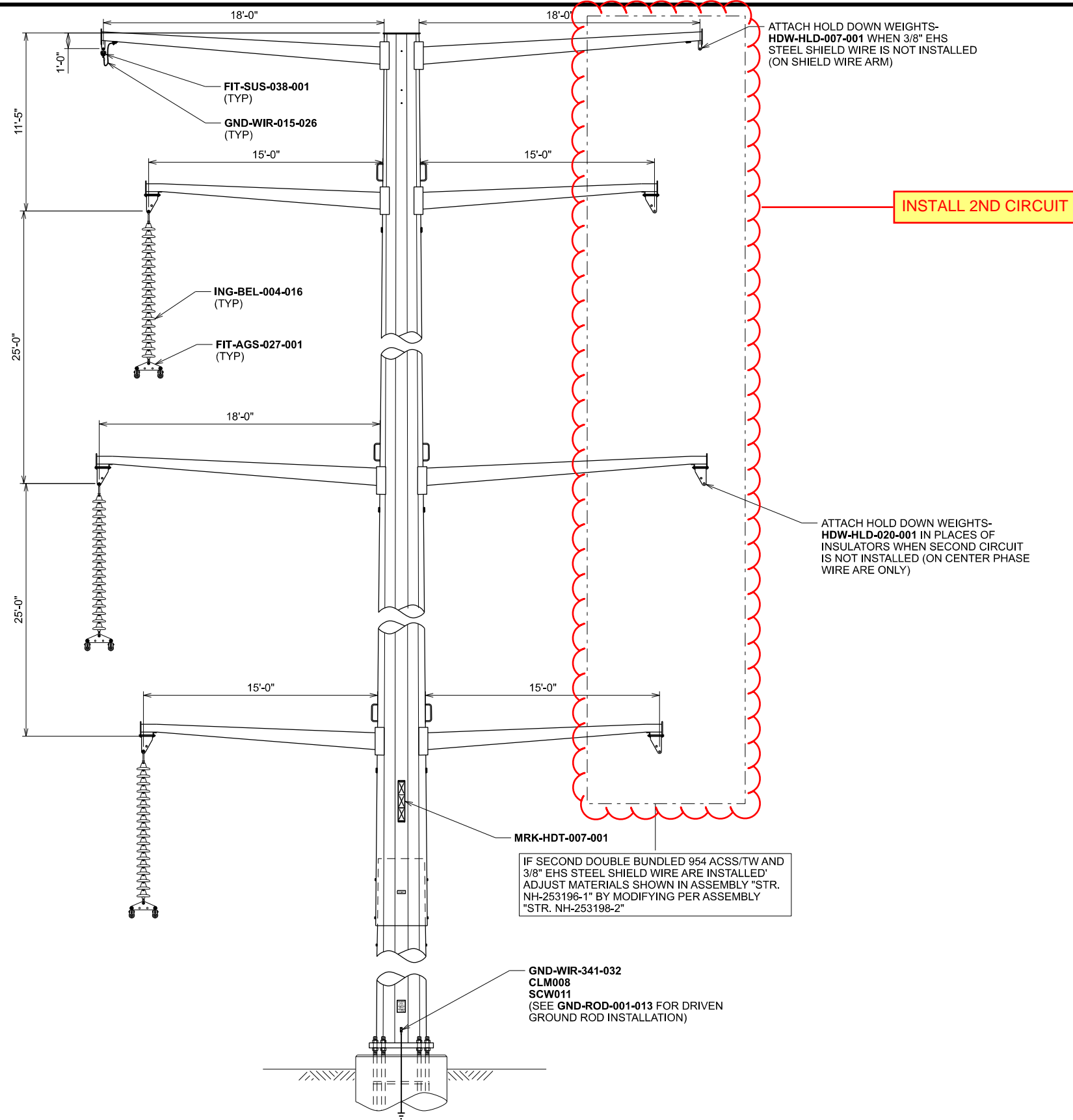


APPENDIX C

Engineering Drawings





TYPICAL TANGENT STRUCTURE

ASSEMBLY
STR ND-302554
FOR STEEL POLES
STL ND-253215-PST96505
LD NH-253196

QTY	SUBASSEMBLIES
3	FIT-AGS-027-001
1	FIT-SUS-038-001
1	GND-ROD-001-013
1	GND-WIR-015-026
1	GND-WIR-341-032
3	ING-BEL-004-016
1	MRK-HDT-007-001

EXTRA MATERIAL	
QTY	SUBASSEMBLIES/XP #S
2	CLM008
2	SCW011

ELEVATION VIEW
LOOKING AHEAD

DRAWING REFERENCE

PLAN & PROFILE _____ NH-253190
SUBASSEMBLY INDEX _____ NL-302552

THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

THIS MAP/DRAWING IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS. YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SPARS. INTERNAL INFORMATION: DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY

LINE 0955 **345 kV**
STRUCTURE DRAWING - TANGENT - STEEL - D.C. - SINGLE POLE
0-2 DEGREE, SUSPENSION VERTICAL, DBL SWR

ND-302554-1 Appendix C
Docket No. E002, ET2, E015, E077, E16195/

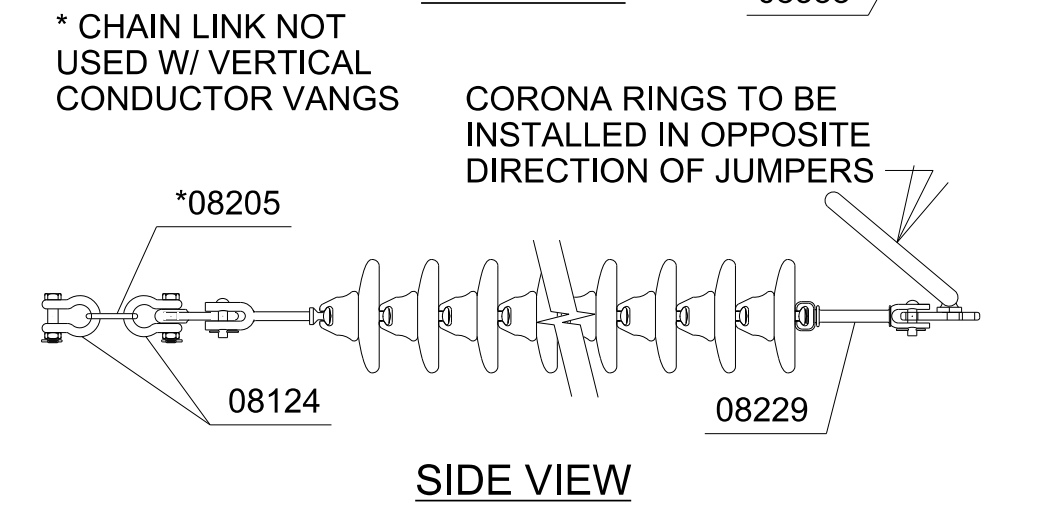
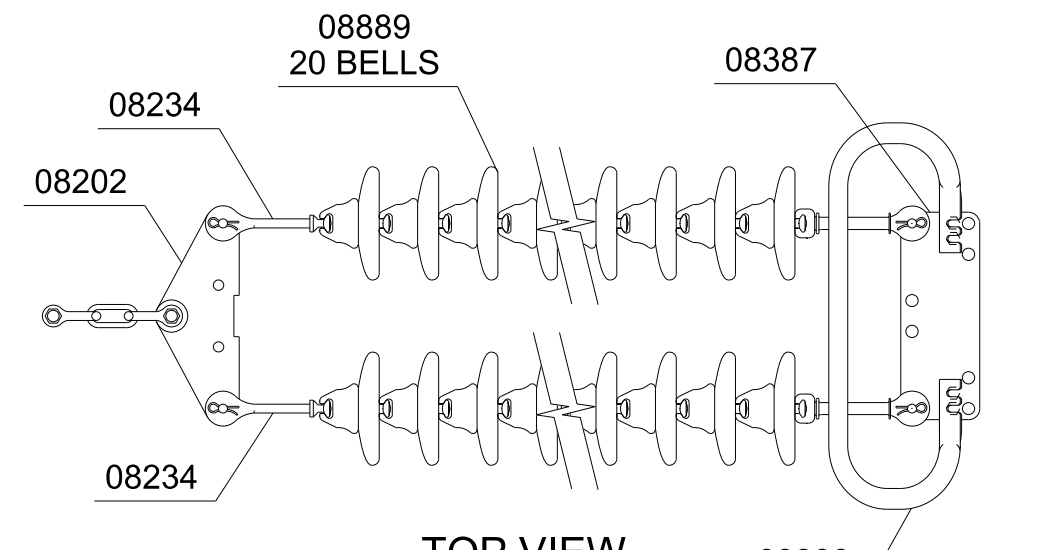
REV	DATE	WBS 4	REVISION DESCRIPTION
Bison to Alexandria Second Circuit			1
345 kV Transmission Project		B.0000004.033.001.001	IFC - 0955 STR 193 & 194 RELO

ND-302554-1.DGN
9/6/2024 8:37:45 AM
TL-09-1056

TYPICAL DEAD-END STRUCTURE

ING-Y20-08889-2D1(A) INSULATOR, GLASS, 20 BELLS, 80K ULT, 345KV, FOR DBL BUNDLED CONDUCTOR, D E

QTY.	ITEM #	DESCRIPTION
2	08124	SHACKLE, ANCHOR, 80K ULT
1	08202	PLATE, YOKE, 18" HOLE SPACING, 80K ULT
*1	08205	LINK, CHAIN, 1-1/4" X 7/8", GALV, 80K ULT
2	08229	LINK, EXT. SOCKET CLEVIS, 7/8" PIN, 50K ULT
2	08234	LINK, EXT. CLEVIS BALL, 7/8" PIN, 50K ULT
1	08387	PLATE, YOKE, RECTANGULAR, 18" SPACING, 40K ULT PER CONDUCTOR, 80K ULT
1	08388	CORONA RING FOR USE W/08387 YOKE PLATE
40	08889	INS, BALL & SOCKET, 11" DIA X 5-3/4", 40K ULT



ULTIMATE STRENGTH OF ASSEMBLY = 80K
ULTIMATE STRENGTH PER STRING/CONDUCTOR = 40K

ASSEMBLY STR. NH-248873 FOR STEEL POLES

STL ND-256102-96619
STL ND-256102-96620
STL ND-256102-96621
STL ND-256102-96622
STL ND-256102-96623
STL ND-256102-96624
STL ND-256102-96625
STL ND-256102-96626
STL ND-256102-96712
STL ND-256102-96713
STL ND-256102-96714
STL ND-256102-96715
STL ND-256102-96850
STL ND-256102-96851
STL ND-256102-96852
STL ND-256102-96853
L&D NH-248872

STL ND-253251-96553
STL ND-253251-96554
STL ND-253251-96555
STL ND-253251-96556
STL ND-253251-96557
STL ND-253251-96558
STL ND-253251-96559
STL ND-253251-96590
STL ND-253251-96591
STL ND-253251-96592
STL ND-253251-96593
STL ND-253251-96604
STL ND-253251-96716
STL ND-253251-96717
STL ND-253251-96739
STL ND-253251-96740
STL ND-253251-96741
STL ND-253251-96742
STL ND-253251-96743
STL ND-253251-96744
STL ND-253251-96854
STL ND-253251-96855
STL ND-253251-96856
STL ND-253251-96857
STL ND-253251-96858
STL ND-253251-96859
STL ND-253251-96860
STL ND-253251-96861
L&D NH-253231

DAVID WEDELL (SIGNED)
DATE: 11/22/2013
DAVID WEDELL (SIGNED)
REG. NO. PE-15800 (MN)
REG. NO. PE-7807 (ND)
PH NO: (314) 851-4024

DAVID WEDELL (SIGNED)
PH NO: (314) 851-4024
MATT HEBNER (SIGNED)
PH NO: (314) 851-4002
DWN: KLJ DATE: 10/18/13

CHK'D: TJB DATE: 11/22/13
1 REVIEWED BY
W.O. - 11524004 (MN)
W.O. - 11524010 (ND)
AS-BUILT

APP'D: DAVID WEDELL (SIGNED)
DATE: 08/21/15
PH NO: (314) 851-4024

DWN: KLJ DATE: 08/21/15
THESE AS-BUILT DRAWINGS ARE A COMPILATION OF THE ORIGINAL SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, AS MODIFIED BY ADDENDA, CHANGE ORDERS AND INFORMATION PROVIDED BY THE CONTRACTOR AND OTHERS. THE INFORMATION SHOWN ON THE AS-BUILT DRAWINGS THAT WAS PROVIDED BY CONTRACTOR OR OTHERS HAS NOT BEEN VERIFIED FOR ACCURACY OR COMPLETENESS. POWER ENGINEERS SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY BE INCORPORATED INTO THE AS-BUILT DRAWINGS AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS.

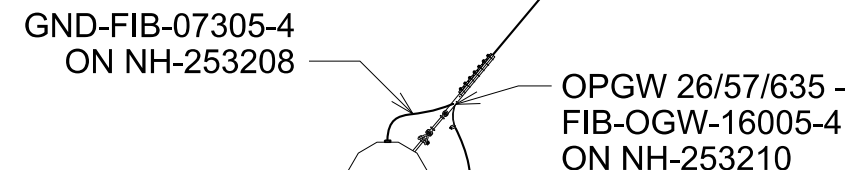
QTY	SUBASSEMBLIES
6	CND-SPA-09506-1
2	FCW-0954-2007-E2
1	FIB-OGW-16005-4
1	GND-FIB-07305-4
1	GND-STP-07008-2
6	ING-Y20-08889-2D1(A)
1	MRK-BPL-06244-3S
3	NH-253307-1

INSTALL 2ND POLE NEXT TO EXISTING POLE, INSTALL 2ND CIRCUIT

FUTURE 345KV INSTALLATION, FOR POLE TO INSTALL. SEE PLAN AND PROFILE OR PHASING DIAGRAM

STRUCTURE SHOWN IS RIGHT ANGLE CONFIGURATION - ROTATE 180° FOR LEFT ANGLE CONFIGURATION

TEMPORARY SUPPORT ARMS TO BE UTILIZED DURING STRINGING OPERATIONS



FUTURE INSTALLATION

SECTION 1-1

DOUBLE BUNDLED 954 ACSS/TW 20/7 FCTW-0954-2007-E2 ON NH-253210

ASSEMBLY CND-SPA-09506-1 ON NH-253210

MAINTAIN MIN. 9'-2" PHASE TO GROUND CLEARANCE

ASSEMBLY NH-253307-1 ON NH-253307

DRAWING REFERENCES

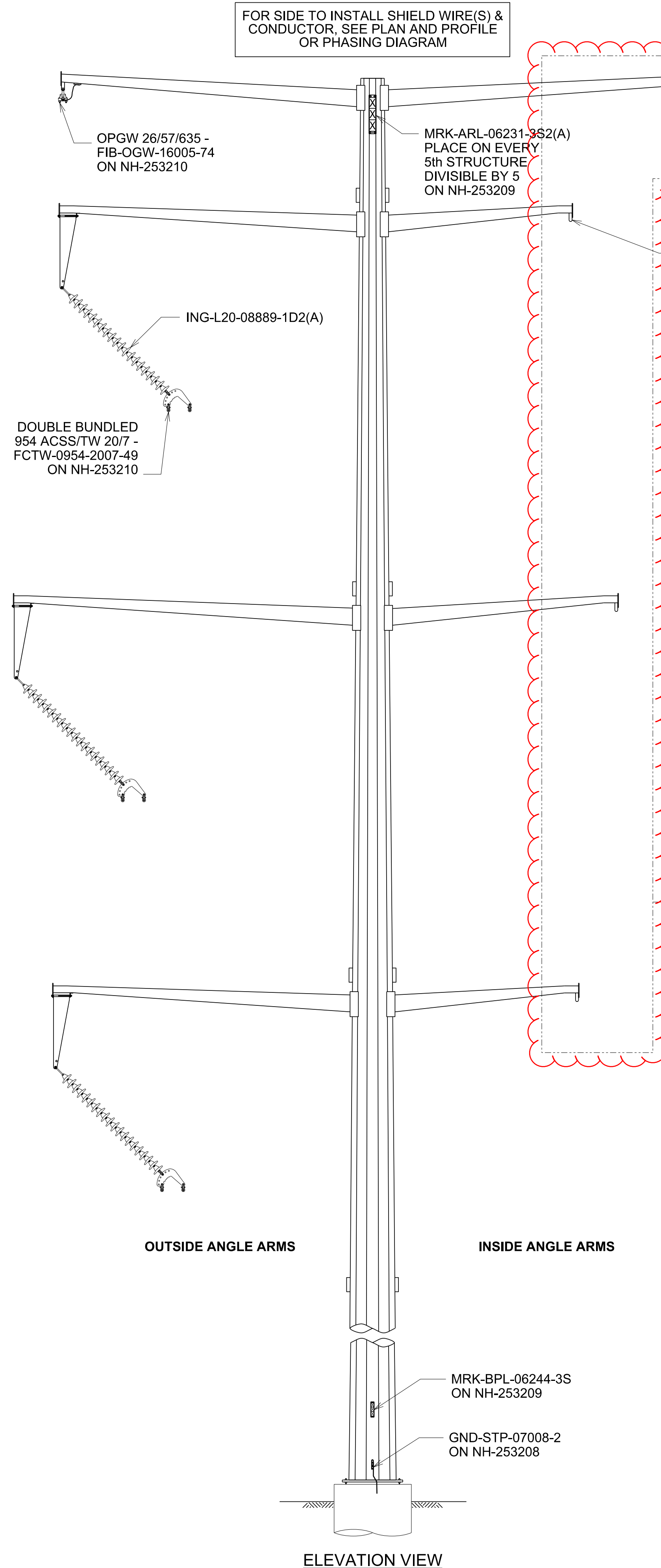
PLAN & PROFILE	NH-253190
GROUNDING DETAILS	NH-253208
POLE MARKING DETAIL	NH-253209
WIRE ATTACHMENT DETAILS	NH-253210
PHASING DIAGRAM	NH-253238
SUBASSEMBLY DETAILS - GUYING, ANCHORING AND MISC	NH-253307

THIS MAP/DOCUMENT IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS. YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SPARS.		INTERNAL INFORMATION: DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY	REV 1
NSP OPERATING AREA ENGINEERING Minneapolis, MN	LINE 0955 STRUCTURE DRAWING - DEADEND - TERMINAL - STEEL - ANGLE 60 TO 95 DEG, DEADEND	345 kV	SCALE NONE NH-248873
Xcel Energy		REV 1	DATE

ELEVATION VIEW

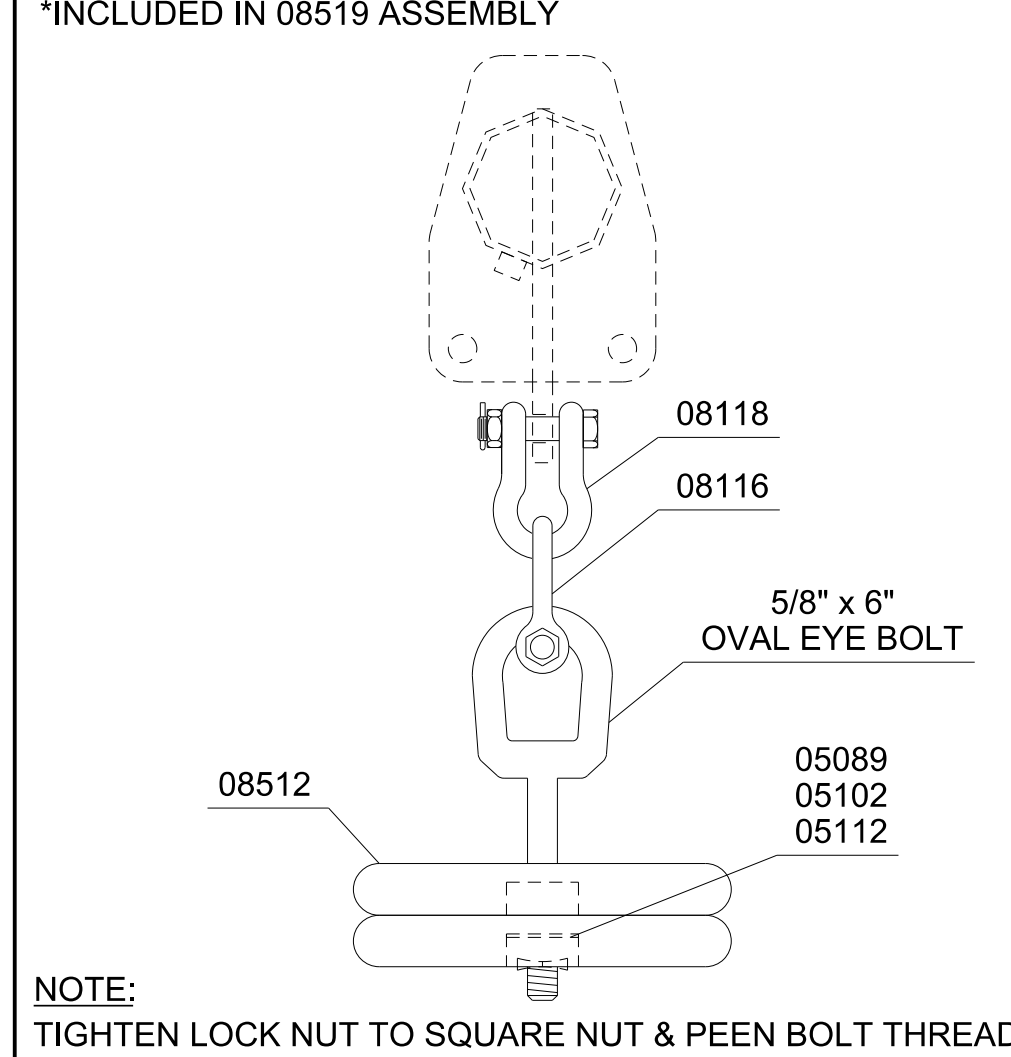
LINE ANGLE VARIES BY STRUCTURE

SECTION 2-2



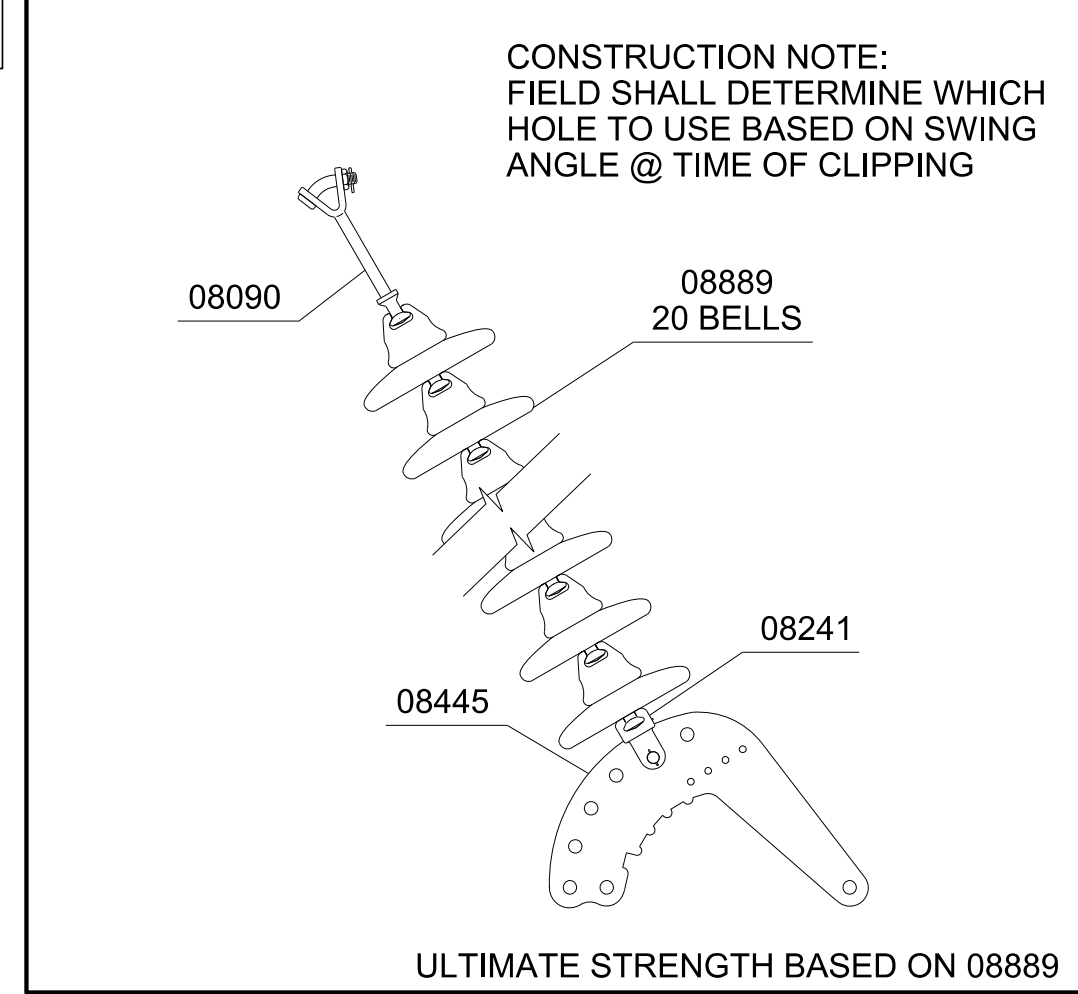
HDW-HLD-08519-1 HOLD DOWN WEIGHT ASSEMBLY, 100 LB

QTY.	ITEM #	DESCRIPTION
*1	05089	WASHER, ROUND, 1 1/2" OD, 11/16" HOLE
*1	05102	NUT, LOCK, MF, GALV, 5/8"
*1	05112	NUT, SQUARE, GALV, 5/8"
*1	08116	SHACKLE, ANCHOR, 5/8" PIN, W/ BNK, 30K ULT
*1	08118	SHACKLE, ANCHOR, 7/8" PIN, W/ BNK, 50K ULT
*2	08512	WEIGHT, HOLD DOWN, 50 LBS
*1	08519	WEIGHT, HOLD DOWN, ASSEMBLY
*1	-	BOLT, OVAL EYE, 5/8" x 6", GALV



ING-L20-08889-1D2(A) INSULATOR, GLASS, 20 BELLS, 40K ULT, 345KV, W/ Y-CLEVIS BALL EXT. LINK, SOCKET CLEVIS & CRESCENT YOKE PLATE FOR BUNDLED CONDUCTOR

QTY.	ITEM #	DESCRIPTION
1	08090	LINK, EXT, Y-CLEVIS BALL, 7/8" PIN, 50K ULT
1	08241	SOCKET, CLEVIS, 7/8" PIN, W/ BNK, 50K ULT
1	08445	PLATE, YOKE, CRESCENT, 18" SPACING, 25K ULT PER CONDUCTOR
20	08889	INS, BALL & SOCKET, 11" DIA X 5-3/4", 40K ULT



ASSEMBLY STR. NH-253237-1 FOR STEEL POLES

STL ND-253247-96518

STL ND-253247-96520

STL ND-253247-96657

STL ND-253247-96658

STL ND-253247-96659

STL ND-253247-96660

STL ND-253247-96661

STL ND-253247-96692

STL ND-253247-96693

STL ND-253247-96807

STL ND-253247-96808

L&D NH-253227

QTY	SUBASSEMBLIES
1	FCTW-0954-2007-49
1	FIB-OGW-16005-74
1	GND-STP-07008-2
1	HDW-HLD-08519-1
3	ING-L20-08889-1D2(A)
1	MRK-BPL-06244-3S
3	*08117

ASSEMBLY STR. NH-253237-2 FOR STEEL POLES

PH NO: (314) 851-4002

QTY	SUBASSEMBLIES
1	FCTW-0954-2007-49
1	FSEH-0308-07SD-06(A)
1	GND-STP-07024-1(A)
-1	HDW-HLD-08519-1
3	ING-L20-08889-1D2(A)

A REVISION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF:

MINNESOTA
NORTH DAKOTA

W.O.- 11524004 (MN)
W.O.- 11524010 (ND)

HOLD-DOWN WEIGHT RECOMMENDATION MODIFIED

APP'D & CERT: DAVID WEDELL (SIGNED)

DATE: 01/20/2014

DAVID WEDELL ENG.
REG. NO. PE-15800 (MN)
REG. NO. PE-7807 (ND)
PH NO: (314) 851-4024

DAVID WEDELL PROJ. ENG.
PH NO: (314) 851-4024

MATT HEBNER DSGN.
PH NO: (314) 851-4002

DWN: KLJ DATE: 01/17/14

CHK'D: TJB DATE: 01/20/14

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NORTH DAKOTA

W.O.- 11524004(MN)
W.O.- 11524010 (ND)

AS-BUILT

APP'D & CERT: DAVID WEDELL (SIGNED)

DATE: 08/21/2015

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DAVID WEDELL PROJ. ENG.
PH NO: (314) 851-4024

MATT HEBNER DSGN.
PH NO: (314) 851-4002

CHK'D: RMJ DATE: 08/21/15

TYPICAL ANGLE STRUCTURE

DRAWING REFERENCES

PLAN & PROFILE	NH-253190
GROUNDING DETAILS	NH-253208
POLE MARKING DETAIL	NH-253209
WIRE ATTACHMENT DETAILS	NH-253210
PHASING DIAGRAM	NH-253238

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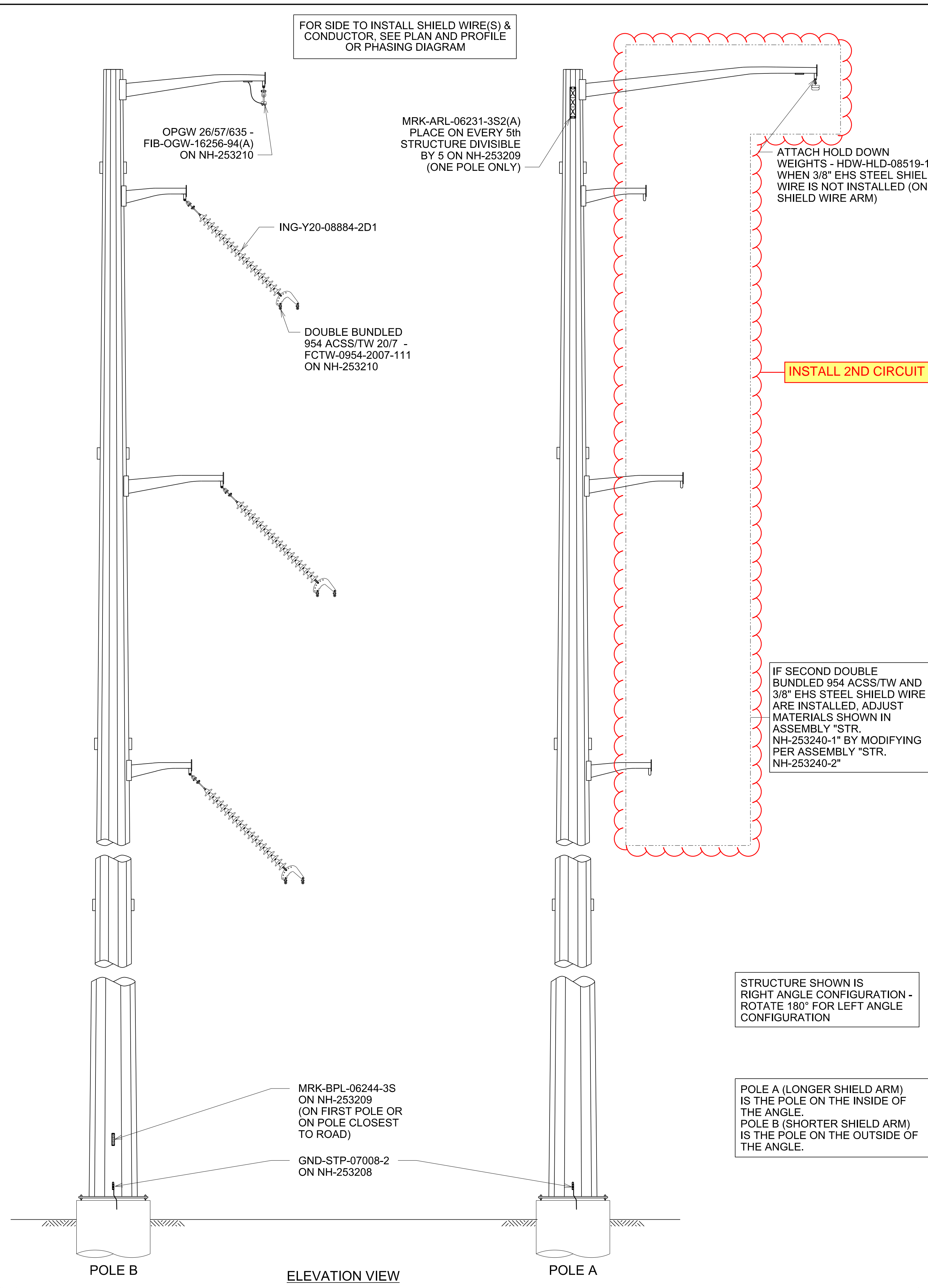
INTERNAL INFORMATION: DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY

NSP OPERATING AREA ENGINEERING Minneapolis, MN	LINE 0955	345 kV	SIGNIFICANT NUMBER 0955
	STRUCTURE DRAWING - ANGLE - STEEL - D.C. - SINGLE POLE		
10 TO 15 DEG, RUNNING ANGLE		SCALE NONE	REV 1

Xcel Energy

DATE: 08/21/15

Docket No. E002, ET2, E015, E017, ET6135/ TL-09-1056



HDW-HLD-08519-1 HOLD DOWN WEIGHT ASSEMBLY, 100 LB

QTY.	ITEM #	DESCRIPTION
*1	05089	WASHER, ROUND, 1 1/2" OD, 11/16" HOLE
*1	05102	NUT, LOCK, MF, GALV, 5/8"
*1	05112	NUT, SQUARE, GALV, 5/8"
*1	08116	SHACKLE, ANCHOR, 5/8" PIN, W/ BNK, 30K ULT
*1	08118	SHACKLE, ANCHOR, 7/8" PIN, W/ BNK, 50K ULT
*2	08512	WEIGHT, HOLD DOWN, 50 LBS
*1	08519	BOLT, OVAL EYE, 5/8" x 6", GALV

*INCLUDED IN 08519 ASSEMBLY

NOTE: TIGHTEN LOCK NUT TO SQUARE NUT & PEEN BOLT THREADS.

ING-Y20-08884-2D1 INSULATOR, GLASS, 20 BELLS, 50K ULT, W/ SHACKLES, EXT LINK, YOKE PLATE, SOCKET CLEVIS AND CRESCENT YOKE PLATE FOR BUNDLED CONDUCTOR

QTY.	ITEM #	DESCRIPTION
2	08090	LINK, EXT, Y-CLEVIS BALL, 7/8" PIN, 50K ULT
2	08118	SHACKLE, ANCHOR, 7/8" PIN, W/ BNK, 50K ULT
1	08154	PLATE, YOKE, 18" HOLE SPACING, 50K ULT
2	08237	SOCKET CLEVIS, 7/8" PIN, W/ BNK, 50K ULT
2	08445	PLATE, YOKE, CRESCENT, 18" HOLE SPACING, 25K ULT PER CONDUCTOR, 50K ULT
40	08884	INS, BALL & SOCKET, 11" DIA X 6-1/8", 50K ULT

NOTE: FIELD SHALL DETERMINE WHICH HOLE TO USE BASED ON SWING ANGLE @ TIME OF CLIPPING

ULTIMATE STRENGTH BASED ON 08154

ASSEMBLY STR. NH-253240-1 FOR STEEL POLES

STL ND-256088-96617
STL ND-256088-96618
STL ND-256088-96823
STL ND-256088-96824
L&D NH-256085

STL ND-253250-96531
STL ND-253250-96545
STL ND-253250-96582
STL ND-253250-96583
STL ND-253250-96594
STL ND-253250-96595
STL ND-253250-96596
STL ND-253250-96597
STL ND-253250-96615
STL ND-253250-96616
STL ND-253250-96668
STL ND-253250-96669
STL ND-253250-96916
STL ND-253250-96917
L&D NH-253230

QTY	SUBASSEMBLIES
2	FCTW-0954-2007-111
1	FIB-OGW-16256-94(A)
1	GND-STP-07008-2
1	*HDW-HLD-08519-1
3	ING-Y20-08884-2D1
1	MRK-BPL-06244-3S

ASSEMBLY STR. NH-253239-2 FOR STEEL POLES

QTY	SUBASSEMBLIES
2	FCTW-0954-2007-111
1	FSEH-0308-07SD-06(A)
1	GND-STP-07008-2
1	GND-STP-07024-1(A)
-1	HDW-HLD-08519-1
3	ING-Y20-08884-2D1

*CONSTRUCTION NOTE: IF SECOND POLE WILL NOT BE INSTALLED, HOLD DOWN WEIGHT ASSEMBLY HDW-HLD-08519-1 WILL NOT BE REQUIRED

APP'D & CERT: DAVID WEDELL (SIGNED)

DATE: 01/20/2014
DAVID WEDELL (SIGNED)
REG. NO. PE-15800 (MN)
REG. NO. PE-7807 (ND)
PH NO: (314) 851-4024

DAVID WEDELL (SIGNED)
PH NO: (314) 851-4024

MATT HEBNER (SIGNED)
PH NO: (314) 851-4002

DWN: KLJ DATE: 01/17/14

CHK'D: TJB DATE: 01/20/14

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MINNESOTA
NORTH DAKOTA

W.O.- 11524004 (MN)
W.O.- 11524010 (ND)

HOLD-DOWN WEIGHT RECOMMENDATION MODIFIED

APP'D & CERT: DAVID WEDELL (SIGNED)

DATE: 01/20/2014
DAVID WEDELL (SIGNED)
REG. NO. PE-15800 (MN)
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AS-BUILT

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PH NO: (314) 851-4024

MATT HEBNER (SIGNED)
PH NO: (314) 851-4002

CHK'D: RMJ DATE: 08/21/15

POWER ENGINEERS

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TYPICAL 2-POLE ANGLE STRUCTURE

DRAWING REFERENCES

PLAN & PROFILE	NH-253190
GROUNDING DETAILS	NH-253208
POLE MARKING DETAIL	NH-253209
WIRE ATTACHMENT DETAILS	NH-253210
PHASING DIAGRAM	NH-253238

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INTERNAL INFORMATION: DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY

NSP OPERATING AREA ENGINEERING Minneapolis, MN

LINE 0955
STRUCTURE DRAWING - ANGLE - STEEL - D.C. - DOUBLE POLE
20 TO 30 DEG, RUNNING ANGLE

345 kV

Xcel Energy

SCALE NONE

NH-253240

REV 1

REV	DATE	BY	CHK'D	DESCRIPTION
1				

APPENDIX C

APPENDIX D

Public and Tribal Outreach Materials

- Landowner Mailing List
 - Elected Official Mailing List
 - Tribal Mailing List
 - Minnesota Open Houses Invitation Postcard
 - Route Permit Amendment Letter (Landowners)
 - Route Permit Amendment Letter (Elected Officials and Tribes) Project
 - Update and Opportunity to Meet Letter
-

LANDOWNERS

CLAY COUNTY					
Owner 1	Owner 2	Address	City	State	Zip
AFFIELD DWIGHT & CARRIE		17008 150TH AVE S	BARNESVILLE	MN	56514
AGASSIZ VALLEY GRAIN		17770 150TH AVE S	BARNESVILLE	MN	56514-9102
ANDERSON CHARLES & TAMMY		13919 150TH ST S	BARNESVILLE	MN	56514
ANDERSON CHARLES D		13919 150TH ST S	BARNESVILLE	MN	56514
ANDERSON JOSHUA J		103 16TH ST NE	BARNESVILLE	MN	56514
ANDERSON RYLEE		14319 150TH ST S	BARNESVILLE	MN	56514
ANDERSON SCOTT L & BETTY A		16285 140TH AVE	BARNESVILLE	MN	56514
BARNESVILLE CITY OF		PO BOX 550	BARNESVILLE	MN	56514
BARNESVILLE ECON DEVELOP AUTH		PO BOX 550	BARNESVILLE	MN	56514
BARNESVILLE EDA		PO BOX 550	BARNESVILLE	MN	56514-0550
BAUER SCOTT & KENNETH		1101 MAIN AVE E	BARNESVILLE	MN	56514
BAUER SCOTT & MEGAN		1101 MAIN AVE E	BARNESVILLE	MN	56514
BLOCK BRANDON		107 17TH ST SE	BARNESVILLE	MN	56514
BOLGREAN JASON & JEFFREY		905 8TH AVE SE	BARNESVILLE	MN	56514
BUCKHOUSE TIM & DEANN		14762 110TH ST S	BARNESVILLE	MN	56514
BURNSIDE JEREMY		PO BOX 605	BARNESVILLE	MN	56514
BUTENHOFF HAZEL		14109 130TH ST S	BARNESVILLE	MN	56514
BUTENHOFF JERALD & DOUGLAS & LE: LAWRENCE BUTENHOFF		9741 150TH AVE S	BARNESVILLE	MN	56514
BUTENHOFF RONALD		14109 130TH ST S	BARNESVILLE	MN	56514
BUTENHOFF RONALD & HAZEL		14109 130TH ST S	BARNESVILLE	MN	56514
CHASE TONI CATHERINE		16439 200TH ST S	BARNESVILLE	MN	56514
CHEN ANDREW S & JAMIE		14074 HIGHWAY 9 S	BARNESVILLE	MN	56514
CHRISTENSEN AARON & CHRISTA		111 17TH ST SE	BARNESVILLE	MN	56514
CHRISTENSEN AARON P		111 17TH ST SE	BARNESVILLE	MN	56514
COOK CONNOR THOMAS & MCKENZY KATE		101 17TH ST NE	BARNESVILLE	MN	56514
DAWSON HQ LLC		PO BOX 545	BARNESVILLE	MN	56514
DEANS BULK SERVICE INC		P O BOX 249	BARNESVILLE	MN	56514-0249
DEE'S DRIVE-IN LLC		110 14TH ST SE	BARNESVILLE	MN	56514
DOCKTER CHRISTOPHER D		14168 HWY 9 S	BARNESVILLE	MN	56514
DOCKTER JASON T & SARAH M		1706 2ND AVE SE	BARNESVILLE	MN	56514
DUNHAM WESLEY & AMANDA		1141 340TH AVE	BARNESVILLE	MN	56514
DURENSKY BRIAN D		22339 140TH AVE S	BARNESVILLE	MN	56514
DURENSKY STEVEN & SHIRLEY		117 18TH ST SE	BARNESVILLE	MN	56514
ELLEFSON BRENT J		2458 120TH ST	BARNESVILLE	MN	56514
ERDMANN ELAINE		18120 150 AVE S	BARNESVILLE	MN	56514
ERDMANN RYAN K		19900 110TH AVE S	BARNESVILLE	MN	56514-9111
ERDMANN SCOTT		20628 170TH AVE S	BARNESVILLE	MN	56514
ERICKSON RANDAL G & DENISE A		14072 HWY 9 S	BARNESVILLE	MN	56514
F & D FAMILY FARM LLP		13619 100TH ST S	BARNESVILLE	MN	56514
FRANK J SCHINDLER RLT		PO BOX 443	BARNESVILLE	MN	56514
GILBERTSON CARL STEVEN		16439 200TH ST S	BARNESVILLE	MN	56514
GILBERTSON EDWARD & PATRICIA		1514 9 AVE SE	BARNESVILLE	MN	56514
GILBERTSON JUSTIN EDWARD		2001 9TH AVE SE	BARNESVILLE	MN	56514
GLYNN KALE K		1801 2ND AVE NE	BARNESVILLE	MN	56514
GP HEADERS INC		19767 HWY 34 S	BARNESVILLE	MN	56514
GROMMESH DAVID		PO BOX 447	BARNESVILLE	MN	56514
GROSZ JACOB L & HAILEY L		106 17TH ST NE	BARNESVILLE	MN	56514
HAGEN WESLEY D		1601 2ND AVE NE	BARNESVILLE	MN	56514
HAMMER BRAD A		502 13TH ST NE	BARNESVILLE	MN	56514-3331
HAUGEN LANCE		PO BOX 608	BARNESVILLE	MN	56514
HAUGRUD ADRIAN & CYNTHIA		21612 180TH AVE S	BARNESVILLE	MN	56514
HAUGRUD MATTHEW D		111 18TH ST SE	BARNESVILLE	MN	56514
HENRICKSON TAYLOR N & SARAH L		108 19TH ST NE	BARNESVILLE	MN	56514
HOLT BRIAN		16408 200 ST S	BARNESVILLE	MN	56514
HONRUD TYLER		506 11TH ST NE	BARNESVILLE	MN	56514
HOUGH RYAN, HEATHER & MICHAEL		16441 250TH ST S	BARNESVILLE	MN	56514
HUGHES GREGORY N & KRISTI S		14170 HWY 9 S	BARNESVILLE	MN	56514
J & J BRATON PROPERTIES		1050 300TH AVE	BARNESVILLE	MN	56514
JERALD L & DIANE M BUTENHOFF REVOCABLE TRUST		10449 140TH AVE S	BARNESVILLE	MN	56514
JOHNSON VICKI		17004 140TH AVE S	BARNESVILLE	MN	56514
KATHERINE ASKEGAARD RLT		102 12TH ST NE	BARNESVILLE	MN	56514
KAVA JEFFREY P & KAY L		204 19TH ST CIR NE	BARNESVILLE	MN	56514
KORYNTA DUSTIN & AMANDA		117 19TH ST SE	BARNESVILLE	MN	56514
KUEHN PAUL M & SANDRA E		105 17TH ST NE	BARNESVILLE	MN	56514

LANDOWNERS

CLAY COUNTY					
Owner 1	Owner 2	Address	City	State	Zip
KUIK ERIK A & JULIE R		109 17TH ST SE	BARNESVILLE	MN	56514
KYAR RODNEY		1707 2ND AVE NE	BARNESVILLE	MN	56514
LASS LOGAN & ALEXANDRA		1903 9TH AVE SE	BARNESVILLE	MN	56514
LAWRENCE C DAVIS, SR RT		16439 210 ST S	BARNESVILLE	MN	56514
LEMAR BRENNAN A & AMELIA H		1705 2ND AVE NE	BARNESVILLE	MN	56514
LENZ ALLEN J		20032 HWY 34	BARNESVILLE	MN	56514
LEWIS MICHAEL & KAREN		13886 170TH ST S	BARNESVILLE	MN	56514
LINK RYAN & HEATHER		1709 2ND AVE NE	BARNESVILLE	MN	56514
LODESTAR LEASING LLC		PO BOX 388	BARNESVILLE	MN	56514
MARTINSON RICKY S & VALERIE J		102 17TH ST NE	BARNESVILLE	MN	56514
MARVIG LASHIEL		116 19TH ST SE	BARNESVILLE	MN	56514
MCCONNELL LUCAS & CAITLIN		14109 160TH ST S	BARNESVILLE	MN	56514
MICHAEL WAGNER & P STOETZER & LE: ROBERT WAGNER		PO BOX 431	BARNESVILLE	MN	56514
MIDTHUN DAVID & WANDA		202 19TH STREET CIR SE	BARNESVILLE	MN	56514
MILLER LYLE R		PO BOX 696	BARNESVILLE	MN	56514
MILLER LYLE R & BRIGITTE E		PO BOX 696	BARNESVILLE	MN	56514
MILLER MORGAN H & AMANDA M		104 17TH ST NE	BARNESVILLE	MN	56514
MILLER SHELLEY L		118 18TH ST SE	BARNESVILLE	MN	56514
MULCAHY EDWARD & MARLYS		16532 200TH ST S	BARNESVILLE	MN	56514
MULCAHY PATRICK E		16600 200TH ST S	BARNESVILLE	MN	56514
MULCAHY PATRICK E & SARAH M		16600 200TH ST S	BARNESVILLE	MN	56514
NARUM JAMES & JOLEEN		112 17TH ST SE	BARNESVILLE	MN	56514
NICKLAY RAMONA DARLENE		1154 240TH AVE S	BARNESVILLE	MN	56514-0939
NICKLAY RICHARD		PO BOX 444	BARNESVILLE	MN	56514
OLSON DEVON L & KATHRYN		1103 MAIN AVE E	BARNESVILLE	MN	56514
OLSON ERIC & MELISSA		1004 3RD AVE NE	BARNESVILLE	MN	56514
OMDALEN JUSTIN C & JESSICA L		110 17TH ST SE	BARNESVILLE	MN	56514
PETERSON KIM W & MICHELLE		1006 6TH AVE SE	BARNESVILLE	MN	56514
PHILPOTT DANIEL		1803 2ND AVE NE	BARNESVILLE	MN	56514
PHILPOTT ROBERT D		1803 2ND AVE NE	BARNESVILLE	MN	56514
QUIGGLE EVERETT & ANDREA		PO BOX 386	BARNESVILLE	MN	56514
RICHARD K & MARY LOU THOMPSON RLT		10402 130TH AVE S	BARNESVILLE	MN	56514
ROGERS PHILIP		2624 110 ST	BARNESVILLE	MN	56514
ROGERS PHILIP & JILL		2624 110TH ST	BARNESVILLE	MN	56514-9052
ROGERS WENDELL		805 3RD ST SE	BARNESVILLE	MN	56514
RTMT PROPERTIES LLC		PO BOX 249	BARNESVILLE	MN	56514
SAMARZIA NATHAN		1702 2ND AVE SE	BARNESVILLE	MN	56514
SAMARZIA NATHAN S		1702 2ND AVE SE	BARNESVILLE	MN	56514
SCHIEFERT KYLE & PRISCILLA		18133 145 AVE S	BARNESVILLE	MN	56514-9661
SCHRITZ PLUMBING & HEATING LLC		17836 150TH AVE S	BARNESVILLE	MN	56514
SETTELMAYER GREGORY O & INEZ		15503 200TH ST S	BARNESVILLE	MN	56514
SOBTZAK JAMES P		17126 200TH ST S	BARNESVILLE	MN	56514
SOGN KURT B & KATHRYN J		14300 120TH ST S	BARNESVILLE	MN	56514
SORENSEN KODY & KRISTA		1804 2ND AVE SE	BARNESVILLE	MN	56514
STANDFIELD BLAKE & KATIE		105 12TH ST NE	BARNESVILLE	MN	56514
STARK GREGORY & CALYN M		115 18TH ST SE	BARNESVILLE	MN	56514
STAVIG ADAM LEE		1802 2ND AVE SE	BARNESVILLE	MN	56514
STETZ RICKY J & PAMELA J		1005 5TH AVE SE	BARNESVILLE	MN	56514
STRAND BRYAN S & MARGARET J		108 17TH ST SE	BARNESVILLE	MN	56514
STRAND MICHAEL A & KAILEE J		103 17TH ST NE	BARNESVILLE	MN	56514
SWANSON MAUREEN		113 18TH ST SE	BARNESVILLE	MN	56514
SYVERSON DEREK		14566 130TH ST S	BARNESVILLE	MN	56514-9118
SYVERSON DEREK & JAMIE		14566 130TH ST S	BARNESVILLE	MN	56514
TCHIDA MICHAEL		16564 200TH ST S	BARNESVILLE	MN	56514
THE BUNKER LLC		1006 3RD AVE NE	BARNESVILLE	MN	56514
THOMAS DARREL L & RUTH A		602 13TH ST NE	BARNESVILLE	MN	56514
THOMAS P ASKEGAARD REVOCABLE LIVING TRUST		102 12TH ST NE	BARNESVILLE	MN	56514
THOMPSON JACOB		21990 HWY 34	BARNESVILLE	MN	56514
THOMPSON MARGARET ANN		12047 110TH ST S	BARNESVILLE	MN	56514
THOMPSON MICHAEL E & LORI		14283 160TH ST S	BARNESVILLE	MN	56514
THOMPSON MIKE & LORI		14283 160TH ST S	BARNESVILLE	MN	56514
THOMPSON NATHAN & JACOB		21990 HWY 34	BARNESVILLE	MN	56514
THOMPSON TODD & DESIREE		17200 150TH AVE S	BARNESVILLE	MN	56514-9150
THORSON ROBIN & CRYSTAL		1609 2ND AVE NE	BARNESVILLE	MN	56514

LANDOWNERS

CLAY COUNTY					
Owner 1	Owner 2	Address	City	State	Zip
TRIPLE L ENTERPRISES & C/O LARRY DAVIS SR		PO BOX 478	BARNESVILLE	MN	56514
TRI-T FARMS INC		12047 110TH ST S	BARNESVILLE	MN	56514-9128
VAN HEEL CHRISTOPHER & SUMMER JOHNSON		1703 2ND AVE NE	BARNESVILLE	MN	56514
WAGNER ROGER D & ELEANOR M		10267 150TH AVE S	BARNESVILLE	MN	56514
WARD MICHAEL & CASSIA		1604 2ND AVE SE	BARNESVILLE	MN	56514
WHISKEY CREEK SUPPLY LLP		13619 100TH ST S	BARNESVILLE	MN	56514
WINKLER STEFAN D & HEATHER C		1704 2ND AVE SE	BARNESVILLE	MN	56514
WOINAROWICZ JOSHUA R & KORINA N		1701 2ND AVE NE	BARNESVILLE	MN	56514
OLSGAARD DANIEL J		8801 SOUTH FORK JUNCTION	BISMARCK	ND	58504
OLSGAARD JAYNE M		8801 SOUTH FORK JUNCTION	BISMARCK	ND	58504
LARRY & AJ DAHLSTROM TRUST		5700 BONITA BEACH RD #3208	BONITA SPRINGS	FL	34134
ANDREW A ASKEGAARD REVOCABLE LIVING TRUST		PO BOX 156	COMSTOCK	MN	56525-0156
BARKER KIMBERLY K		1938 159TH AVE S	COMSTOCK	MN	56525
COMSTOCK CITY OF		PO BOX 39	COMSTOCK	MN	56525
COMSTOCK LUTHERAN CHURCH		PO BOX 7	COMSTOCK	MN	56525
MARION L ASKEGAARD RLT		PO BOX 156	COMSTOCK	MN	56525-0156
OLSON STEVE		PO BOX 3	COMSTOCK	MN	56525
SHELLITO KATHLEEN K		1938 159TH AVE S	COMSTOCK	MN	56525
LANGHALS ENTERPRISES LLC		PO BOX 279	DELPHOS	OH	45833
HUTTON TERRY & DAPHNE		32639 CLAY BANK RD	ERHARD	MN	56534
CENTURY HOLDINGS LLC		3449 39TH ST S	FARGO	ND	58104
DAKOTA DEVELOPMENTS CONSTRUCTION INC		501 40TH ST S	FARGO	ND	58103
DIETZ LARRY & CANDICE		4857 MEADOW CREEK DR	FARGO	ND	58104
ERNST FAMILY LLLP		PO BOX 9543	FARGO	ND	58106
HALL-TONSFELDT ELAINE		2546 26TH AVE S	FARGO	ND	58103
KENNEDY THOMAS D		201 E PRAIRIEWOOD DR	FARGO	ND	58103
KLEIN ROBERT & PAUL		203 PRAIRIEWOOD DR	FARGO	ND	58103
LIAN DALE		PO BOX 3024	FARGO	ND	58108
MCKINNON JUSTIN & MARISSA		2905 88TH AVE S	FARGO	ND	58104
MINCH ROGER J		1110 3RD AVE N #904W	FARGO	ND	58102-4681
PEUSER KEVIN		1841 17TH ST S	FARGO	ND	58103
STATE BANK & TRUST		PO BOX 9798	FARGO	ND	58106-9798
THOMAS J ENGLISH RLT		1224 ELM ST	FARGO	ND	58102
EDWARD STEPHEN QUIGGLE LT		19030 ECHO LN	FARMINGTON	MN	55024
GRIFFIN FARMLAND HOLDINGS, LLC		1412 BRENVEI DR	FERGUS FALLS	MN	56537
HANSEN ALVIN A		422 W VERNON AVE	FERGUS FALLS	MN	56537
OLSGAARD NORMA		24456 IMPERIAL CT	FOREST LAKE	MN	55025
BURLINGTON NORTHERN & RR CO PROPERTY TAX DEPT		PO BOX 961089	FORT WORTH	TX	76161-0089
LILA M KREBS TR		39483 GOLDEN RETRIEVER LN	FRAZEE	MN	56544
JOHNSON KYLE		383 HWY 9 N	GLYNDON	MN	56547
KUEHL BROS FARMS		3247 120TH ST S	GLYNDON	MN	56547
PENDER JAKOB & BRITTANY		5408 157 ST S	GLYNDON	MN	56547
PENDER TIMOTHY		4497 HWY 9 S	GLYNDON	MN	56547
SPECHT ANDREW & STEPHANIE		26416 28TH AVE S	HAWLEY	MN	56549
ALLEN A NELSON TRUST		122 RAMUNNO CIR	HOCKESSIN	DE	19707
J & J HOUGH PARTNERSHIP LLC		10501 S 56TH ST	LINCOLN	NE	68516-9318
PAULSON RICHARD & NEVA		32298 STATE 27	LONG PRAIRIE	MN	56347
WAGNER FAMILY TRUST		8059 DUNFIELD AVE	LOS ANGELES	CA	90045
T3 TOWER 2 LLC		4017 WASHINGTON RD	MCMURRAY	PA	15317
DENNIS & LINDA BUTENHOFF LT		11011 EAST NATAL AVE	MESA	AZ	85209
JUDY THOMPSON FISCHER TRUST		3249 ALDRICH AVE S	MINNEAPOLIS	MN	55408
NORTHERN STATES POWER CO & PROPERTY TAX DEPT		414 NICOLLET MALL	MINNEAPOLIS	MN	55401
ANDVIK GARY & LE: OLIVE ANDVIK		3200 28TH ST S UNIT 103	MOORHEAD	MN	56560
ANDVIK JEFFREY D & LINDA M		3032 RIVERSHORE DR S	MOORHEAD	MN	56560
ASKEGAARD MARK J & BARBARA		2856 150TH AVE S	MOORHEAD	MN	56560
ASKEGAARD ROBERT R		3294 150TH AVE S	MOORHEAD	MN	56560
ASKEGAARD ROLAINE		2856 150 AVE S	MOORHEAD	MN	56560-7812
BLILIE SCOTT D & RUTH I		4022 3RD ST S	MOORHEAD	MN	56560
BLILIE TODD		3408 WESTMOOR DR	MOORHEAD	MN	56560
BLILIE TODD A & JANE M		3408 WESTMOOR DR	MOORHEAD	MN	56560
BRANDT HAROLD & ARDELLE TR		4503 3RD ST S	MOORHEAD	MN	56560
BULAND HAROLD J & ARLYS J TR		105 N 3RD ST # 303	MOORHEAD	MN	56560

LANDOWNERS

CLAY COUNTY					
Owner 1	Owner 2	Address	City	State	Zip
BUTENHOFF FARMS LLC		3448 10TH ST S	MOORHEAD	MN	56560
DARIN H BRANDT RLT & LISA R BRANDT RLT		15060 50TH ST S	MOORHEAD	MN	56560
HOPPE FAMILY REVOCABLE LIVING TRUST		920 33RD ST S	MOORHEAD	MN	56560
KVALVOG RAY & KATHIE		323 48TH AVE SW	MOORHEAD	MN	56560
MACADAMS JEREMY & ANGELA		4260 150TH AVE S	MOORHEAD	MN	56560
MCCONNON ANTHONY & BETH		14860 28TH ST S	MOORHEAD	MN	56560
MINNESOTA STATE OF		3510 12TH AVE S	MOORHEAD	MN	56561
MOORHEAD CLAY COUNTY JPA		PO BOX 280	MOORHEAD	MN	56560
MORTENSEN CRIS P & TAMI J		1451 100TH ST S	MOORHEAD	MN	56560
SHANE THOMPSON & DAWN WILLITS-THOMPSON TRUST		2752 26TH STREET CIR S	MOORHEAD	MN	56560
WANZEK DENNIS & MARI		5148 150TH AVE S	MOORHEAD	MN	56560
COTTRELL REESE & JOYCE		3871 TRACTOR DR	NORTH POLE	AK	99705-6637
BARTH BRADLEY & JODY L		3 PECAN RUN WAY	OCALA	FL	34472
DONALD & CINDY GOHNER FLT		46200 POSS BEACH RD	PELICAN RAPIDS	MN	56572
HAUGRUD JENNIFER & VICTOR		23614 EDLYNN BEACH TRL	PELICAN RAPIDS	MN	56572
JANET L SMITH 2022 IT		PO BOX 640	PELICAN RAPIDS	MN	56572
LAVIGNE JEFFREY		41277 110TH AVE	PELICAN RAPIDS	MN	56572
PARK REGION COOPERATIVE		PO BOX 630	PELICAN RAPIDS	MN	56572-0630
SCHRITZ FAMILY TRUST DATED JANUARY 25, 2023		47769 SUNSET BEACH LN	PELICAN RAPIDS	MN	56572
SCHRITZ TERENCE & BECKY		47769 SUNSET BEACH LN	PELICAN RAPIDS	MN	56572
POSTER LISA		207 6TH AVE	RICE	MN	56367
OTTER TAIL VALLEY RAILROAD		200 MERIDIAN CENTRE BLVD BLVD SUITE 300	ROCHESTER	NY	14618
ANDERSON PAUL T		15534 70TH ST S	SABIN	MN	56580
BEVERLY A BUTENHOFF RLT		11551 120TH ST S	SABIN	MN	56580
DAHL SHELDON & BARBARA J		14733 70TH ST S	SABIN	MN	56580
HALVORSON MARVIN K & EMILY M		8381 140TH AVE S	SABIN	MN	56580
HANSEN ERIC & TAMI		13952 70TH ST S	SABIN	MN	56580
KRUEGER DEAN R		7714 140TH AVE S	SABIN	MN	56580
LEISETH ROBERT MICHAEL		244 1ST ST S	SABIN	MN	56580
LIEDBERG ALLEN K		8779 140TH AVE S	SABIN	MN	56580
MENNE BENJAMIN M & LISA M		14607 70TH ST S	SABIN	MN	56580
MENNE LISA		14607 70TH ST S	SABIN	MN	56580
PHILPOT MEGAN J		6487 140TH AVE S	SABIN	MN	56580
READY JOHN J		15115 70TH ST S	SABIN	MN	56580
RUSTAD MARK & DEBRA		9288 140TH AVE S	SABIN	MN	56580
SMITH GREGORY M		7744 150TH AVE S	SABIN	MN	56580
SWISHER DWIGHT & PEGGY		6740 140TH AVE S	SABIN	MN	56580
THOMPSON JEFFREY R		10314 120 AVE S	SABIN	MN	56580-9679
VOELKER TAYLOR R & BRODY A		6677 140TH AVE S	SABIN	MN	56580
HILDEBRANDT ALLEN D & MARY L		204 5TH ST N	SAINT PETER	MN	56082
DEMETER FARMS II, GP		PO BOX 2139	SARASOTA	FL	34230
BAUER DANIEL J		8032 E NORWAY PINE TR	SIOUX FALLS	SD	57110
STATE OF MINNESOTA & DEPT OF HIGHWAYS		MAIL STATION 3340	ST PAUL	MN	55146-3340
CAROL M LARSON RLT		32389 BIRCHWOOD SHORE DR	UNDERWOOD	MN	56586
LELAND J LARSON RLT		32389 BIRCHWOOD SHORE DR	UNDERWOOD	MN	56586
DUANE E BRANDT LLLP		26163 MAPLEHURST DR	VERGAS	MN	56587
M & H FARM		7345 177 R AVE SE	WAHPETON	ND	58075
BERNIER ADAM & CLARK		12 S BROADWAY	WATERTOWN	SD	57201
OLSGAARD JACOB		112 EAGLE RIDGE DR	WAVERLY	IA	50677
DAUGHERTY PAUL		PO BOX 154	WOLVERTON	MN	56594
JOHNK MARK & RANDY		1464 205 AVE	WOLVERTON	MN	56594
JOSEPHSON BARBARA		15154 292ND AVE NW	ZIMMERMAN	MN	55398

DOUGLAS COUNTY					
Owner 1	Owner 2	Address	City	State	Zip
RURAL CELLULAR CORPORATION	C/O VERIZON WIRELESS REAL ESTATE TAX	PO BOX 2549	ADDISON	TX	75001
DOUGLAS J BACKMAN ETAL TRUST		54701 240TH ST	ALBERTA	MN	56207
AAGARD PROPERTIES LLC		3711 IOWA ST	ALEXANDRIA	MN	56308
AARON S & MICHELLE A ZOLLNER		4652 DIXIE LN SW	ALEXANDRIA	MN	56308-4798
AARON ZOLLNER ETAL		4652 DIXIE LN SW	ALEXANDRIA	MN	56308
ADAM REPP		5658 10TH AVE SW	ALEXANDRIA	MN	56308
ALAN MOLTER REV TRUST		5629 STATE HWY 114 SW	ALEXANDRIA	MN	56308

LANDOWNERS

DOUGLAS COUNTY					
Owner 1	Owner 2	Address	City	State	Zip
ALLAN C & JEAN M MINNERATH		2807 THE NARROWS DR SW	ALEXANDRIA	MN	56308-4639
ALLEN J & GRETCHEN A BOESEN LE		4544 STATE HWY 27 W	ALEXANDRIA	MN	56308
ALLEN W & SUSAN K EDWARDS		2824 THE NARROWS DR SW	ALEXANDRIA	MN	56308
AMBER & CHRISTOPHER BLOCK		3420 LATOKA BAY RD SW	ALEXANDRIA	MN	56308-9000
ANDREA & SCOTT ALLYN		2436 BRADFORD BAY SW	ALEXANDRIA	MN	56308
ANDREW J WILKEN		4676 DIXIE LN SW	ALEXANDRIA	MN	56308
ANDREW T & KAYLA B HUGHES		4750 W LATOKA LN SW	ALEXANDRIA	MN	56308
ANGELA & DUSTIN HASBROUCK		2402 BRADFORD BAY RD SW	ALEXANDRIA	MN	56308-9170
ASHLEY MILLER		2540 REEDS VILLA LANE SW	ALEXANDRIA	MN	56308
AU MINE LLC		710 N QUINCY ST	ALEXANDRIA	MN	56308
AUSTIN A & MCKEIGH L KLUG		8297 LOKEN LANE SW	ALEXANDRIA	MN	56308
BEAU J & CASSIE BOPP		3830 FOREST PARK RD SW	ALEXANDRIA	MN	56308
BENJAMIN & JANET BRANSON TRUST		2403 REEDS VILLA LN SW	ALEXANDRIA	MN	56308
BENJAMIN J SCHOENROCK		4656 W LATOKA LN SW	ALEXANDRIA	MN	56308
BENJAMIN M DUTTON		1705 W LATOKA DR SW	ALEXANDRIA	MN	56308
BIO COMPANY		3911 NEVADA ST	ALEXANDRIA	MN	56308
BRAD T YERKES		3378 THE NARROWS DRIVE SW	ALEXANDRIA	MN	56308
BRADLEY D & JUNE D SKARSTEN		8136 LAWNYS LN SW	ALEXANDRIA	MN	56308
BRADLEY D SKARSTEN ETAL		8136 LAWNYS LN SW	ALEXANDRIA	MN	56308
BRADLY E LAKE		6051 10TH AVE SW	ALEXANDRIA	MN	56308
BRENDEN D WEBER ETAL		2508 REEDS VILLA RD SW	ALEXANDRIA	MN	56308
BRENT C SCHUTZ		1217 90TH ST SW	ALEXANDRIA	MN	56308
BRIAN D & TAMARA D DAHL		1745 W LATOKA DR SW	ALEXANDRIA	MN	56308
BRIAN DEGROOD		1008 RUBY ST NW	ALEXANDRIA	MN	56308
BRITTANY D BURNS		2610 REEDS VILLA RD SW	ALEXANDRIA	MN	56308
BRUCE & LISA ANDERSON		4568 DIXIE LN SW	ALEXANDRIA	MN	56308
BRUCE A & JODI L BELSETH		3389 LATOKA BAY RD SW	ALEXANDRIA	MN	56308-9526
BRYAN & JILLIAN KELLERMAN		4550 DIXIE LN SW	ALEXANDRIA	MN	56308
BRYAN & SARA FIER		4516 DIXIE LN SW	ALEXANDRIA	MN	56308
BRYCE & KENDALL BRICKWEG		1599 W LATOKA DR SW	ALEXANDRIA	MN	56308
CALEB M KIMMES ETAL		3033 THE NARROWS DR SW	ALEXANDRIA	MN	56308
CALVIN V & MARY A SOMMER		1597 W LATOKA DR SW	ALEXANDRIA	MN	56308
CHAD M & DAWN K COAUETTE		4485 W LATOKA LN SW	ALEXANDRIA	MN	56308
CHARLES J & CAROL BOKINSKIE		3805 FOREST PARK RD SW	ALEXANDRIA	MN	56308
CHARLES J NAGEL		2501 REEDS VILLA RD SW	ALEXANDRIA	MN	56308
CHARLES L K & JOANNE M SROCK		3915 FOREST PARK CIR SW	ALEXANDRIA	MN	56308
CHARLES L K SROCK ETAL		3915 FOREST PARK CIRCLE	ALEXANDRIA	MN	56308
CHERE E K ANDERSON		724 MOSQUITO LN SW	ALEXANDRIA	MN	56308
CHERYL A KOEHN		PO BOX 728	ALEXANDRIA	MN	56308
CHRISTENSEN FAMILY REV LIV TR	C/O JAN & MERIDA CHRISTENSEN	2303 ENGLUND RD SW	ALEXANDRIA	MN	56308
CHRISTINE F LINDQUIST		1342 LATOKA DRIVE CT SW	ALEXANDRIA	MN	56308
CHRISTOPHER L DÖEGE		8240 LAWNYS LN SW	ALEXANDRIA	MN	56308
CHRISTOPHER L SPRENGER &	REBECCA L SPRENGER	6006 10TH AVE SW	ALEXANDRIA	MN	56308
CHURCH FOR THE HARVEST INC		1425 41ST AVE W	ALEXANDRIA	MN	56308
CITY OF ALEXANDRIA	CITY HALL	704 BROADWAY	ALEXANDRIA	MN	56308
COLIN & KIMBERLY ASKEW		6540 10TH AVE SW	ALEXANDRIA	MN	56308
COOK IRREV GRANDCHILDREN'S TR	C/O BARBARA S COOK	278 NORTHBROOK CIRCLE	ALEXANDRIA	MN	56308
CORINNE L & JAMIE D LECY		1939 W LATOKA DR SW	ALEXANDRIA	MN	56308
COUNTY OF DOUGLAS		305 8TH AVE W	ALEXANDRIA	MN	56308
CRAIG A & KALEE M OLSON		3258 LATOKA LN SW	ALEXANDRIA	MN	56308
CRAIG BERG		1846 W LATOKA DR SW	ALEXANDRIA	MN	56308
CRAIG R & RITA M GLIEDEN		2909 VONDERHEIDE DR SW	ALEXANDRIA	MN	56308
CRAIG S & CHRISTINE ERICKSON		301 ERICKSON HERITAGE NE	ALEXANDRIA	MN	56308
CRAIG S GOEMER		8660 NE LOBSTER DR SW	ALEXANDRIA	MN	56308
DALE L & ANNETTE B TOBOLT		8900 LOKEN LANE SW	ALEXANDRIA	MN	56308
DANA & MIRANDA RACH		9285 CHERRY POINT RD SW	ALEXANDRIA	MN	56308
DANIEL D & STACY J THOM		4681 W LATOKA LN SW	ALEXANDRIA	MN	56308
DANIEL J & SUSAN I SWENSON		4502 COUNTRY SHORES SW	ALEXANDRIA	MN	56308
DARIN ERLANDSON		8245 LAWNYS LN SW	ALEXANDRIA	MN	56308
DARLENE J HAMELAU		8262 HUNTERS BAY RD SW	ALEXANDRIA	MN	56308
DARREN S ENGELBRECHT ETAL		4205 COUNTY RD 4 SW	ALEXANDRIA	MN	56308
DARRIN L & PAMELA K THOMPSON	TRUSTEES DARRIN L & PAMELA K	3254 REEDS VILLA CT SW	ALEXANDRIA	MN	56308
DARYL D & SHIRLEY A SAATHOFF		3050 THE NARROWS DR SW	ALEXANDRIA	MN	56308
DAVID E HIGH REVOCABLE TRUST		1601 W LATOKA DR SW	ALEXANDRIA	MN	56308

DOUGLAS COUNTY

LANDOWNERS

Owner 1	Owner 2	Address	City	State	Zip
JEREMY A & HEATHER A NETLAND		969 MOSQUITO LN SW	ALEXANDRIA	MN	56308
JEREMY D & MARIA E BURNS		7832 HUNTERS BAY RD SW	ALEXANDRIA	MN	56308
JEREMY G & CARLA M SPAETH		2210 BRADFORD BAY SW	ALEXANDRIA	MN	56308
JEREMY R & SARA B ANDERSON		3855 FOREST PARK RD SW	ALEXANDRIA	MN	56308
JEREMY S & AMANDA L MILLER		4678 W LATOKA LN SW	ALEXANDRIA	MN	56308
JESSE D & VICKIE L WOHLFEIL		6485 MINA SHORES SW	ALEXANDRIA	MN	56308
JESSICA M & CHRISTOPHER DAVIS		1880 W LATOKA DR SW	ALEXANDRIA	MN	56308
JOHN & GAIL CITROWSKE		7135 10TH AVE SW	ALEXANDRIA	MN	56308
JOHN D & ELAINE E PETERSON		9091 NE LOBSTER DR SW	ALEXANDRIA	MN	56308
JOHN H & CAROLYN A CHLIAN		10937 MAPLE SPRINGS DR SE	ALEXANDRIA	MN	56308
JOHN R & KATIE REITTER		1860 ENGLUND RD SW	ALEXANDRIA	MN	56308
JON L & SUSAN M MARKSTROM		4251 STATE HWY 27 W	ALEXANDRIA	MN	56308
JON M & RITA S KOLL		4795 W LATOKA LN SW	ALEXANDRIA	MN	56308
JONATHAN & HEATHER DANNER		1773 W LATOKA DRIVE SW	ALEXANDRIA	MN	56308
JONATHAN D & SAMANTHA A TOOLEY		2300 REEDS VILLA RD SW	ALEXANDRIA	MN	56308
JOSEPH MINNERATH		3819 FOREST PARK RD SW	ALEXANDRIA	MN	56308
JOSEPH T & NICOLE M SCHABEL		4408 COUNTRY SHORES SW	ALEXANDRIA	MN	56308
JOSHUA J & ALISA J STAPLES		4641 COUNTRY SHORES SW	ALEXANDRIA	MN	56308
JOY L SIVERTSON		6719 MINA SHORES SW	ALEXANDRIA	MN	56308
JUSTIN & KENDRA ROOB		4611 W LATOKA LN SW	ALEXANDRIA	MN	56308
KATHRYN L & RICHARD H MOEN	TRUSTEES	2880 THE NARROWS DR SW	ALEXANDRIA	MN	56308
KEITH & REBECCA GILBERTSON		4510 COUNTRY SHORES SW	ALEXANDRIA	MN	56308
KEITH F & ROSALIE R WIESER		4600 DIXIE LN SW	ALEXANDRIA	MN	56308
KEITH R & SHAWNA D MEYER		3901 FOREST PARK CIR SW	ALEXANDRIA	MN	56308-5477
KELLY A PAVEK ROEPKE ETAL		3428 LATOKA BAY RD SW	ALEXANDRIA	MN	56308
KEN & LINDA DAVIS		2981 VONDERHEIDE DR SW	ALEXANDRIA	MN	56308
KENNETH L & JANET ERLANDSON		8180 HUNTERS BAY RD SW	ALEXANDRIA	MN	56308
KENNETH L & KRISTINE J PEDERSON		2818 THE NARROWS DR SW	ALEXANDRIA	MN	56308
KENNETH W & RUTH E BAKALYAR		3221 REEDS VILLA COURT SW	ALEXANDRIA	MN	56308
KEVIN & PAULINE WEISEL		785 MOSQUITO LN SW	ALEXANDRIA	MN	56308
KEVIN J & MICHELE L RICKER		3071 VONDERHEIDE DR SW	ALEXANDRIA	MN	56308
KEVIN J & MICHELE L RICKER	REVOCABLE TRUST	3071 VONDERHEIDE DR SW	ALEXANDRIA	MN	56308
KIM TENNISON ETAL TRUSTEES	KEITH D MC COY IRREV FAMILY TR	1901 PARKVIEW RD NE	ALEXANDRIA	MN	56308
KODY THOMPSON		4005 FOREST PARK RD SW	ALEXANDRIA	MN	56308
KOLLEEN K ROTH		5621 WATERFOWL DR SW	ALEXANDRIA	MN	56308
KRUSEMARK LLC		2817 GOVERNMENT POINT RD NE	ALEXANDRIA	MN	56308
KYLE & DEBORAH HVEZDA		5228 CO RD 21 SW	ALEXANDRIA	MN	56308
LAKES AREA HUMANE SOCIETY IN		3811 NEVADA ST SW	ALEXANDRIA	MN	56308
LARRY A & SHERRI L FLOAN TRST		2627 REEDS VILLA RD SW	ALEXANDRIA	MN	56308
LEE & HEIDI WILKEN		4853 LOST LANE SW	ALEXANDRIA	MN	56308
LEE A RUPLINGER		3068 VONDERHEIDE DR SW	ALEXANDRIA	MN	56308
LEE E & JUDITH A BACKHAUS		2804 THE NARROWS DR SW	ALEXANDRIA	MN	56308
LISA A SWIFT		1825 W LATOKA DR SW	ALEXANDRIA	MN	56308
LISTROM PROPERTIES LLC		1507 EDNA RD NW	ALEXANDRIA	MN	56308
LOYD M BERGER		1720 W LATOKA DR SW	ALEXANDRIA	MN	56308
LOREN D & DIANE S BENSON		8408 LOKEN LN SW	ALEXANDRIA	MN	56308
LU ANN & DENNIS HINNENKAMP		3800 FOREST PARK RD SW	ALEXANDRIA	MN	56308
LUKE R MOCK ETAL		3331 LATOKA LANE SW	ALEXANDRIA	MN	56308
M VIRGINIA BENSON		4403 PIONEER RD SE APT 306	ALEXANDRIA	MN	56308
MARGARET A KRAEMER-OSTMAN		4366 COUNTRY SHORES SW	ALEXANDRIA	MN	56308
MARIE A HACKER		8120 LAWNYS LANE SW	ALEXANDRIA	MN	56308
MARK A & LINDA M STROMSWOLD		3075 THE NARROWS DR SW	ALEXANDRIA	MN	56308
MARK A OPP &	AMY S ALLEN OPP	3635 VONDERHEIDE DR SW	ALEXANDRIA	MN	56308
MARK A WINTER		1731 STATE HWY 114 SW	ALEXANDRIA	MN	56308
MARK B & JANE M JOHNSON		2505 REEDS VILLA RD SW	ALEXANDRIA	MN	56308
MARK D SCHUETT		1101 90TH ST SW	ALEXANDRIA	MN	56308
MARK E JANKE		904 11TH AVE W	ALEXANDRIA	MN	56308
MARK J & MICHELLE MORRISSETTE		6863 10TH AVE SW	ALEXANDRIA	MN	56308
MARK S ANDERSON		2501 RANCHWOOD CIR SE	ALEXANDRIA	MN	56308
MARSHA L HAUGEN TRUST		3344 LATOKA BAY RD SW	ALEXANDRIA	MN	56308
MARY ANN V BENSON		4403 PIONEER RD SE APT 306	ALEXANDRIA	MN	56308
MATTHEW & HEIDI HAWKINS		7101 MAGNUSON RD SW	ALEXANDRIA	MN	56308
MATTHEW D & JODI L FISCHBACH		4557 W LATOKA LN SW	ALEXANDRIA	MN	56308
MAXWELL WIRTJES		1576 W LATOKA DR SW	ALEXANDRIA	MN	56308
MC COY ENTERPR ALEXANDRIA LLC		4110 MINNESOTA ST	ALEXANDRIA	MN	56308
MELVIN L & RENAE C MORSE		3802 FOREST PARK RD SW	ALEXANDRIA	MN	56308
DOUGLAS COUNTY					

LANDOWNERS

Owner 1	Owner 2	Address	City	State	Zip
MICHAEL & JANE SCHAFFRAN		4450 W LATOKA LN SW	ALEXANDRIA	MN	56308
MICHAEL & KELLI DRAPER		2206 BRADFORD BAY RD SW	ALEXANDRIA	MN	56308
MICHAEL A & LOIS HEDSTROM		6259 10TH AVE SW	ALEXANDRIA	MN	56308
MICHAEL C & CHERYL A QUIST		2208 BRADFORD BAY SW	ALEXANDRIA	MN	56308
MICHAEL D & JENNAH R HAWES		4610 W LATOKA LN SW	ALEXANDRIA	MN	56308
MICHAEL D LYNGEN		2815 VONDERHEIDE DR SW	ALEXANDRIA	MN	56308
MICHAEL J & GLENDA J KVITEK		2611 REEDS VILLA RD SW	ALEXANDRIA	MN	56308
MICHAEL P FERNHOLZ ETAL TRSTEE	MICHAEL P FERNHOLZ ETAL TRUST	5134 WATERFOWL DR SW	ALEXANDRIA	MN	56308
MICHAEL PISCHKE		1990 W LATOKA DR SW	ALEXANDRIA	MN	56308
MICHAEL POTZMANN ETAL		5900 10TH AVE SW	ALEXANDRIA	MN	56308
MICHELLE C NISKA REVOCABLE TR		3061 THE NARROWS DR SW	ALEXANDRIA	MN	56308
MINNERATH INVESTMENTS LLC		6325 CO RD 87 SW	ALEXANDRIA	MN	56308
MITCHELL L & JEANNE A NIELSEN		8216 LAWNYS LN SW	ALEXANDRIA	MN	56308
MOEN ENTERPRISES LLC		6842 POWER LN SW	ALEXANDRIA	MN	56308
MORGAN H & JOSEPH M HURLBUT		1642 W LATOKA DR SW	ALEXANDRIA	MN	56308
NATHAN J HEATON ETAL		4581 W LATOKA LN SW	ALEXANDRIA	MN	56308
NICHOLAS & BARBARA ROERS		4700 DIXIE LANE SW	ALEXANDRIA	MN	56308
NICOLE R & RANDY M ANDERSON		987 90TH ST SW	ALEXANDRIA	MN	56308
NORMAN K & SUSAN M TVRDIK		12783 BLUEBIRD LN SW	ALEXANDRIA	MN	56308
NOVOTNY FAMILY REVOCABLE LV TR		2400 BRADFORD BAY RD SW	ALEXANDRIA	MN	56308
PAMELA K & RUSSELL A WILBUR		3350 LATOKA BAY RD SW	ALEXANDRIA	MN	56308
PATRICIA A FROLAND		2304 REEDS VILLA RD SW	ALEXANDRIA	MN	56308
PATRICIA C LARSON ETAL		3339 LATOKA LN SW	ALEXANDRIA	MN	56308
PATRICK D & TERESA M VERAGUTH		953 90TH ST SW	ALEXANDRIA	MN	56308
PATRICK G & BRENDA S HANSON		8042 LAWNYS LN SW	ALEXANDRIA	MN	56308
PAUL A & DONNA R WHEELER		3023 VONDERHEIDE DR SW	ALEXANDRIA	MN	56308
PAUL W & EILEEN F CLARK		3393 LATOKA BAY RD SW	ALEXANDRIA	MN	56308
Q & W PARTNERSHIP	C/O TERRY J QUIST	2408 BRADFORD BAY SW	ALEXANDRIA	MN	56308
QUINN & HEATHER BRUSTUEN		3816 FOREST PARK RD SW	ALEXANDRIA	MN	56308
RANDY M HEDSTROM		672 IRENE DR SW	ALEXANDRIA	MN	56308
REBECCA A N ZWILLING		PO BOX 175	ALEXANDRIA	MN	56308
REBECCA A STRAND		2612 REEDS VILLA LN SW	ALEXANDRIA	MN	56308
REED F & KAY F HVEZDA LE		5357 CO RD 21 SW	ALEXANDRIA	MN	56308
REID A COURNEYA		6663 MINA SHORES SW	ALEXANDRIA	MN	56308
REINHOLD & MARY JANE HENKE		2530 REEDS VILLA LN SW	ALEXANDRIA	MN	56308
RICHARD A BROMLEY		3905 FOREST PARK CIR SW	ALEXANDRIA	MN	56308
RICHARD D & DIANE M NELSON		2444 BRADFORD BAY SW	ALEXANDRIA	MN	56308
RICHARD E & TERESA DUSTERHOFT		3352 LATOKA LN SW	ALEXANDRIA	MN	56308
RICHARD G & JOYCE A JONES		1910 42ND AVE W	ALEXANDRIA	MN	56308
RICHARD H & JOAN L AKKERMAN		2997 VONDERHEIDE DR SW	ALEXANDRIA	MN	56308
RICHARD J & LYNNE E COSMANO		1608 W LATOKA DR SW	ALEXANDRIA	MN	56308
RICHARD L & FAYE M LEE		2451 REEDS VILLA RD SW	ALEXANDRIA	MN	56308
RICK SCHOENROCK		1920 FIREMANS LODGE RD SW	ALEXANDRIA	MN	56308
ROBERT A & JENNIFER J WEGNER		2801 REEDS VILLA LN SW	ALEXANDRIA	MN	56308
ROBERT G & BARB FRIEDERICHS		3400 LATOKA BAY RD SW	ALEXANDRIA	MN	56308
ROBERT M & MICHELLE M AHLGREN		4796 W LATOKA LN SW	ALEXANDRIA	MN	56308
ROCKY O & PAULETTE A HEDSTROM		515 JEFFERSON ST UNIT 301	ALEXANDRIA	MN	56308
RODGER L & CAROL A NELSON		2720 LE HOMME DIEU HTS NE	ALEXANDRIA	MN	56308-7983
ROGER & SUZANNE HEGLAND		1881 W LATOKA DR SW	ALEXANDRIA	MN	56308
RONALD A & SUZANNE M SALO TTEE	RONALD A & SUZANNE M SALO REV	8560 NE LOBSTER DRIVE SW	ALEXANDRIA	MN	56308
RONALD M & JOYCE M KLINE		2821 VONDERHEIDE DR SW	ALEXANDRIA	MN	56308
RONALD W & MARIAN E WROLSON		8255 LAWNYS LN SW	ALEXANDRIA	MN	56308
RUNESTONE ELECTRIC ASSOCIATION		6839 POWER LN SW	ALEXANDRIA	MN	56308
RUSSELL R SIBINSKI		6755 10TH AVE SW	ALEXANDRIA	MN	56308
RYAN C & HEATHER L SCOTT		2024 WHISPERING OAKS DRIVE NE	ALEXANDRIA	MN	56308
RYAN E & JACQUELYN C LAIR		1680 W LATOKA DR SW	ALEXANDRIA	MN	56308
SACRED JOURNEY PROPERTIES LLC		1515 42ND AVE W	ALEXANDRIA	MN	56308
SARA C & JEFFREY L GUENTHER		6020 10TH AVE SW	ALEXANDRIA	MN	56308
SAS INVESTMENTS LLC		1213 LAKECREST DR	ALEXANDRIA	MN	56308
SCOTT & BRENDA ENGH		PO BOX 355	ALEXANDRIA	MN	56308
SCOTT T & LEONA M HURLBUT		4514 W LATOKA LN SW	ALEXANDRIA	MN	56308
SCOTT W KLEINSCHMIDT &	PATRICIA J KLEINSCHMIDT	3282 THE NARROWS DR SW	ALEXANDRIA	MN	56308
SHANE R & JENNIFER L SPENCER		8020 LAWNYS CIR SW	ALEXANDRIA	MN	56308
SHANNON D PETERSON TRUST ETAL		4028 FOREST PARK RD SW	ALEXANDRIA	MN	56308
SHERYL M HOCUM TRUSTEE	SHERYL M HOCUM REV LVG TRUST	8580 NE LOBSTER DR SW	ALEXANDRIA	MN	56308
SHIRLEY A HASEMAN TRUST		1589 MELVINA LN SW	ALEXANDRIA	MN	56308

DOUGLAS COUNTY

LANDOWNERS

Owner 1	Owner 2	Address	City	State	Zip
SMOKEY'S PROPERTIES LLC		11363 STATE HWY 29 N	ALEXANDRIA	MN	56308
STAN C & RENATA L SCHERRER		2009 FIREMANS LODGE RD SW	ALEXANDRIA	MN	56308
STEPHEN O DAHL &	MAGGIE FOY-MC DONALD DAHL	1359 SHELKAY LN SW	ALEXANDRIA	MN	56308
STEVEN D & JILL M KOHLER		1716 FIREMANS LODGE RD SW	ALEXANDRIA	MN	56308
STEVEN E SANDVIG		6737 10TH AVE SW	ALEXANDRIA	MN	56308
STEVEN F & RACHEL SWANBERG		2298 ENGLUND RD SW	ALEXANDRIA	MN	56308
STEVEN J & DENISE M BAKER		4738 W LATOKA LN SW	ALEXANDRIA	MN	56308
STEVEN K & DENISE R JORUD		1329 CROSS COUNTRY LN SW	ALEXANDRIA	MN	56308
STEVEN P ZASTROW		2593 CO RD 86 SE	ALEXANDRIA	MN	56308
SUJATHA & RICHARD ROBERTS		1427 SHELKAY LN SW	ALEXANDRIA	MN	56308
SUNOPTA GRAINS & FOODS INC		3915 MINNESOTA ST	ALEXANDRIA	MN	56308
SUSAN C GIBBONS		1600 ENGLUND RD SW	ALEXANDRIA	MN	56308
TANER R HLINSKY		2725 REEDS VILLA LN SW	ALEXANDRIA	MN	56308
TANNER D & ALLISON WULFEKUHLE		649 MOSQUITO LANE SW	ALEXANDRIA	MN	56308
TANNER MARSOLEK		1039 90TH ST SW	ALEXANDRIA	MN	56308
TERRY J & SUSAN M QUIST		2408 BRADFORD BAY SW	ALEXANDRIA	MN	56308
THE CHURCH IN THE PINES		3992 HWY 27 W	ALEXANDRIA	MN	56308
THERESA J & ROLLIN J EVINK		4582 W LATOKA LN SW	ALEXANDRIA	MN	56308
THOMAS C RODEL		1934 FIREMANS LODGE RD SW	ALEXANDRIA	MN	56308
THOMAS H & SHELBY R PETERMAN		2807 VONDERHEIDE DR SW	ALEXANDRIA	MN	56308-4638
THOMAS J & ANGELA L MILLER		4515 W LATOKA LN SW	ALEXANDRIA	MN	56308
TIM & TAMERA GROSSMAN		5980 10TH AVE W	ALEXANDRIA	MN	56308
TIMOTHY J & BECKY L NESS		4320 COUNTRY SHORES SW	ALEXANDRIA	MN	56308
TIMOTHY R & NANCY L CONNOR		9271 CHERRY PT RD SW	ALEXANDRIA	MN	56308
TODD & JAN ZARBOK		9649 WATER LILY TRL NW	ALEXANDRIA	MN	56308
TRACEY VON BARGEN &	KIMBERLY A VON BARGEN	4655 W LATOKA LN SW	ALEXANDRIA	MN	56308-9308
TRACY L SVIR		4751 W LATOKA LN SW	ALEXANDRIA	MN	56308
TROY D & TRACY L HEALD		5769 MAGNUSON RD SW	ALEXANDRIA	MN	56308
TRUEMAN & YVONNE HOLTE TRSTE	TRUEMAN H HOLTE TRUST	701 34TH AVE E, APT 227	ALEXANDRIA	MN	56308-2976
UTAH GROUP LLC		510 22ND AVE E SUITE 101	ALEXANDRIA	MN	56308
VICKY L OLSON		3366 LATOKA BAY RD SW	ALEXANDRIA	MN	56308
VIKING INVESTMENTS OF	ALEXANDRIA LLC	4015 MINNESOTA ST	ALEXANDRIA	MN	56308
WALLACE C ALSLEBEN		4080 CO RD 21 SW	ALEXANDRIA	MN	56308
WILLIAM H & SHARON R BURSCH		7797 CENTENNIAL DR NW	ALEXANDRIA	MN	56308
WILLIAM J PAULZINE LIVING TRST		1651 SHELKAY LN SW	ALEXANDRIA	MN	56308
JOEL D CARSON		14315 QUINCE ST NW	ANDOVER	MN	55304
JOHN R DRUM		3100 163RD LN NW	ANDOVER	MN	55304
ANDREW J & LOUISE A LANG		11667 BIG ISLAND RD	ASHBY	MN	56309-4597
DEETTE C JOHNSON		13623 COUNTY ROAD 19	ASHBY	MN	56309
LEO C OHREN		28583 MYRTLE BEACH RD	ASHBY	MN	56309
ACC TOWER SUB LLC	C/O AMERICAN TOWER, ATTENTION:PROPERTY TAX	PO BOX 723597	ATLANTA	GA	31139
GARY BIEWER		16373 150TH AVENUE S	BARNESVILLE	MN	56514
FURRRER PROPERTIES LLC		17832 150TH AVE	BARRETT	MN	56311
J MARIE PROPERTIES LLC		17832 150TH AVE	BARRETT	MN	56311
DEAN L & JEROLYN D JOHNSON		38116 N EAGLE LAKE RD	BATTLE LAKE	MN	56515-9500
JEANNINE M HENNEMAN		14099 E EAGLE LAKE RD	BATTLE LAKE	MN	56515
A T & T CORP	PROPERTY TAX DEPT	PO BOX 7207	BEDMINSTER	NJ	07921-7207
WESTFIELD APARTMENTS	OF ALEXANDRIA PHASE 2 LLLP	17018 COMMERCIAL PARK ROAD	BRAINERD	MN	56401
BRADLEY R OLSON		14293 CENTURY RD NW	BRANDON	MN	56315
CHIPPEWA CEMETERY ASSN		PO BOX 32	BRANDON	MN	56315
CHRISTOPHER A DOKKA JR		14342 SKROVE RD NW	BRANDON	MN	56315
DONALD J & LEILA R BUSE		6709 CO RD 15 NW	BRANDON	MN	56315
DWAYNE S & RENEE P HANSON		17434 BURLINGTON RD NW	BRANDON	MN	56315
GREGORY D & CONNIE L WALES		PO BOX 74	BRANDON	MN	56315
HAROLD D & CAROL MEISSNER		16706 CO RD 82 NW	BRANDON	MN	56315
HERITAGE PROPERTY	DEVELOPMENT INC	PO BOX 93	BRANDON	MN	56315
IRVING SLETTO		233 BROWNS RD SW	BRANDON	MN	56315
JAMES E FULTS		15598 LONG LAKE RD NW	BRANDON	MN	56315
JASON L & HEIDI R ELMER		8411 WHISKEY LK DR NW	BRANDON	MN	56315
JASON L ELMER		8411 WHISKEY LAKE DR NW	BRANDON	MN	56315
JOSEPH N & HOPE E WAGNER		20490 CO RD 7 NW	BRANDON	MN	56315
KENNETH A ZEITHAMER JR ETAL		13772 PHEASANT DR NW	BRANDON	MN	56315
DOUGLAS COUNTY					
Owner 1	Owner 2	Address	City	State	Zip

