

## Hamre, John G.

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**From:** Lein, Jerry R.  
**Sent:** Friday, June 19, 2009 9:05 AM  
**To:** Hamre, John G.; Marquart, Janet R.  
**Subject:** FW: PU 09-136 / PU 08 - 107  
**Attachments:** Sheets View1.pdf; Sheets View2.pdf; Sheets View3.pdf; Sheets View4.pdf; Sheets View5.pdf; Sheets View6.pdf; Sheets View7.pdf; Sheets View8.pdf; Sheets View9.pdf; Sheets View9.pdf; M-POWER 230kv Pillsbury sub to Collection sub Model (1).pdf; 20090617104252990.pdf

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From: TLangston@otpco.com [TLangston@otpco.com]  
Sent: Thursday, June 18, 2009 11:16 AM  
To: Lein, Jerry R.  
Cc: KBurgau@otpco.com  
Subject: RE: PU 09-136 / PU 08 - 107

Jerry,

Otter Tail Power Co. requests that the alignment of the transmission line between structures 72-82 be moved from the original submission to the PUC.

As per landowner request, see attached forms, the alignment be moved to the East 20' which is reflected on the attached construction drawing revision # 3.

Also Jerry you will notice that structures 56-59 have changed in height as part of revision three, the footprint and locations have remained the same.

This was due to the 69 kV line crossing Minnkota has proposed to serve the Keystone pipeline pumping station. This line was not even being considered at the time when the 230 kV line was designed.

The new plan-profiles are forthcoming in another file because of size.

Thanks for all the cooperation in this matter.

Todd

Jerry Lien  
Public Service Commission  
Bismarck, ND

**Re: M-Power, LLC 230 kV Trans. Line – PU 09-136/PU 08=107**

We hereby request, as owners, to relocate Poles No. 72-78 located in Section 6, Ellsbury Township, Barnes County to be relocated 20' to the East from the original route that was submitted, this will better accommodate our farming practices.

Date 6-15-09

  
\_\_\_\_\_  
Pete Pickar

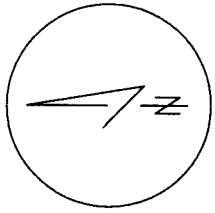
Jerry Lien  
Public Service Commission  
Bismarck, ND

**Re: M-Power, LLC 230 kV Trans. Line – PU 09-136/PU 08=107**

We hereby request, as owners, to relocate Poles No. 79-82 located in Section 7, Ellsbury Township, Barnes County to be relocated 20' to the East from the original route that was submitted, this will better accommodate our farming practices.

Date 6-15-09

Ruth Hodem by Russell  
Ruth Ihry  
Huselka



PETE PICKAR

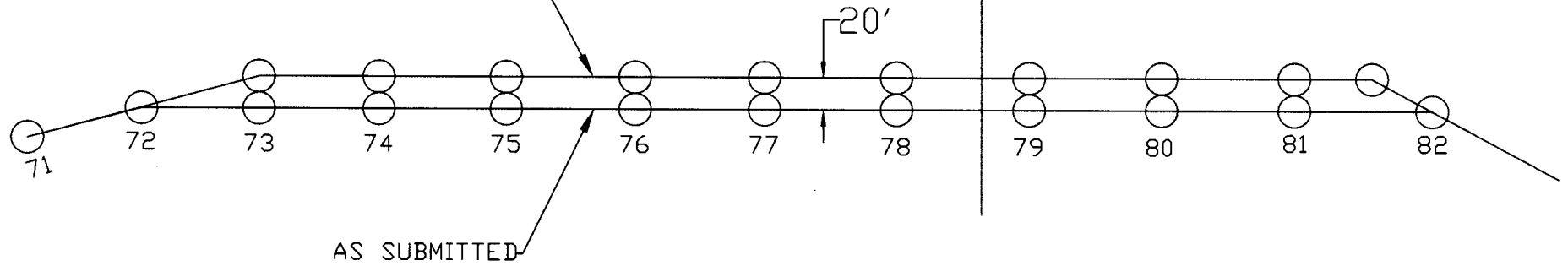
RUTH IHRY/HODEM

SECTION 6

SECTION 7

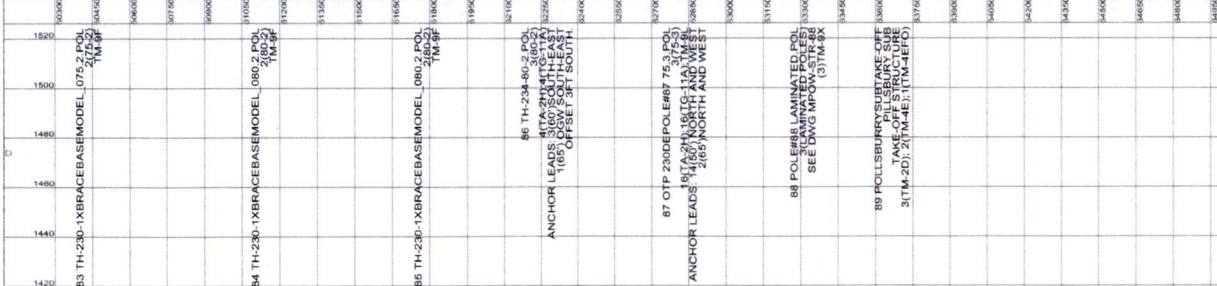
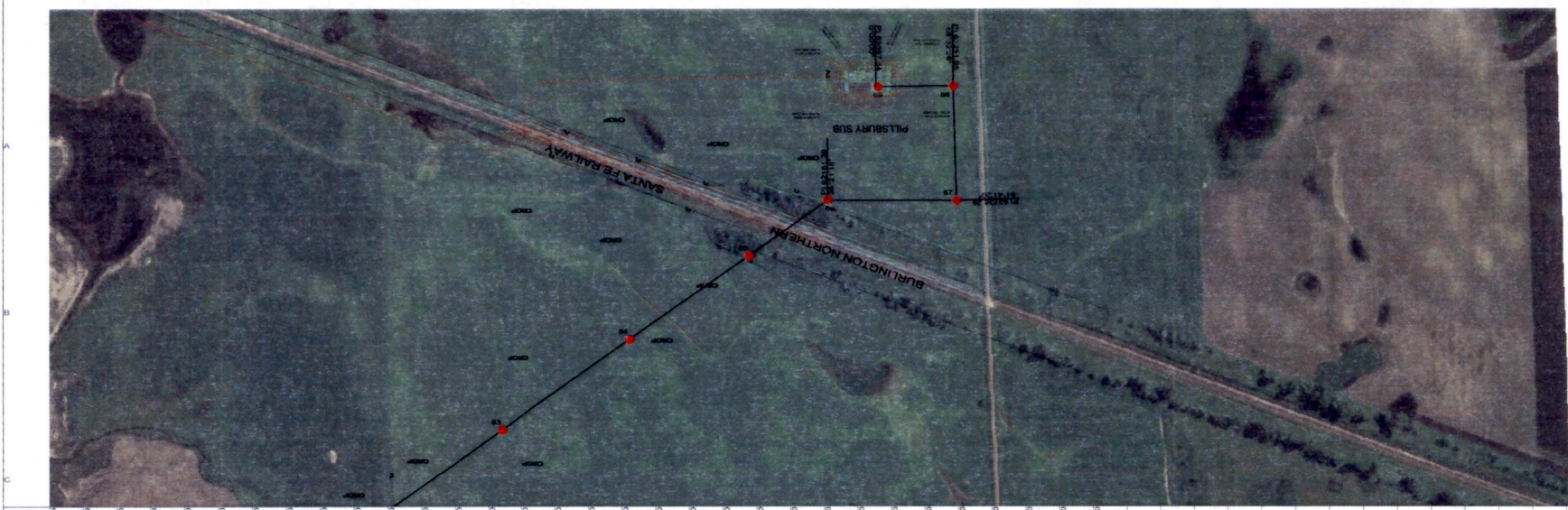
NEW PROPOSED ALIGNMENT

