BASIN ELECTRIC POWER COOPERATIVE
A Touchstone Energy® Cooperative

October 24, 2024

Mr. Steven Kahl
Director, Public Utilities Division
North Dakota Public Service Commission
600 East Boulevard; Department 408
Bismarck, ND 58505-0480

Re: Basin Electric Power Cooperative
Leland Olds Station to Tande 345-kV Transmission Line Certificate of Corridor Compatibility and Route Permit Application

Dear Mr. Kahl:

Enclosed please find an original and seven (7) copies of Basin Electric Power Cooperative's Application for a Consolidated Certificate of Corridor Compatibility and Route Permit for the Leland Olds Station to Tande 345-kV Transmission Line Project. A USB flash drive containing the application in electronic format, corresponding GIS data, and black and white newspaper map has been included. A combined check for the application fee of $100,000 and the administrative fees of $50,000 has also been included.

For inquiries regarding the application, please contact me at rking@bepc.com or at (701) 557-5558 with copy to Ms. Maggie Olson, Senior Staff Counsel, at molson@bepc.com or at (701) 557-5719. If preferable, correspondence can be sent to our physical address of 1717 East Interstate Avenue, Bismarck, ND 58503.

Sincerely,

Ryan King
Environmental Coordinator

Enclosures

cc: Maggie Olson

1 **PU-24-361** Filed: 10/24/2024 Pages: 583
Consolidated Application for a Certificate of Corridor Compatibility & Route Permit and USB Drive Containing GIS Files - Redacted
Basin Electric Power Cooperative
Ryan King, Environmental Coordinator

Consolidated Application to the North Dakota Public Service Commission for a Certificate of Corridor Compatibility and Route Permit

Leland Olds Station to Tande 345-kV Transmission Line
Basin Electric Power Cooperative
Mercer, McLean, Ward, Mountrail, and Williams Counties, North Dakota

Prepared by:

Basin Electric Power Cooperative
1717 East Interstate Ave.
Bismarck, North Dakota 58503

BASIN ELECTRIC POWER COOPERATIVE
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October 2024

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TABLE OF CONTENTS

1.0 INTRODUCTION 1-1
1.1 Compliance with the Energy Conversion and Transmission Facility Siting Act ... 1-2
1.2 Project Terms 1-5
1.3 Project Location 1-6
1.4 Easement Acquisition 1-6
1.5 Project Schedule 1-7
1.6 Project Ownership 1-7
1.7 Future Associated Facilities 1-7
2.0 NEED FOR FACILITY 2-8
2.1 Need Analysis 2-8
2.2 Alternatives 2-9
2.2.1 No Action Alternative 2-9
2.2.2 Route or System Alternatives 2-10
2.2.3 Ten-Year Plan 2-10
3.0 SITE SELECTION CRITERIA 3-1
3.1 Exclusion Areas 3-1
3.2 Avoidance Areas 3-2
3.3 Selection Criteria 3-3
3.4 Policy Criteria 3-4
3.5 Factors to be Considered 3-5
3.6 Setbacks 3-5
3.7 County Criteria 3-6
4.0 DESIGN AND CONSTRUCTION 4-1
4.1 Project Design 4-1
4.1.1 Transmission Line Design Parameters 4-1
4.1.2 Substation Design Parameters 4-2
4.1.3 Supervisory Control and Data Acquisition System 4-6
4.2 Construction Activities 4-6
4.2.1 Pre-construction Surveying 4-6
4.2.2 Site Preparation 4-6
4.2.3 Borehole Excavation and Foundation Installation 4-6
4.2.4 Structure Assembly and Erection 4-6
4.2.5 Conductor Stringing and Tensioning 4-7
4.3 Project Access 4-7
4.3.1 Transmission Structure Site Access and Traffic 4-7
4.3.2 Temporary Land Requirements 4-8
4.4 Permanent Land Requirements 4-8
4.5 Easements 4-9
4.6 Construction Waste Management 4-10
4.7 Construction Sequence, Work Force, and Equipment 4-10
4.8 Worker Safety and Health Protocol 4-10
4.9 Environmental Protection Measures and Policies 4-11
4.10 Reclamation 4-11
4.11 Operation and Maintenance 4-11
4.12 Decommissioning 4-12
5.0 ENVIRONMENTAL ANALYSIS 5-1
5.1 Local Economics 5-1
5.1.1 Description of Resources 5-1
5.1.2 Impacts/Mitigation 5-2
5.2 Public Services 5-2

5.2.1 Description of Resources 5-2
5.2.2 Impacts/Mitigation 5-3
5.3 Public Health, Welfare, and Safety 5-5
5.3.1 Description of Resources 5-5
5.3.2 Impacts/Mitigation 5-5
5.4 Cultural Resources 5-6
5.4.1 Description of Resources 5-6
5.4.2 Impacts/Mitigation 5-8
5.5 Land Cover, Land Use, Noxious Weeds and Recreational Resources 5-8
5.5.1 Description of Resources 5-8
5.5.2 Impacts/Mitigation 5-10
5.6 Soils and Geologic Resources 5-12
5.6.1 Description of Resources 5-12
5.6.2 Impacts/Mitigation 5-12
5.7 Surface Water and Groundwater Resources 5-13
5.7.1 Description of Resources 5-13
5.7.2 Impacts/Mitigation 5-13
5.8 Wildlife and Rare and Unique Natural Resources 5-14
5.8.1 Description of Resources 5-14
5.8.2 Impacts/Mitigation 5-15
6.0 PUBLIC AND AGENCY COORDINATION 6-1
7.0 POTENTIAL PERMITS/APPROVALS 7-1
8.0 QUALIFICATIONS OF CONTRIBUTORS 8-1
9.0 LITERATURE CITED 9-1
10.0 ACRONYMS AND ABBREVIATIONS 10-1

LIST OF TABLES

Table 1-1: Certificate of Corridor Compatibility and Route Permit Criteria Checklist.....1-3
Table 1-2: Project Terms.....1-5
Table 1-3: Project Public Land Survey System Locations.....1-6
Table 3-1: Exclusion Areas.....3-1
Table 3-2: Avoidance Areas.....3-2
Table 3-3: Selection Criteria.....3-3
Table 3-4: Policy Criteria.....3-4
Table 3-5: Factors to be Considered.....3-5
Table 3-6: Setback Distances as Designated by the Commission.....3-6
Table 3-7: County Electrical Transmission Permit Type.....3-6
Table 4-1: Project Transmission Line Design Components.....4-1
Table 4-2: Estimated Disturbance Impacts.....4-9
Table 4-3: Construction Personnel, Equipment, and Time Requirements.....4-10
Table 5-1: Project Impacted Counties.....5-1
Table 5-2: County Income and Unemployment.....5-1
Table 5-3: National Agricultural Statistics by County.....5-2
Table 5-4: Land Cover Classifications.....5-8
Table 5-5: Threatened and Endangered Species.....5-15
Table 7-1: Potential Permits and Approvals Required.....7-1
Table 8-1: Qualifications of Contributors.....8-1

LIST OF FIGURES

Figure 1-1: Project Overview Map
Figure 2-1: Basin Electric 2021 SPP ITP Projects Map
Figure 2-2: Project Route Alternatives
Figure 4-1: Typical Structure Designs
Figure 4-2: Leland Olds Substation Location Map
Figure 4-3: Tande Substation Location Map
Figure 4-4: Crane Creek Substation Location Map

LIST OF APPENDICES

Appendix A Project Map Book
Appendix B Land Use Index Map Book
Appendix C Policies and Commitments Statement to Limit Environmental Impacts
Appendix D Notice to Construct Approved Reliability Network Upgrades
Appendix E Cultural Resources Report (Redacted)
Appendix F Unanticipated Discovery Plan for Cultural Resources and Human Remains
Appendix G Natural Resource Inventory Report
Appendix H Agency Notification Letters and Responses
Appendix I Intercontinental Ballistic Missile Setback Approvals
Appendix J Project Information Pamphlet for Landowners
Appendix K Landowner Waiver

1.0 INTRODUCTION

Pursuant to North Dakota Century Code (NDCC) Section 49-22-08.2, Basin Electric Power Cooperative (Basin Electric) submits this consolidated application for a North Dakota Public Service Commission (Commission) Certificate of Corridor Compatibility (Certificate) and Transmission Facility Route Permit (Route Permit) to construct the Leland Olds Station (LOS) to Tande 345-kilovolt (kV) Transmission Project (Project). The Project is located in Mercer, McLean, Ward, Mountrail, and Williams Counties, North Dakota.

The Project is an approximately 162-mile-long electric transmission line connecting Basin Electric's existing LOS 345-kV Substation (LOS Substation), located near LOS in Stanton, North Dakota (ND), to Basin Electric's existing Tande 345-kV Substation, near Tioga, ND, see **Figure 1-1.**

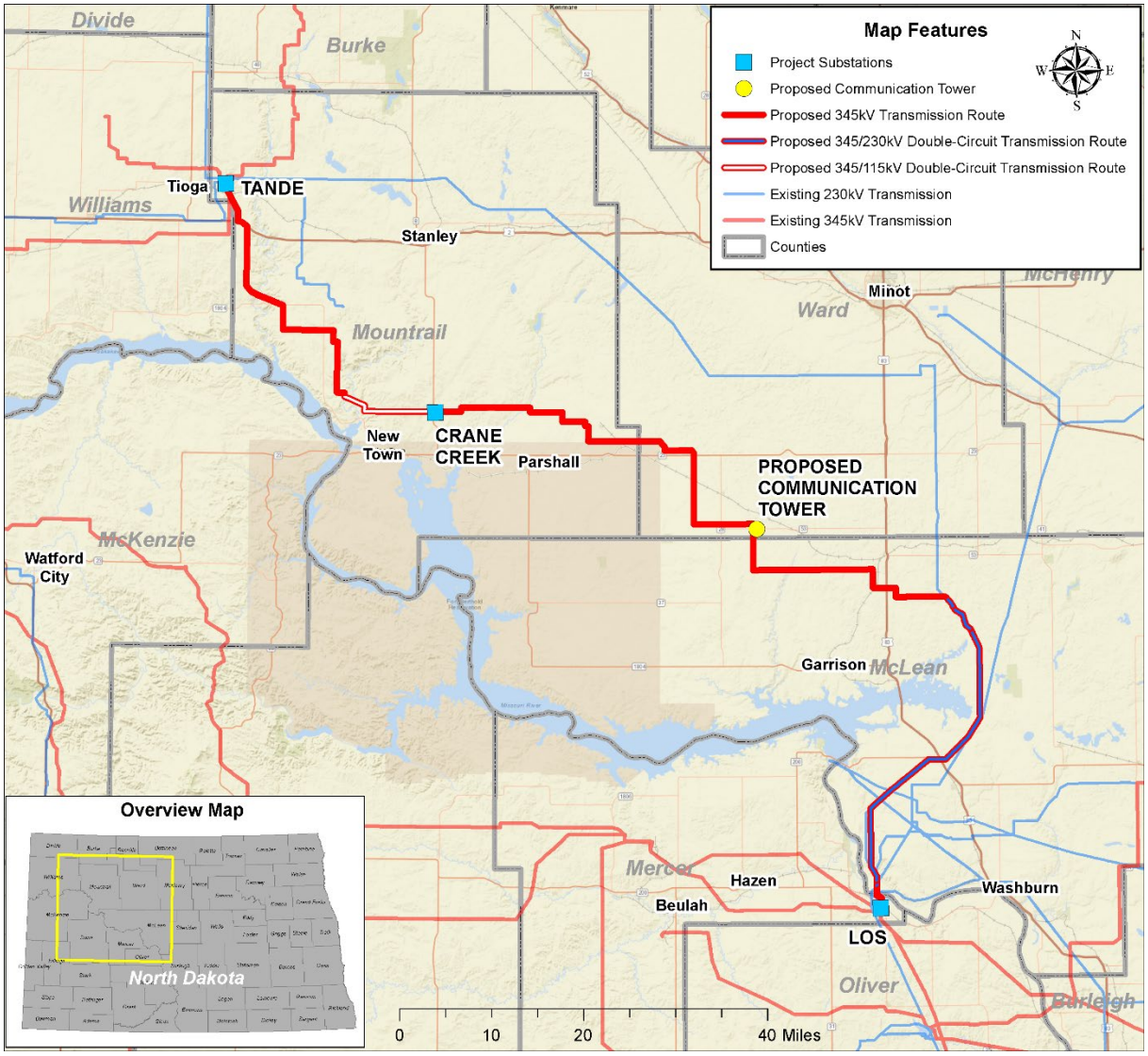

Figure 1-1: Project Overview Map

The Project includes new substation terminal additions at the LOS and Tande Substations, and a new 345-kV/115-kV substation, the Crane Creek Substation, located in Mountrail County (see **Figure 4-4**). The Crane Creek substation will include a 345-kV/115-kV transformer and provide interconnection for three 115-kV circuits owned and operated by Mountrail Williams Electric Cooperative (MWEC).

Between LOS and the LOS 345-kV Substation, Basin Electric will utilize five existing structures (see **Figure 4-2**) for the Project. Within McLean County, Basin Electric will utilize an existing 230-kV transmission corridor (the LOS to Logan 230-kV Transmission Line – *1978 Permit for the Construction of a Transmission Facility No. 8* and *2019 PU-19-302*) for approximately 44 miles. Along this corridor, the Project will be constructed as a double-circuit 345-kV/230-kV transmission line, with the existing 230-kV structures being removed upon Project energization (see **Appendix A**). In a second location within Mountrail County, Basin Electric will construct the transmission line as a double-circuit 345-kV/115-kV transmission line to accommodate a future transmission line circuit needed by MWEC. This segment is approximately 11.5 miles long, see **Appendix A**. The remainder of the Project will be constructed as a single-circuit 345-kV transmission line.

The majority of the Project will be constructed within a 150-foot right-of-way (ROW). In two locations, due to crossing an existing transmission line, the ROW width will need to be 250 feet. These occur from structures 377-017 to 377-020 and 377-073 to 377-076. At a third location, from structure 378-036 to 378-037, the ROW width will need to be 175 feet due to a longer structure to structure span, which increases the conductor blowout width. These wider ROW sections can be seen in **Appendix A**.

The need for an additional 345-kV transmission line is due to load growth in the region. The existing transmission network is unable to maintain loading and voltage criteria during contingency events. The Project is required to meet reliability standards and projected electrical demands. The addition of this Project will allow continued reliable operation of the transmission system to accommodate additional load growth in the region. The Project will provide more reliable service to electric cooperative customers, as well as diversify power resources on the larger transmission system.

Basin Electric is an electric power generation and transmission cooperative, headquartered in Bismarck, ND. Basin Electric generates and transmits wholesale electricity to 140-member rural cooperatives located in a 9-state service area, serving three million customers on their respective systems. The Southwest Power Pool Inc. (SPP) is the regional transmission organization (RTO) that administers bulk electric transmission system reliability upgrades and generation interconnections. Basin Electric received a Notice to Construct Approved Reliability Network upgrades notice in July of 2022 from SPP (see **Appendix D**). Basin Electric is the designated transmission owner.

1.1 Compliance with the Energy Conversion and Transmission Facility Siting Act

The North Dakota Energy Conversion and Transmission Facility Siting Act requires an application for a Certificate to meet the criteria set forth in NDCC Chapter 49-22 and the North Dakota Administrative Code (NDAC) Article 69-06. The siting of a transmission facility is to be made in an orderly manner compatible with environmental preservation and the efficient use of resources (NDCC Section 49-22-02). As outlined in this application, Basin Electric will comply with the exclusion and avoidance areas and selection and policy criteria set forth in NDAC Section 69-06-08-02 in the design of the Project. In addition, sufficient Project design and

technical information have been provided for a thorough evaluation. **Table 1-1** below outlines the requirements to fulfill a Certificate and Route Permit application and the application section that addresses the requirement.

Table 1-1: Certificate of Corridor Compatibility and Route Permit Criteria Checklist

Description		Section(s) Addressed
NDAC 69-06-05-01 - Transmission Facility Permit		
Subsection 2 - Contents		
a.	A description of the following:	
a. (1)	The type of facility proposed	1.0, 2.1, 4.1.1, 4.1.2, 4.1.3
a. (2)	Purpose of the facility	1.0, 2.1
a. (3)	The technology to be used	1.0, 4.1.1, 4.1.2, 4.1.3
a. (4)	The type of product to be transmitted	1.0, 4.1.1, 4.1.2
a. (5)	The source of the product to be transmitted	1.0, 1.3, 2.1
a. (6)	The final destination of the transmission line	1.0, 1.3, 2.1, 4.1.2
a. (7)	The proposed size and design and any alternate size or design that was considered, including:	1.0, 1.2, 1.3, 3.6, 4.1.1, 4.1.2
	(a) The width of right of way (ROW);	
	(b) The approximate length of the facility;	
	(c) The estimated span length for electric facilities;	
	(d) The anticipated type of structure for electric facilities;	
	(e) The voltage for electric facilities; and	
	(f) The requirement for and location of any new associated facilities	
b.	The anticipated time schedule for accomplishing major events, including:	1.5
	(1) Obtaining the certification of corridor compatibility;	
	(2) Obtaining the route permit;	
	(3) Completing right-of-way acquisition;	
	(4) Starting construction;	
	(5) Completing construction;	
	(6) Testing operations; and	
	(7) Commencing operations.	
c.	A copy of each evaluative study or assessment of the environmental impact of the proposed facility submitted to the agencies listed in section 69-06-01-05 and each response received.	6.0, Appendix E, Appendix G, Appendix H
d.	An analysis of the need for the proposed facility based on present and projected demand for the product transmitted, including the most recent system studies supporting the analysis of the need.	1.0, 2.1
e.	A description of any feasible alternative methods for serving the need	2.2
f.	The width of a corridor must be at least ten percent of its length, but not less than one mile [1.61 kilometers] or greater than six miles [9.66 kilometers] unless another appropriate width is determined by the Commission.	1.2, 1.3
g.	A study area that includes a proposed corridor of sufficient width to enable the Commission to evaluate the factors addressed in North Dakota Century Code section 49-22-09.	1.2
h.	A discussion of the factors in North Dakota Century Code section 49-22-09 to aid the Commission's evaluation of the proposed route.	3.5
i.	A discussion of the applicant's policies and commitments to limit the environmental impact of its facilities, including copies of board resolutions and management directives.	4.9, Appendix C
j.	Identification and map of the criteria that led to the proposed route location within the designated corridor, including exclusion areas, avoidance areas, selection criteria, policy criteria, design construction limitations, and economic considerations.	3.0, 3.1, 3.2, 3.3, 3.4, 3.6, 4.1.1, 4.1.2, 4.1.3, 5.1, Figure 3-1, Figure 5-4
k.	A discussion of the relative value of each criteria and how the applicant selected the proposed corridor location, giving consideration to all criteria and how the location, construction, and operation of the facility will affect each criteria.	1.3, 2.2, 3.1, 3.2, 3.3, 3.4, 5.1.2, 5.2.2, 5.3.2, 5.4.2, 5.5.2, 5.6.2, 5.7.2, 5.8.2

Table 1-1: Certificate of Corridor Compatibility and Route Permit Criteria Checklist		
l.	A discussion of the general mitigative measures that the applicant will take to minimize adverse impacts that result from a route location in the proposed corridor and the construction and operation of the facility.	4.8, 4.9, 4.10, 4.11, 5.1.2, 5.2.2, 5.3.2, 5.4.2, 5.5.2, 5.6.2, 5.7.2, 5.8.2
m.	Qualifications of each person involved in the corridor location study.	8
n.	A map identifying the criteria that led to the proposed route location within the designated corridor and the location of any new associated facilities. Several different criteria may be shown on each map depending on the map scale and the density and nature of the criteria.	Appendix A
o.	An eight and one-half-inch by eleven-inch black and white map suitable for newspaper publication depicting the site area	Electronically submitted
p.	A discussion of present and future natural resource development in the area	3.1, 3.2, 3.3, 3.4, 3.5, 5, 6
q.	Map and geographic information systems (GIS) requirements. The applicant shall provide information that is complete, current, presented clearly and concisely, and supported by appropriate references to technical and other written material available to the Commission.	Electronically submitted
NDAC 69-06-08-02 - Transmission Facility Corridor and Route Criteria		
The following criteria must guide and govern the preparation of the inventory of exclusion and avoidance areas, and the corridor and route suitability evaluation process:		
1	Exclusion Areas	3.1, Appendix A
2	Avoidance Areas	3.2, Appendix A
3	Selection Criteria	3.3, Appendix A
4	Policy Criteria	3.4
NDCC 49-22-08 - Application for a certificate - Notice of filing - Amendment - Designation of a site or corridor.		
Section 1 - An application for a certificate must be in such form as the Commission may prescribe, containing the following information:		
a.	A description of the size and type of facility.	1.0, 4.1.1, 4.1.2
b.	A summary of any studies which have been made of the environmental impact of the facility.	5.4, 5.7, 5.8, Appendix E, Appendix G
c.	A statement explaining the need for the facility.	1.0, 2.1
d.	An identification of the location of the preferred site for any electric energy conversion facility	1.0, 2.1, 2.2
e.	An identification of the location of the preferred corridor for any electric transmission facility	1.0, 1.3, Appendix A
f.	A description of the merits and detriments of any location identified and a comprehensive analysis with supporting data showing the reasons why the preferred location is best suited for the facility	5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8
g.	A description of mitigative measures that will be taken to minimize all foreseen adverse impacts resulting from the location, construction, and operation of the proposed facility	4.8, 4.9, 4.10, 4.11, 5.1.2, 5.2.2, 5.3.2, 5.4.2, 5.5.2, 5.6.2, 5.7.2, 5.8.2
h.	An evaluation of the proposed site or corridor with regard to the applicable considerations set out in section 49-22-09 and the criteria established pursuant to section 49-22-05.1.	3.1, 3.5
i.	Such other information as the applicant may consider relevant or the commission may require.	4.2, 4.3, 4.4, 4.5, 4.6, 4.7
NDCC 49-22-08.1 - Application for a permit - Notice of filing - Amendment - Designation of a route.		
Section 1 - An application for a route permit for a transmission facility within a designated corridor shall be filed no later than two years after the issuance of the certificate and shall be in such form as the Commission may prescribe, containing the following information:		
a.	A description of the type, size and design of the proposed facility.	1.0, 4.1.1, 4.1.2, 4.1.3
b.	A description of the location of the proposed facility.	1.0, 1.3
c.	An evaluation of the proposed route with regard to the applicable considerations set out in section 49-22-09 and the criteria established pursuant to section 49-22-05.1.	3.1, 3.5
d.	A description of mitigative measures that will be taken to minimize all foreseen adverse impacts resulting from the location, construction, and operation of the proposed facility.	4.8, 4.9, 4.10, 4.11, 5.1.2, 5.2.2, 5.3.2, 5.4.2, 5.5.2, 5.6.2, 5.7.2, 5.8.2

Table 1-1: Certificate of Corridor Compatibility and Route Permit Criteria Checklist		
e.	A description of the right-of-way preparation and construction and reclamation procedures.	4.2, 4.5, 4.10
f.	A statement setting forth the manner in which:	1.4, 4.5, Appendix J
	(1) The utility will inform affected landowners of easement acquisition, and necessary easement conditions and restrictions.	
	(2) The utility will compensate landowners for easements, without reference to the actual consideration to be paid.	
g.	Such other information as the utility may consider relevant or the Commission may require.	3.7
NDCC 49-22-09 - Factors to be considered in evaluating applications and designation of sites, corridors, and routes.		
Section 1 - The Commission shall be guided by, but is not limited to, the following considerations, where applicable, to aid the evaluation and designation of sites, corridors, and routes:		
a.	Available research and investigations relating to the effects of the location, construction, and operation of the proposed facility on public health and welfare, natural resources, and the environment.	5.0, Appendix E, Appendix G
b.	The effects of new energy conversion and transmission technologies and systems designed to minimize adverse environmental effects.	4.9
c.	The potential for beneficial uses of waste energy from a proposed energy conversion facility.	N/A
d.	Adverse direct and indirect environmental effects which cannot be avoided should the proposed site or route be designated.	5
e.	Alternatives to the proposed site, corridor, or route which are developed during the hearing process and which minimize adverse effects.	To be determined
f.	Irreversible and irretrievable commitments of natural resources should the proposed site, corridor, or route be designated.	3.5, 5.5.2, 5.6.2, 5.7.2, 5.8.2
g.	The direct and indirect economic impacts of the proposed facility.	5.1
h.	Existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site, corridor, or route.	3.5, 5.5, 6.0
i.	The effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites.	3.1, 3.2, 5.4, Appendix E
j.	The effect of the proposed site or route on areas which are unique because of biological wealth or because they are habitats for rare and endangered species.	3.1, 5.8.2, Appendix G
k.	Problems raised by federal agencies, other state agencies, and local entities.	6, Appendix H

1.2 Project Terms

Key terms used in this application associated with the Project are defined in **Table 1-2** below.

Table 1-2: Project Terms	
Term	**Definition/Description**
Project Route	In accordance with NDCC Section 49-22-03(12), "Route" is defined as the location of an electric transmission facility within a designated corridor. The Project Route referred to herein is the approximately 160-mile-long transmission line centerline.
Project Corridor	In accordance with NDCC Section 49-22-03(4), "Corridor" is the area of land where a designated route may be established for a electric transmission facility. The Project Corridor is mostly 150 feet wide, which is the easement size and Project width that will be used for construction and maintenance through the life of the Project. The Project Corridor encompasses the Project Route.
Study Area	The Study Area analyzed for the Project is one-mile wide (0.5 mile on either side of the Project Route) and encompasses approximately 103,300 acres.[a]
[a] NDAC 69-06-05-01(2)(f) states that the "width of the corridor must be at least ten percent of its length, but not less than one mile [1.61 kilometers] or greater than six miles [9.66 kilometers] unless another appropriate width is determined by the Commission." Basin Electric proposes a one-mile-wide Study Area, with a 150-foot-wide Project Corridor, the combination of which is sufficient for the Commission to evaluate the factors addressed in NDCC 49-22-09.	

1.3 Project Location

The Project is located in Mercer, McLean, Ward, Mountrail, and Williams Counties in North Dakota. The Project Route is within primarily rural areas, starting approximately 5 miles southeast of Stanton, ND where the transmission line will connect to the LOS Substation and terminating approximately 4 miles east of Tioga, ND where the transmission line will connect to the Tande Substation. **Table 1-3** shows the Township, Range, and Sections of the Project.

Table 1-3: Project Public Land Survey System Locations

County	Township	Range	Section
Mercer	144N	84W	15, 16, 21, 22, 27
McLean	144N	84W	4, 9, 10, 15, 16
	145N	84W	1, 12, 13, 24, 25, 36
	146N	84W	25, 36
	146N	83W	1, 2, 10, 11, 15, 16, 17, 19, 20, 30
	146N	82W	5, 6
	147N	82W	2, 11, 14, 22, 23, 27, 28, 32, 33
	148N	82W	2, 11, 14, 23, 26, 35
	149N	81W	19, 30, 31
	149N	82W	3, 4, 5, 6, 10, 11, 13, 14, 24, 25
	149N	83W	1, 2, 3
	150N	83W	19, 20, 29, 32, 33, 34
	150N	84W	19, 20, 21, 22, 23, 24
	150N	85W	6, 7, 18, 19, 20, 21, 22, 23, 24
Ward	151N	85W	30, 31
	151N	86W	25, 26, 27, 28, 29, 30
	151N	87W	1, 12, 13, 24, 25
	152N	87W	7, 8, 9, 13, 14, 15, 16, 24, 25, 36
Mountrail	152N	88W	6, 7, 8, 9, 10, 11, 12
	153N	88W	30, 31 ,32, 33
	153N	89W	19, 20, 21, 25, 26, 27, 28,
	153N	90W	22, 23, 24, 26, 27, 28, 29, 30
	153N	91W	25, 26, 27, 28, 29, 30
	153N	92W	18, 19, 20, 21, 25, 26, 27, 28
	153N	93W	1, 12, 13
	154N	93W	7, 8, 9, 10, 11, 12, 13, 24, 25, 36
	154N	94W	1, 12
	155N	94W	5, 8, 17, 20, 21, 25, 26, 27, 28, 36
	156N	94W	6, 7, 17, 18, 20, 29, 32
	157N	94W	28, 29, 32, 33
Williams	156N	95W	1

1.4 Easement Acquisition

There are a total of 268 landowners within the Project Corridor. Approximately 97% of the Project Corridor, approximately 157.16 miles, is on privately owned land, with 3%, approximately 5.07

miles on North Dakota Department of Trust Land (NDDTL) (see **Appendix A**). Basin Electric is in the process of securing easement agreements over the required parcels for the Project Corridor. As of October 2024, approximately 70 percent of landowner easements have been secured for the Project.

1.5 Project Schedule

Basin Electric plans to commence construction in spring 2025, pending permit approvals. Construction is anticipated to be complete by October of 2026, with reclamation extending into 2027, as needed. Winter construction is anticipated for this Project. Private third-party contractors will construct the transmission line. Basin Electric will ensure that any contractors hired will be familiar with and comply with mitigation measures and any agency or permit requirements.

Key schedule milestones include:

1. **Certificate and Route Permit**: Requested by 1st Quarter 2025.
2. **Right-of-Way (ROW) Acquisition**: Anticipated in 1st Quarter 2025.
3. **Equipment Procurement, Manufacture and Delivery**: Ordering of long-lead equipment is in progress.
4. **Construction**: Approximately 18 months of construction beginning in 2nd Quarter 2025 to 4th Quarter 2026, with restoration extending into 2027, as necessary.
5. **Test and Operations**: Anticipated in 3rd Quarter 2026.
6. **Commercial Operation**: Anticipated in 4th Quarter 2026.
7. **Expansions or Additions:** Basin Electric has no plans for expansions or additions to the Project.

1.6 Project Ownership

Basin Electric will own the entire transmission line and will manage the construction of all equipment and associated facilities. The existing LOS Substation and Tande Substation are owned and operated by Basin Electric, and the Crane Creek Substation will also be owned and operated by Basin Electric.

1.7 Future Associated Facilities

There are no proposed or future Basin Electric associated facilities, or upgrades or improvements associated with the Project.

2.0 NEED FOR FACILITY

2.1 Need Analysis

SPP is the RTO that administers bulk electric transmission system reliability upgrades and generation interconnections. It is a non-profit corporation mandated by the Federal Energy Regulatory Commission (FERC) to ensure reliable supplies of power, adequate transmission infrastructure, and competitive wholesale electricity prices on behalf of its members. This Project was selected by SPP as part of the 2021 Interregional Transmission Planning (ITP) process to mitigate reliability constraints and to increase load serving capability in the region.

The Project will complete a 345-kV loop around the north side of Lake Sakakawea between two existing 345-kV substations where no 345-kV transmission exists today and will provide a new 345-kV delivery point at the Crane Creek Substation and will be the backbone 345-kV system to the load-serving 115-kV network (located on the north side of Lake Sakakawea).

Continued forecasted load growth in the area is driving the need for this Project. The 2021 ITP study identified potential voltage collapse from outages of major transmission lines serving the Bakken area and therefore a new transmission line to backup those outages was the preferred solution. Two other Basin Electric projects were selected as part of the 2021 ITP and are shown in **Figure 2-1**.

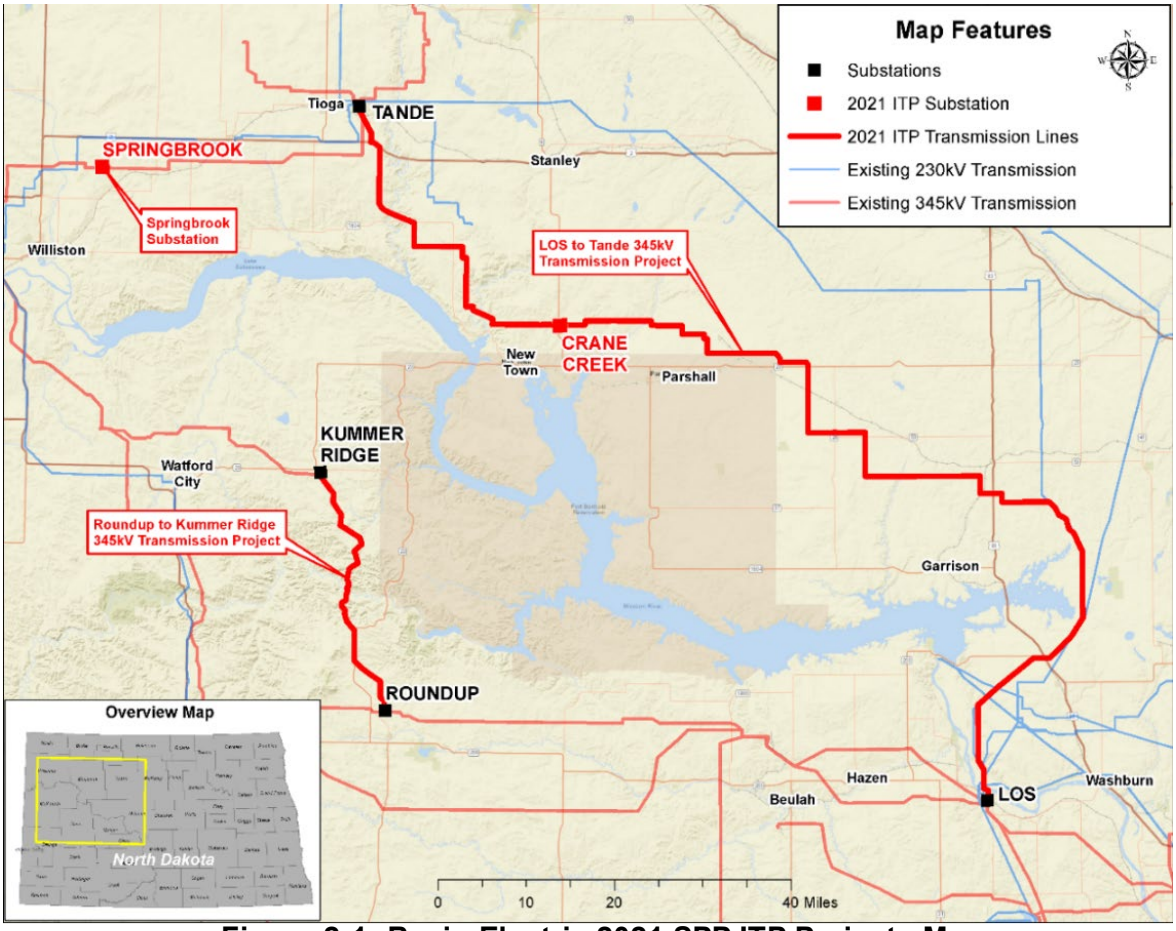

Figure 2-1: Basin Electric 2021 SPP ITP Projects Map

2.2 Alternatives

Basin Electric identified and evaluated several Project alternatives; however, none of these alternatives effectively satisfied the Project objective. These alternatives included:

- No Action Alternative;
- Route Alternatives;
- System Alternatives.

2.2.1 No Action Alternative

The primary objective of the Project is to provide electrical transmission connections between Basin Electric's facilities, transmitting power from the generation station to facilities servicing the territory. Under the No Action alternative, the Project would not be constructed, and the electrical transmission could not effectively service the region. As described under the Need Analysis section, there is a need for additional capacity in the region to meet the growing demand and provide an adequate supply of electrical power for Basin Electric's membership.

A No Action Alternative will leave the region constrained by limited transmission capacity. The No Action Alternative does not meet the commercial needs of Basin Electric and does not serve the load growth in the area and public at-large. Basin Electric rejected the No Action Alternative.

2.2.2 Route or System Alternatives

The Project Route is the most viable alternative based on landowner preferences, utilizing existing infrastructure corridors and following quarter lines and section lines where terrain allows, and it is the most direct route that also minimizes impacts on the exclusion, avoidance, selection, and policy criteria identified in NDAC Section 69-06-08-02. The project route alternatives are illustrated in **Figure 2-2**.

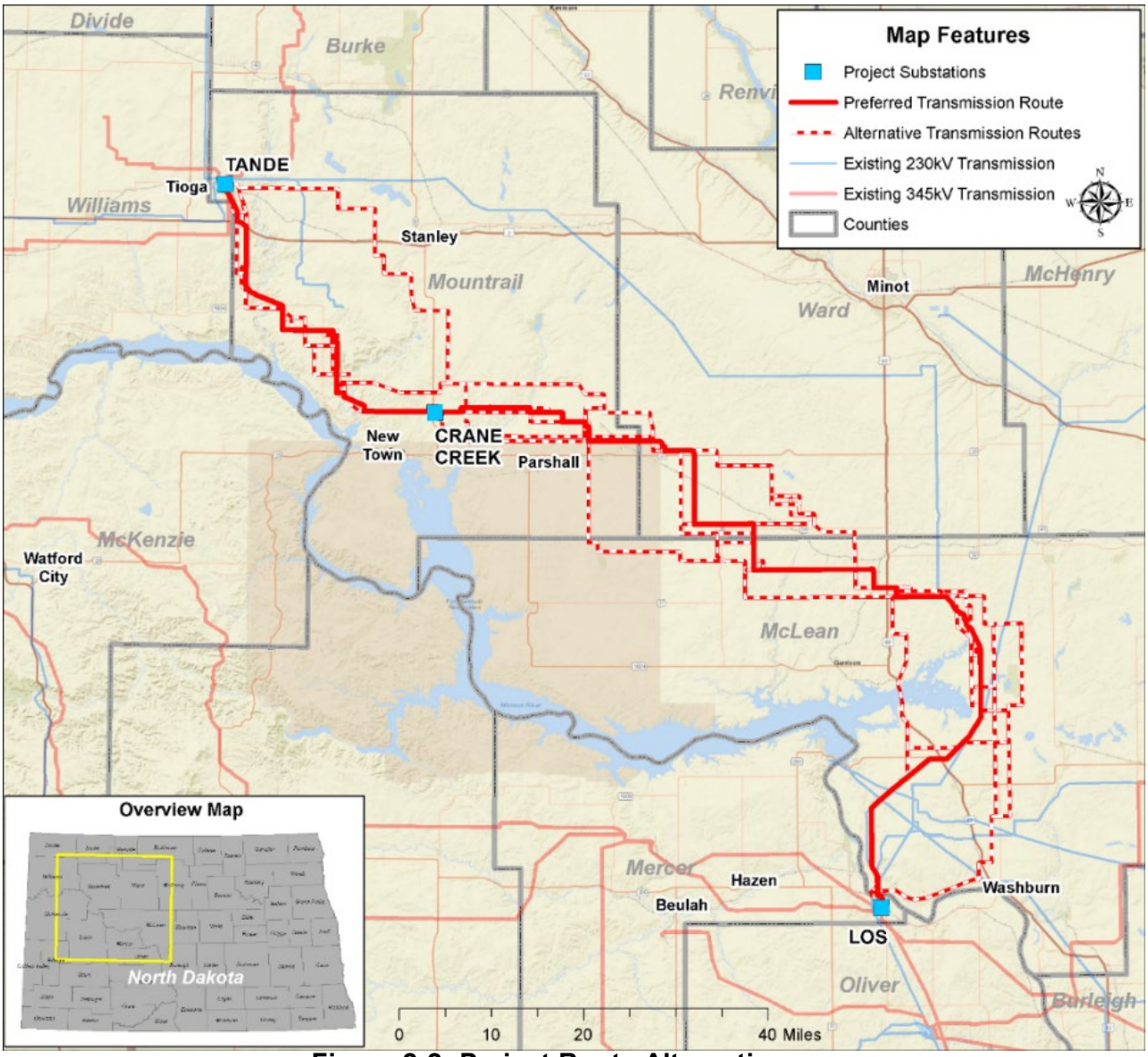

Figure 2-2: Project Route Alternatives

2.2.3 Ten-Year Plan

Basin Electric filed a Ten-Year Plan with the Commission in June 2024. This Project is consistent with the Ten-Year Plan on file with the Commission.

3.0 SITE SELECTION CRITERIA

The Project Corridor is based on landowner participation, field surveys, known environmentally sensitive areas, review of County and state transmission line requirements, and communications with local, state, and federal agencies. North Dakota has several site selection criteria that are considered by the Commission to determine suitability of the transmission line. Basin Electric has reviewed the criteria in NDAC Section 69-06-08-02 and has considered these criteria in Project design. These criteria are discussed in this section.

3.1 Exclusion Areas

In accordance with NDAC Section 69-06-08-02(1), which implements NDCC Section 49-22-05.1, the geographical areas listed in **Table 3-1** below must be excluded in the consideration of a transmission facility route. Exclusion and avoidance areas may be located within a corridor, but at no given point can such an area or areas encompass more than 50 percent of the corridor width unless there is no reasonable alternative. NDAC Section 69-06-08-02 further specifies that a buffer zone of a reasonable width to protect the integrity of the area must be included. Natural screening may be considered in determining the width of the buffer zone. **Appendix A** depicts the results of review for exclusion areas.

Table 3-1: Exclusion Areas

Exclusion Area	Present in Corridor/Route	Proposed Buffer	Section Addressed
Designated or registered national: parks; memorial parks; historic sites and landmarks; natural landmarks; monuments; and wilderness areas.	Not present within Corridor/Route.	No impacts are anticipated, and no buffer is proposed.	5.5
Designated or registered state: parks; historic sites; monuments; historical markers; archaeological sites; and nature preserves.	Not present within Corridor/Route.	No impacts are anticipated, and no buffer is proposed.	5.4, 5.5
County parks and recreational areas; municipal parks; and parks owned or administered by other governmental subdivisions.	Not present within Corridor/Route.	No impacts are anticipated, and no buffer is proposed.	5.5
Areas critical to the life stages of threatened or endangered animal or plant species.	The Project spans Piping Plover critical habitat, the Missouri River. No structures will be placed within the primary constituent elements of piping plover habitat.	The critical habitat encompasses more than 50 percent of the corridor; however, the Project is not anticipated to impact the critical habitat and there were no reasonable alternatives to the Project that would not span the Missouri River. Pre-construction surveys will be completed. Any sightings and associated buffers will be discussed with USFWS prior to construction, if needed.	5.8
Areas where animal or plant species that are unique or rare to this state will be irreversibly damaged.	Not present within Corridor/Route.	No impacts are anticipated, and no buffer is proposed.	5.8

Table 3-1: Exclusion Areas			
Exclusion Area	**Present in Corridor/Route**	**Proposed Buffer**	**Section Addressed**
Areas within 1,200 feet of the geographic center of an intercontinental ballistic missile (ICBM) launch or launch control facility.	Present within Corridor/Route. In 2023, Basin Electric filed for an exemption of the 1,200-foot setback requirement for two ICBM sites (C-07 and C-08). See Appendix A for the ICMB site locations and Appendix I for the NDPSC and US Air Force approvals of this exception.	With the exception of sites C-07 and C-08, no impacts are anticipated.	Appendix I
Areas within 30 feet on either side of a direct line between ICBM launch or launch control facilities to avoid microwave interference.	The closest ICBM launch or launch control facility is approximately 536 feet from the Project.	No impacts are anticipated, and no buffer is proposed.	Appendix I

3.2 Avoidance Areas

In accordance with NDAC Section 69-06-08-02(2), approval of a transmission facility cannot be in the geographical areas listed in **Table 3-2** below unless the applicant shows that, under the circumstances, there is no reasonable alternative. NDAC Section 69-06-08-02(2) further requires a buffer zone of a reasonable width to protect the integrity of the area. Natural screening may be considered in determining the width of the buffer zone. **Appendix A** depicts the avoidance areas.

Table 3-2: Avoidance Areas			
Avoidance Areas	**Present in Corridor/Route**	**Proposed Buffer**	**Section Addressed**
Designated or registered national: historic districts; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands.	Not present within Corridor/Route.	No buffer is proposed.	5.8
Designated or registered state: wild, scenic, or recreational rivers; game refuges; game management areas; management areas; forests; forest management lands; and grasslands.	Not present within Corridor/Route.	No impacts are anticipated, and no buffer is proposed.	5.5
Historical resources which are not specifically designated as exclusion or avoidance areas.	Not present within Corridor/Route.	No impacts are anticipated, and no buffer is proposed.	5.4
Areas which are geologically unstable.	One structure, 378-041, is located within a geologically unstable area. Basin Electric believes that the Project Route is the most viable route alternative and is the most direct route that minimizes impacts to exclusion and avoidance areas.	Minimal impacts are anticipated, and no buffer is proposed. The structure foundation is designed based on soil borings from the area.	5.6, Appendix A
Within 500 feet of a residence, school, or place of business.	Five homesteads are located within 500 feet of the Project Corridor. Basin Electric has obtained landowner waivers for these properties, see Appendix K.	No impacts are anticipated, and no buffer is proposed.	3.6, Appendix A, Appendix K
Reservoirs and municipal water supplies.	Not present within Corridor/Route.	No impacts are anticipated, and no buffer is proposed.	5.2
Water sources for organized rural water districts.	Not present within Corridor/Route.	No impacts are anticipated, and no buffer is proposed.	5.2

Table 3-2: Avoidance Areas			
Avoidance Areas	**Present in Corridor/Route**	**Proposed Buffer**	**Section Addressed**
Irrigated land.	Not present within Corridor/Route.	No impacts are anticipated, and no buffer is proposed.	5.5
Areas of recreational significance which are not designated as exclusion areas.	Not present within Corridor/Route.	No impacts are anticipated, and no buffer is proposed.	5.5

3.3 Selection Criteria

In accordance with NDAC Section 69-06-08-02(3), a site can be approved in an area only when the applicant demonstrates to the Commission that any significant adverse effects resulting from the location, construction, and operation of the facility in that area, as they relate to the criteria listed in **Table 3-3** below, will be at an acceptable minimum, or that those effects will be managed and maintained at an acceptable minimum.

Table 3-3: Selection Criteria		
Selection Criteria	**Potential Effects**	**Section Addressed**
The impact upon agriculture:		
Agricultural production.	Negligible/minimal effect anticipated. Where practical, construction activities will be scheduled during periods when agricultural activities will be minimally affected, or the landowner will be compensated accordingly. Landowners would be compensated for crop and forage loss that occurs as a result of construction and maintenance activities, and damage to soils would be redressed.	5.1, 5.5
Family farms and ranches.	Negligible/minimal effect anticipated. Transmission lines are a compatible use with existing family farms and ranches, and the Project will not displace any farms or ranches.	5.1, 5.5
Land which the owner demonstrates has soil, topography, drainage, and an available water supply that cause the land to be economically suitable for irrigation.	There is no known irrigation within the Study Area, thus, no effects are anticipated. Participating landowners have not expressed concerns related to economically suitable irrigation on their land.	5.5
Surface drainage patterns and ground water flow patterns.	No impacts to surface drainage patterns or groundwater flow patterns are anticipated. The Project will be designed in such a manner that runoff from the upper portions of the watershed can flow unrestricted to the lower portion of the watershed.	5.7
The impact upon:		
Sound-sensitive land uses.	Negligible/minimal effect anticipated. Following construction, there will be a minimal amount of sound from the Project as a result of corona effects, which occur when air molecules near conducting wire are ionized due to changes in the electric field intensity at the conductor surface. The sound is most noticeable when conductors are wet as a result of precipitation.	5.3
The visual effect on the adjacent area.	Negligible/minimal effect anticipated. The Project will be visible to landowners and travelers along roadways. Existing transmission lines, oil and gas well pads, and roads are present in the viewshed.	Appendix A
Extractive and storage resources.	The Project would not directly affect any wells or drill rigs, because the Corridor/Route has been designed to avoid these areas and provide sufficient clearance for well maintenance and operation.	Appendix A
Wetlands, woodlands, and wooded areas.	Negligible/minimal effect anticipated. The Project will avoid permanent impacts to all wetlands, in all but two locations. These two locations, as well as temporary impacts to wetlands and waterbodies impacted during construction (e.g., access routes or workspaces) will be permitted under Nationwide Permit 57. Trees/shrubs will be replaced consistent with the Commission's Tree and Shrub Mitigation Specifications.	5.5, 5.7

Table 3-3: Selection Criteria		
Selection Criteria	**Potential Effects**	**Section Addressed**
Radio and television reception, and other communication or electronic control facilities.	No effect anticipated.	5.2
Human health and safety.	No effect anticipated based on compliance with sound standards and design and construction standards to meet or exceed the National Electrical Safety Code. Regular maintenance and inspections will be performed during the life of the Project to confirm its continued integrity.	5.3
Animal health and safety.	No effect anticipated. Construction work will be coordinated with landowners to avoid impacts to livestock. Basin Electric is committed to mitigating potential impacts to wildlife.	5.8
Plant life.	Negligible/minimal effect anticipated. The transmission line structures will result in approximately 18.2 acres of permanent ground disturbance, including loss of the existing plant life. Trees and shrubs will be replaced consistent with the Commission's Tree and Shrub Mitigation Specifications. Temporarily disturbed areas will be restored as practicable.	4.2, 5.5

3.4 Policy Criteria

In accordance with NDAC Section 69-06-08-02(4), the Commission may give preference to an applicant who will maximize benefits that result from the adoption of the policies and practices listed in **Table 3-4** below and may require the adoption of such policies and practices as appropriate.

Table 3-4: Policy Criteria		
Policy Criteria	**Potential Benefits**	**Section Addressed**
Location and design.	The location is based on landowner participation, field surveys, known environmentally sensitive areas, and state transmission line requirements. Project design will meet the requirements of the National Electrical Safety Code for the Heavy Loading District, Basin Electric, U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS) design criteria, and other applicable local or national building codes.	1.4, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.0, 5.0, 6.0
Training and use of available labor in this state for the general and specialized skills required.	Basin Electric has used several local firms in developing the Project and compiling this application and will continue to use local labor to the extent practicable.	5.1
Economies of construction and operation.	Basin Electric will use local contractors to the extent practicable.	5.1
Use of citizen coordinating committees.	Not applicable.	NA
A commitment of a portion of the transmitted product for use in this state.	The Project will meet the need for additional electric transmission capacity in northwestern North Dakota as a result of increased load growth and will meet reliability and system stability requirements for the region.	1.0, 2.1
Labor relations.	No labor relations would be negatively affected by the Project.	NA
The coordination of facilities.	Existing facilities were considered in the location of the Project. Basin Electric will avoid impacts to existing infrastructure. Basin Electric obtains crossing permits where required for utilities.	4
Monitoring of impacts.	Basin Electric and the contractor will employ Best Management Practices during construction to monitor soil impacts and segregate topsoil. A stormwater pollution prevention plan will be prepared for the Project.	4.2.2, 4.9, 4.10, 5.6
Use of existing and proposed rights of way and corridors	Basin Electric has routed the Project parallel to existing roadways and section lines to the extent practicable and in consideration of preferences from landowners crossed by the Project.	Appendix A
Other existing or proposed transmission facilities.	Basin Electric has paralleled the Project with existing utility corridors as practicable.	Appendix A

3.5 Factors to be Considered

The North Dakota Energy Conversion and Transmission Facility Siting Act NDCC Section 49-22-09 lists the factors to be considered in evaluating applications and designation of sites (see **Table 3-5** below).

Table 3-5: Factors to be Considered

Factors to be Considered	Evaluation	Section(s) Addressed
Available research and investigations relating to the effects of the location, construction, and operation of the proposed facility on public health and welfare, natural resources, and the environment.	Effects of the location, construction, and operation of the Project on public health and welfare, natural resources, and the environment are described in Section 5.	5.3, 5.8, Appendix G
The effects of new energy conversion and transmission technologies and systems designed to minimize adverse environmental effects.	The Project has been designed to minimize adverse environmental effects including utilizing bird flight diverters to avoid and reduce bird mortality.	5.8, Appendix G
The potential for beneficial uses of waste energy from a proposed energy conversion facility.	Not applicable.	Not applicable
Adverse direct and indirect environmental effects which cannot be avoided should the proposed site be designated.	Adverse direct and indirect environmental effects which cannot be avoided are described for each resource area in Section 5.	5
Alternatives to the proposed site which are developed during the hearing process and which minimize adverse effects.	Multiple alternatives were considered for the Project Route. Basin Electric believes that the Project Route is the most viable and most direct route alternative that also minimizes impacts on the exclusion, avoidance, selection, and policy criteria identified in NDAC Section 69-06-08-02.	2.2, 3.1, 3.2
Irreversible and irretrievable commitments of natural resources should the proposed site be designated.	Not applicable.	Not Applicable
The direct and indirect economic impacts of the proposed facility.	Direct and indirect economic impacts of the Project include payments for participating landowners, employment, transmission line tax payment to the state of North Dakota based on mileage and voltage, and sales/use tax on materials.	5.1
Existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site, corridor, or route.	No conflicts are anticipated with existing state, local government, or private entities' development plans.	6.0, Appendix H
The effect of the proposed site on existing scenic areas, historic sites and structures, and paleontological or archaeological sites.	There are no designated scenic areas that will be affected by the Project. As identified through a Class I Literature Review and the Class III Cultural Resources Inventory conducted to-date, archaeological sites are outside the Project Corridor, are found to be not significant, or are spanned. See Section 5.4.	3.1, 3.2, 5.4, Appendix E
The effect of the proposed site on areas which are unique because of biological wealth or because they are habitats for rare and endangered species.	The effect of the Project on areas which are unique because of biological wealth or because they are habitats for rare and endangered species are described in Section 5.	3.1, 3.2, 5.8
Problems raised by federal agencies, other state agencies, and local entities.	Basin Electric and its representatives contacted key local, state, and federal agencies per Section 69-06-01-05 of the NDAC for assistance in identifying concerns or issues within the Study Area.	6.0, Appendix H

3.6 Setbacks

The setbacks used in designing the Project comply with or exceed those required by the Commission, with the exception of five residences and two ICBM locations. Basin Electric has obtained waivers where the Project Route will be within 500 feet of their residence. In 2023,

Basic Electric filed for an exemption of the 1,200-foot setback requirement for two ICBM sites (C-07 and C-08). **Appendix A** shows the location of the five residences and two ICBM sites. **Appendix K** includes the landowner waivers and approval correspondence for the ICBM exception. No additional setback criteria applicable to the Project were identified through consultation with each individual County. The Project complies with or exceeds the following transmission line corridor and route criteria exclusion and avoidance areas provided in NDAC Section 69-06-08-02(1)-(2). **Table 3-6** below lists the setbacks used in designing the Project.

Table 3-6: Setback Distances as Designated by the Commission

Setback Type	Setback Distance
The geographic center of an ICBM launch or launch control facility.	1,200 feet [a]
Areas on either side of a direct line between ICBM launch or launch control facilities to avoid microwave interference.	30 feet [a]
Residence, school, or place of business.	500 feet [b]

[a] See Appendix I for NDPSC and US Airforce approved exceptions.
[b] See Appendix K for Landowner Waivers

3.7 County Criteria

Electrical transmission facilities are conditional uses in Mercer, McLean, Ward, and Mountrail Counties, and, as such, Conditional Use Permits will be applied for in each county. The Project meets the Public Utilities, Minor category of Permitted Uses as defined in the Williams County Zoning Ordinance and Subdivision Regulations and does not require a Conditional Use Permit from the county. **Table 3-7** below outlines the permit types for each county, regarding electrical transmission facilities.

Table 3-7: County Electrical Transmission Permit Type

County	Conditional Use	Permitted Use
Mercer	X	
McLean	X	
Ward	X	
Mountrail	X	
Williams		X

Substations are a Conditional Use in Mountrail County. A Conditional Use Permit will be applied for in Mountrail County for the Crane Creek Substation.

4.0 DESIGN AND CONSTRUCTION

4.1 Project Design

4.1.1 Transmission Line Design Parameters

Project construction and design will meet the requirements of the National Electrical Safety Code (NESC) for the Heavy Loading District, Basin Electric, U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS) design criteria, and other applicable local or national building codes. The Heavy Loading District refers to those areas that are subject to severe ice and wind loading. Minimum conductor clearance is measured at the point of greatest conductor sag and closest proximity to the ground. The transmission line will be constructed with clearances that exceed standards set by NESC. Minimum conductor height under maximum sag conditions will exceed 30 feet for all ground surfaces. **Table 4-1** below includes a description of various Project design component characteristics.

Table 4-1: Project Transmission Line Design Components

Description of Design Component	Values
Voltage (kV)	345-kV
Length of transmission line	162 miles
Approximate total number of structures	834
Conductor size	1.72 inches
Typical minimum and maximum span distances between structures	200-1,250 feet
Average span	Approximately 1000 feet
Minimum and maximum structure height	100 – 185 feet
Average height of structures	130 feet
Average number of structures	5.1 per mile
Minimum conductor-to-ground clearance to agricultural land at 100 degrees Celsius (°C)	30 feet
Minimum conductor-to-ground clearance to rural roads at 100°C	30 feet
Minimum conductor-to-ground clearance to railroad at 100°C	30 feet
Minimum conductor-to-ground clearance to paved highways at 100°C	30 feet
Circuit configuration	Vertical for double-circuit; delta for single-circuit

The Project will consist of an approximately 162 mile-long, 345-kV transmission line with approximately 834 transmission line structures. The circuit will utilize 6 existing lattice tower structures for approximately 1 mile on Basin Electric property adjacent to LOS. Approximately 40 miles, 219 structures, will be constructed as 345/230kV double-circuit, utilizing the existing LOS to Logan 230-kV transmission corridor. The exact quantity and distribution of structure types may change during detailed design and construction. Approximately 11.5 miles, 59 structures, will be constructed as 345-kV/115-kV double-circuit to accommodate a future planned MWEC transmission line.

The Project will use galvanized steel monopoles with three steel davit arms for the conductor phases, one steel davit arm for overhead ground wire, and one steel davit arm for optical ground wire (OPGW). Double-circuit poles will use six steel davit arms for the conductor phases. The OPGW will provide lightning suppression and fiber optic communications between the Project

Substations for systems control. H-frame structures will be utilized for long spans and specific spans such as other utility crossings and the Missouri River crossing.

The structures will range in height from approximately 100 feet to 185 feet with an average of 130 feet, depending on the required span distances between structures and area topography. The span between structures will typically range from 200 to 1,250 feet and average approximately 1000 feet. Depending on topography; taller structures could be used for crossing existing distribution and transmission lines or where unusual terrain exists. All structures, including tangent structures, angle structures (used where the transmission line changes direction) and dead-end structures (used to provide longitudinal stability along the length of the line), will be constructed on drilled concrete pier foundations. Permanent guy wires will not be used. See **Figure 4-1** below for typical structure design.

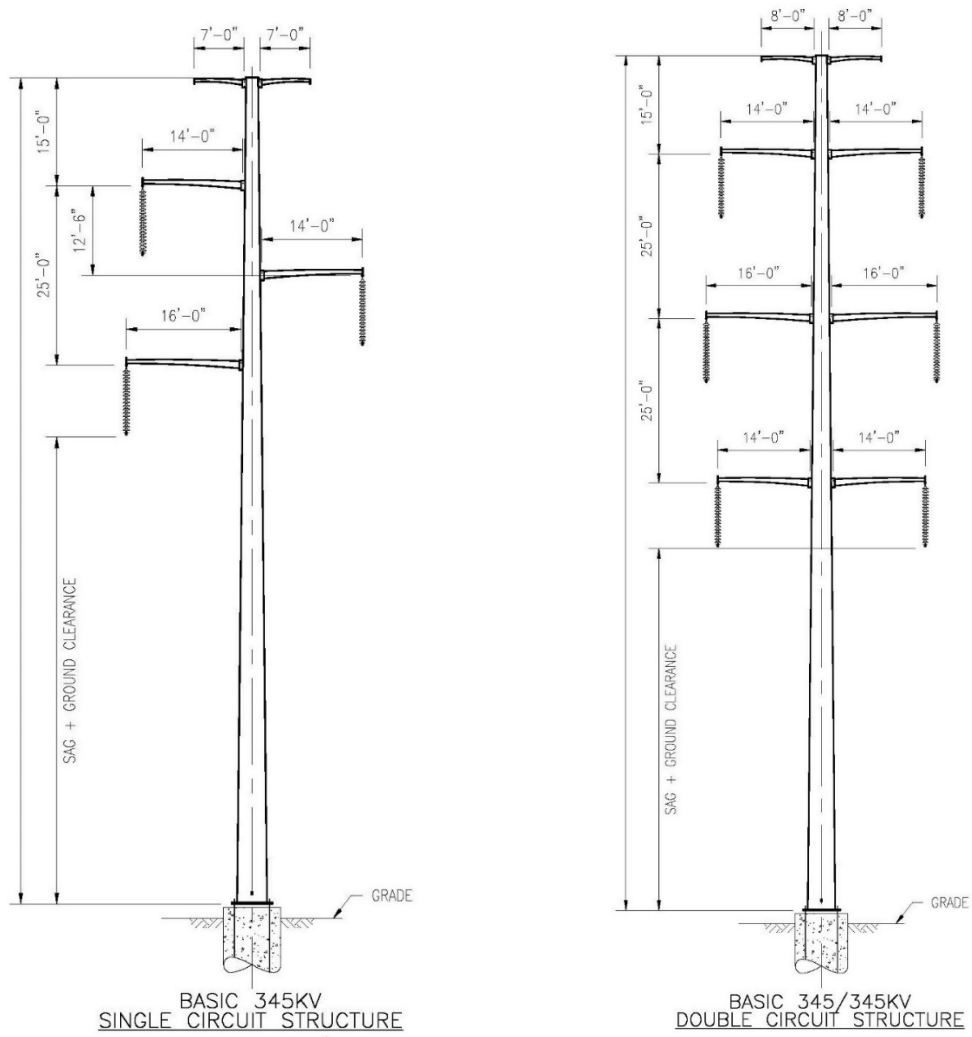

Figure 4-1: Typical Structure Designs

4.1.2 Substation Design Parameters

The LOS Substation is currently under construction as part of an aging infrastructure replacement project (PU-22-372). See **Figure 4-2** for a layout of the LOS Substation. The

terminal at the LOS Substation for this Project is included in the substation footprint and is highlighted in **Figure 4-2.** The terminal includes one 345kV take-off structure, new high and low electric bus structures, a 345kV line disconnect switch, four 345 kV breaker disconnect switches, two 345kV circuit breakers, three single-phase 345kV voltage transformers, and associated structure supports, foundations, and other connectors, cables, and equipment.

