






Luverne Wind Upgrade Project

Figure 1- Site Overview

Steele County, North Dakota

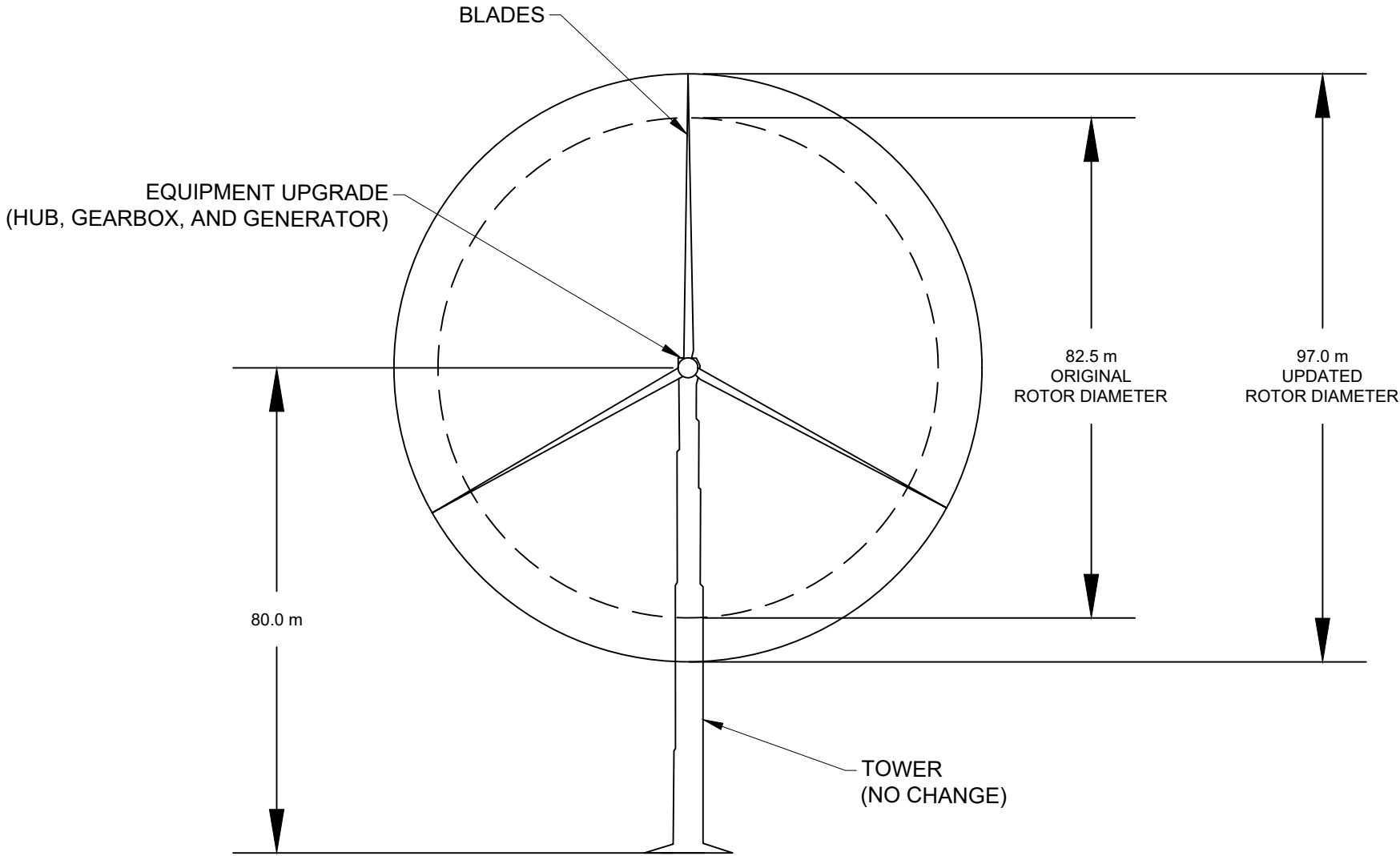
Issue Date: 5/5/2023