AS SUBMITTED



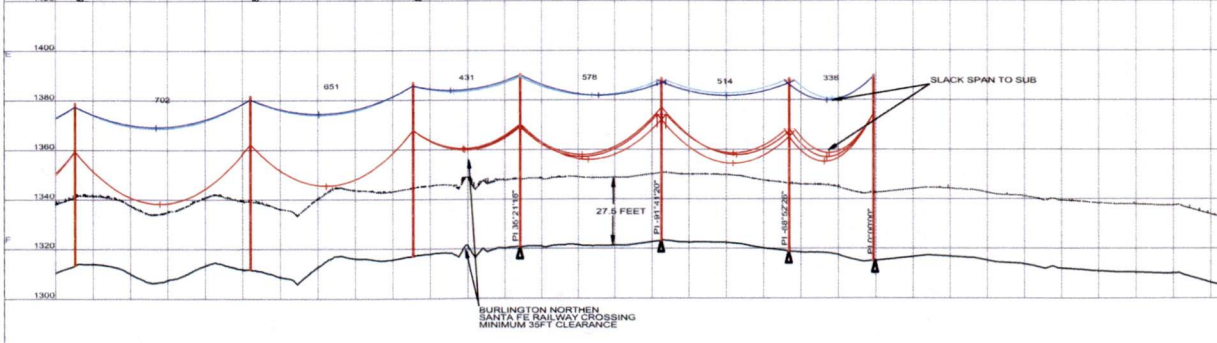
M-POWER, ND

230KV T-LINE FROM PILLSBURY SUB TO COLLECTOR SUB



**CONDUCTOR DESIGN CRITERIA**

	FINAL, 0 DEG F	INITIAL, -35 DEG F	HEAVY LOAD	MAX. TENSION
795, ACSR	25%	20%	50%	9700#
FO-OPGW	20%	20%	50%	5600#
3/8EHS STEEL	20%	17%	50%	4800#



- 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 #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 DNO-3825)

**M-POWER, ND**

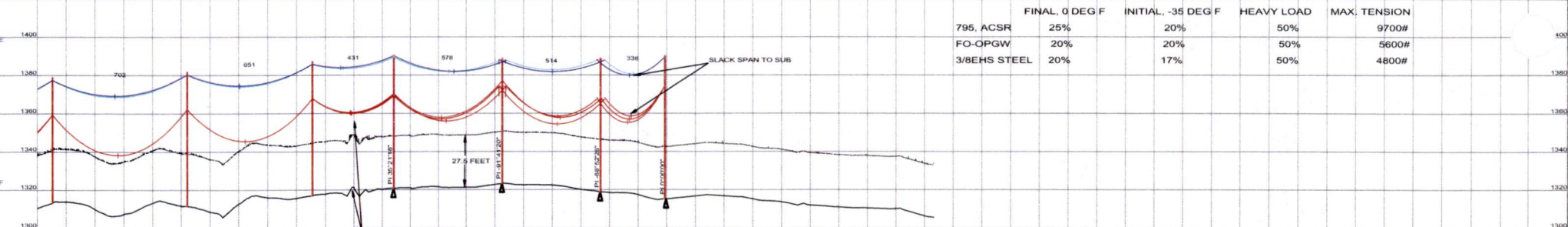
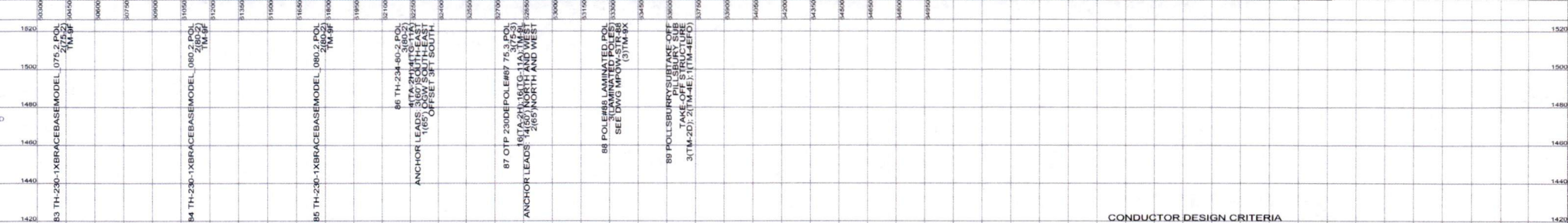
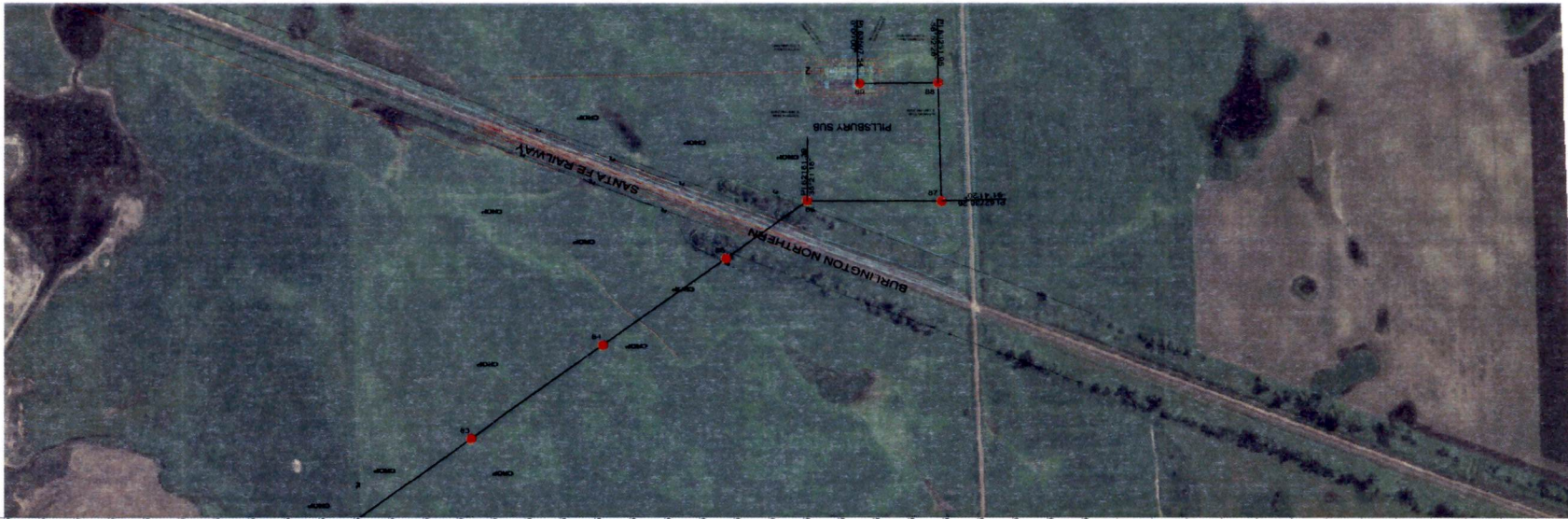
**230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB**

