



Griggs County

⊕ Clipper 96 Wind Turbines

⊕ Suzlon 88 Wind Turbines



**GRIGGS COUNTY**  
**PETITION FOR CONDITIONAL USE PERMIT**

Conditional Use Permits are required when the use of a special nature is not automatically permitted in a zoning district. The fee for filing the Petition for Conditional Use Permit is one hundred dollars (\$100.00) plus publication costs (which will be assessed upon receipt of the statement from the publication source).

Completed Petition, all required information and the fee of \$100 is to be returned to the Griggs County Zoning Administrator, P.O. Box 541, Cooperstown ND 58425-0541. Questions? Please call Connie MacKenzie, Griggs County Zoning Administrator at 701-797-2413.

NAME OF PETITIONER: M-POWER

ADDRESS OF PETITIONER: 602 LINCOLN AVENUE SOUTH, FINLEY, ND 58230

NAME AND ADDRESS OF PROPERTY OWNER (if different from above): JORGEN PEDERSEN  
11961 11TH ST. SE LUVERNE, ND 58056-9211

TELEPHONE #: 701-769-2333 CELL PHONE #: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_

STREET ADDRESS OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED (if different from above address): \_\_\_\_\_

LEGAL DESCRIPTION OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: \_\_\_\_\_  
E 1/2 OF SW 1/4 SEC. 12 AND NW 1/4 OF SEC. 13, T144N, R58W . TOWNSHIP: BROADVIEW

CURRENT ZONING OF THE PROPERTY: AGRICULTURE

DESCRIBE USE OR ACTIVITY PROPOSED FOR THIS PROPERTY (please include all proposed activities for which this property may be used): CONSTRUCTION OF WIND TURBINES AND ASSOCIATED UNDERGROUND ELECTRICAL COLLECTOR LINES

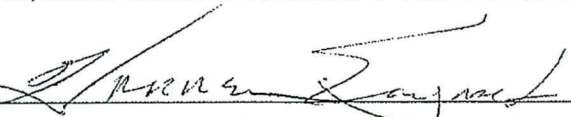
DESCRIBE ALL USES OF PROPERTY WITHIN ONE (1) MILE OF THE SUBJECT PROPERTY/PARCEL(S): AGRICULTURE

WHAT EFFECT WILL THE CONDITIONAL USE HAVE ON PROPERTIES WITHIN ONE-HALF (1/2) MILE? (PLEASE DESCRIBE):  
NONE ANTICIPATED

PLEASE LIST ALL PROPERTY OWNERS ADJACENT TO PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: DENNIS HAUGEN, ALLEN JACOBSEN, IRA FUGLESTAD, CLAY JACOBSON

PROPOSED START DATE: 7/1/2008

*I HEREBY CERTIFY THAT I AM THE OWNER OR AUTHORIZED AGENT OF THE ABOVE PROPERTY AND, THAT, TO THE BEST OF MY KNOWLEDGE, ALL INFORMATION CONTAINED IN THIS PETITION IS TRUE AND CORRECT.*

SIGNATURE:  DATE: 06/15/08

**ATTACH SITE PLAN SHOWING LOCATION OF BUILDING(S) AND USE RELEVANT TO PROPERTY/PARCEL INVOLVED IN THE CONDITIONAL USE PERMIT.**

**(PLEASE RETURN ALL INFORMATION, INCLUDING THIS PETITION, TO THE GRIGGS COUNTY ZONING ADMINISTRATOR, P.O. BOX 541, COOPERSTOWN ND 58425-0541 AND INCLUDE PAYMENT OF \$100.00.)**

FOR USE BY ZONING ADMINISTRATOR ONLY

CONDITIONAL USE PERMIT:

- APPLICATION WITH INFORMATION RECEIVED: DATE: 5/19/08
- SITE PLANS/LOCATION/ELEVATIONS RECEIVED: DATE: 5/19/08
- FEE PAID: \$100 DATE: 5/23/08
- DATE OF PLANNING COMMISSION HEARING: Monday, June 2, 2008 7pm.

ACTION TAKEN BY GRIGGS COUNTY PLANNING COMMISSION: Griggs County Courthouse Commissioners Chambers

- ACTION TAKEN FOR CONDITIONAL USE PERMIT:  APPROVED  DENIED  
1. Abide by landowner's lease.
- IF APPROVED, CONDITIONS: 2. Any legal activity under North Dakota Law and in North Dakota Courts.  
3. All underground cable must comply with North Dakota standards and conditions.  
4. Pay publication costs within 30 day of billing.
- IF DENIED, REASON(S): \_\_\_\_\_

SIGNED: Connie M. Mackenzie DATE: 6/2/08  
CONNIE M. MACKENZIE, GRIGGS COUNTY ZONING ADMINISTRATOR

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY PLANNING COMMISSION CHAIRMAN

ACTION TAKEN BY GRIGGS COUNTY COMMISSION:

- APPROVED:  
ADDITIONAL CONDITIONS, (IF ANY): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- DENIED:  
REASON(S): \_\_\_\_\_  
\_\_\_\_\_

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY COMMISSION CHAIRMAN

No Warranty of Suitability  
Griggs County, by approving a subdivision, auditor's lot, change of use, variance or by issuing a building permit, does NOT warrant that the property in question is suitable for any particular purpose, including, but not limited to, improvements to real property.

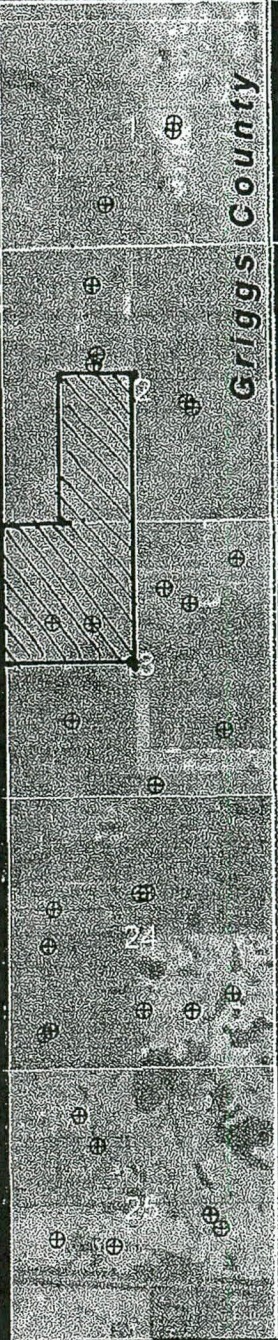
*Proposed Wind Farm Development Area  
M-Power, LLC & National Wind, LLC  
Griggs County, North Dakota*

T145N

T144N

R58W

R57W

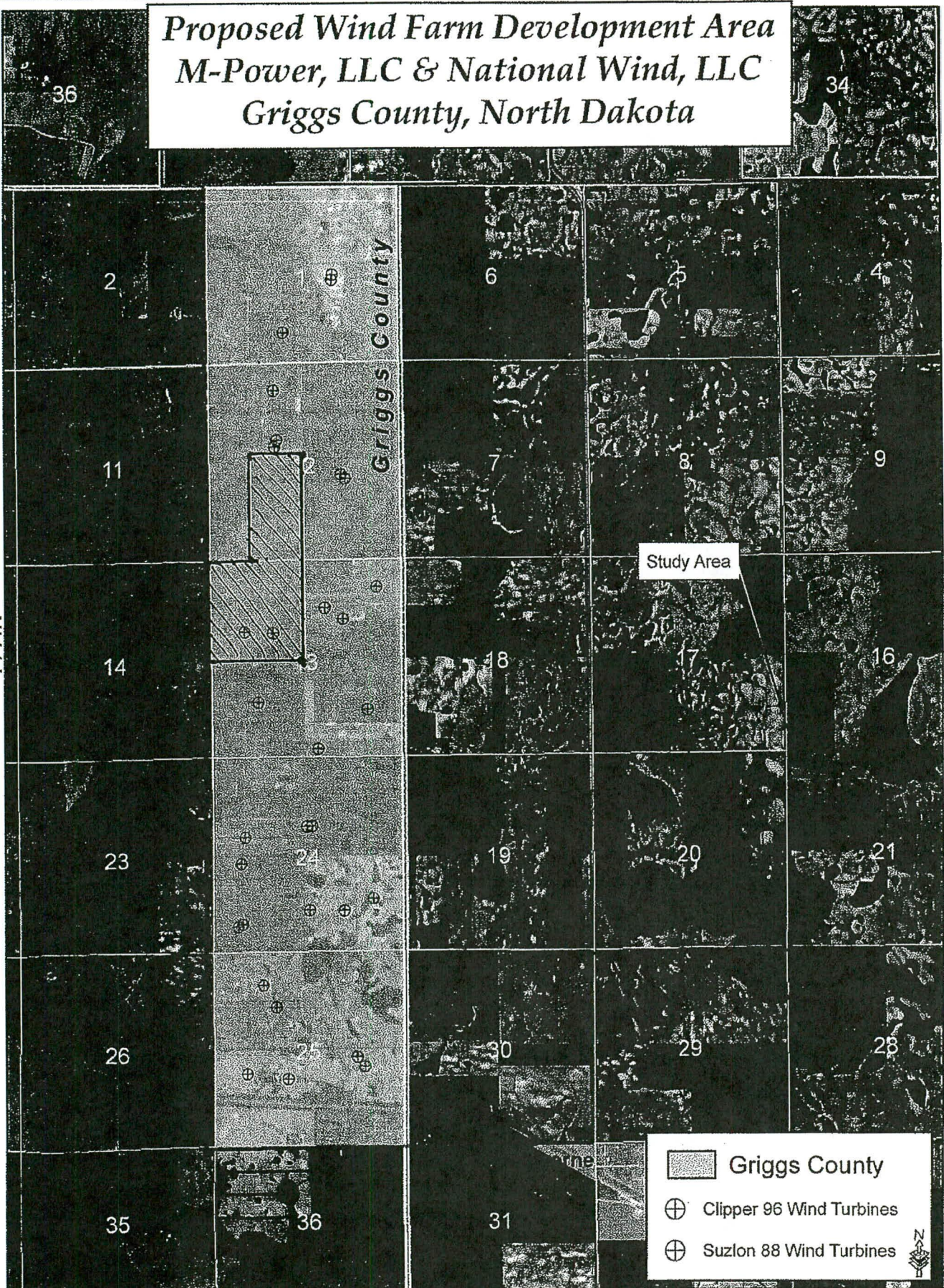



Study Area

Griggs County

⊕ Clipper 96 Wind Turbines

⊕ Suzlon 88 Wind Turbines



**GRIGGS COUNTY**  
**PETITION FOR CONDITIONAL USE PERMIT**

Conditional Use Permits are required when the use of a special nature is not automatically permitted in a zoning district. The fee for filing the Petition for Conditional Use Permit is one hundred dollars (\$100.00) plus publication costs (which will be assessed upon receipt of the statement from the publication source).

Completed Petition, all required information and the fee of \$100 is to be returned to the Griggs County Zoning Administrator, P.O. Box 541, Cooperstown ND 58425-0541. Questions? Please call Connie MacKenzie, Griggs County Zoning Administrator at 701-797-2413.

NAME OF PETITIONER: M-POWER

ADDRESS OF PETITIONER: 602 LINCOLN AVENUE SOUTH, FINLEY, ND 58230

NAME AND ADDRESS OF PROPERTY OWNER (if different from above): ALLAN JACOBSEN  
PO BOX 144 LUVERNE, ND 58056-0144

TELEPHONE #: 701-945-2748 CELL PHONE #: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_

STREET ADDRESS OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED (if different from above address): \_\_\_\_\_

LEGAL DESCRIPTION OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: \_\_\_\_\_  
SE 1/4 OF SEC. 12 AND E 1/2 OF SEC. 13, T144N, R58W, TOWNSHIP: BROADVIEW

CURRENT ZONING OF THE PROPERTY: AGRICULTURE

DESCRIBE USE OR ACTIVITY PROPOSED FOR THIS PROPERTY (please include all proposed activities for which this property may be used): CONSTRUCTION OF WIND TURBINES AND ASSOCIATED UNDERGROUND ELECTRICAL COLLECTOR LINES

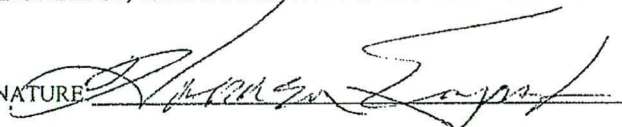
DESCRIBE ALL USES OF PROPERTY WITHIN ONE (1) MILE OF THE SUBJECT PROPERTY/PARCEL(S): AGRICULTURE

WHAT EFFECT WILL THE CONDITIONAL USE HAVE ON PROPERTIES WITHIN ONE-HALF (1/2) MILE? (PLEASE DESCRIBE):  
NONE ANTICIPATED

PLEASE LIST ALL PROPERTY OWNERS ADJACENT TO PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: CLAY JACOBSEN, JORGEN PEDERSEN, IRA FUGLESTAD, MARK SVENNINGSEN, ALLEN JACOBSEN, MARK JACOBSEN, GARY NELSON

PROPOSED START DATE: 7/1/2008

I HEREBY CERTIFY THAT I AM THE OWNER OR AUTHORIZED AGENT OF THE ABOVE PROPERTY AND, THAT, TO THE BEST OF MY KNOWLEDGE, ALL INFORMATION CONTAINED IN THIS PETITION IS TRUE AND CORRECT.

SIGNATURE  DATE: 05/15/09

**ATTACH SITE PLAN SHOWING LOCATION OF BUILDING(S) AND USE RELEVANT TO PROPERTY/PARCEL INVOLVED IN THE CONDITIONAL USE PERMIT.**

(PLEASE RETURN ALL INFORMATION, INCLUDING THIS PETITION, TO THE GRIGGS COUNTY ZONING ADMINISTRATOR, P.O. BOX 541, COOPERSTOWN ND 58425-0541 AND INCLUDE PAYMENT OF \$100.00.)

FOR USE BY ZONING ADMINISTRATOR ONLY

CONDITIONAL USE PERMIT:

APPLICATION WITH INFORMATION RECEIVED: DATE: 5/19/08

SITE PLANS/LOCATION/ELEVATIONS RECEIVED: DATE: 5/19/08

FEE PAID: \$100 DATE: 5/23/08

DATE OF PLANNING COMMISSION HEARING: Monday, June 2, 2008 7pm.  
Griggs County Courthouse

ACTION TAKEN BY GRIGGS COUNTY PLANNING COMMISSION: Commissioners Chambers

ACTION TAKEN FOR CONDITIONAL USE PERMIT:  APPROVED  DENIED

IF APPROVED, CONDITIONS: 1. Abide by landowner's lease.  
2. Any legal activity under North Dakota Law  
and in North Dakota Courts.  
3. All underground cable must comply with  
North Dakota standards and conditions.  
4. Pay publication costs within 30 days of billing.

IF DENIED, REASON(S): \_\_\_\_\_

SIGNED: Connie M. Mackenzie DATE: 6/2/08  
CONNIE M. MACKENZIE, GRIGGS COUNTY ZONING ADMINISTRATOR

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY PLANNING COMMISSION CHAIRMAN

ACTION TAKEN BY GRIGGS COUNTY COMMISSION:

APPROVED:  
ADDITIONAL CONDITIONS, (IF ANY): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DENIED:  
REASON(S): \_\_\_\_\_  
\_\_\_\_\_

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY COMMISSION CHAIRMAN

No Warranty of Suitability  
Griggs County, by approving a subdivision, auditor's lot, change of use, variance or by issuing a building permit, does NOT warrant that the property in question is suitable for any particular purpose, including, but not limited to, improvements to real property.

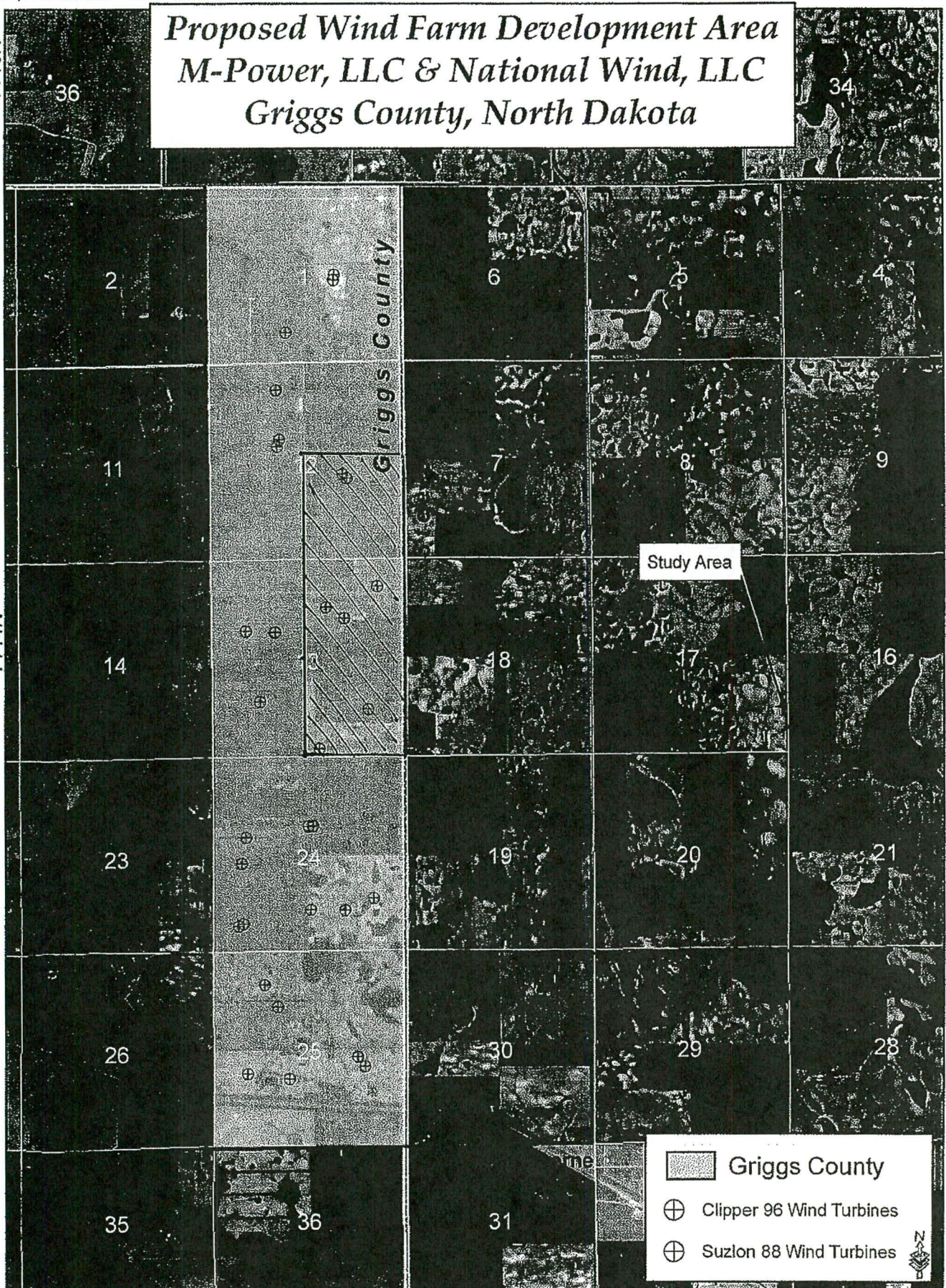
*Proposed Wind Farm Development Area  
M-Power, LLC & National Wind, LLC  
Griggs County, North Dakota*

T145N

T144N

R58W

R57W



	Griggs County
	Clipper 96 Wind Turbines
	Suzlon 88 Wind Turbines



**GRIGGS COUNTY**  
**PETITION FOR CONDITIONAL USE PERMIT**

Conditional Use Permits are required when the use of a special nature is not automatically permitted in a zoning district. The fee for filing the Petition for Conditional Use Permit is one hundred dollars (\$100.00) plus publication costs (which will be assessed upon receipt of the statement from the publication source).

Completed Petition, all required information and the fee of \$100 is to be returned to the Griggs County Zoning Administrator, P.O. Box 541, Cooperstown ND 58425-0541. Questions? Please call Connie MacKenzie, Griggs County Zoning Administrator at 701-797-2413.

NAME OF PETITIONER: M-POWER

ADDRESS OF PETITIONER: 602 LINCOLN AVENUE SOUTH, FINLEY, ND 58230

NAME AND ADDRESS OF PROPERTY OWNER (if different from above): IRA FUGELSTAD  
11871 9TH ST. SE, LUVERNE, ND 58056-9210

TELEPHONE #: 701-769-2355 CELL PHONE #: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_

STREET ADDRESS OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED (if different from above address): \_\_\_\_\_

LEGAL DESCRIPTION OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: \_\_\_\_\_  
SW ¼ SEC. 13 AND NW ¼ SEC. 24, T144N, R58W . TOWNSHIP: BROADVIEW

CURRENT ZONING OF THE PROPERTY: AGRICULTURE

DESCRIBE USE OR ACTIVITY PROPOSED FOR THIS PROPERTY (please include all proposed activities for which this property may be used): CONSTRUCTION OF WIND TURBINES AND ASSOCIATED UNDERGROUND ELECTRICAL COLLECTOR LINES


DESCRIBE ALL USES OF PROPERTY WITHIN ONE (1) MILE OF THE SUBJECT PROPERTY/PARCEL(S): AGRICULTURE

WHAT EFFECT WILL THE CONDITIONAL USE HAVE ON PROPERTIES WITHIN ONE-HALF (1/2) MILE? (PLEASE DESCRIBE):  
NONE ANTICIPATED

PLEASE LIST ALL PROPERTY OWNERS ADJACENT TO PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: JORGEN PEDERSEN, ALLAN JACOBSEN, MARK SVENNINGSSEN, RONALD ARNESAN

PROPOSED START DATE: 7/1/2008

*I HEREBY CERTIFY THAT I AM THE OWNER OR AUTHORIZED AGENT OF THE ABOVE PROPERTY AND, THAT, TO THE BEST OF MY KNOWLEDGE, ALL INFORMATION CONTAINED IN THIS PETITION IS TRUE AND CORRECT.*

SIGNATURE:  DATE: 05/05/08

**ATTACH SITE PLAN SHOWING LOCATION OF BUILDING(S) AND USE RELEVANT TO PROPERTY/PARCEL INVOLVED IN THE CONDITIONAL USE PERMIT.**

**(PLEASE RETURN ALL INFORMATION, INCLUDING THIS PETITION, TO THE GRIGGS COUNTY ZONING ADMINISTRATOR, P.O. BOX 541, COOPERSTOWN ND 58425-0541 AND INCLUDE PAYMENT OF \$100.00.)**

FOR USE BY ZONING ADMINISTRATOR ONLY

CONDITIONAL USE PERMIT:

APPLICATION WITH INFORMATION RECEIVED: DATE: 5/19/08

SITE PLANS/LOCATION/ELEVATIONS RECEIVED: DATE: 5/19/08

FEE PAID: \$100 DATE: 5/23/08

DATE OF PLANNING COMMISSION HEARING: Monday, June 2, 2008 7pm.

Griggs County Courthouse  
Commissioners Chambers

ACTION TAKEN BY GRIGGS COUNTY PLANNING COMMISSION:

ACTION TAKEN FOR CONDITIONAL USE PERMIT:  APPROVED  DENIED

- IF APPROVED, CONDITIONS: 1. Abide by landowner's lease.  
2. Any legal activity under North Dakota Law  
and in North Dakota Courts,  
3. All underground cable must comply with  
North Dakota standards and conditions,  
4. Pay publication costs within 30 days of  
billing.
- IF DENIED, REASON(S): \_\_\_\_\_

SIGNED: Connie M. Mackenzie DATE: 6/2/08  
CONNIE M. MACKENZIE, GRIGGS COUNTY ZONING ADMINISTRATOR

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY PLANNING COMMISSION CHAIRMAN

ACTION TAKEN BY GRIGGS COUNTY COMMISSION:

APPROVED:  
ADDITIONAL CONDITIONS, (IF ANY): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DENIED:  
REASON(S): \_\_\_\_\_  
\_\_\_\_\_

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY COMMISSION CHAIRMAN

No Warranty of Suitability  
Griggs County, by approving a subdivision, auditor's lot, change of use, variance or by issuing a building permit, does NOT warrant that the property in question is suitable for any particular purpose, including, but not limited to, improvements to real property.

*Proposed Wind Farm Development Area  
M-Power, LLC & National Wind, LLC  
Griggs County, North Dakota*

T145N

T144N

36

34

2

Griggs County

6

5

4

11

12

7

8

9

Study Area

14

3

18

17

16

23

14

19

20

21

26

25

30

29

28

35

36

31

Griggs County

⊕ Clipper 96 Wind Turbines

⊕ Suzlon 88 Wind Turbines



R58W

R57W

**GRIGGS COUNTY**  
**PETITION FOR CONDITIONAL USE PERMIT**

Conditional Use Permits are required when the use of a special nature is not automatically permitted in a zoning district. The fee for filing the Petition for Conditional Use Permit is one hundred dollars (\$100.00) plus publication costs (which will be assessed upon receipt of the statement from the publication source).  
Completed Petition, all required information and the fee of \$100 is to be returned to the Griggs County Zoning Administrator, P.O. Box 541, Cooperstown ND 58425-0541. Questions? Please call Connie MacKenzie, Griggs County Zoning Administrator at 701-797-2413.

NAME OF PETITIONER: M-POWER

ADDRESS OF PETITIONER: 602 LINCOLN AVENUE SOUTH, FINLEY, ND 58230

NAME AND ADDRESS OF PROPERTY OWNER (if different from above): RONALD ARNESON  
3109 9TH ST. N FARGO, ND 58102-1341

TELEPHONE #: 701-293-7972 CELL PHONE #: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_

STREET ADDRESS OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED (if different from above address): \_\_\_\_\_

LEGAL DESCRIPTION OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: \_\_\_\_\_  
SW ¼ OF SEC. 24, T144N, R58W. TOWNSHIP: BROADVIEW

CURRENT ZONING OF THE PROPERTY: AGRICULTURE

DESCRIBE USE OR ACTIVITY PROPOSED FOR THIS PROPERTY (please include all proposed activities for which this property may be used): CONSTRUCTION OF WIND TURBINES AND ASSOCIATED UNDERGROUND ELECTRICAL COLLECTOR LINES


DESCRIBE ALL USES OF PROPERTY WITHIN ONE (1) MILE OF THE SUBJECT PROPERTY/PARCEL(S): AGRICULTURE

WHAT EFFECT WILL THE CONDITIONAL USE HAVE ON PROPERTIES WITHIN ONE-HALF (1/2) MILE? (PLEASE DESCRIBE):  
NONE ANTICIPATED

PLEASE LIST ALL PROPERTY OWNERS ADJACENT TO PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: MILDRED GUTTING, MICHAEL HOFER FAMILY, IRA FUGLESTAD

PROPOSED START DATE: 7/1/2008

*I HEREBY CERTIFY THAT I AM THE OWNER OR AUTHORIZED AGENT OF THE ABOVE PROPERTY AND, THAT, TO THE BEST OF MY KNOWLEDGE, ALL INFORMATION CONTAINED IN THIS PETITION IS TRUE AND CORRECT.*

SIGNATURE:  DATE: 05/15/08

**ATTACH SITE PLAN SHOWING LOCATION OF BUILDING(S) AND USE RELEVANT TO PROPERTY/PARCEL INVOLVED IN THE CONDITIONAL USE PERMIT.**

**(PLEASE RETURN ALL INFORMATION, INCLUDING THIS PETITION, TO THE GRIGGS COUNTY ZONING ADMINISTRATOR, P.O. BOX 541, COOPERSTOWN ND 58425-0541 AND INCLUDE PAYMENT OF \$100.00.)**

FOR USE BY ZONING ADMINISTRATOR ONLY

CONDITIONAL USE PERMIT:

APPLICATION WITH INFORMATION RECEIVED: DATE: 5/19/08

SITE PLANS/LOCATION/ELEVATIONS RECEIVED: DATE: 5/19/08

FEE PAID: \$100 DATE: 5/23/08

DATE OF PLANNING COMMISSION HEARING: Monday, June 2, 2008 7pm.  
Griggs County Courthouse

ACTION TAKEN BY GRIGGS COUNTY PLANNING COMMISSION: Commissioners Chambers

ACTION TAKEN FOR CONDITIONAL USE PERMIT:  APPROVED  DENIED

IF APPROVED, CONDITIONS: 1. Abide by landowner's lease.  
2. Any legal activity under North Dakota law and in North Dakota Courts.  
3. All underground cable must comply with North Dakota standards and conditions.  
4. Pay publication costs within 30 days of billing.

IF DENIED, REASON(S): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SIGNED: Connie M. Mackenzie DATE: 6/2/08  
CONNIE M. MACKENZIE, GRIGGS COUNTY ZONING ADMINISTRATOR

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY PLANNING COMMISSION CHAIRMAN

ACTION TAKEN BY GRIGGS COUNTY COMMISSION:

APPROVED:  
ADDITIONAL CONDITIONS, (IF ANY): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DENIED:  
REASON(S): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY COMMISSION CHAIRMAN

No Warranty of Suitability  
Griggs County, by approving a subdivision, auditor's lot, change of use, variance or by issuing a building permit, does NOT warrant that the property in question is suitable for any particular purpose, including, but not limited to, improvements to real property.

**Proposed Wind Farm Development Area**  
**M-Power, LLC & National Wind, LLC**  
**Griggs County, North Dakota**

T145N

T144N

36

34

2

Griggs County

6

5

4

11

12

7

8

9

Study Area

14

13

18

17

16

23

24

19

20

21

26

25

30

29

28

35

36

31

Griggs County

⊕ Clipper 96 Wind Turbines

⊕ Suzlon 88 Wind Turbines



R58W

R57W

**GRIGGS COUNTY**  
**PETITION FOR CONDITIONAL USE PERMIT**

Conditional Use Permits are required when the use of a special nature is not automatically permitted in a zoning district. The fee for filing the Petition for Conditional Use Permit is one hundred dollars (\$100.00) plus publication costs (which will be assessed upon receipt of the statement from the publication source).

Completed Petition, all required information and the fee of \$100 is to be returned to the Griggs County Zoning Administrator, P.O. Box 541, Cooperstown ND 58425-0541. Questions? Please call Connie MacKenzie, Griggs County Zoning Administrator at 701-797-2413.

NAME OF PETITIONER: M-POWER

ADDRESS OF PETITIONER: 602 LINCOLN AVENUE SOUTH, FINLEY, ND 58230

NAME AND ADDRESS OF PROPERTY OWNER (if different from above): MARK SVENNINGSSEN  
1421 122 AVE. SE LUVERNE, ND 58056-9604

TELEPHONE #: 701-945-2733 CELL PHONE #: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_

STREET ADDRESS OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED (if different from above address): \_\_\_\_\_

LEGAL DESCRIPTION OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: \_\_\_\_\_  
NE 1/4 SEC. 24, T144N, R58W TOWNSHIP: BROADVIEW

CURRENT ZONING OF THE PROPERTY: AGRICULTURE

DESCRIBE USE OR ACTIVITY PROPOSED FOR THIS PROPERTY (please include all proposed activities for which this property may be used): CONSTRUCTION OF WIND TURBINES AND ASSOCIATED UNDERGROUND ELECTRICAL COLLECTOR LINES

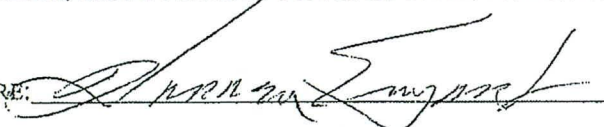
DESCRIBE ALL USES OF PROPERTY WITHIN ONE (1) MILE OF THE SUBJECT PROPERTY/PARCEL(S): AGRICULTURE

WHAT EFFECT WILL THE CONDITIONAL USE HAVE ON PROPERTIES WITHIN ONE-HALF (1/2) MILE? (PLEASE DESCRIBE):  
NONE ANTICIPATED

PLEASE LIST ALL PROPERTY OWNERS ADJACENT TO PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: JORGEN PEDERSEN, MILDRED GUTTING, IRA FUGLESTAD, ALLAN JACOBSEN

PROPOSED START DATE: 7/1/2008

I HEREBY CERTIFY THAT I AM THE OWNER OR AUTHORIZED AGENT OF THE ABOVE PROPERTY AND, THAT, TO THE BEST OF MY KNOWLEDGE, ALL INFORMATION CONTAINED IN THIS PETITION IS TRUE AND CORRECT.

SIGNATURE:  DATE: 05/15/08

**ATTACH SITE PLAN SHOWING LOCATION OF BUILDING(S) AND USE RELEVANT TO PROPERTY/PARCEL INVOLVED IN THE CONDITIONAL USE PERMIT.**

**(PLEASE RETURN ALL INFORMATION, INCLUDING THIS PETITION, TO THE GRIGGS COUNTY ZONING ADMINISTRATOR, P.O. BOX 541, COOPERSTOWN ND 58425-0541 AND INCLUDE PAYMENT OF \$100.00.)**

FOR USE BY ZONING ADMINISTRATOR ONLY

CONDITIONAL USE PERMIT:

APPLICATION WITH INFORMATION RECEIVED: DATE: 5/19/08

SITE PLANS/LOCATION/ELEVATIONS RECEIVED: DATE: 5/19/08

FEE PAID: \$100 DATE: 5/23/08

DATE OF PLANNING COMMISSION HEARING: Monday, June 2, 2008 7p.m.

Griggs County Courthouse  
Commissioners Chambers

ACTION TAKEN FOR CONDITIONAL USE PERMIT:  APPROVED  DENIED

- IF APPROVED, CONDITIONS:
1. Abide by landowner's lease.
  2. Any legal activity under North Dakota Law and in North Dakota Courts.
  3. All underground cable must comply with North Dakota standards and conditions.
  4. Pay publication costs within 30 days of billing.

IF DENIED, REASON(S): \_\_\_\_\_

SIGNED: Connie M. Mackenzie DATE: 6/2/08  
CONNIE M. MACKENZIE, GRIGGS COUNTY ZONING ADMINISTRATOR

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY PLANNING COMMISSION CHAIRMAN

ACTION TAKEN BY GRIGGS COUNTY COMMISSION:

APPROVED:  
ADDITIONAL CONDITIONS, (IF ANY): \_\_\_\_\_

DENIED:  
REASON(S): \_\_\_\_\_

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY COMMISSION CHAIRMAN

No Warranty of Suitability  
Griggs County, by approving a subdivision, auditor's lot, change of use, variance or by issuing a building permit, does NOT warrant that the property in question is suitable for any particular purpose, including, but not limited to, improvements to real property.

**Proposed Wind Farm Development Area**  
**M-Power, LLC & National Wind, LLC**  
**Griggs County, North Dakota**

T145N

T144N

36

34

2

Griggs County

6

5

4

11

12

7

8

9

Study Area

14

13

18

17

16

23

19

20

21

26

25

30

29

28

35

36

31

Griggs County

⊕ Clipper 96 Wind Turbines

⊕ Suzlon 88 Wind Turbines



R58W

R57W

**GRIGGS COUNTY**  
**PETITION FOR CONDITIONAL USE PERMIT**

Conditional Use Permits are required when the use of a special nature is not automatically permitted in a zoning district. The fee for filing the Petition for Conditional Use Permit is one hundred dollars (\$100.00) plus publication costs (which will be assessed upon receipt of the statement from the publication source).

Completed Petition, all required information and the fee of \$100 is to be returned to the Griggs County Zoning Administrator, P.O. Box 541, Cooperstown ND 58425-0541. Questions? Please call Connie MacKenzie, Griggs County Zoning Administrator at 701-797-2413.

NAME OF PETITIONER: M-POWER

ADDRESS OF PETITIONER: 602 LINCOLN AVENUE SOUTH, FINLEY, ND 58230

NAME AND ADDRESS OF PROPERTY OWNER (if different from above): MILDRED GUTTING  
240 5TH AVE. NE #9 VALLEY CITY, ND 58072-3072

TELEPHONE #: 701 845-0976 CELL PHONE #: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_

STREET ADDRESS OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED (if different from above address): \_\_\_\_\_

LEGAL DESCRIPTION OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: \_\_\_\_\_  
SE ¼ SEC 24, N ½ SEC 25, T144N, R58W . TOWNSHIP: BROADVIEW

CURRENT ZONING OF THE PROPERTY: AGRICULTURE

DESCRIBE USE OR ACTIVITY PROPOSED FOR THIS PROPERTY (please include all proposed activities for which this property may be used): CONSTRUCTION OF WIND TURBINES AND ASSOCIATED UNDERGROUND ELECTRICAL COLLECTOR LINES

DESCRIBE ALL USES OF PROPERTY WITHIN ONE (1) MILE OF THE SUBJECT PROPERTY/PARCEL(S): AGRICULTURE

WHAT EFFECT WILL THE CONDITIONAL USE HAVE ON PROPERTIES WITHIN ONE-HALF (1/2) MILE? (PLEASE DESCRIBE):  
NONE ANTICIPATED

PLEASE LIST ALL PROPERTY OWNERS ADJACENT TO PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: MARK SVENNINGSEN, RONALD ARNESON, CLARENCE STEFFEN, MARY ANDERSON, JORGEN PEDERSEN, MICHAEL HOFFER FAMILY

PROPOSED START DATE: 7/1/2008

I HEREBY CERTIFY THAT I AM THE OWNER OR AUTHORIZED AGENT OF THE ABOVE PROPERTY AND, THAT, TO THE BEST OF MY KNOWLEDGE, ALL INFORMATION CONTAINED IN THIS PETITION IS TRUE AND CORRECT.

SIGNATURE: [Signature] DATE: 05/15/08

**ATTACH SITE PLAN SHOWING LOCATION OF BUILDING(S) AND USE RELEVANT TO PROPERTY/PARCEL INVOLVED IN THE CONDITIONAL USE PERMIT.**

**(PLEASE RETURN ALL INFORMATION, INCLUDING THIS PETITION, TO THE GRIGGS COUNTY ZONING ADMINISTRATOR, P.O. BOX 541, COOPERSTOWN ND 58425-0541 AND INCLUDE PAYMENT OF \$100.00.)**

FOR USE BY ZONING ADMINISTRATOR ONLY

CONDITIONAL USE PERMIT:

APPLICATION WITH INFORMATION RECEIVED: DATE: 5/19/08

SITE PLANS/LOCATION/ELEVATIONS RECEIVED: DATE: 5/19/08

FEE PAID: \$100 DATE: 5/23/08

DATE OF PLANNING COMMISSION HEARING: Monday, June 2, 2008 7pm.

ACTION TAKEN BY GRIGGS COUNTY PLANNING COMMISSION: Griggs County Courthouse Commissioners Chambers

ACTION TAKEN FOR CONDITIONAL USE PERMIT:  APPROVED  DENIED

IF APPROVED, CONDITIONS: 1. Abide by landowner's lease.  
2. Any legal activity under North Dakota Law and in North Dakota Courts.  
3. All underground cable must comply with North Dakota standards and conditions.  
4. Pay publication costs within 30 days of billing.

IF DENIED, REASON(S): \_\_\_\_\_

SIGNED: Connie M. Mackenzie DATE: 6/2/08  
CONNIE M. MACKENZIE, GRIGGS COUNTY ZONING ADMINISTRATOR

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY PLANNING COMMISSION CHAIRMAN

ACTION TAKEN BY GRIGGS COUNTY COMMISSION:

APPROVED:  
ADDITIONAL CONDITIONS, (IF ANY): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DENIED:  
REASON(S): \_\_\_\_\_  
\_\_\_\_\_

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY COMMISSION CHAIRMAN

No Warranty of Suitability  
Griggs County, by approving a subdivision, auditor's lot, change of use, variance or by issuing a building permit, does NOT warrant that the property in question is suitable for any particular purpose, including, but not limited to, improvements to real property.

*Proposed Wind Farm Development Area  
M-Power, LLC & National Wind, LLC  
Griggs County, North Dakota*

T145N

T144N

36

34

2

6

5

4

11

12

7

8

9

Study Area

14

13

18

17

16

23

19

20

21

26

30

29

28

35

36

31

Griggs County

⊕ Clipper 96 Wind Turbines

⊕ Suzlon 88 Wind Turbines



R58W

R57W

**GRIGGS COUNTY**  
**PETITION FOR CONDITIONAL USE PERMIT**

Conditional Use Permits are required when the use of a special nature is not automatically permitted in a zoning district. The fee for filing the Petition for Conditional Use Permit is one hundred dollars (\$100.00) plus publication costs (which will be assessed upon receipt of the statement from the publication source).  
Completed Petition, all required information and the fee of \$100 is to be returned to the Griggs County Zoning Administrator, P.O. Box 541, Cooperstown ND 58425-0541. Questions? Please call Connie MacKenzie, Griggs County Zoning Administrator at 701-797-2413.

NAME OF PETITIONER: M-POWER

ADDRESS OF PETITIONER: 602 LINCOLN AVENUE SOUTH, FINLEY, ND 58230

NAME AND ADDRESS OF PROPERTY OWNER (if different from above): JORGEN PEDERSEN  
11961 11TH ST. SE LUVERNE, ND 58056-9211

TELEPHONE #: 701-769-2333 CELL PHONE #: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_

STREET ADDRESS OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED (if different from above address): \_\_\_\_\_

LEGAL DESCRIPTION OF PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: \_\_\_\_\_  
S 1/2 SEC. 25, T144N, R58W . TOWNSHIP: BROADVIEW

CURRENT ZONING OF THE PROPERTY: AGRICULTURE

DESCRIBE USE OR ACTIVITY PROPOSED FOR THIS PROPERTY (please include all proposed activities for which this property may be used): CONSTRUCTION OF WIND TURBINES AND ASSOCIATED UNDERGROUND ELECTRICAL COLLECTOR LINES


DESCRIBE ALL USES OF PROPERTY WITHIN ONE (1) MILE OF THE SUBJECT PROPERTY/PARCEL(S): AGRICULTURE

WHAT EFFECT WILL THE CONDITIONAL USE HAVE ON PROPERTIES WITHIN ONE-HALF (1/2) MILE? (PLEASE DESCRIBE):  
NONE ANTICIPATED

PLEASE LIST ALL PROPERTY OWNERS ADJACENT TO PROPERTY FOR WHICH CONDITIONAL USE PERMIT IS BEING REQUESTED: DALE PEDERSEN, MILDRED GUTTING, MARY ANDERSON

PROPOSED START DATE: 7/1/2008

*I HEREBY CERTIFY THAT I AM THE OWNER OR AUTHORIZED AGENT OF THE ABOVE PROPERTY AND, THAT, TO THE BEST OF MY KNOWLEDGE, ALL INFORMATION CONTAINED IN THIS PETITION IS TRUE AND CORRECT.*

SIGNATURE:  DATE: 05/15/08

**ATTACH SITE PLAN SHOWING LOCATION OF BUILDING(S) AND USE RELEVANT TO PROPERTY/PARCEL INVOLVED IN THE CONDITIONAL USE PERMIT.**

**(PLEASE RETURN ALL INFORMATION, INCLUDING THIS PETITION, TO THE GRIGGS COUNTY ZONING ADMINISTRATOR, P.O. BOX 541, COOPERSTOWN ND 58425-0541 AND INCLUDE PAYMENT OF \$100.00.)**

FOR USE BY ZONING ADMINISTRATOR ONLY

**CONDITIONAL USE PERMIT:**

APPLICATION WITH INFORMATION RECEIVED: DATE: 5/19/08

SITE PLANS/LOCATION/ELEVATIONS RECEIVED: DATE: 5/19/08

FEE PAID: \$100 DATE: 5/23/08

DATE OF PLANNING COMMISSION HEARING: Monday, June 2, 2008 7pm.  
Griggs County Courthouse

ACTION TAKEN BY GRIGGS COUNTY PLANNING COMMISSION: Commissioners Chambers

ACTION TAKEN FOR CONDITIONAL USE PERMIT:  APPROVED  DENIED

- IF APPROVED, CONDITIONS: 1. Abide by landowner's lease,  
2. Any legal activity under North Dakota Law and  
in North Dakota Courts,  
3. All underground cable must comply with North  
Dakota standards and conditions,  
4. Pay publication costs within 30 days of billing.

IF DENIED, REASON(S): \_\_\_\_\_

SIGNED: Connie M. Mackenzie DATE: 6/2/08  
CONNIE M. MACKENZIE, GRIGGS COUNTY ZONING ADMINISTRATOR

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY PLANNING COMMISSION CHAIRMAN

**ACTION TAKEN BY GRIGGS COUNTY COMMISSION:**

APPROVED:  
ADDITIONAL CONDITIONS, (IF ANY): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DENIED:  
REASON(S): \_\_\_\_\_  
\_\_\_\_\_

SIGNED: Lyle Pfeifer DATE: 6/3/08  
LYLE PFEIFER, GRIGGS COUNTY COMMISSION CHAIRMAN

No Warranty of Suitability  
Griggs County, by approving a subdivision, auditor's lot, change of use, variance or by issuing a building permit, does NOT warrant that the property in question is suitable for any particular purpose, including, but not limited to, improvements to real property.

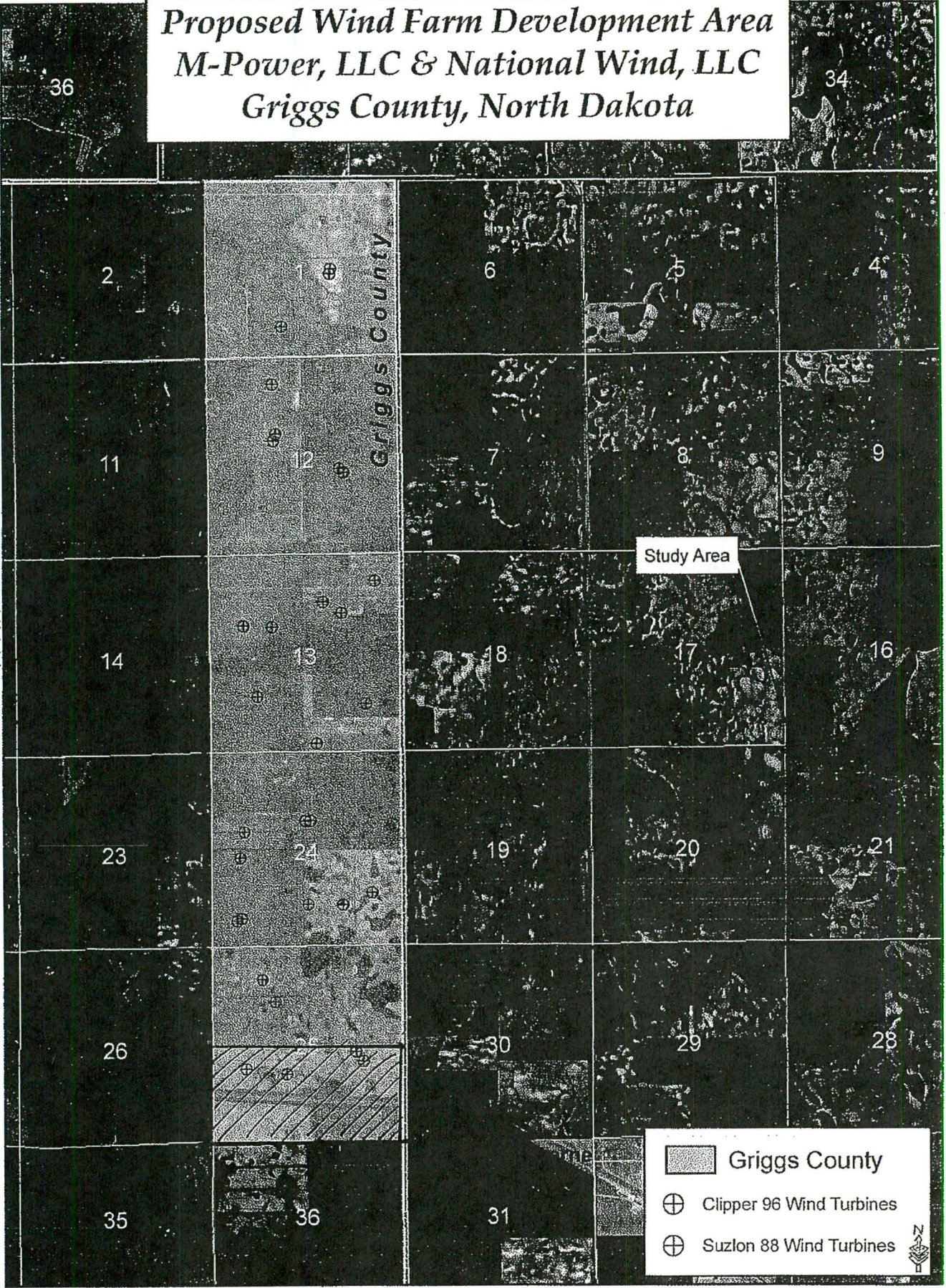
*Proposed Wind Farm Development Area  
M-Power, LLC & National Wind, LLC  
Griggs County, North Dakota*

T145N

T144N

R58W

R57W



Study Area

- Griggs County
- ⊕ Clipper 96 Wind Turbines
- ⊕ Suzlon 88 Wind Turbines



**UTILITY PERMIT  
STEELE COUNTY**

WHEREAS Steele County, P.O. Box 291, Finley, North Dakota 58230, referred to as "Grantor", does now grant to Otter Tail Power Company, 215 South Cascade, Fergus Falls, Minnesota 56537, the "Grantee", a utility permit to cross all county and township roads, including section lines, necessary for the installation of the Steele County Wind Farm. Permit to cross County Road 5. Centerline of transmission line 121.76 feet West of the Southeast corner of Section 31, Township 145, Range 56, Melrose Township.

The Grantor and Grantee specifically agree as follows:

1. The utility shall be placed at a minimum of 42 inches below the surface.
2. The utility shall be placed below the surface of any blacktop road by means of pipe or boring tool.
3. All trenches and excavations shall be carefully backfilled as to eliminate settlement and the surface of the ground shall be returned to its original condition.
4. Steele County shall not be responsible or liable for any costs in connection with the placement or the maintenance the utility.
5. If Steele County chooses to excavate in the area where the utility is located, Grantee shall move the utility at its own expense and upon Grantor's request to do so.
6. No above ground structures shall be placed in the county road right of way without written permission of the Grantor, nor shall any above ground structure (such as utility poles) be placed so near to a county or township road that in the event of failure will obstruct road way.
7. Grantee shall pay a fee as follows:  
Crossing fee, per crossing road or section line - \$300.00 each.

Dated 6-4-09

Dated 6-01-09

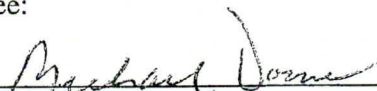
Grantor:



By:

Marck Creech  
Road Superintendent

Grantee:



By:

Michael Domes  
Land Specialist

Check #  
655428  
654845

**UTILITY PERMIT  
STEELE COUNTY**

WHEREAS Steele County, P.O. Box 291, Finley, North Dakota 58230, referred to as "Grantor", does now grant to Otter Tail Power Company, 215 South Cascade, Fergus Falls, Minnesota 56537, the "Grantee", a utility permit to cross all county and township roads, including section lines, necessary for the installation of the Steele County Wind Farm. Permit to cross County Road 8A. Centerline of transmission line 118 feet South of the East Quarter corner, Section 36, Township 145, Range 57, Riverside Township.

The Grantor and Grantee specifically agree as follows:

1. The utility shall be placed at a minimum of 42 inches below the surface.
2. The utility shall be placed below the surface of any blacktop road by means of pipe or boring tool.
3. All trenches and excavations shall be carefully backfilled as to eliminate settlement and the surface of the ground shall be returned to its original condition.
4. Steele County shall not be responsible or liable for any costs in connection with the placement or the maintenance the utility.
5. If Steele County chooses to excavate in the area where the utility is located, Grantee shall move the utility at its own expense and upon Grantor's request to do so.
6. No above ground structures shall be placed in the county road right of way without written permission of the Grantor, nor shall any above ground structure (such as utility poles) be placed so near to a county or township road that in the event of failure will obstruct road way.
7. Grantee shall pay a fee as follows:

Crossing fee, per crossing road or section line - \$300.00 each.

Dated 6-4-09

Dated 6-01-09

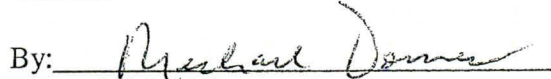
Grantor:



By:

Marck Creech  
Road Superintendent

Grantee:



Michael Domes  
Land Specialist

Check #  
655427

STEELE COUNTY  
APPROACH APPLICATION

Name Otter Tail Power

Address 215 South Cascade  
Fergus Falls, MN 56537

Approach Section 35  
Location Twp. 145 Riverside  
Range 57

Approach width requested (Min. 24' - Max. 40') 40' - 50' feet

Minimum culvert size 18" x 35' - 40' (larger diameter may be needed,  
Size to be determined by flow requirements)

Authorization is hereby given to \_\_\_\_\_ of \_\_\_\_\_  
To construct an approach to minimum standards as determined and shown on the attached sheet. Authorization by the County Board of Commissioners does not relieve the applicant of any legal responsibilities. If approach construction does not meet minimum standards, corrections will be made at the expense of the applicant within 30 days or approach will be removed by the order of the County Commissioners. A \$2,000 deposit is required at the time of application and will be returned upon approval of the completed approach. If approach construction is not approved, the \$2,000 deposit will be forfeited to help pay for approach removal. All expenses incurred will be the responsibility of the applicant.

Otter Tail Power  
Michael Dome

Applicant

Paul Richards

Chairman, Board of  
Steele County Commissioners

Dated May 8, 2009

Dated June 2

11109

**PAID**  
**CK #**  
**654846**



**M-Power, LLC®**

*...harnessing the energy in nature.*

June 1, 2009

Mark Creech  
Steele County Highway Department  
201 Gordon Street  
Finley, ND 58230

Re: M-Power, LLC-Notice of Assignment

Dear Mark:

Reference is hereby made to certain Conditional Use Permits ("Permits") issued by Willow Lake, Carpenter, Melrose, and Riverside Townships in Steele County for siting of the Luverne Wind Farm facilities in Steele County, to M-Power, LLC ("M-Power"). M-Power has sent a Notice of Assignment to each affected Township on February 6, 2009.

As these Permits reference road maintenance, M-Power hereby provides the Steel County Superintendent of Roads notice that M-Power has assigned all of its right, title and interest in the Permits to Otter Tail Corporation, a Minnesota corporation, d/d/a Otter Tail Power Company ("Otter Tail"), and, therefore, Otter Tail assumes responsibility for all conditions under the Permits.

Please send all future notices regarding the Permits to Otter Tail at the following address:

Otter Tail Corporation  
215 Cascade Street  
Fergus Falls, Minnesota 56538-0496  
Attention: Land Management Department

Please let me know if you have any questions.

Sincerely,

Warren Enyart, Secretary  
M-Power, LLC

**"We are an Equal Opportunity Provider"**

PO Box 335 · Finley, North Dakota 58230  
Phone: 701-524-2240 · Fax: 701-524-2244 · Toll Free: 866-852-1135

February 3, 2009

M-Power, LLC  
P.O. Box 335  
602 Lincoln Avenue  
Finley, ND 58203  
Attention: Keith Monson, President

Re: Luverne Wind Farm Project  
Collection Line/Transmission Line Crossings

Dear Mr. Monson:

You have provided us the general plan for the Luverne Wind Farm Project, including the proposed locations of the wind turbines and the underground electrical collection lines and overhead electrical transmission lines between the wind turbines, the wind farm substation and the Pillsbury substation. Subject to the payment of fees, and subject to any conditions outlined in the Utility Permit(s), we are in a position to issue the Utility Permit(s) allowing you to cross all County Roads with such underground/overhead lines. Other than such the issuance of such Utility Permit(s), Steele County has no further requirements for said crossings.

Sincerely,

STEELE COUNTY, NORTH DAKOTA

By: Randy Rukard

Its: Chairman

February 3, 2009

M-Power, LLC  
P.O. Box 335  
602 Lincoln Avenue  
Finley, ND 58203

Attention: Keith Monson, President

Re: Wind Project  
Collection Line Crossings  
Conditional Use Permit

Dear Mr. Monson:

The application for a Permit for Zoning Changes, Conditional Uses and Site Approvals submitted for the Wind Project contained the general plan for the Project, including the location of the wind turbines and the electrical underground collection lines between the wind turbines and the wind farm substation. The approval and issuance of a Permit dated **July 14, 2008 by the Melrose Township** for the project included the overhead/underground crossing of any Township streets and roads by the electrical transmission lines between the wind turbines and the wind farm substation (in accordance with the terms and conditions set forth in the Permit/CUP). Subject to receiving the applicable Utility Permit(s) from Steele County, there are no further requirements by the Township for said crossings.

Sincerely,

**Melrose Township**

By: \_\_\_\_\_

Name: Darren Meyer

Title: Chairman



Lyle Burchill, Board Member

February 3, 2009

M-Power, LLC  
P.O. Box 335  
602 Lincoln Avenue  
Finley, ND 58203  
Attention: Keith Monson, President

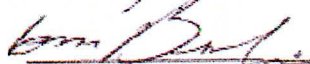
Re: Wind Project  
Collection Line Crossings  
Conditional Use Permit

Dear Mr. Monson:

The application for a Permit for Zoning Changes, Conditional Uses and Site Approvals submitted for the Wind Project contained the general plan for the Project, including the location of the wind turbines and the electrical underground collection lines between the wind turbines and the wind farm substation. The approval and issuance of a Permit dated **July 14, 2008 by the Willow Lake Township** for the project included the overhead/underground crossing of any Township streets and roads by the electrical collection and transmission lines between the wind turbines and the wind farm substation (in accordance with the terms and conditions set forth in the Permit/CUP). Subject to receiving the applicable Utility Permit(s) from Steele County, there are no further requirements by the Township for said crossings.

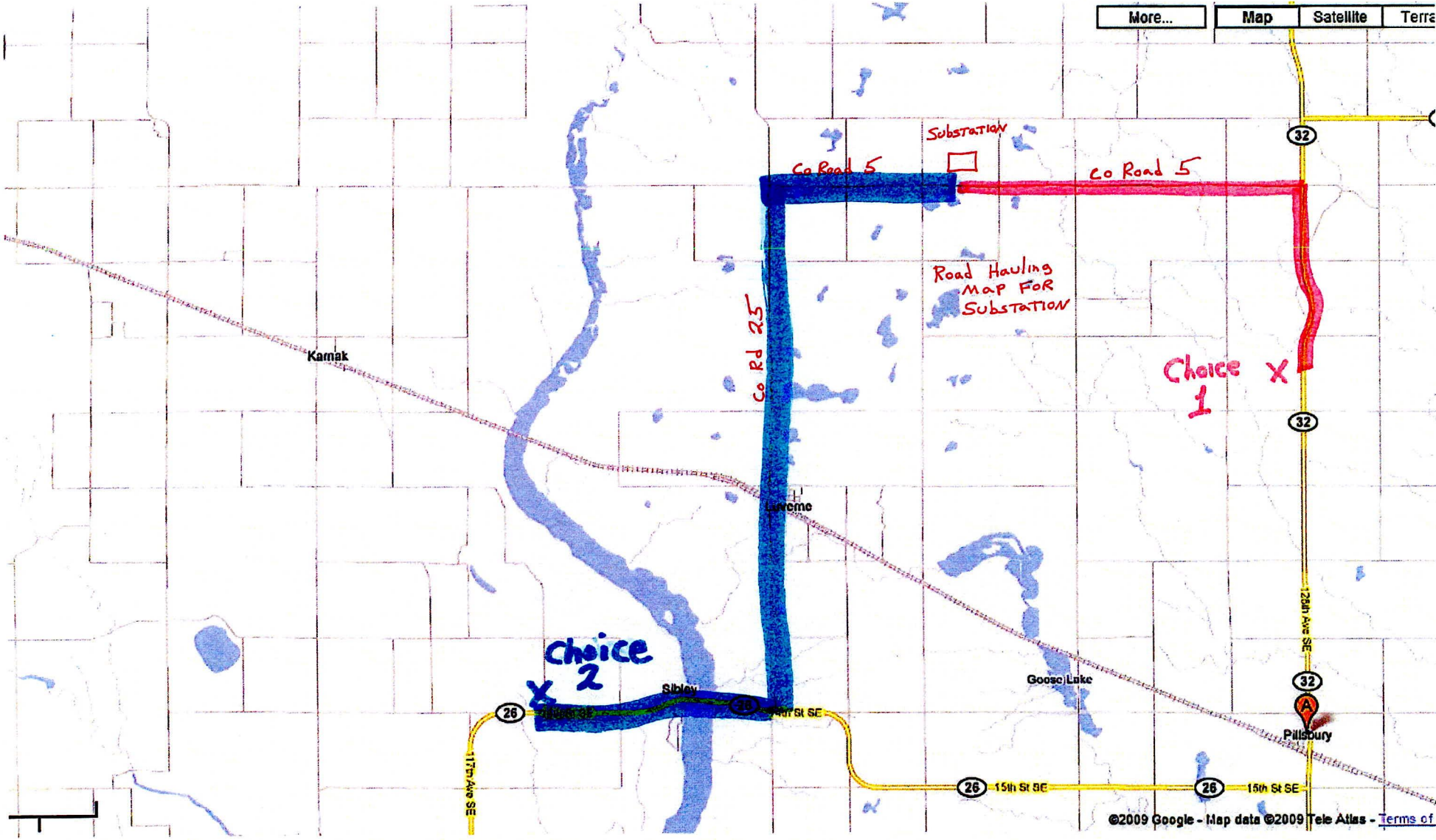
Sincerely,

Willow Lake Township

By:   
Name: Tom Breckheimer  
Title: Chairman

# SUBSTATION ROAD

More... Map Satellite Terra



Substation

Co Road 5

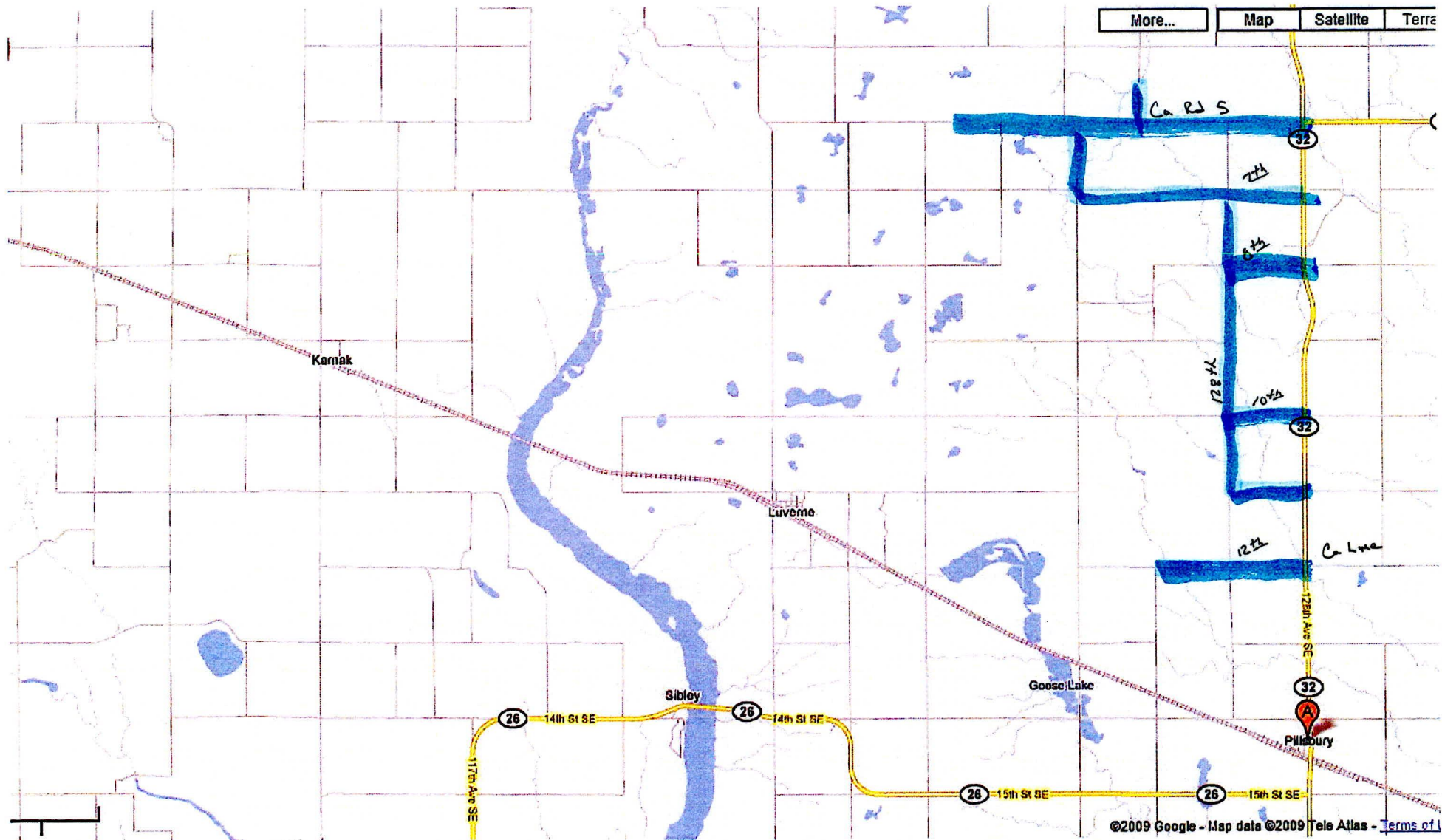
Co Road 5

Road Hauling  
Map For  
Substation

Choice  
1

choice  
x 2

# T-LINE Haul Rd.



CARPENTER TOWNSHIP

PERMIT  
for Zoning Changes, Conditional Uses  
and Site Approvals

Permit No. 1  
8/6/08  
(Date)

This permit is issued to M-Power  
for Construction of transmission line

This applicant has met all requirements of the Carpenter Township  
Zoning Regulations:  Yes;  No.