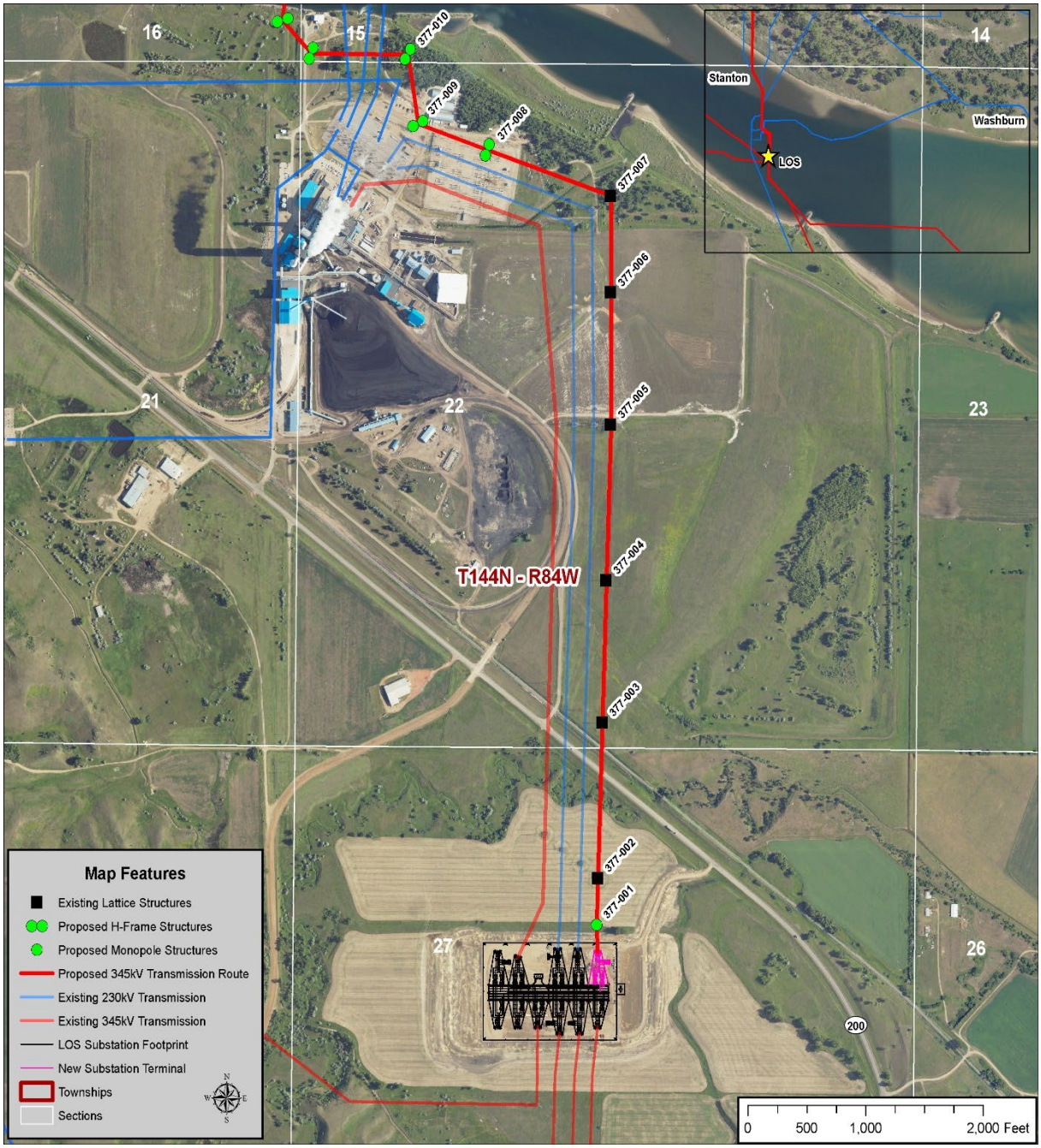

Figure 4-2: Leland Olds Substation Location Map

A new terminal will be needed at the Tande Substation for this Project. See **Figure 4-3** for the layout of Tande Substation. The terminal addition will consist of one new 345kV take-off structure, new high and low electric bus structures, a 345kV line disconnect switch, six 345 kV

breaker disconnect switches, four 345kV circuit breakers, five single-phase 345kV voltage transformers, and associated structure supports, foundations, and other connectors, cables, and equipment. All new components will remain within the existing substation footprint.

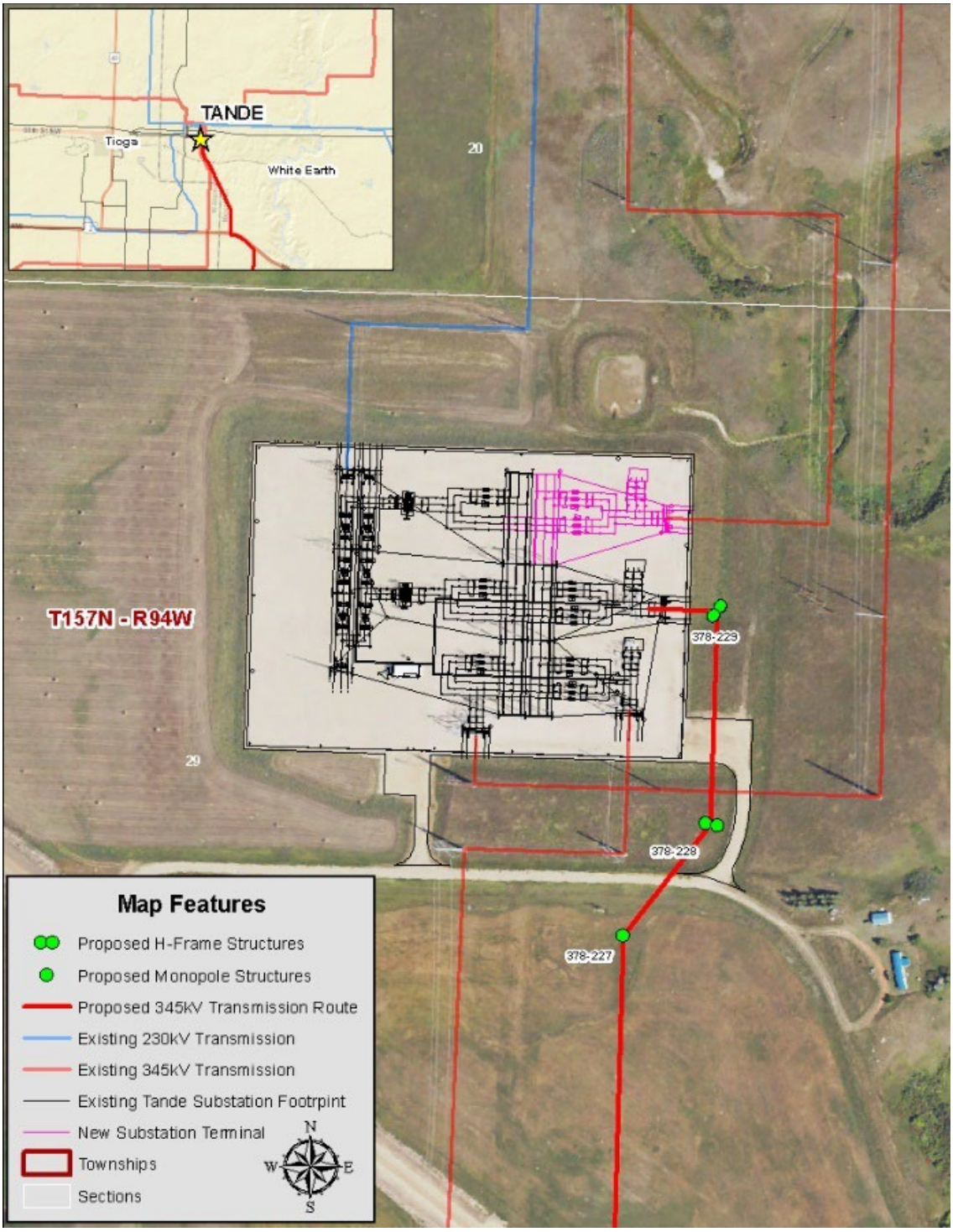

Figure 4-3: Tande Substation Location Map

Crane Creek is a new 345/115-kV Substation in section 26 of Township 153N, Range, 91W in Mountrail County, ND. The Crane Creek substation includes a fenced area of approximately 14.4 acres. The substation will include three 345kV take-off structures, four 345kV line disconnect switch three, twelve 345 kV breaker disconnect switches, six 345kV circuit breakers, twelve single-phase 345kV voltage transformers, two 345/115kV transformers, three 115kV take-off structures, five 115kV line disconnect switches, twelve 115kV breaker disconnect switches, six 115kV circuit breakers, fifteen single-phase 345kV voltage transformers, one 25MVAR shunt reactor, new high and low electric bus structures, and associated structure supports, foundations, and other connectors, cables, and equipment. See **Figure 4-4** for a layout of the Crane Creek Substation.

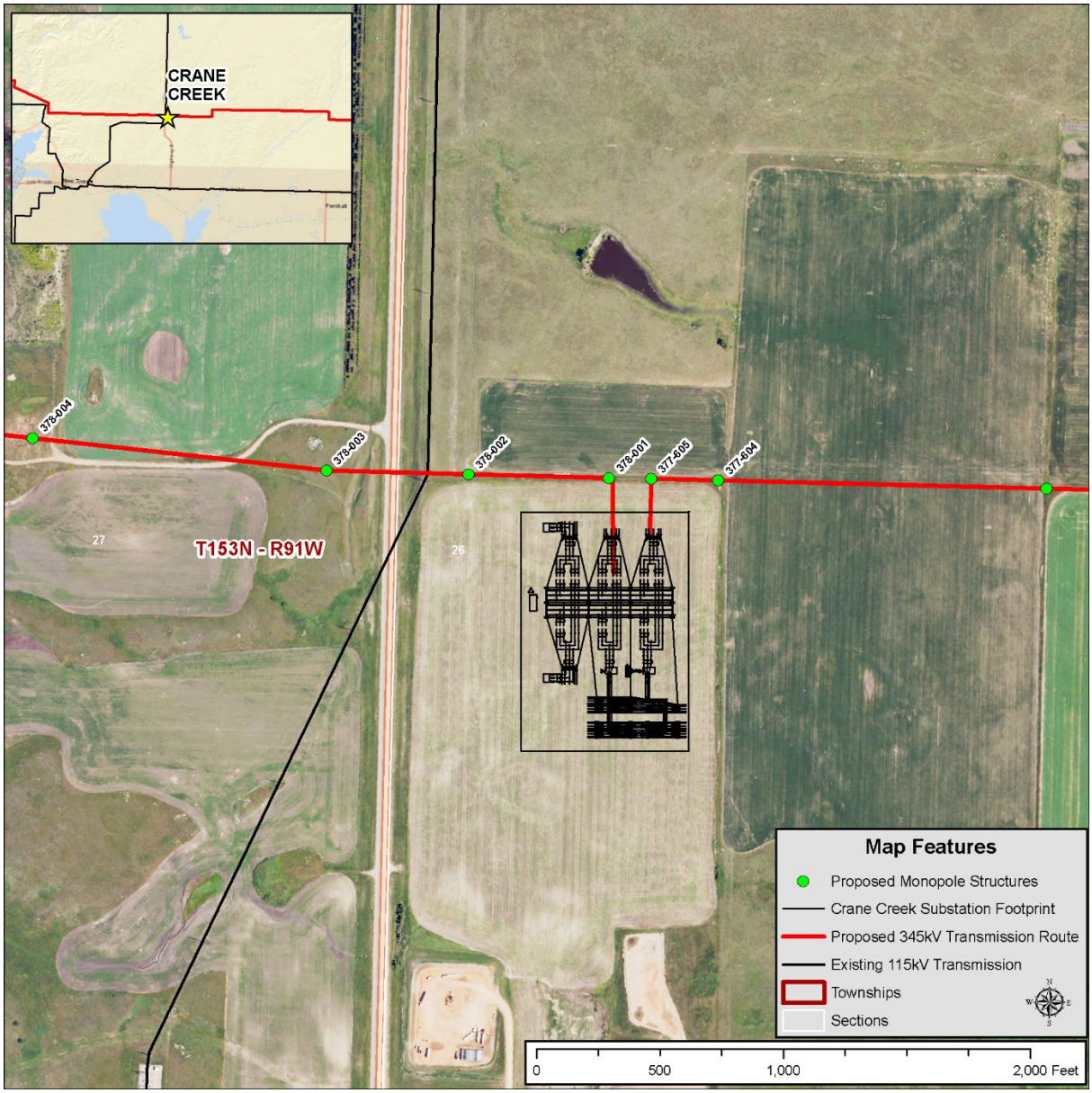

Figure 4-4: Crane Creek Substation Location Map

4.1.3 Supervisory Control and Data Acquisition System

A Supervisory Control and Data Acquisition (SCADA) system will interconnect the LOS, Crane Creek, and Tande Substations. Hard-wire system communications will use fiber optics within the OPGW between the substations and existing microwave communications equipment will be used for SCADA redundancy and to facilitate voice and data communications by field personnel. A new microwave tower will also be needed as part of the project near Douglas, North Dakota. The site will include a 190' tower to support mobile radio coverage between the LOS substation and the Crane Creek Substation. The location of the microwave tower is shown in **Appendix A, page 32**.

4.2 Construction Activities

4.2.1 Pre-construction Surveying

Basin Electric and/or its contractors will perform initial transmission line survey work, consisting of survey control, route centerline location, profile surveys, and access surveys prior to construction. These surveys will likely be conducted concurrently with other pre-construction tasks.

4.2.2 Site Preparation

The Project Corridor includes areas that are relatively flat and areas of more challenging, steeper terrain. It is anticipated that at some structure locations, blading of small areas (up to 40 feet by 40 feet for crane and manlift landings) may be required to level the ground surface to allow the safe operation of the equipment. Blading will be confined to the Project Corridor and will be accomplished using bulldozers, skid steers, or front-end loaders. Soil removed during leveling will be stockpiled and replaced following construction; special emphasis will be placed on salvaging topsoil to be used for reclamation. The ground will be re-graded to the approximate original contour and revegetated (rangeland) or tilled (cropland) when the work is completed. Temporary disturbance to soils will be mitigated by returning the sites to grazing and farming unless other arrangements are made with the landowner in order to facilitate the long-term maintenance of the transmission line.

4.2.3 Borehole Excavation and Foundation Installation

Crews will use a truck-mounted auger or tracked vehicle equipped with a power auger to drill holes for foundations at each structure location.

All structures will require reinforced concrete drilled pier foundations. The pier diameters will range from 6 to 14 feet and extend to depths from 20 to 40 feet. Large volumes of excess soil will be disposed of at local landfills or in accordance with landowner wishes. Disposal of waste material, including concrete spoils, will comply with applicable regulations. Site-specific foundation diameters and depth are determined based on geotechnical and engineering evaluations.

4.2.4 Structure Assembly and Erection

Structure components (i.e., structure segments, davit arms, hardware, insulators, and related materials) will be hauled to structure work site locations and assembled. Davit arms, insulators, and other appurtenances will be attached to the poles while on the ground at each structure

location within the Project Corridor. Erection crews will place the structure on drilled concrete pier foundations using cranes or large boom trucks.

4.2.5 Conductor Stringing and Tensioning

Following structure construction, crews will install the conductor, and OPGW using stringing blocks and line pulling and tensioning equipment. The lines will be kept under tension during the stringing process to keep the conductor clear of the ground and obstacles that could damage the wire surfaces.

Pulling and tensioning sites are typically located at 10,000-foot intervals and at angle point structures. Pulling and tensioning sites along tangent structures are maintained within the Project Corridor, whereas those at angle points typically are partially outside of the Project Corridor. Stringing equipment generally consists of wire pullers, tensioners, conductor reels, OPGW wire reels, steel wire reels, and sheave blocks. About 10,000 feet of conductor, steel shield wire, and OPGW will be installed for each pull. After the conductor/ground wire is pulled for a section of line, it is tightened or sagged to the required design tension in compliance with the NESC. The process will be repeated until all conductor and OPGW are pulled through all sheaves. Conductor stringing will also require access to each structure for securing the conductor to the insulators or OPGW to each structure, once final line sag is established.

For public safety and property protection, temporary guard structures may be used to provide support when stringing wires across existing power lines, roads, highways, railroads, and other linear obstacles. The structures will be removed when stringing is complete; the pole borings will be backfilled, and the temporary support structure sites will be reclaimed. All temporary guard structures will be installed within the Project Corridor.

4.3 Project Access

4.3.1 Transmission Structure Site Access and Traffic

Construction access to transmission structures will involve the use of existing roads where available and temporary overland access trails, where necessary. The use of temporary overland access trails between structure sites will not require new construction but will result in temporary disturbance. Occasional access from section line trails could result in temporary disturbance along the Project Corridor; however, such disturbance will be limited to a 16-foot-wide track (approximately) and only long enough to provide vehicle access directly to structure locations. Some additional access disturbance could occur if truck or vehicle turnarounds are needed; however, the use of structure work sites will be encouraged.

Existing access roads (typically paved or maintained with a gravel or aggregate base) will be used in their original condition. Basin Electric will be responsible for reimbursing the appropriate public entity for the repair of any damage caused by construction equipment movement and will return existing roads to original or better condition following construction. Basin Electric will not be responsible for maintaining roads following construction. Basin Electric will not be responsible for maintaining fences and gates following construction and restoration; however, if necessary, access gates will be installed during construction will be left in place following construction in coordination with landowners.

Line segments that are parallel to section lines that do not have established roadways will use the 66-foot-wide public ROW to the extent practicable. Basin Electric will restore disturbed areas

to pre-construction conditions, to the extent practicable, and will not be responsible for the long-term maintenance of such section line trails. As necessary, any fences, gates, or similar features that will be removed during construction will be replaced or rebuilt. Gates and fences that are installed during construction will be left in place for future use.

4.3.2 Temporary Land Requirements

Temporary impacts are those impacts that result during construction to accommodate equipment and temporary construction activities outside of the areas that will remain as the permanent Project footprint during operation. All temporary impacts are included in **Table 4-2.**

Temporary overland access will be used in areas without existing roads. Landowners will be compensated for loss of crops caused by construction activities. Gates may be installed to facilitate access to some structures and the Project Corridor. The gates will be left in place following construction activities.

Temporary access routes will result in a 16-foot-wide temporary disturbance and compaction of vegetation and soils. Temporary overland access routes will be subject to the same cultural resource and vegetation surveys as the Project Corridor. Landowners will be compensated for access routes where public access does not exist.

An approximately 100-foot x 150-foot (15,000 square feet) temporary work site will be located at each structure location and within the Project Corridor. The area will be graded, if required, to ensure safe movement and operation of heavy equipment.

Pulling and tensioning sites and splicing sites will result in temporary disturbance to lands within and extending outside of the Project Corridor. Pulling and tensioning and splicing site impacts are summarized in **Table 4-2.**

Basin Electric will use three previously disturbed locations for material storage, with approval through county permits.

Total temporary impacts associated with the Project are estimated at approximately 1,162 acres.

4.4 Permanent Land Requirements

Permanent impacts are those required for Project operation, consisting mostly of individual structure locations. Permanent land disturbance has been estimated for self-supporting single and double-circuit tangent structures, and self-supporting angle (turning) structures.

Estimated Project permanent ground disturbance impacts are included in **Table 4-2** below.

Table 4-2: Estimated Disturbance Impacts

Project Component	Temporary Disturbance Assumptions	Permanent Disturbance Assumption	Per Unit Temporary Impact (acres)	Per Unit Permanent Impact (acres)	Impact Multiplier (qty)	Temporary Impact (acres)	Permanent Impact (acres)
LOS Substation	Existing substation, none	Existing substation, none	0	0	1	0	0
Crane Creek Substation	Temporary Disturbance includes all grading extents for grading and stormwater conveyance	800 x 1200 ft substation and 2000 feet of on-site access roads	21	17	1	21	17
Tande Substation	Existing substation, none	Existing substation, none	0	0	1	0	0
Existing Lattice Towers	100 ft x 150 ft = 0.344 acres	Existing tower, none	0.344	0	7	2.41	0
Single-pole Tangent on foundation	100 ft x 150 ft = 0.344 acres	8ft diameter = 0.0012 acres	0.344	0.0012	466	160.47	0.54
Single-pole Angle on foundation	100 ft x 150 ft = 0.344 acres	13ft diameter = 0.0030 acres	0.344	0.003	68	23.42	0.21
Double-Circuit Tangent on foundation	100 ft x 150 ft = 0.344 acres	9ft diameter = 0.0015 acres	0.344	0.0015	257	88.5	0.38
Double-Circuit Angle on foundation	100 ft x 150 ft = 0.344 acres	14ft diameter = 0.0035 acres	0.344	0.0035	21	7.23	0.07
H-frame Tangent (2-pole	100 ft x 150 ft = 0.344 acres	6 ft diameter x 2 = 0.0013 acres	0.344	0.0013	5	1.72	0.01
H-frame Angle (2-pole foundation)	100 ft x 150 ft = 0.344 acres	8 ft diameter x 2 = 0.0054 acres	0.344	0.0023	10	3.44	0.02
Pulling and Tensioning Site	150ft x 300 ft x 2 = 2.07 acres	None	2.066	0	70	144.63	0
Splicing Sites	100 ft x 150 ft = 0.344 acres	None	0.344	0	86	29.61	0
Access	16' wide x 5280 ' = 1.94 acres per mile	None	1.939	0	304	589.58	0
Microwave Tower	75'x75' site	None	0.30	0.30	1	0.30	0.30
					Totals	**1162.01**	**18.22**

4.5 Easements

Landowners are contacted many times throughout the routing process. Initially, survey permissions are requested from each landowner along the route to allow access for engineering, environmental, and archeological surveys. Once a route is finalized, Basin Electric conducts a series of steps throughout the process of acquiring the ROW easements for the transmission line. Title searches going back 50+ years are completed to identify current ownership and all encumbrances that need to be addressed. A market analysis was conducted by a third-party appraiser to identify the current land values, which was, in turn, used to establish monetary offers for the easements. Negotiations with landowners occur to acquire easements.

Basin Electric's ROW group works with utility companies, and State, Federal, county, and township officials to identify asset crossings (roadways, section lines, and utilities). Basin Electric then executes the necessary permits/agreements for each agency.

4.6 Construction Waste Management

Typical waste materials generated from construction activities include miscellaneous lumber and shipping materials used to protect equipment during transportation, paper products, soda cans, food related materials, and sanitary waste. Waste from construction materials and rubbish from all construction areas will be collected, hauled away, and disposed of in an approved landfill. Sanitary waste will be disposed of through arrangements with local municipal sanitary waste treatment facilities.

Material staging areas and vehicle maintenance and refueling areas will not be located near waterways. If any of the material staging areas include vehicle and equipment refueling or storage of petroleum products in excess of 1,320 gallons, a Spill Prevention, Control, and Countermeasure (SPCC) plan will be implemented. The SPCC plan will address: 1) operating procedures to prevent spills; 2) control measures to prevent a spill from reaching navigable waters; and, 3) countermeasures to contain, clean up, and mitigate the effects of a spill that reaches navigable waters. Additionally, spill containment and clean up materials (e.g., absorbent material, shovels) will be available at every work site. The materials will be used to contain and clean up oil and hydraulic spills that may result from equipment leaks. Workers will be trained in procedures to follow to contain and clean up released hazardous materials.

4.7 Construction Sequence, Work Force, and Equipment

Transmission line construction will generally follow a sequential set of activities performed by crews proceeding along the length of the line. **Table 4-3** lists the construction activities. Due to the scope of the project, there will likely be multiple contractors working in different areas of the project. The number of personnel vary depending on the means and methods of each contractor and are listed for reference.

Table 4-3: Construction Personnel, Equipment, and Time Requirements

Task	Number of Personnel	Equipment	Length of Time
Structure site clearing and vegetation management	10-15	Pickups, all-terrain vehicles (ATVs)	Duration of Project
Gate installation	3	Flatbed and pickup trucks	6 months
Structure assembly	18-24	Pickups, cranes, material trucks, rubber-tired crane, 4x4 pickups	12 months
Foundation Installation	15-20	Rotary drilling rigs, backhoes, pickups, rubber-tired digging equipment, ATVs, portable compressors	12 months
Structure erection	18-24	Rubber-tired cranes, boom trucks, 4x4 pickups	14 months
Ground wire and conductor stringing	20–30	Pickups, manlifts/boom trucks, hydraulic tensioning machines, reel trailers	12 months
Cleanup	12	Pickups, dump trucks, flatbed trucks	Duration of Project

4.8 Worker Safety and Health Protocol

All construction and maintenance activities will be carried out in compliance with applicable federal and state worker safety regulations, as defined under the Occupation Safety and Health

Administration Act of 1979. Worker safety and health is administered by Basin Electric's Transmission Systems Maintenance Division, which is a member of the National Safety Council.

4.9 Environmental Protection Measures and Policies

Project-specific mitigation measures have been developed to avoid or reduce the severity of environmental impacts. The measures are applicable to Project construction and operation. These measures are discussed under the Mitigation sections of each resource in Section 5.0, Environmental Analysis. Basin Electric's Policies and Commitments to Limit Environmental Impacts are included in **Appendix C**.

4.10 Reclamation

Following construction, disturbed areas will be graded and/or re-sloped to their approximate original contours to minimize erosion and visual alteration. In grassland or pasture areas, disturbed areas will be reseeded with native species unless an alternate seed mix is required by the landowner. Cultivated land will be tilled and returned to production. Fences and gates damaged as a result of the Project will be repaired.

Rangeland from which vegetation has been removed, destroyed, or damaged will be reclaimed and revegetated. Reclamation activities, weather permitting, will be ongoing throughout construction and will take place as soon as construction activities are completed in a particular area. Drainage structures and similar improvements will be removed from areas to be reclaimed, where appropriate, and the area will be revegetated using a native seed mixture, as recommended by the County Agricultural Extension Service or the Natural Resources Conservation Service (NRCS) unless an alternate seed mix is required by the landowner.

Ruts and scars from overland travel will be leveled to break up compacted soils and aid in returning areas to approximate original contours. Cultivated areas disturbed by overland travel will be leveled and tilled to break up compacted soils (if necessary) and returned to production.

The optimal timing for revegetation success will be spring or fall to coincide with seasonal rains. Mulching may be required to protect seeded areas from erosion. Other erosion control devices, such as water bars, terracing, or water diversion structures will be constructed where needed. Follow-up inspections will be carried out during the next growing season. Areas that did not become revegetated will be reseeded again, as necessary.

The reclamation procedures described above will be applied to disturbed areas including temporary workspaces, access, staging areas, and other areas disturbed by Project activities.

4.11 Operation and Maintenance

The following operation and maintenance activities will be performed throughout the life of the Project.

- Basin Electric's preventive maintenance program for the transmission line includes aerial and ground inspections. Aerial inspections will be conducted at least two times each year. Ground patrols will be conducted annually for the first three or four years, and less frequently thereafter. Climbing inspections of structures will be conducted on a five-year cycle with every fifth structure inspected each year. Inspections and patrols will involve the use of vehicles in areas where there is suitable vehicle access.

- Maintenance activities will include repairing damaged conductors, inspecting and repairing structures, replacing damaged and broken insulators, and tightening hardware.
- Basin Electric will maintain any gates initially installed for the Project if continually used for access.
- Maintenance will include the control of noxious weeds. Herbicides will be applied in accordance with manufacturer's labels and in accordance with the ND Weed and Control Guide. Basin Electric will hire a contractor licensed in chemical application in the state of ND.
- Disturbed areas will be monitored for erosion. Erosion control may include the installation and maintenance of necessary measures for temporary and permanent erosion, sedimentation, and dust control, as required by relevant agencies or property owners. Inspection and maintenance will be completed by Basin Electric or a contractor to ensure compliance with Project reclamation specifications.
- Basin Electric will remove trees that pose a clearance or safety problem to the operation of the transmission line. Specific requirements of the National Electric Reliability Council will be followed. This activity will be completed in accordance with the landowner easement.

4.12 Decommissioning

If the transmission line were to be abandoned or rebuilt, decommissioning and removal of structures, conductor, and ancillary equipment will be in accordance with applicable regulations in place at the time

5.0 ENVIRONMENTAL ANALYSIS

5.1 Local Economics

5.1.1 Description of Resources

Socioeconomic conditions include population, demographics, income, employment, and housing. These conditions can be analyzed and compared at various scales. The ND state population showed a 14% increase in population between the last two censuses (2010 and 2020), including noticeable changes amongst counties, as shown in **Table 5-1**, below. Mountrail and Williams Counties were ahead of the statewide average increase at 22% and 45%, respectively.

Table 5-1: Project Impacted Counties

Location	Population in 2020	% Change from 2010	% of State Population	Predominant Group	Predominant Minority
Mercer County	8,350	-1%	0.01	White (91.3%)	Hispanic or Latino (2.6%)
McLean County	9,771	8%	0.01	White (86%)	American Indian (8.3%)
Ward County	69,919	12%	9	White (81.6%)	Hispanic or Latino (6.6%)
Mountrail County	9,809	22%	0.01	White (58.2%)	American Indian (29%)
Williams County	40,950	45%	5.30	White (77.8%	Hispanic or Latino (9.5%)
North Dakota	779,094	14%	100	White (82.9%)	American Indian (5%)

Source: U.S. Census Bureau 2010, 2020

As shown in **Table 5-2**, each county has a median household income higher than the North Dakota statewide average. Unemployment percentages in each county are higher than the 4.1% North Dakota average, except for McLean County, at 3.7%.

Table 5-2: County Income and Unemployment

Location	Median Household Income	Unemployment Rate	People in Poverty
Mercer County	$82,155	4.8%	9.6%
McLean County	$80,556	3.7%	6.9%
Ward County	$73,787	4.8%	8.7%
Mountrail County	$81,886	4.1%	12.4%
Williams County	$86,139	8.1%	7.4%
North Dakota	$71,970	4.1%	11.5%

Source: U.S. Census Bureau 2020

Agriculture plays a significant role in each county. According to the 2022 Census of Agriculture, all involved counties, but Mercer County, record above the North Dakota average for total market

value of agricultural products sold. Principal crops include wheat, peas, canola, and corn; cattle are the primary livestock. See **Table 5-3** below for a summary of National Agriculture Statistics.

Table 5-3: National Agricultural Statistics by County

Location	County Acreage	Number of Farms	Farm Acres	Market Value of Products Sold
Mercer County	667,392	296	451,663	$73,889,000
McLean County	1,350,592	742	1,049,482	$345,466,000
Ward County	1,288,320	634	1,014,320	$353,685,000
Mountrail County	1,168,128	512	1,165,469	$250,772,000
Williams County	1,329,664	539	1,114,295	$266,952,000
North Dakota	44,144,960	25,068	38,537,022	$12,138,799,000

Source: USDA, National Agriculture Statistics Service 2024

5.1.2 Impacts/Mitigation

The Project will have positive economic impacts for the local population, including payments for participating landowners, employment, and transmission line tax payment to the state of North Dakota based on mileage and voltage, and sales/use tax on materials. No residents will be displaced.

Landowner compensation is established under individual easement agreements and includes compensation for loss of crops caused by construction activities. In general, agricultural areas surrounding each structure can still be farmed. Project construction will not cause additional impacts to leading industries.

In addition, wages and salaries paid to local contractors and workers will contribute to the personal income of the region. Additional personal income will be generated for county residents as well as the state by circulation and recirculation of dollars paid out by Basin Electric as business expenditures and state and local taxes. Expenditures made for equipment, energy, fuel, operating supplies, and other products and services will benefit businesses in each county and the state.

Specialized labor will be required for certain components of the Project. It is likely that this labor will be imported from other areas of the state or from other states

No effects on permanent housing are anticipated. During construction, out-of-town laborers will likely use lodging facilities in and around the major cities in each county.

5.2 Public Services

5.2.1 Description of Resources

Local Government Services

Within the Study Area is a network of established roads and utilities that provide access and necessary services to cities, communities, homesteads, and farms. There are no incorporated or unincorporated cities within the Project Corridor. The nearest communities include Stanton, New Town, and Tioga.

Transportation

Roads located within the Study Area are US Highway 83, US Highway 23, US Highway 2, ND Highway 1804, county roads (gravel graded and drained roads), private roads, section lines, and oil and gas access roads. Roads within the Study Area fall under the North Dakota Department of Transportation (NDDOT) District Boundaries of Bismarck, Minot, and Williston, North Dakota.

Air Traffic

There are no public airports airports/airstrips within the Study Area. The closest commercial airport is the Minot International Airport northwest of Minot, North Dakota which is located approximately 28 miles northeast of the Project route. There is one privately owned airstrip within the Study Area, located approximately 1,440 feet north of the Project Route in T150N, R83W, S34, near Max, ND. Spray planes used for aerial application of pesticides or fertilizer operated by local spray plane operators may occur within the Study Area.

Water Supply

Southwest Pipeline Project supplies potable water to communities in Mercer County near the Project Study Area, Northwest Area Water Supply supplies water to communities in McLean, Ward, and the southern portion of Mountrail County, and Western Area Water Supply supplies water to communities in the northern portion of Mountrail County and Williams County. In each water supply district, water from the Missouri River is treated and used.

Basin Electric will evaluate obtaining water for construction from municipal sources and truck the water to the construction site. Basin Electric will consult with towns and counties to obtain the appropriate permits and/or approvals. There are also many private water suppliers that supply water for local oil and gas operations. Basin Electric may coordinate with these suppliers to supply water for the Project.

Telecommunications

The corona-induced broadband electromagnetic radiation (EMR) from transmission lines can produce interference with some communications signals if there is an overlap in the signal and EMR frequencies. Broadband corona EMR discharge typically occurs in the frequency spectrum from below 100 kilohertz (kHz) to approximately 1,000 megahertz (MHz), which overlaps with the frequencies used for AM and FM radio and some television signals.

5.2.2 Impacts/Mitigation

Local Government Services

No impact is expected to local services.

Transportation

The transportation of materials and equipment will be conducted in accordance with the NDDOT regulations. All necessary provisions will be made to conform to safety requirements for maintaining the flow of public traffic. Construction operations will be conducted to offer the least possible obstruction and inconvenience to public traffic. Public roads, section lines and existing trails will be used, to the extent practicable, to access the transmission line (see **Section 4.3**

above). Fugitive dust emissions generated as a result of surface disturbance activities and vehicle use of access roads will be controlled by the periodic application of water, if necessary. The speed of vehicles traveling on unpaved roads will be limited, to the extent practicable, to reduce the generation of fugitive dust. Vehicles and equipment will be properly maintained to avoid excessive emission of exhaust gases due to poor engine adjustments.

Air Traffic

The Project will not be considered an obstruction to air navigation under Federal Aviation Administration (FAA) regulations. Using the FAA's Obstruction Evaluation/Airport Airspace Analysis Notice Criteria Tool, of the 830 structures, Basin Electric needed to file for 28 structures. Basin Electric filed the necessary information for the 28 structures and the FAA conducted an aeronautical study for each. The FAA determined that all 28 structures do not exceed obstruction standards and would not be a hazard to air navigation. Furthermore, the FAA determined marking and lighting are not necessary for aviation safety.

Water Supply

Construction will not significantly impact local water supply. Construction water estimates are subject to change due to final site investigation and weather. Water for construction will be brought on-site via trucks. The abandonment of existing wells is not required. The Project will not require appropriation of surface water or permanent dewatering. Temporary dewatering of groundwater (i.e., locally lowering groundwater levels in the vicinity of the excavation) may be required during construction of transmission structures.

Telecommunications

Existing telephone and fiber optic cables within the Project Corridor will be located in the field by the respective utility companies prior to construction to ensure that impacts to telephone and fiber optic cables will be avoided.

With sufficient corona activity, some radio and television interference can be noticeable; however, the radio sound generated by a transmission line is very low in power and interference is generally only experienced in very close proximity to the transmission line. These effects are most pronounced directly underneath the line conductors and decrease with distance from the transmission line. The level of interference with reception of a radio signal also depends on the relative locations of the radio transmitter, the radio receiver, and the transmission line. A transmission line that is directly between a radio transmitter and a listener's receiver may be more likely to interfere with that listener's reception, whereas a transmission line behind or beside the listener in relation to the transmitter will not necessarily cause interference depending on the radio receiver's antenna.

As digital signal processing has been integrated into television and radio receivers, the potential interference impact of corona-generated radio sound has been further reduced. Moreover, the advent of cable and satellite television service, and the federally mandated conversion to digital television broadcast in June 2009 have greatly reduced the occurrence of corona-generated interference. Newer digital television receivers are equipped with systems to filter out interference.

5.3 Public Health, Welfare, and Safety

5.3.1 Description of Resources

Audible Sound, Corona Discharge, and Aeolian Vibration

Corona from transmission line conductors can generate electromagnetic "noise" at the same frequencies transmitted by radio and television signals. Corona consists of the breakdown or ionization of air within a few centimeters of conductors and hardware. Aeolian vibration is produced when a steady flow of wind interacts with an object such as a transmission line. Wind must blow steadily and perpendicular to the lines to set up oscillating forces.

The Study Area is primarily rural and agricultural. There are no populated towns within the Study Area. The existing acoustic environment if defined primarily by distant traffic sound from the nearby arterial highways and will also include intermittent aircraft overflights, sound from agricultural operations, and nearby oil and gas operations. In addition to anthropogenic sound sources, the windy conditions of this site define a somewhat elevated ambient sound level, which increases with wind speed. Windy conditions can generate sound caused by the rustling of grass and tree leaves.

Electromagnetic Fields

Power frequency electromagnetic fields (EMF) are created wherever electricity flows. Leading U.S. and international scientific organizations, such as the National Cancer Institute and the World Health Organization, have evaluated EMF research. These organizations generally conclude that overall, the body of scientific research does not show that exposure to EMF causes or contributes to any type of cancer or any other disease or illness (National Institute of Environmental Health Sciences [NIEHS] 1999).

Hazardous Materials/Hazardous Waste

Fuels, hydraulic fluids, and other hazardous substances may be used during construction of the Project. Potentially hazardous materials may also be encountered if historical contamination exists within the Project Corridor (e.g., contamination associated with aboveground storage tanks or oil/gas development). Other potential hazards may exist in rural areas from farm dumps and agricultural chemicals.

5.3.2 Impacts/Mitigation

Audible Sound

Project construction and maintenance may cause short-term but unavoidable sound impacts due to construction and equipment. Construction and maintenance activities will also generate traffic that will have potential sound effects, such as trucks travelling to and from the Project on public roads. Sound generated by construction activities is generally exempt from state and local noise regulation. Once the Project has been built, no significant construction sound impacts are anticipated. Project maintenance will occur periodically but is not expected to result in significant sound generation.

Corona Discharge

Corona effects occur when air molecules near conducting wire are ionized due to changes in the electric field intensity at the conductor surface. Measures such as carefully handling the conductor during construction to avoid nicking or scraping or otherwise damaging the surface and using hardware with no sharp edges or points are typically adequate to control corona. Corona effects are expected to be low enough that no objectionable audible sound will result outside the Study Area. The sound is most noticeable when conductors are wet as a result of precipitation.

Aeolian Vibration

Aeolian vibration is produced when a steady flow of wind interacts with an object such as a transmission line. Wind must blow steadily and perpendicular to the lines to set up oscillating forces. The resulting vibration can produce resonance if the frequency of the vibration matches the natural frequency of the line. However, aeolian vibration is expected to be minimal outside of the Project Corridor.

Electromagnetic Fields

Many studies of EMF have been conducted, but none has identified a cause-and-effect relationship between EMF exposure and health effects or a mechanism by which EMF could cause disease (NIEHS 1999). No impacts from EMF are expected.

Hazardous Materials/Hazardous Waste

As with any construction activity, there is the possibility of accidentally spilling fuel, hydraulic fluid, or other hazardous substances or encountering unanticipated historical contamination during construction of the Project. The potential of such events will be minimized through implementation of a SPCC plan, which will include the following:

- Construction equipment will be equipped with spill cleanup kits.
- Equipment refueling will take place at secure areas, away from wetlands or drainages.
- Workers will be trained in spill clean-up and the use of the spill cleanup kits.
- Burning waste materials within the Project Corridor will not be permitted and all waste materials will be disposed of at permitted waste disposal areas or landfills.

These measures will ensure that surface and groundwater quality will not be degraded through inadvertent spillage of contaminants.

5.4 Cultural Resources

5.4.1 Description of Resources

Metcalf Archaeological Consultants, Inc. (Metcalf) conducted a Class I Literature Review and Class III Cultural Resources Inventory for the Project. Because of crop cover and pending landowner permissions, approximately 17.5% of the current Project Corridor could not be inventoried during the recent field surveys; a second volume to the Class III cultural resources inventory will be submitted to the State Historical Society of North Dakota (SHSND) for review following fall harvest and receiving additional survey permission. Due to sensitivity of the resources, a redacted report of the results of these studies are included in **Appendix E**.

Class I Literature Review

In 2022 Metcalf conducted a Class I Literature Review through file searches of the North Dakota Cultural Resources Survey data files maintained by the SHSND to determine what, if any, cultural resources have been previously recorded or if cultural resource investigations have been conducted within the Project Corridor and a 3-mile buffer around it (search area). In 2024, prior to resuming fieldwork an updated Class I was conducted.

In all, the Class I Literature Review search revealed that 1,765 cultural resources have been recorded in the search area (see **Appendix E, Table 1**). The recorded resources consist of 1,303 sites, 228 site leads, and 234 isolated finds.

The majority of resources (1,025) are Precontact and include stone circles, cairns, and cultural material scatters, and combinations of these. Historic resources include schoolhouses, bridges, and farmsteads, among others.

The file searches revealed that 721 cultural resource projects have been conducted in the search area (see **Appendix E, Table 3**). Projects were associated with energy development, transportation, water, telecommunications, natural resources and recreation, contextual/research documentation, and land management.

Class III Cultural Resources Inventory

Metcalf conducted a Class III Cultural Resources Inventory for the Project conforming to North Dakota's Guidelines for Cultural Resource Inventories (SHSND 2020). The objective of the inventory was to locate any cultural resources located within the area of potential effects, to determine whether those resources qualify for inclusion on the National Register of Historic Places (NRHP) and assess the effect that the Project may have on those cultural resources that qualify for the NRHP. Fieldwork was conducted between June 26th, 2023 and July 17, 2024. The Project area during this study was defined as a 160-mile-long by 200-foot-wide corridor, encompassing the Project Corridor entirely.

Of the 160 miles of Project Corridor's current alignment, approximately 132 miles (82.5%) have been surveyed. Approximately 40 miles of the project corridor were surveyed but have been subsequently abandoned due to reroutes. An additional 43 miles of access roads were inventoried. Planted crops and landowner permission status prevented inventorying the remaining 28 miles, 17.5% percent; the remaining areas will be inventoried in the fall after harvest and obtaining landowner permissions.

Metcalf archaeologists identified 47 new cultural resources and revisited 31 previously documented cultural resources. **Table 4** in **Appendix E** summarizes the sites found, their significance and recommendations for any further steps necessary as it applies to the Project.

A cultural resources report for 5,117 acres of Project Corridor was submitted to the SHSND for review on September 9, 2024 (see **Appendix E**). A second volume of the cultural resources report will be submitted to the SHSND for review and concurrence to accommodate the remaining acres of Project Corridor. The second volume and future correspondence with SHSND will be filed with the Commission, once received, to document that the Project will not adversely affect cultural resources.

5.4.2 Impacts/Mitigation

No significant sites or sites eligible for listing on the NRHP are in the Project Corridor; therefore, no impacts are anticipated to cultural resources. Basin Electric has routed the Project to avoid impacts to known cultural resources, and intends to avoid impacts to unanticipated cultural resources by implementing the following measures for the Project:

- If any previously unknown cultural resources are discovered during Project construction, all work within 100 feet of the discovery that might adversely affect the cultural resource will cease until the agencies, in consultation with the appropriate parties, can evaluate the discovery. The agencies will be notified and will have a qualified professional archaeologist and tribal representative (if necessary) with the proper expertise for the suspected resource type on-site as soon as possible. Construction in the immediate vicinity of the discovery will not proceed until authorized by the agencies.
- In the event that Project personnel identify what they believe to be human remains, construction will stop within 100 feet of the site and Basin Electric and their cultural resource specialist will be notified immediately to evaluate if the discovery contains human remains. The site will be protected, and as required by law, Basin Electric will notify the County Sheriff within 24 hours of the discovery. Work cannot proceed until the stipulations of Protection of Human Burial Sites, Human Remains and Burial Goods in NDCC Section 23-06-27 and Protection of Prehistoric and Historic Human Burial Sites, Human Remains, and Burial Goods in NDAC Chapter 40-02-03 have been met.
- An Unanticipated Discoveries Plan has been prepared that outlines the procedure used to address any unanticipated discoveries of cultural resources, including possible human remains (see **Appendix E**). In the event that unanticipated discoveries are made during construction, the Unanticipated Discoveries Plan provides direction to on-site personnel and their consultants regarding proper procedures for addressing the discoveries.

5.5 Land Cover, Land Use, Noxious Weeds and Recreational Resources

5.5.1 Description of Resources

Land Cover

The Study Area is located in rural North Dakota in an area predominantly comprised of cultivated land, hayfields, pasturelands, and grasslands. Accordingly, much of the Study Area is used for agriculture supporting livestock grazing and crops. The main crops grown are canola, wheat, and soybeans; the main livestock raised is cattle. Wooded areas within the Study Area are limited to shelterbelts between fields, windbreaks surrounding farmsteads, within drainages, and near wetlands. No irrigated land is within the Project Corridor.

Land cover classifications, including acreage within the Study Area and Project Corridor, are shown in **Table 5-4** below and in **Appendix B**. The Project Corridor is comprised primarily of cultivated lands (63 percent) and herbaceous grasslands (34 percent).

Table 5-4: Land Cover Classifications

Land Cover	Acreage within Study Area	Acreage within Project Corridor
Cultivated Crops	64,802	1,905
Forested	358	6
Developed/Bare Ground	592	9

Table 5-4: Land Cover Classifications		
Land Cover	**Acreage within Study Area**	**Acreage within Project Corridor**
Wetlands/Open Water	1,894	30
Grasslands/Herbaceous	35,350	993
Source: Sentinel-2 10m Land Use/Land Cover (Karra, Kontgis, et al. 2021)		

Managed Land Uses

Basin Electric reviewed publicly available data and consulted with agencies to determine if various managed lands (i.e., public lands, easements, and agreements) were crossed by the Project. Within the Study Area, there are NDDTL lands, US Bureau of Reclamation (USBR) land, US Fish and Wildlife Service (USFWS) Grassland Easements, USFWS Wetland Easements, Wildlife Management Areas, Waterfowl Protection Areas, and National Wildlife Refuges. (see **Appendix A**). Basin Electric has consulted with each agency and will obtain the necessary easement and/or approvals.

Conservation Reserve Program (CRP) lands are administered by the Farm Service Agency (FSA) through the USDA. In exchange for yearly compensation, CRP lands are removed from agriculture production and planted with species that will improve environmental quality and health, with a long-term goal of establishing valuable land cover to improve water quality, prevent soil erosion, and reduce the loss of wildlife habitat (USDA, FSA 2024). Specific CRP acres are subject to privacy laws between each landowner and the FSA; Basin Electric has consulted with landowners to determine if CRP lands are crossed by the Corridor and if any requirements (e.g., restoration) need to be considered during construction of the Project.

Private Land Open to Sportsmen (PLOTS) is located within the Project Study Area. PLOTS is an agreement between private landowners and the North Dakota Game and Fish Department (NDGFD) which allows walk-in public access for hunting on private land.

The Study Area does not include any designated or registered national sites including: parks; memorial parks; historic sites and landmarks; natural landmarks; historic districts; monuments; civil works project lands; forests; or wilderness areas; wild, scenic, or recreational rivers.

The Study Area does not include any designated or registered state parks; trails; forests; forest management lands; historic sites; monuments; historical markers; wild, scenic or recreational rivers; or nature preserves.

Noxious Weeds

There are 13 state-listed noxious weeds: absinth wormwood (*Artemisia absinthium*); Canada thistle (*Cirsium arvense*); dalmatian toadflax (*Linaria genistifolia*); diffuse knapweed (*Centaurea diffusa*); houndstongue (*Cynoglossum officinale*); leafy spurge (*Euphorbia esula*); musk thistle (*Carduus nutans*); palmer amaranth (*Amaranthus palmeri*); purple loosestrife (*Lythrum salicaria*); Russian knapweed (*Acroptilon repens*); Saltcedar (*Tamarix chinensis, T. parviflora, T. ramosissima*); spotted knapweed (*Centaurea maculosa*); yellow toadflax (*Linaria vulgaris*).

Additionally, Common Tansy (*Tanacetum vulgare*) is listed in Mountrail County, false chamomile (*Matricaria recutita*) is listed in Ward County, and hoary cress (*Cardaria draba*) is listed in Williams County (North Dakota Department of Agriculture 2023).

Recreational Resources

Multiple areas within the Survey Area can be associated with public recreational activities such as boating, fishing, hunting, and camping. These include state and federal lands and privately owned lands that are open to the public. See **Appendix A** for public lands within the Survey Area.

5.5.2 Impacts/Mitigation

The Project will not result in a significant change in land use. No residences or farms will be displaced due to construction activities. As the Project is not extracting minerals on NDDTL lands, no impacts are expected, and no agreements are necessary. Basin Electric will implement the following mitigation measures for the Project:

Land Use

- The movement of crews and equipment will be limited to the Project Corridor and other areas that have been cleared for cultural, historical, and biological resources. The contractor will limit movement on the Project Corridor to minimize damage to rangeland, cropland, or property.
- Where wooded areas cannot be avoided, the transmission line will be placed in areas with the lowest density of trees, whenever feasible, thereby reducing the number of trees that will require removal within the Project Corridor. If Basin Electric encounters areas where more than a 50-foot width of trees will need to be removed, a request will be filed to the Commission.
- All vegetative materials resulting from clearing operations will either be chipped on site or removed and disposed of in a permitted facility.
- Existing native vegetation within the Project Corridor will be preserved whenever feasible.
- Surface disturbance areas will be reclaimed using native species, as approved by the NRCS, county extension agency, or other desired seed mix if required by landowners, and will be planted at the appropriate times in order to reestablish native vegetative cover and minimize the potential for invasion by non-native species.
- Where feasible, wetland and riparian communities will be spanned by the transmission line, thereby avoiding impacts to these ecosystems. To the extent practicable, access routes and workspaces will be shifted to avoid impacts to wetlands and waterbodies. Currently, 2 structures are within wetland boundaries. Permanent impacts within the wetland includes approximately 0.003 acres for concrete foundation and are included in the Pre-Construction Notification (PCN), under US Army Corps of Engineers (USACE) Nationwide Permit (NWP) 57. All access road impacts will be temporary and permitted under NWP 57, as well. Erosion and sedimentation controls will be implemented to minimize indirect impacts to wetlands and riparian areas.
- If herbicides are used to remove woody species that become established in the Project Corridor and pose a hazard to the transmission line, they will be used in an appropriate manner.
- Mulch and seeds used for revegetation, erosion, and sediment control will be certified as weed-free.
- Where practical, construction activities will be scheduled during periods when agricultural activities will be minimally affected, or the landowner will be compensated accordingly.

- Fences, gates, and similar improvements that are removed or damaged will be promptly repaired or replaced. New gates may be installed, if deemed appropriate.
- The ROW easement will be purchased through negotiations with each landowner affected by the Project and payment will be made of full value for crop damages or other property damage during construction or maintenance.
- When weather and ground conditions permit, all deep ruts that are hazardous to farming operations and to movement of equipment will be eliminated or compensation will be provided if the landowner desires. Such ruts will be leveled, filled, and graded, or otherwise eliminated in an approved manner. Ruts, scars, and compacted soils from construction activities in cropland or rangeland will be loosened and leveled by subsoiling, paraplowing, scarifying, harrowing, or disking, as appropriate. Damage to ditches, roads, and other features of the land will be corrected or payment will be made to Williams County per their specific rules and parameters to complete this type of work. The land and other features will be restored as nearly as practicable to their original conditions.

Managed Lands

- Basin Electric will abide by agreements with USBR, USFWS, NDDTL, and with landowners with CRP easements on their lands, including construction and restoration requirements.

Noxious Weeds

- Basin Electric developed a Weed Management Plan for the project and distributed to each county for approval.
- **Appendix A** includes noxious weed locations within the Project Corridor, per field surveys.
- If noxious weeds are observed in the surface disturbance areas, populations will be controlled with the application of herbicides, which will be applied by a certified herbicide applicator in accordance with label instructions and State and local County Weed Board regulations. Biological control methods (i.e., use of spurge beetles) also may be considered for weed control, in consultation with appropriate agencies.
- Herbicides will not be used near surface water.
- Prior to the initiation of construction activities, construction vehicles and equipment will be thoroughly cleaned to prevent the possible spread of noxious weed seeds within the Project Corridor.
- The Project Corridor and other surface disturbance areas will be monitored annually for noxious weeds for a three-year period following construction and reclamation. Landowners will be consulted regarding all noxious weed control measures and issues.
- Herbicide applications will occur in late spring or early summer to eradicate or control noxious weeds before they mature.

Recreational Resources

No permanent impact is expected to recreational resources as construction will be temporary and land use surrounding the transmission line will return to its previous use after construction.

5.6 Soils and Geologic Resources

5.6.1 Description of Resources

The Study Area is located within one Class III ecoregion and three Class IV ecoregions, which are more detailed ecoregions for state-level applications (Bryce et al. 1996). The four ecoregions are the River Breaks, Collapsed Glacial Outwash, Missouri Coteau, and Missouri Coteau Slope. The River Breaks forms broken terraces and uplands that descend to the Missouri River and its tributaries. The dissected topography, wooded draws, and uncultivated areas provide ample habitat for wildlife. The Collapsed Glacial Outwash was formed from gravel and sand deposited by glacial meltwater and precipitation runoff over stagnant ice. Many large, shallow lakes are found in these areas, attracting numerous shorebirds to the area. The Missouri Coteau includes rolling hummocks that enclose countless wetland depressions and potholes. The wetlands formed by the Wisconsinan glacier slowly melting are crucial to waterfowl production in North America. The Missouri Coteau Slope declines in elevation from the Missouri Coteau to the Missouri River. Due to the level of gently rolling hills, there is more cropland here than on the Missouri Coteau.

There are approximately 206 active oil and gas wells within the Study Area (NDDMR 2024). There are no active sand and/or gravel mines located within the Study Area (US-Mining 2023). There are 14 abandoned coal mines in the Study Area (ND GIS Hub 2024). Approximately 14.4 acres of geologically unstable area, as indicated by the North Dakota Geological Survey landslide mapping program (Anderson et al. 2022), are present within the Study Area (see **Appendix A**).

5.6.2 Impacts/Mitigation

The Project will not result in a significant change to soil and geologic resources. All active oil and gas wells will be avoided. A geotechnical analysis was performed and areas which are geologically unstable will be avoided and spanned as necessary, with exception to one structure, 378-041. The foundation for this structure has been designed based on soil borings in the area. Basin Electric will implement the following mitigation measures for the Project:

- Excess subsoils and rock will be hauled off-site to an approved landfill.
- Erosion and sediment controls will be established prior to construction, then maintained and controlled through application of the Storm Water Pollution Prevention Plan (SWPPP).
- Sediment control measures (e.g., installation of silt fences) will be used, where appropriate, to prevent sediment from moving off-site and into waterbodies.
- Maintenance operations will be scheduled during periods of minimum precipitation to minimize the potential of surface runoff and to reduce the risk of erosion, rutting, sedimentation, and soil compaction. However, emergency repairs to the transmission line may occur during periods of inclement weather. Ruts, scars, and compacted soils resulting from emergency activities will be repaired by subsoiling, paraplowing, scarifying, harrowing, or disking, as appropriate.

5.7 Surface Water and Groundwater Resources

5.7.1 Description of Resources

The Project is located within the Prairie Pothole Region. Prairie potholes (*i.e.*, emergent wetlands, freshwater ponds) are scattered throughout the Study Area. Intermittent drainages associated with the Little Muddy River and Missouri River are also present in the Study Area. Water supply wells located in the Project Study Area are discussed in Section 5.2 above.

Western EcoSystems Technology, Inc. (WEST) conducted a natural resource inventory of a 530-acre area (Survey Area) on May 2 – 4, August 1, and September 7, 2023 which included wetland and waterbody surveys in support of the Project. Prior to field surveys, a desktop assessment was completed to identify wetland and waterbody areas within the Survey Area, which fully encompasses the Project Corridor (see **Appendix G**). The data was used as a precursor for field delineations. Wetland identification utilized the presence of hydrophytic vegetation and landscape hydrology and/or topographic position. Waterbody boundaries were recorded utilizing the criteria and definitions provided by the USACE Ordinary High Water Mark criteria and definitions provided by the US Environmental Protection Agency in *Draft Guidance on Identifying Waters Protected by the Clean Water Act* (Tucker 2024). Wetlands and waterbodies were field classified in accordance with guidelines set forth in the *Classification of Wetlands and Deepwater Habitats of the United States* by the Federal Geographic Data Committee. A total of 434 wetlands and 37 waterbodies have been mapped through the current field survey efforts (see **Appendix A** and **Appendix G**).

There is one Federal Emergency Management Agency (FEMA) mapped floodplain within the Project Corridor and falls within the ordinary high water mark (OHWM) of the Missouri River. (U.S. Department of Homeland Security, FEMA 2024). Aquifers present nearest the Study Area include the Fort Union bedrock aquifer, the Little Muddy surficial aquifer to the east, and the Missouri River-Lake Sakakawea surficial aquifer to the southeast (North Dakota Department of Water Resources [NDDWR] 2024).

5.7.2 Impacts/Mitigation

The Project will not result in a significant change to surface water and groundwater resources. The Project will avoid direct, permanent impacts to all wetlands and waterbodies, where feasible. Two structures will be placed within a wetland boundary (structures 221 and 222; **Appendix A**). Access routes and workspaces will be shifted to avoid impacts to wetlands and waterbodies as practicable. Access routes to the two structures will be temporary and permitted under USACE NWP 57. Basin Electric will implement the following mitigation measures for the Project:

- A pre-construction wetland and waterbody survey has been conducted to determine the location and spatial extent of wetlands and waterbodies within the Project Corridor (see **Appendix G**). All features will be mapped using a Global Positioning System device to enable feature avoidance and site-specific structure placement.
- A 30-foot buffer will be established adjacent to wetlands and streams, where practicable, to prevent or minimize impacts to those ecosystems.
- Transmission line structures will be sited so that streams and drainages are spanned and remain undisturbed. Temporary construction and maintenance impacts will be permitted under NWP 57, if necessary.
- Staging areas and refueling areas will not be located near surface waterbodies.

- Areas that need to be cleared during construction will be revegetated with an approved native seed mix as soon as technically feasible to minimize soil erosion and sediment runoff.
- A SPCC plan will be developed prior to the start of construction to prevent the potential for spills of hazardous substances into streams and drainages, and potential contamination of groundwater. The plan will include a procedure for storage of hazardous materials and refueling of construction equipment outside of riparian zones, spill containment and recovery plan, and notification and activation protocols.
- Refueling of construction vehicles will occur at commercial fueling facilities and staging areas, if on-site fuel storage is needed for refueling.
- A SWPPP will be developed and implemented prior to initial construction activities. The SWPPP will include an analysis of materials that will be used and site activities that could potentially impact storm water and the associated mitigation measures to minimize that potential. SWPPP implementation will include regular inspections of areas under construction, material storage and laydown areas, and structural devices for storm water management. All construction personnel will be trained and required to comply with SWPPP's requirements and the maintenance of all environmental protection measures. The SWPPP will be maintained until final stabilization of all disturbed areas has been completed.
- The FEMA mapped floodplain will not be impacted as the Project components will stay above the OHWM.

5.8 Wildlife and Rare and Unique Natural Resources

5.8.1 Description of Resources

The USFWS administers the Endangered Species Act (ESA), which mandates protection of species federally listed as threatened and endangered and their associated habitats. An endangered species is a species that is in danger of extinction throughout all or a significant portion of its range. A threatened species is a species that is likely to become endangered in the foreseeable future. Critical habitat for these species can be designated if that habitat includes specific areas that are occupied by a species at the time of listing or unoccupied areas that are considered essential to the conservation of a species. Candidate species receive no statutory protection from the USFWS unless they are formally listed. North Dakota does not have a state threatened and endangered species list; however, it recognizes those federally listed under the ESA.

WEST conducted a natural resource inventory of a 5,832-acre area (Survey Area) which included an evaluation of habitat for federally listed species. Assessments for federally listed threatened and endangered species were conducted by evaluating historic accounts and reported occurrences of listed species within the area of the Project. A desktop evaluation was conducted, which was augmented with a field evaluation to confirm the presence or absence of potentially suitable habitat for federally listed species within the Survey Area. The findings are summarized in the Natural Resource Inventory Report (**Appendix G**).

Prior to field surveys, the USFWS Information for Planning and Conservation (IPaC) tool was reviewed and indicated that six threatened, endangered, and candidate species could potentially occur within the Survey Area (Tucker 2024) (see **Table 5-5** below).

Table 5-5: Threatened and Endangered Species

Common Name	Scientific Name	Status
Northern long-eared bat	*Myotis septentrionalis*	Endangered
Piping plover	*Charadrius melodus*	Threatened, Critical Habitat Designated
Red knot	*Calidris canutus rufa*	Threatened
Whooping crane	*Grus americana*	Endangered
Dakota skipper	*Hesperia dacotae*	Threatened, Critical Habitat Designated
Monarch butterfly	*Danaus plexippus*	Candidate

Source: USFWS IPaC (WEST 2024)

Bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are protected under the Bald and Golden Eagle Protection Act (BGEPA). The BGEPA protects bald and golden eagles throughout their range in the United States. Although it does not designate critical habitat, BGEPA protects individual eagles and nests from disturbance. Project surveys conducted by WEST included surveying for raptor nests, including eagles.

An analysis of each threatened, endangered, and candidate species, as well as bald and golden eagles, is included in **Appendix G**.

5.8.2 Impacts/Mitigation

In order to minimize impacts to threatened and endangered species, Basin Electric will implement mitigation measures in addition to the list below, if requested by USFWS. No irreversible damage to rare or unique animal or plant species is anticipated. Individual species are discussed below. Basin Electric will implement the following mitigation measures for the Project:

- Prior to surface disturbance activities during the migratory bird (not including raptors) breeding season (May 1 through July 15), a qualified biologist will survey suitable habitat within the Corridor (i.e., non-cultivated land) for nesting activity and other evidence of nesting (e.g., mated pairs, territorial defense, birds carrying nest material, transporting food). If active nests are located, or other evidence of nesting is observed, appropriate protection measures, including establishment of buffer areas and constraint periods, will be implemented until the young have fledged and dispersed from the nest area. These measures will be implemented on a site-specific and species-specific basis, in coordination with applicable state and federal agencies, as appropriate.
- Standard measures to minimize avian collision risk with overhead transmission lines, as outlined in the Avian Power Line Interaction Committee (APLIC) Reducing Avian Collisions with Power Lines (APLIC 2012), have been examined and appropriate measures developed as outlined in Basin Electric's Avian and Bat Protection Plan is included in **Appendix G**.
- Adequate raptor proofing designs, as described in the APLIC Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006), will be implemented on the structures in coordination with applicable state and federal agencies.
- Holes that are drilled or excavated for foundation construction and left unattended overnight will be marked and secured with temporary fencing and plywood covers to reduce the potential for livestock and wildlife entering the holes and for public safety.