LANDOWNERS

KENT & BRENDA HINTERMEISTER	TRUST	14661 SKROVE RD NW, PO BOX 488	BRANDON	MN	56315
KERBY D LUND		14720 COUNTY ROAD 82 NW	BRANDON	MN	56315
KYLE K NELSON ETAL		13880 SKROVE RD NW	BRANDON	MN	56315
K-Z ENTERPRISES LLC		14661 SKROVE RD NW	BRANDON	MN	56315
LARRY R & MARY KAY LUND		14800 CENTURY RD NW	BRANDON	MN	56315
LE ROY J & DEBRA J BUSE		17720 LONG LK RD NW	BRANDON	MN	56315
M & B PROPERTY LLC		13472 EDGEFIELD RD	BRANDON	MN	56315
MARCIA M BOLIN		305 3RD AVE S	BRANDON	MN	56315
MARGARET H ROERS		17429 BURLINGTON RD NW	BRANDON	MN	56315
MICHAEL J LUND		5971 CO RD 7 NW	BRANDON	MN	56315-8101
MICHAEL T & KARIE S HANSON		2470 CO RD 7	BRANDON	MN	56315
MICHAEL T HANSON ETAL		2470 CO RD 7 NW	BRANDON	MN	56315
MONTE KORKOWSKI		6931 CO RD 15 NW	BRANDON	MN	56315
PAUL J LAUTHEN CREDIT SHELTER	TRUST ETAL	13609 CO RD 56 NW	BRANDON	MN	56315
SQUIRREL HOLLOW TRUST	C/O PETER J LEE	13761 SKROVE RD NW	BRANDON	MN	56315
STEVEN L NELSON ETAL		9501 CO RD 108 NW	BRANDON	MN	56315
WAGNER FREEWAY PROPERTIES	LLC	15380 LONG LAKE RD, PO BOX 258	BRANDON	MN	56315
WAYNE A LUND		6508 CO RD 7 NW	BRANDON	MN	56315
ZACHARY HINTERMEISTER		16063 LONG LAKE RD NW	BRANDON	MN	56315
KEVIN M & ELISABETH A HANSEN		413 ST OLAF AVE	CANBY	MN	56220
DUSTIN J & JESSICA A BUCHERT		6709 BRENDEN CT	CHANHASSEN	MN	55317
TODD E & AMBER T KARELS		28060 CEDAR TRAIL COURT	CLEVELAND	MN	56017
RICHARD N & JUDITH A OWEN		3223 S ATLANTIC AVE #406	COCOA BEACH	FL	32931
DEAN & JULIE HARTLE		1683 390TH ST	COTTONWOOD	MN	56229
LEROY J PUTMAN TRUST ETAL		3301 ALT 19 LOT 149	DUNEDIN	FL	34698
STEVEN P TREBESCH &	LORA J SCHILLING TREBESCH	616 LANTERN COURT	EAGAN	MN	55123
TRAVIS B WINTER		32316 COUNTY 3	EAGLE BEND	MN	56446
DENNIS D PREUSS TRUST ETAL		1140 610TH STREET	ECHO	MN	56237
BAH FAMILY LLP		24235 170TH AVE	ELBOW LAKE	MN	56531
ANTHONY P LESNAU		19351 CLOVERLEAF LN NW	EVANSVILLE	MN	56326
BEVERLY D JACOBSON REV FARM	TRUST	8710 CO RD 25 NW	EVANSVILLE	MN	56326
CHRISTOPHER H JACOBSON &	TRISTA L JACOBSON	PO BOX 9	EVANSVILLE	MN	56326
CLARENCE B SCHLOSSER		19258 RIVER RD NW	EVANSVILLE	MN	56326
CRAIG K HASEMAN		5863 CO RD 55 NW	EVANSVILLE	MN	56326
CRAIG R BOEDDEKER		10572 EVANS LN NW	EVANSVILLE	MN	56326
DALE PETERMAN		9031 GREEN ACRE RD NW	EVANSVILLE	MN	56326
DAN SNIDER ETAL		19556 RIVER RD NW	EVANSVILLE	MN	56326
DARRIN M & RENAE A QUINN		22284 CO RD 41 NW	EVANSVILLE	MN	56326
DARRIN QUINN		22284 COUNTY ROAD 41 NW	EVANSVILLE	MN	56326
DAVID & DARLENE JANTE		24576 W ABERCROMBIE TRL NW	EVANSVILLE	MN	56326
DAVID D & NATALIE C ANDERSON		23756 W ABERCROMBIE TRL NW	EVANSVILLE	MN	56326
DAVID D ANDERSON		23756 W ABERCROMBIE TRL NW	EVANSVILLE	MN	56326
DEAN G & KIM R ANDERSON		21988 ROLLING MEADOWS LN NW	EVANSVILLE	MN	56326-2400
DENNIS A JACOBSON REV FARM TST	BEVERLY D JACOBSON REV FARM TR	8710 CO RD 25 NW	EVANSVILLE	MN	56326
DENNIS R & LAURIE J LEE		10092 KENWORTH DR NW	EVANSVILLE	MN	56326
DUANE R OSTLUND		20409 COUNTY RD 5 NW	EVANSVILLE	MN	56326
E A S		PO BOX 185	EVANSVILLE	MN	56326
ERIC & DEANN SATTERLIE FAM RLT		23758 SUNNYSIDE DR NW	EVANSVILLE	MN	56326
ERIC THRONSON		10394 250TH ST	EVANSVILLE	MN	56326-2601
ERIK JOHNSON		7266 CO RD 55 NW	EVANSVILLE	MN	56326
ETHAN D C & SHERRY HENNEMAN		22265 CO RD 41 NW	EVANSVILLE	MN	56326
GARY L & SHARON A BEHRENS		8857 SPRUCE RIDGE NW	EVANSVILLE	MN	56326
HARLAND H HANSON TRUST B		16565 HUNT LAKE ROAD NW	EVANSVILLE	MN	56326
HAROLD & DOREEN K HANSON		24811 STATE HWY 79 NW	EVANSVILLE	MN	56326
JAMIE M & HEIDI A ENGLUND		7491 CO RD 55 NW	EVANSVILLE	MN	56326
JASON J & KATLYN JO MARTIN		20256 CO RD 8 NW	EVANSVILLE	MN	56326
JASON J MARTIN		20256 CO RD 8 NW	EVANSVILLE	MN	56326
JEFFREY L & KAREN R LARSON		9136 STOWE LK RD NW	EVANSVILLE	MN	56326
JOHN & LEANN STRAND		PO BOX 99	EVANSVILLE	MN	56326
JOHN P & CARRIE L HANSON		8543 CO RD 1 NW	EVANSVILLE	MN	56326
JULIE A HASEMAN		5863 CO RD 55 NW	EVANSVILLE	MN	56326
JULIE R SATTERLIE ESTATE	C/O RANDAL K SATTERLIE	23422 SUNNY SIDE DR NW	EVANSVILLE	MN	56326
KENT A & MARY I HUISMAN		20081 RIVER RD NW	EVANSVILLE	MN	56326
KENT D NELSON REVOC LIVING TR		21901 COUNTY ROAD 41 NW	EVANSVILLE	MN	56326
LANCE E & MACKINZIE SHORES		21876 ROLLING MEADOWS LN	EVANSVILLE	MN	56326
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LYNETTE E MOUNSDON &	RODNEY L MOUNSDON	3634 ARNE LEE RD NW	EVANSVILLE	MN	56326
MARC T & AMANDA L SHORES		9084 CO RD 1 NW	EVANSVILLE	MN	56326
MARCIA L BENEKE		8000 CO RD 55 NW	EVANSVILLE	MN	56326
MARY E LUND REV TRUST ETAL		7766 CO RD 15 NW	EVANSVILLE	MN	56326
MATTHEW R HENNEMAN ETAL		8676 CO RD 1 NW	EVANSVILLE	MN	56326-8264
RANDAL K SATTERLIE		23422 SUNNY SIDE DR NW	EVANSVILLE	MN	56326
RAYMOND A & LISA J LESNAU		19389 CLOVERLEAF LN NW	EVANSVILLE	MN	56326
ROGER D HOLTBERG REV LIV TRUST		6892 CO RD 1 NW	EVANSVILLE	MN	56326
RONALD E & SUSAN OLSON		23087 CO RD 41 NW	EVANSVILLE	MN	56326
RONALD E OLSON		23087 CO RD 41 NW	EVANSVILLE	MN	56326
RUSSELL J & RACHEL L ELLIOTT		23423 CO RD 41 NW	EVANSVILLE	MN	56326
SETH R ENGLUND		PO BOX 5	EVANSVILLE	MN	56326-0005
SHAWN M & STEPHANIE L WAGNER		18861 CLOVERLEAF LN	EVANSVILLE	MN	56326
TERRY & DANA STRESE		14650 BERG ROAD	EVANSVILLE	MN	56326
ESSJAY MN PROPERTIES LLC		4110 40TH ST S STE 104	FARGO	ND	58104
JOYCE E CLARK		2890 SAFFRON DR S	FARGO	ND	58104
LONNIE R & SHIRLEY J RODACKER		1338 9TH ST N	FARGO	ND	58102
SWANSTON EQUIPMENT CORPORATION		3450 MAIN AVE	FARGO	ND	58103
JOANN BEARDSLEY TRUST ETAL		2216 SW 307TH ST	FEDERAL WAY	WA	98023
RODNEY & LINDA SCHMIDT		24835 COUNTY HIGHWAY 11	FERGUS FALLS	MN	56537
ROBERT K LARSON		1004 WEST HILL ST #B	FREDERICKSBURG	TX	78624
GERALD R VOSEN		PO BOX 157	FREEPORT	MN	56331
JERRY VOSEN		PO BOX 157	FREEPORT	MN	56331
A FRANCES BENSON		9145 CO RD 8 NW	GARFIELD	MN	56332
ADAM D JOHNSON		8951 CLEAR VIEW RD NW	GARFIELD	MN	56332
B & B VENTURES LLC		12261 COUNTY ROAD 8 NW	GARFIELD	MN	56332
BRADLEY J & SARAH A MEICHSNER		9038 CO RD 8 NW	GARFIELD	MN	56332
BRUCE ANGEN		10300 CO RD 56 NW	GARFIELD	MN	56332
BRYAN & LISA MEICHSNER		10733 CO RD 56 NW	GARFIELD	MN	56332
CAROL M FOSLIEN		9812 BAY VIEW RD NW	GARFIELD	MN	56332
CHRISTOPHER & LORI WITTKAMP		9026 BAY VIEW RD NW	GARFIELD	MN	56332-3701
DAVID P & REANIE R KNUTSON		10557 CO RD 8 NW	GARFIELD	MN	56332
DELMAR W KLIMEK		12866 CENTURY RD NW	GARFIELD	MN	56332
DENNIS A GULBRANSON		13398 CENTURY RD NW	GARFIELD	MN	56332
DENNIS P NAGLE &	RUTH A GOODWIN NAGLE	11482 CO RD 8 NW	GARFIELD	MN	56332
EMEROY A & SANDRA J JOHNSON		9280 CO RD 8 NW	GARFIELD	MN	56332
ERIKA L & DANIEL A WILLPRECHT		10919 CO RD 8 NW	GARFIELD	MN	56332
GUY A & MARY S EKOLA		9678 WALSTAD RD NW	GARFIELD	MN	56332
HARVEY C & AVIS M BOTHUN		11160 CO RD 8 NW	GARFIELD	MN	56332
HAYDEN M HANSON		9279 CO RD 8 NW	GARFIELD	MN	56332
HOWARD D & ARDELLE M HANSON LE		1265 KRISTI LN NW	GARFIELD	MN	56332
JAMES D PRECHEL		11859 CO RD 8 NW	GARFIELD	MN	56332
JAMES R BLANSHAN		12261 CO RD 8 NW	GARFIELD	MN	56332
JANELL A EDDY		4135 UTOPIA DR NW	GARFIELD	MN	56332
JASON & KAREN CARLSON		11125 CO RD 8 NW	GARFIELD	MN	56332
JEFFERY O HOLTE		11077 TWILIGHT TRL NW	GARFIELD	MN	56332
JERALD R & VIRGINIA I MORICAL		9020 CO RD 56 NW	GARFIELD	MN	56332
JERALD R MORICAL ETAL		9020 CO RD 56 NW	GARFIELD	MN	56332
JEROME L LARSON		11076 TWILIGHT TRL NW	GARFIELD	MN	56332
JOHN E & JOYCE A ENGEL TTEES	ENGEL FAMILY REV LIVING TRUST	12510 CENTURY RD NW	GARFIELD	MN	56332
KARL R RAMIN		11258 TWILIGHT TRAIL NW	GARFIELD	MN	56332
KYLE L & ASHLEY M NIELAND		10299 WALSTAD RD NW	GARFIELD	MN	56332
LU ANNE HOLTE		12575 CENTURY RD NW	GARFIELD	MN	56332
LYNN & ARLENE BUSHARD TRSTEE	BUSHARD FAMILY TRUST	10458 MOE HALL RD NW	GARFIELD	MN	56332
MAYNARD G & CAROLYN L BAKKEN		10792 CO RD 8 NW	GARFIELD	MN	56332
MICHAEL & JANET HAUVER		9561 CO RD 8 NW	GARFIELD	MN	56332
MICHAEL A & MEGGAN N NEWHOUSE		9141 BAY VIEW RD NW	GARFIELD	MN	56332
MOE TOWNSHIP	C/O SCOTT WRIGHT-CLERK	1433 TIMBER LN SW	GARFIELD	MN	56332
NOLAN & EMILY MILLER		12300 CENTURY RD NW	GARFIELD	MN	56332
ORVILLE S & LU ANNE HOLTE		12575 CENTURY RD NW	GARFIELD	MN	56332
RAYNE J BRANDT REVOCABLE TRUST		10040 SHAMROCK LN NW	GARFIELD	MN	56332
RICHARD G KLIMEK ETAL		726 CO RD 7 NW	GARFIELD	MN	56332
ROBERT D & LEZALIE C NIELAND		2207 E MOE RD NW	GARFIELD	MN	56332
ROGER F & FLORENCE C CHLIAN		10441 MOE HALL RD NW	GARFIELD	MN	56332
SAMUEL & BRIANA HERZOG		9700 BAY VIEW RD NW	GARFIELD	MN	56332
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SCHMITZ FAMILY REV LIV TRUST		11580 CO RD 8 NW	GARFIELD	MN	56332
TODD C & SHERI F MORICAL		2468 E MOE RD NW	GARFIELD	MN	56332
WILLIAM M OLSON		10151 ANTLER TER NW	GARFIELD	MN	56332
CHRISTOPHER J HANSON		423 7TH AVE SE	GLENWOOD	MN	56334
DEAN RAZINK		PO BOX 283	GLENWOOD	MN	56334
GEORGINE A ROERS QUALIFIED	PERSONAL RESIDENCE TRUST	6494 E JAVALINA CT	GOLD CANYON	AZ	85119
HARRY G & GEORGINE A ROERS		6494 E JAVALINA CT	GOLD CANYON	AZ	85119
DIANN C OLSON LE		812 S 9TH ST	GRAND FORKS	ND	58201
TRIPLE A RETREATS LLC		9775 COUNTY ROAD NO. 1	HANKINSON	ND	58041
ERIN E NUSTVOLD		PO BOX 381	HEALY	AK	99743
MARK A & REBEKAH K SUMMER		11047 600TH AVE	HERMAN	MN	56248
RED ROCK PORK LLC	C/O TODD A DISTAD	3723 WESTRIDGE LANE SW	HOFFMAN	MN	56339
SCOTT & RACHELLE ANDERSON		6113 COUNTY ROAD 25 SW	HOFFMAN	MN	56339
CALVIN C SHERRETT		PO BOX 27	HOLMES CITY	MN	56341
PRAIRIE LAKES FARM LLC		918 12TH AVE STE 1000	HONOLULU	HI	96816
KASEY M WORRELL TRUST		249 HAWTHORNE RD	HOPKINS	MN	55343
WESTFIELD OF ALEXANDRIA LLC		13925 FENWAY BLVD	HUGO	MN	55038
JUDITH ANDERSON		23255 WENNERSBORG RD SW	KENSINGTON	MN	56343
LEGEND INVESTMENTS LLC		7214 LOON POINT DR SW	KENSINGTON	MN	56343
MAUREEN R SIMPSON &	ANTHONY J SIMPSON	20090 GAMMA LN	LAKEVILLE	MN	55044
GREGORY M & PAMELA A CARLSON	LIVING TRUST	19424 W DENTON ST	LITCHFIELD PARK	AZ	85340
C GENE RINDELAUB REVOC TRUST		2399 REIDMOND LANE	LITTLE CANADA	MN	55117
THOMAS J VAN BEUSEKOM TRUSTEE	THOMAS J VAN BEUSEKOM REV TRST	155 ELSEN STREET	LORETTO	MN	55357
PARADISE ON THE LAKE LLC		56900 243RD LN	MANKATO	MN	56001
BENJAMIN T FISHER		17847 77TH AVE N	MAPLE GROVE	MN	55311
HARRY D & KATHLEEN S THOMPSON		8813 PEONY LANE N	MAPLE GROVE	MN	55311-1321
JON & RINDA NORBERG		18898 100TH PL N	MAPLE GROVE	MN	55311
WAYNE A PETERSON		6755 EVERGREEN LANE N	MAPLE GROVE	MN	55369
JOSE A RODRIGUEZ		2121 JAY AVE	MCALLEN	TX	78504
BRIAN M & KAREN J BIRD		2206 APACHE ST	MENDOTA HIEGHTS	MN	55120
JESSE & BECKY YOUNG		3600 ADVENTURE LN NE	MILTONA	MN	56354
JESSE & REBECCA YOUNG		3600 ADVENTURE LN NE	MILTONA	MN	56354
JED D & ELIZABETH R LARKIN		5501 BRYANT AVE S	MINNEAPOLIS	MN	55419
DANIEL A & CHRISTINA K BRUSVEN		15518 MINNETONKA BLVD	MINNETONKA	MN	55345
FIFTH STREET INVESTMENTS LLC		7050 10TH AVE SW	MONTEVIDEO	MN	56265
JAMIE PAULING		7050 10TH AVE SW	MONTEVIDEO	MN	56265
HERITAGE HOLDINGS LLP		29677 US HIGHWAY 59	MORRIS	MN	56267
HIGHWAY AMOCO INCORPORATED		211 HWY 9 SOUTH	MORRIS	MN	56267
JOE RILEY CONSTRUCTION INC		20794 US HWY 59	MORRIS	MN	56267
LU ALAN F & SHAWN E ROHLOFF	LIVING TRUST	23171 469TH AVE	MORRIS	MN	56267
LYNN & MARK WOOLRIDGE		520 E 8TH ST	MORRIS	MN	56267
MORTON BUILDINGS INC		PO BOX 399	MORTON	IL	61550-0399
KAREN A COSSETTE TRUST		13105 VANDERBUILT DR UNIT 601	NAPLES	FL	34110
WM3D PROPERTIES LLC		9150 187TH AVE	NEW LONDON	MN	56273
ROBERT B & ELIZABETH NELSON		31160 171ST AVE	NEW PRAGUE	MN	56071
TEDDY J OSTERBAUER LIV TR ETAL		3584 GERSHWIN AVE N	OAKDALE	MN	55128
LAURA M KLUVER ETAL		130 CALVARY RD NE	OSAKIS	MN	56360
CRAIG & SUSAN CHAPMAN		6620 OAKWOOD AVE NE	OTSEGO	MN	55330
PRO-AG FARMERS COOPERATIVE		601 EAST SOO STREET STE A	PARKERS PRAIRIE	MN	56361
PAUL J & AMY R LORANG		121 3RD AVE SE	PIPESTONE	MN	56164
MICHAEL M & SUSAN M BREDECK		106 SUNSET DRIVE	PRINSBURG	MN	56281
CRAIG A SCHNELLER		3166 YUKON DR	PT CHARLOTTE	FL	33948
DEAL FAMILY HOLDINGS LLC		7533 SUNWOOD DR SUITE 315	RAMSEY	MN	55303
CRUISIN EAGLE PROPERTIES LLC		102 BABCOCK AVE W	RAYMOND	MN	56282
NUSTAR PIPELINE OPERATING PART	C/O KE ANDREWS	2424 RIDGE ROAD	ROCKWALL	TX	75087
MITCHELL T HOFSTEDT		12500 OTTO ST	ROGERS	MN	55374
STUART D & LYNN M COURNEYA		10605 ROBERT LANE	ROGERS	MN	55374
SUSAN K FOSLIEN		3683 SACRAMENTO ST	SAN FRANCISCO	CA	94118
DAVID LARSON ETAL		2788 MOSS OAK DR	SARASOTA	FL	34231
DICK FAMILY REAL ESTATE LLC		PO BOX 457	SAUK RAPIDS	MN	56379
FAH 501 LLC		8633 EAGLE CREEK PKWY	SAVAGE	MN	55378
WILLIAM M & ELIZABETH M BOYLE	REV TRUST ETAL	13573 QUENTIN AVE S	SAVAGE	MN	55378
WESTERN MINNESOTA MUNICIPAL	POWER AGENCY	PO BOX 88920	SIoux FALLS	SD	57109-8920
ALEX MINNESOTA PROPERTIES LLC	C/O PAN-O-GOLD BAKING CO	PO BOX 848	ST CLOUD	MN	56302-0848
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BRIAN L BASTIAN		6014 18TH ST N	ST CLOUD	MN	56303-0202
DONALD B & JANET I SKUDLAREK		1031 29 AVE N	ST CLOUD	MN	56303-2333
J2 HOLDINGS LLC		1805 MAPLE LN	ST CLOUD	MN	56304
TIMOTHY A & NOLA K TILLER	TRUSTEES OF THE	1017 MANSFIELD RD	ST JOSEPH	MO	64504
TAMMY THIEL		5098 JANA CT NE	ST MICHAEL	MN	55376
MN DEPT OF NAT'L RESOURCES	OF REAL ESTATE MGT	500 LAFAYETTE RD	ST PAUL	MN	55155
STATE OF MINNESOTA	DNR LAND BUREAU	500 LAFAYETTE RD, PO BOX 45	ST PAUL	MN	55155
VIRGINIA L LARSON ETAL		50 CRETIN AVE S APT 306	ST PAUL	MN	55105
BONNIE K & JOHN M HOLUB		9 SALEM LANE	SUNFISH LAKE	MN	55118
LANCE F & NANCY JO KRACHT		7447 STATE HWY 27	WHEATON	MN	56296
ALEXANDRA K LINDGREN		1967 4TH ST	WHITE BEAR LAKE	MN	55110
EILEEN J GRUNDSTROM REVOC TRST		4859 MOREHEAD AVE	WHITE BEAR LAKE	MN	55110
JOHN L THIERY REVOC TRUST ETAL		790 45TH ST NW	WILLMAR	MN	56201
DAVID K JESERITZ TRUST ETAL		2119 560TH STREET	WOOD LAKE	MN	56297
TIMOTHY E WIELAND TRUSTEE OF	JILL R WIELAND REVOCABLE TRUST	10619 WATER LILY TER	WOODBURY	MN	55129-8200
MATTHEW D & MELINDA M MC KAY		7146 260TH ST	WYOMING	MN	55092
STATE OF MN HELD IN TRUST	TAX FORFEITURE				
WESTERN MN MUNICIPAL POWER	AGENCY				

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ELLINGSON/ARLIE V & LOU ANN/LE		4403 PIONEER RD SE APT 290	ALEXANDRIA	MN	56308
ALVSTAD/STEVEN		28661 140TH AVE	ASHBY	MN	56309
ASHBY EQUITY ASSOCIATION		P O BOX 40	ASHBY	MN	56309
B.E.D. TRUST		28213 120TH AVE	ASHBY	MN	56309
BALGAARD SVCS RE HOLDINGS LLC	HARLAN BALGAARD	30728 W HAVEN ROAD	ASHBY	MN	56309
BRICKER/BOBBI K		28111 ASHBY ESTATES ROAD W	ASHBY	MN	56309
COUNTRY BIBLE CHURCH		P.O. BOX 58	ASHBY	MN	56309
DRIGGINS/JONATHAN A		13797 310TH ST	ASHBY	MN	56309
ELLIS/DEAN		11078 270TH ST	ASHBY	MN	56309
ELLIS/DEAN & VICKI		11078 270TH ST	ASHBY	MN	56309
EVENSON/EDWIN		15081 CO RD 4	ASHBY	MN	56309
FITZSIMMONS/RUDY J		12104 290TH ST	ASHBY	MN	56309
FOSBERG/GARY & JUDY		15503 COUNTY RD 4	ASHBY	MN	56309
HALENA/GORDON & BETTY		30461 150TH AVE	ASHBY	MN	56309
HAMMER FAMILY PARTNERSHIP		27744 120TH AVE	ASHBY	MN	56309
HAMMER/GERI RAE & DAVID D		15064 320TH ST	ASHBY	MN	56309
HANSON/MICHAEL D		14909 310TH ST	ASHBY	MN	56309
HANSON/MICHAEL D & DENISE L		14909 310TH ST	ASHBY	MN	56309
HAWN/WILLIAM J & BONNIE L		28173 ASHBY ESTATES RD W	ASHBY	MN	56309
HOKANSON/CALEB		27995 110TH AVENUE	ASHBY	MN	56309
HOKANSON/JOEL & TIFFANY		11559 270TH ST	ASHBY	MN	56309
HOKANSON/SILAS/& LEAH HANSON		13764 300TH ST	ASHBY	MN	56309
HOLTE/JENNIFER MARIE		14978 COUNTY RD 4	ASHBY	MN	56309
JOHNSON/SCOTT		10907 PHILLIPS PT RD	ASHBY	MN	56309
LANG/ANDREW & LOUISE		11667 BIG ISLAND RD	ASHBY	MN	56309
LARSON/ROBERT J & MELISSA K		15086 CO RD 4	ASHBY	MN	56309
MCMAHON/KATHRYN		29188 STATE HWY 78	ASHBY	MN	56309
MICKELSEN/CALLY R & KYLE C		14981 CO RD 4	ASHBY	MN	56309
MOERKE/SHANNON R/ETAL	ROBERT L MOERKE	30336 150TH AVE	ASHBY	MN	56309
NELSON/BEVERLY J/TRUST ETAL	C/O GARY NELSON	12285 280TH ST	ASHBY	MN	56309
NELSON/DEVIN JON JAMES		28579 STATE HWY 78	ASHBY	MN	56309
NELSON/GARY & JANICE		12285 280TH ST	ASHBY	MN	56309
NELSON/HARLAN E & KAREN L		14420 270TH ST	ASHBY	MN	56309
RISBRUDT/JANICE		14897 CO RD 4	ASHBY	MN	56309
RISBRUDT/PETER & JANICE		14897 CO RD 4	ASHBY	MN	56309
ROBERTSON/HELEN		PO BOX 253	ASHBY	MN	56309
SMITH/DONITA		27784 110TH AVE	ASHBY	MN	56309
SORENSEN/RYAN		14895 CO RD 4	ASHBY	MN	56309
WINKELS/ELIZABETH		15196 CO RD 4	ASHBY	MN	56309
U S FISH & WILDLIFE	DIVISION OF REALTY	5600 AMERICAN BLVD W SUITE 990	BLOOMINGTON	MN	55437
NELSON/JONATHAN H & TAMARA M		10455 CO RD 16 NW	BRANDON	MN	56315
ANDERSON FARMS PARTNERSHIP LLC		5917 71ST AVE N	BROOKLYN PARK	MN	55429
ELLINGSON/GREG		13447 CO HWY 35	DALTON	MN	56324
FISHER/MILO		29339 100TH ST	DALTON	MN	56324

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GGR FARMS LLLP	ROBERT J THORMODSON	15134 CO HWY 35	DALTON	MN	56324
SOLAND/KNUTE PETER		15517 CO RD 26	DALTON	MN	56324
HERITAGE LEGACY FARMS LLC		9607 OLYMPIA DRIVE	EDEN PRAIRIE	MN	55347
JOHNSON TR/THEODORE A	THEODORE & RITA JOHNSON TSTEEES	16787 WHITTINGTON WALK	EDEN PRAIRIE	MN	55346
JOHNSON/THEO A		16787 WHITTINGTON WALK	EDEN PRAIRIE	MN	55346
BENGTSON/DONALD		115 6TH AVE SE	ELBOW LAKE	MN	56531
BENGTSON/DONALD/& BEARDSLEY TR		115 6TH AVE SE	ELBOW LAKE	MN	56531
DYNAQUEST LLC		14012 STATE HWY 79	ELBOW LAKE	MN	56531
ERICKSON-WILLIAMS VENTURES LLC		14779 255TH ST	ELBOW LAKE	MN	56531
LADWIG/CHARLES/& DE-LORES FOSS	C/O CHARLES LADWIG	19605 325TH ST	ELBOW LAKE	MN	56531
MEAGHER/J L/RLT UAD	TIPPERARY-KERRY FARMS	31636 160TH AVE	ELBOW LAKE	MN	56531
MICKELSON/KURTIS & MEGAN		32863 CO RD 20	ELBOW LAKE	MN	56531
MICKELSON/KURTIS & RILEY		32863 CO RD 20	ELBOW LAKE	MN	56531
MICKELSON/VINCENT & KARLA J		18346 322ND ST	ELBOW LAKE	MN	56531
OLSON/JOHN & LORI		26525 210TH AVE	ELBOW LAKE	MN	56531
RUPP REAL ESTATE HOLDINGS LLC		PO BOX 86	ELBOW LAKE	MN	56531
WIESE/TIMOTHY D		27211 230TH AVE	ELBOW LAKE	MN	56531
NELSON/STEPHANIE A		454 MAIN STREET, PO BOX 385	EVANSVILLE	MN	56326
BEARDSLEY/ROBERT D & JOANN/TST	ROBERT & JOANN M BEARDSLEY TSE	2216 SW 307TH ST	FEDERAL WAY	WA	98023
COLEMAN/DONALD L & PATRICIA		6555 TIPSICO LAKE RD	HOLLY	MI	48442
TOBOLT/DAVID & SUZANNE		10080 QUAKER LANE	MAPLE GROVE	MN	55369
KILKER/THE/FAMILY REV LIV TRST	DARRELL/WILMA KILKER,TRUSTEES	4261 ABBOTT AVE N	MINNEAPOLIS	MN	55422
HANSON FAMILY FARMS LP	AUDREY HANSON	1414 LIBRA STREET	MISSION	TX	78572
HANSON/AUDREY K		1414 LIBRA STREET	MISSION	TX	78572
BARBER/ARLENE/& ARLIN A OLSON	ARLENE BARBER	3306 VILLAGE GREEN BLVD APT104	MOORHEAD	MN	56560
KVISTERO DISCLAIMER TRUST	ALLAN & KEVIN KVISTERO TRSTEEES	19790 JACKIE LANE	ROGERS	MN	55374
HAMMER/RANDY/ETAL		18506 2ND AVENUE E	SPANAWAY	WA	98387
STEINKE/KAREN		12826 43RD ST NE	ST MICHAEL	MN	55376
STARKEY/CARSON I/ETAL		642 HILLWOOD COURT	ST. PAUL	MN	55119
JONES/ANN R/RLT	ANN R JONES TRUSTEE	10015 W ROYAL OAK ROAD APT 311	SUN CITY	AZ	85351
ZWIRN/A.M./REV TRUST TRUSTEES	ANNA M ZWIRN	1094 SCARBOROUGH LANE	WOODBURY	MN	55125

OTTER TAIL COUNTY					
Owner 1	Owner 2	Address	City	State	Zip
NICHOLAS S PROTHERO	NICHOLAS S PROTHERO	100 E MAIN ST	ADA	MN	56510
FF APARTMENT DEVELOPERS LLC ET AL	NORTH BRANCH RETAIL LLC	3155 PIONEER RD SE	ALEXANDRIA	MN	56308
HOWARD W FREMLING TST	RACHEL D FREMLING TSTEE	1258 WESTBROOK CIR	ALEXANDRIA	MN	56308
JUSTIN STOCK	JUSTIN STOCK	130 WILLIMANTIC DR NW	ALEXANDRIA	MN	56308
KIMBERLY ST ANA HOFFMAN	KIMBERLY ST ANA HOFFMAN	296 CIMARRON RD	APPLE VALLEY	MN	55124
HANSEL LAKE FARM LLC	HANSEL LAKE FARM LLC	38045 COUNTY HIGHWAY 64	ASHBY	MN	56309
HELEN ROBERTSON	HELEN ROBERTSON	PO BOX 253	ASHBY	MN	56309
BJ JOHNS LLC/PERKINS LLC	BJ JOHNS LLC/PERKINS LLC	5901 PEACHTREE DUNWOODY RD NE SUITE B450	ATLANTA	GA	30328
FRANCHISE ASSOCIATES LLC	FRANCHISE ASSOCIATES LLC	THREE GLENLAKE PKWY	ATLANTA	GA	30328
RICHARD A SCHAULS ET AL	UAJIT A WALDEN	1697 CEDAR MILL DR	AVON	IN	46123
OLAF & CLARICE NELSON REV TST	OLAF & CLARICE NELSON REV TST	PO BOX 392	BARNESVILLE	MN	56514
JON B SWARTS	JON B SWARTS	35261 TURNER DR	BATTLE LAKE	MN	56515
SCOTT R HANSTAD	SCOTT R HANSTAD	14632 355TH AVE	BATTLE LAKE	MN	56515
SW PROPERTIES LLC	SW PROPERTIES LLC	27658 COUNTY HIGHWAY 83	BATTLE LAKE	MN	56515
TIMOTHY W MCCARTE	KAROLYN A MCCARTE	40390 COUNTY HIGHWAY 128	BATTLE LAKE	MN	56515
CHRISTOPHER L SONMOR ET AL	LARRY R SONMOR	14691 LYNNDAL DR	BAXTER	MN	56425
WALMART REAL ESTATE BUS TST	WALMART REAL ESTATE BUS TST	PO BOX 8050 MS 0555	BENTONVILLE	AR	72716
CAROLYN & TRUMAN EGGUM TSTS	TRUMAN EGGUM TST	1020 STRAWBERRY AVE	BILLINGS	MT	59105
BRIAN D BRADY LVG TST	BRIAN D BRADY LVG TST	5004 MELLOWSDUN DR	BISMARCK	ND	58503
DANA CLAIRMONT	DANA CLAIRMONT	PO BOX 209	BISMARCK	ND	58502
MDU RESOURCES GROUP INC	MDU RESOURCES GROUP INC	400 N FOURTH ST	BISMARCK	ND	58501
UNITED STATES OF AMERICA	US FISH & WILDLIFE SERVICE	5600 AMERICAN BLVD W SUITE 990	BLOOMINGTON	MN	55437
UNITED STATES OF AMERICA	DIVISION OF REALTY	5600 AMERICAN BLVD W SUITE 990	BLOOMINGTON	MN	55437
US FISH & WILDLIFE SERVICE	US FISH & WILDLIFE SERVICE	5600 AMERICAN BLVD W SUITE 990	BLOOMINGTON	MN	55437
RIVERBEND TRAIL LLC	RIVERBEND TRAIL LLC	201 RIVERBEND TRL	BRECKENRIDGE	MN	56520
STEVEN P CARLSON	JENNIFER L CARLSON	38 ELM ST	CANAL WINCHESTER	OH	43110
TAMI L GEHRKE	TAMI L GEHRKE	102 5TH AVE N, PO BOX 828	CASSELTON	ND	58012
JODI L REISCHL	JODI L REISCHL	5842 NATOMA AVE N	CHICAGO	IL	60631
RYAN & KELLI DUNN FAM TST	RYAN & KELLI DUNN FAM TST	47901 ROCKY LEDGE RD	CORONA	SD	57227
TIMOTHY P BRENNAN LVG TST	TIMOTHY P BRENNAN LVG TST	1115 RIDGEVIEW CT	COUNCIL BLUFFS	IA	56537
ADAM B BARRY	CHALSEY M BARRY	15312 TUMULI RD	DALTON	MN	56324
ALLEN KRUMP	LORNA KRUMP	27589 115TH ST	DALTON	MN	56324

OTTER TAIL COUNTY					
Owner 1	Owner 2	Address	City	State	Zip

LANDOWNERS

ANNA JOSEPHS	ANNA JOSEPHS	16555 COUNTY HIGHWAY 29	DALTON	MN	56324
BARBARA FINKELSON & K PETER	KATHERINE A PETER	115 MAIN ST E	DALTON	MN	56324
BRANDON M TWEED	BRANDON M TWEED	13658 OBRIEN LN	DALTON	MN	56324
CAROL M HANSON	CAROL M HANSON	14974 TUMULI RD	DALTON	MN	56324
CAROL MARIE HANSON TST	CAROL MARIE HANSON TST	14974 TUMULI RD	DALTON	MN	56324
CHAD S PETERSON	CHAD S PETERSON	26591 125TH ST	DALTON	MN	56324
CHRISTOPHER D ECKER	CHRISTOPHER D ECKER	15383 COUNTY HIGHWAY 39	DALTON	MN	56324
CHRISTOPHER MARK	CHRISTOPHER MARK	17463 COUNTY HIGHWAY 35	DALTON	MN	56324
DANA BEVINS	DANA BEVINS	27747 115TH ST	DALTON	MN	56324
DARYL A BERGERSON	VICKIE J BERGERSON	13685 COUNTY HIGHWAY 35	DALTON	MN	56324
DEAN A SONMOR	SHERRI D SONMOR	16171 COUNTY HIGHWAY 33	DALTON	MN	56324
DONALD R MOEBIUS	JOYCE A MOEBIUS	13613 OBRIEN TRL	DALTON	MN	56324
EDWARD A LARKIN	KAREN Y LARKIN	27368 123RD ST	DALTON	MN	56324
EVANGELICAL LUTHERAN	ATTN JEREMY ERICKSON	15713 253RD AVE	DALTON	MN	56324
HANSEL LAKEVIEW FARMS LLC	BRIAN J HANSEL	120 SUNSET DR	DALTON	MN	56324
JAMES A JORGENS	JEANETTE O JORGENS	16263 COUNTY HIGHWAY 29	DALTON	MN	56324
JANICE E AMUNDSON	JANICE E AMUNDSON	11060 275TH AVE	DALTON	MN	56324
JEREMY FRONNING	JEREMY FRONNING	31301 135TH ST	DALTON	MN	56324
JEREMY J ERICKSON	GERALD ERICKSON	15268 TUMULI RD	DALTON	MN	56324
JESSE SCHMIDGALL	TREANNE SCHMIDGALL	12889 COUNTY HIGHWAY 35	DALTON	MN	56324
JOEL A HOLTE	HEIDI R HOLTE	27376 CLEAR LAKE DR	DALTON	MN	56324
JUSTIN L OHREN	ASHLEY J OHREN	24663 ROSE VIEW DR	DALTON	MN	56324
KENNETH SCHMIDT & W SCHROEDER	KENNETH SCHMIDT & W SCHROEDER	26986 125TH ST	DALTON	MN	56324
KEVIN PETERSEN	MARCY PETERSEN	27402 CLEAR LAKE DR	DALTON	MN	56324
LINDA M SALVEVOLD	LOWELL SALVEVOLD	11057 275TH AVE	DALTON	MN	56324
LYNNETTE NELSON ET AL	LORI L THORSEN	15876 STALKER BAY RD	DALTON	MN	56324
MAEVE HAARSTAD	MAEVE HAARSTAD	13370 COUNTY HIGHWAY 35	DALTON	MN	56324
MARK A TAYLOR	MARK A TAYLOR	15213 COUNTY HIGHWAY 82	DALTON	MN	56324
MATTHEW P YAVAROW	MATTHEW P YAVAROW	27370 CLEAR LAKE DR	DALTON	MN	56324
MATTHEW R CEDERBERG	REBECCA A CEDERBERG	13788 NORWAY PINE RD	DALTON	MN	56324
NICHOLAS C HEETER	CARISSA L HEETER	13451 COUNTY HIGHWAY 35	DALTON	MN	56324
NOLAN MOEBIUS	DELORES M MOEBIUS	13676 FIRESIDE DR	DALTON	MN	56324
PAMELA LARSON ET AL	NANCY LARSON	27121 100TH ST	DALTON	MN	56324
PAUL STARIN	PAUL STARIN	10925 275TH AVE	DALTON	MN	56324
RANDY J KALLHOFF	MONICA M KALLHOFF	12013 273RD AVE	DALTON	MN	56324
RAYMOND & JANET NORRGARD ET AL	DAVID S JOHNSON	24717 ROSE VIEW DR	DALTON	MN	56324
RAYMOND A NORRGARD	JANET A NORRGARD	24717 ROSE VIEW DR	DALTON	MN	56324
REUBEN JOHANSEN	CAROLYN JOHANSEN	11468 273RD AVE	DALTON	MN	56324
ROBERT FOSSAN	SHEILA FOSSAN	15099 COUNTY HIGHWAY 82	DALTON	MN	56324
RODNEY F MOEBIUS REV LVG TST	RODNEY F MOEBIUS REV LVG TST	28143 100TH ST	DALTON	MN	56324
RODNEY L FINKELSON	NADINE J FINKELSON	27428 CLEAR LAKE DR	DALTON	MN	56324
ROY A GENZ	JULIE A GENZ	12357 273RD AVE	DALTON	MN	56324
SHANE A FINKELSON	ECHO J FINKELSON	12572 273RD AVE	DALTON	MN	56324
SHAWN P ROBINSON	SHAWN P ROBINSON	24679 ROSE VIEW DR	DALTON	MN	56324
STEVEN A ANDERSON	SHAREN M ANDERSON	25426 VEITENHEIMER RD	DALTON	MN	56324
TEN MILE LAKE LUTH CEM ASSOC	LUTHERAN CEMETARY ASSOC	PO BOX 158	DALTON	MN	56324
TERRY ELLINGSON	GREG A ELLINGSON	13447 COUNTY HIGHWAY 35	DALTON	MN	56324
THOMAS A GIZA	ROXANN M GIZA	13923 NORWAY PINE RD	DALTON	MN	56324
THOMAS D STOCKINGER	MARGARET J STOCKINGER	16354 COUNTY HIGHWAY 29	DALTON	MN	56324
THOMAS J AMUNDSON	JANICE E AMUNDSON	11060 275TH AVE	DALTON	MN	56324
TUEL FAM REV TST	KRISTIN A TUEL TSTEE	16553 COUNTY HIGHWAY 29	DALTON	MN	56324
WILLARD C NELSON REV TST ET AL	BARBARA J NELSON REV LIV TST	28501 120TH ST	DALTON	MN	56324
WILLIAM K SONMOR	REBECCA SONMOR	13941 NORWAY PINE RD	DALTON	MN	56324
RONALD J BINSFELD	MARLENE E BINSFELD	630 50TH ST SE	DEGRAFF	MN	56271
NORTHWESTERN BELL TEL CO	NORTHWESTERN BELL TEL CO	931 14TH ST	DENVER	CO	80202
DAVE FOLTZ	DAVE FOLTZ	19279 RIDGE RD N	DETROIT LAKES	MN	56501
GEORGE & NANCY CUMMINGS TST	GEORGE & NANCY CUMMINGS TST	325 MAPLE DR	DETROIT LAKES	MN	56501
STATE OF MINNESOTA	STATE OF MINNESOTA	1000 HIGHWAY 10 W	DETROIT LAKES	MN	56501
NORTHLAND INVESTMENTS LLC ETAL	NORTHLAND INVESTORS LLC	3112 GOLF RD	EAU CLAIRE	WI	54701
GILLESPIE FAMILY PTNRSHSP	GILLESPIE FAMILY PTNRSHSP	PO BOX 233	ELBOW LAKE	MN	56531
THEODORE H MYRON	JANE S MYRON	32869 230TH AVE	ELBOW LAKE	MN	56531
VINCENT S MICKELSON	KARLA MICKELSON	18346 322ND ST	ELBOW LAKE	MN	56531
OSCAR TOWNSHIP	OSCAR TOWNSHIP	15757 300TH ST	ELIZABETH	MN	56533
RICHARD A LEWIS	LAVONNE D LEWIS	15876 280TH ST	ELIZABETH	MN	56533
SKISTAD FAM TST	SKISTAD FAM TST	28068 160TH AVE	ELIZABETH	MN	56533
SKISTAD FAMILY TST ET AL	DAVID & NOREEN STIGEN FAM TST	28068 160TH AVE	ELIZABETH	MN	56533
WILDE FAMILY REV LIV TST	WILDE FAMILY REV LIV TST	16552 COUNTY HIGHWAY 118	ELIZABETH	MN	56533
OTTER TAIL COUNTY					
Owner 1	Owner 2	Address	City	State	Zip

LANDOWNERS

ANN V ANDERSON	ANN V ANDERSON	35628 180TH AVE	ERHARD	MN	56534
CECIL I MOSHER	PENNY MOSHER	32488 HEILBERGER DR	ERHARD	MN	56534
CLIFFORD O MOEN	CLIFFORD O MOEN	32557 CLAY BANK RD	ERHARD	MN	56534
JANICE K TROSVIG REV LVG TST	JANICE K TROSVIG REV LVG TST	25782 COLLINS RD	ERHARD	MN	56534
AMIN LTD PTNRSHIP	APPLE CORE ENTERPRISES INC	PO BOX 9013	FARGO	ND	58106
I94 PROPERTIES LLC	I94 PROPERTIES LLC	PO BOX 9531	FARGO	ND	58106
KLAERS CORP INC	KLAERS CORP INC	1025 38TH ST SW # 208	FARGO	ND	58103
PROFFUTT LTD PTNRSHIP	PROFFUTT LTD PTNRSHIP	PO BOX 7010	FARGO	ND	58106
STETSON VILLAGE APARTMENTS LLC	STETSON VILLAGE APARTMENTS LLC	4654 AMBER VALLEY PKWY S	FARGO	ND	58104
SWANSTON EQUIPMENT CORPORATION	SWANSTON EQUIPMENT CORPORATION	3450 MAIN AVE	FARGO	ND	58103
STEVEN J LERBAKKEN ET AL	KIMBERLY A LERBAKKEN	19375 EUREKA CT	FARMINGTON	MN	55024
STEVEN J LERBAKKEN ET AL	LORI A ANDERSON	19375 EUREKA CT	FARMINGTON	MN	55024
108 LYDIA LANE LLC	108 LYDIA LANE LLC	1802 LYDIA LANE DR	FERGUS FALLS	MN	56537
AASE LIVING TST	AASE LIVING TST	105 LAURA LN	FERGUS FALLS	MN	56537
ALCOT LLC	ALCOT LLC	416 ALCOTT AVE W	FERGUS FALLS	MN	56537
ALLAN & PATRICIA HOFF TSTS	PATRICIA K HOFF REV LIV TST	15647 215TH AVE	FERGUS FALLS	MN	56537
AMERICAN NATIONAL BANK OF MN	AMERICAN NATIONAL BANK OF MN	727 WESTERN AVE	FERGUS FALLS	MN	56537
AMUND ACRES LLP	AMUND ACRES LLP	23735 SCENIC RIVERVIEW DR	FERGUS FALLS	MN	56537
ANDEEN PROPERTIES LLC	ANDEEN PROPERTIES LLC	402 WESTERN AVE	FERGUS FALLS	MN	56537
ANDERSON FAMILY REV LIV TST	ANDERSON FAMILY REV LIV TST	24721 160TH AVE	FERGUS FALLS	MN	56537
ANDREW C JASKEN	LAURA K JASKEN	112 TWO RIVERS RD	FERGUS FALLS	MN	56537
ANDREW C MILLER	ANDREW C MILLER	1110 DOUGLAS AVE W	FERGUS FALLS	MN	56537
ANDREW J CASEY	SARAH L CASEY	208 TWO RIVERS RD	FERGUS FALLS	MN	56537
ANDREW SWEDBERG	JESSICA SWEDBERG	17156 RIVER OAKS LN	FERGUS FALLS	MN	56537
ANGELA K CRUMMY	ANDREW M CRUMMY	204 TWO RIVERS RD	FERGUS FALLS	MN	56537
ANTHONY K GETTEL	MARGARET T GETTEL	755 WILDWOOD TRL	FERGUS FALLS	MN	56537
ANTHONY R GEORGESON	ANTHONY R GEORGESON	20266 COPPER LANDING DR	FERGUS FALLS	MN	56537
ARTHUR A CHRISTENSON	BETTY J CHRISTENSON	25333 COUNTY HIGHWAY 88	FERGUS FALLS	MN	56537
ARVID R STRANDE	CHERYL A STRANDE	14369 COUNTY HIGHWAY 10	FERGUS FALLS	MN	56537
ARVIN BUCHHOLZ SR	ARVIN BUCHHOLZ SR	106 LYDIA LN	FERGUS FALLS	MN	56537
ATLAS HOMES LLC	ATLAS HOMES LLC	815 BEECH AVE W	FERGUS FALLS	MN	56537
AUSETH FAMILY REV LIVING TST	AUSETH FAMILY REV LIVING TST	16889 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
BAHA RENTALS LLC	BAHA RENTALS LLC	1010 FRONTIER DR SUITE 103	FERGUS FALLS	MN	56537
BARBARA J SMITH REV LVG TST	BARBARA J SMITH REV LVG TST	400 KENNEDY PARK CIR APT 201	FERGUS FALLS	MN	56537
BEAU KRUEGER	BEAU KRUEGER	23147 BIG CHIEF RD	FERGUS FALLS	MN	56537
BECKY A SCHWARZHOFF	ALEXANDER C SCHWARZHOFF	1112 TOWER RD S	FERGUS FALLS	MN	56537
BENJAMIN C KIMBALL ET AL	BRADLEY C KIMBALL	2203 ARROWOOD CT	FERGUS FALLS	MN	56537
BERGE FAMILY REV LIVING TST	BERGE FAMILY REV LIVING TST	17195 RIVER OAKS LN	FERGUS FALLS	MN	56537
BESKE FAMILY TST	BESKE FAMILY TST	25299 150TH AVE	FERGUS FALLS	MN	56537
BEVERLY ROGNESS REV LIV TST	BEVERLY ROGNESS REV LIV TST	1002 CLEARVIEW CT	FERGUS FALLS	MN	56537
BEVERLY SVENDSGAARD	DALE SVENDSGAARD	20829 COUNTY HIGHWAY 15	FERGUS FALLS	MN	56537
BIG CHIEF INC	BIG CHIEF INC	22518 BIG CHIEF RD	FERGUS FALLS	MN	56537
BLAINE RASMUSSEN	BLAINE RASMUSSEN	10698 280TH ST	FERGUS FALLS	MN	56537
BRADLEY D OLSON	BRADLEY D OLSON	20618 189TH ST	FERGUS FALLS	MN	56537
BRADLEY J LAPORTE	SHARON M LAPORTE	21900 RIVER OAKS DR	FERGUS FALLS	MN	56537
BRADLEY L SCHMIDT	REBECCA M SCHMIDT	26239 160TH AVE	FERGUS FALLS	MN	56537
BRENT A NELSON	LAUREL K NELSON	PO BOX 635	FERGUS FALLS	MN	56538
BRIAN P JENC	KIMBERLY A JENC	1728 ALCOTT AVE W	FERGUS FALLS	MN	56537
BRIAN QUERNEMOEN	ELIZABETH J QUERNEMOEN	18470 SILVER RIDGE RD	FERGUS FALLS	MN	56537
BRIAN SHORES	RENEE SHORES	111 LAURA LN	FERGUS FALLS	MN	56537
BRIAN VOSE	BRIAN VOSE	17034 LITTLE CHIEF TRL	FERGUS FALLS	MN	56537
BRIAN WING & REBECCA MOE	REBECCA MOE	21696 175TH ST	FERGUS FALLS	MN	56537
BRUCE T TYSVER	LORI J TYSVER	1118 WESTSIDE DR	FERGUS FALLS	MN	56537
BRYAN ALLEN BECKMAN	BRYAN ALLEN BECKMAN	1106 RIDGEVIEW CT	FERGUS FALLS	MN	56537
BRYAN G HEIDBRINK	LAURA HEIDBRINK	16630 COUNTY HIGHWAY 116	FERGUS FALLS	MN	56537
CANDACE A OLSON	CANDACE A OLSON	20551 189TH ST	FERGUS FALLS	MN	56537
CASEY LEITCH	CASEY LEITCH	201 KRISTIN CT	FERGUS FALLS	MN	56537
CEDAR PARK CLUB	CEDAR PARK CLUB	17769 CEDAR PARK LOOP	FERGUS FALLS	MN	56537
CHAD I WILLSON	CHAD I WILLSON	2025 ALCOTT AVE W	FERGUS FALLS	MN	56537
CHARLOTTE A DALE	CHARLOTTE A DALE	1110 WILLIAMS AVE	FERGUS FALLS	MN	56537
CHRIS G CLARK	LINDSEY CLARK	21188 IVERSON LAKE RD	FERGUS FALLS	MN	56537
CHRISTINE L KOTSCHAVAR	CHRISTINE L KOTSCHAVAR	1045 VERILN LN	FERGUS FALLS	MN	56537
CHRISTOPHER BUTTKE	CHRISTOPHER BUTTKE	1314 WILLIAMS AVE	FERGUS FALLS	MN	56537
CHRISTOPHER H HARIG	AMANDA J HARIG	17062 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
CHRISTOPHER HAKEN	STEPHANIE HAKEN	17255 RIVER OAKS LN	FERGUS FALLS	MN	56537
CHRISTOPHER KNUDSON	LANCE KNUDSON	31661 PALER RD	FERGUS FALLS	MN	56537
CHRISTOPHER R HAMILTON	CHRISTOPHER R HAMILTON	1403 NICOLE CT	FERGUS FALLS	MN	56537
OTTER TAIL COUNTY					
Owner 1	Owner 2	Address	City	State	Zip

LANDOWNERS

FOSS LIVING TST	FOSS LIVING TST	1320 NICOLE CT	FERGUS FALLS	MN	56537
FRANCIS W ZIELIN	CHARLOTTE L ZIELIN	118 TWO RIVERS RD	FERGUS FALLS	MN	56537
FRANK E & JOAN M HAATAJA TSTS	JOAN M HAATAJA REV LIV TST	19100 195TH AVE	FERGUS FALLS	MN	56537
FRIEDRICH FAM LIV TST	SHAROLD M FRIEDRICH TSTEE	17277 230TH ST	FERGUS FALLS	MN	56537
FRONNING FAMILY REV LIV TST	FRONNING FAMILY REV LIV TST	18898 COUNTY HIGHWAY 82	FERGUS FALLS	MN	56537
FRONTIER VENTURES LLC	FRONTIER VENTURES LLC	1120 FRONTIER DR	FERGUS FALLS	MN	56537
GAIL C GUDIM	GAIL C GUDIM	19499 195TH AVE	FERGUS FALLS	MN	56537
GARY & KATHY JOHNSON TST	GARY & KATHY JOHNSON TST	113 ANDREW DR	FERGUS FALLS	MN	56537
GARY TOMHAVE	GORDON & G TOMHAVE TST	2517 DEERFIELD DR	FERGUS FALLS	MN	56537
GARY W QUAMME	GARY W QUAMME	1307 WILLIAMS AVE	FERGUS FALLS	MN	56537
GAYLORD & BETTE RACHELS TST	BETTE J RACHELS TSTEE	20856 IVERSON LAKE RD	FERGUS FALLS	MN	56537
GEORGE P III BARRETT	JOYCE BARRETT	107 LAURA LN	FERGUS FALLS	MN	56537
GERALD C PETERSON	CHRISTINE I PETERSON	20789 COUNTY HIGHWAY 1	FERGUS FALLS	MN	56537
GERALD J POLEJEWSKI	ANGELA M POLEJEWSKI	18642 COUNTY HIGHWAY 25	FERGUS FALLS	MN	56537
GERALD THORSON	SHANTEL THORSON	17502 220TH AVE	FERGUS FALLS	MN	56537
GLEN M MELBY	ARLENE J MELBY	718 TOWER RD S	FERGUS FALLS	MN	56537
GOOD SHEPHERD LUTHERAN CHURCH	GOOD SHEPHERD LUTHERAN CHURCH	515 WESTERN AVE	FERGUS FALLS	MN	56537
GORDON & G TOMHAVE TST	GORDON & G TOMHAVE TSTEE	2515 DEERFIELD DR	FERGUS FALLS	MN	56537
GORDON L RASMUSSEN	ANNA E RASMUSSEN	23043 BIG CHIEF RD	FERGUS FALLS	MN	56537
GRANT THOMAS ANDERSON	DAWN CHRISTINE ANDERSON	1905 FIR AVE E	FERGUS FALLS	MN	56537
GREEN PLAINS OTTER TAIL LLC	GREEN PLAINS OTTER TAIL LLC	24096 170TH AVE	FERGUS FALLS	MN	56537
GREGORY & EDIE COLLINS REV TST	GREGORY & EDIE COLLINS REV TST	11851 COUNTY HIGHWAY 25	FERGUS FALLS	MN	56537
GREGORY D SMITH	SHERI L SMITH	19290 195TH AVE	FERGUS FALLS	MN	56537
GREGORY J RAUSCH	KATHLEEN F RAUSCH	17239 RIVER OAKS LN	FERGUS FALLS	MN	56537
HANS A & R M RONNEVIK TSTS	RACHEL M RONNEVIK TST	13855 280TH ST	FERGUS FALLS	MN	56537
HAROLD NEUMAN	HAROLD NEUMAN	809 ALCOTT AVE W	FERGUS FALLS	MN	56537
HARVEY K SELF	HARVEY K SELF	100 KENNEDY PARK CIR APT 306	FERGUS FALLS	MN	56537
HEINERT FAMILY TST	ROBERT L HEINERT	121 TWO RIVERS RD	FERGUS FALLS	MN	56537
HELLAND FAMILY REV LIVING TST	HELLAND FAMILY REV LIVING TST	510 UNION AVE N	FERGUS FALLS	MN	56537
HOLLY BUSETH	HOLLY BUSETH	100 KENNEDY PARK CIR # 204	FERGUS FALLS	MN	56537
HOLMEN FAMILY REV LIVING TST	HOLMEN FAMILY REV LIVING TST	212 TWO RIVERS RD	FERGUS FALLS	MN	56537
HYACINTH MILDRED ANDERSON	HYACINTH MILDRED ANDERSON	20294 COPPER LANDING DR	FERGUS FALLS	MN	56537
IMRAYA PROPERTIES LLC	IMRAYA PROPERTIES LLC	2454 COLLEGE WAY	FERGUS FALLS	MN	56537
IND SCHOOL DIST 544	IND SCHOOL DIST 544	601 RANDOLPH AVE	FERGUS FALLS	MN	56537
J ARTHUR & J JOHNSON FAM TST	J ARTHUR & J JOHNSON FAM TST	16095 COUNTY HIGHWAY 82	FERGUS FALLS	MN	56537
JAMES VISSERS & B H BOTTEN	BRIGETTE H BOTTEN	20873 IVERSON LAKE RD	FERGUS FALLS	MN	56537
JANICE C GANGL	JANICE C GANGL	400 KENNEDY PARK CIR, CONDO 102	FERGUS FALLS	MN	56537
JANIS M POTTER	JANIS M POTTER	1225 S TOWER RD	FERGUS FALLS	MN	56537
JARED R LARSON	KAYLA A LARSON	17244 RIVER OAKS LN	FERGUS FALLS	MN	56537
JAY R MCDOUGALL	CINDY J MCDOUGALL	775 WILDWOOD TRL	FERGUS FALLS	MN	56537
JAYNELL C BOND	JAYNELL C BOND	109 LYDIA LN	FERGUS FALLS	MN	56537
JD OLSON FAMILY REV LIV TST	JD OLSON FAMILY REV LIV TST	17431 SILVER RIDGE RD	FERGUS FALLS	MN	56537
JEFF REDLIN & M SAYERS REDLIN	MISTY R SAYERS REDLIN	104 LYDIA LN	FERGUS FALLS	MN	56537
JEFFREY A JYRKAS	KAREN A JYRKAS	17140 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
JEFFREY RUTTEN	JEFFREY RUTTEN	1706 ALCOTT AVE W	FERGUS FALLS	MN	56537
JEFFREY SANDS	ASHLEY SANDS	17228 RIVER OAKS LN	FERGUS FALLS	MN	56537
JEFFREY WALVATNE	KIMBERLY A WALVATNE	2121 OAK ST S	FERGUS FALLS	MN	56537
JELLAY T WELDER	EMILY E WELDER	16933 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
JENNEN FAMILY REVOCABLE LIVING TST	JENNEN FAMILY REVOCABLE LIVING TST	17628 250TH ST	FERGUS FALLS	MN	56537
JEREMY S KNICK	JEREMY S KNICK	924 CLEARVIEW CT	FERGUS FALLS	MN	56537
JERRY & CYNTHIA SCHMIDT REV TST	JERRY & CYNTHIA SCHMIDT REV TST	1106 WILLIAMS AVE	FERGUS FALLS	MN	56537
JERRY A SWENDSRUD	RUTH K SWENDSRUD	111 ANDREW DR	FERGUS FALLS	MN	56537
JERRY D JUVEN	SARAH B JUVEN	16670 COUNTY HIGHWAY 82	FERGUS FALLS	MN	56537
JESSE N THORSTAD	JILL R THORSTAD	17159 RIVER OAKS LN	FERGUS FALLS	MN	56537
JIMMIE C LARSEN	JIMMIE C LARSEN	110 ANDREWS DR	FERGUS FALLS	MN	56537
JOANN R EHLERT	JOANN R EHLERT	22279 RIVER OAKS DR	FERGUS FALLS	MN	56537
JODY L LEHN ET AL	DELORIS FRIESEN	17971 220TH AVE	FERGUS FALLS	MN	56537
JOEL ANDERSON	JAIME PRICE ANDERSON	16980 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
JOEL J PIEKARSKI	BRITT M PIEKARSKI	24479 120TH AVE	FERGUS FALLS	MN	56537
JOEL K DEMMER	ANDREA J DEMMER	22071 RIVER OAKS DR	FERGUS FALLS	MN	56537
JOHN C MOE TST	JOHN C MOE TST	22789 CEDAR LN	FERGUS FALLS	MN	56537
JOHN M SUKO & SHERI R JACOBSON	SHERI RENEE JACOBSON	740 TOWER RD S	FERGUS FALLS	MN	56537
JOHN MCCALLUM	JOHN MCCALLUM	PO BOX 1003	FERGUS FALLS	MN	56538
JOHN SETHRE	JOHN SETHRE	28118 COUNTY HIGHWAY 88	FERGUS FALLS	MN	56537
JOHNSON FAMILY REV LVG TST	JOHNSON FAMILY REV LVG TST	1480 WESTSIDE DR APT 208	FERGUS FALLS	MN	56537
JONATHAN D WALVATNE	AHNA K WALVATNE	1027 RIDGEVIEW CT	FERGUS FALLS	MN	56537
JONATHAN P ANDERSON	KRISTEN A ANDERSON	106 ANDREW DR	FERGUS FALLS	MN	56537
OTTER TAIL COUNTY					
Owner 1	Owner 2	Address	City	State	Zip

LANDOWNERS

JONATHAN PIEKARSKI	BRENDA PIEKARSKI	1300 WESTERN AVE	FERGUS FALLS	MN	56537
JONATHAN ROEHL REVOCABLE TST	JONATHAN ROEHL REVOCABLE TST	13819 210TH ST	FERGUS FALLS	MN	56537
JOSEPH & KRISTINE DINSMORE TST	JOSEPH P DINSMORE	21903 RIVER OAKS DR	FERGUS FALLS	MN	56537
JOSHUA D HUMBURG	JOSHUA D HUMBURG	17132 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
JOSHUA A GROVE	TRISHA GROVE	22115 RIVER OAKS DR	FERGUS FALLS	MN	56537
JOSHUA B NELSON	JOSHUA B NELSON	23275 BIG CHIEF RD	FERGUS FALLS	MN	56537
JOSIAH J BURKHARDSMEIER ET AL	SARAH L ONSTAD	107 LYDIA LN	FERGUS FALLS	MN	56537
JUDITH M BRADOW	JUDITH M BRADOW	1302 NICOLE CT	FERGUS FALLS	MN	56537
KAREN MARIE CZECH	KAREN MARIE CZECH	100 KENNEDY PARK CIR APT 202	FERGUS FALLS	MN	56537
KARIN E ANDERSON IRREV TST	KARIN E ANDERSON IRREV TST	1534 PARK LN N	FERGUS FALLS	MN	56537
KATHRYN E MORSTAD BJORGE	KATHRYN E MORSTAD BJORGE	20414 190TH ST	FERGUS FALLS	MN	56537
KEATON L LAUSCH	KEATON L LAUSCH	110 LYDIA LN	FERGUS FALLS	MN	56537
KELLY A KALAN	KELLY A KALAN	22251 RIVER OAKS DR	FERGUS FALLS	MN	56537
KELLY ARNTSON	MATTHEW E ARNTSON	18744 COUNTY HIGHWAY 25	FERGUS FALLS	MN	56537
KELSEY KNUDSEN & C ANDERSON	CALEB ANDERSON	109 ANDREW DR	FERGUS FALLS	MN	56537
KENNETH KLIPFEL	CHERYL KLIPFEL	714 TOWER RD S	FERGUS FALLS	MN	56537
KENT QUAMME	MARIAN C QUAMME	17104 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
KEVIN A SCHMIDT	STEPHANIE L SCHMIDT	24455 HICKORY RD	FERGUS FALLS	MN	56537
KEVIN J GRAF	PAMELA K GRAF	210 KRISTIN CT	FERGUS FALLS	MN	56537
KIM B EMBRETSON	DEBORAH L EMBRETSON	736 TOWER RD S	FERGUS FALLS	MN	56537
KNUT RONNEVIK	GRETCHEN RONNEVIK	29674 COUNTY HIGHWAY 21	FERGUS FALLS	MN	56537
KORBY CONTRACTING CO INC	KORBY CONTRACTING CO INC	23016 240TH AVE	FERGUS FALLS	MN	56537
KREMEIER COMPANY LLC	KREMEIER COMPANY LLC	923 VINE ST N	FERGUS FALLS	MN	56537
KURT FRUSTOL	KURT FRUSTOL	1315 NICOLE CT	FERGUS FALLS	MN	56537
KWENDE KIEMLE	HEATHER KIEMLE	111 LYDIA LN	FERGUS FALLS	MN	56537
KYLE D KALLSTROM	KYLE D KALLSTROM	17094 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
L HATZENBUHLER & K LUNDSTROM REV LVG TST	L HATZENBUHLER & K LUNDSTROM REV LVG TST	400 KENNEDY PARK CIR APT 206	FERGUS FALLS	MN	56537
LACEY M BUCHHOLZ	RYAN D BUCHHOLZ	112 LAURA LN	FERGUS FALLS	MN	56537
LAKE REGION HEALTHCARE CORP	LAKE REGION HEALTHCARE CORP	PO BOX 728	FERGUS FALLS	MN	56537
LAKE REGION HOSPITAL CORP	LAKE REGION HOSPITAL CORP	712 CASCADE ST S	FERGUS FALLS	MN	56537
LAKELAND MENTAL HEALTH CENTER	LAKELAND MENTAL HEALTH CENTER	980 TOWER RD S	FERGUS FALLS	MN	56537
LARRY & MARCY ANDERSON REV TST	LARRY & MARCY ANDERSON REV TST	23229 BIG CHIEF RD	FERGUS FALLS	MN	56537
LARRY B NORNES	JOYCE NORNES	22195 RIVER OAKS DR	FERGUS FALLS	MN	56537
LARRY C II DICKINSON	JESSICA L DICKINSON	18779 COUNTY HIGHWAY 82	FERGUS FALLS	MN	56537
LARRY J ROSENTRER	LARRY J ROSENTRER	100 KENNEDY PARK CIR # 203	FERGUS FALLS	MN	56537
LARRY L KJONO	LARRY L KJONO	16990 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
LARSON FAMILY REV LVG TST	LARSON FAMILY REV LVG TST	122 TWO RIVERS RD	FERGUS FALLS	MN	56537
LAWAYNE D ROGNESS	BEVERLY J ROGNESS	1002 CLEARVIEW CT	FERGUS FALLS	MN	56537
LAWAYNE D ROGNESS REV LVG TST	LAWAYNE D ROGNESS REV LVG TST	1002 CLEARVIEW CT	FERGUS FALLS	MN	56537
LELAND R ROGNESS	LELAND R ROGNESS	212 ANNA CT	FERGUS FALLS	MN	56537
LES & LEANN ROGNESS FAMILY TST	LES & LEANN ROGNESS FAMILY TST	110 SAINT CHARLES AVE E	FERGUS FALLS	MN	56537
LEVI STENERSON	STEVE STENERSON	1415 RIDGEWOOD DR	FERGUS FALLS	MN	56537
LIFE CHURCH	LIFE CHURCH	901 COUNTY HIGHWAY 116	FERGUS FALLS	MN	56537
LINDA K DANIELSON	LINDA K DANIELSON	400 KENNEDY PARK CIR APT 203	FERGUS FALLS	MN	56537
LINDA K RONNEVIK TST	LINDA K RONNEVIK TST	1321 NICOLE CT	FERGUS FALLS	MN	56537
LINDA K RONNEVIK TST ET AL	RICHARD T RONNEVIK DISCLAIMER TST	1321 NICOLE CT	FERGUS FALLS	MN	56537
LINDA R KNUTSON	LINDA R KNUTSON	124 TWO RIVERS RD	FERGUS FALLS	MN	56537
LOIS WINDOM	LOIS WINDOM	1414 MARTIN ST S	FERGUS FALLS	MN	56537
LOOMER BROS CO	LOOMER BROS CO	20622 DAYTON HOLLOW RD	FERGUS FALLS	MN	56537
LOOMER FARMS INC	LOOMER FARMS INC	18460 176TH AVE	FERGUS FALLS	MN	56537
LOREN K HANSON	LAVONN J HANSON	23599 SCENIC RIVERVIEW DR	FERGUS FALLS	MN	56537
LOUISE R TOMHAVE TST	MARY SCHULTZ	2010 WEYRENS RD	FERGUS FALLS	MN	56537
LUKE E CARLSON	TARA J CARLSON	16888 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
MALECHA FAMILY INVESTMENTS LLC	MALECHA FAMILY INVESTMENTS LLC	21856 FOREST LODGE RD	FERGUS FALLS	MN	56537
MALINGEN FAMILY IRREV TST	MALINGEN FAMILY IRREV TST	921 RIDGEVIEW CT	FERGUS FALLS	MN	56537
MARC A BYE	KRISTIN M BYE	23439 BIG CHIEF RD	FERGUS FALLS	MN	56537
MARCIA DRECHSEL	MARCIA DRECHSEL	26698 160TH AVE	FERGUS FALLS	MN	56537
MARCIA E WILLIAMS	MARCIA E WILLIAMS	21967 RIVER OAKS DR	FERGUS FALLS	MN	56537
MARGIE K RASMUSSEN REVOCABLE TST	MARGIE K RASMUSSEN REVOCABLE TST	10698 280TH ST	FERGUS FALLS	MN	56537
MARION D OTNES	MARION D OTNES	18605 COUNTY HIGHWAY 25	FERGUS FALLS	MN	56537
MARK E SCHULZ	MARK E SCHULZ	725 TOWER RD S	FERGUS FALLS	MN	56537
MARK L ANDERSON	TAMARA J WALLS ANDERSON	1420 ALCOTT AVE W	FERGUS FALLS	MN	56537
MARK S JENSEN	LORI L JENSEN	19530 195TH ST	FERGUS FALLS	MN	56537
MARK SAND & GRAVEL COMPANY	MARK SAND & GRAVEL COMPANY	PO BOX 458	FERGUS FALLS	MN	56538
MARK T SAENGER	MARK T SAENGER	2201 ARROWWOOD CT	FERGUS FALLS	MN	56537
MARLENE PEDERSON	MARLENE PEDERSON	400 KENNEDY PARK CIR APT 106	FERGUS FALLS	MN	56537
OTTER TAIL COUNTY					
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LANDOWNERS

MARLYS C SCHMIDT TST	MARLYS C SCHMIDT TSTEE	16426 COUNTY HIGHWAY 116	FERGUS FALLS	MN	56537
MARY E FERGUSON	MARY E FERGUSON	100 TWO RIVERS RD	FERGUS FALLS	MN	56537
MARY M JOHNSON	MARY M JOHNSON	17074 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
MATTHEW E ARNTSON	MATTHEW E ARNTSON	18744 COUNTY HIGHWAY 25	FERGUS FALLS	MN	56537
MATTHEW E PATRICK	MATTHEW E PATRICK	103 LYDIA LN	FERGUS FALLS	MN	56537
MATTHEW W MCGUIRE	TASHA M MCGUIRE	1005 REDWOOD LN	FERGUS FALLS	MN	56537
MEGAN C GLEASON	TYLER GLEASON	15426 275TH ST	FERGUS FALLS	MN	56537
MICHAEL & LINDA KRONEMANN TST	MICHAEL & LINDA KRONEMANN TST	18840 248TH AVE	FERGUS FALLS	MN	56537
MICHAEL A NORGREN	MICHAEL A NORGREN	30237 NORGREN RD	FERGUS FALLS	MN	56537
MICHAEL D HARTWELL	TRISHA L HARTWELL	17198 RIVER OAKS LN	FERGUS FALLS	MN	56537
MICHAEL D SCHMIDT	JOYCE L SCHMIDT	21690 175TH ST	FERGUS FALLS	MN	56537
MICHAEL E CARPENTER	SANDRA HELEN CARPENTER	23311 BIG CHIEF RD	FERGUS FALLS	MN	56537
MICHAEL MOREHEAD & A HOEFS	ALEXIA HOEFS	25105 176TH AVE	FERGUS FALLS	MN	56537
MICHAEL R SMITH	VICKI L SMITH	17022 LITTLE CHIEF TRL	FERGUS FALLS	MN	56537
MICHAEL TROSVIG	MICHAEL TROSVIG	100 KENNEDY PARK CIR APT 305	FERGUS FALLS	MN	56537
MICHELE PETERSON & K LOTZER	KIMBERLY M LOTZER	26893 190TH AVE	FERGUS FALLS	MN	56537
MICHELLE STIGEN	MICHELLE STIGEN	400 KENNEDY PARK CIR APT 105	FERGUS FALLS	MN	56537
MITCHELL CARBERT & M ERIKSSON	MADISON H ERIKSSON	101 LYDIA LN	FERGUS FALLS	MN	56537
MITCHELL K JOBE	TAMMY R JOBE	22235 RIVER OAKS DR	FERGUS FALLS	MN	56537
MYA BARLAGE LILLEMOM	MYA BARLAGE LILLEMOM	20619 189TH ST	FERGUS FALLS	MN	56537
NATHAN BJORGE	NATHAN BJORGE	20414 190TH ST	FERGUS FALLS	MN	56537
NCS HOMES INC	NCS HOMES INC	550 GUTTENBERG HTS	FERGUS FALLS	MN	56537
NEAL C IRION	TAMMY C IRION	202 TWO RIVERS RD	FERGUS FALLS	MN	56537
NEAL K JOHNSON	CAROLYN R JOHNSON	26969 US HIGHWAY 59	FERGUS FALLS	MN	56537
NEAL SCHMIDT	NEAL SCHMIDT	24183 170TH AVE	FERGUS FALLS	MN	56537
NICKOLAS J MILLER	KYLIE MILLER	17116 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
NORGREN FAMILY TST	ANDREW & JOYCE NORGREN TSTEE	30235 NORGREN RD	FERGUS FALLS	MN	56537
NORGREN FAMILY TST	JOYCE I O NORGREN TSTEE	30235 NORGREN RD	FERGUS FALLS	MN	56537
NORTHERN LAKES DENTAL LTD	NORTHERN LAKES DENTAL LTD	1108 WESTERN AVE	FERGUS FALLS	MN	56537
OTTER TAIL POWER CO	OTTER TAIL POWER CO	215 CASCADE ST S	FERGUS FALLS	MN	56537
PAMELA A DANIELS	PAMELA A DANIELS	216 TWO RIVERS RD	FERGUS FALLS	MN	56537
PAUL A NEUMAN	CATHERINE A NEUMAN	809 ALCOTT AVE W	FERGUS FALLS	MN	56537
PAUL B JAEGER	PAUL B JAEGER	22205 RIVER OAKS DR	FERGUS FALLS	MN	56537
PAUL ENGER ET AL	CHARLES FJELD	22973 BIRCHWOOD ESTATES RD	FERGUS FALLS	MN	56537
PAUL ENGER ET AL	ROBIN L ERICKSON	22973 BIRCHWOOD ESTATES RD	FERGUS FALLS	MN	56537
PAUL TYSVER	PAUL TYSVER	22762 224TH ST	FERGUS FALLS	MN	56537
PAULA MARIE PEDERSON	CORY L PEDERSON	1016 REDWOOD LN	FERGUS FALLS	MN	56537
PEEDERS FAMILY REV TST	PEEDERS FAMILY REV TST	912 RIDGEVIEW CT	FERGUS FALLS	MN	56537
PETER R PIEKARSKI	DONNA M PIEKARSKI	16907 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
PETER S KROG	KAILA L KROG	27519 150TH AVE	FERGUS FALLS	MN	56537
PETER V FJESTAD	REBECCA LYNN FJESTAD	26563 130TH AVE	FERGUS FALLS	MN	56537
PETERSON FAMILY REV LIVING TST	PETERSON FAMILY REV LIVING TST	1312 NICOLE CT	FERGUS FALLS	MN	56537
PHILIP CYPHERS	PHILIP CYPHERS	126 VISTA DR	FERGUS FALLS	MN	56537
PHILLIP SAMUELSON	RACHEL SAMUELSON	17401 COUNTY HIGHWAY 82	FERGUS FALLS	MN	56537
PIEKARSKI FARMS LLC	PIEKARSKI FARMS LLC	1416 FAWN LN	FERGUS FALLS	MN	56537
R QUAM & R QUAM REAL EST TST	ERIK RONNEVIK TSTEE	28768 COUNTY HIGHWAY 21	FERGUS FALLS	MN	56537
R TST	R TST	26338 160TH AVE	FERGUS FALLS	MN	56537
R&J JUVEN TST	R&J JUVEN TST	23371 BIG CHIEF RD	FERGUS FALLS	MN	56537
RADWAN D CHAMOUN	JODIE E CHAMOUN	1503 UNION AVE S	FERGUS FALLS	MN	56537
RAMONA L HEITMANN	RAMONA L HEITMANN	1261 TOWER RD S	FERGUS FALLS	MN	56537
RICHARD B VIGER	RICHARD B VIGER	12598 US HIGHWAY 59	FERGUS FALLS	MN	56537
RICHARD D TRIPP	SANDRA L TRIPP	110 LAURA LN	FERGUS FALLS	MN	56537
RICHARD L BROWN	RICHARD L BROWN	1004 RIDGEVIEW CT	FERGUS FALLS	MN	56537
ROBERT & NANCY PERRIER TST	NANCY L PERRIER TSTEE	17068 LITTLE CHIEF TRL	FERGUS FALLS	MN	56537
ROBERT A EHLERT	JOANN R EHLERT	22279 RIVER OAKS DR	FERGUS FALLS	MN	56537
ROBERT A HALVORSON	MARGARET L HALVORSON	25081 176TH AVE	FERGUS FALLS	MN	56537
ROBERT A HESTENES	LORI G HESTENES	16979 RIVER OAKS BLVD	FERGUS FALLS	MN	56538
ROBERT BRANDON	ROBERT BRANDON	1228 WILLIAMS AVE	FERGUS FALLS	MN	56537
ROBERT D BUDKE	JULIE S BUDKE	19441 195TH AVE	FERGUS FALLS	MN	56537
ROCHELLE L SWENSON	ROCHELLE L SWENSON	22112 RIVER OAKS DR	FERGUS FALLS	MN	56537
ROEHL FAMILY REV LIV TST	BETH M ROEHL TSTEE	16401 255TH ST	FERGUS FALLS	MN	56537
ROGER B OLSON	ROGER B OLSON	22166 RIVER OAKS DR	FERGUS FALLS	MN	56537
ROGER E ENGLESON	REBECCA L ENGLESON	23324 COUNTY HIGHWAY 18	FERGUS FALLS	MN	56537
ROGER TEBERG	THERESA TEBERG	1311 TOWER RD S	FERGUS FALLS	MN	56537
ROGERS PROPERTY LLLP	ROGERS PROPERTY LLLP	16889 SWAN VIEW TRL E	FERGUS FALLS	MN	56537
ROGNESS BROTHERS PTNRSHPP	LAWAYNE D ROGNESS	PO BOX 636	FERGUS FALLS	MN	56538
ROLF E RONNEVIK TST ET AL	BRENDA S RONNEVIK TST	27297 COUNTY HIGHWAY 21	FERGUS FALLS	MN	56537
OTTER TAIL COUNTY					
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LANDOWNERS

RONALD D JOHNSON	PATRICIA J JOHNSON	17000 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
RORY A JOHNSON	RORY A JOHNSON	100 KENNEDY PARK CIR # 205	FERGUS FALLS	MN	56537
ROSS JOHNSON	LISA R JOHNSON	28377 COUNTY HIGHWAY 11	FERGUS FALLS	MN	56537
ROYCE A PATON	ROYCE A PATON	400 KENNEDY PARK CIR, CONDO 104	FERGUS FALLS	MN	56537
RURAL BUSINESS INITIATIVE LLC	RURAL BUSINESS INITIATIVE LLC	220 LANA CT	FERGUS FALLS	MN	56537
RYAN ROGNESS	RYAN ROGNESS	922 CLEARVIEW CT	FERGUS FALLS	MN	56537
SANDIA JANSEN	SANDIA JANSEN	100 KENNEDY PARK CIR UNIT 102	FERGUS FALLS	MN	56537
SANDRA BOICE & DAWN NELSON	SANDRA BOICE & DAWN NELSON	20298 COPPER LANDING DR	FERGUS FALLS	MN	56537
SANDRA S TRUAX	SANDRA S TRUAX	105 LYDIA LN	FERGUS FALLS	MN	56537
SARA RUTH TYSVER	TYLER B TYSVER	209 KRISTEN CT	FERGUS FALLS	MN	56537
SCHAN E SORKNESS	SHARI S SORKNESS	19765 195TH AVE	FERGUS FALLS	MN	56537
SCOTT A JUVEN	DENISE R JUVEN	16400 195TH AVE	FERGUS FALLS	MN	56537
SCOTT A WAGNILD	KATHLEEN L WAGNILD	1108 WESTERN AVE	FERGUS FALLS	MN	56537
SCOTT ELLINGSON ET AL	COREY ELLINGSON	316 CHANNING AVE E	FERGUS FALLS	MN	56537
SELAND PROPERTIES LLC	SELAND PROPERTIES LLC	17296 COUNTY HIGHWAY 82	FERGUS FALLS	MN	56537
SERVICE FOOD INC	SERVICE FOOD INC	321 LINCOLN AVE W	FERGUS FALLS	MN	56537
SHANE M THIELKE	SHANE M THIELKE	17008 LITTLE CHIEF TRL	FERGUS FALLS	MN	56537
SHARON A JOHNSON	JERRY JOHNSON	924 RIDGEVIEW CT	FERGUS FALLS	MN	56537
SPEAR FAMILY TST	SPEAR FAMILY TST	17086 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
STATE OF MINNESOTA	STATE OF MINNESOTA	510 W FIR AVE	FERGUS FALLS	MN	56537
STEAVEN M FRONNING	JANE C FRONNING	20082 COUNTY HIGHWAY 1	FERGUS FALLS	MN	56537
STEPHEN H ROEHL	BETH M ROEHL	16401 255TH ST	FERGUS FALLS	MN	56537
STEVE J KOCHER	JESSICA CABUNTAGON KOCHER	105 VISTA DR	FERGUS FALLS	MN	56537
STEVEN ERICKSON	STEVEN ERICKSON	25935 175TH AVE	FERGUS FALLS	MN	56537
STEVEN L GEASE	JUDITH A GEASE	3515 PEBBLE HILLS DR	FERGUS FALLS	MN	56537
STEVEN RIPLEY	LISA J RIPLEY	17775 220TH AVE	FERGUS FALLS	MN	56537
STEVEN WIENBAR	MELINDA WIENBAR	117 TWO RIVERS RD	FERGUS FALLS	MN	56537
STOCK FARMS FAMILY LLLP	STOCK FARMS FAMILY LLLP	15545 COUNTY HIGHWAY 112	FERGUS FALLS	MN	56537
STOCK PROPERTIES LLC	STOCK PROPERTIES LLC	1620 BRENVEI DR	FERGUS FALLS	MN	56537
STOCKERT FAMILY TST	STOCKERT FAMILY TST	724 TOWER RD S	FERGUS FALLS	MN	56537
STONEL CORP	STONEL CORP	26271 US HIGHWAY 59	FERGUS FALLS	MN	56537
STROM FAMILY TST	LAURIE R STROM TSTEE	16942 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
SUPERIOR PLOW BLADES	SUPERIOR PLOW BLADES	1225 FRONTIER DR	FERGUS FALLS	MN	56537
SUSAN K MOORE	SUSAN K MOORE	17012 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
SYNSTELIEN ENTERPRISES LLC	SYNSTELIEN ENTERPRISES LLC	1066 WESTSIDE DR	FERGUS FALLS	MN	56537
T&M FISKUM PROPERTIES LLC	T&M FISKUM PROPERTIES LLC	22014 HILLSIDE BEACH RD	FERGUS FALLS	MN	56537
TAMARA J WALLS ANDERSON	TAMARA J WALLS ANDERSON	1420 ALCOTT AVE W	FERGUS FALLS	MN	56537
TAMARAC CONDO PROPERTIES ASSOC		21856 FOREST LODGE RD	FERGUS FALLS	MN	56537
TAMI L MCDONALD	TAMI L MCDONALD	1413 ALCOTT AVE W	FERGUS FALLS	MN	56537
TAMMY MILLER	TAMMY MILLER	1307 ALCOTT AVE W	FERGUS FALLS	MN	56537
TAYLER A VATNSDAL	TAYLER A VATNSDAL	112 ANDREW DR	FERGUS FALLS	MN	56537
TERRY KANGAS	NANCY KANGAS	17087 LITTLE CHIEF TRL	FERGUS FALLS	MN	56537
THOMAS A JOHNSON	THOMAS A JOHNSON	400 KENNEDY PARK CIR # 204	FERGUS FALLS	MN	56537
THOMAS G SCHMIDT	THOMAS G SCHMIDT	24865 170TH AVE	FERGUS FALLS	MN	56537
THOMAS PARKINS	THOMAS PARKINS	100 KENNEDY PARK CIR APT 103	FERGUS FALLS	MN	56537
TIMOTHY D EIDE	TIMOTHY D EIDE	22167 RIVER OAKS DR	FERGUS FALLS	MN	56537
TIMOTHY J SAMUELSON	TIMOTHY J SAMUELSON	25892 COUNTY HIGHWAY 88	FERGUS FALLS	MN	56537
TIMOTHY KOVAR	KAYLA M KOVAR	23253 BIG CHIEF RD	FERGUS FALLS	MN	56537
TODD L REINERTSON	DONNA L REINERTSON	107 ANDREW DR	FERGUS FALLS	MN	56537
TONY & ANDREA LOOMER TST	TONY & ANDREA LOOMER TST	18054 176TH AVE	FERGUS FALLS	MN	56537
TONYA DEW TOMHAVE	TONYA DEW TOMHAVE	102 LYDIA LN	FERGUS FALLS	MN	56537
TRADESHARES INVESTMENT GROUP	TRADESHARES INVESTMENT GROUP	3515 PEBBLE HILLS DR	FERGUS FALLS	MN	56537
TRAILL A VOSBERG	DAWN M VOSBERG	20752 COUNTY HIGHWAY 1	FERGUS FALLS	MN	56537
TRAVIS ADAMS	JAMIE ADAMS	2029 OAK ST S	FERGUS FALLS	MN	56537
TRENT PEDERSON	TREVOR PEDERSON	24639 225TH AVE	FERGUS FALLS	MN	56537
TREVOR L HASSE	TREVOR L HASSE	17660 COUNTY HIGHWAY 25	FERGUS FALLS	MN	56537
TROY D BAUER	TAMMY L BAUER	25291 170TH AVE	FERGUS FALLS	MN	56537
US FISH & WILDLIFE SERVICE	US FISH & WILDLIFE SERVICE	18965 COUNTY HIGHWAY 82	FERGUS FALLS	MN	56537
US POST OFFICE	US POST OFFICE	1011 WESTERN AVE	FERGUS FALLS	MN	56537
VALERIE J MOXNESS	VALERIE J MOXNESS	23473 BIG CHIEF RD	FERGUS FALLS	MN	56537
VAUGHN DEVELOPMENT LLC	VAUGHN DEVELOPMENT LLC	17300 COUNTY HIGHWAY 82	FERGUS FALLS	MN	56537
VAUGHN FAMILY REV LVG TST	VAUGHN FAMILY REV LVG TST	17827 CEDAR POINT LN	FERGUS FALLS	MN	56537
VERNON KOLTES	DIANE KOLTES	1023 RIDGEVIEW CT	FERGUS FALLS	MN	56537
VERONA KAREN CROWELL	VERONA KAREN CROWELL	100 KENNEDY PARK CIR APT 301	FERGUS FALLS	MN	56537
VEUM FAMILY REV LIVING TST	VEUM FAMILY REV LIVING TST	22271 RIVER OAKS DR	FERGUS FALLS	MN	56537
VIGER PRINCIPAL LLLP	DEBRA A SAWTELL	802 MILL ST APT 202	FERGUS FALLS	MN	56537
VILLAGE COOPERATIVE OF FF	VILLAGE COOPERATIVE OF FF	1124 VILLAGE CIR	FERGUS FALLS	MN	56537
OTTER TAIL COUNTY					
Owner 1	Owner 2	Address	City	State	Zip

LANDOWNERS

VISION PROPERTIES LLC	VISION PROPERTIES LLC	1740 COLLEGE WAY	FERGUS FALLS	MN	56537
WADE A VOGL	MICHELLE VOGL	20330 COPPER LANDING DR	FERGUS FALLS	MN	56537
WALLACE D AFFIELD REV LVG TST	WALLACE D AFFIELD REV LVG TST	400 KENNEDY PARK CIR APT 103	FERGUS FALLS	MN	56537
WARD A OLSON	WARD A OLSON	100 KENNEDY PARK CIR APT 303	FERGUS FALLS	MN	56537
WAYNE R HELLAND	LISA R HELLAND	2225 OAK ST S	FERGUS FALLS	MN	56537
WB DIRKMAN TST	WB DIRKMAN TST	16743 RIVER OAKS BLVD	FERGUS FALLS	MN	56537
WDC VENTURES LLC	WDC VENTURES LLC	321 WESTERN AVE	FERGUS FALLS	MN	56537
WESLEY W BESKE	LORI BESKE	17219 RIVER OAKS LN	FERGUS FALLS	MN	56537
WEST CENTRAL MN INITIATIVE	WEST CENTRAL MN INITIATIVE	1000 WESTERN AVE, PO BOX 318	FERGUS FALLS	MN	56538
WILLIAM J GRONWOLD	SHERRY D GRONWOLD	17312 COUNTY HIGHWAY 82	FERGUS FALLS	MN	56537
WILLIAM SEELHAMMER	MARY SEELHAMMER	23283 BIG CHIEF RD	FERGUS FALLS	MN	56537
WILLIAM V GRONWOLD	TANYA L GRONWOLD	17308 COUNTY HIGHWAY 82	FERGUS FALLS	MN	56537
WILLIS & J GUDMUNDSON REV TST	WILLIS & J GUDMUNDSON TSTEEES	19269 COUNTY HIGHWAY 25	FERGUS FALLS	MN	56537
WIND SONG ENERGY LLC	WIND SONG ENERGY LLC	22518 BIG CHIEF RD	FERGUS FALLS	MN	56537
WYATT MUND	WYATT MUND	21995 RIER OAKS DR	FERGUS FALLS	MN	56537
YVONNE HANLEY TST	YVONNE S HANLEY	30568 JEWETT DR W	FERGUS FALLS	MN	56537
ZHANNA RICKS	ZHANNA RICKS	100 KENNEDY PARK CIR APT 201	FERGUS FALLS	MN	56537
MICHAEL D ZIRNHELT LLC	MICHAEL D ZIRNHELT LLC	13309 89TH ST SE	FORMAN	ND	58032
BETTY MAE KOLLE INC	BETTY MAE KOLLE INC	PO BOX 64	FOXHOME	MN	56543
SAMUEL HERZOG & TROY JOHNSON	TROY JOHNSON	9700 BAY VIEW RD NW	GARFIELD	MN	56332
WEDLL FAMILY TST	WEDLL FAMILY TST	3762 OXCART RD	GARRISON	MN	56450
CHARLES M LAUGEN	CHARLES M LAUGEN	7103 SAINT RUBEN AVE S	GILBERT	AZ	85298
JUDY ROGHOLT ET AL	JEROME WIGDAHL	279 MINNESOTA AVE W UNIT 307	GLENWOOD	MN	56334
MONA & EDWIN BITTENBENDER TST	EDWIN BITTENBENDER TSTEE	1300 FAIRGROUNDS RD	GRAND RAPIDS	MN	55744
LEIF OLSON & SCOTT KYSER	SCOTT KYSER	1434 162ND AVE SE	GRANDIN	ND	58038
MATTHEW BRANDENBURGER	MATTHEW BRANDENBURGER	PO BOX 461	HANKINSON	ND	58041
EMILY RIPLEY	MATTHEW RIPLEY	25027 520TH AVE	HENNING	MN	56551
LIECHTY INTERNATIONAL LLC	LIECHTY INTERNATIONAL LLC	501 17TH ST SW	JAMESTOWN	ND	58401
RICHARD COOK	RICHARD COOK	701 3RD ST SE	JAMESTOWN	ND	58401
BBFFMN001 LLC	BREMER BANK	8555 EAGLE POINT BLVD	LAKE ELMO	MN	55042
LINDA J BJERKAAS	LINDA J BJERKAAS	20081 CAMPBELL AVE W	LITCHFIELD PARK	AZ	85340
STEVEN C OLSON	STEVEN C OLSON	13125 190TH RD	MAYETTA	KS	66509
LINDA E LYONS ET AL	MYRNA G HANSON	2110 BIRDIE WAY	MILLIKEN	CO	80543
2445 COLLEGE WAY LLC	2445 COLLEGE WAY LLC	4624 CEDARWOOD DR	MINNEAPOLIS	MN	55416
WASHINGTON REALTY INC	WASHINGTON REALTY INC	901 94TH ST W	MINNEAPOLIS	MN	55420
WAYNE G HENNEN	WAYNE G HENNEN	3460 170TH AVE	MINNEOTA	MN	56264
WAYNE HENNEN	LISA HENNEN	3460 170TH AVE	MINNEOTA	MN	56264
RHONDA AURE ET AL	AMANDA HALVORSON	2820 32ND ST S	MOORHEAD	MN	56560
VERNON & DOROTHY KNUTSON TST	DOROTHY KNUTSON TSTEE	2401 11TH ST S UNIT 323	MOORHEAD	MN	56560
RIVERVIEW LLP	RIVERVIEW LLP	26406 470TH AVE	MORRIS	MN	56267
LINCOLN CROSSING LLC	LINCOLN CROSSING LLC	915 FOREST ARMS LN	MOUND	MN	55364
APPLE TREE DENTAL	APPLE TREE DENTAL	2201 26TH AVE	NEW BRIGHTON	MN	55112
JB JOHNS LLC	JB JOHNS LLC	5425 BOONE AVE N	NEW HOPE	MN	55428
BADAL ROY	BADAL ROY	325 41ST ST E APT 302	NEW YORK	NY	10017
GREEN PLAINS OTTER TAIL LLC	GREEN PLAINS OTTER TAIL LLC	1811 AKSARBEN DR	OMAHA	NE	68106
MARLYS LARSEN REV TST	MARLYS LARSEN REV TST	PO BOX 542016	OMAHA	NE	68154
STEPHEN J & R BLANCHARD RV TST	STEPHEN J & R BLANCHARD RV TST	55255 210TH ST	OSAGE	MN	56570
RALPH PAPANHEIM	CONNIE LEE PAPANHEIM	5225 RAMIER AVE NE	OTSEGO	MN	55374
CARY A JUVRUD	CARY A JUVRUD	44884 344TH ST	OTTERTAIL	MN	56571
FOREST HILLS PROPERTIES LLC	FOREST HILLS PROPERTIES LLC	25906 FOREST HILLS DR	PELICAN RAPIDS	MN	56572
GARY R GREEN	GARY R GREEN	39247 140TH AVE	PELICAN RAPIDS	MN	56572
GH ENTERPRISES LLC	GH ENTERPRISES LLC	39247 140TH AVE	PELICAN RAPIDS	MN	56572
GREEN CONCRETE CONST INC	GREEN CONCRETE CONST INC	39247 140TH AVE	PELICAN RAPIDS	MN	56572
LAKE REGION COOP ELEC ASSOC	LAKE REGION COOP ELEC ASSOC	PO BOX 643	PELICAN RAPIDS	MN	56572
PAUL MILLER	PAUL MILLER	23898 380TH ST	PELICAN RAPIDS	MN	56572
ROBERT L STEINER	ROBERT L STEINER	43732 W LAKE OLAF RD	PELICAN RAPIDS	MN	56572
TERESA A WEINRICH	TERESA A WEINRICH	19888 APPALOOSA RD	PELICAN RAPIDS	MN	56572
WIESE TST	ROSEMARY K WIESE TSTEE	17410 COUNTY HIGHWAY 28	PELICAN RAPIDS	MN	56572
ANTHONY OBERTO	PATRICIA OBERTO	45531 PLENTYWOOD RD	PERHAM	MN	56573
BUSHELLE AUCTION MARKETS LLC	BUSHELLE AUCTION MARKETS LLC	PO BOX 121	PIERZ	MN	56364
FERGUS FALLS LODGING LLC	FERGUS FALLS LODGING LLC	3030 HARBOR LN N SUITE 210	PLYMOUTH	MN	55447
LORRAINE D PIKE	LORRAINE D PIKE	PO BOX 177	PRINCETON	MN	55371
MARCOS GOMEZ PROP XIV LLC	MARCOS GOMEZ PROP XIV LLC	7500 180TH ST E	PRIOR LAKE	MN	55372
DONALD R KVERNEN REV TST ET AL	ROSELLA C KVERNEN REV TST	3948 POLAR LN NE	ROCHESTER	MN	55906
OTTER TAIL VALLEY RAILROAD CO	OTTER TAIL VALLEY RAILROAD CO	200 MERIDIAN CENTRE BLVD, STE 300	ROCHESTER	NY	14618
BRUCE T BRIESE	BRUCE T BRIESE	26729 COUNTY ROAD 28	ROSEAU	MN	56751
AABERG FAMILY LIVING TST	AABERG FAMILY LIVING TST	30795 COUNTY HIGHWAY 88	ROTHSAY	MN	56579
OTTER TAIL COUNTY					
Owner 1	Owner 2	Address	City	State	Zip