PROJECT \_\_\_\_\_ DRAWING NUMBER \_\_\_\_\_ REV \_\_\_\_\_

CODE \_\_\_\_\_ AREA \_\_\_\_\_ 9 OF 9

ENGINEER PM DRAWN DB CHECKED DATE 6/18/2009

500.0 FT HORIZ SCALE  
50.0 FT VERT SCALE H1/H0N



**CONDUCTOR DESIGN CRITERIA**

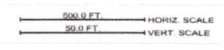
	FINAL, 0 DEG F	INITIAL, -35 DEG F	HEAVY LOAD	MAX. TENSION
795. ACSR	25%	20%	50%	9700#
FO-OPGW	20%	20%	50%	5600#
3/8EHS STEEL	20%	17%	50%	4800#

- 3 06-18-09 STRUCTURES #56,57,58 AND 59 MODIFIED DUE TO MNKOTA 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 05-14-08 STRUCTURE #68 CHANGED FROM STEEL TO LAMINATED WOOD POLES FOR OTP
- 0 04-23-09 ISSUE FOR CONSTRUCTION WITH CHANGES PER OTP (NEW DEADEND STRUCTURES AND FIBER OPTIC DND-3825)

NO. DATE REVISIONS AND RECORD OF ISSUE

**M-POWER, ND**

330KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB

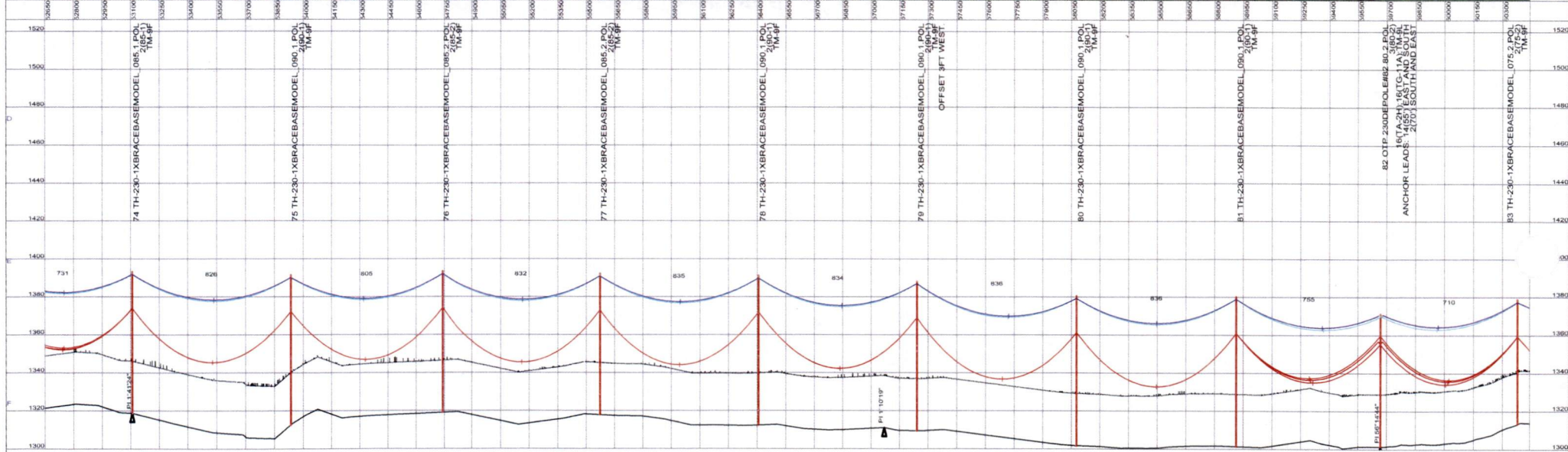


PROJECT: \_\_\_\_\_ DRAWING NUMBER: \_\_\_\_\_ REV: **3**

ENGINEER: PM DRAWN: DB  
 CHECKED: \_\_\_\_\_ DATE: 6/18/2009

CODE: \_\_\_\_\_ AREA: \_\_\_\_\_

9 OF 9

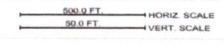


- 3 06-18-09 STRUCTURES #56, 57, 58 AND 59 MODIFIED DUE TO MINNKOTA POWER T-LINE CROSSING. STRUCTURE #82 MOVED 16FT NORTH
- 2 06-08-09 T-LINE ALIGNMENT MOVED 20FT EAST FROM STRUCTURE#72 TO #82 PER OTP REQUEST. STRUCTURES AFFECTED FROM #71 TO #85
- 1 05-14-09 STRUCTURE #88 CHANGED FROM STEEL TO LAMINATED WOOD POLES PER OTP
- 0 04-23-09 ISSUE FOR CONSTRUCTION WITH CHANGES PER OTP (NEW DEADEND STRUCTURES AND FIBER OPTIC DNO-3825)