Applicant is required to meet the conditions described below:

Return all roads to current or better condition

8/6/08  
(Date)

Michael W. Steady  
Chairperson or Township  
Supervisor.  
[Signature]  
[Signature]

Melrose  
Township

CONDITIONAL USE PERMIT

*(DM)*

TOWNSHIP OF

For M-Power LLC.

July 14, 192008

Permit No. 100011

ATTACH TO A STANDARD BUILDING PERMIT FORM.

In reviewing the conditional use, have the following conditions been met satisfactorily?

- 1. Entrance and exit to property with reference to public safety, traffic flow, and convenience. Yes  No
- 2. Parking and loading requirements of the specific use. Yes  No
- 3. General compatibility with the surrounding property with due consideration for noise, odor or other adverse effects. Yes  No
- 4. Required yards and open space. Yes  No
- 5. Adequate utilities, access roads, drainage and other necessary site improvements have been made or are provided. Yes  No

Please list any additional conditions which the applicant must address prior to issuance of the conditional use permit.

Zoning Commission Officers

*(Signature)*

*(Signature)*

Public Hearing Held 7:00 P.M. July 14, 2008

Conditional Use Was Issued: Yes  No  7-14-08  
Date

Riverside TOWNSHIP  
APPLICATION FOR BUILDING (ZONING) PERMIT

This application is made for: use \_\_\_\_\_, construction , repair \_\_\_\_\_,  
and \_\_\_\_\_ of use or structure located at \_\_\_\_\_ at a cost of  
\$ 600,000 / tower for the following use: \_\_\_\_\_  
19.8 million

Legal description of property: Inverso Wind Farm 33 towers  
in Riverside Township

Total value of zoning permit \$39,600.

Describe the proposed use for this property: generating electric power

Attached are plans and drawings.

The main structure will be as follows:

Construction _____	Front yard setback (in feet) _____
Height (stories and feet) <u>240 ft</u>	Side yard setback (in feet) _____
Number of family units _____	Rear yard setback (in feet) _____
Dimensions of lot/parcel _____	

The accessory building will be as follows:

Description _____	Distance from rear lot line _____
Height _____ Size _____	Distance from side yard line _____

I hereby certify that I am the owner or authorized agent for the above property and that all construction will conform with Riverside Township ordinances, laws and regulations.

[Signature]  
Signature \_\_\_\_\_

700 Universe Blvd. Juno Beach FL  
Address \_\_\_\_\_ 33408

Date 6/4/09

Phone 561-304-5434

Lloyd Law Chm.

Dennis Jungs 6-4-09  
Code Administrator Date

This application is used for building (zoning) permits including repair and expansion of improvements for a permitted use in the zoning district. If the use does not conform with the provisions of the district, the permit must not be issued until the Zoning Commission approves the zoning change, conditional use or gives the site approval for designated use.

TZH/LARDC©

X

Riverside TOWNSHIP

PERMIT  
for Zoning Changes, Conditional Uses  
and Site Approvals

Permit No. \_\_\_\_\_

7-14-08  
Date

This permit is issued to M-Power

for construction of wind towers & transmission lines

The applicant has met all requirements of the Riverside Township Zoning  
Regulations:  Yes,  No.

Applicant is required to meet the conditions described below: return all  
roads to current or better conditions  
also be responsible for snow removal on  
roads to obtain access to towers

7-14-08  
Date

Steve Kern  
Chairperson of Township Supervisor

Dee Johnson  
Jan Vele

STEELE COUNTY PRESS  
 BOX 475  
 FINLEY ND 58230 0475

P.2

ID# 706

Riverside Township  
 Dennis Jungels  
 RR1 Box 33  
 Finley ND 58230

TO:17017972713

Date	Description	Units	Debit	Credit
06/27/2008	Display Advertising	5.500	28.88	
	zoning commission			
	Balance Due		28.88	
			<u>x 2</u>	
	<i>Ad run twice</i>		<sup>A</sup> 57.76	

JUL-14-2008 08:29A FROM:STEELE COUNTY PRESS 7015242221

COPY

Riverside TOWNSHIP  
APPLICATION FOR BUILDING (ZONING) PERMIT

This application is made for: use \_\_\_\_\_, construction  construction, repair \_\_\_\_\_,  
and \_\_\_\_\_ of use or structure located at 12431 6<sup>th</sup> St SE at a cost of  
\$ 20,000 for the following use: Security fence.

Legal description of property: SEE Attached drawing & description  
of SW 1/4 of Sec 35, Twp 145, R 57

Describe the proposed use for this property: Security fence to enclose  
Collection Substation and Control House

Attached are plans and drawings.

The main structure will be as follows:

Construction Chain Link Fence  
Height (stories and feet) 8'  
Number of family units N/A  
Dimensions of lot/parcel 668' x 660'  
Fence 150 x 270'

Front yard setback (In feet) 931' So. Sec  
Side yard setback (In feet) 284' E 1/4 Sec  
Rear yard setback (In feet) 1049' Ctr Sec.

The accessory building will be as follows:

Description N/A  
Height \_\_\_\_\_ Size \_\_\_\_\_

Distance from rear lot line \_\_\_\_\_  
Distance from side yard line \_\_\_\_\_

I hereby certify that I am the owner or authorized agent for the above property and that all  
construction will conform with \_\_\_\_\_ Township ordinances, laws and regulations.

Michael Domes  
Signature

OTTER TAIL POWER  
215 S. CASCADE, FERGUS FALLS, MN 56533  
Address

Date 5-12-09

Phone 218-739-8547 Cell 218-770-4280

Jennies Jurgels 5-13-09

David Law 5-13-09  
Code Administrator Date

This application is used for building (zoning) permits including repair and expansion of improvements for  
a permitted use in the zoning district. If the use does not conform with the provisions of the district, the  
permit must not be issued until the Zoning Commission approves the zoning change, conditional use or  
gives the site approval for designated use.

TZH/LARDC©

fee - \$50

M

COPY

Riverside TOWNSHIP  
APPLICATION FOR BUILDING (ZONING) PERMIT

This application is made for: use \_\_\_\_\_, construction X, repair \_\_\_\_\_,  
and \_\_\_\_\_ of use or structure located at 12431 6<sup>th</sup> St S.E. at a cost of  
\$ 100,000.00 for the following use: CONTROL HOUSE FOR SUBSTATION

Legal description of property: SEE attached drawing & description  
of SW 1/4 of Sec. 35, Twp 14S, R57

Describe the proposed use for this property: House controls  
collection substation of Wind Turbines  
in LIVERNE (Astabula II) wind farm.

Attached are plans and drawings.

The main structure will be as follows:	
Construction <u>WOOD/STEEL SIDING 2" X 4"</u>	Front yard setback (in feet) <u>931'</u>
Height (stories and feet) <u>10'</u>	Side yard setback (in feet) <u>72'</u>
Number of family units <u>NA</u>	Rear yard setback (in feet) <u>150'</u>
Dimensions of lot/parcel <u>618' X 660'</u>	

The accessory building will be as follows:	
Description <u>N/A</u>	Distance from rear lot line _____
Height _____ Size _____	Distance from side yard line _____

I hereby certify that I am the owner or authorized agent for the above property and that all construction will conform with Riverside Township ordinances, laws and regulations.

Michael Doms  
Signature

OTTER TAIL POWER  
215 S. CASCADE, Fergus Falls, MN 56537  
Address

Date 5-12-09

Phone 218-734-8547 Cell 218-770-4280  
Dennis Jurgels 5-13-09  
Lloyd Row 5-13-09  
Code Administrator Date

This application is used for building (zoning) permits including repair and expansion of improvements for a permitted use in the zoning district. If the use does not conform with the provisions of the district, the permit must not be issued until the Zoning Commission approves the zoning change, conditional use or gives the site approval for designated use.

TZH/LARDC©

fee \$200 =  $(\frac{100,000 \times 2}{1000})$

Willow Lake TOWNSHIP

PERMIT  
for Zoning Changes, Conditional Uses  
and Site Approvals

Permit No. \_\_\_\_\_

7-14-08  
Date

This permit is issued to M-Power LLC

for Construction of Wind tower 3 FT transmission line

The applicant has met all requirements of the Willow Lake Township Zoning  
Regulations:  Yes,  No.

Applicant is required to meet the conditions described below: return all  
Roads to current or better conditions  
also be responsible for snow removal on access roads  
to towers

7-14-08  
Date

Tom B...  
Chairperson of Township Supervisor

John J. Gray  
Mary Clabon

**CONSENT AND  
CROSSING AGREEMENT**

THIS CONSENT AND CROSSING AGREEMENT (the "Agreement") is executed as of this 13<sup>th</sup> day of January, 2008, by and between Nodak Electric Cooperative, Inc., a Cooperative Association ("Existing Easement Holder") and M-Power, LLC, a North Dakota limited liability company ("Project Company"). Existing Easement Holder and the Project Company are sometimes referred to herein collectively as the "Parties".

**RECITALS:**

**WHEREAS**, Existing Easement Holder, for itself and as successor in interest to Sheyenne Valley Electric Cooperative, Inc., is the holder of certain Easements recorded in the Records of Griggs and Steele County, North Dakota (collectively "Easements"). The real property encumbered by the Easements includes the real property legally described on the attached Exhibit A (the "Property"); and,

**WHEREAS**, Project Company may construct roads and underground and/or overhead utility lines (collectively referred to as "Road and Utility Crossings") across the Easements for the purpose of accessing, constructing, operating and maintaining a wind-powered electric generating project located in Griggs and Steele Counties, North Dakota; and,

**WHEREAS**, Existing Easement Holder is willing to consent to Project Company's construction, maintenance and use of said Road and Utility Crossings on the Easements subject to certain conditions.

**NOW, THEREFORE**, in consideration of the foregoing recitals and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Existing Easement Holder hereby consents to the construction of the Project Company's facilities within the area of the Easements in compliance with all legal and regulatory requirements. The Road and Utility Crossings that cross the Existing Easement Holder's facilities on the Property shall only be perpendicular crossings, unless otherwise approved by Existing Easement Holder (such approval not to be unreasonably withheld).
2. Project Company shall provide Existing Easement Holder a map or sketch of all Road and Utility Crossings after construction is completed upon receiving a written request from Existing Easement Holder.
3. Existing Easement Holder will reasonably cooperate with Project Company with respect to the installation of Project Company's facilities on the Property ("Project Company's Facilities"). Such reasonable cooperation may include, without limitation, relocating (at Project Company's reasonable expense) Existing Easement Holder's facilities on the Property (the "Existing Easement Holder's Facilities") to another location on the Property reasonably acceptable to Existing Easement Holder. After installation of Project Company's facilities on the Property, Existing Easement Holder will have the right to

require Project Company to relocate (at Existing Easement Holder's expense) Project Company's Facilities to another location on the Property if such relocation is reasonably necessary in connection with (i) Existing Easement Holder's use or operation of Existing Easement Holder's Facilities or (ii) any proposed additions, alterations or improvements to the Existing Easement Holder's Facilities. If Existing Easement Holder requires such relocation, then Existing Easement Holder will provide at least ninety (90) days' written notice to the person designated by Project Company in writing to receive notices, unless such action by Existing Easement Holder is an emergency measure (in which event such notice shall be delivered as soon as reasonably possible, taking into consideration such emergency conditions), and in such notice Existing Easement Holder will provide a new location at which Project Company may build a replacement crossing facility. The new crossing location will be subject to Project Company's reasonable approval and as close as reasonably possible to the original location. Any such relocation shall be subject to Project Company receiving any approvals required in connection with such relocation, including, without limitation, any approvals that may be required from the owner of the Property and governmental and regulatory authorities.

4. Project Company agrees to notify Existing Easement Holder immediately in the event any damages are caused by Project Company or a Project Company contractor to Existing Easement Holder's improvements located within the area of the Easements. Project Company will repair the damage, at its expense. In the event it is necessary for Existing Easement Holder to make the emergency repairs, Project Company will reimburse Existing Easement Holder for its expense immediately upon receipt of Existing Easement Holder's invoice.
5. All notices given or permitted to be given hereunder shall be writing. Notice is considered given either (i) when delivered in person to the recipient named below, (ii) upon receipt after deposit in the United States mail in a sealed envelope or container, postage and postal charges prepaid, return receipt requested or certified mail, addressed by name and address to the party or person intended, or (iii) twenty-four (24) hours from proper and timely delivery to an overnight courier service addressed by name and address to the party or person intended as follows:

Notice to Existing Easement Holder: 98760                      Fee: \$28.00                      Pg: 2 of 7

Nodak Electric Cooperative, Inc.                      State of North Dakota)  
 4000 32<sup>nd</sup> Avenue South                      County of Steele)  
 P.O. Box 13000                      Recorded: 1/16/2009 At 10:30 AM  
 Grand Forks, ND 58208-3000  
 Attention: John Rodgers, Engineering Operations Manager

Notice to Project Company:

M-Power, LLC  
 P.O. Box 335  
 602 Lincoln Avenue South

98760

Fee: \$28.00

Pg: 3 of 7

Finley, ND 58203  
Attention: Keith Monson, President  
Attention: Warren Enyart, Secretary

State of North Dakota)  
County of Steele)  
Recorded: 1/16/2009 At 10:30 AM

Either party may, by notice given at any time or from time to time, require subsequent notices to be given to another individual person, whether a party or an officer or representative, or to a different address, or both. Notices given before actual receipt or notice of change shall not be invalidated by the change.

6. This Agreement shall inure to the benefit and be binding on the respective heirs, successors, assigns, agents, contractors, and personal representatives of the Parties to this Agreement. Project Company shall be permitted to assign this Agreement without the prior written consent of Existing Easement Holder. Nothing contained herein shall be construed to abrogate or relinquish any rights granted by the original Easements.
7. This Agreement may be executed simultaneously or in counterparts, each of which together shall constitute one and the same Agreement. This Agreement may be recorded by either Party in the Recorder's Office of any county in which the Property is located. This Agreement and the attached Exhibits shall constitute the entire agreement between the Parties and supersedes all other prior writings and understandings. This Agreement shall not be amended or modified in any way except by an instrument signed by the Parties. The Parties hereto shall at all times hereafter execute any documents and do any further acts which may be reasonably necessary or desirable to carry out the purposes of this Agreement and to give full force and effect to each and all of the provisions hereof. This Agreement shall be governed by and interpreted in accordance with the then existing laws of the State of North Dakota and the county where the Property is located shall be considered the proper forum or jurisdiction for any disputes arising in connection with this Agreement. Whenever in this Agreement the approval or consent of either Party is required or contemplated, unless otherwise specified, such approval or consent shall not be unreasonably withheld or delayed.

[COUNTERPART SIGNATURE PAGES FOLLOW]

COUNTERPART SIGNATURE PAGE

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first set forth above.

98760 Fee: \$28.00 Pg: 4 of 7

State of North Dakota)
County of Steele)
Recorded: 1/16/2009 At 10:30 AM

Existing Easement Holder:

Nodak Electric Cooperative, Inc.,
a Cooperative Association

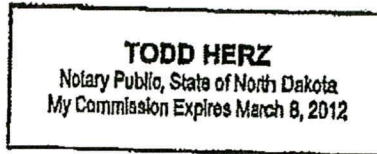
By: [Signature]
Name: GEORGE BERG
Its: PRESIDENT & CEO

STATE OF NORTH DAKOTA )
) SS.
COUNTY OF GRAND FORKS )

2009
On this 12 day of JANUARY, 2008, before me, the undersigned notary public, personally appeared GEORGE BERG, as PRESIDENT & CEO (title) of Nodak Electric Cooperative, Inc., a Cooperative Association, who is [ ] personally known to me to be the person who subscribed to the foregoing instrument or [ ] who has produced a driver's license as identification, and acknowledged that he/she executed the same on behalf of said corporation and that he/she was duly authorized so to do.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

[Signature]
Notary Public
TODD HERZ
Notary Printed Name
My Commission Expires: MARCH 8, 2012





**EXHIBIT A****Legal Description of Encumbered Parcels**

Project Parcel 17: The Northeast Quarter (NE1/4) of Section Twenty-eight (28), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota, except a tract of land more particularly described as follows: Beginning at the Southeast corner of said Northeast Quarter (NE1/4); thence North along the East quarter line of said Northeast Quarter (NE1/4) a distance of 425 feet to a point; thence West parallel to the South quarter line of said Northeast Quarter (NE1/4) a distance of 1,094 feet to a point; thence South parallel to the East quarter line of said Northeast Quarter (NE1/4) a distance of 425 feet to a point on the South quarter line of said Northeast Quarter (NE1/4); thence East along the South quarter line of said Northeast Quarter (NE1/4) a distance of 1,094 feet to the point of beginning.

Project Parcel 18: The Northwest Quarter (NW1/4) of Section Twenty-eight (28), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 25: The Southeast Quarter (SE1/4) of Section Twenty-Nine (29), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 27: The West Half of the Northwest Quarter (W1/2NW1/4) of Section Twenty-Nine (29), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 50: The Northwest Quarter (NW1/4) of Section Thirty-three (33), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 61: The Southeast Quarter (SE1/4) of Section Thirty-one (31), Township One Hundred Forty-five (145) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota, less a parcel of land described as follows: Commencing at the Southeast corner of Section Thirty-one (31); thence West along the section line a distance of 1,600 feet to the point of beginning; thence at right angles North a distance of 734 feet; thence at right angles West a distance of 600 feet; thence at right angles South a distance of 734 feet to the section line; thence East along the section line a distance of 600 feet to the point of beginning.

Project Parcel 62: The Southwest Quarter (SW1/4) of Section Thirty-one (31), Township One Hundred Forty-five (145) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 89: The Northeast Quarter (NE1/4) of Section Thirty (30), Township One Hundred Forty-four (144) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota.

98760

Fee: \$28.00

Pg: 6 of 7

6 State of North Dakota)  
County of Steele)  
Recorded: 1/16/2009 At 10:30 AM

Project Parcel 90: The East Half of the Northwest Quarter (E1/2NW1/4) and Lots One (1) and Two (2) in Section Thirty (30), Township One Hundred Forty-four (144) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota.

98760 Fee: \$28.00 Pg: 7 of 7

State of North Dakota)  
County of Steele)  
Recorded: 1/16/2009 At 10:30 AM

OFFICE OF COUNTY RECORDER Pg: 7 of 7  
State of North Dakota)  
County of STEELE)

I hereby certify that the within instrument was filed in this office for record on 1/16/2009 at 10:30 AM, and was duly recorded as Document Number 98760

Lisa Jacobsen Recorder

Bathv Kroeplin Deputy

Fee \$28.00 VOGEL LAW FIRM, PO BOX 1389  
FARGO, ND 58107-1389



DOCUMENT NUMBER 264589

**CONSENT AND CROSSING AGREEMENT**

THIS CONSENT AND CROSSING AGREEMENT (the "Agreement") is executed as of this 22 day of JANUARY, 2008, by and between Inter-Community Telephone Company, LLC, a North Dakota limited liability company ("Existing Easement Holder") and M-Power, LLC, a North Dakota limited liability company ("Project Company"). Existing Easement Holder and the Project Company are sometimes referred to herein collectively as the "Parties".

**RECITALS:**

WHEREAS, Existing Easement Holder, as successor in interest to Northwestern Bell Telephone Company, is the holder of certain Easements recorded in the Records of Barnes and/or Steele County, North Dakota (collectively "Easements"). The real property encumbered by the Easements includes the real property legally described on the attached Exhibit A (the "Property"); and,

WHEREAS, Project Company may construct roads and underground and/or overhead utility lines (collectively referred to as "Road and Utility Crossings") across the Easements for the purpose of accessing, constructing, operating and maintaining a wind-powered electric generating project located in Griggs and Steele Counties, North Dakota; and,

WHEREAS, Existing Easement Holder is willing to consent to Project Company's construction, maintenance and use of said Road and Utility Crossings on the Easements subject to certain conditions.

NOW, THEREFORE, in consideration of the foregoing recitals and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Existing Easement Holder hereby consents to the construction of the Project Company's facilities within the area of the Easements in compliance with all legal and regulatory requirements provided that Existing Easement Holder is given an opportunity in advance to review and approve the location of the Project Company's Facilities from the proposed work plans and staking sheets. In addition, the Project Company shall comply with North Dakota "One Call" requirements.
2. Project Company shall provide Existing Easement Holder a map or sketch of all Road and Utility Crossings after construction is completed.
3. Existing Easement Holder will reasonably cooperate with Project Company with respect to the installation of Project Company's facilities on the Property ("Project Company's Facilities"). Such reasonable cooperation may include, without limitation, relocating (at Project Company's reasonable expense) Existing Easement Holder's facilities on the Property (the "Existing Easement Holder's Facilities") to another location on the Property reasonably acceptable to Existing Easement Holder. After installation of Project

I 98813 Fee: \$34.00 Pg: 1 of 9  
State of North Dakota  
County of Steele  
Recorded: 1/26/2009 At 12:00 PM

Return To: VOGEL LAW FIRM  
Box 1389  
Fargo ND 58107-1389

264589  
1 of 10

Company's facilities on the Property, Existing Easement Holder will have the right to require Project Company to relocate (at Project Company's reasonable expense) Project Company's Facilities to another location on the Property if such relocation is reasonably necessary in connection with (i) Existing Easement Holder's use or operation of Existing Easement Holder's Facilities or (ii) any proposed additions, alterations or improvements to the Existing Easement Holder's Facilities. If Existing Easement Holder requires such relocation, then Existing Easement Holder will provide at least ninety (90) days' written notice to the person designated by Project Company in writing to receive notices, unless such action by Existing Easement Holder is an emergency measure (in which event such notice shall be delivered as soon as reasonably possible, taking into consideration such emergency conditions), and in such notice Existing Easement Holder will provide a new location at which Project Company may build a replacement crossing facility. The new crossing location will be subject to Project Company's reasonable approval and as close as reasonably possible to the original location. Any relocation by either party shall be subject to receiving any approvals required in connection with such relocation, including, without limitation, any approvals that may be required from the owner of the Property and governmental and regulatory authorities.

4. Either party agrees to notify the other immediately in the event any damages are caused by the party or a party's contractors to improvements located within the area of the Easements. Project Company will repair the damage, at its expense. In the event it is necessary for Existing Easement Holder to make the emergency repairs, Project Company will reimburse Existing Easement Holder for its expense immediately upon receipt of Existing Easement Holder's invoice.
5. All notices given or permitted to be given hereunder shall be writing. Notice is considered given either (i) when delivered in person to the recipient named below, (ii) upon receipt after deposit in the United States mail in a sealed envelope or container, postage and postal charges prepaid, return receipt requested or certified mail, addressed by name and address to the party or person intended, or (iii) twenty-four (24) hours from proper and timely delivery to an overnight courier service addressed by name and address to the party or person intended as follows:

Notice to Existing Easement Holder:

Inter-Community Telephone Company, LLC  
14611 34<sup>th</sup> Street Southeast  
Wheatland, ND 58079  
Attention: Rod Stoa, Plant/Operations Manager

98813 Fee: \$34.00 Pg: 2 of 9

State of North Dakota)  
County of Steele)  
Recorded: 1/26/2009 At 12:00 PM

Notice to Project Company: 98813 Fee: \$34.00 Pg: 3 of 9

M-Power, LLC  
P.O. Box 335  
602 Lincoln Avenue South  
Finley, ND 58203  
Attention: Keith Monson, President  
Attention: Warren Enyart, Secretary

State of North Dakota)  
County of Steele)  
Recorded: 1/26/2009 At 12:00 PM

Either party may, by notice given at any time or from time to time, require subsequent notices to be given to another individual person, whether a party or an officer or representative, or to a different address, or both. Notices given before actual receipt or notice of change shall not be invalidated by the change.

6. This Agreement shall inure to the benefit and be binding on the respective heirs, successors, assigns, agents, contractors, and personal representatives of the Parties to this Agreement. Either party shall be permitted to assign this Agreement without the prior written consent of the other. Nothing contained herein shall be construed to abrogate or relinquish any rights granted by the original Easements.
7. This Agreement may be executed simultaneously or in counterparts, each of which together shall constitute one and the same Agreement. This Agreement may be recorded by either Party in the Recorder's Office of any county in which the Property is located. This Agreement and the attached Exhibits shall constitute the entire agreement between the Parties and supersedes all other prior writings and understandings. This Agreement shall not be amended or modified in any way except by an instrument signed by the Parties. The Parties hereto shall at all times hereafter execute any documents and do any further acts which may be reasonably necessary or desirable to carry out the purposes of this Agreement and to give full force and effect to each and all of the provisions hereof. This Agreement shall be governed by and interpreted in accordance with the then existing laws of the State of North Dakota and the county where the Property is located shall be considered the proper forum or jurisdiction for any disputes arising in connection with this Agreement. Whenever in this Agreement the approval or consent of either Party is required or contemplated, unless otherwise specified, such approval or consent shall not be unreasonably withheld or delayed.

[COUNTERPART SIGNATURE PAGES FOLLOW]

COUNTERPART SIGNATURE PAGE

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first set forth above.

Existing Easement Holder:

Inter-Community Telephone Company, LLC, a North Dakota limited liability company

By: Keith Andersen  
Name: Keith Andersen  
Its: GM/CEO/Sec.-Treas.

STATE OF NDak )  
COUNTY OF Barnes ) SS.

On this 23 day of January, <sup>2009</sup> 2008, before me, the undersigned notary public, personally appeared Keith Andersen, as Secretary/Treas. (title) of Inter-Community Telephone Company, a North Dakota limited liability company, who is  personally known to me to be the person who subscribed to the foregoing instrument or  who has produced a driver's license as identification, and acknowledged that he/she executed the same on behalf of said limited liability company and that he/she was duly authorized so to do.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.



Mary E Peterson  
Notary Public  
Mary E Peterson  
Notary Printed Name  
My Commission Expires:

98813 Fee: \$34.00 Pg: 4 of 9  
State of North Dakota)  
County of Steele)  
Recorded: 1/26/2009 At 12:00 PM

COUNTERPART SIGNATURE PAGE

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first set forth above.

Project Company:

M-Power, LLC,  
a North Dakota limited liability company

By: Elizabeth H. Berge  
Name: ELIZABETH H. BERGE  
Its: Treasurer

STATE OF ND )  
COUNTY OF Steele )

On this 22 day of January, <sup>2009</sup>~~2008~~, before me, the undersigned notary public, personally appeared Elizabeth Berge, as Treasurer of M-Power, LLC, a North Dakota limited liability company, who is personally known to me to be the person who subscribed to the foregoing instrument and acknowledged that he executed the same on behalf of said limited liability company and that he was duly authorized so to do.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Holly Stromsodt  
Notary Public  
Holly Stromsodt  
Notary Printed Name  
My Commission Expires:

98813 Fee: \$34.00 Pg: 5 of 9

State of North Dakota)  
County of Steele)  
Recorded: 1/26/2009 At 12:06 PM

HOLLY STROMSODT  
Notary Public  
State of North Dakota  
My Commission Expires Aug. 2, 2012

98813

Fee: \$34.00

Pg: 6 of 6

State of North Dakota)  
 County of Steele)  
 Recorded: 1/28/2009 At 12:00 PM

**EXHIBIT A****Legal Description of Encumbered Parcels**

Project Parcel 17: The Northeast Quarter (NE1/4) of Section Twenty-eight (28), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota, except a tract of land more particularly described as follows: Beginning at the Southeast corner of said Northeast Quarter (NE1/4); thence North along the East quarter line of said Northeast Quarter (NE1/4) a distance of 425 feet to a point; thence West parallel to the South quarter line of said Northeast Quarter (NE1/4) a distance of 1,094 feet to a point; thence South parallel to the East quarter line of said Northeast Quarter (NE1/4) a distance of 425 feet to a point on the South quarter line of said Northeast Quarter (NE1/4); thence East along the South quarter line of said Northeast Quarter (NE1/4) a distance of 1,094 feet to the point of beginning.

Project Parcel 18: The Northwest Quarter (NW1/4) of Section Twenty-eight (28), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 23: The East Half of the Northwest Quarter (E1/2NW1/4) of Section Twenty-Nine (29), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 24: The Northeast Quarter (NE1/4) of Section Twenty-Nine (29), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 44: The Southwest Quarter (SW1/4) of Section Thirty-two (32), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota, EXCEPT the following described tract of land described more particularly as follows:

Beginning at the northwest corner of the Southwest Quarter (SW1/4) of said Section Thirty-two (32); thence South 89°37'58" East along the Quarter line a distance of 1603.21 feet to an iron pin; thence South 01°58'46" East a distance of 461.15 feet to an iron pin; thence South 83°43'30" East a distance of 194.34 feet to an iron pin; thence South 08°56'42" East a distance of 333.88 feet to an iron pin; thence South 66°53'40" East a distance of 130.71 feet to an iron pin; thence South 07°46'13" West a distance of 117.88 feet to an iron pin; thence South 81°53'11" West a distance of 131.20 feet to an iron pin; thence South 00°53'54" East a distance of 389.73 feet to an iron pin; thence South 84°54'37" East a distance of 521.36 feet to an iron pin; thence South 00°52'54" West a distance of 384.30 feet to an iron pin; thence South 86°55'19" West a distance of 263.71 feet to an iron pin; thence South 07°19'23" East a distance of 697.35 feet to an iron pin; thence South 88°05'59" West a distance of 305.84 feet to an iron pin; thence North 39°04'16" West a distance of 1320.83 feet to an iron pin; thence North 88°44'29" West a distance of 824.50 feet to an iron pin; thence North 35°18'04" West a distance of 233.71 feet to an iron pin; thence North 88°38'57" West a distance of 90.50 feet to a point on the west line of the Southwest Quarter (SW1/4) of said Section Thirty-two (32); thence North 00°11'17" East along the section line a distance of 1308.55 feet to the point of beginning.

A-1

264589  
6 of 10

Return To: VOGEL LAW FIRM  
 Box 1389  
 Fargo ND 58107-1389

Project Parcel 45: The Southeast Quarter (SE1/4) of Section Thirty-two (32), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 46: A tract of land situated in the Southwest Quarter (SW1/4) of Section Thirty-two (32), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota, more particularly described as follows: Beginning at the northwest corner of the Southwest Quarter (SW1/4) of said Section Thirty-two (32); thence South 89°37'58" East along the Quarter line a distance of 1603.21 feet to an iron pin; thence South 01°58'46" East a distance of 461.15 feet to an iron pin; thence South 83°43'30" East a distance of 194.34 feet to an iron pin; thence South 08°56'42" East a distance of 333.88 feet to an iron pin; thence South 66°53'40" East a distance of 130.71 feet to an iron pin; thence South 07°46'13" West a distance of 117.88 feet to an iron pin; thence South 81°53'11" West a distance of 131.20 feet to an iron pin; thence South 00°53'54" East a distance of 389.73 feet to an iron pin; thence South 84°54'37" East a distance of 521.36 feet to an iron pin; thence South 00°52'54" West a distance of 384.30 feet to an iron pin; thence South 86°55'19" West a distance of 263.71 feet to an iron pin; thence South 07°19'23" East a distance of 697.35 feet to an iron pin; thence South 88°05'59" West a distance of 305.84 feet to an iron pin; thence North 39°04'16" West a distance of 1320.83 feet to an iron pin; thence North 88°44'29" West a distance of 824.50 feet to an iron pin; thence North 35°18'04" West a distance of 233.71 feet to an iron pin; thence North 88°38'57" West a distance of 90.50 feet to a point on the west line of the Southwest Quarter (SW1/4) of said Section Thirty-two (32); thence North 00°11'17" East along the section line a distance of 1308.55 feet to the point of beginning.

Project Parcel 47: The Southeast Quarter (SE1/4) of Section Thirty-three (33), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 49: The Northeast Quarter (NE1/4) of Section Thirty-three (33), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 51: The Southwest Quarter (SW1/4) of Section Thirty-four (34), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 54: The Southeast Quarter (SE1/4) of Section Thirty-four (34), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota, less a parcel of land described as follows: Commencing at a point 20 rods East of the Southwest corner of the Southeast Quarter (SE1/4) of Section Thirty-four (34); thence North 8 rods; thence East 10 rods; thence South 8 Rods; thence West 10 rods to the place of beginning.

98813 Fee: \$24.00 Pg. 7 of 9

State of North Dakota)  
County of Steele)  
Recorded: 1/26/2009 At 12:00 PM

A-2

264589  
7 of 10

Return To: VOGEL LAW FIRM  
Box 1389  
Fargo ND 58107-1389

Project Parcel 55: The Southeast Quarter (SE1/4) of Section Thirty-five (35), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 57: The Southwest Quarter (SW1/4) of Section Thirty-five (35), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 58: The Southeast Quarter (SE1/4) of Section Thirty-six (36), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 59: The East Half of the Southwest Quarter (E1/2SW1/4) of Section Thirty-six (36), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 60: The West Half of the Southwest Quarter (W1/2SW1/4) of Section Thirty-six (36), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 61: The Southeast Quarter (SE1/4) of Section Thirty-one (31), Township One Hundred Forty-five (145) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota, less a parcel of land described as follows: Commencing at the Southeast corner of Section Thirty-one (31); thence West along the section line a distance of 1,600 feet to the point of beginning; thence at right angles North a distance of 734 feet; thence at right angles West a distance of 600 feet; thence at right angles South a distance of 734 feet to the section line; thence East along the section line a distance of 600 feet to the point of beginning.

Project Parcel 62: The Southwest Quarter (SW1/4) of Section Thirty-one (31), Township One Hundred Forty-five (145) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 65: The Northeast Quarter (NE1/4) of Section One (1), Township One Hundred Forty-four (144) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 79: The Southeast Quarter (SE1/4) of Section Eighteen (18), Township One Hundred Forty-four (144) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 83: The Northeast Quarter (NE1/4) of Section Nineteen (19), Township One Hundred Forty-four (144) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota.

98813 Fee: \$34.00 Pg: 8 of 9

State of North Dakota)  
County of Steele)  
Recorded: 1/26/2009 At 12:00 PM

A-3

Project Parcel 84: The Southeast Quarter (SE1/4) of Section Nineteen (19), Township One Hundred Forty-four (144) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 85: The East Half of the Southwest Quarter (E1/2SW1/4) and Lots Three (3) and Four (4) in Section Nineteen (19), Township One Hundred Forty-four (144) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 94: The Southeast Quarter (SE1/4) of Section Thirty-one (31), Township One Hundred Forty-four (144) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 95: The Southwest Quarter (SW1/4) of Section Thirty-one (31), Township One Hundred Forty-four (144) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 96: The Northeast Quarter (NE1/4) of Section Six (6), Township One Hundred Forty-three (143) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Barnes County, North Dakota.

Project Parcel 98: The Southeast Quarter (SE1/4) of Section Six (6), Township One Hundred Forty-three (143) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Barnes County, North Dakota.

98813 Fee: \$34.00 Pg: 9 of 9

State of North Dakota)  
County of Steele)  
Recorded: 1/26/2009 At 12:00 PM

OFFICE OF COUNTY RECORDER Pg: 9 of 9  
State of North Dakota)  
County of STEELE)

I hereby certify that the within instrument was filed in this office for record on 1/26/2009 at 12:00 PM, and was duly recorded as Document Number 98813

Lisa Jacobsen Recorder

Kathy Kroeplin Deputy  
Fee: \$34.00 VOGEL LAW FIRM PO BOX 1389  
Fargo, ND 58107-1389



A-4

RECORDER'S OFFICE  
Steele County, North Dakota  
I hereby certify that I have compared the within instrument with the original instrument now on file in my office and that it is a true and correct copy of the same, and the whole thereof, and that the above is a true copy of the filing thereon.  
\_\_\_\_\_  
Date

DOCUMENT NUMBER 264589

Grantor	A
Grantee	J
Indexed	J
Checked	J



Fee: \$ 37.00 264589.  
 OFFICE OF COUNTY RECORDER County of Barnes, North Dakota  
 I hereby certify that the within instrument was filed in this office  
 on 2/2/2009 at 11:48 AM, and was duly recorded.

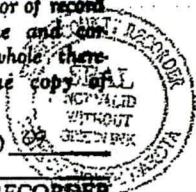
By Kerstin Cochran County Recorder  
Gail Hoff Deputy

**RECORDER'S OFFICE**  
**Steele County, North Dakota**

I hereby certify that I have compared the  
 within instrument with the original instru-  
 ment No. 98813 now on file or of record  
 in my office and that it is a true and cor-  
 rect copy of the same, and the whole there-  
 of, and that the above is a true copy of  
 the filing thereon.

Dated January 29 20 09  
Lisa Jarolmes

RECORDER



**CONSENT AND  
CROSSING AGREEMENT**

THIS CONSENT AND CROSSING AGREEMENT (the "Agreement") is executed as of this 13th day of January, 2009, by and between Dakota Rural Water District, a North Dakota Political Subdivision ("Existing Easement Holder") and M-Power, LLC, a North Dakota limited liability company ("Project Company"). Existing Easement Holder and the Project Company are sometimes referred to herein collectively as the "Parties".

**RECITALS:**

**WHEREAS**, Existing Easement Holder, as successor in interest to Dakota Water Users, Inc., is the holder of certain Easements recorded in the Records of Barnes and/or Steele County, North Dakota (collectively "Easements"). The real property encumbered by the Easements includes the real property legally described on the attached Exhibit A (the "Property"); and,

**WHEREAS**, Project Company may construct roads and underground and/or overhead utility lines (collectively referred to as "Road and Utility Crossings") across the Easements for the purpose of accessing, constructing, operating and maintaining a wind-powered electric generating project located in Griggs and Steele Counties, North Dakota; and,

**WHEREAS**, Existing Easement Holder is willing to consent to Project Company's construction, maintenance and use of said Road and Utility Crossings on the Easements subject to certain conditions.

**NOW, THEREFORE**, in consideration of the foregoing recitals and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Existing Easement Holder hereby consents to the construction of the Project Company's facilities within the area of the Easements in compliance with all legal and regulatory requirements.
2. Project Company shall provide Existing Easement Holder a map or sketch of all Road and Utility Crossings after construction is completed upon receiving a written request from Existing Easement Holder.
3. Existing Easement Holder will reasonably cooperate with Project Company with respect to the installation of Project Company's facilities on the Property ("Project Company's Facilities"). Such reasonable cooperation may include, without limitation, relocating (at Project Company's reasonable expense) Existing Easement Holder's facilities on the Property (the "Existing Easement Holder's Facilities") to another location on the Property reasonably acceptable to Existing Easement Holder. After installation of Project Company's facilities on the Property, Existing Easement Holder will have the right to require Project Company to relocate (at Project Company's reasonable expense) Project Company's Facilities to another location on the Property if such relocation is reasonably necessary in connection with (i) Existing Easement Holder's use or operation of Existing

98763

Fee: \$34.00

Pg. 1 of 9

Easement Holder's Facilities or (ii) any proposed additions, alterations or improvements to the Existing Easement Holder's Facilities. If Existing Easement Holder requires such relocation, then Existing Easement Holder will provide at least ninety (90) days' written notice to the person designated by Project Company in writing to receive notices, unless such action by Existing Easement Holder is an emergency measure (in which event such notice shall be delivered as soon as reasonably possible, taking into consideration such emergency conditions), and in such notice Existing Easement Holder will provide a new location at which Project Company may build a replacement crossing facility. The new crossing location will be subject to Project Company's reasonable approval and as close as reasonably possible to the original location. Any such relocation shall be subject to Project Company receiving any approvals required in connection with such relocation, including, without limitation, any approvals that may be required from the owner of the Property and governmental and regulatory authorities.

- 4. Project Company agrees to notify Existing Easement Holder immediately in the event any damages are caused by Project Company or a Project Company contractor to Existing Easement Holder's improvements located within the area of the Easements. Project Company will repair the damage, at its expense. In the event it is necessary for Existing Easement Holder to make the emergency repairs, Project Company will reimburse Existing Easement Holder for its expense immediately upon receipt of Existing Easement Holder's invoice.
- 5. All notices given or permitted to be given hereunder shall be writing. Notice is considered given either (i) when delivered in person to the recipient named below, (ii) upon receipt after deposit in the United States mail in a sealed envelope or container, postage and postal charges prepaid, return receipt requested or certified mail, addressed by name and address to the party or person intended, or (iii) twenty-four (24) hours from proper and timely delivery to an overnight courier service addressed by name and address to the party or person intended as follows:

Notice to Existing Easement Holder:

Dakota Rural Water District  
P.O. Box 476  
Finley, ND 58230  
Attention: Larry Amundson

98763                      Fee: \$34.00  
State of North Dakota)  
County of Steele)  
Recorded: 1/20/2009 At 9:15 AM

Pg: 2 of 9

Notice to Project Company:

M-Power, LLC  
P.O. Box 335  
602 Lincoln Avenue South  
Finley, ND 58203  
Attention: Keith Monson, President  
Attention: Warren Enyart, Secretary

STEELE COUNTY RECORDER/CLERK OF COURT

201 WASHINGTON AVE  
PO BOX 296  
FINLEY ND 58230

PHONE 701-524-2152  
FAX 701-524-1325  
[ljacobsen@state.nd.us](mailto:ljacobsen@state.nd.us)

FAX TRANSMITTAL FORM

TO: Michelle

FROM: Steele County Recorder/Clerk of Court

FAX NUMBER \_\_\_\_\_

DATE SENT \_\_\_\_\_

NUMBER OF PAGES \_\_\_\_\_

MESSAGE:  
WE ARE PROVIDING THIS INFORMATION UNDER  
THE OPEN RECORDS LAW AND DO NOT GUARANTEE  
IT'S SUFFICIENCY. THIS OFFICE TAKES NO  
RESPONSIBILITY FOR ACCURACY, ERRORS OR  
OMISSIONS OF DOCUMENTS.

Either party may, by notice given at any time or from time to time, require subsequent notices to be given to another individual person, whether a party or an officer or representative, or to a different address, or both. Notices given before actual receipt or notice of change shall not be invalidated by the change.

6. This Agreement shall inure to the benefit and be binding on the respective heirs, successors, assigns, agents, contractors, and personal representatives of the Parties to this Agreement. Project Company shall be permitted to assign this Agreement without the prior written consent of Existing Easement Holder. Nothing contained herein shall be construed to abrogate or relinquish any rights granted by the original Easements.
7. This Agreement may be executed simultaneously or in counterparts, each of which together shall constitute one and the same Agreement. This Agreement may be recorded by either Party in the Recorder's Office of any county in which the Property is located. This Agreement and the attached Exhibits shall constitute the entire agreement between the Parties and supersedes all other prior writings and understandings. This Agreement shall not be amended or modified in any way except by an instrument signed by the Parties. The Parties hereto shall at all times hereafter execute any documents and do any further acts which may be reasonably necessary or desirable to carry out the purposes of this Agreement and to give full force and effect to each and all of the provisions hereof. This Agreement shall be governed by and interpreted in accordance with the then existing laws of the State of North Dakota and the county where the Property is located shall be considered the proper forum or jurisdiction for any disputes arising in connection with this Agreement. Whenever in this Agreement the approval or consent of either Party is required or contemplated, unless otherwise specified, such approval or consent shall not be unreasonably withheld or delayed.

[COUNTERPART SIGNATURE PAGES FOLLOW]

98763

Fee: \$34.00

Pg: 3 of 9

State of North Dakota)

County of Steele)

Recorded: 1/20/2009 At 9:15 AM

**COUNTERPART SIGNATURE PAGE**

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first set forth above.

**Existing Easement Holder:**

Dakota Rural Water District,  
a Non-Political Subdivision

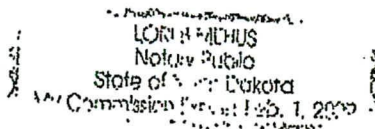
By: *Galen Satrom*  
Name: Galen Satrom  
Its: President

STATE OF NORTH DAKOTA    )  
  ) SS.  
COUNTY OF STEELE        )

On this 13<sup>th</sup> day of January, 2009, before me, the undersigned notary public, personally appeared Galen Satrom, as President of Dakota Rural Water District, a North Dakota Political Subdivision, who is personally known to me to be the person who subscribed to the foregoing instrument, and acknowledged that he executed the same on behalf of said corporation and that he was duly authorized so to do.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

*Lori B. Mehus*  
Notary Public  
Lori B. Mehus.  
Notary Printed Name  
My Commission Expires: 2-1-09



98763                      Fee: \$34.00                      Pg: 4 of 9

State of North Dakota)  
County of Steele)  
Recorded: 1/20/2009 At 9:15 AM

**COUNTERPART SIGNATURE PAGE**

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first set forth above.

**Project Company:**

M-Power, LLC,  
a North Dakota limited liability company

By: *Warren Engart*  
Name: Warren Engart  
Its: Secretary

STATE OF North Dakota )  
 ) SS.  
COUNTY OF Beulah )

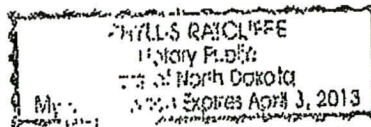
On this 13<sup>th</sup> day of January, 2009, before me, the undersigned notary public, personally appeared Warren Engart, as Secretary of M-Power, LLC, a North Dakota limited liability company, who is personally known to me to be the person who subscribed to the foregoing instrument and acknowledged that he executed the same on behalf of said corporation and that he was duly authorized so to do.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

*Phyllis Ratcliffe*  
Notary Public  
Phyllis Ratcliffe  
Notary Printed Name  
My Commission Expires:

98763 Fee: \$34.00 Pg: 5 of 9

State of North Dakota  
County of Steele  
Recorded: 1/20/2009 At 9:15 AM



98763

Fee: \$34.00

Pg: 6 of 9

State of North Dakota)  
 County of Steele)  
 Recorded: 1/20/2009 At 9:15 AM

**EXHIBIT A****Legal Description of Encumbered Parcels**

Project Parcel 24: The Northeast Quarter (NE1/4) of Section Twenty-Nine (29), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 25: The Southeast Quarter (SE1/4) of Section Twenty-Nine (29), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 27: The West Half of the Northwest Quarter (W1/2NW1/4) of Section Twenty-Nine (29), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 38: The Southeast Quarter (SE1/4) of Section Thirty-one (31), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota, EXCEPT any part thereof included within the following described land:

A tract of land situated in Section Thirty-one (31), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota, more particularly described as follows: Beginning at the northeast corner of said Section Thirty-one (31); thence North 89°42'48" West along the Section line a distance of 1320.81 feet to an iron pin at the northwest corner of the E1/2NE1/4 of said Section Thirty-one (31); thence South 00°17'05" West along the Sixteenth line a distance of 1007.19 feet to an iron pin; thence South 65°44'04" West a distance of 1016.83 feet to an iron pin; thence South 25°49'56" West a distance of 926.96 feet to an iron pin on the east line of the NW1/4 of said Section Thirty-one (31); thence South 00°22'56" West along the east line of the NW1/4 a distance of 363.54 feet to the center of said Section Thirty-one (31); thence North 89°34'20" West along the south line of said NW1/4 a distance of 181.50 feet to a point; thence South 34°40'24" West a distance of 2035.97 feet to a point on the west line of the E1/2SW1/4 of said Section Thirty-one (31); thence South 00°27'13" West along the Sixteenth line a distance of 952.27 feet to a point on the south line of said Section Thirty-one (31); thence South 89°33'38" East along the Section line a distance of 911.31 feet to an iron pin; thence North 04°26'49" East a distance of 645.63 feet to an iron pin; thence North 89°44'33" East a distance of 372.70 feet to a point on the West line of the SE1/4 of said Section Thirty-one (31); thence continuing North 89°44'33" East a distance of 383.28 feet to an iron pin; thence South 59°35'38" East a distance of 204.52 feet to an iron pin; thence North 05°32'04" East a distance of 773.30 feet to an iron pin; thence North 45°01'09" East a distance of 188.08 feet to an iron pin; thence South 82°28'17" East a distance of 157.08 feet to an iron pin; thence North 13°11'13" East a distance of 155.24 feet to an iron pin; thence North 66°17'17" East a distance of 95.25 feet to an iron pin; thence North 88°59'39" East a distance of 75.68 feet to an iron pin; thence North 00°55'42" East a distance of 532.09 feet to an iron pin; thence South 89°26'17" East a distance of 593.89 feet to an iron pin; thence South 02°29'35" East a distance of 716.30 feet to an iron pin; thence South 42°05'26" East a distance of 409.06 feet to an iron pin; thence North 52°18'20" East a distance

of 310.06 feet to an iron pin; thence South 88°38'57" East a distance of 385.09 feet to a point on the east line of said Section Thirty-one (31); thence North 00°11'17" East along the Section line a distance of 1308.55 feet to the southeast corner of the NE1/4 of said Section Thirty-one (31); thence continuing North 00°11'17" East along the Section line a distance of 2636.13 to the point of beginning.

Project Parcel 39: So much of the following described land as is located within the Southeast Quarter (SE1/4) of Section Thirty-one (31), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota, described as follows:

A tract of land situated in Section Thirty-one (31), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota, more particularly described as follows: Beginning at the northeast corner of said Section Thirty-one (31); thence North 89°42'48" West along the Section line a distance of 1320.81 feet to an iron pin at the northwest corner of the E1/2NE1/4 of said Section Thirty-one (31); thence South 00°17'05" West along the Sixteenth line a distance of 1007.19 feet to an iron pin; thence South 65°44'04" West a distance of 1016.83 feet to an iron pin; thence South 25°49'56" West a distance of 926.96 feet to an iron pin on the east line of the NW1/4 of said Section Thirty-one (31); thence South 00°22'56" West along the east line of the NW1/4 a distance of 363.54 feet to the center of said Section Thirty-one (31); thence North 89°34'20" West along the south line of said NW1/4 a distance of 181.50 feet to a point; thence South 34°40'24" West a distance of 2035.97 feet to a point on the west line of the E1/2SW1/4 of said Section Thirty-one (31); thence South 00°27'13" West along the Sixteenth line a distance of 952.27 feet to a point on the south line of said Section Thirty-one (31); thence South 89°33'38" East along the Section line a distance of 911.31 feet to an iron pin; thence North 04°26'49" East a distance of 645.63 feet to an iron pin; thence North 89°44'33" East a distance of 372.70 feet to a point on the West line of the SE1/4 of said Section Thirty-one (31); thence continuing North 89°44'33" East a distance of 383.28 feet to an iron pin; thence South 59°35'38" East a distance of 204.52 feet to an iron pin; thence North 05°32'04" East a distance of 773.30 feet to an iron pin; thence North 45°01'09" East a distance of 188.08 feet to an iron pin; thence South 82°28'17" East a distance of 157.08 feet to an iron pin; thence North 13°11'13" East a distance of 155.24 feet to an iron pin; thence North 66°17'17" East a distance of 95.25 feet to an iron pin; thence North 88°59'39" East a distance of 75.68 feet to an iron pin; thence North 00°55'42" East a distance of 532.09 feet to an iron pin; thence South 89°26'17" East a distance of 593.89 feet to an iron pin; thence South 02°29'35" East a distance of 716.30 feet to an iron pin; thence South 42°05'26" East a distance of 409.06 feet to an iron pin; thence North 52°18'20" East a distance of 310.06 feet to an iron pin; thence South 88°38'57" East a distance of 385.09 feet to a point on the east line of said Section Thirty-one (31); thence North 00°11'17" East along the Section line a distance of 1308.55 feet to the southeast corner of the NE1/4 of said Section Thirty-one (31); thence continuing North 00°11'17" East along the Section line a distance of 2636.13 to the point of beginning.

Project Parcel 47: The Southeast Quarter (SE1/4) of Section Thirty-three (33), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

98763

Fee: \$34.00

Pg: 7 of 9

7 State of North Dakota)  
County of Steele)  
Recorded: 1/20/2009 At 9:15 A.M.

CHI-1686711v2

Project Parcel 49: The Northeast Quarter (NE1/4) of Section Thirty-three (33), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 50: The Northwest Quarter (NW1/4) of Section Thirty-three (33), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 51: The Southwest Quarter (SW1/4) of Section Thirty-four (34), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 54: The Southeast Quarter (SE1/4) of Section Thirty-four (34), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota, less a parcel of land described as follows: Commencing at a point 20 rods East of the Southwest corner of the Southeast Quarter (SE1/4) of Section Thirty-four (34); thence North 8 rods; thence East 10 rods; thence South 8 Rods; thence West 10 rods to the place of beginning.

Project Parcel 55: The Southeast Quarter (SE1/4) of Section Thirty-five (35), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 57: The Southwest Quarter (SW1/4) of Section Thirty-five (35), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 58: The Southeast Quarter (SE1/4) of Section Thirty-six (36), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 59: The East Half of the Southwest Quarter (E1/2SW1/4) of Section Thirty-six (36), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 60: The West Half of the Southwest Quarter (W1/2SW1/4) of Section Thirty-Six (36), Township One Hundred Forty-five (145) North, Range Fifty-seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 61: The Southeast Quarter (SE1/4) of Section Thirty-one (31), Township One Hundred Forty-five (145) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota, less a parcel of land described as follows: Commencing at the Southeast corner of Section Thirty-one (31); thence West along the section line a distance of 1,600 feet to the point of beginning; thence at right angles North a distance of 734 feet; thence at right angles West a distance of 600 feet; thence at right angles South a distance of 734 feet to the section line; thence East along the section line a distance of 600 feet to the point of beginning.

98763

Fee: \$34.00

Pg: 8 of 9

Project Parcel 62: The Southwest Quarter (SW1/4) of Section Thirty-one (31), Township One Hundred Forty-five (145) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 81: The Northeast Quarter (NE1/4) of Section Eighteen (18), Township One Hundred Forty-four (144) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Steele County, North Dakota.

Project Parcel 96: The Northeast Quarter (NE1/4) of Section Six (6), Township One Hundred Forty-three (143) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Barnes County, North Dakota.

Project Parcel 98: The Southeast Quarter (SE1/4) of Section Six (6), Township One Hundred Forty-three (143) North, Range Fifty-six (56) West of the Fifth Principal Meridian, Barnes County, North Dakota.

98763 Fee: \$34.00 Pg: 9 of 9

State of North Dakota)  
County of Steele)  
Recorded: 1/20/2009 At 9:15 AM

OFFICE OF COUNTY RECORDER Pg: 9 of 9  
State of North Dakota)  
County of STEELE)

I hereby certify that the within instrument was filed in this office for record on 1/20/2009 at 9:15 AM, and was duly recorded as Document Number 98763

Lisa Jacobsen Recorder

Kathy Kroeplin Deputy

Fee: \$34.00 VOGEL LAW FIRM PO BOX 1389  
FARGO, ND 58107-1389





May 7, 2009

North Dakota Pollutant Discharge Elimination System (NDPDES)  
General Permit for Stormwater Discharges from Construction Activity  
NOTICE OF COVERAGE

Permittee(s)

Owner / Operator    Todd Langston  
Contact:              Otter Tail Power Company  
                            PO Box 496  
                            Fergus Falls, MN 56538-0496

Permit coverage is identified as follows:

Permit ID:              Site Name:  
NDR102671              Luverne Wind Farm Generation Outlet – Otter Tail Power Company

Please remember to update the Storm Water Pollution Prevention (SWPP) plan as appropriate for site conditions. The best management practices (BMPs) and temporary structures must be inspected, maintained and adjusted until the site is stabilized following construction activities. Once the site is stabilized as outlined in the general permit, you may end permit coverage by filing a termination notice. Cities or counties may impose additional requirements and/or specific BMPs for construction affecting their storm drainage system. Please check with the local officials to be sure all local storm water management considerations are addressed.

Additional Information

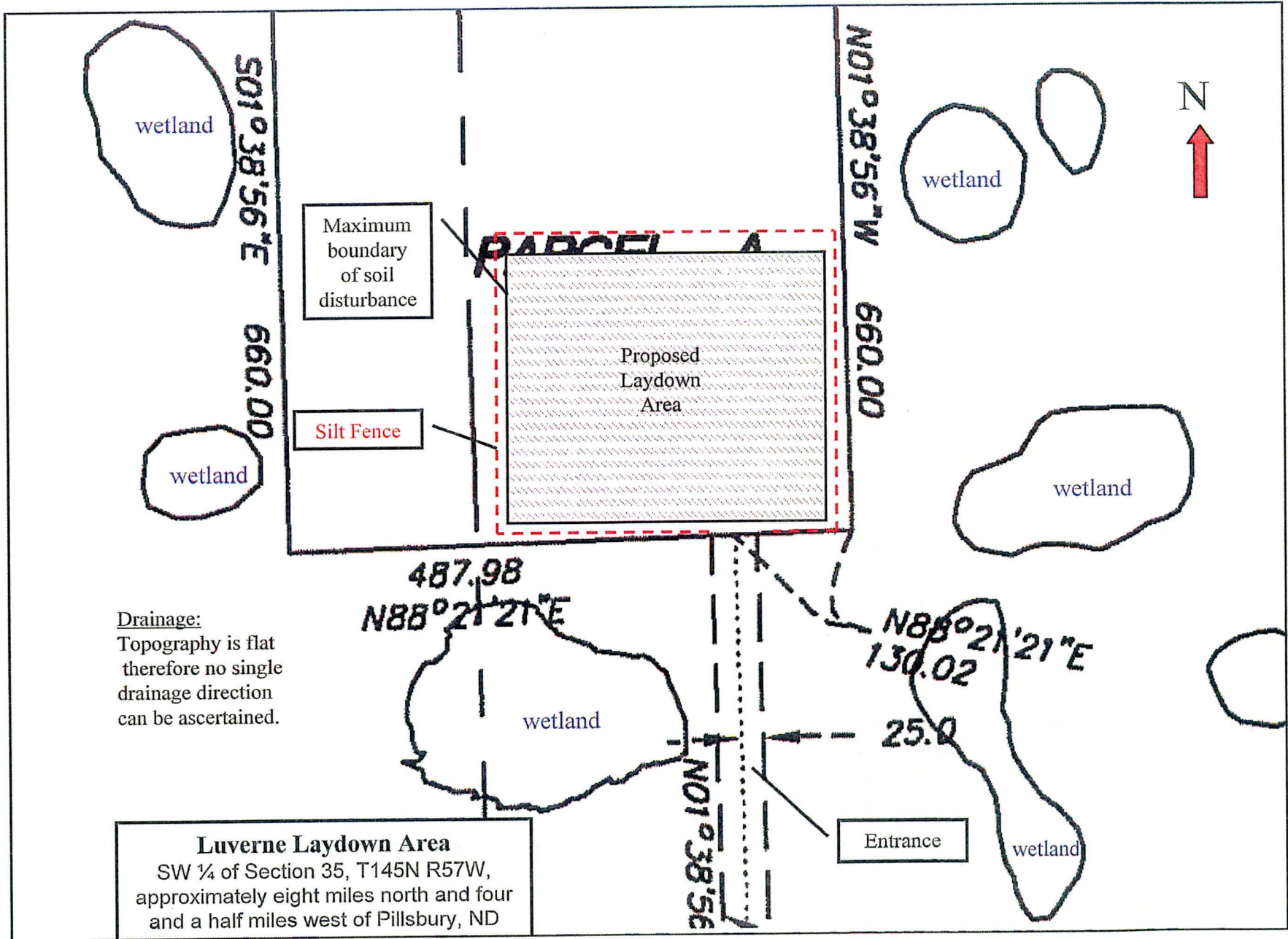
The permit conditions, forms and related information may be found on our web site at:

<http://www.ndhealth.gov/wq/Storm/Construction/ConstructionHome.htm>

Should you have any questions on the permit, please contact the stormwater staff person listed below.

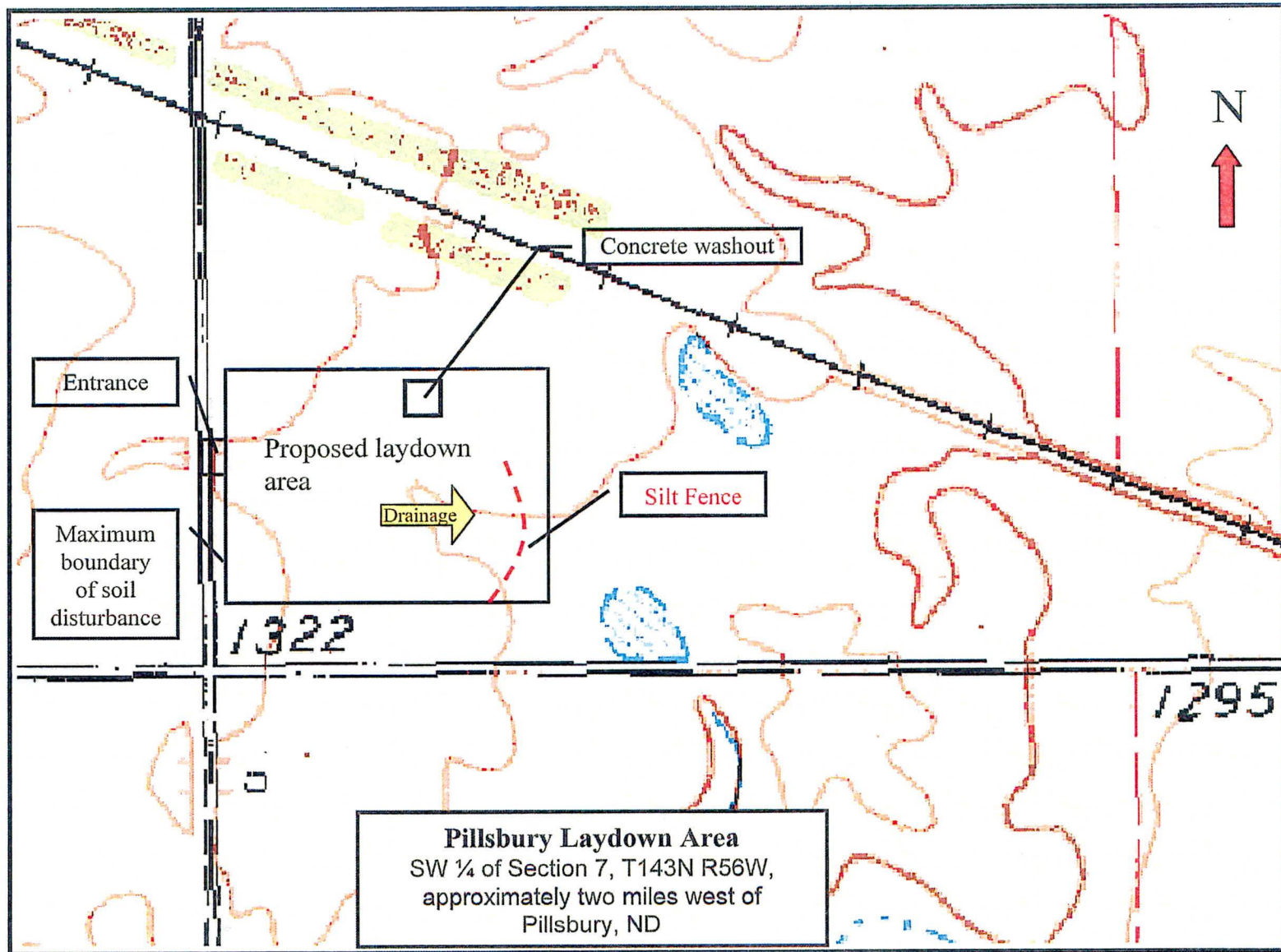
Cory Lawson  
Division of Water Quality  
Phone: 701-328-5244  
Email: [cllawson@nd.gov](mailto:cllawson@nd.gov)





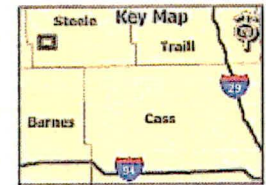
Drainage:  
 Topography is flat  
 therefore no single  
 drainage direction  
 can be ascertained.