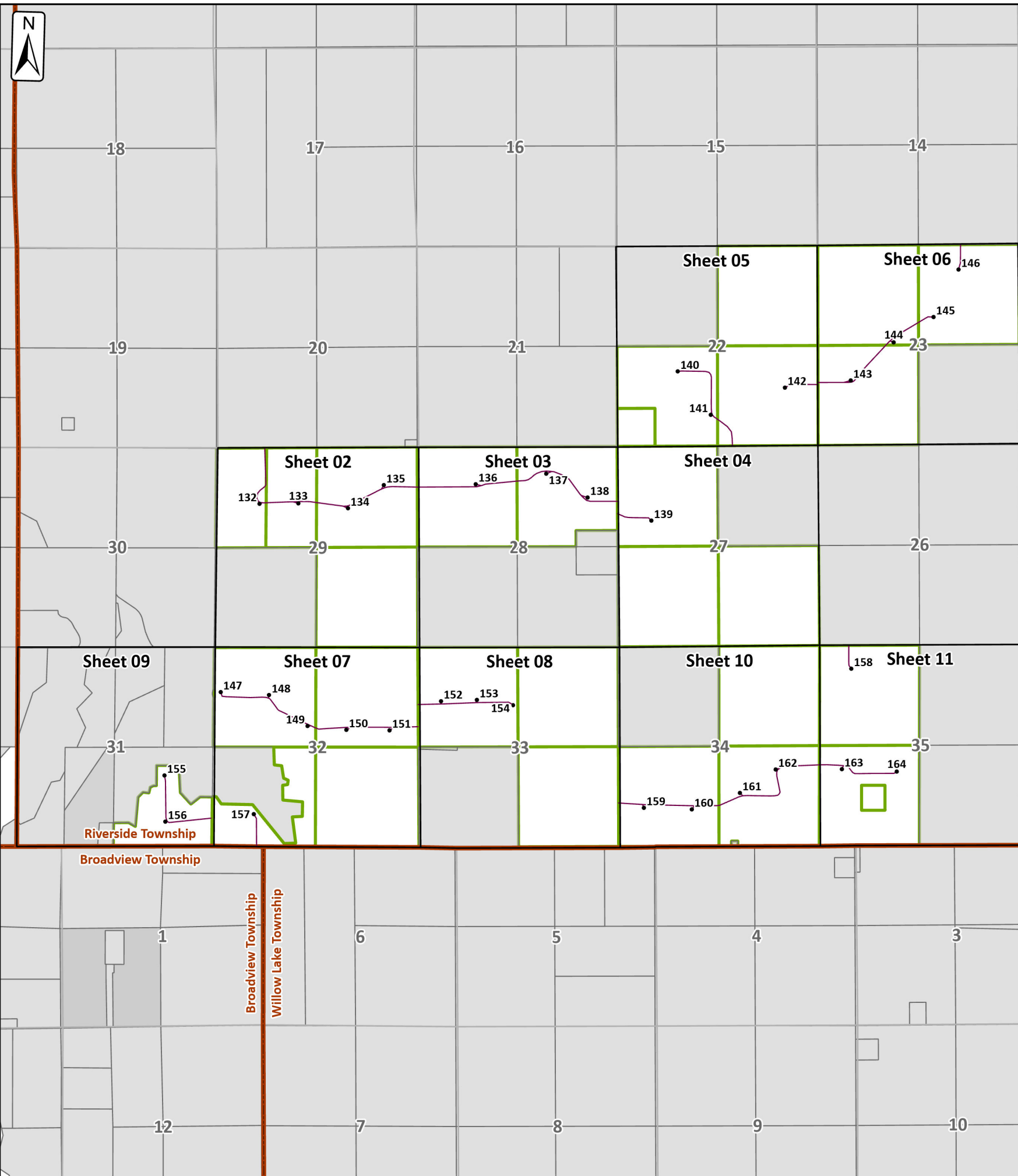
-  Existing Turbine Locations
-  Participating Parcels
-  Disturbance Area (~80 acres)
-  Study Area
-  Township