LANDOWNERS

BETH REICH	BETH REICH	12281 330TH ST	ROTHSAY	MN	56579
BJORN J ERICKSON	BRADLEY ERICKSON	PO BOX 233	ROTHSAY	MN	56579
BRADLEY ERICKSON	SUSAN C ERICKSON	PO BOX 233	ROTHSAY	MN	56579
BRENDA M BALKEN	MATTHEW A BALKEN	417 MAIN AVE E	ROTHSAY	MN	56579
BRIAN R HALVORSON	BRIAN R HALVORSON	12317 310TH ST	ROTHSAY	MN	56579
BRUCE L BRENDEN	BRUCE L BRENDEN	11915 360TH ST	ROTHSAY	MN	56579
CARTER L MALINGEN	CARTER L MALINGEN	1879 330TH AVE	ROTHSAY	MN	56579
CHERYL R OIEN	CHERYL R OIEN	221 1ST AVE SE	ROTHSAY	MN	56579
CHRIS O WATTERUD ET AL	DONNA M PIEKARSKI	37375 110TH AVE	ROTHSAY	MN	56579
CITY OF ROTHSA	CITY OF ROTHSA	PO BOX 117	ROTHSAY	MN	56579
COREY ALLEN	COREY ALLEN	35502 COUNTY HIGHWAY 11	ROTHSAY	MN	56579
DANIEL J AMUNDSON	MELISSA A AMUNDSON	36328 COUNTY HIGHWAY 11	ROTHSAY	MN	56579
DANIELSON FAM TST	KAREN S DANIELSON TSTEE	10204 COUNTY HIGHWAY 28	ROTHSAY	MN	56579
DARREL J ANDERSEN	HEATHER M KUJAVA ANDERSEN	121 4TH ST SE	ROTHSAY	MN	56579
DARRELL L TOLLEFSON	CONNIE M TOLLEFSON	111 2ND ST SE	ROTHSAY	MN	56579
DEAN M DANIELSON	SUSAN D ROLLIE DANIELSON	309 4TH ST SE	ROTHSAY	MN	56579
DENNIS E AKSAMIT TST	DENNIS E AKSAMIT TST	122 MAIN AVE E	ROTHSAY	MN	56579
DIANE K GUNVALDSON	DIANE K GUNVALDSON	220 E MAIN	ROTHSAY	MN	56579
DICK ROGER TRACY	JANICE LEE TRACY	305 4TH ST SE	ROTHSAY	MN	56579
DOUGLAS & S DANIELSON FAM TST	SHIRLEY DANIELSON TSTEE	2531 340TH AVE	ROTHSAY	MN	56579
ERIC A ANDERSEN	HANNAH K ANDERSEN	106 4TH ST SE	ROTHSAY	MN	56579
ERIC D LARSON	KIMBERLY R LARSON	516 1ST AVE SE	ROTHSAY	MN	56579
ETHAN T NELSON	ETHAN T NELSON	406 MAIN AVE E	ROTHSAY	MN	56579
FREDERICK & ELAINE HANSEN TST	FREDERICK & ELAINE HANSEN TST	2358 250TH AVE	ROTHSAY	MN	56579
GARY BRANDT	COLLEEN BRANDT	410 1ST AVE SE	ROTHSAY	MN	56579
GENE ALLEN NORD	HOLLY YVONNE NORD	306 4TH ST SE	ROTHSAY	MN	56579
GREEN FAMILY REV LVG TRUST	GREEN FAMILY REV LVG TRUST	32547 130TH AVE	ROTHSAY	MN	56579
HEATHER K WEBER	HEATHER K WEBER	211 MAIN AVE E	ROTHSAY	MN	56579
JANICE RUDH	JANICE RUDH	10628 COUNTY HIGHWAY 24	ROTHSAY	MN	56579
JASON K GRUNEWALD	JOANN HEXUM TSTEE	33492 110TH AVE	ROTHSAY	MN	56579
JASON T WINKELS	JASON T WINKELS	34098 110TH AVE	ROTHSAY	MN	56579
JEANETTE I DANIEL	JEANETTE I DANIEL	202 CIRCLE DR N	ROTHSAY	MN	56579
JENNIFER LANDERS	KENDALL LANDERS	214 2ND ST SE	ROTHSAY	MN	56579
JEREMY EVANS	NATACHA EVANS	117 MAIN AVE E	ROTHSAY	MN	56579
JEREMY M CARLSRUD	KARI A CARLSRUD	117 4TH ST SE	ROTHSAY	MN	56579
JESSE L SAMUELSON	JESSE L SAMUELSON	411 1ST AVE SE	ROTHSAY	MN	56579
JOHN AABERG	JOHN AABERG	33595 130TH AVE	ROTHSAY	MN	56579
JOHN C REBER	HEATHER J REBER	209 1ST ST SE	ROTHSAY	MN	56579
JOHN OPHOVEN	BREANN OPHOVEN	446 MAIN AVE E	ROTHSAY	MN	56579
JOHN P KUNZE	DIANE M KUNZE	210 CIRCLE DR N	ROTHSAY	MN	56579
JORDAN A BARRY	JORDAN A BARRY	405 MAIN AVE E	ROTHSAY	MN	56579
JOSEPH L PEASLEY	JOSEPH L PEASLEY	102 MAIN AVE E	ROTHSAY	MN	56579
JUSTIN A NORD	JUSTIN A NORD	321 MAIN AVE E	ROTHSAY	MN	56579
KACEY C WATTERUD	KACEY C WATTERUD	404 SE 1ST AVE	ROTHSAY	MN	56579
KARI A CARLSRUD	DEBRA L JORGENSEN	117 4TH ST SE	ROTHSAY	MN	56579
KATHLEEN A RAW	KATHLEEN A RAW	307 4TH ST SE	ROTHSAY	MN	56579
KEVIN BRENDEN & LYNN BRENDEN	KEVIN BRENDEN & LYNN BRENDEN	36734 110TH AVE	ROTHSAY	MN	56579
KEVIN L BRENDEN	LYNN BRENDEN	36734 110TH AVE	ROTHSAY	MN	56579
LARRY A COTE	VIRGINIA L COTE	13399 300TH ST	ROTHSAY	MN	56579
LEANN NEULEIB	LEANN NEULEIB	217 MAIN AVE E	ROTHSAY	MN	56579
LYNN BRENDEN ET AL	JULIE BRENDEN	36734 110TH AVE	ROTHSAY	MN	56579
MARTY D WEETS	JESSE J WEETS	206 2ND ST SE	ROTHSAY	MN	56579
MARY GABEL & MARY FRONNING	MARY R FRONNING	321 2ND ST NW	ROTHSAY	MN	56579
MATTHEW CARRILLO	WEST CENTRAL MN COM ACTION INC	215 1ST AVE SE	ROTHSAY	MN	56579
MICHAEL J HEIDECKER	KRISTEN A HEIDECKER	10799 340TH ST	ROTHSAY	MN	56579
MICHAEL O HAARSTAD	LINDA C HAARSTAD	31193 COUNTY HIGHWAY 21	ROTHSAY	MN	56579
MICHELLE R WENDLING	MICHELLE R WENDLING	31425 130TH AVE	ROTHSAY	MN	56579
MOLLY K ECKLEY & BRECK ECKLEY	BRECK T ECKLEY	425 MAIN AVE E	ROTHSAY	MN	56579
NATHAN J ZIEGLER	PATRICE ZIEGLER	125 1ST AVE SE	ROTHSAY	MN	56579
NATHAN STREED	HANNA GREEN	30391 COUNTY HIGHWAY 21	ROTHSAY	MN	56579
NELSON FAMILY REV LIV TST	NELSON FAMILY REV LIV TST	209 1ST AVE SE	ROTHSAY	MN	56579
NEW LIFE LUTH CHURCH ROTHSA	NEW LIFE LUTH CHURCH ROTHSA	PO BOX 57	ROTHSAY	MN	56579
NICHOLAS MAJERUS	NICOLE MAJERUS	505 1ST AVE SE	ROTHSAY	MN	56579
OBERT T AABERG	EDNA JEANETTE AABERG TSTEE	33316 COUNTY HIGHWAY 11	ROTHSAY	MN	56579
OSCAR PARKE MUTUAL INS CO	OSCAR PARKE MUTUAL INS CO	302 2ND AVE NW	ROTHSAY	MN	56579
OUR SAVIORS LUTHERAN CHURCH	OUR SAVIORS LUTHERAN CHURCH	PO BOX 57	ROTHSAY	MN	56579
PAUL THOMAS AABERG	PAUL THOMAS AABERG	32334 COUNTY HIGHWAY 88	ROTHSAY	MN	56579
OTTER TAIL COUNTY					
Owner 1	Owner 2	Address	City	State	Zip

LANDOWNERS

PETER R RUDH	KARI J RUDH	519 1ST AVE SE	ROTHSAY	MN	56579
PETER R RUDH ET AL	JANICE RUDH	519 1ST AVE SE	ROTHSAY	MN	56579
PHILIP R HENDRICKX	PHILIP R HENDRICKX	11282 COUNTY HIGHWAY 24	ROTHSAY	MN	56579
RANDY BRUSVEN	RANDY BRUSVEN	1590 330TH AVE	ROTHSAY	MN	56579
RANDY S BUCKINGHAM	MARY A BUCKINGHAM	105 1ST ST SE	ROTHSAY	MN	56579
REBECCA A BELLET	REBECCA A BELLET	11148 340TH ST	ROTHSAY	MN	56579
RICHARD E DREVLLOW	RICHARD E DREVLLOW	13502 330TH ST	ROTHSAY	MN	56579
ROQUE ROSSETTI	ROQUE ROSSETTI	509 3RD AVE SE	ROTHSAY	MN	56579
ROTHSAY BAPTIST CHURCH	ROTHSAY BAPTIST CHURCH	PO BOX 296	ROTHSAY	MN	56579
ROTHSAY TRUCK STOP & CAFE INC	ROTHSAY TRUCK STOP & CAFE INC	544 CENTER ST N, PO BOX 277	ROTHSAY	MN	56579
SARA J UMLAUF	GREGORY UMLAUF	305 MAIN AVE E	ROTHSAY	MN	56579
SIDNEY J JOHNSON	LINDA M SCHMIDT JOHNSON	30721 COUNTY HIGHWAY 21	ROTHSAY	MN	56579
STEVE STENERSON	STEVE STENERSON	13443 300TH ST	ROTHSAY	MN	56579
STEVEN A GREEN	LINDSEY J GREEN	14152 COUNTY HIGHWAY 118	ROTHSAY	MN	56579
THE POWERHOUSE INC	THE POWERHOUSE INC	436 CENTER ST N	ROTHSAY	MN	56579
TIMOTHY NAVRATIL	REBECCA NAVRATIL	110 MAIN AVE E	ROTHSAY	MN	56579
TOM C JENSEN	MARY E JENSEN	315 MAIN AVE E	ROTHSAY	MN	56579
TRAVIS A SHIRLEY	TRAVIS A SHIRLEY	103 MAIN AVE E	ROTHSAY	MN	56579
TREVOR W HONE	TREVOR W HONE	119 1ST AVE SE	ROTHSAY	MN	56579
TYLER J WOLFER	SARAH C WOLFER	203 1ST AVE SE	ROTHSAY	MN	56579
VICKI J KLEMEK	VICKI J KLEMEK	205 CIRCLE DR N	ROTHSAY	MN	56579
VICKI JORGENSON & D F JOHNSON	DARLENE F JOHNSON	203 MAIN AVE E	ROTHSAY	MN	56579
VIOLA L LARSON REV LVG TST	VIOLA L LARSON REV LVG TST	205 1ST ST SE	ROTHSAY	MN	56579
WATTERUD FAM REV LVG TST	BARBARA WATTERUD	419 MAIN AVE E	ROTHSAY	MN	56579
WAYNE MOEN	DORIS MOEN	30502 COUNTY HIGHWAY 21	ROTHSAY	MN	56579
WENDY J MYERS	ZACHARY J MYERS	214 MAIN AVE E	ROTHSAY	MN	56579
WILLIAM P FISHER	WILLIAM P FISHER	105 2ND ST SE	ROTHSAY	MN	56579
ANN M BENRUD	ANN M BENRUD	566 FAIRVIEW AVE S	SAINT PAUL	MN	55116
CHS INC	CHS INC	PO BOX 64089	SAINT PAUL	MN	55164
DEPT OF NATURAL RESOURCES	DEPT OF NATURAL RESOURCES	500 LAFAYETTE RD N	SAINT PAUL	MN	55155
LUTHERAN SOCIAL SERVICES OF MN	LUTHERAN SOCIAL SERVICES OF MN	2485 COMO AVE	SAINT PAUL	MN	55108
RICH ROUBIK ET AL	THOMAS ROUBIK	250 PAGE ST W	SAINT PAUL	MN	55107
SAFFRONTAG LLC	SAFFRONTAG LLC	2227 UNIVERSITY AVE W # 534	SAINT PAUL	MN	55114
STATE OF MINNESOTA	STATE OF MINNESOTA	PO BOX 45	SAINT PAUL	MN	55155
THOMAS JR & STACEY BOEHM ET AL	STACEY BOEHM	651 SUMNER ST	SAINT PAUL	MN	55116
US FISH & WILDLIFE SERVICE	US FISH & WILDLIFE SERVICE	1 FEDERAL DR	SAINT PAUL	MN	55111
STANLEY & KAREN SYNSTELIEN TST	STANLEY & KAREN SYNSTELIEN TST	29412 SCHINNECOCK HILLS LN	SAN ANTONIO	FL	33576
ROBERT J BUNKOWSKE LLP	ROBERT J BUNKOWSKE LLP	4629 IROQUOIS AVE	SAN DIEGO	CA	92117
DIAMOND W LLC	DIAMOND W LLC	12826 EMERY WAY	SHAKOPEE	MN	55379
MAA DURGA INC	MAA DURGA INC	2068 SUMMERHILL CT	SHAKOPEE	MN	55379
HWB PAULSON FARMS LLP	HWB PAULSON FARMS LLP	5125 SHADY ISLAND RD	SHOREWOOD	MN	55364
MANSFIELD FAM REV LIVING TST	PAMELA MANSFIELD TSTEE	19951 GOBBLER RD	SPEARFISH	SD	57783
LEIGHTON ENTERPRISES INC	LEIGHTON ENTERPRISES INC	619 SAINT GERMAIN ST W, PO BOX 1458	ST CLOUD	MN	56302
AT & T CORPORATION	AT & T CORPORATION	1010 PINE, 6E-L-01	ST. LOUIS	MO	63101
EIDE FAMILY DECEDENT TST	NANCY E REEK TSTEE	5901 PENNEY LN	THE VILLAGES	FL	32163
BOBCAT CAPITAL LTD	BOBCAT CAPITAL LTD	PO BOX 35	TUALATIN	OR	97062
DIRKMAN ENTERPRISES LP	DIRKMAN ENTERPRISES LP	30001 RIVER POINTE TRL	UNDERWOOD	MN	56586
JUSTIN MOE	JUSTIN MOE	26179 310TH AVE	UNDERWOOD	MN	56586
OUTDOOR LLC	OUTDOOR LLC	259 SHORE DR N	UNDERWOOD	MN	56586
STEVEN JENSEN	PATRICIA JENSEN	32315 265TH ST	UNDERWOOD	MN	56586
REBECCA MARIE LEE	REBECCA MARIE LEE	7000 NE 72ND AVE APT 36	VANCOUVER	WA	98661
PRESERVE TRAD MSM NAT HIST FDN	PRESERVE TRAD MSM NAT HIST FDN	1634 SANDBAR CIR	WACONIA	MN	55387
STEPHEN C SLACK TST	STEPHEN C SLACK TST	1634 SANDBAR CIR	WACONIA	MN	55387
STEPHEN C SLACK TST ET AL	RICHARD R RUDD	1634 SANDBAR CIR	WACONIA	MN	55387
LINDA PATTERSON	LINDA PATTERSON	222 5TH AVE N	WAHPETON	ND	58075
MARLENE GAST	MARLENE GAST	2000 4TH ST N APT 224	WAHPETON	ND	58075
RIVER BLUFF II LLP	INH PROPERTY MGMT	175 7TH AVE S	WAITE PARK	MN	56387
RIVER HEIGHTS ESTATES FF LLP	RIVER HEIGHTS ESTATES FF LLP	175 7TH AVE S	WAITE PARK	MN	56387
GARY J CODE TST AGMT ET AL	ELIZABETH N FELTON TST AGMT	2765 WEST RD	WAYZATA	MN	55391
LUTHER CENTURY FARM LLC	LUTHER CENTURY FARM LLC	16386 RINGER RD	WAYZATA	MN	55391
ANTHONY ENDRESON	ANTHONY ENDRESON	27535 320TH ST	WENDELL	MN	56590
KNUDSON FARM HOLDINGS LLLP	KNUDSON FARM HOLDINGS LLLP	PO BOX 25	WENDELL	MN	56590
QNE PROPERTIES LLC	SHEILA OLSON	29563 310TH ST	WENDELL	MN	56590
ERIC BERGE	ERIC BERGE	728 NORTHBRIDGE WAY	WEST FARGO	ND	58078
J & S DEVELOPMENT LLP	J & S DEVELOPMENT LLP	2138 MAIN AVE W	WEST FARGO	ND	58078
JAMES M KRAEMER	LOIS J KRAEMER	209 3RD AVE W	WEST FARGO	ND	58078
ROGER A ELLIOTT	TAMI L GEHRKE	208 17TH AVE E	WEST FARGO	ND	58078
OTTER TAIL COUNTY					
Owner 1	Owner 2	Address	City	State	Zip

LANDOWNERS

WILLIAM C ROUBIK	RITA ROUBIK	365 BERNARD ST E	WEST SAINT PAUL	MN	55118
RAG HOLDINGS LLC	RAG HOLDINGS LLC	6867 740TH ST	WHEATON	MN	56296
SONDRE FRIBORG NORWEGIAN	SONDRE FRIBORG NORWEGIAN				

WILKIN COUNTY					
Owner 1	Owner 2	Address	City	State	Zip
ACKERSON/KEVIN		110 6TH AVE NE	BARNESVILLE	MN	56514
AXNESS/MARK		11955 COUNTY HWY 30	BARNESVILLE	MN	56514
BLILLIE/CORY A & AMBER M		1044 300TH AVE	BARNESVILLE	MN	56514
BRATON FAMILY REV LIV TRT	JAMES & PAMELA BRATON JR TTEES	1050 300TH AVE	BARNESVILLE	MN	56514
BRATON/JAMES,PAMELA,JEFF/TTEES	JCB & PMB BFRLT & JSB RLT	1050 300TH AVE	BARNESVILLE	MN	56514
BRATON/SHANE M/& LAUREN R PAUL		1031 300TH AVE S	BARNESVILLE	MN	56514
DUNHAM/LEON & DONNA J/TRUSTEES	THE DUNHAM FAM REV LIVING TRST	3025 110TH ST	BARNESVILLE	MN	56514
DURAN/DOUGLAS E		3081 120 ST	BARNESVILLE	MN	56514
FRIEDERICHS/TRENT & KRISTI	FRIEDERICHS/THOMAS & JUDITH	1155 270TH AVE	BARNESVILLE	MN	56514
FROSLIE/RYAN K & KELLI JO		3022 110TH ST	BARNESVILLE	MN	56514
HAUGRUD/MARIAN E	THORSON/JOAN/& SHELLY WASHBURN	1409 2ND AVE NE	BARNESVILLE	MN	56514
HILGERS/RAYMOND F		1049 310TH AVE	BARNESVILLE	MN	56514
HOVLAND/KURT		3051 100TH ST	BARNESVILLE	MN	56514
HOVLAND/ROBERT & SHARON		PO BOX 21	BARNESVILLE	MN	56514
JORGENSON/MYRON W & MARILYN		1081 310TH AVE	BARNESVILLE	MN	56514
OLSON/ERIC J & MELISSA M		1004 3RD AVE NE	BARNESVILLE	MN	56514
PLATH/LARRY M & CRYSTAL L		PO BOX 186	BARNESVILLE	MN	56514
VOXLAND/JOEL & CHRISTINA		3075 100TH ST	BARNESVILLE	MN	56514
WILSON/ADAM C & KARI M		1115 310TH AVE	BARNESVILLE	MN	56514
KROGH/MARILYN A		3109 FARNAM STREET	BILLINGS	MT	59102
CRISTALDO/MARIO & KRISTY		1061 3RD ST N	CASSELTON	ND	58012
BEKKERUS/CHARLES H	C/O STEVEN BEKKERUS	3910 MONTGLENN TRACE	CUMMING	GA	30041
KWJ FARM LLC		21298 COUNTY RD 11	ELBOW LAKE	MN	56531
UGELSTAD/BRUCE A & SHERI R		1616 31ST AVE S	FARGO	ND	58103
BIEDERMAN/CHRISTI		1122 S UNION AVE	FERGUS FALLS	MN	56537
BUTLER/MARIE H		903 SUNSET DR	FERGUS FALLS	MN	56537
JOHNSON/ROSS & LISA R		28377 CO HWY 11	FERGUS FALLS	MN	56537
OSTLUND/MARILYN	OSTLUND/JEFFREY & MARK	148 MEADOWLARK LANE WEST	FERGUS FALLS	MN	56537
BRUSVEN/RANDY/& LORA ACKERT	C/O JANE M HAUGER	112 GRANDVIEW ST	GRANITE FALLS	MN	56241
HAUGER/JANE M	HAUGER/JOSEPH/& B KUMMROW	112 GRANDVIEW ST	GRANITE FALLS	MN	56241
OLSON/DAVID		1002 SUNRISE DR	HAZEN	ND	58545
HALBAKKEN/SOLVEIG G/TRUSTEE	SOLVEIG HALBAKKEN REV LIV TRST	301 S O'CONNELL ST	MARSHALL	MN	56258
GREEN/KRISTINE D		10211 CEDAR LAKE RD APT 302	MINNETONKA	MN	55305
SEVEN LIVES INVESTMENT TRUST	FLORENTINO VASQUEZ-MORENO,TTEE	3297 HIGHWAY 65	MORA	MN	55051
JAEHNING/RICH		3225 PALOS VERDES DR N	PALOS VERDES ESTATES	CA	90274
DITTUS/DONALD C/TRUSTEE	DC DITTUS LIVING TRST AGREEMNT	6814 PLATTEVIEW RD	PAPILLION	NE	68133
KOETT/THOMAS & LOIS/LIVING TRT		31362 HARBOR CIRCLE	PARKER	AZ	85344
AXNESS/THOMAS A & CONNI J/TTEE	AXNESS FAMILY REV LIVING TRUST	42607 120TH AVE	PELICAN RAPIDS	MN	56572
BRATON/MARK D & HOLLIE J		23038 WASHBURN LN	PELICAN RAPIDS	MN	56572
JOHNSON/LANCE/ETAL		43485 120TH AVE	PELICAN RAPIDS	MN	56572
SOLUM/KEVIN D		43671 INLET BEACH RD	PELICAN RAPIDS	MN	56572
SOLUM/KEVIN D & KAREN L		43671 INLET BEACH RD	PELICAN RAPIDS	MN	56572
STEINER/ROBERT L		43732 W LAKE OLAF RD	PELICAN RAPIDS	MN	56572
WIESE/STEPHEN & ROSEMARY/TRUST	WIESE FAMILY REV LIVING TRUST	17410 CO HWY 28	PELICAN RAPIDS	MN	56572
OTTER TAIL VALLEY RAILROAD	GENESEE & WYOMING RR SERVICES	200 MERIDAN CENTRE BLVD # 300	ROCHESTER	NY	14618
FISCHER/MICHELLE Y		4836 160TH ST E	ROSEMOUNT	MN	55068
AABERG/DEXTER T		319 1ST ST NW	ROTHSAY	MN	56579
ACKERT/BILLY J		212 2ND AVE NW	ROTHSAY	MN	56579
ACKERT/STEVEN D & BARBARA M		315 2ND AVE NW	ROTHSAY	MN	56579
AMUNDSON/GENE E & SANDRA L		1997 340TH AVE	ROTHSAY	MN	56579
ANDERSON/RICHARD		210 1ST ST NW	ROTHSAY	MN	56579
BABCOCK/LEVI		205 4TH ST NW	ROTHSAY	MN	56579
BEELER/KRISTEN		220 2ND AVE NW	ROTHSAY	MN	56579
BILDEN/RICHARD JAY/ETAL	C/O ROGER BILDEN	1864 330TH AVE	ROTHSAY	MN	56579
BOE/DAVID R/ETAL	C/O ROBERT & CHARLENE BOE	PO BOX 66	ROTHSAY	MN	56579
BOOTH/DOUGLAS/&	ELISHA BERG	214 1ST AVE NW	ROTHSAY	MN	56579
BRENDEN/AARON AXEL/&	SKYLAR LEA ANDERSON-BUCKINGHAM	219 CENTER ST N	ROTHSAY	MN	56579
BRENNY/RONALD J & GAYLE		301 3RD ST NW	ROTHSAY	MN	56579
BRUSVEN/RANDY J		1590 330TH AVE	ROTHSAY	MN	56579
CARRILLO/MARIA		312 2ND AVE N	ROTHSAY	MN	56579
COX/CODY J/& HANNAH M KLOVSTAD		3219 150TH ST	ROTHSAY	MN	56579
WILKIN COUNTY					
Owner 1	Owner 2	Address	City	State	Zip

LANDOWNERS

CURTIS/CASEY A & STEPHANIE J		303 3RD ST NW	ROTHSAY	MN	56579
CURTIS/CASSONDRA L		206 1ST AVE NW	ROTHSAY	MN	56579
DALMAN/MATTHEW & TRACY		3264 ST HWY 108	ROTHSAY	MN	56579
DUNHAM/DAVID L & SHELLY J		3183 120TH ST	ROTHSAY	MN	56579
DUNHAM/NOLAN W & DAVID L		3183 120TH ST	ROTHSAY	MN	56579
DUPREE/CHARLES B/III		216 2ND AVE NW	ROTHSAY	MN	56579
ERICSON/TANYA/&	MITCHELL S ACKERT	103 MAIN AVE W	ROTHSAY	MN	56579
FORNESS/BRYCE K		306 3RD ST NW	ROTHSAY	MN	56579
FROSLIE/DANIEL & RENAE		1659 320TH AVE	ROTHSAY	MN	56579
FROSLIE/KAREN & CLIFFORD/TTEES	REV TRUST AGRMT KAREN FROSLIE	1555 320TH AVE	ROTHSAY	MN	56579
FROSLIE/REV TRUST AGRMT KAREN	C/O CLIFFORD & KAREN FROSLIE	1555 320TH AVE	ROTHSAY	MN	56579
FUDER/AMANDA J & MARK L		204 4TH ST NW	ROTHSAY	MN	56579
FYHRIE/JODI		153 1ST ST NW	ROTHSAY	MN	56579
GERACI/KIMBERLY		211 1ST AVE NW	ROTHSAY	MN	56579
GRUNEWALD/YVONNE GAYLE	C/O YVONNE MILLER	3170 130TH ST	ROTHSAY	MN	56579
HALGRIMSON/JOHN & CHRISTA		1307 COUNTY RD 19	ROTHSAY	MN	56579
HANNEMAN/JOSEPH D		139 CENTER ST	ROTHSAY	MN	56579
HANSEN/MICHAEL J		2358 250TH AVE	ROTHSAY	MN	56579
HANSEN/MICHAEL J & SUSAN		114 2ND AVE NW	ROTHSAY	MN	56579
HARLOW/JOSHUA		217 2ND AVE NW	ROTHSAY	MN	56579
HAUGRUD/BENJAMIN,NATHAN,BRYCE		3229 130TH ST	ROTHSAY	MN	56579
HAUGRUD/BRENT K & DEBRA L/&	BRYANT K & TL REV LIV TRTS	3327 130TH ST	ROTHSAY	MN	56579
HONER/MADISON/& KOLE LEE		211 2ND AVE NW	ROTHSAY	MN	56579
HOVLAND/DIANE		1353 310TH AVE	ROTHSAY	MN	56579
HOVLAND/LYLE E	HOVLAND/KURT	1353 310TH AVE	ROTHSAY	MN	56579
HOVLAND/LYLE E & DIANE V	MISCHEL/KRYSTA	1353 310TH AVE	ROTHSAY	MN	56579
HOVLAND/LYLE E & DIANE V	HOVLAND/KURT	1353 310TH AVE	ROTHSAY	MN	56579
HUSTAD/CHANDRA H		1742 330TH AVE	ROTHSAY	MN	56579
INDEPENDENT SCHOOL DIST #11	C/O ROTHSA Y PUBLIC SCHOOL	2040 COUNTY RD 52	ROTHSAY	MN	56579
INDEPENDENT SCHOOL DIST #850		2040 COUNTY RD 52	ROTHSAY	MN	56579
JANUSCHEITIS/TYLER & CAITLIN		202 4TH ST NW	ROTHSAY	MN	56579
JOHNSON/TIFFANY A		312 1ST AVE NW	ROTHSAY	MN	56579
JORGENSEN/EDWARD/ETAL	C/O PAUL G JORGENSEN	PO BOX 14	ROTHSAY	MN	56579
KRAUSE/TAYLOR JOHN		310 1ST AVE NW	ROTHSAY	MN	56579
KUJAV/HANNAH M		147 CENTER ST N	ROTHSAY	MN	56579
KURVERS/HEATHER		122 MAIN AVE W	ROTHSAY	MN	56579
LANG/KIM E & STACEY L/TRUSTEES	LANG FAMILY REVOCABLE LIV TRST	314 2ND AVE NW	ROTHSAY	MN	56579
LANKOW/GLENN & TAMERA MOEN		2973 250TH ST	ROTHSAY	MN	56579
LARSON/ROBERT D & JULIE A		222 1ST AVE NW	ROTHSAY	MN	56579
LEHN/SHANE		320 2ND ST NW	ROTHSAY	MN	56579
LEHTO/KAYLA R		305 3RD ST NW	ROTHSAY	MN	56579
LINDBERG/DOUGLAS		PO BOX 68	ROTHSAY	MN	56579
LINDHOLM/JAMES		3224 130TH ST	ROTHSAY	MN	56579
MOEN/COREY R & CARLA J		304 3RD ST NW	ROTHSAY	MN	56579
MOTZ/ANGIE C	ANDERSON/RICHARD/& ANGIE MOTZ	210 1ST ST NW	ROTHSAY	MN	56579
MOTZ/TERRY DEAN/&	JENNIE ELIZABETH MOTZ	302 2ND ST NW	ROTHSAY	MN	56579
NELSON/DANA & PATRICIA/TRUSTEE	NELSON FAM REV LIVING TRUST	209 1ST AVE SE	ROTHSAY	MN	56579
NELSON/SCOTT A		1828 330TH AVE	ROTHSAY	MN	56579
NEW LIFE LUTHERAN CHURCH		102 WEST MAIN AVE	ROTHSAY	MN	56579
NORD/LUCAS C		208 2ND AVE NW	ROTHSAY	MN	56579
NOSAL/WAYNE		1418 CTY HWY 19	ROTHSAY	MN	56579
OPSAHL/HAROLD A & DEBRA K		320 1ST AVE NW	ROTHSAY	MN	56579
OUREN/JAKE D/& MIKAYLA FISCHER		1516 330TH AVE	ROTHSAY	MN	56579
OUSE/COLE ALAN & HEATHER ANNA		1531 330TH AVE	ROTHSAY	MN	56579
PEGEL/SIDNEY D		204 2ND AVE NW	ROTHSAY	MN	56579
PETERSEN/JOEL S & HEATHER M		203 4TH ST NW	ROTHSAY	MN	56579
QUACKENBUSH/COREY W & STACIE L		148 2ND ST NW	ROTHSAY	MN	56579
RASMUSSEN/BRENDA		115 2ND AVE NW PO BOX 213	ROTHSAY	MN	56579
RASMUSSEN/MARLOWE		213 1ST AVE NW	ROTHSAY	MN	56579
RENNIE/DAVID & VICTORIA		118 2ND AVE NW	ROTHSAY	MN	56579
REV TRST AGMTS-C & K FROSLIE		1555 320TH AVE	ROTHSAY	MN	56579
RHODES/KENNETH M & EVELYN D		147 2ND ST NW	ROTHSAY	MN	56579
RONSBURG/ROBERT & TESSIE/TRSTE	THE R & T RONSBERG JOINT RL	3133 130TH ST	ROTHSAY	MN	56579
ROTHSAY HOUSING PROJECT INC		303 3RD ST NW	ROTHSAY	MN	56579
ROTHSAY/CITY OF		PO BOX 117	ROTHSAY	MN	56579
RYG/NICHOLAS K		114 1ST AVE NW	ROTHSAY	MN	56579
SCHAKE/SHIELA	C/O SHIELA MERZ	122 1ST AVE NW	ROTHSAY	MN	56579
WILKIN COUNTY					
Owner 1	Owner 2	Address	City	State	Zip

LANDOWNERS

SHAMP/WILLIAM/& REGENE TARRELL		321 2ND AVE NW	ROTHSAY	MN	56579
SILLERUD/DEAN J & CYNTHIA K		1675 330TH AVE	ROTHSAY	MN	56579
SKARSTAD/GAYLE E & DEBORAH L		123 1ST ST NW	ROTHSAY	MN	56579
SLETTEN/AARON		215 2ND AVE NW	ROTHSAY	MN	56579
SOLUM/BRADY K		3330 130TH ST	ROTHSAY	MN	56579
SYVERSON/BARTH MARLYN		222 2ND ST NW	ROTHSAY	MN	56579
TORGERSON/BRUCE JON & CYNTHIA		224 1ST ST NW	ROTHSAY	MN	56579
TOSO/ERIC S & MARIE A		131 1ST ST NW	ROTHSAY	MN	56579
TROSVIK INC		PO BOX 218	ROTHSAY	MN	56579
WALDOCH/FAITH S		313 1ST AVE NW	ROTHSAY	MN	56579
WATTERUD/CHRIS O		37375 110TH AVE	ROTHSAY	MN	56579
WATTERUD/CHRIS O & ERIN J		37375 110TH AVE	ROTHSAY	MN	56579
WIESE/AVIS	HAUGRUD/ANITA, ADRIAN, ARDEAN	1941 340TH AVE	ROTHSAY	MN	56579
WINKELS/MARLYS		221 2ND ST NW	ROTHSAY	MN	56579
ZIMMERMAN/PEGGY		206 4TH ST NW	ROTHSAY	MN	56579
HWB PAULSON FARMS, LLP	C/O WAYNE PAULSON	5125 SHADY ISLAND RD	SHOREWOOD	MN	55364
ST OF MN-POLLUTION CNTRL AGENC	CLOSED LANDFILL PROGRAM UNIT	520 LAFAYETTE RD N	ST PAUL	MN	55155
FARMERS STATE BANK		PO BOX 247	UNDERWOOD	MN	56586
L&B LLC		20434 COUNTY HIGHWAY 119	UNDERWOOD	MN	56586
ROTHSAY ACQUISITION, INC	C/O OTTER COM, INC	PO BOX 277	UNDERWOOD	MN	56586
SOLUM/DANIEL C & JOY P/TRUSTEE	DANIEL C & JOY P SOLUM REV TRT	42339 LIDA VIEW LANE	VERGAS	MN	56587
CARLSRUD/CONNIE/& R OSTLUND		727 NORTHRIDGE WAY	WEST FARGO	ND	58078

- END OF LANDOWNER LIST -

LOCAL GOVERNMENT

CITIES						
City of Barnesville	Tonya Stokka	Council Member	P.O. Box 550	Barnesville	MN	56514
City of Barnesville	Jeremy Cossette	Administrator	P.O. Box 550	Barnesville	MN	56514
City of Barnesville	Jeri Reep	Clerk	P.O. Box 550	Barnesville	MN	56514
City of Brandon	Roger Campbell	Mayor	P.O. Box 137	Brandon	MN	56315
City of Brandon	Scott Pohlman	Council Member	P.O. Box 137	Brandon	MN	56315
City of Brandon	Mike Ranweiler	Council Member	P.O. Box 137	Brandon	MN	56315
City of Brandon	Jerry Bitzan	Council Member	P.O. Box 137	Brandon	MN	56315
City of Brandon	Brad Klossner	Council Member	P.O. Box 137	Brandon	MN	56315
City of Brandon	Deb Grommesh	Clerk	P.O. Box 137	Brandon	MN	56315
City of Evansville	Chuck Steffenson	Mayor	P.O. Box 265	Evansville	MN	56326
City of Evansville	Liz Plaster	Council Member	P.O. Box 265	Evansville	MN	56326
City of Evansville	Julie Aasness	Council Member	P.O. Box 265	Evansville	MN	56326
City of Evansville	Monica Olson	Council Member	P.O. Box 265	Evansville	MN	56326
City of Evansville	Jason Andersen	Council Member	P.O. Box 265	Evansville	MN	56326
City of Fergus Falls	Anthony Hicks	Mayor	112 W Washington Ave	Fergus Falls	MN	56537
City of Fergus Falls	Andrew Bremseth	Administrator	112 W Washington Ave	Fergus Falls	MN	56537
City of Fergus Falls	Jim Fish	Council Member	112 W Washington Ave	Fergus Falls	MN	56537
City of Fergus Falls	Laura Job	Council Member	112 W Washington Ave	Fergus Falls	MN	56537
City of Fergus Falls	Scott Kvamme	Council Member	112 W Washington Ave	Fergus Falls	MN	56537
City of Fergus Falls	Mark Leighton	Council Member	112 W Washington Ave	Fergus Falls	MN	56537
City of Fergus Falls	Mike Mortenson	Council Member	112 W Washington Ave	Fergus Falls	MN	56537
City of Fergus Falls	Al Kremer	Council Member	112 W Washington Ave	Fergus Falls	MN	56537
City of Fergus Falls	Scott Rachels	Council Member	112 W Washington Ave	Fergus Falls	MN	56537
City of Fergus Falls	Laurel Kilde	Council Member	112 W Washington Ave	Fergus Falls	MN	56537
City of Fergus Falls	Lynne Olson	Assistant Administrator	112 W Washington Ave	Fergus Falls	MN	56537
City of Fergus Falls	William Sonmor	Finance Director	112 W Washington Ave	Fergus Falls	MN	56537
City of Rothsay	Shane Balkan	Mayor	119 2nd St SW	Rothsay	MN	56579
City of Rothsay	Nathan Ziegler	Council Member and Deputy Mayor	119 2nd St SW	Rothsay	MN	56579
City of Rothsay	Daryl Schleeeter	Council Member	119 2nd St SW	Rothsay	MN	56579
City of Rothsay	Heather Weber	Council Member	119 2nd St SW	Rothsay	MN	56579
City of Rothsay	Matthew Balken	Council Member	119 2nd St SW	Rothsay	MN	56579
City of Rothsay	Amanda Kuschel	City Clerk and Treasurer	119 2nd St SW	Rothsay	MN	56579
TOWNSHIPS						
Alliance Township	Jerald Butenhoff	Chairman	10449 140 Ave S	Sabin	MN	56580
Alliance Township	Mark Rustad	Supervisor	9288 140th Ave S	Sabin	MN	56586
Alliance Township	Paul Anderson	Supervisor	15534 70th St S	Sabin	MN	56586
Alliance Township	Rae Ann Berg	Township Clerk and Treasurer	12479 100th St S	Sabin	MN	56580
Barnesville Township	Frank Schindler	Chairman	17807 150 St S	Barnesville	MN	56514
Barnesville Township	Kelly Peppel	Supervisor	17737 180th St S	Barnesville	MN	56514
Barnesville Township	Chuck Anderson	Supervisor	13919 150th St S	Barnesville	MN	56514
Barnesville Township	Erica Halverson	Treasurer	16856 170th Ave s	Barnesville	MN	56514
Barnesville Township	Ted Ducharme	Township Clerk and Treasurer	P.O. Box 627	Barnesville	MN	56514
Buse Township	Tyler Armstrong	Chairman	17336 Co Highway 1	Fergus Falls	MN	56537
Buse Township	Brad LaPorte	Supervisor	21900 River Oaks Drive	Fergus Falls	MN	56537
Buse Township	Frank Haataja	Supervisor	19100 195th Avenue	Fergus Falls	MN	56537
Buse Township	Joel Anderson	Treasurer	16980 River Oaks Blvd	Fergus Falls	MN	56537
Buse Township	Andrea Loomer	Clerk	18054 176th Avenue	Fergus Falls	MN	56537
Carlisle Township	Joel Piekarski	Chairman	24479 120th Ave	Fergus Falls	MN	56537
Carlisle Township	Daniel Jennen	Supervisor	26814 130th Ave	Fergus Falls	MN	56537
Carlisle Township	Zachary Fjestad	Supervisor	27500 County Highway 21	Fergus Falls	MN	56537
Carlisle Township	Sharlene Schmidt	Treasurer	24195 120th Avenue	Fergus Falls	MN	56537
Carlisle Township	Peter Fjestad	Clerk	26563 130th Avenue	Fergus Falls	MN	56537
Dane Prairie Township	Benjamin Thompson	Chairman	23450 Hidden Lake Ln	Fergus Falls	MN	56537
Dane Prairie Township	John Mark	Supervisor	28207 Joten Lake Rd	Dalton	MN	56324
Dane Prairie Township	Michael Tinjum	Supervisor	16334 Co Highway 35	Dalton	MN	56324
Dane Prairie Township	Kim Mark	Treasurer	28207 Joten Lake Rd	Dalton	MN	56324
Dane Prairie Township	Bonnie Mark	Clerk	18259 275th Avenue	Fergus Falls	MN	56537
Erdahl Township	Dean Ellis	Clerk	11078 270th St	Ashby	MN	56309
Erdahl Township	Sylvia Olson	Treasurer	24374 120th Ave	Elbow Lake	MN	56531
Erdahl Township	James Warde	Supervisor	26783 Oak Point Rd.	Elbow Lake	MN	56531
Erdahl Township	Gary Nelson	Supervisor	12285 280th	Ashby	MN	56309
Erdahl Township	Bonnie Waskosky	Supervisor	26141 123rd Ave	Elbow Lake	MN	56531
Fergus Falls Township	Barbara Zempel	Chairman	20929 250th St	Fergus Falls	MN	56537
Fergus Falls Township	Nicolas Teberg	Supervisor	19261 250th St	Fergus Falls	MN	56537
Fergus Falls Township	Roland Braud	Supervisor	24553 Country Oak Lane	Fergus Falls	MN	56537
Fergus Falls Township	Ken Garrahan	Clerk	24771 Country Oak Loop	Fergus Falls	MN	56537
Fergus Falls Township	Stephanie Wolden	Treasurer	24758 County Highway 88	Fergus Falls	MN	56537
Holy Cross Township	Tim Leiseth	Chairman	12630 40th St S	Moorhead	MN	56560
Holy Cross Township	Darin Brandt	Supervisor	15060 50th St S	Moorhead	MN	56560
Holy Cross Township	Rick Brakke	Supervisor	4901 120 Ave S	Moorhead	MN	56560
Holy Cross Township	Robert Askegaard	Treasurer	3294 150th Ave S	Moorhead	MN	56560
Holy Cross Township	Mark Anderson	Clerk	4495 160th Ave S	Moorhead	MN	56560
Organization	Name	Title	Address	City	State	ZIP
TOWNSHIPS						

LOCAL GOVERNMENT

Humboldt Township	Darrel Thomas	Chairman	602 13 st NE	Barnesville	MN	56514
Humboldt Township	David Grommesh	Supervisor	140 7th Ave NE	Barnesville	MN	56514
Humboldt Township	Nathan Thompson	Supervisor	21990 Hwy 34	Barnesville	MN	56514
Humboldt Township	Becky Stahl	Treasurer	12840 200th St S	Barnesville	MN	56514
Humboldt Township	Corey O'leary	Clerk	16137 216th St S	Barnesville	MN	56514
LaGrand Township	Greg Bowen	Chairperson	P.O. Box 762	Alexandria	MN	56308
LaGrand Township	Greg Niblett	Supervisor	P.O. Box 762	Alexandria	MN	56308
LaGrand Township	Royce Martin	Supervisor	P.O. Box 762	Alexandria	MN	56308
LaGrand Township	Kelly Beilke	Clerk	P.O. Box 762	Alexandria	MN	56308
LaGrand Township	Paulynn Terhark	Treasurer	P.O. Box 762	Alexandria	MN	56308
Lake Mary Township	James Schmidt	Chairman	P.O. Box 1172	Alexandria	MN	56308
Lake Mary Township	Peter Fernholz	Supervisor	P.O. Box 1172	Alexandria	MN	56308
Lake Mary Township	Max Radil	Supervisor	P.O. Box 1172	Alexandria	MN	56308
Lake Mary Township	Sue Hanson	Clerk	P.O. Box 1172	Alexandria	MN	56308
Lake Mary Township	Christy Tvrdik	Treasurer	P.O. Box 1172	Alexandria	MN	56308
Moe Township	Lynn Bushard	Chairperson	1433 Timber Lane SW	Garfield	MN	56332
Moe Township	John Krafthefer	Supervisor	1433 Timber Lane SW	Garfield	MN	56332
Moe Township	Bill Hinnenkamp	Supervisor	1433 Timber Lane SW	Garfield	MN	56332
Moe Township	Scott Wright	Clerk	1433 Timber Lane SW	Garfield	MN	56332
Moe Township	Whitney Citrowske	Treasurer	1433 Timber Lane SW	Garfield	MN	56332
Oscar Township	Jason Grunewald	Chairman	32256 County Highway 2133492 110th Ave	Rothsay	MN	56579
Oscar Township	John Haarstad	Supervisor	12968 300th St	Rothsay	MN	56579
Oscar Township	Jennifer Sletten	Supervisor	14222 County Highway 118	Rothsay	MN	56579
Oscar Township	Mike Metzger	Clerk	15757 300th St	Elizabeth	MN	56533
Oscar Township	Danielle Grunewald	Treasurer	32256 County Highway 21	Rothsay	MN	56579
Pelican Lake Township	Janice Ellingson	Clerk	P.O. Box 374	Ashby	MN	56309
Pelican Lake Township	Denise Hanson	Treasurer	14909 310th St	Ashby	MN	56309
Pelican Lake Township	Beaver Johnson	Supervisor	32930 100th Ave	Ashby	MN	56309
Pelican Lake Township	Peter Risbrudt	Supervisor	14897 County Rd 4	Ashby	MN	56309
Pelican Lake Township	Edwin Evenson	Supervisor	31821 County Rd 4	Ashby	MN	56309
Pomme de Terre Township	Jackie Webb	Clerk	19587 Co. Rd 4	Elbow Lake	MN	56531
Pomme de Terre Township	Matt Allen	Treasurer	21921 Co. Road 26	Elbow Lake	MN	56531
Pomme de Terre Township	Aaron Weinandt	Supervisor	32871 180th Ave	Elbow Lake	MN	56531
Pomme de Terre Township	Nathan Jennen	Supervisor	18783 Co. Rd 4	Elbow Lake	MN	56531
Pomme de Terre Township	Mike Woessner	Supervisor	29340 Co. Rd 20	Elbow Lake	MN	56531
Prairie View Township	Robert Hovland	Chairman	1483 320th Ave	Rothsay	MN	56579
Prairie View Township	Llyal Braton	Supervisor	1186 290th Ave	Barnesville	MN	56514
Prairie View Township	Bill Braton	Supervisor	1250 290th Ave	Barnesville	MN	56514
Prairie View Township	Kathy Braton	Clerk	1250 290th Ave	Barnesville	MN	56514
Prairie View Township	Doug Duran	Treasurer	3081 120th St	Barnesville	MN	56514
Saint Olaf Township	Jon Bratvold	Chairman	119214 Co Highway 117	Ashby	MN	56309
Saint Olaf Township	Randy Swonger	Supervisor	15786 Golf Course RD	Dalton	MN	56324
Saint Olaf Township	Stacy Thormodson	Clerk	32276 110th Street	Ashby	MN	56309
Saint Olaf Township	Evelyn Lang	Treasurer	34258 140th St	Battle Lake	MN	56515
Tanberg Township	Marvin Peterson	Chairman	3321 210th St	Rothsay	MN	56579
Tanberg Township	Justin Larson	Supervisor	1948 280th Ave	Rothsay	MN	56579
Tanberg Township	Derek Froslic	Supervisor	2953 210th st	Rothsay	MN	56579
Tanberg Township	Rena Froslic	Clerk	1659 320th Ave	Rothsay	MN	56579
Tanberg Township	Evelyn Jensen	Treasurer	3232 180th St	Rothsay	MN	56579
Trondhjem Township	Chris Watterud	Chairman and Supervisor	37375 110th Ave	Rothsay	MN	56579
Trondhjem Township	Cary Danielson	Vice Chair and Supervisor	10204 Co Hwy 28	Rothsay	MN	56579
Trondhjem Township	Marshall Ohe	Supervisor	13727 Co Highway 28	Rothsay	MN	56579
Trondhjem Township	Gary Johnson	Treasurer	12501 Co Highway 28	Rothsay	MN	56579
Trondhjem Township	Maggie Lindsay	Clerk	14829 Cty Hwy 24	Rothsay	MN	56579
Tumuli Township	Jay Mark	Chairman	P.O. Box 513	Dalton	MN	56324
Tumuli Township	Chalsey Barry	Supervisor	P.O. Box 513	Dalton	MN	56324
Tumuli Township	Rodney Young	Supervisor	P.O. Box 513	Dalton	MN	56324
Tumuli Township	Echo Finkelson	Treasurer	P.O. Box 513	Dalton	MN	56324
Tumuli Township	Daniel Maertens	Clerk	P.O. Box 513	Dalton	MN	56324
STAKEHOLDERS						
Alexandria Volunteer Fire Department	Jeff Karrow	Fire Chief	302 Fillmore Street	Alexandria	MN	56308
Alexandria Aviation Airport	Kreg Anderson	Airport Manager	2604 Aga Drive	Alexandria	MN	56308
Alexandria City Administrator	Martin Schultz	City Administrator	704 Broadway St	Alexandria	MN	56308
Alexandria Police Department	Scott Kent	Chief of Police	501 3rd Ave W	Alexandria	MN	56308
City of Barnesville	Joel Voxland	Police Chief	P.O. Box 550	Barnesville	MN	56514
Barnesville Volunteer Fire Department	Andy Boyum	Fire Chief	P.O. Box 550	Barnesville	MN	56514
Evansville Fire Department	Tyler Anderson	Fire Chief	106 State St NW	Evansville	MN	56326
Fergus Falls Fire Department	Ryan Muchow	Fire Chief	325 E Washington Avenue	Fergus Falls	MN	56537
Fergus Falls Police Department	Kile Bergren		122 W Junius Avenue	Fergus Falls	MN	56537
Rothsay Fire Department			355 Center St N	Rothsay	MN	56579
Douglas County Emergency Management	Julie Anderson	Director	821 Cedar St	Alexandria	MN	56308
Grant County Emergency Management	Miah Ulrich	Coordinator	10 2nd St NE	Elbow Lake	MN	56531
Organization	Name	Title	Address	City	State	ZIP
STAKEHOLDERS						
Clay County Emergency Management	Gabe Tweten	Director	911 11th St N	Moorhead	MN	56560

LOCAL GOVERNMENT

Otter Tail County Emergency Management	Patrick Waletzko	Manager	520 W Fir Avenue	Fergus Falls	MN	56537
Wilkin County Emergency Management	Breanna Koval	Director	505 South 8th St	Breckenridge	MN	56520

- END OF LOCAL GOVERNMENT LIST -

Tribal Name	First Name	Last Name	Email
1854 Treaty Authority	Myers	Sonny	smyers@1854treatyauthority.org
Apache Tribe of Oklahoma	Tselee	Matthew	matthew.tselee@apachetribe.org
Bad River Band of the Lake Superior Tribe of Chippewa Indians of the Bad River Reservation, Wisconsin	Blanchard	Robert	r.blanchard@badriver-nsn.gov
Bad River Band of the Lake Superior Tribe of Chippewa Indians of the Bad River Reservation, Wisconsin	Leoso	Edith	thpo@badriver-nsn.gov
Bois Forte Band of Chippewa	Holm	Chris	cholm@boiseforte-nsn.gov
Boise Forte Band of Chippewa	Villebrun	Frank	fvillebrun@boiseforte-nsn.gov
Bois Forte Tribal Government	Strong	Jaylen	jaylen.strong@boiseforte-nsn.gov
Boise Forte Band of Chippewa	Chavers	Cathy	cchavers@boiseforte-nsn.gov
Boise Forte Band of Chippewa	Drift	Amy	amy.mason@boiseforte-nsn.gov
Boise Forte Band of Chippewa	Drift	Perry	pdrift@boiseforte-nsn.gov
Boise Forte Band of Chippewa	Drift	Shane	sdrift@boiseforte-nsn.gov
Boise Forte Band of Chippewa	Lilya	Miranda	mlilya@boiseforte-nsn.gov
Boise Forte Band of Chippewa	Moyer, Jr.	Robert	rmoyer@boiseforte-nsn.gov
Boise Forte Reservation Tribal Council	Geshick	Tara	tara.geshick@boiseforte-nsn.gov
Cheyenne and Arapaho Tribes, Oklahoma	Bear	Max	mbear@cheyenneandrapaho-nsn.gov
Cheyenne and Arapaho Tribes, Oklahoma	Wassana	Reggie	rwassana@c-a-tribes.org
Flandreau Santee Sioux Tribe of South Dakota	Kills-A-Hundred	Garrie	garrie.killsahundred@fsst.org
Flandreau Santee Sioux Tribe of South Dakota	Reider	Anthony	anthony.reider@fsst.org
Fond du Lac Band of Lake Superior Chippewa	Northbird	Arianna	ariannanorthbird@fdlband.org
Fond du Lac Band of Lake Superior Chippewa	Schuldt	Nancy	nancyschuldt@fdlband.org
Fond du Lac Band of Lake Superior Chippewa	Abramowski	Robert	robertabramowski@fdlband.org
Fond du Lac Band of Lake Superior Chippewa	Bichler	Seth	sethbichler@fdlrez.com
Fond du Lac Band of Lake Superior Chippewa	Buchanan	Scott	scottbuchanan@fdlrez.com
Fond du Lac Band of Lake Superior Chippewa	Dunlap	Caleb	calebdunlap@fdlband.org
Fond du Lac Band of Lake Superior Chippewa	Dupuis	Wally	wallydupuis@fdlband.org
Fond du Lac Band of Lake Superior Chippewa	Otis	Earl	earlotis@fdlband.org
Fond du Lac Band of Lake Superior Chippewa	Savage	Bruce	brucesavage@fdlband.org
Fond du Lac Band of Lake Superior Chippewa	Schroeder	Evan	evanschroeder@fdlrez.com
Fond du Lac Band of Lake Superior Chippewa	Thompson	Bill	billthompson@fdlrez.com
Fond du Lac Band of Lake Superior Chippewa	Young	Ian	ianyong@fdlband.org

Fort Belknap Indian Community of the Fort Belknap Reservation of Montana	Blackwolf	Michael	mblackwolf@ftbelknap.org
Fort Belknap Indian Community of the Fort Belknap Reservation of Montana	Stiffarm	Jeffery	jeffery.stiffarm@ftbelknap.org
Grand Portage Bank of Lake Superior Chippewa	Armstrong	Agatha	agathaa@grandportage.com
Grand Portage Bank of Lake Superior Chippewa	Deschampe	Bobby	robertdeschampe@grandportage.com
Grand Portage Bank of Lake Superior Chippewa	McCormick	April	april@m@grandportage.com
Grand Portage Bank of Lake Superior Chippewa	Stephens	Toby	tobys@grandportage.com
Grand Portage Bank of Lake Superior Chippewa	Woerheide	Krishna	kwoerheide@grandportage.com
Iowa Tribe of Kansas and Nebraska	Foster	Lance	lfoster@iowas.org
Iowa Tribe of Kansas and Nebraska	Rhodd	Timothy	trhodd@iowas.org
Lac du Flambeau Tribe, Lac du Flambeau Band of Lake Superior Chippewa Indians	Johnson	John	jjohnson@ldftribe.com
Lac du Flambeau Tribe, Lac du Flambeau Band of Lake Superior Chippewa Indians	Thompson	Sarah	sarah.thompson@ldftribe.com
Lac Vieux Desert Band of Lake Superior Chippewa Indians of Michigan	Shively	Alina	alina.shively@lvd-nsn.gov
Lac Vieux Desert Band of Lake Superior Chippewa Indians of Michigan	Williams	James	jim.williams@lvd-nsn.gov
Leech Lake Band of Ojibwe	Chosa	Mike	mike.chosa@llojibwe.net
Leech Lake Band of Ojibwe	Fairbanks	Kyle	kyle.fairbanks@llojibwe.net
Leech Lake Band of Ojibwe	Fineday	Leonard	leonard.fineday@llojibwe.com
Leech Lake Band of Ojibwe	Harrison	Ashley	ashley.harrison@llojibwe.net
Leech Lake Band of Ojibwe	Relations	Gov	govt.relations@llojibwe.net
Leech Lake Band of Ojibwe	Staples Fairbanks III	LeRoy	leroy.fairbanks@llojibwe.net
Leech Lake Band of Ojibwe	Strowbridge	Eugene	eugene.strowbridge@llojibwe.net
Leech Lake Band of Ojibwe	White	Steve	steve.white@llojibwe.net
Leech Lake Band of the Minnesota Chippewa Tribe	Jackson	Faron	faron.jackson@llojibwe.org
Leech Lake Band of the Minnesota Chippewa Tribe	Lemon	Gina	gina.lemon@llojibwe.net
Leech Lake Band of Ojibwe	Harper	Jeff	jeff.harper@llojibwe.net
Leech Lake Bank of Ojibwe	Tofte	Brandy	brandy.toft@llojibwe.net
Lower Sioux Indian Community	Prescott	Robert	bob.prescott@lowersioux.com
Lower Sioux Indian Community	Prescott	Tyler	tyler.prescott@lowersioux.com
Lower Sioux Indian Community	Sam	Miranda	miranda.sam@lowersioux.com
Lower Sioux Indian Community	Smith	Nizhoni	nizhoni.smith@lowersioux.com
Lower Sioux Indian Community	Dirlam	Deb	deb.dirlam@lowersioux.com
Lower Sioux Indian Community in the State of Minnesota	Larsen	Robert	robert.larsen@lowersioux.com
Lower Sioux Indian Community in the State of Minnesota	St. John	Cheyenne	cheyenne.stjohn@lowersioux.com

Menominee Indian Tribe of Wisconsin	Grignon	David	dgrignon@mitw.org
Menominee Indian Tribe of Wisconsin	Kakkak	Gena	chairman@mitw.org
Mille Lacs Band of Ojibwe	Applegate	Kelly	kelly.applegate@millelacsband.com
Mille Lacs Band of Ojibwe	Lippert	Charles	charlie.lippert@millelacsband.com
Mille Lacs Band of Ojibwe	Beaulieu	Carolyn	carolyn.beaulieu@millelacsband.com
Mille Lacs Band of Ojibwe	Boyd	Sheldon	sheldon.boyd@millelacsband.com
Mille Lacs Band of Ojibwe	Davis	Harry	harry.davis@millelacsband.com
Mille Lacs Band of Ojibwe	Edwards	Jamie	jamie.edwards@millelacsband.com
Mille Lacs Band of Ojibwe	Matrious	Shena	shena.matrious@millelacsband.com
Mille Lacs Band of Ojibwe	Merrill	Wendy	wendy.merrill@millelacsband.com
Mille Lacs Band of Ojibwe	Wind	Virgil	virgil.wind@millelacsband.com
Mille Lacs Band of Ojibwe (The Mille Lacs Band of the Minnesota Chippewa Tribe Mille Lacs Band of Ojibwe)	Benjamin	Melanie	melanie.benjamin@millelacsband.com
Mille Lacs Band of Ojibwe (The Mille Lacs Band of the Minnesota Chippewa Tribe Mille Lacs Band of Ojibwe)	Wilson	Mike	mike.wilson@millelacsband.com
Minnesota Chippewa Tribe	Warnsholz	Luke	lwarnsholz@mnchippewatribe.org
Minnesota Chippewa Tribe	Chavers	Catherine	gfrazer@mnchippewatribe.org
Minnesota Chippewa Tribe	Hull	Rob	thpo@grandportage.com
Minnesota Chippewa Tribe	Smith	Joel	jsmith@mnchippewatribe.org
Prairie Island Indian Community	Hince	Rylie	Rylee.hince@piic.org
Prairie Island Indian Community	Johnson	Blake	blake.johnson@piic.org
Prairie Island Indian Community	Johnson	Grant	grant.johnson@piic.org
Prairie Island Indian Community	Johnson	Jody	jody.johnson@piic.org
Prairie Island Indian Community	Johnson	Ronald	ron.johnston@piic.org
Prairie Island Indian Community	Mgeni	Valentia	valentina.mgeni@piic.org
Prairie Island Indian Community	Seim	Jessie	jessie.seim@piic.org
Prairie Island Indian Community	Westra	Heather	heather.westra@piic.org
Prairie Island Indian Community	Campbell	Constance	tori.campbell@piic.org
Prairie Island Indian Community	Childs, Jr.	Michael	michael.childsjr@piic.org
Prairie Island Indian Community in the State of Minnesota	Johnson	Johnny	sbartell@piic.org
Prairie Island Indian Community in the State of Minnesota	White	Noah	noah.white@piic.org
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin	Boyd	Nicole	nicole.boyd@redcliff-nsn.gov
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin	Defoe	Marvin	marvin.defoe@redcliff-nsn.gov
Red Lake Band of Chippewa	Bowe	Shane	sbowe@redlakenation.org
Red Lake Band of Chippewa	Branchaud	George	george_branchaud@redlakenation.org
Red Lake Nation	Defoe	Jason	jasondefoe@redlakenation.org
Red Lake Nation	Lussier	Vernelle	vernelle.lussier@redlakenation.org
Red Lake Nation	Plumer	Joe	joe.plumer@redlakenation.org
Red Lake Nation	Strong	Samuel	sam.strong@redlakenation.org
Red Lake Region	Ferris	Kade	kade.ferris@redlakenation.org

Santee Sioux Nation, Nebraska	Denney	Alonzo	alonzo.denney@ssndakota.com
Santee Sioux Nation, Nebraska	Thomas	Larry	larry.thomas@ohiyacasino.com
Shakopee Mdewakanton Sioux Community	Walz	Scott	scott.walz@shakopeedakota.org
Shakopee Mdewakanton Sioux Community	Davis Anderson	Ferin	ferin.davis@shakopeedakota.org
Shakopee Mdewakanton Sioux Community	Albrecht	Steve	steve.albrecht@shakopeedakota.org
Shakopee Mdewakanton Sioux Community	Miller	Cole W.	cole.miller@shakopeedakota.org
Shakopee Mdewakanton Sioux Community	Rudnicki	Bill	bill.rudnicki@shakopeedakota.org
Shakopee Mdewakanton Sioux Community	Wabasha	Leonard	leonard.wabasha@shakopeedakota.org
Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota	Desrosiers	Dianne	dianned@swo-nsn.gov
Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota	Renville	J. Garret	chairman@swo-nsn.gov
Sokaogon Chippewa Community, Wisconsin	Laronge	Michael	michael.laronge@scc-nsn.gov
Sokaogon Chippewa Community, Wisconsin	Vanzile	Robert	robert.vanzile@scc-nsn.gov
Spirit Lake Tribe, North Dakota	Graywater	Kenneth	thpo@spiritlakenation.com
Spirit Lake Tribe, North Dakota	Street	Lonna	lonnas@spiritlakenation.com
Spirit Lake Tribe, North Dakota	BigEagle	Jerry	jerryb@uppersiouxcommunity-nsn.gov
Upper Sioux Community	Hamilton	Jeremy	jhamilton@uppersiouxcommunity-nsn.gov
Upper Sioux Community	Savariago	Adam	adams@uppersiouxcommunity-nsn.gov
Upper Sioux Community	Tanhoff	Camille	kamip@uppersiouxcommunity-nsn.gov
Upper Sioux Community	Trutna	Caralyn	carrie@uppersiouxcommunity-nsn.gov
Upper Sioux Community, Minnesota	Jensvold	Kevin	kevinj@uppersiouxcommunity-nsn.gov
Upper Sioux Community, Minnesota	Odegard	Samantha	samanthao@uppersiouxcommunity-nsn.gov
White Earth Band of Minnesota Chippewa	Fairbanks	Michael	michael.fairbanks@whiteearth-nsn.gov
White Earth Band of Ojibwe	Roy	Dustin	dustin.roy@whiteearth-nsn.gov
White Earth Band of Ojibwe	Hedstrom	Monica	monica.hedstrom@whiteearth-nsn.gov
White Earth Nation	Arsenault	Jaimie	jaimie.arsenault@whiteearth-nsn.gov
White Earth Nation	Erickson	Laura	laura.erickson@whiteearth-nsn.gov
White Earth Nation	Fox	Henry	henry.fox@whiteearth-nsn.gov
White Earth Nation	Haverkamp	Christie	christie.haverkamp@whiteearth-nsn.gov
White Earth Nation	Laroque	Mike	mike.laroque@whiteearth-nsn.gov
White Earth Nation	Mathews	Nate	nathan.mathews@whiteearth-nsn.gov
White Earth Nation	McArthur	Jacob	jacob.mcarthur@whiteearth-nsn.gov
White Earth Nation	Smith	Mike	icecrackingswamp.org
White Earth Nation	Sommers	Eugene	eugene.sommers@whiteearth-nsn.gov
White Earth Nation	Tonihka	Joe	joe.tonihka@whiteearth-nsn.gov
White Earth Reservation	York	Laurie	laurie.york@whiteearth-nsn.gov



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Transmission Line Information

Dear landowner,

Please join us at an upcoming public open house to hear important information and have your questions answered about the proposed Fargo to Alexandria Second Circuit 345-kV transmission line project. If approved, the project will add a second circuit to the existing transmission line between the existing Bison Substation near Fargo, North Dakota and the existing Alexandria Substation in Alexandria, Minnesota. The project is designed to increase reliability, reduce grid congestion, and increase access to new electric generation sources in Minnesota, North Dakota, and South Dakota. We're asking landowners to join us to learn more about the project, discuss important land use issues in each area, and provide feedback on the proposal.

No formal presentation is planned, so attend at any time. Detailed route maps will be presented at the public meetings and will be available on the project website after the meetings.

We will also host a virtual open house for those unable to attend the in-person meetings.

Open House Schedule

Sep. 24, 2025 11:00 am - 1:00 pm	Bigwood Events Center	925 Western Ave, Fergus Falls, MN 56537
Sep. 24, 2025 5:00 pm - 7:00 pm	Broadway Ballroom Event Center	115 30th Avenue E, Alexandria, MN 56308
Sep. 25, 2025 1:00 pm	Virtual Open House	Access.live/xcelenergy
Sep. 25, 2025 5:00-7:00 pm	Barnesville Event Center	101 2nd Street SE, Barnesville, MN 56514

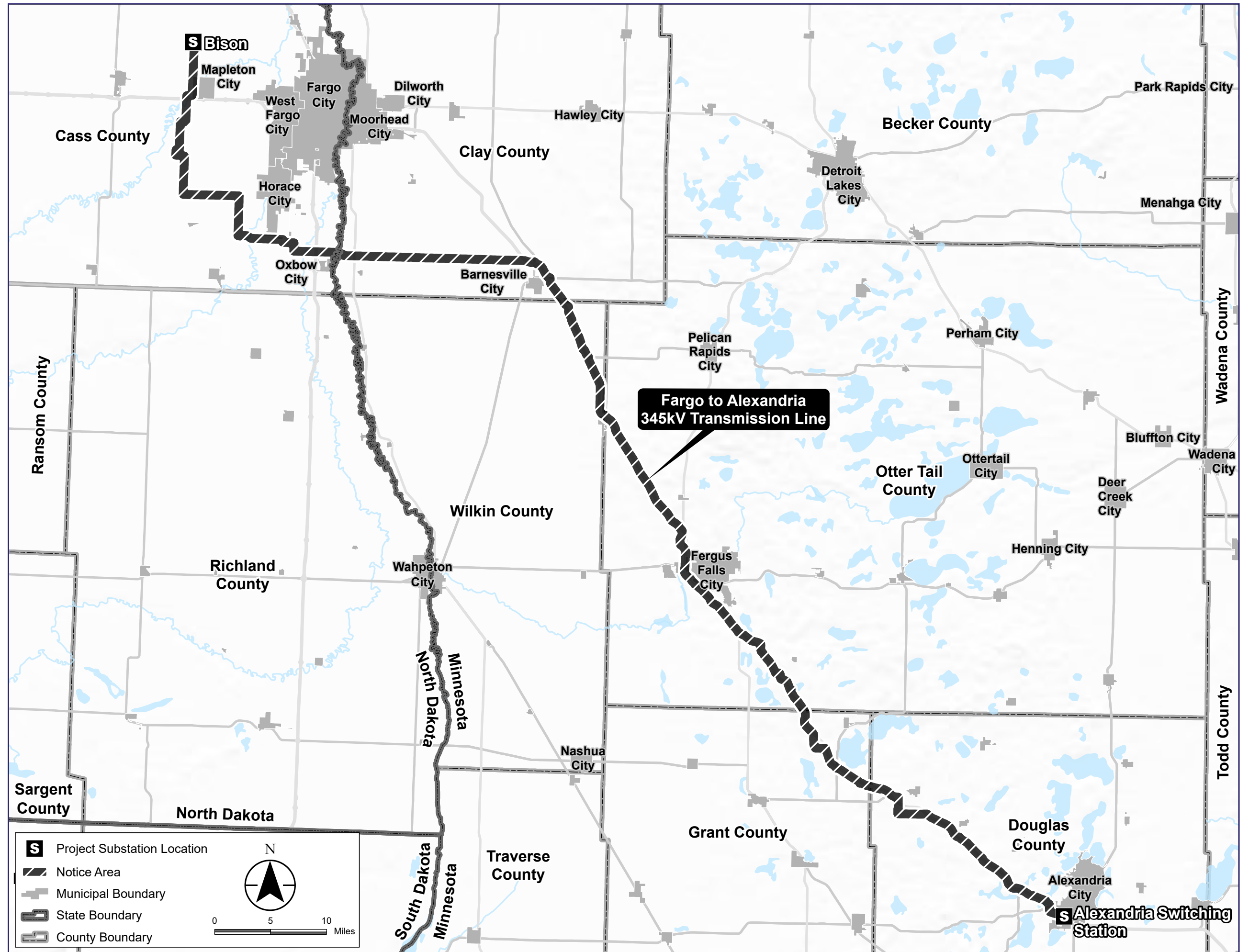
For more information, visit FargotoAlexandria.com, email FargotoAlexandria@xcelenergy.com or call toll-free **1-701-420-1412**.

About the Fargo to Alexandria Second Circuit 345-kV Transmission Line Project

The energy companies that built the CapX2020 Fargo-St. Cloud/Monticello transmission project have proposed to add a second circuit to an existing transmission line to increase reliability, reduce grid congestion, and increase access to new electric generation sources in Minnesota, North Dakota, and South Dakota. Project participants include Great River Energy, Minnesota Power, Missouri River Energy Services, Otter Tail Power Company, and Xcel Energy.



Fargo to Alexandria Second Circuit Project



From: [Ray, Allison](#)
To: lfoster@iowas.org
Subject: Xcel Energy Fargo to Alex 2nd Circuit Project Introduction
Date: Thursday, September 18, 2025 4:29:00 PM

Good afternoon,

I am reaching out to share information about the proposed Fargo to Alexandria Second Circuit 345-kV transmission line project and invite you to attend upcoming public open houses.

If approved, the project will add a second circuit to the existing transmission line between the existing Bison Substation near Fargo, North Dakota and the existing Alexandria Substation in Alexandria, Minnesota. The project is designed to increase reliability, reduce grid congestion, and increase access to new electric generation sources in Minnesota, North Dakota, and South Dakota. A map of the project is shown below.

I encourage you to attend one of the public open houses to learn more, ask questions and share your thoughts. These events are informal (with no scheduled presentations), so feel free to stop by at any time. A schedule and location information is shown below. We will also host a virtual open house for those unable to attend the in-person meetings.

Detailed route maps will be available at the meetings and posted on the project website afterwards.

We value your input. Should you have any questions or concerns we encourage you to share them as we prepare our project applications for submission to various regulatory authorities. Please feel free to reach out or provide feedback at your convenience. My email address is Allison.ray@xcelenergy.com, and a project email address is fargotoalexandria@xcelenergy.com. You can also call the project hotline -- 1-701-420-1412.

Open House Schedule		
Sept. 24, 2025 11:00 am - 1:00 pm	Bigwood Events Center	925 Western Ave, Fergus Falls, MN 56537
Sept. 24, 2025 5:00 pm - 7:00 pm	Broadway Ballroom Event Center	115 30th Avenue E, Alexandria, MN 56308
Sept. 25, 2025 1:00 pm	Virtual Open House	Access.live/xcelenergy
Sept. 25, 2025 5:00 – 7:00 pm	Barnesville Event Center	101 2nd Street SE, Barnesville, MN 56514

Project Location Map



NOVEMBER 19, 2025

RE: ROUTE PERMIT AMENDMENT APPLICATION TO ADD A NEW 345 KILOVOLT (KV) TRANSMISSION CIRCUIT TO THE BISON TO ALEXANDRIA TRANSMISSION LINE PROJECT.
DOCKET NO. 09-1056

This letter is intended to notify you that Northern States Power Company, doing business as Xcel Energy (Xcel Energy), along with Great River Energy, Minnesota Power, Otter Tail Power Company (Otter Tail), and Western Minnesota Municipal Power Agency, (together, the Utilities) are seeking a Route Permit Amendment to add a new 345 kilovolt (kV) transmission circuit on existing transmission line structures for approximately 136 miles from the existing Bison Substation near Fargo, North Dakota in Cass County to the existing Alexandria Substation near Alexandria, Minnesota in Douglas County.

This Application for Route Permit Amendment is being filed in addition to the Certificate of Need Application for the Bison to Alexandria Transmission Line Project. The existing 180-mile Fargo – CapX2020 Fargo - St. Cloud 345 kV Transmission Project was constructed under Minnesota Public Utilities Commission (MPUC) permitting authority (Docket# ET2/TL-09-1056). The CapX2020 Fargo – St. Cloud 345 kV Transmission Project was constructed with one circuit on double circuit capable structures. Those segments connect the Bison Substation to the Alexandria Substation, and the Alexandria Substation to the Quarry Substation. Only the Bison to Alexandria segment will be modified by the Project. For this Project, certain locations will require new structures. Approximately 106 new structures are proposed, 86 of which would be located in Minnesota. These new structures are necessary in specific areas along the existing corridor to manage alignment turns and highway crossings.

The Utilities intend to request an amendment to the Route Permit for the Bison to Alexandria Second Circuit 345kV Transmission Line Project. The Route Permit Amendment would amend the previous Route Permit issued in 2011 by the Commission.

In accordance with Minn. Stat. 216I.09, the Route Permit Amendment application will describe the alteration to be made or the amendment sought, explain why the amendment request meets eligibility criteria, and describe changes to the environmental impacts that were previously evaluated during the initial Route Permit issued by the Commission. The Commission will provide a minimum ten-day comment period for interested persons to submit comments on the Route Permit Amendment. After the closure of the comment period, the Commission will decide on whether to approve the amendment request.

It is anticipated that the Route Permit Amendment will be filed in winter 2026 following submittal of the Certificate of Need.

Major Process Steps and Summary Schedule

Activity	Schedule
Project planning, engineering, design	Second Quarter 2025 through Fourth Quarter 2027
Project Permitting	Third Quarter 2025 through Third Quarter 2028
Open Houses and Public Comments	September 2025 – June 2026
Transmission line construction	July 2028 – January 2031
Construction complete	First Quarter 2031
Project In-service	June 2032

To subscribe to the Project’s Route Permit Amendment docket and to receive email notifications when information is filed in that docket, please visit <https://mn.gov/puc/>, click on the “edockets” tab, then click on the “Subscribe to eDockets” button and follow the directions listed. For the docket number, enter “09-1056”.

To be placed on the Project’s Route Permit Amendment mailing list (MPUC Docket 09-1056), email eservice.admin@state.mn.us or call 651-201-2246. You may request to receive notices by email or U.S. Mail. If you have questions about the state regulatory process, you may contact the Minnesota state regulatory staff listed below:

Minnesota Public Utilities Commission

Energy Infrastructure Permitting Staff

Jacques Harvieux

121 7th Place East, Suite 350

St. Paul, Minnesota 55101

651-201-2233

800.657.3782

jacques.harvieux@state.mn.us

Please visit the Project website at: FargotoAlexandria@xcelenergy.com for more information.

Project phone and e-mail address are:

Project Phone Number: 1-701-420-1412

Project e-mail address: FargotoAlexandria@xcelenergy.com



NOVEMBER 19, 2025

RE: ROUTE PERMIT AMENDMENT APPLICATION TO ADD A NEW 345 KILOVOLT (KV) TRANSMISSION CIRCUIT TO THE BISON TO ALEXANDRIA TRANSMISSION LINE PROJECT.
DOCKET NO. 09-1056

Northern States Power Company, doing business as Xcel Energy (Xcel Energy), along with Great River Energy, Minnesota Power, Otter Tail Power Company (Otter Tail), and Western Minnesota Municipal Power Agency, (together, the Utilities) are seeking a Route Permit Amendment to add a new 345 kilovolt (kV) transmission circuit on existing transmission line structures for approximately 136 miles from the existing Bison Substation near Fargo, North Dakota in Cass County to the existing Alexandria Substation near Alexandria, Minnesota in Douglas County. This letter is intended to notify you about the Project and extend an invitation to you to meet with Xcel Energy to ask questions and provide comments. For information on how to request a meeting, please see the second page of the letter.

This Application for Route Permit Amendment is being filed in addition to the Certificate of Need Application for the Bison to Alexandria Transmission Line Project. The existing 180-mile Fargo – CapX2020 Fargo - St. Cloud 345 kV Transmission Project was constructed under Minnesota Public Utilities Commission (MPUC) permitting authority (Docket# ET2/TL-09-1056). The CapX2020 Fargo – St. Cloud 345 kV Transmission Project was constructed with one circuit on double circuit capable structures. Those segments connect the Bison Substation to the Alexandria Substation, and the Alexandria Substation to the Quarry Substation. Only the Bison to Alexandria segment will be modified by the Project.

The Utilities intend to request an amendment to the Route Permit for the Bison to Alexandria Second Circuit 345kV Transmission Line Project. The Route Permit Amendment would amend the previous Route Permit issued in 2011 by the Commission.

In accordance with Minn. Stat. 216I.09, the Route Permit Amendment application will describe the alteration to be made or the amendment sought, explain why the amendment request meets eligibility criteria, and describe changes to the environmental impacts that were previously evaluated during the initial Route Permit issued by the Commission. The Commission will provide a minimum ten-day comment period for interested persons to submit comments on the Route Permit Amendment. After the closure of the comment period, the Commission will decide on whether to approve the amendment request.

It is anticipated that the Route Permit Amendment will be filed in winter 2026 following submittal of the Certificate of Need.



Major Process Steps and Summary Schedule

Activity	Schedule
Project planning, engineering, design	Second Quarter 2025 through Fourth Quarter 2027
Project Permitting	Third Quarter 2025 through Third Quarter 2028
Open Houses and Public Comments	September 2025 – June 2026
Transmission line construction	July 2028 – January 2031
Construction complete	First Quarter 2031
Project In-service	June 2032

To subscribe to the Project’s Route Permit Amendment docket and to receive email notifications when information is filed in that docket, please visit <https://mn.gov/puc/>, click on the “edockets” tab, then click on the “Subscribe to eDockets” button and follow the directions listed. For the docket number, enter “09-1056”.

To be placed on the Project’s Route Permit Amendment mailing list (MPUC Docket 09-1056), email eservice.admin@state.mn.us or call 651-201-2246. You may request to receive notices by email or U.S. Mail. If you have questions about the state regulatory process, you may contact the Minnesota state regulatory staff listed below:

Minnesota Public Utilities Commission

Energy Infrastructure Permitting Staff

Jacques Harvieux

121 7th Place East, Suite 350

St. Paul, Minnesota 55101

651-201-2233

800.657.3782

jacques.harvieux@state.mn.us

Xcel Energy is extending an invitation to you to meet in-person or via phone to answer questions about the Project. To request a meeting please call 1-701-420-1412 or email FargotoAlexandria@xcelenergy.com. We look forward to hearing from you.

Please visit the Project website at: FargotoAlexandria@xcelenergy.com for more information.



MARCH 2, 2026

RE: OPPORTUNITY TO REQUEST MEETING WITH XCEL ENERGY AND PROJECT UPDATE FOR THE 345 KILOVOLT (KV) FARGO TO ALEXANDRIA SECOND CIRCUIT PROJECT.

This letter is intended to update you on project status of the 345 kV Fargo to Alexandria Second Circuit Project (Project) and extend an invitation to you to meet with Xcel Energy to ask questions about the Project. For information on how to request a meeting, please see the second page of the letter.

Xcel Energy and our partners are happy to attend an upcoming meeting, either with staff or at a formal agenda meeting, to provide information about the project and answer questions. We can meet virtually or in person. To request a meeting please call 1-701-420-1412 or email FargotoAlexandria@xcelenergy.com. We look forward to hearing from you.

Minnesota energy companies continually prepare for the needs of our customers, including how to efficiently deliver reliable electricity. As part of this commitment, on January 15, 2026, Great River Energy, Minnesota Power, Otter Tail Power Company, Western Minnesota Municipal Power Agency, and Xcel Energy applied to the Minnesota Public Utilities Commission (MPUC) for a Certificate of Need to add a second transmission line circuit to the existing transmission line structures between the existing Bison Substation near Fargo, North Dakota in Cass County to the existing Alexandria Substation near Alexandria, Minnesota in Douglas County. The project was originally planned for and built double circuit capable as part of the CapX2020 projects about ten years ago.

If approved, the new circuit will be added to the existing transmission line towers, with some new structures added within the existing right-of-way, limiting impacts to landowners.

The MPUC review process typically takes about a year and includes opportunities for input from customers, landowners, and other stakeholders. If approved, construction could begin in 2028, with the line expected to be placed in service around 2032.

The utilities will also submit an amendment application to the MPUC for the existing Route Permit (No. E0002, ET2/TL-09-1056 Fargo-St. Cloud 345 kV Transmission Project). In accordance with Minn. Stat. 216I.09, the Route Permit Amendment application will describe the alteration to be made or the amendment sought, explain why the amendment request meets eligibility criteria, and describe changes to the environmental impacts that were previously evaluated during the initial Route Permit issued by the Commission. The Commission will provide a comment period for interested persons to submit comments on the Route Permit Amendment. After the closure of the comment period, the Commission will decide to approve or deny the amendment request. The Route Permit Amendment is anticipated to be filed with the MPUC by the end of the second quarter of 2026.

The Project also requires approvals of a Certificate of Public Convenience and Necessity and an amendment to the previous Certificate of Corridor Compatibility and Route Permit from the North Dakota Public Service Commission (NDPSC). Filings to the NDPSC are anticipated to be submitted in the second half of 2026. The table below provides a high-level summary of the major steps in the regulatory process.

Major Process Steps and Summary of Anticipated Schedule

Activity	Schedule
Project planning, engineering, design	Second Quarter 2025 through Fourth Quarter 2027
Project Permitting	Third Quarter 2025 through Third Quarter 2028
Open Houses and Public Comments	September 2025 – June 2026
Transmission line construction	July 2028 – January 2031
Construction complete	First Quarter 2031
Project In-service	June 2032

How can I meet with Xcel Energy?

Xcel Energy is extending an invitation to you to meet in-person or via phone to answer questions about the Project. To request a meeting please call 1-701-420-1412 or email FargotoAlexandria@xcelenergy.com. We look forward to hearing from you.

Please visit the Project website at: FargotoAlexandria.com for more information.



APPENDIX E

Agency Correspondence



Agency	Point of Contact	Date(s)	Description
Federal			
United States Fish and Wildlife Service (USFWS)	Minnesota-Wisconsin Ecological Services Field Office 3815 American Blvd East Bloomington, MN 55425-1659 952-858-0793	2/11/2026	Official Information for Planning and Consultation (IPaC) list of threatened and endangered species with the potential to occur within the project area.
USFWS	Assistant Regional Director-Ecological Services 5600 American Blvd. West Bloomington, MN 55437-1458 612-713-5350	2/11/2026	Effects determination for species identified in the IPaC query.
USFWS	Mr. Darin Simpkins Minnesota-Wisconsin Ecological Services Field Office Ecological Services 2661 Scott Tower Drive New Franken, WI 54229	3/30/2026	Concurrence request.
USFWS	Nick Utrup U.S. Fish and Wildlife Service Minnesota-Wisconsin Ecological Services Field Office 3815 American Boulevard East Bloomington, MN 55425	4/15/2026	Concurrence response.
State			
Minnesota Department of Transportation (MN DOT)	Stacy Kotch Egstad stacy.kotch@state.mn.us	8/11/2025 8/15/2025 8/26/2025 9/4/2025 11/6/2025 11/12/2025	Initial consultation with the agency
MN DOT Aviation Planning	Brian McMahon North Region Planner 395 John Ireland Blvd MS 410 St. Paul, MN 55155 brian.mcmahon@state.mn.us 612-427-3870	9/30/2025 10/1/2025	Consultation regrading Federal Aviation Administration compliance.
Minnesota Department of Natural Resources (MN DNR)	James Drake Natural Heritage Review Specialist james.f.drake@state.mn.us	11/12/2025	Natural Heritage Review of the project.
MN DNR	James Drake Minnesota Department of Natural Resources Division of Ecological & Water Resources 500 Lafayette Road, Box 25 St. Paul, MN 55155-4025	3/24/2026	Findings of the project's impacts on state protected species.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
Phone: (952) 858-0793

In Reply Refer To:

02/11/2026 19:12:14 UTC

Project Code: 2026-0048704

Project Name: Bison to Alexandria 345kV 2nd Circuit Transmission Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).

Threatened and Endangered Species

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Consultation Technical Assistance

Please refer to our [Section 7 website](#) for guidance and technical assistance, including [step-by-step instructions](#) for making effects determinations for each species that might be present and for specific guidance on the following types of projects: projects in developed areas, HUD, CDBG, EDA, USDA Rural Development projects, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

We recommend running the project (if it qualifies) through our **Minnesota-Wisconsin Federal Endangered Species Determination Key (Minnesota-Wisconsin ("D-key"))**. A [demonstration video](#) showing how-to access and use the determination key is available. Please note that the Minnesota-Wisconsin D-key is the third option of 3 available d-keys. D-keys are tools to help Federal agencies and other project proponents determine if their proposed action has the potential to adversely affect federally listed species and designated critical habitat. The Minnesota-Wisconsin D-key includes a structured set of questions that assists a project proponent in determining whether a proposed project qualifies for a certain predetermined consultation outcome for all federally listed species found in Minnesota and Wisconsin (except for the northern long-eared bat- see below), which includes determinations of “no effect” or “may affect, not likely to adversely affect.” In each case, the Service has compiled and analyzed the best available information on the species’ biology and the impacts of certain activities to support these determinations.

If your completed d-key output letter shows a "No Effect" (NE) determination for all listed species, print your IPaC output letter for your files to document your compliance with the Endangered Species Act.

For Federal projects with a “Not Likely to Adversely Affect” (NLAA) determination, our concurrence becomes valid if you do not hear otherwise from us after a 30-day review period, as indicated in your letter.

If your d-key output letter indicates additional coordination with the Minnesota-Wisconsin Ecological Services Field Office is necessary (i.e., you get a “May Affect” determination), you will be provided additional guidance on contacting the Service to continue ESA coordination outside of the key; ESA compliance cannot be concluded using the key for “May Affect” determinations unless otherwise indicated in your output letter.

Note: Once you obtain your official species list, you are not required to continue in IPaC with d-keys, although in most cases these tools should expedite your review. If you choose to make an effects determination on your own, you may do so. If the project is a Federal Action, you may want to review our section 7 step-by-step instructions before making your determinations.

Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **no effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.
2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see below) – then project proponents must determine if proposed activities will have **no effect** on or **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain [Life History Information for Listed and Candidate Species](#) on our office website. If no impacts will occur to a species on the IPaC species list (e.g., there is no habitat present in the project area), the appropriate determination is **no effect**. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.

3. Should you determine that project activities **may affect** any federally listed, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

Northern Long-Eared Bats

Northern long-eared bats occur throughout Minnesota and Wisconsin and the information below may help in determining if your project may affect these species.

Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥ 3 inches dbh for northern long-eared bat that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, northern long-eared bats could be affected. For bat activity dates, please review Appendix L in the [Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines](#).

Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas,
- Trees found in highly developed urban areas (e.g., street trees, downtown areas),
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees, and
- A monoculture stand of shrubby vegetation with no potential roost trees.

If IPaC returns a result that northern long-eared bats are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** this species **IF** one or more of the following activities are proposed:

- Clearing or disturbing suitable roosting habitat, as defined above, at any time of year,
- Any activity in or near the entrance to a cave or mine,
- Mining, deep excavation, or underground work within 0.25 miles of a cave or mine,
- Construction of one or more wind turbines, or
- Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on the northern long-eared bat. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC

species list report for your records.

If any of the above activities are proposed, and the northern long-eared bat appears on the user's species list, the federal project user will be directed to either the northern long-eared bat and tricolored bat range-wide D-key or the Federal Highways Administration, Federal Railways Administration, and Federal Transit Administration Indiana bat/Northern long-eared bat D-key, depending on the type of project and federal agency involvement. Similar to the Minnesota-Wisconsin D-key, these d-keys help to determine if prohibited take might occur and, if not, will generate an automated verification letter. Additional information about available tools can be found on the Service's [northern long-eared bat website](#).

Whooping Crane

Whooping crane is designated as a non-essential experimental population in Wisconsin and consultation under Section 7(a)(2) of the Endangered Species Act is only required if project activities will occur within a National Wildlife Refuge or National Park. If project activities are proposed on lands outside of a National Wildlife Refuge or National Park, then you are not required to consult. For additional information on this designation and consultation requirements, please review "[Establishment of a Nonessential Experimental Population of Whooping Cranes in the Eastern United States](#)."

Other Trust Resources and Activities

Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. It is the responsibility of the project proponent to survey the area for any migratory bird nests. If there is an eagle nest on-site while work is on-going, eagles may be disturbed. We recommend avoiding and minimizing disturbance to eagles whenever practicable. If you cannot avoid eagle disturbance, you may seek a [permit](#). A [nest take permit](#) is always required for removal, relocation, or obstruction of an eagle nest. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of [recommendations that minimize potential impacts to migratory birds](#). Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed [voluntary guidelines for minimizing impacts](#).

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to [guidelines](#) developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's [Wind Energy Guidelines](#). In addition, please refer to the Service's [Eagle Conservation Plan Guidance](#), which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

State Department of Natural Resources Coordination

While it is not required for your Federal section 7 consultation, please note that additional state endangered or threatened species may also have the potential to be impacted. **Please contact the Minnesota or Wisconsin Department of Natural Resources for information on state listed species that may be present in your proposed project area.**

Minnesota

[Minnesota Department of Natural Resources - Endangered Resources Review Homepage](#)

Email: Review.NHIS@state.mn.us

Wisconsin

[Wisconsin Department of Natural Resources - Endangered Resources Review Homepage](#)

Email: DNRERReview@wi.gov

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Note: IPaC has provided all available attachments because this project is in multiple field office jurisdictions.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Minnesota-Wisconsin Ecological Services Field Office

3815 American Blvd East
Bloomington, MN 55425-1659
(952) 858-0793

This project's location is within the jurisdiction of multiple offices. However, only one species list document will be provided for all offices. The species and critical habitats in this document reflect the aggregation of those that fall in each of the affiliated office's jurisdiction. Other offices affiliated with the project:

North Dakota Ecological Services Field Office

3425 Miriam Avenue
Bismarck, ND 58501-7926
(701) 250-4481

PROJECT SUMMARY

Project Code: 2026-0048704
Project Name: Bison to Alexandria 345kV 2nd Circuit Transmission Project
Project Type: Transmission Line - Maintenance/Modification - Above Ground
Project Description: Northern States Power Company, doing business as Xcel Energy, along with Great River Energy, Minnesota Power, Otter Tail Power Company, and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency, (collectively, the Applicants) are proposing to add approximately 136-miles of a new 345-kV transmission circuit on the existing CapX2020 transmission line structures from the existing Bison Substation near Fargo, North Dakota to the existing Alexandria Substation near Alexandria, Minnesota. The existing 345-kV structures were previously permitted and constructed as double-circuit capable as part of the Fargo – St. Cloud 345-kV Transmission Project. The proposed right-of-way for the Project will remain at 150-feet in width and be mostly installed on existing transmission towers using a helicopter where feasible. During construction, temporary and minor impacts will be limited to areas of temporary access roads, matted workspace areas, helicopter landing pads, and the installation of select new structures which will be within the existing, permitted ROW. Permanent impacts are limited to the new structure installations. No tree clearing is anticipated for this Project as it is within pre-existing ROW.

Based on 2023 National Land Cover Dataset, existing landcover within the Project Area primarily includes cultivated crops (agricultural land), developed lands, and pasture. The existing CapX2020 transmission line follows Interstate 94 (I-94) for most of its length, which is mapped as Developed-Low Intensity and Developed-Open Space (roadside ROW). The CapX2020 transmission line also crosses areas of mapped Deciduous Forest, Pasture/Hay, Open Water, Woody Wetlands, Developed-Medium Intensity, Developed-High Intensity, and Emergent Herbaceous Wetlands.

The Project crosses multiple mapped wetlands, waterbodies, and waterways, including Lake Latoka, the Otter Tail River, the Pelican River, the Buffalo River (south branch), the Chippewa River, the Pomme de Terre River, the Red River of the North, Wolverton Creek, Whiskey Creek, and Pelican Creek. Minor temporary impacts to wetlands may occur due to construction matting and the addition of select new structures (to support the additional 345-kV line given the existing line's angle at specific crossings).