**Luverne Laydown Area**  
 SW ¼ of Section 35, T145N R57W,  
 approximately eight miles north and four  
 and a half miles west of Pillsbury, ND



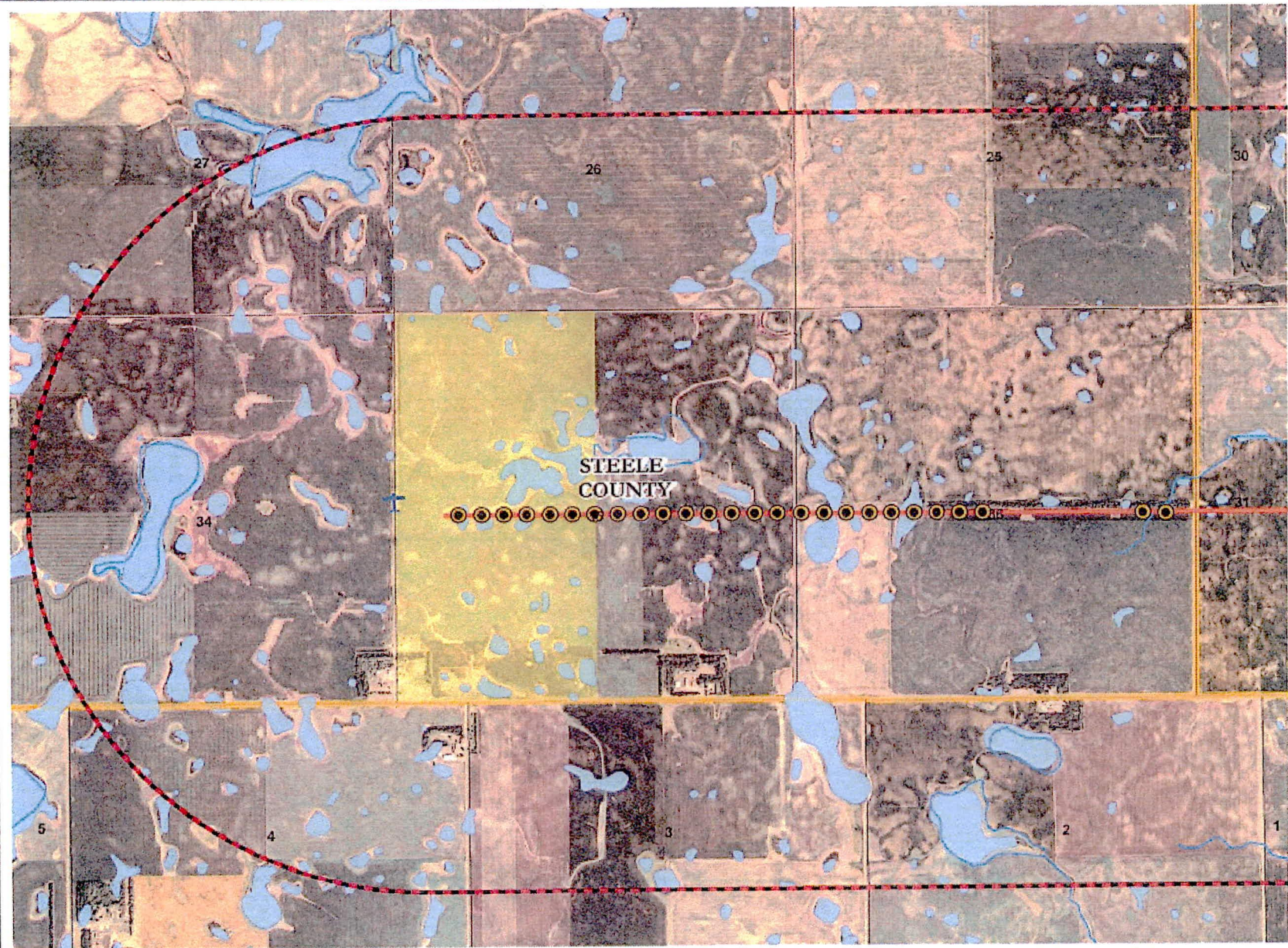
**Luverne Wind Farm  
 Generation Outlet**

Proposed Aviation Ball Marker Locations  
 Figure 12  
 Sheet 5 of 5



**Legend**

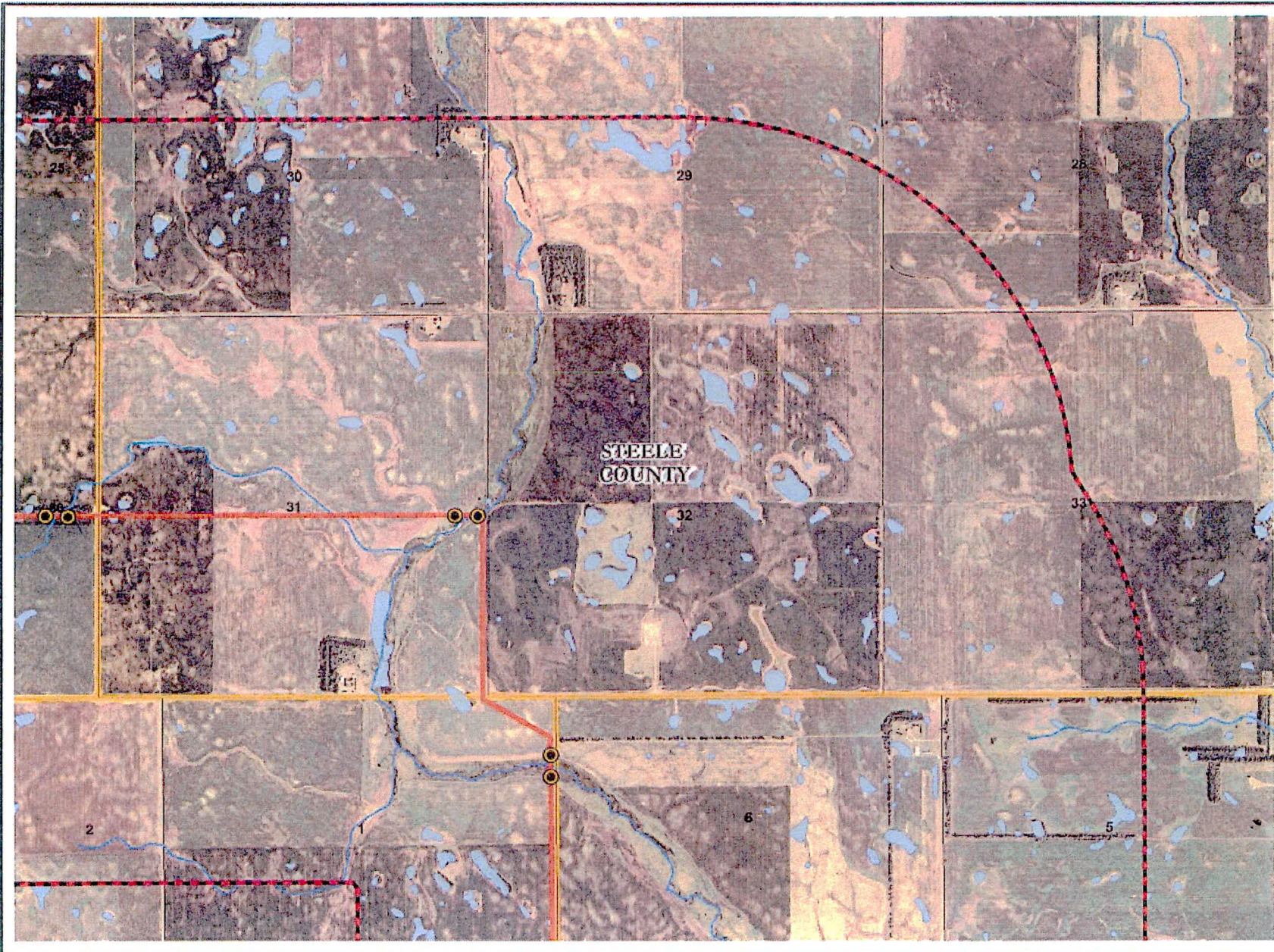
- Aviation Ball Markers
- Proposed Route
- Corridor Boundary
- Proposed Substation
- Surface Water
- Airstrip
- Railroad
- County Boundary
- NW Wetlands
- USFWS Wetland Easement



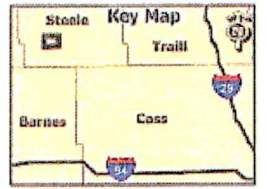
0 1,250 2,500 Feet

Prepared By:

**HDR**  
 July 2008



Proposed Aviation Ball Marker Locations  
 Figure 12  
 Sheet 4 of 5



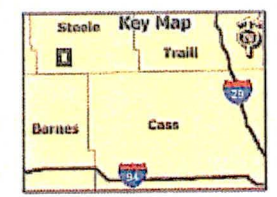
- Legend**
- Aviation Ball Markers
  - Proposed Route
  - Corridor Boundary
  - Proposed Substation
  - Surface Water
  - Airstrips
  - Railroad
  - County Boundary
  - NWI Wetlands
  - USFWS Wetland Easement



Prepared By:  
**HDR**  
 July 2008

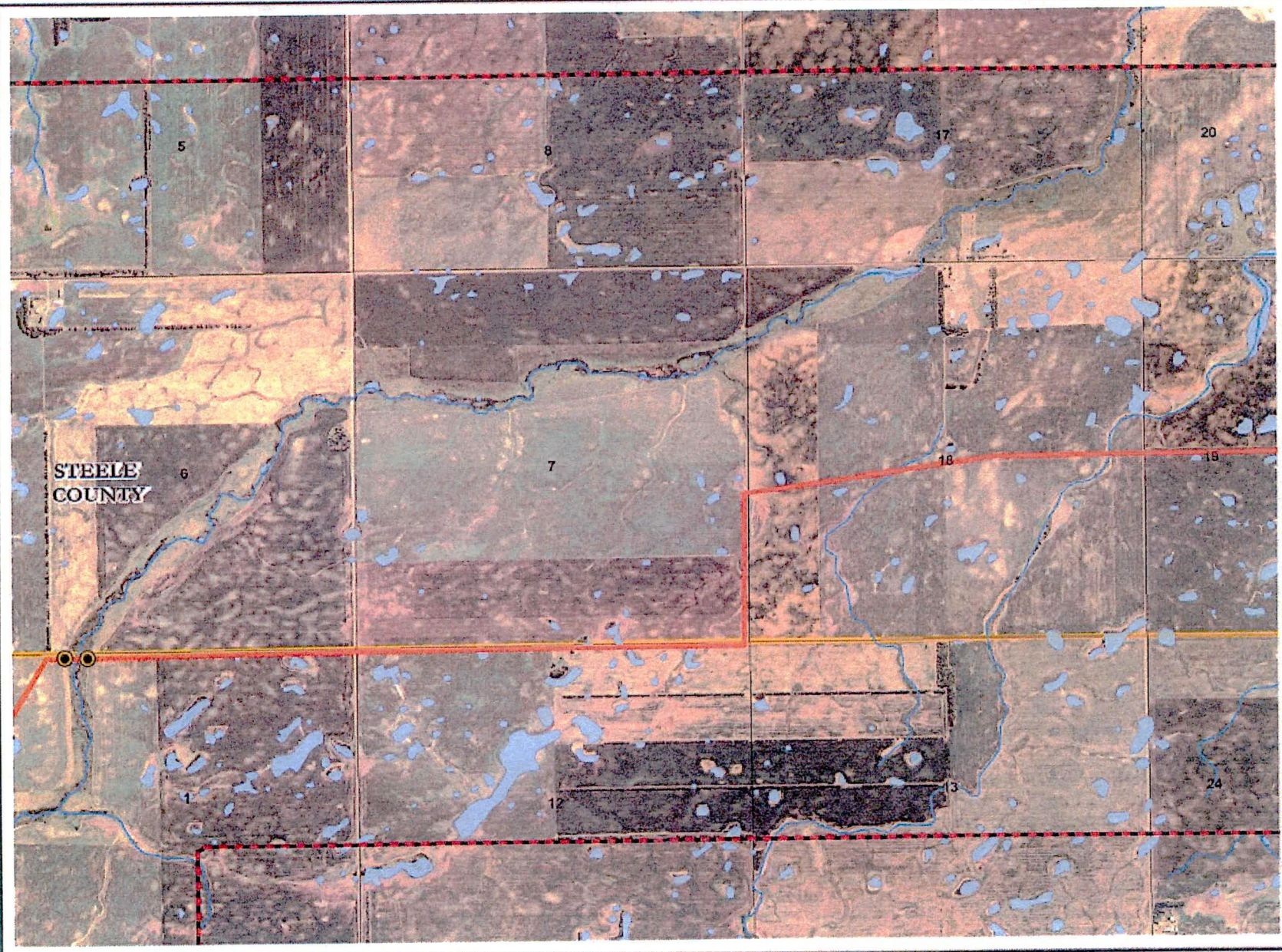
**Luverne Wind Farm  
 Generation Outlet**

Proposed Aviation Ball Marker Locations  
 Figure 12  
 Sheet 3 of 5



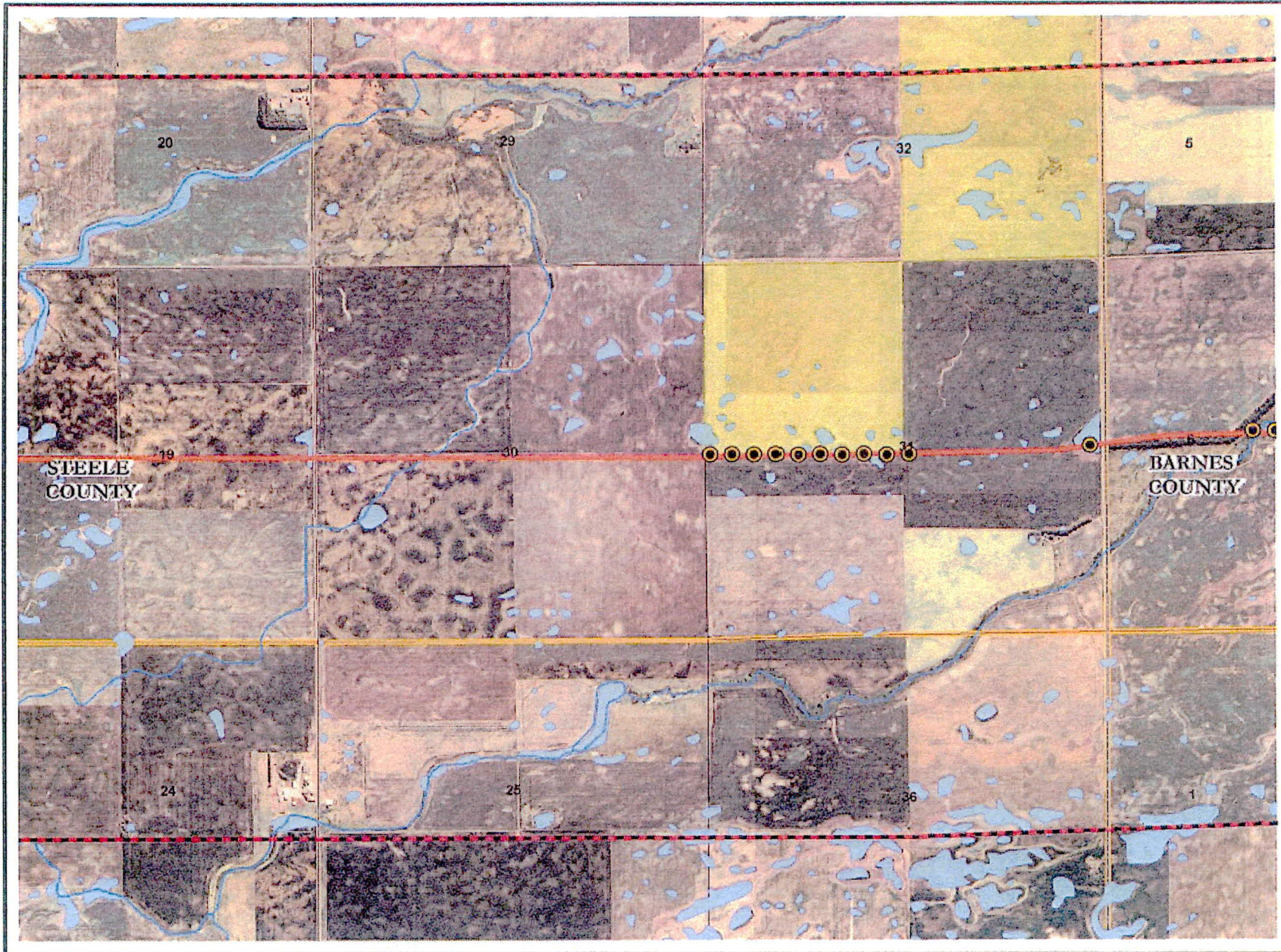
**Legend**

- Aviation Ball Markers
- Proposed Route
- Corridor Boundary
- Proposed Substation
- Surface Water
- Airstrips
- Railroad
- County Boundary
- NWI Wetlands
- USFWS Wetland Easement



0 1,250 2,500 Feet

Prepared By:  
**HDR**  
 July 2008



**M-Power, LLC**  
*...harnessing the energy in nature.*

**Luverne Wind Farm  
 Generation Outlet**

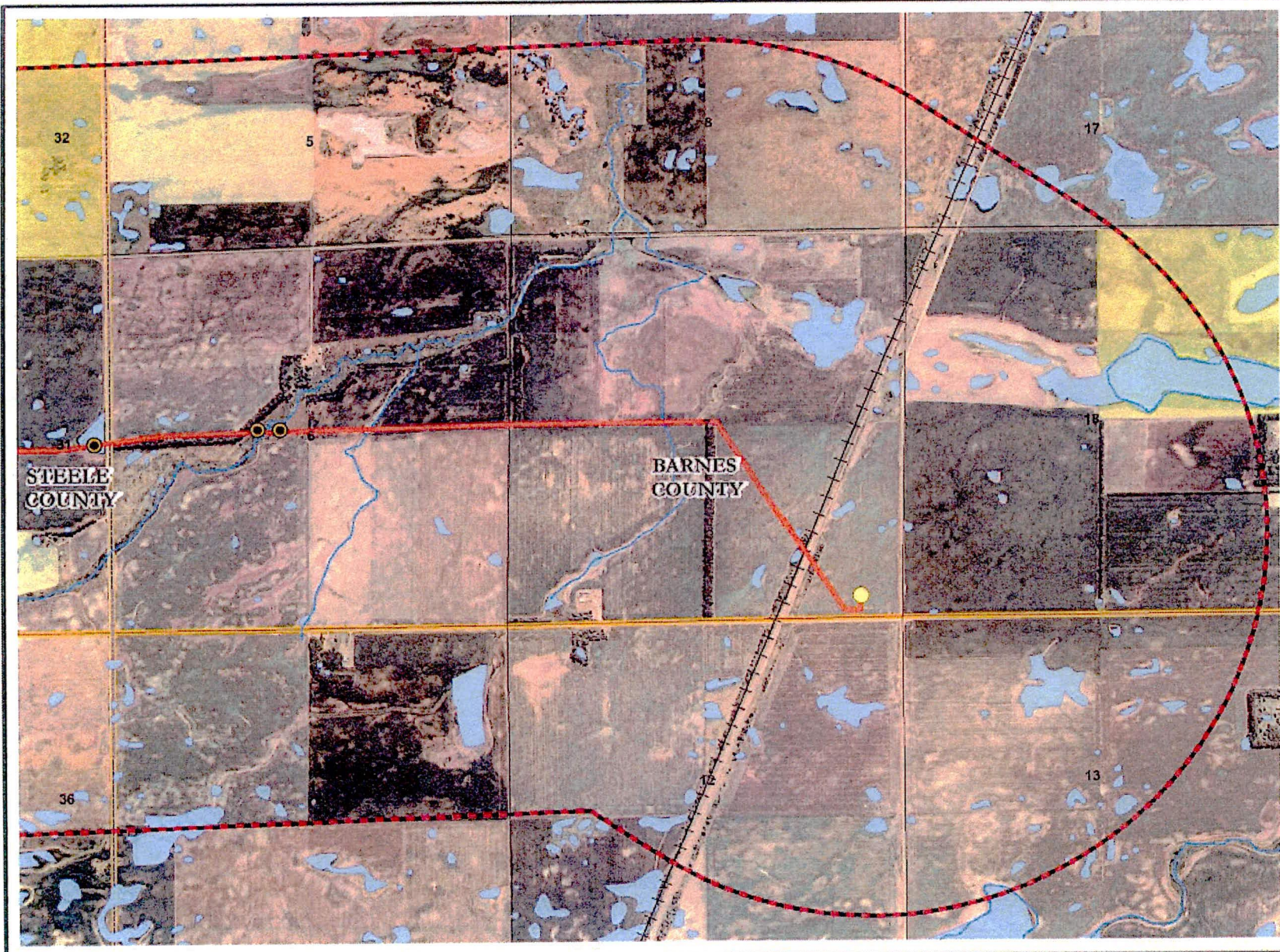
Proposed Aviation Ball Marker Locations  
 Figure 12  
 Sheet 2 of 5

**Legend**

- Aviation Ball Markers
- Proposed Route
- Corridor Boundary
- Proposed Substation
- Surface Water
- Airstrips
- Railroad
- County Boundary
- NWI Wellands
- USFWS Welland Easement

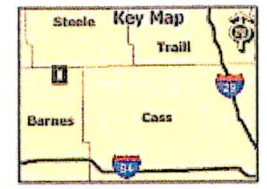
0 1,250 2,500 Feet

Prepared By:  
**HDR**  
 July 2008



**M-Power LLC**  
*...harnessing the energy in nature.*  
**Luverne Wind Farm  
 Generation Outlet**

Proposed Aviation Ball Marker Locations  
 Figure 12  
 Sheet 1 of 5



- Legend**
- Aviation Ball Markers
  - Proposed Route
  - Corridor Boundary
  - Proposed Substation
  - Surface Water
  - Airstrips
  - Railroad
  - County Boundary
  - NWI Wetlands
  - USFWS Wetland Easement

0      1,250      2,500 Feet

Prepared By:  
**HDR**  
 July 2008

This document is the property of M-Power LLC and is not to be distributed outside the project area without the written consent of M-Power LLC.



**STATE  
HISTORICAL  
SOCIETY  
OF NORTH DAKOTA**

RECEIVED  
OCT 28 2008  
BY:

John Hoeven  
Governor of North Dakota

North Dakota  
State Historical Board

Albert I. Berger  
Grand Forks - President

Chester E. Nelson, Jr.  
Bismarck - Vice President

Gerold Gerntholz  
Valley City - Secretary

A. Ruric Todd III  
Jamestown

Diane K. Larson  
Bismarck

Marvin L. Kaiser  
Williston

Richard Kloubec  
Fargo

Sara Otte Coleman  
Director  
Tourism Division

Kelly Schmidt  
State Treasurer

Alvin A. Jaeger  
Secretary of State

Douglas Prchal  
Director  
Parks and Recreation  
Department

Francis Ziegler  
Director  
Department of Transportation

Merlan E. Paaverud, Jr.  
Director

Accredited by the  
American Association  
of Museums

October 27, 2008

John G. Morrison  
Archaeological Programs  
Earthworks, Inc.  
128 Soo Line Drive  
Bismarck, ND 58501

Jennifer Turnbow  
Environmental Planner  
Kadmas, Lee, and Jackson, Inc.  
128 Soo Line Drive  
Bismarck, ND 58501

NDSHPO REF.: 08-0444b PSC/KLJ M-Power and [Luverne] Wind, LLC  
157 Mega Watt (MW) Griggs and Steele Counties, Wind Farm & 230 kV  
Transmission Line (13 miles) Letter Correspondence and Map  
Documentation; PSC Case: PU-08-766

Dear John and Jennifer:

We have received and reviewed letter correspondence and accompanying map documentation of October 24 regarding: 08-0444b: "PSC/KLJ M-Power and [Luverne] Wind, LLC 157 Mega Watt (MW) Griggs and Steele Counties, Wind Farm & 230 kV Transmission Line (13 miles)."

We concur with a "No Significant Sites Affected" determination, and if consulted by a federal agency we would concur with a "No Historic Properties Affected" determination, provided the project is restricted to the nature stated and it takes place in the plotted locations in the received project documentation. Cultural resource recommendations provided in February 28, 2008 project correspondence have been undertaken. Project additions and/or modifications are subject to cultural resource protocols as outlined. Also, all borrow/fill/material is to be derived from an approved source. *Lastly, we look forward to receiving the complete final project report covering the investigations.*

If you have questions please contact either Susan Quinnell at (701) 328-3576 or Paul Picha at (701) 328-3574. Please include the NDSHPO REF.: 08-0444b in correspondence regarding the project.

Sincerely,

Merlan E. Paaverud, Jr.  
State Historic Preservation Officer (North Dakota)  
and

Director, State Historical Society of North Dakota  
c: Susan E. Wefald, President, Commissioner, PSC

## TransCanada Keystone Pipeline U.S. Great Plains Region

Key Contact Information - April, 2010

Regional Director	Phone / Fax Contact	Office Location
Jim Krause <a href="mailto:Jim.Krause@transcanada.com">Jim.Krause@transcanada.com</a>	402-492-7455 (Office) 402-492-7482 (Fax)	13710 FNB Parkway Omaha, NE, 68154-5200

### ND, SD and NE Area Pipeline Operations (Glacial Lakes Area)

Area Manager	Phone / Fax Contact	Office Location
Rod (Mac) McGillivray <a href="mailto:mac.mcgillivray@transcanada.com">mac.mcgillivray@transcanada.com</a>	605-692-7229 (Office) 605-695-0214 (Cell) 605-692-4011 (Fax)	200 Highway 14 Bypass Brookings, SD 57006

### Other Regional Contacts ( Land, Community Relations & Environment)

Land & C.R. Specialist	Phone / Fax Contact	Office Location
Robert Latimer <a href="mailto:rob.latimer@transcanada.com">rob.latimer@transcanada.com</a>	402-492-7454 (Office) 402-332-8122 (Cell) 402-492-7491 (Fax)	13710 FNB Parkway Omaha, NE, 68154-5200

Senior Environmental Specialist	Phone / Fax Contact	Office Location
Robert Baumgartner <a href="mailto:robert.baumgartner@transcanada.com">robert.baumgartner@transcanada.com</a>	402-492-7464 (Office) 402-960-0483 (Cell) 402-492-7491 (Fax)	13710 FNB Parkway Omaha, NE, 68154-5200

**TransCanada Keystone Emergency Line:**

**1-800-447-8066**

Website:

[www.transcanada.com](http://www.transcanada.com)



98651 Fee: \$37.00 Pg: 1 of 10

State of North Dakota  
County of Steele  
Recorded: 12/8/2008 At 10:15 AM

R/W # \_\_\_\_\_  
Consent # \_\_\_\_\_  
Milepost # \_\_\_\_\_

**CONSENT TO COMMON USE**

THIS AGREEMENT, entered into this 5th day of December, 2008, by and between TRANSCANADA KEYSTONE PIPELINE, LP, hereinafter called "Keystone", and M-POWER, LLC, a North Dakota limited liability company, its successors and assigns, hereinafter called "Applicant."

**WITNESSED**

WHEREAS, Keystone is the owner in possession of a right of way for its pipeline(s) in certain parcels of real property located in Steel County, North Dakota, and more particularly described on Exhibit A attached hereto and hereby made a part hereof; and

WHEREAS Applicant proposes to use a portion of the area within the right of way in common with Keystone, the portion being shown or otherwise described on Exhibit "B" attached hereto, and hereby made a part hereof, and being hereinafter called "area of common use" for the following purposes:

The construction of access roads and the installation of buried 34.5 KV (AC) power cables. The access roads must provide at least 5 ft. of cover over Keystone's existing pipeline and across the entire 50 ft. width of Keystone's right of way. The power cables must be at least three feet below Keystone's existing pipeline and this depth will be maintained across the entire 50 ft. width of Keystone's right of way, at the locations shown on the drawing. Applicant will encase the power cables in a rigid plastic conduit across the entire width of Keystone's 50-foot right of way. PVC pipe is an acceptable conduit.

NOW, THEREFORE, Keystone hereby consents to Applicant's use of the area of common use for the purposes hereinabove set forth, subject to the following terms and conditions:

- 1) Applicant shall obtain all necessary rights from owners of the lands crossed by Keystone's right of way in the event Applicant does not own the lands and rights.
- 2) Applicant shall use the area of common use in such a manner as will not interfere with Keystone's use thereof, endanger Keystone's facilities installed therein, or create an infraction of any statute, ordinance, rule or regulation applicable to the operation and maintenance of Keystone's facilities installed in the area of common use or Applicant's use of the area of common use.
- 3) Applicant shall use the area of common use at its sole risk and expense.
- 4) Prior to crossing Keystone's right of way with vehicles or equipment heavier than ordinary street vehicles, Applicant shall give Keystone advance notice of Applicant's intent to cross Keystone's right of way along with a detailed description of Applicant's planned activities and the measures it proposes to implement to protect Keystone's pipeline from damage. Applicant shall not proceed with its proposed work across Keystone's right of way without Keystone's prior written approval.
- 5) Except as expressly set forth herein, this agreement shall not alter, modify, or terminate Keystone's right to use the area of common use for all of the purposes for which the right was acquired. Applicant acknowledges the priority of Keystone's right over the right of Applicant to use the area of common use pursuant to this Agreement.

State of North Dakota)  
County of Steele)  
Recorded: 12/8/2008 At 10:15 AM

- 6) Upon receipt of at least ninety (90) days advance written notice Applicant agrees to temporarily modify or relocate the access road(s) and/or buried power cable(s), provided Keystone provides Applicant an alternate location within Keystone's right of way, to accommodate any future construction, reconstruction, maintenance or operation of Keystone's existing or future facilities, at no charge to Keystone.
- 7) Applicant will place suitable markers on either side of Keystone's right of way.
- 8) Applicant will notify Keystone's District Foreman, CHARLES STEWART & KERWIN KOSTAP at EXT 125 at EXT 133 Telephone 816-830-4881, at least 48 hours prior to beginning work.
- 9) Notwithstanding anything contained herein, Applicant agrees to reimburse Keystone for any damage to Keystone's facilities resulting from Applicant's use of the area of common use.
- 10) In the event of a dispute with respect to any provision, duty or right under the terms of this consent, the parties agree to attempt to negotiate a resolution of a dispute within 20 days of written notice of the same. Should negotiations fail the parties agree to commence binding arbitration proceedings within 30 days of the first written notice of dispute. Failure to institute arbitration within such time shall forever bar a claim based on the subject matter contained in the notice of dispute. The proceedings shall be conducted pursuant to the rules of the American Arbitration Association with the prevailing party receiving its cost and attorney fees. Any arbitration award may be entered as a judgment in any court with jurisdiction over the non-prevailing party.
- 11) The parties acknowledge and agree that the cooperation of both Keystone and Applicant are necessary to promote the safe and effective utilization of the area of common use by the parties. Accordingly, the parties agree that in connection with their respective use, occupancy and operations in the area of common use and the exercise of their respective rights and the performance of their respective obligations under the easements and this agreement, each party shall: (a) conduct its business and operations within the area of common use in a safe and prudent manner consistent with sound industry practices and use commercially reasonable efforts to conduct its business and operations within the area of common use in a manner which does not invalidate or increase the other parties' cost of insurance; (b) to the extent lack of compliance adversely affects the use of the applicable portions of the area of common use by the other party, comply, at its sole expense, with all (i) applicable laws, regulations, ordinances, and similar enactments, by and from any local, county, state or federal agency or body, including without limitation environmental laws and regulations, and applicable zoning, subdivision, health and building codes which govern the use and operation of the area of common use or any portion thereof; (ii) applicable insurance requirements; and (iii) authorizations, approvals or permits or other instruments or documents (including without limitation environmental permits) that are issued by any local, county, state or federal agency or body which govern the use and operation of the property described herein, and other requirements relating to health and safety codes and the use of hazardous or toxic substances, materials or wastes; and (c) use reasonable efforts not to interfere with the enjoyment of and the use and occupancy of the area of common use by the other party as permitted by this agreement.
- 12) In recognition of the fact that the area of common use shall be shared by the parties as provided in this agreement, each of Keystone and Applicant covenants and agrees that it shall reasonably cooperate in good faith with the other in connection with the use of the area of common use; provided, however, that except as expressly provided in this agreement, no party shall be required to incur any incremental out-of-pocket cost in connection with such cooperation. Without



98651

Fee: \$37.00

Pg: 3 of 10

Page 3 of 8

State of North Dakota)  
County of Steele)  
Recorded: 12/8/2008 At 10:15 AM

limiting the generality of the foregoing, each party shall reasonably cooperate in good faith with respect to scheduling of any work relating to any improvements located in an area of common use.

- 13) Neither party shall make any alterations, additions or improvements to the area of common use, including, without limitation, install or remove any transmission or collection lines or pipelines, without reasonable prior notice to the other party.
- 14) All covenants, conditions, and restrictions and reservations and easements, and every other provision and agreement contained herein are made for the direct mutual and reciprocal benefit of each and every part and parcel of the area of common use; and shall, as to each of Keystone and Applicant, their heirs, successors and assigns, operate as covenants running with the land for the benefit of all other interests.
- 15) At Applicant's option, this agreement may be recorded by Applicant in the applicable County Recorder's Office at Applicant's sole cost and expense. This agreement and the agreements of the parties contained herein shall be covenants running with each of the parties' land rights with respect to the land described herein. Each party may assign its interest under this agreement without the consent of the other party.
- 16) This agreement may be executed in several counterparts, each of which will be deemed an original, and all of which will constitute but one and the same instrument.

This Agreement shall inure to the benefit of and be binding upon the heirs, successors, and assigns of the parties hereto.



98651

Fee: \$37.00

Pg: 4 of 10

State of North Dakota)  
County of Steele)  
Recorded: 12/8/2008 At 10:15 AM

IN WITNESS WHEREOF the parties have caused this agreement to be executed in duplicate by their respective officials thereunto duly authorized.

M-POWER, LLC

TRANSCANADA KEYSTONE PIPELINE, LP, by its  
general partner, TRANSCANADA KEYSTONE  
PIPELINE GP, LLC.

Name

Lauri Newton, Assistant Secretary

chairman

Title

Kelly Jameson, Secretary



98651

Fee: \$37.00

Pg: 5 of 10

Page 4 of 8

State of North Dakota)  
County of Steele)  
Recorded: 12/8/2008 At 10:15 AM

IN WITNESS WHEREOF the parties have caused this agreement to be executed in duplicate by their respective officials thereunto duly authorized.

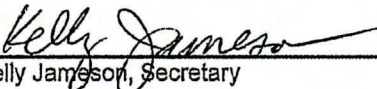
M-POWER, LLC

TRANSCANADA KEYSTONE PIPELINE, LP, by its  
general partner, TRANSCANADA KEYSTONE  
PIPELINE GP, LLC.

  
\_\_\_\_\_  
Name

  
\_\_\_\_\_  
Lauri Newton, Assistant Secretary

*Chairman*  
\_\_\_\_\_  
Title

  
\_\_\_\_\_  
Kelly Jameson, Secretary

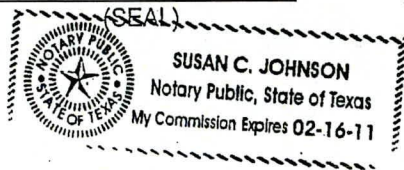
STATE OF TEXAS  
COUNTY OF HARRIS

)  
) SS:  
)

The forgoing instrument was acknowledged before me this 21<sup>st</sup> day of November, 2008, by Kelly Jameson, Secretary of TC OIL PIPELINE OPERATIONS INC., as agent for TRANSCANADA KEYSTONE PIPELINE, LP, a Delaware Limited Liability Company on behalf of the limited liability company.

  
Notary Public, Commission No. \_\_\_\_\_

My Commission Expires: \_\_\_\_\_



98651 Fee: \$37.00 Pg: 6 of 10  
State of North Dakota)  
County of Steele)  
Recorded: 12/8/2008 At 10:15 AM



98651

Fee: \$37.00

Pg: 7 of 10

Page 5 of 8

State of North Dakota  
County of Steele  
Recorded: 12/8/2008 At 10:15 AM

STATE OF NORTH DAKOTA )  
 )  
COUNTY OF GRIGGS ) SS:

The forgoing instrument was acknowledged before me this 5<sup>th</sup> day of December, 2008, by Keith Monson, the Chairman of M-POWER, LLC, a North Dakota limited liability company on behalf of the limited liability company.

**ORRIN DELONG III**  
Notary Public  
State of North Dakota  
My Commission Expires on August 15, 2014

*Orrin DeLong III*  
Notary Public, Commission No. \_\_\_\_\_

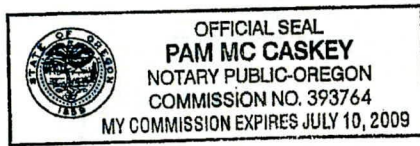
My Commission Expires:  
August 15, 2014  
(SEAL)

STATE OF OREGON )  
COUNTY OF Multnomah )

98651 Fee: \$37.00  
SS: State of North Dakota)  
County of Steele)  
Recorded: 12/8/2008 At 10:15 AM

Pg: 8 of 10

The forgoing instrument was acknowledged before me this 21<sup>st</sup> day of November 2008, by Lauri Newton, Assistant Secretary of TRANSCANADA KEYSTONE PIPELINE GP, LLC. the general partner of TRANSCANADA KEYSTONE PIPELINE, LP.



*Pam Mc Caskey*

Notary Public, Commission No. \_\_\_\_\_

My Commission Expires: 7-10-2009

\_\_\_\_\_  
(SEAL)

STATE OF TEXAS )  
COUNTY OF \_\_\_\_\_ ) SS:

The forgoing instrument was acknowledged before me this \_\_\_ day of \_\_\_, 2008, by Kelly Jameson, Secretary of TRANSCANADA KEYSTONE PIPELINE GP, LLC. the general partner of TRANSCANADA KEYSTONE PIPELINE, LP.

Notary Public, Commission No. \_\_\_\_\_

My Commission Expires:

\_\_\_\_\_  
(SEAL)

98651

Fee: \$37.00

Pg: 9 of 10

State of North Dakota}  
County of Steele}  
Recorded: 12/8/2008 At 10:15 AM

**EXHIBIT A**

**Legal Description of Affected Parcels**

**TRACT 1:** THE NORTHWEST QUARTER (NW1/4) OF SECTION TWENTY-EIGHT (28), TOWNSHIP ONE HUNDRED FORTY-FIVE (145) NORTH, RANGE FIFTY-SEVEN (57) WEST OF THE FIFTH PRINCIPAL MERIDIAN, STEELE COUNTY, NORTH DAKOTA.

**TRACT 2:** THE NORTHEAST QUARTER (NE1/4) OF SECTION THIRTY-THREE (33), TOWNSHIP ONE HUNDRED FORTY-FIVE (145) NORTH, RANGE FIFTY-SEVEN (57) WEST OF THE FIFTH PRINCIPAL MERIDIAN, STEELE COUNTY, NORTH DAKOTA.

**TRACT 3:** THE SOUTHWEST QUARTER (sw1/4) OF THE NORTHEAST QUARTER (NE1/4), AND GOVERNMENT LOT 2, ALL IN SECTION 5, TOWNSHIP 144 NORTH, RANGE 57 WEST, OF THE FIFTH PRINCIPAL MERIDIAN, STEELE COUNTY, NORTH DAKOTA.

**TRACT 4:** THE NORTHEAST QUARTER (NE1/4) OF SECTION 8, TOWNSHIP 144 NORTH, RANGE 57 WEST, OF THE FIFTH PRINCIPAL MERIDIAN, STEELE COUNTY, NORTH DAKOTA.

**TRACT 5:** THE SOUTHEAST QUARTER (SE1/4) OF SECTION 17, TOWNSHIP 144 NORTH, RANGE 57 WEST, OF THE FIFTH PRINCIPAL MERIDIAN, STEELE COUNTY, NORTH DAKOTA.

98651

Fee: \$37.00

Pg: 10 of 10

State of North Dakota)  
County of Steele)  
Recorded: 12/8/2008 At 10:15 AM

EXHIBIT B

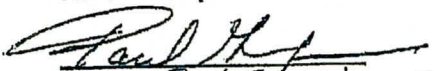
SPECIFIC LOATION OF COMMON USE

Six 50 foot wide paths over the parcels described on Exhibit A, the centerlines of which are lines formed by connecting the following points A and B, such lines shortened or extended as is necessary so that the beginning and ending points of such lines lie on the boundaries of the Keystone right of way.

<u>TRACT NUMBER</u>	<u>POINT A</u>	<u>POINT B</u>
<u>TRACT 1</u>	X=2604124 Y=139069	X=2604174 Y=139071
<u>TRACT 2</u>	X=2605789 Y=133124	X=2605859 Y=133115
<u>TRACT 3</u>	X=2606302 Y=128516	X=2606351 Y=128525
<u>TRACT 4 (FIRST CROSSING)</u>	X=2607188 Y=124779	X=2607238 Y=124781
<u>TRACT 4 (SECOND CROSSING)</u>	X=2607178 Y=123402	X=2607229 Y=123392
<u>TRACT 5</u>	X=2608707 Y=115898	X=2608758 Y=115896

Points in NAD 83 North Dakota State Planes, North Zone, International Feet

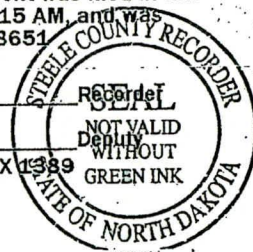
The undersigned certifies the above coordinate values conform to the requirements of NDCC Chapter 47-20.2

  
Name: Paul Greenhagen  
NDRLS#: 5536

OFFICE OF COUNTY RECORDER Pg: 10 of 10  
State of North Dakota)  
County of STEELE)

I hereby certify that the within instrument was filed in this office for record on 12/8/2008 at 10:15 AM, and was duly recorded as Document Number 98651

Lisa Jacobsen  
Kathy Kroepelin  
Fee: \$37.00 VOGEL LAW FIRM PO BOX 1389  
FARGO, ND 58107-1389





JONES LANG  
LASALLE.

Jones Lang LaSalle Americas, Inc.  
3017 Lou Menk Drive, Suite 100  
Fort Worth, Texas 76131-2800  
tel +1 817-230-2600, fax +1 817 306-8265

December 18, 2008

Tracking #08-36005

Warren Enyart  
Secretary  
M-Power, LLC  
602 Lincoln Ave.  
Finley, ND 58230

Dear Mr. Enyart:

Enclosed please find one (1) fully executed Agreement for your file. **A copy of the executed Agreement must be available upon request at the job site allowing authorization to do the work.** Please contact Roadmaster at telephone (701) 837-6635 or cell (701) 226-3112, (5) days in advance of entry and **BEFORE YOU DIG, CALL 1-800-533-2891.**

If you need additional information please contact me at (817) 230-2634.

Sincerely,

Heather Calhoun  
Contract Specialist

Enclosure

cc: Barry Kline, BNSF, 6400 4<sup>th</sup> Ave. NE, Minot, ND 58702

**LICENSE FOR ELECTRIC SUPPLY LINE  
ACROSS OR ALONG RAILWAY PROPERTY**

(Electric Light, Power Supply, Irrespective of Voltage, Overhead or Underground)

**THIS LICENSE** ("License"), made as of the 18<sup>th</sup> day of December, 2008 ("Effective Date") by and between **BNSF RAILWAY COMPANY**, a Delaware corporation ("Licensor"), and **M-POWER, LLC**, a North Dakota limited liability company ("Licensee").

**NOW THEREFORE**, in consideration of the mutual covenants contained herein, the parties agree to the following:

**GENERAL**

1. Licensor hereby grants Licensee a non-exclusive license, subject to all rights, interests, and estates of third parties including, without limitation, any leases, use rights, easements, liens or other encumbrances, and upon the terms and conditions set forth below, to construct, maintain, and use in strict accordance with the drawings and specifications approved by Licensor as part of Licensee's application process ("the Drawings and Specifications") an electric supply line containing a maximum of five (5) conductors, together with its supporting or containing structures (collectively, the "Electric Supply Line") across or along the premises of Licensor at or near the station of Pillsbury, County of Barnes, State of North Dakota, Line Segment 0034, Mile Post 54.58, located in the West Half of the Southwest Quarter of Section 7, Township 143N, Range 56W, in said county and state, and shown by bold line upon the Drawing No. 1-43601 dated April 11, 2008, marked Exhibit "A", attached hereto and made a part hereof ("Premises").
2. Licensee shall not disturb any improvements of Licensor or Licensor's existing lessees, Licensees, easement beneficiaries or lien holders, if any, or interfere with the use of such improvements.
3. Licensee shall use the Premises solely for construction, maintenance, and use of an Electric Supply Line in accordance with the Drawings and Specifications. Licensee shall not use the Premises for any other purpose. Licensee shall not use or store hazardous substances, as defined by the Comprehensive Environmental Response, Compensation, and Liability Act, as amended ("CERCLA") or petroleum or oil as defined by applicable Environmental Laws on the Premises.
4. In the case of the eviction of Licensee by anyone owning or claiming title to or any interest in the Premises, Licensor shall not be liable to refund Licensee any compensation paid hereunder or for any damage Licensee sustains in connection therewith.
5. Any contractors or subcontractors performing work on the Electric Supply Line or entering the Premises on behalf of Licensee, shall be deemed servants and agents of Licensee for purposes of this License.

**TERM**

6. This License shall commence on the Effective Date and shall continue for a period of twenty-five (25) years, subject to prior termination as hereinafter described.

**COMPENSATION**

7. (a) Licensee shall pay Licensor, prior to the Effective Date, the sum of Two Thousand Five Hundred Thirty-Four and No/100 Dollars (\$2,534.00) as compensation for the use of the Premises.
- (b) Licensee agrees to reimburse Licensor (within thirty (30) days after receipt of bills therefor) for all costs and expenses incurred by Licensor in connection with Licensee's use of the Premises or the presence, construction, maintenance, and use of the Electric Supply Line, including but not limited to the furnishing of Licensor's flaggers and any vehicle rental costs incurred. The cost of flagger services provided by Licensor, when deemed necessary by Licensor's representative, will be borne by Licensee. The estimated cost for one (1) flagger is \$800.00 for an eight (8) hour basic day with time and one-half or double time for overtime, rest days and holidays. The estimated cost for each flagger includes vacation allowance, paid holidays, Licensor and unemployment insurance, public liability and property damage insurance, health and welfare benefits, transportation, meals, lodging and supervision. Negotiations for Licensor labor or collective bargaining agreements and rate changes authorized by appropriate Federal authorities may increase actual or estimated flagging rates. The flagging rate in effect at the time of performance by the flaggers will be used to calculate the actual costs of flagging pursuant to this paragraph.
- (c) All invoices are due thirty (30) days after the date of invoice. In the event that Licensee shall fail to pay any monies due to Licensor within thirty (30) days after the invoice date, then Licensee shall pay interest on such unpaid sum from thirty (30) days after its invoice date to the date of payment by Licensee at an annual rate equal to (i) the greater of (a) for the period January 1 through June 30, the prime rate last published in *The Wall Street Journal* in the preceding December plus two and one-half percent (2 1/2%), and for the period July 1 through December 31, the prime rate last published in *The Wall Street Journal* in the preceding June plus two and one-half percent (2 1/2%), or (b) twelve percent (12%), or (ii) the maximum rate permitted by law, whichever is less.

**COMPLIANCE WITH LAWS**

8. (a) Licensee shall observe and comply with any and all laws, statutes, regulations, ordinances, orders, covenants, restrictions, or decisions of any court of competent jurisdiction ("Legal Requirements") relating to the construction, maintenance and use of the Electric Supply Line and the use of the Premises.
- (b) Prior to entering the Premises, Licensee shall and shall cause its contractor to comply with all Licensor's applicable safety rules and regulations. Prior to commencing any work on the Premises, Licensee shall complete and shall require its contractor to complete the safety-training program at the following Internet Website "<http://www.contractororientation.com>". This training must be completed no more than one year in advance of Licensee's entry on the Premises.

**DEFINITION OF COST AND EXPENSE**

9. For the purpose of this License, "cost" or "costs" "expense" or "expenses" includes, but is not limited to, actual labor and material costs including all assignable additives, and material and supply costs at current value where used.

**RIGHT OF LICENSOR TO USE**

10. Licensor excepts and reserves the right, to be exercised by Licensor and any other parties who may obtain written permission or authority from Licensor:
- (a) to maintain, renew, use, operate, change, modify and relocate any existing pipe, power, communication lines and appurtenances and other facilities or structures of like character upon, over, under or across the Premises;
  - (b) to construct, maintain, renew, use, operate, change, modify and relocate any tracks or additional facilities or structures upon, over, under or across the Premises; or
  - (c) to use the Premises in any manner as the Licensor in its sole discretion deems appropriate, provided Licensor uses all commercially reasonable efforts to avoid material interference with the use of the Premises by Licensee for the purpose specified in Section 3 above.

**LICENSEE'S OPERATIONS**

11. (a) Licensee shall notify Licensor's Roadmaster at 6400 4<sup>th</sup> Ave. NE, Minot, ND 58702, telephone (701) 837-6635 or cell (701) 226-3112, at least five (5) business days prior to construction of the Electric Supply Line and prior to entering the Premises for any subsequent maintenance thereon.
- (b) In performing the work described in Section 3, Licensee shall use only public roadways to cross from one side of Licensor's tracks to the other.
12. (a) Licensee shall, at its sole cost and expense, construct and at all times maintain the Electric Supply Line in accordance with the National Electric Code.
- (b) If the operation or maintenance of said Electric Supply Line shall at any time cause interference, including but not limited to physical interference from electromagnetic induction, electrostatic induction, or from stray or other currents, with the facilities of the Licensor or of any lessee or Licensee of the Licensor, or in any manner interfere with the operation, maintenance, or use by the Licensor of its right-of-way, tracks, structures, pole lines, signal and communication lines, radio, or other equipment, devices, other property or appurtenances thereto, Licensee agrees immediately to make such changes in its Electric Supply Line and furnish such protective devices and/or replacement equipment to Licensor and its lessees or Licensees as shall be necessary, in the judgment of the Licensor's representative, to eliminate such interference. The cost of such protective devices and their installations shall be borne solely by Licensee. If any of the interference covered by this paragraph shall be, in the judgment of the Licensor, or such importance to the safety of the Licensor's operations as to

require immediate corrective action, Licensee, upon notice from the Licensor, shall either, at the Licensor's election, cease using said Electric Supply Line for any purpose whatsoever and remove same, or reduce the voltage or load on said Electric Supply Line, or take such other interim protective measures as the Licensor may deem advisable, until the protective devices and/or replacement equipment required by this paragraph have been installed, put in operation, tested, and found to be satisfactory to correct the interference.

13. (a) Under no conditions shall Licensee be permitted to conduct any tests, investigations or any other activity using mechanized equipment and/or machinery, or place or store any mechanized equipment, tools or other materials, within twenty-five (25) feet of the centerline of any railroad track on the Premises unless Licensee has obtained prior written approval from Licensor. Licensee shall, at its sole cost and expense, perform all activities on and about the Premises in such a manner as not at any time to be a source of danger to or interference with the existence or use of present or future tracks, roadbed or property of Licensor, or the safe operation and activities of Licensor. If ordered to cease using the Premises at any time by Licensor's personnel due to any hazardous condition, Licensee shall immediately do so. Notwithstanding the foregoing right of Licensor, the parties agree that Licensor has no duty or obligation to monitor Licensee's use of the Premises to determine the safe nature thereof, it being solely Licensee's responsibility to ensure that Licensee's use of the Premises is safe. Neither the exercise nor the failure by Licensor to exercise any rights granted in this Section will alter the liability allocation provided by this License.
- (b) Licensee shall, at its sole cost and expense, and subject to the supervision of Licensor's Roadmaster, locate, construct and maintain the Electric Supply Line in such a manner and of such material that it will not at any time be a source of danger to or interference with the existence or use of present or future tracks, roadbed or property of Licensor, or the safe operation and activities of its railroad. Further, the Electric Supply Line shall be constructed, installed and maintained in conformity with the plans and specifications shown on the print attached hereto as Exhibit "A" and made a part hereof (which, if present, are to be deemed part of the Drawings and Specifications). Licensor may direct one of its field engineers to observe or inspect the construction and/or maintenance of the Electric Supply Line at any time for compliance with the Drawings and Specifications. If ordered at any time to halt construction or maintenance of the Electric Supply Line by Licensor's personnel due to non-compliance with the same or any other hazardous condition, Licensee shall immediately do so. Notwithstanding the foregoing right of Licensor, the parties agree that Licensor has no duty or obligation to observe or inspect, or to halt work on, the Electric Supply Line, it being solely Licensee's responsibility to ensure that the Electric Supply Line is constructed in strict accordance with the Drawings and Specifications and in a safe and workmanlike manner in compliance with all terms hereof. Neither the exercise nor the failure by Licensor to exercise any right granted by this Section will alter in any way the liability allocation provided by this License. If at any time Licensee shall, in the sole judgment of Licensor, fail to properly perform its obligations under this Section, Licensor may, at its option and at Licensee's sole expense, arrange for the performance of such work as it deems necessary for the safety of its operations and activities. Licensee

shall promptly reimburse Licensor for all costs and expenses of such work, upon receipt of an invoice for the same. Licensor's failure to perform any obligations of Licensee shall not alter the liability allocation hereunder.

14. Licensee shall, at its sole cost and expense, remove all combustible material from around wooden poles and will at all times keep the space around such poles free of such material, and if removal of such combustible material shall not be attended to with fifteen (15) days after having been requested by Licensor to do so, Licensor shall have the right itself to perform the work and Licensee hereby agrees to reimburse Licensor for the expense so incurred.
15. During the construction and any subsequent maintenance performed on Electric Supply Line, Licensee shall perform such work in a manner to preclude damage to the property of Licensor, and preclude interference with the operation of its railroad. The construction of the Electric Supply Line shall be completed within one (1) year of the Effective Date. Upon completion of the construction of the Electric Supply Line and after performing any subsequent maintenance thereon, Licensee shall, at Licensee's own cost and expense, restore Licensor's premises to their former state as of the Effective Date of this License.
16. If at any time during the term of this License, Licensor shall desire the use of its rail corridor in such a manner as would, in Licensor's reasonable opinion, be interfered with by the Electric Supply Line, Licensee shall, at its sole expense, within ninety (90) days after receiving written notice from Licensor to such effect, make such changes in the Electric Supply Line as in the sole discretion of Licensor may be necessary to avoid interference with the proposed use of Licensor's rail corridor, including, without limitation, the relocation of the existing or the construction of a new Electric Supply Line. In the event that the Electric Supply Line, after being relocated at Licensee's sole cost and expense as requested by and in a manner satisfactory to Licensor, would be located outside the boundaries of the License but within property owned by Licensor, Licensor agrees to execute a new license on the same terms and conditions as this License at no additional cost to Licensee for such license, the consideration for this License being sufficient therefor.
17. (a) Prior to Licensee conducting any boring work on or about any portion of the Premises, Licensee shall explore the proposed location for such work with hand tools to a depth of at least three (3) feet below the surface of the ground to determine whether pipelines or other structures exist below the surface, provided, however, that in lieu of the foregoing, the Licensee shall have the right to use suitable detection equipment or other generally accepted industry practice (e.g., consulting with the Underground Services Association) to determine the existence or location of pipelines and other subsurface structures prior to drilling or excavating with mechanized equipment. Upon Licensee's written request, which shall be made thirty (30) business days in advance of Licensee's requested construction of the Electric Supply Line, Licensor will provide Licensee any information that Licensor's Engineering Department has in its possession concerning the existence and approximate location of Licensor's underground utilities and pipelines at or near the vicinity of the proposed Electric Supply Line. Prior to conducting any such boring work, the Licensee will review all such material. Licensor does not warrant the accuracy of information relating to subsurface conditions and Licensee's operations will be subject at all times to the liability provisions herein.

- (b) For all bores greater than 26-inch diameter and at a depth less than 10.0 feet below bottom of rail, a soil investigation will need to be performed by the Licensee and reviewed by Licensor prior to construction. This study is to determine if granular material is present, and to prevent subsidence during the installation process. If the investigation determines in Licensor's reasonable opinion that granular material is present, Licensor may select a new location for Licensee's use, or may require Licensee to furnish for Licensor's review and approval, in its sole discretion a remedial plan to deal with the granular material. Once Licensor has approved any such remedial plan in writing, Licensee shall, at its sole cost and expense, carry out the approved plan in accordance with all terms thereof and hereof.
18. Any open hole, boring or well constructed on the Premises by Licensee shall be safely covered and secured at all times when Licensee is not working in the actual vicinity thereof. Following completion of that portion of the work, all holes or borings constructed on the Premises by Licensee shall be:
- (a) filled in to surrounding ground level with compacted bentonite grout; or
- (b) otherwise secured or retired in accordance with any applicable Legal Requirement. All excavated materials shall not remain on Licensor's property for more than ten (10) days and shall be properly disposed of by Licensee in accordance with applicable Legal Requirements.
19. Upon termination of this License, Licensee shall, at its sole cost and expense:
- (a) remove all of its equipment from the Premises;
- (b) remove the Electric Supply Line at Licensor's sole discretion;
- (c) report and restore any damage to the Premises arising from, growing out of, or connected with Licensee's use of the Premises;
- (d) remedy any unsafe conditions on the Premises created or aggravated by Licensee; and
- (e) leave the Premises in the condition which existed as of the Effective Date of this License.
20. Licensee's on-site supervision shall retain/maintain a fully-executed copy of this License at all times while on the Premises.

#### **LIABILITY**

21. (a) **TO THE FULLEST EXTENT PERMITTED BY LAW, LICENSEE SHALL RELEASE, INDEMNIFY, DEFEND AND HOLD HARMLESS LICENSOR AND LICENSOR'S AFFILIATED COMPANIES, PARTNERS, SUCCESSORS, ASSIGNS, LEGAL REPRESENTATIVES, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES AND AGENTS (COLLECTIVELY, "INDEMNITEES") FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LIABILITIES, FINES, PENALTIES, COSTS, DAMAGES, LOSSES, LIENS,**

CAUSES OF ACTION, SUITS, DEMANDS, JUDGMENTS AND EXPENSES (INCLUDING, WITHOUT LIMITATION, COURT COSTS, ATTORNEYS' FEES AND COSTS OF INVESTIGATION, REMOVAL AND REMEDIATION AND GOVERNMENTAL OVERSIGHT COSTS) ENVIRONMENTAL OR OTHERWISE (COLLECTIVELY "LIABILITIES") OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON OR ENTITY DIRECTLY OR INDIRECTLY ARISING OUT OF, RESULTING FROM OR RELATED TO (IN WHOLE OR IN PART):

- (i) THIS LICENSE, INCLUDING, WITHOUT LIMITATION, ITS ENVIRONMENTAL PROVISIONS,
- (ii) ANY RIGHTS OR INTERESTS GRANTED PURSUANT TO THIS LICENSE,
- (iii) LICENSEE'S OCCUPATION AND USE OF THE PREMISES,
- (iv) THE ENVIRONMENTAL CONDITION AND STATUS OF THE PREMISES CAUSED BY OR CONTRIBUTED BY LICENSEE, OR
- (v) ANY ACT OR OMISSION OF LICENSEE OR LICENSEE'S OFFICERS, AGENTS, INVITEES, EMPLOYEES, OR CONTRACTORS, OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE THEY CONTROL OR EXERCISE CONTROL OVER,

EVEN IF SUCH LIABILITIES ARISE FROM OR ARE ATTRIBUTED TO, IN WHOLE OR IN PART, ANY NEGLIGENCE OF ANY INDEMNITEE. THE ONLY LIABILITIES WITH RESPECT TO WHICH LICENSEE'S OBLIGATION TO INDEMNIFY THE INDEMNITEES DOES NOT APPLY ARE LIABILITIES TO THE EXTENT PROXIMATELY CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF AN INDEMNITEE, OR (II) WHOLLY CAUSED BY THE SOLE NEGLIGENCE OF AN INDEMNITEE.

- (b) FURTHER, TO THE FULLEST EXTENT PERMITTED BY LAW, NOTWITHSTANDING THE LIMITATION IN SECTION 21(a), LICENSEE SHALL NOW AND FOREVER WAIVE ANY AND ALL CLAIMS, REGARDLESS WHETHER BASED ON STRICT LIABILITY, NEGLIGENCE OR OTHERWISE, THAT LICENSOR IS AN "OWNER", "OPERATOR", "ARRANGER", OR "TRANSPORTER" WITH RESPECT TO THE ELECTRIC SUPPLY LINE FOR THE PURPOSES OF CERCLA OR OTHER ENVIRONMENTAL LAWS. LICENSEE WILL INDEMNIFY, DEFEND AND HOLD THE INDEMNITEES HARMLESS FROM ANY AND ALL SUCH CLAIMS REGARDLESS OF THE NEGLIGENCE OF THE INDEMNITEES. LICENSEE FURTHER AGREES THAT THE USE OF THE PREMISES AS CONTEMPLATED BY THIS LICENSE SHALL NOT IN ANY WAY SUBJECT LICENSOR TO CLAIMS THAT LICENSOR IS OTHER THAN A COMMON CARRIER FOR PURPOSES OF ENVIRONMENTAL LAWS AND EXPRESSLY AGREES TO INDEMNIFY, DEFEND, AND HOLD THE INDEMNITEES HARMLESS FOR ANY AND ALL SUCH CLAIMS. IN NO EVENT SHALL LICENSOR BE RESPONSIBLE FOR THE ENVIRONMENTAL CONDITION OF THE PREMISES.

- (c) **TO THE FULLEST EXTENT PERMITTED BY LAW, LICENSEE FURTHER AGREES, REGARDLESS OF ANY NEGLIGENCE OR ALLEGED NEGLIGENCE OF ANY INDEMNITEE, TO INDEMNIFY, AND HOLD HARMLESS THE INDEMNITEES AGAINST AND ASSUME THE DEFENSE OF ANY LIABILITIES ASSERTED AGAINST OR SUFFERED BY ANY INDEMNITEE UNDER OR RELATED TO THE FEDERAL EMPLOYERS' LIABILITY ACT ("FELA") WHENEVER EMPLOYEES OF LICENSEE OR ANY OF ITS AGENTS, INVITEES, OR CONTRACTORS CLAIM OR ALLEGE THAT THEY ARE EMPLOYEES OF ANY INDEMNITEE OR OTHERWISE. THIS INDEMNITY SHALL ALSO EXTEND, ON THE SAME BASIS, TO FELA CLAIMS BASED ON ACTUAL OR ALLEGED VIOLATIONS OF ANY FEDERAL, STATE OR LOCAL LAWS OR REGULATIONS, INCLUDING BUT NOT LIMITED TO THE SAFETY APPLIANCE ACT, THE LOCOMOTIVE INSPECTION ACT, THE OCCUPATIONAL SAFETY AND HEALTH ACT, THE RESOURCE CONSERVATION AND RECOVERY ACT, AND ANY SIMILAR STATE OR FEDERAL STATUTE.**
- (d) Upon written notice from Licensor, Licensee agrees to assume the defense of any lawsuit or other proceeding brought against any Indemnitee by any entity, relating to any matter covered by this License for which Licensee has an obligation to assume liability for and/or save and hold harmless any Indemnitee. Licensee shall pay all costs incident to such defense, including, but not limited to, attorneys' fees, investigators' fees, litigation and appeal expenses, settlement payments, and amounts paid in satisfaction of judgments.