SOURCE: USGS Topo Maps

FIGURE 2: PROPOSED TURBINE UPGRADE





OTP Luverne Repower Exclusions and Avoidance
Turbine Details: Hub height of 80 meters, Rotor diameter of 97 meters

Public Service Commission			
Setback Requirement	Setback Distance (m/ft)	Closest Turbine	Measured Distance (ft)
1.1x the turbine height from the nearest edge of an interstate or state roadway right-of-way (ROW).	141.4 / 463.7	146	19,361
1.1x the turbine height plus 75 feet from the centerline of any county or maintained township roadway.	164.2 / 538.7	152	606
1.1x the turbine height from the nearest edge of railroad ROW.	141.4 / 463.7	146	23,286
1.1x the turbine height from the nearest edge of a 115 kV or higher transmission line ROW.	141.4 / 463.7	164	477
1.1x the turbine height from the property line of a nonparticipating landowner.	141.4 / 463.7	155 157	178 *waivers to be obtained 295 *waivers to be obtained
3x the height of the turbine from an occupied rural residence of a non-participating landowner.	385.5 / 1,264.8	139	1,758

Previous Commitments (PU-08-034 Reissued PU-09-73)			
Setback Requirement	Setback Distance (ft)	Closest Turbine	Measured Distance (ft)
1,400 ft from Occupied Residence	1400	133	1,501
400 ft or turbine fall zone from any developed road	422	152	606
500 ft from any large (lacustrine) wetland complex (greater than 50 acres)	500	137	1,274
0.25 miles from USFWS Waterfowl Production Area	1,320	140	1,742

- Turbine Location
- Access Road
- Existing Paved State Road Centerline
- + Railroad
- ▭ Participating
- ▭ Non-Participating
- ▭ Mapbook Order
- ▭ Section Boundary
- ▭ Township

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22, 23, 27, 28, 29, 31, 32
33, 34, 35
T145N R57W
Riverside Township
Steele County, ND