NO. DATE REVISIONS AND RECORD OF ISSUE

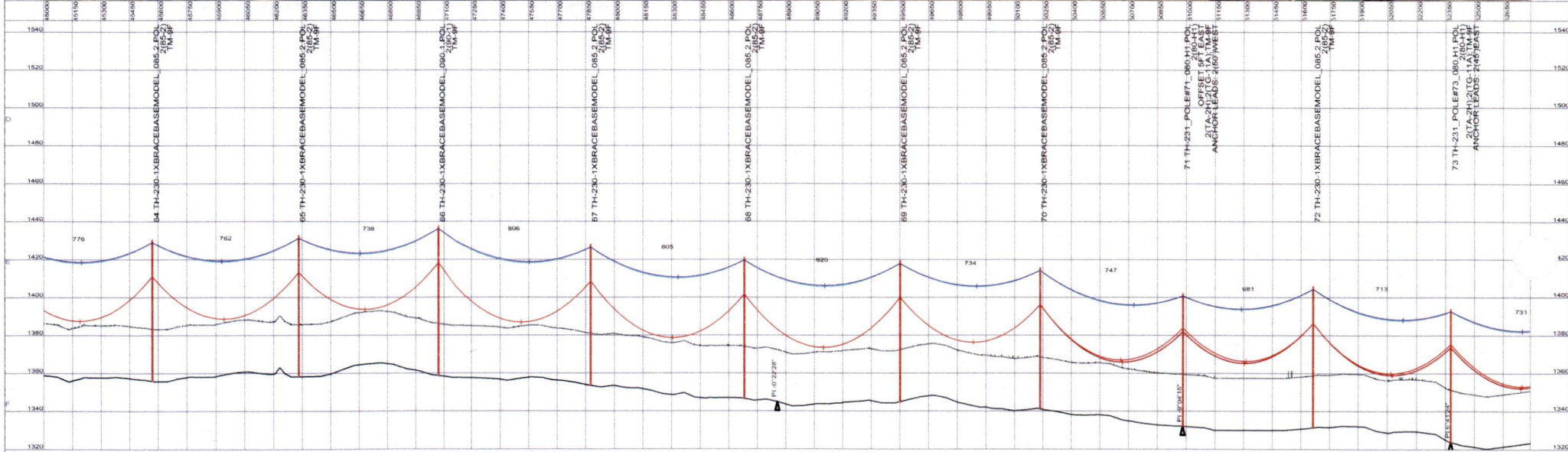
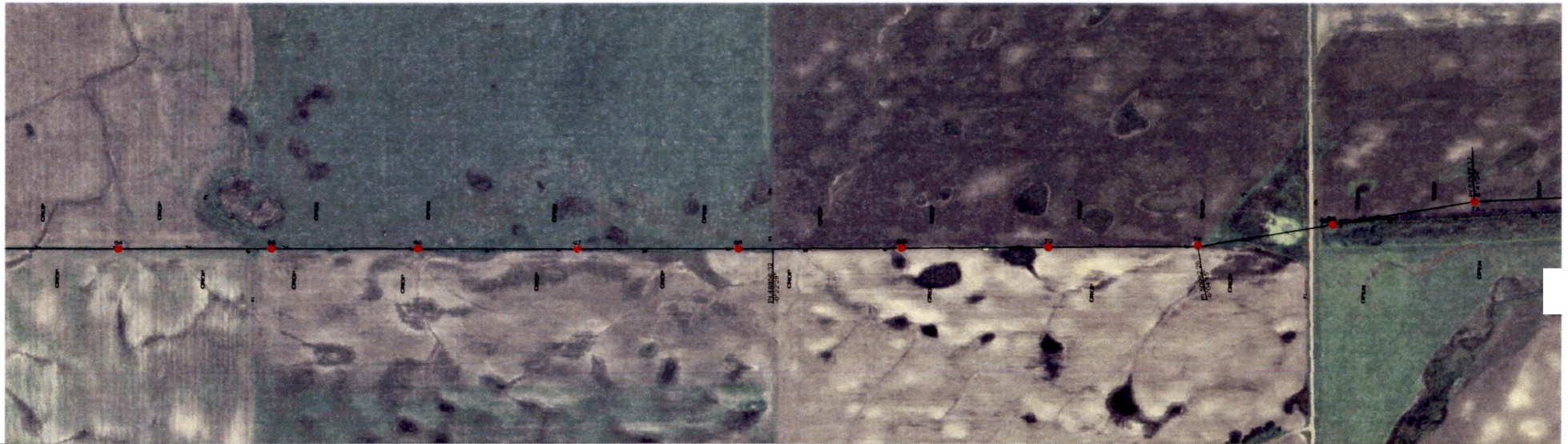
### M-POWER, ND

230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB



ENGINEER PM DRAWN DB  
 CHECKED DATE 6/18/2009

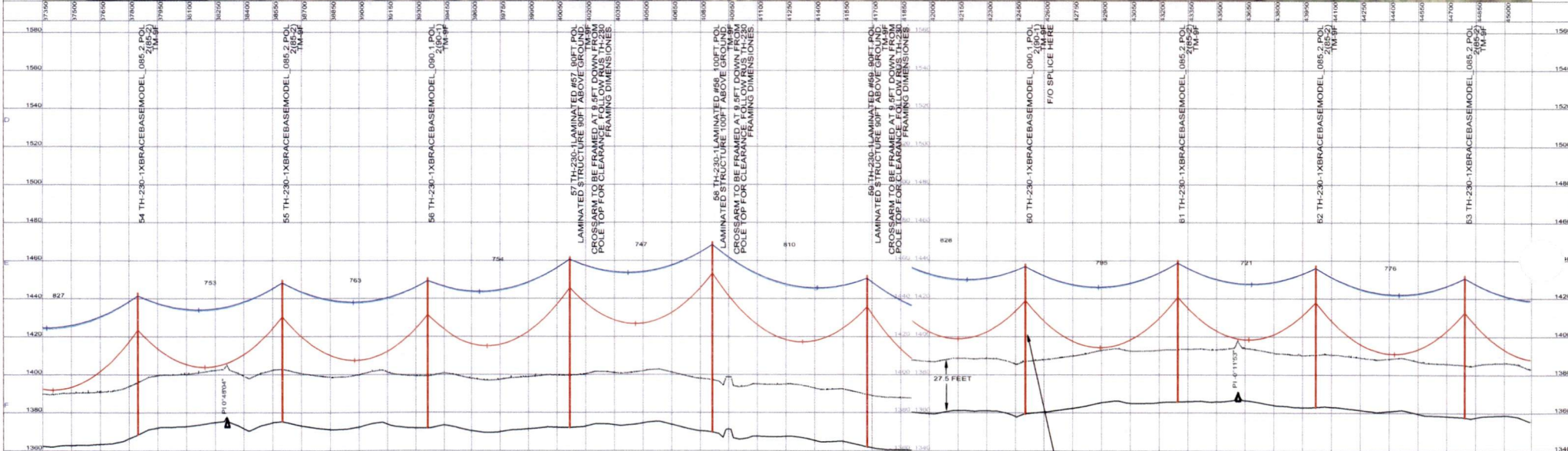
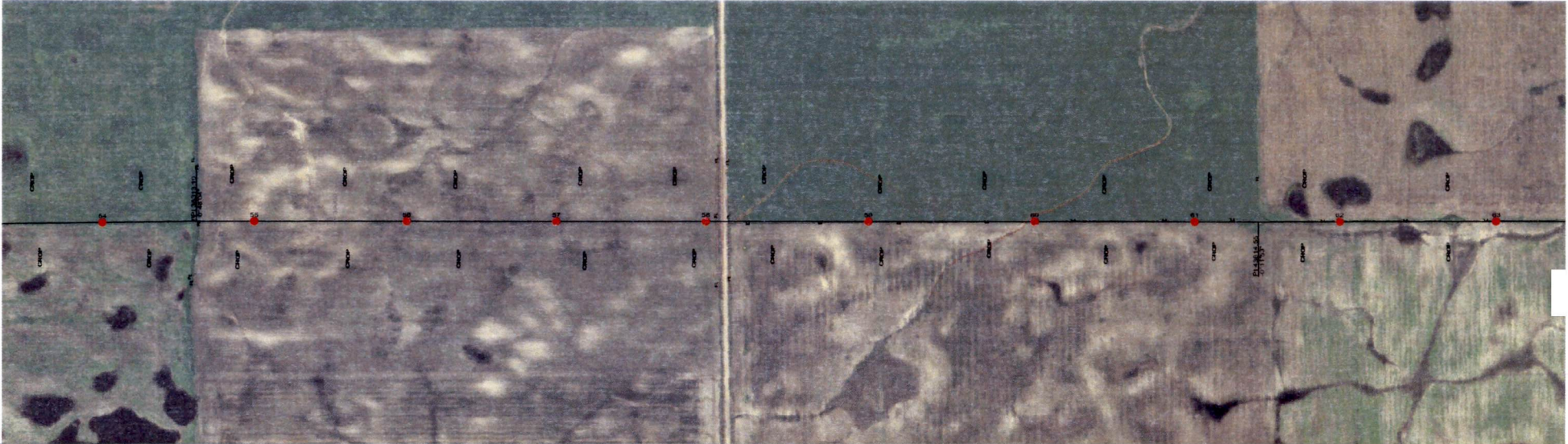
PROJECT \_\_\_\_\_ DRAWING NUMBER \_\_\_\_\_ REV 3  
 CODE \_\_\_\_\_ AREA \_\_\_\_\_ 8 OF 9