**PERSONAL PROPERTY WAIVER**

22. **ALL PERSONAL PROPERTY OF LICENSEE, INCLUDING, BUT NOT LIMITED TO, FIXTURES, EQUIPMENT, OR RELATED MATERIALS UPON THE PREMISES WILL BE AT THE RISK OF LICENSEE ONLY, AND NO INDEMNITEE WILL BE LIABLE FOR ANY DAMAGE THERETO OR THEFT THEREOF, WHETHER OR NOT DUE IN WHOLE OR IN PART TO THE NEGLIGENCE OF ANY INDEMNITEE.**

**INSURANCE**

23. Licensee shall, at its sole cost and expense, procure and maintain during the life of this License the following insurance coverage:
- A. Commercial General Liability Insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$2,000,000 each occurrence and an aggregate limit of at least \$4,000,000. Coverage must be purchased on a post 1998 ISO occurrence or equivalent and include coverage for, but not limited to, the following:
- ◆ Bodily Injury and Property Damage
  - ◆ Personal Injury and Advertising Injury
  - ◆ Fire legal liability
  - ◆ Products and completed operations

This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- ◆ It is agreed that any workers' compensation exclusion does not apply to Licensor's payments related to the Federal Employers Liability Act or a Licensor Wage Continuation Program or similar programs and any payments made are deemed not to be either payments made or obligations assumed under any Workers Compensation, disability benefits, or unemployment compensation law or similar law.
- ◆ The definition of insured contract shall be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- ◆ Any exclusions related to the explosion, collapse and underground hazards shall be removed.

No other endorsements limiting coverage may be included on the policy.

- B. Business Automobile Insurance. This insurance shall contain a combined single limit of at least \$1,000,000 per occurrence, and include coverage for, but not limited to the following:
- ◆ Bodily injury and property damage
  - ◆ Any and all vehicles owned, used or hired
- C. Workers Compensation and Employers Liability Insurance. This insurance shall include coverage for, but not limited to:
- ◆ Licensee's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.
  - ◆ Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.
- D. Railroad Protective Liability Insurance. This insurance shall name only the Licensor as the Insured with coverage of at least \$2,000,000 per occurrence and \$6,000,000 in the aggregate. The coverage obtained under this policy shall only be effective during the initial installation and/or construction of the Electric Supply Line. **THE CONSTRUCTION OF THE ELECTRIC SUPPLY LINE SHALL BE COMPLETED WITHIN ONE (1) YEAR OF THE EFFECTIVE DATE.** If further maintenance of the Electric Supply Line is needed at a later date, an additional Railroad Protective Liability Insurance Policy shall be required. The policy shall be issued on a standard ISO form CG 00 35 10 93 and include the following:
- ◆ Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
  - ◆ Endorsed to include the Limited Seepage and Pollution Endorsement.
  - ◆ Endorsed to include Evacuation Expense Coverage Endorsement.
  - ◆ No other endorsements restricting coverage may be added.
  - ◆ The original policy must be provided to the Licensor prior to performing any work or services under this Agreement

In lieu of providing a Railroad Protective Liability Policy, Licensee may participate in Licensor's Blanket Railroad Protective Liability Insurance Policy available to Licensee or its contractor. The limits of coverage are the same as above. The cost is \$400.

- I elect to participate in Licensor's Blanket Policy;
- I elect not to participate in Licensor's Blanket Policy.

Other Requirements:

Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages and certificates of insurance shall reflect that no exclusion exists.

Licensee agrees to waive its right of recovery against Licensor for all claims and suits against Licensor. In addition, its insurers, through policy endorsement, waive their right of subrogation against Licensor for all claims and suits. The certificate of insurance must reflect waiver of subrogation endorsement. Licensee further waives its right of recovery, and its insurers also waive their right of subrogation against Licensor for loss of its owned or leased property or property under its care, custody or control.

Licensee's insurance policies through policy endorsement must include wording which states that the policy shall be primary and non-contributing with respect to any insurance carried by Licensor. The certificate of insurance must reflect that the above wording is included in evidenced policies.

All policy(ies) required above (excluding Workers' Compensation and if applicable, Railroad Protective) shall include a severability of interest endorsement and shall name Licensor and Staubach Global Services – RR, Inc. as additional insureds with respect to work performed under this License. Severability of interest and naming Licensor and Staubach Global Services - RR, Inc. as additional insureds shall be indicated on the certificate of insurance.

Licensee is not allowed to self-insure without the prior written consent of Licensor. If granted by Licensor, any deductible, self-insured retention or other financial responsibility for claims shall be covered directly by Licensee in lieu of insurance. Any and all Licensor liabilities that would otherwise, in accordance with the provisions of this License, be covered by Licensee's insurance will be covered as if Licensee elected not to include a deductible, self-insured retention, or other financial responsibility for claims.

Prior to commencing any work, Licensee shall furnish to Licensor an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments and referencing the contract audit/folder number if available. The policy(ies) shall contain a provision that obligates the insurance company(ies) issuing such policy(ies) to notify Licensor in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. This cancellation provision shall be indicated on the certificate of insurance. Upon request from Licensor, a certified duplicate original of any required policy shall be inspected at Licensee's offices during normal business hours.

Any insurance policy shall be written by a reputable insurance company acceptable to Licensor or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provided.

Licensee WARRANTS that this License has been thoroughly reviewed by Licensee's insurance agent(s)/broker(s), who have been instructed by Licensee to procure the insurance coverage required by this License. Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.

Not more frequently than once every five years, Licensor may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by Licensee, Licensee shall require that the subcontractor shall provide and maintain insurance coverages as set forth herein, naming Licensor as an additional insured, and shall require that the subcontractor shall release, defend and indemnify Licensor to the same extent and under the same terms and conditions as Licensee is required to release, defend and indemnify Licensor herein.

Failure to provide evidence as required by this section shall entitle, but not require, Licensor to terminate this License immediately. Acceptance of a certificate that does not comply with this section shall not operate as a waiver of Licensee's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by Licensee shall not be deemed to release or diminish the liability of Licensee including, without limitation, liability under the indemnity provisions of this License. Damages recoverable by Licensor shall not be limited by the amount of the required insurance coverage.

For purposes of this Section 23, Licensor shall mean "Burlington Northern Santa Fe Corporation", "BNSF Railway Company" and the subsidiaries, successors, assigns and affiliates of each.

#### **ENVIRONMENTAL**

24. (a) Licensee shall strictly comply with all federal, state and local environmental laws and regulations in its use of the Premises, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, CERCLA (collectively referred to as the "Environmental Laws"). Licensee shall not maintain a treatment, storage, transfer or disposal facility, or underground storage tank, as defined by Environmental Laws on the Premises. Licensee shall not release or suffer the release of oil or hazardous substances, as defined by Environmental Laws on or about the Premises.
- (b) Licensee shall give Licensor immediate notice to Licensor's Resource Operations Center at (800) 832-5452 of any release of hazardous substances on or from the Premises, violation of Environmental Laws, or inspection or inquiry by governmental authorities charged with enforcing Environmental Laws with

respect to Licensee's use of the Premises. Licensee shall use the best efforts to promptly respond to any release on or from the Premises. Licensee also shall give Licensor immediate notice of all measures undertaken on behalf of Licensee to investigate, remediate, respond to or otherwise cure such release or violation.

- (c) In the event that Licensor has notice from Licensee or otherwise of a release or violation of Environmental Laws arising in any way with respect to the Electric supply Line which occurred or may occur during the term of this License, Licensor may require Licensee, at Licensee's sole risk and expense, to take timely measures to investigate, remediate, respond to or otherwise cure such release or violation affecting the Premises or Licensor's right-of-way.
- (d) Licensee shall promptly report to Licensor in writing any conditions or activities upon the Premises known to Licensee which create a risk of harm to persons, property or the environment and shall take whatever action is necessary to prevent injury to persons or property arising out of such conditions or activities; provided, however, that Licensee's reporting to Licensor shall not relieve Licensee of any obligation whatsoever imposed on it by this License. Licensee shall promptly respond to Licensor's request for information regarding said conditions or activities.

#### **ALTERATIONS**

- 25. Licensee may not make any alterations to the Premises or permanently affix anything to the Premises or any buildings or other structures adjacent to the Premises without Licensor's prior written consent.

#### **NO WARRANTIES**

- 26. **LICENSOR'S DUTIES AND WARRANTIES ARE LIMITED TO THOSE EXPRESSLY STATED IN THIS LICENSE AND SHALL NOT INCLUDE ANY IMPLIED DUTIES OR IMPLIED WARRANTIES, NOW OR IN THE FUTURE. NO REPRESENTATIONS OR WARRANTIES HAVE BEEN MADE BY LICENSOR OTHER THAN THOSE CONTAINED IN THIS LICENSE. LICENSEE HEREBY WAIVES ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE PREMISES WHICH MAY EXIST BY OPERATION OF LAW OR IN EQUITY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, HABITABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

#### **QUIET ENJOYMENT**

- 27. **LICENSOR DOES NOT WARRANT ITS TITLE TO THE PREMISES NOR UNDERTAKE TO DEFEND LICENSEE IN THE PEACEABLE POSSESSION OR USE THEREOF. NO COVENANT OF QUIET ENJOYMENT IS MADE.**

#### **DEFAULT**

- 28. If default shall be made in any of the covenants or agreements of Licensee contained in this License and Licensee shall fail to cure said default within 30 days after written notice is provided to Licensee by Licensor, or in case of any assignment or transfer of this License by operation of law, Licensor may, at its option, terminate this License by

serving five (5) days' notice in writing upon Licensee. Any waiver by Licensor of any default or defaults shall not constitute a waiver of the right to terminate this License for any subsequent default or defaults, nor shall any such waiver in any way affect Licensor's ability to enforce any Section of this License. The remedy set forth in this Section 28 shall be in addition to, and not in limitation of, any other remedies that Licensor may have at law or in equity.

### **LIENS AND CHARGES**

29. Licensee shall promptly pay and discharge any and all liens arising out of any construction, alterations or repairs done, suffered or permitted to be done by Licensee on Premises. Licensor is hereby authorized to post any notices or take any other action upon or with respect to Premises that is or may be permitted by law to prevent the attachment of any such liens to Premises; provided, however, that failure of Licensor to take any such action shall not relieve Licensee of any obligation or liability under this Section 29 or any other Section of this License. Licensee shall pay when due any taxes, assessments or other charges (collectively, "Taxes") levied or assessed upon the Electric Supply Line or any other improvements constructed or installed upon the Premises by or for Licensee (collectively, "Improvements") by any governmental or quasi-governmental body or any Taxes levied or assessed against Licensor or the Premises that are attributable to the Improvements.

### **TERMINATION**

30. This License may be terminated by Licensor, at any time, by serving ninety (90) days' written notice of termination upon Licensee; provided that if Licensor terminates this License for its convenience pursuant to its right to do so under this Section 30, Licensor agrees to offer Licensee the opportunity to enter into another license for the use of premises adjacent to or in close proximity to the Premises, if in Licensor's sole discretion such adjacent premises are available, provided further that Licensee agrees to execute Licensor's then-standard license agreement for such adjacent premises. This License may be terminated by Licensee upon execution of Licensor's Mutual Termination Letter Agreement then in effect. Upon expiration of the time specified in such notice, this License and all rights of Licensee shall absolutely cease.
31. If Licensee fails to surrender to Licensor the Premises, upon any termination of this License, all liabilities and obligations of Licensee hereunder shall continue in effect until the Premises are surrendered. Termination shall not release Licensee from any liability or obligation, whether of indemnity or otherwise, resulting from any events happening prior to the date of termination.

### **ASSIGNMENT**

32. Neither Licensee, nor the heirs, legal representatives, successors, or assigns of Licensee, nor any subsequent assignee, shall assign or transfer this License or any interest herein, without the prior written consent and approval of Licensor, which may be withheld in Licensor's sole discretion. Licensee may assign this License to the following upon prior written notice to Licensor together with an agreement by such assignee to be bound by the terms and conditions of this License: (a) Otter Tail Power Company, a Minnesota corporation ("Otter Tail"); or (b) an Affiliate of Licensee or Otter Tail. An "Affiliate" shall be deemed to be the following: (i) a parent or wholly owned subsidiary

corporation of Licensee (a corporation or business entity under common control, direct or indirect, of a parent of Licensee); (ii) a corporation which results from the reconstruction, consolidation, amalgamation or merger of Licensee, or a partnership or other business entity in which Licensee (or not less than one half of the principals thereof) has the majority interest and which affiliate has at least as much net worth as Licensee; or (iii) a transferee who is a purchaser of all or substantially all of the interests of Licensee in and to the Electric Supply Line. Notwithstanding the foregoing, Licensor hereby consents to the granting of a security interest in and an assignment by Licensee of this License and its rights herein to a lender, security holder, investor, equity provider to Licensee and/or others providing financing or refinancing to or on behalf of Licensee (collectively, the "Financing Parties"), or any trustee or agent acting on behalf of a Financing Party, provided that each such Financing Party enters into Licensor's then-current standard form of Collateral Security Agreement.

### **NOTICES**

33. Any notice required or permitted to be given hereunder by one party to the other shall be in writing and the same shall be given and shall be deemed to have been served and given if (i) placed in the United States mail, certified, return receipt requested, or (ii) deposited into the custody of a nationally recognized overnight delivery service, addressed to the party to be notified at the address for such party specified below, or to such other address as the party to be notified may designate by giving the other party no less than thirty (30) days' advance written notice of such change in address.

If to Licensor:           Staubach Global Services - RR, Inc.  
                                  3017 Lou Menk Drive, Suite 100  
                                  Fort Worth, TX 76131-2800  
                                  Attn: Licenses/Permits

with a copy to:         BNSF Railway Company  
                                  2500 Lou Menk Dr. – AOB-3  
                                  Fort Worth, TX 76131  
                                  Attn: Manager – Land Revenue Management

If to Licensee:         M-Power, LLC  
                                  602 Lincoln Ave.  
                                  Finley, ND 58230

### **SURVIVAL**

34. Neither termination nor expiration will release either party from any liability or obligation under this License, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration, or, if later, the date when the Electric Supply Line and improvements are removed and the Premises are restored to its condition as of the Effective Date.

### **RECORDATION**

35. It is understood and agreed that this License shall not be placed on public record.

**APPLICABLE LAW**

36. All questions concerning the interpretation or application of provisions of this License shall be decided according to the substantive laws of the state of Texas without regard to conflicts of law provisions.

**SEVERABILITY**

37. To the maximum extent possible, each provision of this License shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this License shall be prohibited by, or held to be invalid under, applicable law, such provision shall be ineffective solely to the extent of such prohibition or invalidity, and this shall not invalidate the remainder of such provision or any other provision of this License.

**INTEGRATION**

38. This License is the full and complete agreement between Licensor and Licensee with respect to all matters relating to Licensee's use of the Premises, and supersedes any and all other agreements between the parties hereto relating to Licensee's use of the Premises. However, nothing herein is intended to terminate any surviving obligation of Licensee or Licensee's obligation to defend and hold Licensor harmless in any prior written agreement between the parties.

**MISCELLANEOUS**

39. In the event that Licensee consists of two or more parties, all the covenants and agreements of Licensee herein contained shall be the joint and several covenants and agreements of such parties.
40. The waiver by Licensor of the breach of any provision herein by Licensee shall in no way impair the right of Licensor to enforce that provision for any subsequent breach thereof.

The remainder of this page is intentionally blank.

41. All provisions contained in this License shall be binding upon, inure to the benefit of, and be enforceable by the respective successors and assigns of Licensor and Licensee to the same extent as if each such successor and assign was named a party to this License.

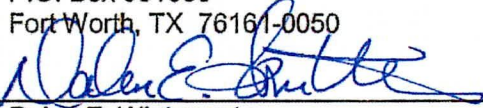
Staubach Global Services – RR, Inc. is acting as representative for BNSF Railway Company.

**IN WITNESS WHEREOF**, this License has been duly executed, in duplicate, by the parties hereto as of the day and year first above written.

**BNSF RAILWAY COMPANY**

P.O. Box 961050  
Fort Worth, TX 76161-0050

By:

  
Dalen E. Wintermute

Title: Manager – Land Revenue Management

**M-POWER, LLC**

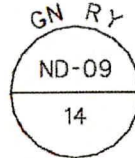
602 Lincoln Ave.  
Finley, ND 58230

By:

  
Title: Secretary

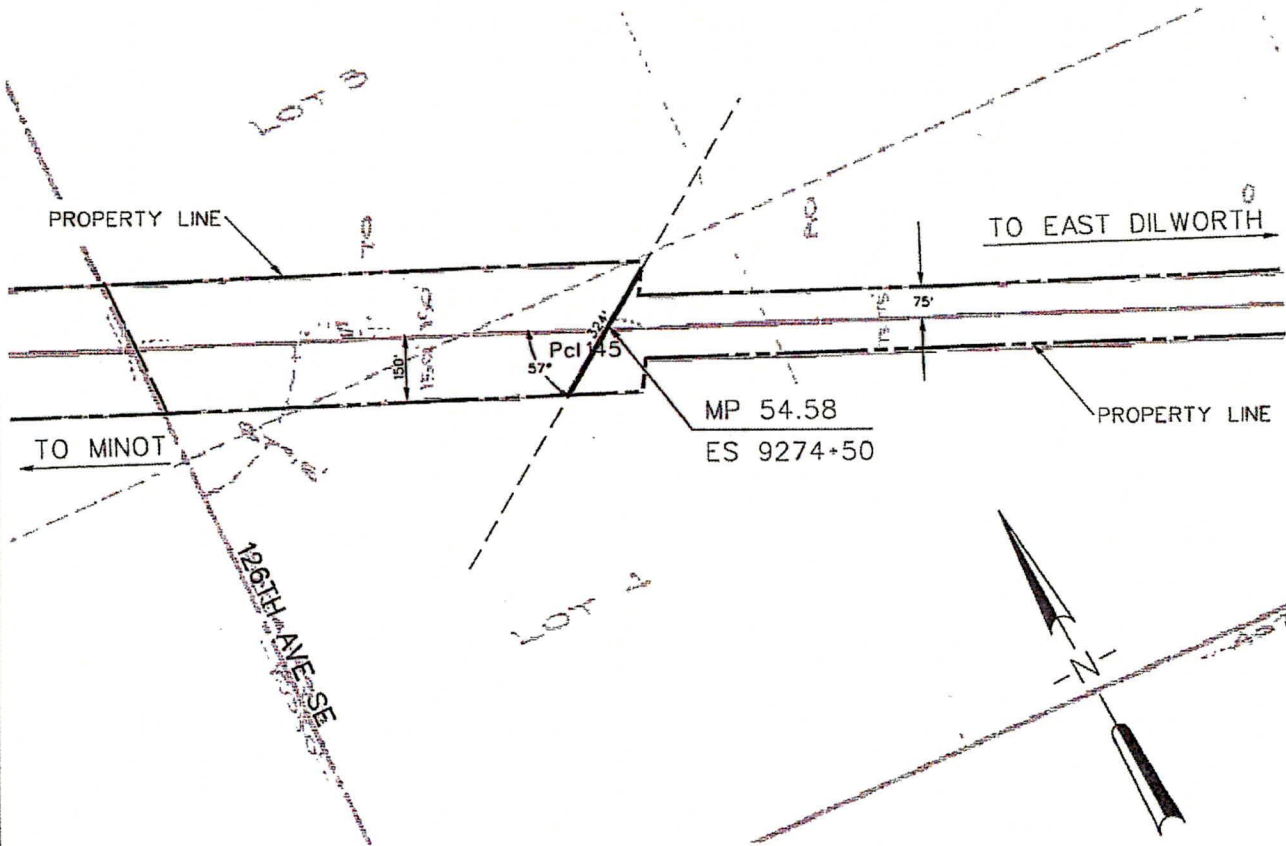
**EXHIBIT "A"**  
 ATTACHED TO CONTRACT BETWEEN  
**BNSF RAILWAY COMPANY**  
 AND  
**M-POWER, LLC**

SCALE: 1 IN. = 400 FT.  
 TWIN CITIES DIV.  
 KO SUBDIV. L.S. 0034  
 DATE 04/11/2008



SECTION: 7  
 TOWNSHIP: 14.3N  
 RANGE: 56W  
 MERIDIAN: 5PM

MAP REF. R61259



DESCRIPTION OF WIRES OVER TRACK  
 WIRES LOCATED AS SHOWN BOLD

TYPE	NUMBER	VOLTAGE	DISTANCE ABOVE TOP OF RAIL	CLEARANCE RAILWAY COMPANY'S WIRES
ELE.	5-ACSR	230KV	30'	N/A

NEAR PILLSBURY  
 COUNTY OF BARNES

STATE OF ND

AFV



REPLY TO  
ATTENTION OF

North Dakota Regulatory Office

**DEPARTMENT OF THE ARMY**  
CORPS OF ENGINEERS, OMAHA DISTRICT  
NORTH DAKOTA REGULATORY OFFICE  
1513 SOUTH 12<sup>TH</sup> STREET  
BISMARCK ND 58504-6640  
February 13, 2009

Otter Tail Corporation, d/b/a Otter Tail Power Company  
ATTN: Land Management Department  
215 Cascade Street  
Fergus Falls, Minnesota 56538-0496

To Whom It May Concern:

This letter is to acknowledge receipt of the Notice of Assignment executed by **Otter Tail Power Corporation** and **M-Power LLC** on February 6, 2009. Our records pertaining to Nationwide Permit No. **NWO-2008-2611-BIS** dated October 10, 2008 have been updated to reflect the change in ownership and responsibility. All terms and conditions of the permit remain in full force and effect.

If you have any questions regarding the permit, permit conditions or our program, please feel free to contact me or **Toni R. Erhardt** of my staff at the above address or by phone at (701) 255-0015.

Sincerely,

Daniel E. Cimarosti  
Regulatory Program Manager  
North Dakota

Copy Furnished:  
M-Power, LLC  
ATTN: Keith Monson, President  
PO Box 335  
Finley, North Dakota 58203

**U.S. Army Corps of Engineers  
North Dakota Regulatory Office  
1513 South 12th Street  
Bismarck, North Dakota 58504  
Telephone (701) 255-0015 Fax (701) 255-4917**

**IMPORTANT INSTRUCTIONS FOR OUR PERMIT CUSTOMERS**

Notice of the Reissuance of Nationwide Permits was published in the Federal Register [72 FR 11092] on March 12, 2007. The Nationwide Permits went into effect on March 19, 2007. Project compliance certification is required by General Condition 26. The following instructions are provided to clarify the information contained within the nationwide permit authorization letter and attachments.<sup>1</sup>

**STEP 1**

Review the permit authorization and be sure you understand the terms and conditions for the authorization to remain valid. If you do not understand, or have any questions, please do not hesitate to contact this office at the above address.

**STEP 2**

Complete your project in accordance with the permit terms and conditions. [Remember that any deviation from the original plans and specifications of your project could require additional authorization from this office.]

**STEP 3**

Within thirty (30) days of project completion, please complete the permit compliance certification contained within your permit authorization letter. A photocopy of the first page (marked with a colored COPY stamp) has been provided for this purpose. Mark the applicable statements, sign and date where indicated, and forward the COPY to this office at the above address.

---

<sup>1</sup>There is no charge associated with any aspect of this nationwide authorization or the follow-up compliance certification.



# COPY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, OMAHA DISTRICT  
NORTH DAKOTA REGULATORY OFFICE  
1513 SOUTH 12<sup>TH</sup> STREET  
BISMARCK ND 58504-6640

October 10, 2008

North Dakota Regulatory Office

[NWO-2008-2611-BIS]

Kadrmass, Lee and Jackson  
ATTN: Grady Wolf  
PO Box 1157  
Bismarck, North Dakota 58502-1157

Dear Mr. Wolf:

1. **Project Authorization.** We have reviewed your October 10, 2008 request on behalf of **M-Power, LLC.** for Department of the Army (DA) authorization to discharge material into a wetland in conjunction with construction of an access road to a substation being built to service the Luverne Wind Farm in Steele and Griggs County.

An Approved Jurisdictional Determination (JD) has not been completed for the project site. You may request this office complete an Approved JD prior to your commencement of any work in the waterways. Completion of such a JD may require coordination with Corps Headquarters and the US Environmental Protection Agency. If you do not want the Corps to complete an Approved JD, you may proceed with the proposed project in accordance with the terms and conditions of Department of the Army Nationwide Permit No. 12, found in the March 12, 2007 Federal Register (72 FR 11092), Reissuance of Nationwide Permits. Enclosed is a fact sheet that fully describes this Nationwide Permit and lists the General and Regional Conditions and the Section 401 Water Quality Certification Requirements, if applicable, that must be complied with. **Please note any deviations from the original plans and specifications of your project could require additional authorization from this office.** This verification will be valid until **October 10, 2010.**

2. **Project Location.** The project is located in Section 35, Township 145 North, Range 57 West, Steele County, North Dakota.

3. **Project Compliance Certification.** *In compliance with General Condition 26, you are required to submit the following project compliance certification within thirty (30) days of project completion. [Please check all applicable statements]*

- I certify that I have completed the project as permitted.
- I certify that I have completed a modified version of the project.
- I certify that I have completed all required mitigation.

Permittee's Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**DEPARTMENT OF THE ARMY**  
 CORPS OF ENGINEERS, OMAHA DISTRICT  
 NORTH DAKOTA REGULATORY OFFICE  
 1513 SOUTH 12<sup>TH</sup> STREET  
 BISMARCK ND 58504-6640  
 October 10, 2008

North Dakota Regulatory Office

[NWO-2008-2611-BIS]

Kadrmass, Lee and Jackson  
 ATTN: Grady Wolf  
 PO Box 1157  
 Bismarck, North Dakota 58502-1157

Dear Mr. Wolf:

1. **Project Authorization.** We have reviewed your October 10, 2008 request on behalf of **M-Power, LLC.** for Department of the Army (DA) authorization to discharge material into a wetland in conjunction with construction of an access road to a substation being built to service the Luverne Wind Farm in Steele and Griggs County.

An Approved Jurisdictional Determination (JD) has not been completed for the project site. You may request this office complete an Approved JD prior to your commencement of any work in the waterways. Completion of such a JD may require coordination with Corps Headquarters and the US Environmental Protection Agency. If you do not want the Corps to complete an Approved JD, you may proceed with the proposed project in accordance with the terms and conditions of Department of the Army Nationwide Permit No. 12, found in the March 12, 2007 Federal Register (72 FR 11092), Reissuance of Nationwide Permits. Enclosed is a fact sheet that fully describes this Nationwide Permit and lists the General and Regional Conditions and the Section 401 Water Quality Certification Requirements, if applicable, that must be complied with. **Please note any deviations from the original plans and specifications of your project could require additional authorization from this office.** This verification will be valid until **October 10, 2010.**

2. **Project Location.** The project is located in Section 35, Township 145 North, Range 57 West, Steele County, North Dakota.

3. **Project Compliance Certification.** *In compliance with General Condition 26, you are required to submit the following project compliance certification within thirty (30) days of project completion. [Please check all applicable statements]*

- I certify that I have completed the project as permitted.
- I certify that I have completed a modified version of the project.
- I certify that I have completed all required mitigation.

Permittee's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

4. **Other Authorizations.** This determination is applicable only to the permit program administered by the US Army Corps of Engineers. It does not eliminate the need to obtain other Federal, state, tribal, and local approvals before beginning work.

5. **Responsibility.** You are responsible for all work accomplished in accordance with the terms and conditions of this Nationwide Permit. If a contractor or other authorized representative will be accomplishing the work authorized by the Nationwide Permit on your behalf, it is strongly recommended that they be provided a copy of this letter and the attached conditions so that they are aware of the limitations of the Nationwide Permit. Any activity that fails to comply with all the terms and conditions of the Nationwide Permit will be considered unauthorized and subject to appropriate enforcement action.

6. **Other Special Conditions.**

**Endangered Species**

That the permittee shall report any threatened or endangered species at the project site. Notification shall be made to the North Dakota Regulatory Office by telephone or fax within 24 hours. Written confirmation shall be provided within 48 hours if deemed necessary by the North Dakota Regulatory Office.

**Cultural Resources**

That the permittee and/or the permittee's contractor, or any of the employees, subcontractors or other persons working in the performance of a contract or contract(s) to complete the work authorized herein, shall cease work immediately and report the discovery of any previously unknown historic or archeological remains to the North Dakota Regulatory Office. Notification shall be by telephone or fax within 24 hours of the discovery and, in writing, within 48 hours. The North Dakota Regulatory Office will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places. Work shall not resume until notified by the North Dakota Regulatory Office.

**Spawning Season**


That no regulated activity within waters of the United States listed as Class III or higher on the 1978 Stream Evaluation Map for the State of North Dakota or on the North Dakota Game and Fish Department's website as a North Dakota Public Fishing Water shall occur between 15 April and 1 June. No regulated activity within the Red River of the North shall occur between 15 April and 1 July.

7. **Additional Information.**

**Suitable Material and 1978 Stream Evaluation Map:** Permittees are reminded that General Condition No. 6 prohibits the use of unsuitable material. In addition, organic debris, some building waste, and materials excessive in fines are not suitable material. Specific verbiage on prohibited materials and the 1978 Stream Evaluation Map for the State of North Dakota can be accessed on the North Dakota Regulatory Office's website at: <https://www.nwo.usace.army.mil/html/od-rnd/ndhome.htm>.

8. **Points-of-Contact.** If you have any questions concerning this determination, please contact **Toni R. Erhardt** of this office by letter or telephone at 701-255-0015 and reference Authorization Number **NWO-2008-2611-BIS**.

Sincerely

A handwritten signature in black ink that reads "Daniel E. Cimarosti". The signature is written in a cursive style with a large initial 'D' and a distinct 'E'.

Daniel E. Cimarosti  
Regulatory Program Manager  
North Dakota

Enclosure

**FACT SHEET  
NATIONWIDE PERMIT 12  
(2007)**

**UTILITY LINE ACTIVITIES.** Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2 acre of waters of the United States.

**Utility lines:** This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in pre-construction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term "utility line" does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

**Utility line substations:** This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2 acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

**Foundations for overhead utility line towers, poles, and anchors:** This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

**Access roads:** This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the total discharge from a single and complete project does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or

under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP also authorizes temporary structures, fills, and work necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

**Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) the activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (Sections 10 and 404)

**Note 1:** Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters), copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

**Note 2:** Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, accordance with the requirements for temporary fills.

**Note 3:** Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

**General Conditions:** To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer.

**1. Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

**2. Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

**3. Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

**4. Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

**5. Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48.

**6. Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

**7. Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

**8. Adverse Effects From Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

**9. Management of Water Flows.** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

**10. Fills Within 100-Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

**11. Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

**12. Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

**13. Removal of Temporary Fills.** Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

**14. Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

**15. Wild and Scenic Rivers.** No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

**16. Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

**17. Endangered Species.** (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical

habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at <http://www.fws.gov/> and <http://www.noaa.gov/fisheries.html> respectively.

**18. Historic Properties.** (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

**19. Designated Critical Resource Waters.** Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

**20. Mitigation.** The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address

documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

**21. Water Quality.** Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality. *Specifically in North Dakota, the North Dakota Department of Health has denied certification for projects under this Nationwide Permit proposed to cross Class I or Class 1A rivers, or classified lakes; individual certification for project in these waterways must be obtained by the project proponent prior to authorization under this Nationwide Permit. For utility line crossings of all other waters, the Department of Health has issued water quality certification provided the attached Construction and Environmental Disturbance Requirements are followed.*

**22. Coastal Zone Management.** *Not Applicable.*

**23. Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

**24. Use of Multiple Nationwide Permits.** The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

**25. Transfer of Nationwide Permit Verifications.** If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:  
"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

---

(Transferee)

---

(Date)

**26. Compliance Certification.** Each permittee who received a NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;
- (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

**27. Pre-Construction Notification.** *See attached pages.*

**28. Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

#### **Further Information**

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.

**General Condition 27. Pre-Construction Notification.**

(a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) Forty five calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);

(4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWP's and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.

(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

**2007 NATIONWIDE PERMITS  
REGIONAL CONDITIONS  
STATE OF NORTH DAKOTA  
OMAHA DISTRICT – CORPS OF ENGINEERS**

The U.S. Army Corps of Engineers has adopted the following regional conditions for activities authorized by nationwide permits within the State of North Dakota. However, the pre-construction notification requirements defined below are not applicable to Nationwide Permit 47.

**1. Wetlands Classified as Fens**

All Nationwide Permits, with the exception of 3, 5, 20, 32, 38, 45, and 47, are revoked for use in fens in North Dakota. For nationwide permits 3, 5, 20, 32, 38, and 45 permittees must notify the Corps in accordance with General Condition 27 (Notification) prior to initiating any regulated activity impacting fens in North Dakota.

Fens are wetlands that develop where a relatively constant supply of ground water to the plant rooting zone maintains saturated conditions most of the time. The water chemistry of fens reflects the mineralogy of the surrounding and underlying soils and geological materials. The substrate is carbon-accumulating, ranging from muck to peat to carbonates. These wetlands may be acidic to alkaline, have pH ranging from 3.5 to 8.4 and support a range of vegetation types. Fens may occur on slopes, in depressions, or on flats (i.e., in different hydrogeomorphic classes; after: Brinson 1993).

**2. Waters Adjacent to Natural Springs**

For all Nationwide Permits permittees must notify the Corps in accordance with General Condition No. 27 (Notification) for regulated activities located within 100 feet of the water source in natural spring areas in North Dakota. For purposes of this condition, a spring source is defined as any location where there is artesian flow emanating from a distinct point at any time during the growing season. Springs do not include seeps and other groundwater discharge areas where there is no distinct point source.

**3. Missouri River, including Lake Sakakawea and Lake Oahe within the State of North Dakota**

For all Nationwide Permits permittees must notify the Corps in accordance with General Condition No. 27 (Notification) prior to initiating any regulated activity in the Missouri River, including Lake Sakakawea and Lake Oahe, within the State of North Dakota.

**4. Historic Properties**

That the permittee and/or the permittee's contractor, or any of the employees, subcontractors or other persons working in the performance of a contract(s) to complete the work authorized herein, shall cease work and report the discovery of any previously unknown historic or archeological remains to the North Dakota Regulatory Office. Notification shall be by telephone or fax within 24 hours of the discovery and in writing within 48 hours. Work shall not resume until the permittee is notified by the North Dakota Regulatory Office.

**5. Spawning Condition**

That no regulated activity within waters of the United States listed as Class III or higher on the 1978 Stream Evaluation Map for the State of North Dakota or on the North Dakota Game and Fish Department's website as a North Dakota Public Fishing Water shall occur between 15 April and 1 June. No regulated activity within the Red River of the North shall occur between 15 April and 1 July.

### **Additional Information**

Permittees are reminded that General Condition No. 6 prohibits the use of unsuitable material. In addition, organic debris, some building waste, and materials excessive in fines are not suitable material.

Specific verbiage on prohibited materials and the 1978 Stream Evaluation Map for the State of North Dakota can be accessed on the North Dakota Regulatory Office's website at:  
<https://www.nwo.usace.army.mil/html/od-rnd/ndhome.htm>



**Construction and Environmental Disturbance Requirements**

These represent the minimum requirements of the North Dakota Department of Health. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect the waters of the State of North Dakota. All projects will be designed and implemented to restrict the losses or disturbances of soil, vegetative cover, and pollutants (chemical or biological) from a site.

**Soils**

Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative cover on disturbed areas after construction is completed. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, or land resources will be protected against compaction, vegetation loss, and unnecessary damage.

**Surface Waters**

All construction which directly or indirectly impacts aquatic systems will be managed to minimize impacts. All attempts will be made to prevent the contamination of water at construction sites from fuel spillage, lubricants, and chemicals, by following safe storage and handling procedures. Stream bank and stream bed disturbances will be controlled to minimize and/or prevent silt movement, nutrient upsurges, plant dislocation, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near these systems is forbidden without approval from this Department.

**Fill Material**

Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill materials. All temporary fills must be removed. Debris and solid wastes will be removed from the site and the impacted areas restored as nearly as possible to the original condition.



May 7, 2009

North Dakota Pollutant Discharge Elimination System (NDPDES)  
General Permit for Stormwater Discharges from Construction Activity  
NOTICE OF COVERAGE

Permittee(s)

Owner / Operator     Todd Langston  
Contact:                Otter Tail Power Company  
                              PO Box 496  
                              Fergus Falls, MN 56538-0496

Permit coverage is identified as follows:

Permit ID:                Site Name:  
NDR102671                Luverne Wind Farm Generation Outlet – Otter Tail Power Company

Please remember to update the Storm Water Pollution Prevention (SWPP) plan as appropriate for site conditions. The best management practices (BMPs) and temporary structures must be inspected, maintained and adjusted until the site is stabilized following construction activities. Once the site is stabilized as outlined in the general permit, you may end permit coverage by filing a termination notice. Cities or counties may impose additional requirements and/or specific BMPs for construction affecting their storm drainage system. Please check with the local officials to be sure all local storm water management considerations are addressed.

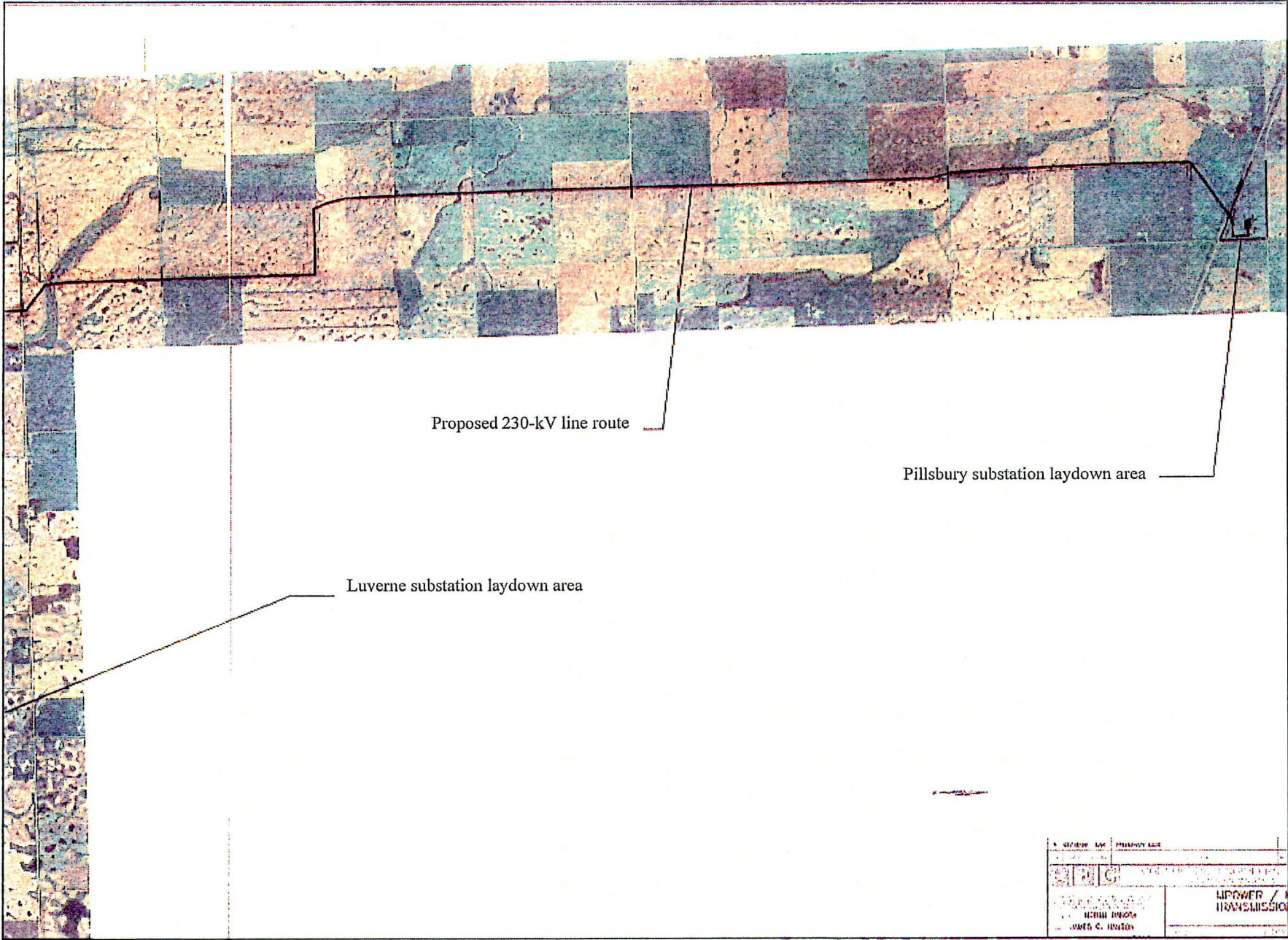
Additional Information

The permit conditions, forms and related information may be found on our web site at:

<http://www.ndhealth.gov/wq/Storm/Construction/ConstructionHome.htm>

Should you have any questions on the permit, please contact the stormwater staff person listed below.

Cory Lawson  
Division of Water Quality  
Phone: 701-328-5244  
Email: [clawson@nd.gov](mailto:clawson@nd.gov)



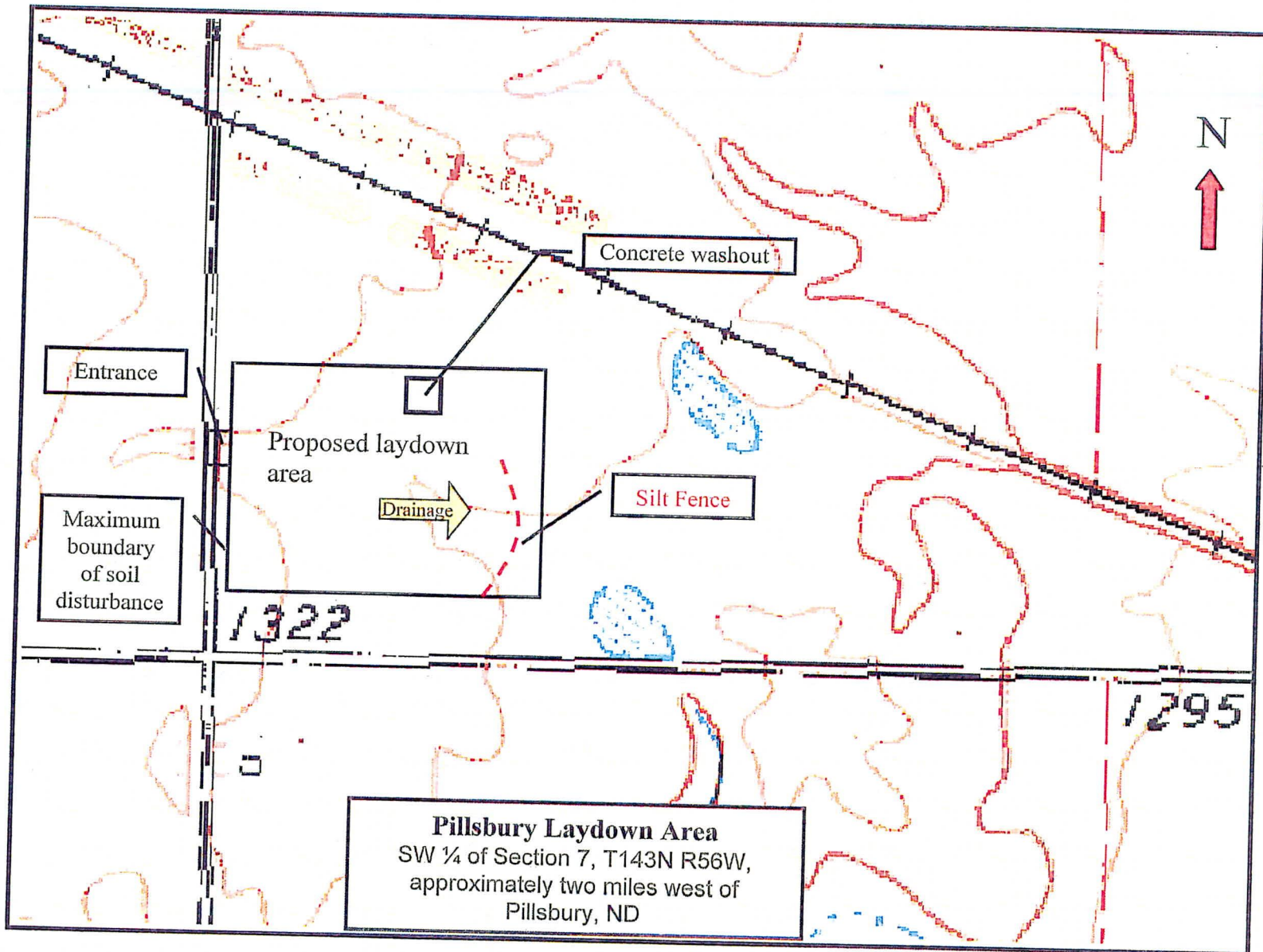
Proposed 230-kV line route

Pillsbury substation laydown area

Luverne substation laydown area

NO. 107-1000	DATE	PREPARED BY
107-1000	10/1/00	J.C. HUNTER
PROJECT TITLE		NO. 107-1000
TRANSMISSION		NO. 107-1000
DRAWN BY		J.C. HUNTER
CHECKED BY		J.C. HUNTER
APPROVED BY		J.C. HUNTER





Entrance

Maximum boundary of soil disturbance

Proposed laydown area

Drainage

Concrete washout

Silt Fence



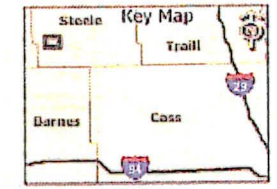
1322

1295

**Pillsbury Laydown Area**  
SW ¼ of Section 7, T143N R56W,  
approximately two miles west of  
Pillsbury, ND

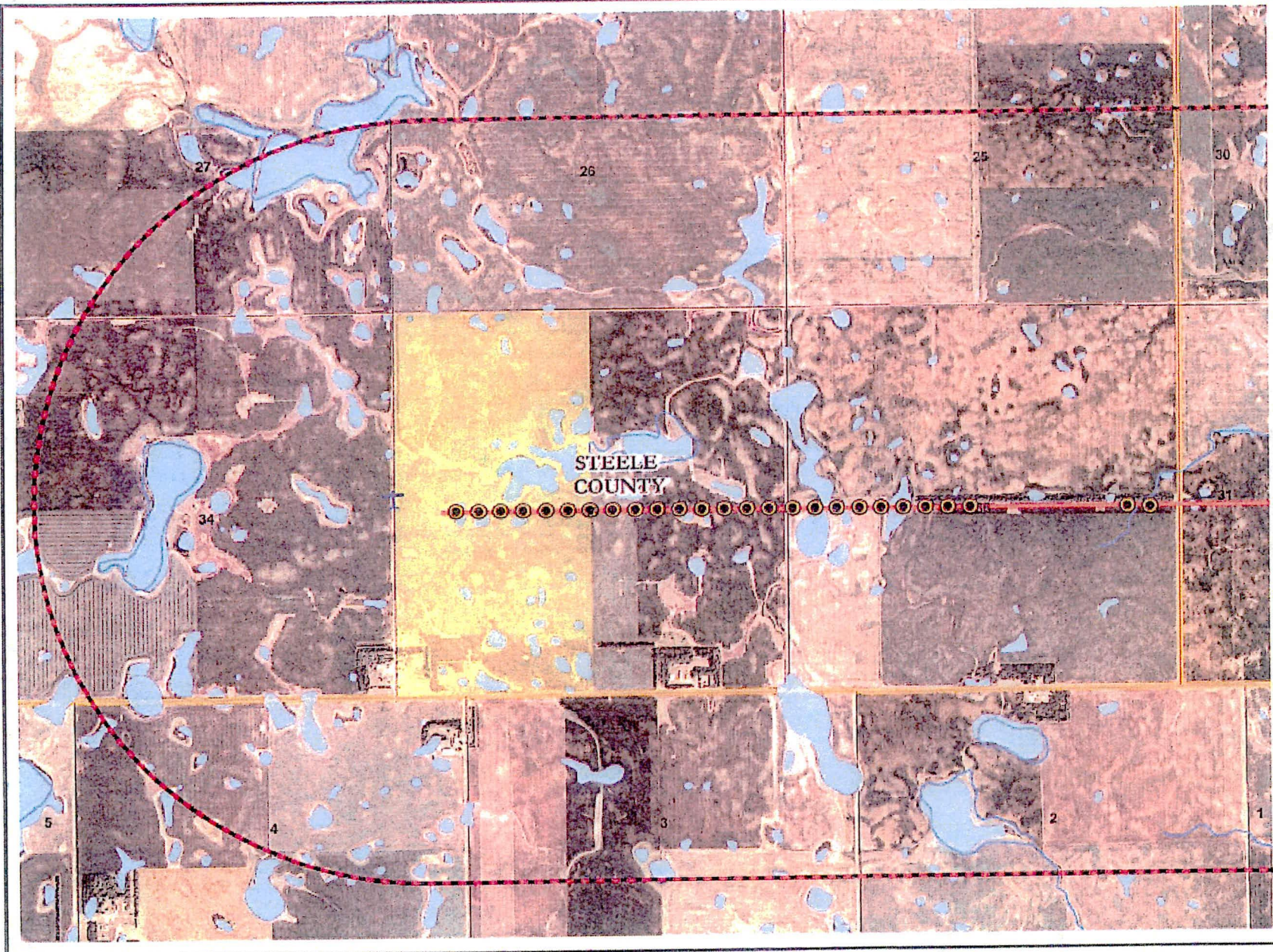
**M-Power LLC**  
*...harnessing the energy in nature.*  
**Luverne Wind Farm  
 Generation Outlet**

Proposed Aviation Ball Marker Locations  
 Figure 12  
 Sheet 5 of 5



**Legend**

- Aviation Ball Markers
- Proposed Route
- Corridor Boundary
- Proposed Substation
- Surface Water
- Airstrip
- Railroad
- County Boundary
- NW Wetlands
- UGFWS Wetland Easement

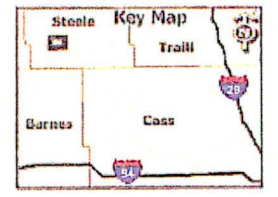


0 1,250 2,500 Feet

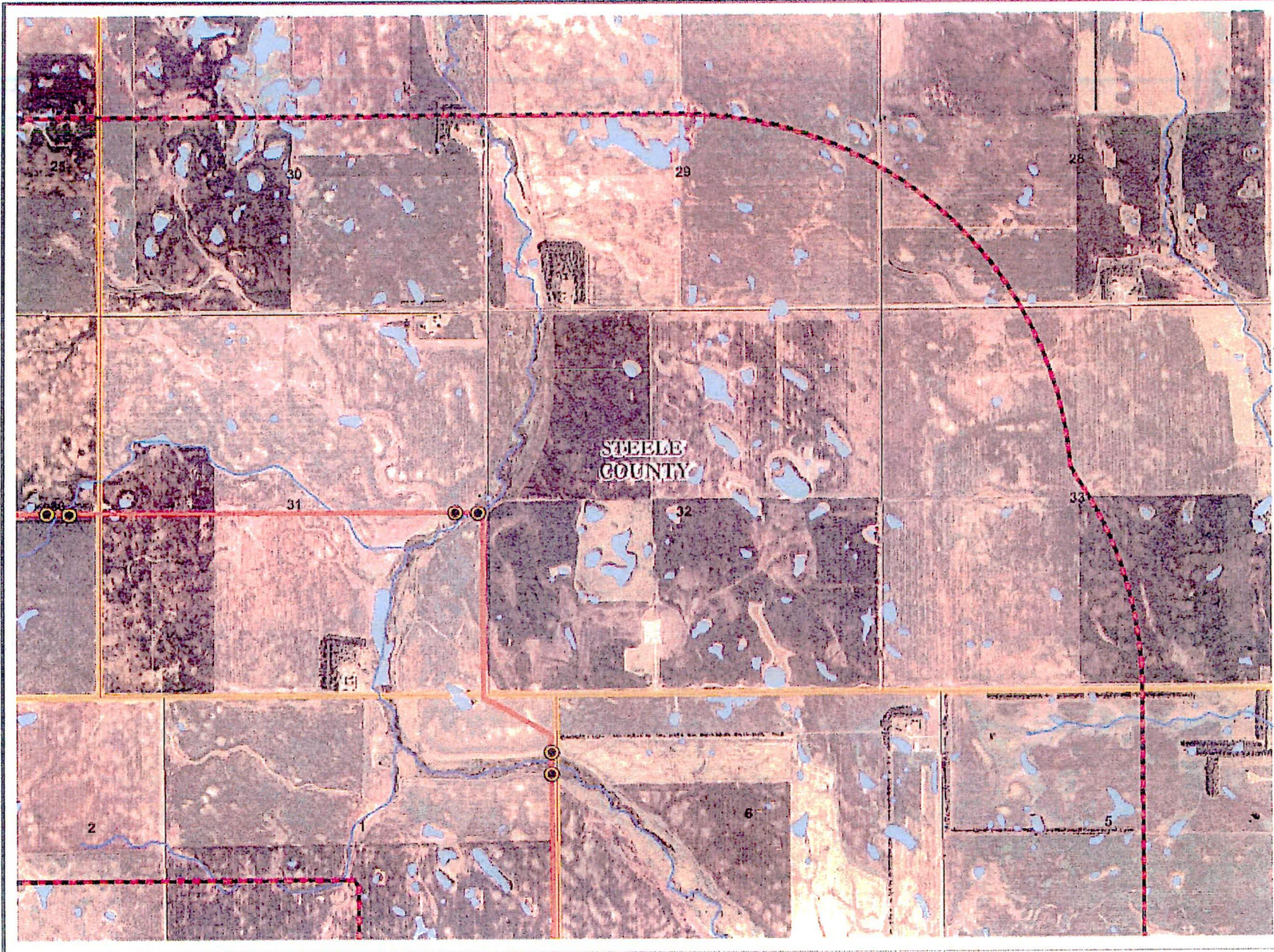
Prepared By:

**HDR**  
 July 2008

Proposed Aviation Ball Marker Locations  
 Figure 12  
 Sheet 4 of 5



- Legend**
- Aviation Ball Markers
  - Proposed Route
  - Corridor Boundary
  - Proposed Substation
  - Surface Water
  - Anstips
  - Railroad
  - County Boundary
  - NWI Wetlands
  - USFWS Wetland Easement

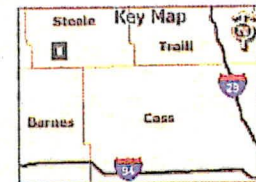


0 1,250 2,500 Feet

Prepared By:  
**HDR**  
 July 2008

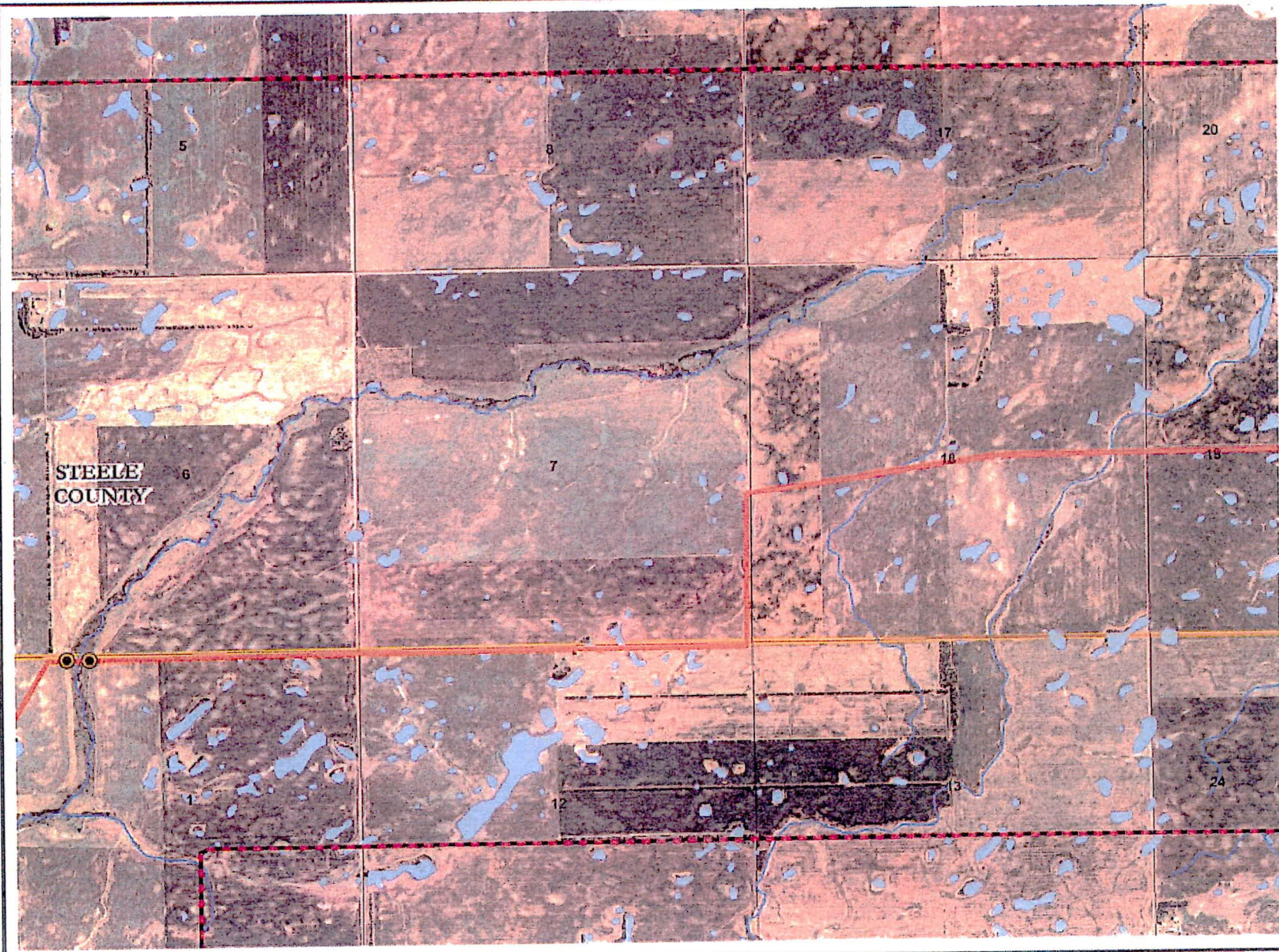
**Luverne Wind Farm  
 Generation Outlet**

Proposed Aviation Ball Marker Locations  
 Figure 12  
 Sheet 3 of 5



**Legend**

- Aviation Ball Markers
- Proposed Route
- Corridor Boundary
- Proposed Substation
- Surface Water
- Airstrips
- Railroad
- County Boundary
- NWE Wetlands
- USFWS Wetland Easement



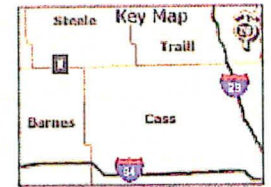
0 1,250 2,500 Feet

Prepared By:

**HDR**  
 July 2008

**M-Power, LLC**  
*...harnessing the energy in nature.*  
**Luverne Wind Farm  
 Generation Outlet**

Proposed Aviation Bell Marker Locations  
 Figure 12  
 Sheet 2 of 5



**Legend**

- Aviation Bell Markers
- Proposed Route
- Corridor Boundary
- Proposed Substation
- Surface Water
- Airstrip
- Railroad
- County Boundary
- NWI Wetlands
- USFWS Wetland Easement

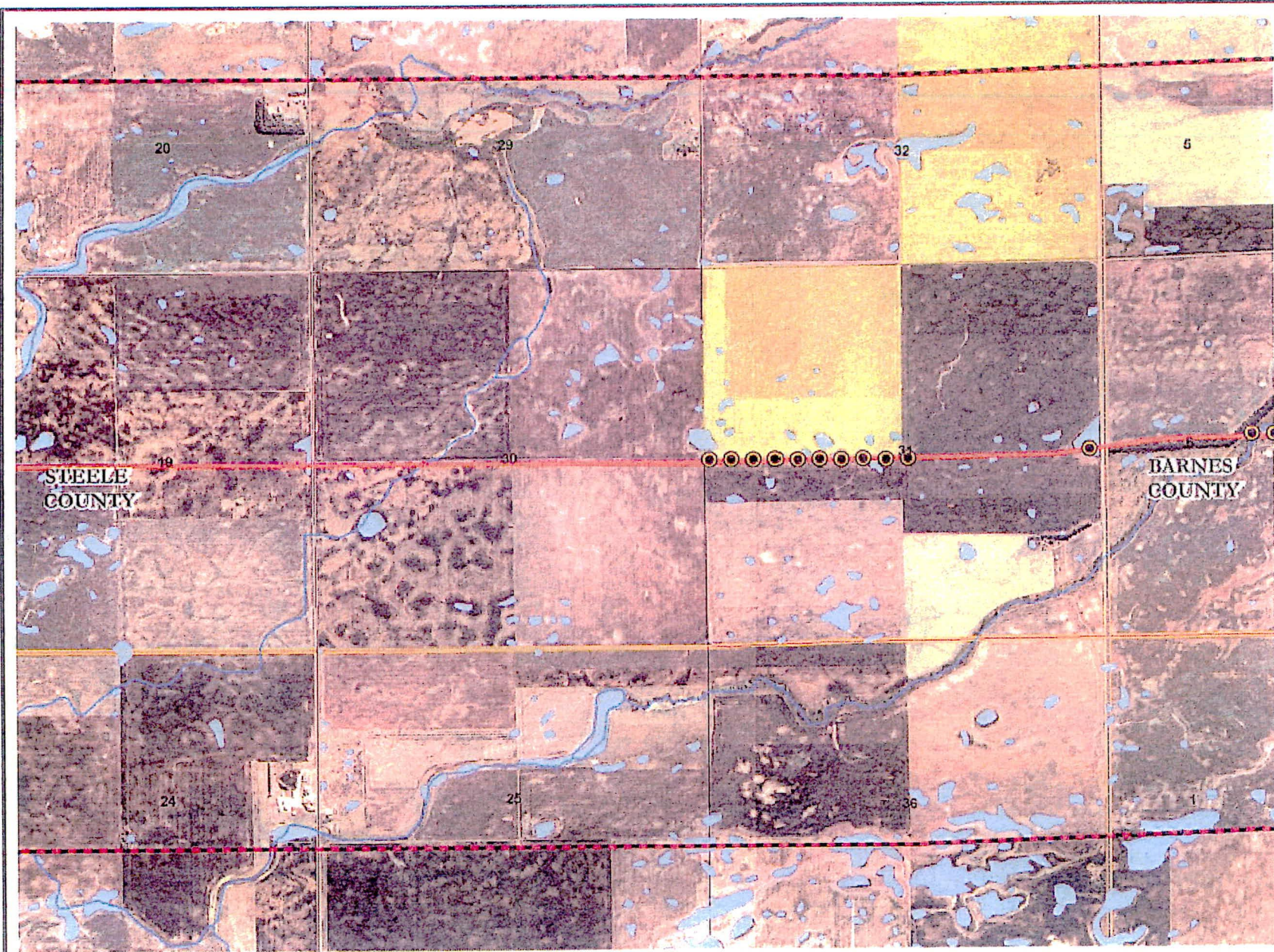


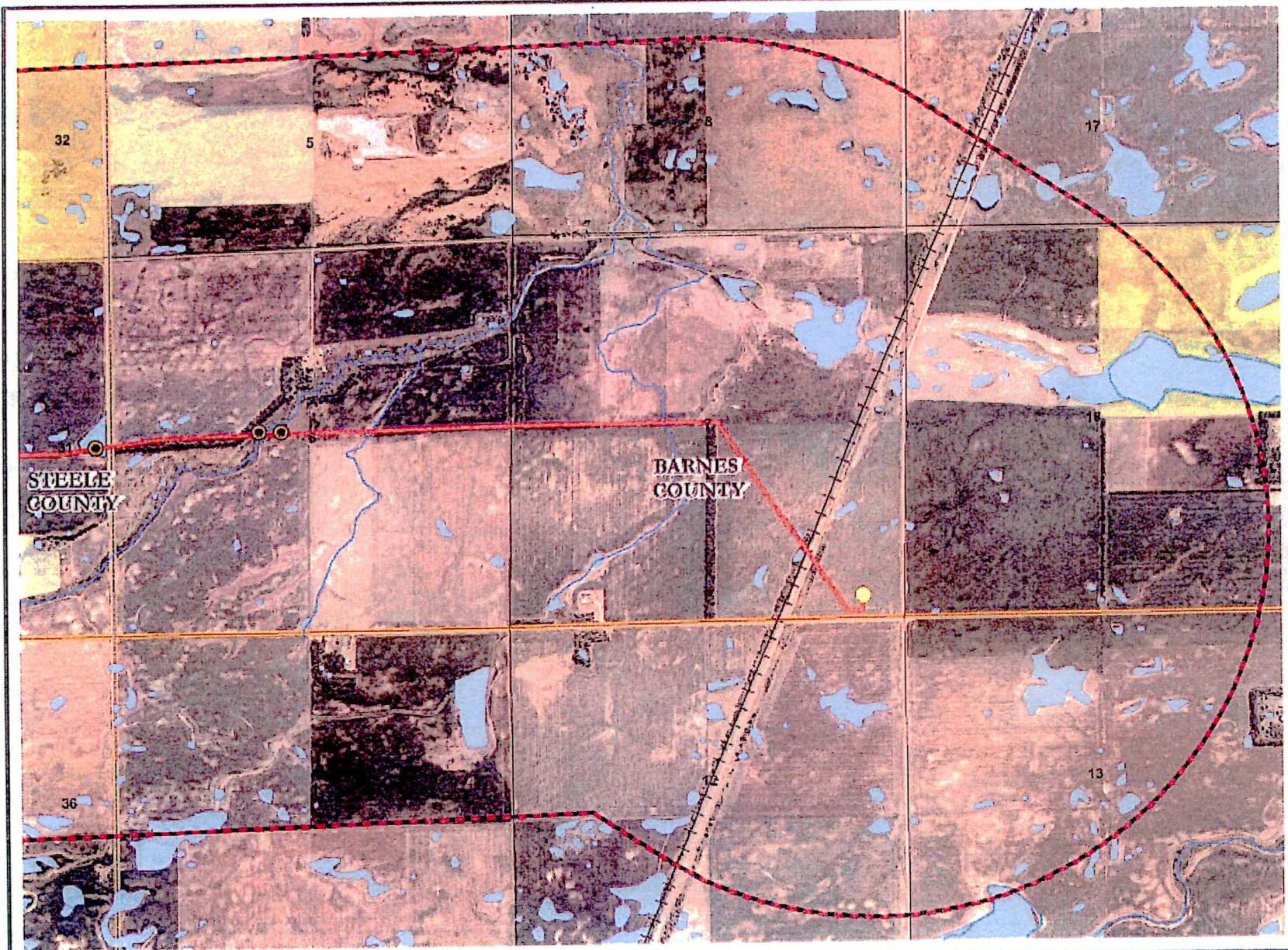
0 1,250 2,500 Feet

Prepared By:

**HDR**

July 2008

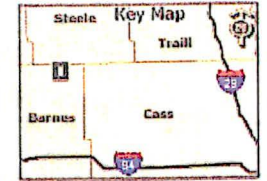




**M-Power LLC**  
*...harnessing the energy in nature.*

**Luverne Wind Farm  
 Generation Outlet**

Proposed Aviation Ball Marker Locations  
 Figure 12  
 Sheet 1 of 5



**Legend**

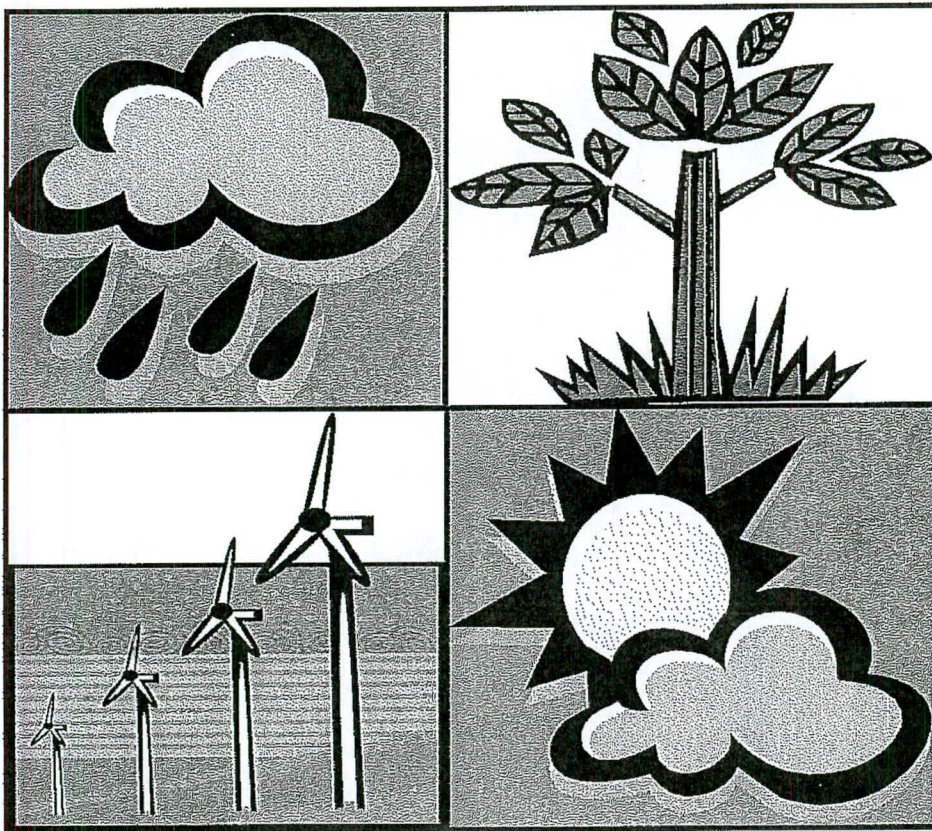
- Aviation Ball Markers
- Proposed Route
- Corridor Boundary
- Proposed Substation
- Surface Water
- Airstrips
- Railroad
- County Boundary
- NW Wetlands
- USFWS Wetland Easement



Prepared By:  
**HDR**  
 July 2008

This document is the property of M-Power LLC and is not to be distributed outside of the project area without the written consent of M-Power LLC.