SECTIONS
TOWNSHIP
TOWNSHIPS
COUNTY, STATE

Otter Tail Power Company

Luverne Wind Upgrade Project

Figure 3: Exclusions and Avoidance

CLIENT:
SCALE: 0 500 1,000 Feet

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Section 19
Section 30

Section 20
Section 29

Section 21
Section 28

BRADLEY L
GJESDAL
16000003318000

JAY WILFRED
MORGAN
16000003317000

STEVEN M JOHNSON
16000003316000

DAVID A JOHNSON
16000003313000

132

133

134

135

136

Section 30
Section 29

Section 29
Section 28

Section 29
Section 32

Section 28
Section 33

KROER FARM LLLP
16000003335000

KROER FARM LLLP
16000003319000

KROER FARM LLLP
16000003334000

MARK PEDERSEN
16000003340000

- Turbine Location
- Occupied Residence
- Access Road
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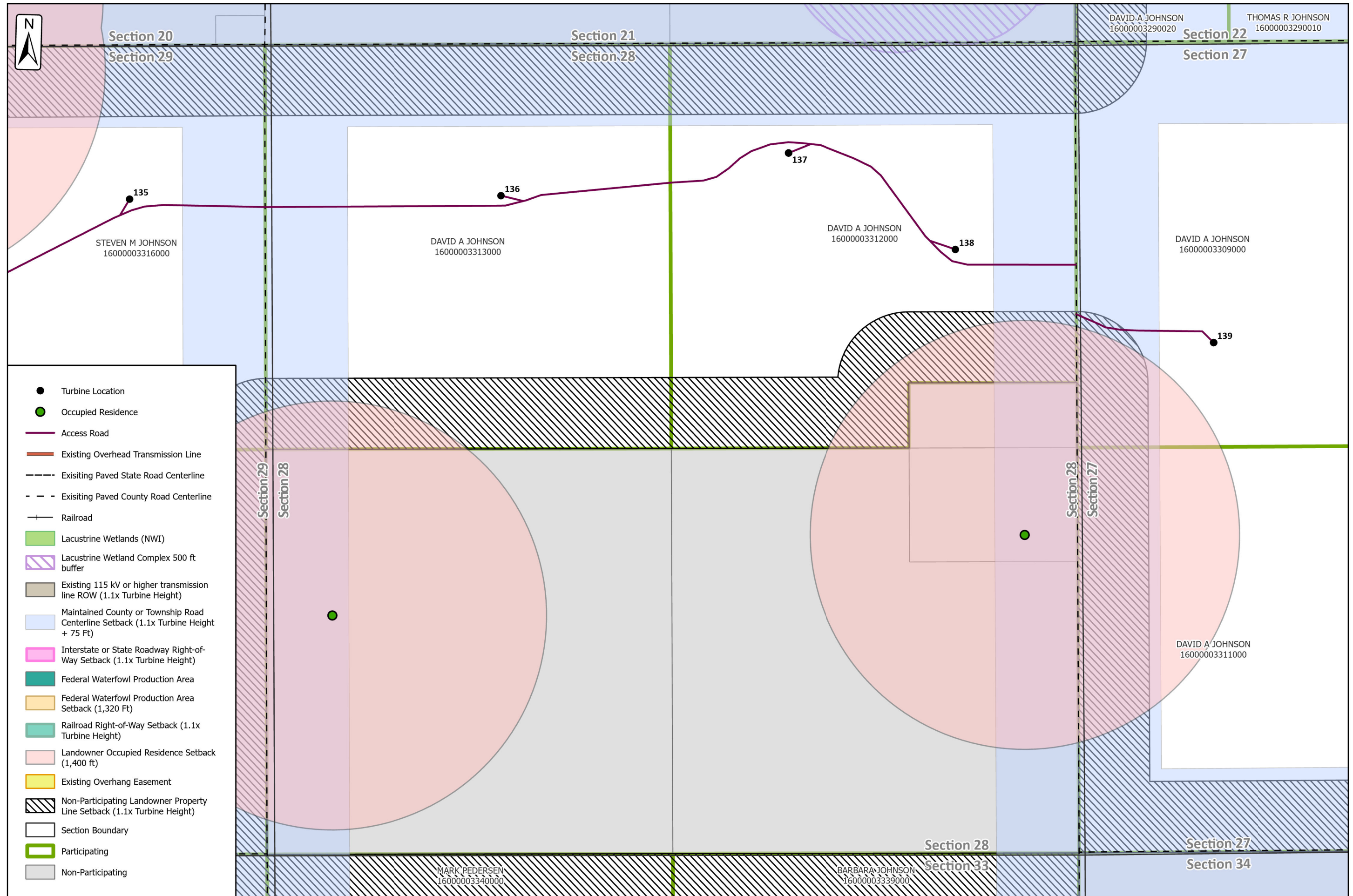
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COUNTY, STATE	Steele County, ND

CLIENT: Otter Tail Power Company

Luverne Wind Upgrade Project Figure 3: Exclusions and Avoidance



SCALE:	0 130 260
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Luverne Wind Upgrade Project

Figure 3: Exclusions and Avoidance



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SHEET NO:	3 of 11



DAVID A JOHNSON
16000003290020

THOMAS R JOHNSON
16000003290010

THOMAS R JOHNSON
16000003289000

JEFFERY A
JULIUSON
16000003294000

Section 21
Section 28

Section 22
Section 27

Section 23
Section 26

DAVID A JOHNSON
16000003312000

138

DAVID A JOHNSON
16000003309000

139

DAVID A JOHNSON
16000003311000

DAVID A JOHNSON
16000003310000

VALERIE DAWN
JOHNSON
16000003343000

VALERIE DAWN
JOHNSON
16000003349000

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Luverne Wind Upgrade Project Figure 3: Exclusions and Avoidance