Northern Long-Eared Bat

A desktop analysis was conducted to determine impacts to tree habitat and determine what locations have a higher probability of providing habitat for the northern long-eared bat (NLEB). A 1,000 ft buffer of the Project Corridor was digitally analyzed for tree habitat. Tree habitat patches greater than 10 ac in size were selected as potential NLEB habitat. The 10 ac potential habitat patches were then buffered by 1,000 ft and all tree habitat within the buffer was classified as connected habitat. The review determined that 23.25 acres of potential treed habitat are located within the Project Corridor. To avoid incidental take, tree clearing activities will occur between the USFWS recommended dates, November 1st through April 14th. If localized tree clearing activities cannot be conducted during this window, the USFWS will be consulted to determine the necessary action.

Piping Plover

This Project spans critical habitat, the Missouri River, at the south end of the Project, which is an exclusion area under NDAC Section 69-06-08-02. There are four additional locations on the Project where critical habitat falls within 1 mile of the Project Corridor and 18 locations of critical habitat within 3.0 mi of the Project Corridor (Tucker 2024). The field survey documented that the Project Corridor is predominantly cropland and contains wetlands and waterbodies that are well vegetated and do not provide bare ground suitable for nesting habitat. During the period of concern (April 15 to August 15), prior to construction, piping plover surveys will be conducted in suitable habitat within one half mile of the Project to document the presence or absence of piping plovers. If nesting birds are observed during the surveys, the USFWS will be consulted to determine the necessary action. While the Project Corridor contains critical habitat, through USFWS consultation and conducting pre-construction surveys, it is unlikely that the Project will affect the Piping Plover, and it is reasonable to believe that the Project is not likely to destroy or adversely modify designated critical habitat.

Rufa Red Knot

Rufa red knot does not nest in North Dakota but may use areas along the Missouri River as stopover habitat. The Project spans possible stopover habitat, the Missouri River, in one location. The remainder of the Survey Corridor does not have suitable shoreline stopover habitat for the rufa red knot. It is unlikely that the Project will affect the red knot.

Whooping Crane

The Project is located within the migration corridor where 75-95% of whooping cranes travel. Land use within the Project is a mixture of cropland and rangeland, and oil/gas development. The USFWS Database shows the Project Counties (McLean, Mercer, Mountrail, Ward, and Williams) have 285 verified whooping crane sightings. The closest confirmed sighting to the Project was of two adult cranes in 2002 within the Project area in Sec. 11, T149N, R82W. The Project was analyzed using the model developed by the US Geological Survey (USGS) Northern Prairie Wildlife Research Center and the USFWS Habitat and Population Evaluation Team. The Model predicts that 57% of the Project's Corridor (3,350.35 ac) is within the 10th probability decile and 15% (893.32 ac) is within the 9th probability decile, on a 1-10 scale (Niemuth et al., 2018).

Noise and vehicle activity during construction activities may cause migratory cranes to divert from the area but would be unlikely to contribute to any indirect or direct effect that would result in an increase of fatalities and, therefore, would be considered insignificant (Tucker 2024). If a crane is sighted within 1.0 mile of the project area, construction activities using heavy equipment

would be suspended, and the sighting would be promptly reported to the USFWS. In coordination with the USFWS, suspended activities would resume once the bird(s) have left the area. Flight diverters will be installed on the transmission line to minimize bird strikes. **Appendix G** contains Basin Electric's Avian and Bat Protection Plan. Following these guidelines, it is reasonable to expect the Project is unlikely to adversely affect the whooping cranes.

Dakota Skipper

A desktop assessment of habitat within the surveyed portion of the Survey Corridor was used to divide habitat into one of two basic habitat groups: grassland habitat and unsuitable habitat. The assessment identified 1,822.87 ac (34%) of grassland habitat and 3,561 ac (66%) of unsuitable habitat. The field survey was conducted within the identified grassland habitat to determine if suitable habitat was present. Suitable habitat is defined as native grassland that contains one or more primary constituent elements for the skipper to complete its entire life cycle, including breeding, feeding/foraging, and sheltering behaviors (Tucker 2024).

The field survey recorded 61 locations of suitable habitat, totaling 11.69 ac; less than 1% of the area within the Survey Corridor. An additional four locations of suitable habitat, totaling 0.42 acres, were recorded in the project pull lanes. The portion of the Project Survey Area that has not been surveyed contains 113.96 ac of unbroken grasslands, which was identified by a desktop evaluation using multiple years of aerial imagery. These areas will be surveyed once access is granted.

BEPC has designed the Project to minimize impacts to suitable habitat for the Dakota skipper (DASK). This includes routing access trails around potential habitat and placing pole structures outside of potential habitat. Identified DASK habitat will be avoided during all construction activities. A ½ mi buffer around identified DASK habitat has been established and native grassland habitat within the 1/2 mi buffer will be disturbed at the minimum level practical. To minimize the impacts to foraging or dispersing adult DASK, a 500-meter (m) avoidance buffer will be established around identified DASK habitat locations. Existing surfaced roads within the 500-m buffer may be used for travel, but construction within the 500-m buffers will not occur during the flight window. In addition, dust abatement may be necessary on gravel surfaced roads during the flight window. The flight period is typically 14 days long between the dates of June 10 – July 25 and dates may be adjusted based on annual observations by the USFWS. The ½ mile and 500-m buffers are depicted in **Appendix G**.

With these impact minimizing practices and the Project's location outside the species range, the Project will likely have no effect on the Dakota skipper or its designated critical habitat. Correspondence with the USFWS email is included in **Appendix G**.

Bald and Golden Eagle

The transmission line will be outfitted with bird flight diverters following APLIC guidelines, which will also increase visibility of the lines for large raptors such as eagles, thereby reducing collision risk with the transmission lines. Therefore, the impacts of the Project on eagles are likely to be low.

6.0 PUBLIC AND AGENCY COORDINATION

Basin Electric contacted key local, state, and federal agencies per Section 69-06-01-05 of the NDAC for assistance in identifying concerns or issues within the Study Area. Public and agency correspondence as of October 2024 are included in **Appendix H**. Basin Electric has maintained close coordination with landowner stakeholders throughout the process via in-person meetings, mailers, and phone calls. Each landowner received a pamphlet that detailed information about the Project such as Project permitting, design and construction, construction, maintenance, and landowner relations (**Appendix J**). Basin Electric will continue to meet with various state and county officials as the Project moves forward for all necessary permits.

7.0 POTENTIAL PERMITS/APPROVALS

Table 7-1 below outlines the federal, state, county, and township permits or approvals that have been identified as potentially required for the construction and operation of the Project. Permits dependent on the final Project layout will be applied for after receiving Commission approval, but prior to construction.

Table 7-1: Potential Permits and Approvals Required

Agency	Type of Approval	Status*	Need
Federal			
USACE	Individual Section 404 Permit	N/A	Required for discharge of dredged or fill material into waters of the US, including wetlands. Not needed for this Project.
	Section 10 Permit	2	Required for the construction in or over navigable water of the US.
	NWP 57 Pre-Construction Notification	2	Required for discharges to jurisdictional wetlands and waterbodies. Because a Section 10 permit is needed, an NWP 57 Pre-Construction Notification is needed prior to construction.
USBR	Special Use Permit	2	Required for crossing the McClusky Canal
USFWS	Special Use Permit/Compatibility Determination	2	Required for Projects within Grassland Easements
State of North Dakota			
Agency	**Type of Approval**	**Status***	**Need**
NDPSC	Certificate of Site Compatibility and Route Permit - Transmission Facility	2	Required for construction of a transmission facility over 115-kV.
SHSND	Concurrence with effect determinations	2	A Class III cultural resources inventory report was submitted September 9th, 2024. Volume II to the Class III report will be submitted to SHSND for review when complete. Concurrence is expected once the Volume II report is reviewed.
ND Department of Environmental Quality	National Pollutant Discharge Elimination System Permit: General Construction Storm Water	3	Required for disturbance of over one acre of land and a stormwater pollution prevention plan must be prepared
	401 Water Quality Certification	2	Required for filling in jurisdictional water of the US; granted with NWP 57
ND Highway Patrol	Oversize/Overweight Permit	3	Required to transport oversize loads on state-maintained roads.
NDDOT	Road Approach/Access Permit	3	Required for construction of access roads from state highways
	Utility Permit/Risk Management Documents	3	Required for utility crossings on state highway ROWs
ND State Water Commission	Drainage Permit	N/A	The Project will not drain a pond, slough, lake, or sheet water, or any series thereof, that has a watershed areas of 80 acres or more
	Conditional or Temporary Permit for Water Appropriation	N/A	No water appropriation required
	Water Permit	N/A	Required if drilling a well. Not required for this Project
NDDTL	Rights-of-way Easement	3	Required for transmission lines on NDDTL surface lands
County/Townships			
Agency	**Type of Approval**	**Status***	**Need**
Mercer County	Conditional Use Permit	3	Required for transmission facilities within Agriculture Districts
McLean County	Conditional Use Permit	3	Required for electrical power transmission lines within Agriculture Districts
Ward County	Special Use Permit	3	Required for electrical transmission lines
Mountrail County	Conditional Use Permit - Transmission Line	3	Required for Utilities within Agriculture Districts

County/Townships			
Agency	**Type of Approval**	**Status***	**Need**
	Conditional Use Permit - Substation	3	Required for Substations within Agriculture Districts
	Building Permit - Substation	3	Required prior to Substation construction
	Outlot Plat Review Application - Substation	2	Required to change the parcel zoning.
Williams County	Conditional Use Permit	N/A	Project is categorized as Public Utility, Minor, which is a permitted use in all zoning areas
	Construction Stormwater Permit	N/A	Required for any land disturbing activity over 1 acre, as defined by the County Water Resource District Rules and Regulations. Impacted area is less than 1 acre in Williams County.

*Status Explanation:
1: Complete and approved
2: Applied for and/or decision pending
3: Will be applied for prior to construction, as applicable

8.0 QUALIFICATIONS OF CONTRIBUTORS

Table 8-1: Qualifications of Contributors		
Basin Electric Power Cooperative		
Name	**Responsibilities**	**Education and Experience**
Bobby Nasset	Project Manager	B.S. Civil Engineering Registered Professional Engineer 19 Years of Experience
Shane Vasbinder	Project Engineer	B.S. Civil Engineering Registered Professional Engineer 19 Years of Experience
Ryan King	Environmental/Permitting	Master of Natural Resources Management B.S. Construction Management 13 Years of Experience
Erin Dukart	Environmental/Permitting	B.S. Biology 15 Years of Experience
Nathan Kleyer	Right-of-Way	16 Years of Experience
Jason Brekke	GIS Analyst	B.S. Geography 18 Years of Experience
Shannon Vaira	GIS Analyst	B.A. Geography; Minor in GIS 10 Years of Experience
Metcalf Archaeological Consultants, Inc.		
Name	**Responsibilities**	**Education and Experience**
Damita Engel	Cultural Resources Inventory	B.A. Anthropology Master of Anthropology, Specialization in Cultural Resource Management 31 Years of Experience
Amy Bleier	Cultural Resources Inventory	B.A. Anthropology Master of Anthropology, Specialization in Cultural Resource Management 28 Years of Experience
Western EcoSystems Technology, Inc		
Name	**Responsibilities**	**Education and Experience**
Chad Tucker	Natural Resources Inventory/Report	B.S. Wildlife Fisheries Science 19 Years of Experience

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10.0 ACRONYMS AND ABBREVIATIONS

APLIC	Avian Power Line Interaction Committee
Basin Electric	Basin Electric Power Cooperative
BGEPA	Bald and Golden Eagle Protection Act
Certificate	Certificate of Corridor Compatibility
Commission	North Dakota Public Service Commission
CRP	Conservation Reserve Program
DASK	Dakota Skipper
EMF	electromagnetic fields
EMR	electromagnetic radiation
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FSA	Farm Service Agency
ft	foot
GIS	geographic information systems
ICBM	intercontinental ballistic missile
IPaC	Information for Planning and Conservation
ITP	Interregional Transmission Organization
kHz	kilohertz
kV	kilovolt
LOS	Leland Olds Station
Metcalf	Metcalf Archaeological Consultants, Inc.
MHz	megahertz
MWEC	Mountrail Williams Electric Cooperative
ND	North Dakota
NDAC	North Dakota Administrative Code
NDCC	North Dakota Century Code
NDDMR	North Dakota Department of Mineral Resources
NDDOT	North Dakota Department of Transportation
NDDTL	North Dakota Department of Trust Lands
NDDWR	North Dakota Department of Water Resources
NDGFD	North Dakota Game and Fish Department
NESC	National Electrical Safety Code
NIEHS	National Institute of Environmental Health Sciences
NLEB	northern long-eared bat
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWP	Nationwide Permit
OHWM	Ordinary High Water Mark
OPGW	optical ground wire

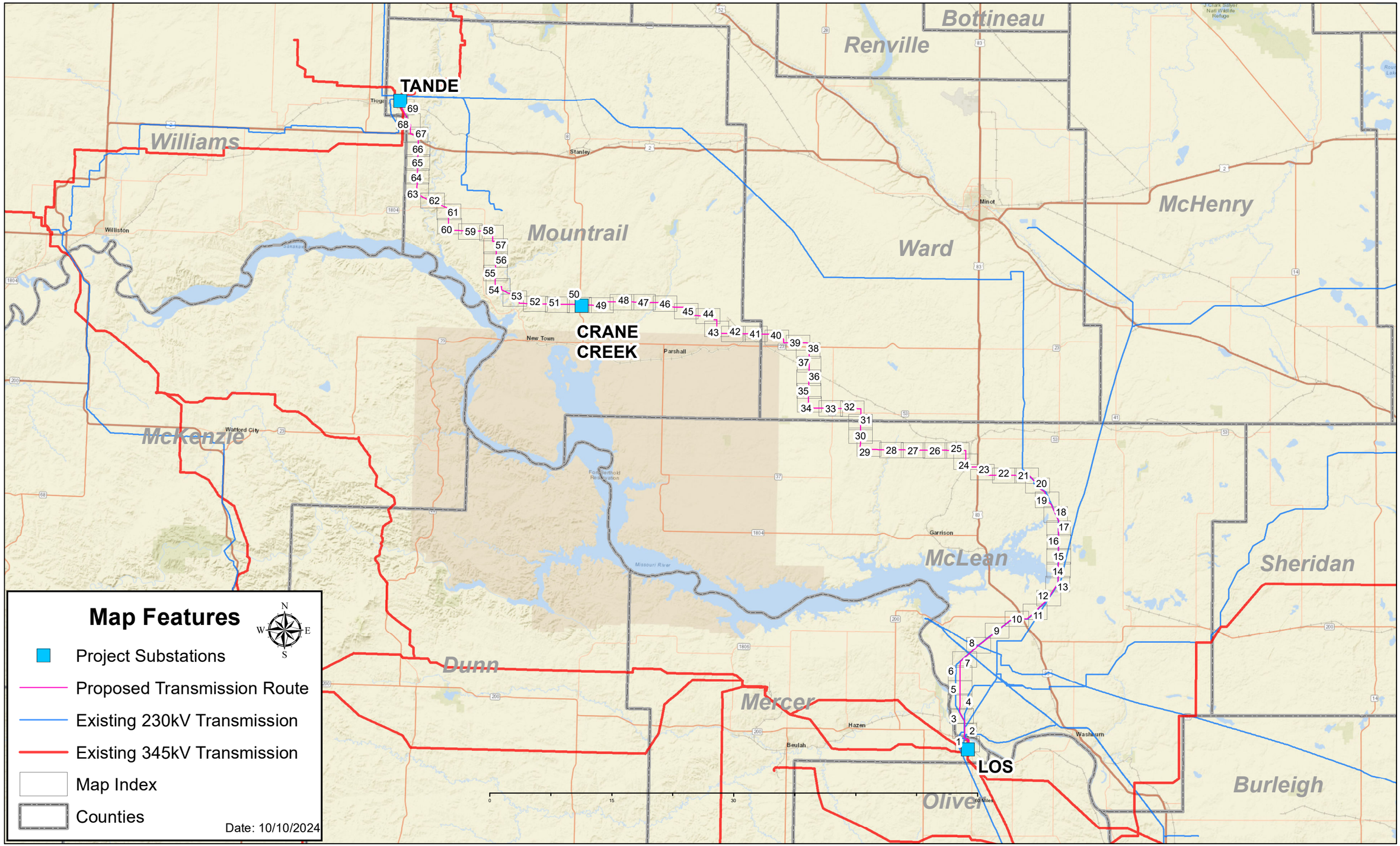
PCN	Pre Construction Notification
PLOTS	Private Land Open to Sportsmen
Project	Leland Olds Station to Tande 345-kV Transmission Project
Route Permit	Transmission Facility Route Permit
ROW	right-of-way
RTO	Regional Transmission Organization
RUS	Rural Utilities Service
SCADA	Supervisory Control and Data Acquisition
SHSND	State Historical Society of North Dakota
SPP	Southwest Power Pool
SPCC	Spill Prevention, Control and Countermeasure (plan)
SWPPP	Storm Water Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USBR	U.S. Bureau of Reclamation
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WEST	Western EcoSystems Technology, Inc.

Appendix A

Project Map Book

LOS to Tande 345kV Transmission Project - Map Book Index

BASIN ELECTRIC POWER COOPERATIVE
A Touchstone Energy® Cooperative



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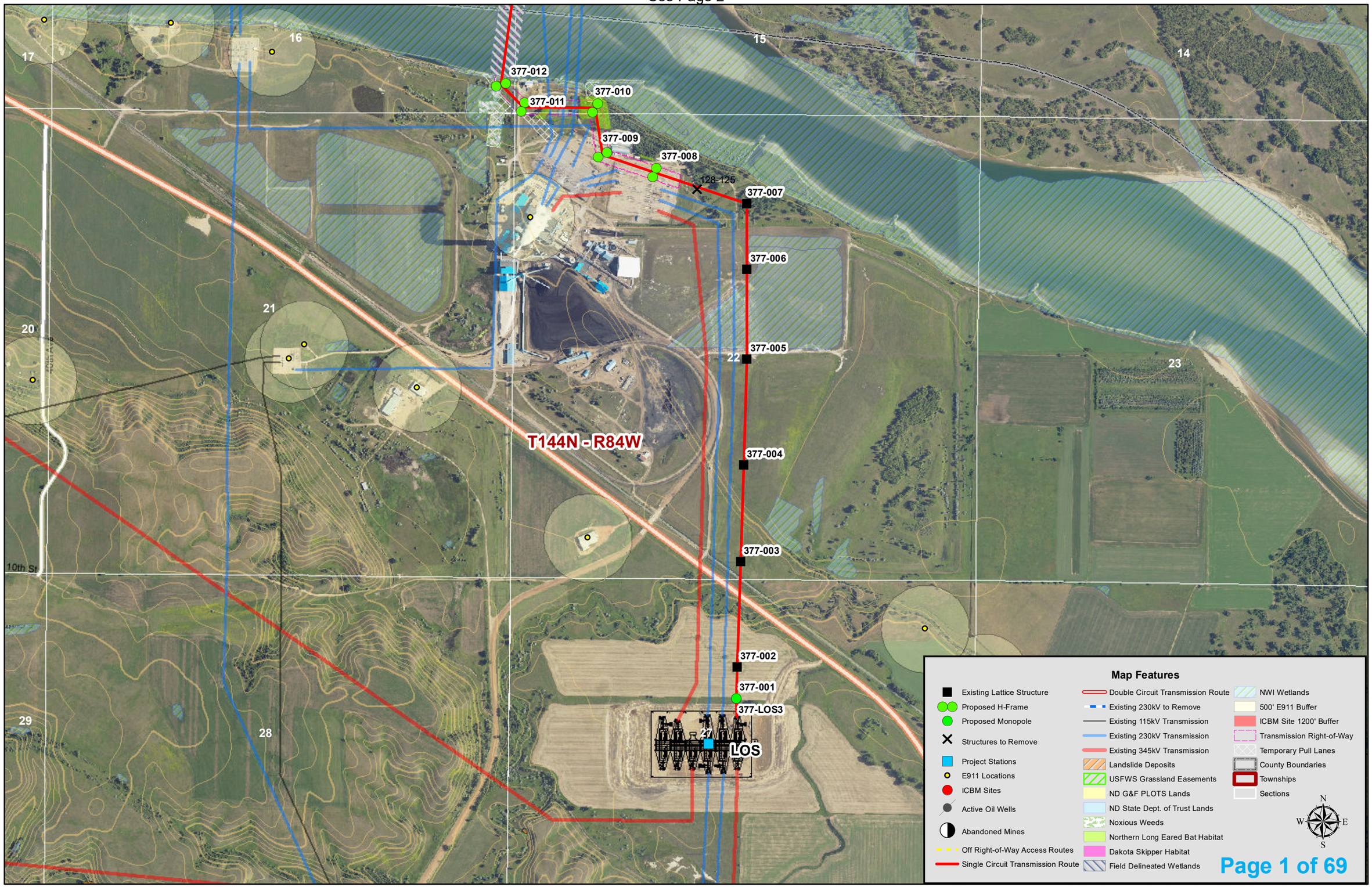
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128-125
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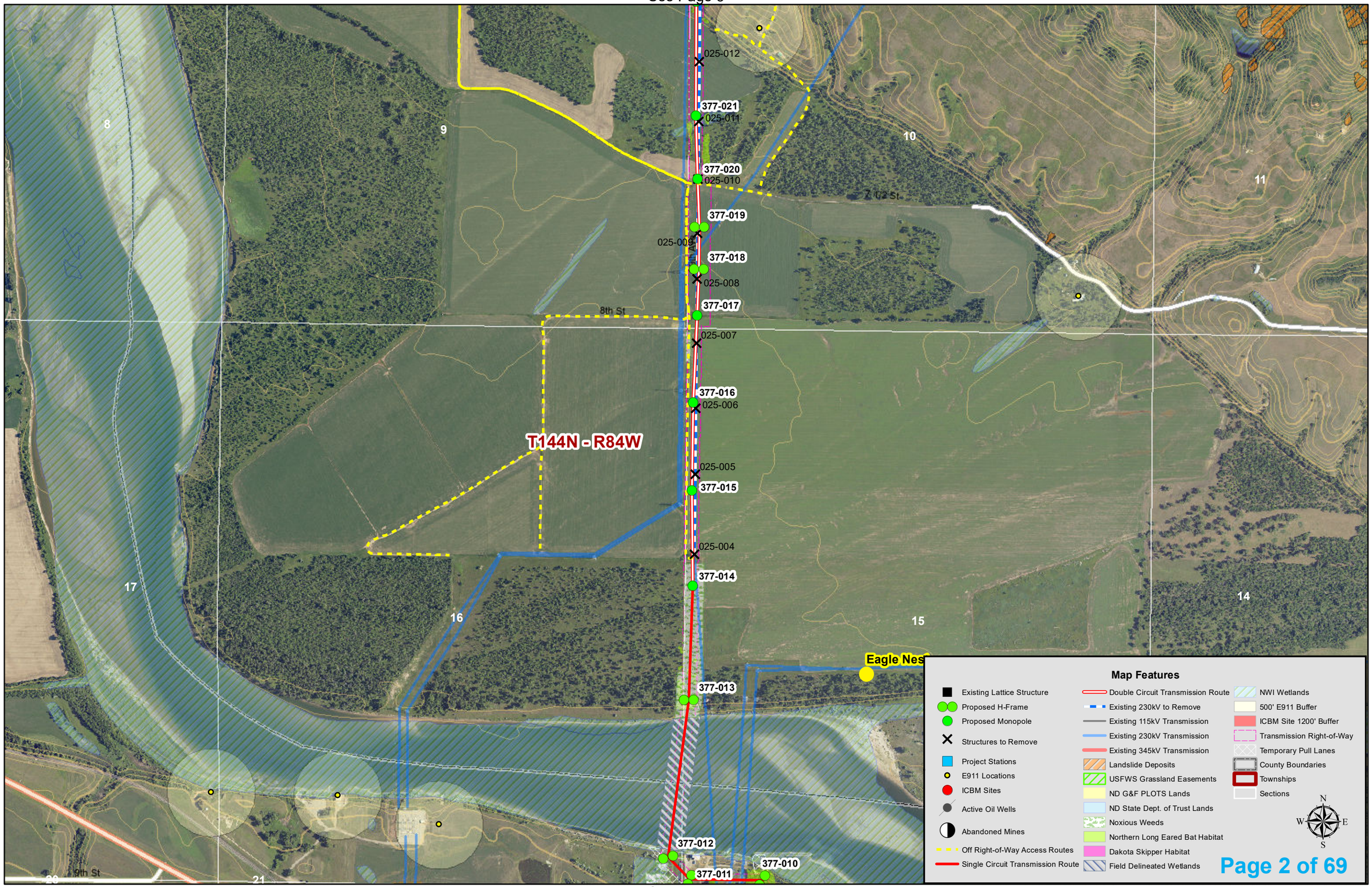
377-006
377-005
377-004
377-003
377-002
377-001
377-LOS3
LOS
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S

See Page 3



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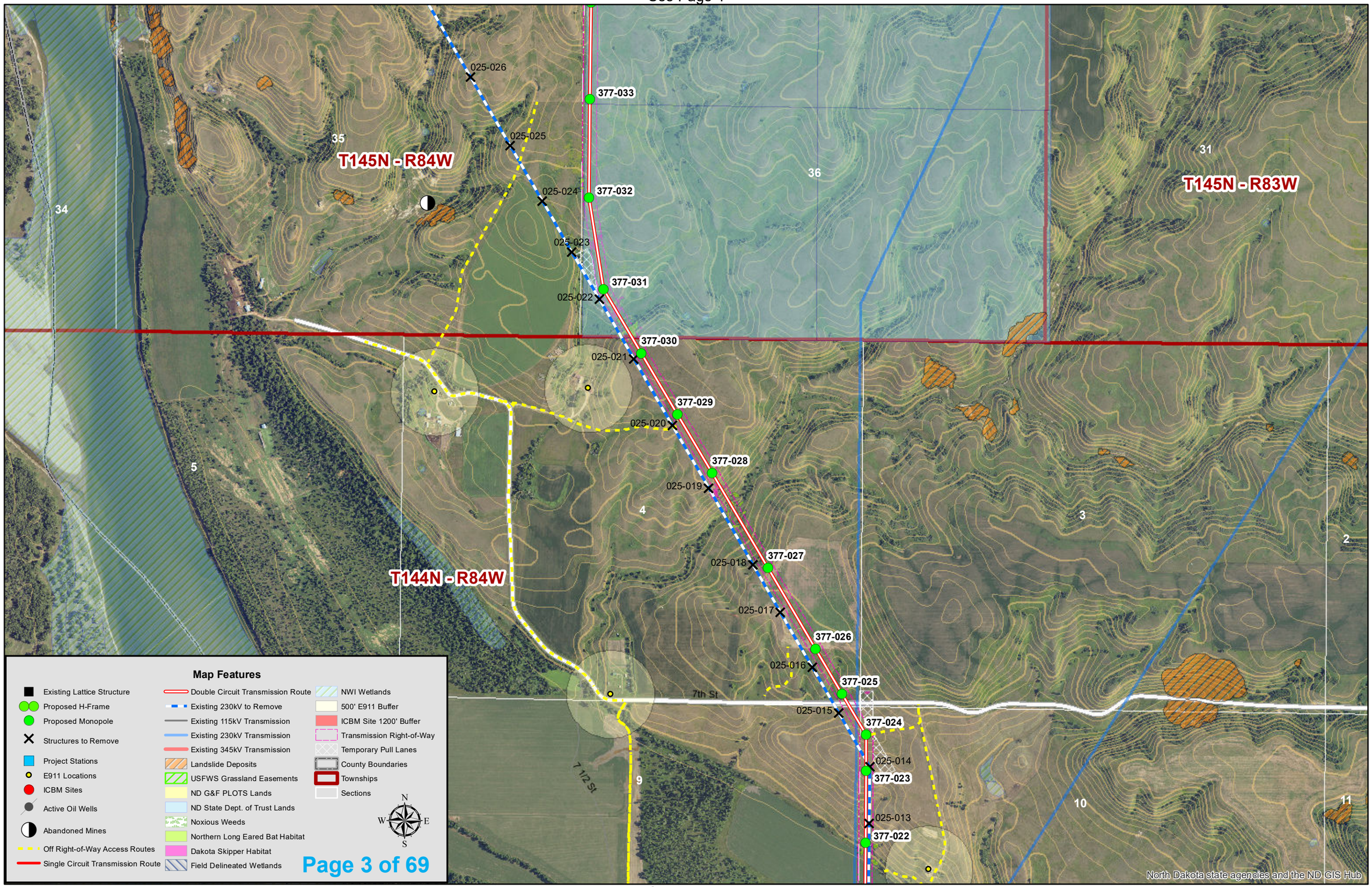

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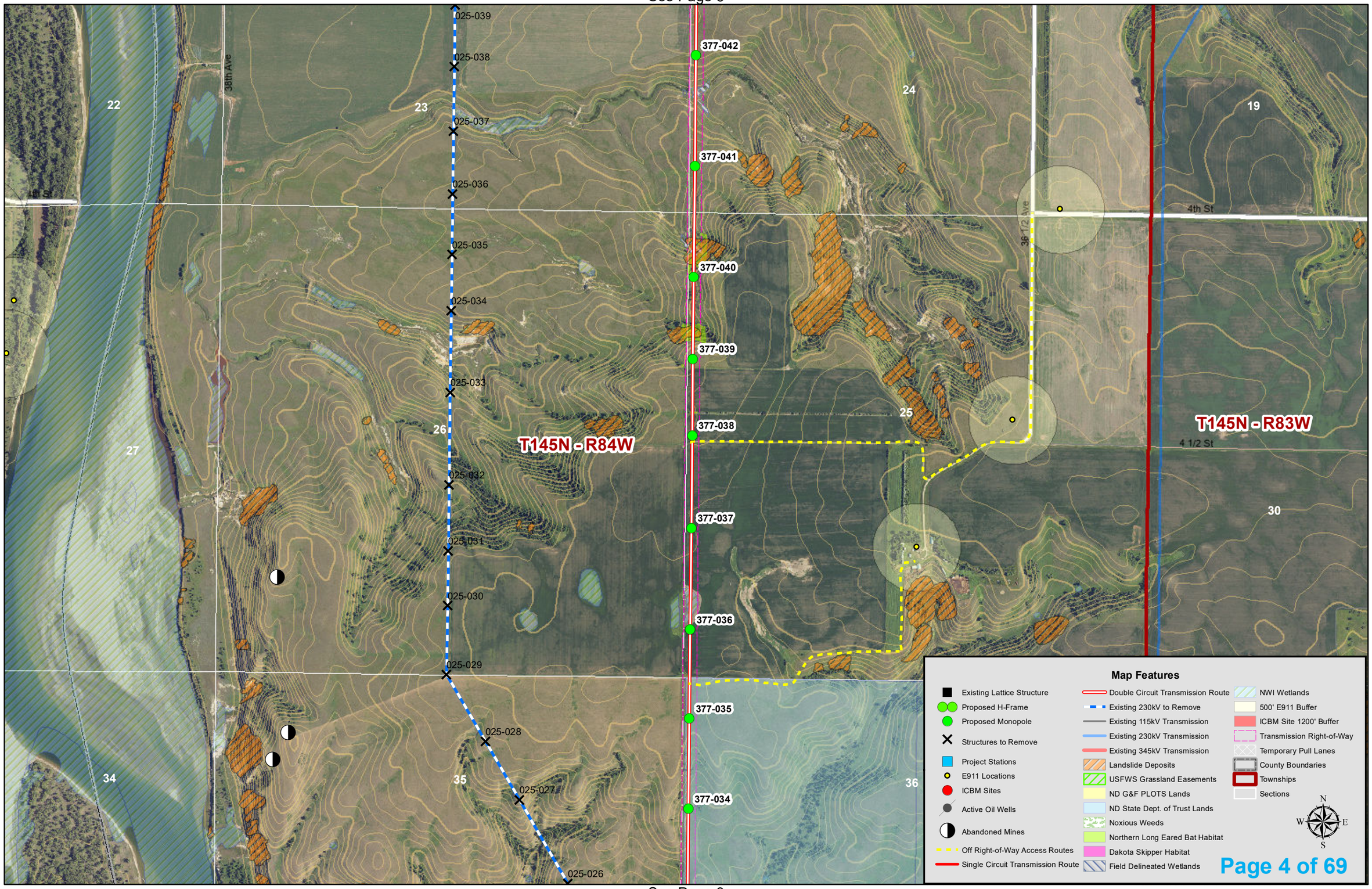

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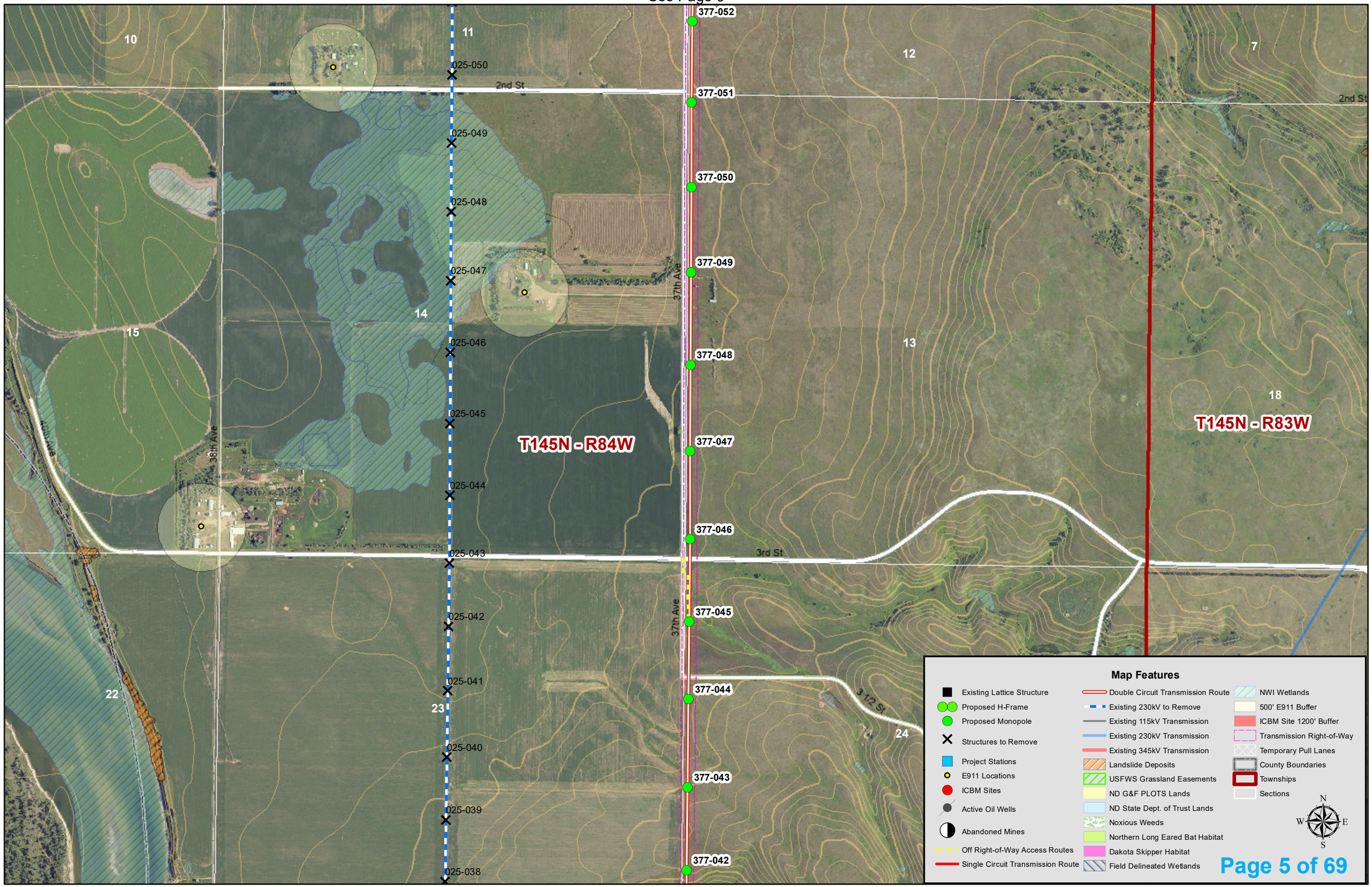

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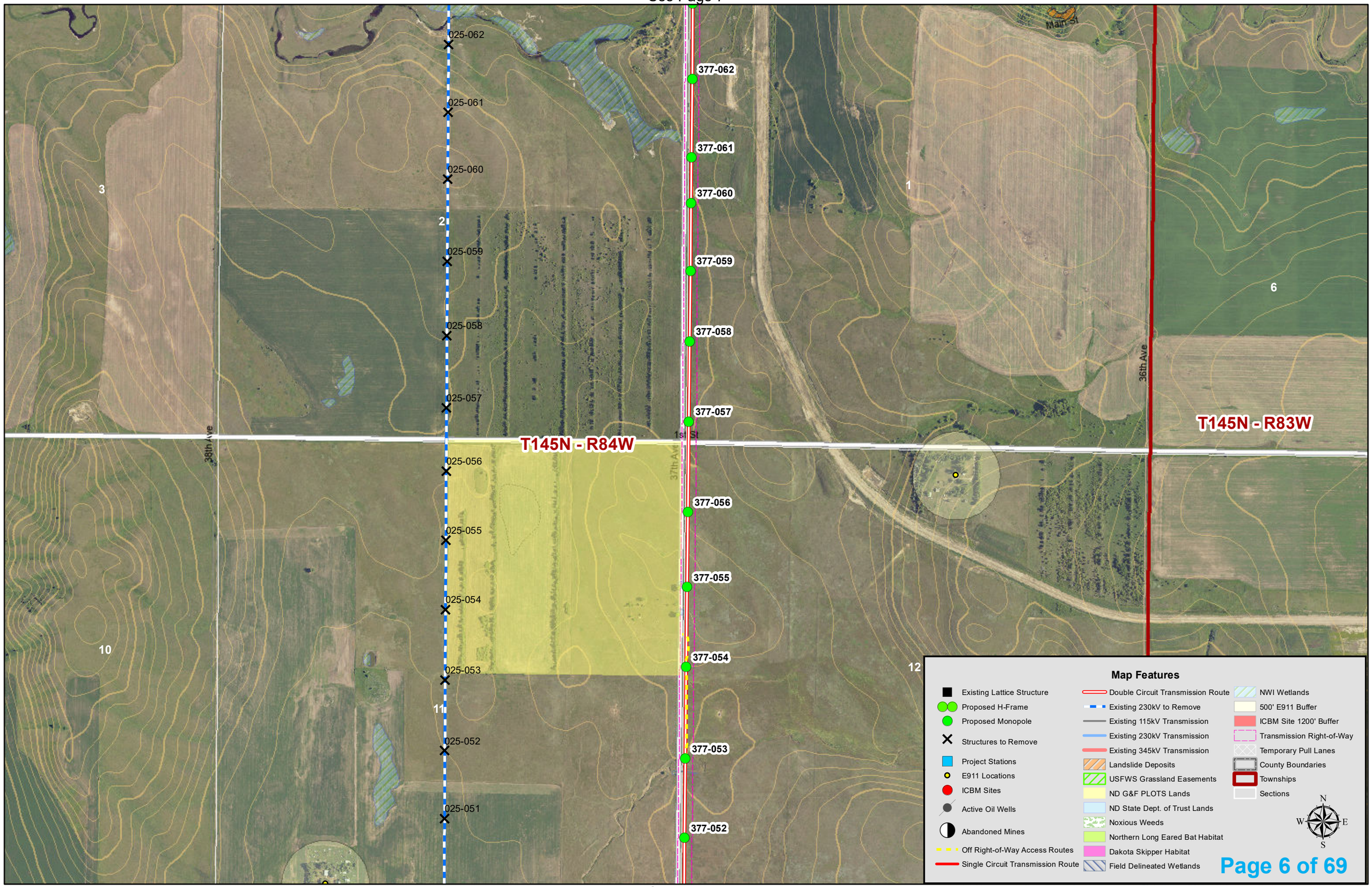

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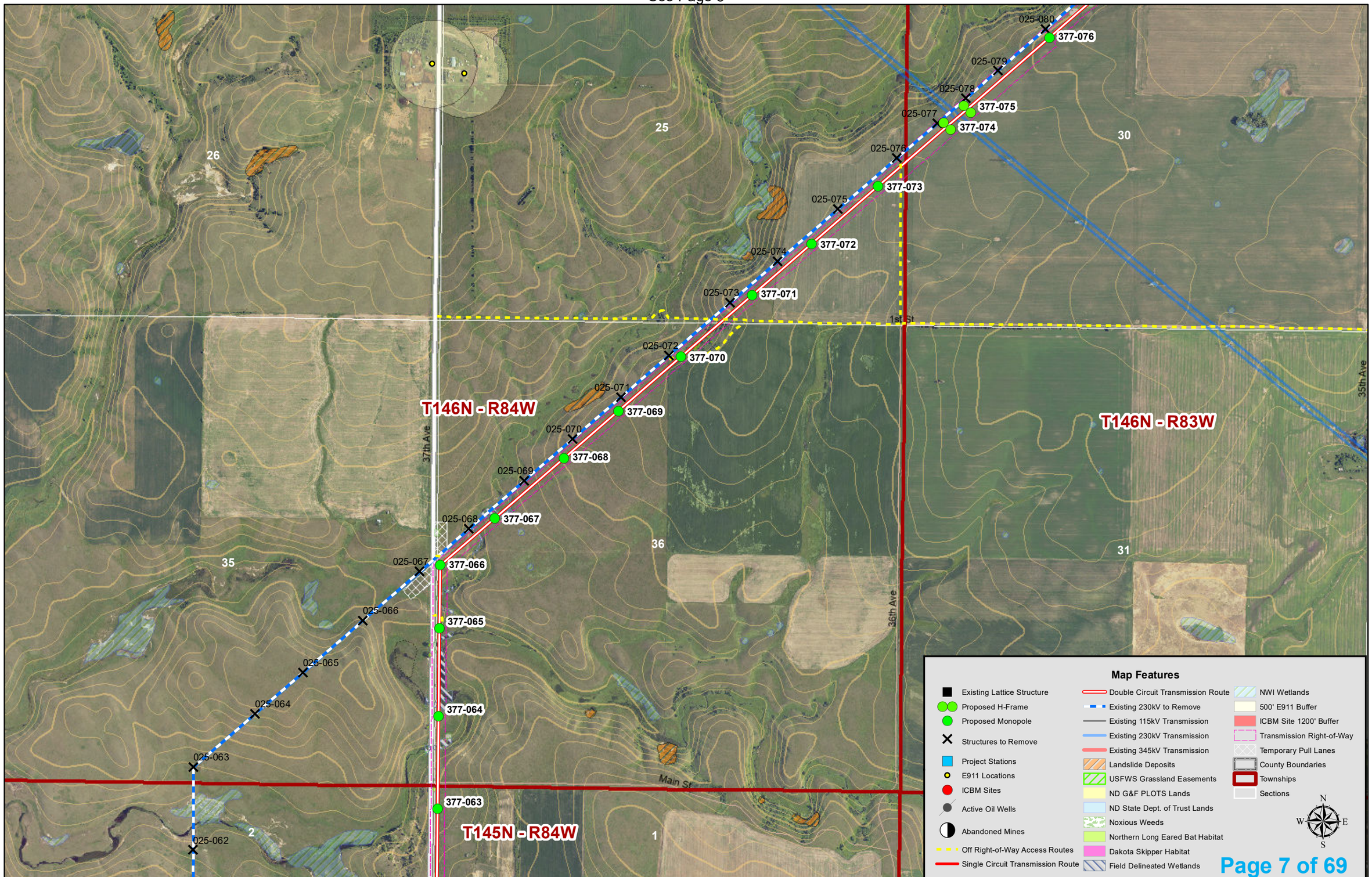
See Page 8



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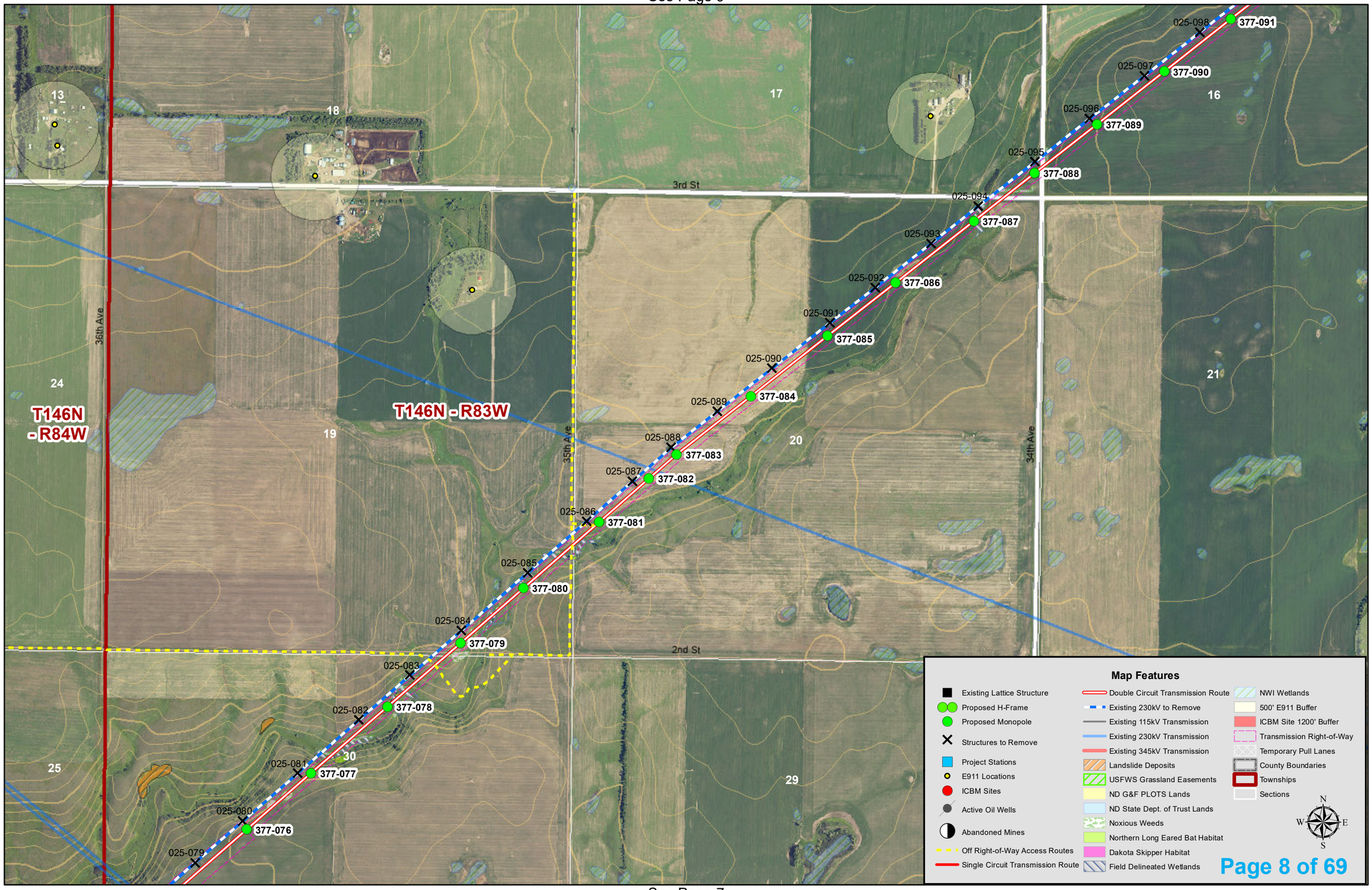
See Page 9



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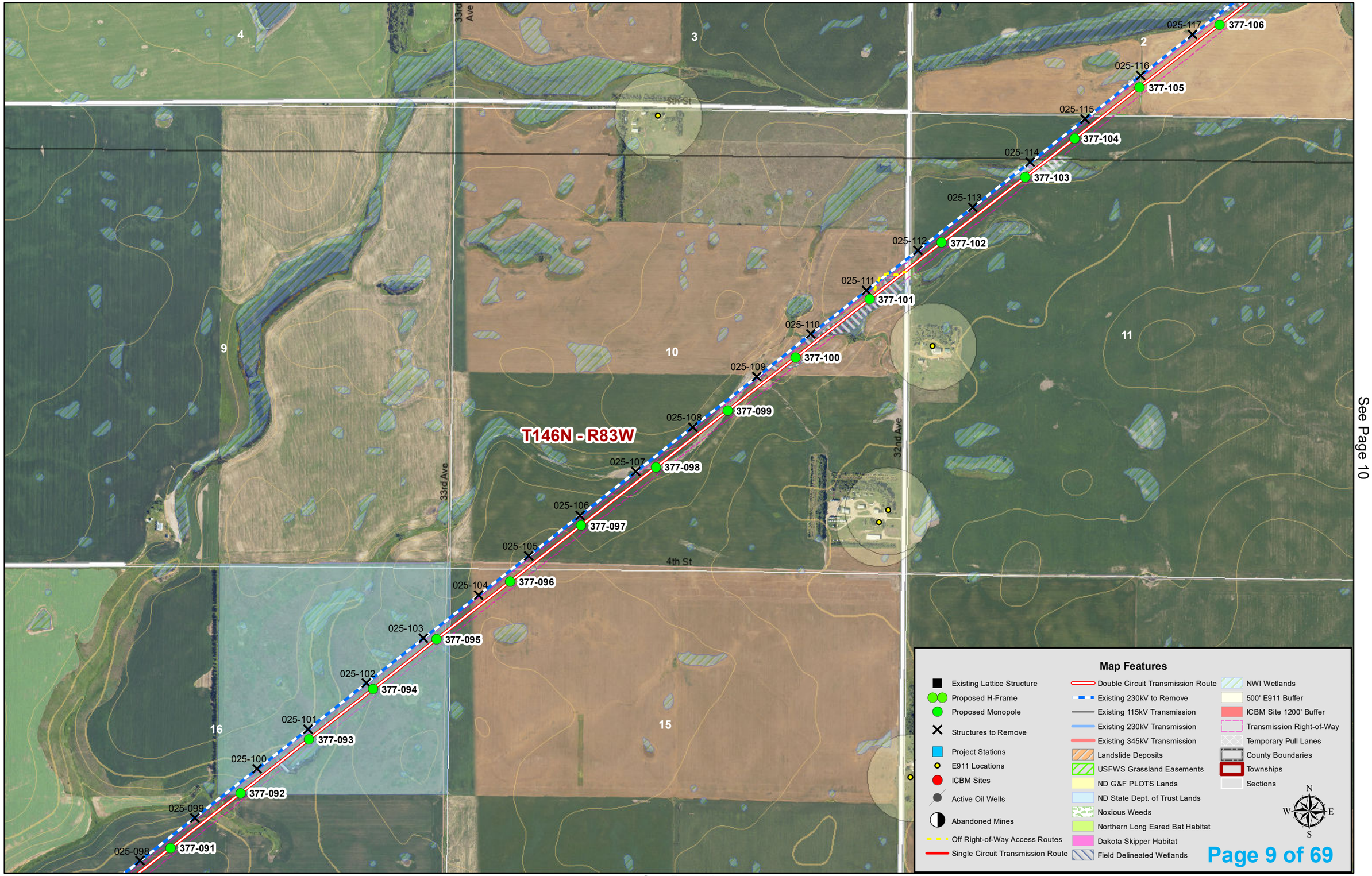

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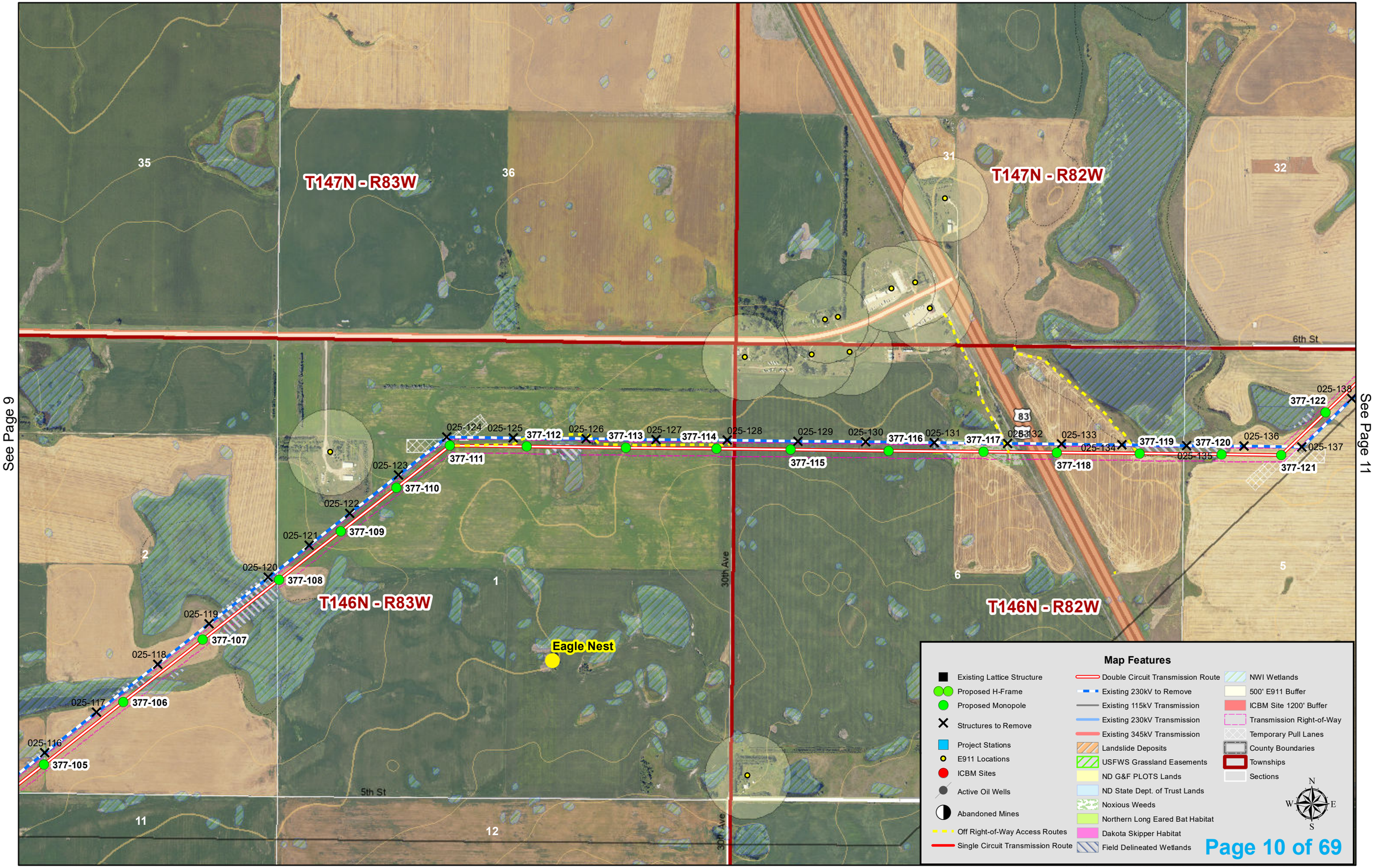
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See Page 11
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T146N - R83W
T146N - R82W
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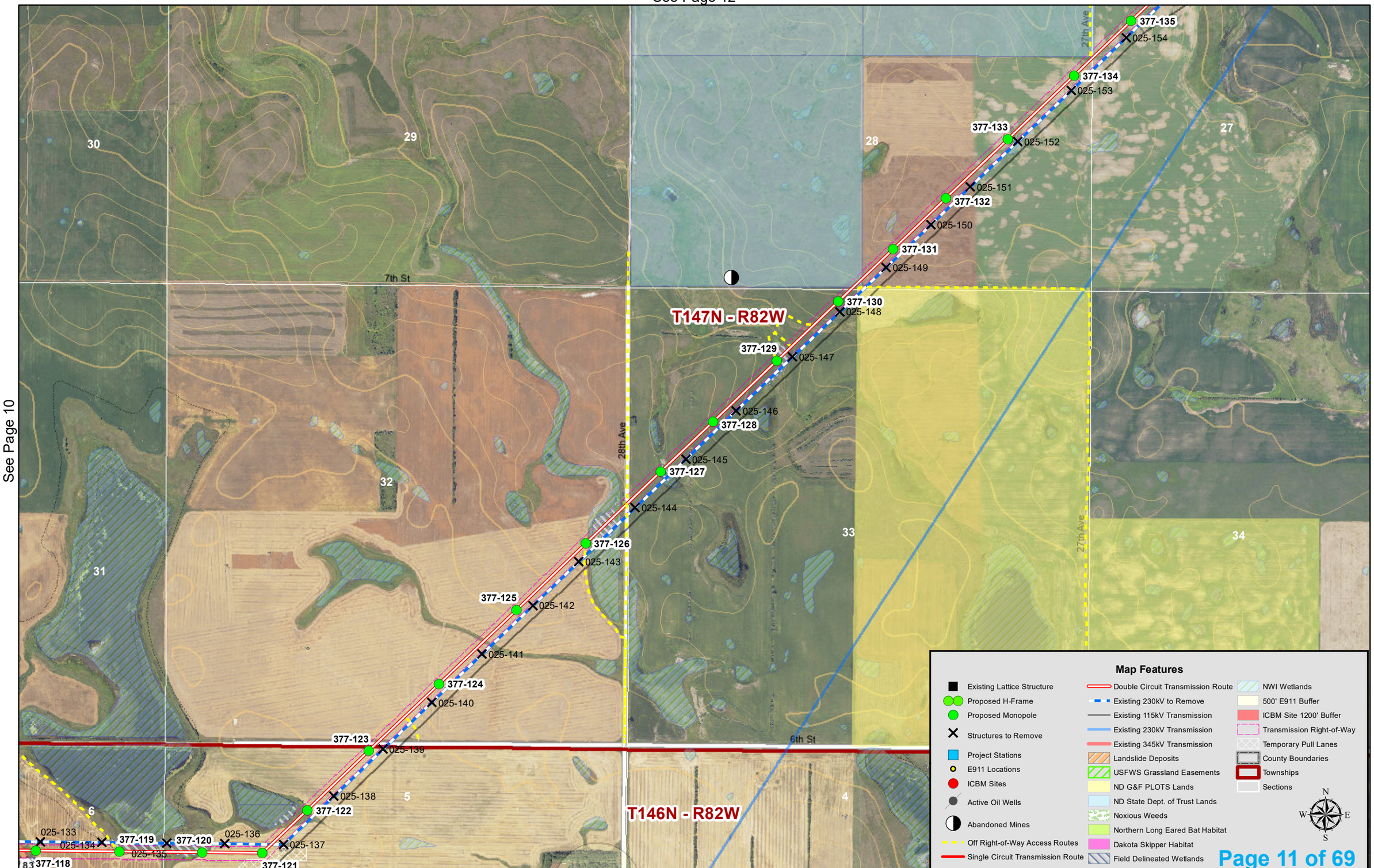
025-127
025-128
025-129
025-130
025-131
025-132
025-133
025-134
025-135
025-136
025-137
025-138
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S

See Page 12

See Page 10



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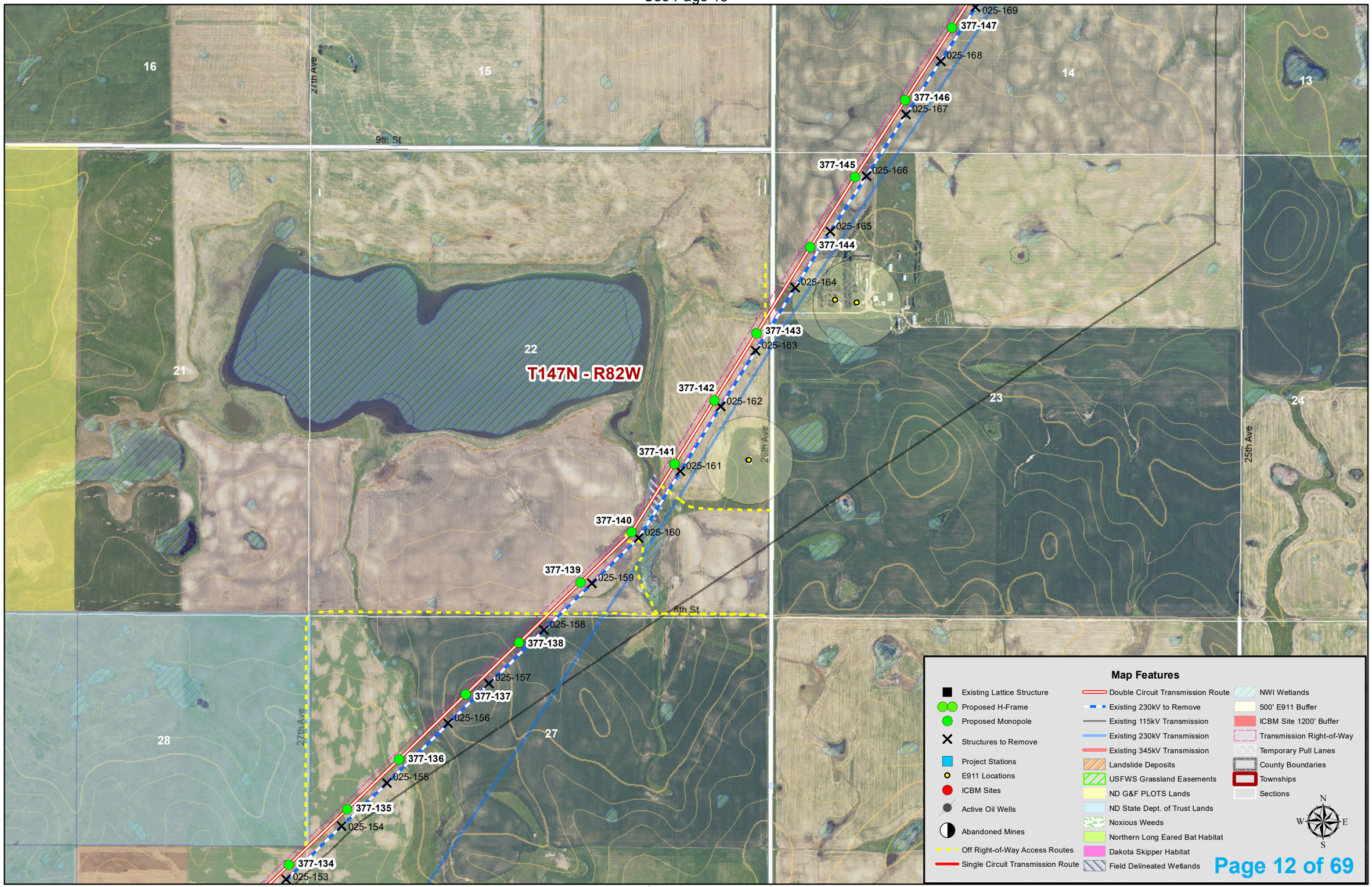