Otter Tail Power Company  
Storm Water Pollution Prevention Plan  
Luverne Collector Substation



May 4, 2009

## Table of Contents

Storm Water Pollution Prevention Plan.....	1-12
Information checklist.....	1
Project description.....	2
Site map development checklist .....	3
Signatory certification.....	3
Best management practices for erosion and sediment control.....	4-5
Spill prevention methods.....	6
Site inspection and maintenance procedures.....	7
Other best management practices.....	8
Significant materials.....	9
Additional owners/operators.....	10
Site inspection record.....	11
Revision record.....	12
Appendix A: Erosion control drawings and site map	
Appendix B: Notice of Intent	
Appendix C: NDR10-0000	
Appendix D: Guide to temporary erosion control measures	



**CONSTRUCTION STORM WATER  
POLLUTION PREVENTION PLAN**  
NORTH DAKOTA DEPARTMENT OF HEALTH  
DIVISION OF WATER QUALITY  
SFN 19388 (2/06)

# **NORTH DAKOTA DEPARTMENT OF HEALTH NDPDES PROGRAM**

## **Construction Storm Water Pollution Prevention Plan Guidance Forms**

### **CONTENTS**

Use the following information as a checklist for developing the Storm Water Pollution Prevention Plan.

1.  PROJECT DESCRIPTION
2.  SITE MAP DEVELOPMENT
3.  SIGNATORY CERTIFICATION
4.  BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL
5.  OTHER BEST MANAGEMENT PRACTICES
6.  SIGNIFICANT MATERIALS
7.  ADDITIONAL OWNERS/OPERATORS
8.  SITE INSPECTION RECORD

A SWPPP must be prepared and implemented for all construction activities covered under NDR10-0000. A copy of the SWPPP must be submitted to the Dept. of Health for projects that involve 50 or more acres, or have a discharge point located within 2000 ft of, and flow to, a water body that is listed as impaired due to sediment or parameters associated with sediment transport.

## PROJECT DESCRIPTION

<b>Project Name</b>	Luverne Collector Substation
<b>Project Type</b>	Substation Construction
<b>Project Location</b>	SW ¼ of Section Thirty-Five (35), Township One Hundred Forty-five (145) North, Range Fifty Seven (57) West of the Fifth Principal Meridian, Steele County, North Dakota
<b>Estimate of Project Size In Acres</b>	5 acres

<b>Description of the Nature of Activity</b>
<p>A new 230/34.5-kV substation will be constructed in SW 1/4 of Section 35, T145N, R57W, about eight miles north and four and a half miles west of Pillsbury, ND. The new substation will be a 230/34.5-kV collector substation designed to facilitate the transformer, relaying and control equipment for the wind generated energy from the Ashtabula II Wind Farm to the Pillsbury Wind substation along the new 230-kV transmission line. The new substation footprint, which includes the entrance road and fencing, will occupy approximately 5 acres.</p> <p>Activity at the site will consist of grading and filling earth, constructing aggregate surfacing, concrete foundations, erecting steel, and installing electrical switching station equipment.</p> <p>Order of Activity:</p> <ol style="list-style-type: none"> <li>1. Install downslope erosion and sediment control BMP's before land-disturbing activity occurs</li> <li>2. Remove vegetation and topsoil from approximately 5 acres</li> <li>3. Cut and fill areas to subgrade</li> <li>4. Install drainage ways (i.e. culverts) and concrete washout if necessary</li> <li>5. Place Class V aggregate over substation site and entrance road</li> <li>6. Cover or stabilize disturbed areas as soon as possible</li> <li>7. Remove erosion control BMP's and any sediment if necessary</li> </ol>

<b>Description of Existing Soils, Fill Material, and Erodibility of Such Soils</b>
<p>There is approximately 8 inches of organic topsoil. At 8 inches sandy lean clay with traces of gravel is found. This soil is brown and may also contain cobbles and boulders. Existing soils will be used for cut and fill material. Areas to be seeded will be finished with a minimum six inches of organic topsoil. Access road will be finished with 6 inches of class 5 aggregate base.</p>

<b>Proposed Timetable for Construction Phases or Activities</b>
<p>Construction is scheduled to begin in late May or June 2009 and take approximately one month to complete initial construction. Re-vegetation activities will follow, with established cover expected by October 2009.</p>

<b>Name of Receiving Waters or Municipal Separate Storm Sewer System (MS4)</b>
Natural drainage to unnamed wetlands.

**SITE MAP DEVELOPMENT**

The site map should be suitably scaled and drawn to show the following required information:

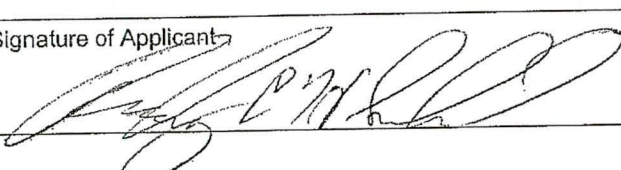
**MAP FEATURES**

Use the following information as a checklist for developing the site map.

- 1.  Construction site boundaries and area(s) of soil disturbance.
- 2.  The location of springs, streams, wetlands, and other surface waters.
- 3.  The location of areas used for storage of building materials, soils, or waste materials.
- 4.  The locations of proposed and existing storm water controls.
- 5.  Storm water runoff/run on drainage patterns.
- 6.  Section, township, range, or street address.

**SIGNATORY CERTIFICATION**

**INSTRUCTIONS:** The following statement shall be signed by a responsible corporate officer, general partner, principle executive officer or ranking elected official. The statement may be signed by a duly authorized representative of the person above in accordance with Part IV-E of the permit.

CERTIFICATION	
<p>"I, <u>Rodney C.H. Scheel</u>, certify under penalty of law that I have personally examined and am familiar with the information submitted herein. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.</p>	
<p>Printed Name of Applicant Rodney C.H. Scheel</p>	<p>Title Vice President, Asset Management</p>
<p>Signature of Applicant </p>	<p>Date 5/4/09</p>

## BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL

**EROSION & SEDIMENT CONTROL PRACTICES:**

	<u>LOCATION(s)</u>	<u>STAGE OF INSTALLATION<sup>†</sup></u>
<input checked="" type="checkbox"/> Straw Bale Dikes	<u>As needed on site</u>	<u>After sub-grade is established</u>
<input checked="" type="checkbox"/> Silt Fences	<u>Place down gradient of any disturbed areas</u>	<u>Before soil disturbance</u>
<input type="checkbox"/> Rock Checks	_____	_____
<input type="checkbox"/> Brush Barriers	_____	_____
<input type="checkbox"/> Sediment Logs/Biorolls	_____	_____
<input type="checkbox"/> Geotextile Triangular Dikes	_____	_____
<input type="checkbox"/> Floating Silt Curtain	_____	_____
<input checked="" type="checkbox"/> Drain Inlet Protection	<u>On areas that drain outside of disturbed area</u>	<u>Before soil disturbance</u>
<input type="checkbox"/> Sediment Traps	_____	_____
<input type="checkbox"/> Cut-Back Curb	_____	_____
<input type="checkbox"/> Stabilized Construction Access	_____	_____
<input type="checkbox"/> Terraces/Contours	_____	_____
<input type="checkbox"/> Drainage Swales	_____	_____
<input type="checkbox"/> Pipe Slope Drains	_____	_____
<input type="checkbox"/> Temporary Drain Diversion/Berm	_____	_____
<input checked="" type="checkbox"/> Concrete Washout Area	<u>See Erosion Control Plan Drawing</u>	<u>After sub-grade is established</u>
<input type="checkbox"/> Flocculation Sock	_____	_____
<input type="checkbox"/> Stockpile Protection	_____	_____
<input type="checkbox"/> Dewatering Bag	_____	_____
<input type="checkbox"/> Downspout Extensions	_____	_____
<input type="checkbox"/> Temporary Sediment Basins*	_____	_____
<input type="checkbox"/> Outlet Drawdown Device**	_____	_____

\*Sediment basins must be provided, where practical, when 10 or more acres of disturbed area drain to a common location. Requirements for sediment basins may be found in Appendix 1 of the permit.

\*\*Outlet drawdown devices must be provided for all temporary or permanent basins. Devices that will be installed permanently must meet local design standards. Requirements for temporary devices may be found in Appendix 1 of the permit.

\* Stage of installation may include the planned date or the specific construction stage when the item may be installed such as initial site clearing, grading, finish grading, seeding, stabilization, etc... Dates may change depending on delays.

## BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL

**STABILIZATION PRACTICES:**

	<u>LOCATION(s)</u>	<u>STAGE OF INSTALLATION</u>
<input type="checkbox"/> Temporary Seeding	_____	_____
<input checked="" type="checkbox"/> Mulching	<u>Disturbed areas requiring re-vegetation</u>	<u>After topsoil placement</u>
<input type="checkbox"/> Hydromulching	_____	_____
<input type="checkbox"/> Filter/Vegetative Strips	_____	_____
<input checked="" type="checkbox"/> Erosion Control Blankets	<u>Disturbed areas with slopes greater than or equal to 4:1</u>	<u>After placement of mulch</u>
<input checked="" type="checkbox"/> Permanent Seeding	<u>Disturbed areas on property requiring re-vegetation</u>	<u>After topsoil placement</u>
<input type="checkbox"/> Retaining Wall	_____	_____
<input type="checkbox"/> Tree/Shrub Planting	_____	_____
<input type="checkbox"/> Sod Stabilization	_____	_____
<input type="checkbox"/> Riprap Slopes	_____	_____
<input type="checkbox"/> Surface Roughening	_____	_____
<input type="checkbox"/> Rock Outlet Protection	_____	_____
<input type="checkbox"/> Concrete Outlet Protection	_____	_____

**Additional Practices (Both E&SC and Stabilization):**

All employees working of this project shall be made aware of this permit and the requirements listed herein.

Refer to enclosed Permit No.: **NDR10-0000** for detailed requirements for stormwater construction activity.

Final stabilization shall be in place within 14 days following completion of construction.

## OTHER BEST MANAGEMENT PRACTICES

Will any contaminated soils potentially be encountered:

Yes  No

If yes, please attach a description of the methods used for handling and disposing of the contaminated soils.

### Spill Prevention methods, post construction controls and site inspections/maintenance

#### Description of Spill Prevention and Response Procedures (e.g., Fueling, Maintenance, Staging Areas):

Spill hazard is perceived to be minimal. There is currently no plan to have fuel storage on the site. However, equipment containing fuels will be present. Containment shall be provided around fueling or chemical storage areas to ensure that spills in these areas do not reach waters of the state. Special containers will be kept at the project site for the proper disposal of all grease and other maintenance waste to prevent contamination.

Contractor employees will take special precautions to prevent chemical, fuel oil, grease, herbicides, lime, net cement silt or other pollutants from entering the waterways and avoid washing down or refueling equipment close to waters. The Contractor shall provide containment around fueling and chemical storage areas to ensure that spills in these areas do not reach waters of the state.

Spills may be averted by planning, such as parking trucks or equipment on level ground. Materials or substances used in construction that could cause spills of regulated substances will be contained in proper packaging, in good condition, and properly labeled. Lids or valves will be secured tightly and the container, tank, or packaging has been designed and/or approved for the material or substance that it holds as well as the quantity. All materials must be stored, stacked, handled, and transported properly. Oil containing equipment to be placed in the substation will be stored in the staging area a reasonable distance away from vehicles, heavy machinery, and other materials to minimize risk of damage.

In the event of a spill determine:

- The identity and the source of the substance.
- If the substance is hazardous by referring to the MSDS sheet.
- If the spill can be handled on site with available personnel, material, and equipment or if additional outside emergency help is needed

Alert all people in the spill area of the identification of the substance and any related dangers. Evacuate the area if needed. Call local emergency response such as the local fire department or outside spill or excavation contractor.

Emergency spills will be handled as follows:

**Contact Paul Vukonich, Environmental Services Department, Otter Tail Power Company 218.739.8349**

Provide the following information:

- Facility name and contact phone number
- Facility address
- Date and time of the discharge
- Type of material discharged
- Estimate of total quantity discharged
- Source of the discharge
- Description of affected media (e.g. did the spill make its way to any body of water?)
- Description of any damages and/or injuries
- Description of any cleanup activities already undertaken

Provide follow-up information as necessary to Environmental Services.

**Description of Post Construction Controls (e.g. Detention/Retention Ponds, Constructed Wetlands):**

None. Surrounding area is agricultural. Once final stabilization occurs, there is no need for post construction controls. Inspections by the area electrical technician shall be conducted once per month until 70% perennial vegetative cover has occurred. If weather prohibits inspection, document on inspection report.

**Description of Procedures for Site Inspections and Maintenance:**

Inspections during construction shall be performed by or under the direct supervision of Contractor at least once every 14 calendar days and within 24 hours after any storm event of greater than 0.50 inches of rain per 24-hour period during active construction. You may have a rain gauge on site, or refer to <http://ndawn.ndsu.nodak.edu/station-info.html?station=64> for local rainfall data from Pillsbury, ND.

Records of inspections shall be kept on site for the duration of the construction and be available for review by Otter Tail Power Company or the North Dakota Department of Health.

Copies of all inspections shall be forwarded to Paul Vukonich, Otter Tail Power Company, by either mail or electronic means. All inspection reports must be submitted to Otter Tail Power Company within seven days of the inspection.

Inspections are not required during adverse weather conditions, but should be conducted as soon as practical. The reason for delaying the inspection should be documented on the inspection form.

Inspection and maintenance conducted during construction must be recorded in writing and these records must be retained for three years. Forms included in this SWPPP shall be used to conduct inspections. The records shall include:

- a. Date and time of inspection
- 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 ½ inch (0.5 inches) in 24 hours
- f. Documentation that the SWPP Plan has been amended when substantial changes are made to the erosion and sediment controls or other BMP's in response to inspections

Maintenance shall include the following:

- A. Maintain pollution prevention controls in proper working order, including cleaning, repairing, or replacing controls until final stabilization.
- B. Maintain and clean out sediment in silt fence when reduction of 50% capacity occurs.
- C. Inspect disturbed areas of construction site not fully stabilized. Areas are not considered to have achieved final stabilization until 70% of permanent cover has been achieved.

Inspections criteria includes:

- 1 Visual observation of storage areas of materials where there is potential for pollutants to enter drainage system.
- 2 Observe structural control measures to ensure correct operation.
- 3 Observe accessible discharge locations to determine effectiveness in preventing significant impacts to receiving waters.
- 4 Observe locations where vehicles enter or exit Site for evidence of off-site sediment tracking.
- 5 Changes that may be required to correct deficiencies in the SWPPP.

Implement corrective actions no later than 7 calendar days after inspection.

## OTHER BEST MANAGEMENT PRACTICES

### Description of sediment tracking reduction and sediment recover methods

#### Description of Methods to Reduce Sediment Tracking:

The construction area is rural and is adjacent to gravel roads. Minimal tracking is expected due to the nature of the site. Because of this, no additional methods are proposed. Contractor will take measures to remove material from the road if necessary.

#### Description of Methods for Recovering Tracked Sediments (e.g. Street Sweeping):

Area roads are gravel, so there will be no street sweeping. Sediments will be removed from roads as needed.

#### Description of Methods for Recovering Sediments from Sediment & Erosion Control Devices:

Manually remove sediment in BMP's when capacity is reduced by 50%.

#### Description of Winter Stabilization Practices that will be Utilized:

MNDOT seed mixture 250 will be used for final stabilization. Germination may take place during fall of 2009 or spring 2010. Erosion control blankets will be placed over seeded areas with a slope greater than or equal to 4:1.

## SIGNIFICANT MATERIALS

**INSTRUCTIONS:** Based on your site's material inventory, provide the following information. For the definition of "significant materials," see Part V of the permit. The **location** of the significant materials should be indicated on the site map. See example below:

MATERIAL	QTY KEPT ON SITE	DISPOSAL METHOD FOR WASTE OR SPILLS	POLLUTION PREVENTION MEASURES
Ex: Diesel Fuel	Ex: 500 gallons	Ex: Using NDDH Waste Management Guidelines	Ex: Berm constructed around tank to capture any spills or leaks. Employees have been trained to prevent spills during fueling process and to contact management if a spill occurs.
Top Soil	11,500 CY	Stockpile	Silt Fence
Class V Aggregate	7,750 CY	Hauled to site as needed	N/A
Cut & Fill	Net 1,500 CY of Fill	Temporarily stored in stockpile. Excess material hauled to site as needed	Silt Fence
Crushed Rock	500 CY	Hauled to site as needed	N/A

(Attach additional pages if needed)

**ADDITIONAL OWNERS/OPERATORS**

**INSTRUCTIONS:** This section is provided to include additional owners and operators that may be designated by the permit holder to perform activities on a project (i.e., subcontractor). The additional owners/operators must adhere to this Storm Water Pollution Prevention Plan. The use of this section is intended for projects involved in "large" construction activity. It may also be used for "small" construction activity as a record for the owner.

**Signatory**

"I certify under penalty of law that I have personally read, understood, and accepted all terms and conditions of this Storm Water Pollution Prevention Plan, and that I shall implement the Plan accordingly. I am also familiar with the NDPDES General Permit for Storm Water Discharges Associated with Construction Activity (NDR10-0000).

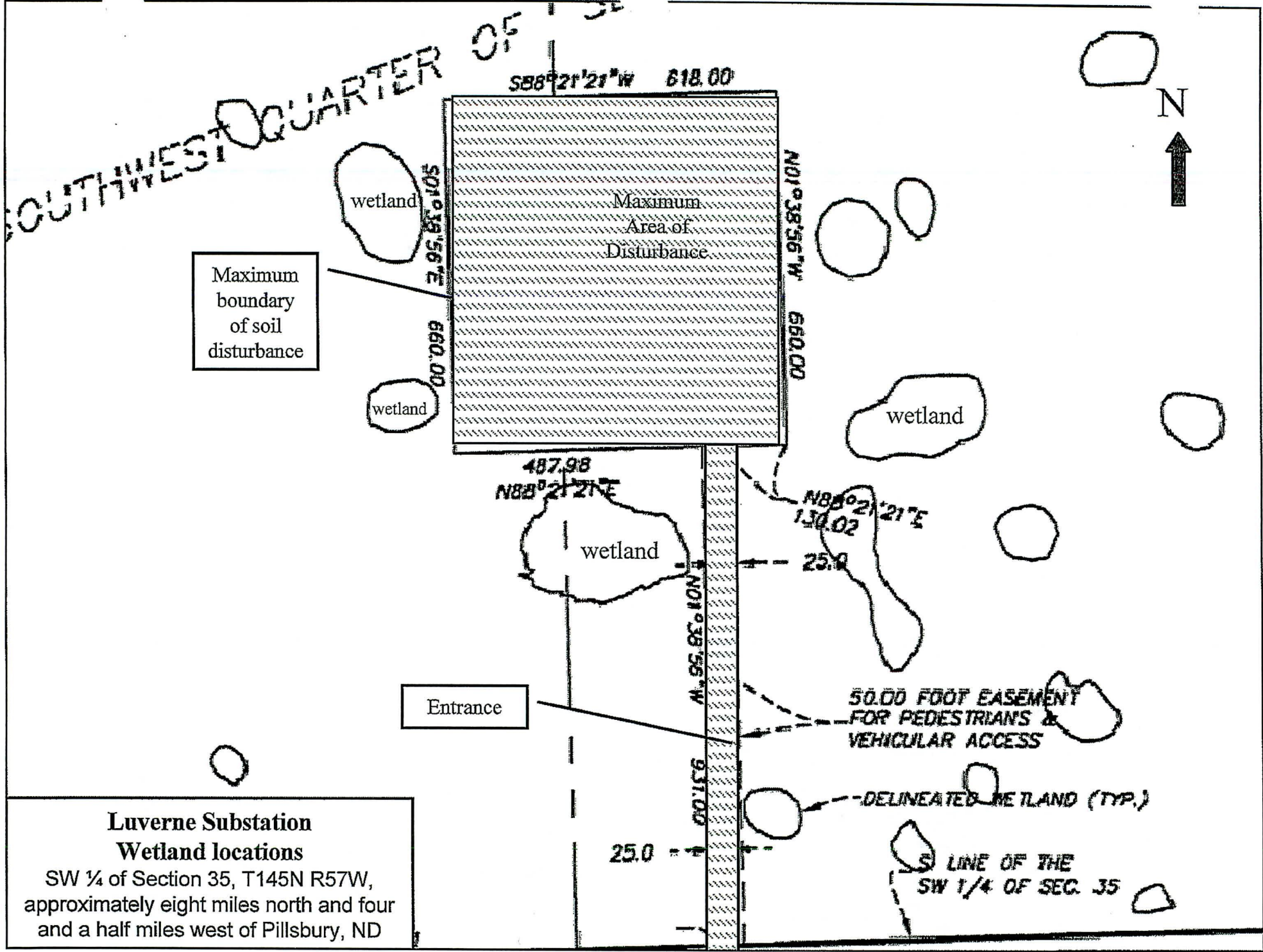
Printed Name	Signature	Title	Company Name	Date
Dan Shirek		Site Foreman	Industrial Contract Services	
Dean Jensen		Owner	Jensen Excavating	



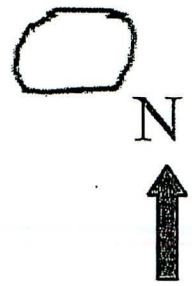


**Appendix A**

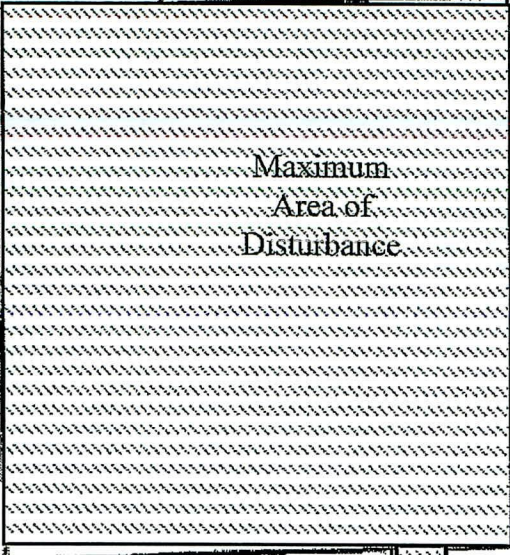
**Erosion Control Drawings and Site Map**



SOUTHWEST QUARTER OF SECTION 35



Maximum boundary of soil disturbance



wetland

wetland

487.98  
 $N88^{\circ}21'21''E$



$N01^{\circ}38'56''W$

Entrance

$N88^{\circ}21'21''E$   
130.02

50.00 FOOT EASEMENT FOR PEDESTRIANS & VEHICULAR ACCESS

DELINEATED WETLAND (TYP.)

25.0

S LINE OF THE SW 1/4 OF SEC. 35

**Luverne Substation  
Wetland locations**  
SW 1/4 of Section 35, T145N R57W,  
approximately eight miles north and four  
and a half miles west of Pillsbury, ND

Yellow arrows indicate drainage

Erosion control measures will be implemented by contractor.

Inlet and outlet protection will be placed by all culverts installed on the access road

Seed all disturbed areas

<sup>1</sup>Silt fence will extend on both sides of the access road to the existing road and will encompass entire disturbed area.

<sup>2</sup>Bale checks placed at contractor's discretion

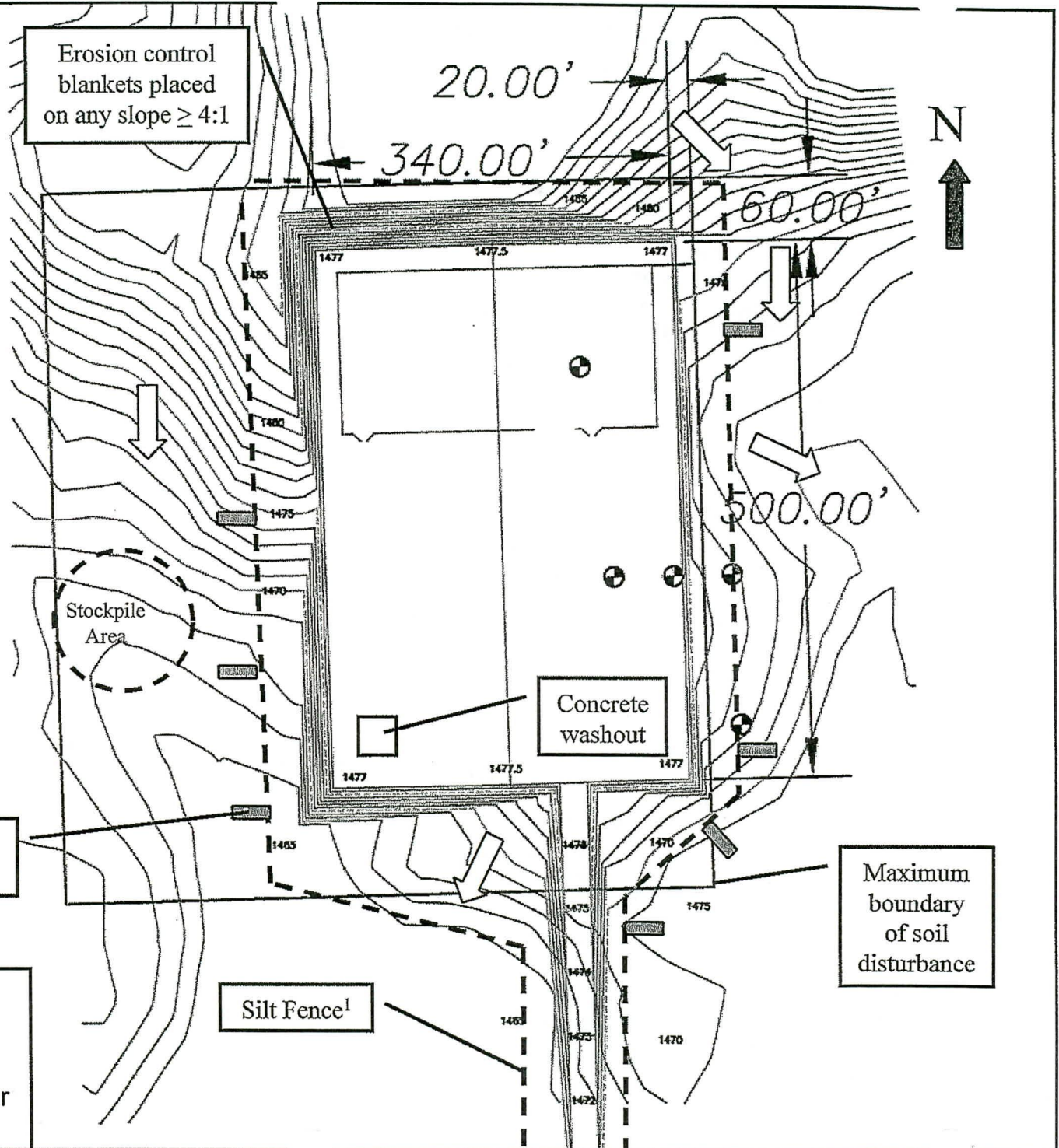
Erosion control blankets placed on any slope  $\geq 4:1$

Straw bale checks<sup>2</sup>

Silt Fence<sup>1</sup>

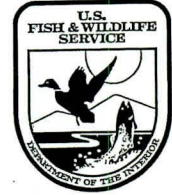
Maximum boundary of soil disturbance

**Luverne Substation  
Erosion Control Plan**  
SW ¼ of Section 35, T145N R57W,  
approximately eight miles north and four  
and a half miles west of Pillsbury, ND





# United States Department of the Interior



U.S. FISH & WILDLIFE SERVICE  
Valley City Wetland Management District  
11515 River Road  
Valley City, ND 58072-9619  
(701) 845-3466

April 28, 2009

Steele County 35X

Michael Domes – Land Specialist  
Otter Tail Power Company  
215 South Cascade Street  
Fergus Falls, MN 56538-0496

Dear Mr. Domes:

This letter is a follow up to our meeting that took place on April 22, 2009. This letter is in reference to the land that is under a US Fish and Wildlife Service easement located in the SW1/4 of section 35, T. 145 N., R. 57 W., Steele County, North Dakota.

During the inspection of the proposed access road and substation, it was determined that wetlands protected under Service easements will not be affected by the construction as long as the survey markers are followed. A later inspection will be conducted after the completion of this project to ensure wetlands were not affected. You may proceed with the proposed development.

If you have any other questions please contact this office at (701) 845-3466.

Sincerely,

Chad Zorn  
Wetland District Manager

cc: Valley City WMD Easement File



John Hoeven, Governor  
Douglass A. Prchal, Director

1600 East Century Avenue, Suite 3  
Bismarck, ND 58503-0649  
Phone 701-328-5357  
Fax 701-328-5363  
E-mail [parkrec@nd.gov](mailto:parkrec@nd.gov)  
[www.parkrec.nd.gov](http://www.parkrec.nd.gov)

March 11, 2008

Jennifer Turnbow  
Kadmas, Lee and Jackson, Inc.  
PO Box 1157  
Bismarck, ND 58502-1157



Re: M-Power, LLC and National Wind, LLC Wind Farm Development Project  
Griggs and Steele Counties, North Dakota

Dear Ms. Turnbow:

The North Dakota Parks and Recreation Department (the Department) has reviewed the above referenced project proposal to develop a 150 MW wind farm and associated access roads and utilities located in Sections 14, 15, 22, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36, T145N, R57W; and Sections 4, 5, 6, 7, 8, 9, 16, 17, 18, 19, 20, and 30, T144N, R57W, Steele County; and Sections 1, 12, 13, 24, and 25, T144N, R58W, Griggs County.

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, several occurrences have been identified adjacent to the project area including: *Pascopyrum smithii-Stipa comata prairie* (central mixed grass prairie), *Carex buxbaumii* (Buxbaum's sedge), *Schizachyrium scoparium - Bouteloua curtipendula - Stipa spartea prairie* (dry mesic tallgrass prairie), and *Fusconaita flava* (Wabash pigtoe mussel). Please see attached spreadsheet and map for more specific information on these species. Occurrences adjacent to the project area indicate that the habitat in the project area may be suited for these species or other rare, threatened, sensitive or endangered species. We defer further comments regarding animal species to the North Dakota Game and Fish Department and the United States Fish and Wildlife Service.

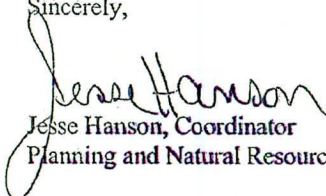
Because this information is not based on a comprehensive inventory, there may be species of concern or otherwise significant ecological communities in the area that are not represented in the database. The lack of data for any project area cannot be construed to mean that no significant features are 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 threat to nesting, feeding and migratory bird and bats in the area we suggest that all efforts be made to avoid impacts to wildlife species and their habitats. In an effort to avoid or minimize impacts to wildlife and their habitats we encourage proper evaluation of all potential wind energy sites. To identify and assess adverse impacts to wildlife we suggest pre and post construction avian and bat monitoring studies be conducted.

The Department recommends that the project be accomplished with minimal impacts and that all efforts be made to ensure that critical habitats not be disturbed in the project area to help secure rare species conservation in North Dakota. Regarding any reclamation efforts, we recommend that any impacted areas be revegetated with species native to the project area.

Thank you for the opportunity to comment on this project. Please contact Kathy Duttonhefner (701-328-5370 or [kgduttonhefner@nd.gov](mailto:kgduttonhefner@nd.gov)) of our staff if additional information is needed.

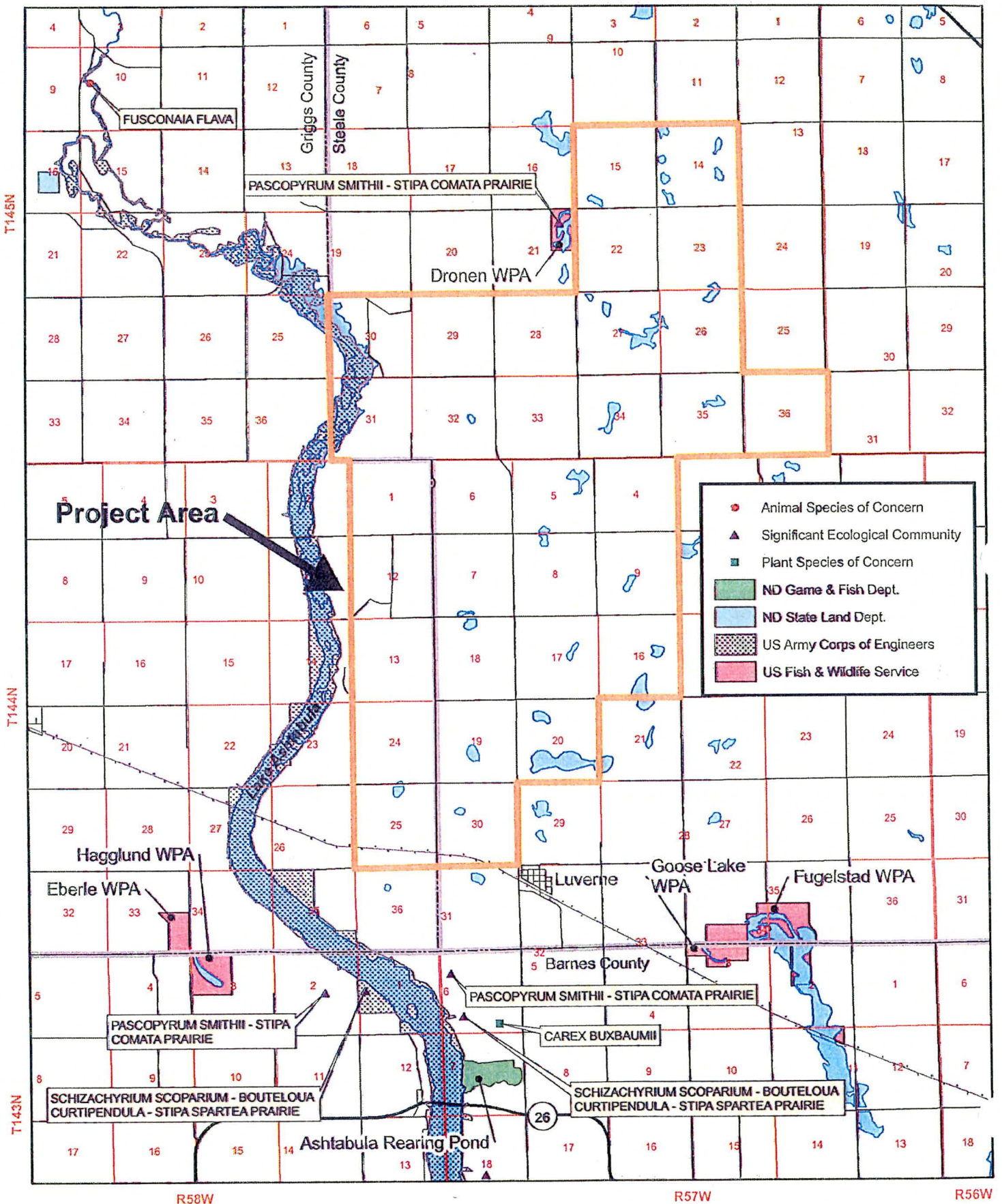
Sincerely,

  
Jesse Hanson, Coordinator  
Planning and Natural Resources Division

R.USNDNHII\*1943

.....  
Play in our backyard!

# North Dakota Natural Heritage Inventory Species of Concern and Significant Ecological Communities



North Dakota Natural Heritage Inventory  
Species of Concern and Significant Ecological Communities

State Scientific Name	State Common Name	Township & Range	Section	TRS Notes	State Rank	Global Rank	Federal Status	EO Rank	Last Observation
CAREX BUXBAUMII	BUXBAUM'S SEDGE	143N057W	6		S1S2	G5			1973-07-17
PASCOPYRUM SMITHII - STIPA COMATA PRAIRIE	CENTRAL MIXED GRASS PRAIRIE	143N057W 143N058W	6 1	Sec. 7	S2			BC	1998-08-28
SCHIZACHYRIUM SCOPARIUM - BOUTELOUA CURTIPENDULA - STIPA SPARTEA PRAIRIE	DRY MESIC TALLGRASS PRAIRIE	143N057W 143N058W	6 1	Sec. 7	S1			BC	1998-08-28
PASCOPYRUM SMITHII - STIPA COMATA PRAIRIE	CENTRAL MIXED GRASS PRAIRIE	143N058W	1	2	S2			CD	1998-08-27
SCHIZACHYRIUM SCOPARIUM - BOUTELOUA CURTIPENDULA - STIPA SPARTEA PRAIRIE	DRY MESIC TALLGRASS PRAIRIE	143N058W	1	2	S1			CD	1998-08-27
PASCOPYRUM SMITHII - STIPA COMATA PRAIRIE	CENTRAL MIXED GRASS PRAIRIE	145N057W	21	NE4 E2	S2			D	1995-08-29
FUSCONAIA FLAVA	WABASH PIGTOE MUSSEL	145N058W	10	NW4NE4	S4	G5			1975

**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.

**PU-08-107/PU-09-388**

**AS-BUILT DRAWINGS**

**LUVERNE WIND FARM 230 KV LINE  
OTTER TAIL POWER COMPANY**

**TO**

**PUBLIC SERVICE COMMISSION  
NORTH DAKOTA**

**MARCH 2014**



CONSULTING ENGINEERS GROUP  
*Engineering Powerful Solutions*



21210 Eaton Avenue, Suite C  
Farmington, MN 55024  
(651) 463-6263  
fax (651) 463-6179  
www.ceg-engineers.com

March 17, 2014

Mr. Harvey McMahan  
Otter Tail Power Company  
215 S. Cascade St.  
Fergus Falls, MN 56538

Dear Mr. McMahan:

Re: M-Power LLC/Luverne Transmission Line Verification Statement

CEG has completed the design drawings, material lists, material and construction specifications and quality control and testing documents for the following portion of the project:

Substation Drawing Set  
 Transmission Line Drawing Set  
 Collection System Drawing Set

CEG has verified that the 230kV transmission line was designed in accordance with the requirements of the National Electric Code, National Electric Safety Code, Rural Utility Service standards, and the Avian Power Line Interaction Committee Raptor-Safe design standards.

Sincerely,

James C. Hanson, P.E.  
Senior Engineer  
Consulting Engineers Group  
21210 Eaton Avenue, Suite C  
Farmington MN, 55024  
651-244-9747

Attachments

1. Transmission Line As Built Drawing Set (electronic copy), signed/stamped

DRAWING	ISSUE	REV	DESCRIPTION
MPOW-INDEX-02	AB	4	230KV TRANSMISSION LINE INDEX
P&P_1	AB	4	PLAN & PROFILE
P&P_2	AB	4	PLAN & PROFILE
P&P_3	AB	4	PLAN & PROFILE
P&P_4	AB	4	PLAN & PROFILE
P&P_5	AB	4	PLAN & PROFILE
P&P_6	AB	4	PLAN & PROFILE
P&P_7	AB	4	PLAN & PROFILE
P&P_8	AB	4	PLAN & PROFILE
P&P_9	AB	4	PLAN & PROFILE
MPOW-DP-01	AB	2	TRANSMISSION LINE DAMPER PLACEMENT
MPOW-FO-01	AB	1	FIBER OPTIC CABLE INSTALLATION PILLSBURY SUBSTATION TO MPOWER SUBSTATION
MPOW-FD-05	OBSOLETE		
MPOW-MAT-01	AB	1	TRANSMISSION LINE MATERIAL LIST
MPOW-PF-01	AB	1	POLE FRAMING SH 1; POWER SCREW ANCHOR, MISCELLANEOUS
MPOW-PF-02	AB	1	POLE FRAMING SH 2; TRANSMISSION CROSSARMS
MPOW-PF-03	AB	1	POLE FRAMING SH 3; CROSSARM DETAILS
MPOW-PF-04	AB	1	POLE FRAMING SH 4; CROSSARM DETAILS
MPOW-PF-05	AB	1	POLE FRAMING SH 5; CROSSARM BRACE DETAILS, GUYING ASSEMBLIES
MPOW-PF-06	AB	1	POLE FRAMING SH 6; GUY ATTACHMENTS, POLE TIE ASSEMBLIES
MPOW-PF-07	AB	1	POLE FRAMING SH 7; INSULATOR ASSEMBLIES
MPOW-PF-08	AB	1	POLE FRAMING SH 8; O.H.G.W. ASSEMBLIES, O.H.G.W. SUPPORT ASSEMBLY
MPOW-PF-09	AB	1	POLE FRAMING SH 9; GROUNDING ASSEMBLIES
MPOW-PF-10	AB	1	POLE FRAMING SH 10; TRANSMISSION ROW CLEARING, MISCELLANEOUS FENCE GATES
MPOW-PF-11	AB	1	POLE FRAMING SH 11; FOUNDATION UNITS, MISCELLANEOUS X-BRACE ASSEMBLIES
MPOW-PF-12	AB	1	POLE FRAMING SH 12; MISCELLANEOUS X-ARM ASSEMBLIES
MPOW-PF-13	AB	1	POLE FRAMING SH 13; TRANSMISSION LINE STRUCTURE
MPOW-PF-14	AB	1	POLE FRAMING SH 14; TRANSMISSION LINE STRUCTURE, 230KV WOOD STRUCTURE
MPOW-PF-15	AB	1	POLE FRAMING SH 15; FIBER OPTIC SPLICE GUIDE
MPOW-PH-01	AB	1	PHASING DIAGRAM PILLSBURY/MPOWER 230KV LINE
MPOW-S&T-01	AB	1	DRAKE CONDUCTOR & 3/8" EHS STEEL SAG & TENSION
MPOW-S&T-02	AB	1	FO-DNO-3825 OHGW FIBER OPTIC SAG & TENSION
MPOW-S&T-03	AB	3	795kcmil DRAKE CONDUCTOR STRINGING CHART
MPOW-S&T-04	AB	3	3/8" EHS STEEL OHGW STRINGING CHART
MPOW-S&T-05	AB	3	FO-DNO-3825 STRINGING CHART
MPOW-STR-88	AB	2	LAMINATED POLE, STRUCTURE #88
MPOW-TLR-01	AB	1	TRANSMISSION LINE ROUTE
MPOW-TLR-02	AB	4	TRANSMISSION LINE STRUCTURE COORDINATES
MPOW-TLR-03	AB	3	TRANSMISSION LINE CORNER POLE ANCHOR COORDINATES

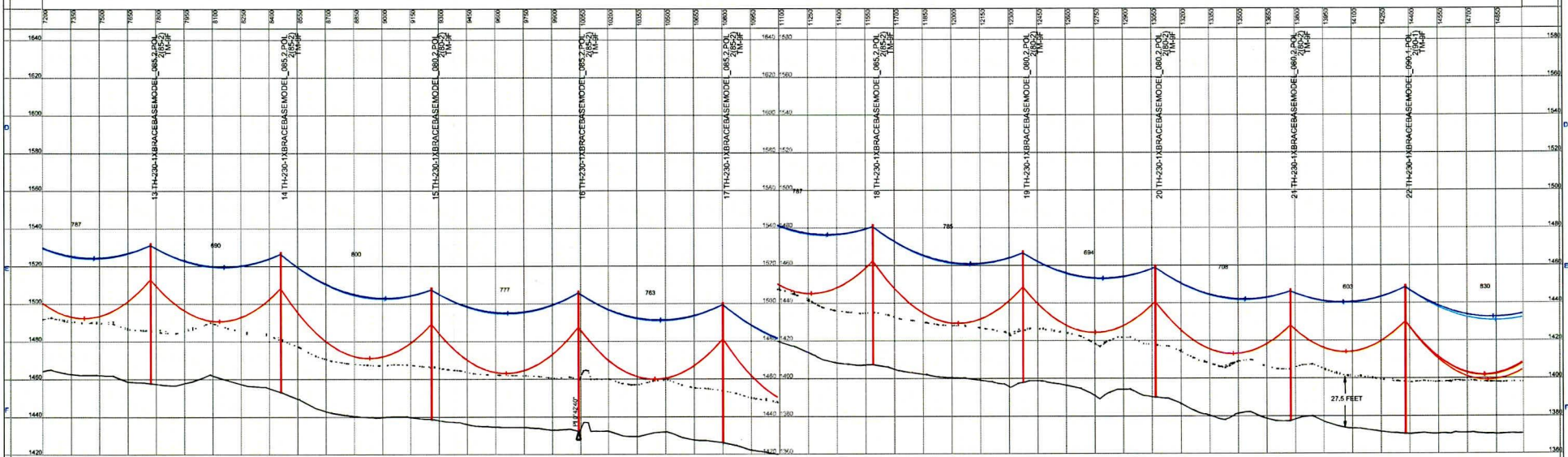
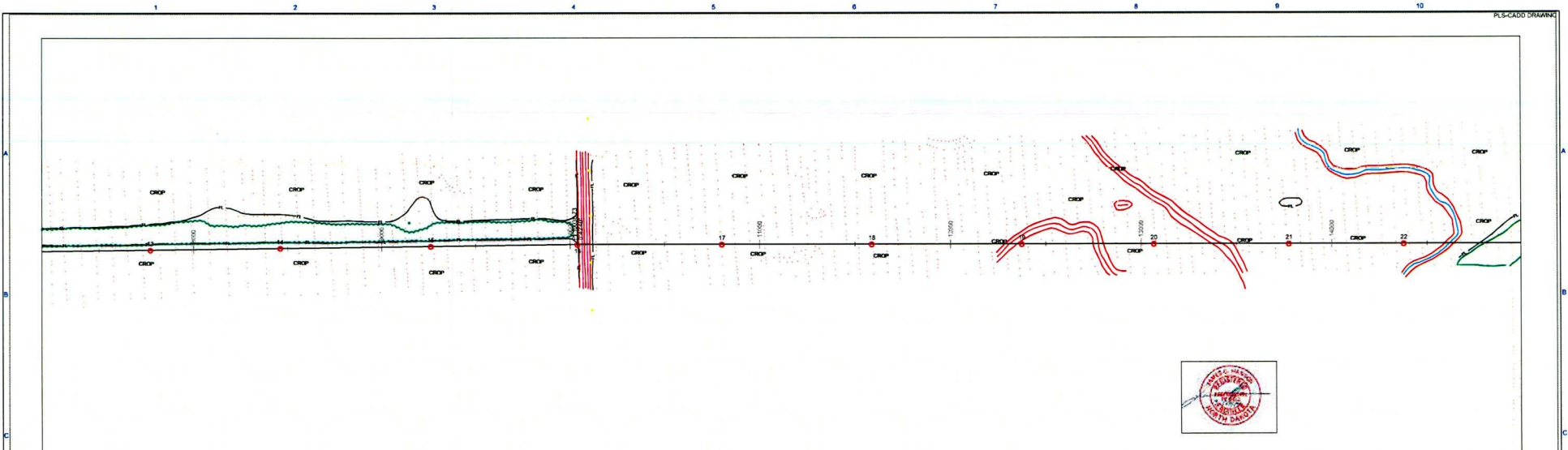
**LEGEND**

- - REVISED THIS ISSUE
- AB - AS BUILT
- FC - DRAWING HAS BEEN RELEASED FOR CONSTRUCTION
- FB - DRAWING HAS BEEN RELEASED FOR BID & PROCUREMENT
- FF - DRAWING HAS BEEN RELEASED FOR FABRICATION
- PR - DRAWING IS PRELIMINARY & MAY CHANGE DURING DESIGN
- IF NO LETTER OR NUMBER IS SHOWN, THE DRAWING HAS NOT BEEN ISSUED



4	06/26/08	JAC	AS BUILT					
3	06/19/08	MAK	MODIFICATION FOR MINNESOTA T-LINE CROSSPOLE/SEE POSITION AND					
2	06/16/08	MAK	FIELD UPDATES					
1	06/16/08	MAK	CHANGE STEEL POLE TO LAMINATE					
0	04/28/08	MAK	ISSUE FOR CONSTRUCTION					
REV.	DATE	BY	DESCRIPTION	WORK ORDER	CHG	APPR	DATE	
<b>CEG</b> CONSULTING ENGINEERS GROUP FARMINGTON, MINNESOTA								
MPOWER / LUVERNE 230KV TRANSMISSION LINE INDEX								
NAME: JAMES C. HANSON				CHECKED	SCALE: NONE			
NO. 5413				DATE	W.D. NO.			
				DRAWN: MAK	MAP NO.			
				DATE: 08/25/08	DWG. NO. MPOW-INDEX-02			





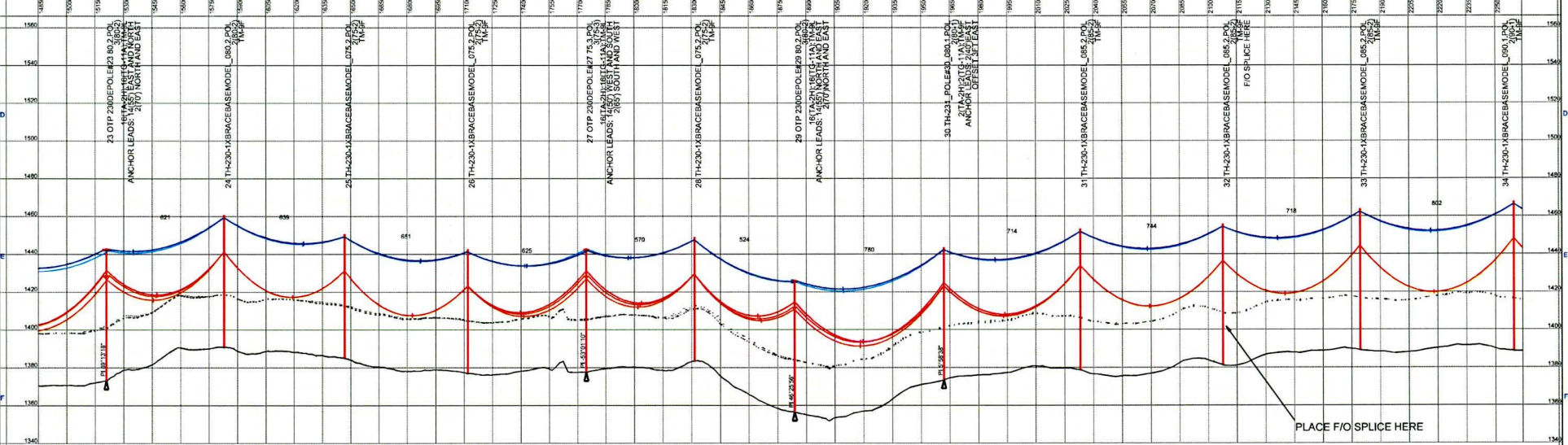
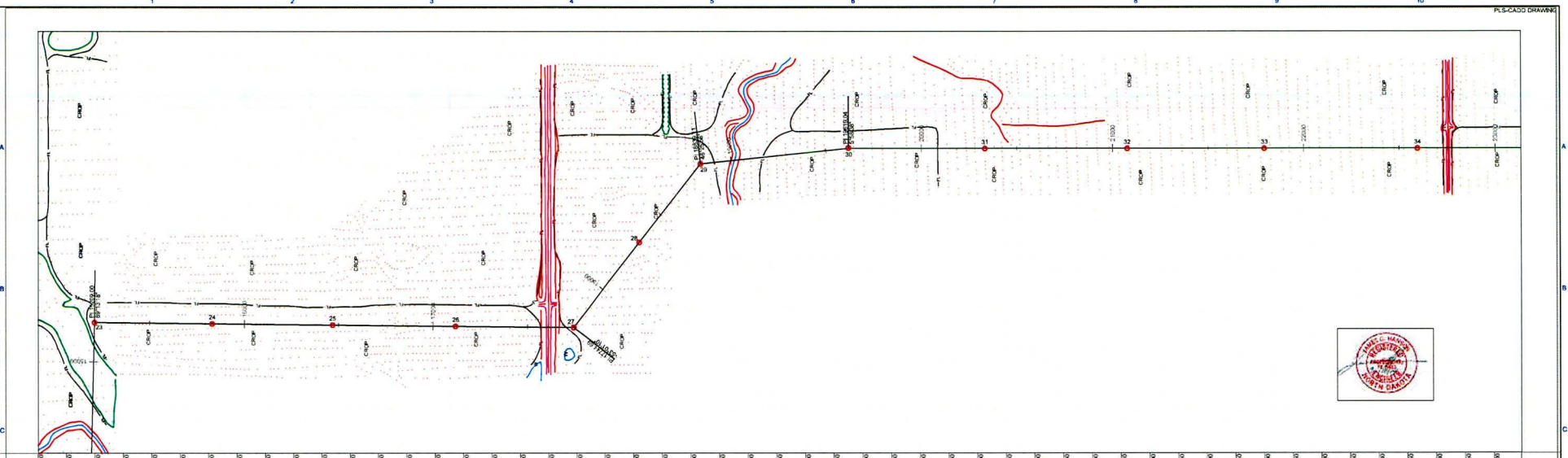
NO	DATE	REVISIONS AND RECORD OF ISSUE
4	08/08/09	AS BUILT
3	06-18-09	STRUCTURES #56, 57, 58 AND 59 MODIFIED DUE TO MINNOKOTA POWER T-LINE CROSSING; STRUCTURE #82 MOVED 16FT NORTH
2	06-04-09	T-LINE ALIGNMENT MOVED 20FT EAST FROM STRUCTURE#72 TO #82 PER OTH REQUEST; STRUCTURES AFFECTED FROM #71 TO #86.
1	05-14-09	STRUCTURE #88 CHANGED FROM STEEL TO LAMINATED WOOD POLES PER OTH
0	04-23-09	ISSUE FOR CONSTRUCTION WITH CHANGES PER OTH (NEW DEADEND STRUCTURES AND FIBER OPTIC DND-305)

M-POWER, ND  
230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB

**CEG**  
 DESIGNER: PM  
 CHECKED: DB  
 DATE: 5/18/2009

500.0 FT. ———— HORIZ. SCALE  
 50.0 FT. ———— VERT. SCALE  
 NORTH ↑

PROJECT: \_\_\_\_\_ DRAWING NUMBER: \_\_\_\_\_ REV: 4  
 CODE: \_\_\_\_\_ AREA: \_\_\_\_\_ 2 OF 9

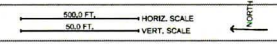


NO	DATE	REVISIONS AND RECORD OF ISSUE
4	09/08/09	AS BUILT
3	06-18-09	STRUCTURES #56, 57, 58 AND 59 MODIFIED DUE TO MINNACOTA POWER T-LINE CROSSING; STRUCTURE #62 MOVED 1967 NORTH
2	06-04-09	T-LINE ALIGNMENT MOVED 20FT EAST FROM STRUCTURE#72 TO #62 PER OTP REQUEST; STRUCTURES AFFECTED FROM #71 TO #65.
1	05-14-09	STRUCTURE #88 CHANGED FROM STEEL TO LAMINATED WOOD POLES PER OTP
0	04-23-09	ISSUE FOR CONSTRUCTION WITH CHANGES PER OTP (NEW DEADEND STRUCTURES AND FIBER OPTIC DNO-3025)

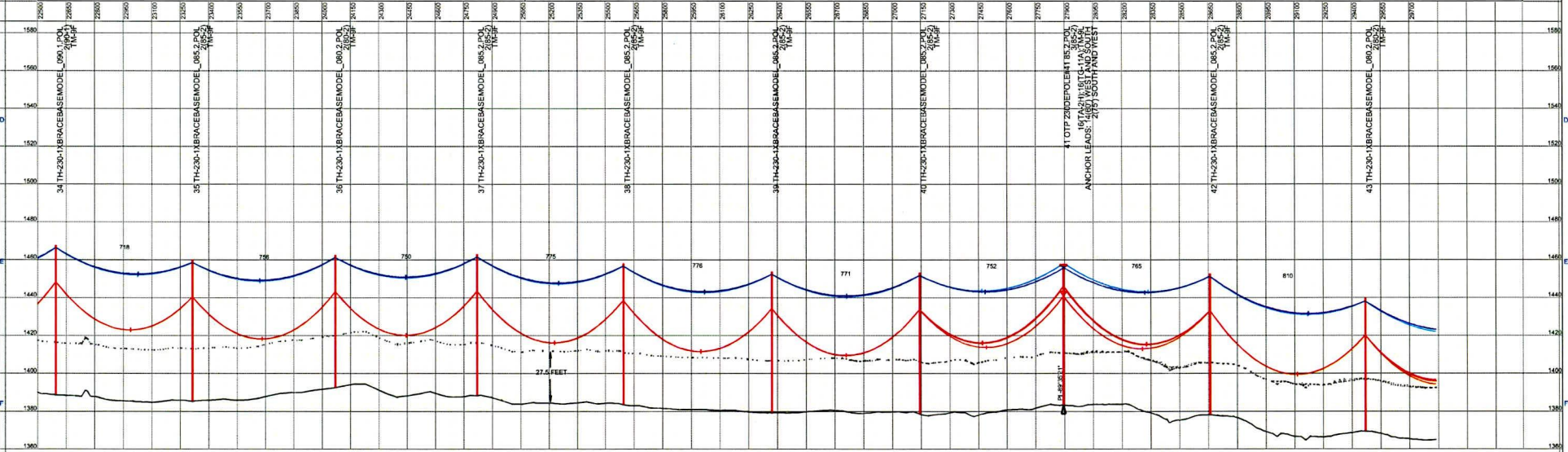
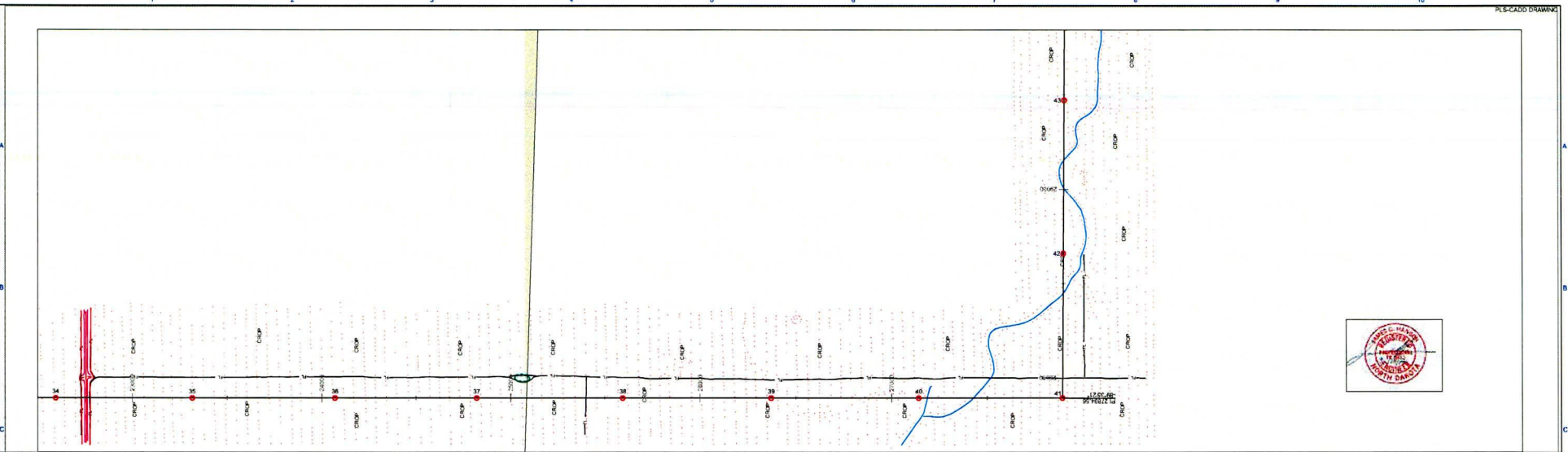
M-POWER, ND

230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB

**CEG**  
 ENGINEER: PM  
 CHECKED: ON 6/18/2009



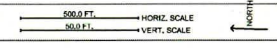
PROJECT	DRAWING NUMBER	REV
AREA	3 OF 9	4



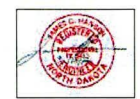
NO	DATE	REVISIONS AND RECORD OF ISSUE
4	09-08-09	AS BUILT
3	06-18-09	STRUCTURES #66,57,58 AND 59 MODIFIED DUE TO MINNOKOTA POWER T-LINE CROSSING; STRUCTURE #82 MOVED 16FT NORTH
2	06-08-09	T-LINE ALIGNMENT MOVED 20FT EAST FROM STRUCTURE#72 TO #82 PER OTP REQUEST; STRUCTURES AFFECTED FROM #71 TO #85.
1	05-14-09	STRUCTURE #88 CHANGED FROM STEEL TO LAMINATED WOOD POLES PER OTP
0	04-23-09	ISSUE FOR CONSTRUCTION WITH CHANGES PER OTP (NEW DEADEND STRUCTURES AND FIBER OPTIC; DND-305).