The construction schedule is still under review, but activities are anticipated to begin in 2028 after PUC approval from North Dakota and Minnesota and applicable permits are received.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@46.17648285,-95.96005985,14z>



Counties: Minnesota and North Dakota

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045 General project design guidelines: https://ipac.ecosphere.fws.gov/project/AOCDX2X6CJHBLMGPUEBUU4CNSQ/documents/generated/9654.pdf	Endangered

INSECTS

NAME	STATUS
Dakota Skipper <i>Hesperia dacotae</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1028 General project design guidelines: https://ipac.ecosphere.fws.gov/project/AOCDX2X6CJHBLMGPUEBUU4CNSQ/documents/generated/9522.pdf	Threatened
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Suckley's Cuckoo Bumble Bee <i>Bombus suckleyi</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10885 General project design guidelines: https://ipac.ecosphere.fws.gov/project/AOCDX2X6CJHBLMGPUEBUU4CNSQ/documents/generated/9852.pdf	Proposed Endangered
Western Regal Fritillary <i>Argynnis idalia occidentalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/12017	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Western Prairie Fringed Orchid <i>Platanthera praeclara</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1669 General project design guidelines: https://ipac.ecosphere.fws.gov/project/AOCDX2X6CJHBLMGPUEBUU4CNSQ/documents/generated/9621.pdf	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

The following FWS National Wildlife Refuge Lands and Fish Hatcheries lie fully or partially within your project area:

FACILITY NAME	ACRES
OTTER TAIL COUNTY WATERFOWL PRODUCTION AREA https://www.fws.gov/our-facilities?keywords=%5C%22OTTER+TAIL+COUNTY+WATERFOWL+PRODUCTION+AREA%5C%22	133,616.983

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

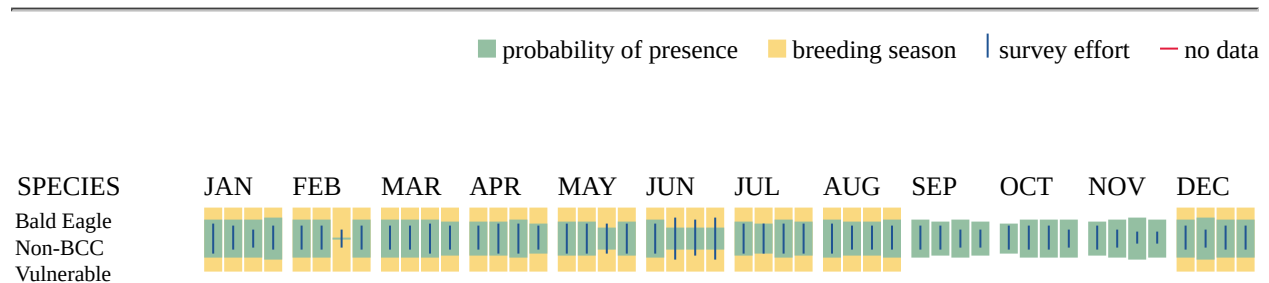
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<p>American Golden-plover <i>Pluvialis dominica</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/10561</p>	Breeds elsewhere
<p>Bald Eagle <i>Haliaeetus leucocephalus</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p> <p>https://ecos.fws.gov/ecp/species/1626</p>	Breeds Dec 1 to Aug 31
<p>Black Tern <i>Chlidonias niger surinamensis</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/3093</p>	Breeds May 15 to Aug 20
<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9399</p>	Breeds May 15 to Oct 10
<p>Bobolink <i>Dolichonyx oryzivorus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9454</p>	Breeds May 20 to Jul 31
<p>Canada Warbler <i>Cardellina canadensis</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9643</p>	Breeds May 20 to Aug 10
<p>Chestnut-collared Longspur <i>Calcarius ornatus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9437</p>	Breeds May 1 to Aug 10
<p>Chimney Swift <i>Chaetura pelagica</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9406</p>	Breeds Mar 15 to Aug 25
<p>Eastern Whip-poor-will <i>Antrostomus vociferus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/10678</p>	Breeds May 1 to Aug 20
<p>Franklin's Gull <i>Leucophaeus pipixcan</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/10567</p>	Breeds May 1 to Jul 31

NAME	BREEDING SEASON
<p>Golden-winged Warbler <i>Vermivora chrysoptera</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745</p>	Breeds May 1 to Jul 20
<p>Grasshopper Sparrow <i>Ammodramus savannarum perpallidus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329</p>	Breeds Jun 1 to Aug 20
<p>Henslow's Sparrow <i>Centronyx henslowii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941</p>	Breeds May 1 to Aug 31
<p>Hudsonian Godwit <i>Limosa haemastica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9482</p>	Breeds elsewhere
<p>Le Conte's Sparrow <i>Ammospiza leconteii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9469</p>	Breeds Jun 1 to Aug 15
<p>Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679</p>	Breeds elsewhere
<p>Marbled Godwit <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481</p>	Breeds May 1 to Jul 31
<p>Northern Harrier <i>Circus hudsonius</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8350</p>	Breeds Apr 1 to Sep 15
<p>Pectoral Sandpiper <i>Calidris melanotos</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561</p>	Breeds elsewhere
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398</p>	Breeds May 10 to Sep 10

NAME	BREEDING SEASON
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Semipalmated Sandpiper <i>Calidris pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Upland Sandpiper <i>Bartramia longicauda</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9294	Breeds May 1 to Aug 31
Western Grebe <i>Aechmophorus occidentalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10669	Breeds Apr 20 to Aug 5
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31
Yellow Rail <i>Coturnicops noveboracensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9476	Breeds May 15 to Sep 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

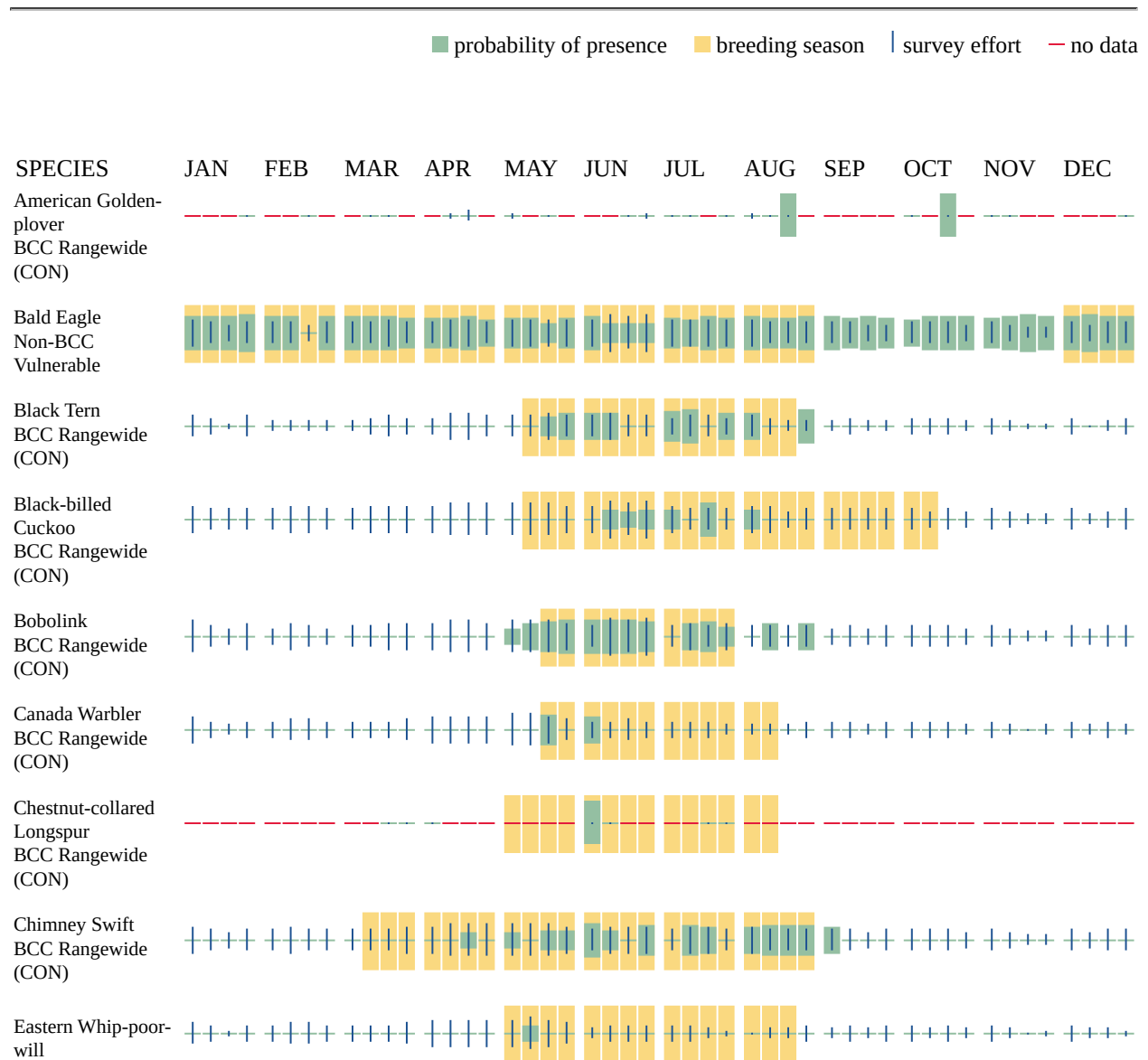
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

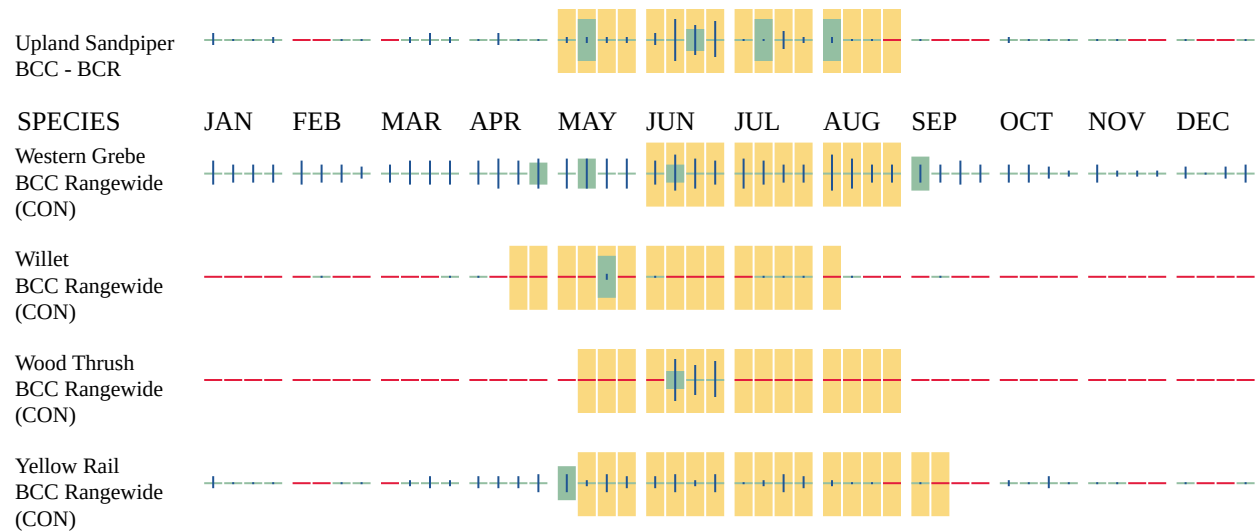
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (-)

A week is marked as having no data if there were no survey events for that week.







Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Mia Bauer
Address: One Carlson Parkway
Address Line 2: Suite 100
City: Plymouth
State: MN
Zip: 55447
Email: mia.bauer@stantec.com
Phone: 6124273725

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Assistant Regional Director-Ecological Services
5600 American Blvd. West
Bloomington, MN 55437-1458
Phone: (612) 713-5350 Fax: (612) 713-5292

In Reply Refer To: 02/11/2026 22:10:39 UTC
Project code: 2026-0048704
Project Name: Bison to Alexandria 345kV 2nd Circuit Transmission Project

Federal Nexus: yes
Federal Action Agency (if applicable): Army Corps of Engineers

Subject: Record of project representative’s no effect determination for 'Bison to Alexandria 345kV 2nd Circuit Transmission Project'

Dear Mia Bauer:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on February 11, 2026, for 'Bison to Alexandria 345kV 2nd Circuit Transmission Project' (here forward, Project). This project has been assigned Project Code 2026-0048704 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species’ determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the **Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (Dkey)**, invalidates this letter. **Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.**

Determination for the Northern Long-Eared Bat and/or Tricolored Bat

Based upon your IPaC submission and a standing analysis, your project has reached the following effect determinations:

Species	Listing Status	Determination
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Endangered	No effect

To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Dakota Skipper *Hesperia dacotae* Threatened
- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Suckley's Cuckoo Bumble Bee *Bombus suckleyi* Proposed Endangered
- Western Prairie Fringed Orchid *Platanthera praeclara* Threatened
- Western Regal Fritillary *Argynnis idalia occidentalis* Proposed Threatened

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the species covered by this key. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the Assistant Regional Director-Ecological Services and reference Project Code 2026-0048704 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Bison to Alexandria 345kV 2nd Circuit Transmission Project

2. Description

The following description was provided for the project 'Bison to Alexandria 345kV 2nd Circuit Transmission Project':

Northern States Power Company, doing business as Xcel Energy, along with Great River Energy, Minnesota Power, Otter Tail Power Company, and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency, (collectively, the Applicants) are proposing to add approximately 136-miles of a new 345-kV transmission circuit on the existing CapX2020 transmission line structures from the existing Bison Substation near Fargo, North Dakota to the existing Alexandria Substation near Alexandria, Minnesota. The existing 345-kV structures were previously permitted and constructed as double-circuit capable as part of the Fargo – St. Cloud 345-kV Transmission Project. The proposed right-of-way for the Project will remain at 150-feet in width and be mostly installed on existing transmission towers using a helicopter where feasible. During construction, temporary and minor impacts will be limited to areas of temporary access roads, matted workspace areas, helicopter landing pads, and the installation of select new structures which will be within the existing, permitted ROW. Permanent impacts are limited to the new structure installations. No tree clearing is anticipated for this Project as it is within pre-existing ROW.

Based on 2023 National Land Cover Dataset, existing landcover within the Project Area primarily includes cultivated crops (agricultural land), developed lands, and pasture. The existing CapX2020 transmission line follows Interstate 94 (I-94) for most of its length, which is mapped as Developed-Low Intensity and Developed-Open Space (roadside ROW). The CapX2020 transmission line also crosses areas of mapped Deciduous Forest, Pasture/Hay, Open Water, Woody Wetlands, Developed-Medium Intensity, Developed-High Intensity, and Emergent Herbaceous Wetlands.

The Project crosses multiple mapped wetlands, waterbodies, and waterways, including Lake Latoka, the Otter Tail River, the Pelican River, the Buffalo River (south branch), the Chippewa River, the Pomme de Terre River, the Red River of the North, Wolverton Creek, Whiskey Creek, and Pelican Creek. Minor temporary impacts to wetlands may occur due to construction matting and the addition of select new structures (to support the additional 345-kV line given the existing line's angle at specific crossings).

The construction schedule is still under review, but activities are anticipated to

begin in 2028 after PUC approval from North Dakota and Minnesota and applicable permits are received.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@46.17648285,-95.96005985,14z>



DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the species covered by this determination key. Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

No

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Note for projects in Pennsylvania: Projects requiring authorization under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act would be considered as having a federal nexus. Since the U.S. Army Corps of Engineers (Corps) has issued the Pennsylvania State Programmatic General Permit (PASPGP), which may be verified by the PA Department of Environmental Protection or certain Conservation Districts, the need to receive a Corps authorization to perform the work under the PASPGP serves as a federal nexus. As such, if proposing to use the PASPGP, you would answer 'yes' to this question.

Yes

6. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

7. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

No

8. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

9. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

No

10. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum or winter roost? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state wildlife agency.

Automatically answered

No

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

No

12. Does the action area contain (1) talus or (2) anthropogenic or naturally formed rock shelters or crevices in rocky outcrops, rock faces or cliffs?

No

13. Will the action cause effects to a bridge?

Note: Covered bridges should be considered as bridges in this question.

No

14. Will the action result in effects to a culvert or tunnel at any time of year?

No

15. Are trees present within 1000 feet of the action area?

Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

Yes

16. Does the action include the intentional exclusion of bats from a building or building-like structure? **Note:** Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

No

17. Does the action involve removal, modification, or maintenance of a human-made building-like structure (barn, house, or other building) **known or suspected to contain roosting bats?**

No

18. Will the action cause construction of one or more new roads open to the public?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

19. Will the action include or cause any construction or other activity that is reasonably certain to increase average night-time traffic permanently or temporarily on one or more existing roads? **Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

20. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

21. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

Note: For information regarding NSF/ANSI 60 please visit <https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects>

No

22. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

No

23. Will the action include drilling or blasting?

No

24. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use at night)?

No

25. Will the proposed action involve the use of herbicides or pesticides (e.g., fungicides, insecticides, or rodenticides)?

No

26. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season?

Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

No

27. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable northern long-eared bat or tricolored bat roosting habitat?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

No

28. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

No

29. Will the proposed action result in the use of prescribed fire?

Note: If the prescribed fire action includes other activities than application of fire (e.g., tree cutting, fire line preparation) please consider impacts from those activities within the previous representative questions in the key. This set of questions only considers impacts from flame and smoke.

No

30. Does the action area intersect the northern long-eared bat species list area?

Automatically answered

Yes

31. [Semantic] Is the action area located within 0.5 miles of radius of an entrance/opening to any known NLEB hibernacula or winter roost? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

32. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

33. [Semantic] Is the action area located within 150 feet of a documented northern long-eared bat roost site?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency. Have you contacted the appropriate agency to determine if your action is within 150 feet of any documented northern long-eared bat roosts?

Note: A document with links to Natural Heritage Inventory databases and other state-specific sources of information on the locations of northern long-eared bat roosts is available here. Location information for northern long-eared bat roosts is generally kept in state natural heritage inventory databases – the availability of this data varies by state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited.

Automatically answered

No

34. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?

If unsure, answer "Yes."

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

Yes

35. Has a presence/probable absence summer bat survey targeting the northern long-eared bat following the Service's [Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines](#) been conducted within the project area?

No

36. Do you have any documents that you want to include with this submission?

No

PROJECT QUESTIONNAIRE

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Mia Bauer
Address: One Carlson Parkway
Address Line 2: Suite 100
City: Plymouth
State: MN
Zip: 55447
Email: mia.bauer@stantec.com
Phone: 6124273725

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers



March 30, 2026

Mr. Darin Simpkins
Minnesota-Wisconsin Ecological Services Field Office
Ecological Services
2661 Scott Tower Drive
New Franken, WI 54229

Reference: Bison to Alexandria 345kV 2nd Circuit Transmission Project

Dear Mr. Simpkins,

Stantec Consulting Services Inc. (Stantec) understands that Northern States Power Company, doing business as Xcel Energy, along with Great River Energy, Minnesota Power, Otter Tail Power Company, and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency (collectively, the Applicants) are proposing the Bison to Alexandria 345kV 2nd Circuit Transmission Project (Project). The proposed Project would add a new 345kV transmission circuit on existing transmission line structures for approximately 136 miles from the existing Bison Substation near Fargo, North Dakota in Cass County to the existing Alexandria Substation near Alexandria, Minnesota in Douglas County (Attachment A). The existing 345kV structures were previously permitted and constructed as double-circuit capable as part of the CapX2020 Fargo – St. Cloud 345 kV Transmission Project (CapX2020 transmission line).

The proposed right-of-way (ROW) for the Project will remain at 150-feet in width and be mostly installed on existing transmission towers using a helicopter where feasible. During construction, temporary and minor impacts will be limited to areas of temporary access roads, matted workspace areas, helicopter landing pads, and the installation of 107 new monopole structures (86 within Minnesota) which will be within the existing, permitted ROW. Permanent impacts are limited to the new structure installations. No tree clearing is anticipated for this Project as it is within an existing transmission line corridor subject to routine vegetation maintenance. Project construction is anticipated to begin in July 2028 following approval from the Minnesota Public Utilities Commission (PUC) and North Dakota Public Service Commission (PSC) and once all necessary permits are received.

We are requesting concurrence from the United States Fish and Wildlife Service (USFWS) that the proposed Project will have no effect on the following species:

- Northern long-eared bat (*Myotis septentrionalis*)
- Monarch butterfly (*Danaus plexippus*)
- Suckley's cuckoo bumble bee (*Bombus suckleyi*)
- Dakota skipper (*Hesperia dacotae*)
- Western regal fritillary (*Argynnis idalia occidentalis*)
- Western prairie fringed orchid (*Platanthera praeclara*)

We carefully reviewed the list of species and critical habitat that may be present within the Project area based on a query of the Information for Planning and Consultation (IPaC) website on February 11, 2026 (Project Code: 2026-0048704). That list is enclosed as Attachment B.

Reference: Bison to Alexandria 345kV 2nd Circuit Transmission Project

Northern long-eared bat

The northern long-eared bat (NLEB) is listed as federally endangered and a state-special concern species in Minnesota¹. In Minnesota, the species is most likely to be found overwintering in natural caves, sand mines, and iron mines. Suitable roosting, forage, and travel habitat for NLEB in the summer consists of a wide variety of contiguous forested and wooded habitats with varying tree density and amounts of canopy closure. While roosting, NLEB is generally found in deep crevices in areas such as forests and woodlots (i.e., live trees and/or snags greater than or equal to three inches in diameter at breast height that have exfoliating bark, cracks, crevices, and/or cavities) as well as linear features such as fence rows, riparian forests, and other wooded corridors. NLEB roosts in both live trees and snags. (Sasse and Perkins 1996; Foster and Kurta 1999; and Owen et al. 2003). Additional summer habitat for the NLEB consists of areas adjacent to wooded areas, namely emergent wetlands and edges of agricultural fields, old fields, and pastures. The NLEB has also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses. (USFWS 2024a).

The IPaC review indicates that no known NLEB hibernaculum or roost sites occur within 0.5-mile of the Project. A review of the Minnesota Department of Natural Resources (MDNR) Natural Heritage Inventory System (NHIS) licensed data also did not indicate NLEB species occurrences within the Project Area (MDNR 2026). Additionally, a review of North Dakota Geographic Information Systems (GIS) Hub Key Native Wildlife Habitat Areas map indicates that the portion of the Project in North Dakota is primarily located in a low impact area characterized by fragmented, disturbed land that has been converted from its native state. The Project occurs primarily on agricultural lands and roadside ROW, but fragmented forest is present, especially in association with intact native habitats around riparian corridors, including the Wild Rice River, Sheyenne River, Maple River, and Red River (ND GIS Hub 2021). Given the limited fragmented habitat present within the Project, the NLEB is unlikely to occur.

The Applicants have designed the Project to avoid the need for tree clearing. The NLEB and Tricolored Bat Range-wide Determination Key was completed for the Project on February 11, 2026 and a determination of **no effect** was reached (Attachment C).

Monarch butterfly

The monarch butterfly is a federally proposed threatened species and common throughout Minnesota and North Dakota during summer months. This is a widespread species found in fields, prairies, savannahs, and most places where their host plant milkweed (*Asclepias* spp.) occurs throughout the United States and southern Canada. This species generally occurs in areas with high densities of native nectar sources. During late summer and migration, adults use nectar species such as black-eyed Susan (*Rudbeckia hirta*), narrow-leaved coneflower (*Echinacea angustifolia*), and rough blazing star (*Liatris aspera*) (MDNR 2022). However, the presence of milkweed is required as it is the only plant on which monarch caterpillars can feed (National Wildlife Federation undated).

The Project occurs primarily on agricultural land and roadside ROW. A review of the MDNR's Native Prairie database identified one native prairie crossed by the existing CapX2020 transmission line and several native prairie fragments in proximity to the Project (MDNR 2026). According to desktop review of the national land cover dataset (NLCD; Geological, U.S. 2024), North Dakota GIS Hub (2021), and various MDNR natural

¹ The state of North Dakota does not have a state endangered and threatened species list. Only those species listed by the Endangered Species Act (ESA) are considered threatened or endangered in North Dakota. Therefore, the North Dakota status for the species in question follows the federal listing status.

Reference: Bison to Alexandria 345kV 2nd Circuit Transmission Project

resource datasets hosted on the Minnesota Geospatial Information Office (MnGeo undated)², the Project is largely situated on disturbed lands, including cropland and developed areas, which support few native plant species used by butterfly larvae or as nectar sources for adults. However, some limited intact native habitat persists along riparian corridors. Given the species' ability to utilize a wide range of habitats, the monarch butterfly may be present within the Project area.

No permanent impacts to monarch butterfly habitat are anticipated as a result of the Project. Potential nectar and larval habitat may be temporarily disturbed within matted workspaces for new structures and access roads; however, no permanent vegetation clearing is proposed. Given the extent and nature of temporary impacts associated with the Project, the continued existence of the monarch butterfly would not be jeopardized. The Applicants will further reduce potential impacts to the monarch butterfly by coordinating with the Minnesota Department of Transportation (MnDOT) and North Dakota Department of Transportation (NDDOT) for an appropriate native seed mix to use during restoration activities within their ROW. As a result, we have determined that the Project will have **no effect** on the monarch butterfly.

Suckley's cuckoo bumble bee

Suckley's cuckoo bumble bee (SCBB) is proposed to be listed as federally endangered and is a parasitic bumble bee that relies exclusively on other bumble bees as hosts. The SCBB historically occurs across a wide range of habitats, including prairies, grasslands, meadows, woodlands, urban areas, and agricultural areas where host bumble bee nests are present. This species has historically occurred in North Dakota (pre-2000) and portions of western and northern Minnesota (pre-2000), but no extant populations are known to occur in Minnesota or North Dakota at present. The last confirmed sighting of SCBB in the contiguous United States was in Oregon in 2016 (USFWS 2024b). Therefore, the likelihood of SCBB occurrence within the Project Area is highly unlikely.

No permanent impacts to SCBB habitat are anticipated as a result of the Project. Potential foraging habitat may be temporarily disturbed by the matted workspaces for new structures and access roads; however, no permanent vegetation clearing would occur. No tree clearing is proposed for the Project. Given the extent and nature of temporary impacts associated with the Project, and the lack of recent SCBB records, we have determined that the continued existence of the SCBB would not be jeopardized by the Project and the Project will have **no effect** on the SCBB.

Dakota skipper

The Dakota skipper is a federally threatened and state-endangered species in Minnesota. These butterflies are considered an obligate of high-quality prairie where assemblages of plant species reflect the historic compositions of native grasses and forbs. This species occurs in more than one type of high-quality native grassland including wet-mesic tallgrass and dry-mesic mixed grass prairie types (Royer and Marrone 1992, Dana 1997).

Available data do not indicate any occurrences of the Dakota skipper along the Project. One northern wet prairie mapped by the MDNR intersects the Project; however, this feature is a narrow strip located along a railroad corridor between a highway and adjacent agricultural land, where no ground disturbance is proposed or anticipated (MDNR 2026). According to the NLCD (Geological, U.S. 2024), the North Dakota GIS Hub

² Stantec's desktop review of habitat within the Minnesota portion of the Project utilized the following MDNR provided layers, which were downloaded from MnGeo in July 2025: Calcareous Fens – Source Point Features, MNDNR Native Plant Communities, Rare Natural Communities, Minnesota County Biological Survey (MCBS) Railroad Rights-of-Way Prairies, and MBS Sites of Biodiversity Significance.

Reference: **Bison to Alexandria 345kV 2nd Circuit Transmission Project**

(2021), and MnGeo data layers (undated), the Project is primarily located within disturbed areas where native prairie has largely been converted to cropland or other developed land uses. As limited native prairie fragments occur near the Project, the likelihood of Dakota skipper presence within the Project area is low.

According to the U.S. Fish and Wildlife Service's Information for Planning and Consultation (IPaC) system, the Project does not overlap any designated critical habitat for the species. Review of the Dakota Skipper Habitat Suitability Model (Barnes 2024) indicates that the Project avoids most areas identified as potentially suitable habitat. Additional desktop review of the small areas of potentially suitable habitat intersected by the Project shows these locations consist primarily of herbaceous wetlands or grasslands dominated by smooth brome (*Bromus inermis*), which are generally considered less suitable for Dakota skipper larval development (MDNR 2018).

Given the lack of impact on suitable native prairie habitat along the Project, we have determined that the Project will have **no effect** on the Dakota skipper.

Western regal fritillary

The western regal fritillary (WRF) is a federally proposed threatened species and state-special concern species in Minnesota. This species is strongly associated with native prairie habitat in Minnesota that contains violets (*Viola* spp.), especially bird's-foot violet (*V. pedate*). This species requires large, intact grasslands at a landscape scale, with violets for larvae, nectar sources for adults, and native warm-season bunch grasses for shelter at all life stages. The grasslands need to be large and contiguous, generally more than 3.86 square miles, and be maintained by periodic disturbances (USFWS 2024c).

The Project is located primarily on agricultural lands and within roadside ROW. A review of the MDNR NHIS licensed data did not indicate any WRF species occurrences within the Project area. One MDNR mapped northern wet prairie intersects the Project with original surveys from 1990 documenting prairie cordgrass (*Spartina pectinata*), Canada bluejoint (*Calamagrostis canadensis*), sedges (*Carex* spp.), and smooth brome (MDNR 2026). However, this feature is a narrow strip located along a railroad corridor between a highway and adjacent agricultural land where no ground disturbance is proposed or anticipated. According to the NLCD (Geological, U.S. 2024), the North Dakota GIS Hub (2021), and MnGeo data layers (undated), the Project is primarily situated on disturbed lands, including cropland and developed areas, which support few native plant species suitable for larval use or adult nectar sources. Although limited native prairie fragments occur near the Project, the lack of connectivity among these habitats reduces the likelihood of WRF occurrence within the Project area. Given the lack of contiguous suitable native prairie habitat identified along the Project, we have determined that the Project will have **no effect** on the WRF.

Western prairie fringed orchid

The western prairie fringed orchid is a federally threatened species and state-endangered species in Minnesota that inhabits moist tallgrass prairies and sedge meadows. This species is typically found in mesic prairie or wet prairie in full sunlight on moist calcareous till or sandy soils. In Minnesota, they are found almost exclusively in remnant native plant communities. Light grazing and intermittent haying may not negatively impact this species (USFWS undated; Anderson and Smith 2020).

The Project occurs primarily on agricultural land and roadside ROW. A review of the MDNR NHIS licensed data did not indicate western prairie fringed orchid species occurrences intersected by the Project. One MDNR mapped northern wet prairie intersects the Project. However, this feature is a narrow strip on either side of a railroad between a highway and agricultural field where no ground impacts are proposed or anticipated (MDNR 2026). The NLCD (Geological, U.S. 2024), North Dakota GIS Hub (2021), and MnGeo

Reference: **Bison to Alexandria 345kV 2nd Circuit Transmission Project**

data layers (undated) indicate the Project occurs primarily on disturbed lands (cropland and developed lands). Therefore, this species is unlikely to occur along the Project.

Given the lack of impacts in suitable habitat, we have determined that the Project will have **no effect** on the western prairie fringed orchid.

Conclusion

For the above reasons, we conclude that the Project will have no effect on the NLEB, monarch butterfly, SCBB, Dakota skipper, WRF, and western prairie fringed orchid and are requesting concurrence for these determinations.

Please contact us if there are questions or concerns.

Thanks,

Stantec Consulting Services Inc.



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Attachments:

Attachment A – Project Figure

Attachment B – IPaC Official Species List (Project Code: 2026-0048704)

Attachment C – NLEB/TCB Technical Assistance Letter

References

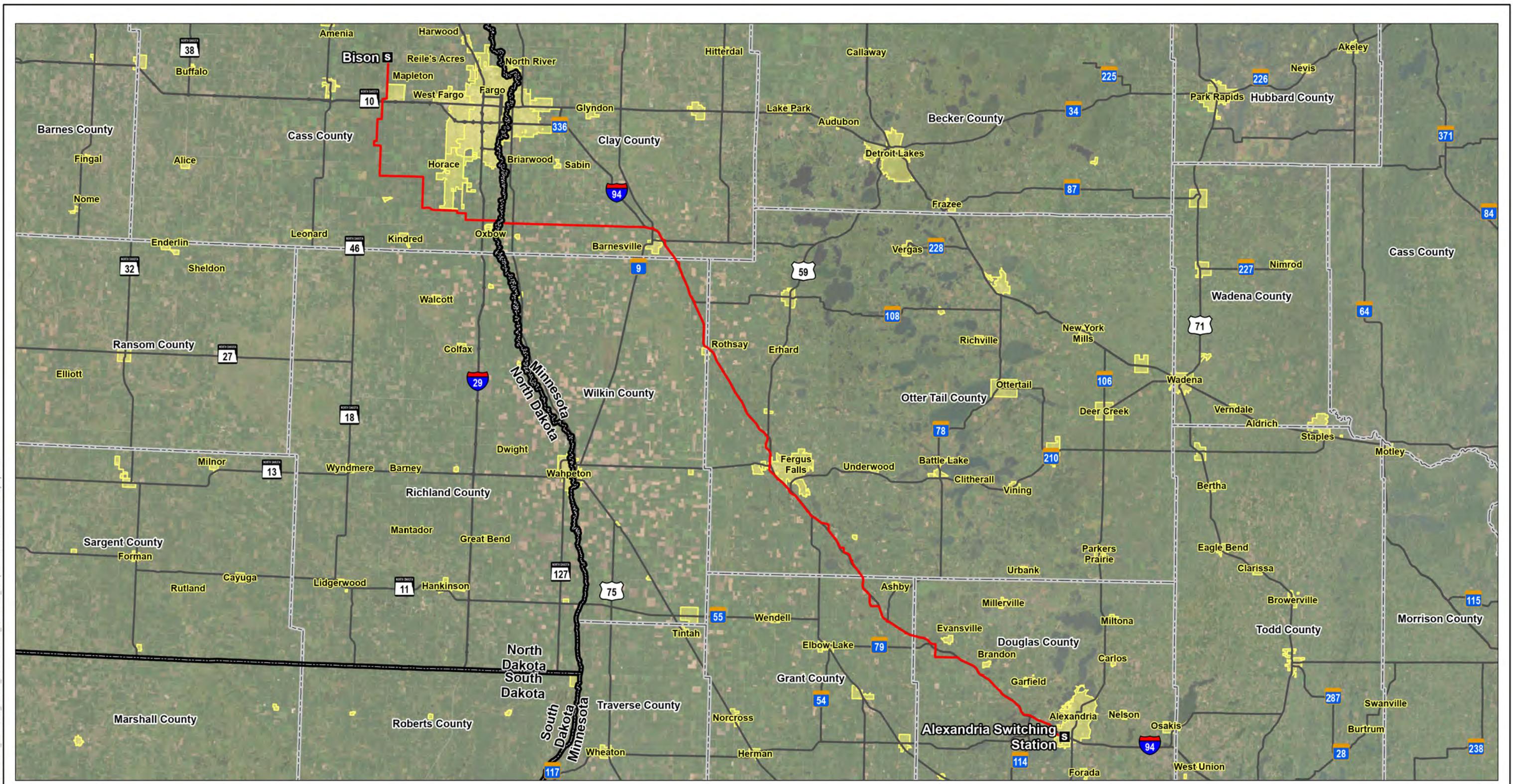
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Reference: Bison to Alexandria 345kV 2nd Circuit Transmission Project

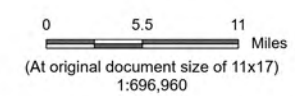
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Reference: **Bison to Alexandria 345kV 2nd Circuit Transmission Project**

Attachment A – Project Figure



- Legend**
- S Project Substation
 - Project Area (Right-of-Way)
 - Municipality
 - County Boundary
 - State Boundary
 - Major Highway



Project Location
Cass County, North Dakota and Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-24

Attachment A
Project Overview Map
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

Notes
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet
2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB
3. Background: ESRI World Imagery

Reference: **Bison to Alexandria 345kV 2nd Circuit Transmission Project**

Attachment B – IPaC Official Species List (Project Code: 2026-0048704)



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
Phone: (952) 858-0793

In Reply Refer To:

02/11/2026 19:12:14 UTC

Project Code: 2026-0048704

Project Name: Bison to Alexandria 345kV 2nd Circuit Transmission Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).

Threatened and Endangered Species

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Consultation Technical Assistance

Please refer to our [Section 7 website](#) for guidance and technical assistance, including [step-by-step instructions](#) for making effects determinations for each species that might be present and for specific guidance on the following types of projects: projects in developed areas, HUD, CDBG, EDA, USDA Rural Development projects, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

We recommend running the project (if it qualifies) through our **Minnesota-Wisconsin Federal Endangered Species Determination Key (Minnesota-Wisconsin ("D-key"))**. A [demonstration video](#) showing how-to access and use the determination key is available. Please note that the Minnesota-Wisconsin D-key is the third option of 3 available d-keys. D-keys are tools to help Federal agencies and other project proponents determine if their proposed action has the potential to adversely affect federally listed species and designated critical habitat. The Minnesota-Wisconsin D-key includes a structured set of questions that assists a project proponent in determining whether a proposed project qualifies for a certain predetermined consultation outcome for all federally listed species found in Minnesota and Wisconsin (except for the northern long-eared bat- see below), which includes determinations of “no effect” or “may affect, not likely to adversely affect.” In each case, the Service has compiled and analyzed the best available information on the species’ biology and the impacts of certain activities to support these determinations.

If your completed d-key output letter shows a "No Effect" (NE) determination for all listed species, print your IPaC output letter for your files to document your compliance with the Endangered Species Act.

For Federal projects with a “Not Likely to Adversely Affect” (NLAA) determination, our concurrence becomes valid if you do not hear otherwise from us after a 30-day review period, as indicated in your letter.

If your d-key output letter indicates additional coordination with the Minnesota-Wisconsin Ecological Services Field Office is necessary (i.e., you get a “May Affect” determination), you will be provided additional guidance on contacting the Service to continue ESA coordination outside of the key; ESA compliance cannot be concluded using the key for “May Affect” determinations unless otherwise indicated in your output letter.

Note: Once you obtain your official species list, you are not required to continue in IPaC with d-keys, although in most cases these tools should expedite your review. If you choose to make an effects determination on your own, you may do so. If the project is a Federal Action, you may want to review our section 7 step-by-step instructions before making your determinations.

Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **no effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.
2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see below) – then project proponents must determine if proposed activities will have **no effect** on or **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain [Life History Information for Listed and Candidate Species](#) on our office website. If no impacts will occur to a species on the IPaC species list (e.g., there is no habitat present in the project area), the appropriate determination is **no effect**. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.

3. Should you determine that project activities **may affect** any federally listed, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

Northern Long-Eared Bats

Northern long-eared bats occur throughout Minnesota and Wisconsin and the information below may help in determining if your project may affect these species.

Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥ 3 inches dbh for northern long-eared bat that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, northern long-eared bats could be affected. For bat activity dates, please review Appendix L in the [Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines](#).

Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas,
- Trees found in highly developed urban areas (e.g., street trees, downtown areas),
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees, and
- A monoculture stand of shrubby vegetation with no potential roost trees.

If IPaC returns a result that northern long-eared bats are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** this species **IF** one or more of the following activities are proposed:

- Clearing or disturbing suitable roosting habitat, as defined above, at any time of year,
- Any activity in or near the entrance to a cave or mine,
- Mining, deep excavation, or underground work within 0.25 miles of a cave or mine,
- Construction of one or more wind turbines, or
- Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on the northern long-eared bat. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC

species list report for your records.

If any of the above activities are proposed, and the northern long-eared bat appears on the user's species list, the federal project user will be directed to either the northern long-eared bat and tricolored bat range-wide D-key or the Federal Highways Administration, Federal Railways Administration, and Federal Transit Administration Indiana bat/Northern long-eared bat D-key, depending on the type of project and federal agency involvement. Similar to the Minnesota-Wisconsin D-key, these d-keys help to determine if prohibited take might occur and, if not, will generate an automated verification letter. Additional information about available tools can be found on the Service's [northern long-eared bat website](#).

Whooping Crane

Whooping crane is designated as a non-essential experimental population in Wisconsin and consultation under Section 7(a)(2) of the Endangered Species Act is only required if project activities will occur within a National Wildlife Refuge or National Park. If project activities are proposed on lands outside of a National Wildlife Refuge or National Park, then you are not required to consult. For additional information on this designation and consultation requirements, please review "[Establishment of a Nonessential Experimental Population of Whooping Cranes in the Eastern United States](#)."

Other Trust Resources and Activities

Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. It is the responsibility of the project proponent to survey the area for any migratory bird nests. If there is an eagle nest on-site while work is on-going, eagles may be disturbed. We recommend avoiding and minimizing disturbance to eagles whenever practicable. If you cannot avoid eagle disturbance, you may seek a [permit](#). A [nest take permit](#) is always required for removal, relocation, or obstruction of an eagle nest. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of [recommendations that minimize potential impacts to migratory birds](#). Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed [voluntary guidelines for minimizing impacts](#).

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to [guidelines](#) developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's [Wind Energy Guidelines](#). In addition, please refer to the Service's [Eagle Conservation Plan Guidance](#), which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

State Department of Natural Resources Coordination

While it is not required for your Federal section 7 consultation, please note that additional state endangered or threatened species may also have the potential to be impacted. **Please contact the Minnesota or Wisconsin Department of Natural Resources for information on state listed species that may be present in your proposed project area.**

Minnesota

[Minnesota Department of Natural Resources - Endangered Resources Review Homepage](#)

Email: Review.NHIS@state.mn.us

Wisconsin

[Wisconsin Department of Natural Resources - Endangered Resources Review Homepage](#)

Email: DNRERReview@wi.gov

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Note: IPaC has provided all available attachments because this project is in multiple field office jurisdictions.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Minnesota-Wisconsin Ecological Services Field Office

3815 American Blvd East
Bloomington, MN 55425-1659
(952) 858-0793

This project's location is within the jurisdiction of multiple offices. However, only one species list document will be provided for all offices. The species and critical habitats in this document reflect the aggregation of those that fall in each of the affiliated office's jurisdiction. Other offices affiliated with the project:

North Dakota Ecological Services Field Office

3425 Miriam Avenue
Bismarck, ND 58501-7926
(701) 250-4481

PROJECT SUMMARY

Project Code: 2026-0048704
Project Name: Bison to Alexandria 345kV 2nd Circuit Transmission Project
Project Type: Transmission Line - Maintenance/Modification - Above Ground
Project Description: Northern States Power Company, doing business as Xcel Energy, along with Great River Energy, Minnesota Power, Otter Tail Power Company, and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency, (collectively, the Applicants) are proposing to add approximately 136-miles of a new 345-kV transmission circuit on the existing CapX2020 transmission line structures from the existing Bison Substation near Fargo, North Dakota to the existing Alexandria Substation near Alexandria, Minnesota. The existing 345-kV structures were previously permitted and constructed as double-circuit capable as part of the Fargo – St. Cloud 345-kV Transmission Project. The proposed right-of-way for the Project will remain at 150-feet in width and be mostly installed on existing transmission towers using a helicopter where feasible. During construction, temporary and minor impacts will be limited to areas of temporary access roads, matted workspace areas, helicopter landing pads, and the installation of select new structures which will be within the existing, permitted ROW. Permanent impacts are limited to the new structure installations. No tree clearing is anticipated for this Project as it is within pre-existing ROW.

Based on 2023 National Land Cover Dataset, existing landcover within the Project Area primarily includes cultivated crops (agricultural land), developed lands, and pasture. The existing CapX2020 transmission line follows Interstate 94 (I-94) for most of its length, which is mapped as Developed-Low Intensity and Developed-Open Space (roadside ROW). The CapX2020 transmission line also crosses areas of mapped Deciduous Forest, Pasture/Hay, Open Water, Woody Wetlands, Developed-Medium Intensity, Developed-High Intensity, and Emergent Herbaceous Wetlands.

The Project crosses multiple mapped wetlands, waterbodies, and waterways, including Lake Latoka, the Otter Tail River, the Pelican River, the Buffalo River (south branch), the Chippewa River, the Pomme de Terre River, the Red River of the North, Wolverton Creek, Whiskey Creek, and Pelican Creek. Minor temporary impacts to wetlands may occur due to construction matting and the addition of select new structures (to support the additional 345-kV line given the existing line's angle at specific crossings).

The construction schedule is still under review, but activities are anticipated to begin in 2028 after PUC approval from North Dakota and Minnesota and applicable permits are received.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@46.17648285,-95.96005985,14z>



Counties: Minnesota and North Dakota

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045 General project design guidelines: https://ipac.ecosphere.fws.gov/project/AOCDX2X6CJHBLMGPUEBUU4CNSQ/documents/generated/9654.pdf	Endangered

INSECTS

NAME	STATUS
Dakota Skipper <i>Hesperia dacotae</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1028 General project design guidelines: https://ipac.ecosphere.fws.gov/project/AOCDX2X6CJHBLMGPUEBUU4CNSQ/documents/generated/9522.pdf	Threatened
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Suckley's Cuckoo Bumble Bee <i>Bombus suckleyi</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10885 General project design guidelines: https://ipac.ecosphere.fws.gov/project/AOCDX2X6CJHBLMGPUEBUU4CNSQ/documents/generated/9852.pdf	Proposed Endangered
Western Regal Fritillary <i>Argynnis idalia occidentalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/12017	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Western Prairie Fringed Orchid <i>Platanthera praeclara</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1669 General project design guidelines: https://ipac.ecosphere.fws.gov/project/AOCDX2X6CJHBLMGPUEBUU4CNSQ/documents/generated/9621.pdf	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

The following FWS National Wildlife Refuge Lands and Fish Hatcheries lie fully or partially within your project area:

FACILITY NAME	ACRES
OTTER TAIL COUNTY WATERFOWL PRODUCTION AREA https://www.fws.gov/our-facilities?keywords=%5C%22OTTER+TAIL+COUNTY+WATERFOWL+PRODUCTION+AREA%5C%22	133,616.983

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

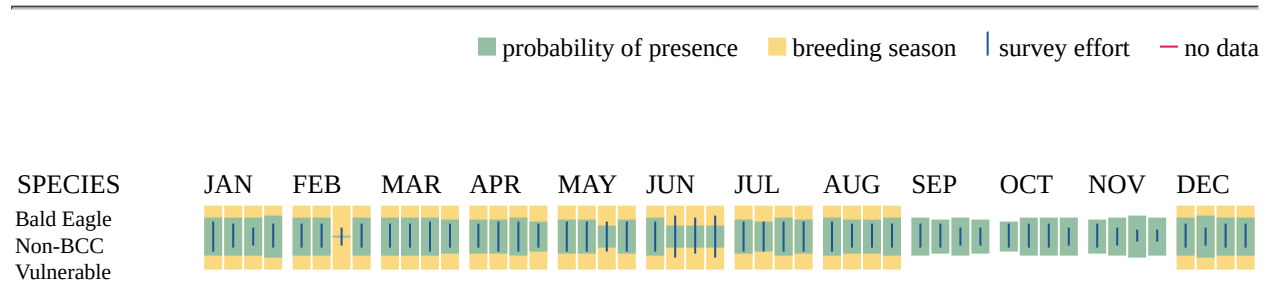
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (-)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<p>American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10561</p>	Breeds elsewhere
<p>Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626</p>	Breeds Dec 1 to Aug 31
<p>Black Tern <i>Chlidonias niger surinamensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093</p>	Breeds May 15 to Aug 20
<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399</p>	Breeds May 15 to Oct 10
<p>Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454</p>	Breeds May 20 to Jul 31
<p>Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9643</p>	Breeds May 20 to Aug 10
<p>Chestnut-collared Longspur <i>Calcarius ornatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9437</p>	Breeds May 1 to Aug 10
<p>Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406</p>	Breeds Mar 15 to Aug 25
<p>Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678</p>	Breeds May 1 to Aug 20
<p>Franklin's Gull <i>Leucophaeus pipixcan</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10567</p>	Breeds May 1 to Jul 31

NAME	BREEDING SEASON
<p>Golden-winged Warbler <i>Vermivora chrysoptera</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745</p>	Breeds May 1 to Jul 20
<p>Grasshopper Sparrow <i>Ammodramus savannarum perpallidus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329</p>	Breeds Jun 1 to Aug 20
<p>Henslow's Sparrow <i>Centronyx henslowii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941</p>	Breeds May 1 to Aug 31
<p>Hudsonian Godwit <i>Limosa haemastica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9482</p>	Breeds elsewhere
<p>Le Conte's Sparrow <i>Ammospiza leconteii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9469</p>	Breeds Jun 1 to Aug 15
<p>Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679</p>	Breeds elsewhere
<p>Marbled Godwit <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481</p>	Breeds May 1 to Jul 31
<p>Northern Harrier <i>Circus hudsonius</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8350</p>	Breeds Apr 1 to Sep 15
<p>Pectoral Sandpiper <i>Calidris melanotos</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561</p>	Breeds elsewhere
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398</p>	Breeds May 10 to Sep 10

NAME	BREEDING SEASON
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Semipalmated Sandpiper <i>Calidris pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Upland Sandpiper <i>Bartramia longicauda</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9294	Breeds May 1 to Aug 31
Western Grebe <i>Aechmophorus occidentalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10669	Breeds Apr 20 to Aug 5
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31
Yellow Rail <i>Coturnicops noveboracensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9476	Breeds May 15 to Sep 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

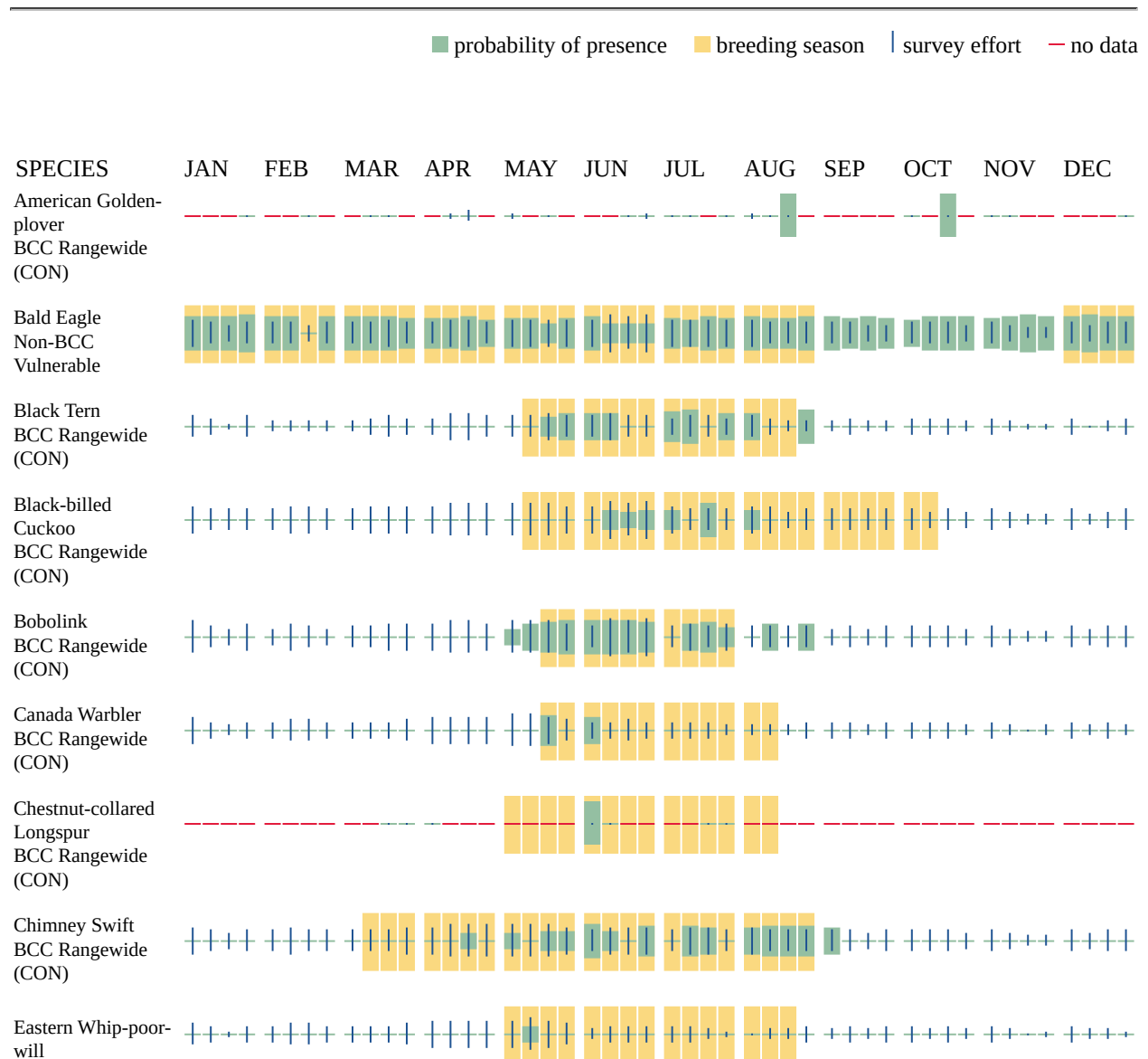
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

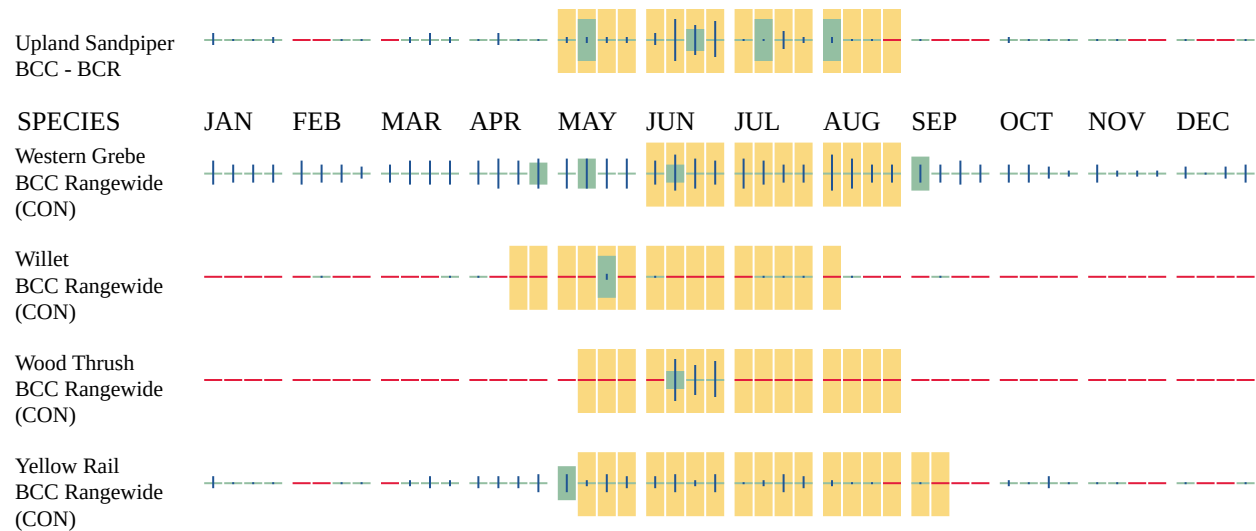
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (-)

A week is marked as having no data if there were no survey events for that week.







Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Mia Bauer
Address: One Carlson Parkway
Address Line 2: Suite 100
City: Plymouth
State: MN
Zip: 55447
Email: mia.bauer@stantec.com
Phone: 6124273725

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

Reference: Bison to Alexandria 345kV 2nd Circuit Transmission Project

Attachment C – NLEB/TCB Technical Assistance Letter



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Assistant Regional Director-Ecological Services
5600 American Blvd. West
Bloomington, MN 55437-1458
Phone: (612) 713-5350 Fax: (612) 713-5292

In Reply Refer To: 02/11/2026 22:10:39 UTC
Project code: 2026-0048704
Project Name: Bison to Alexandria 345kV 2nd Circuit Transmission Project

Federal Nexus: yes
Federal Action Agency (if applicable): Army Corps of Engineers

Subject: Record of project representative’s no effect determination for 'Bison to Alexandria 345kV 2nd Circuit Transmission Project'

Dear Mia Bauer:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on February 11, 2026, for 'Bison to Alexandria 345kV 2nd Circuit Transmission Project' (here forward, Project). This project has been assigned Project Code 2026-0048704 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species’ determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the **Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (Dkey)**, invalidates this letter. **Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.**

Determination for the Northern Long-Eared Bat and/or Tricolored Bat

Based upon your IPaC submission and a standing analysis, your project has reached the following effect determinations:

Species	Listing Status	Determination
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Endangered	No effect

To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Dakota Skipper *Hesperia dacotae* Threatened
- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Suckley's Cuckoo Bumble Bee *Bombus suckleyi* Proposed Endangered
- Western Prairie Fringed Orchid *Platanthera praeclara* Threatened
- Western Regal Fritillary *Argynnis idalia occidentalis* Proposed Threatened

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the species covered by this key. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the Assistant Regional Director-Ecological Services and reference Project Code 2026-0048704 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Bison to Alexandria 345kV 2nd Circuit Transmission Project

2. Description

The following description was provided for the project 'Bison to Alexandria 345kV 2nd Circuit Transmission Project':

Northern States Power Company, doing business as Xcel Energy, along with Great River Energy, Minnesota Power, Otter Tail Power Company, and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency, (collectively, the Applicants) are proposing to add approximately 136-miles of a new 345-kV transmission circuit on the existing CapX2020 transmission line structures from the existing Bison Substation near Fargo, North Dakota to the existing Alexandria Substation near Alexandria, Minnesota. The existing 345-kV structures were previously permitted and constructed as double-circuit capable as part of the Fargo – St. Cloud 345-kV Transmission Project. The proposed right-of-way for the Project will remain at 150-feet in width and be mostly installed on existing transmission towers using a helicopter where feasible. During construction, temporary and minor impacts will be limited to areas of temporary access roads, matted workspace areas, helicopter landing pads, and the installation of select new structures which will be within the existing, permitted ROW. Permanent impacts are limited to the new structure installations. No tree clearing is anticipated for this Project as it is within pre-existing ROW.

Based on 2023 National Land Cover Dataset, existing landcover within the Project Area primarily includes cultivated crops (agricultural land), developed lands, and pasture. The existing CapX2020 transmission line follows Interstate 94 (I-94) for most of its length, which is mapped as Developed-Low Intensity and Developed-Open Space (roadside ROW). The CapX2020 transmission line also crosses areas of mapped Deciduous Forest, Pasture/Hay, Open Water, Woody Wetlands, Developed-Medium Intensity, Developed-High Intensity, and Emergent Herbaceous Wetlands.

The Project crosses multiple mapped wetlands, waterbodies, and waterways, including Lake Latoka, the Otter Tail River, the Pelican River, the Buffalo River (south branch), the Chippewa River, the Pomme de Terre River, the Red River of the North, Wolverton Creek, Whiskey Creek, and Pelican Creek. Minor temporary impacts to wetlands may occur due to construction matting and the addition of select new structures (to support the additional 345-kV line given the existing line's angle at specific crossings).

The construction schedule is still under review, but activities are anticipated to

begin in 2028 after PUC approval from North Dakota and Minnesota and applicable permits are received.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@46.17648285,-95.96005985,14z>



DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the species covered by this determination key. Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

No

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Note for projects in Pennsylvania: Projects requiring authorization under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act would be considered as having a federal nexus. Since the U.S. Army Corps of Engineers (Corps) has issued the Pennsylvania State Programmatic General Permit (PASPGP), which may be verified by the PA Department of Environmental Protection or certain Conservation Districts, the need to receive a Corps authorization to perform the work under the PASPGP serves as a federal nexus. As such, if proposing to use the PASPGP, you would answer 'yes' to this question.

Yes

6. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

7. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

No

8. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

9. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

No

10. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum or winter roost? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state wildlife agency.

Automatically answered

No

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

No

12. Does the action area contain (1) talus or (2) anthropogenic or naturally formed rock shelters or crevices in rocky outcrops, rock faces or cliffs?

No

13. Will the action cause effects to a bridge?

Note: Covered bridges should be considered as bridges in this question.

No

14. Will the action result in effects to a culvert or tunnel at any time of year?

No

15. Are trees present within 1000 feet of the action area?

Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

Yes

16. Does the action include the intentional exclusion of bats from a building or building-like structure? **Note:** Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

No

17. Does the action involve removal, modification, or maintenance of a human-made building-like structure (barn, house, or other building) **known or suspected to contain roosting bats?**

No

18. Will the action cause construction of one or more new roads open to the public?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

19. Will the action include or cause any construction or other activity that is reasonably certain to increase average night-time traffic permanently or temporarily on one or more existing roads? **Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.). .

No

20. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

21. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

Note: For information regarding NSF/ANSI 60 please visit <https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects>

No

22. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

No

23. Will the action include drilling or blasting?

No

24. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use at night)?

No

25. Will the proposed action involve the use of herbicides or pesticides (e.g., fungicides, insecticides, or rodenticides)?

No

26. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season?

Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

No

27. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable northern long-eared bat or tricolored bat roosting habitat?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

No

28. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

No

29. Will the proposed action result in the use of prescribed fire?

Note: If the prescribed fire action includes other activities than application of fire (e.g., tree cutting, fire line preparation) please consider impacts from those activities within the previous representative questions in the key. This set of questions only considers impacts from flame and smoke.

No

30. Does the action area intersect the northern long-eared bat species list area?

Automatically answered

Yes

31. [Semantic] Is the action area located within 0.5 miles of radius of an entrance/opening to any known NLEB hibernacula or winter roost? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

32. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

33. [Semantic] Is the action area located within 150 feet of a documented northern long-eared bat roost site?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency. Have you contacted the appropriate agency to determine if your action is within 150 feet of any documented northern long-eared bat roosts?

Note: A document with links to Natural Heritage Inventory databases and other state-specific sources of information on the locations of northern long-eared bat roosts is available here. Location information for northern long-eared bat roosts is generally kept in state natural heritage inventory databases – the availability of this data varies by state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited.

Automatically answered

No

34. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?

If unsure, answer "Yes."

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

Yes

35. Has a presence/probable absence summer bat survey targeting the northern long-eared bat following the Service's [Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines](#) been conducted within the project area?

No

36. Do you have any documents that you want to include with this submission?

No

PROJECT QUESTIONNAIRE

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Mia Bauer
Address: One Carlson Parkway
Address Line 2: Suite 100
City: Plymouth
State: MN
Zip: 55447
Email: mia.bauer@stantec.com
Phone: 6124273725

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

From: [Twin Cities, FW3](#)
To: [Ray, Allison](#)
Cc: [Xcel Bison to Alexandria Project](#); [Bauer, Mia](#)
Subject: Re: [EXTERNAL] Re: 2026-0048704 - Bison to Alexandria 2nd Circuit 345kV Transmission Project
Date: Wednesday, April 15, 2026 1:17:30 PM

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Hi Allison,

We do not provide concurrences for projects determined to have no effect on threatened or endangered species. Documentation provided by our IPaC system is all you need to proceed.

We appreciate that you reached out to our office, please let us know if you need any further assistance.

Thanks,

Nick Utrup
nick_utrup@fws.gov

U.S. Fish and Wildlife Service
Minnesota-Wisconsin Ecological Services Field Office*
3815 American Boulevard East
Bloomington, MN 55425
*f/k/a Twin Cities Ecological Services Field Office
(952) 952-2487

From: Ray, Allison <Allison.Ray@xcelenergy.com>
Sent: Thursday, April 2, 2026 2:26 PM
To: Twin Cities, FW3 <TwinCities@fws.gov>
Cc: Xcel Bison to Alexandria Project <bisontoalex@stantec.com>; Bauer, Mia <mia.bauer@stantec.com>
Subject: [EXTERNAL] Re: 2026-0048704 - Bison to Alexandria 2nd Circuit 345kV Transmission Project

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

To Whom It May Concern:

I am submitting the attached letter regarding the Bison to Alexandria 345kV 2nd Circuit 345kV Transmission Project.

The attached provides a summary of the proposed project and our effects analysis for federally listed, proposed, and candidate species identified through IPaC. Based on our review, we have determined that the project will have no effect on the species evaluated and are requesting your concurrence with these determinations.

We appreciate your time and consideration. Please let me know if you have any questions or require any additional information.

Thanks,
Allison

Allison Ray, PMP

Xcel Energy

Siting and Land Rights – Contractor (Stantec)

414 Nicollet Mall - 6th Floor, Minneapolis, MN 55401

C: 909-282-9038

E: allison.ray@xcelenergy.com

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From: [Kotch Egstad, Stacy \(DOT\)](#)
To: [Ray, Allison](#)
Cc: [Xcel Bison to Alexandria Project](#)
Subject: RE: Bison to Alexandria 2nd Circuit 345kV Transmission Line Project - Additional Narrative Info
Date: Wednesday, November 12, 2025 5:54:33 AM

Good Morning, Allison,

Thank you for the more detailed explanation of anticipated work.

I will finish up my “request for comment” notice and send the ENM package out for review this week.

Much appreciated,

From: Ray, Allison <Allison.Ray@xcelenergy.com>
Sent: Thursday, November 6, 2025 3:38 PM
To: Kotch Egstad, Stacy (DOT) <stacy.kotch@state.mn.us>
Cc: Xcel Bison to Alexandria Project <bisontoalex@stantec.com>
Subject: Bison to Alexandria 2nd Circuit 345kV Transmission Line Project - Additional Narrative Info

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Hi Stacy,

Thanks for your time earlier. Some additional information for your use/circulation:

The proposed Project involves the stringing of a second set of conductor on the existing transmission structures between the Minnesota-North Dakota border in Holy Cross Township in Clay County to the Alexandria Substation in Alexandria in Douglas County. The Project crosses Clay, Wilkin, Otter Tail, Grant and Douglas counties. The existing structures, including a second set of conductor on all crossings of I-94, were previously permitted by MnDOT as part of the CapX2020 Fargo-St. Cloud Transmission Line Project. We anticipate utilizing a helicopter for wire stringing. During construction, temporary and minor impacts will be limited to areas of temporary access roads, matting areas, helicopter landing pads, and the installation of 86 new monopole structures, which will be within existing ROW. These structure installations are necessary to accommodate angles.

Access roads shown on the figures provided are those that were utilized during construction of the first circuit. Xcel and the other utility applicants will evaluate wire stringing locations and

access roads in consultation with the selected construction contractor. It is assumed that this effort will result in a reduction in the number of access roads and structure work locations required for the Project. Access from I-94 is not anticipated; access across MnDOT ROW will be evaluated along with the overall access road assessment.

Construction is not anticipated to begin until at least 2028.

I will follow-up with Engineering regarding conductor blowout.

Thanks,
Allison

Allison Ray

Xcel Energy

Siting and Land Rights – Contractor (Stantec)

414 Nicollet Mall - 6th Floor, Minneapolis, MN 55401

C: 909-282-9038

E: allison.ray@xcelenergy.com

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From: [Ray, Allison](#)
To: [Kotch Egstad, Stacy \(DOT\)](#)
Cc: [Xcel Bison to Alexandria Project](#)
Subject: Bison to Alexandria 2nd Circuit 345kV Transmission Line Project - Additional Narrative Info
Date: Thursday, November 6, 2025 3:38:01 PM

Hi Stacy,

Thanks for your time earlier. Some additional information for your use/circulation:

The proposed Project involves the stringing of a second set of conductor on the existing transmission structures between the Minnesota-North Dakota border in Holy Cross Township in Clay County to the Alexandria Substation in Alexandria in Douglas County. The Project crosses Clay, Wilkin, Otter Tail, Grant and Douglas counties. The existing structures, including a second set of conductor on all crossings of I-94, were previously permitted by MnDOT as part of the CapX2020 Fargo-St. Cloud Transmission Line Project. We anticipate utilizing a helicopter for wire stringing. During construction, temporary and minor impacts will be limited to areas of temporary access roads, matting areas, helicopter landing pads, and the installation of 86 new monopole structures, which will be within existing ROW. These structure installations are necessary to accommodate angles.

Access roads shown on the figures provided are those that were utilized during construction of the first circuit. Xcel and the other utility applicants will evaluate wire stringing locations and access roads in consultation with the selected construction contractor. It is assumed that this effort will result in a reduction in the number of access roads and structure work locations required for the Project. Access from I-94 is not anticipated; access across MnDOT ROW will be evaluated along with the overall access road assessment.

Construction is not anticipated to begin until at least 2028.

I will follow-up with Engineering regarding conductor blowout.

Thanks,
Allison

Allison Ray
Xcel Energy
Siting and Land Rights – Contractor (Stantec)
414 Nicollet Mall - 6th Floor, Minneapolis, MN 55401
C: 909-282-9038
E: allison.ray@xcelenergy.com
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From: [Ray, Allison](#)
To: [Xcel Bison to Alexandria Project](#)
Subject: FW: Bison to Alexandria 345kV Second Circuit Project - Intro. Meeting w/ MnDOT
Date: Thursday, September 4, 2025 9:36:51 AM
Attachments: [image001.png](#)

From: Kotch Egstad, Stacy (DOT) <stacy.kotch@state.mn.us>
Sent: Thursday, September 4, 2025 9:36 AM
To: Ray, Allison <Allison.Ray@xcelenergy.com>
Subject: RE: Bison to Alexandria 345kV Second Circuit Project - Intro. Meeting w/ MnDOT

EXTERNAL - STOP & THINK before opening links and attachments.

Good Morning, Allison,

As discussed, please be on the lookout for an invite to retrieve your Utility ENM package and MnDOT snow fence information from my MFT/Web Transfer Client for your use and review. If I remember correctly, zip files and such sent to Xcel emails get rejected/kicked back to me, so this is my fix for that.

Please let me know if you have any issues with this method or the information contained within.

Stacy Kotch Egstad

Utility Routing & Siting Coordinator | Office of Land Management

Minnesota Department of Transportation

395 John Ireland Blvd Mailstop 678

St. Paul, MN. 55155

651-358-0786



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If you are uncertain whether specific information is appropriate to share or disclose, you must consult your MnDOT project manager or the MnDOT Data Practices Office before taking any action.

By working with MnDOT, you agree to uphold these confidentiality standards and ensure that

all personnel under your supervision do the same.

From: Ray, Allison <Allison.Ray@xcelenergy.com>

Sent: Tuesday, August 26, 2025 9:27 AM

To: Kotch Egstad, Stacy (DOT) <stacy.kotch@state.mn.us>

Subject: RE: Bison to Alexandria 345kV Second Circuit Project - Intro. Meeting w/ MnDOT

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Hi Stacy,

Thank you for the meeting last week! We enjoyed our time with you.

In addition to the ENM checklist, can you send details about the snow fence project? We want to get that integrated into our project planning as soon as possible.

Thanks!

Allison

-----Original Appointment-----

From: Kotch Egstad, Stacy (DOT) <stacy.kotch@state.mn.us>

Sent: Monday, August 11, 2025 12:41 PM

To: Ray, Allison

Subject: Accepted: Bison to Alexandria 345kV Second Circuit Project - Intro. Meeting w/ MnDOT

When: Wednesday, August 20, 2025 1:00 PM-1:50 PM (UTC-06:00) Central Time (US & Canada).

Where: Microsoft Teams Meeting

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From: [Ray, Allison](#)
To: [Kotch Egstad, Stacy \(DOT\)](#); john.gildersleeve@state.mn.us; Jeremy.flatau@state.mn.us; daryn.minske@state.mn.us; paul.hartzheim@state.mn.us; karissa.hogan@state.mn.us; timothy.g.rogers; [Heine, Ellen L](#); [Mueller, Kevin](#); [Sejkora, Erin](#); [Tatro, Kaitlyn](#); [Glick, Jeremy](#); [Ray, Allison](#)
Subject: RE: Bison to Alexandria 345kV Second Circuit Project - Intro. Meeting w/ MnDOT
Date: Friday, August 15, 2025 9:39:13 AM
Attachments: [20250815 Bison to Alex MN ROW GIS.zip](#)

Good morning:

In advance of our meeting next week, I am providing a shp file of the Project ROW so that MnDOT can review. Of note: the line does not intersect with any rest areas, though the Project does intersect with MnDOT ROW. We do not know the extent of necessary temporary workspaces at this time.

Looking forward to our discussion next week.

Have a good weekend!

Thanks,
Allison

-----Original Appointment-----

From: Ray, Allison

Sent: Monday, August 11, 2025 12:32 PM

To: Ray, Allison; [Kotch Egstad, Stacy \(DOT\)](#); john.gildersleeve@state.mn.us; Jeremy.flatau@state.mn.us; daryn.minske@state.mn.us; paul.hartzheim@state.mn.us; karissa.hogan@state.mn.us; [Rogers, Timothy G](#); [Heine, Ellen L](#); [Mueller, Kevin](#); [Sejkora, Erin](#); [Tatro, Kaitlyn](#); [Glick, Jeremy](#); [Ray, Allison](#)

Subject: Bison to Alexandria 345kV Second Circuit Project - Intro. Meeting w/ MnDOT

When: Wednesday, August 20, 2025 1:00 PM-1:50 PM (UTC-06:00) Central Time (US & Canada).

Where: Microsoft Teams Meeting

Good afternoon!

The Bison to Alexandria 2nd Circuit Transmission Project is an Xcel Energy project consisting of hanging a second circuit on existing structures between Alexandria Substation in Alexandria, MN (Douglas County) and the Bison Substation west of Fargo, ND. The Project traverses Wilkin, Otter Tail, Grant, Douglas and Clay counties, and generally follows I-94.

We are currently developing the Certificate of Need/Route Permit Amendment for submittal. The objective of this meeting is to introduce the Project and discuss any concerns Xcel Energy may be able to address while we are early in the development

process.

Please feel free to forward as necessary.

Microsoft Teams [Need help?](#)

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From: [MN_DOT_AviationPlanning](#)
To: [Ray, Allison](#); [Honeycutt, Nicholas](#); fargotoalexandria@xcelenergy.com
Subject: RE: Airport Influence Area Coordination
Date: Wednesday, October 1, 2025 5:41:26 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Some people who received this message don't often get email from aviationplanning.dot@state.mn.us. [Learn why this is important](#)

Not at this time. However, if additional project components are added that fall within the Airport Influence Area, you will need to submit those as well.

Also, be sure to include any cranes located within the Airport Influence Area.

Brian McMahon (He/Him/His)

North Region Planner | MnDOT Office of Aeronautics
395 John Ireland Blvd MS 410, St. Paul, MN 55155
brian.mcmahon@state.mn.us | 612-427-3870

From: Ray, Allison <Allison.Ray@stantec.com>
Sent: Wednesday, October 1, 2025 2:36 PM
To: MN_DOT_AviationPlanning <aviationplanning.dot@state.mn.us>; Honeycutt, Nicholas <Nicholas.Honeycutt@stantec.com>; fargotoalexandria@xcelenergy.com
Subject: RE: Airport Influence Area Coordination

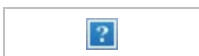
Hi Brian,

Thanks for your quick response!

A Form 7460 will be submitted prior to construction. Are there any additional concerns to be addressed?

Thanks,
Allison

Allison Ray
Senior Project Manager
Mobile: (909) 282-9038



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From: MN_DOT_AviationPlanning <aviationplanning.dot@state.mn.us>
Sent: Wednesday, October 1, 2025 12:43 PM
To: Honeycutt, Nicholas <Nicholas.Honeycutt@stantec.com>; fargotoalexandria@xcelenergy.com;

Ray, Allison <Allison.Ray@stantec.com>

Subject: RE: Airport Influence Area Coordination

Hi Nick,

Thanks for your email.

You'll need to submit a [FAA Form 7460](#) for the proposed monopole structure and any associated construction equipment that falls within the Airport Influence Area of Fergus Falls Municipal Airport.

Once the FAA receives the 7460, they'll issue a determination letter, typically within two months, which will include any necessary instructions before construction can begin.

Please feel free to reach out if you have any questions.

Thanks,

Brian

Brian McMahon (He/Him/His)

North Region Planner | MnDOT Office of Aeronautics

395 John Ireland Blvd MS 410, St. Paul, MN 55155

brian.mcmahon@state.mn.us | 612-427-3870

From: Honeycutt, Nicholas <Nicholas.Honeycutt@stantec.com>

Sent: Tuesday, September 30, 2025 9:14 AM

To: MN_DOT_AviationPlanning <aviationplanning.dot@state.mn.us>

Cc: Ray, Allison <Allison.Ray@stantec.com>

Subject: Airport Influence Area Coordination

You don't often get email from nicholas.honeycutt@stantec.com. [Learn why this is important](#)

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Hello,

I am reaching out to share information about the proposed Fargo to Alexandria Second Circuit 345-kV transmission line project. If approved, the project will add a second circuit to the existing transmission line between the existing Bison Substation near Fargo, North Dakota and the existing Alexandria Substation in Alexandria, Minnesota (project map attached). In addition, the project will also include the installation of approximately 100 new monopole structures to address alignment changes along the route. The project overlaps with two Airport Influence Areas; Fergus Falls Municipal Airport – Einar Mickelson Field and Alexandria Municipal Airport – Chandler Field. Within the overlap areas only one new monopole structure

is anticipated to be installed (within the Fergus Falls Municipal Airport – Einar Mickelson Field). The new monopole structure will be located approximately 50 feet away from the existing transmission structure and will be approximately 75-170 feet tall (the same height as the existing adjacent structure). We are seeking your input regarding any potential impacts of our project on any Airport Influence Areas. Should you have any questions or concerns we encourage you to share them with us as we prepare our project applications for submission to various regulatory authorities. Please feel free to reach out or provide feedback at your convenience. We are available via email (Project Manager: Allison Ray Allison.ray@xcelenergy.com; project email address fargotoalexandria@xcelenergy.com) or you can also call the project hotline -- 1-701-420-1412. Thank you for your time and consideration!

Nick Honeycutt
Environmental Scientist
He/Him

Direct: (412) 246-4452
Mobile: (850) 741-6930
nicholas.honeycutt@stantec.com



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Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

November 12, 2025

Kaitlyn Tatro
Stantec Consulting Services, Inc.

RE: Natural Heritage Review of the proposed Bison to Alexandria Second Circuit 345 kV Transmission Line Proj., Clay, Douglas, Grant, Otter Tail, and Wilkin Counties

Dear Kaitlyn Tatro,

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2025-00666** in the email subject line.

As requested, the [Minnesota Natural Heritage Information System](#) has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

Ecologically Significant Areas

- The Minnesota Biological Survey (MBS) has identified five Sites of *Moderate* Biodiversity Significance overlapping or in the vicinity of the proposed project. Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Sites ranked as *Moderate* contain occurrences of rare species and/or moderately disturbed native plant communities, and/or landscapes that have a strong potential for recovery. Given the ecological significance of these areas, we recommend that the project be designed to avoid impacts to the MBS Sites and native plant communities by either spanning or confining construction activities to the opposite side of the road. Actions to minimize disturbance to Sites may include, but are not limited to, the following recommendations:
 - Confine construction activities to the opposite side of the road from the Sites of Biodiversity. If this is not feasible, confine construction activities to the existing road rights-of-way.
 - Span Sites and native plant communities.
 - As much as possible, operate within already-disturbed areas.
 - Retain a buffer between proposed activities and the MBS Site.
 - Minimize vehicular disturbance in the area (allow only vehicles necessary for the proposed work).
 - Do not park equipment or stockpile supplies in the area.
 - Do not place spoil within MBS Sites or other sensitive areas.

- Inspect and clean equipment prior to operating within the MBS Site and follow recommendations to [prevent the spread of invasive species](#).
 - If possible, conduct the work under frozen ground conditions.
 - Use effective erosion prevention and sediment control measures.
 - Revegetate disturbed soil with [native species suitable to the local habitat](#) as soon after construction as possible.
 - Use only weed-free mulches, topsoils, and seed mixes. Of particular concern is birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas, such as roadsides.
- Lake Latoka has been identified as a Lake of *Outstanding* Biological Significance. Lakes of Biological Significance were ranked as *Outstanding, High or Moderate* based on unique plant and animal presence. This lake has records of three aquatic species, pugnose shiner (*Miniellus anogenus*), state-listed as threatened, and least darter (*Etheostoma microperca*) and mudpuppy (*Necturus maculosus*), both species of special concern. As such, it is important that effective erosion prevention and sediment control practices be implemented and maintained near the lake throughout the duration of the project. Indirect impacts, such as the introduction or spread of invasive species, should also be considered and minimized.
 - Ecologically Significant Areas can be viewed using the Explore page in [Minnesota Conservation Explorer](#) (MCE) or their GIS shapefiles can be downloaded from the [MN Geospatial Commons](#). Reference the [MBS Site Biodiversity Significance](#) and [Native Plant Community](#) websites for information on interpreting the data. A list of Ecologically Significant Areas in the proposed project area can be found in the attached Conservation Planning Report (2025-BisonToAlexandria-CPR).
 - If the Wetland Conservation Act (WCA) is applicable to this project, please note that one or more Native Plant Communities in the vicinity of the project may qualify as a “rare natural community” under this Act. Minnesota Rules, part 8420.0515, subpart 3 states that a wetland replacement plan for activities that modify a rare natural community must be denied if the local government unit determines the proposed activities will permanently adversely affect the natural community. If the proposed project includes a wetland replacement plan under WCA, please contact your [DNR Regional Ecologist](#) for further evaluation. Please visit [WCA Program Guidance and Information](#) for additional information, including the [Rare Natural Communities Technical Guidance](#).
 - Twelve calcareous fens (see attached Conservation Planning Report for a list) have been documented within the vicinity of the proposed project area. Hairy fimbry (*Fimbristylis puberla* var. *interior*), state-listed as endangered, and sterile sedge (*Carex sterilis*), beaked spikerush (*Eleocharis rostellata*), whorled nutrush (*Scleria verticillata*), and hair-like beak rush (*Rhynchospora capillacea*), all state-listed threatened plants, have been documented within the fens. A calcareous fen is a rare and distinctive peat-accumulating wetland that is legally protected in Minnesota. The Wetlands Conservation Act, authorized by Minnesota Statutes, section 103G.223, states that calcareous fens may not be filled, drained, or otherwise degraded, wholly or partially, by any activity, except as provided for in a management plan approved by the commissioner of the Department of Natural Resources. Many of the

unique characteristics of calcareous fens result from the upwelling of groundwater through calcareous substrates. Because of this dependence on groundwater hydrology, calcareous fens can be affected by nearby activities or even those several miles away. For more information regarding calcareous fens, please see the [Calcareous Fen Fact Sheet](#). To minimize stormwater impacts, please refer to the Minnesota Pollution Control Agency's [General Principles for Erosion Prevention and Sediment Control](#) in the Minnesota Stormwater Manual. Please note that calcareous fens are "Special Waters" and a [buffer zone](#) may be required.

Calcareous fens may be impacted by activities within the fen, activities that affect surface water flows (e.g., stormwater flow, erosion), or activities that affect groundwater hydrology (e.g., groundwater pumping, contamination, or discharge). To ensure compliance with WCA, please contact the Calcareous Fen Program Coordinator, Keylor Andrews (Keylor.Andrews@state.mn.us). **If it is determined the project will impact the fen in any way, including indirect impacts through the alteration of hydrological conditions, a botanical survey is required.** Surveys must be conducted by a qualified surveyor and follow the standards contained in the [Rare Species Survey Process](#) and [Rare Plant Guidance](#). Visit the [Natural Heritage Review](#) page for a list of certified surveyors and more information on this process. Survey proposals should be submitted to Reports.NHIS@state.mn.us prior to initiating survey work. Project planning should take into account that any botanical survey needs to be conducted during the appropriate time of the year, which may be limited. Please consult Review.NHIS@state.mn.us if you have any questions regarding this process.

State-listed Species

Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and chapter 6134) prohibit the take of threatened or endangered species without a permit.

- Henslow's sparrow (*Centronyx henslowii*), state-listed as endangered, and lark sparrow (*Chondestes grammacus*), state-listed as a species of special concern, have been documented near the proposed project. Suitable nesting habitat for Henslow's sparrows includes uncultivated and unmowed grasslands and old fields with standing, dead vegetation, and a substantial litter layer. They are not likely to nest adjacent to noisy areas such as I-94. Lark sparrows are found in open, grassland areas with scattered trees and shrubs. As such, **initial disturbance in areas that contain suitable nesting habitat for Henslow's sparrows should not occur during their breeding season, between May 15 and July 15.**

Please contact Review.NHIS@state.mn.us to confirm that the above avoidance measure will be implemented or to inform us that avoidance is not feasible. **If avoidance during the breeding season is not feasible, areas that will be disturbed that contain suitable nesting habitat will need to be surveyed for active nests prior to any disturbance.** Requirements for surveys and lists of DNR certified surveyors can be found at the [Natural Heritage Review website](#).

- Wilson's phalarope (*Phalaropus tricolor*), a state-listed threatened bird, and marbled godwit (*Limosa fedoa*), state-listed as a species of special concern, have been documented during the breeding season in the vicinity of the proposed project in Wilkin County. Wilson's phalarope nests on the ground in wet meadows, grassy marshes, and both species nest along edges of shallow inland waters. Given the presence of this state-protected bird, **disturbance to suitable nesting habitat for Wilson's phalarope in Wilkin County must be avoided between mid-May and July, the breeding season for Wilson's phalaropes.**

Please contact Review.NHIS@state.mn.us to confirm that the above avoidance measure will be implemented or to inform us that avoidance is not feasible. If avoidance is not feasible, the project area will need to be surveyed for active nests prior to any project disturbance. Requirements for surveys and lists of DNR certified surveyors can be found at the [Natural Heritage Review website](#).

- The state-listed mussels fluted-shell (*Lasmigona costata*), listed as endangered, and black sandshell (*Ligumia recta*), listed as a species of special concern, have been documented in the Otter Tail River near where it crosses the proposed project. **If there will be disturbance to the riverbed**, then to demonstrate avoidance the applicant will need to hire a qualified surveyor to determine if suitable habitat exists within the activity impact area and, if there is, conduct a survey. If state-protected species are documented during the survey, a permit to take will be needed. **No disturbance to the riverbed (including sedimentation from bank work) may occur until avoidance has been approved or a permit to take has been issued.**

Surveys must follow the [Rare Species Survey Process](#) and the [MN Mussel Survey and Relocation Protocol](#). Alternatively, in situations where a survey is not feasible, the applicant can assume presence of state-protected mussels and apply for a [permit to take](#). Visit [Natural Heritage Review](#) for a list of certified surveyors and more information regarding the survey process. Visit [Endangered and Threatened Species Permits](#) for information regarding permits. Please consult with Review.NHIS@state.mn.us if you have questions regarding the survey process or EndangeredSpeciesPermits.dnr@state.mn.us if you have questions regarding the permit to take process.

- The pugnose shiner (*Miniellus anogenus*), a state-listed threatened fish species, and least darters (*Etheostoma microperca*), a state-listed fish species of special concern, have been documented in Lake Latoka. These species prefer clear lakes and low velocity streams with an abundance of submerged vegetation such as eelgrass, Canadian elodea, pondweed, and muskgrass. **If there will be work within the water of Lake Latoka, it must be avoided from May 1 through July 31 to avoid impacts to spawning pugnose shiner.** Contact Review.NHIS@state.mn.us if this is not feasible, as further action may be needed. As this species is intolerant of environmental degradation, especially turbidity and siltation, it is important that effective erosion and sediment control practices be implemented and maintained for the duration of the project near the lake.
- Small white lady's-slipper (*Cypripedium candidum*), sea naiad (*Najas marina*), and spiral ditchgrass (*Ruppia cirrhosa*), all state-listed as species of special concern, have been documented near the proposed project. Small white lady's-slipper is found in mesic or wet prairies, sedge meadows, and

calcareous fens while the other two species are in alkaline prairie lakes. We recommend minimizing or avoiding impacts to suitable habitat as feasible. Actions to minimize disturbance may include, but are not limited to, the following recommendations:

- Use effective erosion prevention and sediment control measures;
 - Inspect and clean equipment prior to operating within the MBS Site, and follow recommendations to [prevent the spread of invasive species](#);
 - As much as possible, operate within already disturbed areas;
 - Revegetate disturbed soil with [native species suitable to the local habitat](#) as soon after construction as possible; and
 - Use only weed-free mulches, topsoils, and seed mixes. Of particular concern are birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas.
- Booming grounds of the greater prairie chicken (*Tympanuchus cupido*), a state-listed bird of special concern, have been documented in the immediate vicinity of the proposed project in Clay and Wilkin Counties. During the booming season, usually April 1 through May 15, dozens of males gather in areas of short cover (including agricultural land), where they defend small territories and advertise to females using elaborate displays and booming sounds. After the mating season ends, the birds disperse and nest in areas of dense, undisturbed cover. **If prairie-chickens are actively using the area, we recommend minimizing project activities in the early morning hours, before 9 AM, during the booming season to help minimize disturbance to this rare bird.**
 - Great Plains toad (*Anaxyrus cognatus*), a state-listed species of special concern, was documented in the vicinity of the proposed project. This species is found in remnant prairies and grasslands in Western Minnesota. They breed from May to July in highly ephemeral water-filled prairie depressions and have adapted to breed in flooded agricultural fields. Given the presence of these rare toads, the DNR recommends that the use of erosion control mesh, if any, be limited to [wildlife-friendly materials](#).
 - Several state-listed birds that are associated with wetlands, ponds, and lakes have been documented in close proximity to the proposed projects. These rare birds may be at risk for colliding with or being electrocuted by overhead transmission lines. We recommend the use of bird diverters on overhead lines near lakes and rivers, or other areas that may attract large concentrations of waterfowl.
 - Please visit the [DNR Rare Species Guide](#) for more information on the habitat use of these species and recommended measures to avoid or minimize impacts.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online [Information for Planning and Consultation \(IPaC\) tool](#).

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available and is the most complete source of data on Minnesota's native plant communities, rare species, and other rare features. However, the NHIS is not an exhaustive inventory and does not contain the locations of all rare features in the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and project description provided with the request. **If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.** Resubmit by selecting *Clone Project as Draft* on the project page in MCE.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit [Natural Heritage Review](#) for additional information regarding this process, survey guidance, and other related information. For information on the environmental review process or other natural resource concerns, please contact your [DNR Regional Environmental Assessment Ecologist](#).

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

James Drake

Natural Heritage Review Specialist

james.f.drake@state.mn.us

Cc: Owen Baird, Becky Marty, Jennie Skancke, Keylor Andrews, Martin Donovan



March 24, 2026

Mr. James Drake
Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

Reference: MCE-2025-00666 Bison to Alexandria 345kV 2nd Circuit Transmission Project

Dear Mr. Drake,

Stantec Consulting Services Inc. (Stantec) understands that Northern States Power Company, doing business as Xcel Energy, along with Great River Energy, Minnesota Power, Otter Tail Power Company, and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency (collectively, the Applicants) are proposing the Bison to Alexandria 345kV 2nd Circuit Transmission Project (Project). The proposed Project would add a new 345kV transmission circuit on existing transmission line structures for approximately 136 miles from the existing Bison Substation near Fargo, North Dakota in Cass County to the existing Alexandria Substation near Alexandria, Minnesota in Douglas County. The existing 345kV structures were previously permitted and constructed as double-circuit capable as part of the CapX202 Fargo – St. Cloud 345 kV Transmission Project.

The proposed right-of-way (ROW) for the Project will remain at 150-feet in width and be mostly installed on existing transmission towers using a helicopter where feasible. During construction, temporary and minor impacts will be limited to areas of temporary access roads, matted workspace areas, helicopter landing pads, and the installation of 107 new monopole structures (86 within Minnesota) which will be within the existing, permitted ROW. Permanent impacts are limited to the new structure installations. No tree clearing is anticipated for this Project as it is within an existing transmission line corridor subject to routine vegetation maintenance.

Within Minnesota, the Project encompasses approximately 1,911 acres located within Clay, Wilkin, Otter Tail, Grant, and Douglas counties. The Project is shown in Figures 1 and 2. Project construction is anticipated to begin in July 2028 following approval from the Minnesota Public Utilities Commission (PUC) and North Dakota Public Service Commission and all necessary permits are received.

State Review

As part of the threatened and endangered species review, Stantec initiated consultation with the Minnesota Department of Natural Resources (MDNR) on July 31, 2025, by using the Minnesota Conservation Explorer (MCE) tool to evaluate the potential for the Project to impact state-listed species and other rare features (MCE-2025-00666). A Conservation Planning Report (CPR) was

Reference: MCE-2025-00666 Bison to Alexandria 345kV 2nd Circuit Transmission Project

generated on November 4, 2025, and a final review letter was received from the MDNR on November 12, 2025. Attachments A and B include this correspondence from the MDNR.

Ecologically Significant Areas

The MDNR review and CPR letter, along with an internal review by Stantec, identified nine Minnesota Biological Survey (MBS) Sites of Biodiversity Significance, five MDNR Native Plant Communities, and two Lakes of Biological Significance within 330 feet of the Project. Additionally, 13 calcareous fens were identified within five miles of the Project. These resources and their potential to be impacted as a result of the Project are detailed in Attachment C. Figure 1 shows the locations of MBS Sites, MDNR Native Plant Communities, and Lakes of Biological Significance relative to the Project. Figure 2 shows the locations of calcareous fens relative to the Project.

As indicated in Attachment C, all but five ecologically significant areas are located outside of the Project. Of these five sites, only one, the Dane Prairie 32 MBS Site, has work proposed on the ground consisting of a new monopole structure and foundation and a temporary access road. Impacts on this resource would be minimized given the small footprint of a new monopole and the temporary nature of the access road. This site is also below the threshold for statewide significance.

The remaining four sites, the Barnesville-Sabin Hwy 52-RR ROW MBS Site, the Pomme De Terre Lake 2 MBS Site, a Wet Prairie (Northern) MDNR Native Plant Community, and Lake Latoka have no groundwork or in-water work proposed; work would be limited to overhead line stringing. Therefore, no impacts are anticipated for these resources.

To further minimize disturbance to ecologically significant areas, the Applicants will follow the following recommendations:

- Where feasible, confine construction activities to the opposite side of the road from the Sites of Biodiversity. If this is not feasible, confine construction activities to the existing road ROWs.
- Span MBS Sites and native plant communities where engineering and construction conditions allow.
- As much as possible, utilize already-disturbed areas for construction access and workspaces.
- Limit vehicle use within sensitive areas to those necessary to complete the work. Do not park equipment or stockpile supplies in the area.
- Do not place spoil within MBS Sites or other sensitive areas.
- Inspect and clean equipment prior to operating within the MBS Site and follow recommendations to prevent the spread of invasive species.
- If possible, conduct the work under frozen ground conditions.
- Implement appropriate erosion prevention and sediment control measures consistent with applicable permits and construction practices. Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible.
- Use only weed-free mulches, topsoils, and seed mixes. Of particular concern is birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas, such as roadsides.

Ecologically Significant Area Rare Species

None of the calcareous fens identified from the MDNR review overlap the Project; the closest fen to the Project is the Rothsay Prairie – Prairie View 33 (ID: 7070) located approximately 1.78 miles southwest of the Project. Additionally, while temporary dewatering may be required for the Project, there are no long term or permanent impacts to groundwater anticipated. Therefore, impacts to calcareous fens, as well as the rare species they harbor, such as the hairy fimbry (*Fimbristylis puberla* var. *interior*), sterile sedge (*Carex sterilis*), beaked spikerush (*Eleocharis rostellata*), whorled nutrush (*Scleria verticillata*), and hair-like beak rush (*Rhynchospora capillacea*), are not anticipated.

Additionally, given that overhead line stringing is the only work proposed over Lake Latoka, no impacts are anticipated for the rare aquatic species found within this resource: pugnose shiner (*Miniellus anogenus*), least darter (*Etheostoma microperca*), or mudpuppy (*Necturus maculosus*).