- 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 #69 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-3825)

**M-POWER, ND**  
230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB

ENGINEER PM	DRAWN DB	CHECKED	DATE 6/18/2009
<p style="text-align: center;">500.0 FT    ←    HORIZ SCALE 30.0 FT        ←    VERT SCALE</p>		<p>PROJECT _____ DRAWING NUMBER _____ REV _____</p> <p>CODE _____ AREA _____</p>	<p>7 OF 9</p>



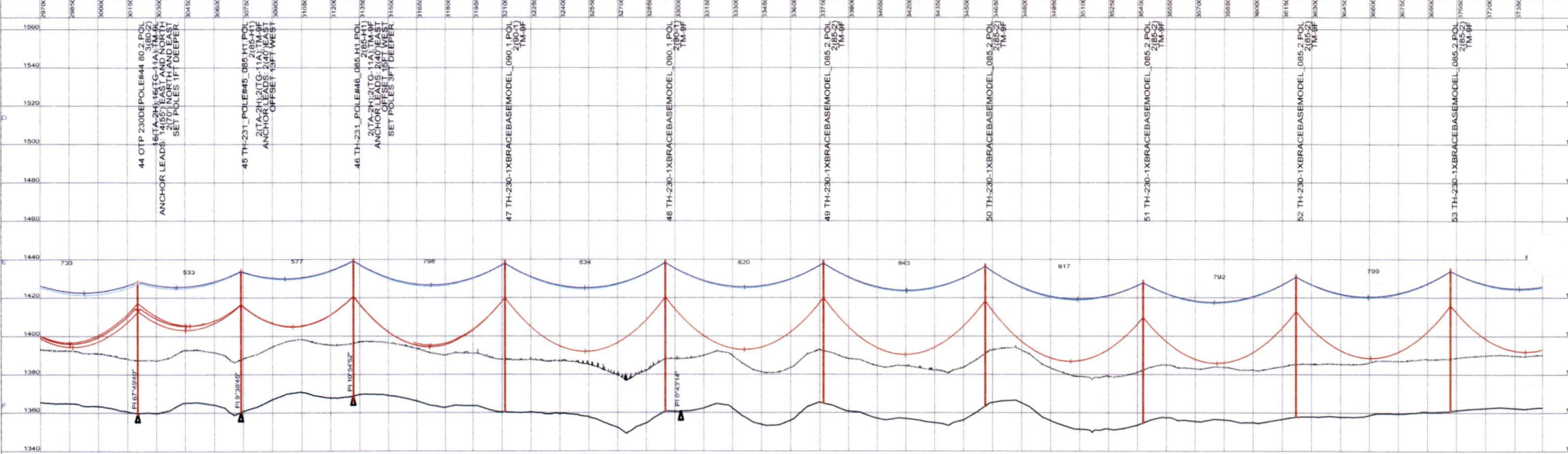
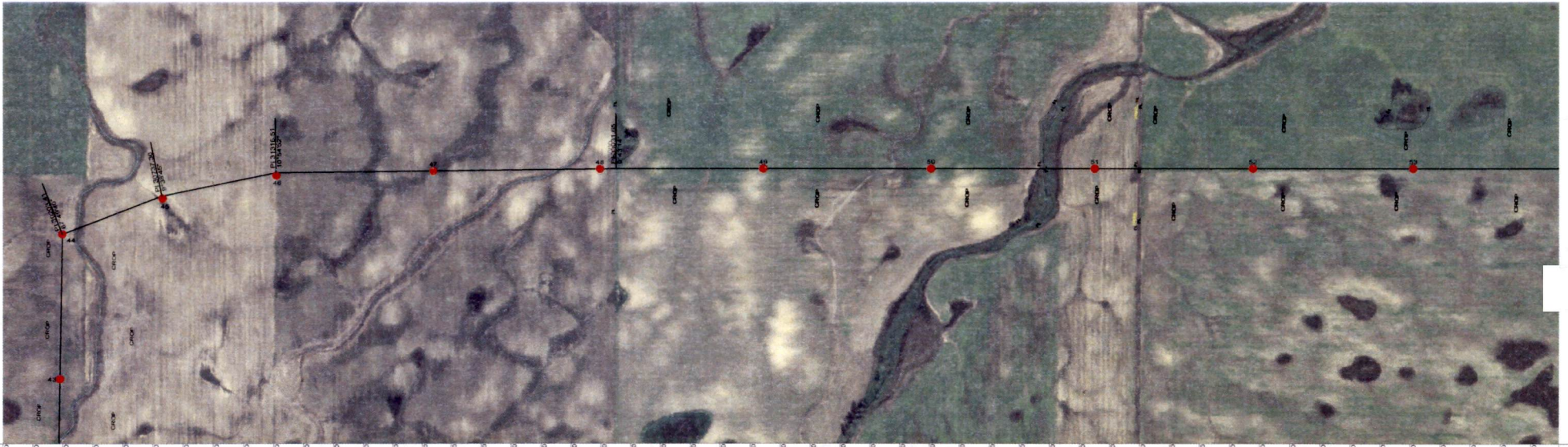
- 3 06-18-09 STRUCTURES #56,57,58 AND 59 MODIFIED DUE TO MINNKOTA POWER T-LINE CROSSING; STRUCTURE #82 MOVED 16FT NORTH
- 2 06-08-09 T-LINE ALIGNMENT MOVED 20FT EAST FROM STRUCTURE#72 TO #82 PER OTP REQUEST; STRUCTURES AFFECTED FROM #71 TO #85
- 1 05-14-09 STRUCTURE #88 CHANGED FROM STEEL TO LAMINATED WOOD POLES PER OTP
- 0 04-23-09 ISSUE FOR CONSTRUCTION WITH CHANGES PER OTP (NEW DEADEND STRUCTURES AND FIBER OPTIC DNO-3825)

NO. DATE REVISIONS AND RECORD OF ISSUE

### M-POWER, ND

230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB

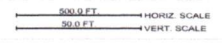
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 DRAWING NUMBER: 3  
 REV: 3  
 DATE: 6/18/2009  
 ENGINEER: PM  
 DRAWN: DB  
 CHECKED: [ ]  
 SCALE: 500.0 FT HORIZ SCALE, 50.0 FT VERT SCALE  
 NORTH: [ ]  
 CODE: [ ]  
 AREA: [ ]