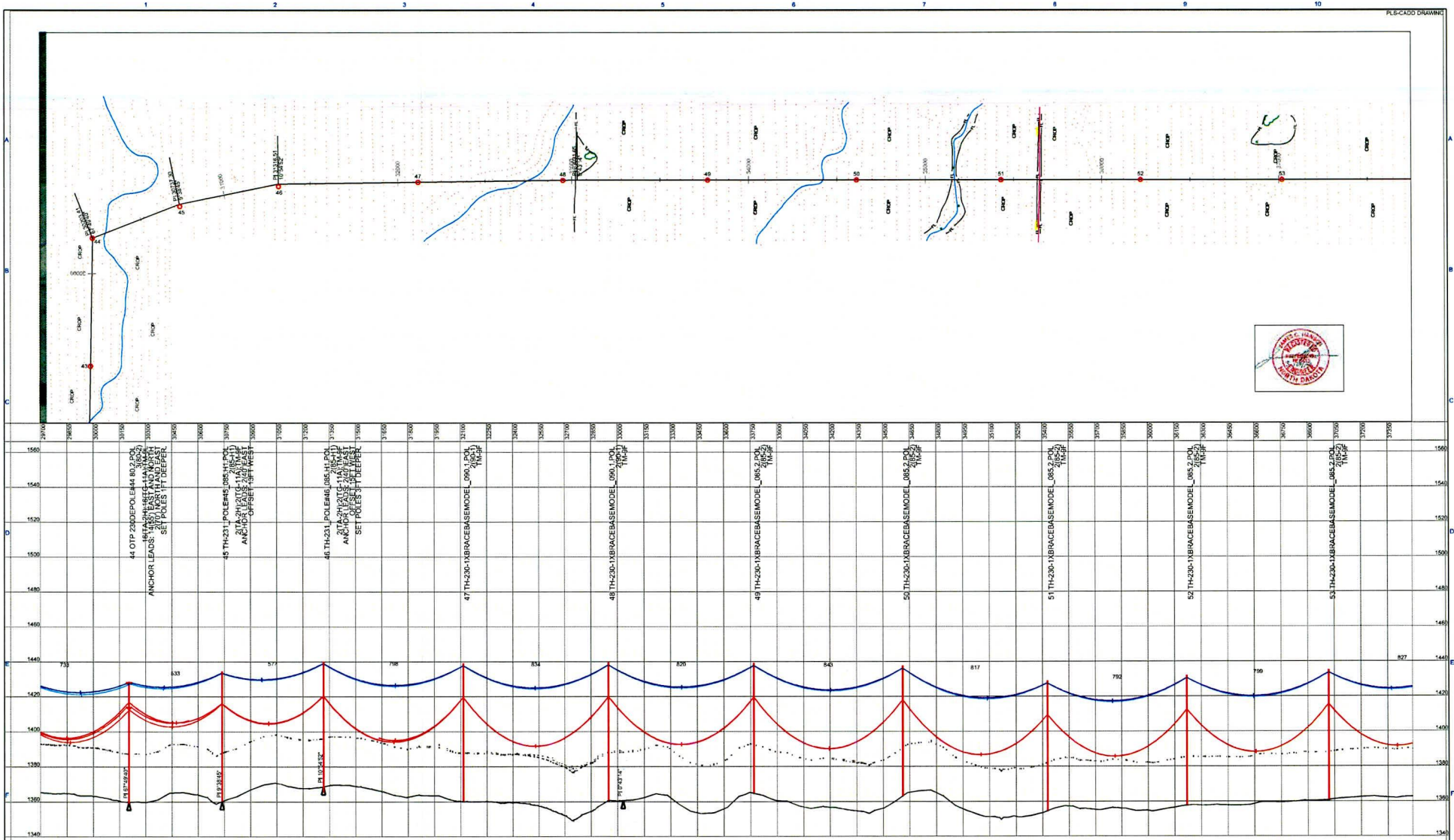
M-POWER, ND  
230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB

**CEG**  
ENGINEER PM DESIGNER DB  
CHECKED DATE 6/18/2009



PROJECT	DRAWING NUMBER	REV
AREA	4 OF 9	4



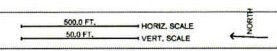


NO	DATE	REVISIONS AND RECORD OF ISSUE
4	09/09/09	AS BUILT
3	06-16-09	STRUCTURES #56,57,58 AND 59 MODIFIED DUE TO MINNKOTA POWER T-LINE CROSSING; STRUCTURE #82 MOVED 16FT NORTH
2	06-08-09	T-LINE ALIGNMENT MOVED 20FT EAST FROM STRUCTURE#72 TO #82 PER REQUEST; STRUCTURES AFFECTED FROM #71 TO #85.
1	05-14-09	STRUCTURE #88 CHANGED FROM STEEL TO LAMINATED WOOD POLES PER OTP
0	04-23-09	ISSUE FOR CONSTRUCTION WITH CHANGES PER OTP (NEW DEADEND STRUCTURES AND FIBER OPTIC DMS-3025)

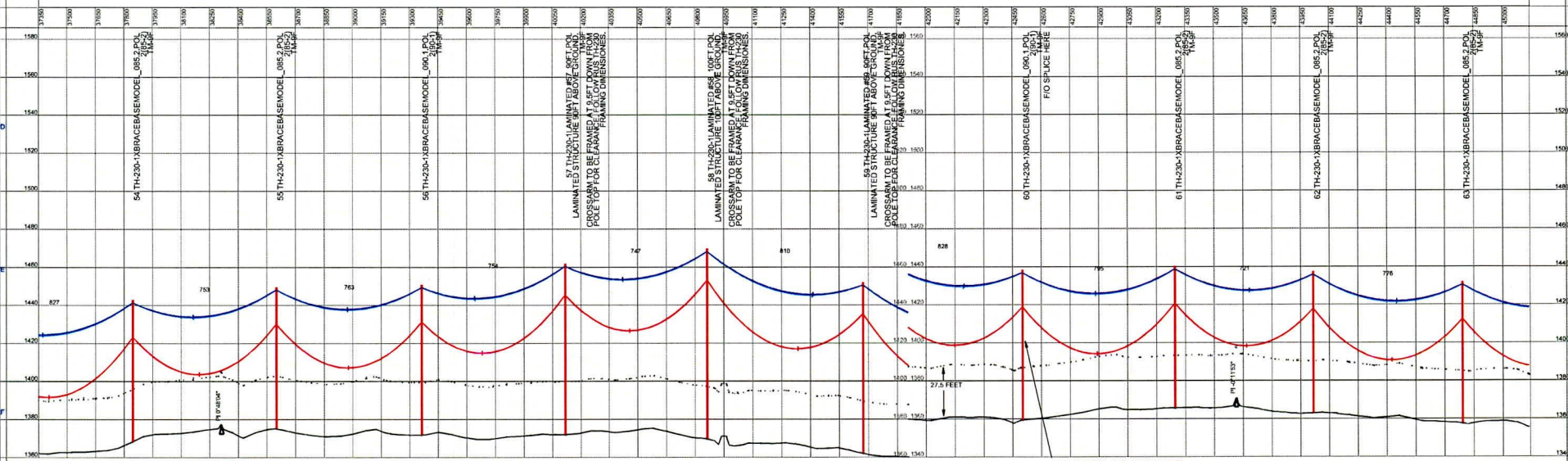
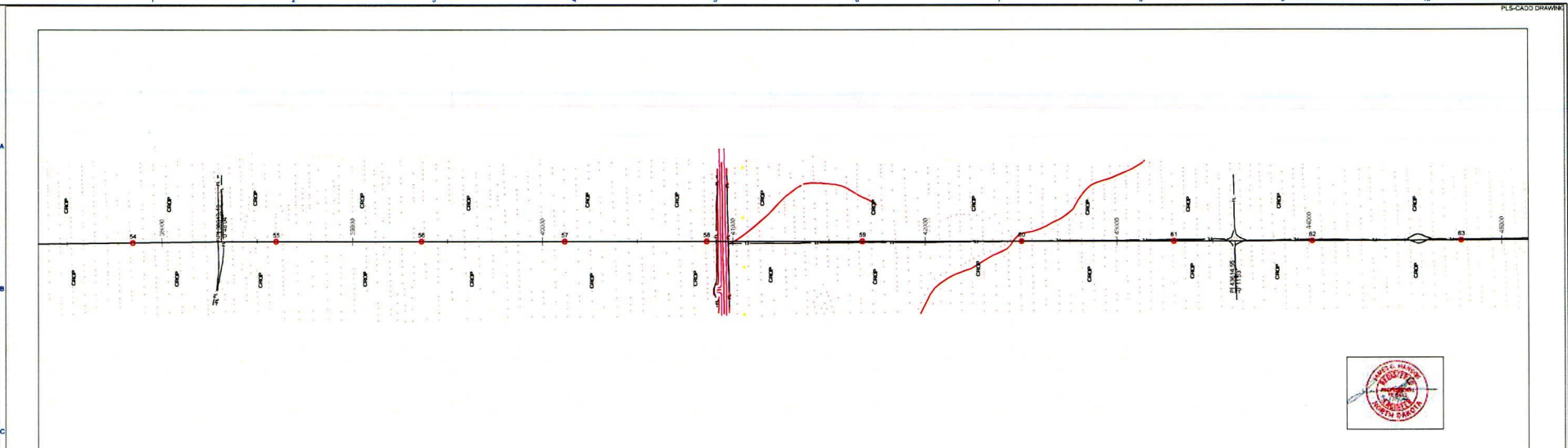
M-POWER, ND

230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB

**CEG**  
 CIVIL ENGINEER  
 PROJECT: PM  
 CHECKED: DB  
 DATE: 04/16/2009



PROJECT	DRAWING NUMBER	REV
	5 OF 9	4

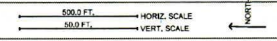


PLACE F/O SPLICE HERE

NO	DATE	REVISIONS AND RECORD OF ISSUE
4	06/08/09	AS BUILT
3	06-14-09	STRUCTURES #56, 57, 58 AND 59 MODIFIED DUE TO MINNOKOTA POWER T-LINE CROSSING; STRUCTURE #82 MOVED 16FT NORTH
2	06-08-09	T-LINE ALIGNMENT MOVED 20FT EAST FROM STRUCTURE#72 TO #82 PER OTP REQUEST; STRUCTURES AFFECTED FROM #71 TO #85.
1	05-14-09	STRUCTURE #88 CHANGED FROM STEEL TO LAMINATED WOOD POLES PER OTP
0	04-23-09	ISSUE FOR CONSTRUCTION WITH CHANGES PER OTP (NEW DEADEND STRUCTURES AND FIBER OPTIC(DMO-3025))

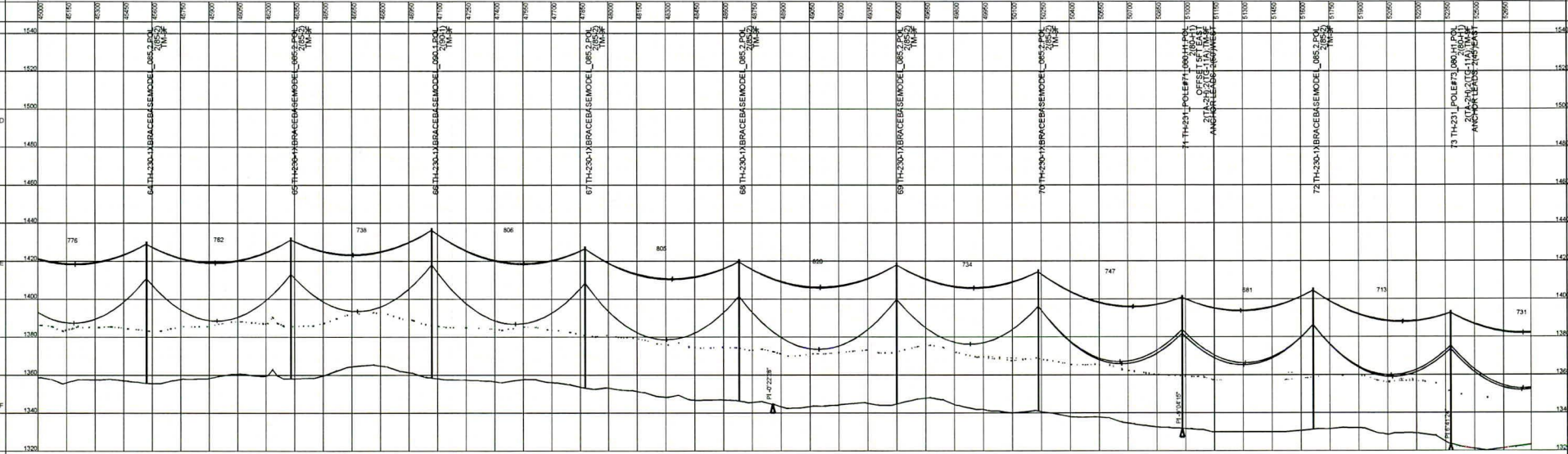
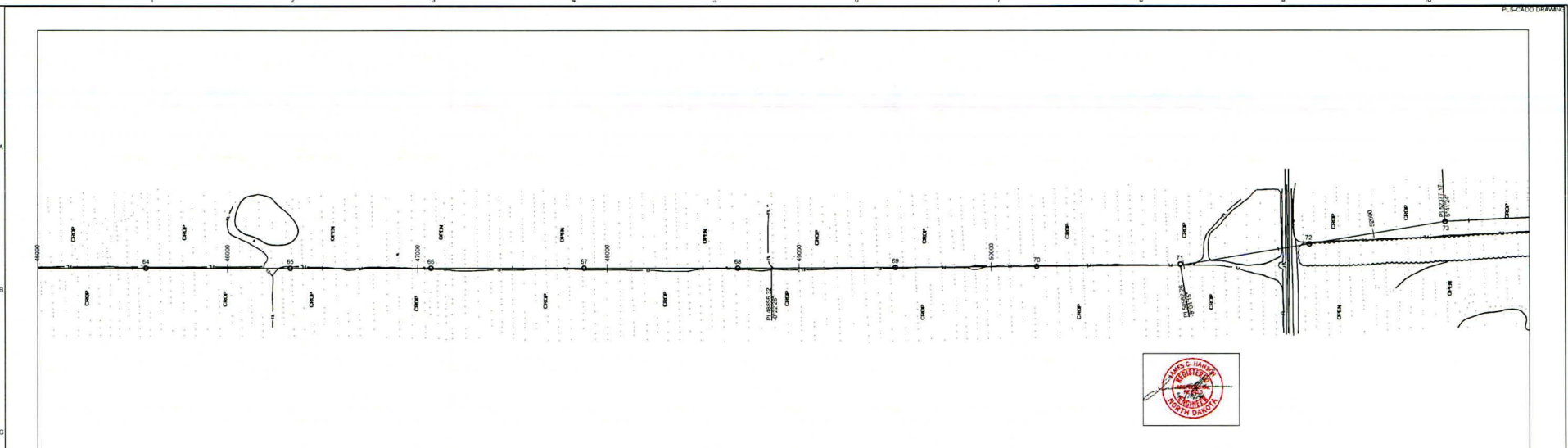
M-POWER, ND

230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB



PROJECT	DRAWING NUMBER	REV
AREA	6 OF 9	4

ENGR. PM DB  
CHECKED DATE 6/18/2009



NO	DATE	REVISIONS AND RECORD OF ISSUE
4	08-06-09	AS BUILT
3	06-16-09	STRUCTURES #56, 57, 58 AND 59 MODIFIED DUE TO MINNOKOTA POWER T-LINE CROSSING. STRUCTURE #62 MOVED LEFT NORTH
2	05-06-09	T-LINE ALIGNMENT MOVED SOFT EAST FROM STRUCTURE#72 TO #62 PER OTP REQUEST. STRUCTURES AFFECTED FROM #71 TO #65.
1	05-14-09	STRUCTURE #68 CHANGED FROM STEEL TO LAMINATED WOOD POLES PER OTP
0	04-23-09	ISSUE FOR CONSTRUCTION WITH CHANGES PER OTP (NEW DEADEND STRUCTURES AND FIBER OPTIC DMS-3825)

M-POWER, ND

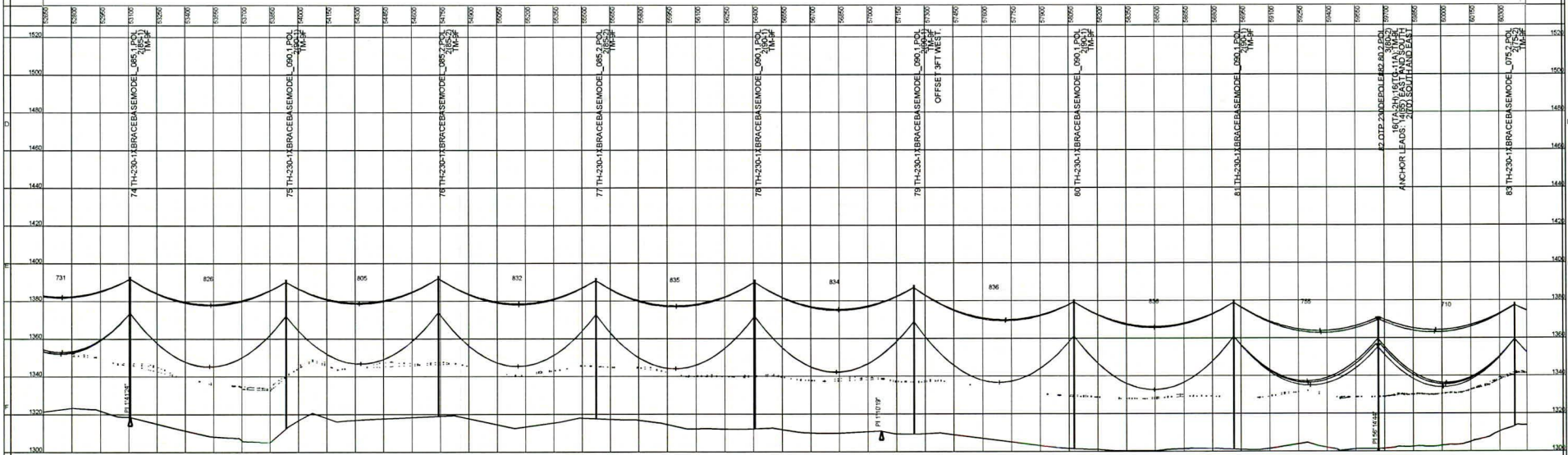
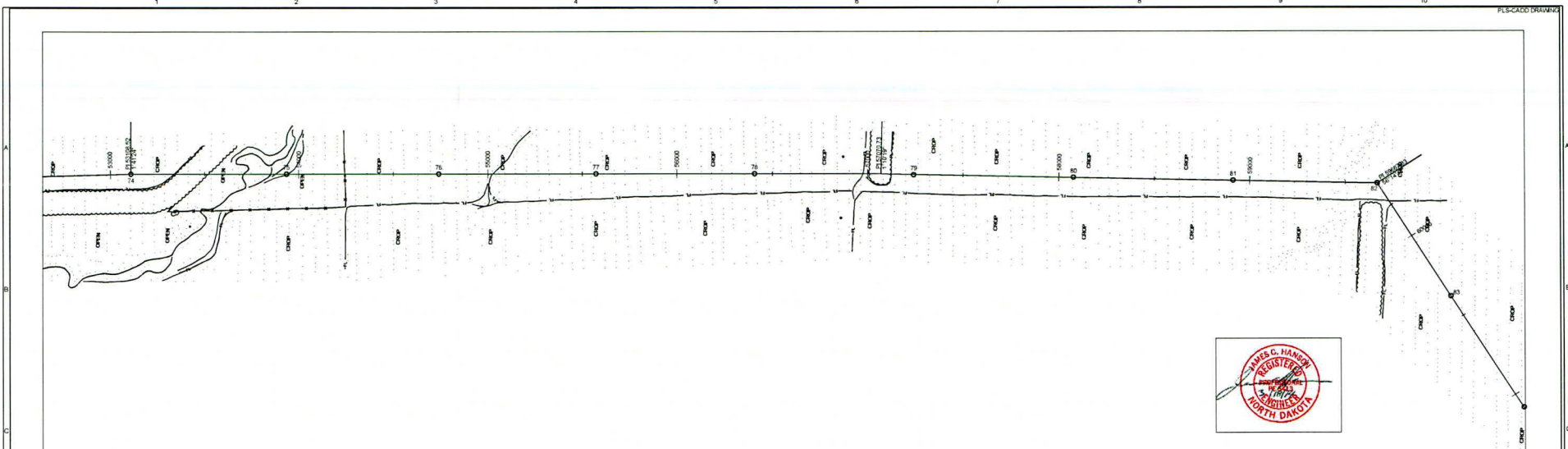
230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB



DESIGNER: PM  
 CHECKED: DATE: 6/18/2009  
 DRAWN: DB



PROJECT	DRAWING NUMBER	REV
AREA	7 OF 9	4



NO	DATE	REVISIONS AND RECORD OF ISSUE
4	09/06/09	AS BUILT
3	06-18-09	STRUCTURES #6, 57, 58 AND 59 MOORED DUE TO MINNOKOTA POWER T-LINE CROSSING. STRUCTURE #62 MOVED 16FT NORTH
2	05-08-09	T-LINE ALIGNMENT MOVED 20FT EAST FROM STRUCTURE#7 TO #62 PER OTP REQUEST. STRUCTURES AFFECTED FROM #71 TO #65.
1	05-14-09	STRUCTURE #68 CHANGED FROM STEEL TO LAMINATED WOOD POLES PER OTP
0	04-23-09	ISSUE FOR CONSTRUCTION WITH CHANGES PER OTP (NEW DEADEND STRUCTURES AND FIBER OPTIC DND-3025)

M-POWER, ND

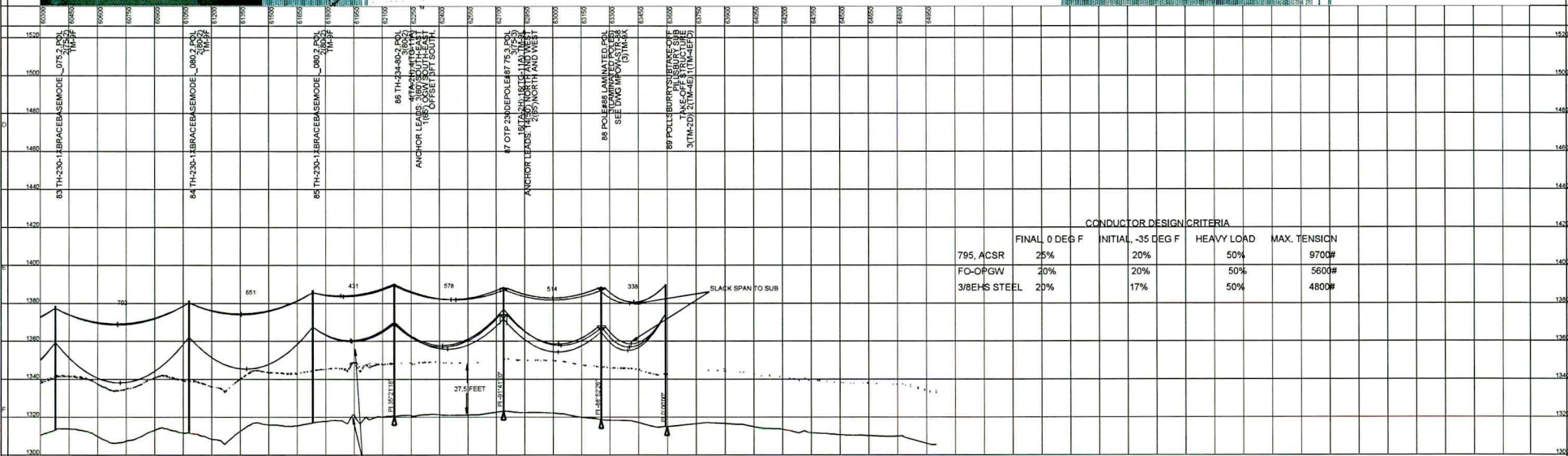
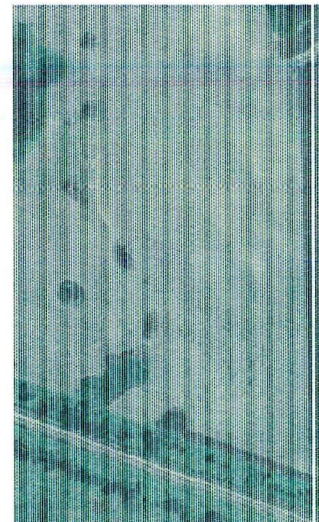
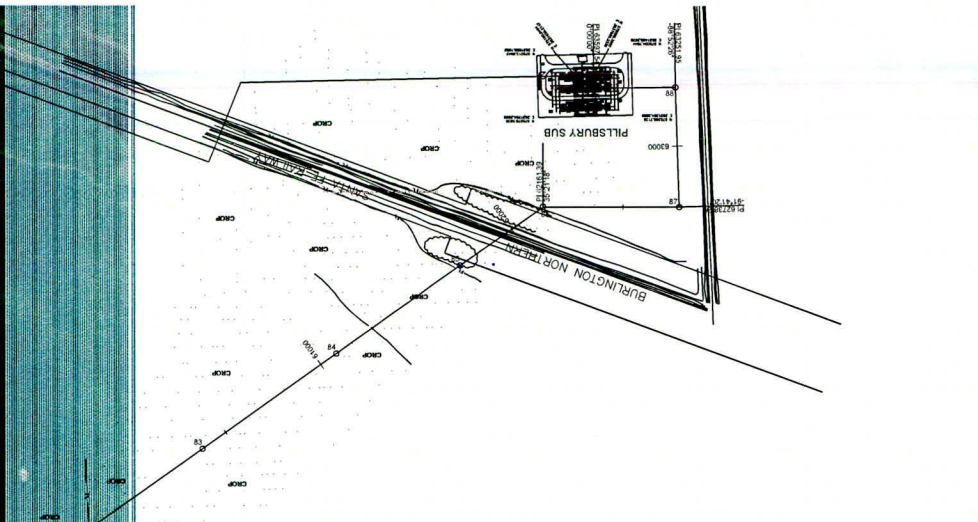
230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB

**CEG**

ENGINEER: PM  
 CHECKED: DB  
 DRAWN: DB  
 DATE: 6/18/2009



PROJECT	DRAWING NUMBER	REV
CODE	8 OF 9	4
AREA		



BURLINGTON NORTHERN SANTA FE RAILWAY CROSSING MINIMUM 20 FT CLEARANCE

NO	DATE	REVISIONS AND RECORD OF ISSUE
4	09/08/09	AS BUILT
3	06-18-09	STRUCTURES #56,57,58 AND 59 MODIFIED DUE TO MINNKOTA POWER T-LINE CROSSING. STRUCTURE #62 MOVED 16FT NORTH
2	06-08-09	T-LINE ALIGNMENT MOVED 20FT EAST FROM STRUCTURE#72 TO #62 PER OTP REQUEST; STRUCTURES AFFECTED FROM #71 TO #65.
1	05-14-09	STRUCTURE #68 CHANGED FROM STEEL TO LAMINATED WOOD POLES PER OTP
0	04-23-09	ISSUE FOR CONSTRUCTION WITH CHANGES PER OTP (NEW DEADEND STRUCTURES AND FIBER OPTIC DND-3825)

M-POWER, ND

230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB



ENGINEER PM DRAWN DB  
CHECKED DATE 6/18/2009

500.0 FT. HORIZ. SCALE  
50.0 FT. VERT. SCALE  
H150N

PROJECT DRAWING NUMBER REV  
9 OF 9 4

MPowerLine Damper Spacings							
Total Count	82	1	Total Count	166			
Conductor	STEE/EL/3/8&7		Conductor	OPGW DNO-3825			
Damper Catalog (bare)	1701-5	1701-2	Damper Catalog (bare)	OVD461/570			
Table Of Catalog	Dampers From Placemen Side	Span	Item	Table Of Catalog	Dampers From Placemen Side	Span	Item
NONE		406		NONE			
NONE		417		NONE			
1701-5	11 Right	603	1	OVD461/570	19 Right	603	1
1701-5	11 Left	572	1	OVD461/570	34 Right	572	1
1701-5	11 Right	675	1	OVD461/570	19 Right	675	1
1701-5	11 Left	687	1	OVD461/570	35 Right	687	2
1701-5	11 Right	689	1	OVD461/570	19 Right	689	1
1701-5	11 Left	737	1	OVD461/570	35 Right	737	2
1701-5	11 Right	787	1	OVD461/570	19 Right	787	1
1701-5	11 Left	578	1	OVD461/570	35 Right	578	2
1701-5	11 Right	832	1	OVD461/570	19 Right	832	1
1701-5	11 Left	772	1	OVD461/570	35 Right	772	2
1701-5	11 Right	705	1	OVD461/570	19 Right	705	1
1701-5	11 Left	800	1	OVD461/570	35 Right	800	2
1701-5	11 Right	777	1	OVD461/570	19 Right	777	1
1701-5	11 Left	773	1	OVD461/570	35 Right	773	2
1701-5	11 Right	777	1	OVD461/570	19 Right	777	1
1701-5	11 Left	785	1	OVD461/570	35 Right	785	2
1701-5	11 Right	694	1	OVD461/570	19 Right	694	1
1701-5	11 Left	708	1	OVD461/570	35 Right	708	2
1701-5	11 Right	603	1	OVD461/570	19 Right	603	1
1701-5	11 Left	830	1	OVD461/570	35 Right	830	2
1701-5	11 Right	631	1	OVD461/570	19 Right	631	1
1701-5	11 Left	638	1	OVD461/570	34 Right	638	1
1701-5	11 Right	641	1	OVD461/570	19 Right	641	1
1701-5	11 Left	625	1	OVD461/570	34 Right	625	1
NONE		570		NONE			
NONE		524		NONE			

1701-5	11 Right	780	1	OVD461/570	19 Right	780	1
1701-5	11 Left	714	1	OVD461/570	35 Right	714	2
1701-5	11 Right	744	1	OVD461/570	19 Left	744	1
1701-5	11 Left	718	1	OVD461/570	35 Left	718	2
1701-5	11 Right	802	1	OVD461/570	19 Right	802	1
1701-5	11 Left	718	1	OVD461/570	35 Right	718	2
1701-5	11 Right	756	1	OVD461/570	19 Left	756	1
1701-5	11 Left	750	1	OVD461/570	35 Right	750	2
1701-5	11 Right	775	1	OVD461/570	19 Left	775	1
1701-5	11 Left	763	1	OVD461/570	35 Right	763	2
1701-5	11 Right	763	1	OVD461/570	19 Left	763	1
1701-5	11 Left	773	1	OVD461/570	35 Right	773	2
1701-5	11 Right	793	1	OVD461/570	19 Left	793	1
1701-5	11 Left	763	1	OVD461/570	34 Right	763	2
1701-5	11 Left	746	1	OVD461/570	19 Left	746	1
1701-5	11 Right	536	1	OVD461/570	34 Left	536	2
1701-5	11 Left	579	1	OVD461/570	19 Right	579	1
1701-5	11 Right	822	1	OVD461/570	35 Right	822	2
1701-5	11 Left	811	1	OVD461/570	19 Left	811	1
1701-5	11 Right	820	1	OVD461/570	35 Left	820	2
1701-5	11 Left	843	1	OVD461/570	19 Right	843	1
1701-5	11 Right	799	1	OVD461/570	35 Left	799	2
1701-5	11 Left	804	1	OVD461/570	19 Right	804	1
1701-5	11 Right	804	1	OVD461/570	35 Left	804	2
1701-5	11 Left	827	1	OVD461/570	19 Right	827	1
1701-5	11 Right	753	1	OVD461/570	35 Left	753	2
1701-5	11 Left	763	1	OVD461/570	19 Left	763	1
1701-5	11 Right	754	1	OVD461/570	35 Right	754	2
1701-5	11 Left	747	1	OVD461/570	19 Right	747	1
1701-5	11 Right	802	1	OVD461/570	35 Left	802	2
1701-5	11 Left	826	1	OVD461/570	19 Right	826	1
1701-5	11 Right	795	1	OVD461/570	35 Left	795	2
1701-5	11 Left	730	1	OVD461/570	19 Right	730	1
1701-5	11 Right	730	1	OVD461/570	35 Left	730	2

1701-5	11 Right	776	1	OVD461/570	19 Right	776	1
1701-5	11 Left	761	1	OVD461/570	35 Right	761	2
1701-5	11 Right	777	1	OVD461/570	19 Left	777	1
1701-5	11 Left	746	1	OVD461/570	35 Left	746	2
1701-5	11 Right	799	1	OVD461/570	19 Right	799	1
1701-5	11 Left	805	1	OVD461/570	35 Right	805	2
1701-5	11 Right	815	1	OVD461/570	19 Left	815	1
1701-5	11 Left	728	1	OVD461/570	35 Right	728	2
1701-5	11 Right	747	1	OVD461/570	19 Left	747	1
1701-5	11 Left	681	1	OVD461/570	35 Right	681	2
1701-5	11 Right	713	1	OVD461/570	19 Left	713	1
1701-5	11 Left	731	1	OVD461/570	35 Right	731	2
1701-5	11 Right	826	1	OVD461/570	19 Left	826	1
1701-5	11 Left	805	1	OVD461/570	35 Right	805	2
1701-5	11 Right	832	1	OVD461/570	19 Left	832	1
1701-5	11 Left	835	1	OVD461/570	35 Right	835	2
1701-5	11 Right	834	1	OVD461/570	19 Left	834	1
1701-5	11 Left	835	1	OVD461/570	35 Right	835	2
1701-5	11 Right	835	1	OVD461/570	19 Left	835	1
1701-5	11 Left	770	1	OVD461/570	35 Right	770	2
1701-5	11 Right	691	1	OVD461/570	19 Left	691	1
1701-5	11 Left	683	1	OVD461/570	34 Right	683	1
1701-5	11 Right	665	1	OVD461/570	19 Left	665	1
1701-5	11 Left	430	1	OVD461/570	34 Right	430	1
1701-5	11 Right	577	1	OVD461/570	19 Left	577	1
1701-2	13 Right	514	1	OVD461/570	34 Left	514	1
				OVD461/570	30 Right		2

**NOTES:**

1. NO DAMPERS ARE NEEDED FOR 795kcmil.
2. SPANS START AT LUVERNE SUBSTATION AND GO TO PILLSBURY SUBSTATION. LEFT/RIGHT IS AS VIEWED FROM "RIGHT" SIDE OF LINE.



1	06/06/08	JEC	AS BUILT				
2	06/06/08	MAX	FIELD UPDATES				
3	04/28/08	MAX	ISSUE FOR CONSTRUCTION				
REV.	DATE	DRAWN	DESCRIPTION	WORK ORDER	CHG	APPRO	DATE
<b>CEIG</b> CONSULTING ENGINEERS GROUP FARMINGTON, MINNESOTA							
MPOWER / LUVERNE TRANSMISSION LINE DAMPER PLACEMENTS				SCALE NONE			
CHECKED				DATE			
DRAWN				DATE			
DATE 02/27/09				MAP NO. DWG. NO. MPOW-DP-01			

MPOWER SUBSTATION CONTROL HOUSE

PATCH PANEL IN CONTROL HOUSE ST CONNECTIONS

FIBER COLOR	POSITION #/ FIBER #
(BLUE TUBE)	
311L TX BLUE	1
311L RX ORANGE	2
421 TX GREEN	3
421 RX BROWN	4
GRAY	5
WHITE	6
RED	7
BLACK	8
YELLOW	9
VIOLET	10
ROSE	11
AQUA	12
(ORANGE TUBE)	
TX BLUE	1
RX ORANGE	2
GREEN	3
BROWN	4
GRAY	5
WHITE	6
RED	7
BLACK	8
YELLOW	9
VIOLET	10
ROSE	11
AQUA	12

SPLICE ON STEEL DEADEND IN SUBSTATION

FIBER COLOR	POSITION #/ FIBER #
(BLUE TUBE)	
BLUE	1
ORANGE	2
GREEN	3
BROWN	4
GRAY	5
WHITE	6
RED	7
BLACK	8
YELLOW	9
VIOLET	10
ROSE	11
AQUA	12
(ORANGE TUBE)	
BLUE	1
ORANGE	2
GREEN	3
BROWN	4
GRAY	5
WHITE	6
RED	7
BLACK	8
YELLOW	9
VIOLET	10
ROSE	11
AQUA	12

SPLICE ON TRANSMISSION LINE POLE #32

FIBER COLOR	POSITION #/ FIBER #
(BLUE TUBE)	
BLUE	1
ORANGE	2
GREEN	3
BROWN	4
GRAY	5
WHITE	6
RED	7
BLACK	8
YELLOW	9
VIOLET	10
ROSE	11
AQUA	12
(ORANGE TUBE)	
BLUE	1
ORANGE	2
GREEN	3
BROWN	4
GRAY	5
WHITE	6
RED	7
BLACK	8
YELLOW	9
VIOLET	10
ROSE	11
AQUA	12

SPLICE ON TRANSMISSION LINE POLE #50

FIBER COLOR	POSITION #/ FIBER #
(BLUE TUBE)	
BLUE	1
ORANGE	2
GREEN	3
BROWN	4
GRAY	5
WHITE	6
RED	7
BLACK	8
YELLOW	9
VIOLET	10
ROSE	11
AQUA	12
(ORANGE TUBE)	
BLUE	1
ORANGE	2
GREEN	3
BROWN	4
GRAY	5
WHITE	6
RED	7
BLACK	8
YELLOW	9
VIOLET	10
ROSE	11
AQUA	12

SPLICE ON STEEL DEADEND IN SUBSTATION

FIBER COLOR	POSITION #/ FIBER #
(BLUE TUBE)	
BLUE	1
ORANGE	2
GREEN	3
BROWN	4
GRAY	5
WHITE	6
RED	7
BLACK	8
YELLOW	9
VIOLET	10
ROSE	11
AQUA	12
(ORANGE TUBE)	
BLUE	1
ORANGE	2
GREEN	3
BROWN	4
GRAY	5
WHITE	6
RED	7
BLACK	8
YELLOW	9
VIOLET	10
ROSE	11
AQUA	12

PILLSBURY SUBSTATION

PATCH PANEL IN CONTROL HOUSE, ST CONNECTIONS

POSITION #/ FIBER #	FIBER COLOR
1	311L RX BLUE
2	311L TX ORANGE
3	421 RX GREEN
4	421 TX BROWN
5	GRAY
6	WHITE
7	RED
8	BLACK
9	YELLOW
10	VIOLET
11	ROSE
12	AQUA
(ORANGE TUBE)	
1	416 RX BLUE
2	416 TX ORANGE
3	GREEN
4	BROWN
5	GRAY
6	WHITE
7	RED
8	BLACK
9	YELLOW
10	VIOLET
11	ROSE
12	AQUA

PATCH CORDS

SEL-311L RELAY  
PRI RLYC RX  
PRI RLYC TX

SEL-421 RELAY WITH SEL-2829  
TTR RX  
TTR TX

NOTES:

- CONTRACTOR TO SUPPLY AND INSTALL SPLICE ON STEEL DEADEND IN PILLSBURY SUBSTATION. FINAL SCOPE OF FIBER OPTIC WORK IN PILLSBURY SUBSTATION TO BE DETERMINED BY OWNER AND MINNKOTA.
- ALL 24 FIBERS ARE TO BE TERMINATED IN EACH PATCH PANEL AND TESTED END TO END.
- OPCW IS AFL DNO-3825, 24SM FIBER, 0.465" DIAMETER, RBS 16,826#, BENDING RADIUS 10", 0.40db/Km LOSS@1310nm.

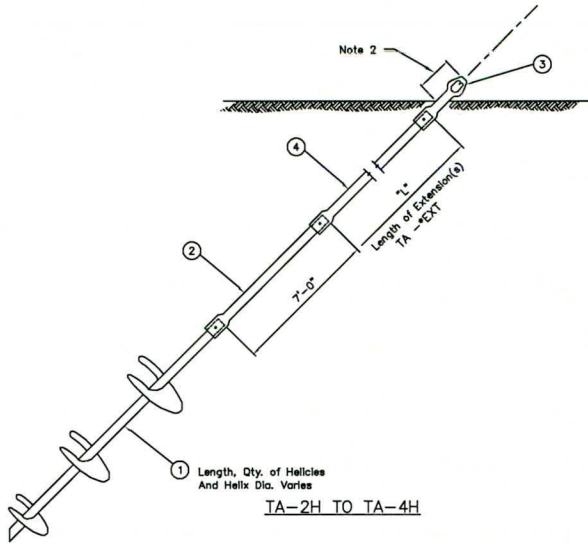


1	04/26/09	JJC	AS BUILT				
0	04/26/09	MAK	ISSUE FOR CONSTRUCTION				
REV.	DATE	DRWN	DESCRIPTION	WORK ORDER	CHD	APPD	DATE
CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA				FIBER OPTIC CABLE INSTALLATION PILLSBURY SUBSTATION TO MPOWER SUBSTATION			
CHECKED BY: _____ DATE: _____				SCALE: NONE W.O. NO.: _____			
DRAWN BY: MAK DATE: 01/12/09				MAP NO.: _____ DWG. NO.: MPOWER-FO-01			



LIST OF MATERIALS

DWG. REF.	QTY.	DESCRIPTION	ITEM	DET.	CODE No.
1	1	Anchor, Helix Section	z		
2	1	Anchor, Ext. Shaft, 5 ft. 1 1/2" sq	z		
3	1	Adapter, Guy, Twin eye	z		
4		TA- * EXT			



NOTES:

1. Appropriate anchor unit and maximum holding power shall be specified on plan and profile drawings.
2. Recommended maximum projection after preloading is 8 inches. Projection may be increased to avoid overtightening of the shaft. Final projection shall be approved by the engineer.
3. The entire anchor assembly shall be hot dipped galvanized in accordance with ASTM A153.
4. Contractor shall install screw anchors in accordance with manufacturer's recommendations.
5. Engineer shall consult manufacturer in selection of screw anchor.

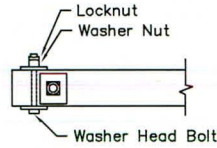
- 6.\*Anchor rod extension shaft beyond five feet is not a part of the anchor assembly unit. The extension shaft beyond five feet is included in UNIT TA-\*EXT where the "\*" represents the length of the extension shaft beyond 5 feet. For example, an installation requiring two 10 ft. extension shafts would be indicated by 2(TA-10EXT)
- 7.\*Anchors shall be installed in line with the guys.

UNITS	ANCHOR TYPE
*TA-2H	DOUBLE HELIX
*TA-3H	TRIPLE HELIX
*TA-4H	QUAD HELIX
ANCHORS	
POWER SCREW ANCHOR	

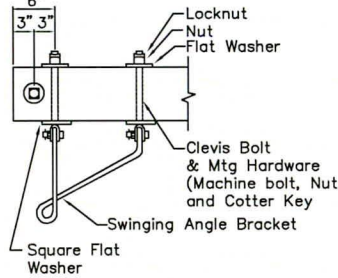
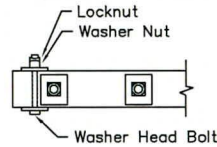
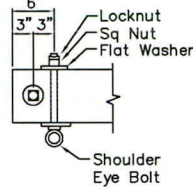
NO.	REVISION	DATE
2	REVISED	11/98
1*	note 6, 7, items 2, 4	03/98



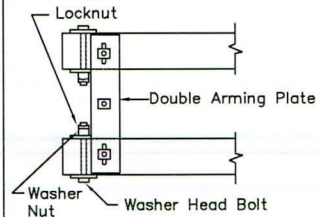
TA-2H to 4H



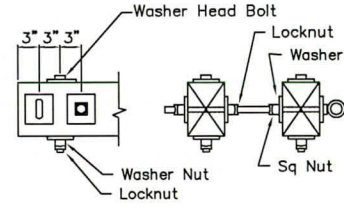
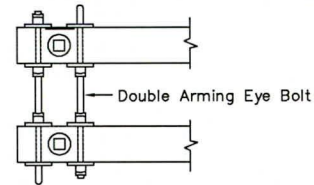
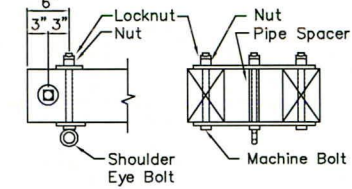
TD-9A



TD-9C



TD-9B



TD-9D

DETAILS  
MISCELLANEOUS

Reissued 03/98

NO.	REVISION	DATE
		Aug., 1986

Sheet 1 of 2  
TD-9

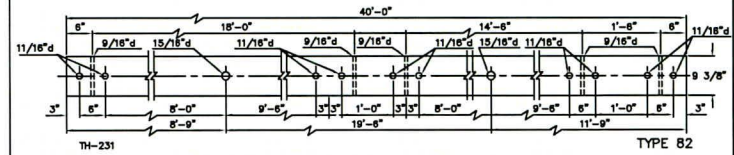
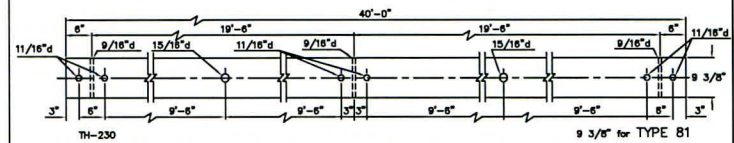


REV.	DATE	BY	DESCRIPTION	WORK ORDER	CHG	APP	DATE
1	04/98/08	JHC	AS BUILT				
0	04/98/08	UNK	ISSUE FOR CONSTRUCTION				

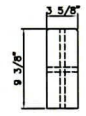
**CEG** CONSULTING ENGINEERS GROUP  
FARMINGTON MINNESOTA

MPOWER / LUVERNE  
TRANSMISSION LINE  
POLE FRAMING DRAWINGS SH 1

CHECKED: \_\_\_\_\_ SCALE: NONE  
DATE: \_\_\_\_\_ W.O. NO.: \_\_\_\_\_  
DRAWN: MAX MAP NO.: \_\_\_\_\_  
DATE: 02/27/09 DWG. NO.: \_\_\_\_\_  
MPOW-PF-01



ENLARGED END VIEWS



- NOTES:
1. Drill all holes on centerlines.
  2. "d" denotes hole diameter.
  3. Holes shall be drilled before treating.

Tolerance:  
Length ± 1/4"  
Cross section ± 1/8"

TRANSMISSION CROSSARMS  
FORTY FOOT

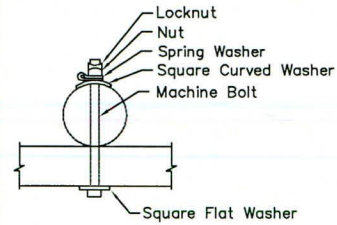
1	REVISED	02/09
1,*	REMOVE #80.B3	03/08
NO.	REVISION	DATE



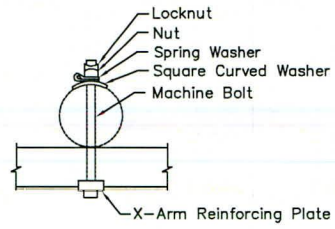
TCD-40



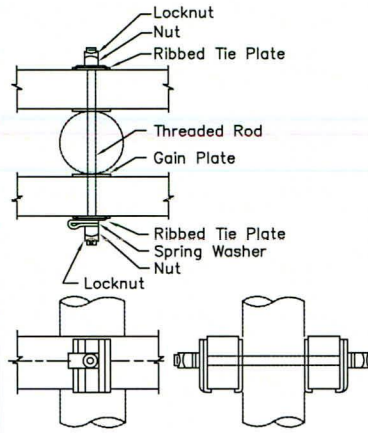
1	04/04/09	JHC	AS BUILT					
2	04/04/09	JHC	ISSUE FOR CONSTRUCTION					
REV.	DATE	BY	DESCRIPTION	ISSUE ORDER	CHD	APP	DATE	
<b>CEG</b> CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA								
MPOWER / LUVERNE TRANSMISSION LINE POLE FRAMING DRAWINGS SH 2								
DRAWN BY: JAMES C. HANSON				CHECKED: _____ SCALE: NONE				
DATE: _____				W.O. NO. _____				
DRAWN: MAX				MAP NO. _____				
DATE: 02/27/09				DWG. NO. MPOW-PF-02				



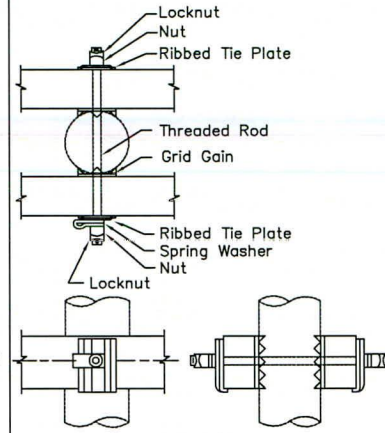
ID-14A



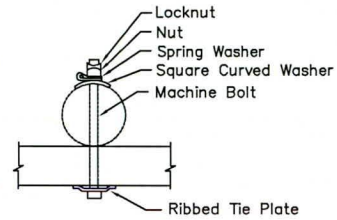
ID-14B



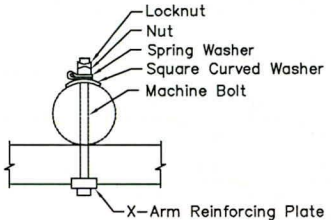
ID-15E



ID-15F



ID-14C



ID-14D

DETAILS			
SINGLE CROSSARM TO POLE			
NO.	REVISION	DATE	
			TD-14

Reissued 03/98

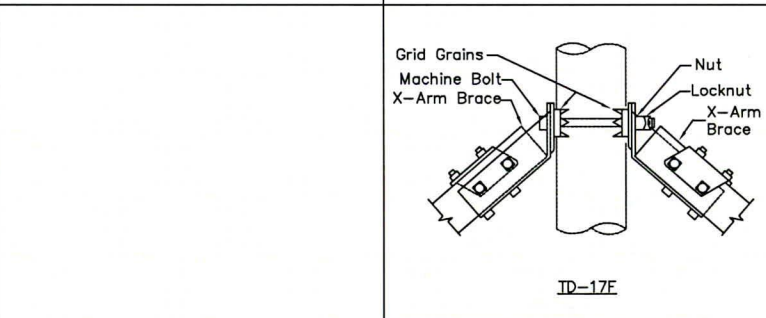
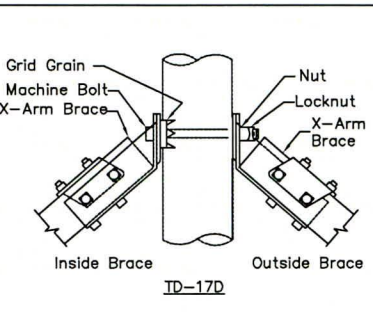
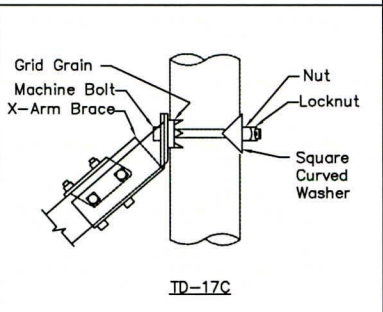
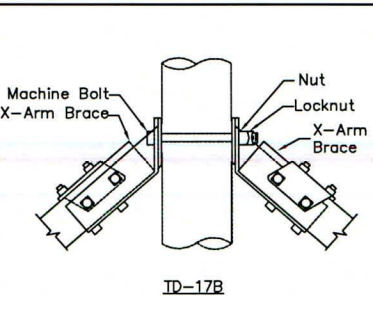
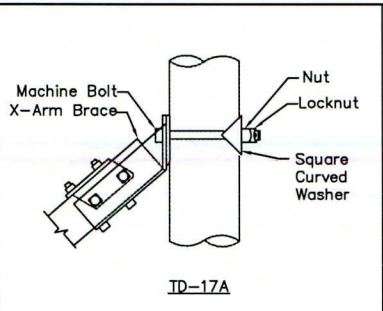
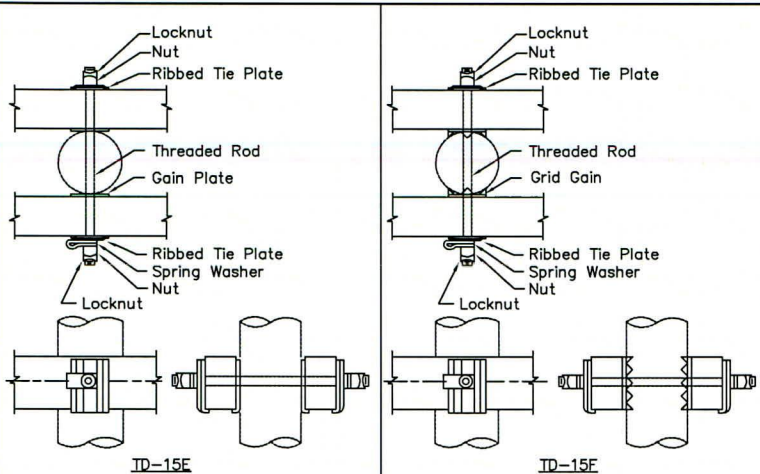
DETAILS			
DOUBLE CROSSARM TO POLE			
NO.	REVISION	DATE	
			TD-15

SHEET 2 OF 2

Reissued 03/98



1	DATE	BY	AS BUILT				
2	DATE	BY	WORK FOR CONSTRUCTION				
NO.	DATE	ISSUED	DESCRIPTION	WORK ORDER	CHG	APP	DATE
<b>CEG</b> CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA							
MPOWER / LUVERNE TRANSMISSION LINE POLE FRAMING DRAWINGS SH 3							
DRAWN BY: JAMES C. HANSON				SCALE: NONE			
DATE: 02/27/09				W.O. NO.:			
DRAWN: MAX				MAP NO.:			
DATE: 02/27/09				DWG. NO.:			
				MPOW-PF-03			



DETAILS  
DOUBLE CROSSARM TO POLE

DETAILS  
DOUBLE CROSSARM TO POLE

Reissued 03/98

NO.	REVISION	DATE

SHEET 2 OF 2  
TD-15

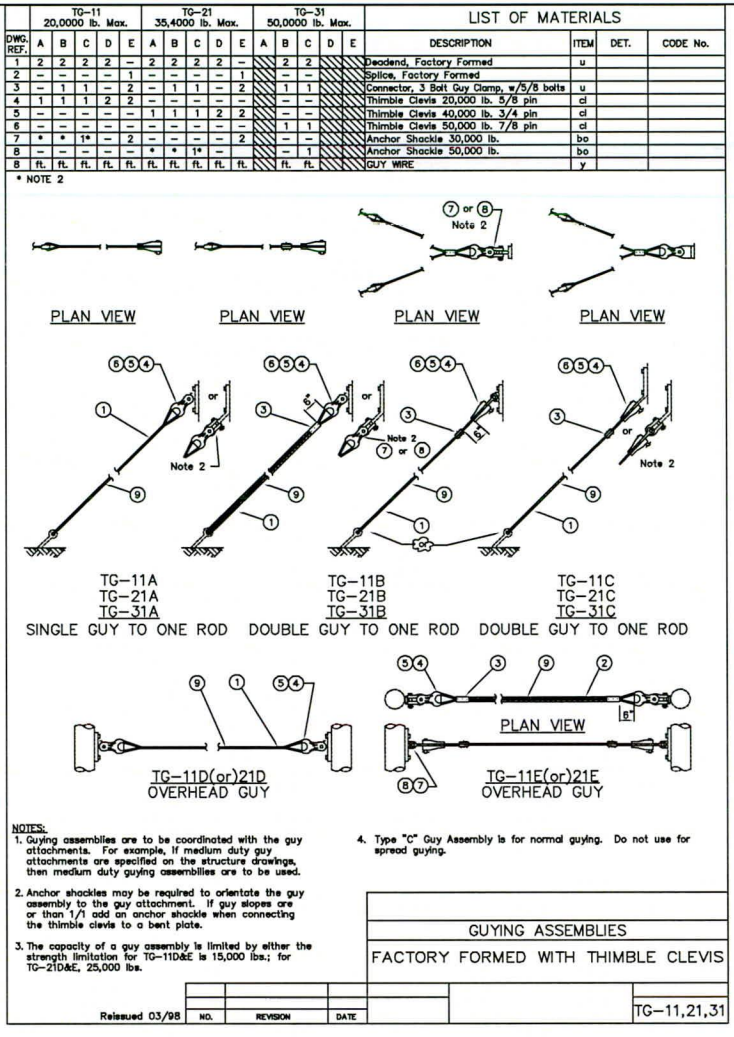
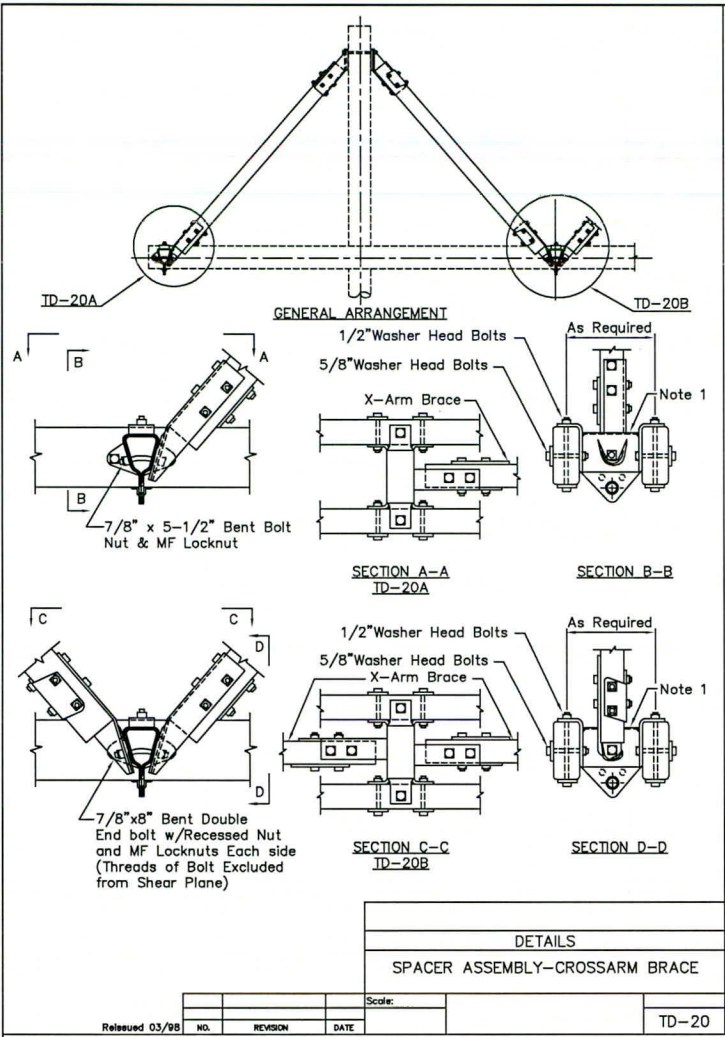
Reissued 03/98

NO.	REVISION	DATE

Scale: \_\_\_\_\_  
SHEET 1 OF 2  
TD-17

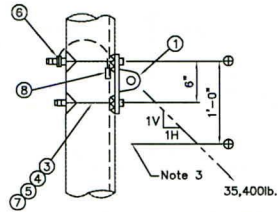


1	04/18/09	JAC	AS BUILT					
0	04/18/09	JAC	ISSUE FOR CONSTRUCTION					
REV.	DATE	BY	REVISION	ISSUE ORDER	ISSUED	APP'D	DATE	
<b>CEG</b> CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA				MPOWER / LUVERNE TRANSMISSION LINE POLE FRAMING DRAWINGS SH 4				
DRAWN BY: JAMES C. HANSON DRAWING NO.: 5413				CHECKED:	SCALE:	NONE		
DATE: 02/27/09				DATE:	MAP NO.:			
				DATE: 02/27/09	DWG. NO.:	MPOWER-PF-04		

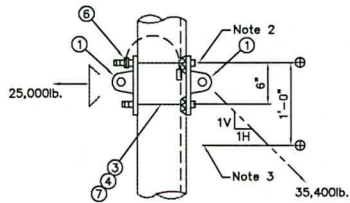


1	04/09/08	JCH	AS BUILT					
2	04/09/08	JCH	ISSUE FOR CONSTRUCTION					
REV.	DATE	BY	DESCRIPTION	WORK ORDER	CHG	APP	DATE	
<b>CEG</b> CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA				MPOWER / LUVERNE TRANSMISSION LINE POLE FRAMING DRAWINGS SH 5				
NORTH DAKOTA JAMES C. HANSON No. 1878				CHECKED	SCALE NONE			
DATE				W.O. NO.				
DRAWN MAX				MAP NO.				
DATE 02/27/09				DWR. NO. MPOWER-PF-05				

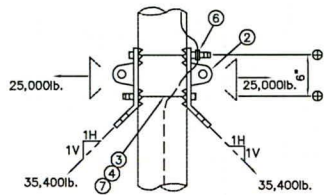
TG-25					LIST OF MATERIALS				
DWG. REF.	A	B	C	D	E	DESCRIPTION	ITEM	DET.	CODE No.
1	1	2	-	-	-	Tee, Deadend, medium duty	fv		
2	-	-	2	-	-	Tee, Deadend & Guying, medium duty	fv		
3	2	2	4	-	-	Grid Galn, 4" x 4", 15/16" hole	bl		
4	2	2	2	-	-	7/8" Bolt, Machine, by req'd length	c		
5	2	-	-	-	-	Washer, Curved, 4" sq x 1/4", 15/16" hole	d		
6	1	1	1	-	-	7/8" Clamp, Groundwire + 1 nut	dp		
7	2	2	2	-	-	7/8" Locknut, MF Type	ek		
8	1	1	-	-	-	Connector, Compression	p		



TG-25C



TG-25D



TG-25E

**Notes:**

- The indicated loads are design maximum.
- For guy slopes more than 1V to 1H the maximum vertical capacity should not exceed 25,000 lbs.
- The lower work points (a) are for locations where two guy attachments are required.
- When there is no pole groundwire or the groundwire is stood off from the pole, items 6 & 8 are not required.
- Dimensions of the guying attachments shall accommodate medium duty guying assemblies.