Additional State-Listed Species

Henslow's sparrow and lark sparrow

The MDNR letter indicated that the Henslow's sparrow (*Centronyx henslowii*) and lark sparrow (*Chondestes grammacus*) have been documented within one mile of the proposed Project. Based on internal review using Stantec's Limited License Agreement (2024-057), known records for these species do not overlap the Project. Known records of Henslow's sparrow are located in the vicinity of the Project but are only as recent as 2004. One of these records overlaps a field where a new monopole structure is proposed. However, this field is maintained for agricultural purposes according to aerial imagery, and the new monopole would be installed adjacent to the I-94 ROW. The lack of perch sites caused by mowing and the proximity to traffic noise from I-94 make this area unlikely to provide suitable habitat for Henslow's sparrow. Construction activities will be scheduled, to the extent practicable, to occur outside of sensitive nesting period of May 15 through July 15 so that young of both species would be near fledging age and able to avoid active construction. Therefore, the Project is not anticipated to impact these avian species.

Wilson's phalarope and marbled godwit

The MDNR letter indicated that Wilson's phalarope (*Phalaropus tricolor*) and marbled godwit (*Limosa fedoa*) have been documented within one mile of the proposed Project. Based on internal review using Stantec's Limited License Agreement (2024-057), known records for these species do not overlap the Project. Temporary impacts to wetland habitats may occur through the use of matting; however, no permanent impacts are proposed for wetlands or inland lake shorelines where these species breed. Construction timing will be coordinated, where practicable, to avoid sensitive breeding periods between mid-May and July, so that young birds would be near fledging age and able to avoid active construction activities. Therefore, the Project is not anticipated to impact these avian species.

Greater prairie chicken

The MDNR letter indicated that booming grounds for the greater prairie chicken (*Tympanuchus cupido*) have been documented within one mile of the proposed Project. Two records for this species overlap the Project; however, these records date from 1976 and 2006. Construction

Reference: MCE-2025-00666 Bison to Alexandria 345kV 2nd Circuit Transmission Project

activities in the vicinity of these records will be scheduled, to the extent practicable, outside the species' booming season of April 1 through May 15 or after early morning hours (9 AM). Therefore, the Project is not anticipated to impact the greater prairie chicken.

Fluted-shell and black sandshell

The MDNR letter indicated that there are records of the fluted-shell (*Lasmigona costata*) and black sandshell (*Ligumia recta*) mussels in the Otter Tail River, which is overlapped by the Project. There will be no disturbance to the riverbed as the only work in this area will consist of overhead line stringing. There will be no new monopoles or access roads within this resource. Given that there will be no direct work associated with the Otter Tail River, the Project will have no impact on these mussel species.

Great plains toad

The MDNR letter indicated that records of the great plains toad (*Anaxyrus cognatus*) have been documented within one mile of the proposed Project. Based on internal review using Stantec's Limited License Agreement (2024-057), known records for this species do not overlap the Project. Additionally, the most recent records within one mile of the Project are from 1999. The stretch of the Project near these records consist solely of overhead line stringing directly adjacent to I-94 where ephemeral water-filled prairie depressions are unlikely to be present. Therefore, the Project will have no impact on the great plains toad.

Small white lady's slipper

The MDNR letter indicated that records of the small white lady's slipper (*Cypripedium candidum*) have been documented within one mile of the proposed Project. Based on internal review using Stantec's Limited License Agreement (2024-057), known records for this species do not overlap the Project. Ground disturbance in the vicinity of known records is proposed to be limited to new monopole structures and temporary access roads in areas that are located on agricultural and maintained lands. Therefore, the Project will have no impact on the small white lady's slipper.

Sea naiad and spiral ditchgrass

The MDNR letter indicated that records of the sea naiad (*Najas marina*) and spiral ditchgrass (*Ruppia cirrhosa*) have been documented within one mile of the proposed Project. Based on internal review using Stantec's Limited License Agreement (2024-057), known records for these species do not overlap the Project. Additionally, the Project will not have any impacts on alkaline prairie lakes; bodies of water that overlap the Project would be crossed aerially for overhead line stringing. Therefore, the Project will have no impact on these aquatic plant species.

Conclusion

Stantec, on behalf of the Applicants, has determined that the Project will have no impact on MDNR Native Plant Communities, Lakes of Biological Significance, or calcareous fens. All MBS Sites of Biodiversity Significance will also not be impacted with the exception Dane Prairie 32, an MBS Site below the threshold for statewide significance, where impacts will be minimized.

Reference: MCE-2025-00666 Bison to Alexandria 345kV 2nd Circuit Transmission Project

The Project will also have no impact on the hairy fimbry, sterile sedge, beaked spikerush, whorled nutrush, hair-like beak rush, pugnose shiner, least darter, mudpuppy, Henslow's sparrow, lark sparrow, Wilson's phalarope, marbled godwit, greater prairie chicken, fluted-shell, black sandshell, great plains toad, small white lady's slipper, sea naiad, or spiral ditchgrass.

We trust this information meets your needs. Please feel free to contact me if you have questions or need additional information.

Thanks,

Stantec Consulting Services Inc.



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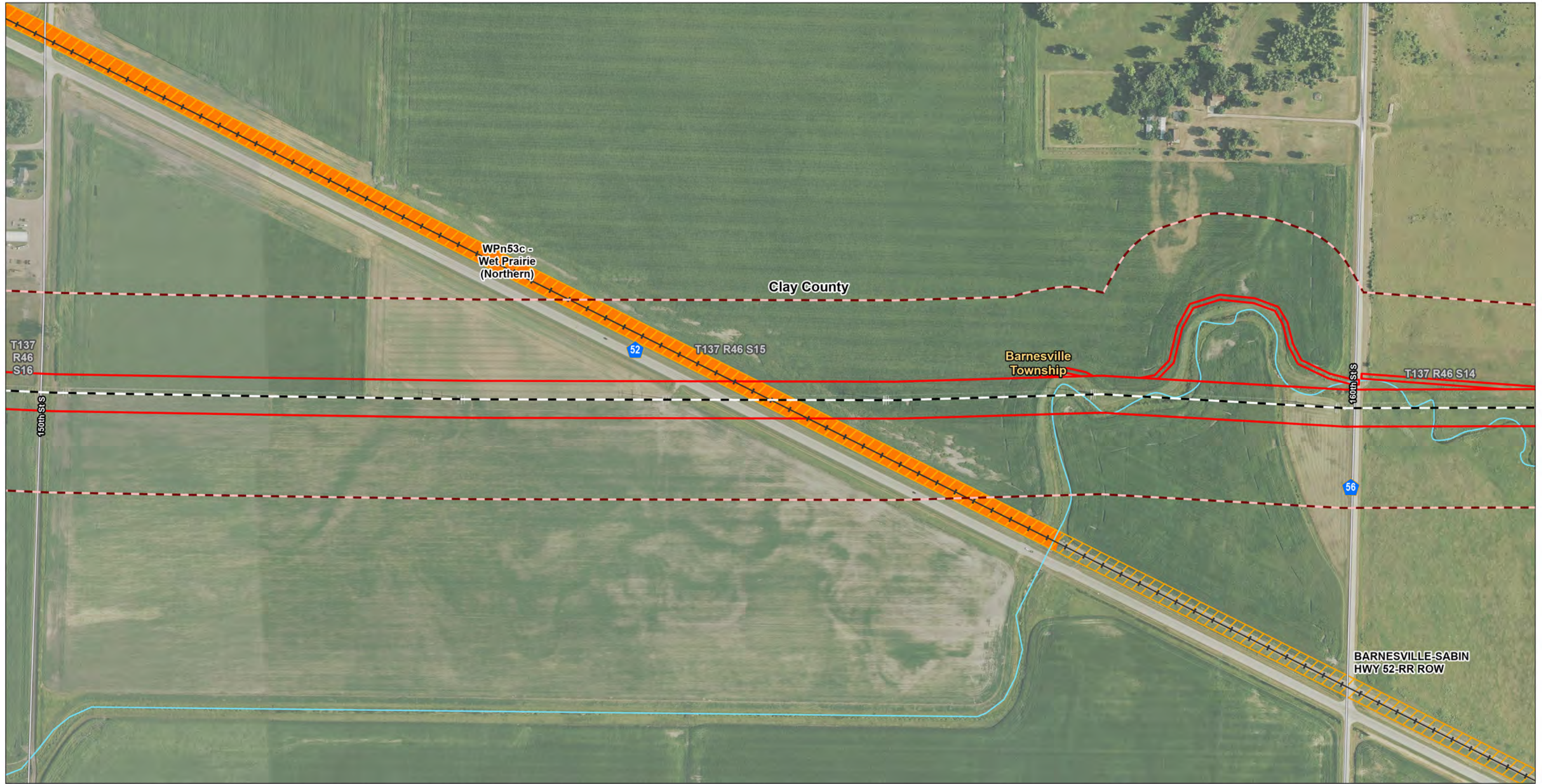
Figures

- Figure 1 – Project Area Relative to Ecologically Significant Areas
- Figure 2 – Project Area Relative to Calcareous Fens
- Attachment A – Natural Heritage Review Letter (MCE-2025-00666)
- Attachment B – Conservation Planning Report (MCE-2025-00666)
- Attachment C – Ecologically Significant Areas in Relation to the Project

Reference: MCE-2025-00666 Bison to Alexandria 345kV 2nd Circuit Transmission Project

Figures

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- Legend**
- Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary
 - Railroad

- Sites of Biodiversity Significance**
- Moderate
 - DNR Native Plant Communities
 - Wetland Prairie System
 - National Hydrography Dataset
 - Stream



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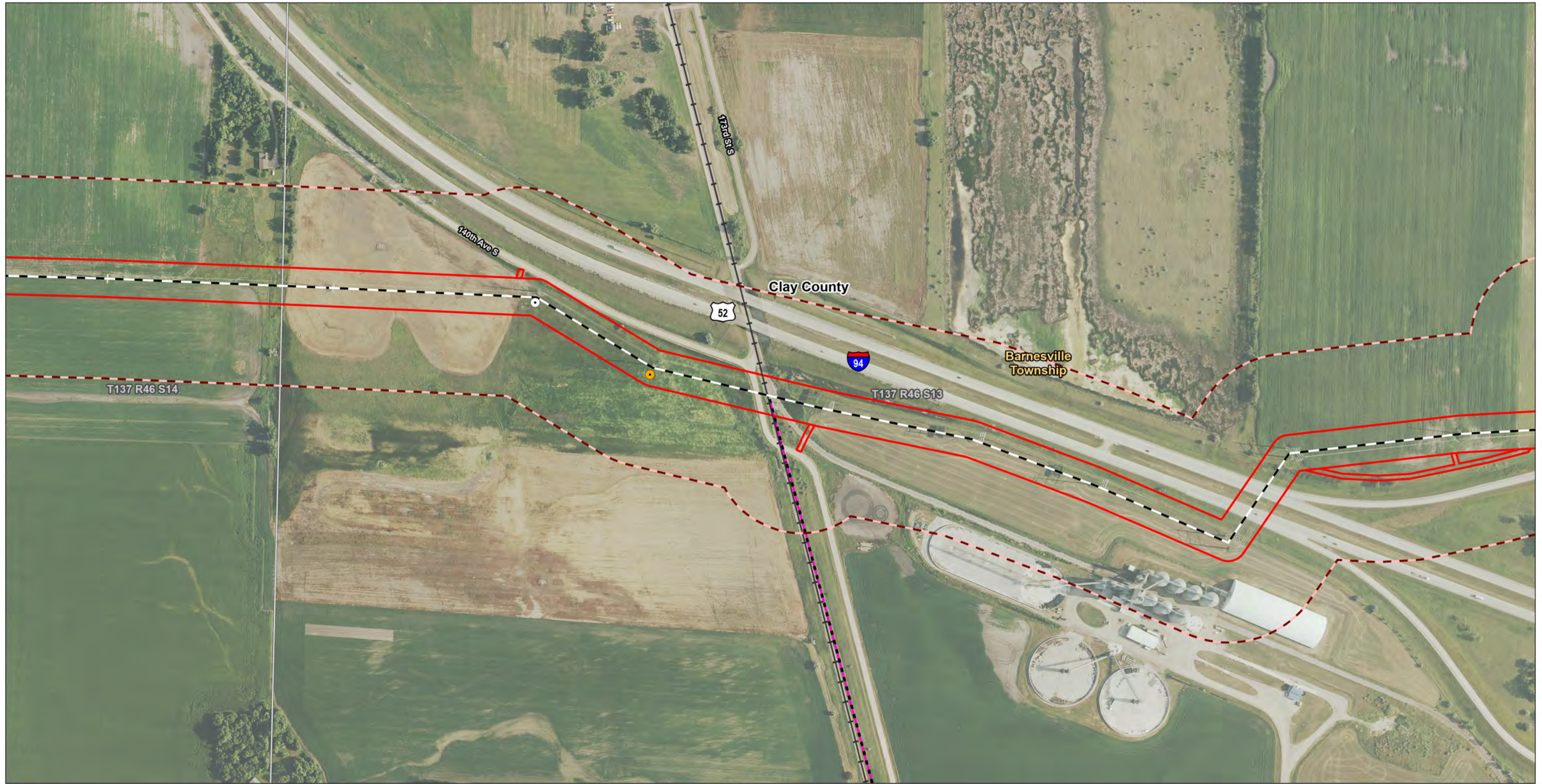
Project Location
 Clay, Wilkin, Otter Tail, Grant
 and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-17

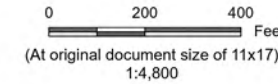
Map 1 of 14

T&E Resources within 330 ft
 Bison-Alexandria 345 kV 2nd Circuit
 Transmission Project
 Route Permit Amendment

- Notes**
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet
 2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
 3. Background: NADP 2023



- Legend**
- New Foundation & Structure
 - ⊙ New Structure Only
 - - - Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary
 - + - - Railroad
 - MBS Railroad Rights-of-Way Prairies
 - - - Good



Project Location
Clay, Wilkin, Otter Tail, Grant
and Douglas Counties, Minnesota

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Map 2 of 14

T&E Resources within 330 ft
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

Notes
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet
2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
3. Background: NAIP 2023

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- Legend**
- New Foundation & Structure
 - Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary
- Sites of Biodiversity Significance**
- Moderate
 - DNR Native Plant Communities
 - Complex community
 - National Hydrography Dataset
 - Stream

Project Location
Clay, Wilkin, Otter Tail, Grant
and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-17



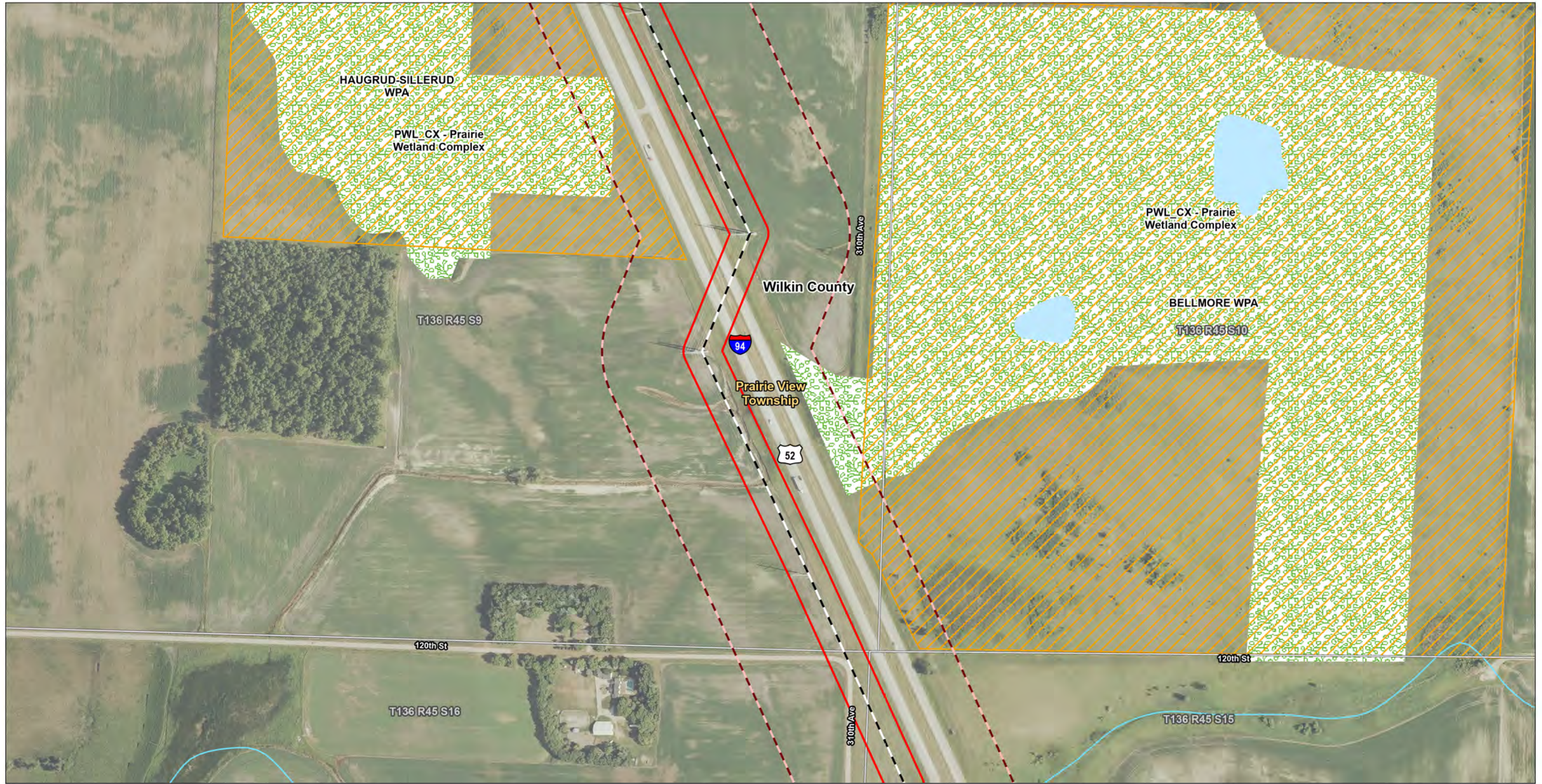
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Map 3 of 14

**T&E Resources within 330 ft
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment**

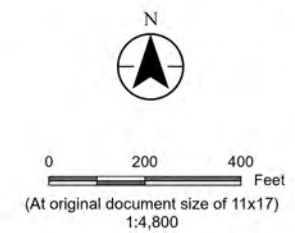
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 3. Background: NAIP 2023

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- Legend**
- Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary
 - Sites of Biodiversity Significance
 - Moderate
 - DNR Native Plant Communities Complex community
 - National Hydrography Dataset Stream
 - Waterbody

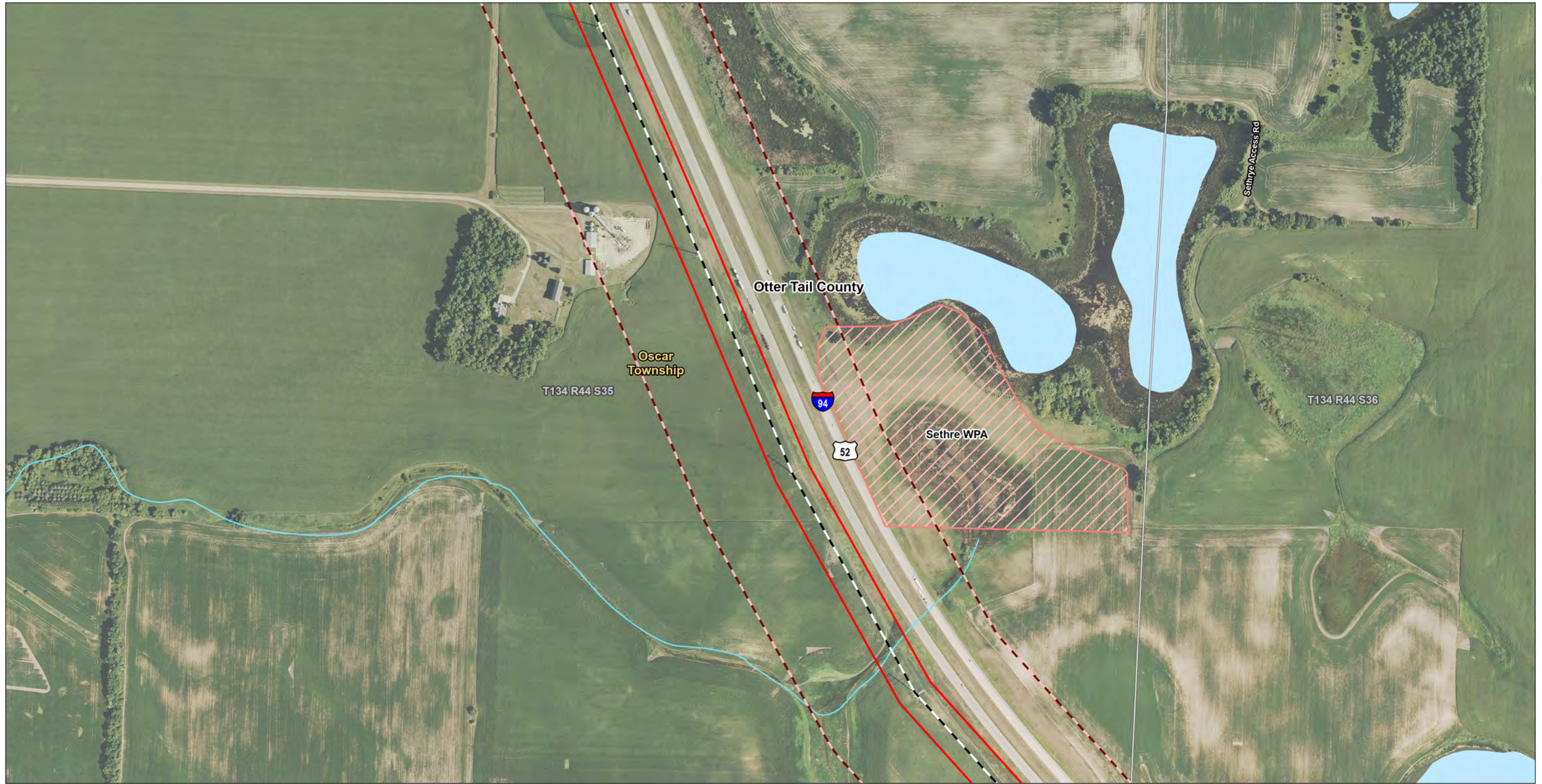
Project Location
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota
Prepared by KJM on 2026-03-17



Map 4 of 14
T&E Resources within 330 ft
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

Notes
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet
2. Data Sources: Xcoel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
3. Background: NAIP 2023

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- Legend**
- Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary
- Sites of Biodiversity Significance**
- Below National Hydrography Dataset
 - Stream
 - Waterbody

Project Location
Clay, Wilkin, Otter Tail, Grant
and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-17



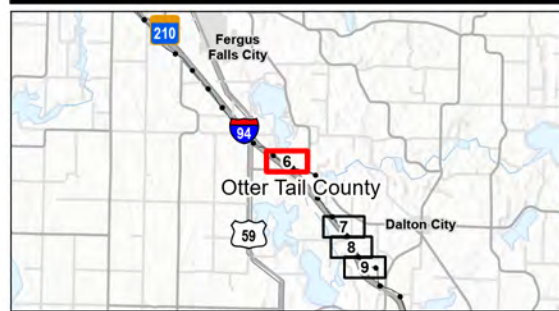
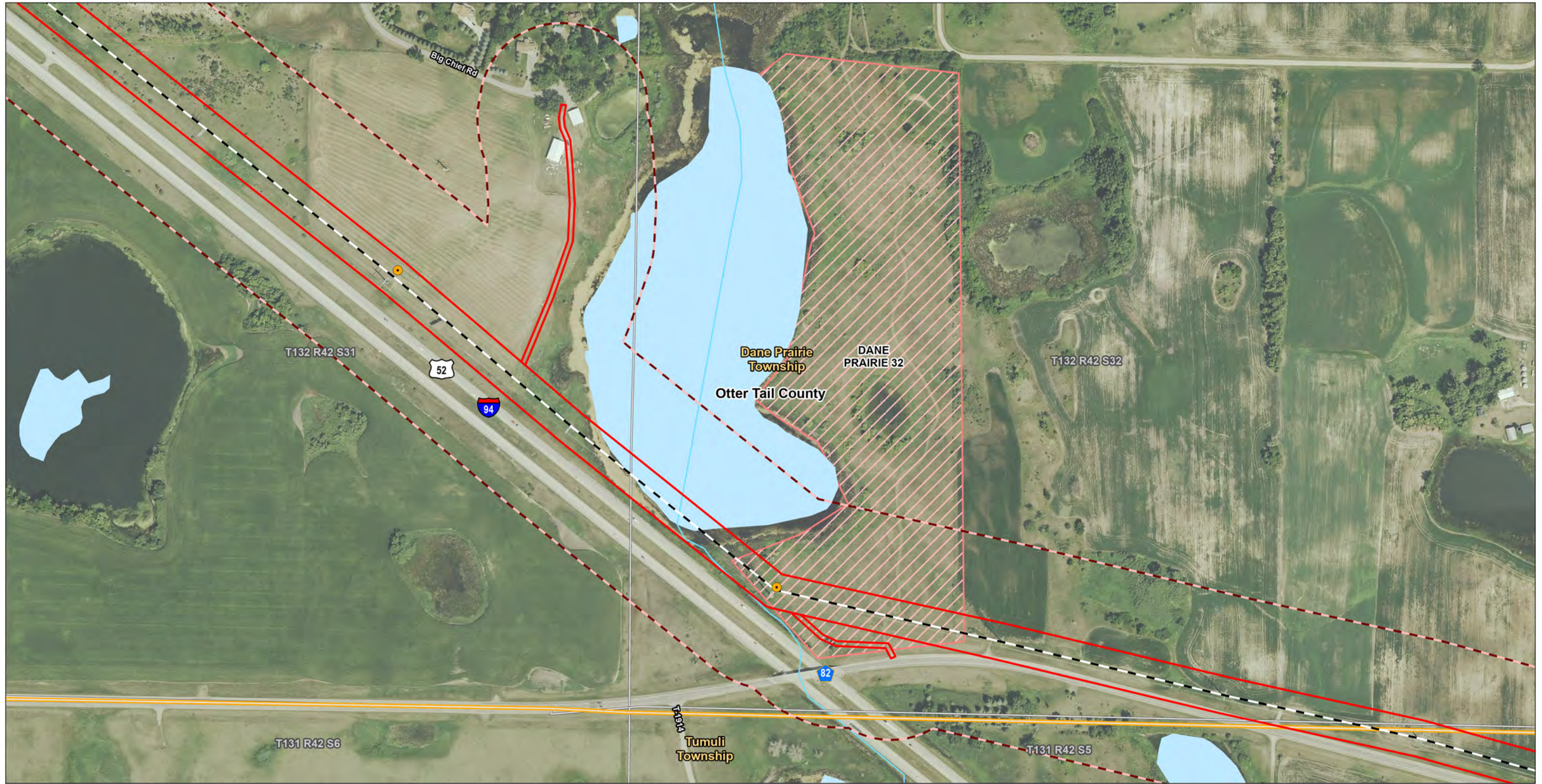
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Map 5 of 14

**T&E Resources within 330 ft
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment**

- Notes**
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet
 2. Data Sources: Xcoel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
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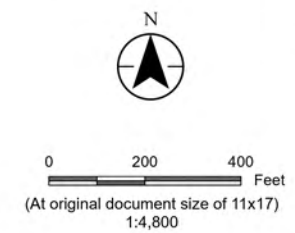
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- Legend**
- New Foundation & Structure
 - Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary
- Sites of Biodiversity Significance**
- Below National Hydrography Dataset
 - Stream
 - Waterbody

Project Location
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-17



Map 6 of 14

T&E Resources within 330 ft
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

Notes

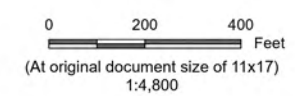
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3. Background: NAIP 2023

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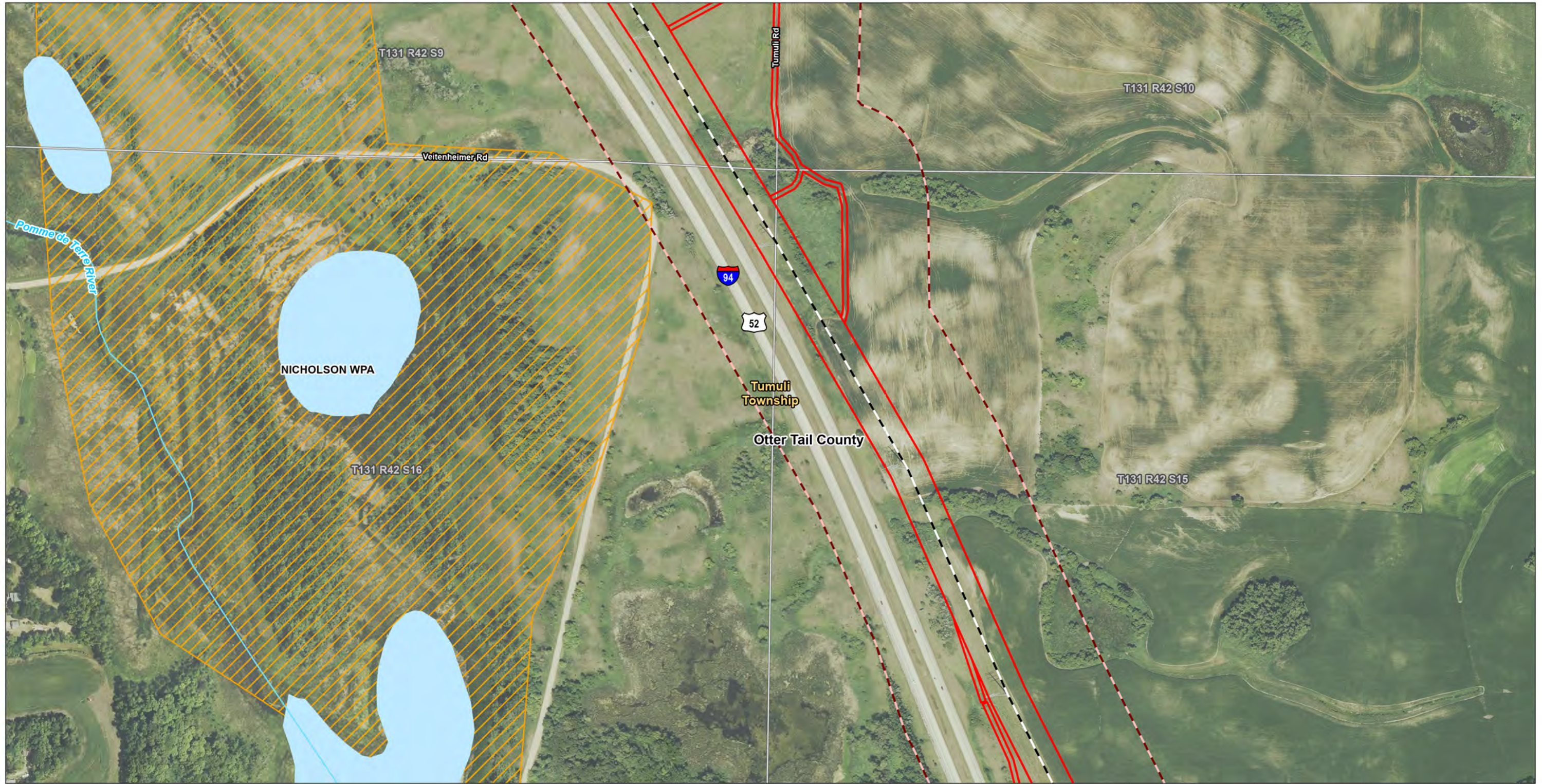
- Legend**
- Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary
 - Sites of Biodiversity Significance Moderate
 - National Hydrography Dataset Stream
 - Waterbody

Project Location
Clay, Wilkin, Otter Tail, Grant
and Douglas Counties, Minnesota
Prepared by KJM on 2026-03-17



Map 7 of 14
T&E Resources within 330 ft
 Bison-Alexandria 345 kV 2nd Circuit
 Transmission Project
 Route Permit Amendment

Notes
 1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet
 2. Data Sources: Xcoel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
 3. Background: NADP 2023



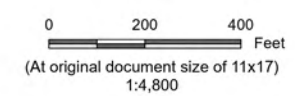
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- Legend**
- Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary
- Sites of Biodiversity Significance**
- Moderate
- National Hydrography Dataset**
- Stream
 - Waterbody

Project Location
Clay, Wilkin, Otter Tail, Grant
and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-17



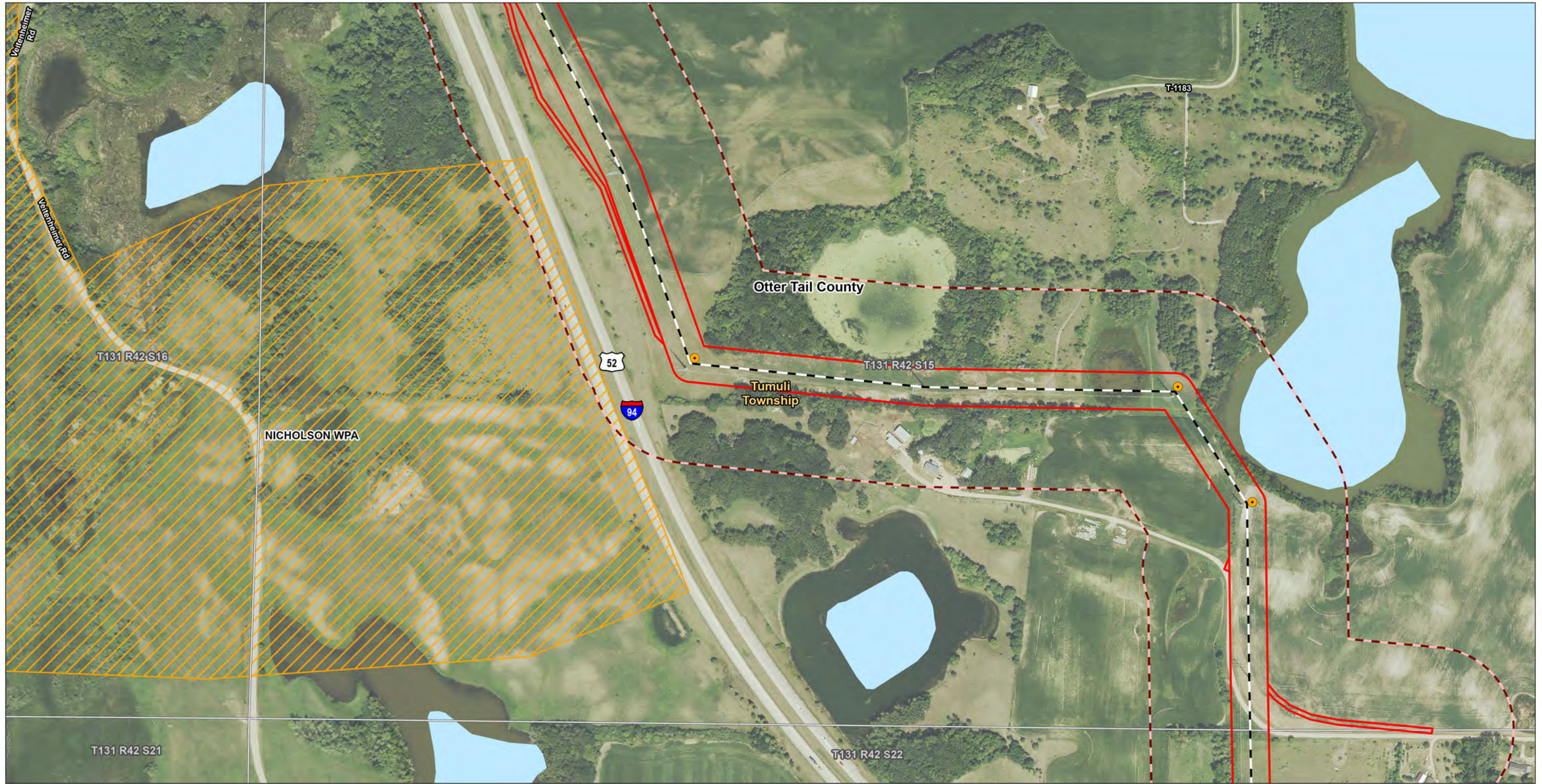
Map 8 of 14

T&E Resources within 330 ft
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

Notes

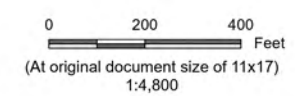
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3. Background: NAD 2023

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- Legend**
- New Foundation & Structure
 - Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary
 - Sites of Biodiversity Significance
 - Moderate
 - National Hydrography Dataset
 - Waterbody

Project Location
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota
Prepared by KJM on 2026-03-17



Map 9 of 14
T&E Resources within 330 ft
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

Notes
 1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet
 2. Data Sources: Xcoel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
 3. Background: NAIP 2023

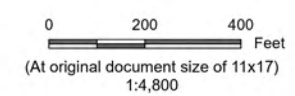


- Legend**
- Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary

- Sites of Biodiversity Significance**
- Below National Hydrography Dataset
 - Stream
 - Waterbody

Project Location
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

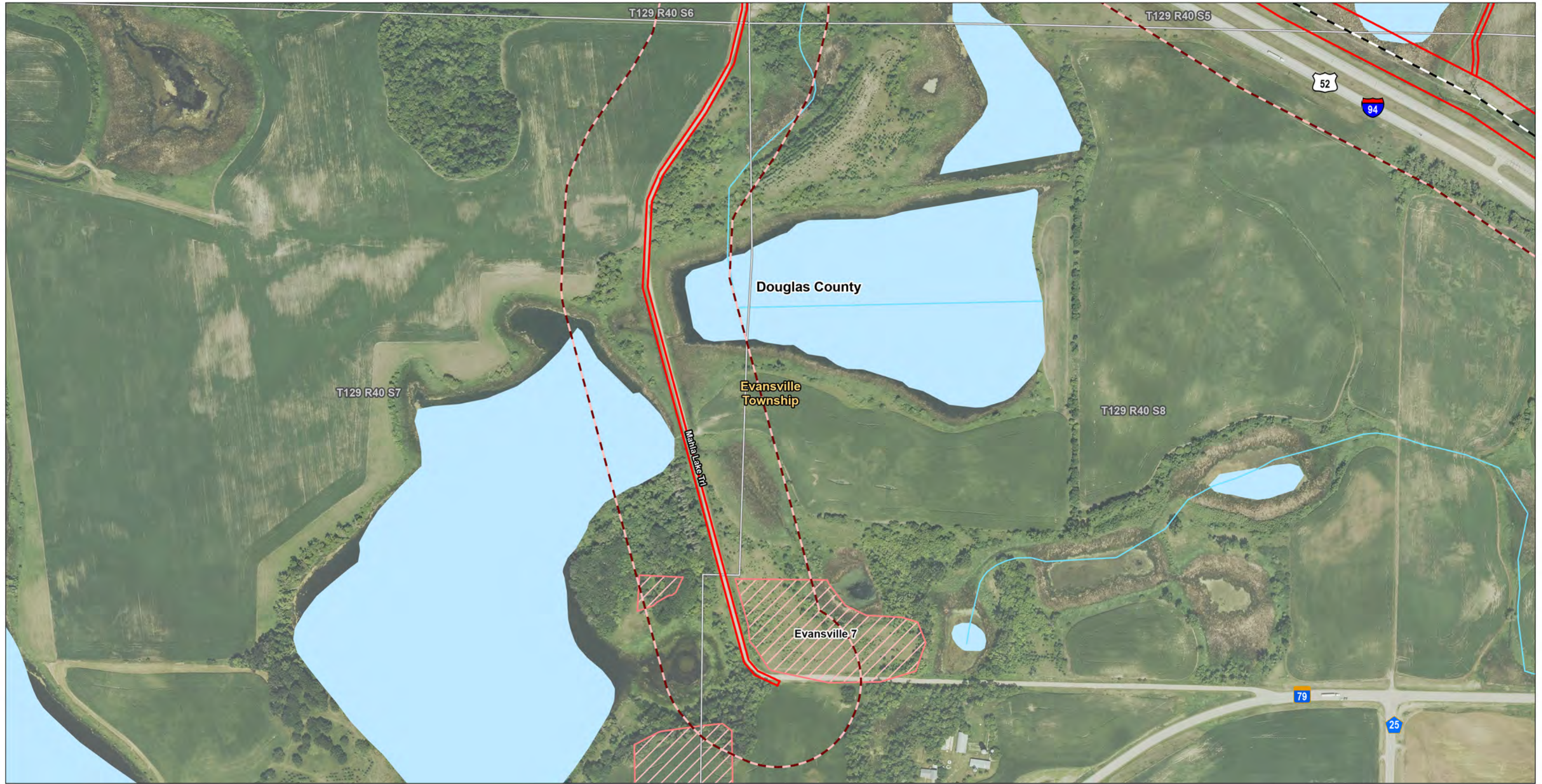
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Map 10 of 14

T&E Resources within 330 ft
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

- Notes**
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet
 2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
 3. Background: NAIP 2023



- Legend**
- Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary

- Sites of Biodiversity Significance**
- Below National Hydrography Dataset
 - Stream
 - Waterbody

Project Location
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-17

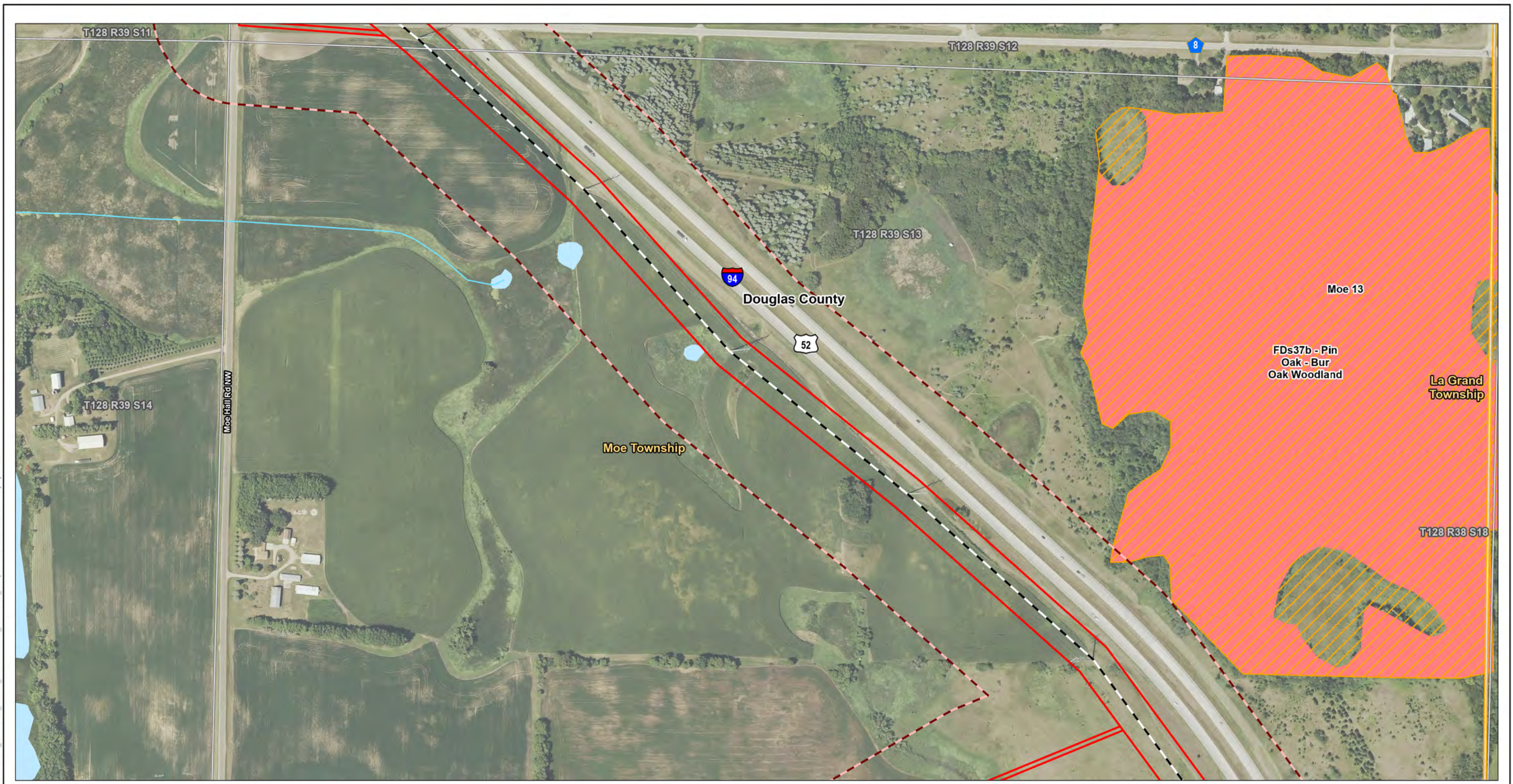


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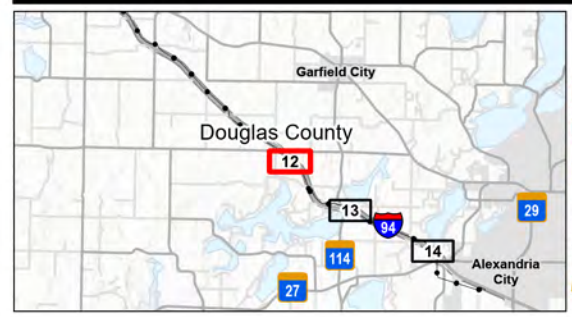
Map 11 of 14

T&E Resources within 330 ft
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

- Notes**
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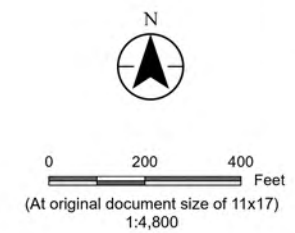
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- Legend**
- Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary
 - Sites of Biodiversity Significance
 - Moderate
 - DNR Native Plant Communities**
 - Fire-Dependent Forest/Woodland System
 - National Hydrography Dataset**
 - Stream
 - Waterbody

Project Location
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-17



Map 12 of 14

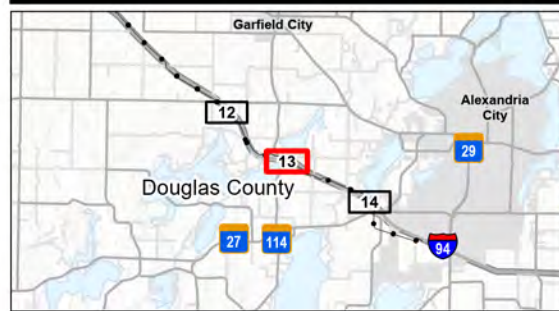
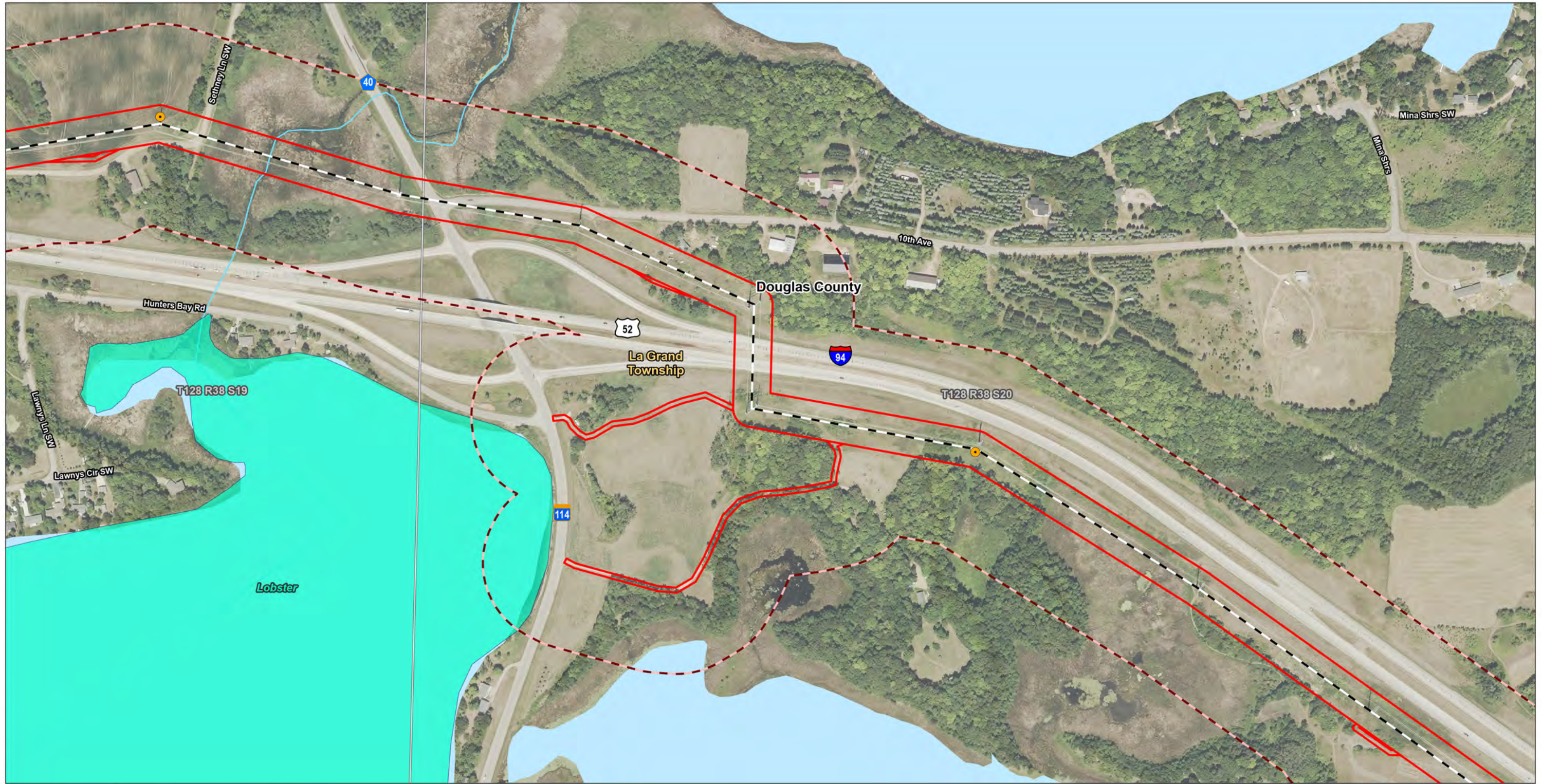
T&E Resources within 330 ft
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

Notes

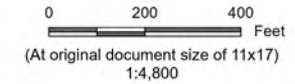
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3. Background: NAIP 2023

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- Legend**
- New Foundation & Structure
 - Existing Centerline
 - Project Area
 - 330-foot Buffer
 - County Subdivision
 - County Boundary
- Lakes of Biological Significance
 - Outstanding
 - National Hydrography Dataset
 - ~ Stream
 - Waterbody

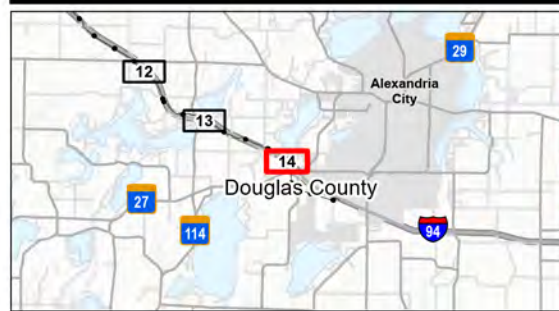
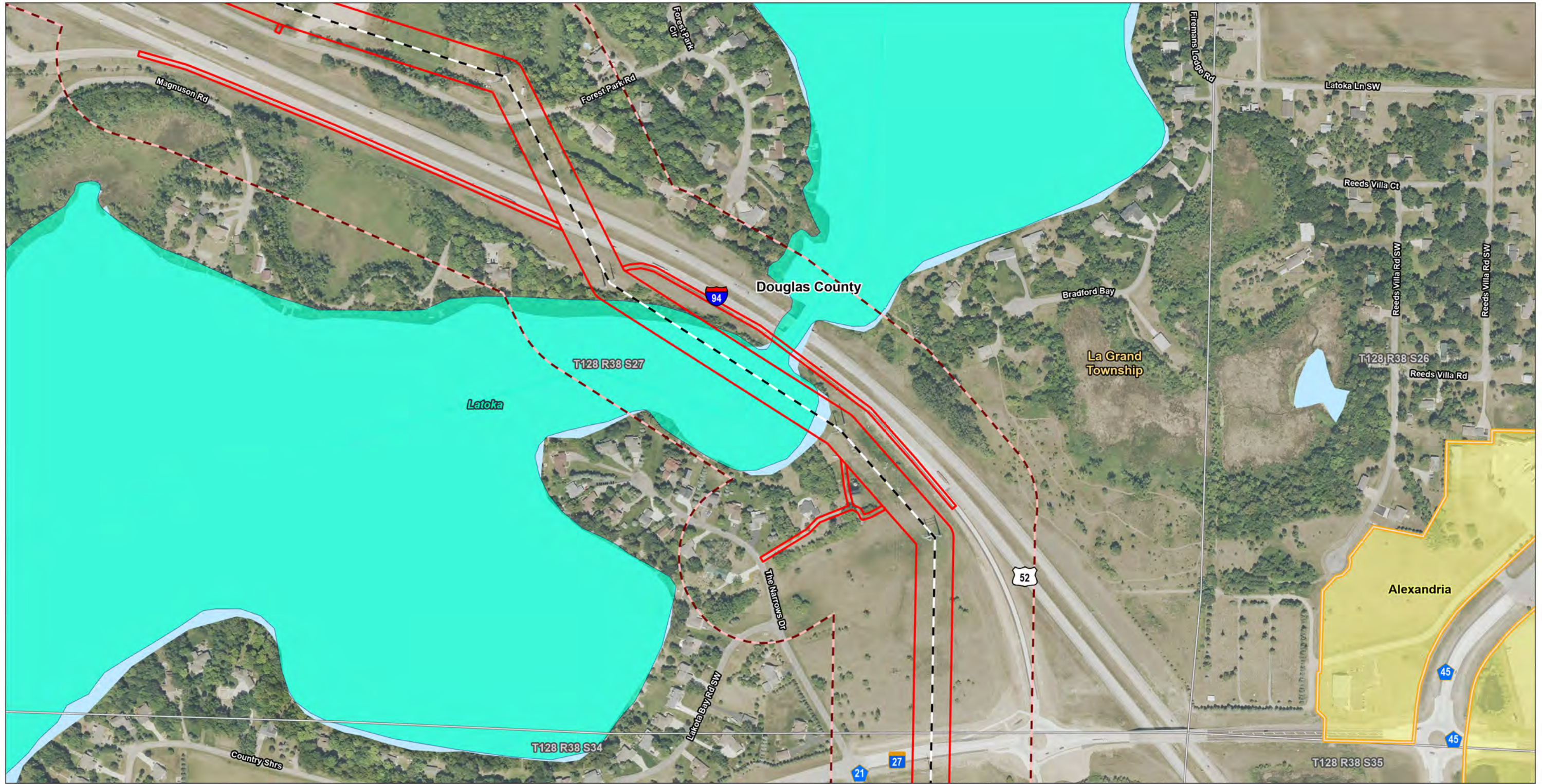


Project Location
Clay, Wilkin, Otter Tail, Grant
and Douglas Counties, Minnesota
Prepared by KJM on 2026-03-17

Map 13 of 14
T&E Resources within 330 ft
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

Notes
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet
2. Data Sources: Xcoel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
3. Background: NAIP 2023

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- Legend**
- Existing Centerline
 - Project Area
 - 330-foot Buffer
 - Municipality
 - County Subdivision
 - County Boundary

- Lakes of Biological Significance**
- Outstanding
 - National Hydrography Dataset
 - Stream
 - Waterbody

Project Location
Clay, Wilkin, Otter Tail, Grant
and Douglas Counties, Minnesota

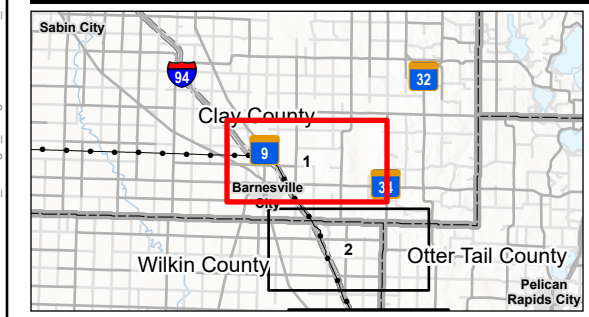
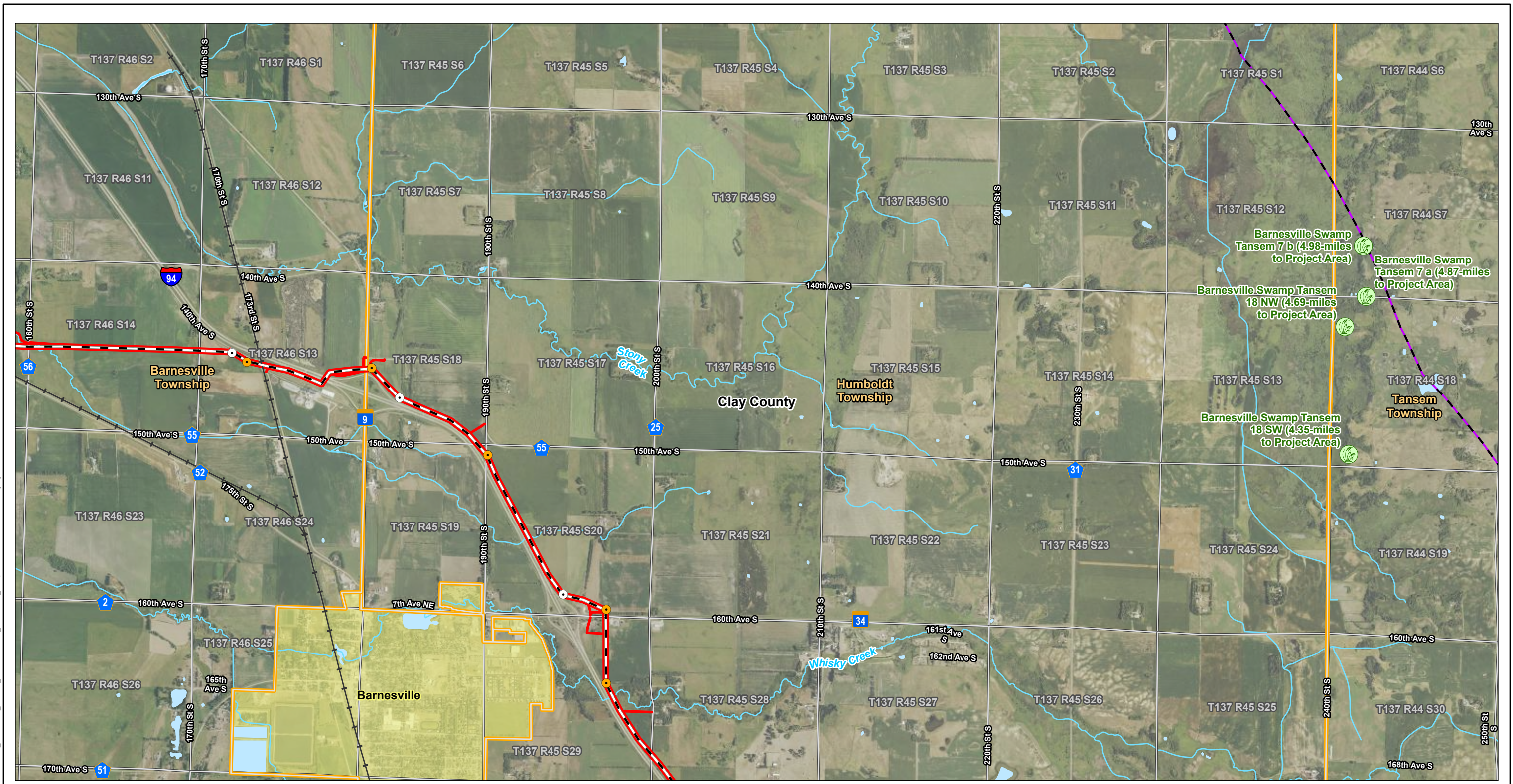
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Map 14 of 14
T&E Resources within 330 ft
 Bison-Alexandria 345 kV 2nd Circuit
 Transmission Project
 Route Permit Amendment

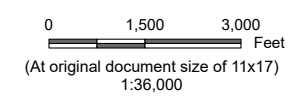
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 3. Background: NAIP 2023



- Legend**
- New Foundation & Structure
 - New Structure Only
 - Existing Centerline
 - ▭ Project Area
 - ▭ 5-mile Buffer
 - Railroad
 - ▭ County Subdivision
 - Calcareous Fen
 - ▭ National Hydrography Dataset
 - Stream
 - ▭ Waterbody

Project Location
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

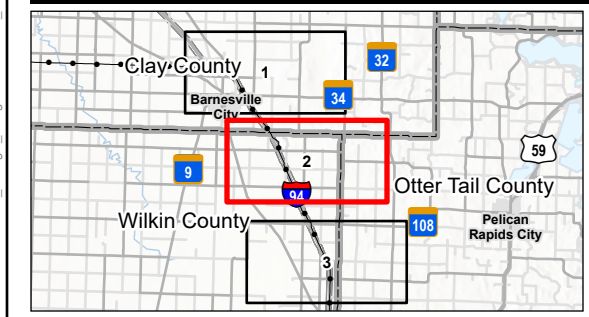
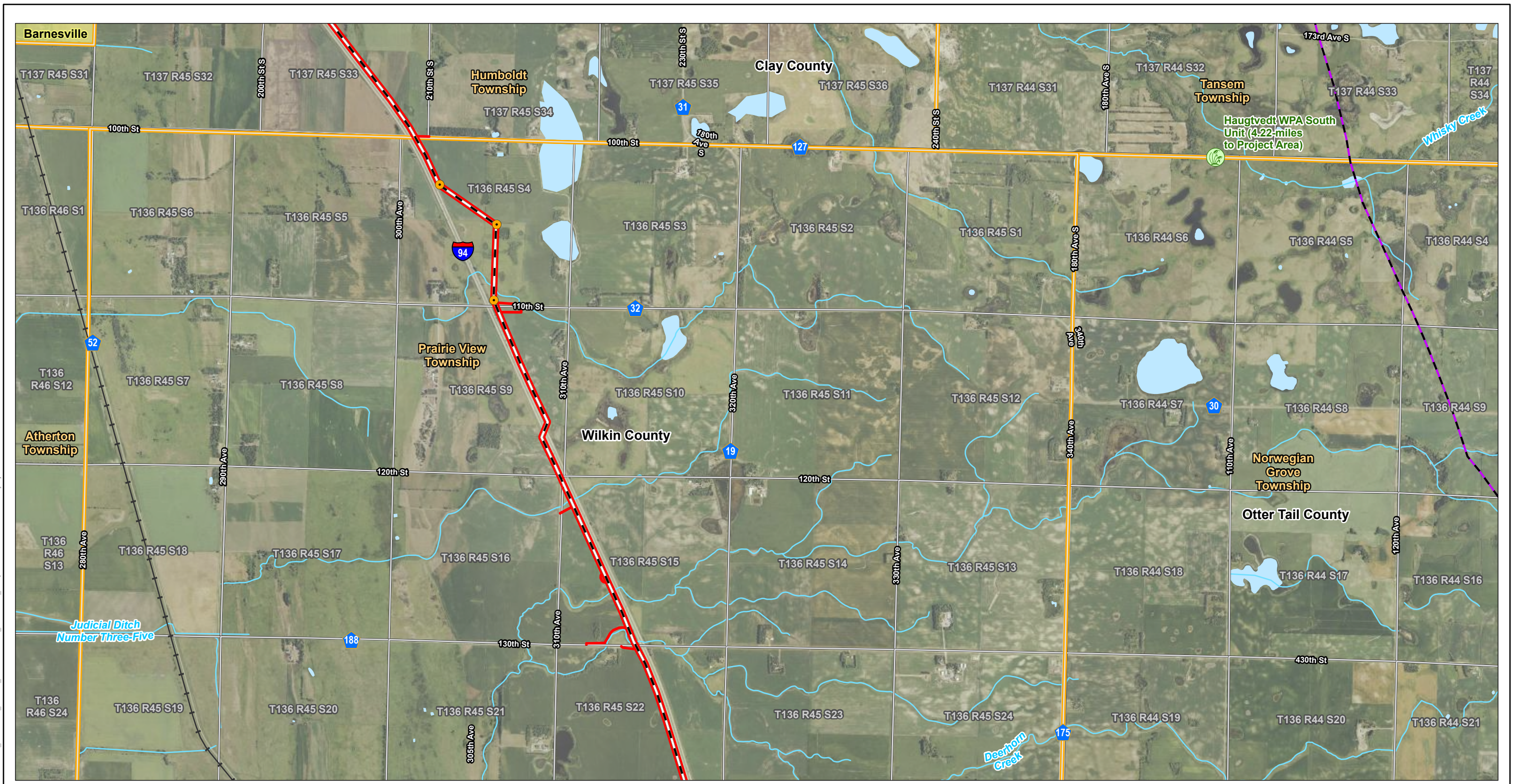
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Map 1 of 5

Calcareous Fens within 5-Miles
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

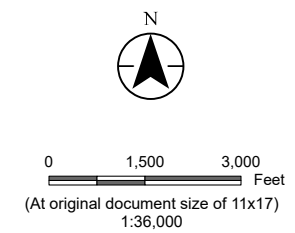
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2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
3. Background: NAIP 2023



Legend

- New Foundation & Structure
- Existing Centerline
- Project Area
- 5-mile Buffer
- +— Railroad
- County Subdivision
- Calcareous Fen
- National Hydrography Dataset
- Stream
- Waterbody

Project Location: Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota
 Prepared by KJM on 2026-03-17

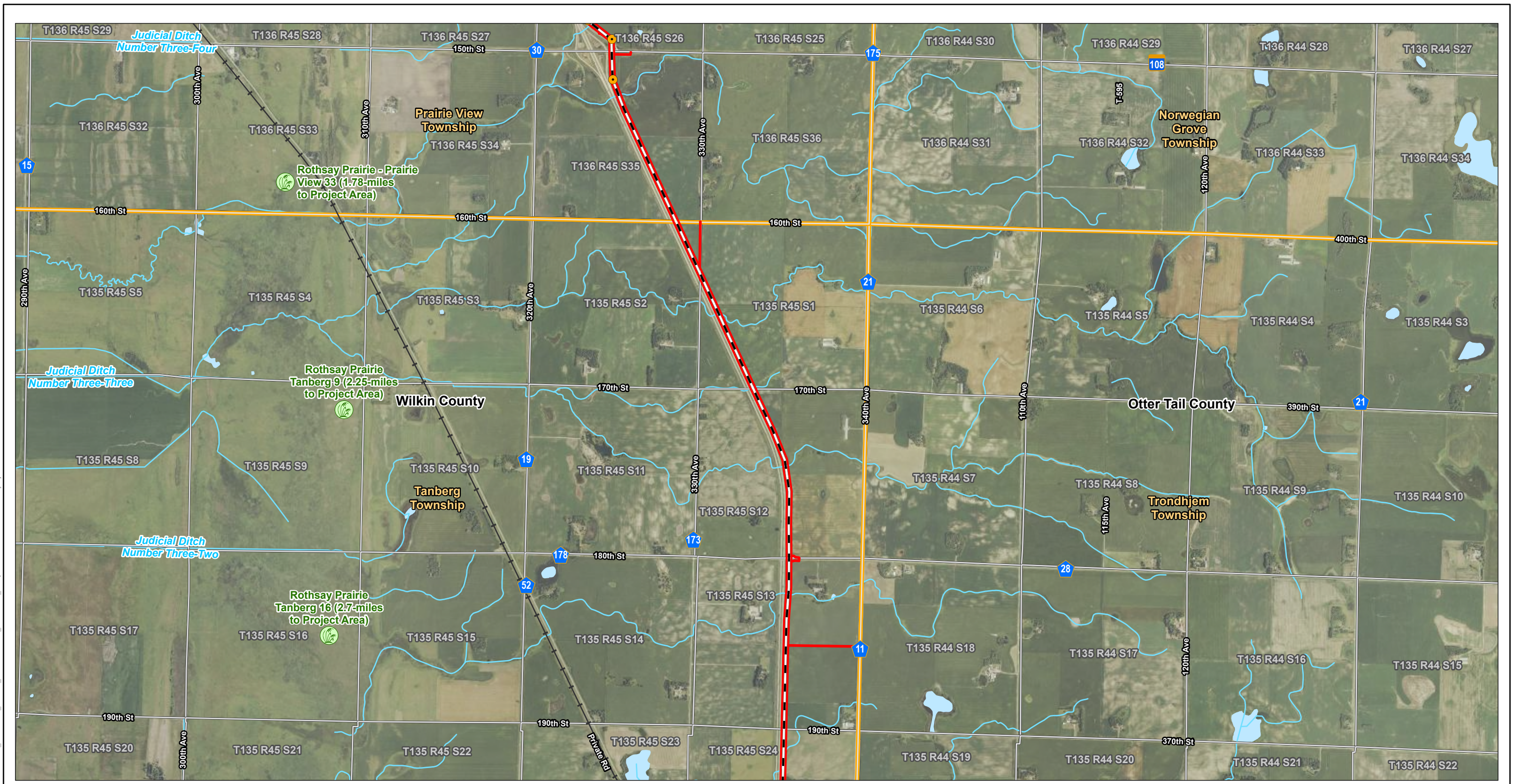


Map 2 of 5

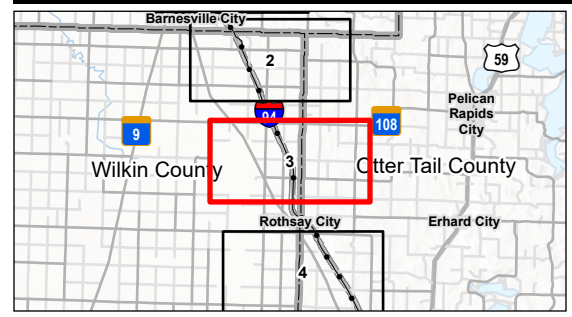
Calcareous Fens within 5-Miles
 Bison-Alexandria 345 kV 2nd Circuit
 Transmission Project
 Route Permit Amendment

Notes

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2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
3. Background: NAIP 2023



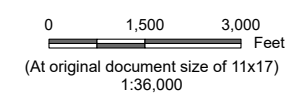
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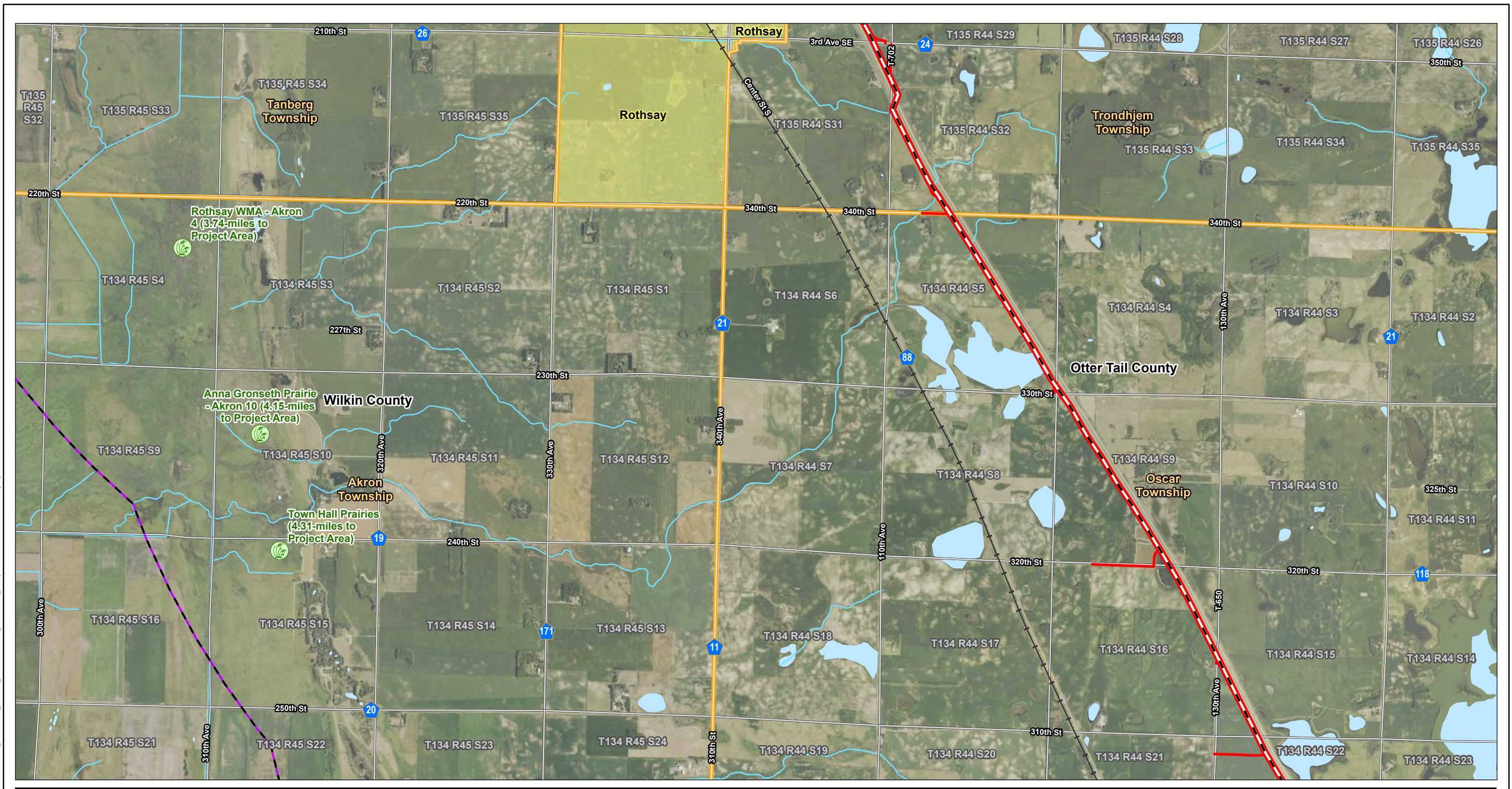
- New Foundation & Structure
- - - Existing Centerline
- Project Area
- 5-mile Buffer
- + Railroad
- County Subdivision
- Calcareous Fen
- National Hydrography Dataset
- ~ Stream
- Waterbody

Project Location: Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota
 Prepared by KJM on 2026-03-17



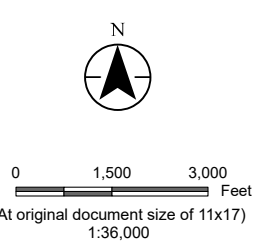
Map 3 of 5
Calcareous Fens within 5-Miles
 Bison-Alexandria 345 kV 2nd Circuit
 Transmission Project
 Route Permit Amendment

Notes
 1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet
 2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
 3. Background: NAIP 2023



- Legend**
- Existing Centerline
 - Project Area
 - 5-mile Buffer
 - Railroad
 - County Subdivision

- Calcareous Fen
- National Hydrography Dataset Stream
- Waterbody



Project Location
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

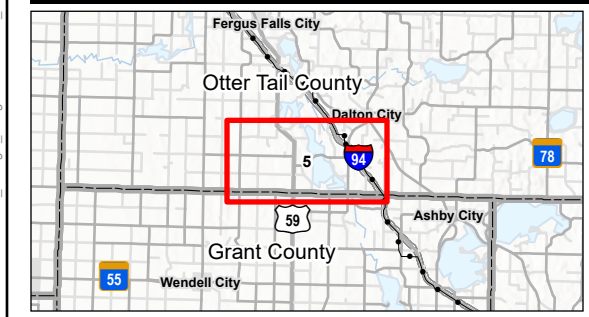
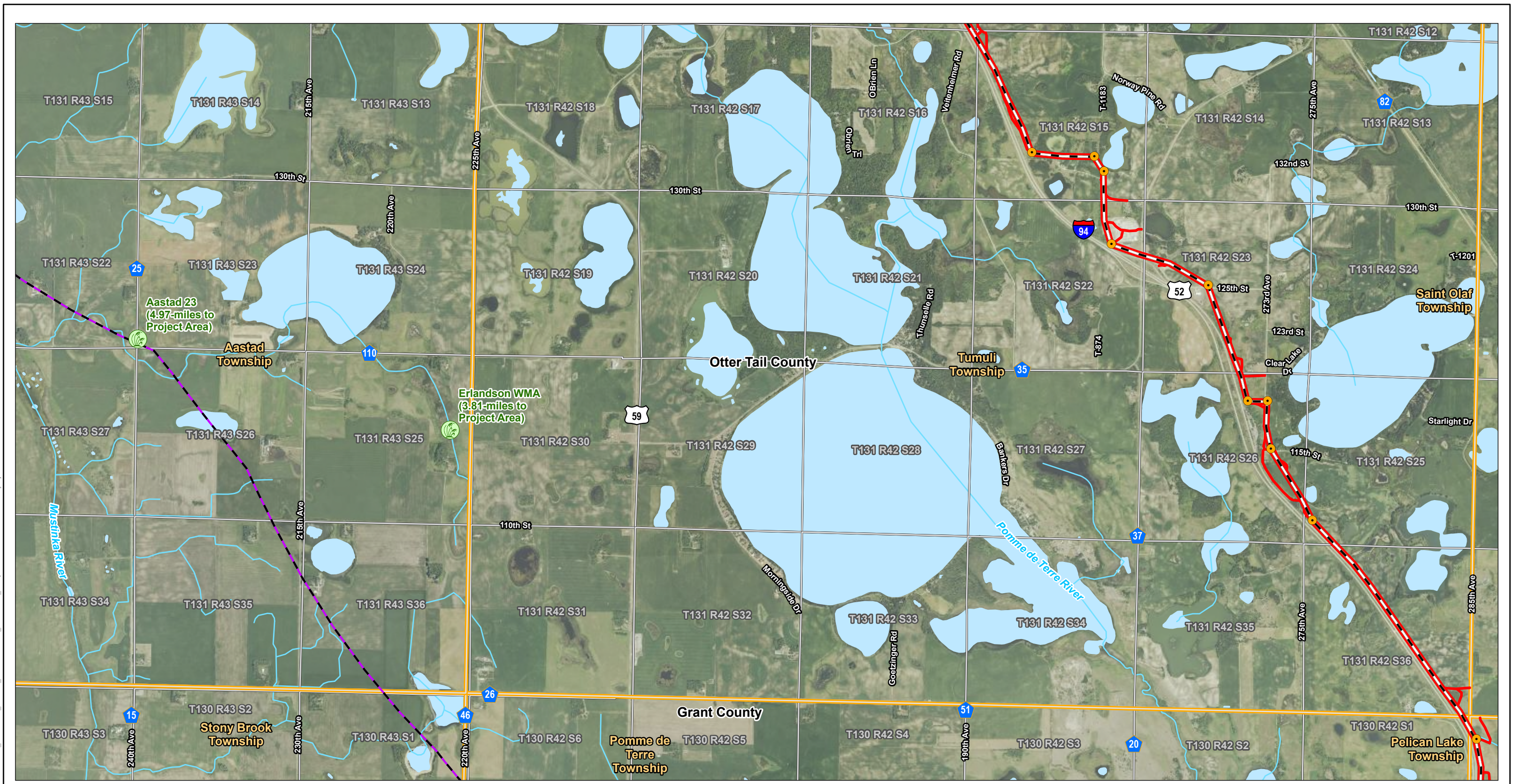
Prepared by KJM on 2026-03-17

Map 4 of 5

Calcareous Fens within 5-Miles
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

Notes

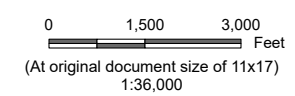
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet
2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
3. Background: NAIP 2023



- Legend**
- New Foundation & Structure
 - Existing Centerline
 - Project Area
 - 5-mile Buffer
 - Railroad
 - County Subdivision
 - Calcareous Fen
 - National Hydrography Dataset
 - ~ Stream
 - Waterbody

Project Location
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-17



Map 5 of 5

Calcareous Fens within 5-Miles
Bison-Alexandria 345 kV 2nd Circuit
Transmission Project
Route Permit Amendment

Notes

1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet
2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB, USFWS, USGS
3. Background: NAIP 2023

Reference: MCE-2025-00666 Bison to Alexandria 345kV 2nd Circuit Transmission Project

Attachment A – Natural Heritage Review Letter (MCE-2025-00666)



Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

November 12, 2025

Kaitlyn Tatro
Stantec Consulting Services, Inc.

RE: Natural Heritage Review of the proposed Bison to Alexandria Second Circuit 345 kV Transmission Line Proj., Clay, Douglas, Grant, Otter Tail, and Wilkin Counties

Dear Kaitlyn Tatro,

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2025-00666** in the email subject line.

As requested, the [Minnesota Natural Heritage Information System](#) has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

Ecologically Significant Areas

- The Minnesota Biological Survey (MBS) has identified five Sites of *Moderate* Biodiversity Significance overlapping or in the vicinity of the proposed project. Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Sites ranked as *Moderate* contain occurrences of rare species and/or moderately disturbed native plant communities, and/or landscapes that have a strong potential for recovery. Given the ecological significance of these areas, we recommend that the project be designed to avoid impacts to the MBS Sites and native plant communities by either spanning or confining construction activities to the opposite side of the road. Actions to minimize disturbance to Sites may include, but are not limited to, the following recommendations:
 - Confine construction activities to the opposite side of the road from the Sites of Biodiversity. If this is not feasible, confine construction activities to the existing road rights-of-way.
 - Span Sites and native plant communities.
 - As much as possible, operate within already-disturbed areas.
 - Retain a buffer between proposed activities and the MBS Site.
 - Minimize vehicular disturbance in the area (allow only vehicles necessary for the proposed work).
 - Do not park equipment or stockpile supplies in the area.
 - Do not place spoil within MBS Sites or other sensitive areas.

- Inspect and clean equipment prior to operating within the MBS Site and follow recommendations to [prevent the spread of invasive species](#).
 - If possible, conduct the work under frozen ground conditions.
 - Use effective erosion prevention and sediment control measures.
 - Revegetate disturbed soil with [native species suitable to the local habitat](#) as soon after construction as possible.
 - Use only weed-free mulches, topsoils, and seed mixes. Of particular concern is birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas, such as roadsides.
- Lake Latoka has been identified as a Lake of *Outstanding* Biological Significance. Lakes of Biological Significance were ranked as *Outstanding, High or Moderate* based on unique plant and animal presence. This lake has records of three aquatic species, pugnose shiner (*Miniellus anogenus*), state-listed as threatened, and least darter (*Etheostoma microperca*) and mudpuppy (*Necturus maculosus*), both species of special concern. As such, it is important that effective erosion prevention and sediment control practices be implemented and maintained near the lake throughout the duration of the project. Indirect impacts, such as the introduction or spread of invasive species, should also be considered and minimized.
 - Ecologically Significant Areas can be viewed using the Explore page in [Minnesota Conservation Explorer](#) (MCE) or their GIS shapefiles can be downloaded from the [MN Geospatial Commons](#). Reference the [MBS Site Biodiversity Significance](#) and [Native Plant Community](#) websites for information on interpreting the data. A list of Ecologically Significant Areas in the proposed project area can be found in the attached Conservation Planning Report (2025-BisonToAlexandria-CPR).
 - If the Wetland Conservation Act (WCA) is applicable to this project, please note that one or more Native Plant Communities in the vicinity of the project may qualify as a “rare natural community” under this Act. Minnesota Rules, part 8420.0515, subpart 3 states that a wetland replacement plan for activities that modify a rare natural community must be denied if the local government unit determines the proposed activities will permanently adversely affect the natural community. If the proposed project includes a wetland replacement plan under WCA, please contact your [DNR Regional Ecologist](#) for further evaluation. Please visit [WCA Program Guidance and Information](#) for additional information, including the [Rare Natural Communities Technical Guidance](#).
 - Twelve calcareous fens (see attached Conservation Planning Report for a list) have been documented within the vicinity of the proposed project area. Hairy fimbry (*Fimbristylis puberla* var. *interior*), state-listed as endangered, and sterile sedge (*Carex sterilis*), beaked spikerush (*Eleocharis rostellata*), whorled nutrush (*Scleria verticillata*), and hair-like beak rush (*Rhynchospora capillacea*), all state-listed threatened plants, have been documented within the fens. A calcareous fen is a rare and distinctive peat-accumulating wetland that is legally protected in Minnesota. The Wetlands Conservation Act, authorized by Minnesota Statutes, section 103G.223, states that calcareous fens may not be filled, drained, or otherwise degraded, wholly or partially, by any activity, except as provided for in a management plan approved by the commissioner of the Department of Natural Resources. Many of the

unique characteristics of calcareous fens result from the upwelling of groundwater through calcareous substrates. Because of this dependence on groundwater hydrology, calcareous fens can be affected by nearby activities or even those several miles away. For more information regarding calcareous fens, please see the [Calcareous Fen Fact Sheet](#). To minimize stormwater impacts, please refer to the Minnesota Pollution Control Agency's [General Principles for Erosion Prevention and Sediment Control](#) in the Minnesota Stormwater Manual. Please note that calcareous fens are "Special Waters" and a [buffer zone](#) may be required.

Calcareous fens may be impacted by activities within the fen, activities that affect surface water flows (e.g., stormwater flow, erosion), or activities that affect groundwater hydrology (e.g., groundwater pumping, contamination, or discharge). To ensure compliance with WCA, please contact the Calcareous Fen Program Coordinator, Keylor Andrews (Keylor.Andrews@state.mn.us). **If it is determined the project will impact the fen in any way, including indirect impacts through the alteration of hydrological conditions, a botanical survey is required.** Surveys must be conducted by a qualified surveyor and follow the standards contained in the [Rare Species Survey Process](#) and [Rare Plant Guidance](#). Visit the [Natural Heritage Review](#) page for a list of certified surveyors and more information on this process. Survey proposals should be submitted to Reports.NHIS@state.mn.us prior to initiating survey work. Project planning should take into account that any botanical survey needs to be conducted during the appropriate time of the year, which may be limited. Please consult Review.NHIS@state.mn.us if you have any questions regarding this process.

State-listed Species

Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and chapter 6134) prohibit the take of threatened or endangered species without a permit.

- Henslow's sparrow (*Centronyx henslowii*), state-listed as endangered, and lark sparrow (*Chondestes grammacus*), state-listed as a species of special concern, have been documented near the proposed project. Suitable nesting habitat for Henslow's sparrows includes uncultivated and unmowed grasslands and old fields with standing, dead vegetation, and a substantial litter layer. They are not likely to nest adjacent to noisy areas such as I-94. Lark sparrows are found in open, grassland areas with scattered trees and shrubs. As such, **initial disturbance in areas that contain suitable nesting habitat for Henslow's sparrows should not occur during their breeding season, between May 15 and July 15.**

Please contact Review.NHIS@state.mn.us to confirm that the above avoidance measure will be implemented or to inform us that avoidance is not feasible. **If avoidance during the breeding season is not feasible, areas that will be disturbed that contain suitable nesting habitat will need to be surveyed for active nests prior to any disturbance.** Requirements for surveys and lists of DNR certified surveyors can be found at the [Natural Heritage Review website](#).

- Wilson's phalarope (*Phalaropus tricolor*), a state-listed threatened bird, and marbled godwit (*Limosa fedoa*), state-listed as a species of special concern, have been documented during the breeding season in the vicinity of the proposed project in Wilkin County. Wilson's phalarope nests on the ground in wet meadows, grassy marshes, and both species nest along edges of shallow inland waters. Given the presence of this state-protected bird, **disturbance to suitable nesting habitat for Wilson's phalarope in Wilkin County must be avoided between mid-May and July, the breeding season for Wilson's phalaropes.**

Please contact Review.NHIS@state.mn.us to confirm that the above avoidance measure will be implemented or to inform us that avoidance is not feasible. If avoidance is not feasible, the project area will need to be surveyed for active nests prior to any project disturbance. Requirements for surveys and lists of DNR certified surveyors can be found at the [Natural Heritage Review website](#).

- The state-listed mussels fluted-shell (*Lasmigona costata*), listed as endangered, and black sandshell (*Ligumia recta*), listed as a species of special concern, have been documented in the Otter Tail River near where it crosses the proposed project. **If there will be disturbance to the riverbed**, then to demonstrate avoidance the applicant will need to hire a qualified surveyor to determine if suitable habitat exists within the activity impact area and, if there is, conduct a survey. If state-protected species are documented during the survey, a permit to take will be needed. **No disturbance to the riverbed (including sedimentation from bank work) may occur until avoidance has been approved or a permit to take has been issued.**

Surveys must follow the [Rare Species Survey Process](#) and the [MN Mussel Survey and Relocation Protocol](#). Alternatively, in situations where a survey is not feasible, the applicant can assume presence of state-protected mussels and apply for a [permit to take](#). Visit [Natural Heritage Review](#) for a list of certified surveyors and more information regarding the survey process. Visit [Endangered and Threatened Species Permits](#) for information regarding permits. Please consult with Review.NHIS@state.mn.us if you have questions regarding the survey process or EndangeredSpeciesPermits.dnr@state.mn.us if you have questions regarding the permit to take process.

- The pugnose shiner (*Miniellus anogenus*), a state-listed threatened fish species, and least darters (*Etheostoma microperca*), a state-listed fish species of special concern, have been documented in Lake Latoka. These species prefer clear lakes and low velocity streams with an abundance of submerged vegetation such as eelgrass, Canadian elodea, pondweed, and muskgrass. **If there will be work within the water of Lake Latoka, it must be avoided from May 1 through July 31 to avoid impacts to spawning pugnose shiner.** Contact Review.NHIS@state.mn.us if this is not feasible, as further action may be needed. As this species is intolerant of environmental degradation, especially turbidity and siltation, it is important that effective erosion and sediment control practices be implemented and maintained for the duration of the project near the lake.
- Small white lady's-slipper (*Cypripedium candidum*), sea naiad (*Najas marina*), and spiral ditchgrass (*Ruppia cirrhosa*), all state-listed as species of special concern, have been documented near the proposed project. Small white lady's-slipper is found in mesic or wet prairies, sedge meadows, and

calcareous fens while the other two species are in alkaline prairie lakes. We recommend minimizing or avoiding impacts to suitable habitat as feasible. Actions to minimize disturbance may include, but are not limited to, the following recommendations:

- Use effective erosion prevention and sediment control measures;
 - Inspect and clean equipment prior to operating within the MBS Site, and follow recommendations to [prevent the spread of invasive species](#);
 - As much as possible, operate within already disturbed areas;
 - Revegetate disturbed soil with [native species suitable to the local habitat](#) as soon after construction as possible; and
 - Use only weed-free mulches, topsoils, and seed mixes. Of particular concern are birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas.
- Booming grounds of the greater prairie chicken (*Tympanuchus cupido*), a state-listed bird of special concern, have been documented in the immediate vicinity of the proposed project in Clay and Wilkin Counties. During the booming season, usually April 1 through May 15, dozens of males gather in areas of short cover (including agricultural land), where they defend small territories and advertise to females using elaborate displays and booming sounds. After the mating season ends, the birds disperse and nest in areas of dense, undisturbed cover. **If prairie-chickens are actively using the area, we recommend minimizing project activities in the early morning hours, before 9 AM, during the booming season to help minimize disturbance to this rare bird.**
 - Great Plains toad (*Anaxyrus cognatus*), a state-listed species of special concern, was documented in the vicinity of the proposed project. This species is found in remnant prairies and grasslands in Western Minnesota. They breed from May to July in highly ephemeral water-filled prairie depressions and have adapted to breed in flooded agricultural fields. Given the presence of these rare toads, the DNR recommends that the use of erosion control mesh, if any, be limited to [wildlife-friendly materials](#).
 - Several state-listed birds that are associated with wetlands, ponds, and lakes have been documented in close proximity to the proposed projects. These rare birds may be at risk for colliding with or being electrocuted by overhead transmission lines. We recommend the use of bird diverters on overhead lines near lakes and rivers, or other areas that may attract large concentrations of waterfowl.
 - Please visit the [DNR Rare Species Guide](#) for more information on the habitat use of these species and recommended measures to avoid or minimize impacts.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online [Information for Planning and Consultation \(IPaC\) tool](#).

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available and is the most complete source of data on Minnesota's native plant communities, rare species, and other rare features. However, the NHIS is not an exhaustive inventory and does not contain the locations of all rare features in the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and project description provided with the request. **If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.** Resubmit by selecting *Clone Project as Draft* on the project page in MCE.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit [Natural Heritage Review](#) for additional information regarding this process, survey guidance, and other related information. For information on the environmental review process or other natural resource concerns, please contact your [DNR Regional Environmental Assessment Ecologist](#).

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

James Drake

Digitally signed by James Drake
Date: 2025.11.12 11:42:35 -06'00'

Natural Heritage Review Specialist

james.f.drake@state.mn.us

Cc: Owen Baird, Becky Marty, Jennie Skancke, Keylor Andrews, Martin Donovan

Reference: MCE-2025-00666 Bison to Alexandria 345kV 2nd Circuit Transmission Project

Attachment B – Conservation Planning Report (MCE-2025-00666)

Conservation Planning Report: 2025-00666-BisonToAlexandria-CPR

This document is intended for planning purposes only for the area of interest defined by the user. The report identifies ecologically significant areas documented within the defined area of interest plus any additional search distance indicated below. These ecologically significant areas can be viewed in the Explore Tab of the Minnesota Conservation Explorer. Please visit [MN Geospatial Commons](#) for downloadable GIS data.

This document does not meet the criteria for a Natural Heritage Review. If a Natural Heritage Review is needed, please define an Area of Interest in the Explore Tab and click on the Natural Heritage Review option.

This document does not include known occurrences of state-listed or federally listed species.

MBS Sites of Biodiversity Significance

Search distance = 330 feet

Minnesota Biological Survey (MBS) Sites of Biodiversity Significance are areas with varying levels of native biodiversity that may contain high quality native plant communities, rare plants, rare animals, and/or animal aggregations. A [Biodiversity Significance Rank](#) is assigned on the basis of the number of rare species, the quality of the native plant communities, size of the site, and context within the landscape. MBS Sites are ranked Outstanding, High, or Moderate. Areas ranked as Below were found to be disturbed and are retained in the layer as negative data. These areas do not meet the minimum biodiversity threshold for statewide significance but may have conservation value at the local level as habitat for native plants and animals, corridors for animal movements, buffers surrounding higher quality natural areas, or as areas with high potential for restoration of native habitat. The DNR recommends avoidance of MBS Sites of Biodiversity Significance ranked High or Outstanding.

Wetlands within MBS Sites of Outstanding or High Biodiversity Significance may be considered Rare Natural Communities under the Wetland Conservation Act. For technical guidance on Rare Natural Communities, please visit [WCA Program Guidance and Information](#).

For more information please visit [MBS Sites of Biodiversity Significance](#).

The following MBS Sites of Biodiversity Significance are within the search area:

MBS Site Name	Biodiversity Significance	Status
BARNESVILLE-SABIN HWY 52-RR ROW	Moderate	final
BELLMORE WPA	Moderate	final
DANE PRAIRIE 32	Below	final
HAUGRUD-SILLERUD WPA	Moderate	final
Moe 13	Moderate	final
NICHOLSON WPA	Moderate	final
POMME DE TERRE LAKE 2	Below	final
Sethre WPA	Below	final

DNR Native Plant Communities

Search distance = 330 feet

A native plant community is a group of native plants that interact with each other and with their environment in ways not greatly altered by modern human activity or by introduced organisms. These groups of native plant species form recognizable units, such as oak savannas, pine forests, or marshes, that tend to repeat over space and time. Native plant communities are classified and described by considering vegetation, hydrology, landforms, soils, and natural disturbance regimes.

DNR Native Plant Community types and subtypes are given a [Conservation Status Rank](#) that reflects the relative rarity and endangerment of the community type in Minnesota. Conservation Status Ranks range from S1 (critically imperiled) to S5 (secure, common, widespread, and abundant). Native plant communities with a Conservation Status Rank of S1 through S3 are considered rare in the state. The DNR recommends avoidance of rare native plant communities.

Wetland native plant communities with a conservation status rank of S1 through S3 may also be considered Rare Natural Communities under the Wetland Conservation Act. For technical guidance on Rare Natural Communities, please visit [WCA Program Guidance and Information](#).