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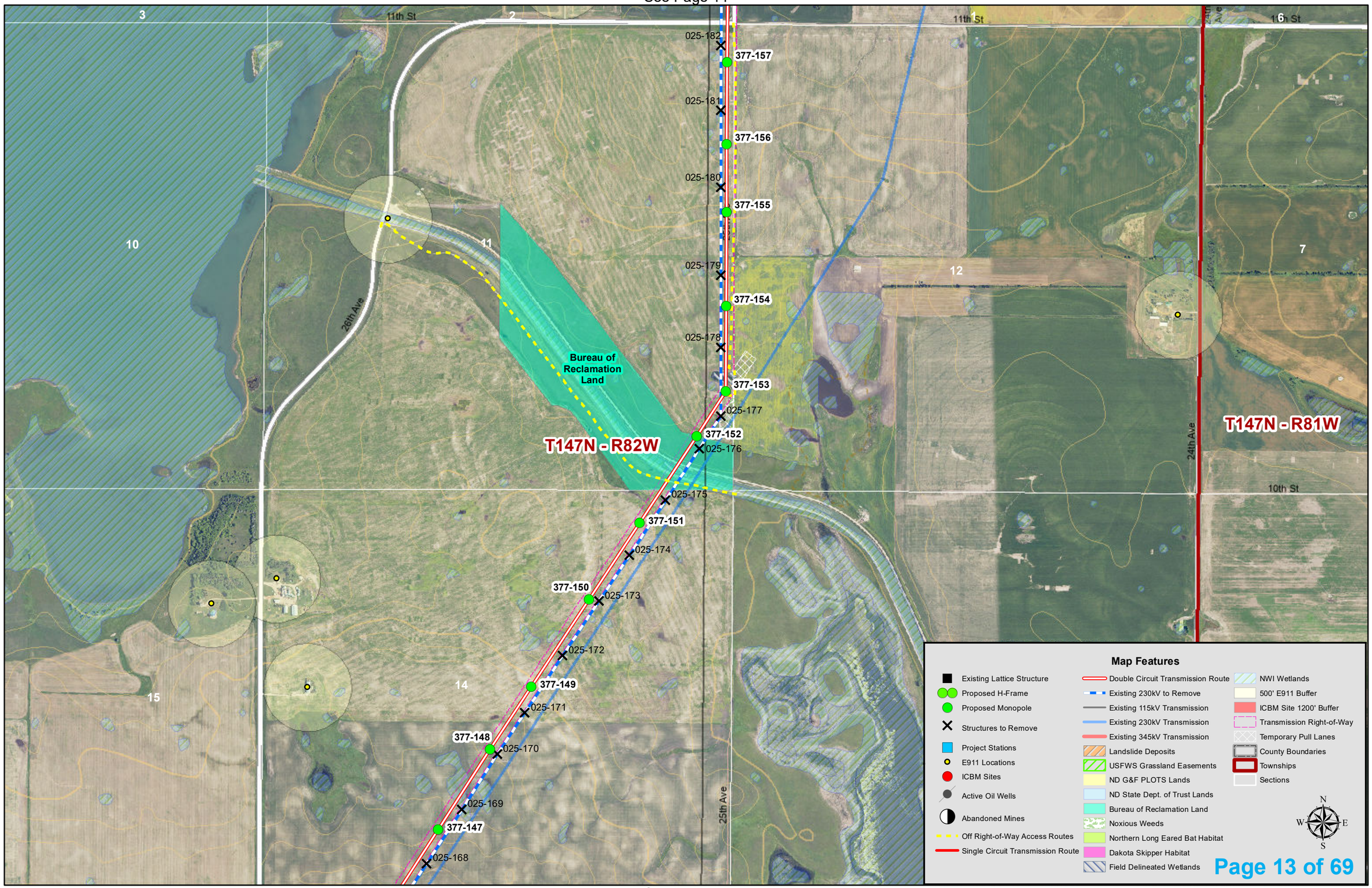
See Page 14



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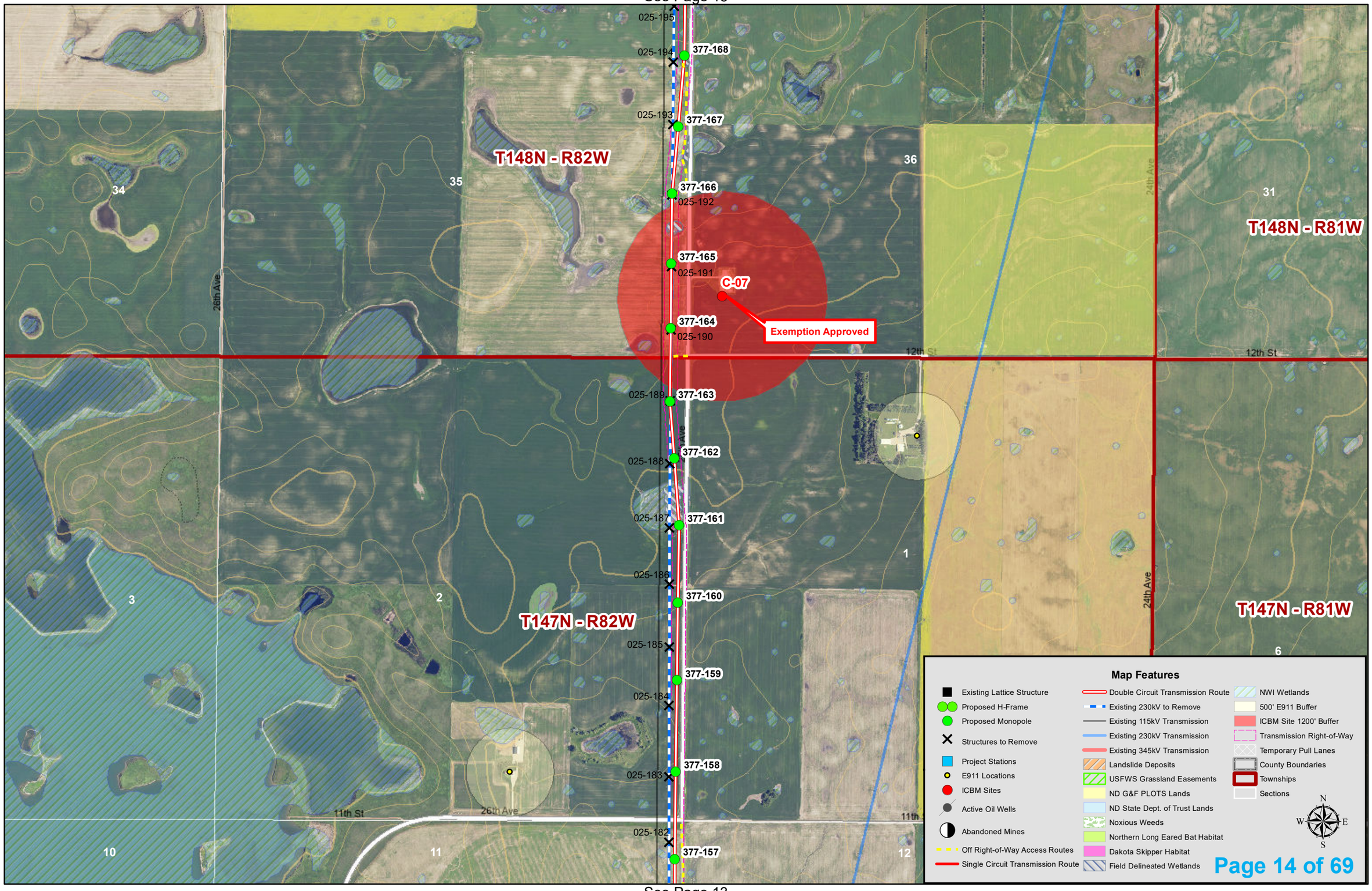
See Page 15



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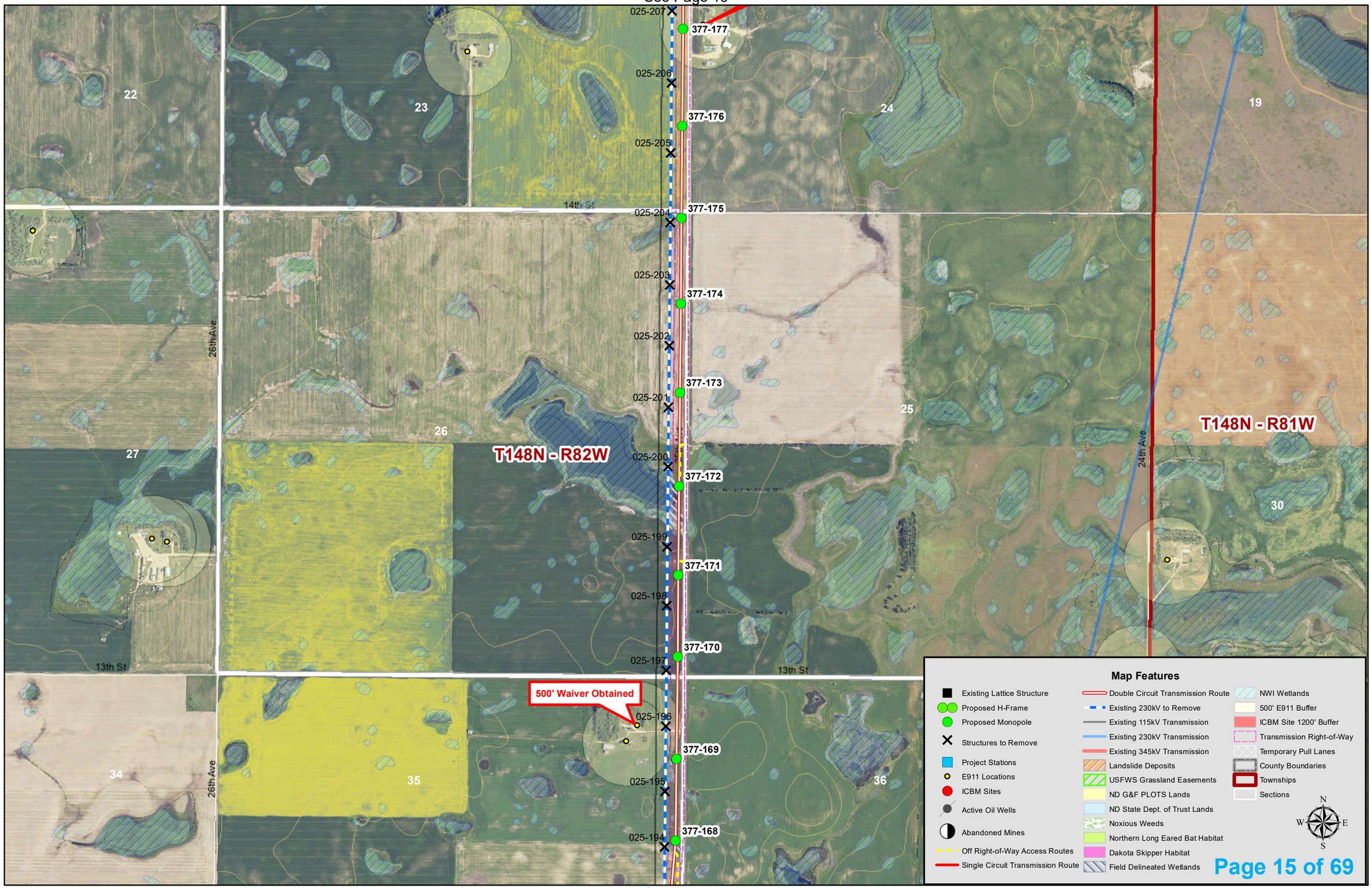
See Page 16



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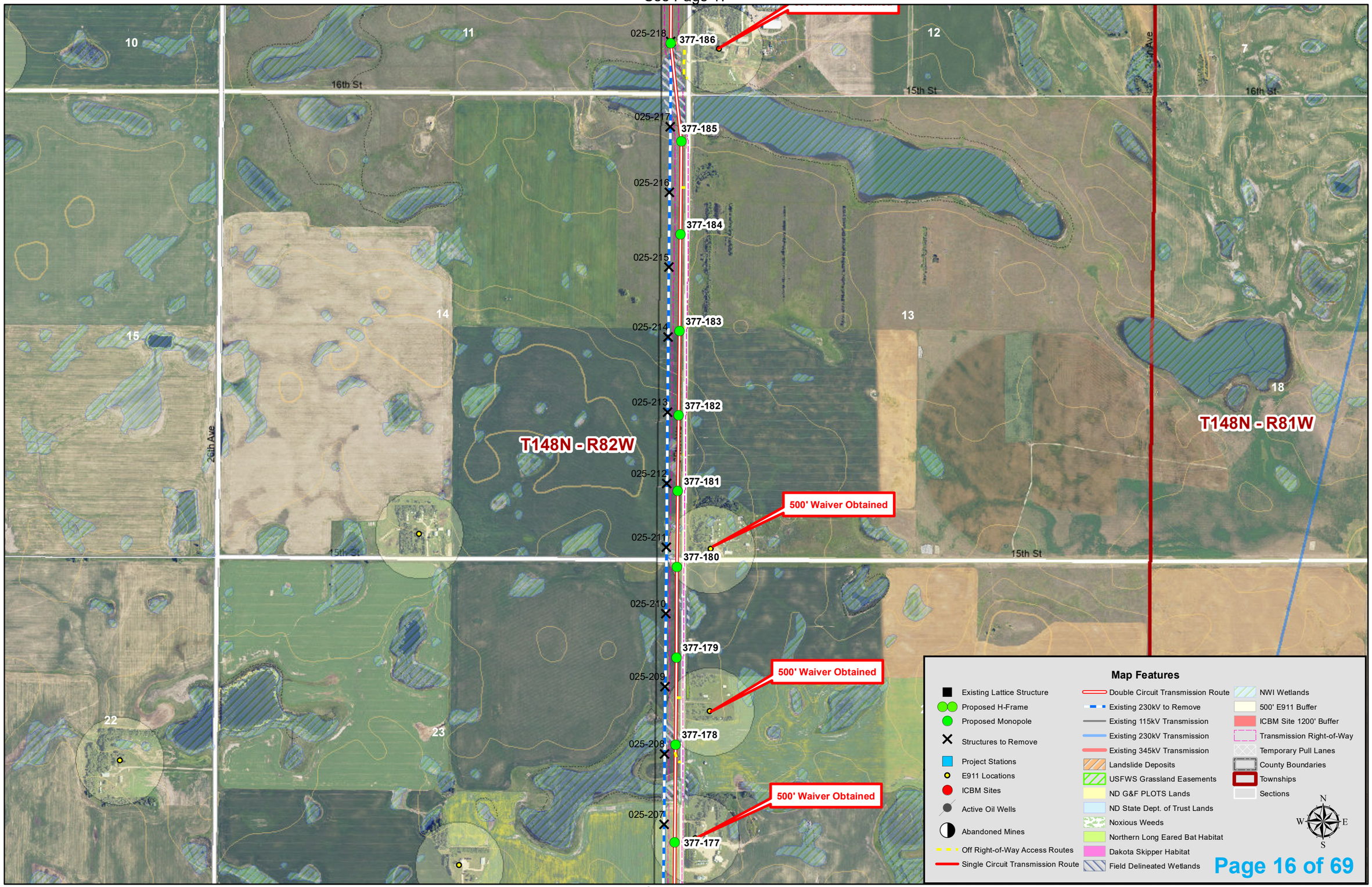
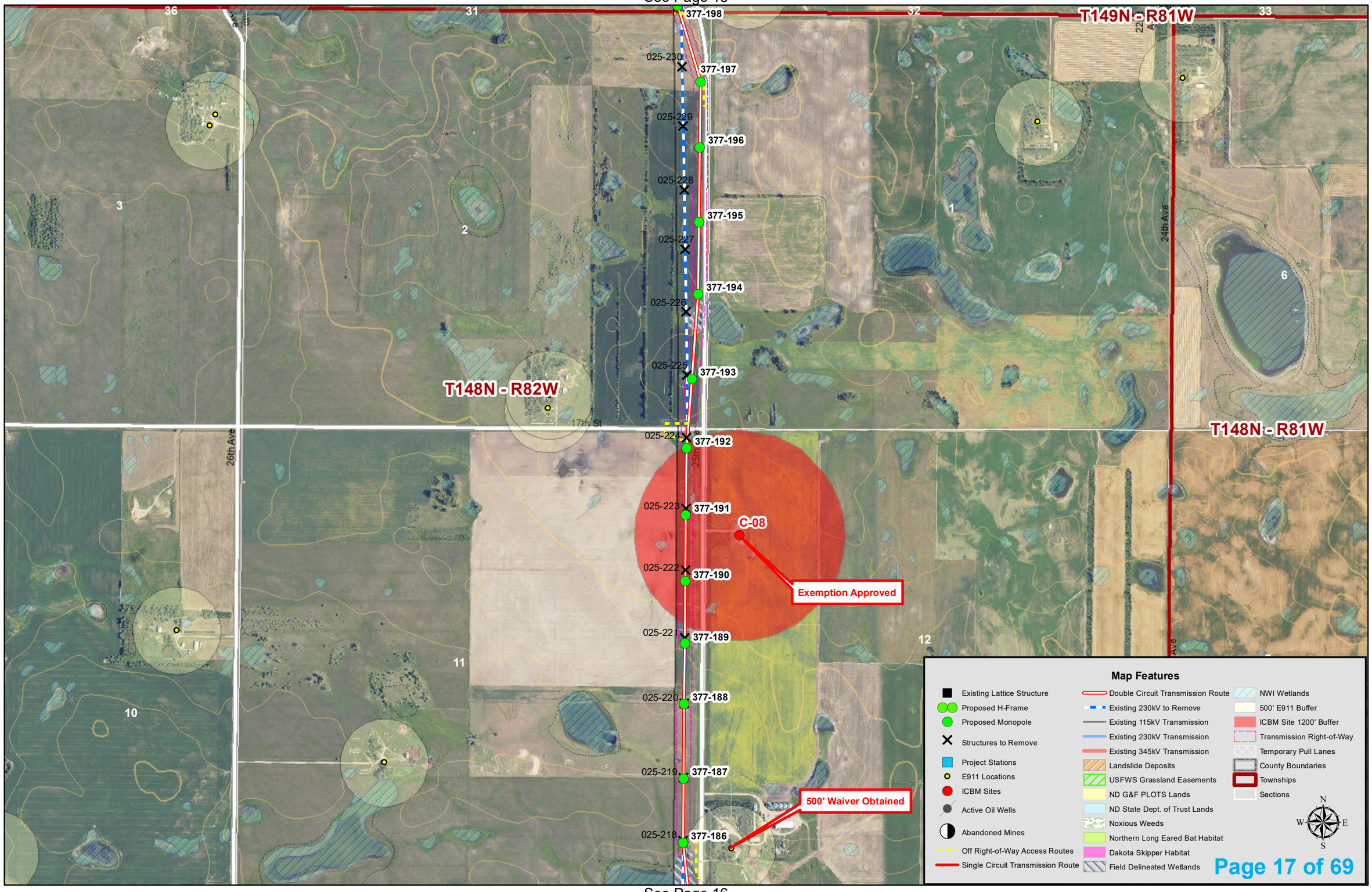
See Page 17



See Page 15

See Page 18



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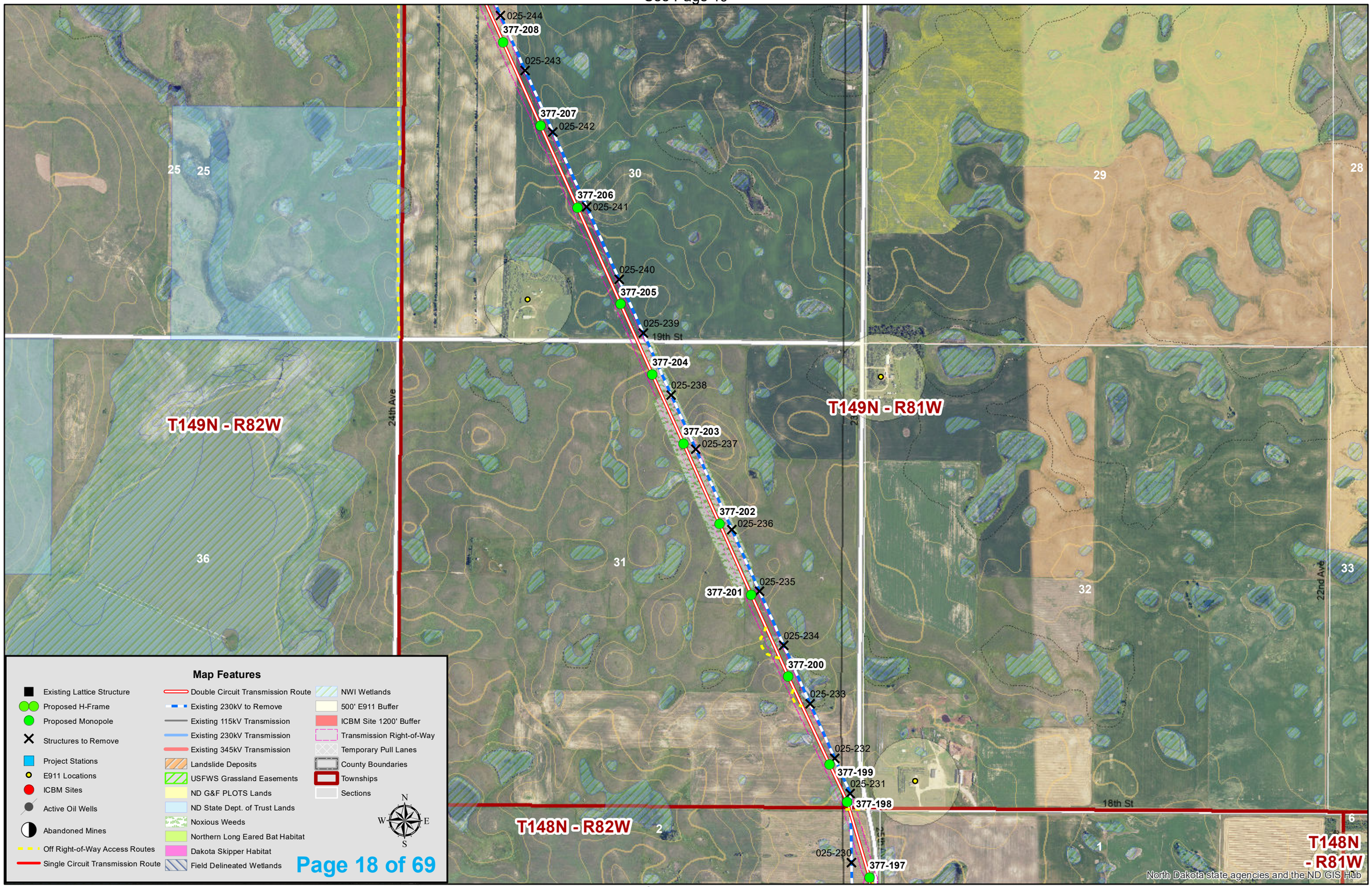
See Page 19



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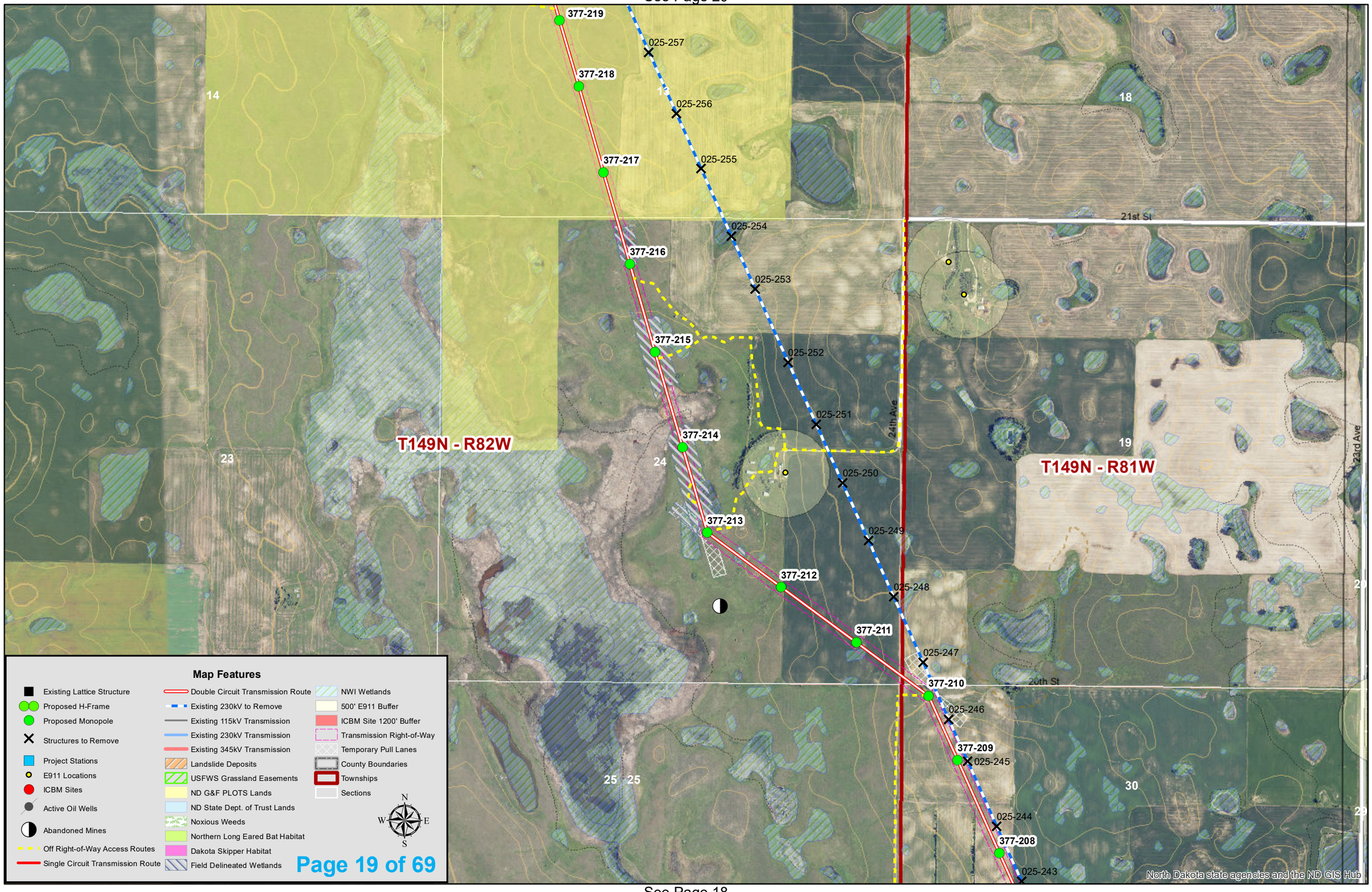
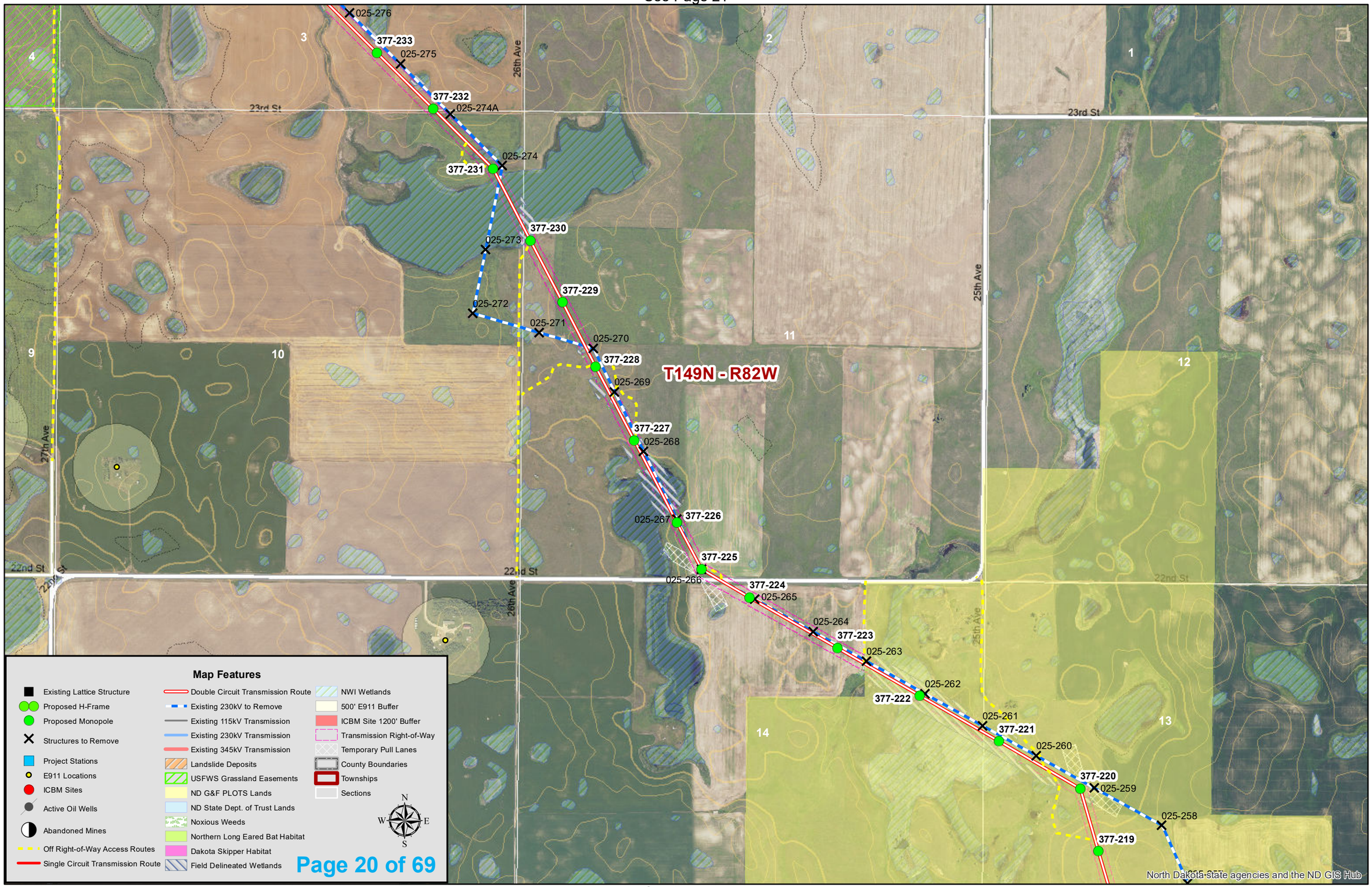
See Page 20



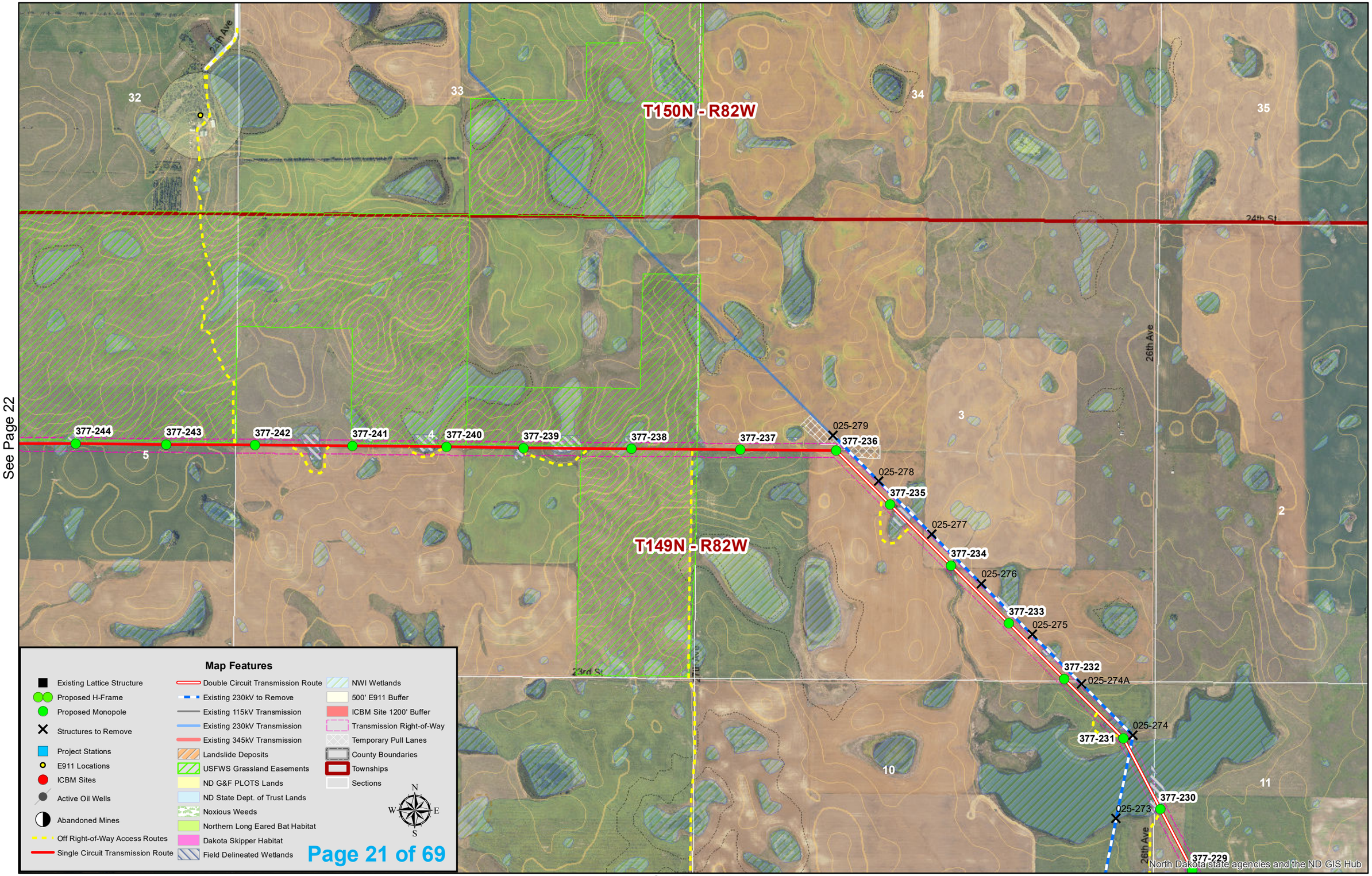
See Page 18

See Page 21



See Page 19

See Page 22



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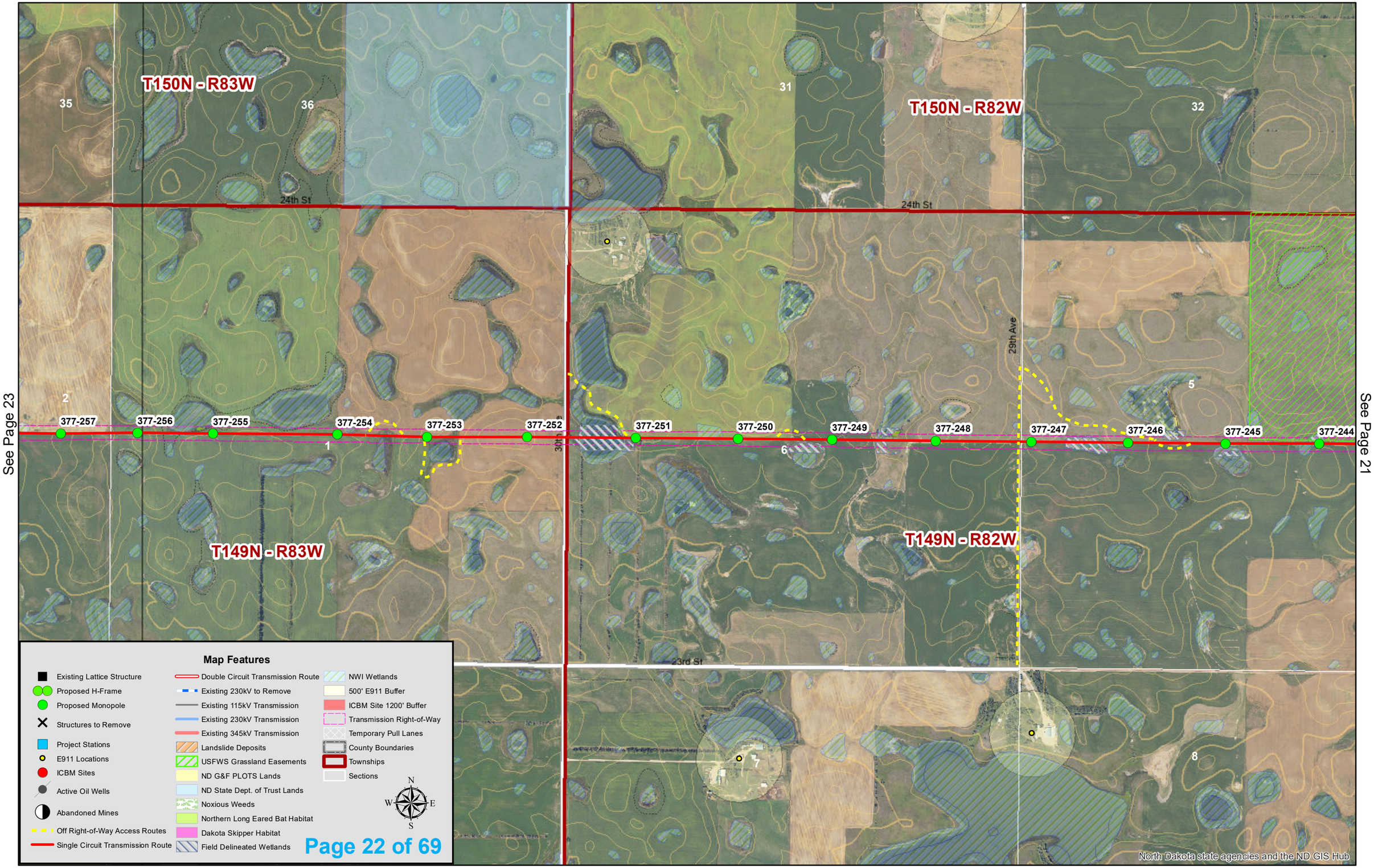
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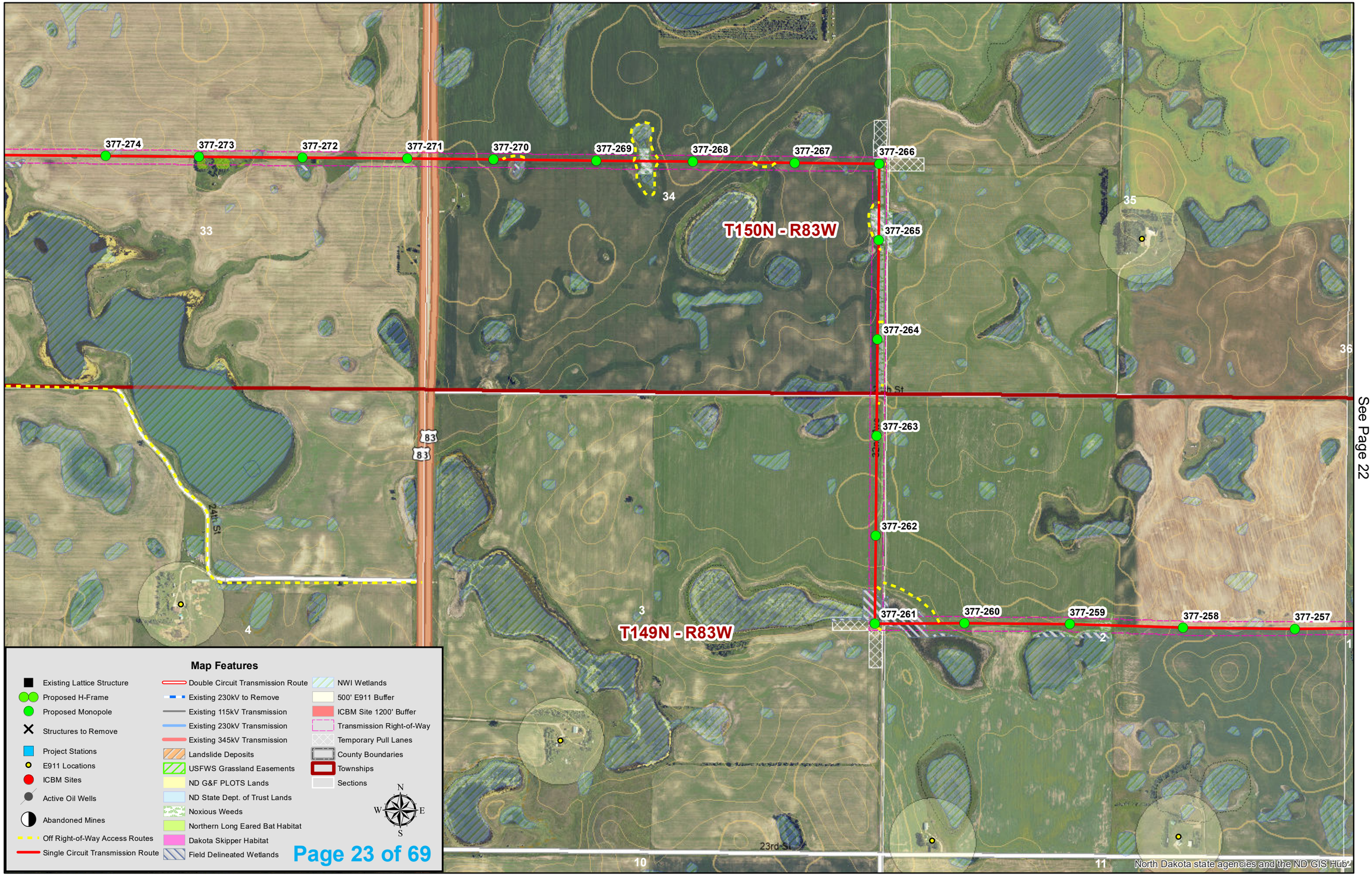
377-248
377-247
377-246
377-245
377-244
See Page 23
See Page 21
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub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T150N - R83W
T149N - R83W
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24th St
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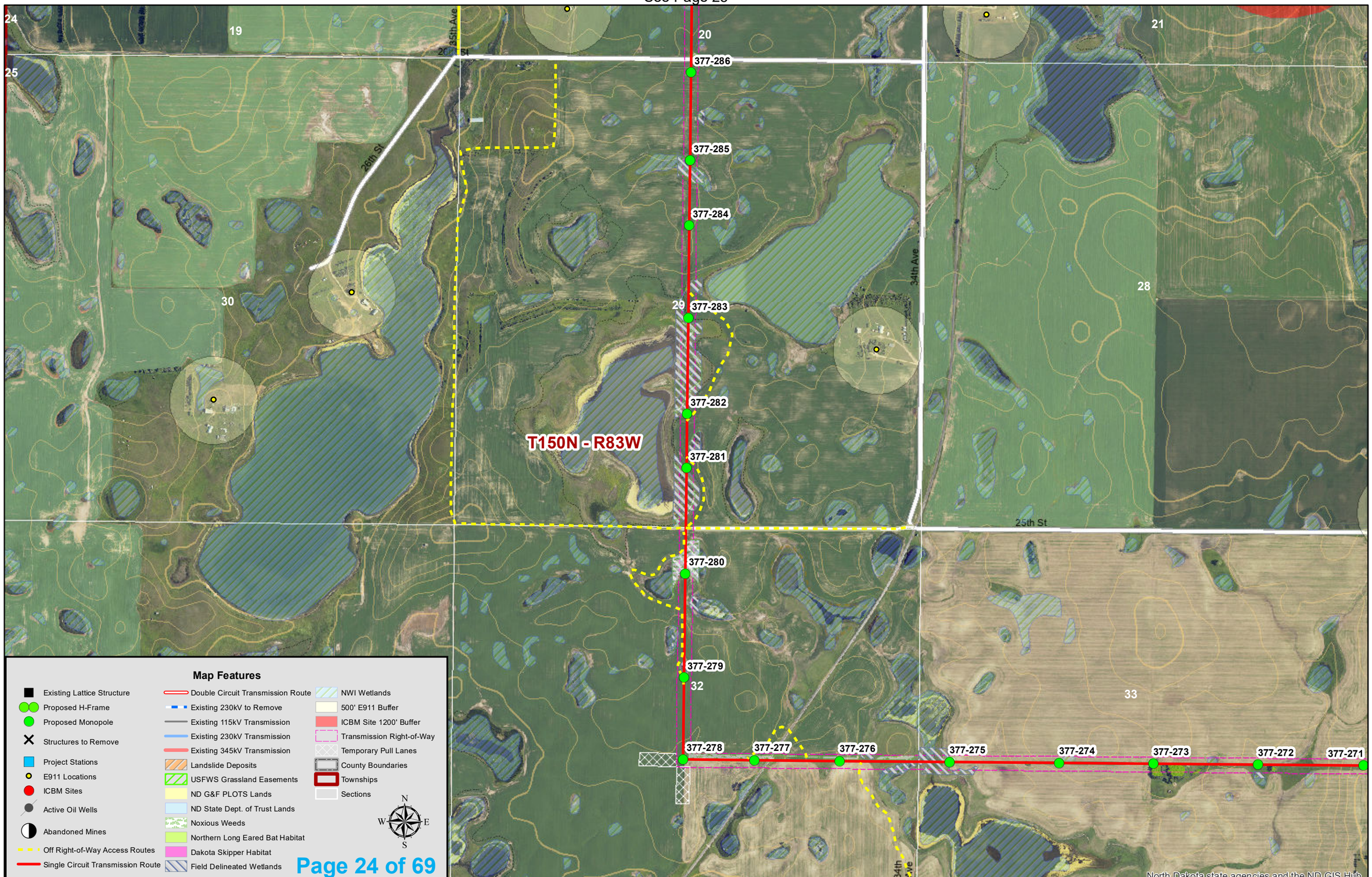
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub

See Page 22

See Page 25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Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
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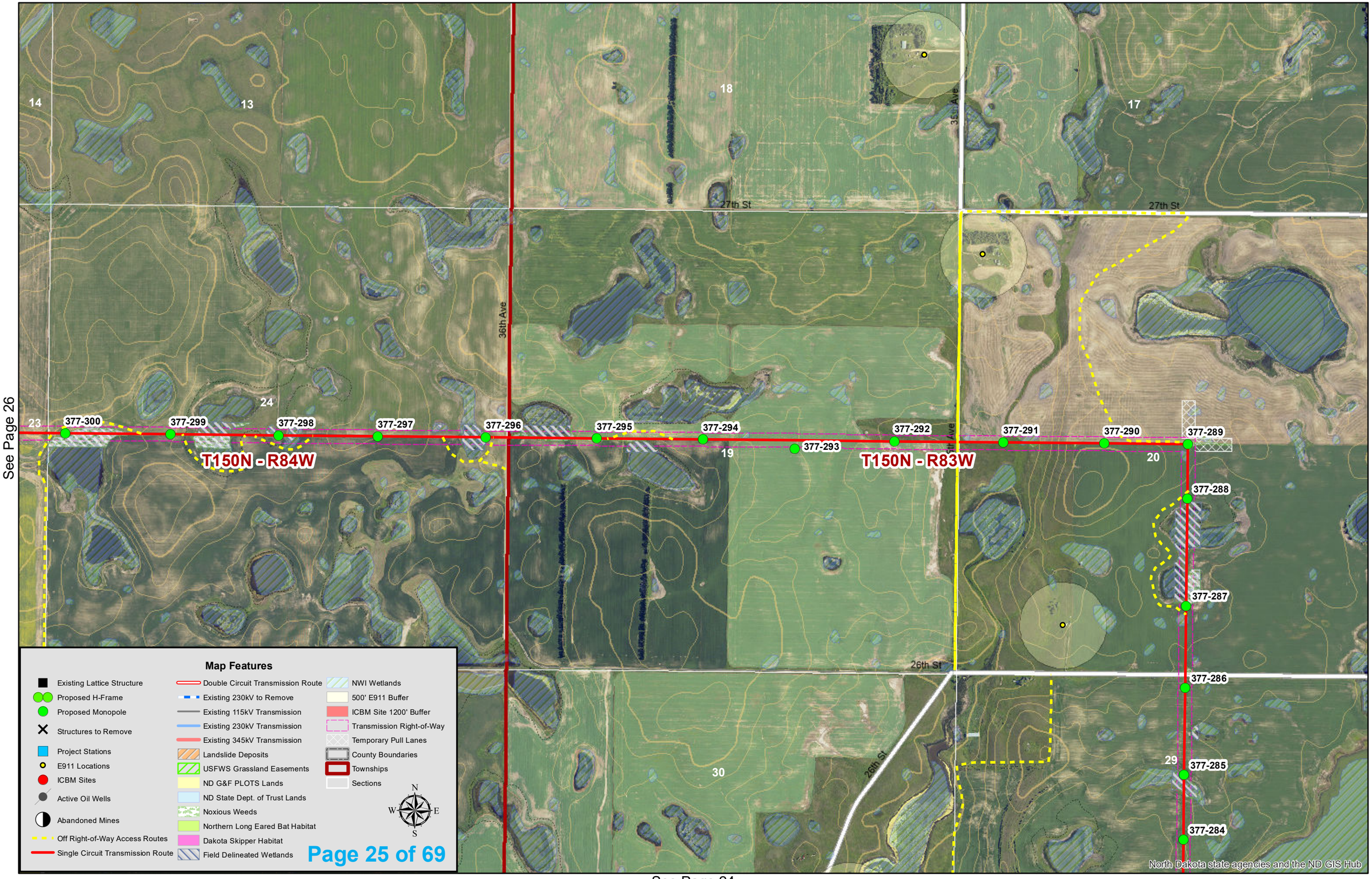
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub



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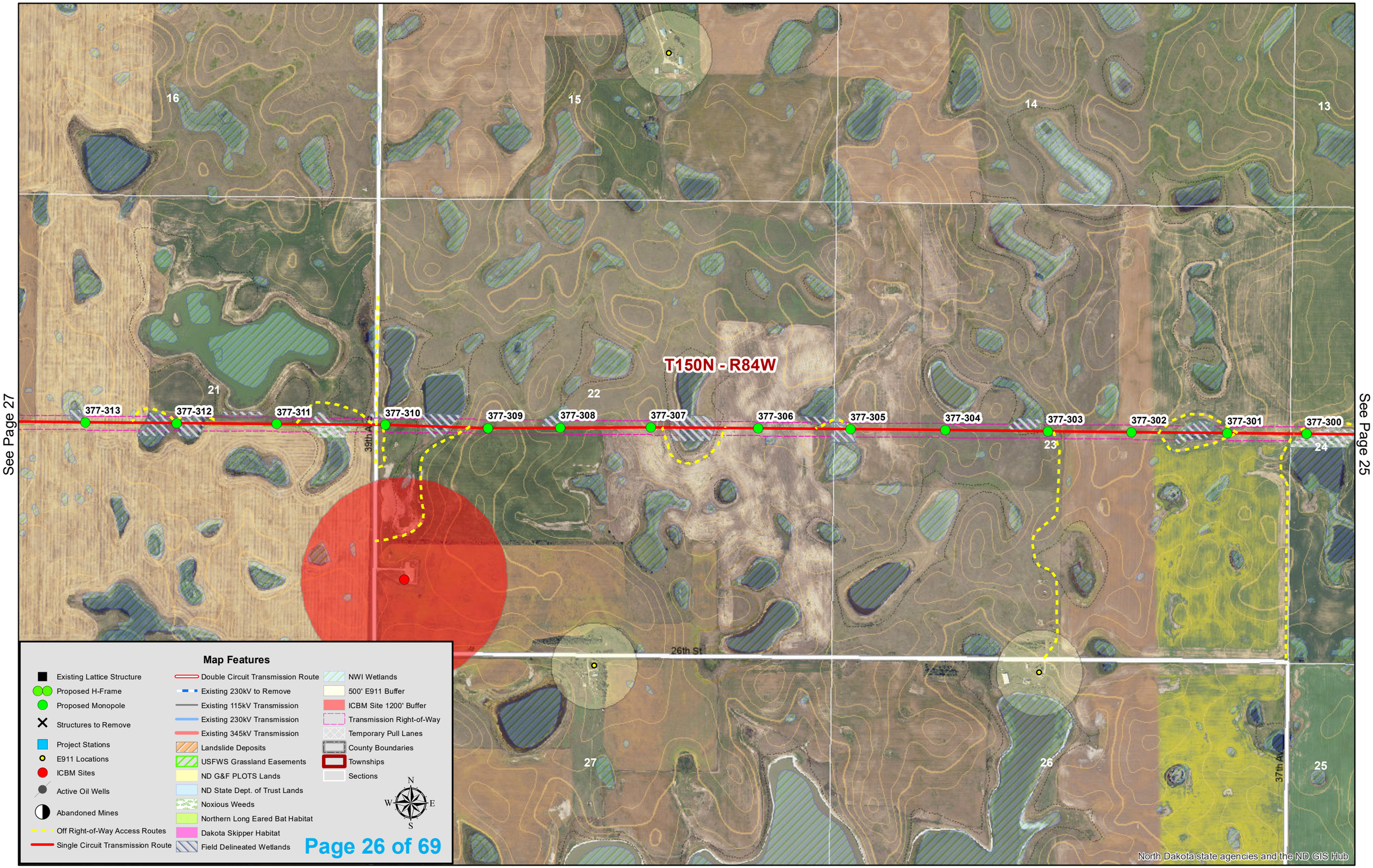
See Page 27
See Page 25
T150N - R84W
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39th Ave
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North Dakota state agencies and the ND GIS Hub
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
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Landslide Deposits
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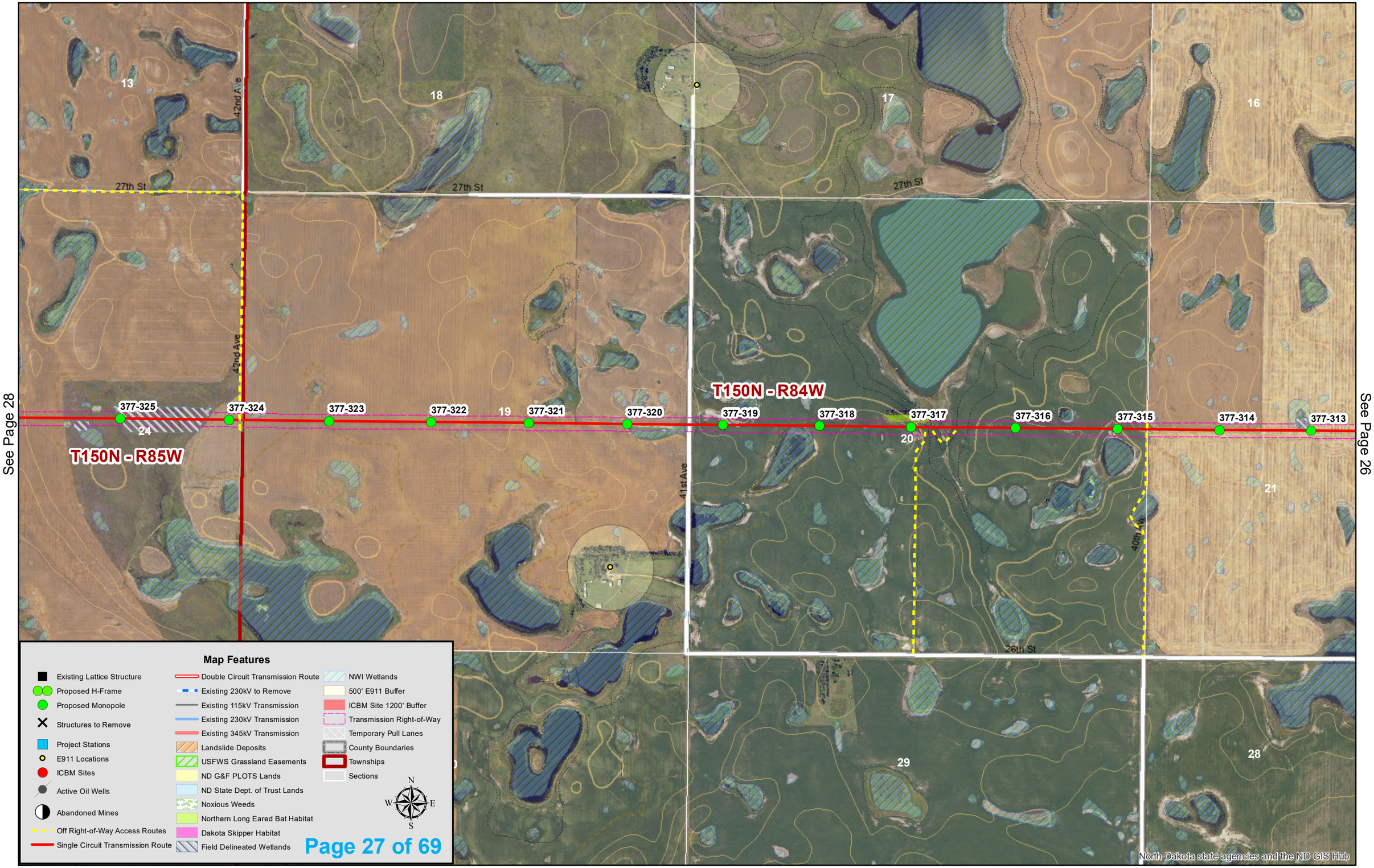
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S


See Page 28
See Page 26
T150N - R84W
T150N - R85W
377-325
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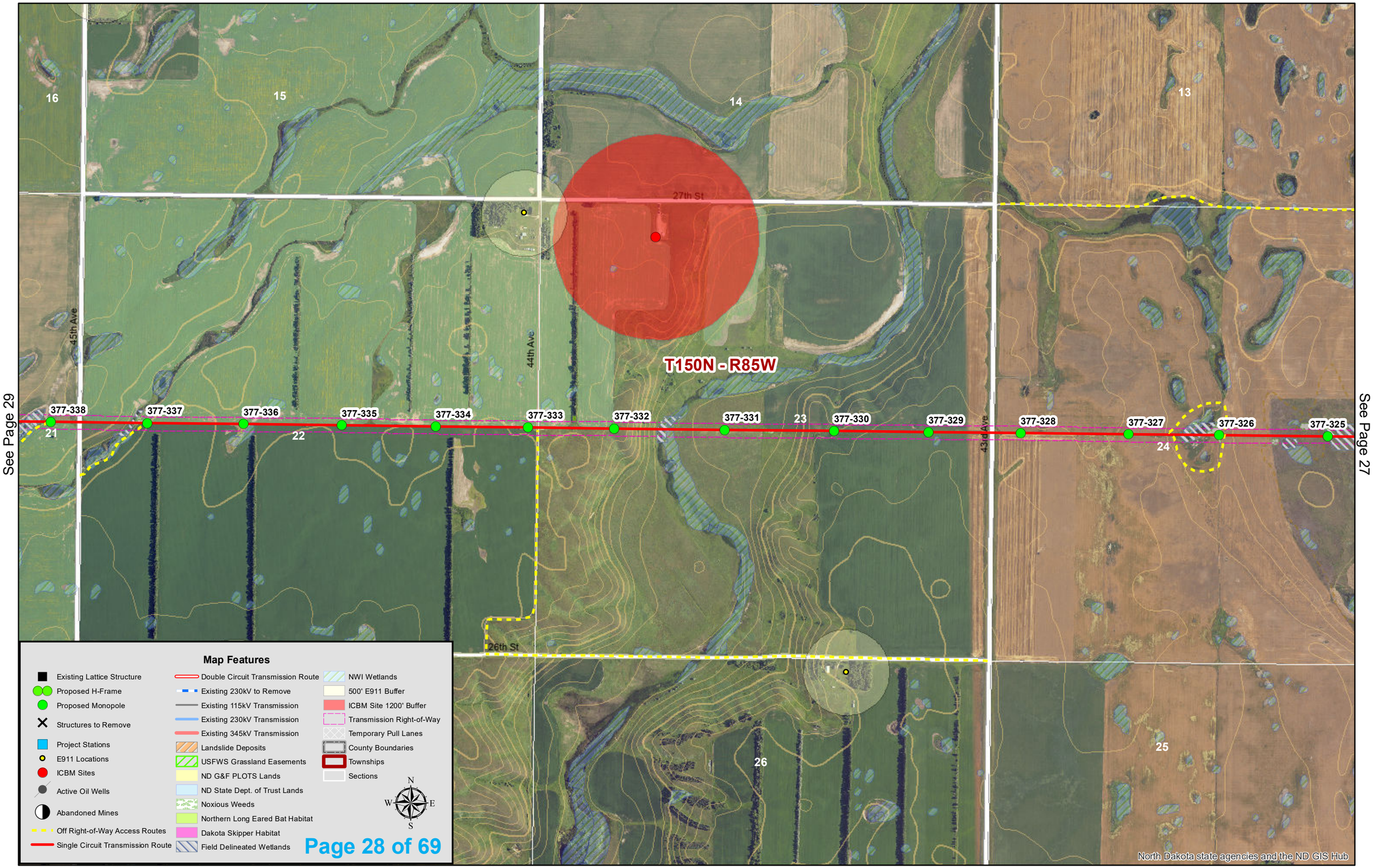
42nd Ave
41st Ave
40th Ave
26th St
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub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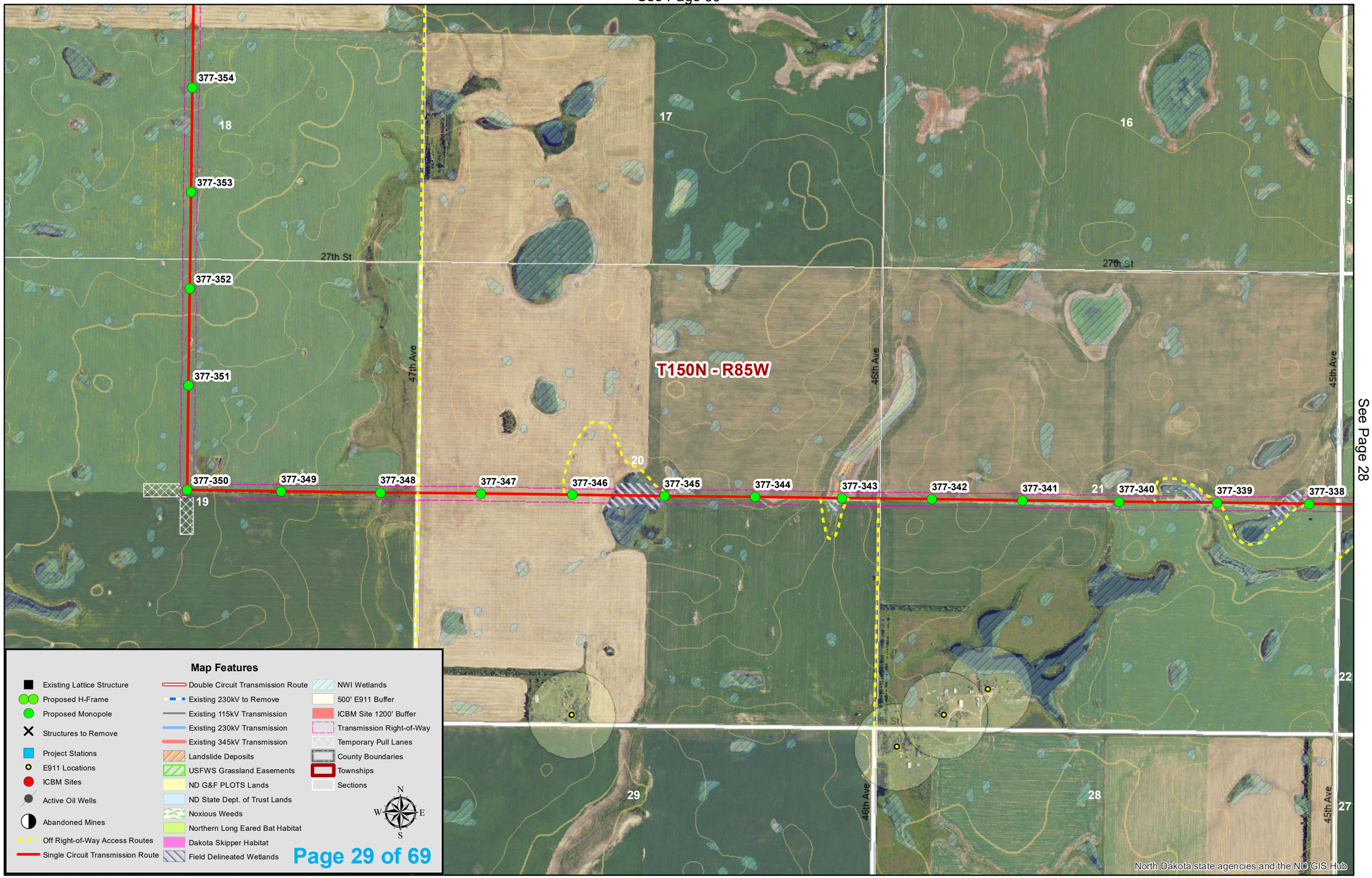
377-329
377-328
377-327
377-326
377-325
See Page 29
See Page 27
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub

See Page 30



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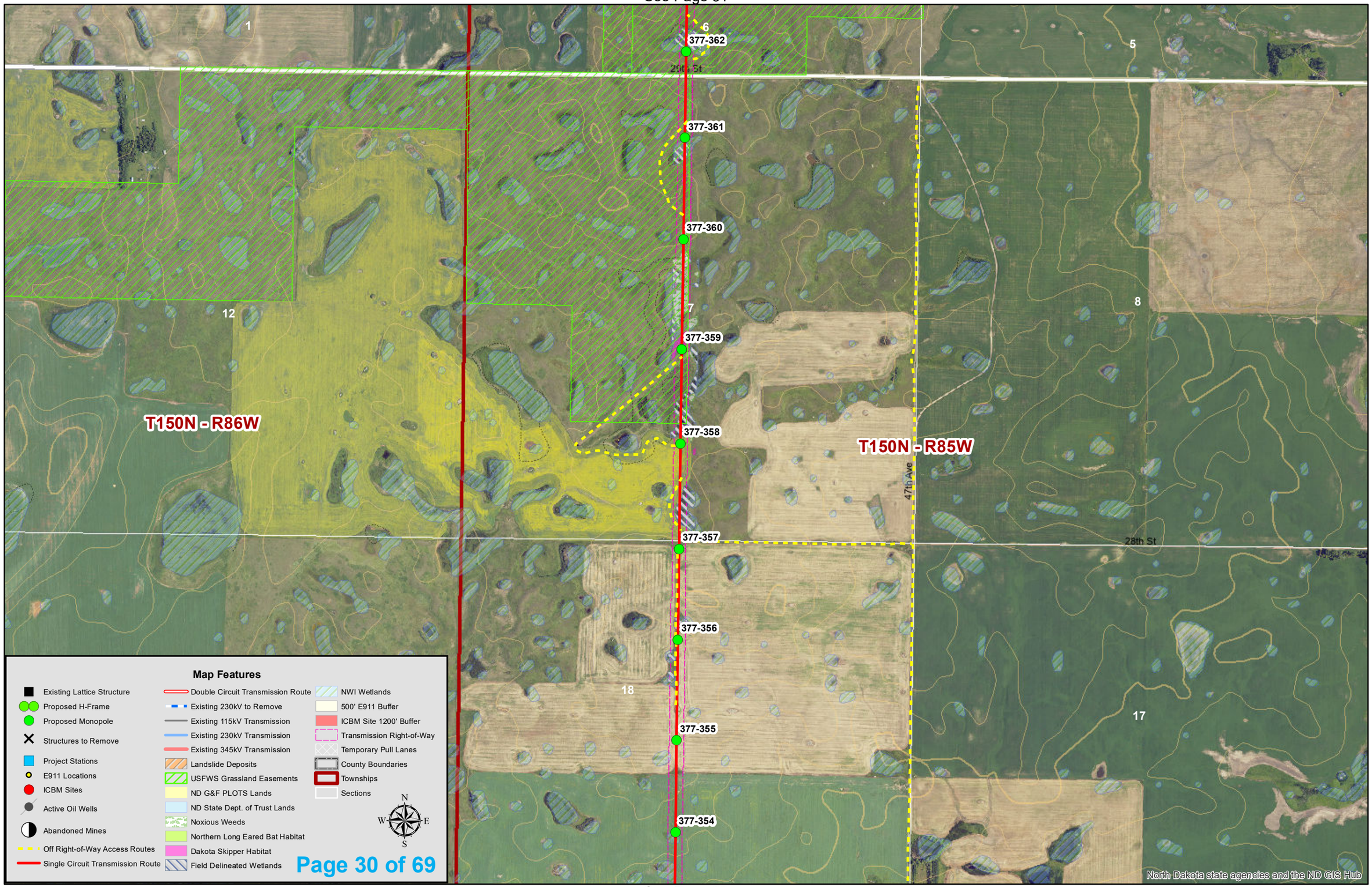
See Page 31



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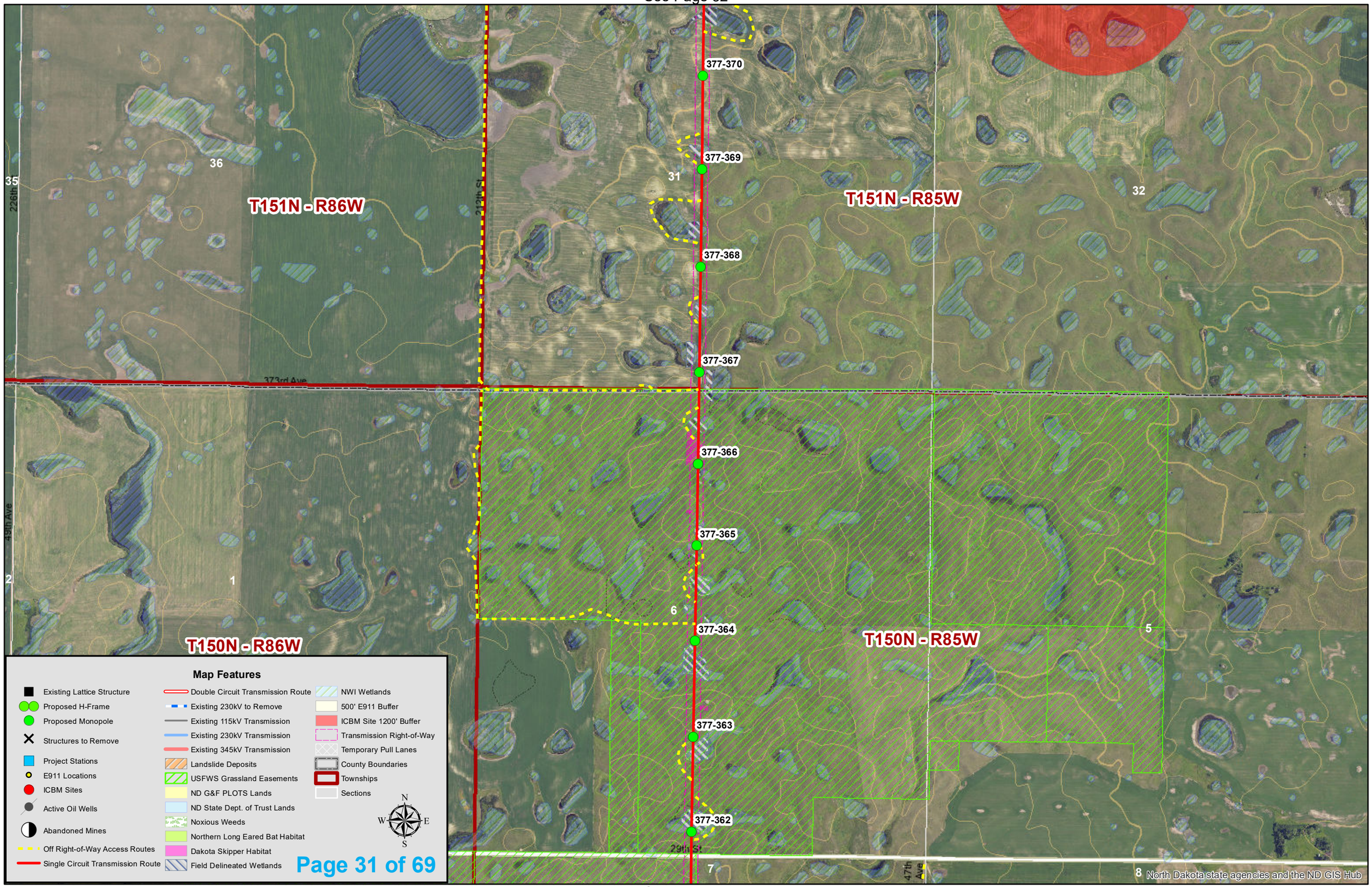
See Page 32



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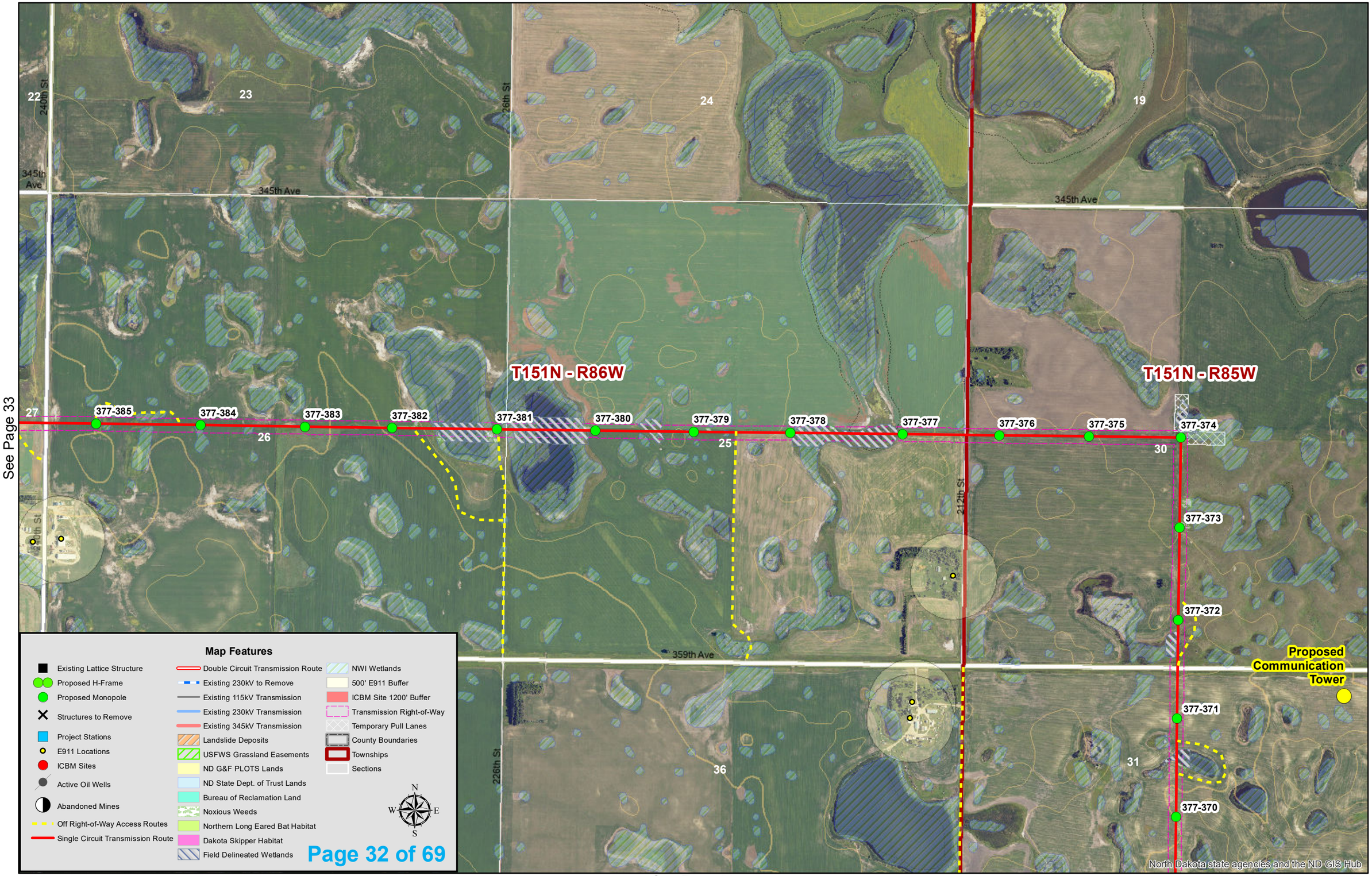
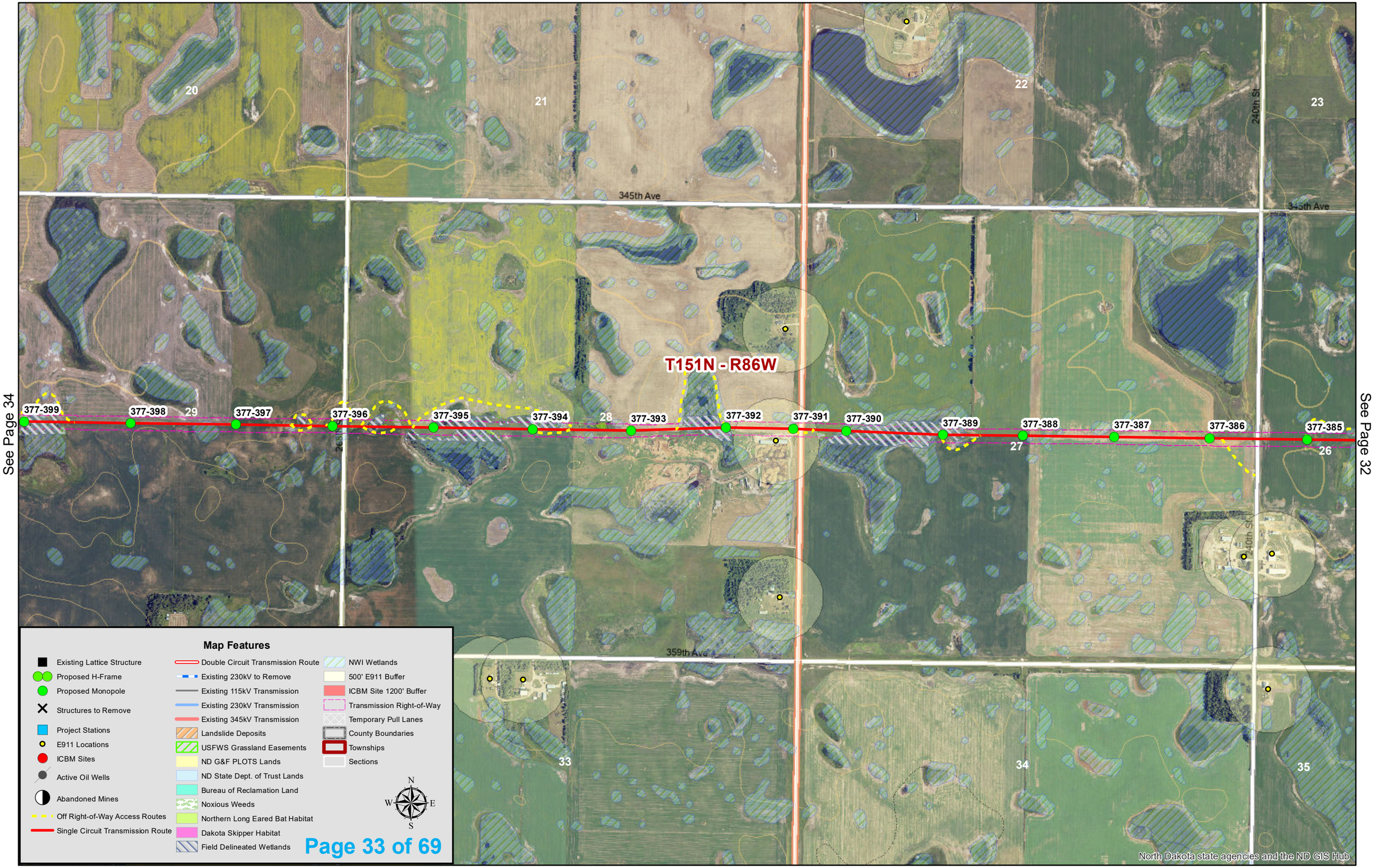


See Page 33

See Page 31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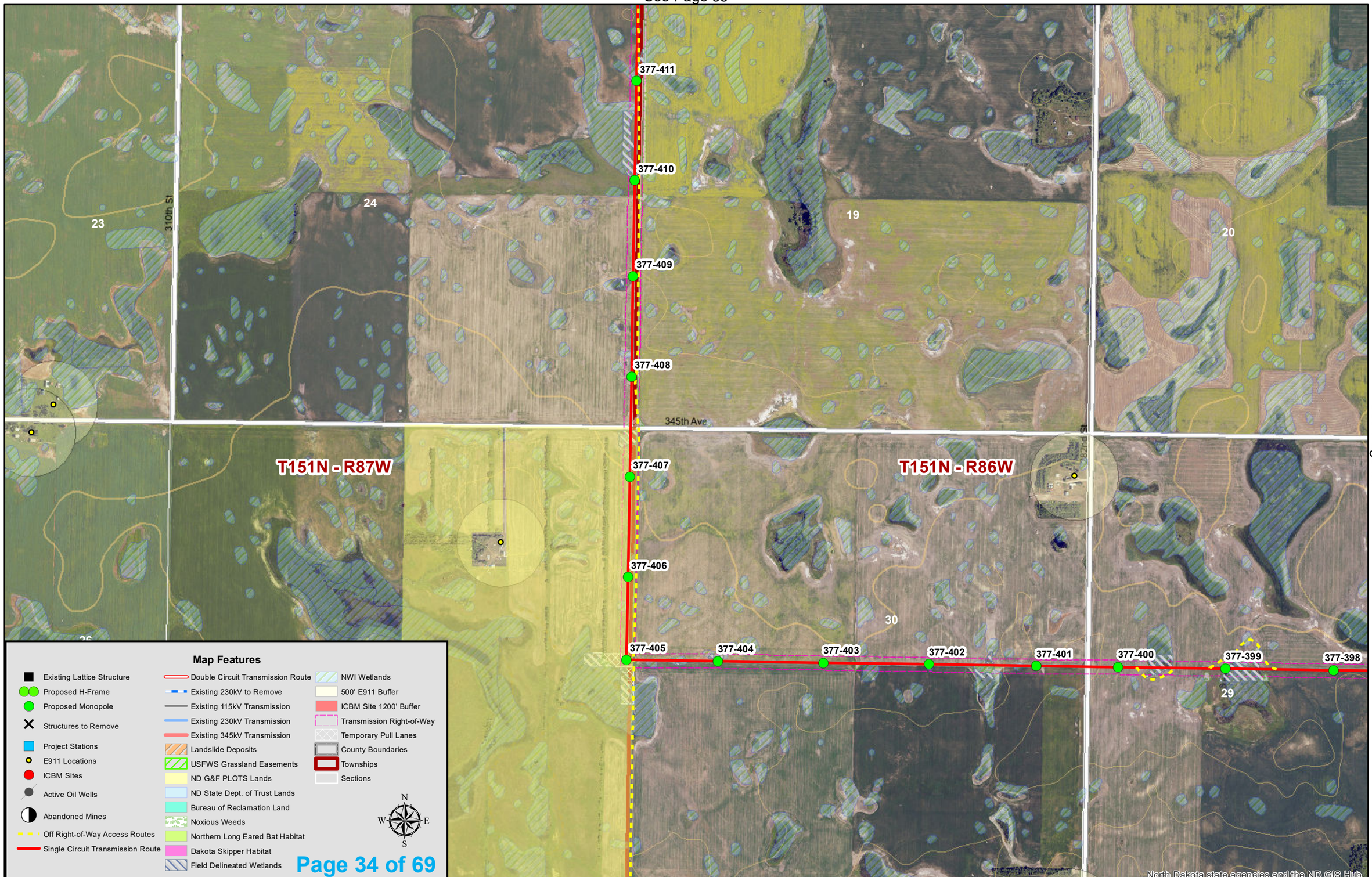
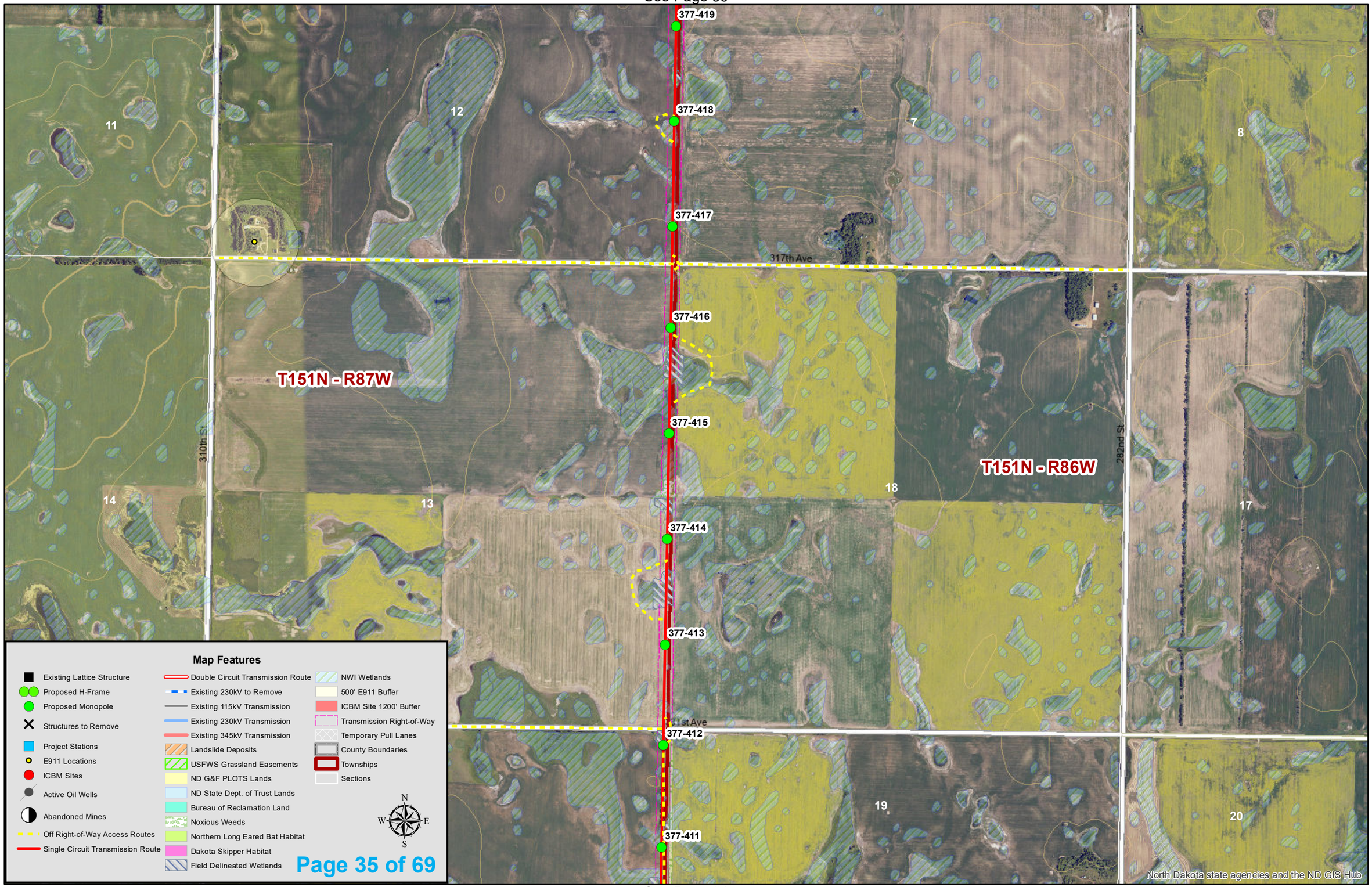
377-386
377-385
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Bureau of Reclamation Land
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub

See Page 35



See Page 33

See Page 36



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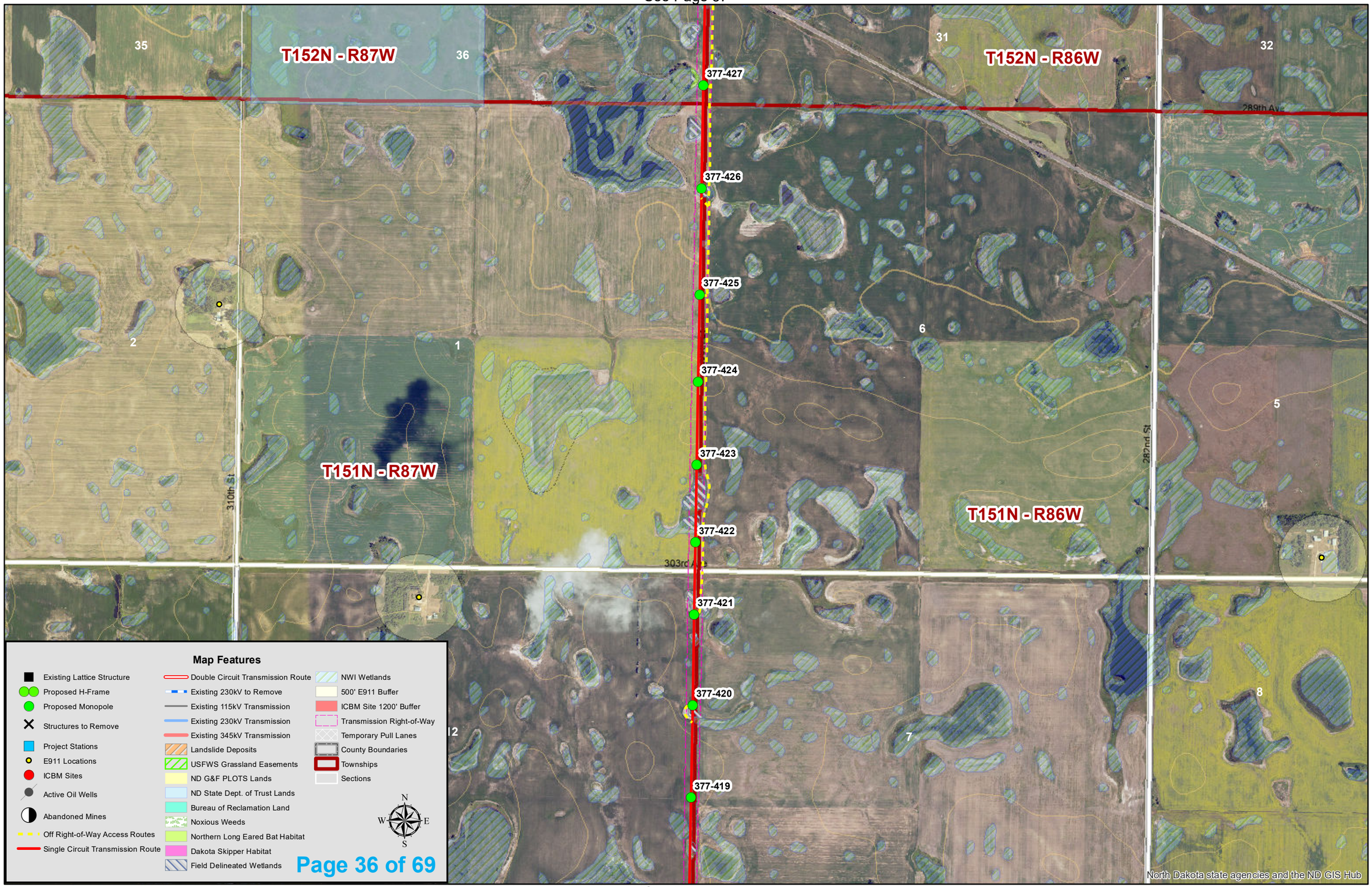
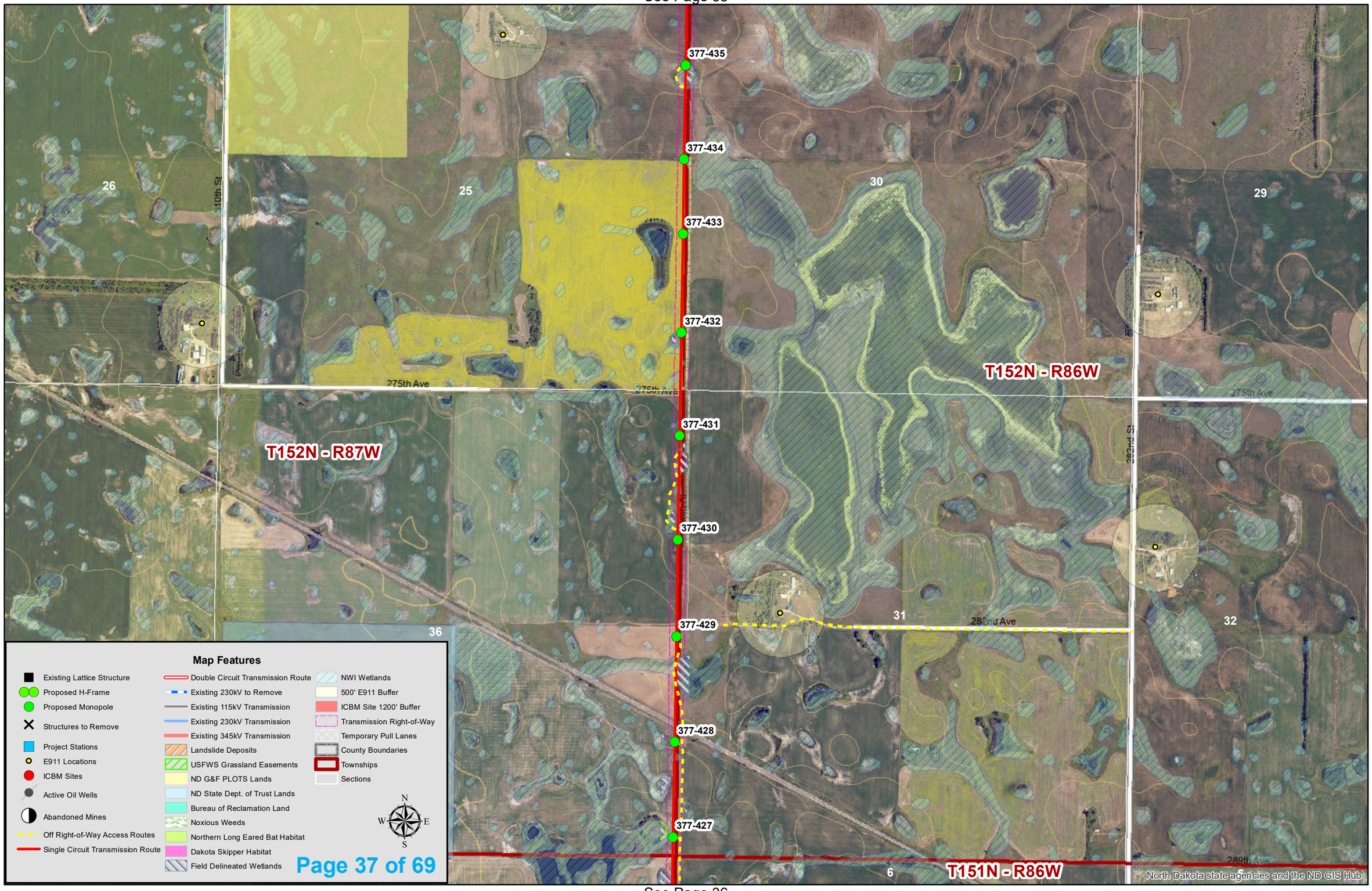
See Page 37



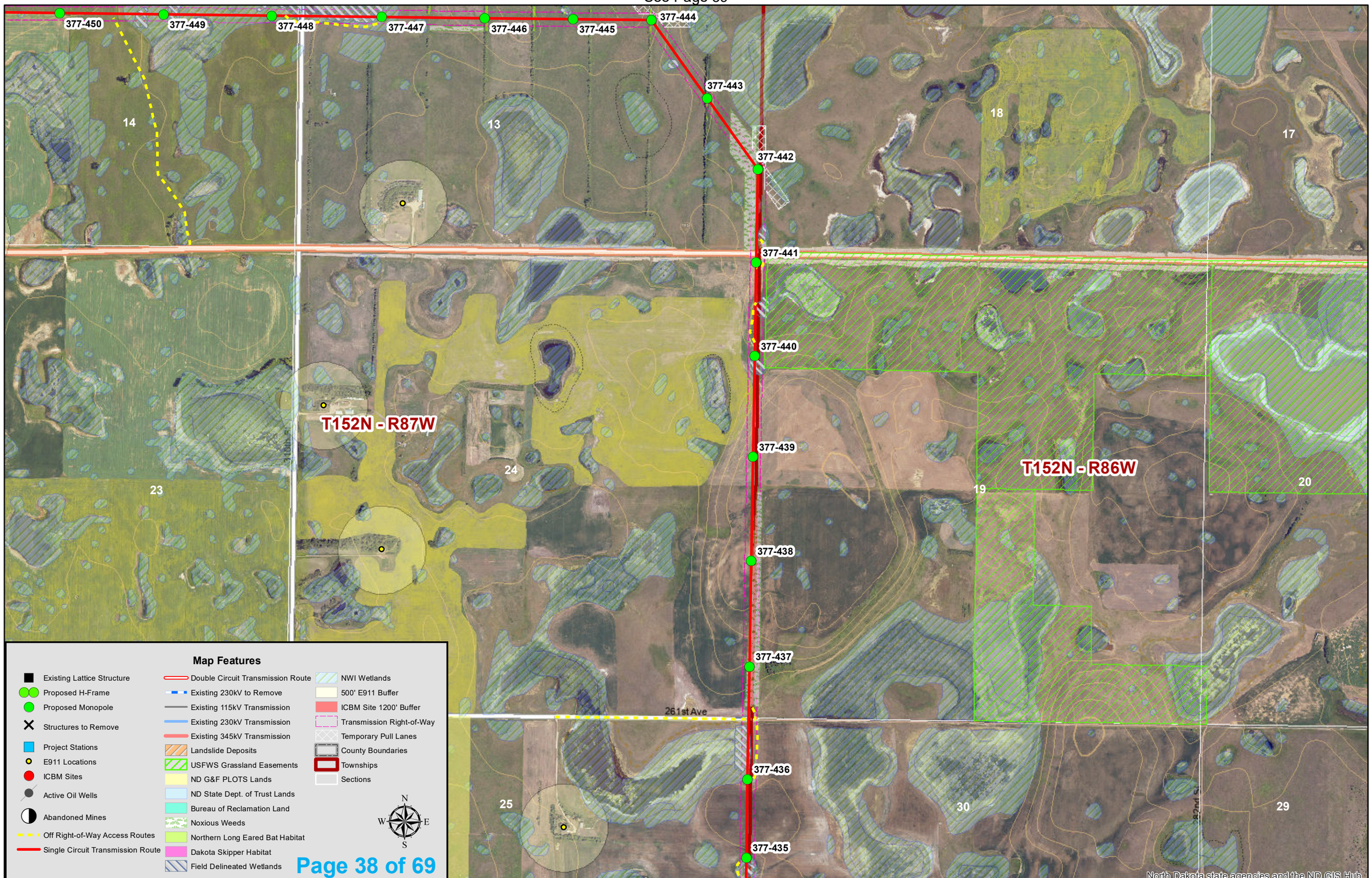
See Page 35

See Page 38



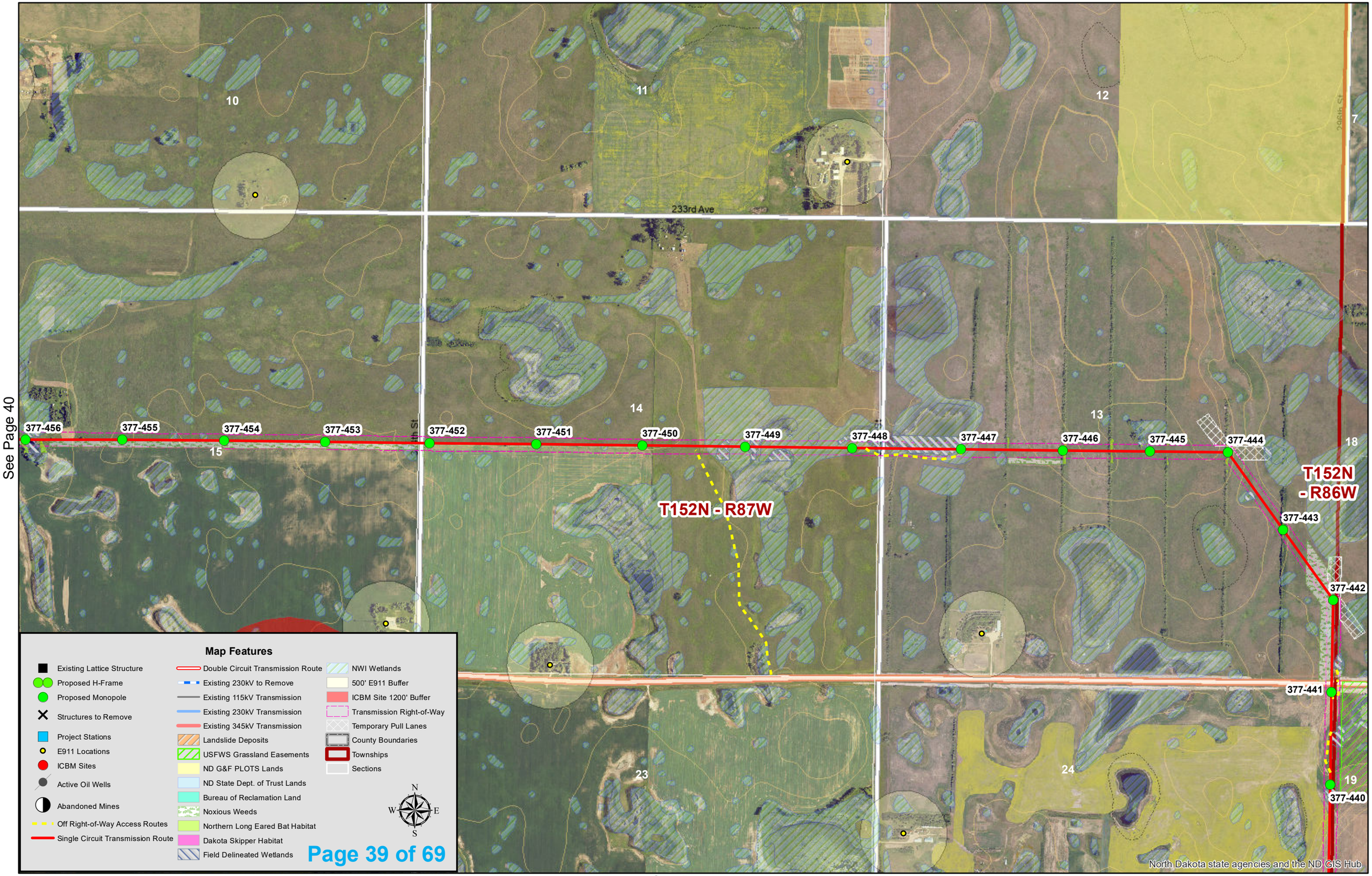
See Page 36

See Page 39



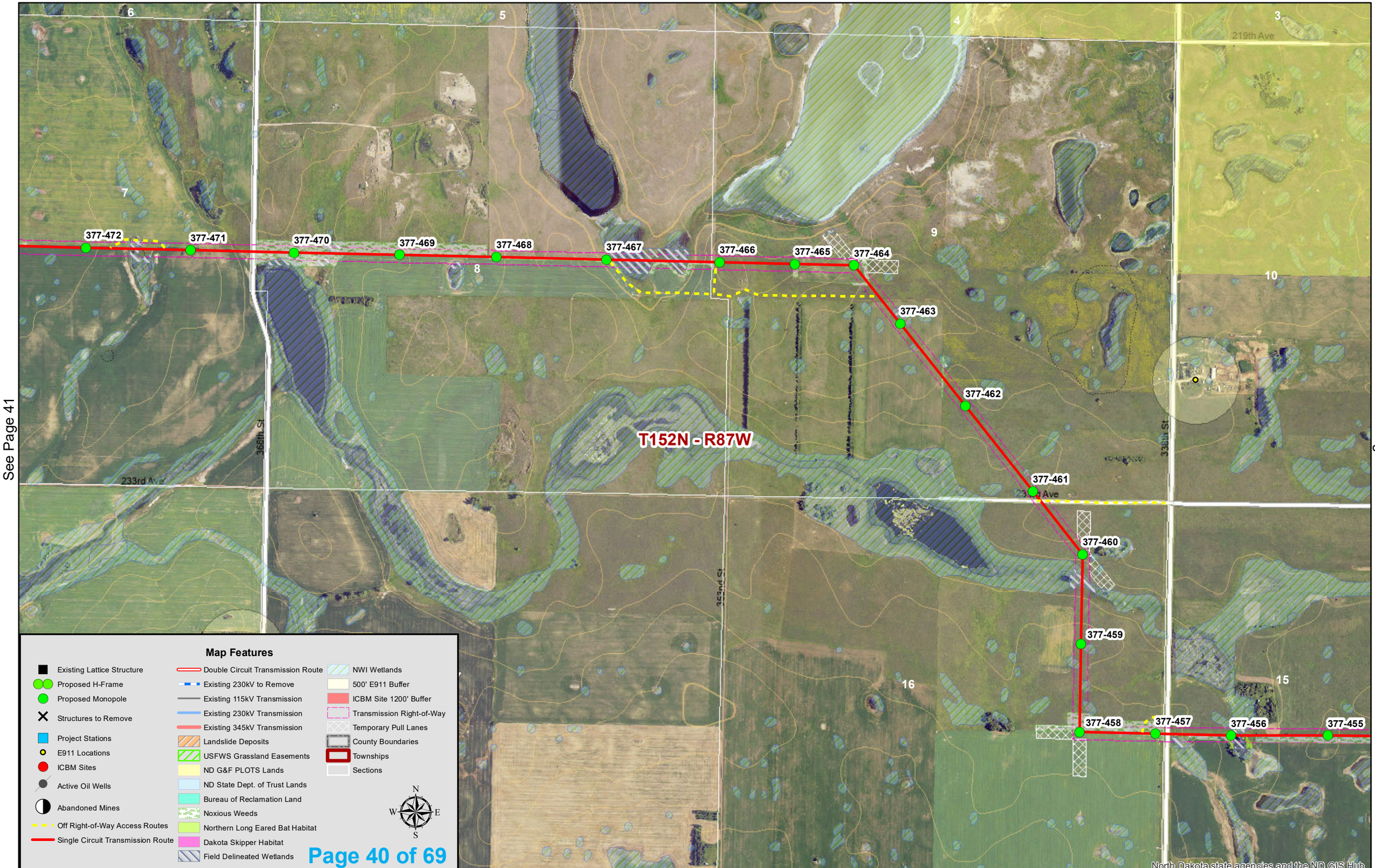
See Page 37

See Page 40



See Page 38

See Page 41



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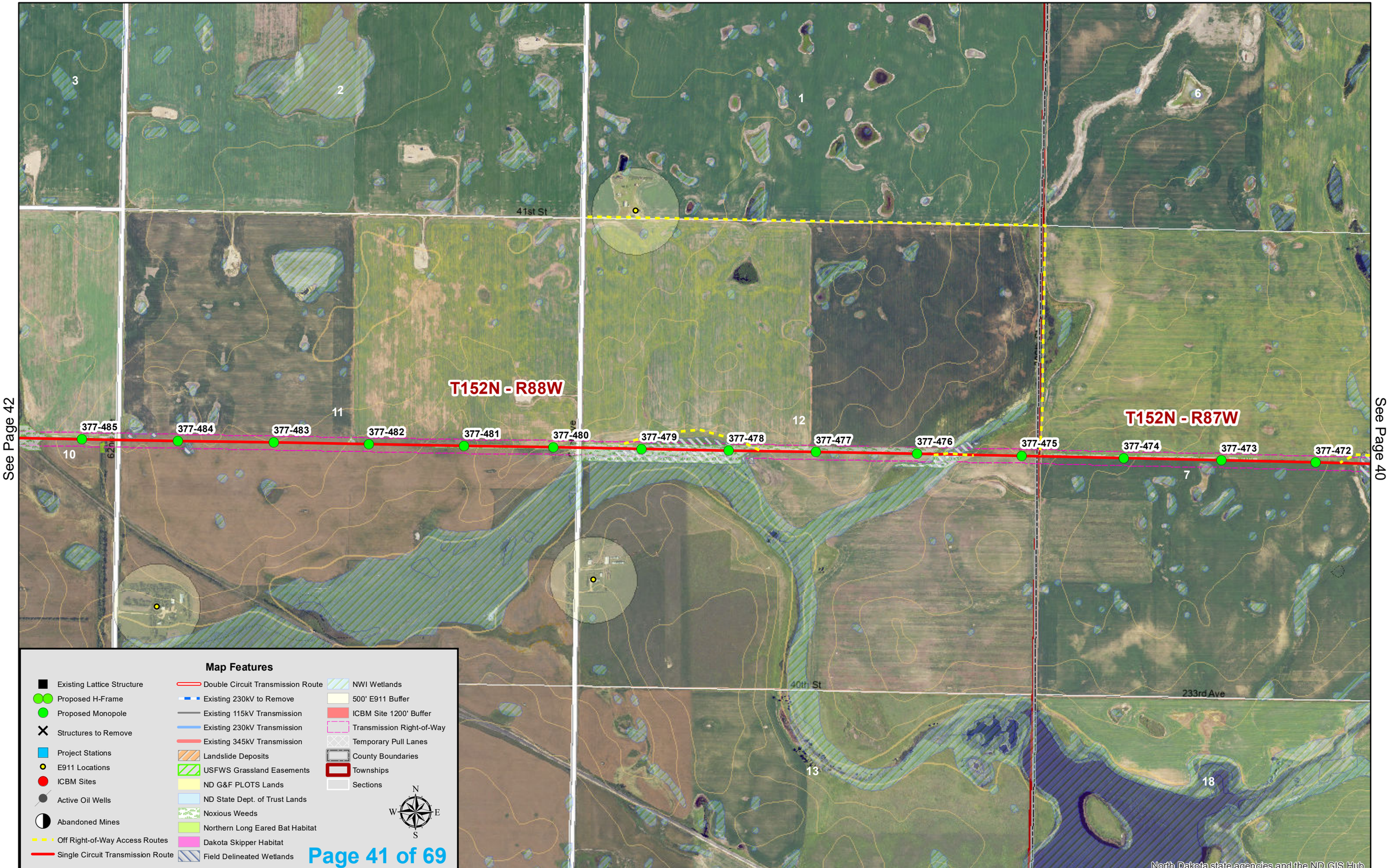
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T152N - R87W
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377-472
41st St
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233rd Ave
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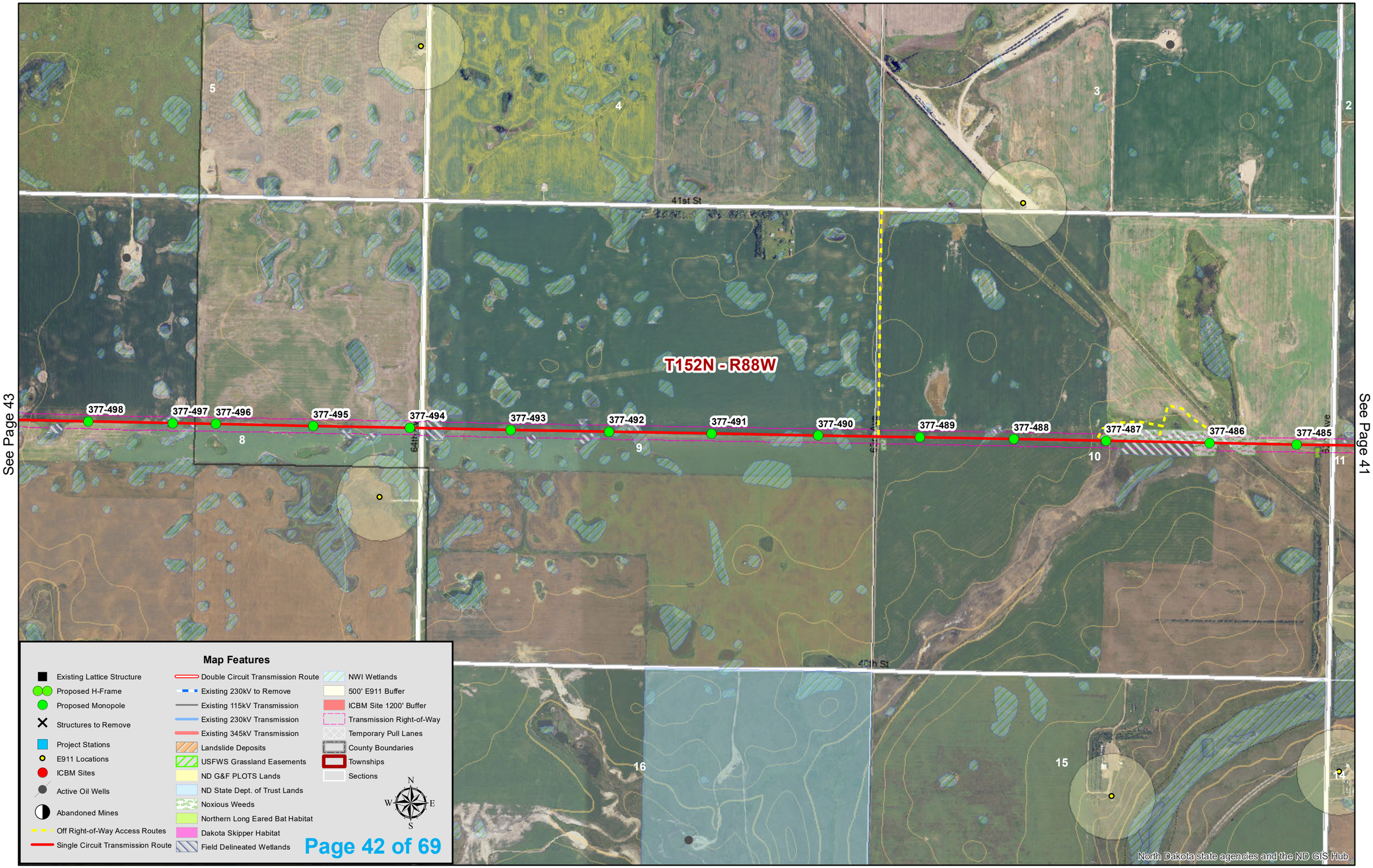
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub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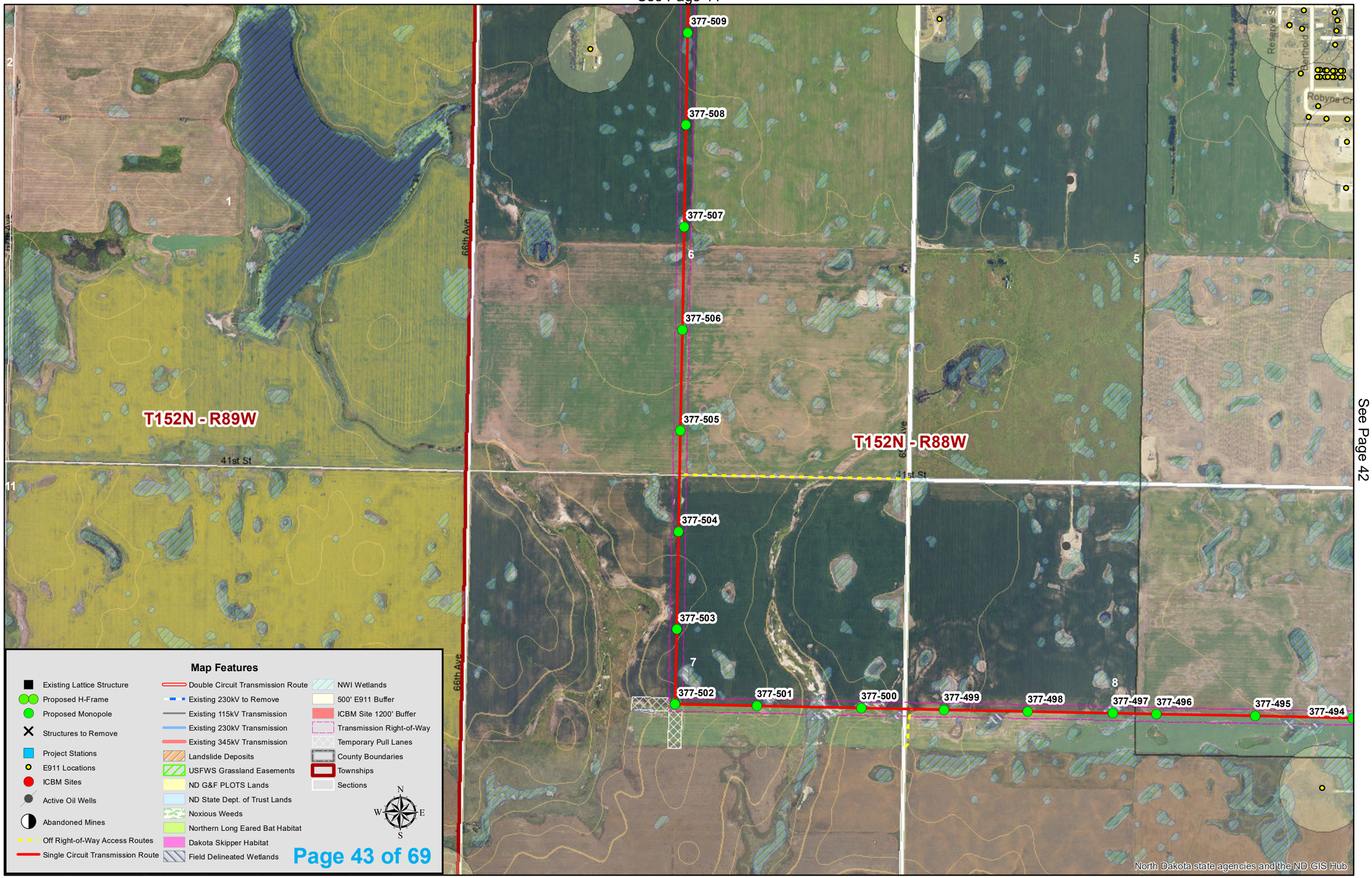
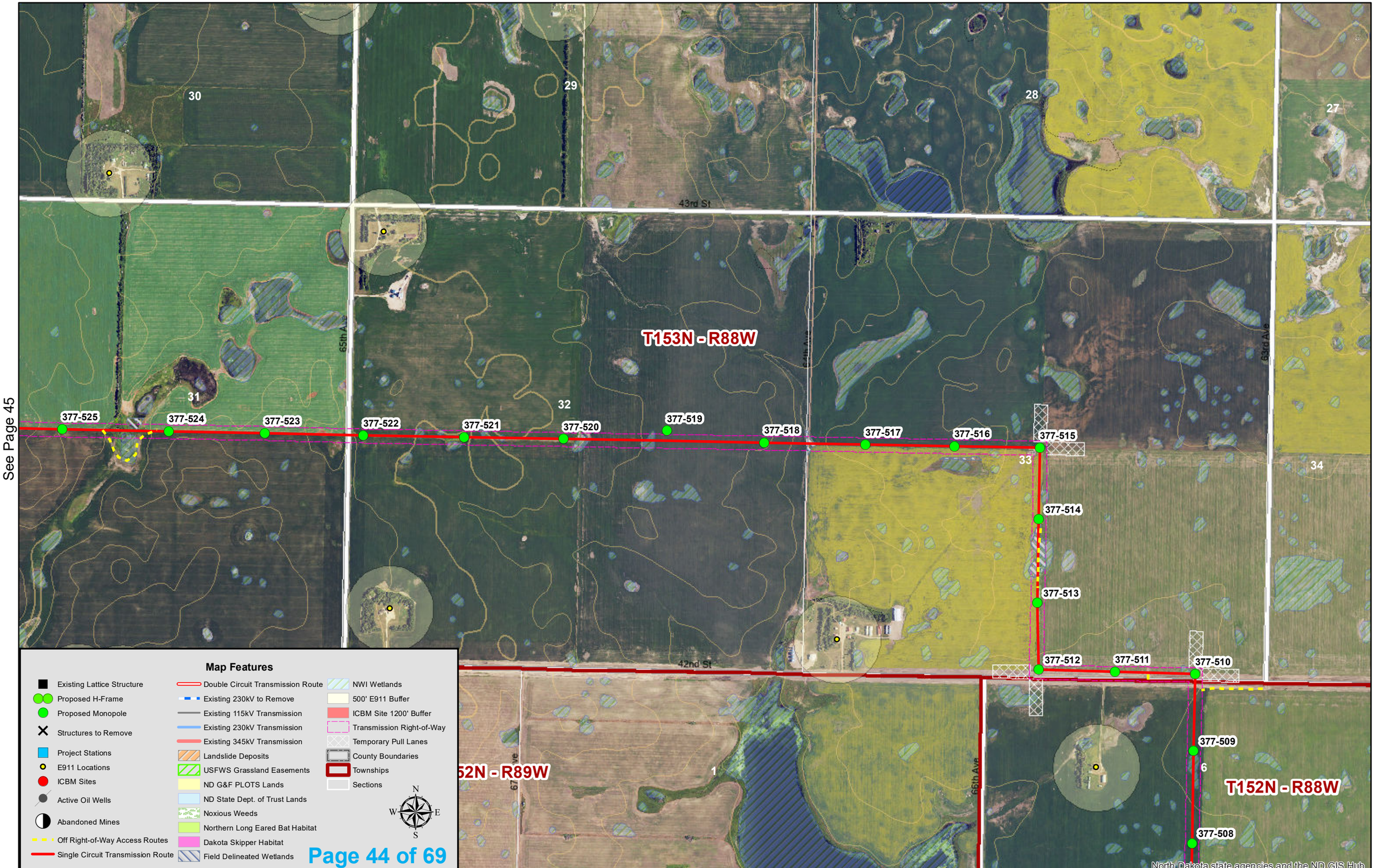
North Dakota state agencies and the ND GIS Hub
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S