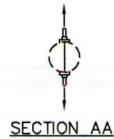
- Item 8, compression connector, may not be necessary depending on the location of the pole ground shown on the structure drawings.

GUY ATTACHMENTS			
MEDIUM DUTY GUYING TEES			
NO.	REVISION	DATE	Aug., 1986

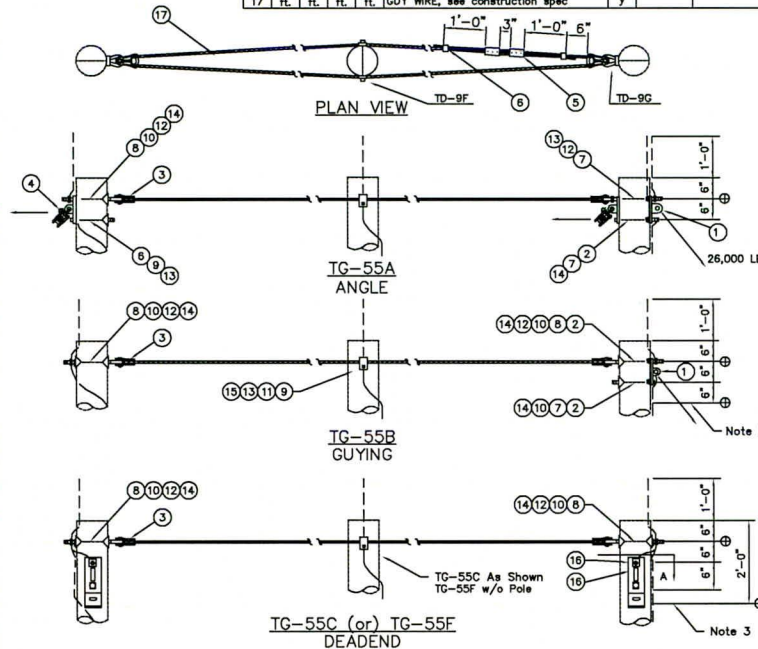
Relissued 03/98

TG-25

TG-55					LIST OF MATERIALS			
DWG. REF.	A	B	C	F	DESCRIPTION	ITEM	DET.	CODE No.
1	3	1	-	-	Tee, Deadend, medium duty	fv		
2	2	2	-	-	Grid Galn, 4" x 4", 15/16" hole	bl		
3	2	2	2	2	Thimble Clevis 20,000 lb.	cl		
4	2	-	-	-	Anchor Shackles 30,000lb.	bo		
5	2	2	2	2	Connector, 3 Bolt Guy Clamp, w/5/8" bolts	u		
6	2	2	2	2	Guy Clip	dz		
7	2	1	-	-	3/4" Bolt, Machine, by req'd length	c		
8	2	2	2	2	3/4" Bolt, Double Arm Eye, by r.l.	dy		
9	1	1	1	-	5/8" Bolt, Machine, by req'd length	c		
10	2	4	4	4	Washer, Curved, 4" sq x 1/4", 13/16" hole	d		
11	2	2	2	-	Clamp, Messenger			
12	2	2	-	-	3/4" Clamp, Groundwire + 1 nut	dp		
13	1	1	1	-	5/8" Clamp, Groundwire + 1 nut	dp		
14	6	5	-	-	3/4" Locknut, MF Type	ek		
15	1	1	1	-	5/8" Locknut, MF Type	ek		
16	-	-	4	4	GUY ATTACHMENT, Deadend & Guy'g Tee			TG-25E
17	fl.	ft.	ft.	ft.	GUY WIRE, see construction spec	y		



SECTION AA



TG-55C (or) TG-55F DEADEND

**NOTES:**

- The indicated loads are design maximum.
- The lower work point (a) on TG-55B is for OHGW deadend and guy attachments when required. Connect the groundwire clamps of the guy attachments to the pole groundwire.
- Engineer should determine if additional guy attachments are required for tangent deadend structures.

POLE TIE ASSEMBLIES			
ANGLE, GUYING & DEADEND POLE TIES (MEDIUM DUTY GUYING TEES)			
NO.	REVISION	DATE	

Relissued 03/98

TG-55

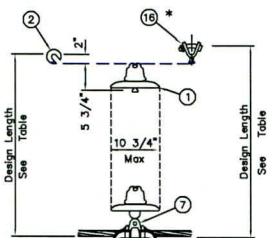


1	04/04/98	JCH	AS BUILT						
2	04/05/98	MAK	MAKE FOR CONSTRUCTION						
REV.	DATE	BY	DESCRIPTION	WORK ORDER	CHG	APP	DATE		
<b>CEG</b> CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA									
MPOWER / LUVERNE TRANSMISSION LINE POLE FRAMING DRAWINGS SH 6									
CHECKED BY JAMES C. HANSON No. 17815				SCALE NONE W.G. NO. DATE DRAWN BY MAK DATE 02/27/09					
MPOW-PF-06									

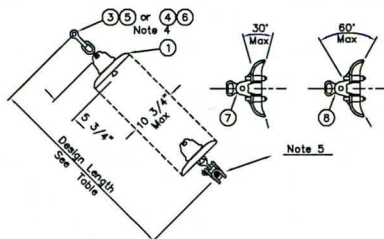
LIST OF MATERIALS

DWG. REF.	QTY.	DESCRIPTION	ITEM	DET.	CODE No.
1	-	Insulator, Suspension, 5-3/4x10-3/4 max.	k		
2	-	Hook, Ball, 30,000 lb.	eh		
3	-	Anchor Shackle, 30,000 lb. BNC	bo		
4	-	Anchor Shackle, 50,000 lb. BNC	bo		
5	-	Oval Eye, Ball, 30,000 lb.			
6	-	Oval Eye, Ball, 50,000 lb.			
7	-	Clamp, Suspension & Socket Eye, to 30°	el		
8	-	Clamp, Suspension & Socket Eye, to 60°	el		
9	-	Link, Extension, Oval Eye Ball, 30k			
10	-	Link, Extension, Oval Eye Ball, 50k			
11	-	Clamp, Bolted D.E. & Socket Eye	ej		
12	-	Clamp, Compression D.E.	cp		
13	-	Jumper Connector, Compression	p		
14	-	Jumper Terminal, Compression			
15	-	Socket Adapter (Socket Eye or Clevis)	fh		
16	-	30k Ball Y-Clevis	ft		
17	-				

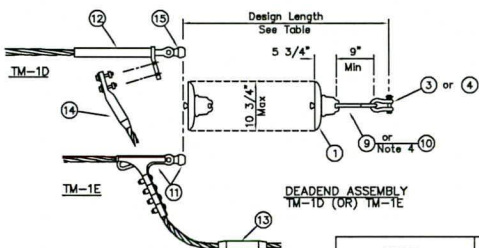
TM-1A TM-1B



TANGENT ASSEMBLY TM-1A (OR) TM-1B



ANGLE ASSEMBLY TM-1C



DEADEND ASSEMBLY TM-1D (OR) TM-1E

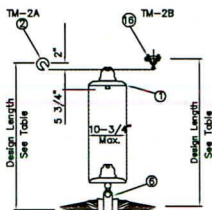
230kv	ASSEMBLY		
	TANGENT	ANGLE	DEADEND
Quantity of Units	12	13	14
ANSI C29.2, Class	52-5	52-5	52-5
M & E Strength (lb.)	25,000	25,000	25,000
Assembly Weight (lb.)	160	173	186
Design Length (in.)	75"	81"	86.5"
Color of Units	GRAY	GRAY	GRAY

INSULATOR ASSEMBLIES  
INSULATOR STRING WITH SUSPENSION CLAMP

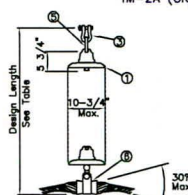


LIST OF MATERIALS

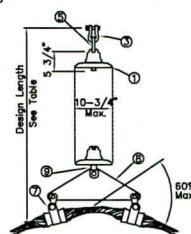
DWG. REF.	DESCRIPTION	ITEM	DET.	CODE No.
1	Insulator, Suspension	k		
2	Hook, Ball, 30,000 lb.	eh		
3	Anchor Shackle, 30,000 lb. BNC	bo		
4	Anchor Shackle, 50,000 lb. BNC	bo		
5	Oval Eye, Ball, 30,000 lb.			
6	Clamp, Suspension & Socket Eye	el		
7	Clamp, Suspension & Clevis Eye	el		
8	Yoke Plate			
9	Socket Adapter (Socket Eye or Clevis)	fh		
10	Link, Extension, Oval Eye Ball, 30k			
11	Link, Extension, Oval Eye Ball, 50k			
12	Clamp, Bolted D.E. & Socket Eye	ej		
13	Clamp, Compression D.E., SINGLE TONGUE	cp		
14	Jumper Connector, Compression	p		
15	Jumper Terminal, Compression			
16	30k Ball Y-Clevis	ft		
17	Clamp, Compression D.E., DOUBLE TONGUE			



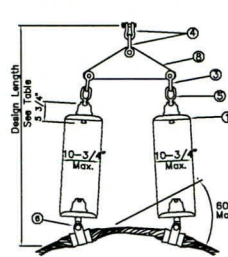
TANGENT ASSEMBLY TM-2A (OR) TM-2B



TYPE 1

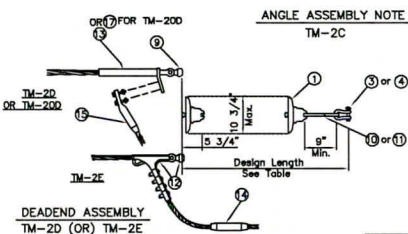


TYPE 2



TYPE 3

ANGLE ASSEMBLY NOTE 4  
TM-2C



DEADEND ASSEMBLY TM-2D (OR) TM-2E

230kv	TANGENT ASSEMBLY	ANGLE TYPE 1	ASS'Y TYPE 2 or 3	DEADEND ASSEMBLY
Quantity of Units	12	12	13	14
ANSI C29.2, Class	52-5		52-5	52-5
M & E Strength (lb.)	25,000		25,000	25,000
Assembly Weight (lb.)	160	160	203	186
Design Length (in)	75"	75"	91"	86.5"
Color of Units	GRAY	GRAY	GRAY	GRAY

INSULATOR ASSEMBLIES  
INSULATOR STRING WITH CUSHIONED SUSPENSION



NOTES:

- The table at the right shall be completed for each project.
- Suitable suspension clamps must be selected for the conductor being used. The following are to be considered: type of conductor, diameter of conductor (considering armor rods and/or liners), etc.
- Corona-free suspension clamps shall be used for 230 kv transmission lines.
- The capacity of the hardware must be equal to or greater than the M&E strength of the insulator units shown in the table at the right. Use items 4, 6 or 10 for 36,000 lb. insulators.
- Appropriate clamps shall be installed for line angles shown on the plan and profile:
  - For angles from 0 degrees to 30 degrees use dwg. ref. 7.
  - For angles from 30 degrees to 60 degrees use dwg. ref. 8.
  - When specified by the engineer, the ball hook may be used for TM-1C.

NO.	REVISION	DATE
2	REVISED	11/14/08
1*	Add Item 16, TM-1B	03/98

NOTES:

- The table at the right shall be completed for each project.
- Suitable suspension clamps must be selected for the conductor being used. The type of conductor and diameter of the conductor shall be considered. Cushioned suspension rods shall have parrot bill ends for 230 kv transmission lines.
- The capacity of the hardware must be equal to or greater than the M&E strength of the insulator units shown in the table at the right. The capacity of drp. ref. 4 and 6 shall be twice the M&E strength of the insulators. Use item 11 for 36,000 lb. insulators.
- Appropriate angle assemblies shall be installed for line angles shown on the plan and profile drawings:
  - For angles from 0 degrees to 30 degrees use type 1.
  - For angles from 30 degrees to 60 degrees use type 2 or 3.
- When specified the ball hook may be used for TM-1C, Type 1 & 2.

NO.	REVISION	DATE
2	REVISED	02/27/08
1*	Add Item 16, TM-2B	03/98



NO.	DATE	BY	CHKD.	DATE	DESCRIPTION	WORK ORDER	CHG.	APP.	DATE
1	04/04/08	JGC	AK	BAL					
2	04/05/08	JGC	AK	BAL	ISSUE FOR CONSTRUCTION				

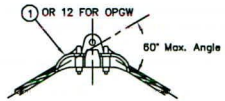
**CEG** CONSULTING ENGINEERS GROUP  
FARMINGTON, MINNESOTA

MPOWER / LUVERNE TRANSMISSION LINE  
POLE FRAMING DRAWINGS SH 7

CHECKED: \_\_\_\_\_ SCALE: NONE  
DATE: \_\_\_\_\_ W.O. NO.: \_\_\_\_\_  
DRAWN: MAX MAP NO.: \_\_\_\_\_  
DATE: 02/27/08 DWG. NO.: MPOWER-PF-07

LIST OF MATERIALS

DWG. REF.	DESCRIPTION	ITEM	DET.	CODE No.
1	Clamp, Suspension (to 60°)	m		
2	Clamp, Cushioned Suspension	el		
3	Clamp, Cushioned Susp. & Clevis Eye	el		
4	Anchor Shackle, 30,000 lbs. BNC	bo		
5	Yolk Plate			
6	Clamp, Bolted Deadend			
7	Clamp, Compression Deadend			
8	Link, Extension, Clevis 6"			
9	Jumper Connector, Compression	p		
10	Jumper Terminal, Compression			
11	3 Bolt Clamp, 6"			
12	OPGW Suspension Clamp			
13	OPGW Deadend Clamp			



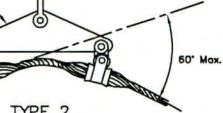
TANGENT & ANGLE CLAMP  
TM-4A  
TM-4AFO



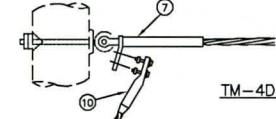
TANGENT ASSEMBLY  
TM-4B



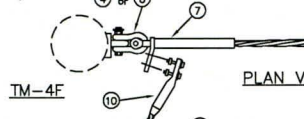
TYPE 1 ANGLE ASSEMBLY  
TM-4C (Note 1)



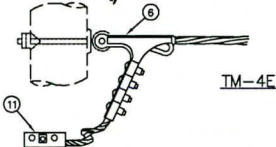
TYPE 2



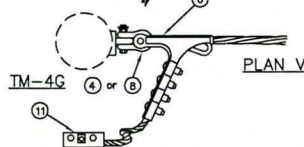
TM-4D



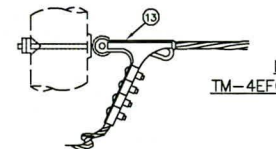
TM-4F



TM-4E

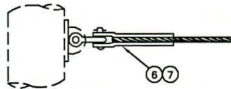


TM-4G



TM-4EFO

DEADEND ASSEMBLY



NOTES:

1. The appropriate cushioned suspension angle assembly shall be installed for the line angles shown on the plan-profile drawings:

- A. For angles from 0 degrees to 30 degrees, use type 1
- B. For angles from 30 degrees to 60 degrees, use type 2

O.H.G.W. ASSEMBLIES

CUSHIONED SUSPENSION AND  
SUSPENSION CLAMP

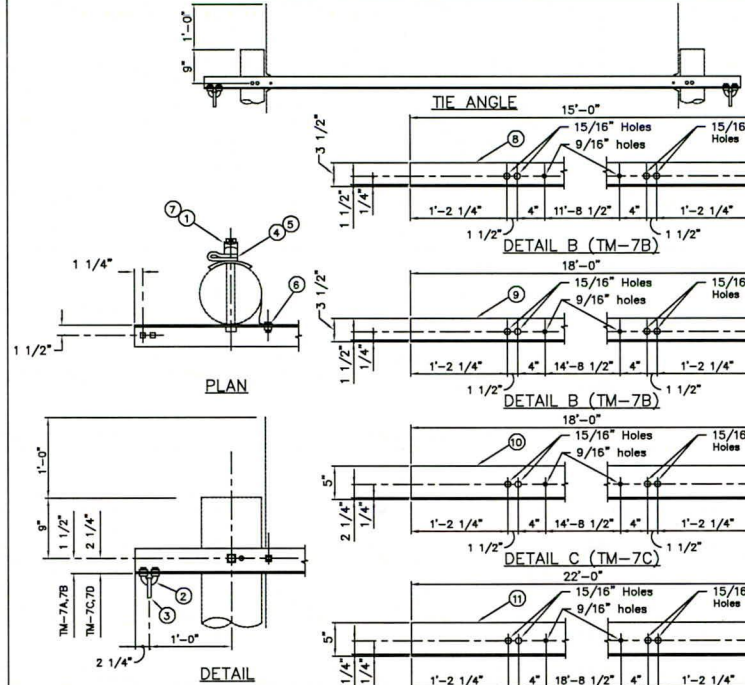
NO.	REVISION	DATE
1	REVISED	11/14/08

**CEG**

TM-4

LIST OF MATERIALS

DWG. REF.	A	B	C	D	DESCRIPTION	ITEM	DET.	CODE No.
1	2	2	2	2	7/8" Bolt, Machine, by req'd length	c		
2	2	2	2	2	5/8" U-Bolt, w/4 nuts			
3	2	2	2	2	Chain link, 5/8" x 2 1/4"	br		
4	2	2	2	2	Washer, Curved, 4" sq. x 1/4", 15/16" hole	d		
5	2	2	2	2	Washer, Spring, 15/16" hole	ow		
6	2	2	2	2	Clamp, Groundwire, 1/2"	dp		
7	2	2	2	2	7/8" Locknut, MF Type	ek		
8	1	-	-	-	Angle, Tie, 3 1/2 x 3 x 1/4 x 15'-0"	-	A	
9	-	1	-	-	Angle, Tie, 3 1/2 x 3 x 1/4 x 18'-0"	-	B	
10	-	-	1	-	Angle, Tie, 3 x 3 x 1/4 x 18'-0"	-	C	
11	-	-	-	1	Angle, Tie, 3 x 3 x 1/4 x 22'-0"	-	D	



NOTES:  
1. The strength limitations of the O.H.G.W. Support Assemblies are:  
Allowable Vertical Load      Maximum Vertical Load  
TM-7A, 7B      1200 lbs.      1900 lbs.  
TM-7C, 7D      2300 lbs.      3700 lbs.

2. The angle steel shall conform to ASTM A36. Angle shall be hot dip galvanized per ASTM A123.  
3. Substitute TM-7C when specified on TH-10 or TH-11B.

O.H.G.W. SUPPORT ASSEMBLY  
SINGLE AND DOUBLE BOLT

Released 03/98

TM-7

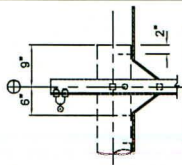


NO.	DATE	BY	DESCRIPTION	ISSUE FOR CONSTRUCTION	WORK ORDER	CHD	APP	DATE
1	04/26/08	JCH	AS BUILT					
2	04/26/08	JCH	ISSUE FOR CONSTRUCTION					

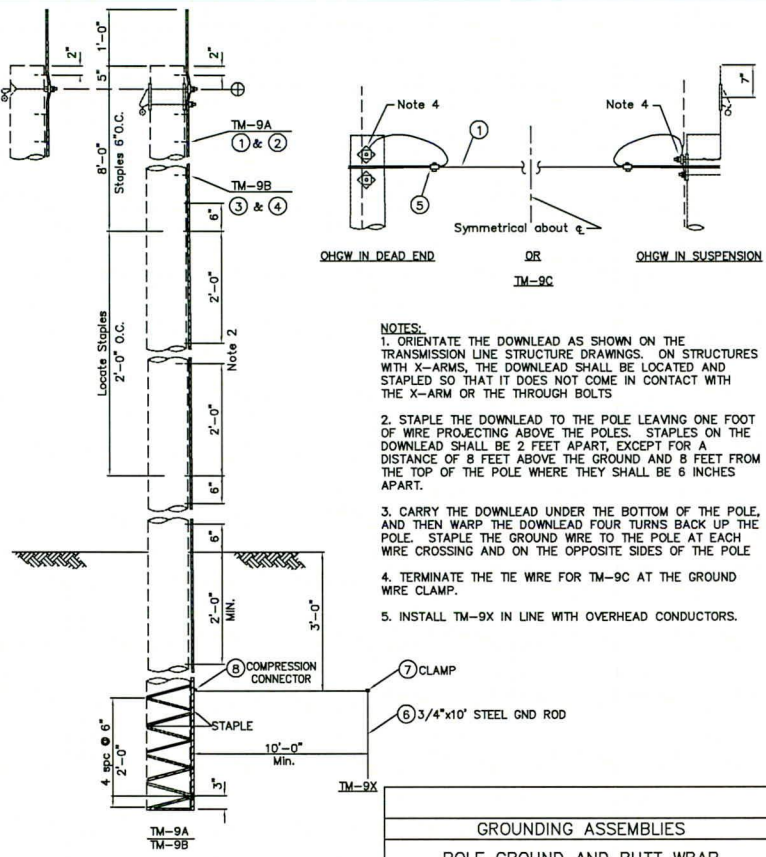
**CEG** CONSULTING ENGINEERS GROUP  
FARMINGTON MINNESOTA

MPOWER / LIVERNE  
TRANSMISSION LINE  
POLE FRAMING DRAWINGS SH 8

CHECKED: \_\_\_\_\_ SCALE: NONE  
DATE: \_\_\_\_\_ W.O. NO.: \_\_\_\_\_  
DRAWN: MAX MAP NO.: \_\_\_\_\_  
DATE: 02/27/09 DWG. NO.: \_\_\_\_\_  
MPOWER-PF-08



TM-9					LIST OF MATERIALS			
DWG. REF.	A	B	C	X	DESCRIPTION	ITEM	DET.	CODE No.
1	ft.	-	ft.	ft.	5/16" Wire, soft annealed iron	cl		
2	lb.	-	-	-	2" x 1/2" Staples, galvanized steel	cl		
3	-	ft.	-	-	#6or#4 Wire AWG, copper or copperclad	cl		
4	-	lb.	-	-	1-1/2" x 3/8" staples, copperclad	al		
5	-	-	2	-	Clamp, U-Bolt	u		
6	-	-	-	1	3/4" x 10' STEEL ROD	al		
7	-	-	-	1	Ground Wire Clamp	a		
8	-	-	-	1	Connector, Compression	p		

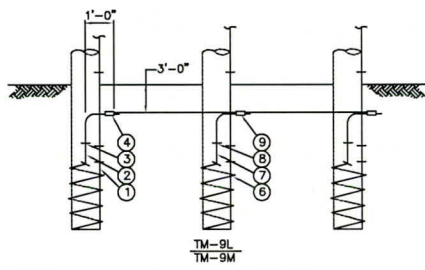
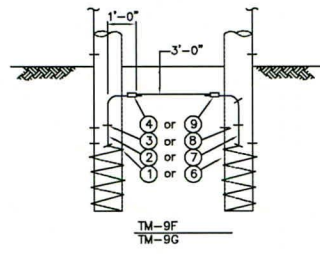


- NOTES:**
- ORIENTATE THE DOWNLEAD AS SHOWN ON THE TRANSMISSION LINE STRUCTURE DRAWINGS. ON STRUCTURES WITH X-ARMS, THE DOWNLEAD SHALL BE LOCATED AND STAPLED SO THAT IT DOES NOT COME IN CONTACT WITH THE X-ARM OR THE THROUGH BOLTS
  - STAPLE THE DOWNLEAD TO THE POLE LEAVING ONE FOOT OF WIRE PROJECTING ABOVE THE POLES. STAPLES ON THE DOWNLEAD SHALL BE 2 FEET APART, EXCEPT FOR A DISTANCE OF 8 FEET ABOVE THE GROUND AND 8 FEET FROM THE TOP OF THE POLE WHERE THEY SHALL BE 6 INCHES APART.
  - CARRY THE DOWNLEAD UNDER THE BOTTOM OF THE POLE, AND THEN WARP THE DOWNLEAD FOUR TURNS BACK UP THE POLE. STAPLE THE GROUND WIRE TO THE POLE AT EACH WIRE CROSSING AND ON THE OPPOSITE SIDES OF THE POLE
  - TERMINATE THE TIE WIRE FOR TM-9C AT THE GROUND WIRE CLAMP.
  - INSTALL TM-9X IN LINE WITH OVERHEAD CONDUCTORS.

GROUNDING ASSEMBLIES			
POLE GROUND AND BUTT WRAP			
1	ADD STEEL GND ROD	01/09	CEG
NO.	REVISION	DATE	

- Notes:**
- For other installation details, refer to sheet 1 of 2, TM-9.
  - Grounding materials must be consistent with good corrosion prevention practices. When galvanized hardware and 5/16" iron wire are used, anchor rods shall be galvanized steel. When copper, copperclad or bronze hardware are used, anchor rods shall be copperclad.
  - Bid items on this drawing include material to top of pole in accordance with sheet 1 of 2, TM-9.

LIST OF MATERIALS						
DWG. REF.	D, F, H, J, L	E, G, I, K, M	DESCRIPTION	ITEM	DET.	CODE No.
as req'd	-	-	Pole Ground & Butt Wrap			
as req'd	-	-	5/16" Wire, soft annealed iron	cj		
as req'd	-	-	2" x 1/2" Staples, galvanized steel	al		
as req'd	-	-	Connector, compression, for item 2	p		
-	-	-	Not Used			
as req'd	-	-	Pole Ground & Butt Wrap			
as req'd	-	-	#6or#4 Wire AWG, copper or copperclad	cj		
as req'd	-	-	1-1/2" x 3/8" Staples, copperclad	al		
as req'd	-	-	Connector, compression, for item 7	p		
as req'd	-	-	Connector, copper (or) bronze	p		



GROUNDING ASSEMBLIES			
MULTIPLE POLE AND ANCHOR GROUNDING			
1	REVISED	11/14/08	CEG
NO.	REVISION	DATE	



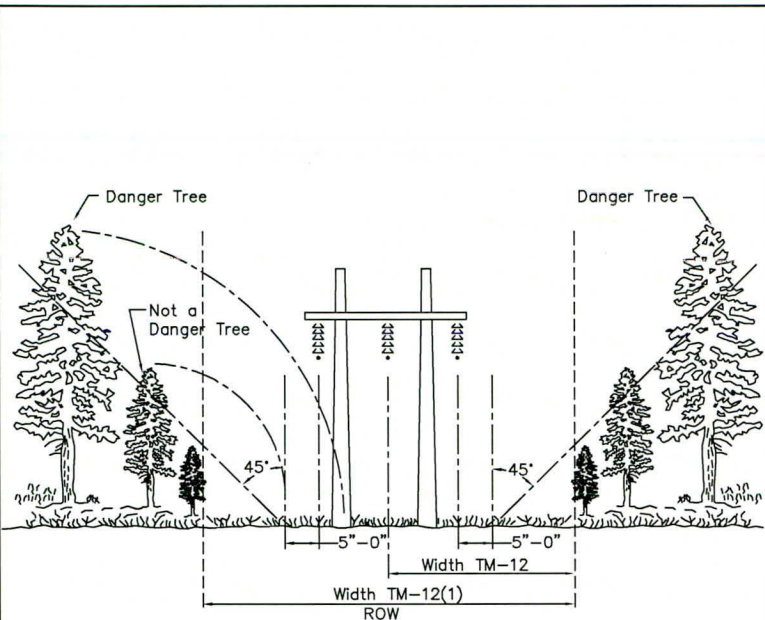
1	04/09/09	JHC	AS BUILT					
2	04/26/09	JHC	ISSUE FOR CONSTRUCTION					
REV.	DATE	ISSUED	DESCRIPTION	WORK ORDER	CHD	APPD	DATE	

**CEG** CONSULTING ENGINEERS GROUP  
FARMINGTON MINNESOTA

MPOWER / LUVERNE  
TRANSMISSION LINE  
POLE FRAMING DRAWINGS SH 9

CHECKED: \_\_\_\_\_ SCALE: NONE  
DATE: \_\_\_\_\_ W.O. NO.: \_\_\_\_\_  
DRAWN: MAX MAP NO.: \_\_\_\_\_  
DATE: 02/27/09 DWG. NO.: \_\_\_\_\_

MPOW-PF-09



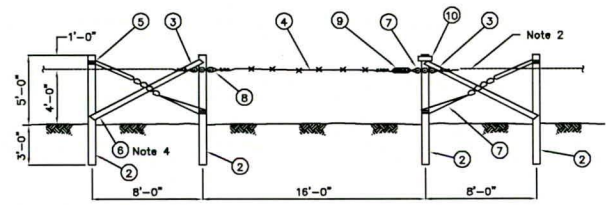
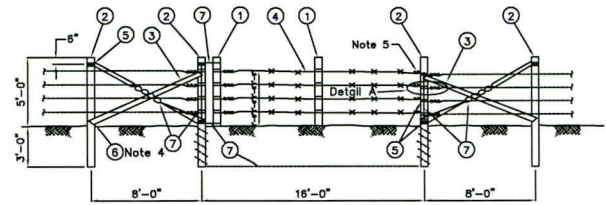
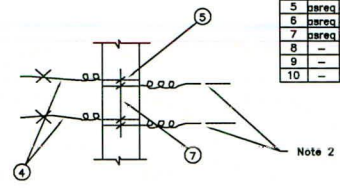
**NOTES:**

1. Engineer will designate all danger trees which shall be removed or topped at option of contractor. In approximately level terrain, trees which would reach within 5 feet of a point underneath the outside conductor in falling are examples of danger trees.
2. As directed by the engineer, portions of the right-of-way (ROW) must be cut so that stumps will not prevent the passage of tractor and trucks along the ROW.
3. The unit for clearing one-half of the ROW is "WIDTH TM-12."
4. The unit for clearing the full ROW is "WIDTH TM-12(1)."
5. The unit for clearing danger trees is "TM-13."

TRANSMISSION ROW CLEARING  
RIGHT-OF-WAY CLEARING GUIDE

Reissued 03/98	NO.	REVISION	DATE	TM-12,-12(1),-13
----------------	-----	----------	------	------------------

TM-30		LIST OF MATERIALS				
DWG. REF.	A	B	DESCRIPTION	ITEM	DET.	CODE No.
1	2	-	Post, Wood, 2" dia x 9'-0"	-	-	
2	4	4	Post, Wood, 8" dia x 8'-0"	-	-	
3	2	2	Post, Wood, 4" dia x 9'-0"	-	-	
4	70ft	16ft	Barbed Wire, galv., 2-#12 strands	-	-	
5	barrel	barrel	2" x 1/2" Staples, galvanized	al	-	
6	barrel	barrel	20 d Nails, galvanized	-	-	
7	barrel	barrel	No. 9 Wire, galvanized	-	-	
8	-	8	Insulators, Spool	cm	-	
9	-	1	Insulated Coil Spring Handle	-	-	
10	-	1	Sign "ELECTRIC FENCE" 4" X 8"	-	-	



**NOTES:**

1. Gates shall be erected in locations and grounded as specified by the engineer.
2. Posts and bracing shall be in place before existing fence wire is cut. The existing fence wire shall be wrapped around gate posts or insulators.
3. Posts and braces shall be creosoted pine, 6 lb. retention, location of latch post on right or left side is optional.
4. Notch post for braces and nail braces in place, twist steel guys to tighten.
5. To terminate new and existing barbed wire, make two complete wraps around stake and tie off with No. 14 wire.
6. All gates to be closed after passing through.

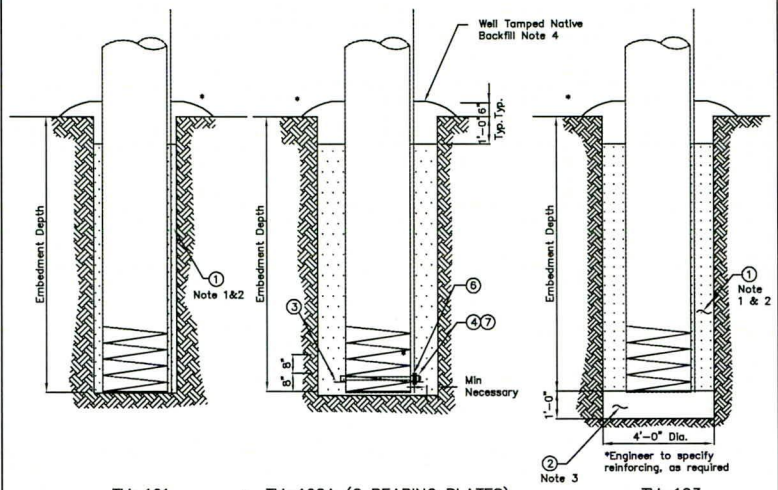
MISCELLANEOUS ASSEMBLIES  
FENCE GATES

Reissued 03/98	NO.	REVISION	DATE	Aug., 1986	TM-30
----------------	-----	----------	------	------------	-------



1	04/04/98	JCH	AS BUILT						
2	04/04/98	JCH	ISSUE FOR CONSTRUCTION						
REV.	DATE	BY	DESCRIPTION	WORK ORDER	CHG	APPD	DATE		
<b>CEG</b> CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA									
MPOWER / LUVERNE TRANSMISSION LINE POLE FRAMING DRAWINGS SH 10									
CHECKED				SCALE NONE					
DATE				W.G. NO.					
DRAWN				MAP NO.					
DATE				DWG. NO.					
				MPOWER-PF-10					

TM--		LIST OF MATERIALS			
DWG. REF.	101	102A	103	DESCRIPTION	ITEM DET. CODE No.
1	cu.yd	cu.yd	cu.yd	Imported Backfill (Note 1 & 2)	--
2	--	1/2yd	--	Concrete, 2000 psi. (Note 9)	--
3	--	2	--	Pole Bearing Plates	fb
4	--	1	--	7/8" Bolt, Machine by req'd length	c
5	--	--	--	5/8" Bolt, Machine by req'd length	c
6	--	1	--	7/8" Clamp, Groundwire +1 nut (Note 5)	dp
7	--	1	--	7/8" Locknut, MF Type	ek



- NOTES:**
1. Gradation for imported backfill is shown in the table. The aggregate shall be well mixed in a stock pile, and pneumatically placed and tamped in 6-inch lifts.
  2. The specification for aggregate given in the table is minimum. In areas where smaller fines are available at comparable cost, it is recommended that the engineer specify smaller fines.
  3. Concrete shall be 2000 psi high early strength concrete. It shall be deposited in a manner which will prevent segregation of the aggregate and cement. Care should be taken to avoid getting dirt mixed with the concrete. The pole shall not be set until the concrete bearing base has obtained sufficient strength to support the pole. During placement of pole, avoid bumping concrete base.
  4. Well tamped native backfill should be placed around the pole as shown.
  5. All buried metals must be consistent with good corrosion prevention practices. Similar or compatible metals should be used for bearing plates, pole ground wire and ground connectors.

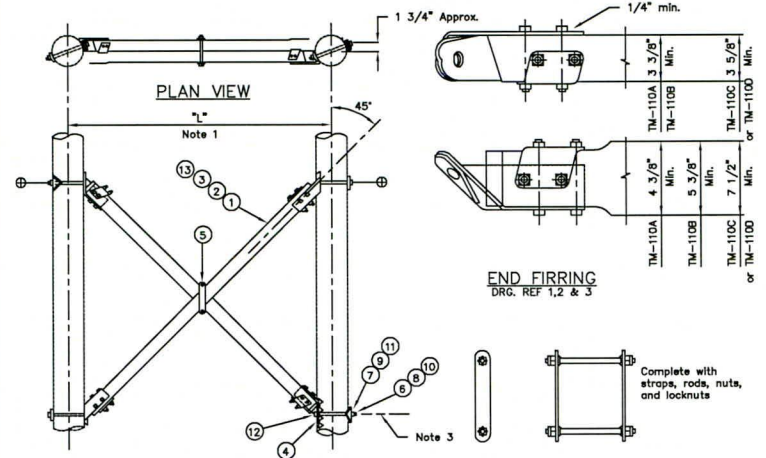
GRADATION FOR IMPORTED GRANULAR BACKFILL	
SIZE OF GRAVEL (OR) CRUSHED STONE	SIZE OF MESH (in)
100% By Weight to pass 1" screen	1.00
60% - 90% By Weight to pass 1/2" screen	0.500
40% - 60% By Weight to pass no. 4 screen	0.187
25% - 50% By Weight to pass no. 8 screen	0.0937
20% - 40% By Weight to pass no. 15 screen	0.0469
15% - 30% By Weight to pass no. 40 screen	0.0165

FOUNDATION UNITS  
POLE STABILITY, BEARING, & UPLIFT FOUNDATIONS

1*	TM101,102A,103,dr.6	03/98	
NO.	REVISION	DATE	

TM-101,102,103

TM-110				LIST OF MATERIALS			
DWG. REF.	A	B	C	D	DESCRIPTION	ITEM DET. CODE No.	
1	1	--	--	--	Set, X-Brace, 3-3/8 x 4-3/8min.		
2	--	1	--	--	Set, X-Brace, 3-3/8 x 5-3/8min.		
3	--	--	1	--	Set, X-Brace, 3-3/8 x 7-1/2min.		
4	--	--	4	--	Grid Galv, 4" x 6", 1-1/16" hole		
5	1	1	1	1	Clamp, Center, Assembly		
6	--	--	4	--	1" Bolt, Machine, by req'd length	vx	
7	4	4	--	--	7/8" Bolt, Machine, by req'd length		
8	--	--	4	--	Washer, Curved, 4" sq. x 3/8", 1-1/16h.		
9	4	4	--	--	Washer, Curved, 4" sq. x 1/4", 1 15/16h.		
10	--	--	4	--	1" Locknut, MF Type		
11	4	4	--	--	7/8" Locknut, MF Type		
12	--	--	4	--	Washer, Flat 3-1/2 sq. x 3/8" x 1-1/16" h.	note 5	
13	--	--	1	--	Set, X-Brace, 35,000# Minimum	note 11	



- NOTES:**
1. X-Brace length shall be suitable to accommodate the pole spacing shown on the respective transmission line structure drawings.
  2. Machine bolts must pass through center of pole and fit tightly in the holes.
  3. Lower holes shall be field drilled and be thoroughly treated.
  4. Use of X-Brace should be economically justified by the engineer.
  5. End fittings for TM-110C may be channel type. Item 12, reinforcing washer, shall be supplied when channel type end fittings are used. The washer shall be placed between the head of the bolt and the end fitting.
  6. Bolts with rolled threads or cut threads and full size shanks shall be used for item 6 and 7.
  7. Minimum number of bolts for end fittings are shown.
  8. Supplier shall test the X-Brace assembly and obtain REA standard approval.
  9. Maximum tensile-compressive capacity of X-Brace assembly is 25,000 lbs. for the following:  
X-Brace Max. Pole Spacing  
TM-110A 14'-0"  
TM-110B 15'-6"  
TM-110C 19'-6"
  10. For other assembly requirements, see REA Specifications T-7 and T-8.
  11. Maximum tensile-compressive capacity of X-Brace assembly is 35,000 lbs. for the following:  
X-Brace Max. Pole Spacing  
TM-110D 19'-6"

1	ADD NOTE 11	02/27/98	
NO.	REVISION	DATE	

Released 03/98

Aug. 1986



TM-110A,B,C,D



1	10/20/98	JCH	AS BUILT				
5	04/26/99	JCH	ISSUE FOR CONSTRUCTION				
NO.	DATE	ISSUED	DESCRIPTION	WORK ORDER	CHG	APPV	DATE

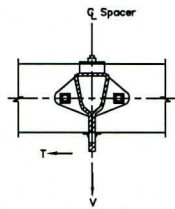
**CEG** CONSULTING ENGINEERS GROUP  
FARMINGTON MINNESOTA

MPOWER / LUVERNE TRANSMISSION LINE  
POLE FRAMING DRAWINGS SH 11

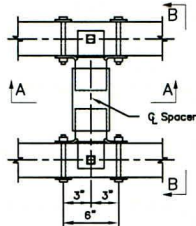
CHECKED	SCALE	NONE
DATE	W.O. NO.	
DRAWN	MAP NO.	
DATE	DWG. NO.	

MPOW-PF-11

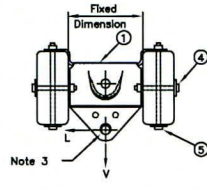
TM-111		LIST OF MATERIALS				
DWG. REF.	A	B	DESCRIPTION	ITEM	DET.	CODE No.
1	1		Fixed Spacer Body			
2	1		Center Spacer Section			
3	2		End Spacer Section			
4	2		5/8" Bolt, hex + MF locknut			
5	4		5/8" Bolt Washer Head, by req'd l.			
6	2		1/2" Bolt, Washer Head, by req'd l.			



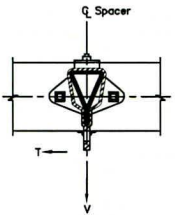
SECTION AA



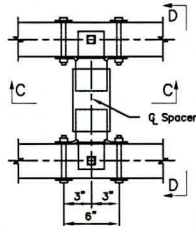
FIXED SPACER ASSEMBLY  
TM-111A



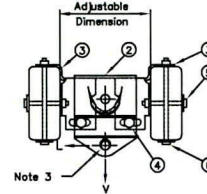
SECTION BB



SECTION CC



ADJUSTABLE SPACER ASSEMBLY  
TM-111B



SECTION DD

- Notes:
1. Details of hardware on typical manufacturers standard hardware providing same dimensions and strength will be acceptable.
  2. Static proof hardware, threaded holes for fasteners, and washer head bolts shall be used.
  3. The 1-1/4" diameter holes shall be reamed on both sides, suitable for self-locking ball hook and for insulator clearance.

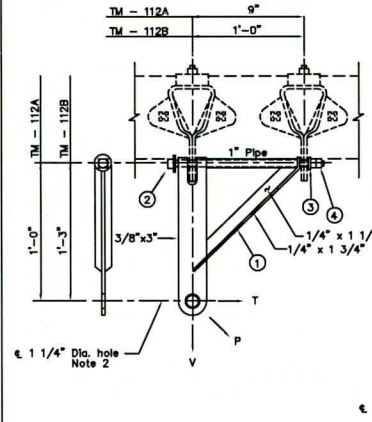
- \* 4. Spacer Assembly shall meet the strength requirements in RUS Specifications T-7 and T-8. The spacer is to sustain the following independent ultimate loads:
- |                      |                         |
|----------------------|-------------------------|
| A. Vertical load     | - - - - V = 14,000 lbs. |
| B. Transverse load   | - - - - T = 5,000 lbs.  |
| C. Longitudinal load | - - - - L = 1,400 lbs.  |

NO.	REVISION	DATE
1,*	Revise Note 4.	03/98

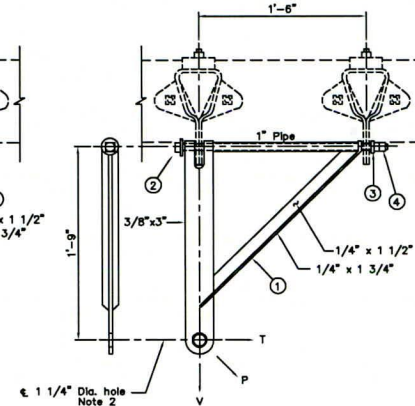
MISCELLANEOUS ASSEMBLIES  
X-ARM SPACER

TM-111

TM-112		LIST OF MATERIALS			
DWG. REF.	QTY.	DESCRIPTION	ITEM	DET.	CODE No.
1	1	Bracket, Welded Assembly			
2	1	3/4" Bolt, Washer Head			
3	1	Washer Nut, or std. nut			
4	1	3/4" Locknut			
5	1				



TM-112A  
TM-112B



TM-112C

- Notes:
1. The above brackets are used with spacer assemblies TM-111.
  2. The 1-1/4" diameter hole shall be reamed on both sides suitable for self-locking ball hook.
  3. Loads "P" and "T" also act to the left.
  4. Strength limitation of swinging angle bracket assembly:
 

A. Maximum vertical load	- - - - - V=10,000 lbs.
B. Maximum transverse load	- - - - - T= 5,000 lbs.
C. Maximum oblique load	- - - - - P=12,000 lbs.

MISCELLANEOUS ASSEMBLIES  
X-ARM ANGLE BRACKET

TM-112

Released 03/98

NO.	REVISION	DATE



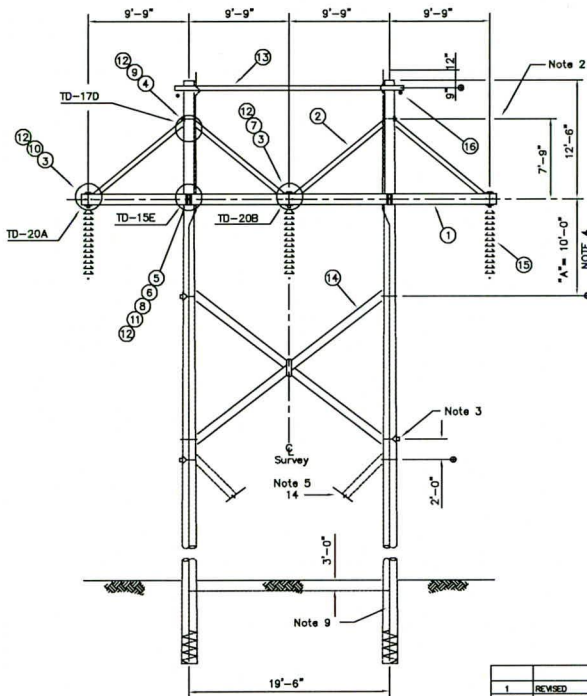
NO.	DATE	BY	DESCRIPTION	ISSUE FOR CONSTRUCTION	ISSUE ORDER	ISSUE APPR	ISSUE
1	04/04/98	JCH	AS BUILT				
2	04/04/98	JCH	ISSUE FOR CONSTRUCTION				

**CEG** CONSULTING ENGINEERS GROUP  
FARMINGTON MINNESOTA

MPOWER / LUVERNE  
TRANSMISSION LINE  
POLE FRAMING DRAWINGS SH 12

CHECKED BY: JAMES C. HANSON  
DATE: 02/27/98

SCALE: NONE  
W.O. NO.:  
MAP NO.:  
DWG. NO.: MPOW-PF-12



DWG. REF.	QTY.	DESCRIPTION	ITEM	DET.	CODE No.
1	2	X-Arm, 40'-0" (see Note 3), #81		TCD-40	
2	4	Brace, X-Arm, 3-3/8"x5-3/8"xreq'd L.			
3	3	Spacer Assembly, see construction spec		TM-111	
4	2	Grid Gain, 4"x4", 15/16" hole			
5	4	Plate, Ribbed Tie			
6	4	Plate, Ribbed Tie			
7	1	7/8" D.E. Bolt, Bent w/2 recessed nuts			
8	2	7/8" Threaded Rod, w/2 nuts			
9	2	7/8" Bolt, Machine, by req'd length			
10	2	7/8" Bolt, Bent			
11	2	Washer, Spring, 15/16" hole			
12	10	7/8" Locknut, MF Type			
13	1	OHGW Support Assembly		TM-7D	
14	1	X-Brace Assembly		vx TM-110C	
15	3	INSULATOR ASSEMBLY, TANGENT		TM-2B	
16	1	OHGW ASSEMBLY, TANGENT		TM-4B	
17	1	OPGW ASSEMBLY, TANGENT		TM-4AFO	

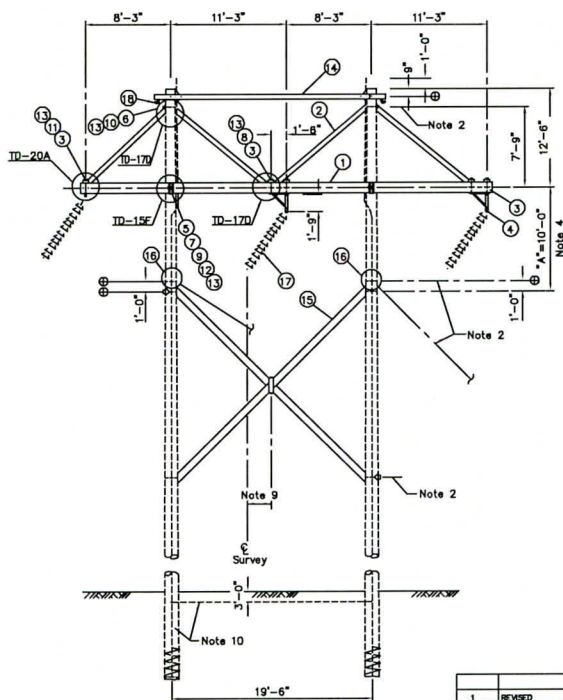
- NOTES:
- Double X-Arms shall be shipped with factory assembled hardware.
  - Field drilled holes shall be thoroughly treated.
  - Engineer to specify X-Arm size by type number. X-Arm may be 3-5/8"x9-3/8" solid sawn (X-Arm #81) or 5-1/8"x7-1/2" laminate (X-Arm #83).
  - Dimensions "A" shall be as shown on the pole framing drawing.
  - Structure TH-230X is the same as TH-230 with one additional X-Brace.
  - For other assembly requirements, see REA specification T-8.
  - For strength limitations of OHGW support assembly, see TM-7D.
  - Drawing TE-2 gives guidance to subassembly alternatives.
  - The following materials are to be specified on plan and profile drawings and staking sheets: POLES, POLE GROUNDING ASSEMBLIES, AND ADDITIONAL GROUNDING OR POLE FOUNDATION UNITS.

TRANSMISSION LINE STRUCTURE  
TANGENT H FRAME  
(230kV MAXIMUM)



TH-230

NO.	REVISION	DATE
1	REVISED	02/27/08



DWG. REF.	QTY.	DESCRIPTION	ITEM	DET.	CODE No.
1	2	X-Arm, 40'-0" (see Note 3), #82		TDC-40	
2	4	Brace, X-Arm, 3-3/8"x5-3/8"xreq'd L.			
3	5	Spacer Assembly, see construc. spec.		TM-111	
4	2	Bracket, Swinging Angle, Assembly		TM-112C	
5	4	Grid Gain, 4-1/2 x 9", 15/16" hole			
6	2	Grid Gain, 4" x 4", 15/16" hole			
7	4	Plate, Ribbed Tie			
8	1	7/8" D.E. Bolt, Bent w/2 recessed nuts			
9	2	7/8" Threaded Rod, w/2 nuts			
10	2	7/8" Bolt, Machine, by req'd length			
11	2	7/8" Bolt, Bent			
12	2	Washer, Spring, 15/16" hole			
13	10	7/8" Locknut, MF Type			
14	1	OHGW Support Assembly		TM-7D	
15	1	X-Brace Assembly		vx TM-110D	
16	2	GUY ATTACHMENT, MEDIUM DUTY		TG-25C	
17	3	INSULATOR ASSEMBLY, TANGENT		TM-2C	
18	1	OHGW ASSEMBLY, TANGENT		TM-4B	
19	1	OPGW ASSEMBLY, TANGENT		TM-4AFO	

- NOTES:
- Double X-Arms shall be shipped complete with factory assembled hardware.
  - Field drilled hole shall be thoroughly treated.
  - Engineer to specify X-Arm size by type number. X-arm may be 3-5/8" x 9-3/8" solid sawn (X-Arm #82) or 5-1/8" x 7-1/2" laminate (X-Arm #84).
  - Dimension "A" shall be as shown on the pole framing drawing.
  - For other assembly requirements, see REA specification T-8.
  - For strength limitations of OHGW support assembly, see drawing TM-7D.
  - Drawing TE-2 gives guidance to subassembly alternatives.
  - When guying is not required, delete drawing reference 16.
  - For guying arrangements and offset table, see drawing TMG-11.
  - The following materials are to be specified on plan and profile drawings and staking sheets: POLES, POLE GROUNDING ASSEMBLY, GUYING ASSEMBLIES, AND ANY POLE FOUNDATION UNITS.

TRANSMISSION LINE STRUCTURE  
SMALL ANGLE H-FRAME  
(230 kV MAXIMUM)



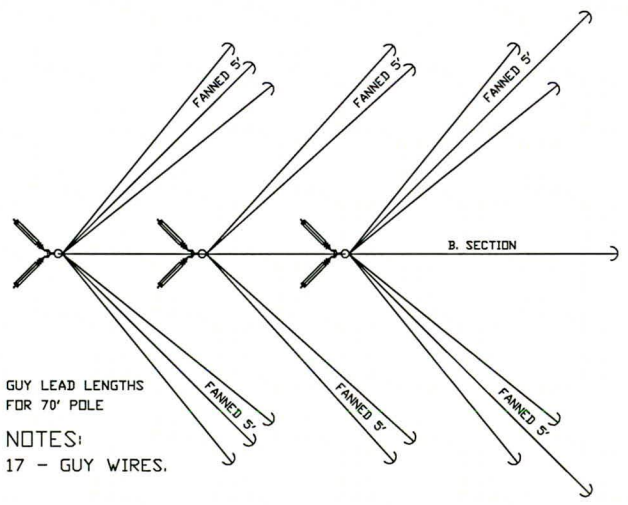
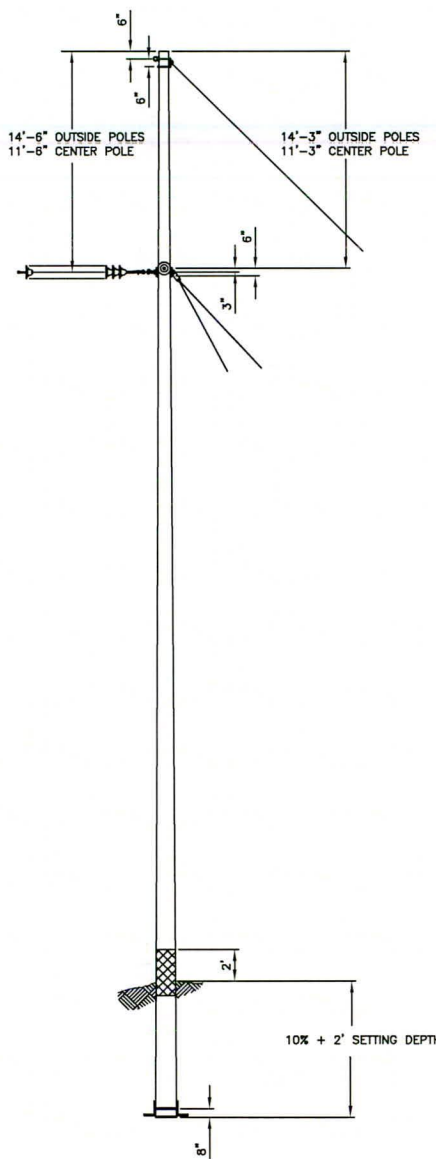
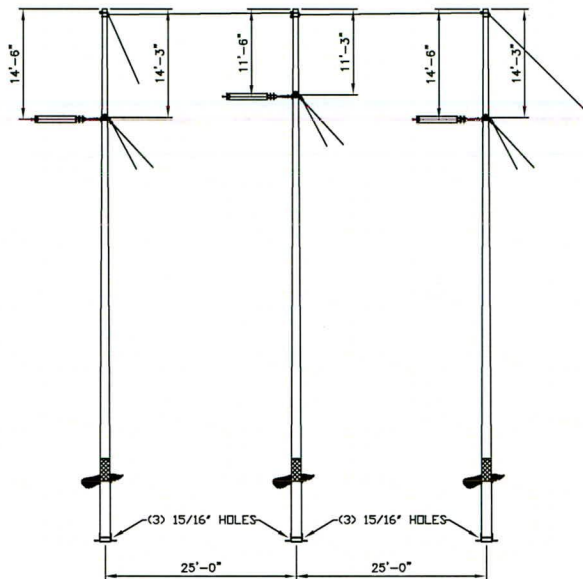
TH-231

NO.	REVISION	DATE
1	REVISED	02/27/08

Reissued 03/98

DATE	02/27/08
SCALE	NONE
CHECKED BY	JAMES G. JANSON
DATE	02/27/08
DESIGNED BY	JAMES G. JANSON
DATE	02/27/08
PROJECT NO.	MP-OW-PF-13
PROJECT NAME	MPower / LIVERNE TRANSMISSION LINE POLE FRAMING DRAWINGS SH 1.3
ENGINEER	JAMES G. JANSON
DATE	02/27/08
SCALE	NONE
CHECKED BY	JAMES G. JANSON
DATE	02/27/08
DESIGNED BY	JAMES G. JANSON
DATE	02/27/08



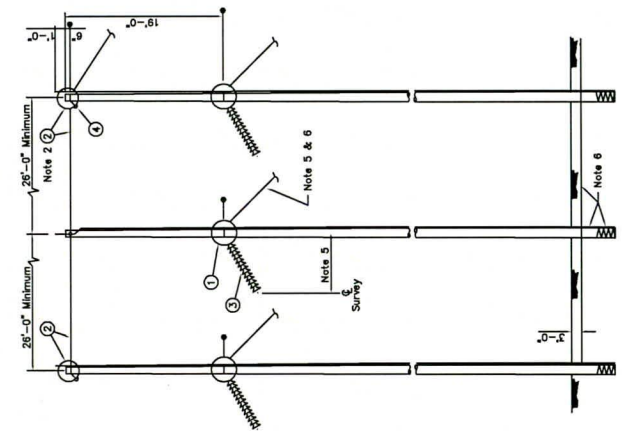


DEAD-END  
60° - 90°  
230KV WOOD STRUCTURE  
DWG # OTP\_230KV\_D.E.

DWG REF.	QTY.	DESCRIPTION	ITEM	DET.	CODE No.
1	3	GUY ATTACHMENT, MEDIUM DUTY	-	TC-250	
2	1	POLE TIE, LARGE ANGLE, MEDIUM DUTY	-	TC-55A	
3	3	INSULATOR ASSEMBLY, ANGLE	-	TN-2C	
4	2	ORIG ASSEMBLY, DEADEND	-	TN-4E	
5	2	ORIG DEADEND ASSEMBLY	-	TN-4EFO	

LIST OF MATERIALS

- NOTES:
- Field drilled holes shall be thoroughly treated.
  - The location of the Orig's are shown for optimum lightning protection. Guy wires shall be attached to the middle pole. The Orig may be moved accordingly.
  - The minimum pole-to-pole spacing is for guy slopes of 1V:1H.
  - Drawing TE-2 gives guidance to subassembly alternatives.
  - For guying arrangements and offset table, see drawing TN-4K.
  - The following materials are to be specified on plan and elevation drawings: INSULATORS, ANCHORS, AND GROUNDING ASSEMBLY, GUYING ASSEMBLY, ANCHORS, AND ANY ADDITIONAL GROUNDING OR POLE FOUNDATION UNITS.

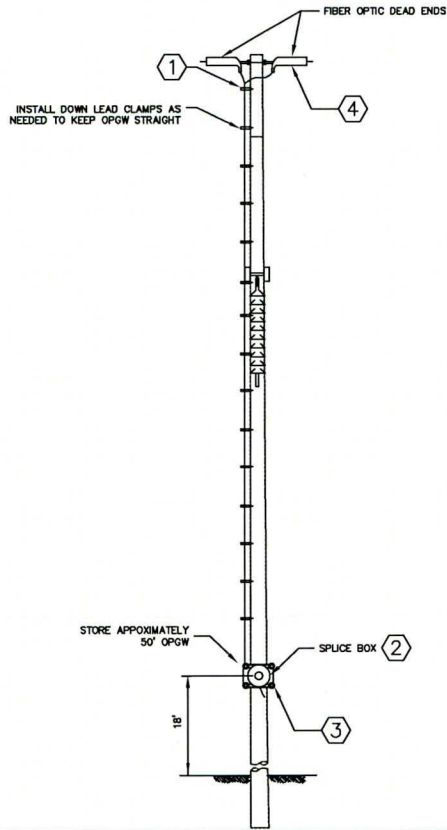


1	04/04/09	JGC	AS BUILT						
0	04/04/09	JGC	ISSUE FOR CONSTRUCTION						
REV.	DATE	BY	DESCRIPTION	WORK ORDER	ISSUED	APP'D	DATE		
<b>CEG</b> CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA				MPOWER / LUVERNE TRANSMISSION LINE POLE FRAMING DRAWINGS SH 14					
NORTH DAKOTA JAMES G. HANSON No. 0413				CHECKED	SCALE NONE				
				DATE	W.O. NO.				
				DRAWN	MAP NO.				
				DATE	DWG. NO.				
				02/27/09					
				MPOWER-PF-14					

TRANSMISSION LINE STRUCTURE  
LARGE ANGLE  
(230KV MAXIMUM)

**CEG**

TH-234



ITEM #	QTY	DESCRIPTION
1.	15 EST.	DOWN LEAD CLAMP FOR WOOD POLE
2.	1	SPICE ENCLOSURE/BOX
3.	1	EXTERNAL COIL BRACKET
4.	2	DEADEND FOR FIBER OPTIC

- NOTES:
1. ROUTE OPGW DOWN POLE TO MISS ALL HARDWARE BY A MINIMUM OF 3".
  2. GROUND FIBER OPTIC DEAD ENDS TO POLE GROUND.