DNR Native Plant Communities may be given a Condition Rank that reflects the degree of ecological integrity of a specific occurrence of a native plant community. The Condition Rank is based on species composition, vegetation structure, ecological processes and functions, level of human disturbance, presence of exotic species, and other factors. Condition Ranks range from A-rank (excellent ecological integrity) to D-rank (poor ecological integrity). A Condition Rank of NR means Not Ranked and a Condition Rank of MULTI mean multiple ranks are present because the record is a native plant community complex.

For more information please visit [Minnesota's Native Plant Communities](#).

The following DNR Native Plant Communities are within the search area:

MBS Site Name	NPC Code	Native Plant Community Classification	Conservation Status Rank	Number of Communities
BARNESVILLE-SABIN HWY 52-RR ROW	WPn53c	Wet Prairie (Northern)	S3	1
BELLMORE WPA	PWL_CX	Prairie Wetland Complex	(S1, S2, S3)	1
HAUGRUD-SILLERUD WPA	PWL_CX	Prairie Wetland Complex	(S1, S2, S3)	1
Moe 13	FDs37b	Pin Oak - Bur Oak Woodland	S3	1
Not Within MBS Site	PWL_CX	Prairie Wetland Complex	(S1, S2, S3)	2

Calcareous Fens

Search distance = 5 miles

A calcareous fen is a rare and distinctive peat-accumulating wetland that is legally protected in Minnesota under the Wetland Conservation Act (*Minnesota Statutes, section 103G.223*). Many of the unique characteristics of calcareous fens result from the upwelling of groundwater through calcareous substrates. Because of this dependence on groundwater hydrology, calcareous fens can be affected by nearby activities or even those several miles away. For more information regarding calcareous fens, please see the [Calcareous Fen Fact Sheet](#) or review the [List of Known Calcareous Fens](#).

The following Calcareous Fens are within the search area:

Fen Site Name	Fen ID	TRS
Anna Gronseth Prairie - Akron 10	7072	134N045W - 10
Barnesville Swamp Tansem 7 a	18814	137N044W - 7; 137N044W - 18
Barnesville Swamp Tansem 7 b	1973	137N044W - 7
Barnesville Swamp Tansem 18 NW	246	137N044W - 18
Barnesville Swamp Tansem 18 SW	6625	137N045W - 13; 137N044W - 18; 137N045W - 24; 137N044W - 19
Erlandson WMA	28155	131N043W - 25; 131N042W - 30

Fen Site Name	Fen ID	TRS
Haugtvedt WPA South Unit	21259	137N044W - 32; 136N044W - 6
Rothsay Prairie - Prairie View 33	7070	136N045W - 33; 135N045W - 4
Rothsay Prairie Tanberg 9	7073	135N045W - 4; 135N045W - 3; 135N045W - 9; 135N045W - 10
Rothsay Prairie Tanberg 16	7074	135N045W - 16; 135N045W - 15
Rothsay WMA - Akron 4	7040	134N045W - 4; 134N045W - 3
Town Hall Prairies	7071	134N045W - 10; 134N045W - 15

DNR Old Growth Stands

Search distance = 330 feet

[Old-growth forests](#) are natural forests that have developed over a long period of time, generally at least 120 years, without experiencing severe, stand-replacing disturbances such as fires, windstorms, or logging. Old-growth forests are a unique, nearly vanished piece of Minnesota's history and ecology; less than 4% of Minnesota's old-growth forests remain. The DNR recommends avoidance of all DNR Old Growth Stands. The following DNR Old Growth Stands have been documented within the search area.

SEARCH RESULTS: No features were found within the search area.

MN Prairie Conservation Plan

Search distance = 330 feet

The [Minnesota Prairie Conservation Plan](#), a twenty-five year strategy for accelerating prairie conservation in the state, identifies Core Areas, Corridors, and Corridor Complexes as areas to focus conservation efforts. The Plan's strategies include protection, enhancement, and restoration of grassland and wetland habitat. To meet the Plan's goals, approaches within Core Areas will need to include restoration and approaches within Corridors will need to include conservation of grassland habitat which can provide stepping stones between larger Core Areas.

The following MN Prairie Conservation Plan Designations are within the search area:

- Core Area: Rothsay
- Corridor: Agassiz Beach Ridges
- Corridor: Alexandria Moraine
- Corridor Complex: Blacken Lake WPA
- Corridor Complex: Richardson WPA

Important Bird Areas

Search distance = 1 mile

[Important Bird Areas](#), identified by Audubon Minnesota in partnership with the DNR, are part of an international conservation effort aimed at conserving globally important bird habitats. They are voluntary and non-regulatory, but the designation demonstrates the significant ecological value of the area.

The following Important Birds Areas are within the search area:

- [Rothsay Prairie](#)

Lakes of Biological Significance

Search distance = 330 feet

[Lakes of Biological Significance](#) are high quality lakes as determined by the aquatic plant, fish, bird, or amphibian communities present within the lake. To be included in this layer, a lake only needs to meet the criteria for one of these four community types. The lake is assigned a biological significance of Outstanding, High, or Moderate based on the community with the highest quality.

The following Lakes of Biological Significance are within the search area:

Public Water Basin Name	Biological Significance	Plant Rank	Fish Rank	Amphibian Rank	Bird Rank
Latoka	Outstanding		1	2	

USFWS Habitat Conservation Plans

A [Habitat Conservation Plan \(HCP\)](#) is a mechanism for compliance with the federal Endangered Species Act for a given set of activities and protected species. An HCP is required by the U.S. Fish and Wildlife Service (USFWS) as part of an application for an [incidental take permit \(ITP\)](#). The ITP allows the permit holder to proceed with activities covered in the HCP that could result in the unintentional take of federally listed species.

[Lakes States Forest Management Bat Habitat Conservation Plan \(Bat HCP\)](#): (search distance = 0; within area of interest only) This HCP was created to provide flexibility to the Minnesota Department of Natural Resources (DNR) to manage forests while addressing federal Endangered Species Act (ESA) regulations related to federally threatened and endangered bat species. The Bat HCP covers three bat species within Minnesota: northern long-eared bat, little brown bat, and tricolored bat. This report is intended to help non-federal, non-DNR landowners evaluate their potential eligibility for the Landowner Enrollment Program of the Bat HCP (For DNR-administered land, DNR staff should refer to the Bat HCP Implementation Policy).

[Landowner Enrollment Program](#) – DNR’s incidental take permit may be extended through the Landowner Enrollment Program (LEP) to eligible non-federal landowners who conduct forest management activities. Landowners may be eligible to enroll in the LEP if they are a county land administrator, own more than 10,000 acres, or own land that overlaps a Bat HCP feature. The results below indicate if the defined area of interest overlaps a Bat HCP feature. For more information on how to enroll in the LEP, please visit the [Landowner Enrollment Program \(LEP\)](#).

SEARCH RESULTS: No Bat HCP features were found within the area of interest. Landowners are only eligible to apply for the Landowner Enrollment Program if they are a county land administrator or they own more than 10,000 acres.

USFWS Regulatory Layers

To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online [Information for Planning and Consultation \(IPaC\) tool](#). This report is not a substitution for a Section 7 review.

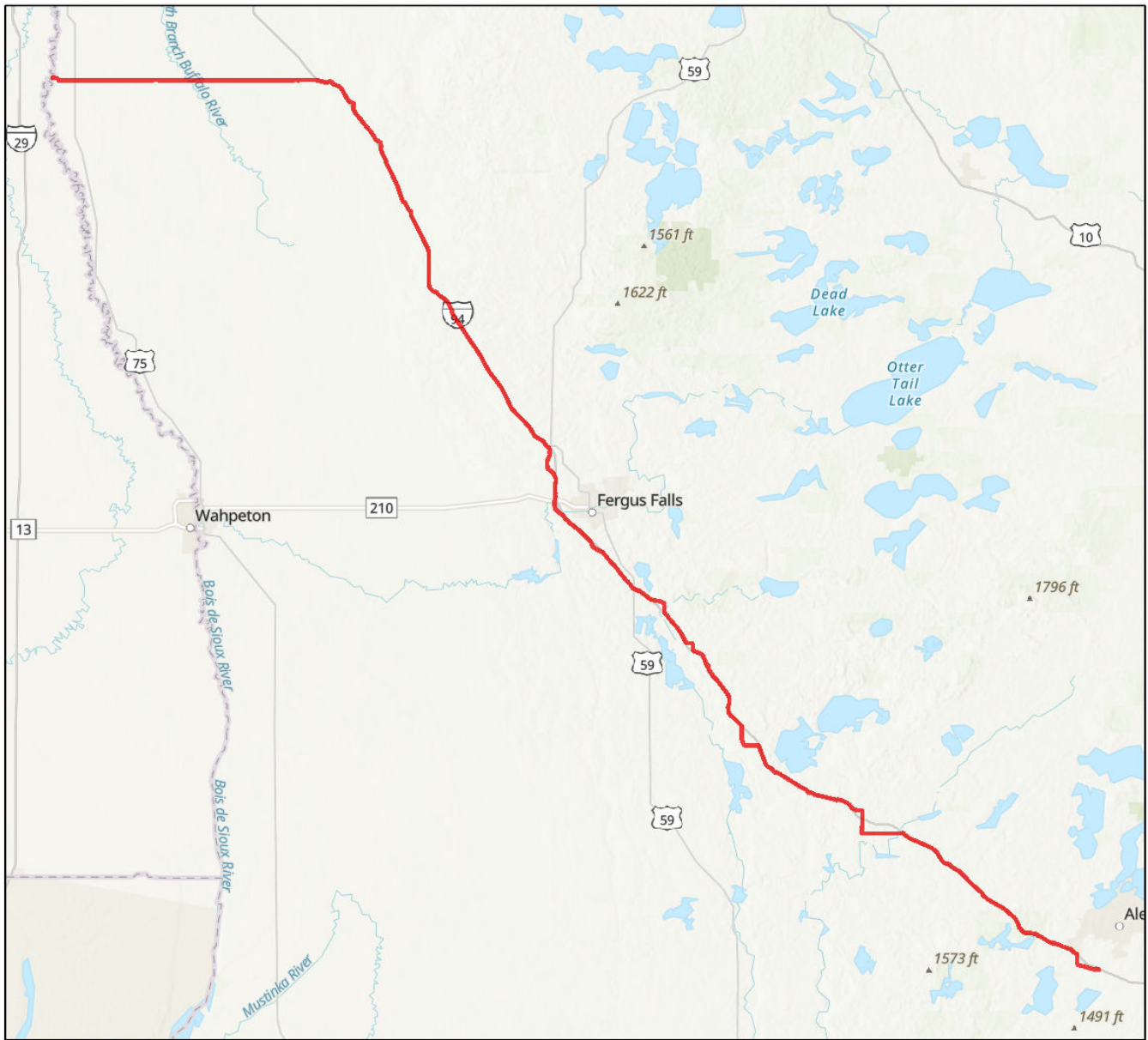
For informational purposes only, this tool currently checks the following USFWS Regulatory Layers:


[Rusty Patched Bumblebee High Potential Zones](#): (search distance = 0; within area of interest only) The rusty patched bumble bee (*Bombus affinis*), federally listed as endangered, is likely to be present in suitable habitat within the high potential zones. From April through October this species uses underground nests in upland grasslands, shrublands, and forest edges, and forages where nectar and pollen are available. From October through April the species overwinters under tree litter in upland forests and woodlands. The rusty patched bumble bee may be impacted by a variety of land management activities including, but not limited to, prescribed fire, tree-removal, haying, grazing, herbicide use, pesticide use, land-clearing, soil disturbance or compaction, or use of non-native bees. The [USFWS RPBB guidance](#) provides guidance on avoiding impacts to rusty patched bumble bee and a key for determining if actions are likely to affect the species; the determination key can be found in the appendix. Please visit the [USFWS Rusty Patched Bumble Bee Map](#) for the most current locations of High Potential Zones.

SEARCH RESULTS: No features were found within the search area.

2025-00666-BisonToAlexandria-CPR

Conservation Planning Map



 Area of Interest

Size (acres): 1,859.28

County(s): Clay, Douglas, Grant, Otter Tail +

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
 Esri, CGIAR, USGS
 MN Dept Natural Resources, Esri, TomTom, Garmin, SafeGraph, FAO, METI/



Reference: MCE-2025-00666 Bison to Alexandria 345kV 2nd Circuit Transmission Project

Attachment C – Ecologically Significant Areas in Relation to the Project

Resource	Ranking	Relation to Project
MBS Sites of Biodiversity Significance		
Barnesville-Sabin Hwy 52-RR ROW	Moderate MBS site	Overlaps the Project, but no new monopole structures or temporary access roads are proposed within this resource. Work would be limited to overhead line stringing. No impacts are anticipated.
Bellmore WPA	Moderate MBS site	Located outside of the Project. No impacts are anticipated.
Evansville 7*	Below the minimum biodiversity threshold for statewide significance	Located outside of the Project. No impacts are anticipated.
Haugrud-Sillerud WPA	Moderate MBS site	Located outside of the Project. No impacts are anticipated.
Moe 13	Moderate MBS site	Located outside of the Project on the opposite side of I-94. No impacts are anticipated.
Nicholson WPA	Moderate MBS site	Located outside of the Project on the opposite side of I-94. No impacts are anticipated.

Resource	Ranking	Relation to Project
Dane Prairie 32	Below the minimum biodiversity threshold for statewide significance	Overlaps the Project area, and a new monopole structure and temporary access road are proposed within this resource. This resource is below the threshold for statewide significance. Given the minimal acreage needed for a new monopole and that the access road would be temporary, impacts to this resource will be minimized.
Pomme De Terre Lake 2	Below the minimum biodiversity threshold for statewide significance	Overlaps the Project area, but work would be limited to overhead line stringing. A temporary access road is proposed directly to the north of this resource. Additionally, this resource is below the threshold for statewide significance. No impacts are anticipated.
Sethre WPA	Below the minimum biodiversity threshold for statewide significance	Located outside of the Project on the opposite side of I-94. No impacts are anticipated.
MDNR Native Plant Communities		
Wet Prairie (Northern) WPn53c	S3	Associated with the Barnesville-Sabin Hwy 52-RR ROW MBS site. This resource overlaps the Project, but no new monopole structures or temporary access roads are proposed within this resource. Work would be limited to overhead line stringing. No impacts are anticipated.

Resource	Ranking	Relation to Project
Prairie Wetland Complex PWL_CX	S1, S2, S3	Associated with the Bellmore WPA MBS site. Located outside of the Project. No impacts are anticipated.
Prairie Wetland Complex PWL_CX	S1, S2, S3	Associated with the Haugrud-Sillerud WPA MBS site. Located outside of the Project. No impacts are anticipated.
Prairie Wetland Complex PWL_CX	S1, S2, S3	Not associated with an MBS site but adjacent to Bellmore WPA. Located outside of the Project. No impacts are anticipated.
Pin Oak – Bur Oak Woodland FDs37b	S3	Associated with the Moe 13 MBS site. Located outside of the Project on the opposite side of I-94. No impacts are anticipated.
Calcareous Fens		
Aastad 23*	--	Located approximately 4.97 miles southwest of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.
Anna Gronseth Prairie - Akron 10 (ID: 7072)	--	Located approximately 4.15 miles southwest of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.

Resource	Ranking	Relation to Project
Barnesville Swamp Tansem 7a (ID: 18814)	--	Located approximately 4.87 miles northeast of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.
Barnesville Swamp Tansem 7b (ID: 1973)	--	Located approximately 4.98 miles northeast of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.
Barnesville Swamp Tansem 18 NW (ID: 246)	--	Located approximately 4.69 miles northeast of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.
Barnesville Swamp Tansem 18 SW (ID: 6625)	--	Located approximately 4.35 miles northeast of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.
Erlandson WMA (ID: 28155)	--	Located approximately 3.81 miles southwest of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.
Haugtvedt WPA South Unit (ID: 21259)	--	Approximately 4.22 miles east of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.

Resource	Ranking	Relation to Project
Rothsay Prairie – Prairie View 33 (ID: 7070)	--	Approximately 1.78 miles southwest of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.
Rothsay Prairie Tanberg 9 (ID: 7073)	--	Located approximately 2.25 miles southwest of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.
Rothsay Prairie Tanberg 16 (ID: 7074)	--	Located approximately 2.70 miles west of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.
Rothsay WMA – Akron 4 (ID: 7040)	--	Located approximately 3.74 miles southwest of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.
Town Hall Prairies (ID: 7071)	--	Located approximately 4.31 miles southwest of the Project. The Project may involve temporary dewatering, but there are no long term or permanent impacts anticipated.
Lakes of Biological Significance		

Resource	Ranking	Relation to Project
Lake Latoka	Outstanding	Overlaps the Project, but work would be limited to overhead line stringing. No impacts are anticipated.
Lobster Lake*	Outstanding	Located outside of the Project. No impacts are anticipated.
*Resources identified within 330 feet (MBS Sites and Lakes of Biological Significance) and within 5 miles (calcareous fens) through Stantec internal review. These resources were not identified through the DNR CPR.		

APPENDIX F
EMF Calculations



OVERHEAD TRANSMISSION SYSTEM

The EMF model assumed typical configurations of steel monopole structures and dual-pole structures. The minimum ground clearance was approximately 30.2-feet, which is in line with standard requirements. The electric and magnetic field impact was calculated at approximately 3.28 feet (1 meter) above ground level.

CONDUCTOR DETAILS		
Description	Existing 345 kV Line	Future 345 kV line
Conductor	954 kcmil Cardinal ACSS/TW	795 kcmil Ibis/VR2 ACSR
Conductor diameter	1.084 inch	1.281 inch
Ampacity (Max. Loading)	997 Amperes	941 Amperes

Phasing of the conductors in 2-circuit overhead lines will play an important role in determining the electrical and magnetic field impacts of the lines. Across the seven (7) different configurations there are fourteen (14) phasing configurations, as defined below, that have been studied. Each color defines an individual circuit.

2-Pole Vertical Deadend

2-CIRCUIT OVERHEAD LINES							
Scenario 1 Config. (a)			Scenario 2 Config. (b)			Scenario 3 Config. (c)	
B	C		C	A		A	B
C	A		A	B		B	C
A	B		B	C		C	A

Vertical Tangent

2-CIRCUIT OVERHEAD LINES							
Scenario 4 Config. (a)			Scenario 5 Config. (b)			Scenario 6 Config. (c)	
B	C		C	A		A	B
C	A		A	B		B	C
A	B		B	C		C	A

2-Pole Vertical Right Angle

2-CIRCUIT OVERHEAD LINES							
Scenario 7 Config. (a)			Scenario 8 Config. (b)			Scenario 9 Config. (c)	
B	C		C	A		A	B
C	A		A	B		B	C
A	B		B	C		C	A

2-Pole Delta Deadend

2-CIRCUIT OVERHEAD LINES				
Scenario 10 Config. (a)			Scenario 11 Config. (b)	
B	C		C	A
C	A		A	B
A	B		B	C

Horizontal Tangent Suspension

2-CIRCUIT OVERHEAD LINES	
Scenario 12 Config. (a)	
B	C
C	A
A	B

Horizontal Tangent Deadend

2-CIRCUIT OVERHEAD LINES	
Scenario 13 Config. (a)	
B	C
C	A
A	B

Vertical Monopole Deadend

2-CIRCUIT OVERHEAD LINES	
Scenario 14 Config. (a)	
B	C
C	A
A	B

Results

OVERHEAD TRANSMISSION SYSTEM

The maximum electric field strength and magnetic field strength estimated near or at the centerline of the overhead lines was calculated and is summarized in the table below. In each scenario for the overhead lines, at 75 feet from the centerline and 1 meter above ground, the electric field was below 4.0 kV/m, and the magnetic field was below 98 milli-Gauss (mG).

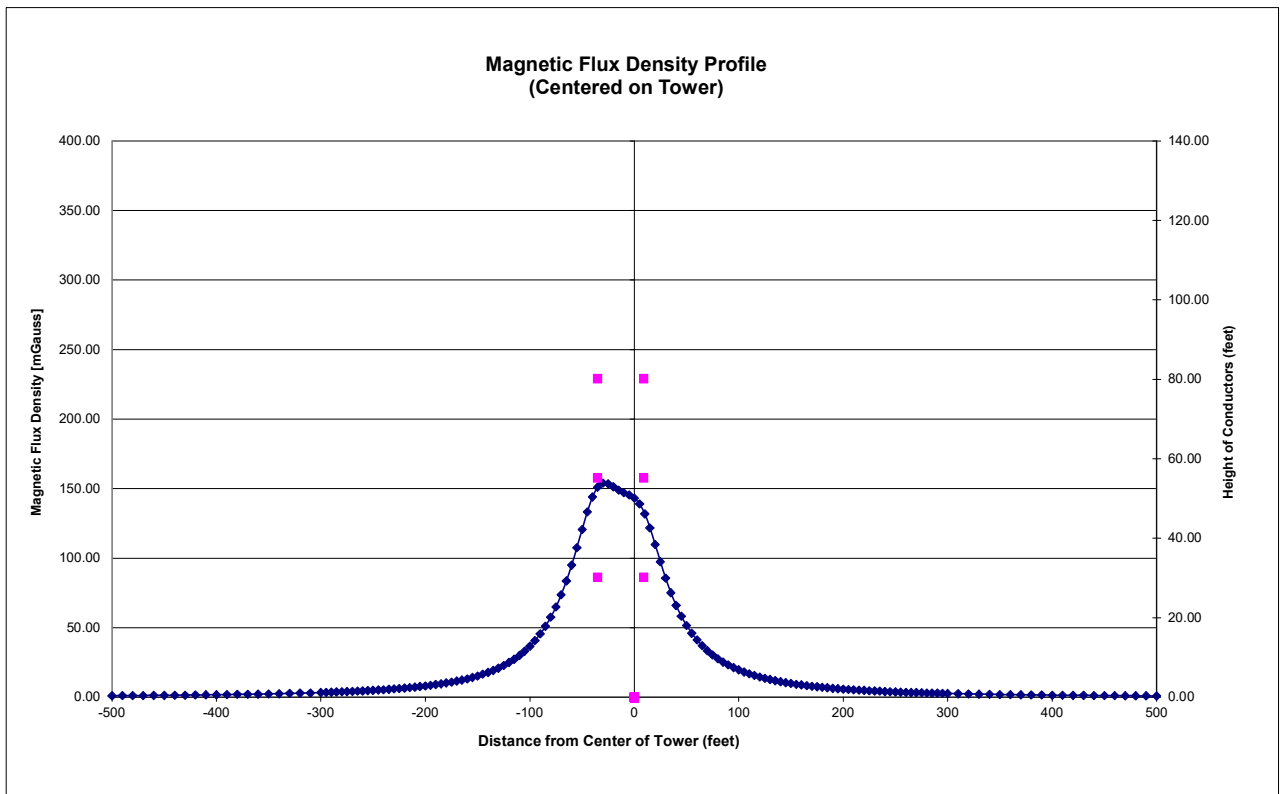
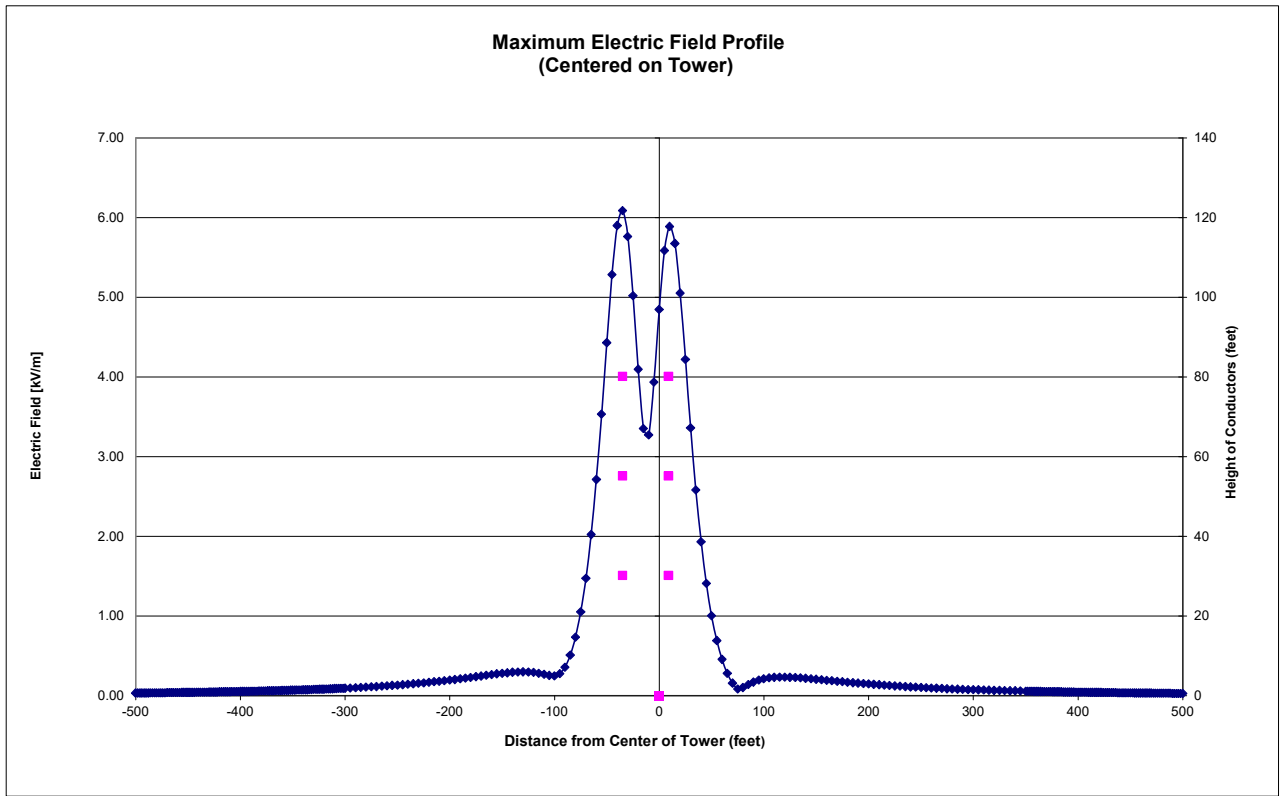
Overhead (OH) lines (Scenarios)	Max Electric field (kV/m)	Max Magnetic field (mGauss)
Scenario 1 – 2-Pole Vertical Deadend (Config. a)	1.05	65.05
Scenario 2 – 2-Pole Vertical Deadend (Config. b)	1.09	53.18
Scenario 3 – 2-Pole Vertical Deadend (Config. c)	1.05	65.05
Scenario 4 – Vertical Tangent (Config. a)	0.42	40.68
Scenario 5 – Vertical Tangent (Config. b)	0.42	40.68
Scenario 6 – Vertical Tangent (Config. c)	0.42	40.68
Scenario 7 – 2-Pole Vertical Right Angle (Config. a)	1.07	65.29
Scenario 8 – 2-Pole Vertical Right Angle (Config. b)	1.07	65.29
Scenario 9 – 2-Pole Vertical Right Angle (Config. c)	1.07	65.29
Scenario 10 – 2-Pole Delta Deadend (Config. a)	3.59	97.57
Scenario 11 – 2-Pole Delta Deadend (Config. b)	3.59	97.57
Scenario 12 – Horizontal Tangent Suspension (Config. a)	2.34	65.03
Scenario 13 – Horizontal Tangent Deadend (Config. a)	2.34	65.03
Scenario 14 – Vertical Monopole Deadend (Config. a)	0.42	40.68

Scenario 1 - 2-Pole Vert Deadend Config. (a)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0960	-95	3.28	0.2774	110	3.28	0.2318
-295	3.28	0.0991	-90	3.28	0.3596	115	3.28	0.2348
-290	3.28	0.1024	-85	3.28	0.5101	120	3.28	0.2351
-285	3.28	0.1059	-80	3.28	0.7366	125	3.28	0.2333
-280	3.28	0.1095	-75	3.28	1.0522	130	3.28	0.2300
-275	3.28	0.1133	-70	3.28	1.4750	135	3.28	0.2256
-270	3.28	0.1172	-65	3.28	2.0246	140	3.28	0.2203
-265	3.28	0.1214	-60	3.28	2.7140	145	3.28	0.2146
-260	3.28	0.1258	-55	3.28	3.5347	150	3.28	0.2085
-255	3.28	0.1304	-50	3.28	4.4327	155	3.28	0.2022
-250	3.28	0.1352	-45	3.28	5.2845	160	3.28	0.1958
-245	3.28	0.1402	-40	3.28	5.9003	165	3.28	0.1893
-240	3.28	0.1455	-35	3.28	6.088	170	3.28	0.1830
-235	3.28	0.1511	-30	3.28	5.7633	175	3.28	0.1768
-230	3.28	0.1569	-25	3.28	5.0202	180	3.28	0.1707
-225	3.28	0.1630	-20	3.28	4.0981	185	3.28	0.1648
-220	3.28	0.1694	-15	3.28	3.3542	190	3.28	0.1590
-215	3.28	0.1761	-10	3.28	3.2740	195	3.28	0.1535
-210	3.28	0.1831	-5	3.28	3.9365	200	3.28	0.1481
-205	3.28	0.1904	0	3.28	4.8475	205	3.28	0.1430
-200	3.28	0.1980	5	3.28	5.5864	210	3.28	0.1380
-195	3.28	0.2059	10	3.28	5.8892	215	3.28	0.1333
-190	3.28	0.2140	15	3.28	5.6758	220	3.28	0.1287
-185	3.28	0.2225	20	3.28	5.0527	225	3.28	0.1244
-180	3.28	0.2311	25	3.28	4.2206	230	3.28	0.1202
-175	3.28	0.2400	30	3.28	3.3609	235	3.28	0.1162
-170	3.28	0.2489	35	3.28	2.5835	240	3.28	0.1124
-165	3.28	0.2578	40	3.28	1.9322	245	3.28	0.1087
-160	3.28	0.2665	45	3.28	1.4107	250	3.28	0.1052
-155	3.28	0.2749	50	3.28	1.0042	255	3.28	0.1019
-150	3.28	0.2826	55	3.28	0.6928	260	3.28	0.0986
-145	3.28	0.2895	60	3.28	0.4574	265	3.28	0.0956
-140	3.28	0.2951	65	3.28	0.2826	270	3.28	0.0926
-135	3.28	0.2988	70	3.28	0.1585	275	3.28	0.0898
-130	3.28	0.3002	75	3.28	0.0866	280	3.28	0.0871
-125	3.28	0.2984	80	3.28	0.1033	285	3.28	0.0845
-120	3.28	0.2929	85	3.28	0.1405	290	3.28	0.0820
-115	3.28	0.2833	90	3.28	0.1725	295	3.28	0.0796
-110	3.28	0.2700	95	3.28	0.1968	300	3.28	0.0773
-105	3.28	0.2562	100	3.28	0.2139			
-100	3.28	0.2515	105	3.28	0.2251			

Scenario 1 - 2-Pole Vert Deadend Config. (a)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	3.4417	-95	3.28	40.8787	110	3.28	16.9546
-295	3.28	3.5669	-90	3.28	45.6381	115	3.28	15.7591
-290	3.28	3.6990	-85	3.28	51.1605	120	3.28	14.6808
-285	3.28	3.8385	-80	3.28	57.5820	125	3.28	13.7056
-280	3.28	3.9861	-75	3.28	65.0520	130	3.28	12.8210
-275	3.28	4.1424	-70	3.28	73.7207	135	3.28	12.0167
-270	3.28	4.3079	-65	3.28	83.7089	140	3.28	11.2835
-265	3.28	4.4836	-60	3.28	95.0450	145	3.28	10.6135
-260	3.28	4.6702	-55	3.28	107.5524	150	3.28	9.9999
-255	3.28	4.8687	-50	3.28	120.6828	155	3.28	9.4367
-250	3.28	5.0800	-45	3.28	133.3559	160	3.28	8.9187
-245	3.28	5.3053	-40	3.28	144.0080	165	3.28	8.4412
-240	3.28	5.5458	-35	3.28	151.1112	170	3.28	8.0004
-235	3.28	5.8029	-30	3.28	154.0511	175	3.28	7.5925
-230	3.28	6.0782	-25	3.28	153.5921	180	3.28	7.2146
-225	3.28	6.3735	-20	3.28	151.3709	185	3.28	6.8637
-220	3.28	6.6905	-15	3.28	148.9196	190	3.28	6.5374
-215	3.28	7.0316	-10	3.28	147.0001	195	3.28	6.2335
-210	3.28	7.3992	-5	3.28	145.4297	200	3.28	5.9500
-205	3.28	7.7960	0	3.28	143.23	205	3.28	5.6852
-200	3.28	8.2252	5	3.28	139.0475	210	3.28	5.4375
-195	3.28	8.6902	10	3.28	131.8917	215	3.28	5.2055
-190	3.28	9.1953	15	3.28	121.7970	220	3.28	4.9878
-185	3.28	9.7448	20	3.28	109.8359	225	3.28	4.7834
-180	3.28	10.3441	25	3.28	97.4344	230	3.28	4.5912
-175	3.28	10.9993	30	3.28	85.6997	235	3.28	4.4103
-170	3.28	11.7172	35	3.28	75.2062	240	3.28	4.2398
-165	3.28	12.5059	40	3.28	66.1113	245	3.28	4.0789
-160	3.28	13.3746	45	3.28	58.3433	250	3.28	3.9269
-155	3.28	14.3342	50	3.28	51.7386	255	3.28	3.7832
-150	3.28	15.3971	55	3.28	46.1161	260	3.28	3.6472
-145	3.28	16.5781	60	3.28	41.3098	265	3.28	3.5184
-140	3.28	17.8946	65	3.28	37.1787	270	3.28	3.3963
-135	3.28	19.3667	70	3.28	33.6071	275	3.28	3.2803
-130	3.28	21.0188	75	3.28	30.5015	280	3.28	3.1702
-125	3.28	22.8792	80	3.28	27.7865	285	3.28	3.0655
-120	3.28	24.9822	85	3.28	25.4010	290	3.28	2.9659
-115	3.28	27.3684	90	3.28	23.2954	295	3.28	2.8711
-110	3.28	30.0865	95	3.28	21.4290	300	3.28	2.7807
-105	3.28	33.1952	100	3.28	19.7679			
-100	3.28	36.7645	105	3.28	18.2843			



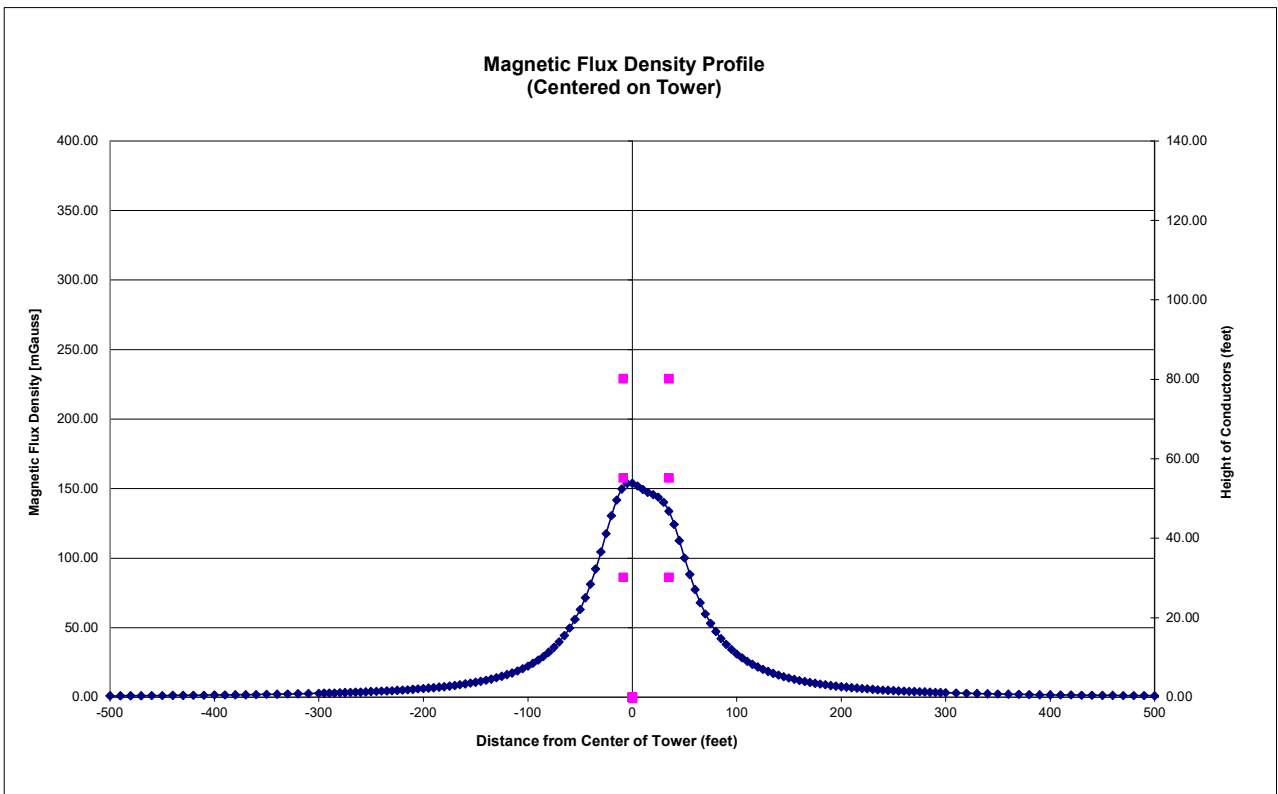
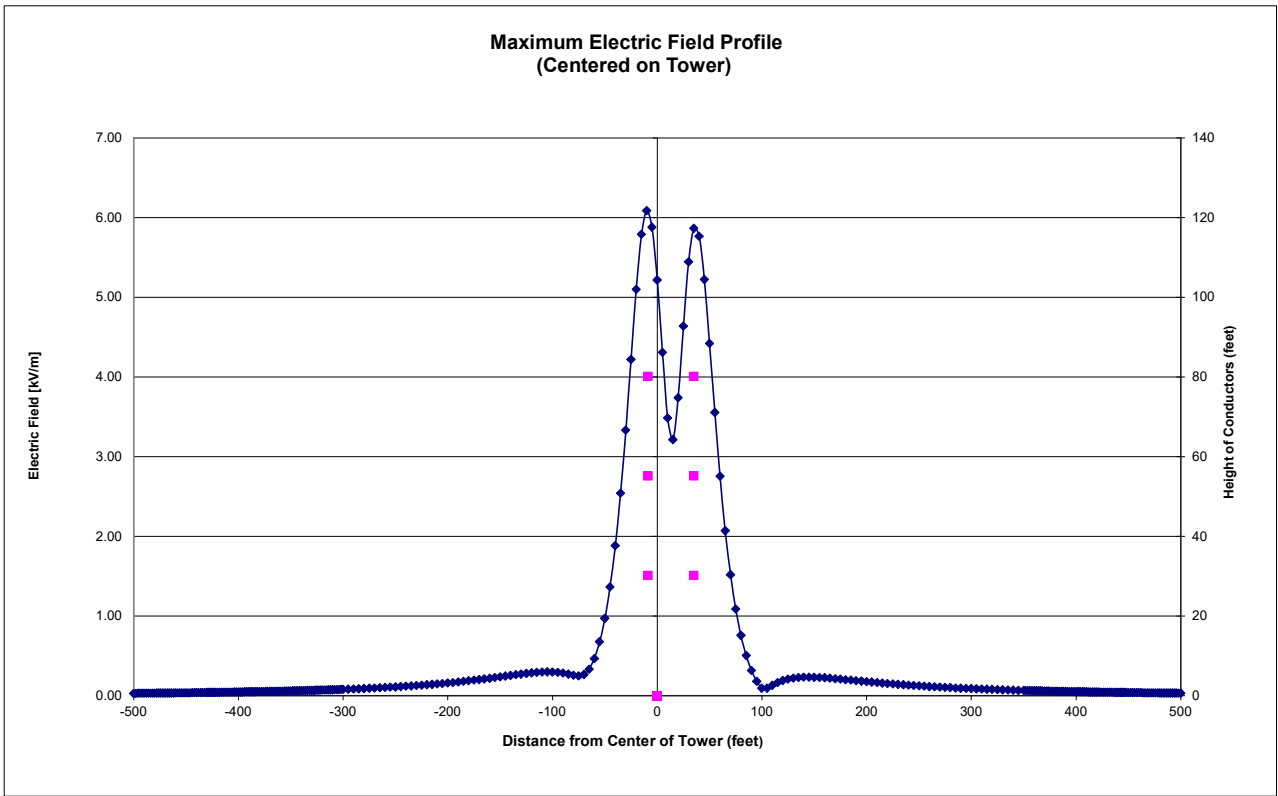
Scenario 1 - 2-Pole Vert Deadend Config. (a)

Scenario 2 - 2-Pole Vert Deadend Config. (b)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0816	-95	3.28	0.2946	110	3.28	0.1321
-295	3.28	0.0841	-90	3.28	0.2859	115	3.28	0.1658
-290	3.28	0.0867	-85	3.28	0.2733	120	3.28	0.1918
-285	3.28	0.0894	-80	3.28	0.2591	125	3.28	0.2105
-280	3.28	0.0923	-75	3.28	0.2509	130	3.28	0.2230
-275	3.28	0.0953	-70	3.28	0.2672	135	3.28	0.2306
-270	3.28	0.0984	-65	3.28	0.3347	140	3.28	0.2343
-265	3.28	0.1016	-60	3.28	0.4688	145	3.28	0.2352
-260	3.28	0.1051	-55	3.28	0.6767	150	3.28	0.2339
-255	3.28	0.1086	-50	3.28	0.9702	155	3.28	0.2309
-250	3.28	0.1124	-45	3.28	1.3663	160	3.28	0.2267
-245	3.28	0.1163	-40	3.28	1.8849	165	3.28	0.2216
-240	3.28	0.1204	-35	3.28	2.5415	170	3.28	0.2160
-235	3.28	0.1248	-30	3.28	3.3345	175	3.28	0.2099
-230	3.28	0.1293	-25	3.28	4.2227	180	3.28	0.2036
-225	3.28	0.1340	-20	3.28	5.1002	185	3.28	0.1972
-220	3.28	0.1390	-15	3.28	5.7895	190	3.28	0.1908
-215	3.28	0.1443	-10	3.28	6.09	195	3.28	0.1845
-210	3.28	0.1498	-5	3.28	5.8821	200	3.28	0.1782
-205	3.28	0.1555	0	3.28	5.2191	205	3.28	0.1721
-200	3.28	0.1615	5	3.28	4.3115	210	3.28	0.1661
-195	3.28	0.1679	10	3.28	3.4862	215	3.28	0.1603
-190	3.28	0.1745	15	3.28	3.2142	220	3.28	0.1547
-185	3.28	0.1814	20	3.28	3.7417	225	3.28	0.1493
-180	3.28	0.1886	25	3.28	4.6387	230	3.28	0.1442
-175	3.28	0.1962	30	3.28	5.4468	235	3.28	0.1392
-170	3.28	0.2040	35	3.28	5.8653	240	3.28	0.1344
-165	3.28	0.2121	40	3.28	5.7681	245	3.28	0.1298
-160	3.28	0.2205	45	3.28	5.2236	250	3.28	0.1254
-155	3.28	0.2291	50	3.28	4.4218	255	3.28	0.1212
-150	3.28	0.2379	55	3.28	3.5559	260	3.28	0.1171
-145	3.28	0.2468	60	3.28	2.7534	265	3.28	0.1133
-140	3.28	0.2557	65	3.28	2.0714	270	3.28	0.1096
-135	3.28	0.2645	70	3.28	1.5207	275	3.28	0.1060
-130	3.28	0.2730	75	3.28	1.0893	280	3.28	0.1026
-125	3.28	0.2809	80	3.28	0.7576	285	3.28	0.0994
-120	3.28	0.2880	85	3.28	0.5061	290	3.28	0.0963
-115	3.28	0.2939	90	3.28	0.3184	295	3.28	0.0933
-110	3.28	0.2982	95	3.28	0.1830	300	3.28	0.0904
-105	3.28	0.3001	100	3.28	0.0970			
-100	3.28	0.2992	105	3.28	0.0951			

Scenario 2 - 2-Pole Vert Deadend Config. (b)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	2.8829	-95	3.28	24.4707	110	3.28	25.9278
-295	3.28	2.9787	-90	3.28	26.7871	115	3.28	23.7612
-290	3.28	3.0793	-85	3.28	29.4234	120	3.28	21.8425
-285	3.28	3.1851	-80	3.28	32.4357	125	3.28	20.1365
-280	3.28	3.2964	-75	3.28	35.8912	130	3.28	18.6140
-275	3.28	3.4136	-70	3.28	39.8707	135	3.28	17.2505
-270	3.28	3.5373	-65	3.28	44.4705	140	3.28	16.0254
-265	3.28	3.6677	-60	3.28	49.8045	145	3.28	14.9213
-260	3.28	3.8055	-55	3.28	56.0044	150	3.28	13.9233
-255	3.28	3.9511	-50	3.28	63.2174	155	3.28	13.0187
-250	3.28	4.1053	-45	3.28	71.5955	160	3.28	12.1967
-245	3.28	4.2687	-40	3.28	81.2703	165	3.28	11.4477
-240	3.28	4.4419	-35	3.28	92.2995	170	3.28	10.7637
-235	3.28	4.6259	-30	3.28	104.5674	175	3.28	10.1376
-230	3.28	4.8215	-25	3.28	117.6283	180	3.28	9.5632
-225	3.28	5.0297	-20	3.28	130.5336	185	3.28	9.0351
-220	3.28	5.2517	-15	3.28	141.8052	190	3.28	8.5486
-215	3.28	5.4885	-10	3.28	149.8337	195	3.28	8.0996
-210	3.28	5.7417	-5	3.28	153.7207	200	3.28	7.6844
-205	3.28	6.0127	0	3.28	153.92	205	3.28	7.2997
-200	3.28	6.3031	5	3.28	151.9533	210	3.28	6.9428
-195	3.28	6.6149	10	3.28	149.4535	215	3.28	6.6110
-190	3.28	6.9502	15	3.28	147.3929	220	3.28	6.3021
-185	3.28	7.3114	20	3.28	145.8042	225	3.28	6.0140
-180	3.28	7.7012	25	3.28	143.8660	230	3.28	5.7451
-175	3.28	8.1225	30	3.28	140.2593	235	3.28	5.4935
-170	3.28	8.5789	35	3.28	133.8347	240	3.28	5.2580
-165	3.28	9.0743	40	3.28	124.3563	245	3.28	5.0371
-160	3.28	9.6131	45	3.28	112.7006	250	3.28	4.8297
-155	3.28	10.2004	50	3.28	100.2840	255	3.28	4.6348
-150	3.28	10.8420	55	3.28	88.3245	260	3.28	4.4513
-145	3.28	11.5447	60	3.28	77.5169	265	3.28	4.2784
-140	3.28	12.3161	65	3.28	68.0983	270	3.28	4.1154
-135	3.28	13.1654	70	3.28	60.0352	275	3.28	3.9614
-130	3.28	14.1028	75	3.28	53.1769	280	3.28	3.8158
-125	3.28	15.1405	80	3.28	47.3421	285	3.28	3.6781
-120	3.28	16.2928	85	3.28	42.3600	290	3.28	3.5477
-115	3.28	17.5761	90	3.28	38.0834	295	3.28	3.4240
-110	3.28	19.0101	95	3.28	34.3911	300	3.28	3.3067
-105	3.28	20.6180	100	3.28	31.1847			
-100	3.28	22.4273	105	3.28	28.3850			



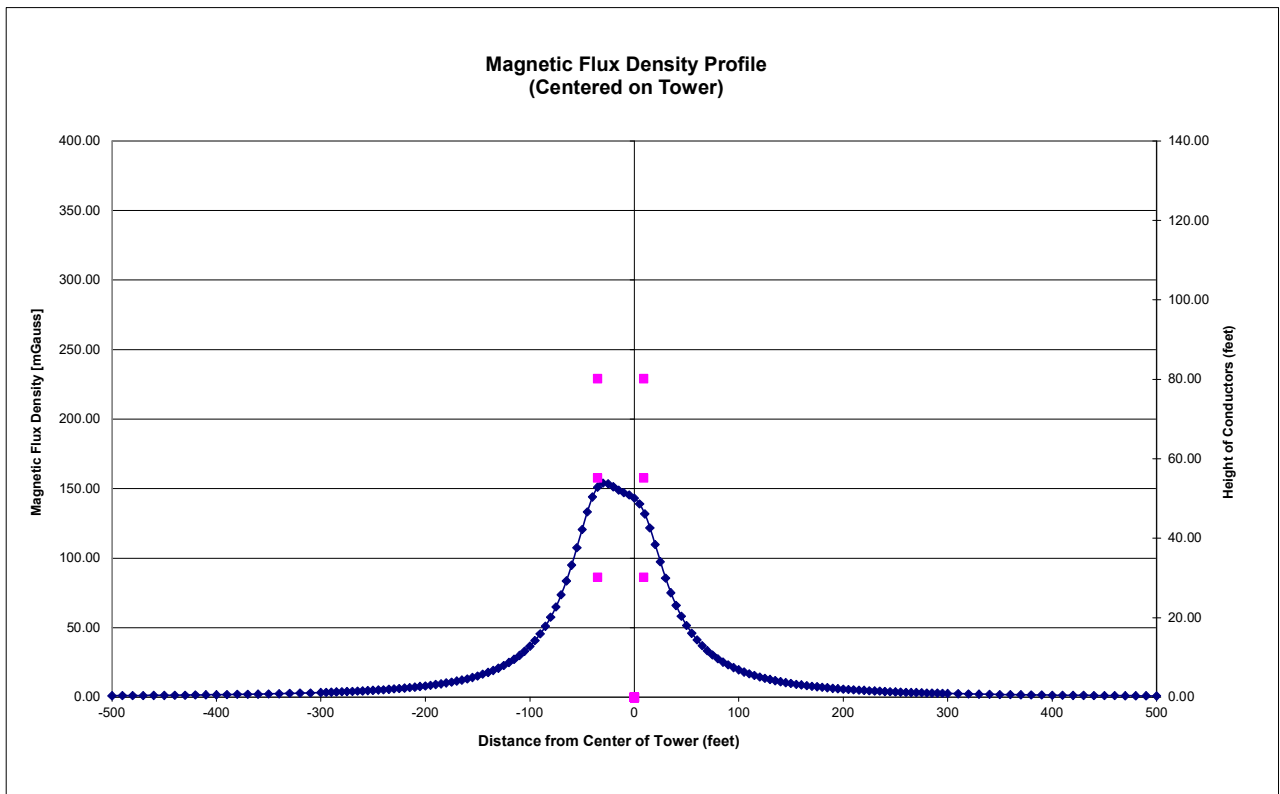
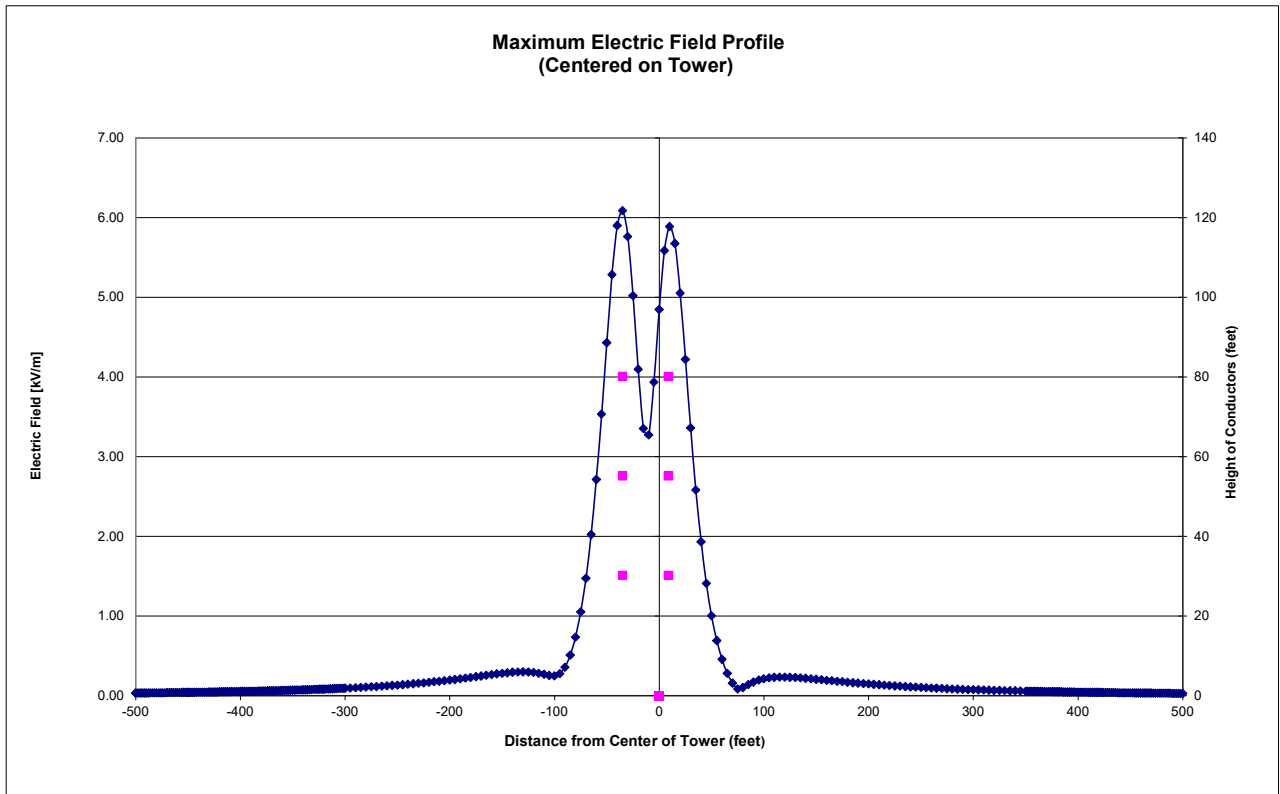
Scenario 2 - 2-Pole Vert Deadend Config. (b)

Scenario 3 - 2-Pole Vert Deadend Config. (c)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0960	-95	3.28	0.2774	110	3.28	0.2318
-295	3.28	0.0991	-90	3.28	0.3596	115	3.28	0.2348
-290	3.28	0.1024	-85	3.28	0.5101	120	3.28	0.2351
-285	3.28	0.1059	-80	3.28	0.7366	125	3.28	0.2333
-280	3.28	0.1095	-75	3.28	1.0522	130	3.28	0.2300
-275	3.28	0.1133	-70	3.28	1.4750	135	3.28	0.2256
-270	3.28	0.1172	-65	3.28	2.0246	140	3.28	0.2203
-265	3.28	0.1214	-60	3.28	2.7140	145	3.28	0.2146
-260	3.28	0.1258	-55	3.28	3.5347	150	3.28	0.2085
-255	3.28	0.1304	-50	3.28	4.4327	155	3.28	0.2022
-250	3.28	0.1352	-45	3.28	5.2845	160	3.28	0.1958
-245	3.28	0.1402	-40	3.28	5.9003	165	3.28	0.1893
-240	3.28	0.1455	-35	3.28	6.09	170	3.28	0.1830
-235	3.28	0.1511	-30	3.28	5.7633	175	3.28	0.1768
-230	3.28	0.1569	-25	3.28	5.0202	180	3.28	0.1707
-225	3.28	0.1630	-20	3.28	4.0981	185	3.28	0.1648
-220	3.28	0.1694	-15	3.28	3.3542	190	3.28	0.1590
-215	3.28	0.1761	-10	3.28	3.2740	195	3.28	0.1535
-210	3.28	0.1831	-5	3.28	3.9365	200	3.28	0.1481
-205	3.28	0.1904	0	3.28	4.8475	205	3.28	0.1430
-200	3.28	0.1980	5	3.28	5.5864	210	3.28	0.1380
-195	3.28	0.2059	10	3.28	5.8892	215	3.28	0.1333
-190	3.28	0.2140	15	3.28	5.6758	220	3.28	0.1287
-185	3.28	0.2225	20	3.28	5.0527	225	3.28	0.1244
-180	3.28	0.2311	25	3.28	4.2206	230	3.28	0.1202
-175	3.28	0.2400	30	3.28	3.3609	235	3.28	0.1162
-170	3.28	0.2489	35	3.28	2.5835	240	3.28	0.1124
-165	3.28	0.2578	40	3.28	1.9322	245	3.28	0.1087
-160	3.28	0.2665	45	3.28	1.4107	250	3.28	0.1052
-155	3.28	0.2749	50	3.28	1.0042	255	3.28	0.1019
-150	3.28	0.2826	55	3.28	0.6928	260	3.28	0.0986
-145	3.28	0.2895	60	3.28	0.4574	265	3.28	0.0956
-140	3.28	0.2951	65	3.28	0.2826	270	3.28	0.0926
-135	3.28	0.2988	70	3.28	0.1585	275	3.28	0.0898
-130	3.28	0.3002	75	3.28	0.0866	280	3.28	0.0871
-125	3.28	0.2984	80	3.28	0.1033	285	3.28	0.0845
-120	3.28	0.2929	85	3.28	0.1405	290	3.28	0.0820
-115	3.28	0.2833	90	3.28	0.1725	295	3.28	0.0796
-110	3.28	0.2700	95	3.28	0.1968	300	3.28	0.0773
-105	3.28	0.2562	100	3.28	0.2139			
-100	3.28	0.2515	105	3.28	0.2251			

Scenario 3 - 2-Pole Vert Deadend Config. (c)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	3.4417	-95	3.28	40.8787	110	3.28	16.9546
-295	3.28	3.5669	-90	3.28	45.6381	115	3.28	15.7591
-290	3.28	3.6990	-85	3.28	51.1605	120	3.28	14.6808
-285	3.28	3.8385	-80	3.28	57.5820	125	3.28	13.7056
-280	3.28	3.9861	-75	3.28	65.0520	130	3.28	12.8210
-275	3.28	4.1424	-70	3.28	73.7207	135	3.28	12.0167
-270	3.28	4.3079	-65	3.28	83.7089	140	3.28	11.2835
-265	3.28	4.4836	-60	3.28	95.0450	145	3.28	10.6135
-260	3.28	4.6702	-55	3.28	107.5524	150	3.28	9.9999
-255	3.28	4.8687	-50	3.28	120.6828	155	3.28	9.4367
-250	3.28	5.0800	-45	3.28	133.3559	160	3.28	8.9187
-245	3.28	5.3053	-40	3.28	144.0080	165	3.28	8.4412
-240	3.28	5.5458	-35	3.28	151.1112	170	3.28	8.0004
-235	3.28	5.8029	-30	3.28	154.05	175	3.28	7.5925
-230	3.28	6.0782	-25	3.28	153.5921	180	3.28	7.2146
-225	3.28	6.3735	-20	3.28	151.3709	185	3.28	6.8637
-220	3.28	6.6905	-15	3.28	148.9196	190	3.28	6.5374
-215	3.28	7.0316	-10	3.28	147.0001	195	3.28	6.2335
-210	3.28	7.3992	-5	3.28	145.4297	200	3.28	5.9500
-205	3.28	7.7960	0	3.28	143.229	205	3.28	5.6852
-200	3.28	8.2252	5	3.28	139.0475	210	3.28	5.4375
-195	3.28	8.6902	10	3.28	131.8917	215	3.28	5.2055
-190	3.28	9.1953	15	3.28	121.7970	220	3.28	4.9878
-185	3.28	9.7448	20	3.28	109.8359	225	3.28	4.7834
-180	3.28	10.3441	25	3.28	97.4344	230	3.28	4.5912
-175	3.28	10.9993	30	3.28	85.6997	235	3.28	4.4103
-170	3.28	11.7172	35	3.28	75.2062	240	3.28	4.2398
-165	3.28	12.5059	40	3.28	66.1113	245	3.28	4.0789
-160	3.28	13.3746	45	3.28	58.3433	250	3.28	3.9269
-155	3.28	14.3342	50	3.28	51.7386	255	3.28	3.7832
-150	3.28	15.3971	55	3.28	46.1161	260	3.28	3.6472
-145	3.28	16.5781	60	3.28	41.3098	265	3.28	3.5184
-140	3.28	17.8946	65	3.28	37.1787	270	3.28	3.3963
-135	3.28	19.3667	70	3.28	33.6071	275	3.28	3.2803
-130	3.28	21.0188	75	3.28	30.5015	280	3.28	3.1702
-125	3.28	22.8792	80	3.28	27.7865	285	3.28	3.0655
-120	3.28	24.9822	85	3.28	25.4010	290	3.28	2.9659
-115	3.28	27.3684	90	3.28	23.2954	295	3.28	2.8711
-110	3.28	30.0865	95	3.28	21.4290	300	3.28	2.7807
-105	3.28	33.1952	100	3.28	19.7679			
-100	3.28	36.7645	105	3.28	18.2843			



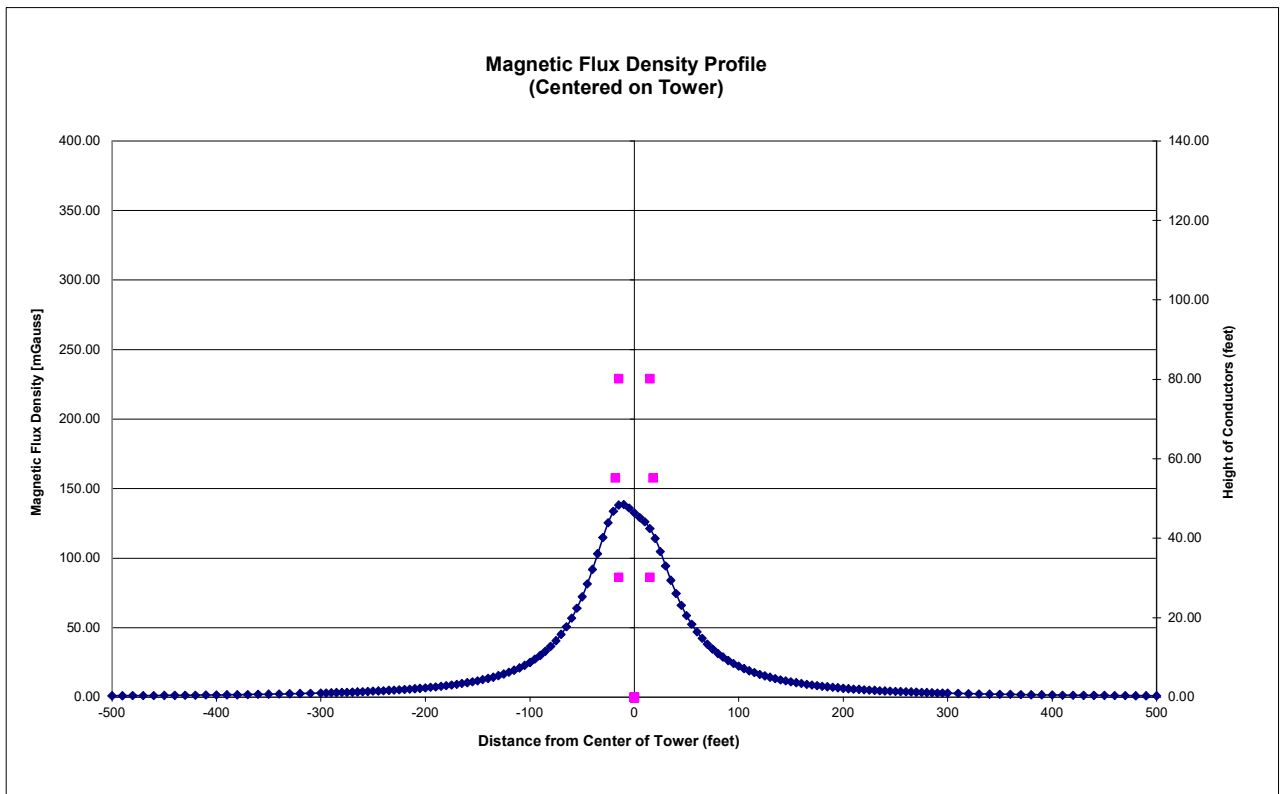
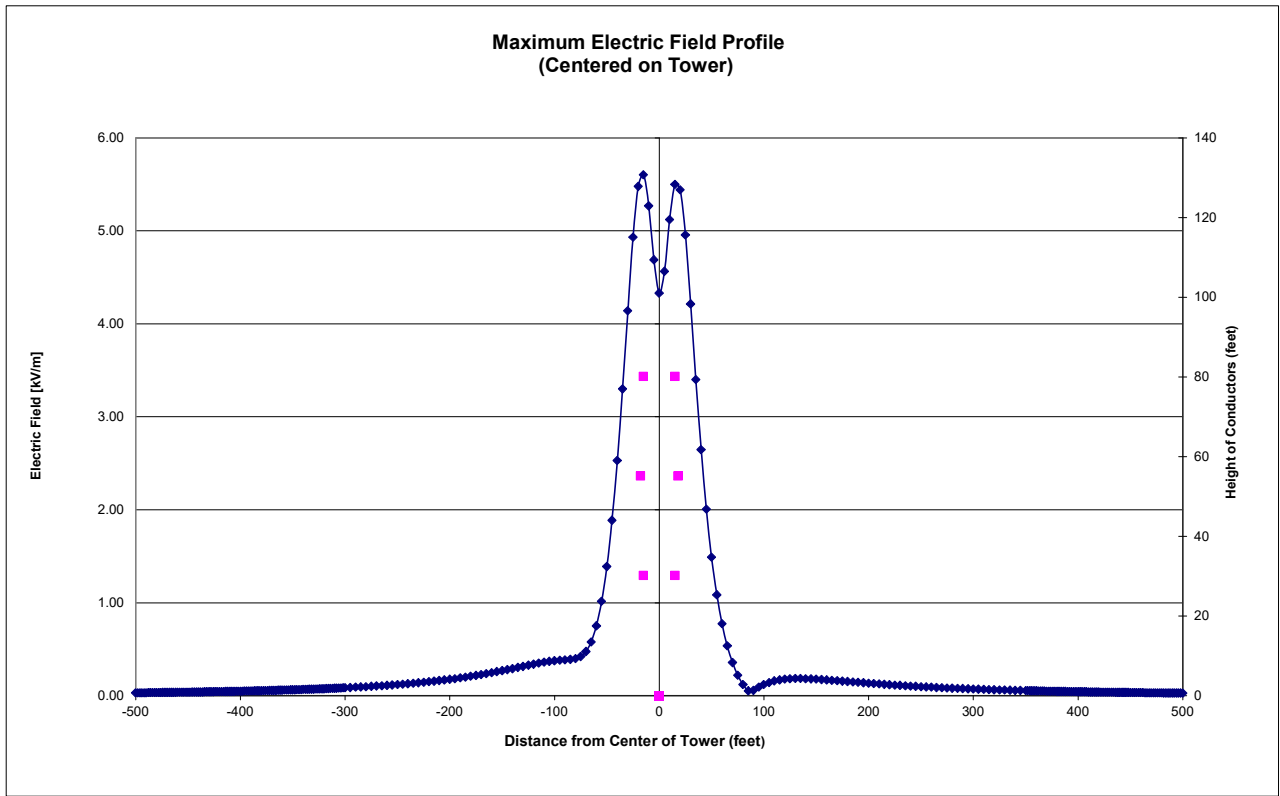
Scenario 3 - 2-Pole Vert Deadend Config. (c)

Scenario 4 -Vertical Tangent Config. (a)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0868	-95	3.28	0.3827	110	3.28	0.1602
-295	3.28	0.0895	-90	3.28	0.3869	115	3.28	0.1716
-290	3.28	0.0924	-85	3.28	0.3915	120	3.28	0.1791
-285	3.28	0.0955	-80	3.28	0.4008	125	3.28	0.1835
-280	3.28	0.0986	-75	3.28	0.4238	130	3.28	0.1855
-275	3.28	0.1020	-70	3.28	0.4762	135	3.28	0.1857
-270	3.28	0.1054	-65	3.28	0.5790	140	3.28	0.1845
-265	3.28	0.1091	-60	3.28	0.7529	145	3.28	0.1822
-260	3.28	0.1129	-55	3.28	1.0166	150	3.28	0.1792
-255	3.28	0.1170	-50	3.28	1.3892	155	3.28	0.1756
-250	3.28	0.1212	-45	3.28	1.8895	160	3.28	0.1715
-245	3.28	0.1256	-40	3.28	2.5295	165	3.28	0.1672
-240	3.28	0.1303	-35	3.28	3.2991	170	3.28	0.1627
-235	3.28	0.1352	-30	3.28	4.1420	175	3.28	0.1582
-230	3.28	0.1404	-25	3.28	4.9321	180	3.28	0.1535
-225	3.28	0.1458	-20	3.28	5.4797	185	3.28	0.1489
-220	3.28	0.1516	-15	3.28	5.60	190	3.28	0.1444
-215	3.28	0.1576	-10	3.28	5.2694	195	3.28	0.1399
-210	3.28	0.1639	-5	3.28	4.6902	200	3.28	0.1355
-205	3.28	0.1706	0	3.28	4.3323	205	3.28	0.1312
-200	3.28	0.1777	5	3.28	4.5652	210	3.28	0.1271
-195	3.28	0.1851	10	3.28	5.1202	215	3.28	0.1231
-190	3.28	0.1929	15	3.28	5.4996	220	3.28	0.1192
-185	3.28	0.2010	20	3.28	5.4416	225	3.28	0.1154
-180	3.28	0.2097	25	3.28	4.9566	230	3.28	0.1118
-175	3.28	0.2187	30	3.28	4.2143	235	3.28	0.1083
-170	3.28	0.2282	35	3.28	3.4025	240	3.28	0.1049
-165	3.28	0.2381	40	3.28	2.6478	245	3.28	0.1017
-160	3.28	0.2484	45	3.28	2.0071	250	3.28	0.0985
-155	3.28	0.2592	50	3.28	1.4907	255	3.28	0.0955
-150	3.28	0.2703	55	3.28	1.0867	260	3.28	0.0927
-145	3.28	0.2818	60	3.28	0.7755	265	3.28	0.0899
-140	3.28	0.2935	65	3.28	0.5379	270	3.28	0.0872
-135	3.28	0.3054	70	3.28	0.3574	275	3.28	0.0847
-130	3.28	0.3174	75	3.28	0.2215	280	3.28	0.0822
-125	3.28	0.3292	80	3.28	0.1214	285	3.28	0.0798
-120	3.28	0.3407	85	3.28	0.0548	290	3.28	0.0776
-115	3.28	0.3516	90	3.28	0.0589	295	3.28	0.0754
-110	3.28	0.3615	95	3.28	0.0925	300	3.28	0.0733
-105	3.28	0.3702	100	3.28	0.1215			
-100	3.28	0.3773	105	3.28	0.1439			

Scenario 4 -Vertical Tangent Config. (a)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	3.0753	-95	3.28	27.4399	110	3.28	19.1572
-295	3.28	3.1795	-90	3.28	30.1153	115	3.28	17.7792
-290	3.28	3.2890	-85	3.28	33.1684	120	3.28	16.5369
-285	3.28	3.4043	-80	3.28	36.6652	125	3.28	15.4138
-280	3.28	3.5257	-75	3.28	40.6843	130	3.28	14.3960
-275	3.28	3.6537	-70	3.28	45.3175	135	3.28	13.4713
-270	3.28	3.7887	-65	3.28	50.6706	140	3.28	12.6292
-265	3.28	3.9313	-60	3.28	56.8611	145	3.28	11.8605
-260	3.28	4.0820	-55	3.28	64.0114	150	3.28	11.1573
-255	3.28	4.2416	-50	3.28	72.2326	155	3.28	10.5126
-250	3.28	4.4105	-45	3.28	81.5903	160	3.28	9.9204
-245	3.28	4.5897	-40	3.28	92.0414	165	3.28	9.3754
-240	3.28	4.7800	-35	3.28	103.3272	170	3.28	8.8727
-235	3.28	4.9822	-30	3.28	114.8268	175	3.28	8.4083
-230	3.28	5.1974	-25	3.28	125.4366	180	3.28	7.9785
-225	3.28	5.4267	-20	3.28	133.6672	185	3.28	7.5800
-220	3.28	5.6713	-15	3.28	138.1829	190	3.28	7.2099
-215	3.28	5.9327	-10	3.28	138.64	195	3.28	6.8657
-210	3.28	6.2124	-5	3.28	136.1177	200	3.28	6.5451
-205	3.28	6.5120	0	3.28	132.5572	205	3.28	6.2460
-200	3.28	6.8336	5	3.28	129.3721	210	3.28	5.9665
-195	3.28	7.1793	10	3.28	126.1666	215	3.28	5.7051
-190	3.28	7.5514	15	3.28	121.4051	220	3.28	5.4602
-185	3.28	7.9528	20	3.28	114.1633	225	3.28	5.2304
-180	3.28	8.3864	25	3.28	104.7920	230	3.28	5.0147
-175	3.28	8.8559	30	3.28	94.4061	235	3.28	4.8119
-170	3.28	9.3652	35	3.28	84.1087	240	3.28	4.6209
-165	3.28	9.9187	40	3.28	74.5964	245	3.28	4.4410
-160	3.28	10.5217	45	3.28	66.1591	250	3.28	4.2712
-155	3.28	11.1800	50	3.28	58.8274	255	3.28	4.1109
-150	3.28	11.9005	55	3.28	52.5078	260	3.28	3.9593
-145	3.28	12.6909	60	3.28	47.0657	265	3.28	3.8158
-140	3.28	13.5604	65	3.28	42.3663	270	3.28	3.6800
-135	3.28	14.5193	70	3.28	38.2901	275	3.28	3.5512
-130	3.28	15.5801	75	3.28	34.7367	280	3.28	3.4290
-125	3.28	16.7569	80	3.28	31.6238	285	3.28	3.3129
-120	3.28	18.0665	85	3.28	28.8841	290	3.28	3.2026
-115	3.28	19.5287	90	3.28	26.4625	295	3.28	3.0976
-110	3.28	21.1669	95	3.28	24.3137	300	3.28	2.9977
-105	3.28	23.0085	100	3.28	22.4000			
-100	3.28	25.0865	105	3.28	20.6900			



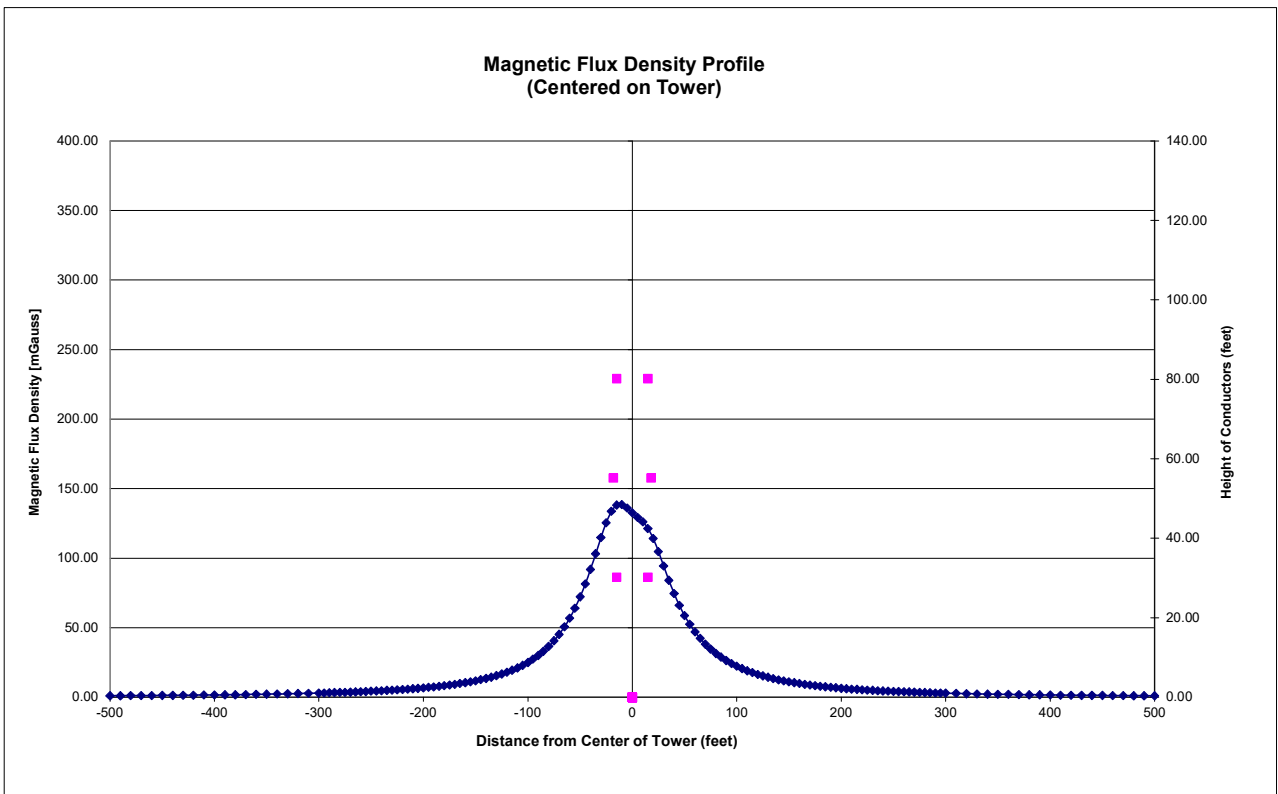
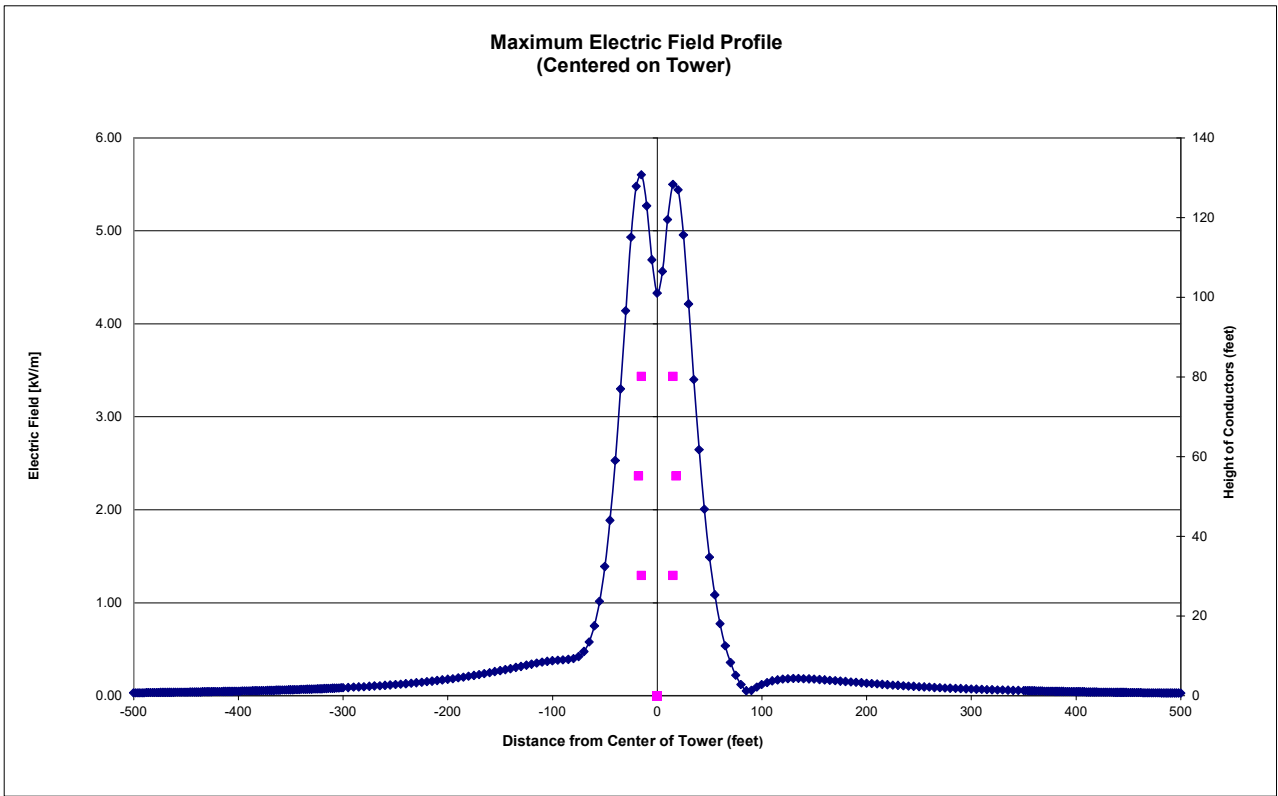
Scenario 4 -Vertical Tangent Config. (a)

Scenario 5 -Vertical Tangent Config. (b)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0868	-95	3.28	0.3827	110	3.28	0.1602
-295	3.28	0.0895	-90	3.28	0.3869	115	3.28	0.1716
-290	3.28	0.0924	-85	3.28	0.3915	120	3.28	0.1791
-285	3.28	0.0955	-80	3.28	0.4008	125	3.28	0.1835
-280	3.28	0.0986	-75	3.28	0.4238	130	3.28	0.1855
-275	3.28	0.1020	-70	3.28	0.4762	135	3.28	0.1857
-270	3.28	0.1054	-65	3.28	0.5790	140	3.28	0.1845
-265	3.28	0.1091	-60	3.28	0.7529	145	3.28	0.1822
-260	3.28	0.1129	-55	3.28	1.0166	150	3.28	0.1792
-255	3.28	0.1170	-50	3.28	1.3892	155	3.28	0.1756
-250	3.28	0.1212	-45	3.28	1.8895	160	3.28	0.1715
-245	3.28	0.1256	-40	3.28	2.5295	165	3.28	0.1672
-240	3.28	0.1303	-35	3.28	3.2991	170	3.28	0.1627
-235	3.28	0.1352	-30	3.28	4.1420	175	3.28	0.1582
-230	3.28	0.1404	-25	3.28	4.9321	180	3.28	0.1535
-225	3.28	0.1458	-20	3.28	5.4797	185	3.28	0.1489
-220	3.28	0.1516	-15	3.28	5.60	190	3.28	0.1444
-215	3.28	0.1576	-10	3.28	5.2694	195	3.28	0.1399
-210	3.28	0.1639	-5	3.28	4.6902	200	3.28	0.1355
-205	3.28	0.1706	0	3.28	4.3323	205	3.28	0.1312
-200	3.28	0.1777	5	3.28	4.5652	210	3.28	0.1271
-195	3.28	0.1851	10	3.28	5.1202	215	3.28	0.1231
-190	3.28	0.1929	15	3.28	5.4996	220	3.28	0.1192
-185	3.28	0.2010	20	3.28	5.4416	225	3.28	0.1154
-180	3.28	0.2097	25	3.28	4.9566	230	3.28	0.1118
-175	3.28	0.2187	30	3.28	4.2143	235	3.28	0.1083
-170	3.28	0.2282	35	3.28	3.4025	240	3.28	0.1049
-165	3.28	0.2381	40	3.28	2.6478	245	3.28	0.1017
-160	3.28	0.2484	45	3.28	2.0071	250	3.28	0.0985
-155	3.28	0.2592	50	3.28	1.4907	255	3.28	0.0955
-150	3.28	0.2703	55	3.28	1.0867	260	3.28	0.0927
-145	3.28	0.2818	60	3.28	0.7755	265	3.28	0.0899
-140	3.28	0.2935	65	3.28	0.5379	270	3.28	0.0872
-135	3.28	0.3054	70	3.28	0.3574	275	3.28	0.0847
-130	3.28	0.3174	75	3.28	0.2215	280	3.28	0.0822
-125	3.28	0.3292	80	3.28	0.1214	285	3.28	0.0798
-120	3.28	0.3407	85	3.28	0.0548	290	3.28	0.0776
-115	3.28	0.3516	90	3.28	0.0589	295	3.28	0.0754
-110	3.28	0.3615	95	3.28	0.0925	300	3.28	0.0733
-105	3.28	0.3702	100	3.28	0.1215			
-100	3.28	0.3773	105	3.28	0.1439			

Scenario 5 -Vertical Tangent Config. (b)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	3.0753	-95	3.28	27.4399	110	3.28	19.1572
-295	3.28	3.1795	-90	3.28	30.1153	115	3.28	17.7792
-290	3.28	3.2890	-85	3.28	33.1684	120	3.28	16.5369
-285	3.28	3.4043	-80	3.28	36.6652	125	3.28	15.4138
-280	3.28	3.5257	-75	3.28	40.6843	130	3.28	14.3960
-275	3.28	3.6537	-70	3.28	45.3175	135	3.28	13.4713
-270	3.28	3.7887	-65	3.28	50.6706	140	3.28	12.6292
-265	3.28	3.9313	-60	3.28	56.8611	145	3.28	11.8605
-260	3.28	4.0820	-55	3.28	64.0114	150	3.28	11.1573
-255	3.28	4.2416	-50	3.28	72.2326	155	3.28	10.5126
-250	3.28	4.4105	-45	3.28	81.5903	160	3.28	9.9204
-245	3.28	4.5897	-40	3.28	92.0414	165	3.28	9.3754
-240	3.28	4.7800	-35	3.28	103.3272	170	3.28	8.8727
-235	3.28	4.9822	-30	3.28	114.8268	175	3.28	8.4083
-230	3.28	5.1974	-25	3.28	125.4366	180	3.28	7.9785
-225	3.28	5.4267	-20	3.28	133.6672	185	3.28	7.5800
-220	3.28	5.6713	-15	3.28	138.1829	190	3.28	7.2099
-215	3.28	5.9327	-10	3.28	138.64	195	3.28	6.8657
-210	3.28	6.2124	-5	3.28	136.1177	200	3.28	6.5451
-205	3.28	6.5120	0	3.28	132.5572	205	3.28	6.2460
-200	3.28	6.8336	5	3.28	129.3721	210	3.28	5.9665
-195	3.28	7.1793	10	3.28	126.1666	215	3.28	5.7051
-190	3.28	7.5514	15	3.28	121.4051	220	3.28	5.4602
-185	3.28	7.9528	20	3.28	114.1633	225	3.28	5.2304
-180	3.28	8.3864	25	3.28	104.7920	230	3.28	5.0147
-175	3.28	8.8559	30	3.28	94.4061	235	3.28	4.8119
-170	3.28	9.3652	35	3.28	84.1087	240	3.28	4.6209
-165	3.28	9.9187	40	3.28	74.5964	245	3.28	4.4410
-160	3.28	10.5217	45	3.28	66.1591	250	3.28	4.2712
-155	3.28	11.1800	50	3.28	58.8274	255	3.28	4.1109
-150	3.28	11.9005	55	3.28	52.5078	260	3.28	3.9593
-145	3.28	12.6909	60	3.28	47.0657	265	3.28	3.8158
-140	3.28	13.5604	65	3.28	42.3663	270	3.28	3.6800
-135	3.28	14.5193	70	3.28	38.2901	275	3.28	3.5512
-130	3.28	15.5801	75	3.28	34.7367	280	3.28	3.4290
-125	3.28	16.7569	80	3.28	31.6238	285	3.28	3.3129
-120	3.28	18.0665	85	3.28	28.8841	290	3.28	3.2026
-115	3.28	19.5287	90	3.28	26.4625	295	3.28	3.0976
-110	3.28	21.1669	95	3.28	24.3137	300	3.28	2.9977
-105	3.28	23.0085	100	3.28	22.4000			
-100	3.28	25.0865	105	3.28	20.6900			



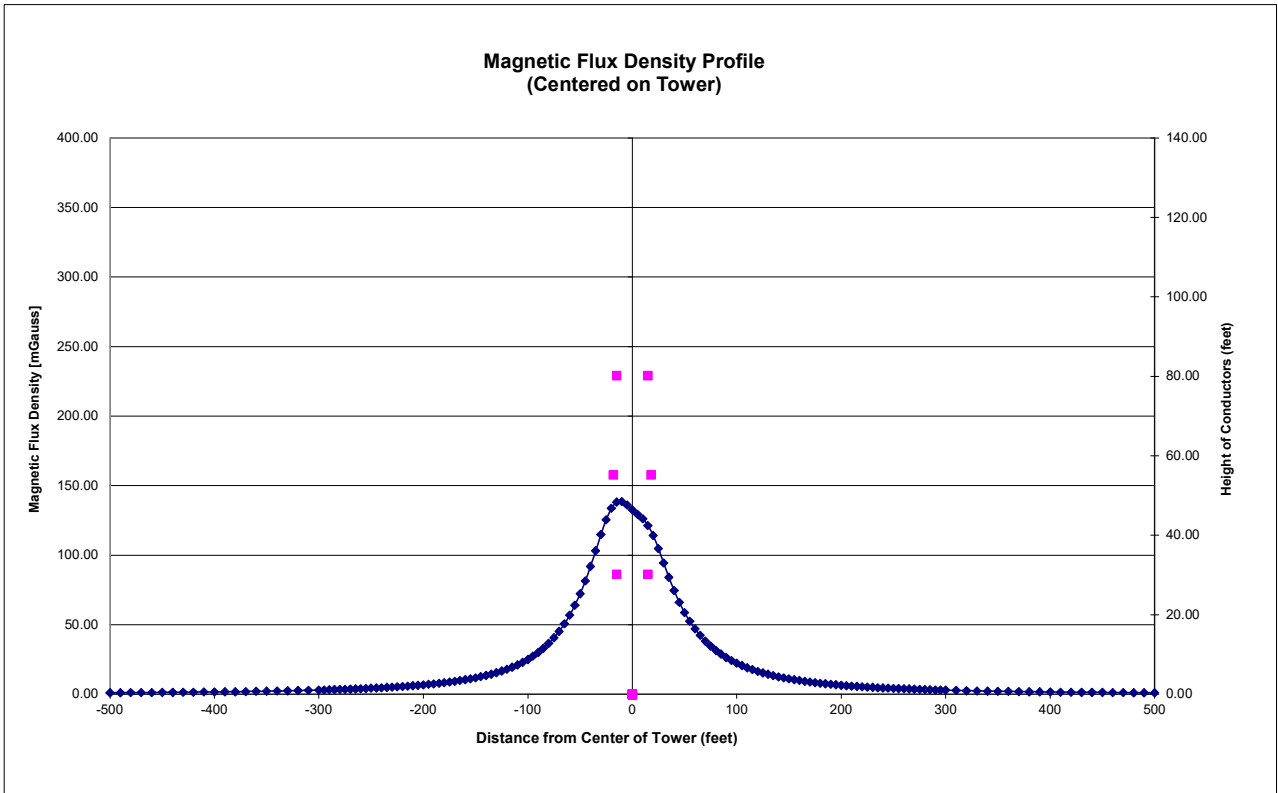
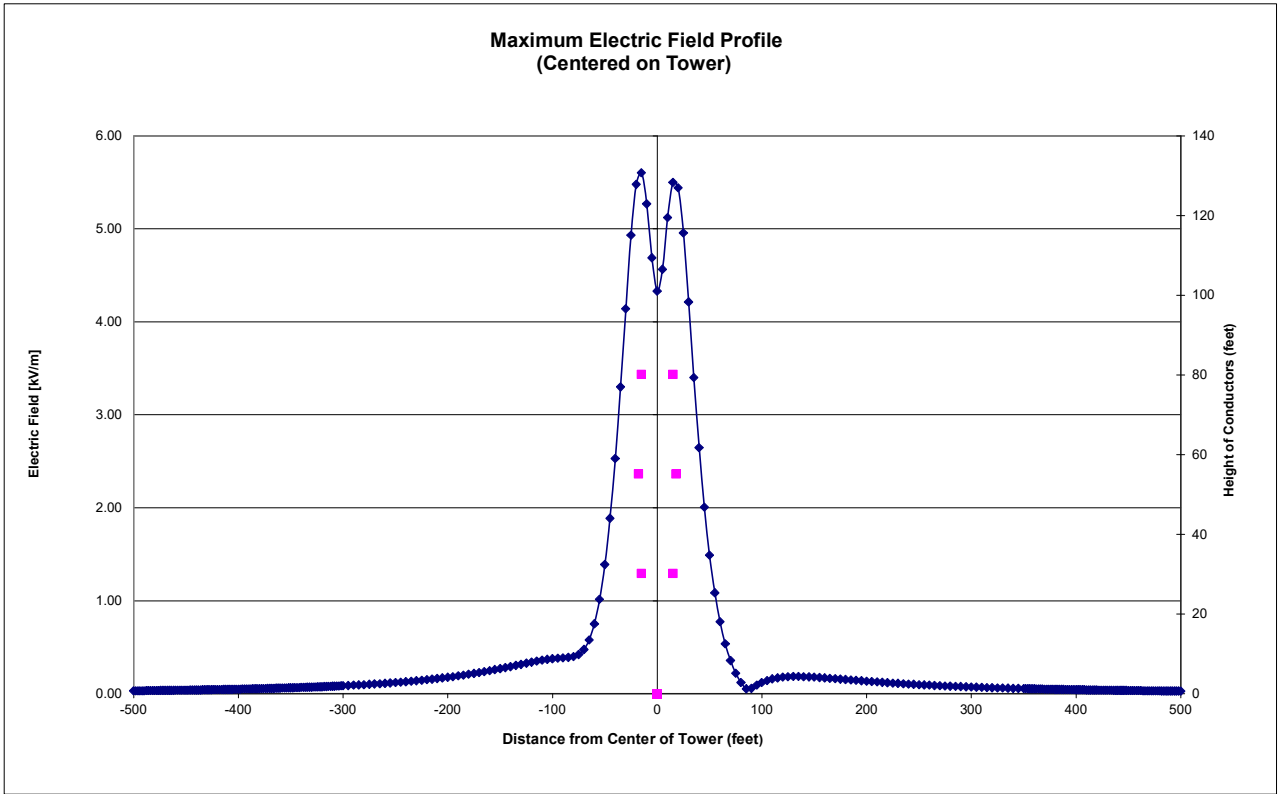
Scenario 5 -Vertical Tangent Config. (b)

Scenario 6 - Vertical Tangent Config. (c)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0868	-95	3.28	0.3827	110	3.28	0.1602
-295	3.28	0.0895	-90	3.28	0.3869	115	3.28	0.1716
-290	3.28	0.0924	-85	3.28	0.3915	120	3.28	0.1791
-285	3.28	0.0955	-80	3.28	0.4008	125	3.28	0.1835
-280	3.28	0.0986	-75	3.28	0.4238	130	3.28	0.1855
-275	3.28	0.1020	-70	3.28	0.4762	135	3.28	0.1857
-270	3.28	0.1054	-65	3.28	0.5790	140	3.28	0.1845
-265	3.28	0.1091	-60	3.28	0.7529	145	3.28	0.1822
-260	3.28	0.1129	-55	3.28	1.0166	150	3.28	0.1792
-255	3.28	0.1170	-50	3.28	1.3892	155	3.28	0.1756
-250	3.28	0.1212	-45	3.28	1.8895	160	3.28	0.1715
-245	3.28	0.1256	-40	3.28	2.5295	165	3.28	0.1672
-240	3.28	0.1303	-35	3.28	3.2991	170	3.28	0.1627
-235	3.28	0.1352	-30	3.28	4.1420	175	3.28	0.1582
-230	3.28	0.1404	-25	3.28	4.9321	180	3.28	0.1535
-225	3.28	0.1458	-20	3.28	5.4797	185	3.28	0.1489
-220	3.28	0.1516	-15	3.28	5.60	190	3.28	0.1444
-215	3.28	0.1576	-10	3.28	5.2694	195	3.28	0.1399
-210	3.28	0.1639	-5	3.28	4.6902	200	3.28	0.1355
-205	3.28	0.1706	0	3.28	4.3323	205	3.28	0.1312
-200	3.28	0.1777	5	3.28	4.5652	210	3.28	0.1271
-195	3.28	0.1851	10	3.28	5.1202	215	3.28	0.1231
-190	3.28	0.1929	15	3.28	5.4996	220	3.28	0.1192
-185	3.28	0.2010	20	3.28	5.4416	225	3.28	0.1154
-180	3.28	0.2097	25	3.28	4.9566	230	3.28	0.1118
-175	3.28	0.2187	30	3.28	4.2143	235	3.28	0.1083
-170	3.28	0.2282	35	3.28	3.4025	240	3.28	0.1049
-165	3.28	0.2381	40	3.28	2.6478	245	3.28	0.1017
-160	3.28	0.2484	45	3.28	2.0071	250	3.28	0.0985
-155	3.28	0.2592	50	3.28	1.4907	255	3.28	0.0955
-150	3.28	0.2703	55	3.28	1.0867	260	3.28	0.0927
-145	3.28	0.2818	60	3.28	0.7755	265	3.28	0.0899
-140	3.28	0.2935	65	3.28	0.5379	270	3.28	0.0872
-135	3.28	0.3054	70	3.28	0.3574	275	3.28	0.0847
-130	3.28	0.3174	75	3.28	0.2215	280	3.28	0.0822
-125	3.28	0.3292	80	3.28	0.1214	285	3.28	0.0798
-120	3.28	0.3407	85	3.28	0.0548	290	3.28	0.0776
-115	3.28	0.3516	90	3.28	0.0589	295	3.28	0.0754
-110	3.28	0.3615	95	3.28	0.0925	300	3.28	0.0733
-105	3.28	0.3702	100	3.28	0.1215			
-100	3.28	0.3773	105	3.28	0.1439			