See Page 44



See Page 42

See Page 45



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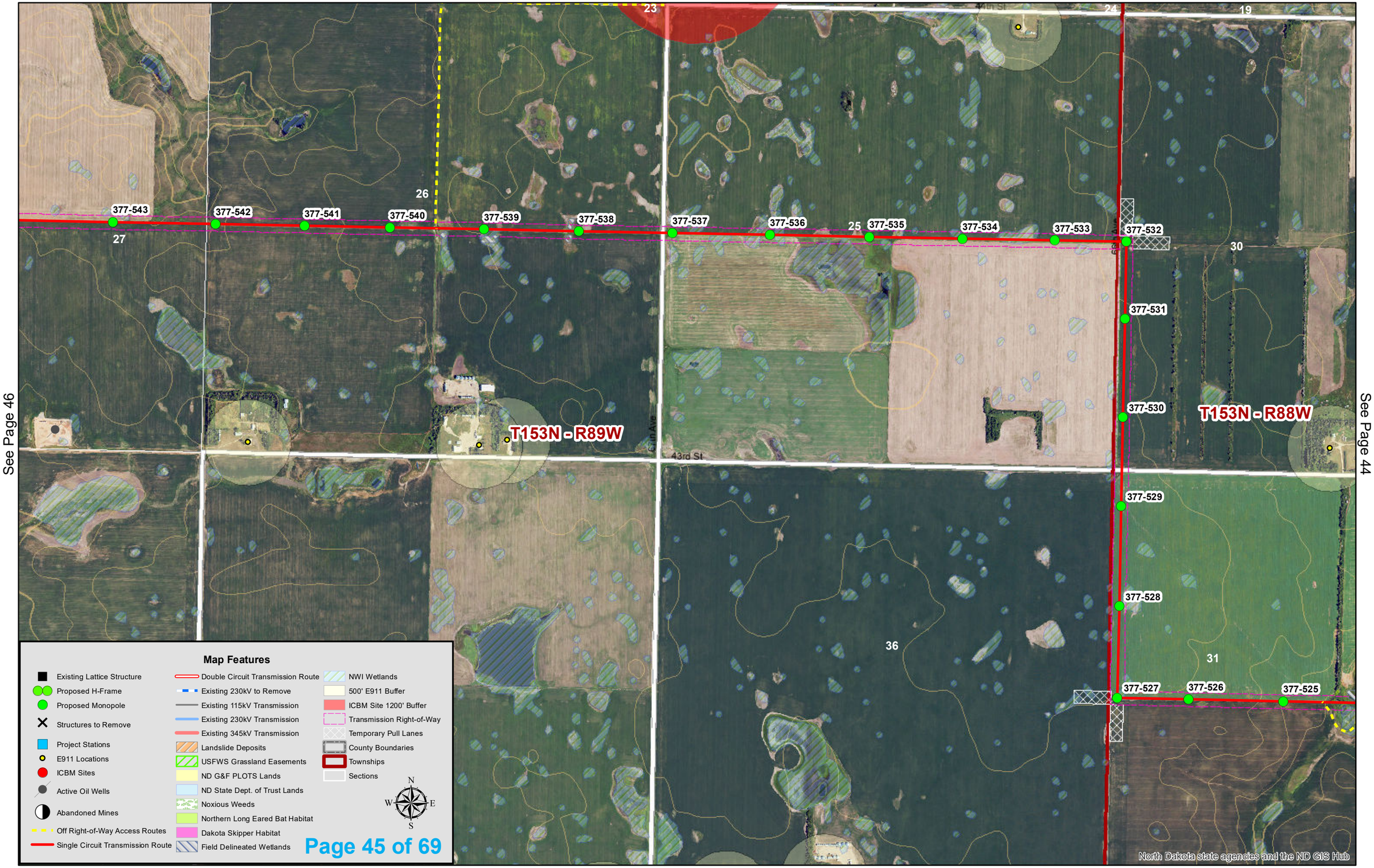
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T153N - R88W
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377-536
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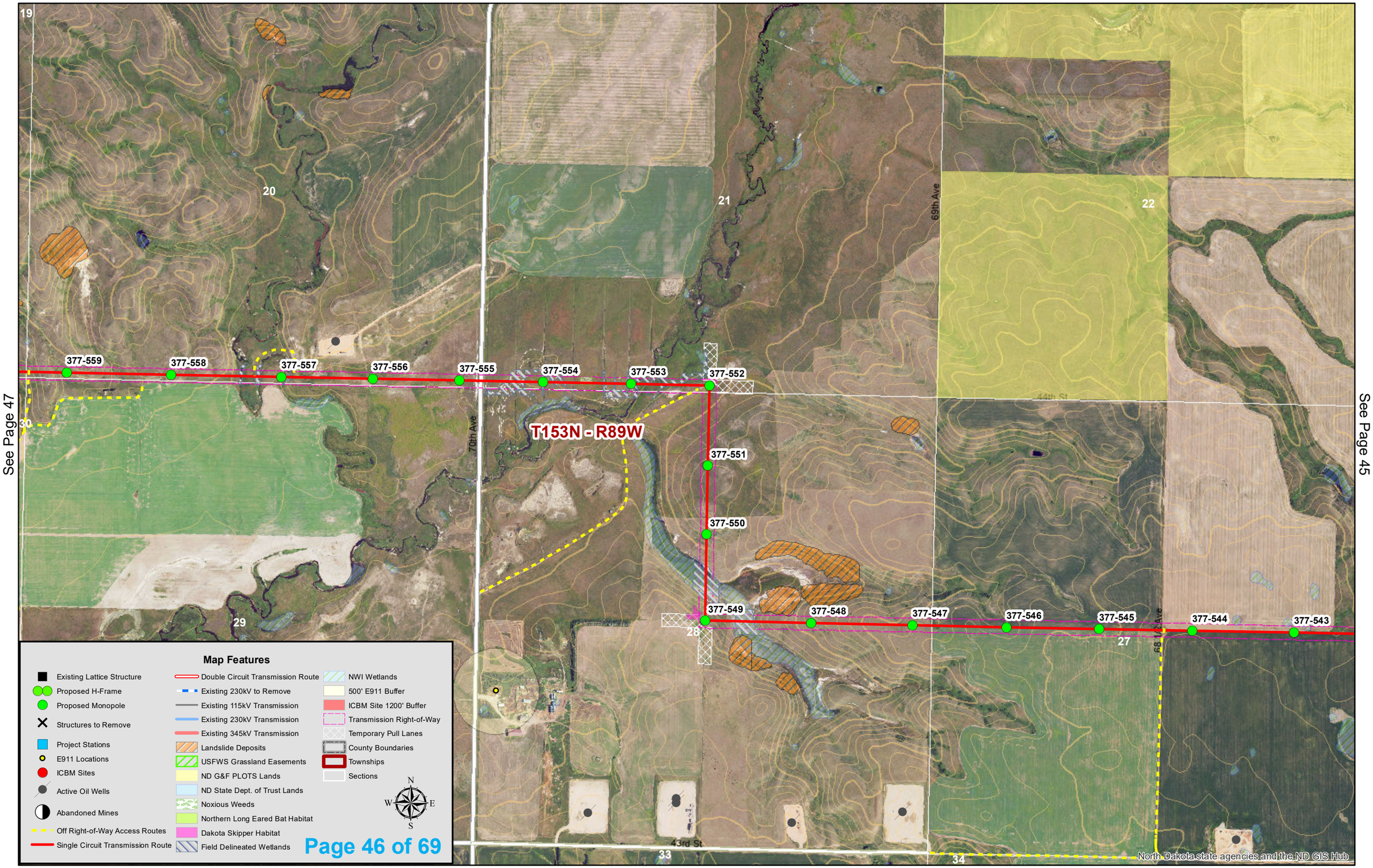
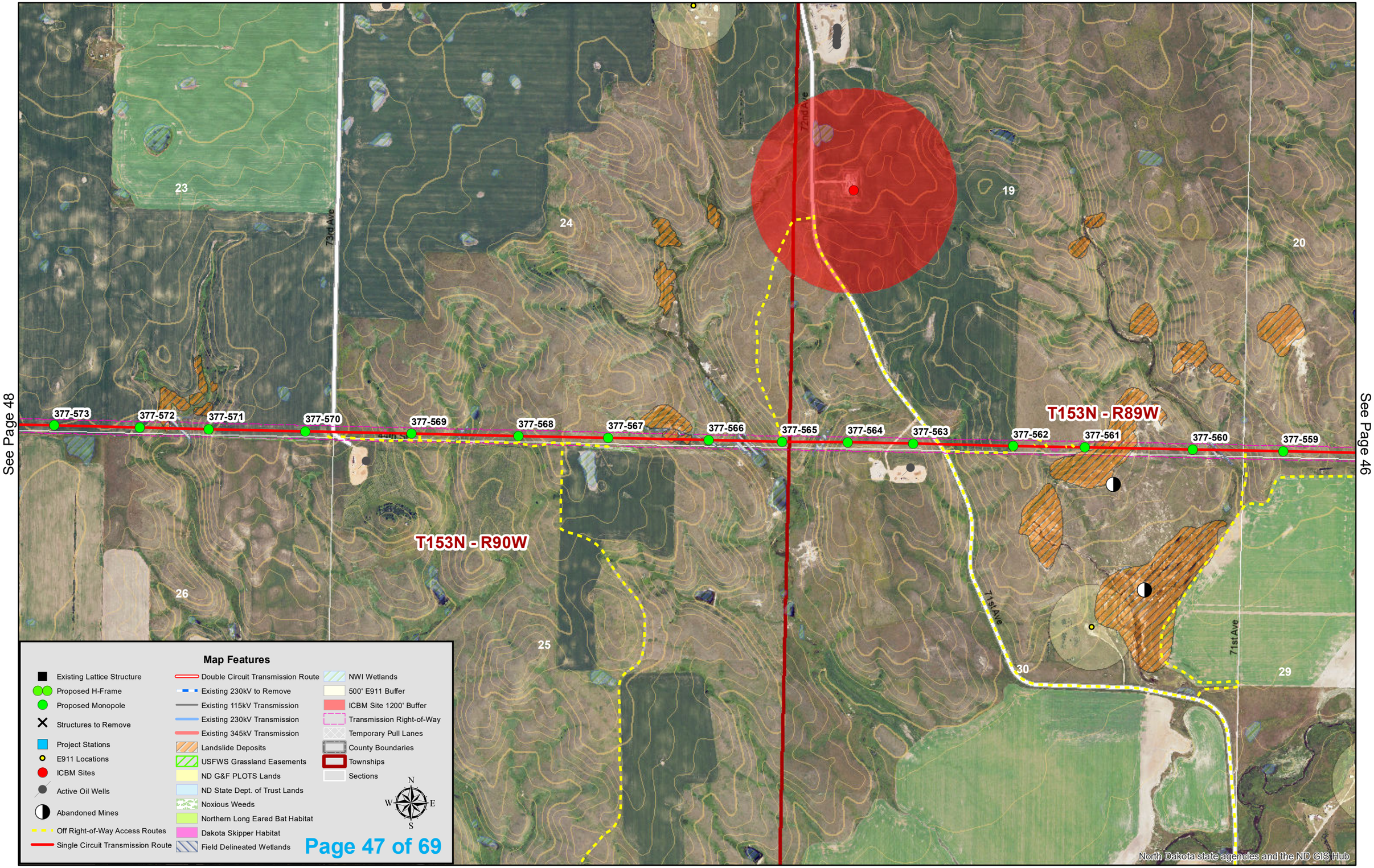
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub



See Page 47

See Page 45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T153N - R90W
T153N - R89W
23
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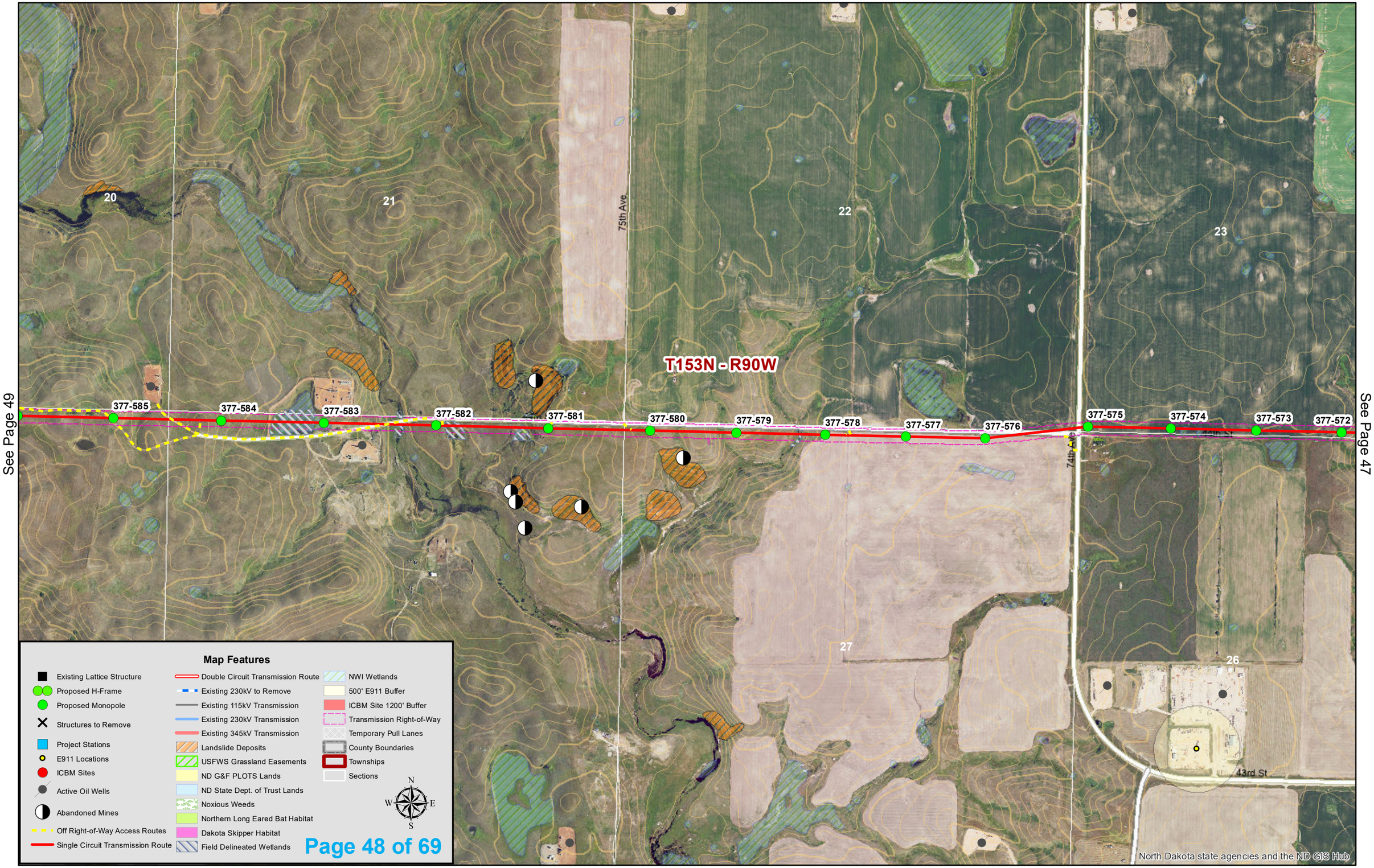
73rd Ave
72nd Ave
71st Ave
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub


See Page 49
See Page 47
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43rd St
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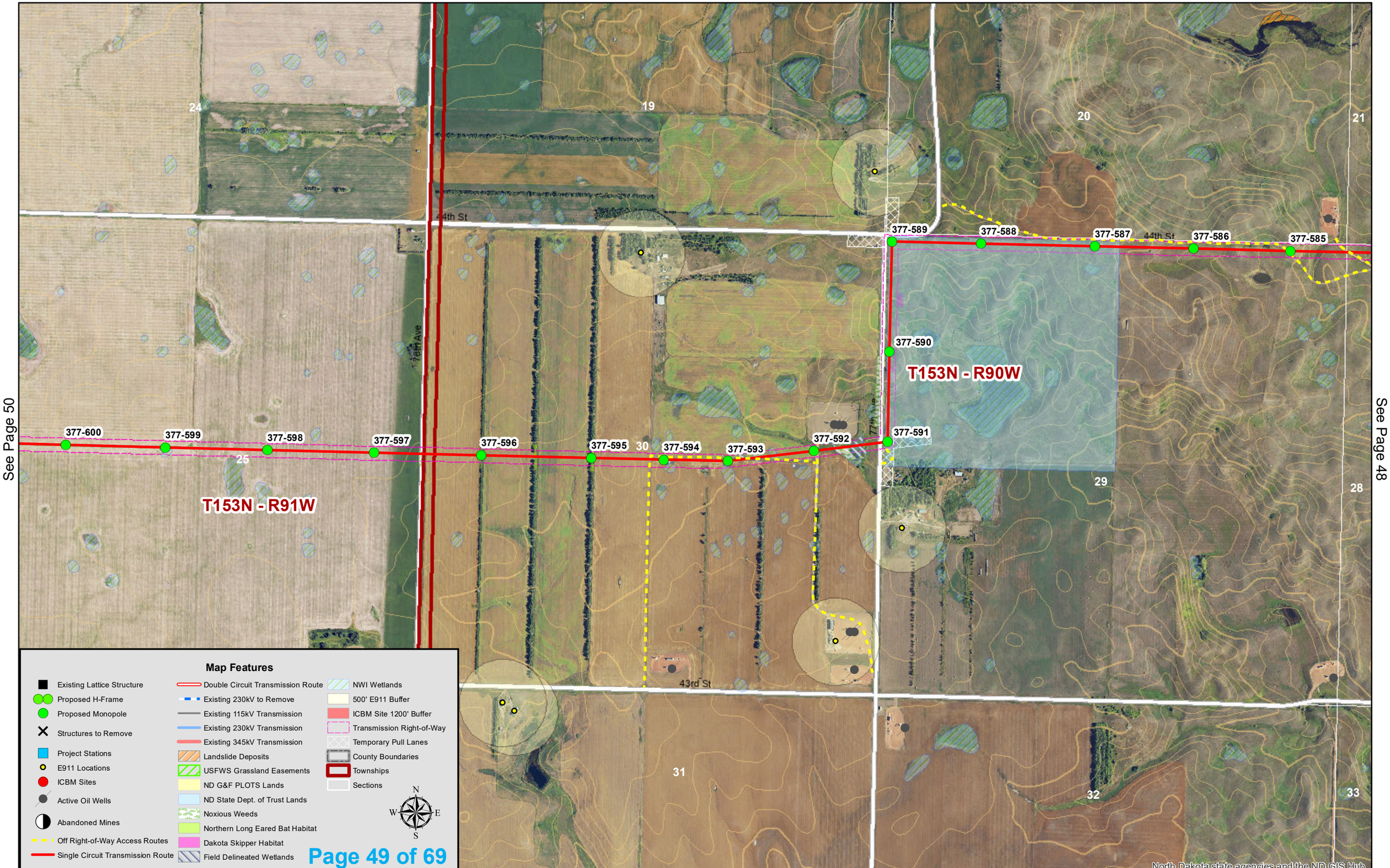
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub


See Page 50
See Page 48
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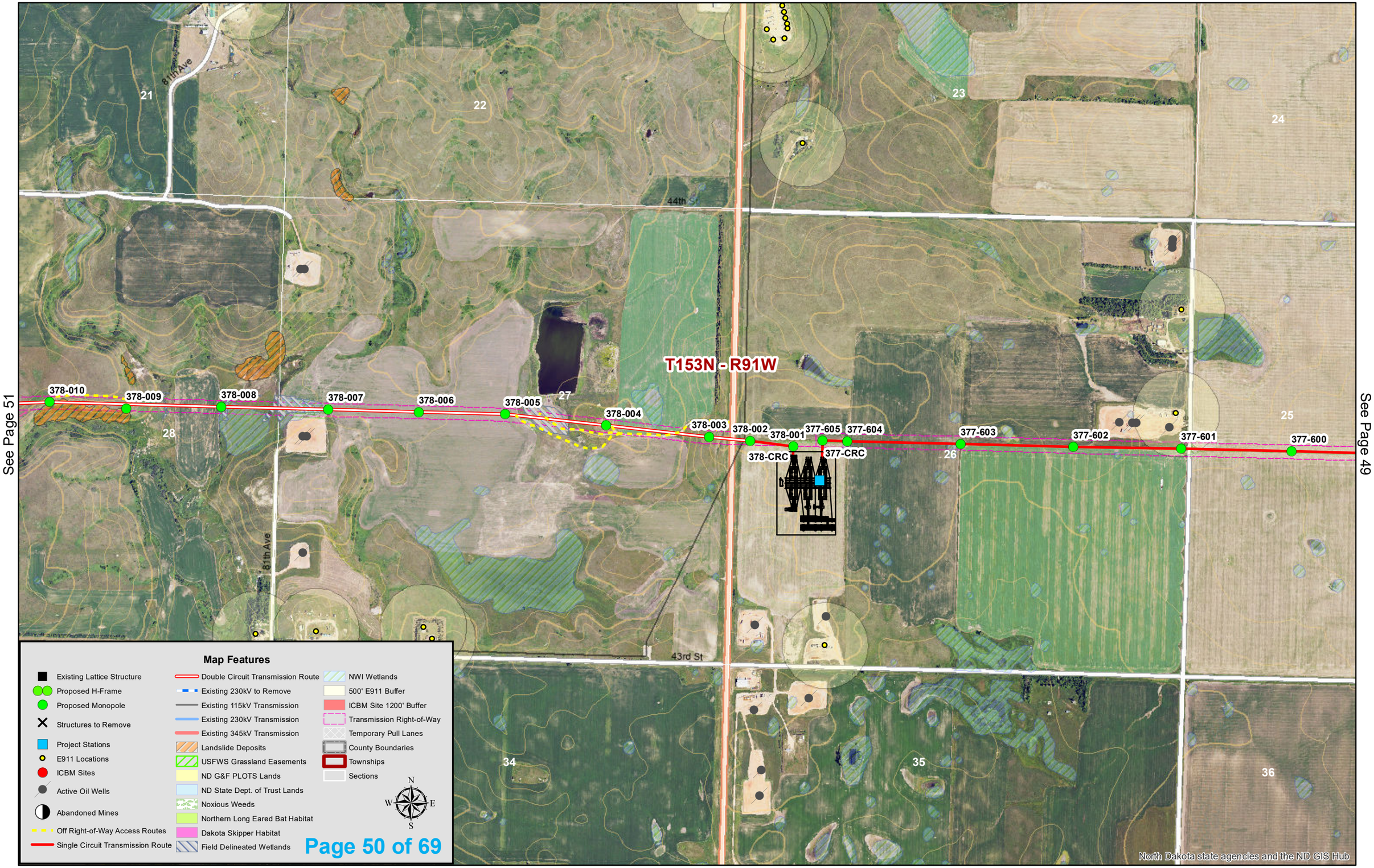
377-585
T153N - R91W
T153N - R90W
North Dakota state agencies and the ND GIS Hub
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S


See Page 51
See Page 49
T153N - R91W
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44th St
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377-603
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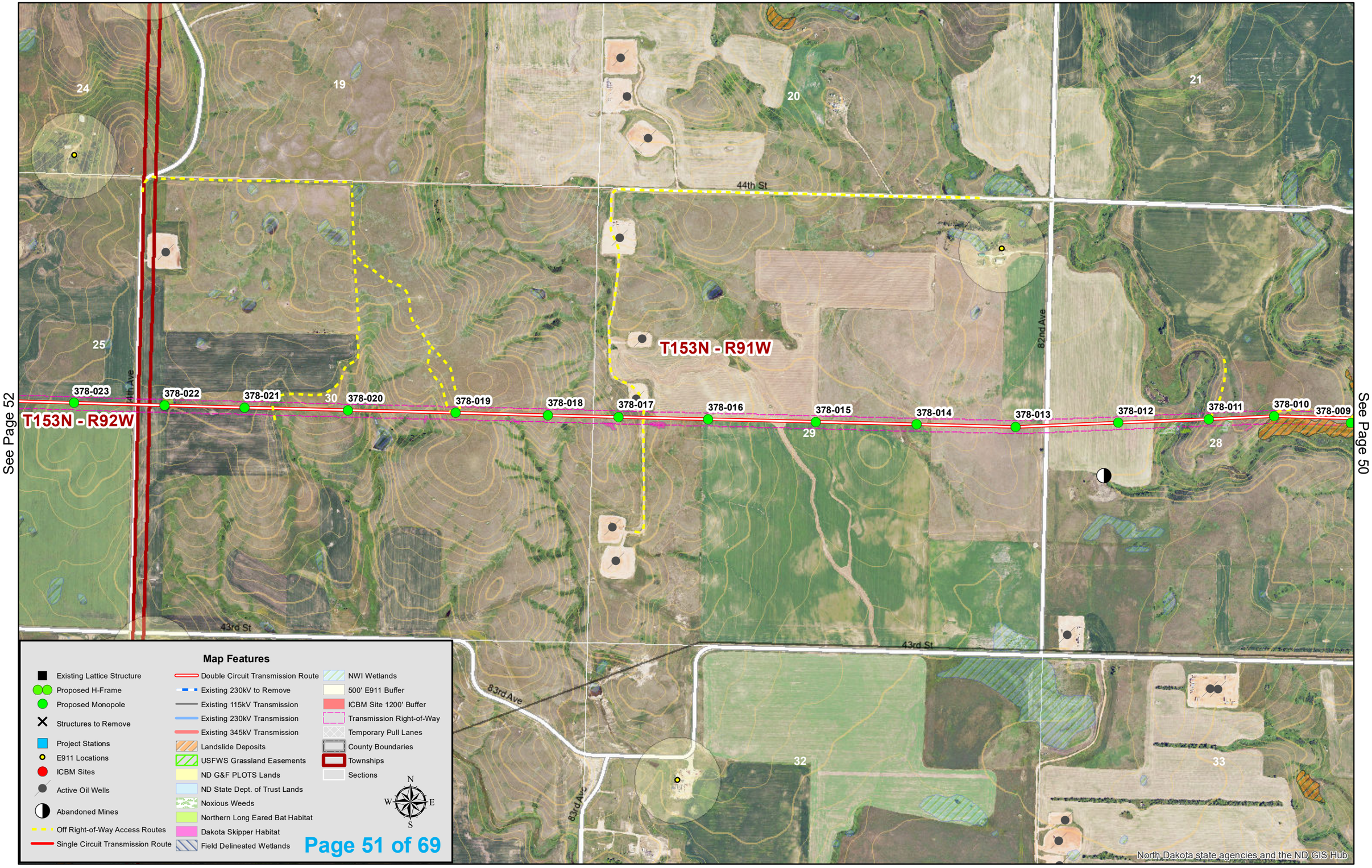
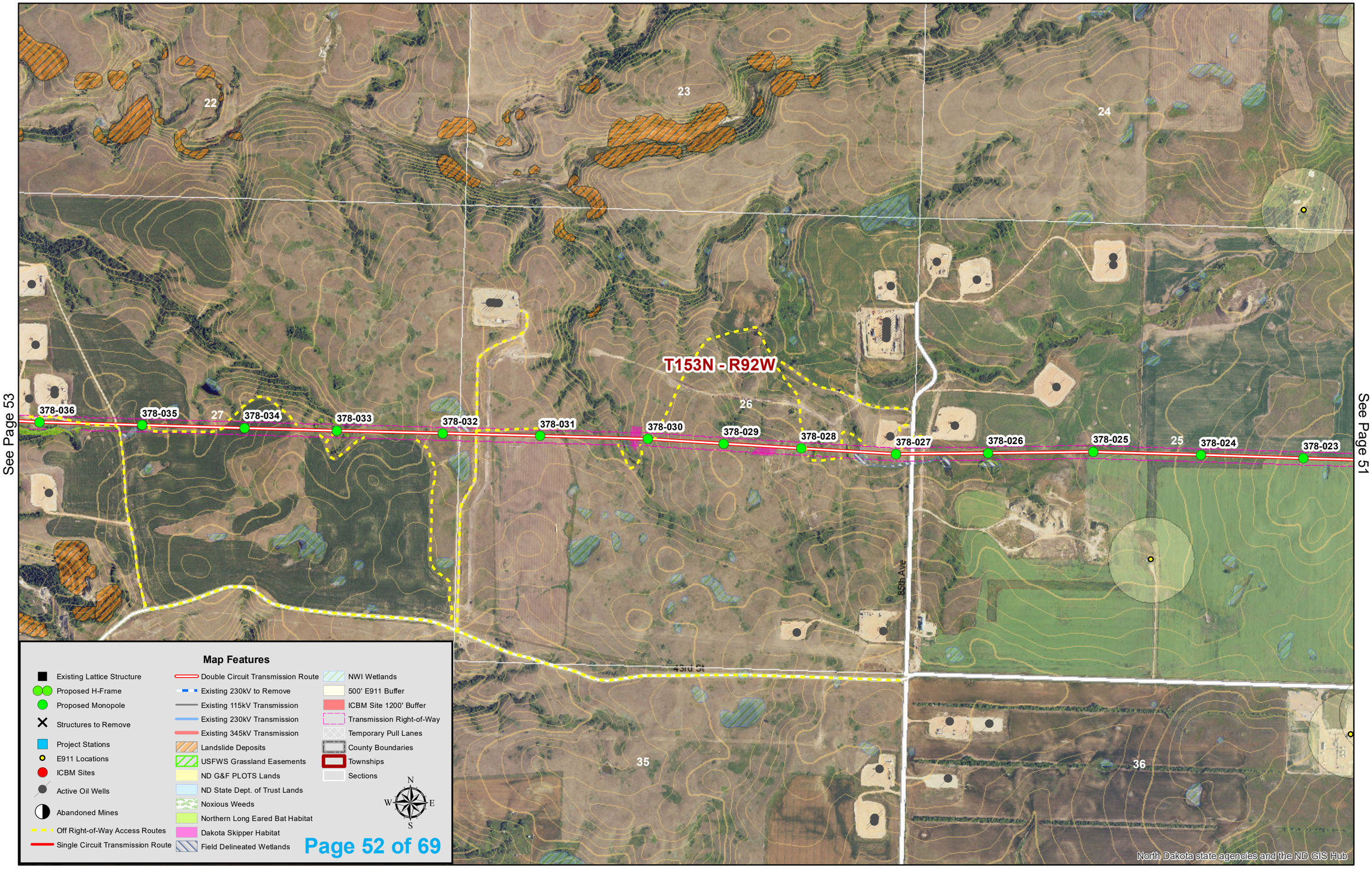
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub



See Page 52

See Page 50


See Page 53
See Page 51
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36
T153N - R92W
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378-032
378-031
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378-027
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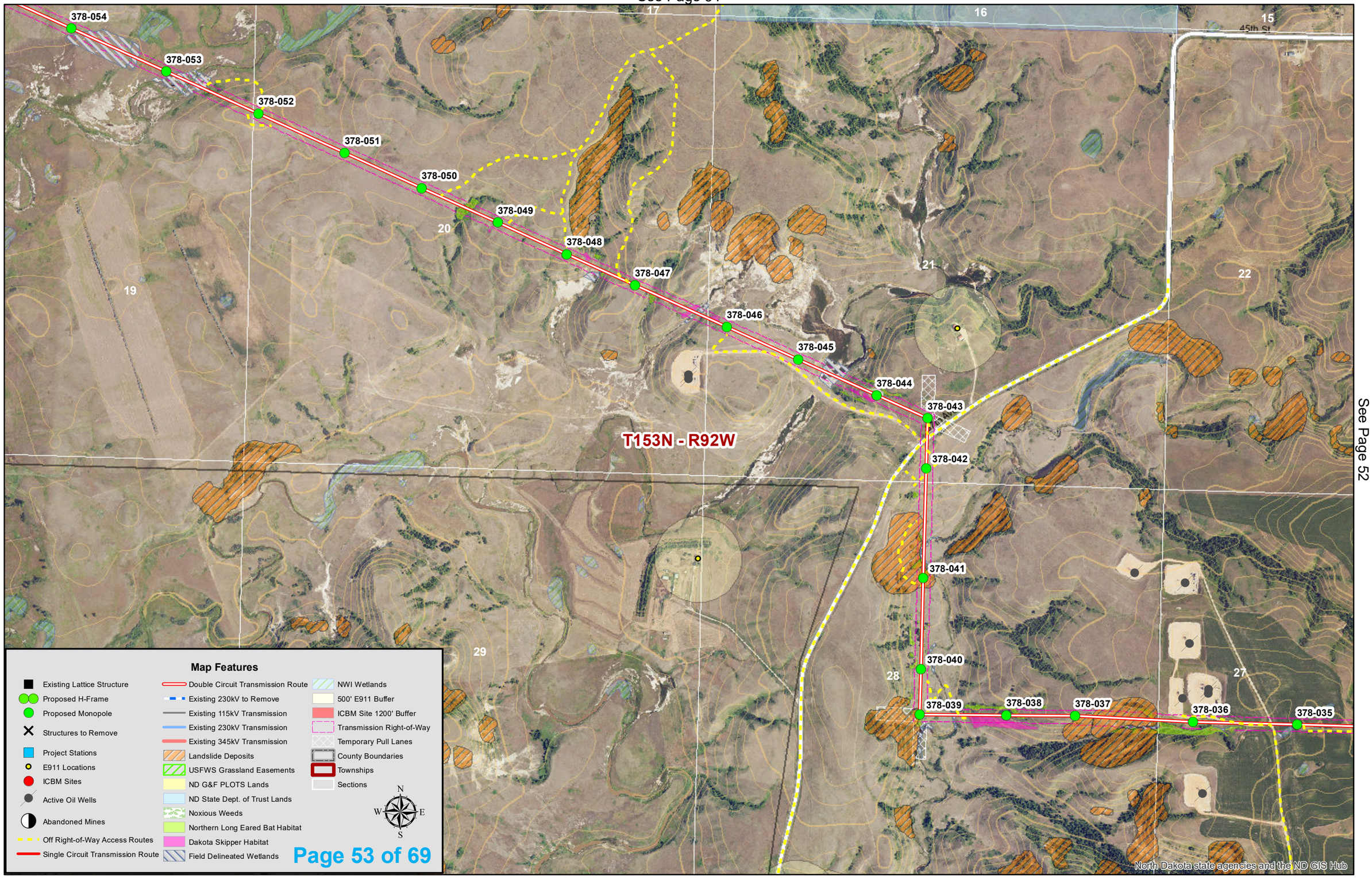
85th Ave
43rd St
North Dakota state agencies and the ND GIS Hub
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S

See Page 54



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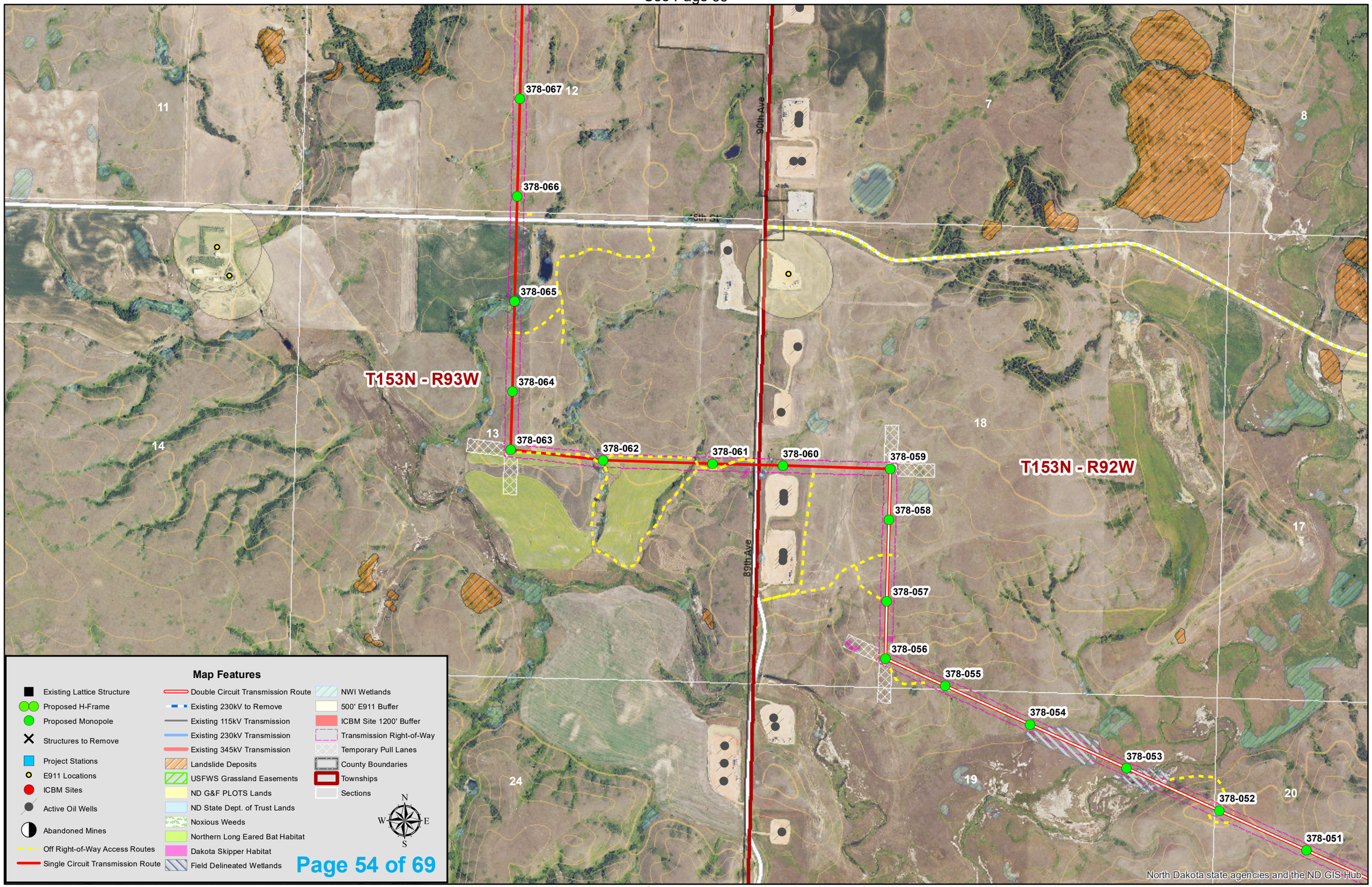

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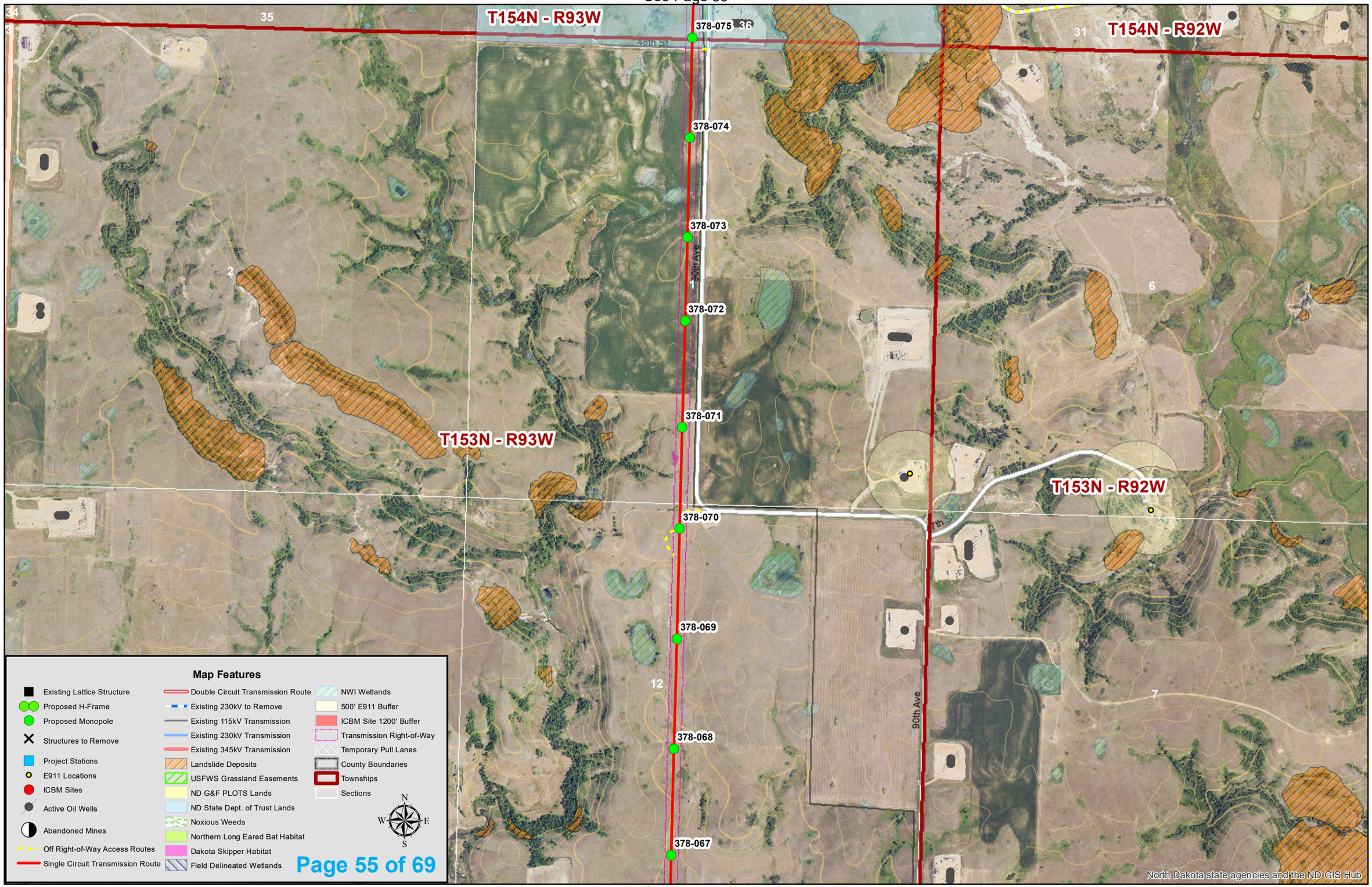

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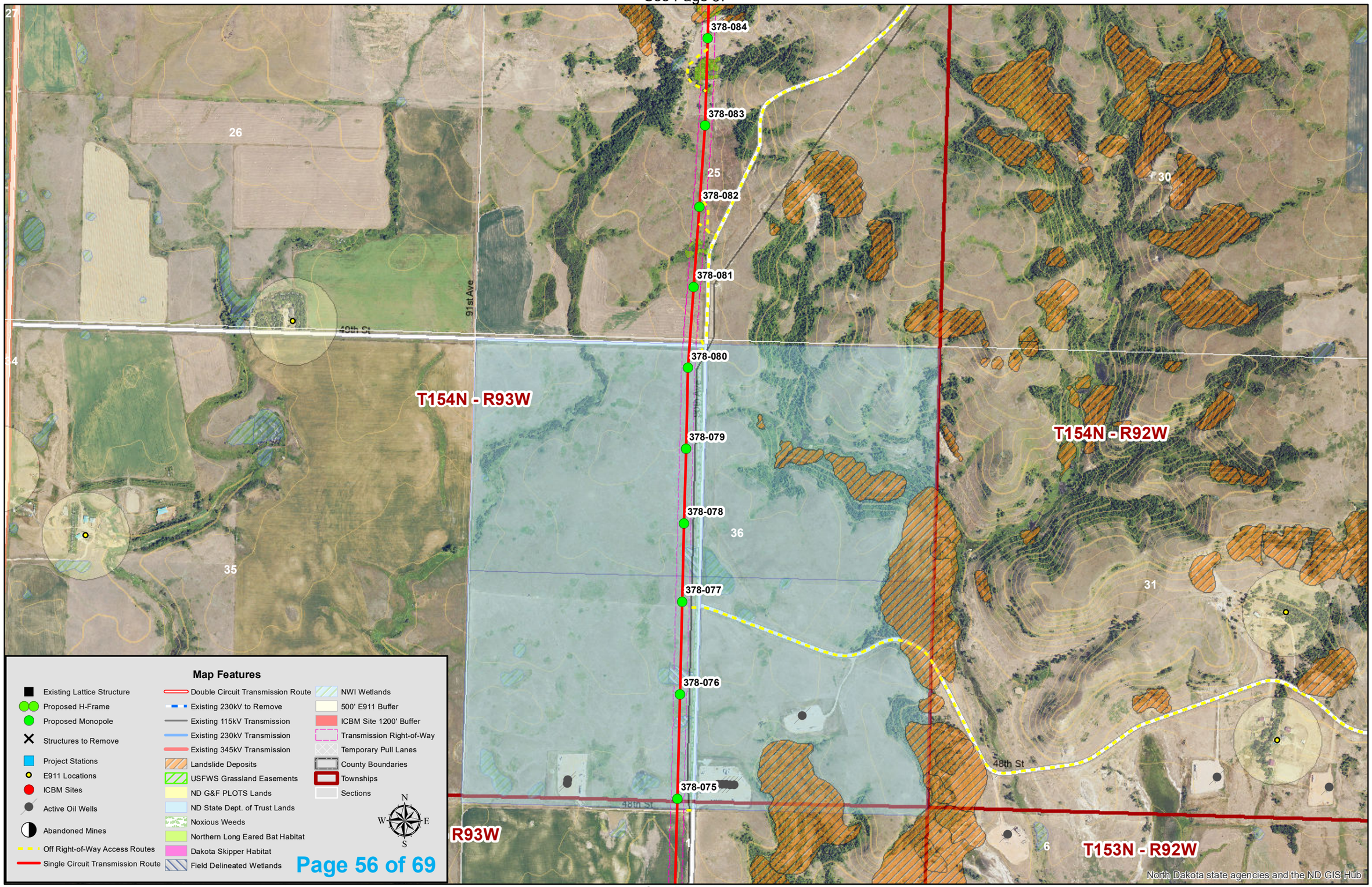

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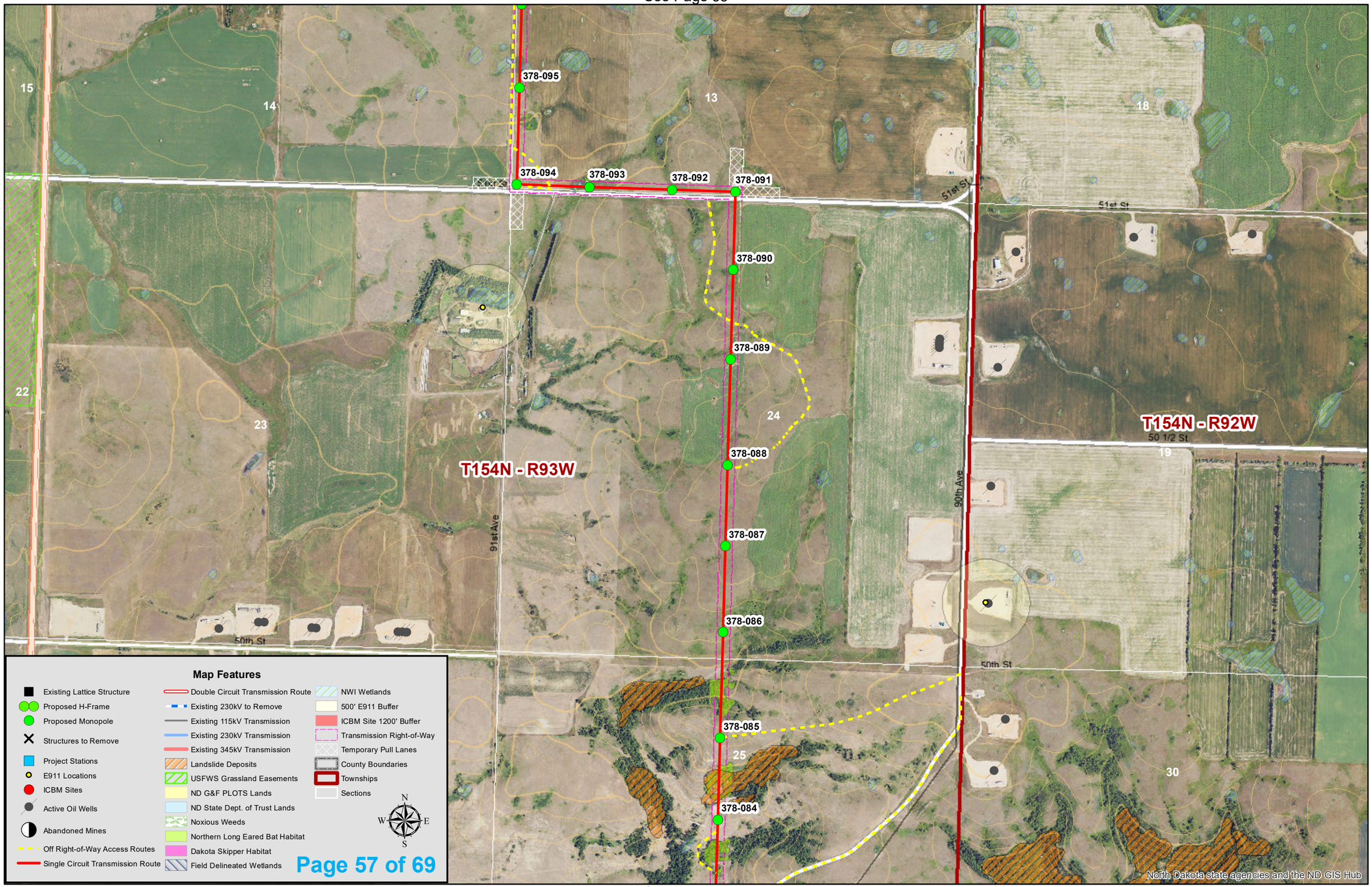

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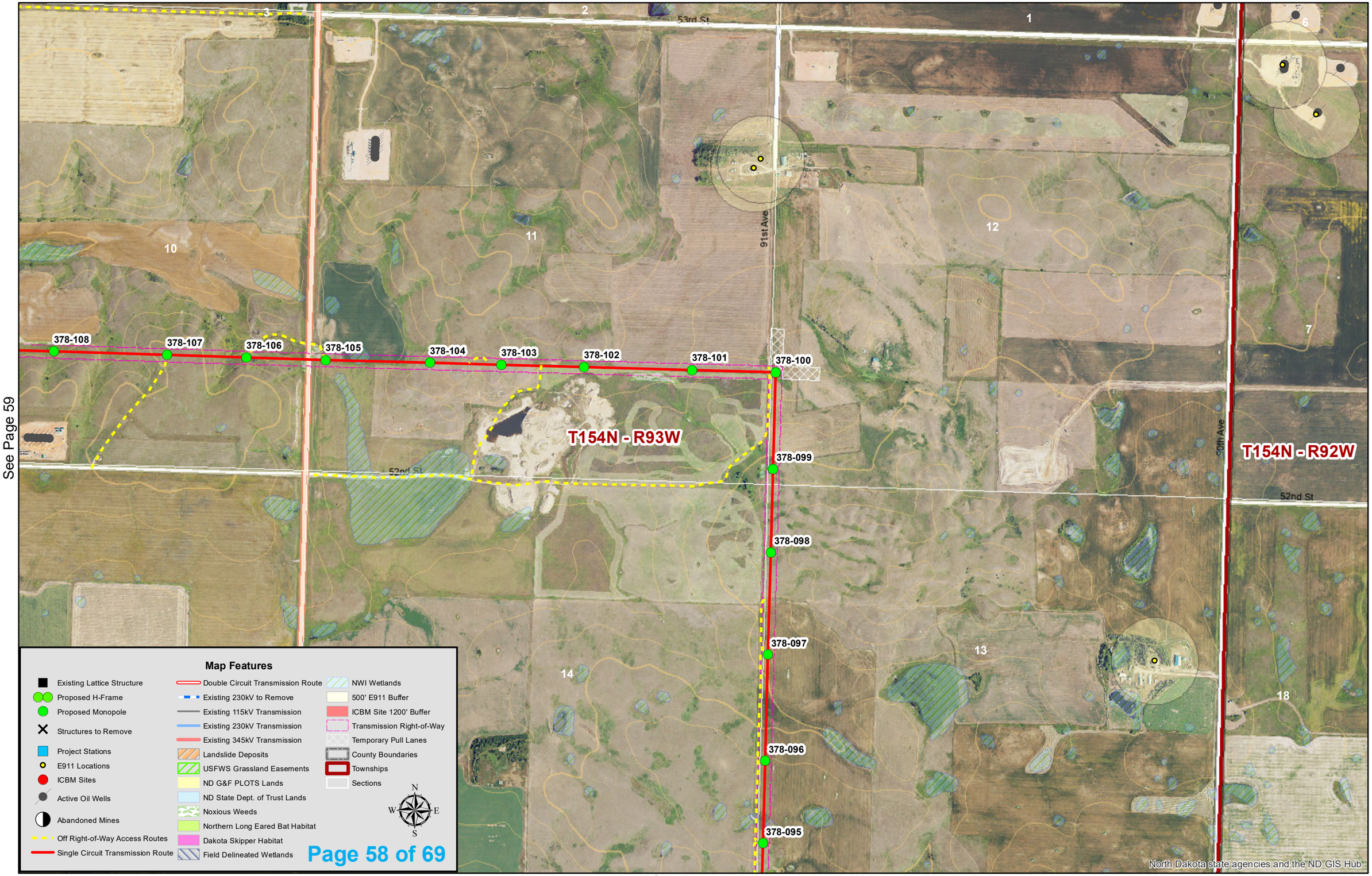

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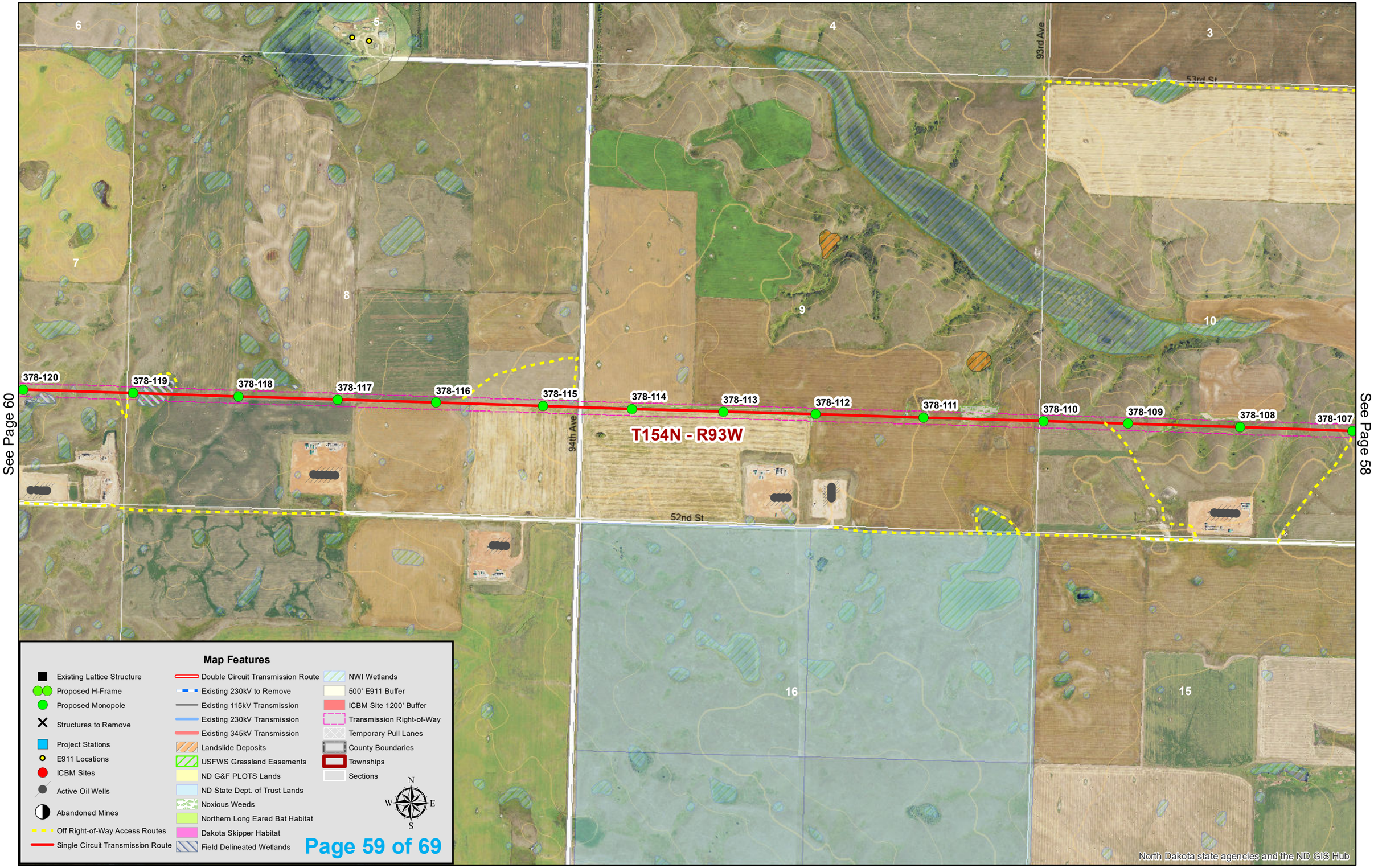
See Page 60
See Page 58
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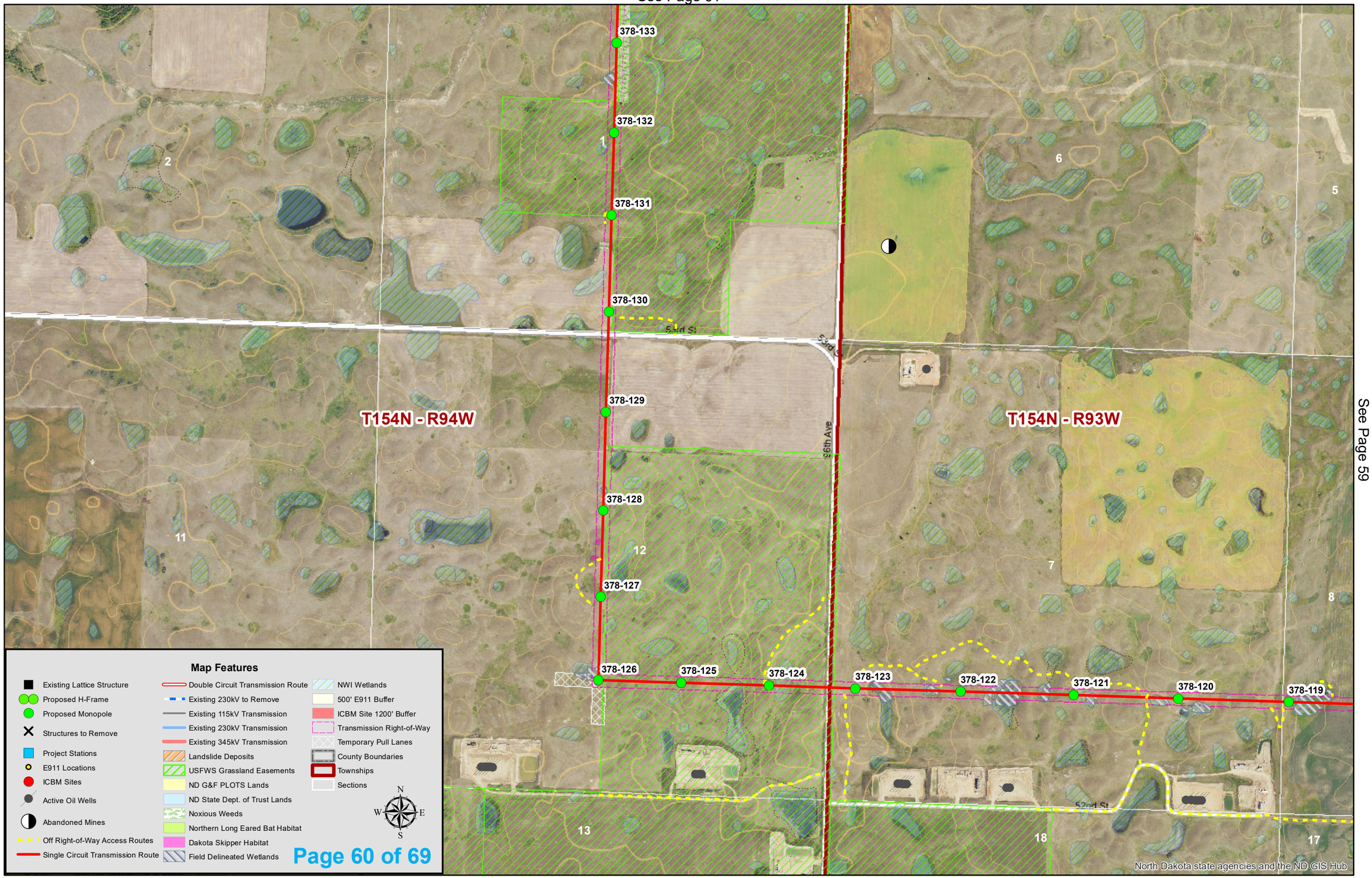
5
4
3
7
8
9
10
16
15
93rd Ave
53rd St
94th Ave
52nd St
T154N - R93W
378-120
378-119
378-118
378-117
378-116
378-115
378-114
378-113
378-112
378-111
378-110
378-109
378-108
378-107
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub

See Page 61



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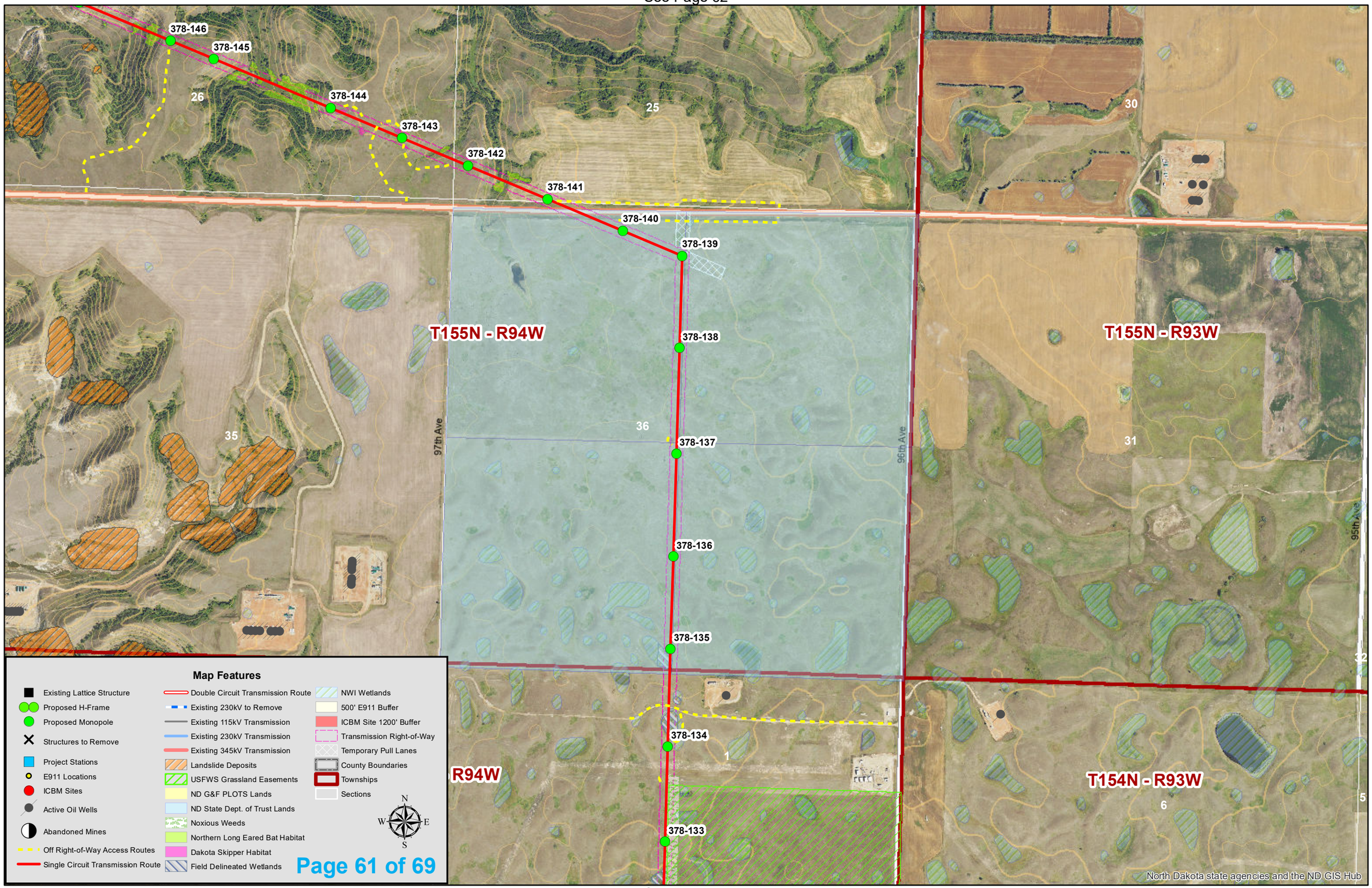