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Section 16
Section 21

Section 15
Section 22

Section 14
Section 23

BARBARA JOHNSON
16000003287000

JEFFERY A
JULIUSON
16000003292000

THOMAS R JOHNSON
16000003290010

THOMAS R JOHNSON
16000003289000

JEFFERY A
JULIUSON
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DAVID A JOHNSON
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DAVID A JOHNSON
16000003309000

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Luverne Wind Upgrade Project Figure 3: Exclusions and Avoidance



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Section 15
Section 22

Section 14
Section 23

Section 13
Section 24

BARBARA JOHNSON
16000003287000

JEFFERY A
JULIUSON
16000003292000

JEFFERY A
JULIUSON
16000003291000

JEFFERY A
JULIUSON
16000003294000

Section 23
Section 26

Section 24
Section 25


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Luverne Wind Upgrade Project
Figure 3: Exclusions and Avoidance



SCALE: 0 130 260
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Section 31

Section 29

Section 32

Section 28

Section 33

KROER FARM LLLP
16000003319000

GEORGE A BERGER
16000003327000

KROER FARM LLLP
16000003335000

KROER FARM LLLP
16000003334000

MARK PEDERSEN
16000003340000

147

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CHRISTINE MLETVIN
16000003338000

JANICE HINSCHBERGER
16000003336000

Section 32

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Section 33

Section 6

Section 33

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Luverne Wind Upgrade Project
Figure 3: Exclusions and Avoidance



SCALE:	0 130 260
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DATE:	5/5/2023
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KROER FARM LLLP
16000003319000
Section 29
Section 32

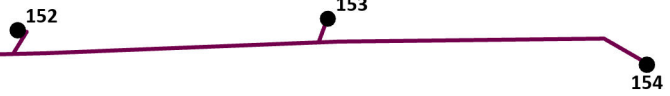
Section 28
Section 33

DAVID A JOHNSON
16000003311000
Section 27
Section 34

KROER FARM LLLP
16000003334000

MARK PEDERSEN
16000003340000

BARBARA JOHNSON
16000003339000



MARK H PEDERSEN
16000003341000

JAMES JACOBSEN
16000003346000



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Luverne Wind Upgrade Project
Figure 3: Exclusions and Avoidance



SCALE: 0 130 260 Feet

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DATE:	5/5/2023
SHEET NO:	8 of 11



Section 25
Section 36

Section 30
Section 31

Section 29
Section 32

GEORGE A BERGER
16000003327000

KROER FARM LLLP
16000003335000

CHRISTINE
M LETVIN
16000003331015

CHRISTINE
M LETVIN
16000003338000

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SCALE:	0 130 260
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Luverne Wind Upgrade Project
Figure 3: Exclusions and Avoidance



Section 28
Section 33

DAVID A JOHNSON
16000003311000

Section 27
Section 34

DAVID A JOHNSON
16000003310000

Section 26
Section 35

BARBARA JOHNSON
16000003339000

VALERIE DAWN
JOHNSON
16000003343000

VALERIE DAWN
JOHNSON
16000003349000

Section 34
Section 35

158

- Turbine Location
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Section 33
Section 34

JAMES JACOBSEN
16000003346000

VALERIE DAWN
JOHNSON
16000003345000

VALERIE DAWN
JOHNSON
16000003350000

OTTERTAIL
POWER CO
16000003350010

Section 34
Section 5

Section 34
Section 4

Section 35
Section 4

Section 35
Section 3

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SCALE: 0 130 260
Feet

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P.M.

BOOK:

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Luverne Wind Upgrade Project

Figure 3: Exclusions and Avoidance



DAVID A JOHNSON
16000003310000

Section 27

Section 34

VALERIE DAWN
JOHNSON
16000003343000

VALERIE DAWN
JOHNSON
16000003349000

VALERIE DAWN
JOHNSON
16000003350000

OTTERTAIL
POWER CO
16000003350010

158

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Section 26

Section 35

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Section 36

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Section 2

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