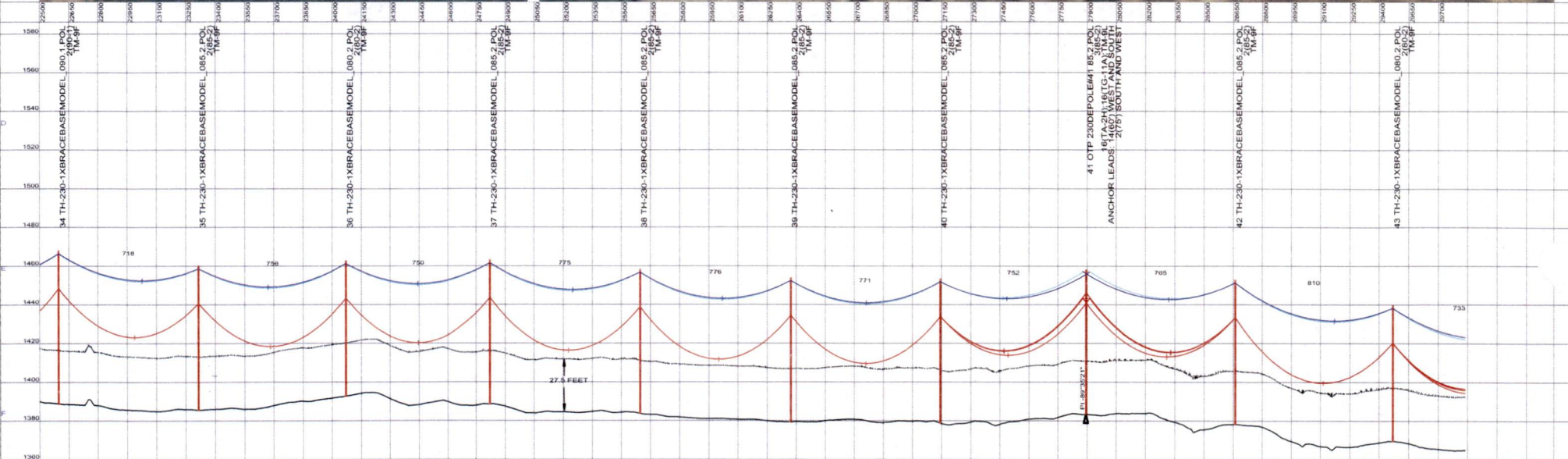
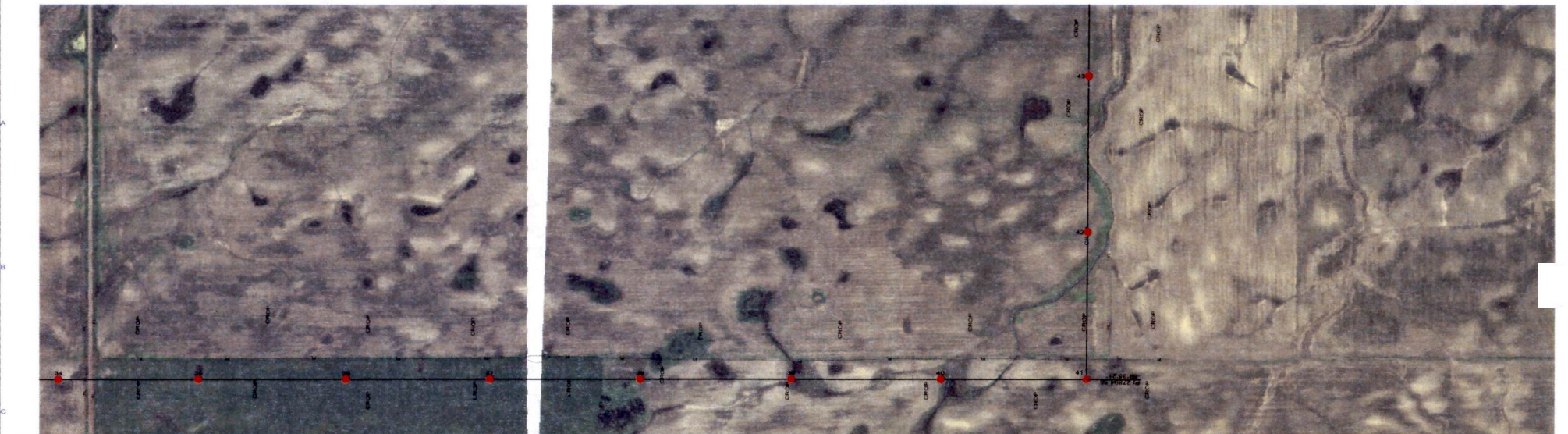
NO	DATE	REVISIONS AND RECORD OF ISSUE
3	06-18-09	STRUCTURES #56,57,58 AND 59 MODIFIED DUE TO MINNKOTA POWER T-LINE CROSSING. STRUCTURE #62 MOVED 16FT NORTH
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1	05-14-09	STRUCTURE #68 CHANGED FROM STEEL TO LAMINATED WOOD POLES PER OTP
0	04-23-09	ISSUE FOR CONSTRUCTION WITH CHANGES PER OTP (NEW DEADEND STRUCTURES AND FIBER OPTIC DNO-3825)

### M-POWER, ND

230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB



ENGINEER	PM	DRAWN	DB	PROJECT	DRAWING NUMBER	REV
CHECKED		DATE	6/18/2009	CODE	AREA	5 OF 9



- 3 06-15-09 STRUCTURES #56,57,58 AND 59 MODIFIED DUE TO MINNAPOTA POWER T-LINE CROSSING. STRUCTURE #62 MOVED 16FT NORTH
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NO DATE REVISIONS AND RECORD OF ISSUE