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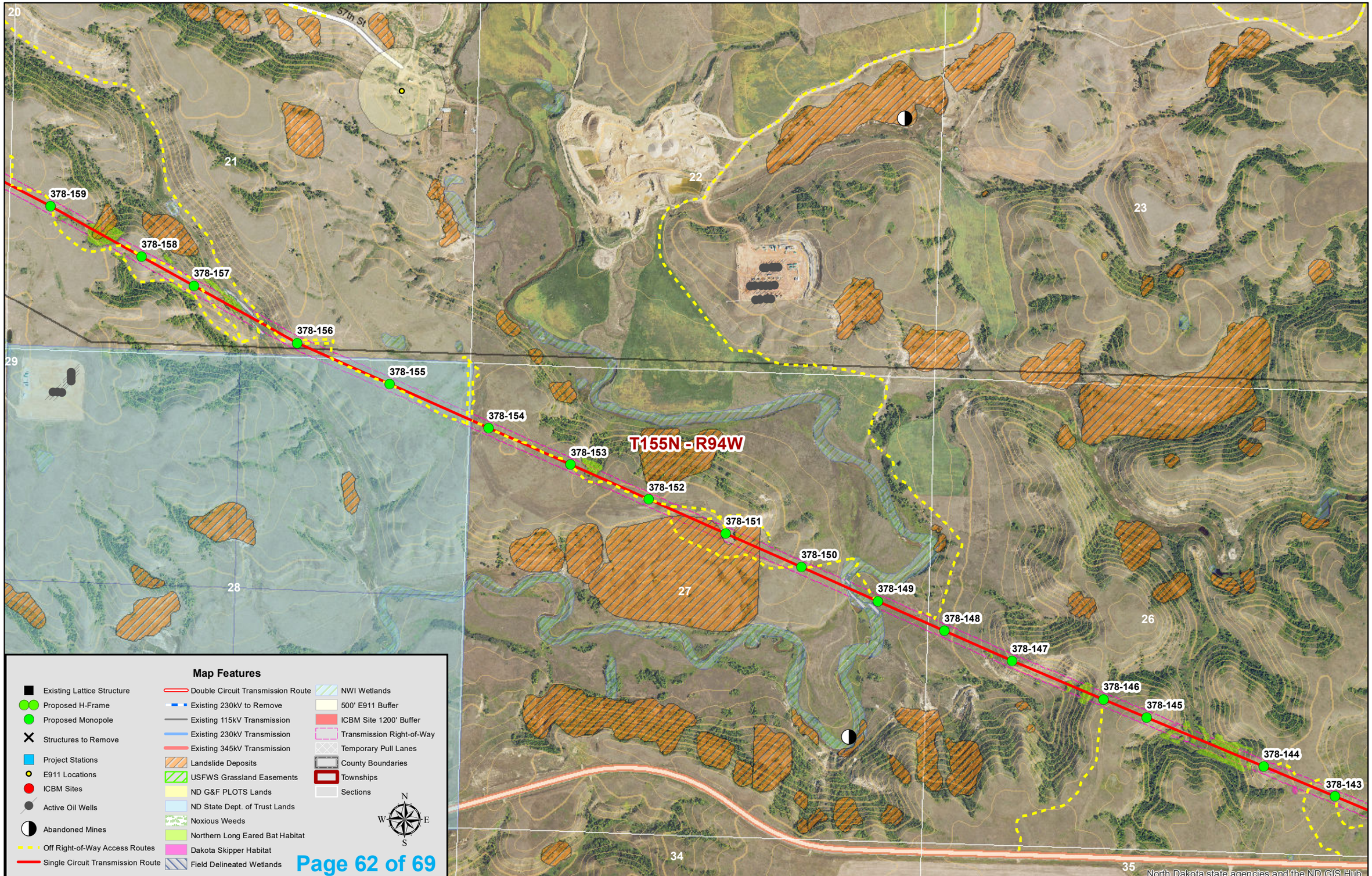
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21
22
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28
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26
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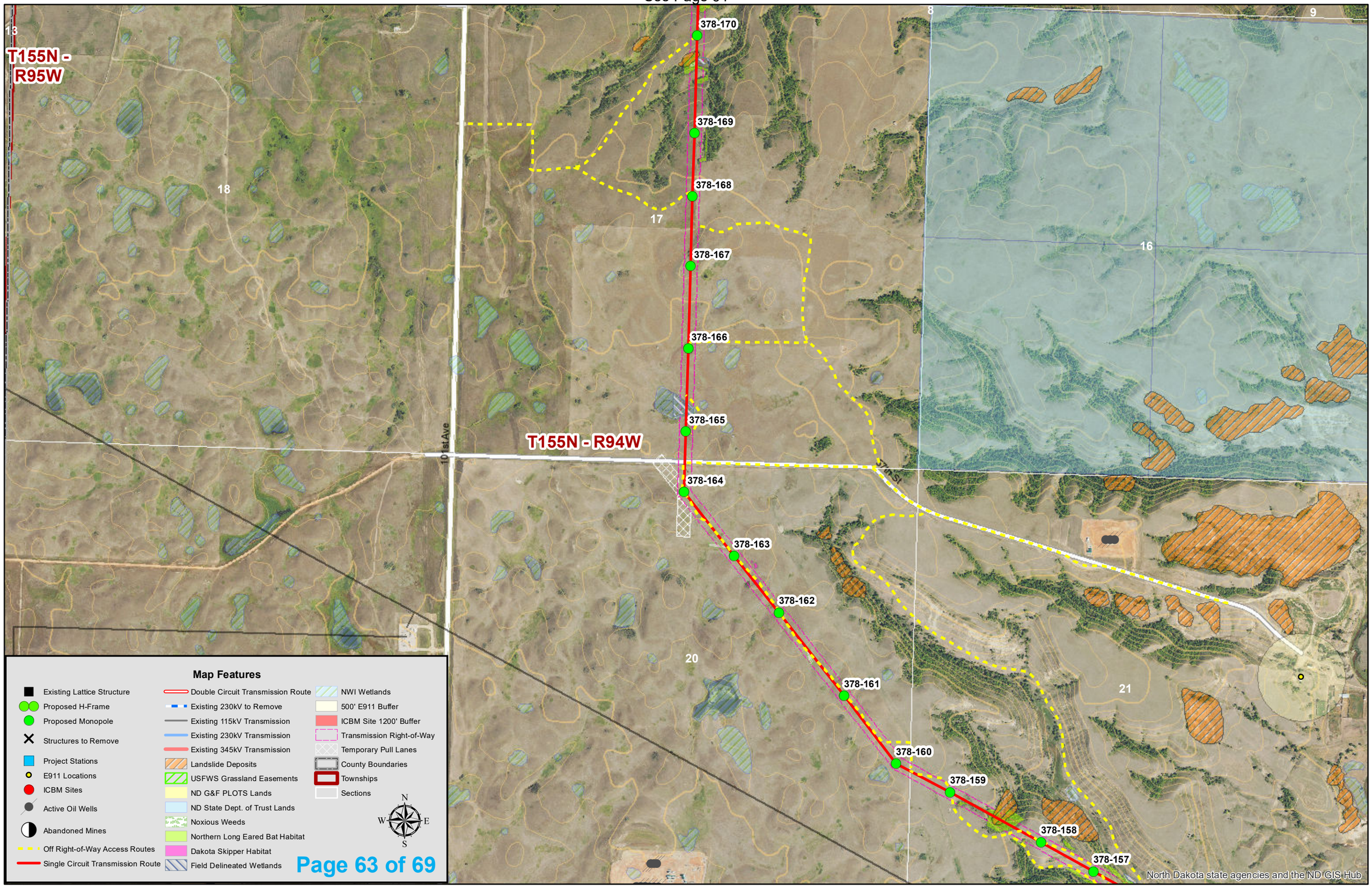
378-153
378-152
378-151
378-150
378-149
378-148
378-147
378-146
378-145
378-144
378-143
T155N - R94W
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub

See Page 61

See Page 64


T155N - R95W
T155N - R94W
13
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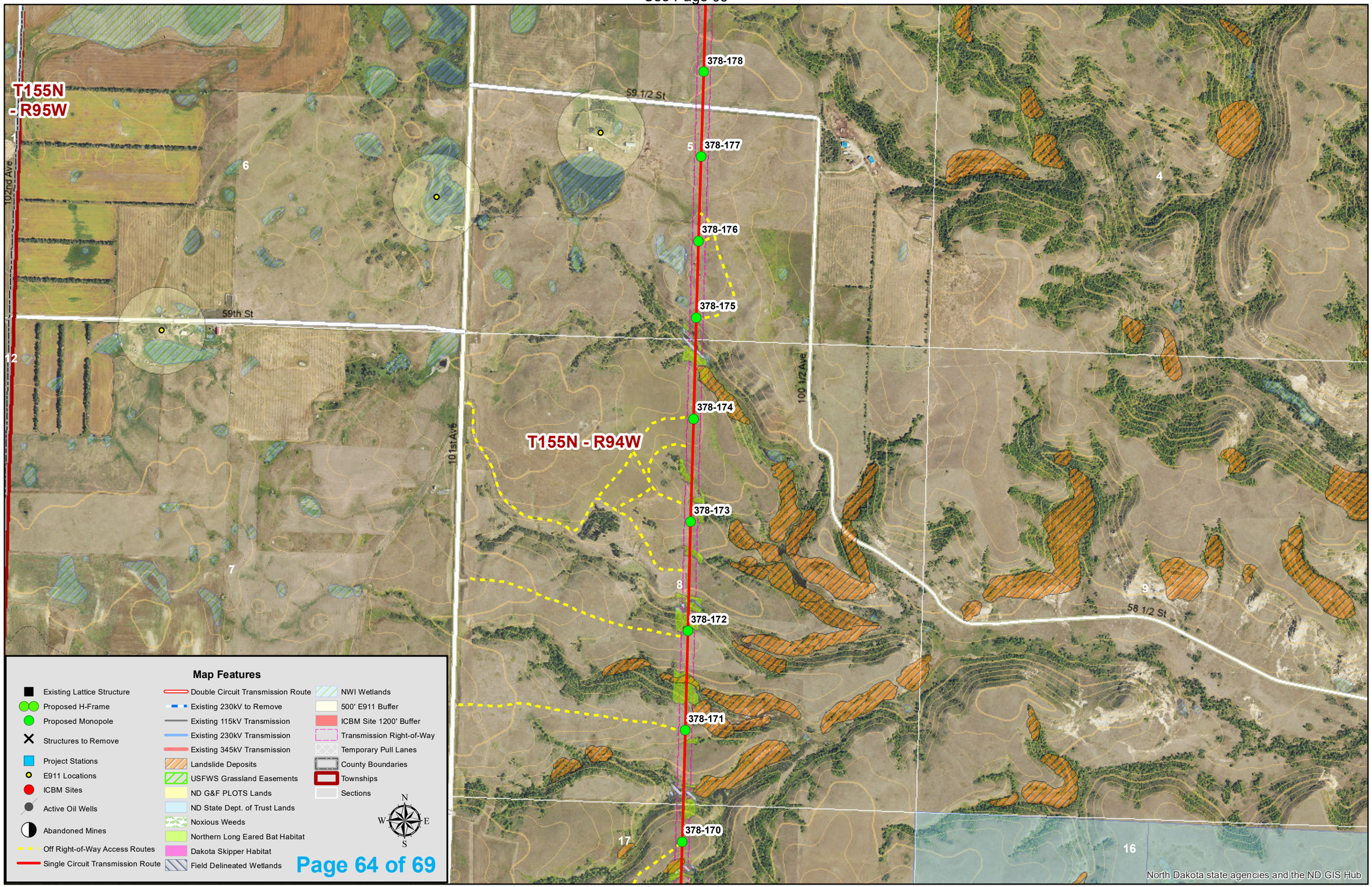
37th St
378-170
378-169
378-168
378-167
378-166
378-165
378-164
378-163
378-162
378-161
378-160
378-159
378-158
378-157
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
Existing 230kV Transmission
Existing 345kV Transmission
Landslide Deposits
USFWS Grassland Easements
ND G&F PLOTS Lands
ND State Dept. of Trust Lands
Noxious Weeds
Northern Long Eared Bat Habitat
Dakota Skipper Habitat
Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S
North Dakota state agencies and the ND GIS Hub

See Page 65



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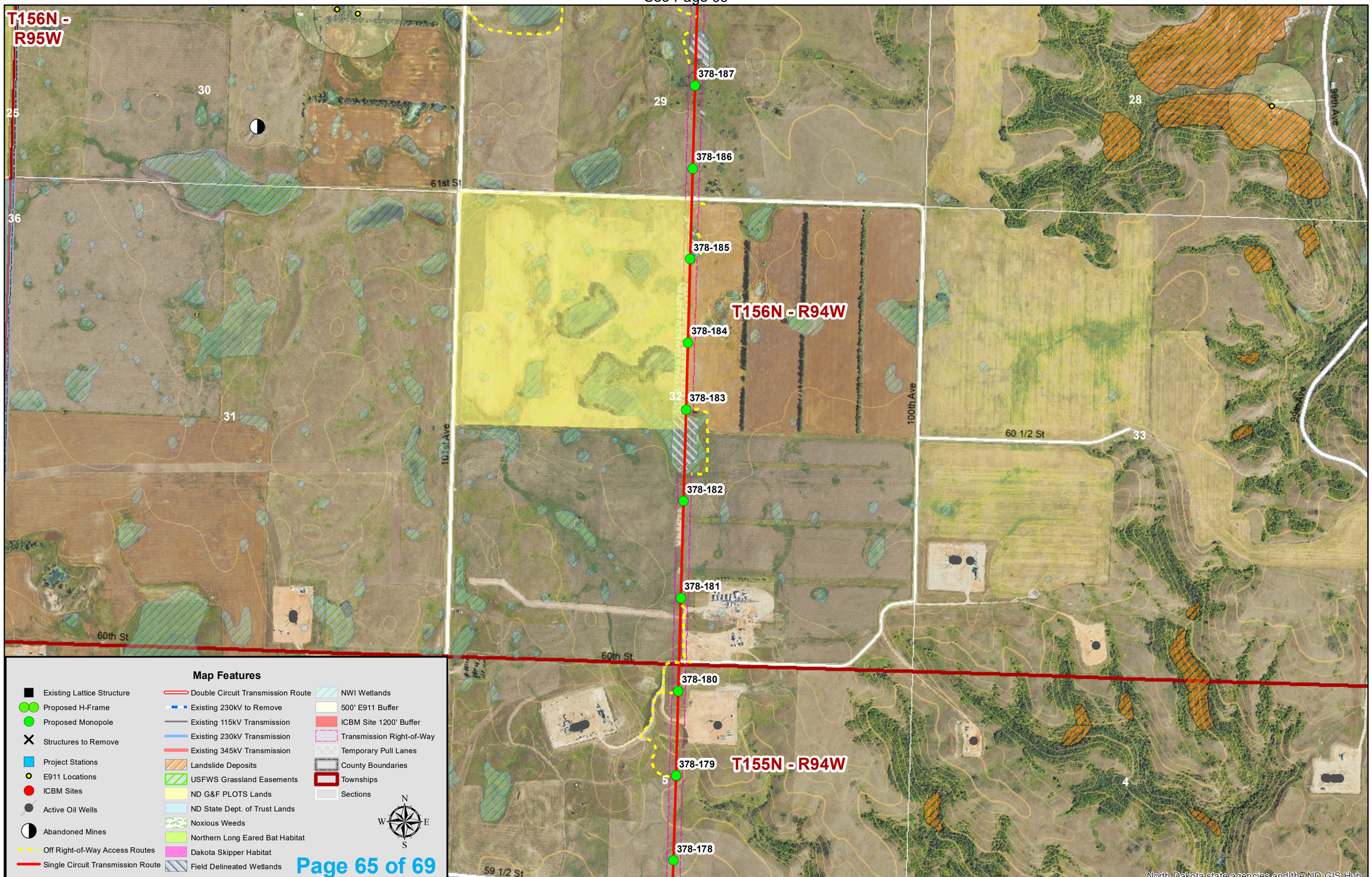
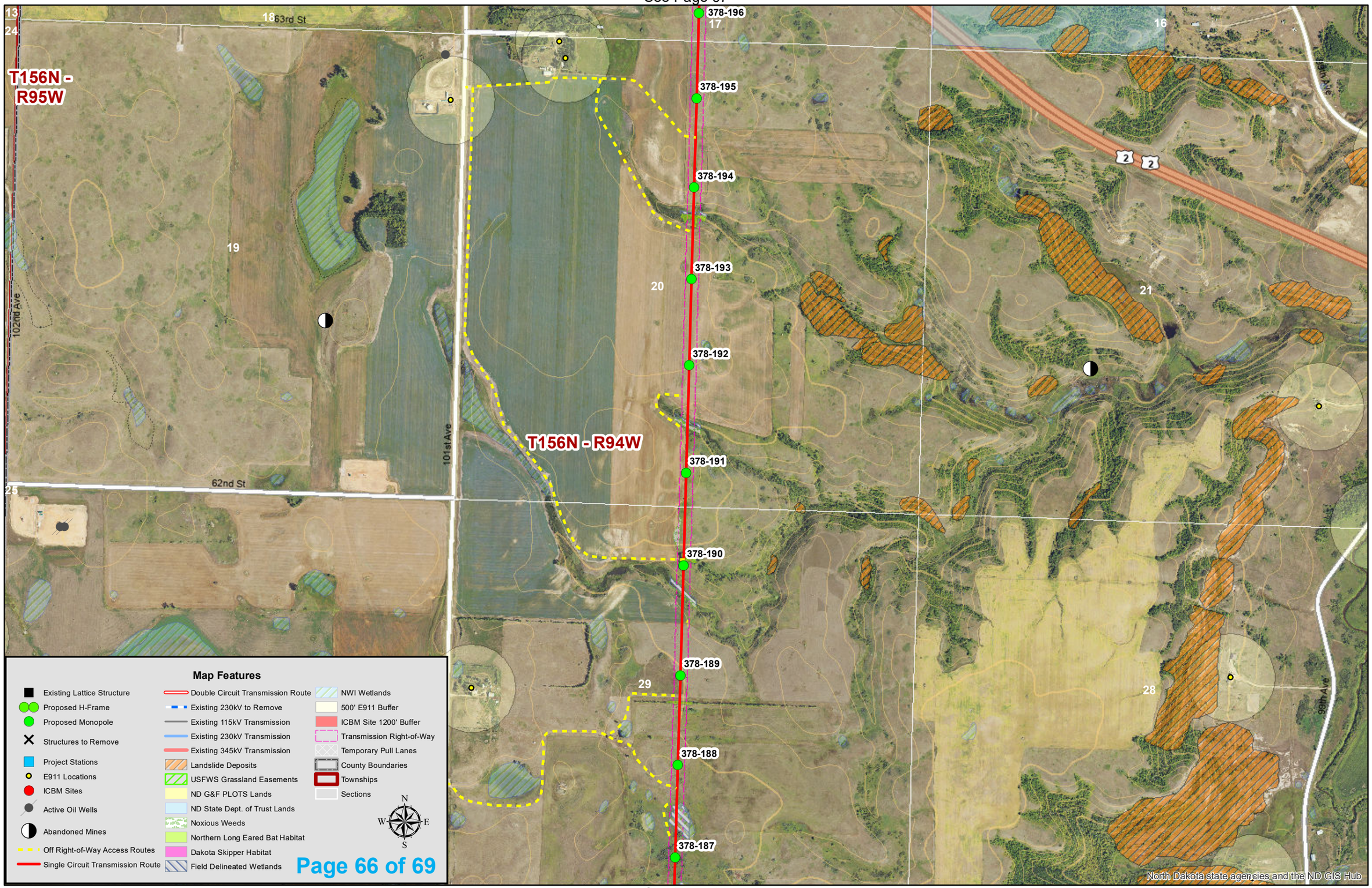
See Page 66



See Page 64

See Page 67



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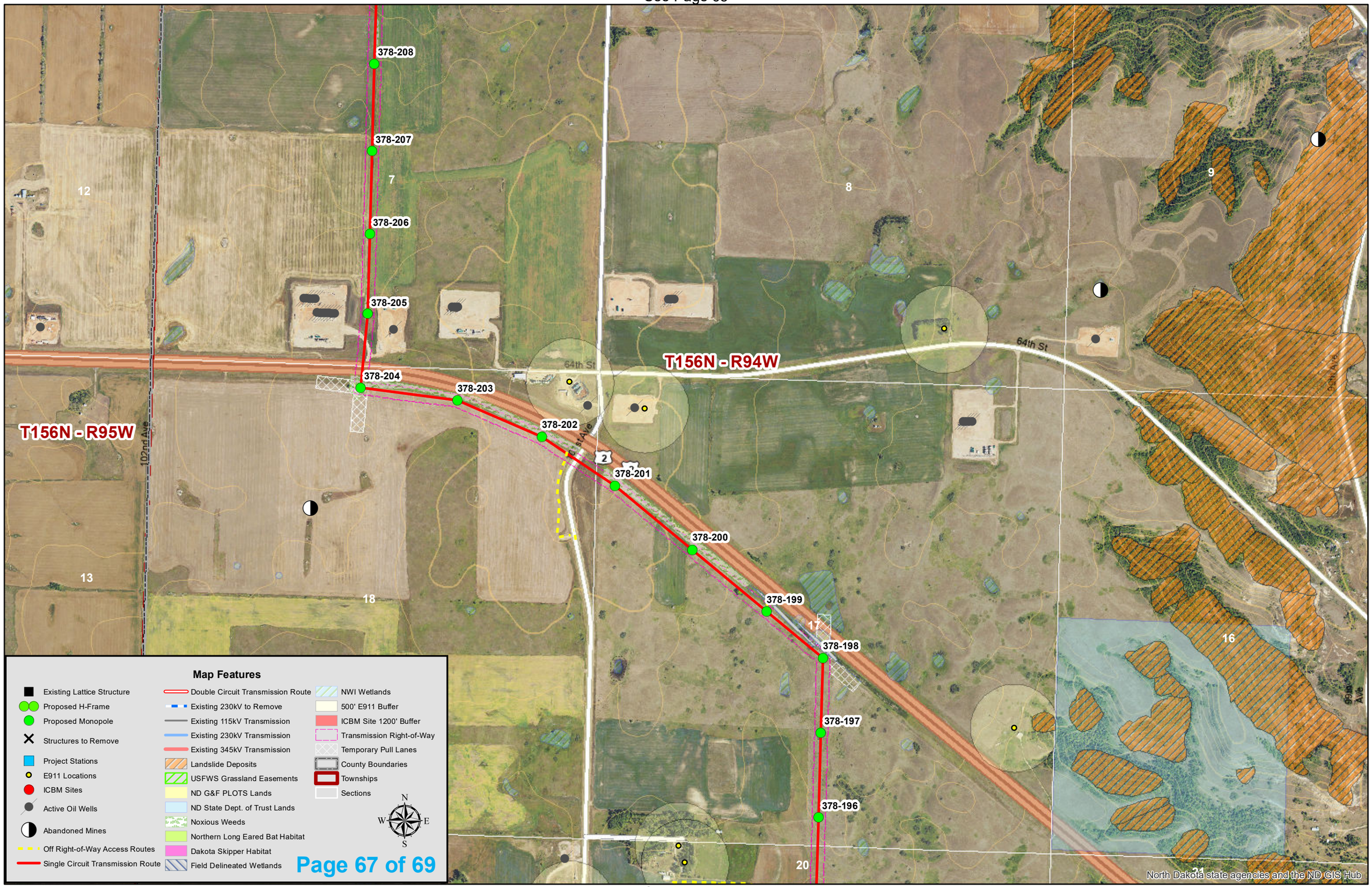
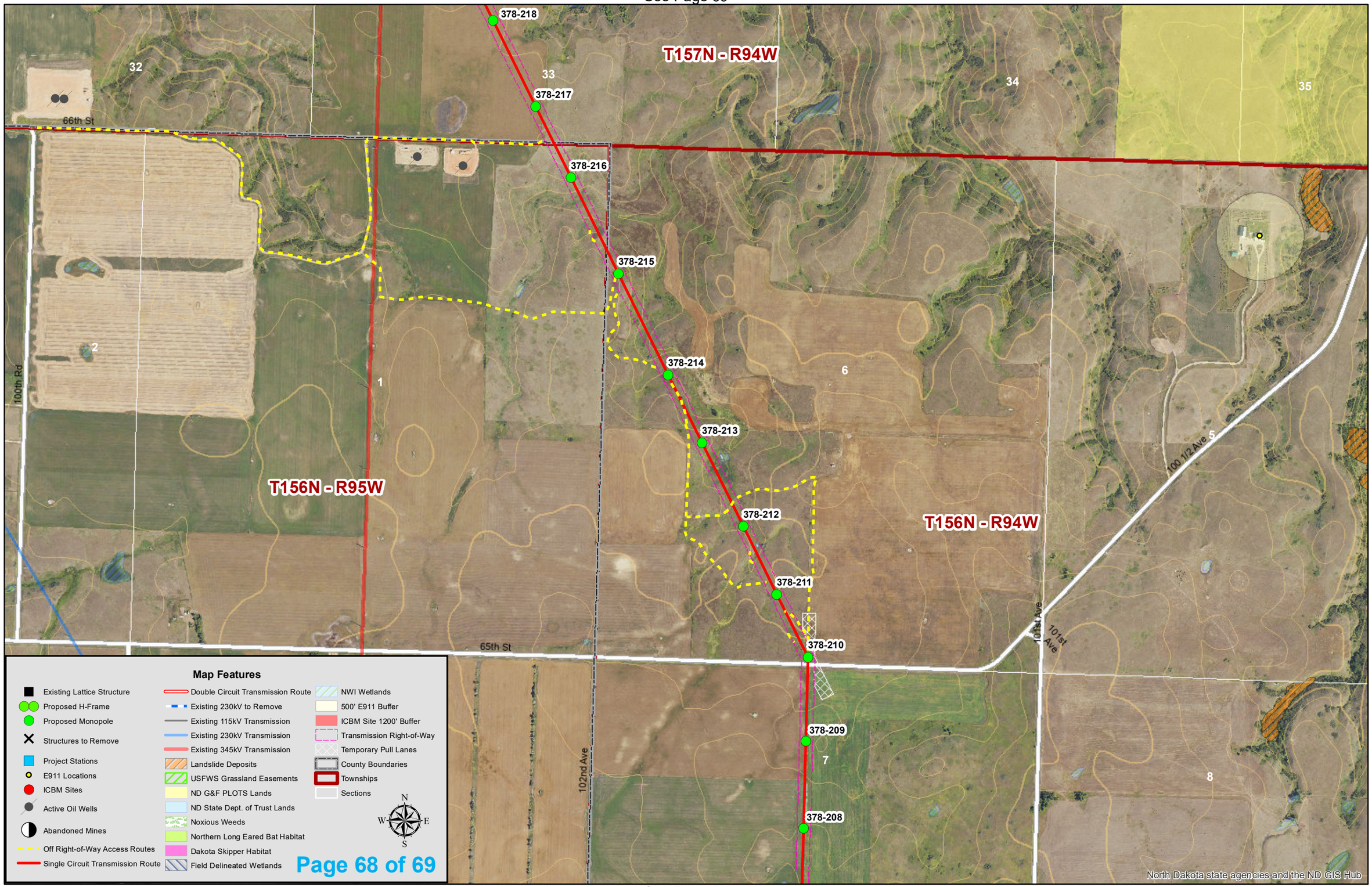
See Page 68



See Page 66

See Page 69



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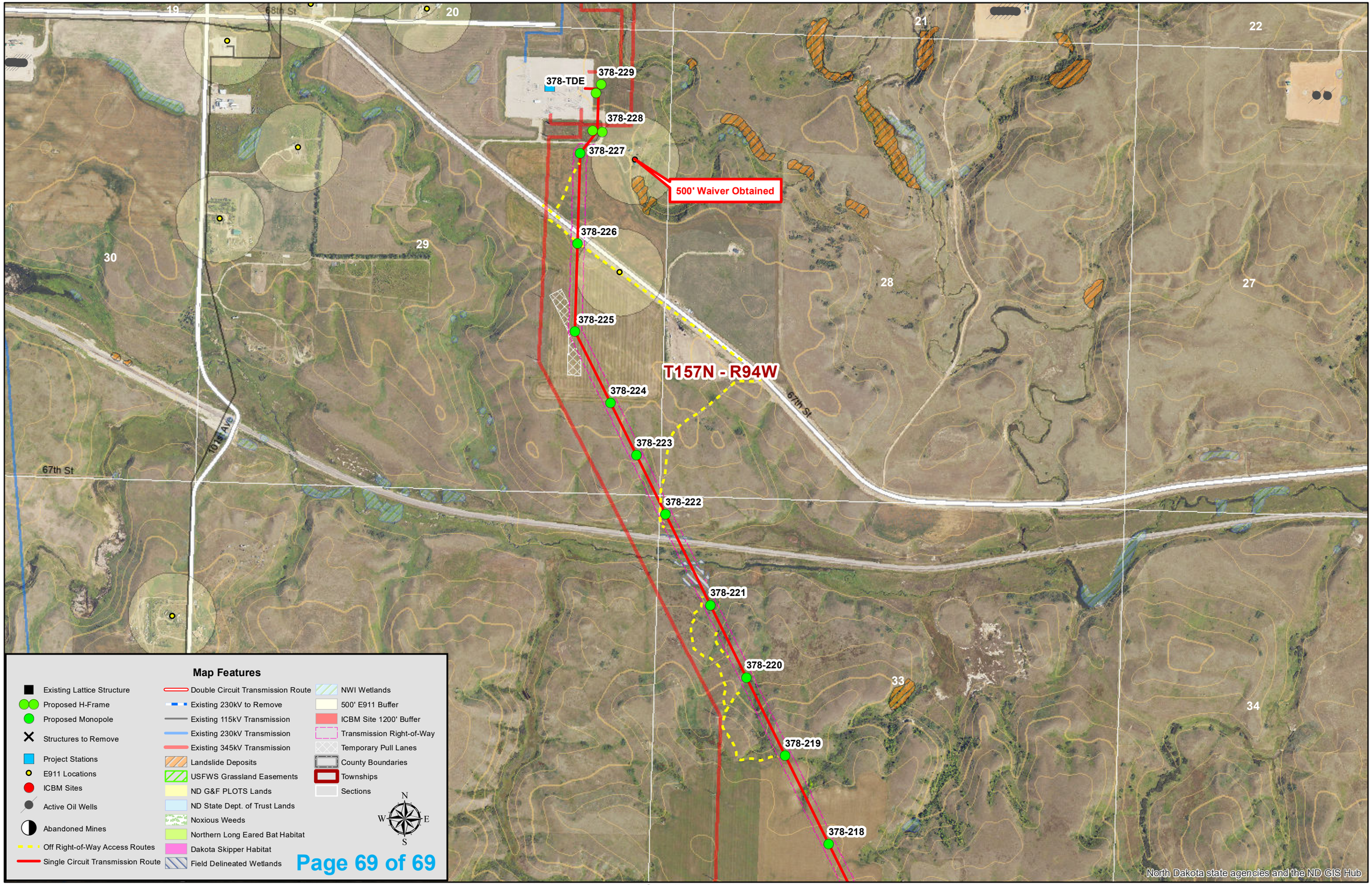
19
68th St
20
21
22
378-229
378-TDE
378-228
378-227
500' Waiver Obtained
378-226
29
30
28
27
378-225
T157N - R94W
378-224
67th St
378-223
101st Ave
67th St
378-222
378-221
378-220
33
34
378-219
378-218
North Dakota state agencies and the ND GIS Hub
Map Features
Existing Lattice Structure
Proposed H-Frame
Proposed Monopole
Structures to Remove
Project Stations
E911 Locations
ICBM Sites
Active Oil Wells
Abandoned Mines
Off Right-of-Way Access Routes
Single Circuit Transmission Route
Double Circuit Transmission Route
Existing 230kV to Remove
Existing 115kV Transmission
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Landslide Deposits
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Northern Long Eared Bat Habitat
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Field Delineated Wetlands
NWI Wetlands
500' E911 Buffer
ICBM Site 1200' Buffer
Transmission Right-of-Way
Temporary Pull Lanes
County Boundaries
Townships
Sections
N
W
E
S

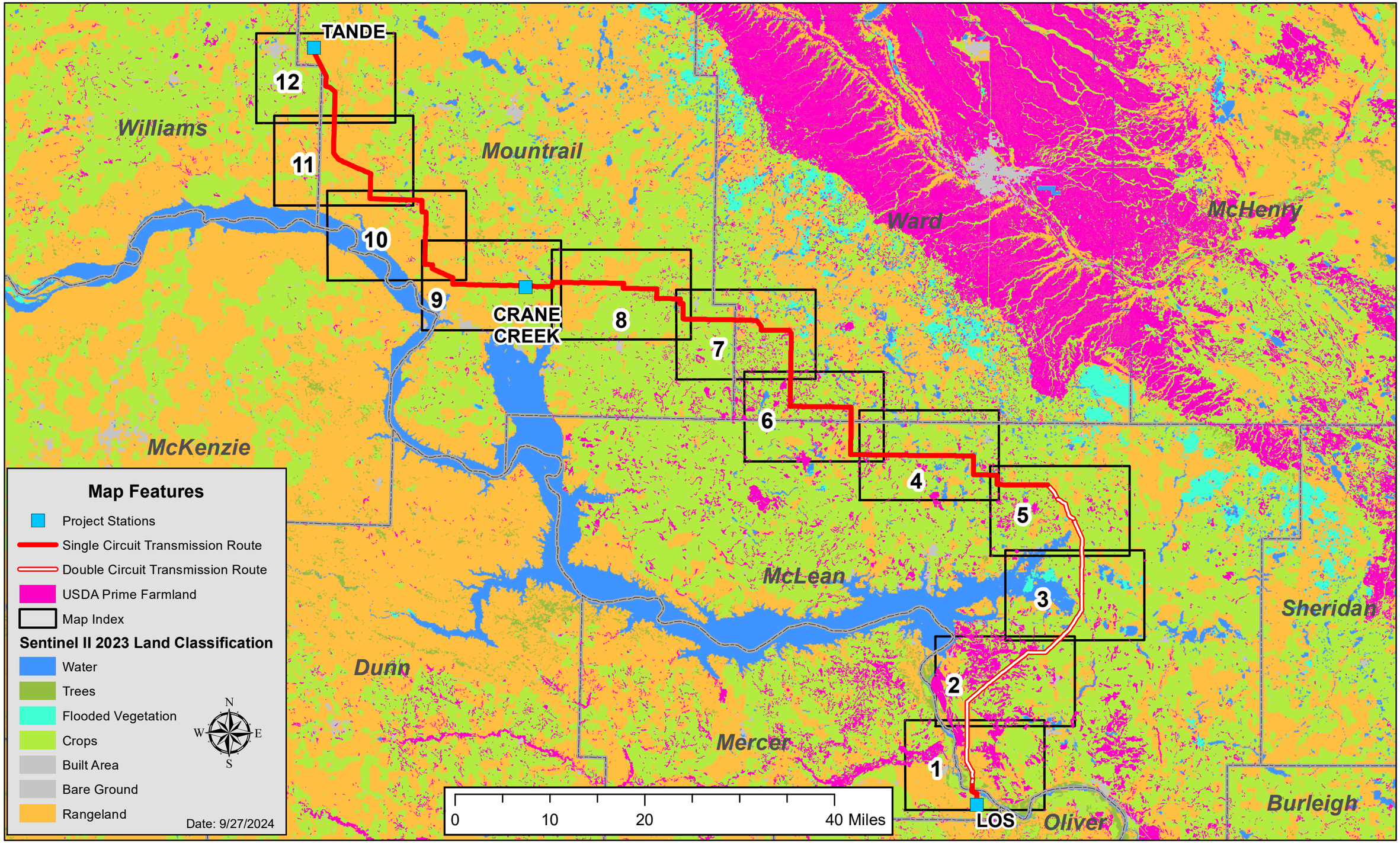
See Page 68

Appendix B

Land Use Index Map Book

LOS to Tande 345kV Transmission Project - Land Use Index

BASIN ELECTRIC POWER COOPERATIVE
A Touchstone Energy® Cooperative



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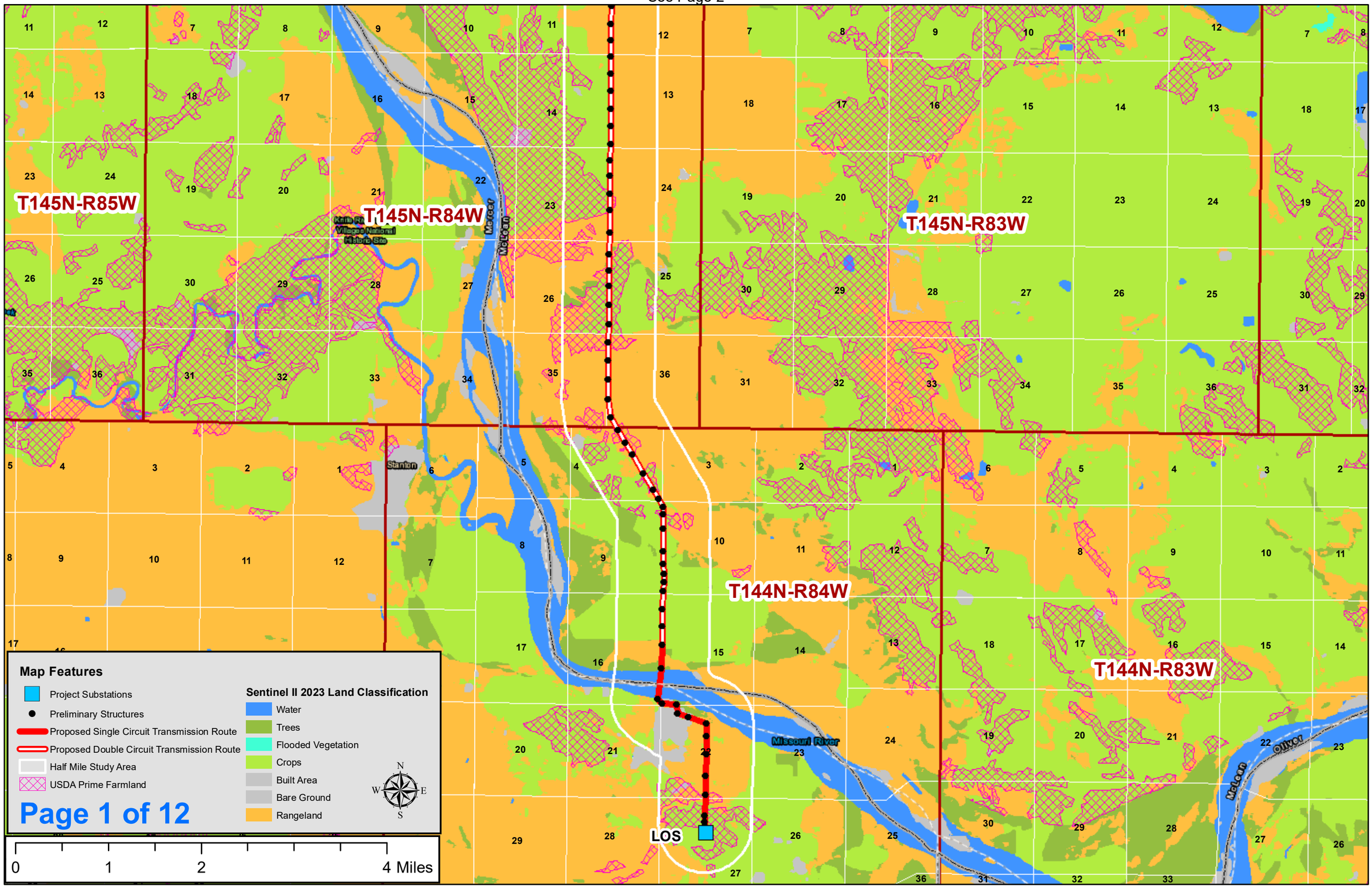
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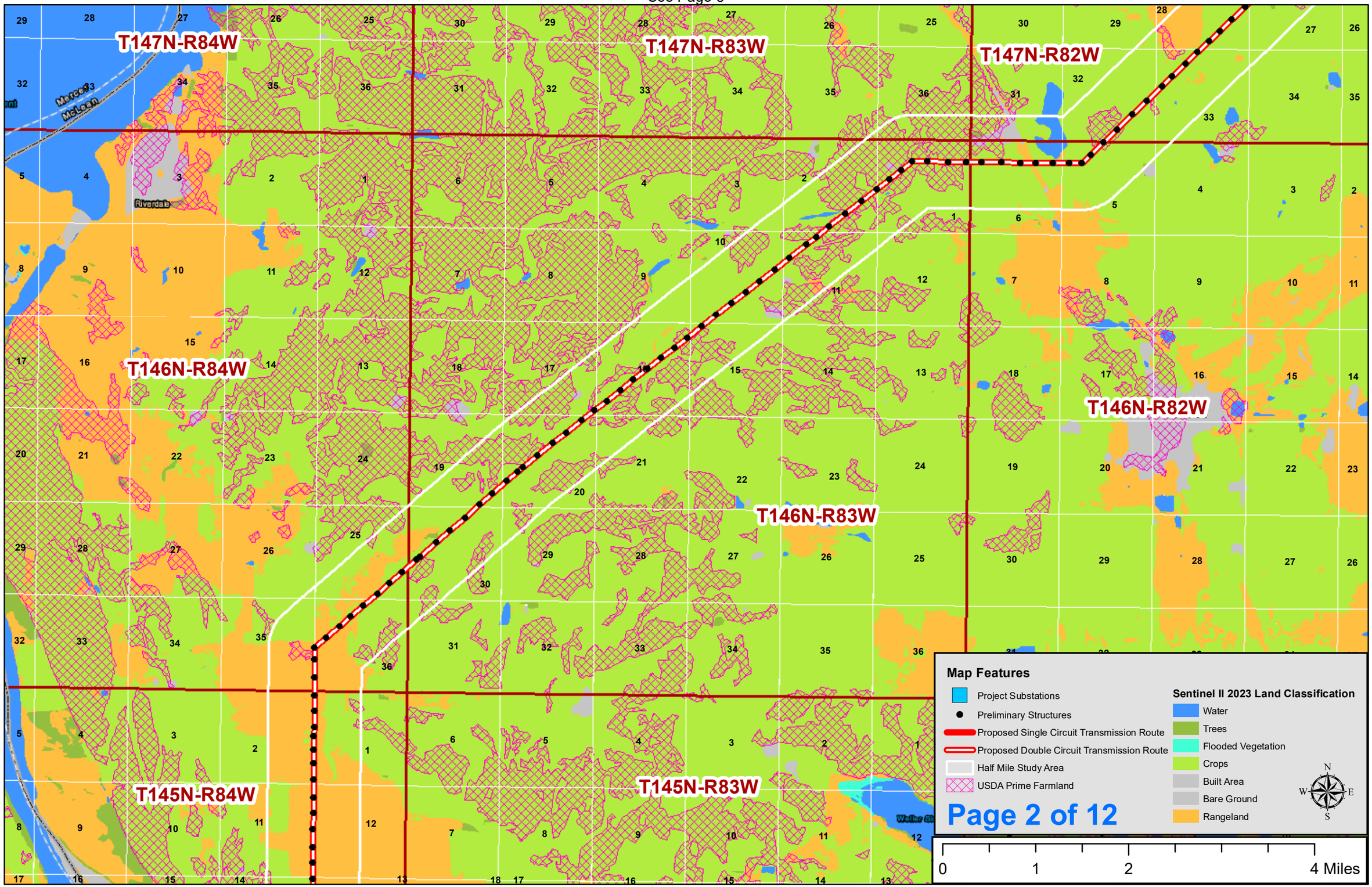
T145N-R84W
T145N-R83W
T144N-R84W
T144N-R83W
Knife Rt. Village National Historic Site
McLean
Mercer
Stanton
Missouri River
Oliver
McLean
LOS
Map Features
Project Substations
Preliminary Structures
Proposed Single Circuit Transmission Route
Proposed Double Circuit Transmission Route
Half Mile Study Area
USDA Prime Farmland
Sentinel II 2023 Land Classification
Water
Trees
Flooded Vegetation
Crops
Built Area
Bare Ground
Rangeland
N
W
E
S
0
1
2
4 Miles

See Page 3



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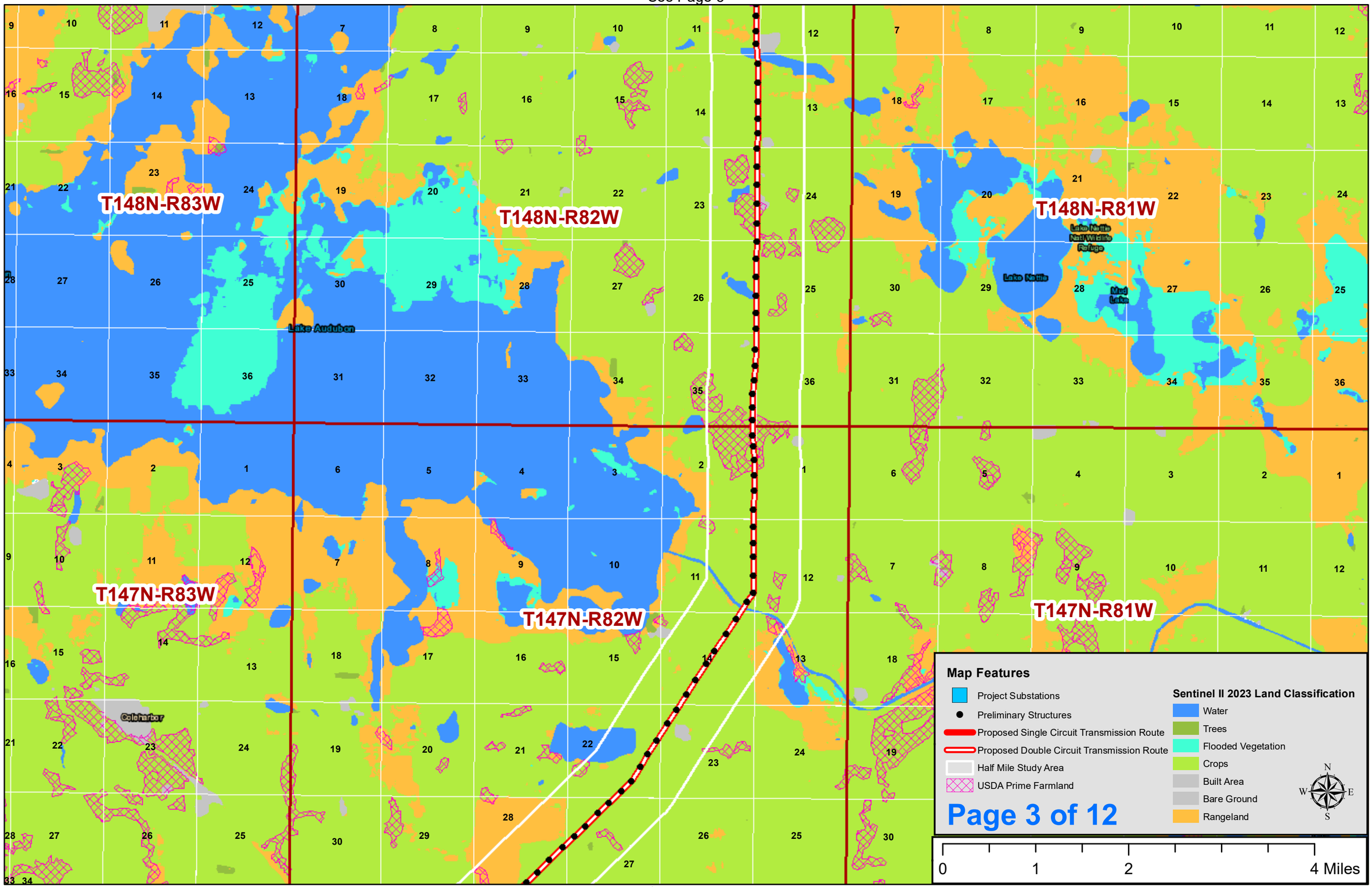
See Page 5



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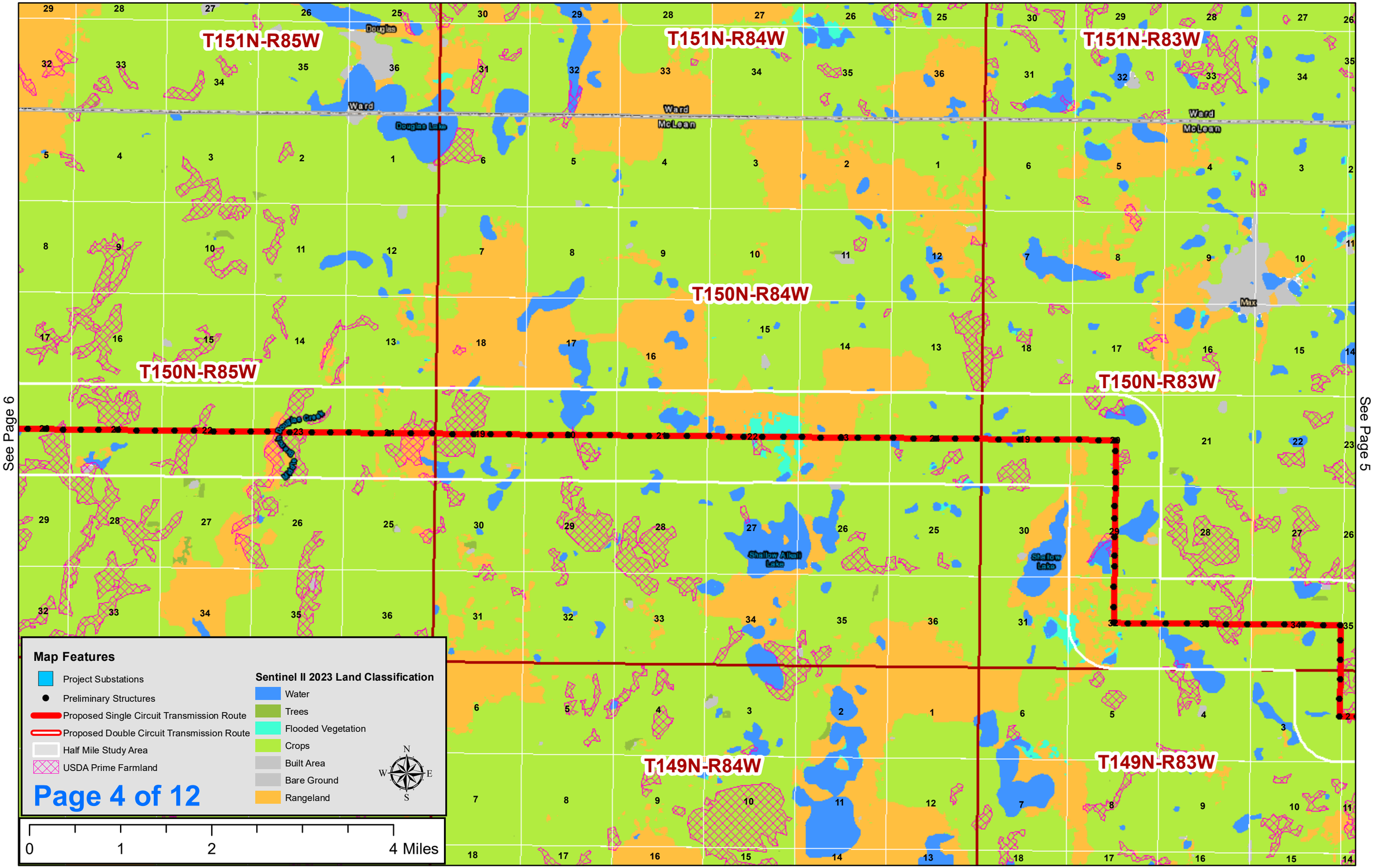
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T151N-R84W
T151N-R83W
T150N-R85W
T150N-R84W
T150N-R83W
T149N-R84W
T149N-R83W
Douglas
Ward
Douglas Lake
McLean
Max
Shallow Alkali Lake
Shallow Lake
See Page 6
See Page 5
Map Features
Project Substations
Preliminary Structures
Proposed Single Circuit Transmission Route
Proposed Double Circuit Transmission Route
Half Mile Study Area
USDA Prime Farmland
Sentinel II 2023 Land Classification
Water
Trees
Flooded Vegetation
Crops
Built Area
Bare Ground
Rangeland
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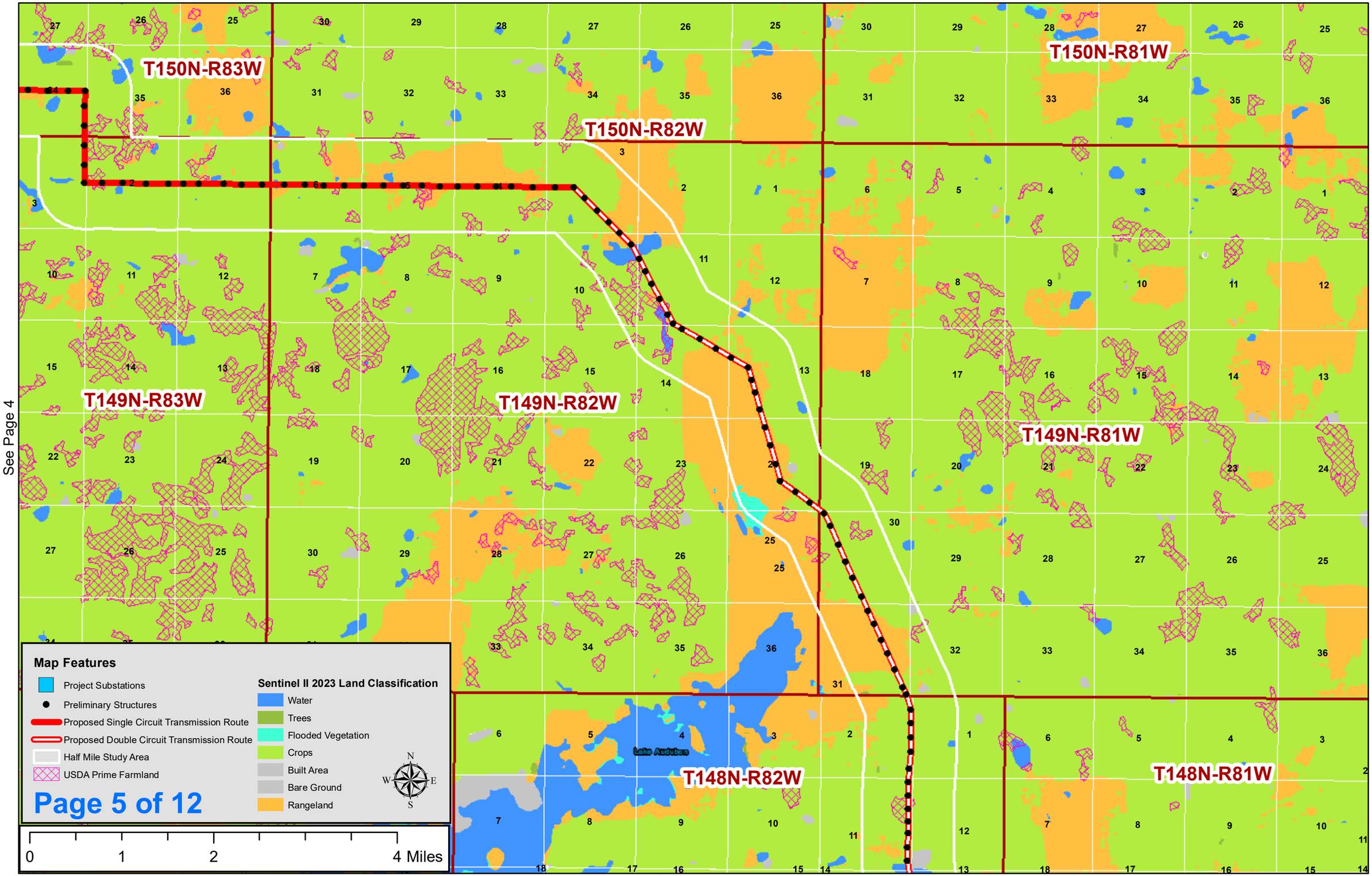
4 Miles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T150N-R81W
T149N-R83W
T149N-R82W
T149N-R81W
T148N-R82W
T148N-R81W
Lake Audubon
See Page 4
See Page 3
Map Features
Project Substations
Preliminary Structures
Proposed Single Circuit Transmission Route
Proposed Double Circuit Transmission Route
Half Mile Study Area
USDA Prime Farmland
Sentinel II 2023 Land Classification
Water
Trees
Flooded Vegetation
Crops
Built Area
Bare Ground
Rangeland
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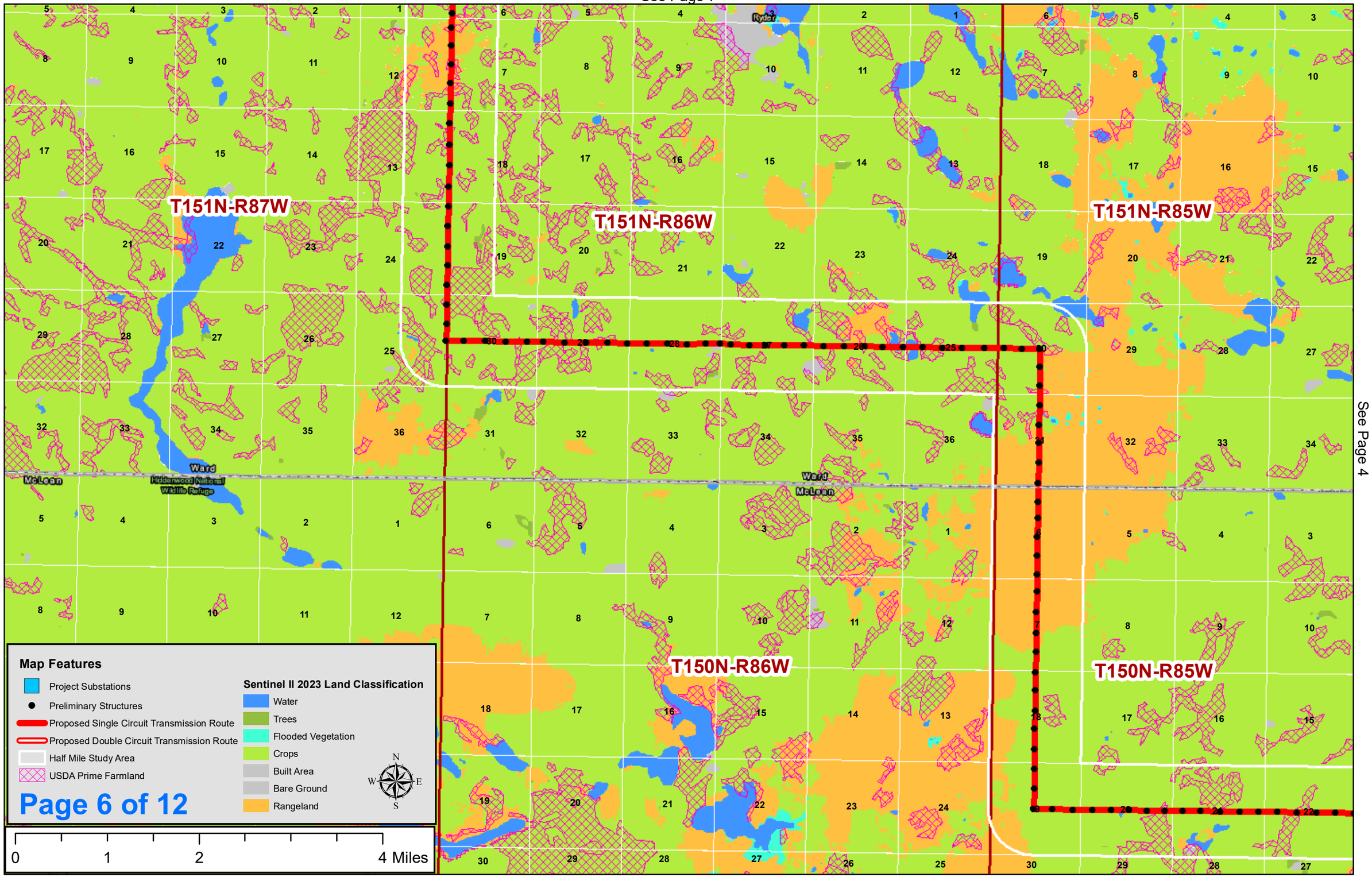
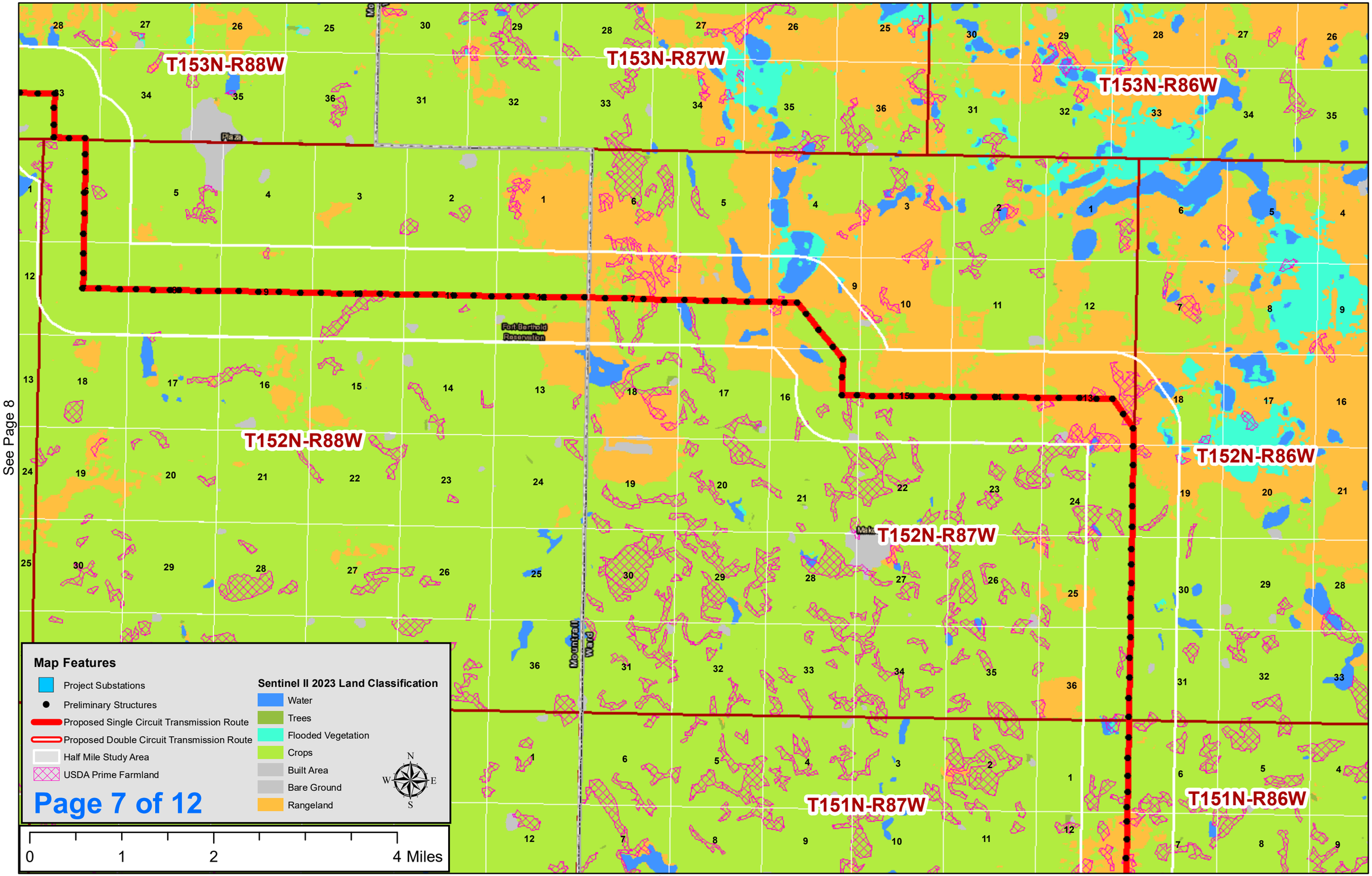
4 Miles