Scenario 6 - Vertical Tangent Config. (c)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	3.0753	-95	3.28	27.4399	110	3.28	19.1572
-295	3.28	3.1795	-90	3.28	30.1153	115	3.28	17.7792
-290	3.28	3.2890	-85	3.28	33.1684	120	3.28	16.5369
-285	3.28	3.4043	-80	3.28	36.6652	125	3.28	15.4138
-280	3.28	3.5257	-75	3.28	40.6843	130	3.28	14.3960
-275	3.28	3.6537	-70	3.28	45.3175	135	3.28	13.4713
-270	3.28	3.7887	-65	3.28	50.6706	140	3.28	12.6292
-265	3.28	3.9313	-60	3.28	56.8611	145	3.28	11.8605
-260	3.28	4.0820	-55	3.28	64.0114	150	3.28	11.1573
-255	3.28	4.2416	-50	3.28	72.2326	155	3.28	10.5126
-250	3.28	4.4105	-45	3.28	81.5903	160	3.28	9.9204
-245	3.28	4.5897	-40	3.28	92.0414	165	3.28	9.3754
-240	3.28	4.7800	-35	3.28	103.3272	170	3.28	8.8727
-235	3.28	4.9822	-30	3.28	114.8268	175	3.28	8.4083
-230	3.28	5.1974	-25	3.28	125.4366	180	3.28	7.9785
-225	3.28	5.4267	-20	3.28	133.6672	185	3.28	7.5800
-220	3.28	5.6713	-15	3.28	138.1829	190	3.28	7.2099
-215	3.28	5.9327	-10	3.28	138.64	195	3.28	6.8657
-210	3.28	6.2124	-5	3.28	136.1177	200	3.28	6.5451
-205	3.28	6.5120	0	3.28	132.5572	205	3.28	6.2460
-200	3.28	6.8336	5	3.28	129.3721	210	3.28	5.9665
-195	3.28	7.1793	10	3.28	126.1666	215	3.28	5.7051
-190	3.28	7.5514	15	3.28	121.4051	220	3.28	5.4602
-185	3.28	7.9528	20	3.28	114.1633	225	3.28	5.2304
-180	3.28	8.3864	25	3.28	104.7920	230	3.28	5.0147
-175	3.28	8.8559	30	3.28	94.4061	235	3.28	4.8119
-170	3.28	9.3652	35	3.28	84.1087	240	3.28	4.6209
-165	3.28	9.9187	40	3.28	74.5964	245	3.28	4.4410
-160	3.28	10.5217	45	3.28	66.1591	250	3.28	4.2712
-155	3.28	11.1800	50	3.28	58.8274	255	3.28	4.1109
-150	3.28	11.9005	55	3.28	52.5078	260	3.28	3.9593
-145	3.28	12.6909	60	3.28	47.0657	265	3.28	3.8158
-140	3.28	13.5604	65	3.28	42.3663	270	3.28	3.6800
-135	3.28	14.5193	70	3.28	38.2901	275	3.28	3.5512
-130	3.28	15.5801	75	3.28	34.7367	280	3.28	3.4290
-125	3.28	16.7569	80	3.28	31.6238	285	3.28	3.3129
-120	3.28	18.0665	85	3.28	28.8841	290	3.28	3.2026
-115	3.28	19.5287	90	3.28	26.4625	295	3.28	3.0976
-110	3.28	21.1669	95	3.28	24.3137	300	3.28	2.9977
-105	3.28	23.0085	100	3.28	22.4000			
-100	3.28	25.0865	105	3.28	20.6900			



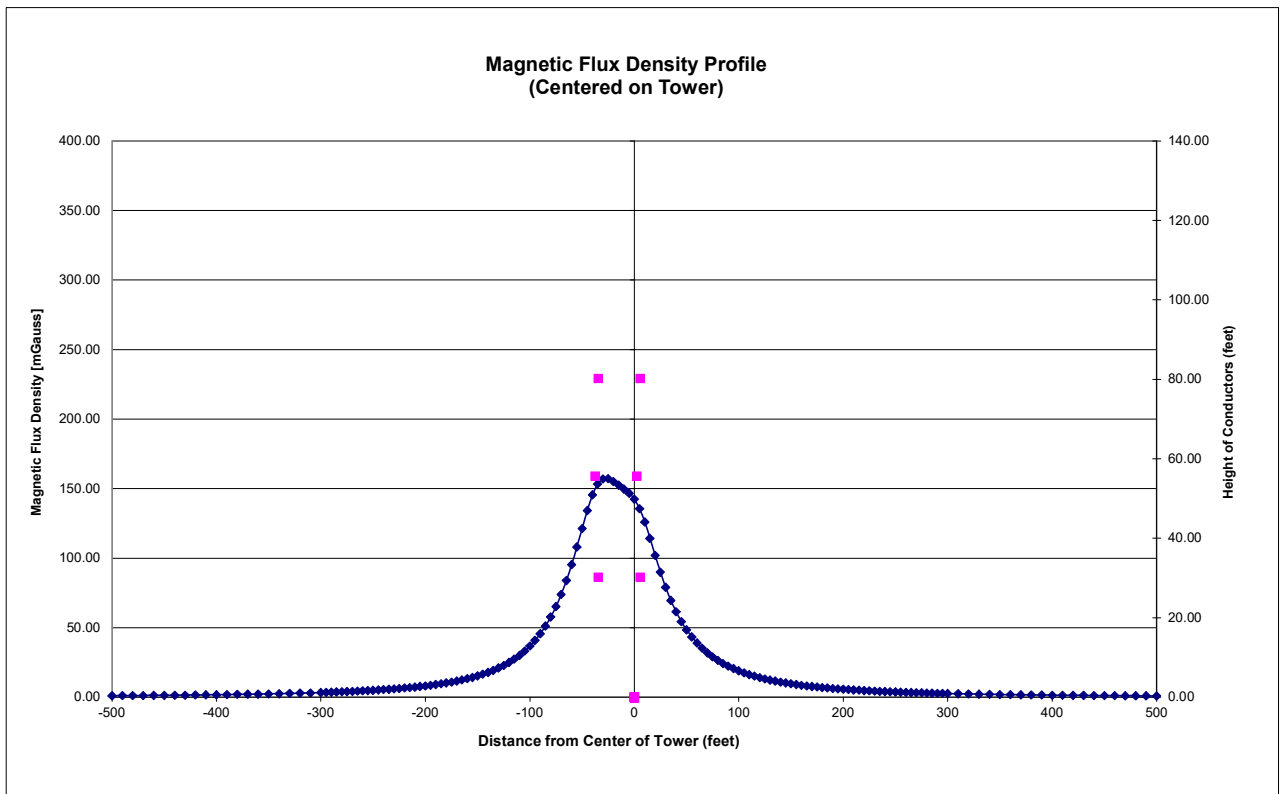
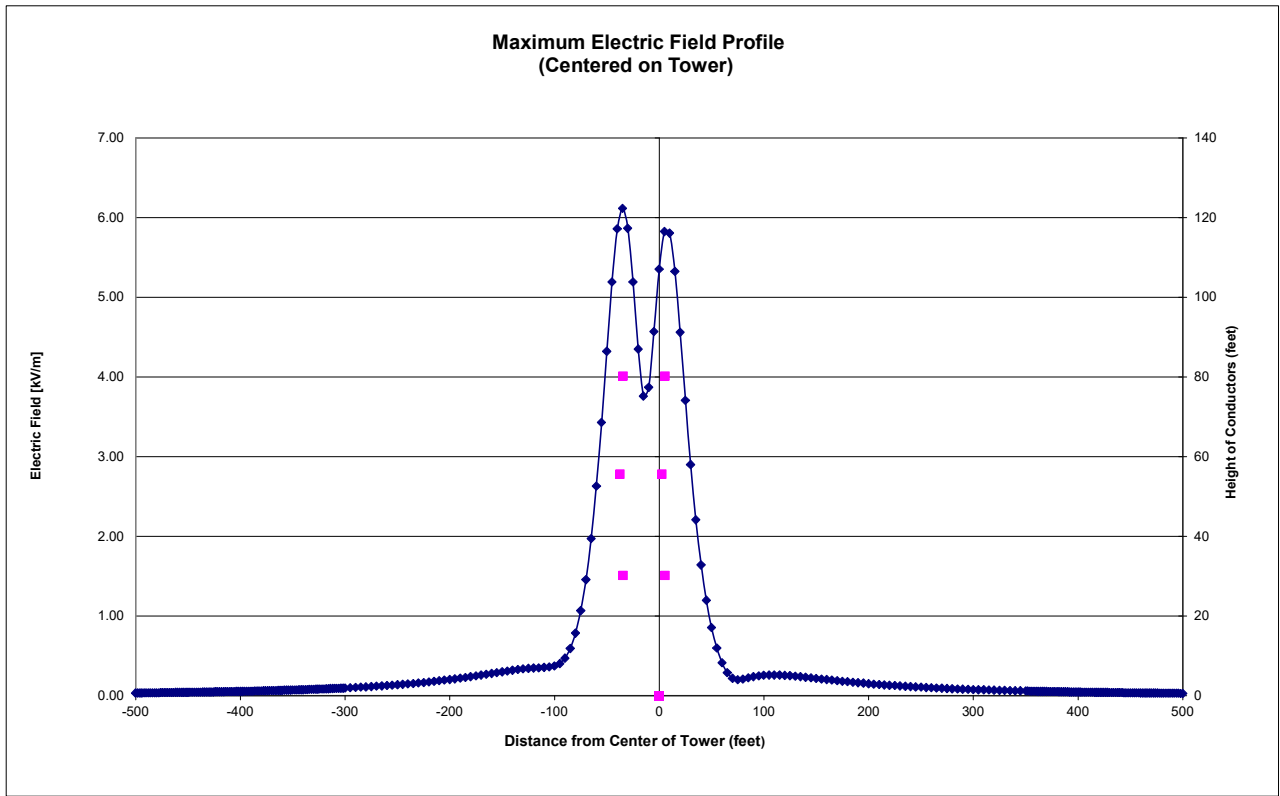
Scenario 6 - Vertical Tangent Config. (c)

Scenario 7 - 2-Pole Vertical Right Angle Config. (a)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0984	-95	3.28	0.4057	110	3.28	0.2618
-295	3.28	0.1017	-90	3.28	0.4732	115	3.28	0.2601
-290	3.28	0.1051	-85	3.28	0.5946	120	3.28	0.2566
-285	3.28	0.1086	-80	3.28	0.7872	125	3.28	0.2518
-280	3.28	0.1123	-75	3.28	1.0678	130	3.28	0.2461
-275	3.28	0.1162	-70	3.28	1.4560	135	3.28	0.2396
-270	3.28	0.1203	-65	3.28	1.9722	140	3.28	0.2328
-265	3.28	0.1246	-60	3.28	2.6318	145	3.28	0.2256
-260	3.28	0.1291	-55	3.28	3.4307	150	3.28	0.2183
-255	3.28	0.1338	-50	3.28	4.3225	155	3.28	0.2111
-250	3.28	0.1388	-45	3.28	5.1930	160	3.28	0.2038
-245	3.28	0.1440	-40	3.28	5.8573	165	3.28	0.1967
-240	3.28	0.1495	-35	3.28	6.12	170	3.28	0.1898
-235	3.28	0.1552	-30	3.28	5.8671	175	3.28	0.1830
-230	3.28	0.1613	-25	3.28	5.1921	180	3.28	0.1765
-225	3.28	0.1676	-20	3.28	4.3516	185	3.28	0.1702
-220	3.28	0.1743	-15	3.28	3.7613	190	3.28	0.1641
-215	3.28	0.1813	-10	3.28	3.8693	195	3.28	0.1582
-210	3.28	0.1887	-5	3.28	4.5701	200	3.28	0.1526
-205	3.28	0.1964	0	3.28	5.3520	205	3.28	0.1472
-200	3.28	0.2045	5	3.28	5.8244	210	3.28	0.1421
-195	3.28	0.2129	10	3.28	5.8041	215	3.28	0.1371
-190	3.28	0.2217	15	3.28	5.3241	220	3.28	0.1324
-185	3.28	0.2309	20	3.28	4.5601	225	3.28	0.1279
-180	3.28	0.2404	25	3.28	3.7072	230	3.28	0.1235
-175	3.28	0.2502	30	3.28	2.9012	235	3.28	0.1194
-170	3.28	0.2603	35	3.28	2.2073	240	3.28	0.1155
-165	3.28	0.2707	40	3.28	1.6424	245	3.28	0.1117
-160	3.28	0.2812	45	3.28	1.1979	250	3.28	0.1081
-155	3.28	0.2917	50	3.28	0.8566	255	3.28	0.1046
-150	3.28	0.3021	55	3.28	0.6005	260	3.28	0.1013
-145	3.28	0.3122	60	3.28	0.4148	265	3.28	0.0981
-140	3.28	0.3217	65	3.28	0.2896	270	3.28	0.0951
-135	3.28	0.3305	70	3.28	0.2210	275	3.28	0.0922
-130	3.28	0.3382	75	3.28	0.2016	280	3.28	0.0894
-125	3.28	0.3445	80	3.28	0.2094	285	3.28	0.0868
-120	3.28	0.3492	85	3.28	0.2248	290	3.28	0.0842
-115	3.28	0.3526	90	3.28	0.2394	295	3.28	0.0817
-110	3.28	0.3555	95	3.28	0.2505	300	3.28	0.0794
-105	3.28	0.3606	100	3.28	0.2576			
-100	3.28	0.3737	105	3.28	0.2611			

Scenario 7 - 2-Pole Vertical Right Angle Config. (a)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	3.4548	-95	3.28	41.0070	110	3.28	16.4095
-295	3.28	3.5804	-90	3.28	45.7885	115	3.28	15.2727
-290	3.28	3.7130	-85	3.28	51.3371	120	3.28	14.2454
-285	3.28	3.8530	-80	3.28	57.7888	125	3.28	13.3146
-280	3.28	4.0010	-75	3.28	65.2928	130	3.28	12.4690
-275	3.28	4.1578	-70	3.28	73.9993	135	3.28	11.6988
-270	3.28	4.3239	-65	3.28	84.0315	140	3.28	10.9958
-265	3.28	4.5001	-60	3.28	95.4269	145	3.28	10.3525
-260	3.28	4.6873	-55	3.28	108.0331	150	3.28	9.7625
-255	3.28	4.8863	-50	3.28	121.3492	155	3.28	9.2203
-250	3.28	5.0982	-45	3.28	134.3630	160	3.28	8.7210
-245	3.28	5.3242	-40	3.28	145.5613	165	3.28	8.2604
-240	3.28	5.5653	-35	3.28	153.3803	170	3.28	7.8345
-235	3.28	5.8232	-30	3.28	157.0536	175	3.28	7.4402
-230	3.28	6.0992	-25	3.28	157.15	180	3.28	7.0743
-225	3.28	6.3952	-20	3.28	155.1636	185	3.28	6.7344
-220	3.28	6.7131	-15	3.28	152.5173	190	3.28	6.4180
-215	3.28	7.0550	-10	3.28	149.8499	195	3.28	6.1231
-210	3.28	7.4234	-5	3.28	146.8322	200	3.28	5.8477
-205	3.28	7.8211	0	3.28	142.4414	205	3.28	5.5903
-200	3.28	8.2513	5	3.28	135.6123	210	3.28	5.3493
-195	3.28	8.7173	10	3.28	126.0172	215	3.28	5.1234
-190	3.28	9.2234	15	3.28	114.3745	220	3.28	4.9114
-185	3.28	9.7741	20	3.28	101.9839	225	3.28	4.7121
-180	3.28	10.3746	25	3.28	90.0161	230	3.28	4.5247
-175	3.28	11.0311	30	3.28	79.1603	235	3.28	4.3480
-170	3.28	11.7504	35	3.28	69.6625	240	3.28	4.1815
-165	3.28	12.5407	40	3.28	61.5003	245	3.28	4.0242
-160	3.28	13.4111	45	3.28	54.5323	250	3.28	3.8757
-155	3.28	14.3726	50	3.28	48.5848	255	3.28	3.7351
-150	3.28	15.4377	55	3.28	43.4919	260	3.28	3.6020
-145	3.28	16.6213	60	3.28	39.1099	265	3.28	3.4758
-140	3.28	17.9406	65	3.28	35.3195	270	3.28	3.3561
-135	3.28	19.4163	70	3.28	32.0233	275	3.28	3.2425
-130	3.28	21.0726	75	3.28	29.1423	280	3.28	3.1345
-125	3.28	22.9382	80	3.28	26.6120	285	3.28	3.0318
-120	3.28	25.0475	85	3.28	24.3800	290	3.28	2.9340
-115	3.28	27.4415	90	3.28	22.4029	295	3.28	2.8409
-110	3.28	30.1694	95	3.28	20.6449	300	3.28	2.7521
-105	3.28	33.2901	100	3.28	19.0761			
-100	3.28	36.8744	105	3.28	17.6714			



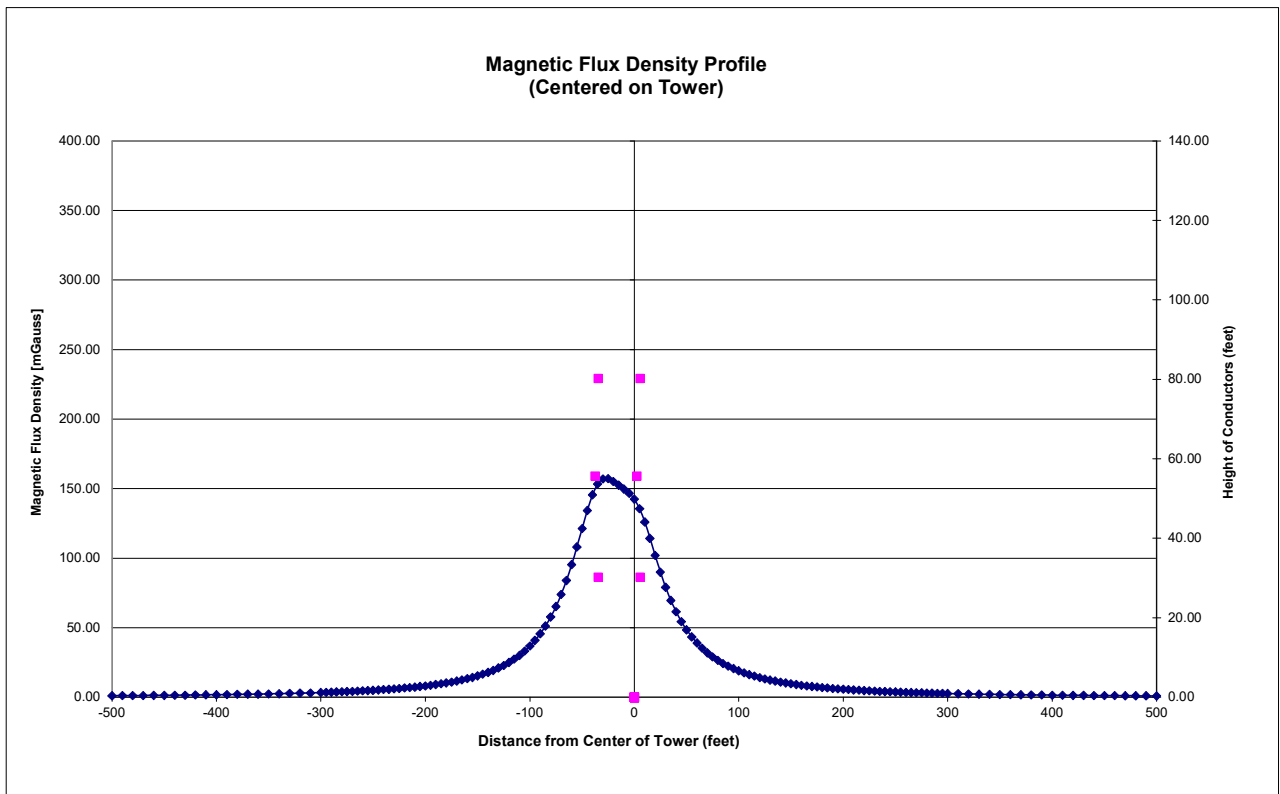
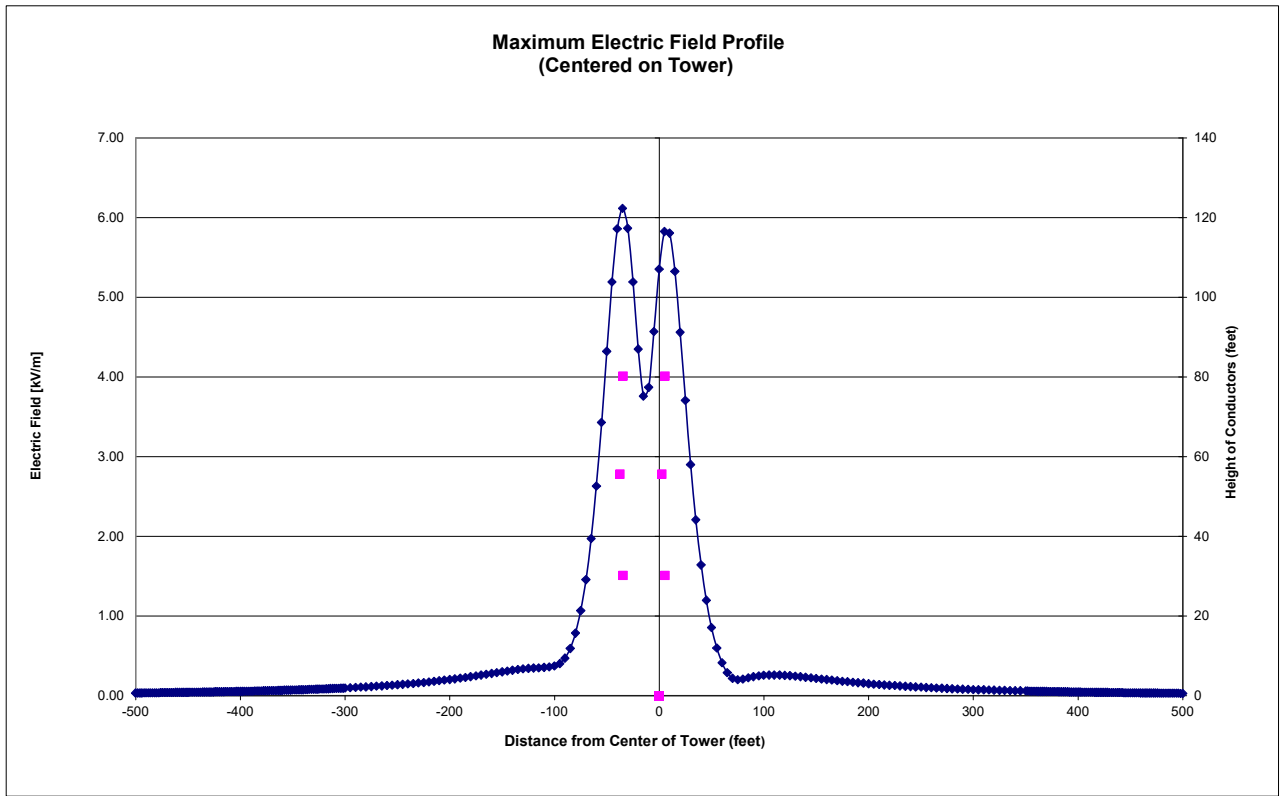
Scenario 7 - 2-Pole Vertical Right Angle Config. (a)

Scenario 8 - 2-Pole Vertical Right Angle Config. (b)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0984	-95	3.28	0.4057	110	3.28	0.2618
-295	3.28	0.1017	-90	3.28	0.4732	115	3.28	0.2601
-290	3.28	0.1051	-85	3.28	0.5946	120	3.28	0.2566
-285	3.28	0.1086	-80	3.28	0.7872	125	3.28	0.2518
-280	3.28	0.1123	-75	3.28	1.0678	130	3.28	0.2461
-275	3.28	0.1162	-70	3.28	1.4560	135	3.28	0.2396
-270	3.28	0.1203	-65	3.28	1.9722	140	3.28	0.2328
-265	3.28	0.1246	-60	3.28	2.6318	145	3.28	0.2256
-260	3.28	0.1291	-55	3.28	3.4307	150	3.28	0.2183
-255	3.28	0.1338	-50	3.28	4.3225	155	3.28	0.2111
-250	3.28	0.1388	-45	3.28	5.1930	160	3.28	0.2038
-245	3.28	0.1440	-40	3.28	5.8573	165	3.28	0.1967
-240	3.28	0.1495	-35	3.28	6.12	170	3.28	0.1898
-235	3.28	0.1552	-30	3.28	5.8671	175	3.28	0.1830
-230	3.28	0.1613	-25	3.28	5.1921	180	3.28	0.1765
-225	3.28	0.1676	-20	3.28	4.3516	185	3.28	0.1702
-220	3.28	0.1743	-15	3.28	3.7613	190	3.28	0.1641
-215	3.28	0.1813	-10	3.28	3.8693	195	3.28	0.1582
-210	3.28	0.1887	-5	3.28	4.5701	200	3.28	0.1526
-205	3.28	0.1964	0	3.28	5.3520	205	3.28	0.1472
-200	3.28	0.2045	5	3.28	5.8244	210	3.28	0.1421
-195	3.28	0.2129	10	3.28	5.8041	215	3.28	0.1371
-190	3.28	0.2217	15	3.28	5.3241	220	3.28	0.1324
-185	3.28	0.2309	20	3.28	4.5601	225	3.28	0.1279
-180	3.28	0.2404	25	3.28	3.7072	230	3.28	0.1235
-175	3.28	0.2502	30	3.28	2.9012	235	3.28	0.1194
-170	3.28	0.2603	35	3.28	2.2073	240	3.28	0.1155
-165	3.28	0.2707	40	3.28	1.6424	245	3.28	0.1117
-160	3.28	0.2812	45	3.28	1.1979	250	3.28	0.1081
-155	3.28	0.2917	50	3.28	0.8566	255	3.28	0.1046
-150	3.28	0.3021	55	3.28	0.6005	260	3.28	0.1013
-145	3.28	0.3122	60	3.28	0.4148	265	3.28	0.0981
-140	3.28	0.3217	65	3.28	0.2896	270	3.28	0.0951
-135	3.28	0.3305	70	3.28	0.2210	275	3.28	0.0922
-130	3.28	0.3382	75	3.28	0.2016	280	3.28	0.0894
-125	3.28	0.3445	80	3.28	0.2094	285	3.28	0.0868
-120	3.28	0.3492	85	3.28	0.2248	290	3.28	0.0842
-115	3.28	0.3526	90	3.28	0.2394	295	3.28	0.0817
-110	3.28	0.3555	95	3.28	0.2505	300	3.28	0.0794
-105	3.28	0.3606	100	3.28	0.2576			
-100	3.28	0.3737	105	3.28	0.2611			

Scenario 8 - 2-Pole Vertical Right Angle Config. (b)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	3.4548	-95	3.28	41.0070	110	3.28	16.4095
-295	3.28	3.5804	-90	3.28	45.7885	115	3.28	15.2727
-290	3.28	3.7130	-85	3.28	51.3371	120	3.28	14.2454
-285	3.28	3.8530	-80	3.28	57.7888	125	3.28	13.3146
-280	3.28	4.0010	-75	3.28	65.2928	130	3.28	12.4690
-275	3.28	4.1578	-70	3.28	73.9993	135	3.28	11.6988
-270	3.28	4.3239	-65	3.28	84.0315	140	3.28	10.9958
-265	3.28	4.5001	-60	3.28	95.4269	145	3.28	10.3525
-260	3.28	4.6873	-55	3.28	108.0331	150	3.28	9.7625
-255	3.28	4.8863	-50	3.28	121.3492	155	3.28	9.2203
-250	3.28	5.0982	-45	3.28	134.3630	160	3.28	8.7210
-245	3.28	5.3242	-40	3.28	145.5613	165	3.28	8.2604
-240	3.28	5.5653	-35	3.28	153.3803	170	3.28	7.8345
-235	3.28	5.8232	-30	3.28	157.0536	175	3.28	7.4402
-230	3.28	6.0992	-25	3.28	157.15	180	3.28	7.0743
-225	3.28	6.3952	-20	3.28	155.1636	185	3.28	6.7344
-220	3.28	6.7131	-15	3.28	152.5173	190	3.28	6.4180
-215	3.28	7.0550	-10	3.28	149.8499	195	3.28	6.1231
-210	3.28	7.4234	-5	3.28	146.8322	200	3.28	5.8477
-205	3.28	7.8211	0	3.28	142.4414	205	3.28	5.5903
-200	3.28	8.2513	5	3.28	135.6123	210	3.28	5.3493
-195	3.28	8.7173	10	3.28	126.0172	215	3.28	5.1234
-190	3.28	9.2234	15	3.28	114.3745	220	3.28	4.9114
-185	3.28	9.7741	20	3.28	101.9839	225	3.28	4.7121
-180	3.28	10.3746	25	3.28	90.0161	230	3.28	4.5247
-175	3.28	11.0311	30	3.28	79.1603	235	3.28	4.3480
-170	3.28	11.7504	35	3.28	69.6625	240	3.28	4.1815
-165	3.28	12.5407	40	3.28	61.5003	245	3.28	4.0242
-160	3.28	13.4111	45	3.28	54.5323	250	3.28	3.8757
-155	3.28	14.3726	50	3.28	48.5848	255	3.28	3.7351
-150	3.28	15.4377	55	3.28	43.4919	260	3.28	3.6020
-145	3.28	16.6213	60	3.28	39.1099	265	3.28	3.4758
-140	3.28	17.9406	65	3.28	35.3195	270	3.28	3.3561
-135	3.28	19.4163	70	3.28	32.0233	275	3.28	3.2425
-130	3.28	21.0726	75	3.28	29.1423	280	3.28	3.1345
-125	3.28	22.9382	80	3.28	26.6120	285	3.28	3.0318
-120	3.28	25.0475	85	3.28	24.3800	290	3.28	2.9340
-115	3.28	27.4415	90	3.28	22.4029	295	3.28	2.8409
-110	3.28	30.1694	95	3.28	20.6449	300	3.28	2.7521
-105	3.28	33.2901	100	3.28	19.0761			
-100	3.28	36.8744	105	3.28	17.6714			



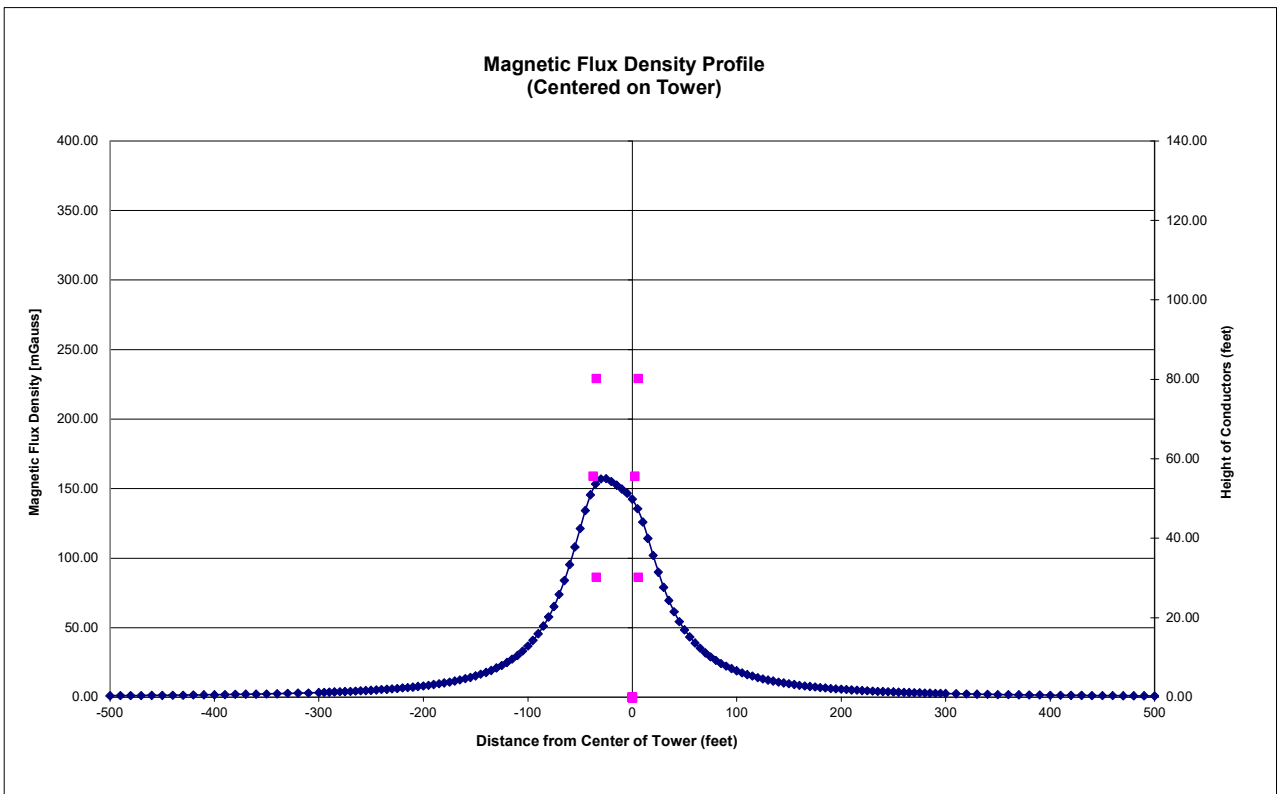
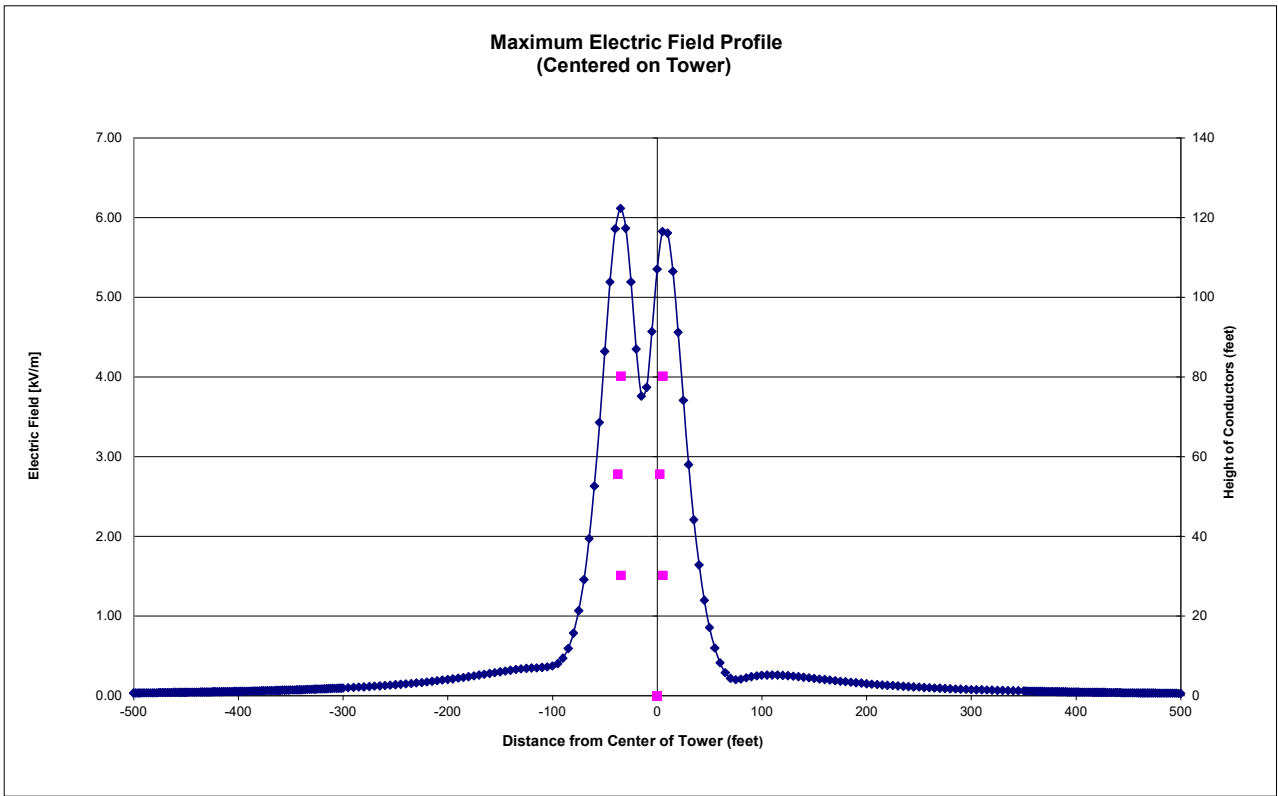
Scenario 8 - 2-Pole Vertical Right Angle Config. (b)

Scenario 9 - 2-Pole Vertical Right Angle Config. (C)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0984	-95	3.28	0.4057	110	3.28	0.2618
-295	3.28	0.1017	-90	3.28	0.4732	115	3.28	0.2601
-290	3.28	0.1051	-85	3.28	0.5946	120	3.28	0.2566
-285	3.28	0.1086	-80	3.28	0.7872	125	3.28	0.2518
-280	3.28	0.1123	-75	3.28	1.0678	130	3.28	0.2461
-275	3.28	0.1162	-70	3.28	1.4560	135	3.28	0.2396
-270	3.28	0.1203	-65	3.28	1.9722	140	3.28	0.2328
-265	3.28	0.1246	-60	3.28	2.6318	145	3.28	0.2256
-260	3.28	0.1291	-55	3.28	3.4307	150	3.28	0.2183
-255	3.28	0.1338	-50	3.28	4.3225	155	3.28	0.2111
-250	3.28	0.1388	-45	3.28	5.1930	160	3.28	0.2038
-245	3.28	0.1440	-40	3.28	5.8573	165	3.28	0.1967
-240	3.28	0.1495	-35	3.28	6.12	170	3.28	0.1898
-235	3.28	0.1552	-30	3.28	5.8671	175	3.28	0.1830
-230	3.28	0.1613	-25	3.28	5.1921	180	3.28	0.1765
-225	3.28	0.1676	-20	3.28	4.3516	185	3.28	0.1702
-220	3.28	0.1743	-15	3.28	3.7613	190	3.28	0.1641
-215	3.28	0.1813	-10	3.28	3.8693	195	3.28	0.1582
-210	3.28	0.1887	-5	3.28	4.5701	200	3.28	0.1526
-205	3.28	0.1964	0	3.28	5.3520	205	3.28	0.1472
-200	3.28	0.2045	5	3.28	5.8244	210	3.28	0.1421
-195	3.28	0.2129	10	3.28	5.8041	215	3.28	0.1371
-190	3.28	0.2217	15	3.28	5.3241	220	3.28	0.1324
-185	3.28	0.2309	20	3.28	4.5601	225	3.28	0.1279
-180	3.28	0.2404	25	3.28	3.7072	230	3.28	0.1235
-175	3.28	0.2502	30	3.28	2.9012	235	3.28	0.1194
-170	3.28	0.2603	35	3.28	2.2073	240	3.28	0.1155
-165	3.28	0.2707	40	3.28	1.6424	245	3.28	0.1117
-160	3.28	0.2812	45	3.28	1.1979	250	3.28	0.1081
-155	3.28	0.2917	50	3.28	0.8566	255	3.28	0.1046
-150	3.28	0.3021	55	3.28	0.6005	260	3.28	0.1013
-145	3.28	0.3122	60	3.28	0.4148	265	3.28	0.0981
-140	3.28	0.3217	65	3.28	0.2896	270	3.28	0.0951
-135	3.28	0.3305	70	3.28	0.2210	275	3.28	0.0922
-130	3.28	0.3382	75	3.28	0.2016	280	3.28	0.0894
-125	3.28	0.3445	80	3.28	0.2094	285	3.28	0.0868
-120	3.28	0.3492	85	3.28	0.2248	290	3.28	0.0842
-115	3.28	0.3526	90	3.28	0.2394	295	3.28	0.0817
-110	3.28	0.3555	95	3.28	0.2505	300	3.28	0.0794
-105	3.28	0.3606	100	3.28	0.2576			
-100	3.28	0.3737	105	3.28	0.2611			

Scenario 9 - 2-Pole Vertical Right Angle Config. (C)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	3.4548	-95	3.28	41.0070	110	3.28	16.4095
-295	3.28	3.5804	-90	3.28	45.7885	115	3.28	15.2727
-290	3.28	3.7130	-85	3.28	51.3371	120	3.28	14.2454
-285	3.28	3.8530	-80	3.28	57.7888	125	3.28	13.3146
-280	3.28	4.0010	-75	3.28	65.2928	130	3.28	12.4690
-275	3.28	4.1578	-70	3.28	73.9993	135	3.28	11.6988
-270	3.28	4.3239	-65	3.28	84.0315	140	3.28	10.9958
-265	3.28	4.5001	-60	3.28	95.4269	145	3.28	10.3525
-260	3.28	4.6873	-55	3.28	108.0331	150	3.28	9.7625
-255	3.28	4.8863	-50	3.28	121.3492	155	3.28	9.2203
-250	3.28	5.0982	-45	3.28	134.3630	160	3.28	8.7210
-245	3.28	5.3242	-40	3.28	145.5613	165	3.28	8.2604
-240	3.28	5.5653	-35	3.28	153.3803	170	3.28	7.8345
-235	3.28	5.8232	-30	3.28	157.0536	175	3.28	7.4402
-230	3.28	6.0992	-25	3.28	157.15	180	3.28	7.0743
-225	3.28	6.3952	-20	3.28	155.1636	185	3.28	6.7344
-220	3.28	6.7131	-15	3.28	152.5173	190	3.28	6.4180
-215	3.28	7.0550	-10	3.28	149.8499	195	3.28	6.1231
-210	3.28	7.4234	-5	3.28	146.8322	200	3.28	5.8477
-205	3.28	7.8211	0	3.28	142.4414	205	3.28	5.5903
-200	3.28	8.2513	5	3.28	135.6123	210	3.28	5.3493
-195	3.28	8.7173	10	3.28	126.0172	215	3.28	5.1234
-190	3.28	9.2234	15	3.28	114.3745	220	3.28	4.9114
-185	3.28	9.7741	20	3.28	101.9839	225	3.28	4.7121
-180	3.28	10.3746	25	3.28	90.0161	230	3.28	4.5247
-175	3.28	11.0311	30	3.28	79.1603	235	3.28	4.3480
-170	3.28	11.7504	35	3.28	69.6625	240	3.28	4.1815
-165	3.28	12.5407	40	3.28	61.5003	245	3.28	4.0242
-160	3.28	13.4111	45	3.28	54.5323	250	3.28	3.8757
-155	3.28	14.3726	50	3.28	48.5848	255	3.28	3.7351
-150	3.28	15.4377	55	3.28	43.4919	260	3.28	3.6020
-145	3.28	16.6213	60	3.28	39.1099	265	3.28	3.4758
-140	3.28	17.9406	65	3.28	35.3195	270	3.28	3.3561
-135	3.28	19.4163	70	3.28	32.0233	275	3.28	3.2425
-130	3.28	21.0726	75	3.28	29.1423	280	3.28	3.1345
-125	3.28	22.9382	80	3.28	26.6120	285	3.28	3.0318
-120	3.28	25.0475	85	3.28	24.3800	290	3.28	2.9340
-115	3.28	27.4415	90	3.28	22.4029	295	3.28	2.8409
-110	3.28	30.1694	95	3.28	20.6449	300	3.28	2.7521
-105	3.28	33.2901	100	3.28	19.0761			
-100	3.28	36.8744	105	3.28	17.6714			



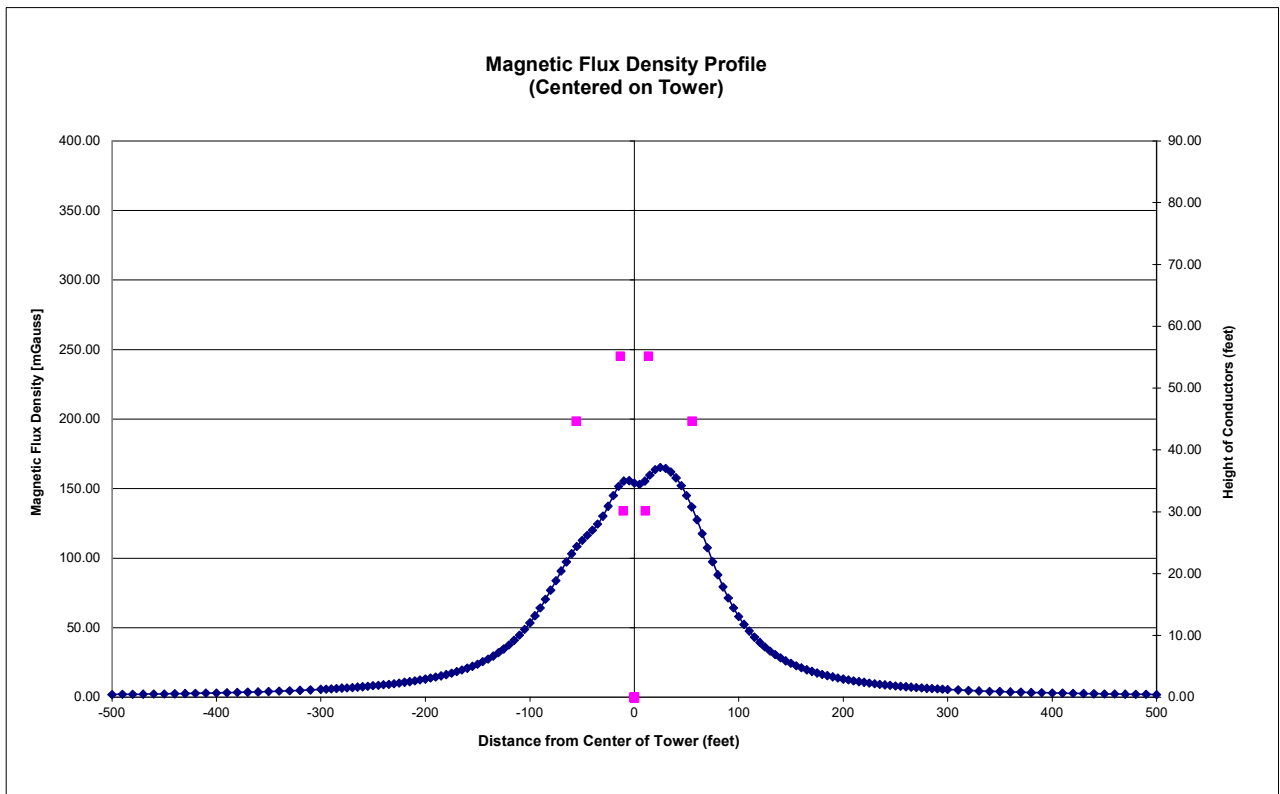
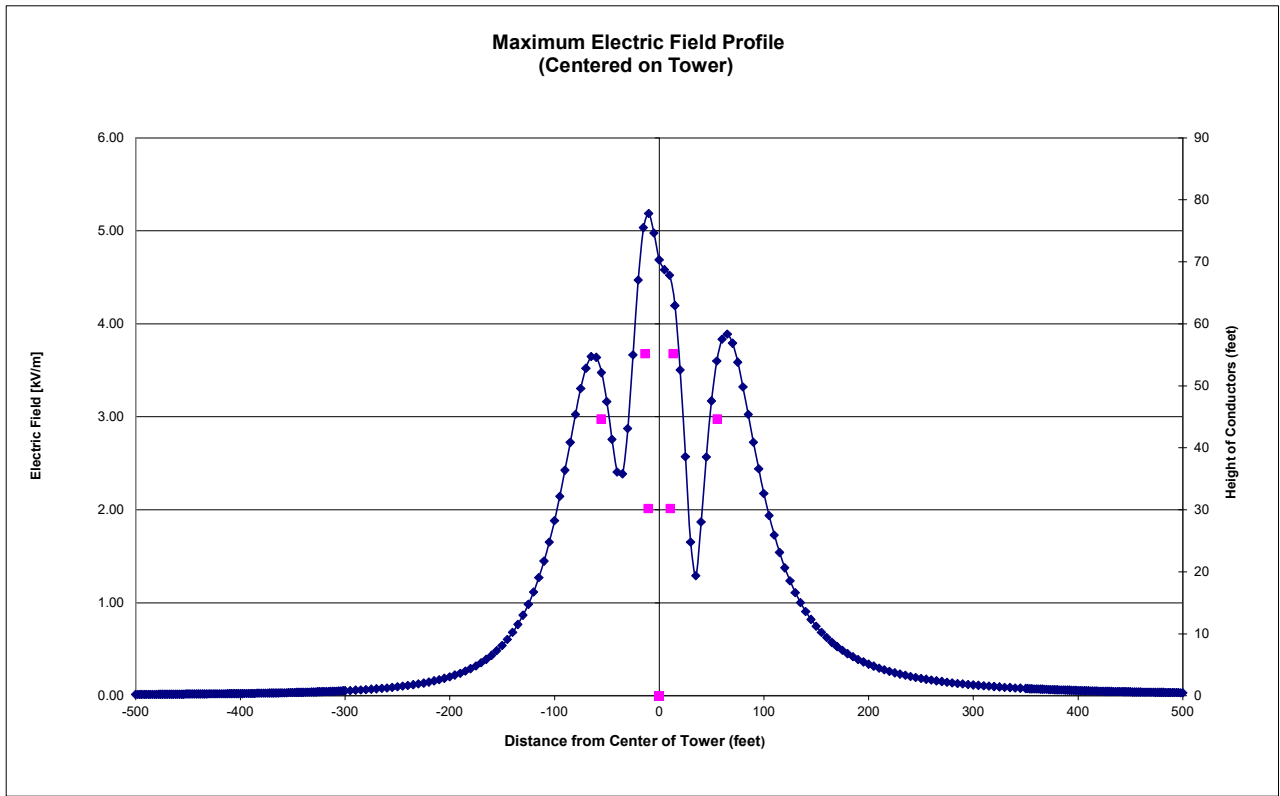
Scenario 9 - 2-Pole Vertical Right Angle Config. (C)

Scenario 10 - 2-Pole Delta Deadend Config. (a)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0543	-95	3.28	2.1434	110	3.28	1.7272
-295	3.28	0.0571	-90	3.28	2.4267	115	3.28	1.5409
-290	3.28	0.0602	-85	3.28	2.7261	120	3.28	1.3777
-285	3.28	0.0635	-80	3.28	3.0263	125	3.28	1.2351
-280	3.28	0.0672	-75	3.28	3.3033	130	3.28	1.1105
-275	3.28	0.0711	-70	3.28	3.5237	135	3.28	1.0015
-270	3.28	0.0753	-65	3.28	3.6482	140	3.28	0.9061
-265	3.28	0.0800	-60	3.28	3.6397	145	3.28	0.8224
-260	3.28	0.0850	-55	3.28	3.4753	150	3.28	0.7488
-255	3.28	0.0906	-50	3.28	3.1625	155	3.28	0.6838
-250	3.28	0.0966	-45	3.28	2.7583	160	3.28	0.6263
-245	3.28	0.1032	-40	3.28	2.4074	165	3.28	0.5752
-240	3.28	0.1105	-35	3.28	2.3867	170	3.28	0.5297
-235	3.28	0.1185	-30	3.28	2.8742	175	3.28	0.4891
-230	3.28	0.1273	-25	3.28	3.6664	180	3.28	0.4526
-225	3.28	0.1371	-20	3.28	4.4716	185	3.28	0.4199
-220	3.28	0.1478	-15	3.28	5.0336	190	3.28	0.3904
-215	3.28	0.1597	-10	3.28	5.19	195	3.28	0.3638
-210	3.28	0.1730	-5	3.28	4.9775	200	3.28	0.3396
-205	3.28	0.1877	0	3.28	4.6895	205	3.28	0.3177
-200	3.28	0.2042	5	3.28	4.5831	210	3.28	0.2977
-195	3.28	0.2226	10	3.28	4.5231	215	3.28	0.2795
-190	3.28	0.2432	15	3.28	4.1982	220	3.28	0.2628
-185	3.28	0.2663	20	3.28	3.5045	225	3.28	0.2475
-180	3.28	0.2924	25	3.28	2.5714	230	3.28	0.2334
-175	3.28	0.3219	30	3.28	1.6530	235	3.28	0.2205
-170	3.28	0.3553	35	3.28	1.2915	240	3.28	0.2085
-165	3.28	0.3933	40	3.28	1.8690	245	3.28	0.1975
-160	3.28	0.4365	45	3.28	2.5701	250	3.28	0.1873
-155	3.28	0.4858	50	3.28	3.1717	255	3.28	0.1778
-150	3.28	0.5424	55	3.28	3.6005	260	3.28	0.1690
-145	3.28	0.6073	60	3.28	3.8359	265	3.28	0.1608
-140	3.28	0.6821	65	3.28	3.8890	270	3.28	0.1532
-135	3.28	0.7683	70	3.28	3.7925	275	3.28	0.1461
-130	3.28	0.8680	75	3.28	3.5892	280	3.28	0.1395
-125	3.28	0.9834	80	3.28	3.3218	285	3.28	0.1332
-120	3.28	1.1169	85	3.28	3.0257	290	3.28	0.1274
-115	3.28	1.2712	90	3.28	2.7265	295	3.28	0.1219
-110	3.28	1.4491	95	3.28	2.4405	300	3.28	0.1168
-105	3.28	1.6530	100	3.28	2.1766			
-100	3.28	1.8844	105	3.28	1.9387			

Scenario 10 - 2-Pole Delta Deadend Config. (a)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	5.7112	-95	3.28	58.6713	110	3.28	47.6026
-295	3.28	5.9112	-90	3.28	64.3417	115	3.28	43.3171
-290	3.28	6.1219	-85	3.28	70.5073	120	3.28	39.5446
-285	3.28	6.3441	-80	3.28	77.0868	125	3.28	36.2171
-280	3.28	6.5786	-75	3.28	83.9254	130	3.28	33.2745
-275	3.28	6.8264	-70	3.28	90.7864	135	3.28	30.6646
-270	3.28	7.0885	-65	3.28	97.3666	140	3.28	28.3423
-265	3.28	7.3661	-60	3.28	103.3521	145	3.28	26.2691
-260	3.28	7.6603	-55	3.28	108.5144	150	3.28	24.4123
-255	3.28	7.9725	-50	3.28	112.8228	155	3.28	22.7437
-250	3.28	8.3042	-45	3.28	116.5324	160	3.28	21.2396
-245	3.28	8.6571	-40	3.28	120.1981	165	3.28	19.8795
-240	3.28	9.0330	-35	3.28	124.5638	170	3.28	18.6459
-235	3.28	9.4340	-30	3.28	130.2674	175	3.28	17.5239
-230	3.28	9.8622	-25	3.28	137.3904	180	3.28	16.5005
-225	3.28	10.3203	-20	3.28	145.0979	185	3.28	15.5646
-220	3.28	10.8110	-15	3.28	151.7217	190	3.28	14.7066
-215	3.28	11.3375	-10	3.28	155.5071	195	3.28	13.9182
-210	3.28	11.9034	-5	3.28	155.8314	200	3.28	13.1919
-205	3.28	12.5126	0	3.28	154.0760	205	3.28	12.5215
-200	3.28	13.1696	5	3.28	153.2061	210	3.28	11.9013
-195	3.28	13.8794	10	3.28	155.4525	215	3.28	11.3265
-190	3.28	14.6479	15	3.28	159.8537	220	3.28	10.7928
-185	3.28	15.4814	20	3.28	163.6892	225	3.28	10.2962
-180	3.28	16.3875	25	3.28	165.33	230	3.28	9.8335
-175	3.28	17.3745	30	3.28	164.6230	235	3.28	9.4015
-170	3.28	18.4522	35	3.28	161.9647	240	3.28	8.9977
-165	3.28	19.6317	40	3.28	157.7264	245	3.28	8.6196
-160	3.28	20.9255	45	3.28	152.0841	250	3.28	8.2650
-155	3.28	22.3483	50	3.28	145.1042	255	3.28	7.9321
-150	3.28	23.9170	55	3.28	136.8807	260	3.28	7.6191
-145	3.28	25.6509	60	3.28	127.6313	265	3.28	7.3244
-140	3.28	27.5723	65	3.28	117.7107	270	3.28	7.0467
-135	3.28	29.7066	70	3.28	107.5501	275	3.28	6.7846
-130	3.28	32.0831	75	3.28	97.5661	280	3.28	6.5370
-125	3.28	34.7348	80	3.28	88.0882	285	3.28	6.3028
-120	3.28	37.6990	85	3.28	79.3296	290	3.28	6.0811
-115	3.28	41.0165	90	3.28	71.3939	295	3.28	5.8710
-110	3.28	44.7307	95	3.28	64.3011	300	3.28	5.6716
-105	3.28	48.8858	100	3.28	58.0166			
-100	3.28	53.5226	105	3.28	52.4761			



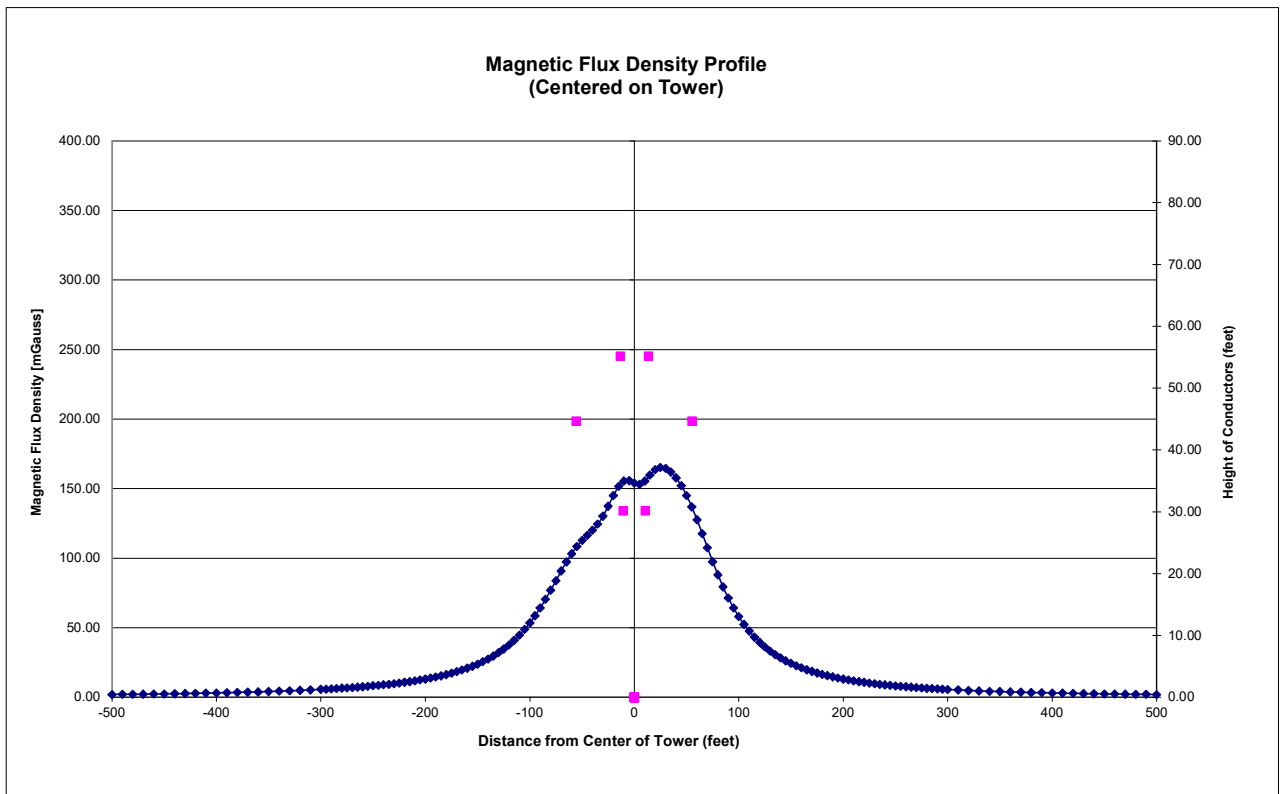
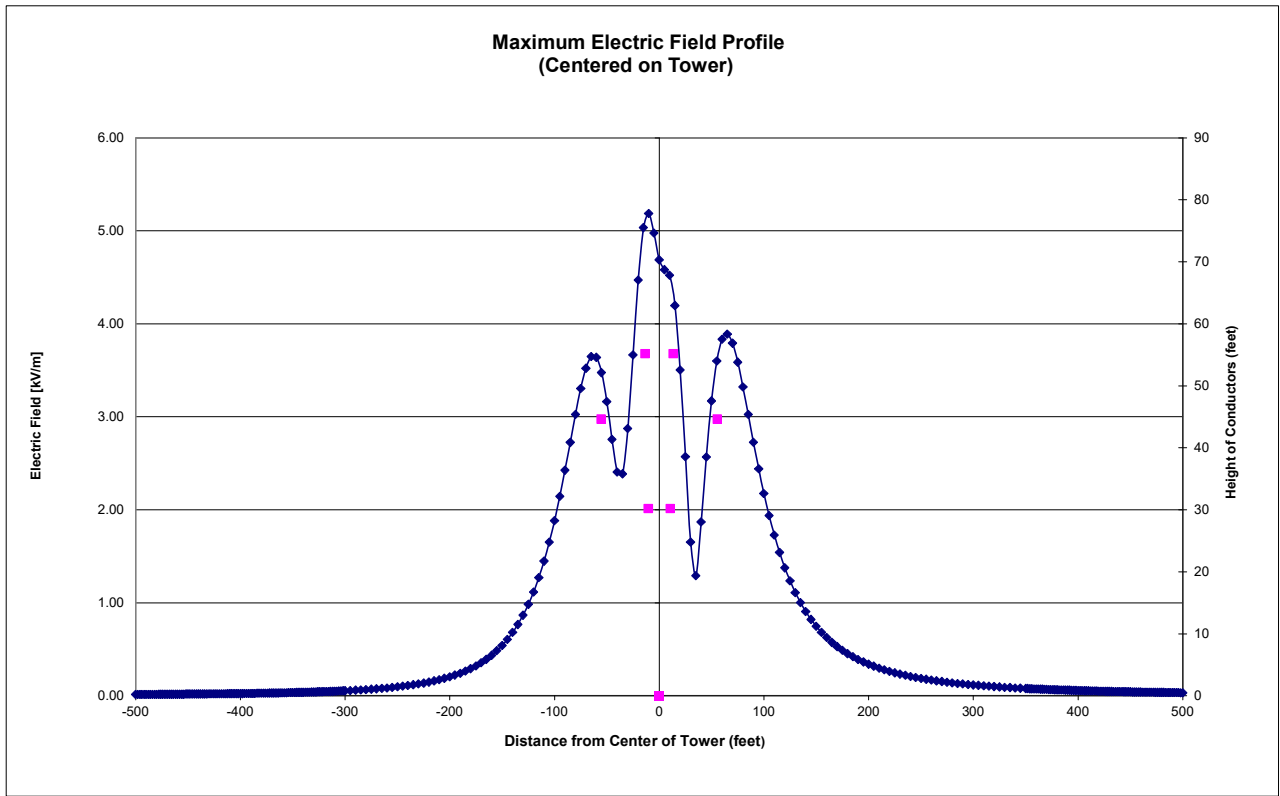
Scenario 10 - 2-Pole Delta Deadend Config. (a)

Scenario 11 - 2-Pole Delta Deadend Config. (b)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0543	-95	3.28	2.1434	110	3.28	1.7272
-295	3.28	0.0571	-90	3.28	2.4267	115	3.28	1.5409
-290	3.28	0.0602	-85	3.28	2.7261	120	3.28	1.3777
-285	3.28	0.0635	-80	3.28	3.0263	125	3.28	1.2351
-280	3.28	0.0672	-75	3.28	3.3033	130	3.28	1.1105
-275	3.28	0.0711	-70	3.28	3.5237	135	3.28	1.0015
-270	3.28	0.0753	-65	3.28	3.6482	140	3.28	0.9061
-265	3.28	0.0800	-60	3.28	3.6397	145	3.28	0.8224
-260	3.28	0.0850	-55	3.28	3.4753	150	3.28	0.7488
-255	3.28	0.0906	-50	3.28	3.1625	155	3.28	0.6838
-250	3.28	0.0966	-45	3.28	2.7583	160	3.28	0.6263
-245	3.28	0.1032	-40	3.28	2.4074	165	3.28	0.5752
-240	3.28	0.1105	-35	3.28	2.3867	170	3.28	0.5297
-235	3.28	0.1185	-30	3.28	2.8742	175	3.28	0.4891
-230	3.28	0.1273	-25	3.28	3.6664	180	3.28	0.4526
-225	3.28	0.1371	-20	3.28	4.4716	185	3.28	0.4199
-220	3.28	0.1478	-15	3.28	5.0336	190	3.28	0.3904
-215	3.28	0.1597	-10	3.28	5.19	195	3.28	0.3638
-210	3.28	0.1730	-5	3.28	4.9775	200	3.28	0.3396
-205	3.28	0.1877	0	3.28	4.6895	205	3.28	0.3177
-200	3.28	0.2042	5	3.28	4.5831	210	3.28	0.2977
-195	3.28	0.2226	10	3.28	4.5231	215	3.28	0.2795
-190	3.28	0.2432	15	3.28	4.1982	220	3.28	0.2628
-185	3.28	0.2663	20	3.28	3.5045	225	3.28	0.2475
-180	3.28	0.2924	25	3.28	2.5714	230	3.28	0.2334
-175	3.28	0.3219	30	3.28	1.6530	235	3.28	0.2205
-170	3.28	0.3553	35	3.28	1.2915	240	3.28	0.2085
-165	3.28	0.3933	40	3.28	1.8690	245	3.28	0.1975
-160	3.28	0.4365	45	3.28	2.5701	250	3.28	0.1873
-155	3.28	0.4858	50	3.28	3.1717	255	3.28	0.1778
-150	3.28	0.5424	55	3.28	3.6005	260	3.28	0.1690
-145	3.28	0.6073	60	3.28	3.8359	265	3.28	0.1608
-140	3.28	0.6821	65	3.28	3.8890	270	3.28	0.1532
-135	3.28	0.7683	70	3.28	3.7925	275	3.28	0.1461
-130	3.28	0.8680	75	3.28	3.5892	280	3.28	0.1395
-125	3.28	0.9834	80	3.28	3.3218	285	3.28	0.1332
-120	3.28	1.1169	85	3.28	3.0257	290	3.28	0.1274
-115	3.28	1.2712	90	3.28	2.7265	295	3.28	0.1219
-110	3.28	1.4491	95	3.28	2.4405	300	3.28	0.1168
-105	3.28	1.6530	100	3.28	2.1766			
-100	3.28	1.8844	105	3.28	1.9387			

Scenario 11 - 2-Pole Delta Deadend Config. (b)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	5.7112	-95	3.28	58.6713	110	3.28	47.6026
-295	3.28	5.9112	-90	3.28	64.3417	115	3.28	43.3171
-290	3.28	6.1219	-85	3.28	70.5073	120	3.28	39.5446
-285	3.28	6.3441	-80	3.28	77.0868	125	3.28	36.2171
-280	3.28	6.5786	-75	3.28	83.9254	130	3.28	33.2745
-275	3.28	6.8264	-70	3.28	90.7864	135	3.28	30.6646
-270	3.28	7.0885	-65	3.28	97.3666	140	3.28	28.3423
-265	3.28	7.3661	-60	3.28	103.3521	145	3.28	26.2691
-260	3.28	7.6603	-55	3.28	108.5144	150	3.28	24.4123
-255	3.28	7.9725	-50	3.28	112.8228	155	3.28	22.7437
-250	3.28	8.3042	-45	3.28	116.5324	160	3.28	21.2396
-245	3.28	8.6571	-40	3.28	120.1981	165	3.28	19.8795
-240	3.28	9.0330	-35	3.28	124.5638	170	3.28	18.6459
-235	3.28	9.4340	-30	3.28	130.2674	175	3.28	17.5239
-230	3.28	9.8622	-25	3.28	137.3904	180	3.28	16.5005
-225	3.28	10.3203	-20	3.28	145.0979	185	3.28	15.5646
-220	3.28	10.8110	-15	3.28	151.7217	190	3.28	14.7066
-215	3.28	11.3375	-10	3.28	155.5071	195	3.28	13.9182
-210	3.28	11.9034	-5	3.28	155.8314	200	3.28	13.1919
-205	3.28	12.5126	0	3.28	154.0760	205	3.28	12.5215
-200	3.28	13.1696	5	3.28	153.2061	210	3.28	11.9013
-195	3.28	13.8794	10	3.28	155.4525	215	3.28	11.3265
-190	3.28	14.6479	15	3.28	159.8537	220	3.28	10.7928
-185	3.28	15.4814	20	3.28	163.6892	225	3.28	10.2962
-180	3.28	16.3875	25	3.28	165.33	230	3.28	9.8335
-175	3.28	17.3745	30	3.28	164.6230	235	3.28	9.4015
-170	3.28	18.4522	35	3.28	161.9647	240	3.28	8.9977
-165	3.28	19.6317	40	3.28	157.7264	245	3.28	8.6196
-160	3.28	20.9255	45	3.28	152.0841	250	3.28	8.2650
-155	3.28	22.3483	50	3.28	145.1042	255	3.28	7.9321
-150	3.28	23.9170	55	3.28	136.8807	260	3.28	7.6191
-145	3.28	25.6509	60	3.28	127.6313	265	3.28	7.3244
-140	3.28	27.5723	65	3.28	117.7107	270	3.28	7.0467
-135	3.28	29.7066	70	3.28	107.5501	275	3.28	6.7846
-130	3.28	32.0831	75	3.28	97.5661	280	3.28	6.5370
-125	3.28	34.7348	80	3.28	88.0882	285	3.28	6.3028
-120	3.28	37.6990	85	3.28	79.3296	290	3.28	6.0811
-115	3.28	41.0165	90	3.28	71.3939	295	3.28	5.8710
-110	3.28	44.7307	95	3.28	64.3011	300	3.28	5.6716
-105	3.28	48.8858	100	3.28	58.0166			
-100	3.28	53.5226	105	3.28	52.4761			



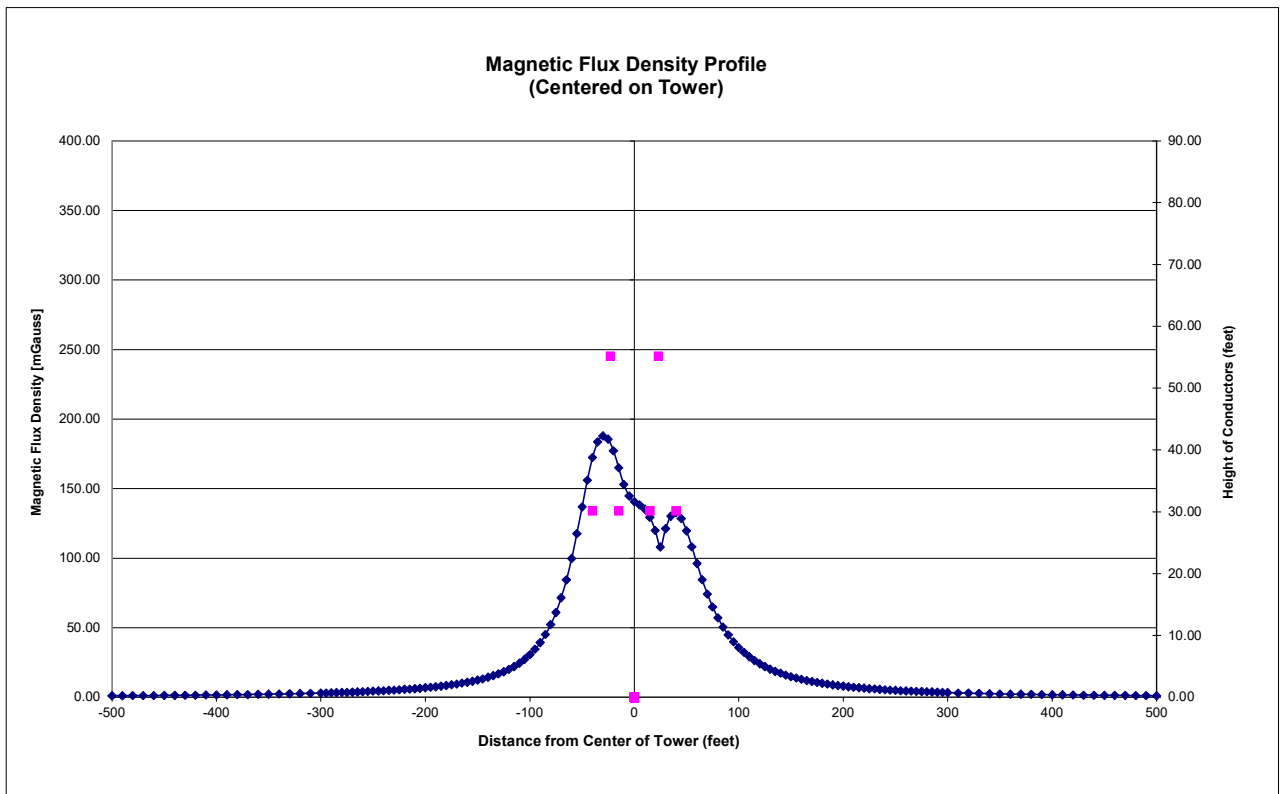
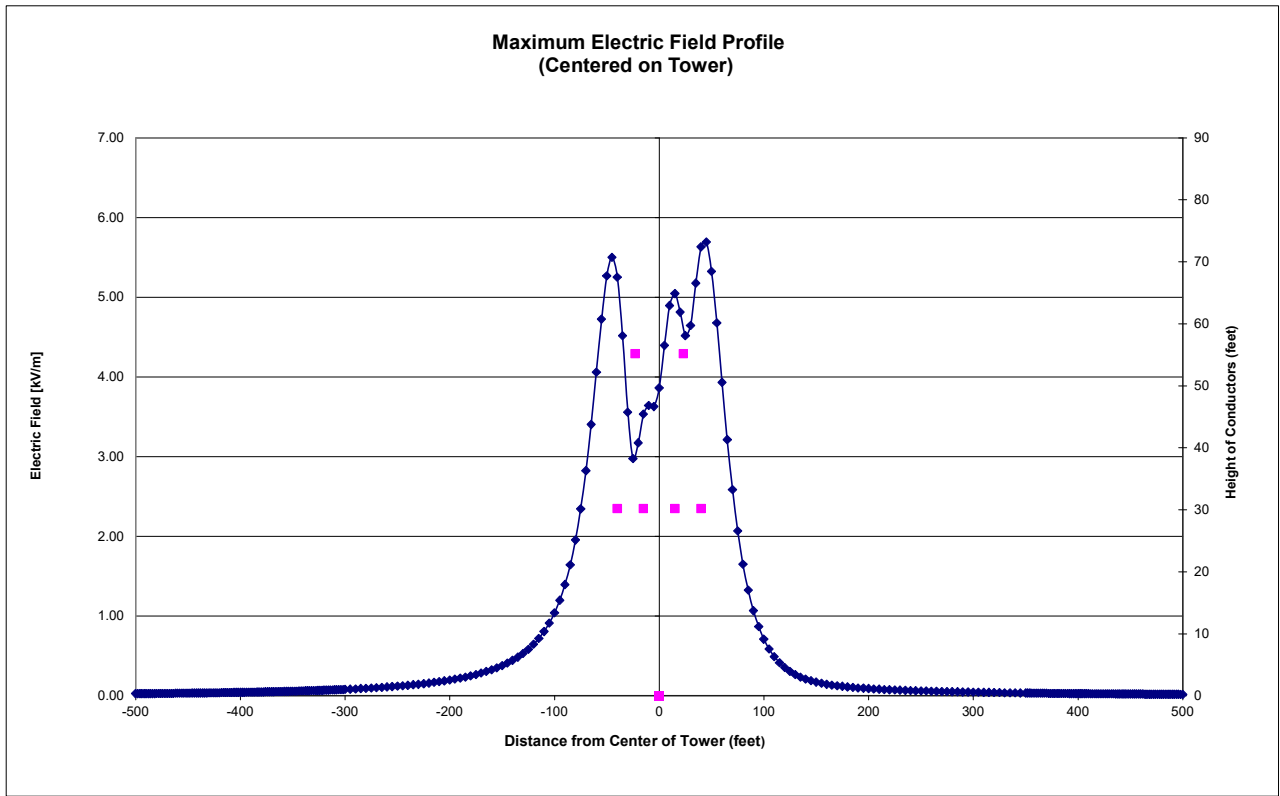
Scenario 11 - 2-Pole Delta Deadend Config. (b)

Scenario 12 - Horizontal Tangent Suspension Config. (a)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0808	-95	3.28	1.1997	110	3.28	0.4911
-295	3.28	0.0838	-90	3.28	1.3967	115	3.28	0.4148
-290	3.28	0.0870	-85	3.28	1.6437	120	3.28	0.3542
-285	3.28	0.0904	-80	3.28	1.9546	125	3.28	0.3057
-280	3.28	0.0940	-75	3.28	2.3443	130	3.28	0.2669
-275	3.28	0.0978	-70	3.28	2.8263	135	3.28	0.2354
-270	3.28	0.1018	-65	3.28	3.4046	140	3.28	0.2099
-265	3.28	0.1060	-60	3.28	4.0593	145	3.28	0.1889
-260	3.28	0.1106	-55	3.28	4.7246	150	3.28	0.1715
-255	3.28	0.1154	-50	3.28	5.2681	155	3.28	0.1571
-250	3.28	0.1206	-45	3.28	5.5005	160	3.28	0.1449
-245	3.28	0.1261	-40	3.28	5.2534	165	3.28	0.1345
-240	3.28	0.1319	-35	3.28	4.5173	170	3.28	0.1256
-235	3.28	0.1382	-30	3.28	3.5599	175	3.28	0.1178
-230	3.28	0.1450	-25	3.28	2.9781	180	3.28	0.1111
-225	3.28	0.1522	-20	3.28	3.1747	185	3.28	0.1051
-220	3.28	0.1600	-15	3.28	3.5333	190	3.28	0.0997
-215	3.28	0.1684	-10	3.28	3.6419	195	3.28	0.0949
-210	3.28	0.1774	-5	3.28	3.6286	200	3.28	0.0906
-205	3.28	0.1872	0	3.28	3.8617	205	3.28	0.0866
-200	3.28	0.1978	5	3.28	4.3974	210	3.28	0.0830
-195	3.28	0.2093	10	3.28	4.8958	215	3.28	0.0796
-190	3.28	0.2218	15	3.28	5.0467	220	3.28	0.0765
-185	3.28	0.2355	20	3.28	4.8133	225	3.28	0.0736
-180	3.28	0.2504	25	3.28	4.5200	230	3.28	0.0709
-175	3.28	0.2668	30	3.28	4.6479	235	3.28	0.0684
-170	3.28	0.2849	35	3.28	5.1770	240	3.28	0.0660
-165	3.28	0.3049	40	3.28	5.6327	245	3.28	0.0638
-160	3.28	0.3271	45	3.28	5.69	250	3.28	0.0617
-155	3.28	0.3518	50	3.28	5.3253	255	3.28	0.0597
-150	3.28	0.3794	55	3.28	4.6784	260	3.28	0.0578
-145	3.28	0.4105	60	3.28	3.9321	265	3.28	0.0560
-140	3.28	0.4457	65	3.28	3.2139	270	3.28	0.0543
-135	3.28	0.4858	70	3.28	2.5868	275	3.28	0.0527
-130	3.28	0.5318	75	3.28	2.0683	280	3.28	0.0511
-125	3.28	0.5851	80	3.28	1.6525	285	3.28	0.0496
-120	3.28	0.6472	85	3.28	1.3245	290	3.28	0.0482
-115	3.28	0.7205	90	3.28	1.0677	295	3.28	0.0468
-110	3.28	0.8079	95	3.28	0.8672	300	3.28	0.0455
-105	3.28	0.9132	100	3.28	0.7105			
-100	3.28	1.0415	105	3.28	0.5877			

Scenario 12 - Horizontal Tangent Suspension Config. (a)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	3.0782	-95	3.28	34.6176	110	3.28	29.1743
-295	3.28	3.1823	-90	3.28	39.3954	115	3.28	26.4952
-290	3.28	3.2918	-85	3.28	45.1949	120	3.28	24.1584
-285	3.28	3.4071	-80	3.28	52.2732	125	3.28	22.1102
-280	3.28	3.5286	-75	3.28	60.9408	130	3.28	20.3066
-275	3.28	3.6568	-70	3.28	71.5494	135	3.28	18.7113
-270	3.28	3.7922	-65	3.28	84.4455	140	3.28	17.2942
-265	3.28	3.9354	-60	3.28	99.8530	145	3.28	16.0303
-260	3.28	4.0869	-55	3.28	117.6436	150	3.28	14.8986
-255	3.28	4.2475	-50	3.28	136.9960	155	3.28	13.8817
-250	3.28	4.4179	-45	3.28	156.1229	160	3.28	12.9647
-245	3.28	4.5988	-40	3.28	172.4627	165	3.28	12.1351
-240	3.28	4.7913	-35	3.28	183.5517	170	3.28	11.3823
-235	3.28	4.9964	-30	3.28	187.97	175	3.28	10.6972
-230	3.28	5.2151	-25	3.28	185.5573	180	3.28	10.0719
-225	3.28	5.4488	-20	3.28	177.1843	185	3.28	9.4997
-220	3.28	5.6989	-15	3.28	165.0459	190	3.28	8.9749
-215	3.28	5.9670	-10	3.28	152.9784	195	3.28	8.4923
-210	3.28	6.2549	-5	3.28	144.6925	200	3.28	8.0476
-205	3.28	6.5647	0	3.28	140.6269	205	3.28	7.6369
-200	3.28	6.8987	5	3.28	138.4017	210	3.28	7.2568
-195	3.28	7.2596	10	3.28	135.2832	215	3.28	6.9044
-190	3.28	7.6506	15	3.28	129.3448	220	3.28	6.5771
-185	3.28	8.0750	20	3.28	119.9711	225	3.28	6.2725
-180	3.28	8.5372	25	3.28	108.1165	230	3.28	5.9887
-175	3.28	9.0418	30	3.28	121.2660	235	3.28	5.7236
-170	3.28	9.5944	35	3.28	130.2361	240	3.28	5.4758
-165	3.28	10.2018	40	3.28	132.5599	245	3.28	5.2438
-160	3.28	10.8717	45	3.28	128.5352	250	3.28	5.0262
-155	3.28	11.6135	50	3.28	119.7101	255	3.28	4.8219
-150	3.28	12.4384	55	3.28	108.2684	260	3.28	4.6298
-145	3.28	13.3601	60	3.28	96.1407	265	3.28	4.4490
-140	3.28	14.3952	65	3.28	84.5660	270	3.28	4.2786
-135	3.28	15.5641	70	3.28	74.1388	275	3.28	4.1178
-130	3.28	16.8919	75	3.28	65.0348	280	3.28	3.9660
-125	3.28	18.4100	80	3.28	57.2113	285	3.28	3.8223
-120	3.28	20.1578	85	3.28	50.5345	290	3.28	3.6864
-115	3.28	22.1846	90	3.28	44.8452	295	3.28	3.5576
-110	3.28	24.5531	95	3.28	39.9904	300	3.28	3.4354
-105	3.28	27.3427	100	3.28	35.8340			
-100	3.28	30.6546	105	3.28	32.2608			



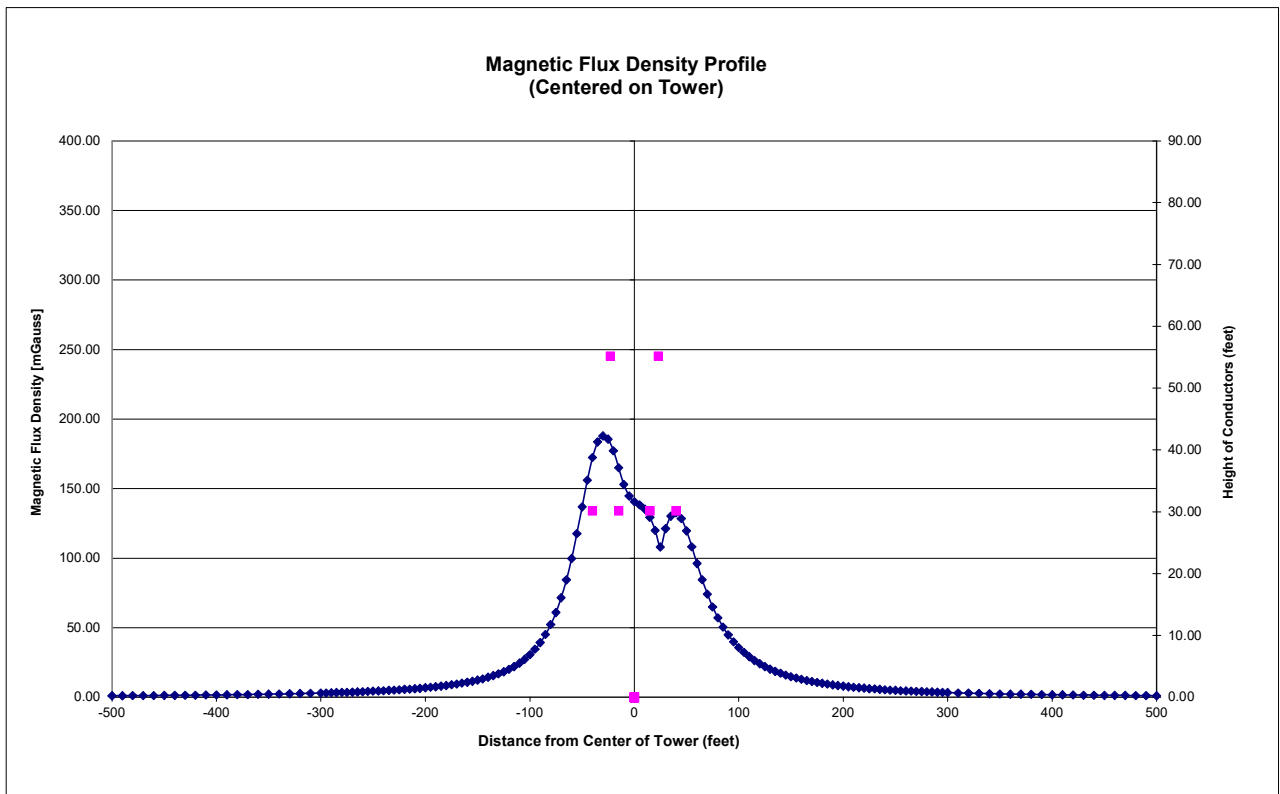
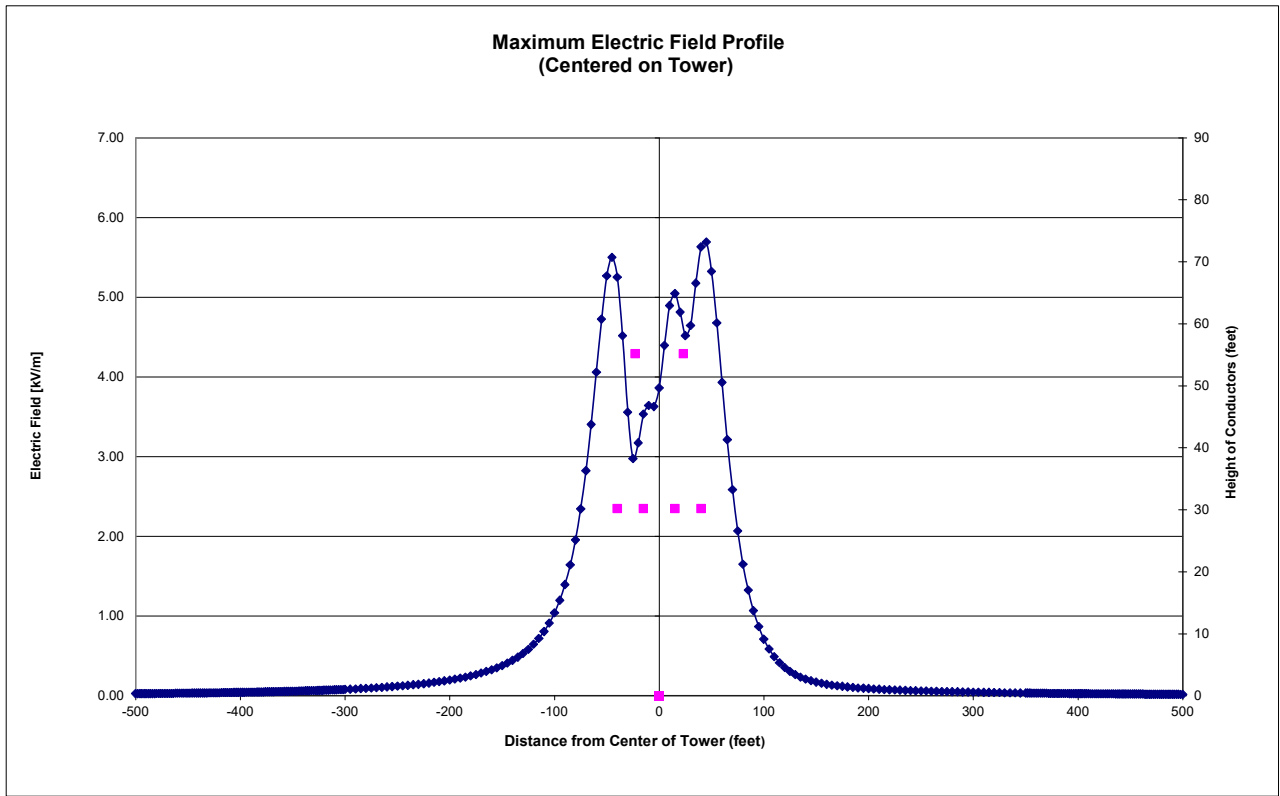
Scenario 12 - Horizontal Tangent Suspension Config. (a)

Scenario 13 - Horizontal Tangent Deadend Config. (a)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0808	-95	3.28	1.1997	110	3.28	0.4911
-295	3.28	0.0838	-90	3.28	1.3967	115	3.28	0.4148
-290	3.28	0.0870	-85	3.28	1.6437	120	3.28	0.3542
-285	3.28	0.0904	-80	3.28	1.9546	125	3.28	0.3057
-280	3.28	0.0940	-75	3.28	2.3443	130	3.28	0.2669
-275	3.28	0.0978	-70	3.28	2.8263	135	3.28	0.2354
-270	3.28	0.1018	-65	3.28	3.4046	140	3.28	0.2099
-265	3.28	0.1060	-60	3.28	4.0593	145	3.28	0.1889
-260	3.28	0.1106	-55	3.28	4.7246	150	3.28	0.1715
-255	3.28	0.1154	-50	3.28	5.2681	155	3.28	0.1571
-250	3.28	0.1206	-45	3.28	5.5005	160	3.28	0.1449
-245	3.28	0.1261	-40	3.28	5.2534	165	3.28	0.1345
-240	3.28	0.1319	-35	3.28	4.5173	170	3.28	0.1256
-235	3.28	0.1382	-30	3.28	3.5599	175	3.28	0.1178
-230	3.28	0.1450	-25	3.28	2.9781	180	3.28	0.1111
-225	3.28	0.1522	-20	3.28	3.1747	185	3.28	0.1051
-220	3.28	0.1600	-15	3.28	3.5333	190	3.28	0.0997
-215	3.28	0.1684	-10	3.28	3.6419	195	3.28	0.0949
-210	3.28	0.1774	-5	3.28	3.6286	200	3.28	0.0906
-205	3.28	0.1872	0	3.28	3.8617	205	3.28	0.0866
-200	3.28	0.1978	5	3.28	4.3974	210	3.28	0.0830
-195	3.28	0.2093	10	3.28	4.8958	215	3.28	0.0796
-190	3.28	0.2218	15	3.28	5.0467	220	3.28	0.0765
-185	3.28	0.2355	20	3.28	4.8133	225	3.28	0.0736
-180	3.28	0.2504	25	3.28	4.5200	230	3.28	0.0709
-175	3.28	0.2668	30	3.28	4.6479	235	3.28	0.0684
-170	3.28	0.2849	35	3.28	5.1770	240	3.28	0.0660
-165	3.28	0.3049	40	3.28	5.6327	245	3.28	0.0638
-160	3.28	0.3271	45	3.28	5.69	250	3.28	0.0617
-155	3.28	0.3518	50	3.28	5.3253	255	3.28	0.0597
-150	3.28	0.3794	55	3.28	4.6784	260	3.28	0.0578
-145	3.28	0.4105	60	3.28	3.9321	265	3.28	0.0560
-140	3.28	0.4457	65	3.28	3.2139	270	3.28	0.0543
-135	3.28	0.4858	70	3.28	2.5868	275	3.28	0.0527
-130	3.28	0.5318	75	3.28	2.0683	280	3.28	0.0511
-125	3.28	0.5851	80	3.28	1.6525	285	3.28	0.0496
-120	3.28	0.6472	85	3.28	1.3245	290	3.28	0.0482
-115	3.28	0.7205	90	3.28	1.0677	295	3.28	0.0468
-110	3.28	0.8079	95	3.28	0.8672	300	3.28	0.0455
-105	3.28	0.9132	100	3.28	0.7105			
-100	3.28	1.0415	105	3.28	0.5877			

Scenario 13 - Horizontal Tangent Deadend Config. (a)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	3.0782	-95	3.28	34.6176	110	3.28	29.1743
-295	3.28	3.1823	-90	3.28	39.3954	115	3.28	26.4952
-290	3.28	3.2918	-85	3.28	45.1949	120	3.28	24.1584
-285	3.28	3.4071	-80	3.28	52.2732	125	3.28	22.1102
-280	3.28	3.5286	-75	3.28	60.9408	130	3.28	20.3066
-275	3.28	3.6568	-70	3.28	71.5494	135	3.28	18.7113
-270	3.28	3.7922	-65	3.28	84.4455	140	3.28	17.2942
-265	3.28	3.9354	-60	3.28	99.8530	145	3.28	16.0303
-260	3.28	4.0869	-55	3.28	117.6436	150	3.28	14.8986
-255	3.28	4.2475	-50	3.28	136.9960	155	3.28	13.8817
-250	3.28	4.4179	-45	3.28	156.1229	160	3.28	12.9647
-245	3.28	4.5988	-40	3.28	172.4627	165	3.28	12.1351
-240	3.28	4.7913	-35	3.28	183.5517	170	3.28	11.3823
-235	3.28	4.9964	-30	3.28	187.97	175	3.28	10.6972
-230	3.28	5.2151	-25	3.28	185.5573	180	3.28	10.0719
-225	3.28	5.4488	-20	3.28	177.1843	185	3.28	9.4997
-220	3.28	5.6989	-15	3.28	165.0459	190	3.28	8.9749
-215	3.28	5.9670	-10	3.28	152.9784	195	3.28	8.4923
-210	3.28	6.2549	-5	3.28	144.6925	200	3.28	8.0476
-205	3.28	6.5647	0	3.28	140.6269	205	3.28	7.6369
-200	3.28	6.8987	5	3.28	138.4017	210	3.28	7.2568
-195	3.28	7.2596	10	3.28	135.2832	215	3.28	6.9044
-190	3.28	7.6506	15	3.28	129.3448	220	3.28	6.5771
-185	3.28	8.0750	20	3.28	119.9711	225	3.28	6.2725
-180	3.28	8.5372	25	3.28	108.1165	230	3.28	5.9887
-175	3.28	9.0418	30	3.28	121.2660	235	3.28	5.7236
-170	3.28	9.5944	35	3.28	130.2361	240	3.28	5.4758
-165	3.28	10.2018	40	3.28	132.5599	245	3.28	5.2438
-160	3.28	10.8717	45	3.28	128.5352	250	3.28	5.0262
-155	3.28	11.6135	50	3.28	119.7101	255	3.28	4.8219
-150	3.28	12.4384	55	3.28	108.2684	260	3.28	4.6298
-145	3.28	13.3601	60	3.28	96.1407	265	3.28	4.4490
-140	3.28	14.3952	65	3.28	84.5660	270	3.28	4.2786
-135	3.28	15.5641	70	3.28	74.1388	275	3.28	4.1178
-130	3.28	16.8919	75	3.28	65.0348	280	3.28	3.9660
-125	3.28	18.4100	80	3.28	57.2113	285	3.28	3.8223
-120	3.28	20.1578	85	3.28	50.5345	290	3.28	3.6864
-115	3.28	22.1846	90	3.28	44.8452	295	3.28	3.5576
-110	3.28	24.5531	95	3.28	39.9904	300	3.28	3.4354
-105	3.28	27.3427	100	3.28	35.8340			
-100	3.28	30.6546	105	3.28	32.2608			