### M-POWER, ND

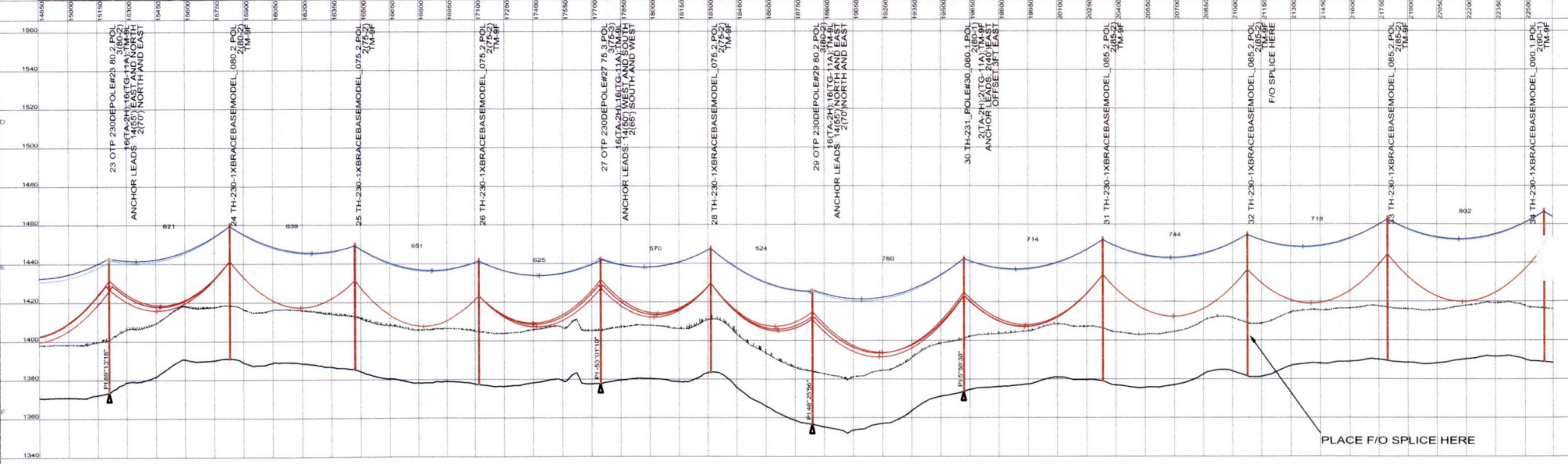
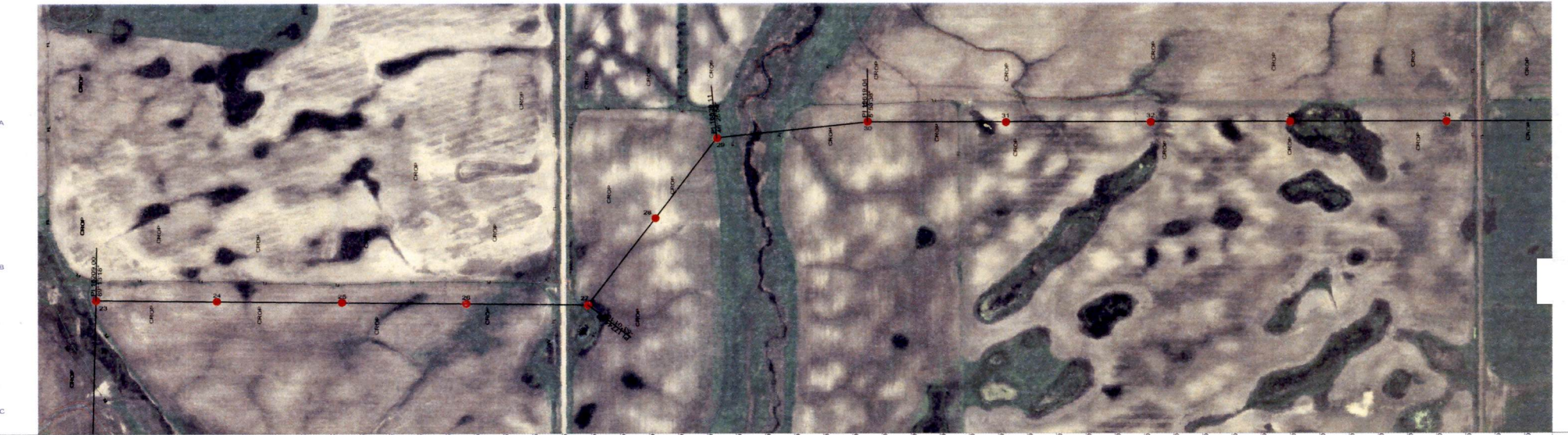
230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB

ENGINEER PM DRAWN DB  
 CHECKED DATE 6/18/2009

500.0 FT HORIZ SCALE  
 50.0 FT VERT SCALE



PROJECT DRAWING NUMBER REV 3  
 CODE AREA 4 OF 9



- 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 #82 PER OTP REQUEST. STRUCTURES AFFECTED FROM #71 TO #85
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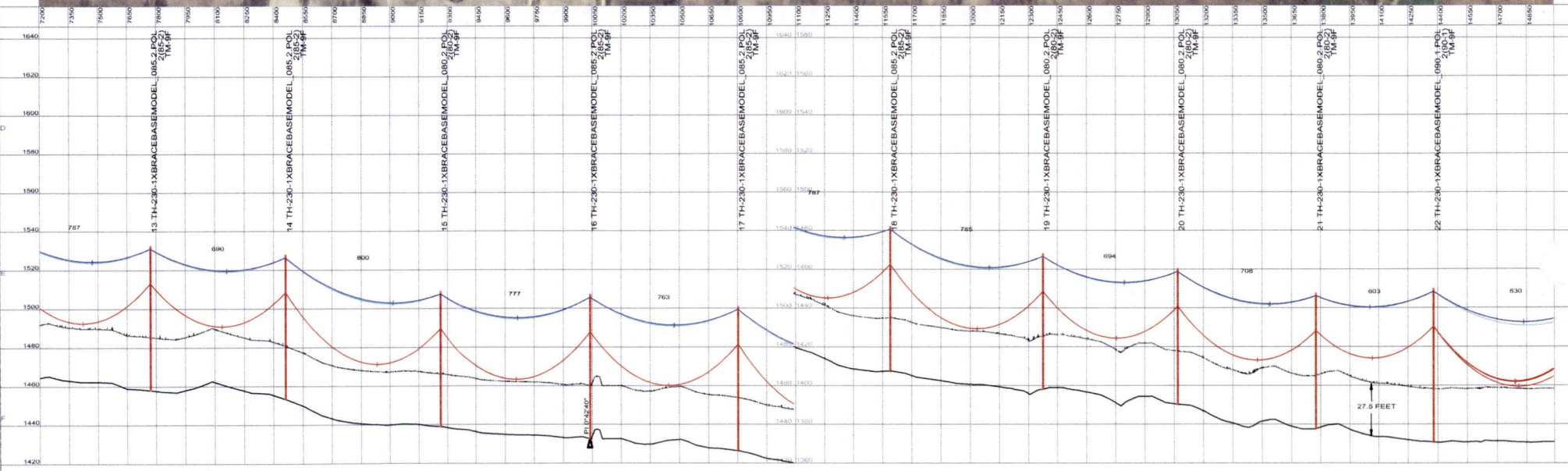
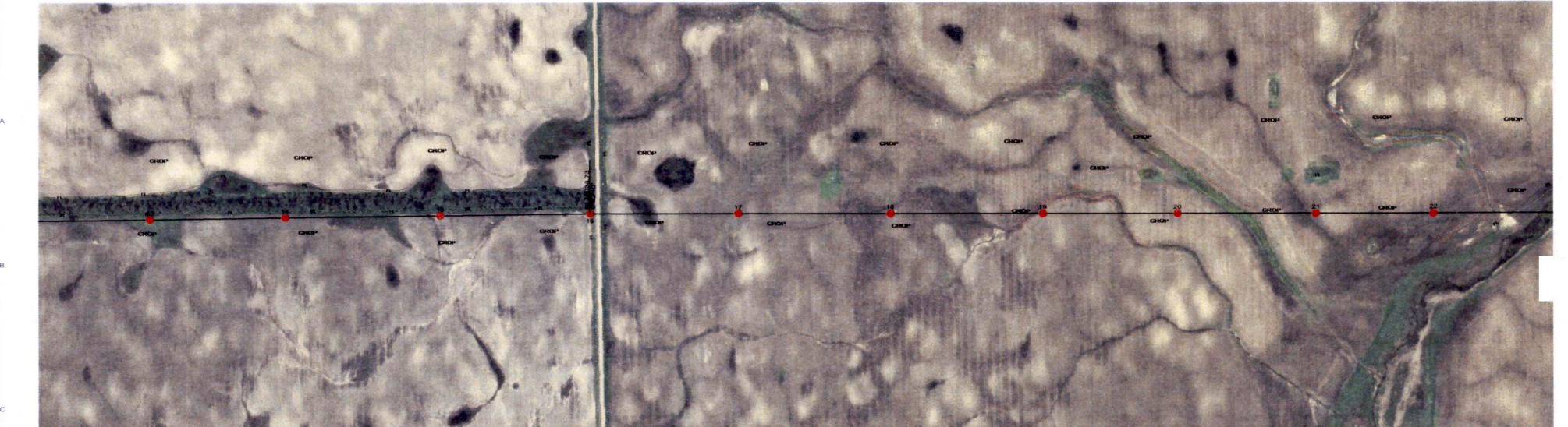
### M-POWER, ND