TRANSMISSION LINE STRUCTURE  
POLE FRAMING GUIDE  
FIBER OPTIC SPLICE

**CEG**

GUIDE

1	DATE	BY	REVISION
2	DATE	BY	REVISION
3	DATE	BY	REVISION
4	DATE	BY	REVISION
5	DATE	BY	REVISION
6	DATE	BY	REVISION
7	DATE	BY	REVISION
8	DATE	BY	REVISION
9	DATE	BY	REVISION
10	DATE	BY	REVISION
11	DATE	BY	REVISION
12	DATE	BY	REVISION
13	DATE	BY	REVISION
14	DATE	BY	REVISION
15	DATE	BY	REVISION
16	DATE	BY	REVISION
17	DATE	BY	REVISION
18	DATE	BY	REVISION
19	DATE	BY	REVISION
20	DATE	BY	REVISION
21	DATE	BY	REVISION
22	DATE	BY	REVISION
23	DATE	BY	REVISION
24	DATE	BY	REVISION
25	DATE	BY	REVISION
26	DATE	BY	REVISION
27	DATE	BY	REVISION
28	DATE	BY	REVISION
29	DATE	BY	REVISION
30	DATE	BY	REVISION
31	DATE	BY	REVISION
32	DATE	BY	REVISION
33	DATE	BY	REVISION
34	DATE	BY	REVISION
35	DATE	BY	REVISION
36	DATE	BY	REVISION
37	DATE	BY	REVISION
38	DATE	BY	REVISION
39	DATE	BY	REVISION
40	DATE	BY	REVISION
41	DATE	BY	REVISION
42	DATE	BY	REVISION
43	DATE	BY	REVISION
44	DATE	BY	REVISION
45	DATE	BY	REVISION
46	DATE	BY	REVISION
47	DATE	BY	REVISION
48	DATE	BY	REVISION
49	DATE	BY	REVISION
50	DATE	BY	REVISION
51	DATE	BY	REVISION
52	DATE	BY	REVISION
53	DATE	BY	REVISION
54	DATE	BY	REVISION
55	DATE	BY	REVISION
56	DATE	BY	REVISION
57	DATE	BY	REVISION
58	DATE	BY	REVISION
59	DATE	BY	REVISION
60	DATE	BY	REVISION
61	DATE	BY	REVISION
62	DATE	BY	REVISION
63	DATE	BY	REVISION
64	DATE	BY	REVISION
65	DATE	BY	REVISION
66	DATE	BY	REVISION
67	DATE	BY	REVISION
68	DATE	BY	REVISION
69	DATE	BY	REVISION
70	DATE	BY	REVISION
71	DATE	BY	REVISION
72	DATE	BY	REVISION
73	DATE	BY	REVISION
74	DATE	BY	REVISION
75	DATE	BY	REVISION
76	DATE	BY	REVISION
77	DATE	BY	REVISION
78	DATE	BY	REVISION
79	DATE	BY	REVISION
80	DATE	BY	REVISION
81	DATE	BY	REVISION
82	DATE	BY	REVISION
83	DATE	BY	REVISION
84	DATE	BY	REVISION
85	DATE	BY	REVISION
86	DATE	BY	REVISION
87	DATE	BY	REVISION
88	DATE	BY	REVISION
89	DATE	BY	REVISION
90	DATE	BY	REVISION
91	DATE	BY	REVISION
92	DATE	BY	REVISION
93	DATE	BY	REVISION
94	DATE	BY	REVISION
95	DATE	BY	REVISION
96	DATE	BY	REVISION
97	DATE	BY	REVISION
98	DATE	BY	REVISION
99	DATE	BY	REVISION
100	DATE	BY	REVISION

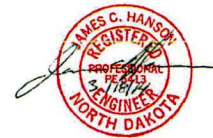
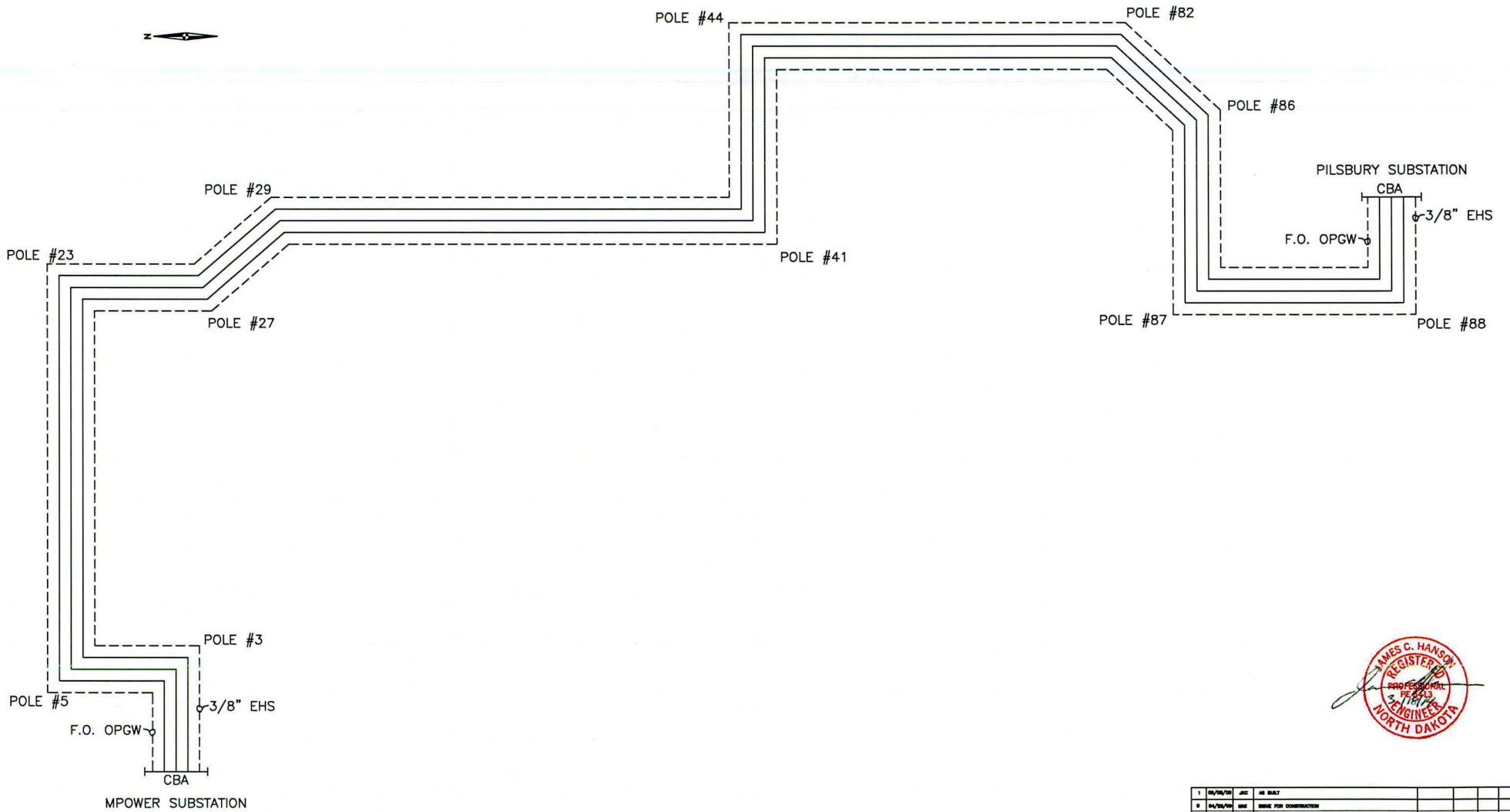
MPower / LIVERNE  
TRANSMISSION LINE  
POLE FRAMING DRAWING SH 15

CHECKED: \_\_\_\_\_ DATE: \_\_\_\_\_  
SCALE: NONE

DATE: 02/27/09

MPON-PF-15





1	01/12/09	JCC	AS BUILT					
2	01/12/09	JCC	ISSUE FOR CONSTRUCTION					
REV.	DATE	BY	DESCRIPTION	ISSUE ORDER	ISSUED	APPROV.	DATE	
<b>CEG</b> CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA								
<small>STATE OF NORTH DAKOTA          REGISTERED PROFESSIONAL ENGINEER          JAMES C. HANSON          LICENSE NO. 2413          EXPIRES 3/11/13</small>				<b>PHASING DIAGRAM          PILLSBURY/MPOWER          230KV LINE</b>				
CHECKED	DATE			SCALE	NONE			
DRAWN	DATE			W.G. NO.				
DATE	01/12/09	MAP NO.	DATE		MPOW-PH-01			

Consulting Engineers Group

Project Name: '1:\cog\cog projects\other projects\cogm01 - mpower\transmission\pls-cad\m-power 02-26-09.DWG'

**795Kcmil Drake ACSR Conductor**

Section #24 from structure #44 to structure #62, start set #5 'RRK', end set #35 'RAH'  
 Cable '1:\cog\cog projects\other projects\cogm01 - mpower\transmission\pls-cad\drake\_ocr.wir', Ruling span (ft) 783.51

Sagging data: Catenary (ft) 4265.08 Condition I Temperature (deg F) 60

Weather case for final after creep 60 Deg F, Equivalent to 25.1 (deg F) temperature increase

Weather case for final after load NESC Heavy (250B), Equivalent to 27.2 (deg F) temperature increase

**Ruling Span Sag Tension Report**

# Description	---Cable Load---		---R.S. Initial Cond.---				---R.S. Final Cond.---			
	Hor. Vert Res.	Tens. Tens. UL C Sag	Max. Hori. %	R.S.	---After Creep---		---After Load---			
					Tens. Tens. UL C Sag	Max. Hori. %	R.S.	Max. Hori. %	R.S.	
	---(lbs/ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---	
1 NESC Heavy (250B)	0.70 2.09 2.51	9692 9622 31 3836 20.02	9663 8593 31 3824 20.08	9692 9622 31 3836 20.02						
2 Extreme Wind (22 psf)	1.60 1.09 1.94	7249 7199 23 3709 20.71	7016 6965 22 3588 21.41	6991 6940 22 3575 21.49						
3 Concurrent Ice/Wind (250B)	1.66 3.72 4.07	13024 12895 41 3169 24.24	13023 12894 41 3169 24.24	13024 12895 41 3169 24.24						
4 Reduced Wind/Heavy Ice	1.37 5.96 6.11	17154 16935 54 2770 27.75	17154 16935 54 2770 27.75	17154 16935 54 2770 27.75						
5 Extreme Ice	0.90 3.72 3.72	12512 12396 40 3336 23.03	12501 12386 40 3334 23.05	12512 12396 40 3336 23.03						
6 Cold (-35 Deg)	0.00 1.09 1.09	6299 6276 20 5737 13.38	6003 5979 19 5465 14.05	5956 5932 19 5422 14.16						
7 Cold (-50 Deg)	0.00 1.09 1.09	6651 6629 21 6059 12.67	6399 6377 20 5829 13.17	6346 6323 20 5780 13.28						
8 Max. ACSR Operating	0.00 1.09 1.09	3420 3384 11 3093 24.84	3394 3357 11 3069 25.04	3407 3370 11 3081 24.94						
9 Blowout	0.55 1.09 1.23	4474 4439 14 3620 21.22	4189 4152 13 3386 22.69	4175 4138 13 3375 22.76						
10 Air Gap 1(-20 GFSF)	0.55 1.09 1.23	6417 6390 20 5211 14.73	6137 6109 19 4982 15.41	6096 6068 19 4949 15.51						
11 Air Gap 2(120 GFSF)	0.83 1.09 1.37	4917 4878 16 3550 21.63	4631 4590 15 3341 22.99	4616 4575 15 3330 23.07						
12 Air Gap 3(40 GFSF .5 ice)	0.70 2.09 2.21	8913 8854 28 4009 19.16	8662 8603 28 3986 19.27	8628 8569 28 3971 19.34						
13 Air Gap 4(60 GFSF 0 ice)	0.00 1.09 1.09	4695 4666 15 4265 18.00	4367 4337 14 3965 19.37	4347 4317 14 3946 19.46						
14 GALLOPING (SWING)	0.35 2.09 2.12	8160 8100 26 3815 20.13	8004 7944 25 3742 20.53	7973 7913 25 3727 20.61						
15 GALLOPING (SAG)	0.00 2.09 2.09	8083 8025 26 3833 20.04	7917 7858 25 3753 20.47	7890 7830 25 3740 20.54						
16 -20 Deg F	0.00 1.09 1.09	5981 5957 19 5446 14.10	5655 5630 18 5147 14.92	5612 5587 18 5107 15.03						
17 0 Deg F	0.00 1.09 1.09	5596 5571 18 5092 15.08	5255 5229 17 4779 16.06	5220 5193 17 4747 16.17						
18 50 Deg F	0.00 1.09 1.09	4822 4795 15 4383 17.52	4490 4461 14 4077 18.83	4466 4437 14 4056 18.93						
19 60 Deg F	0.00 1.09 1.09	4695 4666 15 4265 18.00	4367 4337 14 3965 19.37	4347 4317 14 3946 19.46						
20 120 Deg F	0.00 1.09 1.09	4065 4033 13 3687 20.83	3785 3751 12 3429 22.40	3771 3738 12 3417 22.48						
21 212 Deg F	0.00 1.09 1.09	3420 3384 11 3093 24.84	3394 3357 11 3069 25.04	3407 3370 11 3081 24.94						
22 257 Deg F	0.00 1.09 1.09	3269 3231 10 2954 26.02	3257 3219 10 2942 26.12	3269 3231 10 2954 26.02						
23 -20 Deg F, Moderate Wind	0.55 1.09 1.23	6417 6390 20 5211 14.73	6137 6109 19 4982 15.41	6096 6068 19 4949 15.51						
24 60 Deg F, High Wind	1.35 1.09 1.74	6678 6634 21 3816 20.13	6415 6369 20 3664 20.96	6392 6346 20 3651 21.04						
25 NESC(60 GFSF 0 ice)	0.55 1.09 1.23	5126 5095 16 4155 18.48	4809 4776 15 3895 19.72	4786 4753 15 3876 19.81						

**3/8" EHS Steel OHGW**

Section #23 from structure #44 to structure #62, start set #2 'LSWAN', end set #32 'LSWBK'

Cable '1:\cog\cog projects\other projects\cogm01 - mpower\transmission\pls-cad\3\_8\_7\_strand\_ahs\_steel.wir', Ruling span (ft) 783.08

Sagging data: Catenary (ft) 7865.93 Condition I Temperature (deg F) 60

Weather case for final after creep 60 Deg F, Equivalent to 0.2 (deg F) temperature increase

Weather case for final after load NESC Heavy (250B), Equivalent to 17.4 (deg F) temperature increase

**Ruling Span Sag Tension Report**

# Description	---Cable Load---		---R.S. Initial Cond.---				---R.S. Final Cond.---			
	Hor. Vert Res.	Tens. Tens. UL C Sag	Max. Hori. %	R.S.	---After Creep---		---After Load---			
					Tens. Tens. UL C Sag	Max. Hori. %	R.S.	Max. Hori. %	R.S.	
	---(lbs/ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---	---(lbs) (lbs) (ft) (ft)---		
1 NESC Heavy (250B)	0.45 0.81 1.23	4808 4775 31 3894 19.70	4808 4775 31 3894 19.70	4808 4775 31 3894 19.70						
2 Extreme Wind (22 psf)	0.55 0.27 0.61	2970 2966 19 4061 15.78	2970 2966 19 4061 15.78	2925 2912 19 4773 16.07						
3 Concurrent Ice/Wind (250B)	1.26 1.96 2.33	6892 6814 45 2921 26.28	6892 6814 45 2921 26.28	6892 6814 45 2921 26.28						
4 Reduced Wind/Heavy Ice	1.12 3.74 3.91	9327 9166 61 2346 32.75	9327 9166 61 2346 32.75	9327 9166 61 2346 32.75						
5 Extreme Ice	0.00 1.96 1.96	6380 6236 41 3175 24.17	6380 6236 41 3175 24.17	6380 6236 41 3175 24.17						
6 Cold (-35 Deg)	0.00 0.27 0.27	2617 2612 17 9569 8.01	2617 2612 17 9569 8.01	2586 2581 16 9162 8.37						
7 Cold (-50 Deg)	0.00 0.27 0.27	2748 2744 18 10051 7.63	2748 2744 18 10051 7.63	2638 2633 17 9646 7.95						
8 Max. ACSR Operating	0.00 0.27 0.27	1305 1299 8 4757 16.12	1288 1282 8 4695 16.34	1243 1236 8 4528 16.94						
9 Blowout	0.18 0.27 0.33	1813 1812 12 5540 13.84	1815 1808 12 5529 13.87	1741 1734 11 5302 14.46						
10 Air Gap 1(-20 GFSF)	0.18 0.27 0.33	2648 2643 17 8083 9.49	2648 2643 17 8083 9.49	2550 2545 17 7783 9.85						
11 Air Gap 2(120 GFSF)	0.27 0.27 0.38	2011 2003 13 5216 14.70	2011 2003 13 5216 14.70	1940 1932 13 5031 15.25						
12 Air Gap 3(40 GFSF .5 ice)	0.45 0.81 0.93	4145 4093 27 4819 17.36	4116 4093 27 4819 17.36	4091 4065 27 4393 17.46						
13 Air Gap 4(60 GFSF 0 ice)	0.00 0.27 0.27	1935 1930 13 7060 10.85	1935 1930 13 7060 10.85	1832 1827 12 6693 11.46						
14 GALLOPING (SWING)	0.23 0.81 0.84	3732 3711 24 4424 17.34	3732 3711 24 4424 17.34	3697 3676 24 4382 17.50						
15 GALLOPING (SAG)	0.00 0.81 0.81	3653 3633 24 4497 17.06	3653 3633 24 4497 17.06	3616 3596 23 4432 17.23						
16 -20 Deg F	0.00 0.27 0.27	2694 2490 16 9120 8.41	2494 2490 16 9120 8.41	2383 2379 15 8713 8.80						
17 0 Deg F	0.00 0.27 0.27	2336 2332 15 8541 8.98	2336 2332 15 8541 8.98	2225 2220 14 8112 9.43						
18 50 Deg F	0.00 0.27 0.27	1994 1989 13 7286 10.52	1994 1989 13 7286 10.52	1890 1885 12 6905 11.10						
19 60 Deg F	0.00 0.27 0.27	1935 1930 13 7060 10.85	1935 1930 13 7060 10.85	1832 1827 12 6693 11.46						
20 120 Deg F	0.00 0.27 0.27	1627 1621 11 5936 12.91	1616 1610 10 5698 13.00	1541 1535 10 5624 13.64						
21 212 Deg F	0.00 0.27 0.27	1385 1299 8 4757 16.12	1288 1282 8 4695 16.34	1243 1236 8 4528 16.94						
22 257 Deg F	0.00 0.27 0.27	1193 1186 8 4246 17.65	1177 1170 8 4206 17.90	1140 1133 7 4149 18.49						
23 -20 Deg F, Moderate Wind	0.18 0.27 0.33	2648 2643 17 8083 9.49	2648 2643 17 8083 9.49	2550 2545 17 7783 9.85						
24 60 Deg F, High Wind	0.44 0.27 0.52	2769 2700 18 5222 14.68	2769 2700 18 5222 14.68	2646 2636 17 5100 15.04						
25 NESC(60 GFSF 0 ice)	0.18 0.27 0.33	2117 2111 14 6455 11.88	2117 2111 14 6455 11.88	2026 2020 13 6176 12.42						



1	04/04/09	JHC	AS BUILT					
2	04/04/09	JHC	MAKE FOR CONSTRUCTION					
REV.	DATE	BY	REASON	DESCRIPTION	WORK ORDER	ISSUE	APP'D	DATE
<b>CEG</b> CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA				MPOWER 230KV LINE DRAKE CONDUCTOR-3/8" EHS STEEL SAG & TENSION				
DRAWN BY: JAMES C. HANSON NO. 5413				CHECKED	SCALE NONE			
DATE				W.D. NO.		MAP NO.		
DATE				DATE		DWG. NO.		
				MPOW-S&T-01				

**FO-DNO-3825 OHGW Fiber Optic**

Section #22 from structure #44 to structure #82, start set #1 'RSWAH', end set #31 'RSWBK'  
 Cable '1:\ceg\ceg projects\other projects\cegnw01 - mpower\transmission\pls-cad\  
 fo-dno-3825-cc-57-465 opt- gv cable - 24 single-mode fibers.wir', Ruling span (ft) 783.954  
 Sagging data: Catenary (ft) 7109.62 Condition I Temperature (deg F) 60  
 Weather case for final after creep 60 Deg F, Equivalent to 36.0 (deg F) temperature increase  
 Weather case for final after load NESC Heavy (250B), Equivalent to 25.8 (deg F) temperature increase

**Ruling Span Sag Tension Report**

# Description	---Weather Case---			---Cable Load---			---R.S. Initial Cond.---			---R.S. Final Cond.---			---R.S. Final Cond.---					
	Hor.	Vert	Res.	Max. Hori.	Tens.	Tens. UL	R.S.	Max. Hori.	Tens.	Tens. UL	R.S.	Max. Hori.	Tens.	Tens. UL	R.S.			
	(ft)	(ft)	(ft)	(ft)	(lbs)	(lbs)	(ft)	(ft)	(lbs)	(lbs)	(ft)	(ft)	(lbs)	(lbs)	(ft)			
1 NESC Heavy (250B)	0.49	0.91	1.34	5608	5574	34	4172	18.43	5520	5485	33	4205	18.73	5608	5574	34	4172	18.43
2 Extreme Wind (22 psf)	0.70	0.31	0.77	3706	3691	22	4784	16.07	3509	3493	21	4527	16.98	3585	3569	22	4626	16.62
3 Concurrent Ice/Wind (250D)	1.31	2.14	2.51	7930	7851	48	3130	24.57	7930	7851	48	3130	24.57	7930	7851	48	3130	24.57
4 Reduced Wind/Heavy Ice	1.15	3.98	4.14	10833	10675	65	2576	29.88	10833	10675	65	2576	29.88	10833	10675	65	2576	29.88
5 Extreme Ice	0.00	2.14	2.14	7315	7250	44	3395	22.66	7315	7250	44	3395	22.66	7315	7250	44	3395	22.66
6 Cold (-35 Deg)	0.00	0.31	0.31	3325	3320	20	10579	7.26	2908	2903	17	9250	8.31	3051	3047	18	9709	7.91
7 Cold (-50 Deg)	0.00	0.31	0.31	3536	3531	21	11253	6.83	3117	3113	19	9919	7.75	3270	3265	20	10404	7.38
8 Max. ACSR Operating	0.00	0.31	0.31	1384	1376	8	4385	17.53	1263	1255	8	3999	19.23	1292	1284	8	4091	18.80
9 Blowout	0.23	0.31	0.39	2084	2076	13	5315	14.46	1879	1870	11	4789	16.05	1932	1924	12	4926	15.60
10 Air Gap 1 (-20 GPSF)	0.23	0.31	0.39	3342	3336	20	8542	9.00	2981	2974	18	7616	10.09	3105	3099	19	7935	9.68
11 Air Gap 2 (120 GPSF)	0.35	0.31	0.47	2361	2351	14	5011	15.34	2161	2150	13	4583	16.77	2215	2205	13	4700	16.35
12 Air Gap 3 (0 GPSF .5 ice)	0.49	0.91	1.04	4890	4866	29	4697	16.37	4740	4715	29	4551	16.89	4833	4808	29	4641	16.56
13 Air Gap 4 (60 GPSF 0 ice)	0.00	0.31	0.31	2235	2229	13	7105	10.82	1937	1931	12	6154	12.49	2015	2009	12	6402	12.00
14 GALLOPING (SWING)	0.24	0.91	0.95	4398	4375	26	4626	16.62	4229	4206	25	4446	17.29	4311	4288	26	4534	16.96
15 GALLOPING (SAG)	0.00	0.91	0.91	4315	4293	26	4697	16.36	4138	4115	25	4503	17.07	4222	4199	25	4596	16.73
16 -20 Deg F	0.00	0.31	0.31	3123	3118	19	9938	7.73	2713	2708	16	8629	8.90	2846	2841	17	9054	8.49
17 0 Deg F	0.00	0.31	0.31	2870	2865	17	9129	8.42	2479	2473	15	7882	9.75	2599	2594	16	8266	9.30
18 50 Deg F	0.00	0.31	0.31	2329	2323	14	7401	10.38	2012	2006	12	6392	12.02	2096	2090	13	6661	11.54
19 60 Deg F	0.00	0.31	0.31	2235	2229	13	7105	10.82	1937	1931	12	6154	12.49	2015	2009	12	6402	12.00
20 120 Deg F	0.00	0.31	0.31	1794	1787	11	5695	13.49	1587	1579	10	5032	15.27	1638	1631	10	5198	14.79
21 212 Deg F	0.00	0.31	0.31	1384	1376	8	4385	17.53	1263	1255	8	3999	19.23	1292	1284	8	4091	18.80
22 257 Deg F	0.00	0.31	0.31	1254	1245	8	3968	19.38	1158	1149	7	3662	21.00	1180	1172	7	3733	20.60
23 -20 Deg F, Moderate Wind	0.23	0.31	0.39	3342	3336	20	8542	9.00	2981	2974	18	7616	10.09	3105	3099	19	7935	9.68
24 60 Deg F, High Wind	0.57	0.31	0.65	3347	3334	20	5145	14.94	3126	3113	19	4804	16.00	3202	3189	19	4921	15.62
25 NESC (60 GPSF 0 ice)	0.23	0.31	0.39	2515	2507	15	6420	11.97	2237	2229	13	5708	13.46	2315	2307	14	5908	13.01



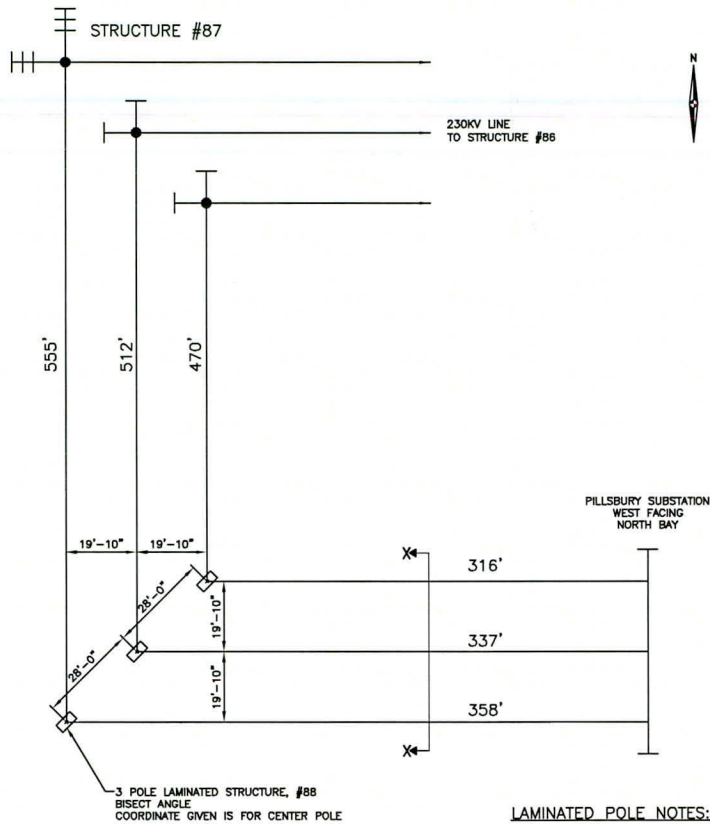
1	06/18/09	JCH	AS BUILT						
2	06/18/09	JCH	DATE FOR CONSTRUCTION						
3	06/18/09	JCH	DESCRIPTION						
<b>CEG</b> CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA									
MPOWER 230KV LINE FO-DNO-3825 OHGW FIBER OPTIC SAG & TENSION									
DRAWN BY: JAMES C. HANSON				SCALE: NONE					
DATE: 01/12/09				W.O. NO.:					
DRAWN BY: JCH				MAP NO.:					
DATE: 01/12/09				DWG. NO. MPOW-S&T-02					

DRAKE 795kcmil												DRAKE 795kcmil																							
Span	Mid	Mid	Mid	Mid	Mid	Mid	Mid	Loft	Span	3	3	3	3	3	3	Loft	Span	3	3	3	3	3	3	Loft											
Length	Span	Span	Span	Span	Span	Span	Span	Span	Length	Wave	Wave	Wave	Wave	Wave	Wave	Wave	Length	Wave	Wave	Wave	Wave	Wave	Wave	Wave											
30 F	40 F	50 F	60 F	70 F	80 F	90 F	Span	Struct	30 F	40 F	50 F	60 F	70 F	80 F	90 F	Span	30 F	40 F	50 F	60 F	70 F	80 F	90 F	Span											
(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)		(ft-in)	Sec.	Sec.	Sec.	Sec.	Sec.	Sec.		(ft-in)	Sec.	Sec.	Sec.	Sec.	Sec.	Sec.												
406-9	5-4	5-8	6-0	6-4	6-8	6-11	7-3	1	406-9	6.9	7.1	7.3	7.5	7.7	7.9	8.1	1	417-6	7.1	7.3	7.5	7.7	7.9	8.1	8.3	2									
417-1	5-8	6-0	6-4	6-8	7-0	7-4	7-8	2	417-6	7.1	7.3	7.5	7.7	7.9	8.1	8.3	2																		
Horizontal tension is for above spans.												Horizontal tension is for above spans.																							
4222	3989	3777	3567	3418	3262	3120			4222	4984	4766	4637	4515	4393	4281		540-10	7-11	9-1	9-4	9-7	9-10	9-0	9-3	44	540-10	0.4	0.5	0.6	0.0	0.9	5.0	9.1	44	
503-3	10-7	11-0	11-5	11-11	12-4	12-9	13-2	3	503-3	9.7	9.9	10.1	10.3	10.5	10.7	10.8	3	576-9	9-0	9-3	9-6	9-9	10-0	10-3	10-6	45	576-9	9.0	9.1	9.2	9.3	9.5	9.6	9.7	45
571-5	9-6	9-11	10-3	10-8	11-1	11-5	11-10	4	571-5	9.2	9.4	9.6	9.8	9.9	10.1	10.3	4	797-8	17-2	17-8	18-2	18-8	19-2	19-8	20-2	46	797-8	12.4	12.6	12.7	12.9	13.1	13.3	13.4	46
Horizontal tension is for above spans.												Horizontal tension is for above spans.																							
671-1	12-8	12-10	13-2	13-7	14-0	14-4	14-9	5	671-1	16.5	16.7	16.9	17.0	17.2	17.3	17.5	5	799-8	18-9	19-4	19-10	20-5	20-11	21-6	22-0	47	834-1	13.0	13.1	13.3	13.5	13.7	13.9	14.0	47
681-8	12-1	12-3	12-10	13-2	13-7	13-11	14-4	6	681-8	16.4	16.6	16.7	16.9	17.0	17.2	17.3	6	819-9	18-1	18-8	19-2	19-9	20-3	20-9	21-3	48	819-9	12.7	12.9	13.1	13.3	13.5	13.6	13.8	48
710-11	13-10	14-3	14-8	15-1	15-6	15-11	16-4	7	710-11	11.1	11.3	11.5	11.6	11.8	11.9	12.1	7	842-7	19-2	19-8	20-3	20-10	21-5	21-11	22-6	49	842-7	13.1	13.3	13.5	13.7	13.8	14.0	14.2	49
745-7	15-2	15-8	16-2	16-7	17-1	17-7	18-0	8	745-7	11.7	11.9	12.0	12.2	12.4	12.5	12.7	8	827-0	18-0	18-6	19-1	19-7	20-1	20-8	21-2	50	827-0	12.7	12.9	13.1	13.2	13.4	13.6	13.7	50
776-10	16-7	17-1	17-7	18-2	18-8	19-2	19-8	9	776-10	12.2	12.4	12.6	12.7	12.9	13.1	13.3	9	791-6	16-11	17-8	17-11	18-5	18-10	19-4	19-10	51	791-6	12.9	13.1	13.2	13.4	13.5	13.7	13.9	51
779-0	9-2	9-5	9-8	10-0	10-3	10-7	10-10	10	779-0	9.0	9.2	9.3	9.5	9.6	9.7	9.8	10	799-0	17-3	17-9	18-3	18-9	19-3	19-9	20-3	52	799-0	12.4	12.6	12.8	12.9	13.1	13.3	13.4	52
820-3	18-11	19-6	20-1	20-8	21-4	21-10	22-5	11	820-3	13.0	13.2	13.4	13.6	13.8	14.0	14.2	11	827-6	18-6	19-0	19-7	20-1	20-8	21-2	21-8	53	827-6	12.9	13.0	13.2	13.4	13.6	13.8	13.9	53
889-11	13-0	13-5	13-10	14-3	14-8	15-0	15-5	12	889-11	10.8	11.0	11.1	11.3	11.4	11.6	11.7	12	753-6	15-4	15-9	16-2	16-8	17-1	17-7	18-0	54	753-6	11.7	11.9	12.0	12.2	12.4	12.5	12.7	54
890-6	17-6	18-1	18-7	19-2	19-8	20-3	20-9	14	890-6	12.5	12.7	12.9	13.1	13.3	13.5	13.6	14	763-0	15-0	16-2	16-7	17-1	17-6	18-0	18-5	55	763-0	11.0	11.2	11.4	11.5	11.7	11.9	12.0	55
777-5	17-6	17-7	17-7	18-1	18-7	19-1	19-7	15	777-5	12.2	12.3	12.5	12.7	12.9	13.1	13.2	15	753-6	15-4	15-9	16-2	16-8	17-1	17-7	18-0	56	753-6	11.7	11.9	12.0	12.2	12.4	12.5	12.7	56
763-2	15-11	16-5	16-11	17-5	17-11	18-5	19-10	16	763-2	11.9	12.1	12.3	12.5	12.7	12.9	13.0	16	746-9	15-0	15-6	15-11	16-4	16-10	17-3	17-8	57	746-9	11.6	11.8	11.9	12.1	12.2	12.4	12.6	57
766-11	16-11	17-5	18-0	18-6	19-0	19-7	20-1	17	766-11	12.3	12.5	12.7	12.9	13.0	13.2	13.4	17	788-5	14-8	15-2	15-7	16-0	16-5	16-10	17-3	58	788-5	11.5	11.6	11.8	12.0	12.1	12.3	12.4	58
785-4	16-10	17-5	17-11	18-5	18-10	19-6	20-0	18	785-4	12.3	12.5	12.7	12.9	13.0	13.2	13.4	18	828-1	18-6	19-0	19-7	20-1	20-8	21-2	21-9	59	828-1	12.9	13.0	13.2	13.4	13.6	13.8	13.9	59
803-11	13-2	13-7	14-0	14-5	14-10	15-2	15-7	19	803-11	16.0	16.1	16.2	16.3	16.5	16.7	16.9	19	795-1	17-1	17-7	18-1	18-7	19-1	19-6	20-0	60	795-1	12.3	12.5	12.7	12.9	13.1	13.2	13.4	60
797-11	13-8	14-1	14-7	15-0	15-5	15-10	16-3	20	797-11	13.1	13.2	13.4	13.6	13.7	13.9	14.1	20	726-10	14-0	14-5	14-10	15-3	15-8	16-1	16-5	61	726-10	11.2	11.4	11.5	11.7	11.8	12.0	12.1	61
603-3	9-11	10-3	10-7	11-1	11-6	11-9	12-1	21	603-3	9.4	9.6	9.7	9.8	10.0	10.1	10.3	21	776-1	16-3	16-9	17-2	17-8	18-2	18-7	19-1	62	776-1	12.1	12.2	12.4	12.6	12.7	12.9	13.1	62
829-5	16-10	17-5	20-0	20-7	21-2	21-9	22-4	22	829-5	13.0	13.2	13.4	13.6	13.8	13.9	14.1	22	776-1	16-3	16-9	17-2	17-8	18-2	18-7	19-1	63	776-1	12.1	12.2	12.4	12.6	12.7	12.9	13.1	63
Horizontal tension is for above spans.												Horizontal tension is for above spans.																							
5007	4856	4713	4579	4452	4335	4224			5007	4951	4755	4664	4544	4429	4323		765-10	15-8	16-1	16-7	17-0	17-6	17-11	18-4	64	765-10	11.8	12.0	12.2	12.3	12.5	12.7	12.8	64	
428-1	10-11	11-4	11-8	12-0	12-7	13-0	13-5	23	428-1	9.4	10.1	10.3	10.4	10.6	10.8	11.0	23	788-5	14-8	15-2	15-7	16-0	16-5	16-10	17-3	65	788-5	11.5	11.6	11.8	12.0	12.1	12.3	12.4	65
478-10	11-7	12-1	12-6	12-11	13-4	13-9	14-3	24	478-10	16.2	16.4	16.6	16.8	16.9	17.1	17.3	24	828-1	17-6	18-0	18-6	19-1	19-7	20-1	20-7	66	828-1	12.5	12.7	12.9	13.1	13.2	13.4	13.6	66
051-1	13-1	13-6	13-8	13-8	13-11	14-4	14-9	25	051-1	16.4	16.6	16.8	17.0	17.1	17.3	17.5	25	805-8	17-6	18-0	18-6	19-1	19-7	20-1	20-7	67	805-8	12.5	12.7	12.9	13.0	13.2	13.4	13.6	67
024-10	11-1	11-6	11-11	12-4	12-9	13-2	13-7	26	024-10	16.0	16.2	16.3	16.5	16.7	16.9	17.0	26	819-8	18-1	18-6	19-0	19-6	20-0	20-6	21-0	68	819-8	12.7	12.9	13.1	13.3	13.5	13.6	13.8	68
Horizontal tension is for above spans.												Horizontal tension is for above spans.																							
4986	4620	4470	4318	4170	4049	3929			4986	4951	4755	4664	4544	4429	4323		747-14	14-6	14-11	15-4	15-10	16-3	16-8	17-1	69	747-14	11.4	11.6	11.7	11.9	12.0	12.2	12.4	69	
569-9	9-8	10-1	10-6	10-11	11-4	11-9	12-2	27	569-9	9.3	9.5	9.7	9.9	10.1	10.3	10.4	27	747-14	14-6	14-11	15-4	15-10	16-3	16-8	17-1	70	747-14	11.4	11.6	11.7	11.9	12.0	12.2	12.4	70
523-10	8-2	8-6	8-10	9-3	9-7	9-11	10-4	28	523-10	8.5	8.7	8.9	9.1	9.3	9.4	9.6	28	828-1	18-6	19-0	19-7	20-1	20-8	21-2	21-9	71	828-1	12.9	13.0	13.2	13.4	13.6	13.8	13.9	71
Horizontal tension is for above spans.												Horizontal tension is for above spans.																							
4686	4415	4227	4073	3921	3789	3652			4686	4620	4470	4318	4170	4049	3929		834-10	18-10	19-4	19-11	20-5	21-0	21-6	22-1	72	834-10	13.0	13.2	13.3	13.5	13.7	13.9	14.0	72	
779-9	16-6	17-1	17-7	18-1	18-7	19-1	19-7	29	779-9	12.2	12.3	12.5	12.7	12.9	13.1	13.2	29	874-0	18-9	19-4	19-10	20-5	20-11	21-6	22-0	73	874-0	13.0	13.1	13.3	13.5	13.7	13.9	14.0	73
713-11	15-10	16-4	16-9	17-5	18-0	18-6	19-0	30	713-11	11.1	11.3	11.5	11.6	11.8	12.0	12.1	30	835-7	18-10	19-5	19-11	20-6	21-0	21-7	22-5	74	835-7	13.0	13.2	13.4	13.5	13.7	13.9	14.1	74
743-9	15-1	15-6	16-0	16-5	16-11	17-4	17-9	31	743-9	11.6	11.8	12.0	12.1	12.3	12.5	12.6	31	835-11	18-10	19-5	19-11	20-6	21-0	21-7	22-5	80	835-11	13.0	13.2	13.4	13.5	13.7	13.9	14.1	80
718-0	14-0	14-5	14-11	15-4	15-9	16-2	16-7	32	718-0	11.2	11.4	11.5	11.7	11.9	12.0	12.2	32	754-9	15-4	15-10	16-3	16-8	17-2	17-7	18-0	81	754-9	11.7	11.9	12.0	12.2	12.4	12.5	12.7	81
882-2	17-6	18-1	18-7	19-1	19-8	20-2	20-8	33	882-2	12.5	12.7	12.9	13.1	13.3	13.4	13.6	33	Horizontal tension is for above spans.																	
718-2	14-0	14-6	14-11	15-4	15-9	16-																													



FO-DNO-3825										FO-DNO-3825									
Span	Mid	Mid	Mid	Mid	Mid	Mid	Mid	Left		Span	3	3	3	3	3	3	3	Left	
Length	Span	Span	Span	Span	Span	Span	Span	Struct	Number	Length	Span	Span	Span	Span	Span	Span	Span	Struct	Number
	30 F	40 F	50 F	60 F	70 F	80 F	90 F				30 F	40 F	50 F	60 F	70 F	80 F	90 F		
(ft-in)(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)		(ft-in)	Sec.	Sec.	Sec.	Sec.	Sec.	Sec.	Sec.	(ft-in)	
407-2	2-10	3-1	3-3	3-6	3-9	4-0	4-3	1		407-2	5.1	5.2	5.4	5.6	5.8	6.0	6.2	1	
399-10	2-9	2-11	3-2	3-4	3-7	3-10	4-1	2		399-10	5.0	5.1	5.3	5.5	5.7	5.9	6.1	2	
Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz			Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz		
Tension	Tension	Tension	Tension	Tension	Tension	Tension	Tension			Tension	Tension	Tension	Tension	Tension	Tension	Tension	Tension		
30 F	40 F	50 F	60 F	70 F	80 F	90 F				30 F	40 F	50 F	60 F	70 F	80 F	90 F			
(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)				(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)			
2278	2135	1996	1866	1744	1622	1528													
Horizontal tension is for above spans.										Horizontal tension is for above spans.									
585-7	5-7	5-11	5-3	6-7	6-11	7-3	7-7	3		585-7	7.1	7.3	7.5	7.7	7.8	8.0	8.2	3	
589-7	5-8	6-0	6-4	6-8	7-0	7-4	7-8	4		589-7	7.1	7.3	7.5	7.7	7.9	8.1	8.3	4	
Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz			Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz		
Tension	Tension	Tension	Tension	Tension	Tension	Tension	Tension			Tension	Tension	Tension	Tension	Tension	Tension	Tension	Tension		
30 F	40 F	50 F	60 F	70 F	80 F	90 F				30 F	40 F	50 F	60 F	70 F	80 F	90 F			
(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)				(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)			
2401	2278	2188	2056	1958	1859	1772													
Horizontal tension is for above spans.										Horizontal tension is for above spans.									
692-3	7-5	7-10	8-2	8-7	8-11	9-3	9-8	5		692-3	8.2	8.4	8.6	8.7	8.9	9.1	9.3	5	
664-8	6-11	7-3	7-7	7-11	8-3	8-7	8-11	6		664-8	7.9	8.0	8.2	8.4	8.6	8.7	8.9	6	
710-11	7-11	8-3	8-8	9-0	9-5	9-9	10-2	7		710-11	8.5	8.6	8.8	9.0	9.2	9.4	9.5	7	
745-7	8-9	9-1	9-8	9-11	10-4	10-9	11-0	8		745-7	8.8	9.0	9.2	9.4	9.6	9.8	10.0	8	
778-10	9-6	9-11	10-4	10-10	11-3	11-7	12-0	9		778-10	9.2	9.4	9.6	9.8	10.0	10.3	10.5	9	
578-0	5-3	5-6	5-9	6-0	6-3	6-6	6-9	4		578-0	6.8	7.0	7.1	7.3	7.5	7.6	7.8	10	
832-3	10-11	11-4	11-10	12-4	12-11	13-5	13-11	11		832-3	9.5	10.1	10.3	10.5	10.7	11.0	11.2	11	
786-9	9-9	10-2	10-7	11-1	11-6	12-0	12-6	12		786-9	9.3	9.5	9.7	9.9	10.1	10.4	10.6	12	
689-11	7-6	7-10	8-2	8-6	8-10	9-3	9-7	13		689-11	8.2	8.4	8.5	8.7	8.9	9.1	9.3	13	
880-6	10-1	10-6	11-0	11-5	11-11	12-5	12-11	14		880-6	9.5	9.7	9.9	10.1	10.3	10.5	10.7	14	
775-6	8-6	9-11	10-4	10-9	11-3	11-8	12-0	15		775-6	9.2	9.4	9.6	9.8	10.0	10.2	10.4	15	
763-2	9-2	9-7	10-0	10-5	10-10	11-3	11-8	16		763-2	9.0	9.2	9.4	9.6	9.8	10.0	10.2	16	
786-11	9-9	10-2	10-7	11-1	11-6	12-0	12-6	17		786-11	9.0	9.2	9.4	9.6	9.8	10.1	10.4	17	
785-4	9-0	10-1	10-7	11-0	11-6	11-11	12-6	18		785-4	9.0	9.2	9.4	9.6	9.8	10.1	10.3	18	
693-11	7-7	7-11	8-3	8-7	8-11	9-4	9-8	19		693-11	8.2	8.4	8.6	8.8	8.9	9.1	9.3	19	
787-11	7-10	7-13	8-7	8-11	9-4	9-8	10-1	20		787-11	8.4	8.5	8.6	8.8	8.9	9.1	9.3	20	
685-3	5-9	6-0	6-3	6-6	6-9	7-1	7-4	21		685-3	7.1	7.3	7.5	7.6	7.8	8.0	8.1	21	
847-6	11-3	11-9	12-3	12-10	13-4	13-11	14-6	22		847-6	10.0	10.2	10.5	10.7	10.9	11.2	11.4	22	
Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz			Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz		
Tension	Tension	Tension	Tension	Tension	Tension	Tension	Tension			Tension	Tension	Tension	Tension	Tension	Tension	Tension	Tension		
30 F	40 F	50 F	60 F	70 F	80 F	90 F				30 F	40 F	50 F	60 F	70 F	80 F	90 F			
(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)				(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)			
2499	2396	2294	2199	2110	2026	1949													
Horizontal tension is for above spans.										Horizontal tension is for above spans.									
638-1	6-7	6-11	7-3	7-7	8-0	8-4	8-9	23		638-1	7.7	7.9	8.1	8.3	8.4	8.7	8.8	23	
638-10	6-7	6-11	7-3	7-8	8-0	8-5	8-9	24		638-10	7.7	7.9	8.1	8.3	8.5	8.7	8.9	24	
651-1	6-10	7-2	7-7	7-11	8-4	8-8	9-1	25		651-2	7.8	8.0	8.2	8.4	8.6	8.8	9.0	25	
614-2	6-1	6-5	6-9	7-1	7-5	7-9	8-1	26		614-2	7.4	7.6	7.8	7.9	8.1	8.3	8.5	26	
Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz			Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz		
Tension	Tension	Tension	Tension	Tension	Tension	Tension	Tension			Tension	Tension	Tension	Tension	Tension	Tension	Tension	Tension		
30 F	40 F	50 F	60 F	70 F	80 F	90 F				30 F	40 F	50 F	60 F	70 F	80 F	90 F			
(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)				(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)			
2476	2312	2220	2099	2002	1910	1826													
Horizontal tension is for above spans.										Horizontal tension is for above spans.									
559-1	5-2	5-6	5-9	6-1	6-5	6-9	7-2	27		559-1	6.8	7.0	7.2	7.4	7.6	7.8	8.0	27	
534-3	4-9	5-0	5-3	5-7	5-10	6-2	6-6	28		534-3	6.5	6.7	6.9	7.1	7.2	7.4	7.6	28	
Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz			Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz		
Tension	Tension	Tension	Tension	Tension	Tension	Tension	Tension			Tension	Tension	Tension	Tension	Tension	Tension	Tension	Tension		
30 F	40 F	50 F	60 F	70 F	80 F	90 F				30 F	40 F	50 F	60 F	70 F	80 F	90 F			
(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)				(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)			
2371	2245	2125	2014	1909	1811	1721													
Horizontal tension is for above spans.										Horizontal tension is for above spans.									
798-7	9-9	10-3	10-8	11-1	11-7	12-1	12-6	29		798-7	9.4	9.6	9.8	10.0	10.2	10.4	10.6	29	
714-5	8-0	8-4	8-9	9-1	9-5	9-10	10-0	30		714-5	8.5	8.6	8.8	9.0	9.2	9.4	9.6	30	
743-0	8-0	8-1	8-5	8-10	10-3	10-8	11-1	31		743-0	8.5	8.6	8.8	9.0	9.2	9.4	9.6	31	
718-0	8-1	8-5	8-10	9-2	9-7	9-11	10-4	32		718-0	8.5	8.7	8.9	9.1	9.2	9.4	9.6	32	
802-2	10-1	10-6	11-0	11-5	11-11	12-5	12-11	33		802-2	9.5	9.7	9.9	10.1	10.3	10.5	10.7	33	
718-2	8-1	8-5	8-10	9-2	9-7	9-11	10-4	34		718-2	8.5	8.7	8.9	9.1	9.2	9.4	9.6	34	
755-9	8-11	9-4	9-9	10-2	10-7	11-0	11-5	35		755-9	8.5	8.7	8.9	9.1	9.2	9.4	9.6	35	
750-1	8-10	9-2	9-7	10-0	10-5	10-10	11-3	36		750-1	8.5	8.7	8.9	9.1	9.2	9.4	9.6	36	
715-0	9-5	9-10	10-3	10-1	11-2	11-7	12-0	37		715-0	9.2	9.4	9.6	9.8	10.0	10.2	10.4	37	
774-0	9-5	9-10	10-3	10-9	11-2	11-7	12-1	38		774-0	9.2	9.4	9.6	9.8	10.0	10.2	10.4	38	
771-0	9-4	9-9	10-2	10-7	11-0	11-6	11-11	39		771-0	9.1	9.3	9.5	9.7	9.9	10.1	10.3	39	
731-4	8-5	8-10	9-2	9-7	10-0	10-5	10-10	40		731-4	8.7	8.9	9.1	9.3	9.5	9.6	9.8	40	
Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz			Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz	Horiz		
Tension	Tension	Tension	Tension	Tension	Tension	Tension	Tension			Tension	Tension	Tension	Tension	Tension	Tension	Tension	Tension		
30 F	40 F	50 F	60 F	70 F	80 F	90 F				30 F	40 F	50 F	60 F	70 F	80 F	90 F			
(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)				(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)			
2506	2359	2200	2025	2117	2035	1959													

Span	Mid	Mid	Mid	Mid	Mid	Mid	Mid	Left		Span	3	3	3	3	3	3	3	Left	
Length	Span	Span	Span	Span	Span	Span	Span	Struct	Number	Length	Span	Span	Span	Span	Span	Span	Span	Struct	Number
	30 F	40 F	50 F	60 F	70 F	80 F	90 F				30 F	40 F	50 F	60 F	70 F	80 F	90 F		
(ft-in)(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)	(ft-in)		(ft-in)	Sec.	Sec.	Sec.	Sec.	Sec.	Sec.	Sec.	(ft-in)	
747-4	8-9	9-1	9-6	9-10	10-3	10-8	11-1	41		747-4	8.8	9.0	9.2	9.4	9.6	9.8	10.0	41	
810-4	10-7	10-8	11-2	11-7	12-1	12-7	13-1	42		810-4	9.4	9.6	9.8	10.0	10.2	10.4	10.6	42	
747-5	8-9	9-1	9-6	9															



NOTE: LOADS SHOWN BELOW ARE AT NESC HEAVY (NO OCF INCLUDED)

SECTION B-B (LOADS) (OGW/OPGW)

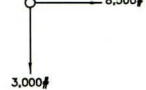


NORMAL LOADS WHERE DEFLECTION LIMIT-TOP IS TO DEFLECT NO MORE THAN 1% OF POLES LENGTH (OF,FINAL) (NO OCF INCLUDED)

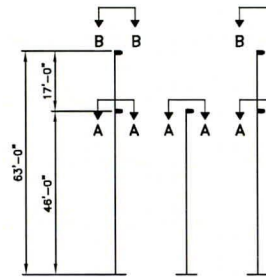
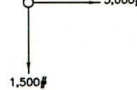
SECTION B-B (LOADS) (OGW/OPGW)



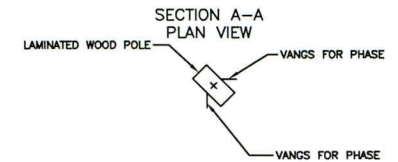
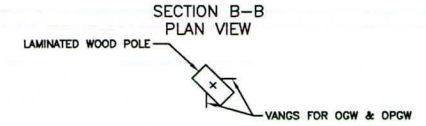
SECTION A-A (LOADS) (PHASE CONDUCTOR)



SECTION A-A (LOADS) (PHASE CONDUCTOR)



SECTION X-X  
STRUCTURE #88



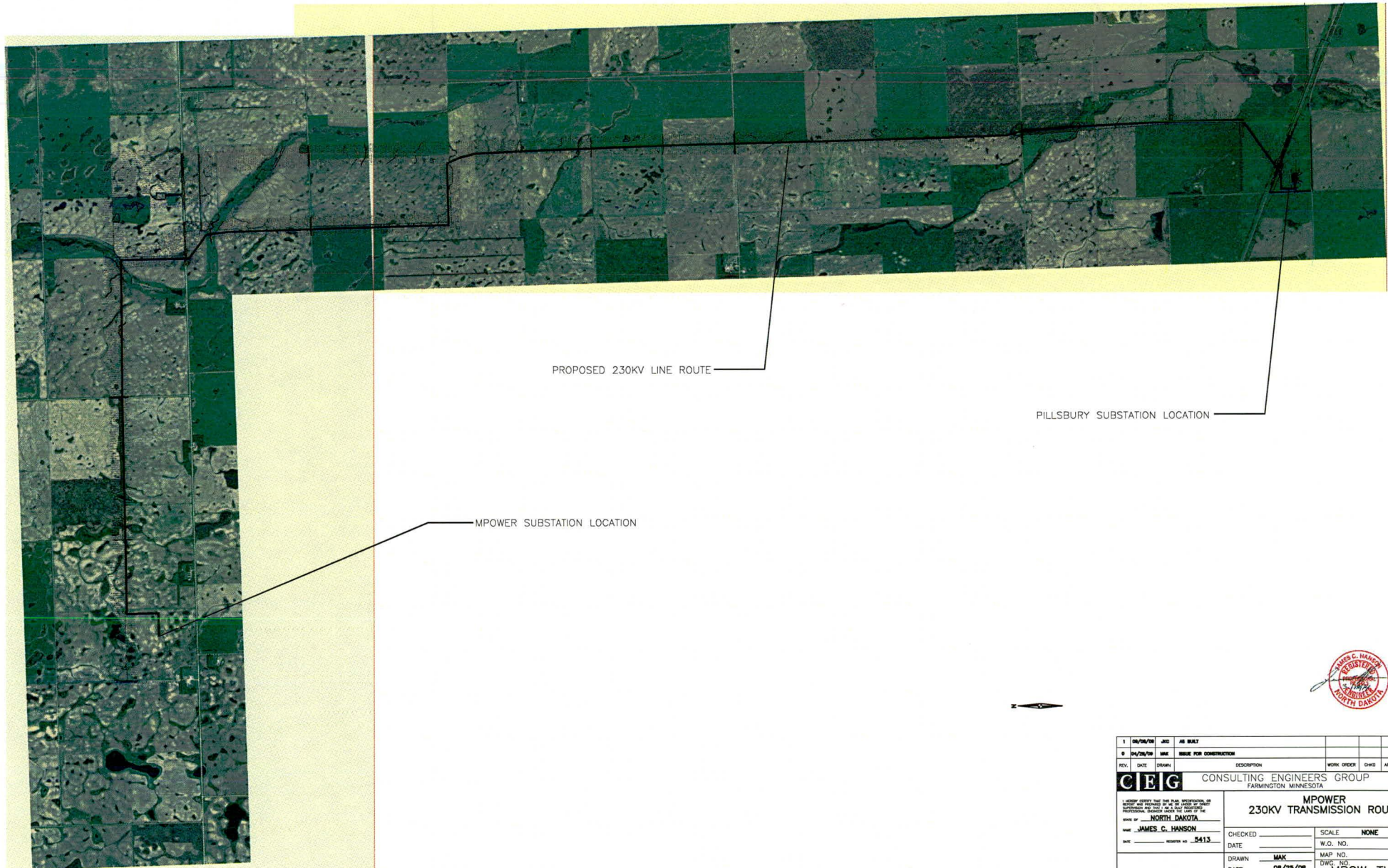
EXACT DETAILS/DIMENSIONS TO BE FINALIZED DURING LAMINATED POLE DESIGN

LAMINATED POLE NOTES:

1. TWO POLES WILL BE IDENTICAL AND WILL BE 63' FROM THE GROUND LINE TO THE TOP CONDUCTOR ATTACHMENT POINT, THE THIRD POLE WILL BE 46' FROM THE GROUND LINE TO THE CONDUCTOR ATTACHMENT POINT.
2. LOADINGS ARE PER THE INFORMATION ON THIS DRAWING.
3. MANUFACTURER SHALL PROPOSE ATTACHMENT DETAILS FOR STANDARD LINE DEADEND.
4. MANUFACTURER SHALL PROPOSE FOUNDATION DESIGN FOR EACH POLE BASED ON AVAILABLE SOIL BORINGS.
5. PHASE CONDUCTOR IS 795 ACSR DRAKE, OGW/OPGW ARE 3/8" EHS STEEL AND FIBER OPTIC DHO-3825. (DIAMETER 0.36" AND 0.465" RESPECTIVELY)



2	10/21/08	JMG	AS BUILT						
1	10/14/08	JMG	CHANGE STEEL POLE TO LAMINATED						
0	10/16/08	JMG	SCALE FOR CONSTRUCTION						
REV.	DATE	BY	DESCRIPTION	WORK ORDER	CHG	APPD	DATE		
<b>CEG</b> CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA									
MPOWER / LUVERNE LAMINATED POLE AT PILLSBURY SUB STRUCTURE #88									
CHECKED _____				SCALE AS SHOWN					
DATE _____				W.O. NO. _____					
DRAWN TCM				MAP NO. _____					
DATE 10/21/08				DWS NO. _____					
				MPOWER-STR-88					



PROPOSED 230KV LINE ROUTE

PILLSBURY SUBSTATION LOCATION

MPOWER SUBSTATION LOCATION



1	08/25/08	JGC	AS BUILT					
0	04/25/08	MAX	ISSUE FOR CONSTRUCTION					
REV.	DATE	DRAWN	DESCRIPTION	WORK ORDER	CHWG	APPR	DATE	
<b>CEG</b>			CONSULTING ENGINEERS GROUP FARMINGTON MINNESOTA					
STATE OF NORTH DAKOTA			MPOWER 230KV TRANSMISSION ROUTE					
NAME: JAMES C. HANSON			CHECKED:			SCALE: NONE		
NO. 4413			DATE:			W.O. NO.		
			DRAWN: MAX			MAP NO.		
			DATE: 08/25/08			DWG. TITLE: MPOW-TLR-01		



6/18/2009  
M-Power X and Y coordinates for angle structure anchor positions  
CEG

Structure #	Attachment	X - Easting (ft)	Y - Northing (ft)
3			
	OHGW	2615426.3	617182.2
	OHGW	2615489.8	617248.8
	PHASE	2615395.3	617231.1
	PHASE	2615384.6	617230.9
	PHASE	2615410.9	617210.6
	PHASE	2615405.2	617210.4
	PHASE	2615431.4	617196.5
	PHASE	2615420.7	617196.3
	PHASE	2615439.7	617288.5
	PHASE	2615439.9	617277.8
	PHASE	2615461.0	617268.7
	PHASE	2615461.1	617263.0
	PHASE	2615475.8	617253.8
	PHASE	2615476.0	617243.1
	OHGW	2615390.0	617231.0
	OHGW	2615439.6	617283.1
5			
	OHGW	2615363.4	618522.2
	OHGW	2615299.8	618455.7
	PHASE	2615394.3	618473.2
	PHASE	2615405.0	618473.4
	PHASE	2615378.7	618493.8
	PHASE	2615384.4	618493.9
	PHASE	2615358.2	618507.9
	PHASE	2615369.0	618508.1
	PHASE	2615349.8	618415.9
	PHASE	2615349.6	618426.6
	PHASE	2615328.6	618435.7
	PHASE	2615328.5	618441.4
	PHASE	2615313.8	618450.6
	PHASE	2615313.6	618461.3
	OHGW	2615399.6	618473.3
	OHGW	2615349.9	618421.3
23			
	OHGW	2628677.9	618645.5
	OHGW	2628607.1	618713.9
	PHASE	2628628.7	618615.3
	PHASE	2628628.9	618603.7
	PHASE	2628649.4	618630.5
	PHASE	2628649.5	618624.4
	PHASE	2628663.6	618651.2
	PHASE	2628663.8	618639.5
	PHASE	2628566.6	618664.0
	PHASE	2628578.3	618664.2
	PHASE	2628586.8	618685.2
	PHASE	2628592.9	618685.3
	PHASE	2628601.5	618699.9
	PHASE	2628613.1	618700.0
	OHGW	2628627.9	618609.5
	OHGW	2628572.5	618663.0

27			
	OHGW	2628568.0	616117.9
	OHGW	2628621.4	616015.1
	PHASE	2628621.0	616128.9
	PHASE	2628627.3	616137.5
	PHASE	2628597.6	616121.0
	PHASE	2628600.9	616125.6
	PHASE	2628576.5	616105.2
	PHASE	2628582.7	616114.0
	PHASE	2628661.4	616052.1
	PHASE	2628672.1	616052.4
	PHASE	2628641.6	616037.4
	PHASE	2628647.3	616037.5
	PHASE	2628616.7	616028.9
	PHASE	2628626.5	616029.0
	OHGW	2628624.1	616133.2
	OHGW	2628666.7	616052.4
29			
	OHGW	2629610.0	615424.8
	OHGW	2629543.9	615533.1
	PHASE	2629557.9	615410.5
	PHASE	2629551.0	615401.0
	PHASE	2629580.5	615419.5
	PHASE	2629576.9	615414.5
	PHASE	2629595.0	615428.0
	PHASE	2629601.6	615437.6
	PHASE	2629507.5	615494.2
	PHASE	2629496.0	615492.6
	PHASE	2629526.0	615509.9
	PHASE	2629519.9	615509.1
	PHASE	2629551.4	615520.0
	PHASE	2629539.9	615518.6
	OHGW	2629553.2	615405.6
	OHGW	2629501.3	615492.2
30			
	PHASE	2629689.6	614683.1
	PHASE	2629670.2	614681.5
41			
	OHGW	2629805.0	606387.0
	OHGW	2629881.3	606315.3
	PHASE	2629853.8	606417.4
	PHASE	2629853.4	606430.1
	PHASE	2629833.3	606402.2
	PHASE	2629833.1	606408.8
	PHASE	2629819.4	606381.4
	PHASE	2629819.1	606393.7
	PHASE	2629921.6	606365.8
	PHASE	2629909.0	606365.4
	PHASE	2629901.5	606344.3
	PHASE	2629894.9	606344.1
	PHASE	2629887.2	606329.4
	PHASE	2629874.7	606329.1
	OHGW	2629855.5	606423.8
	OHGW	2629915.2	606367.7

44			
	OHGW	2632287.9	606486.9
	OHGW	2632193.1	606549.0
	PHASE	2632246.7	606448.4
	PHASE	2632246.8	606436.9
	PHASE	2632263.3	606467.7
	PHASE	2632263.5	606461.5
	PHASE	2632273.5	606491.6
	PHASE	2632273.8	606479.9
	PHASE	2632174.5	606495.3
	PHASE	2632163.8	606490.6
	PHASE	2632185.6	606518.7
	PHASE	2632179.9	606516.4
	PHASE	2632203.7	606538.1
	PHASE	2632192.8	606533.9
	OHGW	2632245.8	606442.7
	OHGW	2632169.9	606492.0
45			
	PHASE	2632453.3	605985.8
	PHASE	2632434.9	605979.5
46			
	PHASE	2632592.2	605416.8
	PHASE	2632572.9	605413.9
71			
	PHASE	2633188.0	585753.7
	PHASE	2633168.6	585751.4
73			
	PHASE	2633547.4	584396.5
	PHASE	2633528.1	584393.9
82			
	OHGW	2633835.2	577025.2
	OHGW	2633889.4	577134.1
	PHASE	2633782.6	577061.6
	PHASE	2633794.3	577061.8
	PHASE	2633808.4	577047.2
	PHASE	2633814.6	577047.4
	PHASE	2633828.8	577039.1
	PHASE	2633840.5	577039.6
	PHASE	2633828.9	577154.5
	PHASE	2633835.8	577145.1
	PHASE	2633855.9	577142.5
	PHASE	2633859.5	577137.5
	PHASE	2633874.6	577131.1
	PHASE	2633881.2	577121.5
	OHGW	2633788.2	577062.7
	OHGW	2633831.3	577149.3
86			
	OHGW	2631804.0	575574.4
	PHASE	2631783.7	575627.8
	PHASE	2631797.6	575604.9
	PHASE	2631802.5	575579.1

87			
	OHGW	2631179.7	575747.3
	OHGW	2631115.8	575681.1
	PHASE	2631210.4	575698.2
	PHASE	2631221.1	575698.3
	PHASE	2631194.9	575718.8
	PHASE	2631200.6	575718.9
	PHASE	2631174.5	575733.0
	PHASE	2631185.3	575733.2
	PHASE	2631165.7	575641.1
	PHASE	2631165.5	575651.8
	PHASE	2631144.5	575661.0
	PHASE	2631144.4	575666.7
	PHASE	2631129.8	575676.0
	PHASE	2631129.7	575686.7
	OHGW	2631215.7	575698.3
	OHGW	2631165.8	575646.5
88			
	Laminated Wood Structure		

NOTES:

- GIVEN COORDINATES ARE IN FEET.
- X AND Y COORDINATES ARE FOR EXACT ANCHOR LOCATIONS.
- REFER TO PLAN AND PROFILE SHEETS FOR MORE DESCRIPTIONS ON ANCHOR LEADS AND ORIENTATIONS.
- OFFSETS ARE INCLUDED IN GIVEN COORDINATES.
- FULL STAKING REPORT IS AVAILABLE IN EXCEL SPREADSHEET "M-POWER STAKING REPORT 06-1B-09.XLS OR PLS-CAD.



3	06/18/09	JJC	AS BUILT						
2	06/18/09	MAX	MODIFICATION FOR MINOR 1-LINE CROSS-POLLAR POSITION ADJ.						
1	06/09/09	MAX	FIELD UPDATES						
0	06/18/09	JJC	ISSUE FOR CONSTRUCTION						
REV.	DATE	DRAWN	DESCRIPTION	WORK ORDER	CHD	APPR	DATE		
				<b>CONSULTING ENGINEERS GROUP</b> FARMINGTON MINNESOTA					
<small>UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED. DIMENSIONS SHALL BE TO CENTERLINE UNLESS OTHERWISE SPECIFIED.</small>				MPOWER / LUVERNE TRANSMISSION LINE CORNER POLE ANCHOR COORDINATES					
NAME: JAMES C. HANSON NO. 15413				CHECKED: _____ DATE: _____		SCALE: NONE W.O. NO.: _____			
DRAWN: JJC DATE: 05/15/09				MAP NO.: _____ DWG. NO.: _____		MPOWER-TLR-03			

**PU-09-674**

**230 KV ELECTRIC TRANSMISSION  
LINE - SARGENT COUNTY  
SITING APPLICATION (NEAR  
FIALA LAKE)**

**OTTER TAIL POWER COMPANY**

**TO**

**PUBLIC SERVICE COMMISSION  
NORTH DAKOTA**

**MARCH 2014**