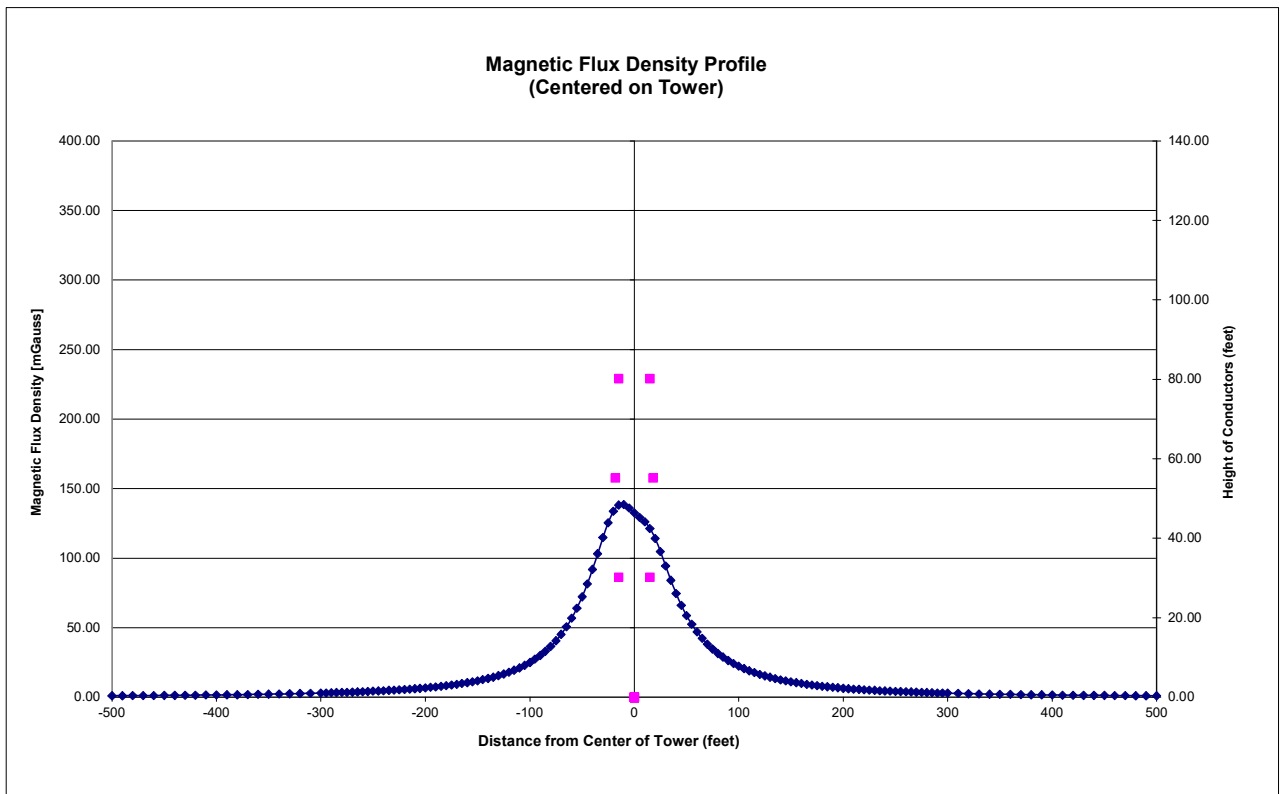
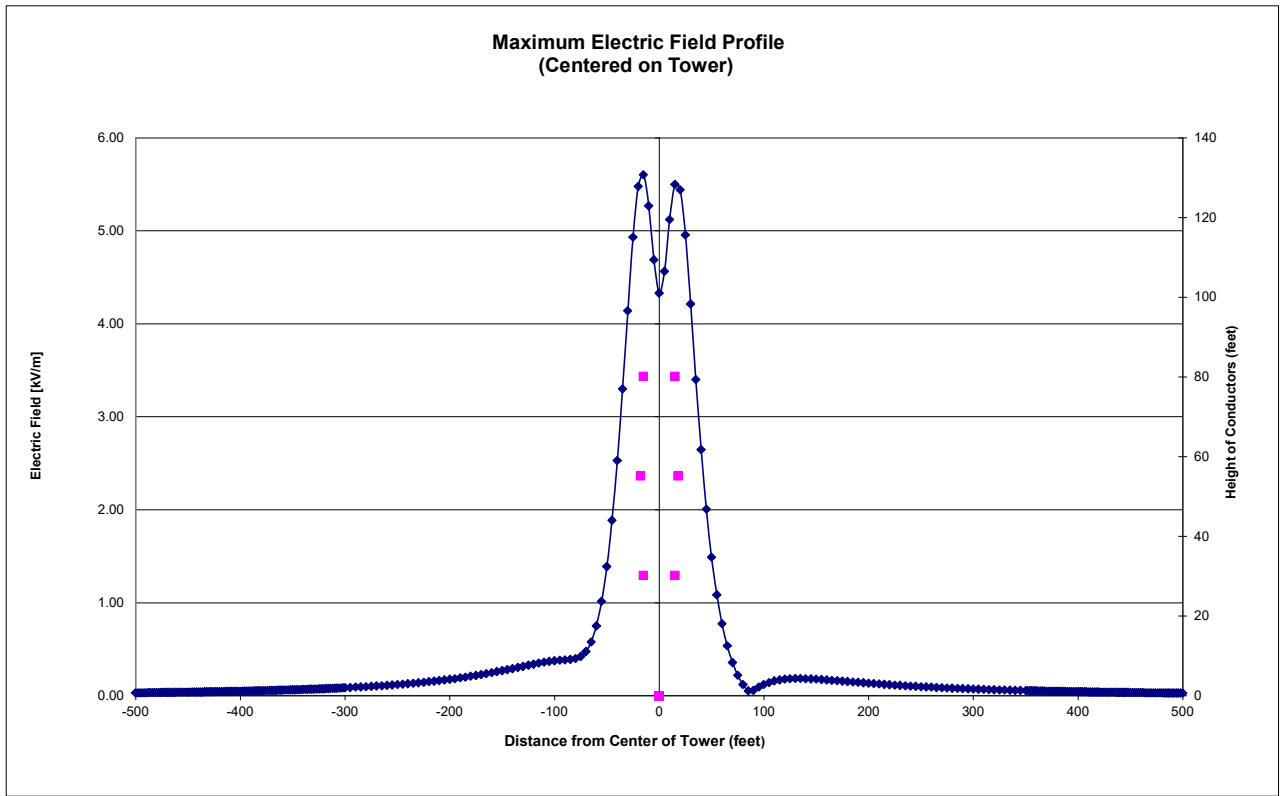
Scenario 13 - Horizontal Tangent Deadend Config. (a)

Scenario 14 - Vertical Monopole Deadend Config. (a)
Electric field intensity

Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M	Dist (ft)	Vert	kV/M
-300	3.28	0.0868	-95	3.28	0.3827	110	3.28	0.1602
-295	3.28	0.0895	-90	3.28	0.3869	115	3.28	0.1716
-290	3.28	0.0924	-85	3.28	0.3915	120	3.28	0.1791
-285	3.28	0.0955	-80	3.28	0.4008	125	3.28	0.1835
-280	3.28	0.0986	-75	3.28	0.4238	130	3.28	0.1855
-275	3.28	0.1020	-70	3.28	0.4762	135	3.28	0.1857
-270	3.28	0.1054	-65	3.28	0.5790	140	3.28	0.1845
-265	3.28	0.1091	-60	3.28	0.7529	145	3.28	0.1822
-260	3.28	0.1129	-55	3.28	1.0166	150	3.28	0.1792
-255	3.28	0.1170	-50	3.28	1.3892	155	3.28	0.1756
-250	3.28	0.1212	-45	3.28	1.8895	160	3.28	0.1715
-245	3.28	0.1256	-40	3.28	2.5295	165	3.28	0.1672
-240	3.28	0.1303	-35	3.28	3.2991	170	3.28	0.1627
-235	3.28	0.1352	-30	3.28	4.1420	175	3.28	0.1582
-230	3.28	0.1404	-25	3.28	4.9321	180	3.28	0.1535
-225	3.28	0.1458	-20	3.28	5.4797	185	3.28	0.1489
-220	3.28	0.1516	-15	3.28	5.60	190	3.28	0.1444
-215	3.28	0.1576	-10	3.28	5.2694	195	3.28	0.1399
-210	3.28	0.1639	-5	3.28	4.6902	200	3.28	0.1355
-205	3.28	0.1706	0	3.28	4.3323	205	3.28	0.1312
-200	3.28	0.1777	5	3.28	4.5652	210	3.28	0.1271
-195	3.28	0.1851	10	3.28	5.1202	215	3.28	0.1231
-190	3.28	0.1929	15	3.28	5.4996	220	3.28	0.1192
-185	3.28	0.2010	20	3.28	5.4416	225	3.28	0.1154
-180	3.28	0.2097	25	3.28	4.9566	230	3.28	0.1118
-175	3.28	0.2187	30	3.28	4.2143	235	3.28	0.1083
-170	3.28	0.2282	35	3.28	3.4025	240	3.28	0.1049
-165	3.28	0.2381	40	3.28	2.6478	245	3.28	0.1017
-160	3.28	0.2484	45	3.28	2.0071	250	3.28	0.0985
-155	3.28	0.2592	50	3.28	1.4907	255	3.28	0.0955
-150	3.28	0.2703	55	3.28	1.0867	260	3.28	0.0927
-145	3.28	0.2818	60	3.28	0.7755	265	3.28	0.0899
-140	3.28	0.2935	65	3.28	0.5379	270	3.28	0.0872
-135	3.28	0.3054	70	3.28	0.3574	275	3.28	0.0847
-130	3.28	0.3174	75	3.28	0.2215	280	3.28	0.0822
-125	3.28	0.3292	80	3.28	0.1214	285	3.28	0.0798
-120	3.28	0.3407	85	3.28	0.0548	290	3.28	0.0776
-115	3.28	0.3516	90	3.28	0.0589	295	3.28	0.0754
-110	3.28	0.3615	95	3.28	0.0925	300	3.28	0.0733
-105	3.28	0.3702	100	3.28	0.1215			
-100	3.28	0.3773	105	3.28	0.1439			

Scenario 14 - Vertical Monopole Deadend Config. (a)
Magnetic field intensity

Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss	Dist - ft	Vert	milligauss
-300	3.28	3.0753	-95	3.28	27.4399	110	3.28	19.1572
-295	3.28	3.1795	-90	3.28	30.1153	115	3.28	17.7792
-290	3.28	3.2890	-85	3.28	33.1684	120	3.28	16.5369
-285	3.28	3.4043	-80	3.28	36.6652	125	3.28	15.4138
-280	3.28	3.5257	-75	3.28	40.6843	130	3.28	14.3960
-275	3.28	3.6537	-70	3.28	45.3175	135	3.28	13.4713
-270	3.28	3.7887	-65	3.28	50.6706	140	3.28	12.6292
-265	3.28	3.9313	-60	3.28	56.8611	145	3.28	11.8605
-260	3.28	4.0820	-55	3.28	64.0114	150	3.28	11.1573
-255	3.28	4.2416	-50	3.28	72.2326	155	3.28	10.5126
-250	3.28	4.4105	-45	3.28	81.5903	160	3.28	9.9204
-245	3.28	4.5897	-40	3.28	92.0414	165	3.28	9.3754
-240	3.28	4.7800	-35	3.28	103.3272	170	3.28	8.8727
-235	3.28	4.9822	-30	3.28	114.8268	175	3.28	8.4083
-230	3.28	5.1974	-25	3.28	125.4366	180	3.28	7.9785
-225	3.28	5.4267	-20	3.28	133.6672	185	3.28	7.5800
-220	3.28	5.6713	-15	3.28	138.1829	190	3.28	7.2099
-215	3.28	5.9327	-10	3.28	138.64	195	3.28	6.8657
-210	3.28	6.2124	-5	3.28	136.1177	200	3.28	6.5451
-205	3.28	6.5120	0	3.28	132.5572	205	3.28	6.2460
-200	3.28	6.8336	5	3.28	129.3721	210	3.28	5.9665
-195	3.28	7.1793	10	3.28	126.1666	215	3.28	5.7051
-190	3.28	7.5514	15	3.28	121.4051	220	3.28	5.4602
-185	3.28	7.9528	20	3.28	114.1633	225	3.28	5.2304
-180	3.28	8.3864	25	3.28	104.7920	230	3.28	5.0147
-175	3.28	8.8559	30	3.28	94.4061	235	3.28	4.8119
-170	3.28	9.3652	35	3.28	84.1087	240	3.28	4.6209
-165	3.28	9.9187	40	3.28	74.5964	245	3.28	4.4410
-160	3.28	10.5217	45	3.28	66.1591	250	3.28	4.2712
-155	3.28	11.1800	50	3.28	58.8274	255	3.28	4.1109
-150	3.28	11.9005	55	3.28	52.5078	260	3.28	3.9593
-145	3.28	12.6909	60	3.28	47.0657	265	3.28	3.8158
-140	3.28	13.5604	65	3.28	42.3663	270	3.28	3.6800
-135	3.28	14.5193	70	3.28	38.2901	275	3.28	3.5512
-130	3.28	15.5801	75	3.28	34.7367	280	3.28	3.4290
-125	3.28	16.7569	80	3.28	31.6238	285	3.28	3.3129
-120	3.28	18.0665	85	3.28	28.8841	290	3.28	3.2026
-115	3.28	19.5287	90	3.28	26.4625	295	3.28	3.0976
-110	3.28	21.1669	95	3.28	24.3137	300	3.28	2.9977
-105	3.28	23.0085	100	3.28	22.4000			
-100	3.28	25.0865	105	3.28	20.6900			



Scenario 14 - Vertical Monopole Deadend Config. (a)

APPENDIX G

Draft Agricultural Impact Mitigation Plan



AGRICULTURAL IMPACT MITIGATION PLAN
Bison-Alexandria 345 kV Second Circuit Transmission Project

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Appendix A Definitions

Appendix B: Mitigative Actions for Organic Agricultural Land

DRAFT AGRICULTURAL IMPACT MITIGATION PLAN

BISON-ALEXANDRIA 345 KV SECOND CIRCUIT TRANSMISSION PROJECT

Purpose

This Agricultural Impact Mitigation Plan ("AIMP" or 'the plan') was developed by Northern States Power Company, doing business as Xcel Energy (Xcel Energy), along with Great River Energy, Minnesota Power, Otter Tail Power Company (Otter Tail), and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency (Western Minnesota), together, referred to as "the Utilities". The overall objective of this AIMP is to identify measures the Utilities will take to avoid, mitigate, repair and/or provide compensation for impacts that may result from the construction of a 345 kV electric transmission line on cultivated Agricultural Land in Minnesota.

The Project will be jointly owned by Xcel Energy, Great River Energy, Minnesota Power, Otter Tail and Western Minnesota. The Bison-Alexandria 345 kV Second Circuit Transmission Project is needed to provide additional transmission capacity, to mitigate current capacity issues, and to improve electric system reliability throughout the region.

The construction standards and policies in this plan apply only to construction activities occurring partially or wholly on privately owned Agricultural Land. The measures do not apply to construction activities occurring entirely on public rights-of-way, railroad rights-of-way, publicly owned land, or private land that is not Agricultural Land. The Utilities will, however, adhere to the same construction standards relating to the repair of agricultural tile (Item No. 3 in the AIMP) when tiles are encountered on public highway rights-of-way, railroad rights-of-way, or publicly or privately owned land.

Appendix B of this AIMP applies only to Organic Agricultural Land as described in the National Organic Program Rules, 7 CFR Parts 205.100, 205.202, and 205.101.

Unless the Easement or other agreement, regardless of nature, between the Utilities and the Landowner or Tenant specifically provides to the contrary, the mitigative actions specified in the construction standards and policies set forth in this AIMP will be implemented in accordance with the General Provisions.

General Provisions

The mitigative actions are subject to change by Landowners or Tenants, provided such changes are negotiated with and acceptable to the Utilities.

Certain provisions of this AIMP require the Utilities to consult with the Landowner and Tenant of a property. The Utilities will engage in a good faith effort to secure the agreement of both Landowner and Tenant in such cases.

Unless otherwise specified, the Utilities will retain qualified contractors to execute mitigative actions. However, the Utilities may negotiate with Landowners or Tenants to carry out the mitigative actions that Landowners or Tenants wish to perform themselves.

Mitigative actions employed by the Utilities pursuant to this AIMP, unless otherwise specified in this AIMP or in an Easement or other agreement negotiated with an individual Landowner or Tenant, will be implemented within 45 days following completion of Final Clean-up on an affected property, weather permitting, or unless otherwise delayed by mutual agreement between Landowner or Tenant and Utility. Temporary repairs will be made by the Utilities during construction as needed to minimize the risk of additional property damage or interference with the Landowner's or Tenant's access to or use of the property that may result from an extended time period to implement mitigative actions.

The Utilities will implement the mitigative actions contained in this AIMP to the extent that they do not conflict with the requirements of any applicable federal and/or state rules and regulations and other permits and approvals that are obtained by the Utilities for the project or they are not determined to be unenforceable by reason of other requirements of federal and state permits issued for the project. To the extent a mitigative action required by this agreement is determined to be unenforceable in the future due to requirements of other federal or state permits issued for the project, the Utilities will inform the Landowner or Tenant and will work with them to develop a reasonable alternative mitigative action.

Prior to the construction of the transmission line, the Utilities will provide each Landowner and Tenant with a telephone number and address which can be used to contact the Utilities, both during and following the completion of construction, regarding the construction work which is performed on their property, agricultural impact mitigation work or other construction-related matter. If the contact information changes at any time before completion of Final Clean-up and/or after the completion of construction, the Utilities will provide the Landowner and Tenant with updated contact information. The Utilities will respond to Landowner and Tenant telephone calls and correspondence within a reasonable time.

During this preconstruction communication with Landowners and Tenants, the Utilities will also use good faith efforts to verify farmland type (cropland, pasture or other), record known drain tiles, and will identify mitigative actions needed on properties, if known. These mitigative actions will be communicated to the construction contractor.

Following completion of Final Clean-up and restoration activities, the Utilities will make good faith efforts to obtain written acknowledgement from the Landowner and/or Tenant confirming completion of agricultural restoration

If any provision of this AIMP is held to be unenforceable, no other provision will be affected by that holding, and the remainder of the AIMP will be interpreted as if it did not contain the unenforceable provision.

Mitigative Actions

The Utilities will reasonably restore or compensate Landowners and/or Tenants, as appropriate, for damages caused by the Utilities as a result of transmission line construction, and as outlined in this plan. The decision to restore land or compensate Landowners will be made by the Utilities after discussion with the Landowner or Tenant.

1. Topsoil and Subsoil Handling

Topsoil and subsoil layers removed during construction activities on Agricultural Land, including pole installation and temporary roads, will be stripped, stored, and replaced separately in the proper sequence.

Unless otherwise specified in an Easement or agreement with the Landowner, the Utilities will not use stripped topsoil or subsoil for other purposes, including construction of access ramps or staging areas. No topsoil or subsoil, other than incidental amounts, may be removed from Agricultural Land without Landowner approval.

2. Pole Placement

During the design of the project, the Utilities' engineering, land rights and permitting staff will work together to address pole placement issues. Utilities' staff will discuss pole placement with Landowners. When the preliminary design is complete, the land rights agents will review the staked pole locations with the Landowners.

3. Soil and Rock Removal for Bored Holes

Any excess soil and rock will be removed from the site unless otherwise requested by the Landowner.

4. Damaged and Adversely Affected Tile

The Utilities will contact affected Landowners or Tenants for their knowledge of Tile locations prior to the transmission line's installation. Utilities will make every attempt to probe for Tile if the Landowner does not know if Tile is located in the proposed pole location. Tile that are damaged, cut, or removed as a result of this probe will be immediately repaired. The repair will be reported to the Inspector.

If Tile is damaged by the transmission line installation, the Tile will be repaired in a manner that restores the Tile's operating condition at the point of repair. If Tile on or adjacent to the transmission line's construction area are adversely affected by the construction of the transmission line, the Utilities will take such actions as are necessary to restore the functioning of the Tile, including the relocation, reconfiguration, and replacement of the existing Tile. The affected Landowner or Tenant may elect to negotiate a fair settlement with the Utilities for the Landowner or Tenant to undertake the responsibility for repair, relocation, reconfiguration, or

replacement of the damaged Tile. In the event the Landowner or Tenant chooses to undertake the responsibility for repair, relocation, reconfiguration, or replacement of the damaged Tile, the Utilities will not be responsible for correcting Tile repairs after completion of the transmission line (the Utilities are responsible for correcting Tile repairs after completion of the transmission line, provided the repairs were made by the Utilities or their agents or designees).

Where the damaged Tile is repaired by the Utilities, the following standards and policies will apply to the Tile repair:

- A. Tiles will be repaired with materials of the same or better quality as that which were damaged. If water is flowing through a damaged Tile, temporary repairs will be promptly installed and maintained until such time that permanent repairs can be made.
- B. Before completing permanent Tile repairs, Tiles will be examined within the work area to check for Tile that might have been damaged by construction equipment. If Tiles are found to be damaged, they will be repaired so they operate as well after construction as before construction began.
- C. The Utilities will make efforts to complete permanent Tile repairs within a reasonable timeframe after Final Clean-up, taking into account weather and soil conditions.
- D. Following completion of the Final Clean-up and damage settlement, the Utilities will be responsible for correcting and repairing Tile breaks, or other damages to Tile systems that are discovered on the Right-of-Way to the extent that such breaks are the result of transmission line construction. These damages are usually discovered after the first significant rain event. The Utilities will not be responsible for Tile repairs the Utilities have paid the Landowner or Tenant to perform.

5. Installation of Additional Tiles

The Utilities will be responsible for installing such additional Tile and other drainage measures as are necessary to properly drain wet areas on the Right-of-Way caused by the construction of the transmission line.

6. Construction Debris

Construction-related debris and material which are not an integral part of the transmission line, and which have been placed there by the Utilities, will be removed from the Landowner's property at the Utilities' cost. Such material to be removed would include excess construction materials or litter generated by the construction crews.

If construction-related debris or materials left by the Utilities cause damage to Landowner or Tenant equipment, the Utilities will reimburse the Landowner or Tenant for reasonable repair costs associated with such damage

7. Compaction, Rutting, Fertilization, Liming, and Soil Restoration

- A. Compaction will be alleviated as needed on Cropland traversed by construction equipment. Cropland that has been compacted will be plowed using appropriate deep-tillage and draft equipment. Alleviation of compaction of the topsoil will be performed during suitable weather conditions, and must not be performed when weather conditions have caused the soil to become so wet that activity to alleviate compaction would damage the future production capacity of the land as determined by the Agricultural Monitor.
- B. The Utilities will restore rutted land to as near as practical to its pre-construction condition.
- C. If there is a dispute between the Landowner or Tenant and the Utilities as to what areas need to be ripped or chiseled, the depth at which compacted areas should be ripped or chiseled, or the necessity or rates of lime, fertilizer, and organic material application, the Agricultural Monitor's opinion will be considered by the Utilities.

8. Damaged Soil Conservation Practices

Soil conservation practices such as terraces and grassed waterways which are damaged by the transmission line's construction, will be restored to their pre-construction condition.

9. Weed Control

On land which is owned by Utilities for substation facilities, the Utilities will work with Landowners if requested on weed control activities outside of the substations with the intent to not allow the spread of weeds onto adjacent Agricultural Land. Any weed control spraying will be in accordance with State of Minnesota regulations. Details of weed control will be provided in a Vegetation Management Plan.

10. Irrigation Systems

- A. If the transmission line and/or temporary work areas intersect an operational (or soon to be operational) spray irrigation system, the Utilities will establish with the Landowner or Tenant, an acceptable amount of time the irrigation system may be out of service.
- B. If, as a result of the transmission line construction activities, an irrigation system interruption results in crop damages, either on the Right-of-Way or off the Right-of-Way, compensation of Landowners and/or Tenants, as appropriate, will be determined as described in section 15 of this AIMP.
- C. If it is feasible and mutually acceptable to the Utilities and the Landowner or Tenant, temporary measures will be implemented to allow an irrigation system to continue to operate across land on which the transmission line is also being constructed. Utilities will work with the Landowner or Tenant to identify a preferable construction time.

11. Temporary Roads

The location of temporary roads to be used for construction purposes will be discussed with the Landowner or Tenant prior to construction

- A. The temporary roads will be designed so as to not impede proper drainage and will be built to mitigate soil erosion on or near the temporary roads.
- B. Upon abandonment, temporary roads may be left intact through mutual agreement of the Landowner or Tenant and the Utilities unless otherwise restricted by federal, state or local regulations.
- C. If a temporary road is to be removed, the Agricultural Land upon which the temporary road is constructed will be returned to its previous use and restored to equivalent condition as existed prior to their construction.

12. Construction in Wet Conditions

If it is necessary to construct during wet conditions, and if the Agricultural Monitor believes conditions are too wet for continued construction, damages which may result from such construction will be paid for by the Utilities and/or appropriate restoration will be conducted. Compensation for Landowners and/or Tenants, as appropriate, will be determined as described in section 15 of this AIMP.

13. Construction in Winter

The Utilities will avoid construction in Agricultural Lands in the winter season to the extent possible. If construction is deemed necessary during the winter season then the following mitigation measures will be observed.

- A. If topsoil stripping is needed when soil is frozen it will only be removed from the areas of new foundation installation. A ripper will be used to break up the frozen topsoil and a backhoe will remove the topsoil layer and store the material in a separate pile. The ripper will extend to the depth of topsoil to twelve (12) inches.
- B. If seasonal or weather conditions prevent final clean-up activities, the trench and temporary workspace areas will be backfilled, stabilized, and temporary erosion control measures will be installed until restoration can be completed. If topsoil/spoil piles remain throughout the winter, the piles will be stabilized by an application of mulch and a tackifier or other methods approved by the MDA. To prevent subsidence, backfill operations will resume when the ground is thawed and the subsoil will be compacted (as needed) prior to final clean-up activities. The construction contractor will monitor these areas until final restoration is complete.

- C. Topsoil stripping and final clean-up activities proposed during winter conditions will be discussed with the MDA prior to commencement of any activities.

14. Fence/Gate Inspection

The Agricultural Monitor shall inspect fencing and gates (installed, altered, or repaired) to verify they are in good working condition. Fences or gates that appear to have been damaged by construction will be included in monitoring reports.

15. Procedures for Determining Construction-Related Damages and Providing Compensation

- A. The Utilities will develop and put into place a procedure for the processing of anticipated Landowners' or Tenants' claims for construction-related damages. The procedure will be intended to standardize and minimize Landowner and Tenant concerns in the recovery of damages, to provide a degree of certainty and predictability for Landowners, Tenants and the Utilities, and to foster good relationships among the Utilities, Landowners and their Tenants over the long term.
- B. Negotiations between the Utilities and any affected Landowner or Tenant will be voluntary in nature and no party is obligated to follow any particular method for computing the amount of loss for which compensation is sought or paid. The compensation offered is only an offer to settle, and the offer shall not be introduced in any proceeding brought by the Landowner or Tenant to establish the amount of damages the Utilities must pay. In the event the Utilities and a Landowner or Tenant are unable to reach an agreement on the amount of damages, the Landowner or Tenant may seek recourse through mediation.

16. Advance Notice of Access to Private Property

The Utilities will endeavor to provide the Landowner and/or Tenant advanced notice before beginning construction on the property. Prior notice will consist of a personal contact, email, letter or a telephone contact, whereby the Landowner and the Tenant are informed of the Utilities' intent to access the land.

17. Role and Responsibilities of Agricultural Monitor

The Utilities will hire an Environmental/Agricultural Monitor (Monitor) to act as an independent third party to monitor compliance with this AIMP and other permit conditions/regulatory requirements¹. Xcel Energy will work with the MDA to select the Monitor.

The Agricultural Monitor will be retained and funded by the Utilities, but will report directly to the MDA. The primary function of the Agricultural Monitor will be to audit the Utilities' compliance with this AIMP. The Agricultural Monitor will notify the Utilities' Inspector if he/she believes a compliance issue has been identified. The Agricultural Monitor will not have direct authority to stop construction activities. If the Agricultural Monitor identifies a significant non-compliance issue, the Monitor will immediately notify the Utilities. The Utilities may issue a stop-work directive if continuation of the activity could result in additional agricultural or environmental damage.

The Agricultural Monitor will have full access to Agricultural Land crossed by the Project and will have the option of attending meetings where construction on Agricultural Land is discussed. Specific duties of the Agricultural Monitor will include, but are not limited to the following:

1. Participate in preconstruction training activities sponsored by the Utilities and provide construction personnel with training on provisions of this AIMP before construction begins.
2. Monitor construction and restoration activities on Agricultural Land for compliance with provisions of this AIMP.
3. Work with construction crews to ensure all practices are in compliance with the provisions of this AIMP
4. Document instances of noncompliance and work with construction personnel to identify and implement appropriate corrective actions as needed.
5. Report instances of noncompliance with the AIMP to the Utilities and the MDA.
6. Coordinate with the MDA to develop a reporting structure and report directly to the MDA on events or schedule as agreed upon with the MDA.
7. Coordinate communication of Landowner concerns to the MDA, if necessary.

¹ For example, if a Monitor is required to implement other permit requirements (such as a Vegetation Management Plan) the Utilities will hire a Monitor that is qualified to conduct compliance monitoring for all such environmental permits, upon review and approval of applicable permitting authorities.

8. Maintain a written log of Landowner concerns observed or reported by the Utilities' construction or land rights agents regarding compliance with this AIMP. The written log should record whether the Monitor reported each logged concern to the MDA.
9. Be responsible for determining whether weather conditions have caused the soil to become so wet that mitigation measures designed to alleviate soil compaction would be ineffective and would actually reduce the future production capacity of the land. The Monitor would advise the Utilities of these conditions. The Utilities will be solely responsible in making the decision on whether it will proceed with construction under these conditions. Compensation for Landowner, as appropriate, will be determined as described in the "Procedures for Determination of Damages and Compensation" section of this AIMP.
10. In disputes between the Utilities and a Landowner over restoration, advise the MDA on whether the agricultural restoration is reasonably adequate in consultation with the Utilities.

18. Qualifications and Selection of Agricultural Monitor

The Agricultural Monitor will have a bachelor's degree in agronomy, soil science or equivalent work experience. The Agricultural Monitor will have demonstrated practical experience with pipeline or electric transmission line construction and restoration on Agricultural Land. Final selection of the Agricultural Monitor will be a joint decision between the MDA and the Utilities.

Appendix A: Definitions

Agricultural Land	Land that is actively managed for cropland, hayland, or pasture, and land in government set-aside programs.
Agricultural Monitor	Monitor retained and funded by the Utilities, reporting directly to the Minnesota Department of Agriculture ("MDA") and responsible for auditing the Utilities' compliance with provisions of this AIMP.
Cropland	Land actively managed for growing row crops, small grains, or hay.
Easement	The agreement(s) and/or interest in privately owned Agricultural Land held by the Utilities by virtue of which it has the right to construct, operate and maintain the transmission line together with such other rights and obligations as may be set forth in such agreement.
Final Clean-up	Transmission line activity that occurs after the power line has been constructed. Final Clean-up activities include but are not limited to: removal of construction debris, de-compaction of soil as required, installation of permanent erosion control structures, final grading, and restoration of fences and required reseeding. Once Final Clean-up is finished, Landowners will be contacted to settle all damage issues and will be provided a form to sign confirming final settlement.
Landowner	Person(s) holding legal title to Agricultural Land on the transmission line route from whom the Utilities is seeking, or has obtained, a temporary or permanent Easement, or their representatives.
Non-Agricultural Land	Any land that is not "Agricultural Land" as defined above.
Right-of-Way	The Agricultural Land included in permanent and temporary Easements which the Utilities acquires for the purpose of constructing, operating and maintaining the transmission line.
Tenant	Any Person lawfully renting or sharing land for agricultural production which makes up the "Right-of-Way" as defined in this AIMP.
Tile	Artificial subsurface drainage system.
Topsoil	The uppermost horizon (layer) of the soil, typically with the darkest color and highest content of organic matter.

Appendix B: Mitigative Actions for Organic Agricultural Land

Introduction

The Utilities recognize that Organic Agricultural Land is a unique feature of the landscape and will treat this land with the same level of care as other sensitive environmental features. This Appendix identifies mitigation measures that apply specifically to farms that are Organic Certified or farms that are in active transition to become Organic Certified and is intended to address the unique management and certification requirements of these operations. All protections provided in the Agricultural Impact Mitigation Plan will also be provided to Organic Agricultural Land in addition to the provisions of this Appendix.

The provisions of this Appendix will apply to Organic Agricultural Land for which the Landowner or Tenant has provided to the Utilities a true, correct and current version of the Organic System Plan within 60 days after the signing of the Easement for such land or 60 days after the issuance of a Route Permit to the Utilities by the PUC, whichever is sooner, or, in the event the Easement is signed later than 60 days after the issuance of the Route Permit. The provisions of this Appendix are applicable when the Organic System Plan is provided to the Utilities at the time of the signing of the Easement.

Organic System Plan

The Utilities recognize the importance of the individualized Organic System Plan (OSP) to the Organic Certification process. Organic farmers should provide the Utilities with a list of the types of substances, materials, seeds, or practices that are not permitted on the land by their certifying entity. The Utilities will work with the Landowner or Tenant, the Landowner or Tenant's Certifying Agent, and/or a mutually acceptable third-party Organic consultant to identify site-specific construction practices that will minimize the potential for Decertification as a result of construction activities. Possible practices may include, but are not limited to: equipment cleaning, planting a deep rooted cover crop in lieu of mechanical decompaction, applications of composted manure or rock phosphate, preventing the introduction of disease vectors from tobacco use, restoration and replacement of beneficial bird and insect habitat, maintenance of organic buffer zones, use of organic seeds for any cover crop, or similar measures. The Utilities recognize that there may be different procedures required by different organic certifying entities or landowners. Further, the Utilities recognizes that Organic System Plans are proprietary in nature and will respect the need for confidentiality.

Prohibited Substances

The Utilities will avoid the application of Prohibited Substances onto Organic Agricultural Land. No herbicides, pesticides, fertilizers or seed will be applied unless requested and approved by the Landowner. Likewise, no refueling, fuel or lubricant storage or routine equipment maintenance will be allowed on Organic Agricultural Land. Equipment will be checked prior to entry to make sure that fuel, hydraulic and lubrication systems are in good working order before working on Organic Agricultural Land. If Prohibited Substances are used on land adjacent to Organic Agricultural Land, these substances will be used in such a way as to prevent them from entering Organic Agricultural Land.

Temporary Road Impacts

Topsoil and subsoil layers that are removed during construction on Organic Agricultural Land for temporary road impacts will be stored separately and replaced in the proper sequence after the transmission line is installed. Unless otherwise specified in the site-specific plan described above, the Utilities will not use this soil for other purposes, including creating access ramps at road crossings. No topsoil or subsoil (other than incidental amounts) may be removed from Organic Agricultural Land. Likewise, Organic Agricultural Land will not be used for storage of soil from non-Organic Agricultural Land.

Erosion Control

On Organic Agricultural Land, the Utilities will, to the extent feasible, implement erosion control methods consistent with the Landowner or Tenant's Organic System Plan. On land adjacent to Organic Agricultural Land, the Utilities' erosion control procedures will be designed so that sediment from adjacent non-Organic Agricultural Land will not flow along the Right-of-Way and be deposited on Organic Agricultural Land. Treated lumber, non-organic hay bales, non-approved metal fence posts, etc. will not be used in erosion control on Organic Agricultural Land.

Weed Control

On Organic Agricultural Land, the Utilities will, to the extent feasible, implement weed control methods consistent with the Landowner's or Tenant's Organic System Plan. Prohibited Substances will not be used in weed control on Organic Agricultural Land. In addition, the Utilities will not use Prohibited Substances in weed control on land adjacent to Organic Agricultural Land in such a way as to allow these materials to drift onto Organic Agricultural Land.

Monitoring

In addition to the responsibilities of the Agricultural Monitor described in the AIMP, the following will apply:

- A. The Agricultural Monitor will monitor construction and restoration activities on Organic Agricultural Land for compliance with the provisions of this appendix and will document any activities that may result in Decertification.
- B. Instances of non-compliance will be documented according to Independent Organic Inspectors Association protocol consistent with the Landowner's Organic System Plan, and will be made available to the MDA, the Landowner, the Tenant, the Landowner's or Tenant's Certifying Agent, and to the Utilities.

If the Agricultural Monitor is responsible for monitoring activities on Organic Agricultural Land, he/she will be trained, at the Utilities' expense, in organic inspection, by the Independent Organic Inspectors Association, unless the Agricultural Monitor received such training during the previous three years.

Compensation for Construction Damages

The settlement of damages will be based on crop yield and/or crop quality determination and the need for additional restoration measures. Unless the Landowner or Tenant of Organic Agricultural Land and Company agree otherwise, at the Utilities expense, a mutually agreed upon professional agronomist will make crop yield determinations, and the Minnesota Department of Agriculture Fruit and Vegetable Inspection Unit will make crop quality determinations. If the crop yield and/or crop quality determinations indicate the need for soil testing, the testing will be conducted by a commercial laboratory that is properly certified to conduct the necessary tests and is mutually agreeable to the Utilities and the Landowner or Tenant. Field work for soil testing will be conducted by a Professional Soil Scientist or Professional Engineer licensed by the State of Minnesota. The Utilities will be responsible for the cost of sampling, testing and additional restoration activities, if needed. Landowners or Tenants may elect to settle damages with the Utilities in advance of construction on a mutually acceptable basis or to settle after construction based on a mutually agreeable determination of actual damages.

Compensation for-Damages Due to Decertification

Compensation for damages due to Decertification will be based on the difference between revenue generated prior to Decertification and revenue generated after Decertification for a period of up to three (3) years, or until Organic Certification is regained, whichever occurs first, provided the Landowner or Tenant makes a good faith effort to regain certification.

Definitions

Unless otherwise provided to the contrary in this Appendix, capitalized terms used in this Appendix shall have the meanings provided below and in the AIMP. In the event of a conflict between this Appendix and the AIMP with respect to definitions, the definition provided in this Appendix will prevail but only to the extent such conflicting terms are used in this Appendix. The definition provided for the defined words used herein shall apply to all forms of the words.

Apply	To intentionally or inadvertently spread or distribute any substance onto the exposed surface of the soil.
Certifying Agent	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.2.
Decertified or Decertification	Loss of Organic Certification.
Organic Agricultural Land	Farms or portions thereof described in 7 CFR Parts 205.100, 205.202, and 205.101.
Organic Buffer Zone	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.2.
Organic Certification or Federal Organic Certified	As defined by the National Organic Program Standards, Regulations 7 CFR Part 205.100 and 7 CFR Part 205.101.
Organic System Plan	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.2.
Prohibited Substance	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.600 through 7 CFR 205.605 using the criteria provided in 7 USC 6517 and 7 USC 6518

APPENDIX H

Greenhouse Gas Emission Calculations



**Xcel Energy Bison to Alexandria
GHG Emissions Summary**

Scope	Source	Tons per year				Tons for Entire Project (50 Years)			
		CO ₂ (ton/yr)	CH ₄ (ton/yr)	N ₂ O (ton/yr)	CO ₂ e (ton/yr)	CO ₂ (tons)	CH ₄ (tons)	N ₂ O (tons)	CO ₂ e (tons)
Scope 1	Construction - Mobile Sources: Helicopter, ATV and Commuting ¹	13.1	0.007	0.00024	13.3	653.5	0.3	0.01	666.4
Scope 1	Construction - Mobile Sources Non-road - Diesel ¹	114	0.011	0.010	116.8	5,686	0.6	0.5	5,841
Total - Construction		127	0.018	0.011	130.1	6,340	0.9	0.5	6,507
Scope 1	Operations - Mobile Sources - Commuting ²	0.04	0.000001	0.001	0.3	0.4	0.00001	0.009	2.6
Total Operations		0.04	0.000001	0.001	0.3	0.4	0.00001	0.009	2.6
Project Total Construction + Operation		127	0.018	0.012	130.4	6,340	0.9	0.5	6,510

1. Per EQB guidance, construction emissions shown are averaged over lifetime of project, which is assumed to be 50 years.

2. Frequency of inspections and maintenance is once every 5 years. Over the lifetime of the project (50 years), there will be 10 trips. The numbers presented here are tons per year, averaged over the 50

Conversions

1 Metric ton = 1.102 short tons
1000 kg
1 kilogram = 1000 g
0.0011 short tons
2.205 lb

Global Warming

Potential*

CO₂: 1
CH₄: 28
N₂O: 265

* Global warming potentials used to convert CH₄ and N₂O into CO₂eq from latest version of the EQB Climate Calculator, which are based on the 2025 Emission Factor Hub.

Construction Emissions – Greenhouse Gas and Noise

Duration of construction: 44 weeks

Hours of operation: 7am-5pm, seven days a week

Type of on-road trucks needed to do the work and quantity of each type: Assume 9 Ford F150XL (included in table below)

Miles traveled per day (approx.), including commuting to/from the site: Assume each truck will travel up to 200 miles each day.

Number of off-road trucks or other vehicles (e.g. cranes, dozers, etc) needed, maximum hp (if avail) and quantity of each type:

Miles traveled per day or fuel usage per day per vehicle type: Assume off-road vehicles will travel up to 30 miles each day.

Construction assumption for helicopter use: Assume one Hughes 500D helicopter stringing an average of 25 structures a day (see "Mobile Sources" tab for emission calculations).

HOOPER AND RENTAL EQUIPMENT (POWERED)	Quantity	Anticipated Horsepower	Typical Hour/day	Typical Days/week
ATV 4 TO 6 WHEEL, W/ DUMP	1	13.5	2	3
BACKHOE W/ LOADER 4X4	2	94	2	3
BUCKET 105' WORK HEIGHT	1	300	8	5
BUCKET 125' WORK HEIGHT 8X6	1	350	8	5
CRANE TRUCK 45 T HYDRAULIC 6 AXLE	4	450	8	5
DIGGER DERRICK 15 T CAP	3	330	8	5
DOZER 10 THRU 12 T, W/ WINCH	1	80	4	3
DOZER 18 T W/ WINCH	2	190	4	3
FORKLIFT 11,000 THRU 12,000# TELESCOPIC BOOM	1	142	4	5
FRONT END LOADER 68,000# 4X4	1	386	4	5
HYDRAULIC BULLWHEEL BUNDLE TENSIONER	1	80	2	3
PULLER ROPE TRAILER 4,000# CAP W/ SPLIT REEL TOW TYPE TANDEM AXLE	1	74	2	3
PULLER CABLE TRAILER 30,000# CAP TOW TYPE TANDEM AXLE	1	400	2	3
PULLER ROPE TRAILER 4 DRUM 3,500# CAP TOW TYPE TANDEM AXLE	1	115	2	3
60T RT Crane	1	320	4	3
SKID STEER LOADER TRACK MTD 80 > 75 HP	2	95	4	5
DUMP BOX TRUCK 2-1/2 T 6X6	1	505	2	5
DUMP BOX TRUCK 1-1/4 & 1-1/2 T	2	420	4	5
FLATBED (FRAMING) TRUCK 1-1/4 & 1-1/2 T	3	420	4	5
PICKUP TRUCK 3/4 T	9	420	8	5
TRUCK TRACTOR 2-1/2 T 6X4 & 5 T 6X6	3	450	4	3

Construction Emissions - Mobile Sources
Off-Road Vehicles During Construction

Construction Duration ¹	44	weeks
	0.85	years
Maximum Days/Year	308	days/yr
Maximum Workday Length	10	hours/day
Project Lifetime	50	years (assumed)

Emissions Source	Number of Units per Day ²	Fuel Type	Total Horsepower (hp)	Consumption Rate (gal/hr per hp-hr) ³	Days Per Year	Hours Per Year	Total Gallons per Year	Total Gallons for Project	GHG Emission Factors ³			GHG Emissions per Year (metric tons per year)				GHG Emissions for Project (metric tons)				GHG Emissions for Project Averaged Over Project Lifetime (metric tons)			
									CO2 (kg/gal)	CH4 (g/gal)	N2O (g/gal)	CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
Dozers	3	Diesel	460	0.05	132	528	12,144	12,144	10.21	1.01	0.94	124	0.012	0.011	127	124	0.012	0.011	127	2	0.0002	0.0002	3
Tractors/Loaders/Backhoes																							
BACKHOE W/ LOADER 4X4	2	Diesel	188	0.05	132	264	2,482	2,482	10.21	1.01	0.94	25	0.003	0.002	26	25	0.003	0.002	26	1	0.0001	0.0000	1
FRONT END LOADER 68,000# 4X4	1	Diesel	386	0.05	220	880	16,984	16,984	10.21	1.01	0.94	173	0.017	0.016	178	173	0.017	0.016	178	3	0.0003	0.0003	4
TRUCK TRACTOR 2-1/2 T 6X4 & 5 T 6X6	3	Diesel	1350	0.05	132	528	35,640	35,640	10.21	1.01	0.94	364	0.036	0.034	374	364	0.036	0.034	374	7	0.0007	0.0007	7
Bucket Trucks	2	Diesel	650	0.05	220	1,760	57,200	57,200	10.21	1.01	0.94	584	0.058	0.054	600	584	0.058	0.054	600	12	0.0012	0.0011	12
Cranes																							
CRANE TRUCK 45 T HYDRAULIC 6 AXLE	4	Diesel	1800	0.05	220	1,760	158,400	158,400	10.21	1.01	0.94	1617	0.160	0.149	1661	1617	0.160	0.149	1661	32	0.0032	0.0030	33
60T RT Crane	1	Diesel	320	0.05	132	528	8,448	8,448	10.21	1.01	0.94	86	0.009	0.008	89	86	0.009	0.008	89	2	0.0002	0.0002	2
Forklift	1	Diesel	142	0.05	220	880	6,248	6,248	10.21	1.01	0.94	64	0.006	0.006	66	64	0.006	0.006	66	1	0.0001	0.0001	1
Digger	3	Diesel	990	0.05	220	1,760	87,120	87,120	10.21	1.01	0.94	889	0.088	0.082	914	889	0.088	0.082	914	18	0.0018	0.0016	18
Tensioner	1	Diesel	80	0.05	132	264	1,056	1,056	10.21	1.01	0.94	11	0.001	0.001	11	11	0.001	0.001	11	0	0.0000	0.0000	0
Pullers	3	Diesel	589	0.05	132	264	7,775	7,775	10.21	1.01	0.94	79	0.008	0.007	82	79	0.008	0.007	82	2	0.0002	0.0001	2
Skid Steers	2	Diesel	190	0.05	220	880	8,360	8,360	10.21	1.01	0.94	85	0.008	0.008	88	85	0.008	0.008	88	2	0.0002	0.0002	2
Dump Trucks																							
DUMP BOX TRUCK 2-1/2 T 6X6	1	Diesel	505	0.05	220	440	11,110	11,110	10.21	1.01	0.94	113	0.011	0.010	117	113	0.011	0.010	117	2	0.0002	0.0002	2
DUMP BOX TRUCK 1-1/4 & 1-1/2 T	2	Diesel	840	0.05	220	880	36,960	36,960	10.21	1.01	0.94	377	0.037	0.035	388	377	0.037	0.035	388	8	0.0007	0.0007	8
Flatbed Framing Trucks	3	Diesel	1260	0.05	220	880	55,440	55,440	10.21	1.01	0.94	566	0.056	0.052	581	566	0.056	0.052	581	11	0.0011	0.0010	12
Total												5,160	0.51	0.48	5,300	5,160	0.51	0.48	5,300	103	0.01	0.01	106

1. Construction expected to take approximately 44 weeks. Each equipment's days per week and hours per day are listed in the table below.
2. Off-road mobile source fuel usage based on South Coast Air Quality Management District CEQA Air Quality Handbook, Table A9-3E.
3. Source: U.S. EPA Emission Factors Hub (<https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf>, updated January 2025.)

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Help

EPA CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

Scope 1 Emissions from Mobile Sources

Guidance

(A) Enter annual data for each vehicle or group of vehicles (grouped by vehicle type, vehicle year, and fuel type) in ORANGE cells in Table 1. Example entry is shown in first row (GREEN Italics). Only enter vehicles owned or leased by your organization on this sheet. All other vehicle use such as employee commuting or business travel is considered a scope 3 emissions source and should be reported in the corresponding scope 3 sheets.

- Note: The latest mobile combustion factors reflect year 2021 data. Therefore, for all vehicle model years 2022 onward, the 2021 year factor is used.
- Select "On-Road" or "Non-Road" from the drop down box to determine the Vehicle Types available. You must make this selection before picking the vehicle type.
- Select "Vehicle Type" from drop down box (closest type available).
- Enter "Fuel Usage" in appropriate units (units appear when vehicle type is selected).
 - If mileage or fuel usage is unknown, estimate using approximate fuel economy values from the manufacturer, www.fueleconomy.gov, or the Reference Table below.
 - Vehicle year and Miles traveled are not necessary for non-road equipment.

(B) When using biofuels, typically the biofuel (biodiesel or ethanol) is mixed with a petroleum fuel (diesel or gasoline) for use in vehicles. Enter the biodiesel and ethanol percentages of the fuel if known, or leave default values shown below.

Biodiesel Percent: 20 %
Ethanol Percent: 80 %

(C) Biomass CO₂ emissions from biodiesel and ethanol are not reported in the total emissions, but are reported separately at the bottom of the sheet.

Table 1. Mobile Source Fuel Combustion and Miles Traveled

Source ID	Source Description	On-Road or Non-Road?	Vehicle Type	Vehicle Year	Fuel Usage	Units	Miles Traveled
<i>Fleet-012</i>	<i>HQ Fleet</i>	<i>OnRoad</i>	<i>Passenger Cars - Gasoline</i>	<i>2019</i>	<i>500</i>	<i>gal</i>	<i>12,400</i>
Hughes 550D Helicopter	Helicopter	NonRoad	Aircraft - Aviation Gasoline	2020	44,000	gal	
ATV	ATV	NonRoad	Recreational Equipment - Gasoline (4 stroke)		396	gal	

Based on Fuel Consumption of 20 gal/hr * 10 hr/day * 5 day/week * 44 weeks/yr
(<https://boltflight.com/md-500d-price-and-operating-costs/>)
Assume 20 miles per gallon, 2 hours per day, 3 days per week, 44 weeks per year, average speed of 30 miles/hr

Reference Table: Average Fuel Economy by Vehicle Type

Vehicle Type	Average Fuel Economy (mpg)
Passenger Cars	24.8
Other 2-Axle, 4-Tire Vehicles	18.1
Motorcycles	44.0
Single unit 2-Axle 6-Tire or More Trucks	7.9
Combination Trucks	6.9
Diesel Buses (Diesel Heavy-Duty Vehicles)	7.4

Average mpg values from the U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 2022 (Updated February 2024), Table VM-1.

GHG Emissions

Total Organization-Wide Mobile Source Fuel Usage and CO₂ Emissions (On-Road and Off-Road Vehicles)

Fuel Type	Fuel Usage	Units	CO ₂ (kg)
Motor Gasoline	396	gallons	3,477
Diesel Fuel	0	gallons	0
Residual Fuel Oil	0	gallons	0
Aviation Gasoline	44,000	gallons	365,640
Kerosene-Type Jet Fuel	0	gallons	0
Liquefied Petroleum Gases (LPG)	0	gallons	0
Ethanol	0	gallons	0
Biodiesel	0	gallons	0
Liquefied Natural Gas (LNG)	0	gallons	0
Compressed Natural Gas (CNG)	0	scf	0

Note: emissions here are only for the gasoline portion of the fuel, biogenic CO₂ emissions are reported i
Note: emissions here are only for the diesel portion of the fuel, biogenic CO₂ emissions are reported bei

Total Organization-Wide On-Road Gasoline Mobile Source Mileage and CH₄/N₂O Emissions

Vehicle Type	Vehicle Year	Mileage (miles)	CH ₄ (g)	N ₂ O (g)
Passenger Cars - Gasoline	1984-93	0	0.0	0.0
	1994	0	0.0	0.0
	1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
	2005	0	0.0	0.0
	2006	0	0.0	0.0
	2007	0	0.0	0.0
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
	2016	0	0.0	0.0
2017	0	0.0	0.0	
2018	0	0.0	0.0	
2019	0	0.0	0.0	
2020	0	0.0	0.0	
2021	0	0.0	0.0	
2022	0	0.0	0.0	
2023	0	0.0	0.0	
2024	0	0.0	0.0	
Light-Duty Trucks - Gasoline (Vans, Pickup Trucks, SUVs)	1987-93	0	0.0	0.0
	1994	0	0.0	0.0
	1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
	2005	0	0.0	0.0
	2006	0	0.0	0.0
	2007	0	0.0	0.0
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
	2016	0	0.0	0.0
2017	0	0.0	0.0	
2018	0	0.0	0.0	
2019	0	0.0	0.0	
2020	0	0.0	0.0	
2021	0	0.0	0.0	
2022	0	0.0	0.0	
2023	0	0.0	0.0	
2024	0	0.0	0.0	

Heavy-Duty Vehicles - Gasoline	1985-86	0	0.0	0.0
	1987	0	0.0	0.0
	1988-1989	0	0.0	0.0
	1990-1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
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	2006	0	0.0	0.0
	2007	0	0.0	0.0
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
2016	0	0.0	0.0	
2017	0	0.0	0.0	
2018	0	0.0	0.0	
2019	0	0.0	0.0	
2020	0	0.0	0.0	
2021	0	0.0	0.0	
2022	0	0.0	0.0	
2023	0	0.0	0.0	
2024	0	0.0	0.0	
Motorcycles - Gasoline	1960-1995	0	0.0	0.0
	1996-2005	0	0.0	0.0
	2006-2024	0	0.0	0.0

Total Organization-Wide On-Road Non-Gasoline Mobile Source Mileage and CH₄/N₂O Emissions

Vehicle Type	Fuel Type	Vehicle Year	Mileage (miles)	CH ₄ (g)	N ₂ O (g)
Passenger Cars - Diesel	Diesel	1960-1982	0	0.0	0.0
		1983-2006	0	0.0	0.0
		2007-2024	0	0.0	0.0
Light-Duty Trucks - Diesel	Diesel	1960-1982	0	0.0	0.0
		1983-2006	0	0.0	0.0
		2007-2024	0	0.0	0.0
Medium- and Heavy-Duty Vehicles - Diesel	Diesel	1960-2006	0	0.0	0.0
		2007-2024	0	0.0	0.0
Light-Duty Cars	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
Light-Duty Trucks	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	LNG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
Medium-Duty Trucks	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	LNG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
Heavy-Duty Trucks	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	LNG		0	0.0	0.0
Buses	Biodiesel		0	0.0	0.0
	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	LNG		0	0.0	0.0
	Biodiesel		0	0.0	0.0

Total Organization-Wide Non-Road Mobile Source Fuel Usage and CH₄/N₂O Emissions

Vehicle Type	Fuel Type	Fuel Usage (gallons)	CH ₄ (g)	N ₂ O (g)
Ships and Boats	Residual Fuel Oil	0	0.0	0.0
	Gasoline (2 stroke)	0	0.0	0.0
	Gasoline (4 stroke)	0	0.0	0.0
	Diesel	0	0.0	0.0
Locomotives	Diesel	0	0.0	0.0
Aircraft	Jet Fuel	0	0.0	0.0
	Aviation Gasoline	44000	310717.7	4707.8
Agricultural Equipment	Gasoline (2 stroke)	0	0.0	0.0
	Gasoline (4 stroke)	0	0.0	0.0
	Gasoline Off-Road Trucks	0	0.0	0.0
	Diesel Equipment	0	0.0	0.0
	Diesel Off-Road Trucks	0	0.0	0.0
Construction/Mining Equipment	LPG	0	0.0	0.0
	Gasoline (2 stroke)	0	0.0	0.0
	Gasoline (4 stroke)	0	0.0	0.0
	Gasoline Off-Road Trucks	0	0.0	0.0
	Diesel Equipment	0	0.0	0.0
Lawn and Garden Equipment	Diesel Off-Road Trucks	0	0.0	0.0
	LPG	0	0.0	0.0
	Gasoline (2 stroke)	0	0.0	0.0
	Gasoline (4 stroke)	0	0.0	0.0
	Diesel	0	0.0	0.0
Airport Equipment	LPG	0	0.0	0.0
	Gasoline	0	0.0	0.0
	Diesel	0	0.0	0.0
Industrial/Commercial Equipment	LPG	0	0.0	0.0
	Gasoline (2 stroke)	0	0.0	0.0
	Gasoline (4 stroke)	0	0.0	0.0
	Diesel	0	0.0	0.0
Logging Equipment	LPG	0	0.0	0.0
	Gasoline (2 stroke)	0	0.0	0.0
	Gasoline (4 stroke)	0	0.0	0.0
Railroad Equipment	Diesel	0	0.0	0.0
	LPG	0	0.0	0.0
	Gasoline	0	0.0	0.0
Recreational Equipment	Gasoline (2 stroke)	0	0.0	0.0
	Gasoline (4 stroke)	396	1077.6	586.9
	Diesel	0	0.0	0.0
	LPG	0	0.0	0.0

Total CO₂ Equivalent Emissions (metric tons) - Mobile Sources	379.3
Total Biomass CO₂ Equivalent Emissions (metric tons) - Mobile Sources	0.0

Scope 3 Emissions from Employee Commuting

Guidance

- (A) Enter annual data in ORANGE cells in the table corresponding to the transport method. Example entry is shown in first row (GREEN Italics).
(B) For employees commuting in a personal vehicle, select the "Vehicle Type" and enter miles traveled (vehicle-miles) in Table 1.
(C) For employees commuting using public transportation, select the "Transport Type" and enter miles traveled (passenger-miles) in Table 2.

Tip: If more than one employee travels by the same vehicle type or transport type, miles can be combined and entered in one row.

Table 1. Personal Vehicle - Employee Commuting by Vehicle-Miles (CO2, CH4 and N2O)

Table with 7 columns: Source ID, Source Description, Vehicle Type, Vehicle-Miles (miles), CO2 Emissions (kg), CH4 Emissions (g), N2O Emissions (g). Rows include JD-001 (Passenger Car), Employee Commute - Construction (Light-Duty Truck), and Employee Commute - Operation (Light-Duty Truck), followed by a total row.

APPENDIX I

Draft Vegetation Management Plan





VEGETATION MANAGEMENT PLAN

APRIL 2026

Submitted by
Northern States Power Company
Great River Energy
Minnesota Power
Otter Tail Power Company
Western Minnesota Municipal Power Agency

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1 INTRODUCTION

1.1 Project Summary

Northern States Power Company, doing business as Xcel Energy (Xcel Energy), along with Great River Energy, Minnesota Power, Otter Tail Power Company (Otter Tail), and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency (Western Minnesota), (collectively, the Utilities) are applying for a Route Permit Amendment to add a second 345 kV circuit onto mostly existing transmission structures between the existing Bison Substation near Fargo, North Dakota to the existing Alexandria Substation near Alexandria, Minnesota. The existing 345 kV structures were previously permitted by the Minnesota Public Utilities Commission (PUC) in 2011 and constructed as double-circuit capable as part of the CapX2020 Fargo – St. Cloud 345 kV Transmission Project.¹

Additionally, an estimated 107 new monopole structures, including 86 within Minnesota, are planned for specific locations along the existing route to accommodate required turns, highway crossings, or adjustments in alignment where it was not necessary to install a second monopole during construction of the existing transmission line.

The Project represents a critical investment identified as part of the Long-Range Transmission Planning (LRTP) Tranche 2.1 Portfolio, reflecting the region's continued coordinated efforts to prepare for a rapidly transforming energy landscape.

In accordance with the previously approved Route Permit for the CapX2020 Fargo – St. Cloud 345 kV Transmission Project, the Utilities have developed this Vegetation Management Plan (Plan). The purpose of the Plan is to minimize tree clearing, prevent the introduction of noxious weeds and invasive species, and revegetate disturbed, non-cropland areas with appropriate native species in cooperation with landowners and appropriate state, federal, and local resource agencies.

1.2 Vegetation Management Plan Overview

This Plan has been developed to address anticipated conditions of the Route Permit Amendment related to vegetation management for the Project in Minnesota. This Plan identifies:

- Average gasoline usage: 20 miles per gallon
- Measures to minimize tree removal and ground disturbance.

¹ *In the Matter of the Application for a Route Permit for the Fargo to St. Cloud 345 kV Transmission Line Project*, Docket No. E002, ET2/TL-09-1056, FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER ISSUING AN HVTL ROUTE PERMIT TO XCEL ENERGY AND GREAT RIVER ENERGY (June 24, 2011).

- A comprehensive re-vegetation plan for non-cropland areas.
- Identify measures to prevent the introduction of noxious weeds and invasive species on lands disturbed by the proposed Project.

This Plan has been prepared to address vegetation management activities associated with construction, restoration, and initial site stabilization related to the Route Permit Amendment. The Plan does not govern routine, long-term operation and maintenance vegetation management, which is conducted by each Utility in accordance with their respective established practices, applicable regulatory requirements, and National Electric Safety Code (NESC) standards.

2 SITE DESCRIPTION

The Project spans approximately 136-miles from the Bison Substation near Fargo, North Dakota to the Alexandria Substation near Alexandria, Minnesota. Approximately 101-miles are within Minnesota, extending from the Minnesota-North Dakota in Holy Cross Township in Clay County to the Alexandria Substation in Douglas County, crossing Clay, Wilkin, Otter Tail, Grant, and Douglas counties.

2.1 Existing Conditions

The vast majority of the ROW for the Project is located within existing, previously cleared electric transmission ROW that has been maintained by the Utilities for over a decade. The dominant land cover of the ROW is cultivated crop land and hay/pasture land, and the ROW has been maintained generally in early successional vegetation (e.g., shrub/scrub, grassland/herbaceous, emergent herbaceous wetlands) in addition to areas of open water, developed land, and barren land.

2.2 Project Components

2.2.1 Existing 345 kV Transmission line ROW

The Project Area, defined as the necessary space for constructing and operating the second 345 kV circuit, is inclusive of the ROW, consisting of the existing transmission line corridor as well as access to the transmission line corridor. The existing 345 kV transmission line corridor is 150 feet wide. No ROW expansion is proposed as part of this Project.

3 GENERAL RIGHTS-OF-WAY VEGETATION MANAGEMENT

The standard practice of the Utilities is to clear all woody vegetation within their ROW that may interfere with or restrict safe and reliable operation of the line. The existing cleared ROW also provides for ready access or observation for inspection and maintenance purposes. There are limited circumstances when this practice is modified and selective vegetation can remain within the right-of-way provided NESC clearance requirements are met. In these areas, Utilities may vary their standard procedure and retain some vegetation within the right-of-way to the extent practicable. While

some trees may still be removed when necessary for the safe and reliable operation of the facility, unnecessary tree or vegetation removal or destruction in these specific areas within the right-of-way may otherwise be avoided.

3.1 General Practices

The following provides a list of general practices the Utilities will follow to minimize vegetation impacts related to Project construction.

- Use erosion control best management practices (BMPs) to intercept stormwater runoff from areas disturbed as part of clearing operations. Stormwater BMPs are addressed in the Stormwater Pollution Prevention Plan (SWPPP).
- Minimize rutting by using matting in wetland areas for all construction activities, including ROW clearing activities; or perform work on firm or frozen ground that can support the equipment used.
- Minimize soil disturbance in steeply sloped areas, to the extent possible and/or practicable.
- Limit construction activities, including vegetation removal, to the ROW and off-ROW access.
- Minimize the spread of invasive plant species through the use of BMPs.
- Additional selective vegetation clearing (i.e., individual trees or small areas of shrubs) will only occur in areas deemed necessary for construction access or work spaces. Where vegetation clearing is not needed, existing vegetation will remain untouched.
- Limit traffic in the ROW between transmission structure locations to a single access path to the extent practicable.
- Use BMPs to minimize the potential for spills or leaks from equipment during construction, including frequent inspections of equipment, requiring portable spill containment kits for construction equipment, ensuring that equipment operators are always present at the nozzle when fueling is in progress, and prohibiting the refueling of equipment in wetlands.
- Avoid placement of staging or laydown areas in wetlands, and immediately adjacent to wetlands to the extent practicable.
- Limit staging and lay-down areas to previously disturbed areas where practicable.
- Locate, design, construct, and maintain access paths to minimize rutting, maintain surface and subsurface water flows in the wetland, and reduce erosion and sedimentation.

- Where wetlands are to be crossed, create access through the shortest route within the wetland resulting in the least amount of physical impact to the wetland during construction.
- Assemble structures on upland areas before transporting them into wetlands where practicable.
- Use construction mats to minimize impacts within wetlands when construction during winter (frozen) months is not possible.
- Slash or woody vegetation that originates from outside wetlands is not to be left in wetlands. These materials are considered unauthorized fill and must be removed.
- To the extent practicable, complete construction in wet organic soils when the ground is frozen.

3.2 Site Clean-Up and Restoration

As construction wastes are generated, respective materials will be properly disposed of in a manner which is suitable and appropriate for those wastes. Restoration of the natural landscape will begin as soon as construction or clearing activities cease. Restoration activities may include:

- Regrading areas disturbed by construction or clearing to reflect pre-construction topography.
- Returning floodplain contours to their pre-construction profile if disturbed during construction.
- Planting or seeding non-agricultural areas disturbed by transmission line structures to prevent erosion. Use native seed mixes from native plants; ensure seeding and/or plantings are done at a time congruent with seeding and growth of the area, not during a time that would preclude germination or rooting.
- Restoring the corridor, temporary work spaces, access paths, and other areas of ground disturbance affected by Project construction upon completion of work.

4 VEGETATION REMOVAL

The Utilities will employ selective clearing and slash disposal procedures when clearing the existing ROW, utilizing techniques which are consistent with the safe, reliable transmission of electric energy in an economic manner, and which are compatible with the environment.

Vegetation clearing will take place in circumstances where woody plants would hinder access and construction activities (i.e., in connection with clearing access roads, structure work areas, and wire-pulling sites).

4.1 Vegetation Clearing and Disposal

In upland areas, woody vegetation will be removed within the ROW and managed through the operational life of the Project. Clearing of vegetation within the ROW will occur prior to other construction activities as allowed by landowner agreements and permit conditions. Clearing of brush, trees, and herbaceous vegetation to facilitate access and to meet safety standards will occur. Clearing may be accomplished with the use of chainsaws, mowers, and hydraulic tree-cutting equipment.

Vegetation will be cut at, or slightly above, the ground surface. Rootstock or stumps will generally be left in place, unless transmission structure installation or construction access requires otherwise or at the request of the landowner. Landowners will be notified prior to clearing activities to allow them time to harvest trees within easement boundaries. At the time of clearing, any merchantable trees will be cut to standard logging lengths and stacked in upland areas within the existing ROW. The landowner will retain the title to all timber material, if desired. Non-merchantable material, including trees, brush, and slash, will be either cut and scattered, placed in windrow piles, chipped, or burned within the ROW. Non-merchantable felled material may also be removed from the ROW in a fashion that does not cause erosion or complies with the SWPPP. The cut and scatter method may be used in areas where limited clearing will occur. The purpose of this method is to limit the need for unnecessarily hauling and potentially disturbing existing ground or vegetation. Likely situations where this method will be used are in shrub and brush areas with a limited number of trees. No upland tree material is to be deposited within wetlands. Woody vegetation may be chipped and scattered over the ROW to a maximum depth of one inch in non-agricultural upland areas.

4.2 Wetlands Clearing and Disposal

The use of heavy equipment in wetlands will be kept to the minimum extent practicable. Permanent wetland fill is limited to structure installation. Temporary wetland fill greater than 0.5 acres will not be permitted without prior written consent from the United States Army Corps of Engineers (USACE) in compliance with the Utility Regional General Permit conditions (RGP). Wetland impact minimization will be accomplished by:

- constructing in wetlands during frozen conditions to the extent feasible;
- the use of ice roads;
- working in dry conditions;
- observing all BMPs relating to the spread of invasive species;
- using low ground-pressure tires or specialized tracked vehicles;
- and using matting materials during non-frozen ground conditions.

These BMPs are intended to minimize damage to wetland vegetation and soils. Forested wetlands may require the removal of woody vegetation within the ROW sufficient to provide access for stringing conductors and shield wires, for transmission structure installation, and for safe Project operation. The removal of woody vegetation within forested wetlands will be conducted in accordance with USACE RGP permit conditions. In these areas, all trees and large shrubs will be cleared to ground level without grubbing. Woody materials will be removed from temporary access paths. Small trees and shrubs (<6" diameter) along the ROW will be cut with debris left in place; large trees and shrubs (>6" diameter) will be moved from wetlands to upland sites as required. Stumps will only be removed in wetlands if they obstruct construction mats, pole sites, or equipment safety, using low ground-pressure machinery to grind them at or below ground level. Woody debris from grinding may be thinly spread in wetlands, but not mounded.

4.3 State Lands

On state-owned lands, Utilities shall vary their standard practice of clearing all woody vegetation within the proposed ROW for a new high voltage transmission line. Where state-owned lands are crossed, Utilities will work with the Minnesota Department of Natural Resources (DNR) in planning for the ROW preparation prior to any clearing activities commencing on those lands. Selective right-of way vegetation removal typically includes the following practices:

- Woody vegetation within 100 feet of a transmission line pole will be cleared for safe construction of the transmission line facilities.
- Woody vegetation whose mature height will not exceed the heights specified in Figure 1 below will be retained to the extent feasible.
- Within 75 feet of a DNR Public Water Inventory stream crossing, woody vegetation whose mature height will not exceed 10 feet will be retained to the extent feasible, so long as the woody vegetation is not within 100 feet of a transmission pole.
- DNR Operational Order #113, Invasive Species Prevention and Management, will be followed.

5 HERBICIDE USE

Herbicides will not be used at organic farms or other properties where landowners prohibit their use. Only individuals who have received the appropriate training and/or certification will be permitted to apply herbicides. Herbicides will be used in accordance with manufacturers' specifications and all applicable federal and state regulations. Herbicides may be used to control the re-sprout of the stumps of tall-growing tree species or to control listed invasive or noxious weed species. Herbicides may not be used for ROW clearing within 75 feet of the vegetative buffer zone of waterbody crossings. Herbicides used in or near wetlands and waterbodies must be designed for use in wet areas as designated by manufacturer's specifications and federal and state regulations. Herbicides may not be used on public lands without a permit.

6 NOXIOUS WEEDS AND INVASIVE SPECIES CONTROL

Noxious and invasive terrestrial plant species are regulated in Minnesota by the Minnesota Department of Agriculture (MDA). The DNR also manages noxious and invasive terrestrial plant species on public lands. During all phases of Project activities, including clearing, construction, operation, and maintenance, the Utilities will manage documented noxious weeds and invasive species (NWIS) occurrences that are listed as "eradicate" or "control" under the "Prohibited Noxious Weed" category by the MDA located within the ROW and temporary workspaces.

The Environmental Inspector (EI) will oversee implementation of this Plan during construction. The EI is responsible for identifying and documenting noxious weeds and invasive species within the right-of-way and temporary workspaces, recommending appropriate prevention and control measures, and coordinating notifications or reporting to applicable agencies as required.

During construction and maintenance, the Utilities will implement the following BMPs to prevent the spread of NWIS:

- All equipment will be clean of dirt and debris before being used in the Project area.
- Limiting grading and excavation to areas surrounding pole structure foundations, and only as needed along access roads and workspace areas for a level and safe working area.
- All equipment will be cleaned of dirt and debris before moving from infested areas of the Project. Equipment cleaning procedures will be implemented in accordance with applicable DNR guidance and best management practices.

Clothing and handheld equipment will be checked for invasive plant materials and cleaned of dirt and debris after use in an infested area, and/or before being used in another area. Equipment cleaning methods will be determined based on site conditions, equipment type, and weather, and may include scraping, brushing, blowing, and/or washing to remove soil, plant material, and propagules prior to equipment movement out of infested areas.

- The contractor(s) must maintain record of cleaning for each piece of equipment used onsite. This information will be available to the EI upon request.
- Non-compliance with equipment cleaning requirements may warrant a stop work order to be issued. Construction activity could then re-commence only after Project equipment has been adequately cleaned.
- Collected invasive materials should be left in the area where they were acquired.
- Minimally disturbed areas will be allowed to restore naturally.
- Only weed-free materials (e.g., straw bales, bio-rolls, mulch) will be used in erosion control.
- All disturbed areas will be revegetated using seed mixes labelled “Noxious Weeds; None Found” in accordance with regulations and will utilize yellow tag seed when available.
- Compliance with MPCA Construction Stormwater General Permit, including stabilization requirements, inspection, maintenance and repair of erosion and sediment control BMPs.
- Certified weed-free straw or weed-free hay will be used for erosion and sediment control BMPs.
- Each regulated invasive terrestrial plant found that requires removal will be managed according to BMPs as outlined by DNR.

6.1 Strategic Actions by Category

During project construction, monitoring of the ROW will occur to locate and identify infestations of prohibited noxious weeds, as defined by DNR. Prohibited noxious weeds are placed in two categories, outlined below. These species are required by law to be eradicated or controlled on all lands within the state. The Utilities agree to carry out BMP of these species if any are found during the monitoring. The Utilities agree to discuss management of species that are categorized as Restricted under DNR rules. The MDA² recommends leaving all destroyed NWIS on the property after management. However, if the operator chooses to remove NWIS from the site, they must make sure that the disposal site can accept and properly dispose of said plants.

² [A Guide to Removal and Disposal of Noxious Weeds in Minnesota | Minnesota Department of Agriculture](#)

6.1.1 Prohibited Eradicate

The "Prohibited-Eradicate Noxious Weeds" category includes species that must be eradicated on all lands within the state. The 16 species that are designated as Prohibited-Eradicate noxious weeds are plants that are not currently known to be present in Minnesota or are not widely established in the state.

Common name	Scientific name
Black swallow-wort	<i>Cynanchum louiseae</i>
Brown knapweed	<i>Centaurea jacea</i>
Common teasel	<i>Dipsacus fullonum</i>
Cutleaf teasel	<i>Dipsacus laciniatus</i>
Dalmatian toadflax	<i>Linaria dalmatica</i>
Diffuse knapweed	<i>Centaurea diffusa</i>
Giant hogweed	<i>Heracleum mantegazzianum</i>
Grecian foxglove	<i>Digitalis lanata</i>
Japanese honeysuckle	<i>Lonicera japonica</i>
Japanese hops	<i>Humulus japonicus</i>
Japanese stiltgrass	<i>Microstegium vimineum</i>
Johnsongrass	<i>Sorghum halepense</i>
Pale swallow-wort	<i>Cynanchum rossicum</i>
Palmer amaranth	<i>Amaranthus palmeri</i>
Red hailstone/goldencreeper	<i>Thladiantha dubia</i>
Tree of heaven	<i>Ailanthus altissima</i>
Yellow star-thistle	<i>Centaurea solstitialis</i>

6.1.1.1 Action Plan

The following action plan outlines essential steps for detection, control, and monitoring efforts across affected areas:

- Record location (using GPS), size of infestation, percent aerial cover, habitat type, origin/cause of infestation.
- Immediate eradication upon detection.
- Monitor high-risk areas – high-quality wetlands, mapped native plant communities, Sites of High or Moderate Biodiversity.

- Use BMP specific to each species of noxious weed to carry out control measures.
- Report observations to DNR.

6.1.2 Prohibited Control

The "prohibited-control noxious weeds" category includes species that must be controlled on all lands within the state. Plants that are designated as prohibited-control noxious weeds are species that are already established throughout the state or regions of the state. At a minimum, these species must be controlled in a way that prevents the spread of these species by seed or vegetative means.

Common Name	Scientific Name
Bohemian knotweed	<i>Polygonum x bohemicum</i>
Canada thistle	<i>Cirsium arvense</i>
Common barberry	<i>Berberis vulgaris</i>
Common tansy	<i>Tanacetum vulgare</i>
Giant knotweed	<i>Polygonum sachalinense</i>
Japanese knotweed	<i>Polygonum cuspidatum</i>
Leafy spurge	<i>Euphorbia esula</i>
Meadow knapweed	<i>Centurea x moncktonii</i>
Narrowleaf bittercress	<i>Cardamine impatiens</i>
Non-native phragmites	<i>Phragmites australis ssp. australis</i>
Plumeless thistle	<i>Carduus acanthoides</i>
Poison hemlock	<i>Conium maculatum</i>
Purple loosestrife	<i>Lythrum salicaria</i>
Round leaf bittersweet	<i>Celastrus orbiculatus</i>
Spotted knapweed	<i>Centurea stoebe ssp. micranthos</i>
Wild parsnip	<i>Pastinaca sativa</i>

6.1.2.1 Action Plan

The following action plan outlines essential steps for detection, control, and monitoring efforts across affected areas:

- Record location (using GPS), size of infestation, percent aerial cover, habitat type, origin/cause of infestation
- Prevent seed production and spread (e.g., mow seed heads).

- Monitor high-risk areas – high-quality wetlands, mapped native plant communities, Sites of High or Moderate Biodiversity.
- Use BMP specific to each species of noxious weed to carry out control measures.
- Report observations to DNR.

6.1.3 Restricted

The "restricted noxious weeds" category includes noxious weeds and their propagating parts that may not be imported, sold, or transported in the state, except as allowed by permit under Minnesota law (MS. 18.82). Noxious weeds that are designated as restricted and placed on the restricted list may be plants that are widely distributed in Minnesota and for which a requirement of eradication or control would not be feasible on a statewide basis using existing practices. It is prohibited to transport or sell these plants illegally as per Minnesota law (MS 18.75-18.91). At a minimum, these plants should not be accidentally transported via construction activity. Spread should be limited via voluntary control.

Common Name	Scientific Name
Amur honeysuckle	<i>Lonicera maackii</i> (Rupr.) Herder
Amur silvergrass	<i>Miscanthus sacchariflorus</i> (Maxim.) Franch.
Autumn olive	<i>Elaeagnus umbellata</i>
Bell's honeysuckle	<i>Lonicera x bella</i> Zabel
Black locust	<i>Robinia pseudoacacia</i> L.
Callery pear	<i>Pyrus calleryana</i>
Common or European buckthorn	<i>Rhamnus cathartica</i> L.
Creeping meadow foxtail	<i>Alopecurus arundinaceus</i>
Crown vetch	<i>Securigera varia</i> (L.) Lassen – Formerly named <i>Coronilla varia</i> L.
European alder	<i>Alnus glutinosa</i> (L.) Gaertn.
Garlic mustard	<i>Alliaria petiolata</i> (M. Bieb.) Cavara & Grande
Glossy buckthorn (all cultivars)	<i>Frangula alnus</i> Mill.
Japanese barberry cultivars	<i>Berberis thunbergii</i> DC.
Lesser celandine	<i>Ficaria verna</i> L.
Morrow's honeysuckle	<i>Lonicera morrowii</i> A. Gray
Multiflora rose	<i>Rosa multiflora</i> Thunb.
Porcelain berry	<i>Ampelopsis brevipedunculata</i> (Maxim.) Trautv.
Saltcedar	<i>Tamarix ramoissima</i> Ledeb.

Common Name	Scientific Name
Siberian peashrub	<i>Caragana arborescens</i> Lam. (exemption for Green Spires® <i>Caragana</i> - <i>Caragana</i> 'Jefarb')
Tatarian honeysuckle	<i>Lonicera tatarica</i> L.
Wild carrot/Queen Anne's lace	<i>Daucus carota</i> L.
Winged burning bush (and all cultivars)	<i>Euonymus alatus</i> Thunb.

6.1.3.1 Action Plan

The following action plan outlines essential steps for detection, control, and monitoring efforts across affected areas:

- Record location, size of infestation, percent aerial cover, habitat type, origin/cause of infestation.
- Limit spread through voluntary control.

6.1.4 Specially Regulated Plants

The "specially regulated plants" category includes noxious weeds that may be native species or nonnative species that have demonstrated economic value but also have the potential to cause harm in noncontrolled environments. Plants designated as specially regulated have been determined to pose ecological, economic, or human or animal health concerns.

Common Name	Scientific Name
Amur corktree	<i>Phellodendron amurense</i> Rupr.
Amur maple	<i>Acer ginnala</i> Maxim.
Common butterbur	<i>Petasites hybridus</i> (L.) G. Gaertn., B. Mey, & Scherb.
Giant butterbur	<i>Petasites japonicus</i> (Siebold & Zucc.) Maxim.
Norway maple	<i>Acer platanoides</i> L.
Rowan mountain ash	<i>Sorbus aucuparia</i> L.
Tatarian maple	<i>Acer tataricum</i> L.

6.1.4.1 Action Plan

The following action plan outlines essential steps for detection, control, and monitoring efforts across affected areas:

- Record location, size of infestation, percent aerial cover, habitat type, origin/cause of infestation.
- Limit spread through voluntary control.

6.1.5 County-listed Noxious Weeds in Clay County

As permitted by Minnesota Statutes §18.79, subds. 13 and 14, additional noxious weed species have been approved for listing by the county board of commissioners as County-Listed Noxious Weeds in Clay County. The county is solely responsible for developing this list and enforcing it. Pursuant to Minnesota Statutes, §18.83, Subd. 1 (2009), all persons in Clay County, Minnesota, shall control or eradicate all noxious weeds on land they occupy or are required to maintain. Control or eradication may be accomplished by any lawful method.

Common Name	Scientific Name
Bull thistle	<i>Cirsium vulgare</i>
Kochia	<i>Bassia scoparia</i>
Musk thistle	<i>Carduus nutans</i>

6.1.5.1 Action Plan

The following action plan outlines essential steps for detection, control, and monitoring efforts across affected areas:

- Record location (using GPS), size of infestation, percent aerial cover, habitat type, origin/cause of infestation.
- Prevent seed production and spread (e.g., mow seed heads).
- Monitor high-risk areas – high-quality wetlands, mapped native plant communities, Sites of High or Moderate Biodiversity.
- Use BMP specific to each species of noxious weed to carry out control measures.

6.2 Further Suggested Measures/ BMPs to the Contractor

Management strategies should be adapted to nearby features (wetland, high biodiversity, etc.), local ecology, state designation, and other specific location details. Management strategies may vary across the project.

Major infestation areas identified during the first growing season will be treated with herbicides or by mechanical methods. The contractor applying herbicide is required to obtain any necessary permits and/or certifications prior to herbicide use. The contractor applying herbicide must keep proper documentation of location and timing of herbicide use and be prepared to provide such documentation to the Utilities or the EM upon request. Treatment shall conform to manufacturers' specifications.

To prevent the spread of NWIS during clearing and construction, mulch used on the Project sites will consist of state-certified weed-free material or mulch derived from onsite locations. The contractor will be responsible for locating and documenting the source of certified weed-free mulch. Copies of the applicable certification documentation must be given to the EM and made available upon request to the appropriate agencies. Mulch derived from onsite locations may be spread up to six inches deep in upland areas to provide ground protection along access paths. Upon abandonment of access routes, woodchip mulch is to be spread evenly to a depth no greater than one inch. No mulch is to be spread in wetland locations.

It is important to note that there may be NWIS already existing on private parcels along the ROW. While this does not preclude the Utilities from the responsibility of managing the spread of NWIS to the greatest extent possible, this ability may be limited by pre-existing conditions. For example, a NWIS concentration adjacent to the ROW may result in NWIS also spreading into the ROW. The Utilities do not have the authority to treat NWIS outside of their ROW. Where land outside of the ROW contains significant amounts of NWIS clearly visible from the ROW, the Utilities and their contractors will attempt to notify landowners about them and control options they may want to consider.

7 SEEDING, EROSION CONTROL, REVEGETATION, AND RESTORATION

Revegetation and restoration of disturbed areas associated with construction activities are intended to protect wetland and water resources from issues associated with erosion and sedimentation, to protect wildlife habitat, and reduce the movement of NWIS species within the right-of-way. Oversight for the implementation of revegetation and restoration procedures will be provided by the EI.

Seed used will be purchased on a Pure Live Seed (PLS) basis for seeding revegetation areas. Seed tags will identify:

- Purity;
- Germination;
- Date tested;
- Total weight and PLS weight;

- Weed seed content; and
- Seed supplier's name and business information.

Seed will be used within 12 months of testing as required by applicable state rules and regulations. The seed tags on the seed sacks will also certify that the seed is “noxious weed free.” Seed rates used on the Project will be based on PLS rate, not actual weight. The species components of individual mixes are subject to availability at the time of purchase. Grass species may be substituted with alternative native or non-invasive species that are included in Natural Resource Conservation Service guidelines and subject to approval by the Utilities. Seed tags must be collected by the contractor and provided to the EI during seeding activities. The tags will be reviewed by the EI prior to use to ensure that the seed mix complies with specifications described herein. Seedbed preparation and seeding are to occur immediately following completion of construction activities and site cleanup in any given location. Prior to seeding, prepared beds should be sufficiently soft to allow for seed penetration and mulch anchoring, while sufficiently firm to provide surface soil stability. Seeding and mulching should occur parallel to ground contours as practicable. In order to minimize ground disturbance along the entire right-of-way, forested areas are being cleared, but roots and stumps are being left in place where appropriate, but may be removed at the request of the landowner or in cases where access is needed for snowmobile, hiking, or maintenance crews. Fertilizers and other soil amendments are not recommended and will only be applied as requested by and agreed to with landowners.

7.1 Seeding Methods, Erosion Control and Timing

7.1.1 Seeding Methods

Drilled seed will be sown at a depth of 0.25 inches. Seeding equipment will be able to accommodate and uniformly distribute different sizes of seed at the required depth. Feeding mechanisms will be able to evenly distribute different seed types at the rates specified. Seedbed soil is to be suitably firmed immediately following seed drilling. Within cleared areas, it is assumed that seed drilling will be limited by the presence of stumps and roots left in place to retain the soil surface. Broadcast seeding will occur as specified in the seed mixes. Seed is to be uniformly distributed by a mechanical, hand-operated seeder; or in small seeding areas, by hand. Following seeding, the surface is to be raked with a cultipacker, harrow, or hand rake. The bed is to be firmed as appropriate to site conditions.

Hydroseeding will occur as specified in the seed mixes and in accordance with all standards established by the Minnesota Department of Transportation. Seed will be applied in a broadcast, hydromulch slurry which will allow the contractor to see where application has taken place and ensure uniform coverage of the seeding area. The hydroseeder must provide for continuous agitation of slurry and provide for a uniform flow of slurry. Hydroseed slurry is not to be held in the tank for more than one hour prior to application.

To the extent practicable seeding will occur at optimal times such as late spring or early summer. If weather conditions or other factors prevent permanent seeding then temporary erosion control

measures will be installed until restoration can be completed. Once conditions have improved permanent seeding will occur and temporary erosion control measures will be removed.

7.1.2 Erosion Control

Straw mulch will be applied to disturbed, non-cultivated upland areas if requested by landowners or land managers. If state certified weed-free straw mulch is not used, the project will manage any noxious weeds in the right-of-way. The contractor will be responsible for acquiring certified weed-free straw mulch from approved sources and copies of applicable documentation must be provided to the EI. Mulch will be required on disturbed, exposed soils on all slopes greater than five percent, and on dry, sandy soils prone to erosion by wind or rain. Straw mulch will be applied at a rate of two tons per acre in upland areas unless otherwise specified in permit conditions. Mulch rate may also be changed based on landowner discussion. Mulch will be uniformly distributed by mechanical blower or by hand in areas where vehicular access is limited. Mulch will be crimped to a depth of two to three inches using a mulch anchoring device where accessible. In areas where stumps and slash limit access by vehicles, mulch may be applied by hand at a reduced rate or at the specified rate and anchored in place by a liquid tackifier approved by the EI. Should conditions prevent straw mulch to be anchored, it shall be applied at a rate to not cause the straw material to move in the wind. Seeding periods for application of the native area vegetation seed mix and the wet meadow seed mix are limited to April 1 to June 30, during spring, or when soil temperatures have fallen below 55 degrees Fahrenheit in the fall. Outside of these time windows, temporary seed mixes, applied according to temporary cover-crop seed mix specifications are to be used. Prior to installation of native seed mixes, the seedbed should be mowed and prepared for final seeding. Seeding of the right-of-way is to occur as indicated in the project SWPPP. Where seeding is not possible, temporary stabilization using erosion control matting or mulch is required. Dormant seeding may be used after soil temperatures have fallen below 55 degrees Fahrenheit. Lower temperatures prevent seed from germinating. If dormant seeding is performed, temporary erosion control measures will be installed as indicated in the project SWPPP. Erosion control measures may consist of anchored straw mulch, hydromulch, wood chip mulch, or erosion control blankets.

7.1.2.1 Temporary Stabilization

Temporary revegetation will be implemented to quickly establish vegetative cover with the primary purposes of minimizing soil erosion and reducing the potential for the establishment of noxious weeds. The temporary seed mix is considered a cover crop, has rapid germination, and provides a quick ground cover. This seed mix is not intended to provide multi-year cover. Temporary seeding of cover crops will occur in locations where unfrozen, bare soil surface conditions and ruts will not be permanently restored within 30 days of completion of active work. Temporary restoration activities will include the repair of rutted surfaces and an even broadcast-seeding of the temporary cover-crop seed mix at a rate appropriate to the cover crop to provide erosion control of the soils. No mulch is to be applied in wetland areas. Temporary vegetation will be placed in accordance with the SWPPP or as directed by the EM. Temporary vegetation establishment may be expected to be successful between April 1 and September 30. Temporary use of mulch to stabilize soils should be applied outside of the

September 30 through April 1 window unless soil temperatures will support vegetation establishment. Straw or wood chip mulch may be used to help stabilize areas or bare soils during the establishment of temporary vegetation or during the period between October 1 and April 1 (winter). The contractor will apply mulch during the establishment of temporary vegetation as requested by the landowner, specified in licenses or permits, or as requested by the Utilities. Wood chip mulch may be used to protect areas where bare soils have been exposed due to tree clearing and construction activities. In winter situations, wood chips or other appropriate BMPs such as erosion control blankets may be used as indicated in the project SWPPP to provide protection for bare soils exposed due to construction activities where out of season seeding is not applicable. Woodchip mulch derived from onsite locations may be spread up to 6 inches deep in upland areas to provide ground protection along access paths. Upon abandonment of access routes, woodchip mulch is to be spread evenly to a depth no greater than 2 inches. Wood chip mulch is not to be used within wetlands. Straw mulch may be used outside of the seeding window as a temporary erosion control measure, followed by temporary or permanent seeding after the April 1 seeding date. The contractor will be responsible for locating and documenting the source of certified weed-free mulch if used. Copies of the applicable documentation must be given to the EI and made available upon request to the applicable agencies. Straw mulch will be applied as previously described.

7.2 Permanent Revegetation and Restoration

Appropriate vegetative cover of the ROW will be required along the entire length of the ROW, except in actively cultivated fields. Because this project does not require major grading activities, in many cases natural revegetation by early successional native species following tree clearing is expected to occur. In areas where native species voluntarily revegetate the ROW, active restoration may not be required. Monthly monitoring during the first year, and adaptive management will be required to ensure that NWIS are controlled, that desirable native plant species become the dominant vegetation communities in natural areas, and that bare soils are quickly stabilized to reduce erosion. In areas of minimal disturbance (less than 25 square feet), vegetation will be allowed to regenerate naturally. Where standing water is not present, and where surrounding vegetation is dominated by abundant native species, the seeding of bare soils with temporary cover crop seed mix may be sufficient for cover while native species revegetate the area.

Vegetation establishment will adhere to the requirements of the Project SWPPP.

The EI will consult with the appropriate agencies during the construction period to assess application of techniques in specific locations. Permanent seed mixes will include native seed varieties commonly found and/or available from local seed distributors. The permanent seed mixes are designed to augment the natural colonization of the ROW by local, native seed sources. On private agricultural lands, the Utilities' land agents will work with landowners to develop appropriate measures for reseeding disturbed lands. Unless requested by the landowner, a regionally selected Minnesota Board of Water and Soil Resources state seed mix will be used in non-farmed land. Pastures will be seeded with landowner-specified seed mix.

In accordance with the Route Permit Amendment, Utilities will advise the Commission, in writing, within 60 days after the completion of all restoration activities.

7.3 Wetland Areas

In wetland areas, clean-up and temporary and/or final restoration will occur immediately following construction activities, in accordance with the SWPPP. Wetland clean-up and site restoration activities include the following:

- All waste, construction materials, and debris from construction activities will be collected and hauled from wetlands immediately upon work being completed in each wetland basin to the extent practical.
- Permanent restoration within wetland areas will include the removal of all construction mats and restoration of all ruts and depressions left by mats that are greater than six inches deep. No fill from outside of a wetland area is allowed to be used for repair of ruts.
- In areas of minimal disturbance, vegetation will be allowed to regenerate naturally.
- Where bare soils are created due to construction activities, but are limited to areas where natural revegetation from native seed bank and rhizomes is likely, a temporary cover crop seed mix will be broadcast-seeded for temporary cover to reduce opportunities for noxious weed invasion as allowed by the wetland permit(s).
- Where standing water is not present and surrounding vegetation is dominated by abundant native species, the broadcast-seeding of bare soil using the temporary cover crop seed mix may be sufficient as allowed by the wetland permit(s).

The preferred method for revegetation of disturbed areas within wetlands is reliance on revegetation by resident plant communities. The EI, in consultation with the appropriate agencies, will determine whether disturbed areas will require the use of the temporary cover crop only, seeding with a wetland-specific mix, or if no action is appropriate. Fertilizers, pesticides, or herbicides are not to be used in or near water bodies, including wetlands unless approved by the wetland permit(s). In areas where wetland plant species are dominated by native species with rhizomatous root systems that will likely recolonize areas of limited disturbance rapidly, bare soils are to be broadcast-seeded with the seasonally appropriate temporary cover crop seed mix. In areas where disturbed and bare soils are sufficient to preclude revegetation from the local, native seed source, a native wetland seed mix will be applied as indicated in the wetland permit(s) or in consultation with wetland authority agencies.

8 MONITORING

The Utilities will be required to monitor and control NWIS within the right-of-way through construction. The EI will inspect and provide information regarding infestations of NWIS along the right-of-way to the appropriate agencies. The Utilities will be required to meet easement and lease conditions and obligations and will continue to work with landowners and the appropriate agencies to achieve standards set forth in easement or lease agreements. The Utilities will monitor areas where seeding and erosion control measures have been implemented and will follow-up with reseeding measures where vegetative cover by the specified seed mix, or revegetation by the local, native seed source is inadequate to provide long term stability and sustainable native plant communities.