230KV T-LINE FROM PILLSBURY SUB TO COLLECTION SUB

ENGINEER PM DRAWN DB  
 CHECKED DATE 6/18/2009



PROJECT	DRAWING NUMBER	REV
		3
CODE		
AREA		



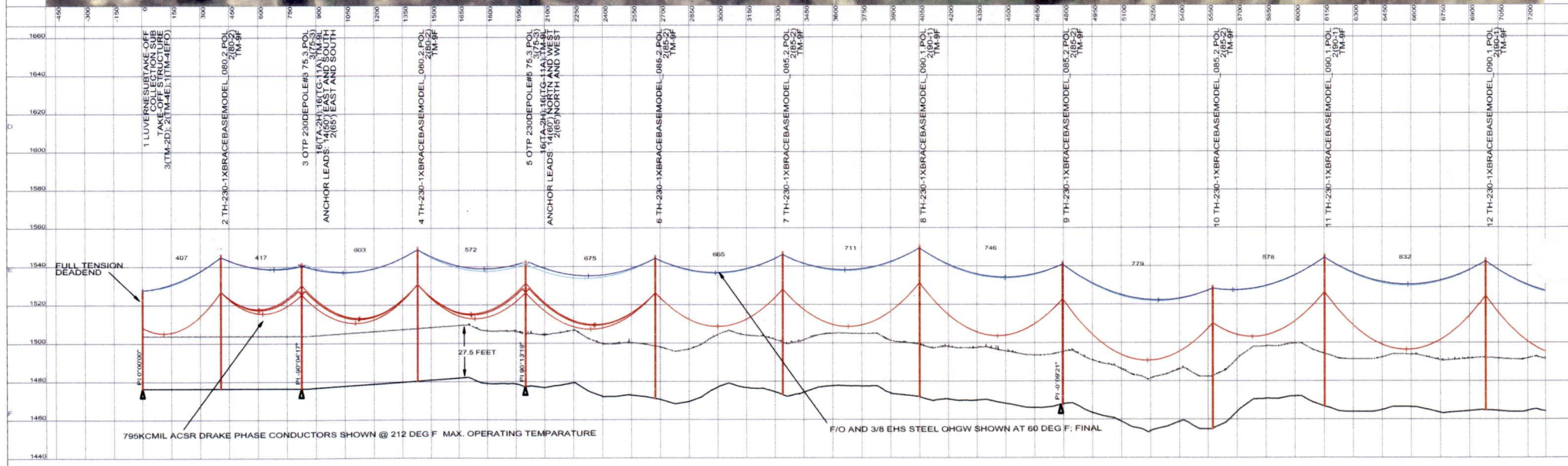
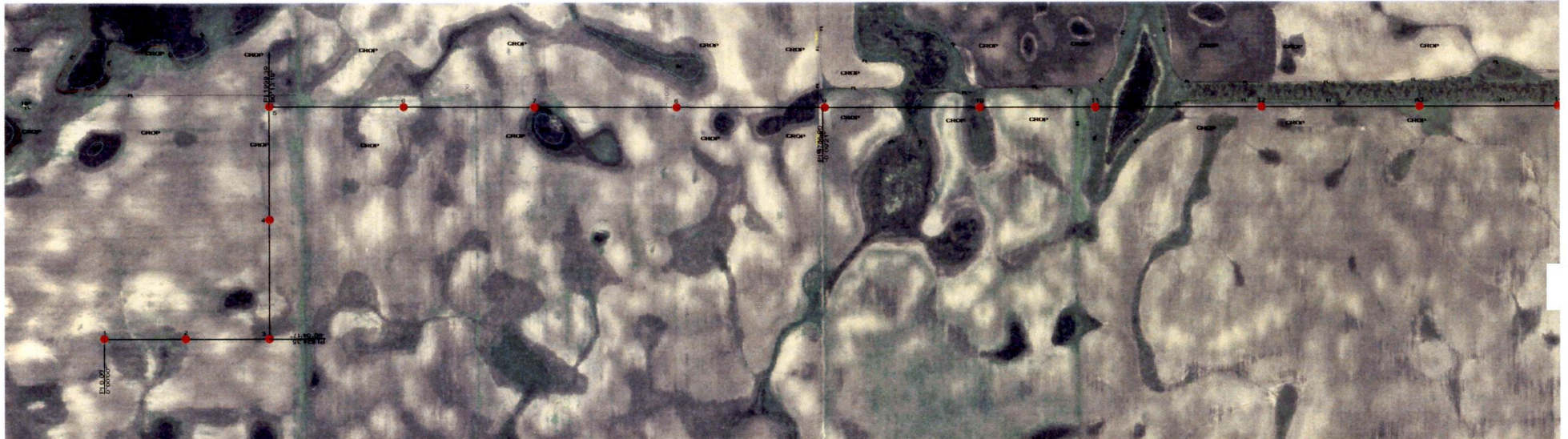
NO.	DATE	REVISIONS AND RECORD OF ISSUE
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### M-POWER, ND

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  
 NORTH

PROJECT CODE AREA  
 DRAWING NUMBER 2 OF 9  
 REV 3



NOTE: FOR CONDUCTOR DESIGN CRITERIA AND TENSION LIMITS SEE PAGE#9.

- 3 06-18-09 STRUCTURES #56,57,58 AND 59 MODIFIED DUE TO MINNKOTA POWER T-LINE CROSSING. STRUCTURE #82 MOVED 16FT NORTH
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- 1 05-14-09 STRUCTURE #86 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-3825)

NO DATE REVISIONS AND RECORD OF ISSUE

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



PROJECT \_\_\_\_\_ DRAWING NUMBER \_\_\_\_\_ REV 3  
 CODE \_\_\_\_\_ AREA \_\_\_\_\_ 1 OF 9