See Page 7



See Page 4



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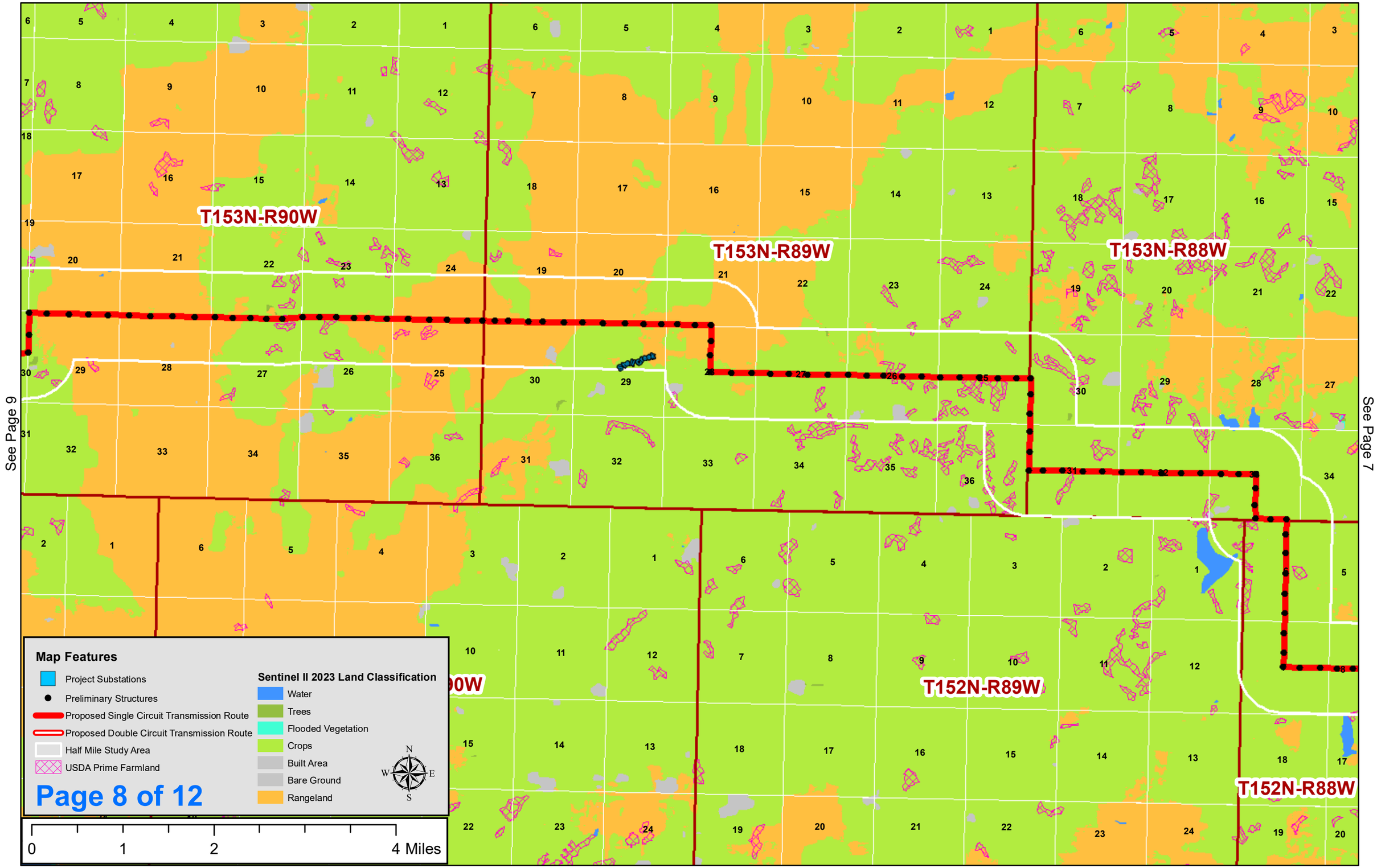
See Page 6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T153N-R89W
T153N-R88W
T152N-R89W
T152N-R88W
See Page 9
See Page 7
Map Features
Project Substations
Preliminary Structures
Proposed Single Circuit Transmission Route
Proposed Double Circuit Transmission Route
Half Mile Study Area
USDA Prime Farmland
Sentinel II 2023 Land Classification
Water
Trees
Flooded Vegetation
Crops
Built Area
Bare Ground
Rangeland
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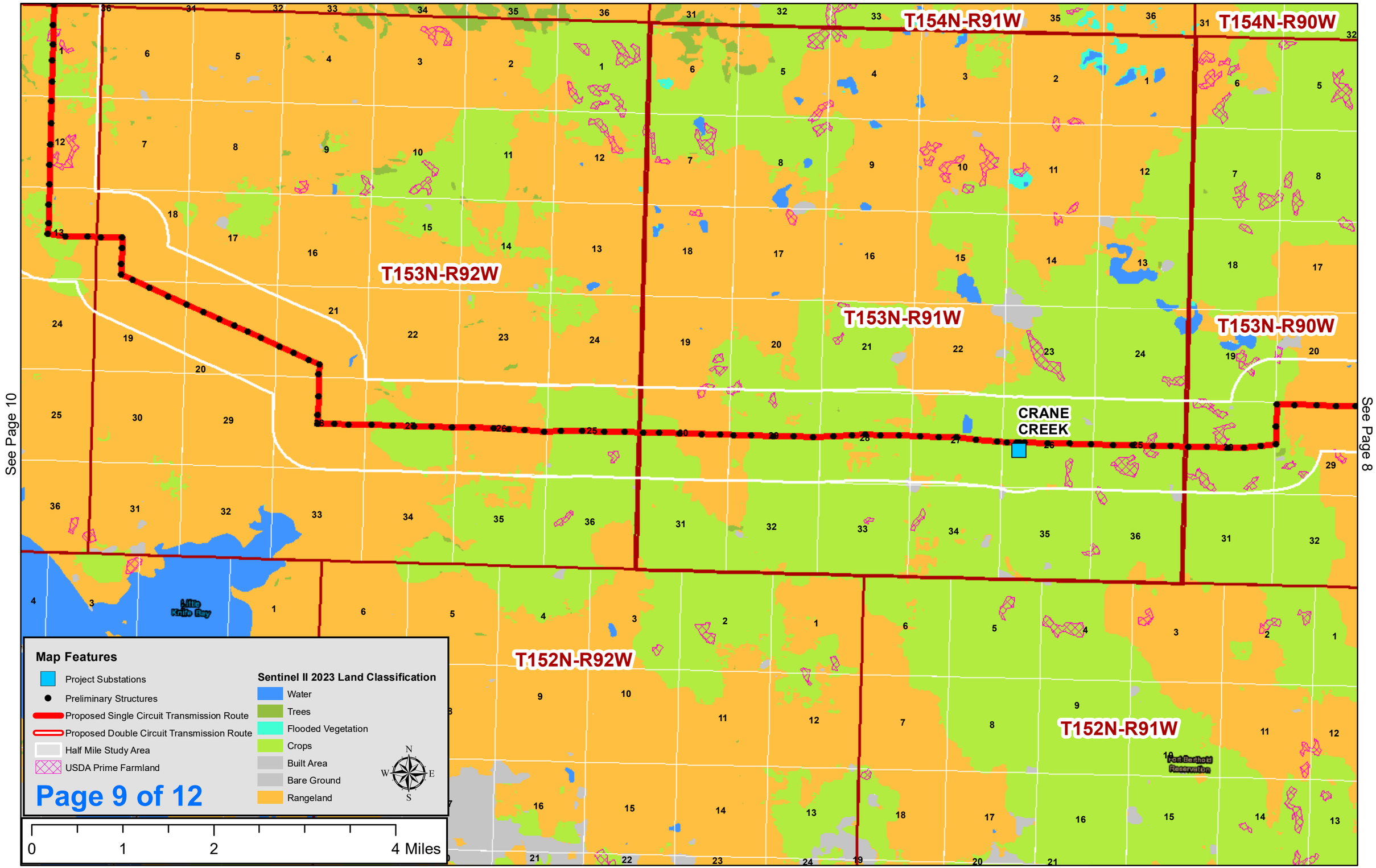
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T154N-R90W
T153N-R92W
T153N-R91W
T153N-R90W
T152N-R92W
T152N-R91W
CRANE CREEK
Little Knife Bay
Fort Berthold Reservation
See Page 10
See Page 8
Map Features
Project Substations
Preliminary Structures
Proposed Single Circuit Transmission Route
Proposed Double Circuit Transmission Route
Half Mile Study Area
USDA Prime Farmland
Sentinel II 2023 Land Classification
Water
Trees
Flooded Vegetation
Crops
Built Area
Bare Ground
Rangeland
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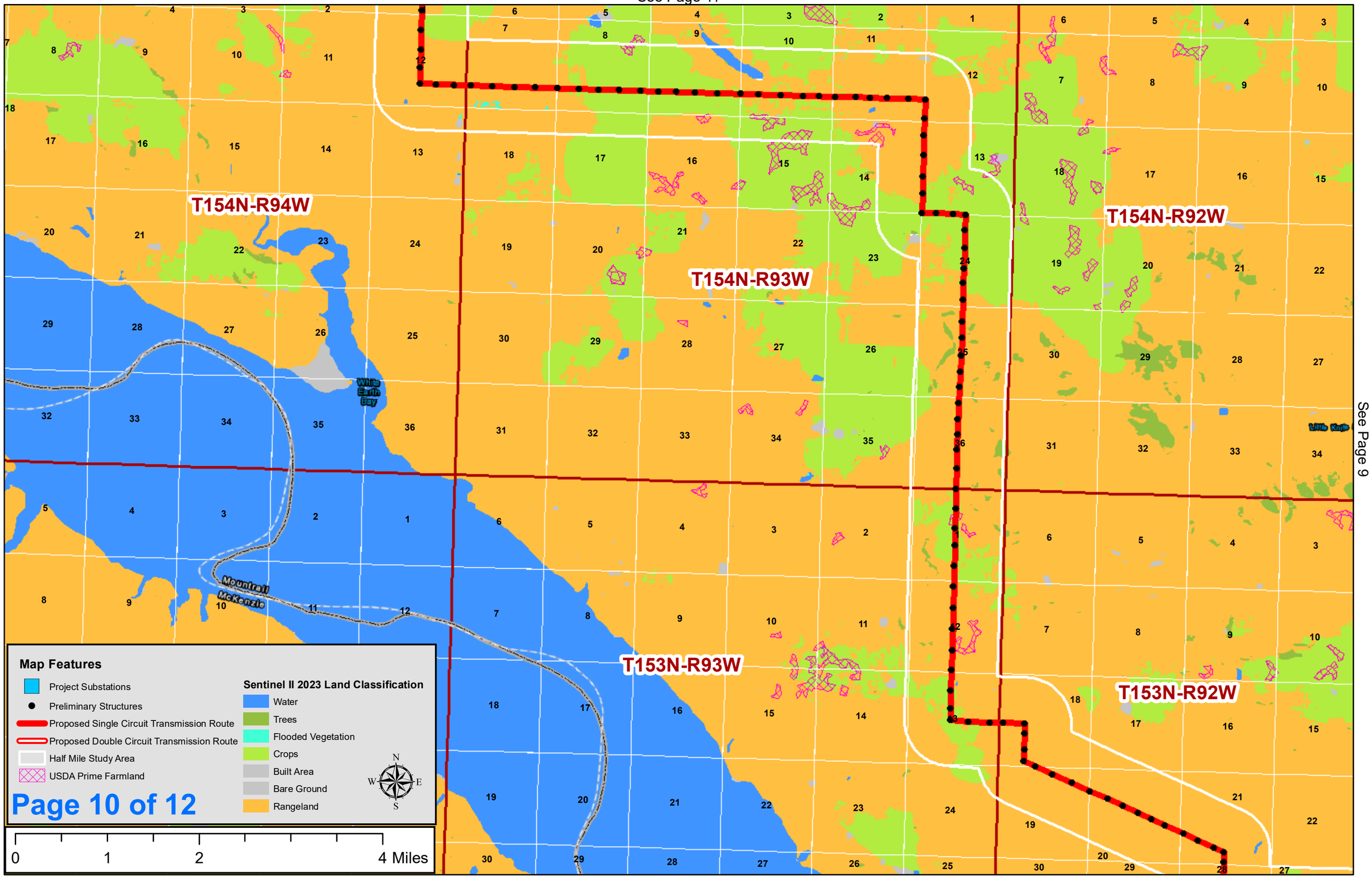
See Page 11



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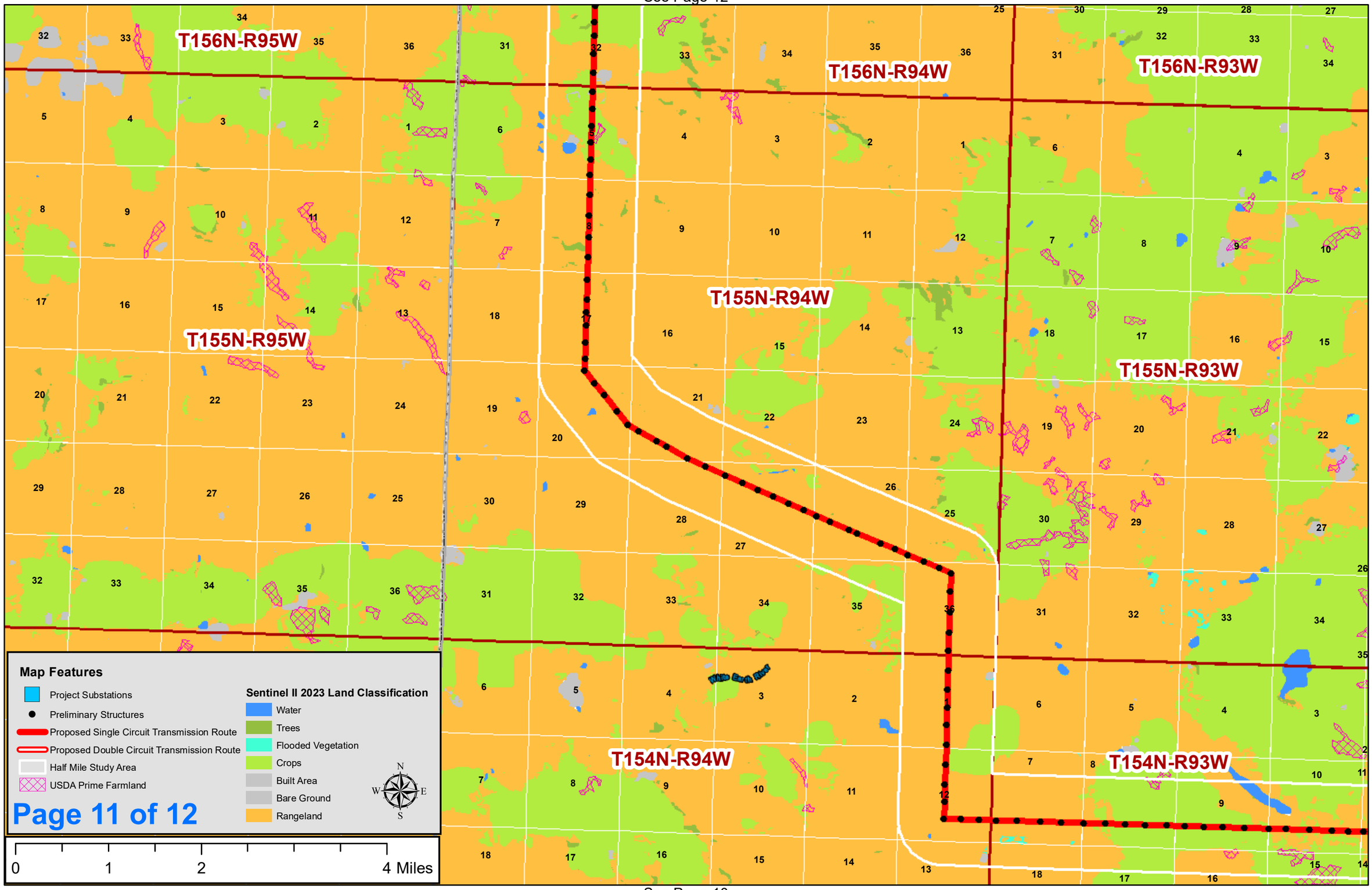
See Page 12



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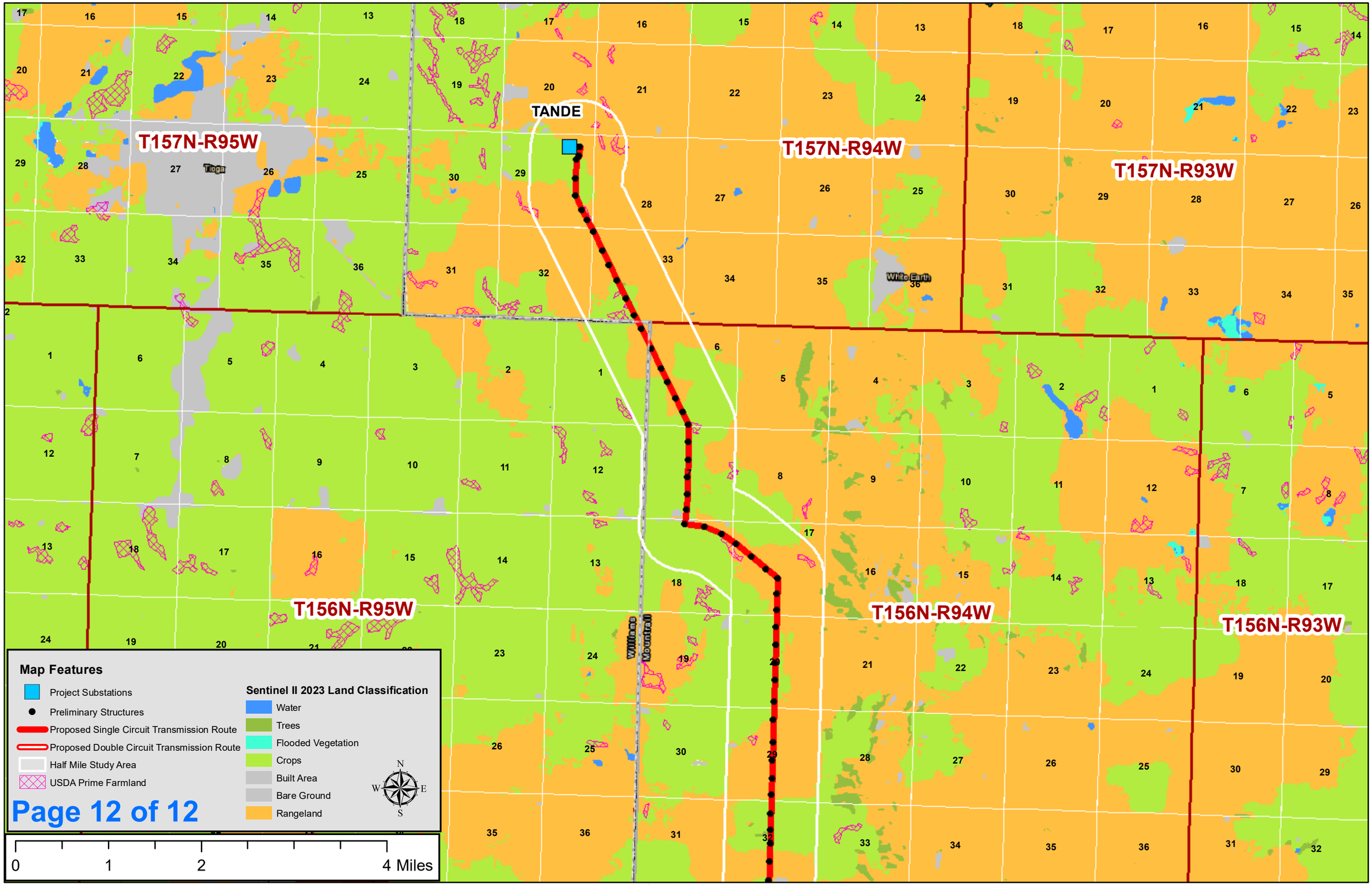
TANDE
T157N-R95W
T157N-R94W
T157N-R93W
T156N-R95W
T156N-R94W
T156N-R93W
Tioga
White Earth
Williams Mountrail
Map Features
Project Substations
Preliminary Structures
Proposed Single Circuit Transmission Route
Proposed Double Circuit Transmission Route
Half Mile Study Area
USDA Prime Farmland
Sentinel II 2023 Land Classification
Water
Trees
Flooded Vegetation
Crops
Built Area
Bare Ground
Rangeland
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See Page 11

Appendix C

Policies and Commitments Statement to Limit Environmental Impacts

Excerpts from **“RESOLUTIONS ADOPTED BY THE MEMBER OF BASIN ELECTRIC POWER COOPERATIVE”** Dated August 14, 2024

STATEMENT OF PURPOSE

The Basin Electric Resolutions Committee shall review all resolutions before presentation to the membership at each Annual Meeting, and that all resolutions are subject to change by the membership at the Annual Meeting.

STATEMENT OF IDEALS AND OBJECTIVES

This statement was initially adopted by the Membership at the 1967 Annual Meeting.

It has been reviewed and readopted by the Membership at each subsequent Annual Meeting, and was last revised in 2023.

Basin Electric Power Cooperative (Basin Electric) was organized by its member systems in the Missouri River Basin to provide an adequate wholesale supply of dependable, low-cost electric power under democratic member control, consistent with the public interest.

We believe:

1. That an adequate, universally available, and safe supply of affordable electricity is a vital ingredient for maintaining and improving the economy and the people's standard of living. Basin Electric commits to ensuring that our generation and transmission resources are used for the benefit of Basin Electric and its member-owners, now and in the future, through cooperation with our power-supply partners.

2. That a clean and healthy environment, which we all need and enjoy, must be maintained and that the energy industry should minimize impacts to the environment.

3. That Basin Electric is dedicated to supporting a healthy agricultural economy, which is essential to the greater development of rural areas and the nation’s general welfare. Furthermore, our commercial and industrial consumer-members are similarly important to cooperative health and should be encouraged.

4. That the Rural Utilities Service program of providing long-term, low-interest loan funds and loan guarantees to rural electric cooperatives is a vital element in providing low cost electricity for the social and economic benefit of people, and is one of the most beneficial programs ever undertaken by our federal government, and that this program should be supported as an important device to foster the economic development of rural areas and to help improve the standard of living of its consumer-owners.

5. That federal hydropower is an important renewable energy resource in the region, providing competitive cost-based rates to the membership. The long-standing statutory and contractual relationship between the membership and the federal government for preference power from these facilities should continue uninterrupted.

6. That the benefits of the development of our national resources should accrue to the people and that the federal government has the principal responsibility for establishing and maintaining programs and policies to protect the public interest in the multipurpose development, conservation, and utilization of our water and power resources.

7. That Basin Electric was established for all its members and the benefits of its operation should accrue to them on a consistent and uniform basis.

8. That people have the right to organize themselves to provide needed goods and services; that cooperatives and their associated entities can provide a yardstick of costs which benefit all consumers; and that they are consistent and help preserve our private enterprise system.

9. That members of Basin Electric Power Cooperative should strive to resolve issues through the established cooperative board/committee or other member engagement processes prior to pursuing legal actions, including FERC intervention/protest, adverse to Basin Electric. After exhausting all internal processes in the event any issue is not then resolved, prior to any adverse filing, members should notify Basin Electric of their intent to file.

We pledge:

1. To provide our members with an adequate supply of wholesale electric power and high- quality service at the lowest-possible cost by:

a. Supporting use of the federal hydroelectric generating plants so these facilities continue to serve as the backbone of a region-wide power supply system.

b. Encouraging prudent development of clean and efficient power technologies, legislation, and research in the fuels and energy fields as it affects our lives and environment.

c. Operating Basin Electric's energy production facilities in the most efficient, productive, and safe manner possible.

2. To maintain a competent staff of dedicated employees by establishing policies which provide challenging careers and fair compensation, and which recognize their rights and responsibilities.

3. To conduct the business affairs of Basin Electric as trustees for the interest of the members on a basis of honesty and equity.

4. To help promote economic development throughout Basin Electric's service area by working with member systems in the planning and execution of programs to help develop the natural, human, and economic resources within the region, and to encourage conservative and efficient use of electrical energy.

5. To conduct a vigorous communication and education program to promote Basin Electric's policies, plans, and progress among its employees, members, and the public.

6. Through membership, aid other rural electric cooperatives, public agencies, and consumer-controlled organizations to obtain reliable wholesale power at the lowest-possible cost.

7. To encourage development of and work with consumer-owned and other organizations having similar objectives.

Resolution 4 - Environment

Basin Electric Power Cooperative (Basin Electric) supports the care and utilization of our natural resources. Basin Electric believes that is best accomplished through 1) clear and easily interpreted environmental laws and regulations; 2) single, efficient, and predictable permitting processes; and 3) local oversight of compliance that ensures needed interpretations consider the realities of the environment and local interests are being fairly considered.

Background:

Basin Electric has provided leadership, resources, and efforts in research to advance state-of-the-art conservation measures, including land reclamation and significant development of renewable generation sources from its inception. Basin Electric, its membership, and member-consumers are committed to maintaining a clean and healthy environment for us and our communities. Basin Electric also recognizes the economic realities that dictate both an achievable environmental standard be maintained while providing satisfactory balance between protecting the environment and sustaining the economy.

Appendix D

Notice to Construct Approved Reliability Network Upgrades

SPP-NTC-210675

SPP
Notification to Construct

July 12, 2022

Mr. Tom Christensen
Basin Electric Power Cooperative
1717 E. Interstate Ave.
Bismarck, ND 58503

RE: Notification to Construct Approved Reliability Network Upgrades

Dear Mr. Christensen,

Pursuant to Section 3.3 of the Southwest Power Pool, Inc. ("SPP") Membership Agreement and Attachments O and Y of the SPP Open Access Transmission Tariff ("OATT"), SPP provides this Notification to Construct ("NTC") directing Basin Electric Power Cooperative ("BEPC"), as the Designated Transmission Owner, to construct the Network Upgrades.

On January 25, 2022, the SPP Board of Directors approved the Network Upgrade(s) listed below to be constructed as part of 2021 ITP.

New Network Upgrades
Previous NTC Number: 210652
Previous NTC Issue Date: 3/11/2022
Project ID: 92113
Project Name: Line - Kummer Ridge - Round Up 345 kV
Need Date for Project: 1/1/2023
Estimated Cost for Project: $78,977,357

Network Upgrade ID: 143588
Network Upgrade Name: Kummer Ridge - Round Up 345 kV
Network Upgrade Description: Build 33.2 mile new 345 kV line from Kummer Ridge to Round Up
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability

SPP-NTC-210675

Network Upgrade Specification: All elements and conductor must meet seasonal rating criteria of 1792/1792/1792/1792 (SN/SE/WN/WE) MVA
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $78,293,357
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: BEPC
Date of Estimated Cost: 5/31/2022

Network Upgrade ID: 143589
Network Upgrade Name: Kummer Ridge 345 kV Terminal Upgrades
Network Upgrade Description: Install terminal equipment at Kummer Ridge substation 345 kV to support a new 345 kV line from Round Up
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: All elements and conductor must meet seasonal rating criteria of 1792/1792/1792/1792 (SN/SE/WN/WE) MVA
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $342,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: BEPC
Date of Estimated Cost: 5/31/2022

Network Upgrade ID: 143590
Network Upgrade Name: Round Up 345 kV Terminal Upgrades
Network Upgrade Description: Install terminal equipment at Round Up substation 345 kV to support a new 345 kV line from Kummer Ridge
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: All elements and conductor must meet seasonal rating criteria of 1792/1792/1792/1792 (SN/SE/WN/WE) MVA
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $342,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: BEPC
Date of Estimated Cost: 5/31/2022

SPP-NTC-210675

Previous NTC Number: 210652
Previous NTC Issue Date: 3/11/2022
Project ID: 92168
Project Name: Multi - Tande - Finstad - Leland Olds 345 kV
Need Date for Project: 1/1/2023
Estimated Cost for Project: $325,562,264 (this project cost reflects Network Upgrades not included in this NTC)

Network Upgrade ID: 143714
Network Upgrade Name: Finstad - Tande 345 kV New Line
Network Upgrade Description: Build a 48 mile 345 kV line from Finstad to Tande.
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: All elements and conductor must meet seasonal rating criteria of 1792(SE) MVA
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $67,411,405
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: BEPC
Date of Estimated Cost: 5/26/2022

Network Upgrade ID: 144227
Network Upgrade Name: Finstad 115 kV Substation
Network Upgrade Description: Build a new 115 kV Substation with terminal equipment to support a line from Vanhook 115 kV substation.
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: All elements and conductor must meet seasonal rating criteria of 239/239/239/239
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $4,675,697
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP
Date of Estimated Cost: 5/31/2022

SPP-NTC-210675

Network Upgrade ID: 144230
Network Upgrade Name: Finstad 345 kV New Substation
Network Upgrade Description: Build a new 345 kV Substation including 345 kV terminals for lines from Leland Olds 345 kV substation, Tande 345 kV substation and high side terminal equipment for Finstad 345/115 kV Ckt 1 transformer and Finstad 345/115 kV Ckt 2 transformer
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: All elements and conductor must meet seasonal rating criteria of 1792/1792/1792/1792 (SN/SE/WN/WE) MVA
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $18,822,018
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: BEPC
Date of Estimated Cost: 5/31/2022

Network Upgrade ID: 144231
Network Upgrade Name: Finstad Switched Shunt
Network Upgrade Description: Install a switched shunt at Finstad.
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: Switched shunt and supporting elements must be rated for minimum of 25 MVAR
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $385,021
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: BEPC
Date of Estimated Cost: 5/31/2022

Network Upgrade ID: 144233
Network Upgrade Name: Finstad 345/115 kV Ckt 1 Transformer
Network Upgrade Description: Install a 345/115 kV Ckt 1 Transformer at Finstad 345
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr

SPP-NTC-210675

TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: All elements and conductor must meet seasonal rating criteria of 332/415/332/415 (SN/SE/WN/WE) MVA
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $5,315,254
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: BEPC
Date of Estimated Cost: 5/31/2022

Network Upgrade ID: 144235
Network Upgrade Name: Finstad 345/115 kV Ckt 2 Transformer
Network Upgrade Description: Install a 345/115 kV Ckt 2 transformer at Finstad 115 and upgrade any necessary 115 kV terminal equipment.
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: All elements and conductor must meet seasonal rating criteria of 332/415/332/415 (SN/SE/WN/WE) MVA
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $5,315,254
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: BEPC
Date of Estimated Cost: 5/31/2022

Network Upgrade ID: 144236
Network Upgrade Name: Leland Olds - Finstad - 345 kV New Line
Network Upgrade Description: Build a 123 mile 345 kV line from Leland Olds to Finstad.
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: All elements and conductor must meet seasonal rating criteria of 1195/1195/1195/1195 (SN/SE/WN/WE) MVA
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $200,761,539
Cost Allocation of the Network Upgrade: Base Plan

SPP-NTC-210675

Estimated Cost Source: BEPC
Date of Estimated Cost: 5/31/2022

Network Upgrade ID: 144237
Network Upgrade Name: Leland Olds 345 kV Substation
Network Upgrade Description: Build a new 345 kV Substation with terminal equipment to support a new line from Finstad 345 kV substation.
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: All elements and conductor must meet seasonal rating criteria of 1195/1195/1195/1195 (SN/SE/WN/WE) MVA
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $9,277,339
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP
Date of Estimated Cost: 5/31/2022

Network Upgrade ID: 144238
Network Upgrade Name: Tande 345 kV Terminal Equipment
Network Upgrade Description: Install new terminal equipment at Tande to support a new 345 kV line from Finstad. Install a series compensation device at Finstad or Tande.
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: All elements and conductor must meet seasonal rating criteria of 1195/1195/1195/1195 (SN/SE/WN/WE) MVA
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $5,085,047
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: BEPC
Date of Estimated Cost: 5/31/2022

Previous NTC Number: 210652
Previous NTC Issue Date: 3/11/2022

SPP-NTC-210675

Project ID: 92211
Project Name: Multi - NE Williston - Folvag 115 kV - Judson - East Fork - Tande 345 kV
Need Date for Project: 1/1/2023
Estimated Cost for Project: $34,634,441(this project cost reflects Network Upgrades not included in this NTC)

Network Upgrade ID: 144171
Network Upgrade Name: East Fork 345/115 kV Substation
Network Upgrade Description: Bisect the Judson to Tande 345 kV line approximately 18 miles from Judson and build a new 345 kV Substation.
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: AAll 345 kV elements and conductor must meet seasonal rating criteria of 1792/192/1792/1792 (SN/SE/WN/WE) MVA
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $17,766,381
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: BEPC
Date of Estimated Cost: 5/31/2022

Network Upgrade ID: 144198
Network Upgrade Name: East Fork 345/115 kV Transformer
Network Upgrade Description: Install a 345/115 kV Transformer at the new East Fork 345/115 kV Substation.
Network Upgrade Owner: BEPC
MOPC Representative(s): Jason Doerr
TWG Representative(s): Phil Westby
Categorization: Regional Reliability
Network Upgrade Specification: All elements and conductor must meet seasonal rating criteria of 332/415/332/415 (SN/SE/WN/WE) MVA
Network Upgrade Justification: 2021 ITP
Estimated Cost for Network Upgrade (current day dollars): $5,904,650
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: BEPC
Date of Estimated Cost: 5/31/2022

SPP-NTC-210675

Commitment to Construct
Please provide to SPP a written commitment to construct the Network Upgrade(s) by October 10, 2022, in addition to providing a construction schedule and an updated -20% to +20% cost estimate, NTC Project Estimate, in the Standardized Cost Estimate Reporting Template for the Network Upgrade(s). Failure to provide a sufficient written commitment to construct as required by the SPP OATT could result in the Network Upgrade(s) being assigned to another entity.

Mitigation Plan
The Need Date represents the timing required for the Network Upgrade(s) to address the identified need. Your prompt attention is required for formulation and approval of any necessary mitigation plans for the Network Upgrade(s) included in the Network Upgrade(s) if the Need Date is not feasible. Additionally, if it is anticipated that the completion of any Network Upgrade will be delayed past the Need Date, SPP requires a mitigation plan be filed within 60 days of the determination of expected delays.

Notification of Commercial Operation
Please submit a notification of commercial operation for each listed Network Upgrade to SPP as soon as the Network Upgrade is complete and in-service. Please provide SPP with the actual costs of these Network Upgrades as soon as possible after completion of construction. This will facilitate the timely billing by SPP based on actual costs.

Notification of Progress
On an ongoing basis, please keep SPP advised of any inability on BEPC's part to complete the approved Network Upgrade(s). For project tracking, SPP requires BEPC's to submit status updates of the Network Upgrade(s) quarterly in conjunction with the SPP Board of Directors meetings. However, BEPC shall also advise SPP of any inability to comply with the Project Schedule as soon as the inability becomes apparent.

All terms and conditions of the SPP OATT and the SPP Membership Agreement shall apply to this project(s), and nothing in this letter shall vary such terms and conditions.

Don't hesitate to contact me if you have questions or comments about these requests. Thank you for the important role that you play in maintaining the reliability of our electric grid.

Sincerely,

Antoine Lucas

SPP-NTC-210675

Vice President, Engineering
Phone: (501) 614-3382 • Fax: (501) 482-2022 • alucas@spp.org

cc: Lanny Nickell - SPP
Casey Cathey - SPP
David Kelley - SPP
Jeremy Severson - BEPC
Jason Doerr - BEPC
SPPprojecttracking@spp.org

Appendix E

Cultural Resources Report (Redacted)

BASIN ELECTRIC POWER COOPERATIVE: A CLASS III CULTURAL RESOURCE INVENTORY OF THE LELAND OLDS STATION TO TANDE 345-KILOVOLT TRANSMISSION LINE IN OLIVER, MCLEAN, WARD, AND MOUNTRAIL COUNTIES, NORTH DAKOTA

By:
Amy C. Bleier

Principal Investigator:
Amy C. Bleier

Metcalf Archaeological Consultants, Inc.
Bismarck, North Dakota

Prepared for:
Basin Electric Power Cooperative

Metcalf Project No. 2023.ND.033/034

August 2024

Metcalf
ARCHAEOLOGICAL CONSULTANTS

Locational information for archaeological and historic sites is protected under North Dakota Century Code § 55-02-07.
All reports (Class I, II, III, Testing, or Data Recovery) or any loose maps that will be distributed outside the agency or client should not contain site locational information. Site locational information includes the location of a site on a topographic map or aerial photographs, the location of a site in tables, such as Township, Range, and Section, or photograph of sites. It is acceptable to mention the Smithsonian Trinomial designation (e.g., 32EM0123) as this does not contain locational information, other than state and county.

EXECUTIVE SUMMARY

Basin Electric Power Cooperative (BEPC) intends to construct the overhead Leland Olds Station to Tande 345-kilovolt Transmission Project (LOS to Tande) in Oliver, McLean, Ward, and Mountrail counties, North Dakota. Metcalf Archaeological Consultants, Inc. (Metcalf) was contracted to conduct a Class III cultural resource inventory of the LOS to Tande project. The proposed LOS to Tande includes a construction corridor and access roads between the Leland Olds Station, on the south side of the Missouri River in Oliver County, and the Tande Substation, east of the community of Tioga in Mountrail County.

The LOS to Tande transmission line is a state level project. Basin Electric Power Cooperative is applying for a permit from the North Dakota Public Service Commission, which is responsible for ensuring the project complies with *North Dakota Century Code* 55-03 - Protection of Prehistoric Sites and Deposits - and *North Dakota Administrative Code* 40-02-02 - Permit for Cultural Resource Investigation.

The inventory completed thus far totals 178 miles of the transmission line construction corridor and 43 miles of access roads. The width of the construction corridor is 150 feet, and the corridor for access roads is 100 feet. In some places the inventory is wider because of reroutes or segments where additional field crew were present and for the proposed Crane Creek Substation. The total acreage for the transmission line construction corridor is 4,660 and the access roads total 457 acres. Archaeologists plan to inventory the remainder of the construction corridor and access roads after harvest and as right-of-entry statuses allow. A separate report will address fieldwork which post-dates July 17, 2024.

Archaeologists conducted the inventory between June 26 and December 4, 2023, and between April 16 and July 17, 2024. Amy Bleier, Kimball Banks, William Bluemle, Damita Engel, and Michael Jackson alternated serving as Principal Investigators over the course of the inventory. Forty-seven new cultural resources were identified, and 31 previously documented cultural resources were revisited (Table E.1).

Table E1: Cultural Resources Recorded for LOS to Tande as of July 17, 2024

County	Pre Site	Pre SL	Pre IF	Post Site	Post SL	Architect Site	Architect & Post Site	Pre & Post Site	CHS	Total
Oliver										
McLean	8	1	2	8	2	3	1			25
Ward										
Mountrail	34	10	3	2	1			2	1	53
Total	42	11	5	10	3	3	1	2	1	78

Abbreviations: Pre = Precontact; Post = Post-contact; Architect = Architectural; CHS = Cultural Heritage Site; SL = Site Lead; IF = Isolated Find

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New and previously documented cultural resources are listed in Table E.2 by type, legal location, recommendation for eligibility for inclusion in the State Historic Sites Registry, and management recommendation. Two cultural resources are recommended *eligible* for inclusion in the State Historic Sites Registry. Avoidance measures must be taken to avoid eligible sites, or mitigated if avoidance is not possible. For 59 cultural resources, inventory data was insufficient to recommend eligibility for inclusion in the State Historic Sites Registry; further work is necessary to recommend eligibility. If these resources cannot be avoided, their eligibility will need to be assessed prior to construction and if *eligible*, avoided or mitigated before construction may impact the resource. Seventeen cultural resources are recommended *not eligible* for inclusion in the State Historic Sites Registry of Historic and no further work is necessary.

Table E2: Cultural Resources and Management Recommendations along Basin LOS to Tande

Number	Type	Description	Ownership	Map #	Eligibility Recommendation	Management Recommendation
32ML926	Post-contact	U.S. Highway 83	State	C25, C31	Eligible	Span the site
32ML1084	Post-contact	Farmstead	Private	C34	Not eligible	No avoidance necessary
32ML1106	Architectural, Post-contact	Farmstead	Private	C34	Not eligible	No avoidance necessary
32ML1406	Architectural	McClusky Canal	Federal	C30	Eligible	Span the site
32ML1473	Post-contact	Cemetery	Private	C29	Not eligible	Not found in project area
32ML1474	Precontact	Stone features	Private	C26	Unevaluated	Avoid or further evaluation
32ML1475	Precontact	Stone features	Private	C26	Unevaluated	Avoid or further evaluation
32ML1476	Precontact	Stone features	Private	C27	Unevaluated	Avoid or further evaluation
32ML1477	Post-contact	Dump	Private	C22	Not eligible	No avoidance necessary
32ML1521	Precontact	Lithic scatter	Private	C33	Unevaluated	Avoid or further evaluation
32ML1522	Post-contact	Bridge remnants	Private	C33	Not eligible	No avoidance necessary
32ML1523	Post-contact	Bridge	Private	C33	Not eligible	No avoidance necessary
32ML1524	Post-contact	Bridge	Private	C34	Not eligible	No avoidance necessary
32ML1525	Post-contact	School grounds	Private	C34	Unevaluated	Avoid or further evaluation
32ML1526	Precontact	Lithic and bone deposits	Private	C33	Unevaluated	Avoid or further evaluation
32ML1527	Post-contact	Dugouts, dump	Private	C33	Not eligible	No avoidance necessary
32ML1528	Post-contact	Dump	Private	C21	Not eligible	No avoidance necessary
32ML1529	Precontact	Stone features	Private	C22	Unevaluated	Avoid or further evaluation
32MLx29	Precontact	Black Cat's Village	Private	C35	Unevaluated	Not found in project area
32MLx40	Precontact	Eagle trap	Private	C34	Unevaluated	Not found in project area
32MLx272	Post-contact	Coal mine	Private	C34	Unevaluated	Not found in project area
32MLx288	Post-contact	Coal mine	Private	C30	Unevaluated	Not found in project area
32MLx920	Precontact	Stone feature	Private	C23	Unevaluated	Avoid or further evaluation
32MLx921	Precontact	Isolated find	Private	C23	Not eligible	No avoidance necessary
32MLx929	Precontact	Isolated find	Private	C33	Not eligible	No avoidance necessary
32MN20	Precontact	Stone features	Private	C6	Unevaluated	Not found in project area
32MN373	Precontact, Post-contact	Stone features; coal mine	Private	C11	Unevaluated	Avoid or further evaluation

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Table E2: Cultural Resources and Management Recommendations along Basin LOS to Tande						
Number	**Type**	**Description**	**Ownership**	**Map #**	**Eligibility Recommendation**	**Management Recommendation**
32MN516	Precontact	Stone features	Private	C1	Unevaluated	Not found in project area
32MN742	Precontact, Post-contact	Stone features; coal mine	Private	C11	Unevaluated	Avoid or further evaluation
32MN791	Precontact	Stone features	Private	C3	Unevaluated	Avoid or further evaluation
32MN1035	Post-contact	Foundations; cultural material	Private	C10	Not eligible	No avoidance necessary
32MN1109	Precontact	Stone features	Private	C8	Unevaluated	Avoid or further evaluation
32MN1400	Precontact	Stone features	Private	C4	Unevaluated	Avoid or further evaluation
32MN1442	Precontact	Stone features	Private	C8	Unevaluated	Avoid or further evaluation
32MN1539	Precontact	Stone features	Private	C3	Unevaluated	Avoid or further evaluation
32MN1648	Precontact	Stone feature	Private	C8	Unevaluated	Avoid or further evaluation
32MN1748	Precontact	Stone feature	Private	C11	Unevaluated	Avoid or further evaluation
32MN1749	Precontact	Stone feature	Private	C6	Unevaluated	Avoid or further evaluation
32MN1750	Precontact	Stone feature	Private	C9	Unevaluated	Avoid or further evaluation
32MN1754	Precontact	Stone feature	Private	C5	Unevaluated	Avoid or further evaluation
32MN1755	Post-contact	Dump	Private	C16	Not eligible	No avoidance necessary
32MN1756	Precontact	Stone feature	Private	C7	Unevaluated	Avoid or further evaluation
32MN1757	Precontact	Stone feature	Private	C7	Unevaluated	Avoid or further evaluation
32MN1758	Precontact	Stone feature	State	C6	Unevaluated	Avoid or further evaluation
32MN1759	Precontact	Stone feature	Private	C7	Unevaluated	Avoid or further evaluation
32MN1760	Precontact	Stone feature	Private	C3	Unevaluated	Avoid or further evaluation
32MN1761	Precontact	Stone feature	Private	C4	Unevaluated	Avoid or further evaluation
32MN1762	Precontact	Stone feature	Private	C4	Unevaluated	Avoid or further evaluation
32MN1763	Precontact	Lithic scatter	Private	C2	Unevaluated	Avoid or further evaluation
32MN1764	Precontact	Lithic scatter	Private	C2	Unevaluated	Avoid or further evaluation
32MN1765	Precontact	Stone feature	Private	C1	Unevaluated	Avoid or further evaluation
32MN1766	Precontact	Stone features	Private	C3	Unevaluated	Avoid or further evaluation
32MN1767	Precontact	Stone features	Private	C3	Unevaluated	Avoid or further evaluation
32MN1768	Precontact	Stone features	Private	C3	Unevaluated	Avoid or further evaluation
32MN1769	Precontact	Stone feature	Private	C3	Unevaluated	Avoid or further evaluation
32MN1770	Precontact	Stone feature	Private	C3	Unevaluated	Avoid or further evaluation
32MN1771	Precontact	Stone feature	Private	C3	Unevaluated	Avoid or further evaluation
32MN1772	Precontact	Stone feature	Private	C3	Unevaluated	Avoid or further evaluation
32MN1773	Precontact	Stone feature	Private	C3	Unevaluated	Avoid or further evaluation
32MN1774	Precontact	Stone features	Private	C3	Unevaluated	Avoid or further evaluation
32MN1775	Precontact	Stone features	Private	C3	Unevaluated	Avoid or further evaluation
32MN1776	Precontact	Stone feature	Private	C1	Unevaluated	Avoid or further evaluation
32MN1777	Precontact	Stone feature	Private	C1	Unevaluated	Avoid or further evaluation
32MNx87	Precontact	Cultural material scatter	Private	C13	Unevaluated	Not found in project area
32MNx116	Precontact	Cultural material scatter	Private	C7	Unevaluated	Not found in project area

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Table E2: Cultural Resources and Management Recommendations along Basin LOS to Tande						
Number	**Type**	**Description**	**Ownership**	**Map #**	**Eligibility Recommendation**	**Management Recommendation**
32MNx118	Precontact	Cultural material scatter	Private	C7	Unevaluated	Avoid or further evaluation
32MNx123	Precontact	Cultural material scatter	Private	C7	Unevaluated	Not found in project area
32MNx172	Precontact	Cultural material scatter	Private	C6	Unevaluated	Not found in project area
32MNx378	Precontact	Cultural material scatter	Private	C2	Unevaluated	Not found in project area
32MNx493	Precontact	Cultural material scatter	Private	C1	Unevaluated	Not found in project area
32MNx495	Precontact	Cultural material scatter	Private	C1	Unevaluated	Not found in project area
32MNx634	Precontact	Isolated find	Private	C1	Not eligible	No avoidance necessary
32MNx764	Precontact	Cultural material scatter	Private	C3	Unevaluated	Not found in project area
32MNx792	Post-contact	Coal mine	Private	C1	Unevaluated	Not found in project area
32MNx1058	Precontact	Stone features	Private	C2	Unevaluated	Avoid or further evaluation
32MNx1069	Precontact	Isolated find	Private	C9	Not eligible	No avoidance necessary
32MNx1070	Precontact	Isolated find	Private	C5	Not eligible	No avoidance necessary
CHFMN71	Modern	Cremains	Private	C2	Unevaluated	Avoid

Metcalf Archaeological Consultants, Inc. recommends a finding of *No Significant Sites* (*North Dakota Century Code* 49-22-09) if Basin Electric Power Cooperative follows the management recommendations outlined herein.

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Appendix F

Unanticipated Discovery Plan for Cultural Resources and Human Remains

Unanticipated Discovery Plan for Cultural Resources and Human Remains

Leland Olds Station to Tande 345-kV Transmission Line
Mercer, McLean, Ward, Mountrail, and Williams Counties, North Dakota

October 2024

BASIN ELECTRIC POWER COOPERATIVE

A Touchstone Energy® Cooperative

Introduction

Although Basin Electric Power Cooperative (Basin Electric) has conducted thorough surveys for cultural resources along the Leland Olds Station to Tande 345-kV Transmission Line Project (Project), the potential exists for exposure of previously unidentified or buried cultural material during excavation and construction of the transmission line as associate facilities. The purpose of this Unanticipated Discovery Plan (UDP) is to document the procedures to be implemented by Basin Electric's construction coordinator and/or contractor if cultural resources, including archaeological sites and possible human remains, are inadvertently discovered during construction. This plan complies with the North Dakota's "Protection of Human Burial Sites, Human Remains, and Burial Goods" law (North Dakota Century Code [NDCC] 23-06-27) and accompanying administrative rules (North Dakota Administrative Code [NDAC] 40-02-03).

Unanticipated Discovery

In the event that previously unknown cultural (or paleontological) resources are discovered within the Area of Potential Effects (APE) during construction activities for the Project, or should those activities directly or indirectly affect known cultural resources in an unanticipated manner, the following actions, at a minimum, will be initiated by Basin Electric or a representative duly authorized to perform these tasks:

1. All activities will halt in the immediate vicinity of the discovery and all actions will be redirected to areas at least 100 feet from the edge of the discovery.
    a. Basin Electric's construction coordinator and/or contractor will immediately report the discovery to the appropriate parties identified in the Emergency Contact List found later in this document.
    b. Ground disturbing construction activities will not occur within 100 feet in any direction from the cultural resource until the site has been properly assessed as described in paragraph 2 (below) and the State Historical Society of North Dakota (SHSND) concurs that construction may resume.
    c. In the event that a cultural resource specialist or other necessary persons are not immediately available, Basin Electric will require that the discovery be covered or otherwise protected until such time that the cultural resource specialist can be present for inspection and evaluation.
2. Upon arriving at the site of the discovery, the cultural resource specialist will assess the resource. The assessment will include:
    a. The cultural resource specialist, in conjunction with a tribal monitor if appropriate, will ascertain the nature and the extent of the resource, and the potential for intact deposits. Evaluation will involve an examination of the ground surface, backfill piles, and exposed construction surfaces. The cultural resource specialist will discuss the potential for additional impacts to the resource with the construction manager.
    b. Based on this examination, the cultural resource specialist will recommend the unanticipated discovery location is:
        (1) not a site (e.g., isolated find or less than 50 years in age);
        (2) not a historic property, i.e., not eligible for inclusion in the National Register of Historic Places (NRHP);
        (3) a historic property, i.e., eligible for inclusion in NRHP or a culturally sensitive site for which no further impacts are likely to occur;
        (4) an NRHP-eligible or a culturally sensitive site (e.g., exposed hearths, house pits) that is likely to be impacted with further construction; or,
        (5) a site for which additional information is required to ascertain extent and NRHP eligibility.

The cultural resource specialist will provide information and a recommendation regarding the potential resource to SHSND to determine the most appropriate course of action.

Emergency Stabilization of Cultural Resources

Unstable earth conditions during construction or other unforeseen natural or man-made events could endanger cultural resources discovered during construction of the Project. If cultural resources are in imminent danger of destruction, Basin Electric will apply prudent methods to stabilize landforms around the unanticipated discovery. Once stabilized, the resource shall be assessed as described above, subject to safety concerns.

Salvage, Curation or Disposition of Cultural Materials

As stated in item 2.b.5 above, additional information may be required for the cultural resource specialist to assess the nature and extent of an unanticipated discovery and to provide a recommendation to SHSND regarding NRHP eligibility. With appropriate concurrence from SHSND, cultural materials may be salvaged for this purpose. This does not include cultural resources that are covered under North Dakota's "Protection of human remains, and burial goods" law (NDCC 23-06-27) and accompanying administrative rules (NDAC 40-02-03). All other cultural materials recovered from privately owned lands are considered the property of the landowner. After necessary laboratory analysis is completed, Basin Electric will provide the landowner with photographs and descriptions of cultural material from his/her property. The landowner will be encouraged to contribute the materials for curation at the SHSND. If the landowner desires, Basin Electric will return cultural materials recovered from his/her land to him/her.

Unanticipated Discovery of Human Remains

If construction or other Project personnel identify what they believe to be human remains, they will immediately halt construction at that location and Basin Electric and the cultural resource specialist will be notified immediately. The construction coordinator will ensure that further construction does not occur within an area less than 100 feet in any direction from the edge of the discovery until a cultural resource specialist, in conjunction with Basin Electric environmental personnel, arrive to assess the discovery. The inspector will also secure the area of the apparent human remains to ensure no further disturbance or removal of those remains and associated material.

After arrival at the site, the cultural resource specialist will evaluate the discovery to determine if it does in fact consist of human remains. As required by law, Basin Electric will notify the McKenzie County or Dunn County Sheriff within 24 hours of the discovery. Basin Electric will also notify the SHSND of the finding.

Basin Electric and/or the contractor will secure the location by means of flagging or roping the perimeter of the avoidance area and covering or otherwise protecting the human remains and any associated materials. The remains will not be further disturbed prior to completion of consultations with respective agencies unless such disturbance is necessary to preserve or protect the human remains. Any disturbance necessary to preserve or protect the remains must be done in consultation with law enforcement, SHSND, and the cultural resource specialist. The 100-foot-radius avoidance area may be expanded if the context of the human remains suggests additional human remains may be present within the construction area or if construction activities outside the 100-foot-radius area might destabilize or otherwise degrade the context of the human remains.

Law enforcement will determine whether the finding is associated with a crime scene within 15 days. If deemed not a crime scene, law enforcement will notify the SHSND of their findings. No cultural resource investigations of human remains can occur without a permit from SHSND. The cultural resource specialist will work with SHSND to obtain a permit to conduct investigations of the location. If the remains are determined to be Native American, or if the ethnic identity of the remains is unknown, SHSND will notify the Intertribal Re-interment Committee. A meeting of interested parties will be set up as soon as possible, preferably within 36 hours of the decision that there is no evidence of a crime, to ensure that the disturbed remains receive the maximum protection. SHSND, in consultation with the tribes (as appropriate) and Basin Electric, will agree upon a suitable action.

Work cannot proceed until the stipulations of Protection of Human Burial Sites, Human Remains and Burial Goods in NDCC Section 23-06-27 and Protection of Prehistoric Sites and Deposits in NDAC Section 40-02-03 have been met.

Emergency Contact List

Entity	Name	Role	Telephone Number
Basin Electric Power Cooperative	Lucas Tiegen	Field Coordinator	701.223.0441
Basin Electric Power Cooperative	Ryan King	Environmental Administrator	701.426.9469
Basin Electric Power Cooperative	Bobby Nasset	Project Manager	701.223.0441
Metcalf Archaeological Consultants, Inc.	Damita Engle	Cultural Resource Specialist	701.214.1335
Mercer County Sheriff	Terry Ternes	County Sheriff	701.745.3333
Mercer County Coroner		County Coroner	701.748.2225
McLean County Sheriff	Jerry Kerzmann	County Sheriff	701.462.8103
McLean County Coroner	Ben Gehring	County Coroner	701.463.2200
Ward County Sheriff	Robert Roed	County Sheriff	701.857.6500
Ward County Coroner	Trinity Medical Center	County Coroner	701.857.5000
Mountrail County Sheriff	Corey Bristol	County Sheriff	701.628.2975
Mountrail County Coroner	Corey Bristol	County Coroner	701.628.2975
Williams County Sheriff	Verlan Kvande	County Sheriff	701.577.7700
Williams County Coroner	Seth Coughlin	County Coroner	701.577.3738
State Historical Society of North Dakota	Andrew Clark	Chief Archaeologist	701.328.3574

Appendix G

Natural Resources Inventory Report

Leland Olds Station to Tande 345-kV Transmission Project
Mercer, McLean, Ward, Mountrail, and Williams Counties, North Dakota

Natural Resources Inventory Report

Prepared for:

Basin Electric Power Cooperative

1717 East Interstate Avenue
Bismarck, North Dakota 58503

Prepared by:

Chad Tucker, Erica Matykiewicz, Nick Hill

Western EcoSystems Technology, Inc.
4007 State Street, Suite 109
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Phone: (307) 772-1083
October 2, 2024

WEST

Confidential Business Information

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Chad Tucker	Project Manager
Erica Matykiewicz	Associate Biologist
Nick Hill	Associate Biologist

REPORT REFERENCE

Tucker, C. 2024. Leland Olds Station to Tande 345-kV Transmission Project, Mercer, McLean, Ward, Mountrail, and Williams Counties, North Dakota: Natural Resources Inventory Report. Prepared by Western EcoSystems Technology, Inc. (WEST), Bismarck, North Dakota. October 2, 2024.

TABLE OF CONTENTS

1.0 INTRODUCTION 3
2.0 PROCEDURES 14
2.1 Wetland and Waterbody Field Determination 14
2.2 Federally Listed Wildlife Species Evaluation 14
2.3 Nesting Raptor Survey 14
2.4 Noxious Weed Inventory 15
2.5 Tree and Shrub Inventory 15
2.6 U.S. Fish and Wildlife Service Conservation Easements. 15
3.0 RESULTS 15
3.1 Wetlands 15
3.2 Waterbodies 16
3.3 Threatened and Endangered Species Habitat Assessment 16
3.3.1 Northern Long-eared Bat 17
3.3.2 Whooping Crane 18
3.3.3 Dakota Skipper 21
3.3.4 Piping Plover 23
3.3.5 Rufa Red Knot 24
3.3.6 Monarch Butterfly 24
3.4 Nesting Raptor Survey 25
3.5 Noxious Weed Inventory 26
3.6 Tree and Shrub Inventory 26
3.7 U.S. Fish and Wildlife Service Conservation Easements 26
4.0 LITERATURE CITED 29

LIST OF TABLES

Table 1. Legal descriptions of the Route of Focus. 3
Table 2. Federally listed threatened and endangered species. 14
Table 3. North Dakota State and Project County listed noxious and invasive weeds. 15
Table 4. NLEB Habitat within the Survey Corridor 18
Table 5. Areas of suitable habitat for the Dakota skipper (DASK) within the Survey Corridor. 21
Table 6. Suitable habitat for the Dakota Skipper (DASK) within the pull lanes. 23
Table 7. Raptor Nest Attributes. 25
Table 8. U.S. Fish and Wildlife Service Easements in Survey Corridor 27

LIST OF FIGURES

Figure 1. Location of the proposed Leland Olds Station to Tande 345-kilovolt Transmission. 5

Figure 2 Detailed view of the proposed Leland Olds Station to Tande 345-kilovolt Transmission Project. 6

Figure 3. USGS / HAPET Model of Whooping Crane Relative Probability of Use. 19

Figure 4. Known sightings, species range, and designated critical habitats in relation to the proposed Leland Olds Station to Tande 345-kilovolt Transmission Project. 20

LIST OF APPENDICES

Appendix A - Natural Resource Inventory Figures

Appendix B - Wetland Attributes

Appendix C - Project Field Photographs

Appendix D - Waterbody Attributes

Appendix E - Northern Long-eared Bat Habitat Analysis

Appendix F - Basin Electric Power Cooperative Avian and Bat Protection Plan

Appendix G - DASK Habitat Buffers

Appendix H - Noxious Weed Attributes

ACRONYMS AND ABBREVIATIONS

Acronym	Definition
ac	acre
BEPC	Basin Electric Power Cooperative
DASK	Dakota Skipper
DBH	diameter at breast height
ESA	Endangered Species Act
Final Rule	*Endangered and Threatened Wildlife and Plants; Endangered Species Status for Northern Long-Eared Bats; Final Rule*
ft	foot
IPaC	Information for Planning and Consultation
kV	kilovolt
m	meter
mi	mile
N	north
NLEB	Northern long-eared bat
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
PAB	Palustrine aquatic bed
PEM	Palustrine emergent
PEMA	Palustrine emergent temporarily flooded
PEMC	Palustrine emergent seasonally flooded
PLSS	Public Land Survey System
Project	Leland Olds Station to Tande 345-kilovolt Transmission Project
R	Range
ROW	Right-of-way
Sec.	Section
Survey Corridor	300-ft corridor centered on Focus Route (5,831.8 acres)
T	Township
USACE	US Army Corps of Engineers
USEPA	US Environmental Protection Agency
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
W	west
WEST	Western EcoSystems Technology, Inc.
WMD	Wetland Management District
WNS	White-nose syndrome

1.0 INTRODUCTION

Basin Electric Power Cooperative (BEPC) proposes to construct and operate the Leland Olds Station to Tande 345-kilovolt (kV) Transmission Project (Project). Western EcoSystems Technology, Inc. (WEST), was retained by BEPC to provide natural resources inventory services, which include the identification of waterbody/wetland boundaries, an evaluation of habitat for federally listed species, an aerial eagle nest survey, a noxious weed inventory, a tree and shrub inventory, and a review of U.S Fish and Wildlife Service (USFWS) Easements associated with the Project. The proposed Project is located within Mercer, McLean, Ward, Mountrail, and Williams Counties, North Dakota. The Project would begin at the Leland Olds Substation, located 4.0 miles (mi) southeast of the town of Stanton, and would end at the Tande Substation, located 4.0 mi east of the town of Tioga (Figure 1). The Project would be approximately 160.41 mi. Table 1 identifies the Public Land Survey System Sections within which the Project is located.

Table 1. Legal descriptions of the Route of Focus.

Section	Township	Range
4, 9, 10, 15, 16, 22	144	84
1, 12, 13, 24, 25, 36	145	84
5, 6	146	82
1, 2, 10, 11, 15, 16, 17, 19, 20, 30	146	83
25, 36	146	84
2, 11, 14, 22, 23, 27, 28, 32, 33	147	82
19, 30, 31	149	81
3, 4, 5, 6, 10, 11, 13, 14, 24	149	82
1, 2, 3	149	83
19, 20, 21, 22, 23, 24	150	84
6, 7, 18, 19, 20, 21, 22, 23, 24	150	85
30, 31	151	85
25, 26, 27, 28, 29, 30	151	86
1, 12, 13, 24, 25	151	87
7, 8, 9, 13, 14, 15, 16, 24, 25, 36	152	87
6, 7, 8, 9, 10, 11, 12	152	88
30, 31, 32, 33	153	88
19, 20, 21, 25, 26, 27, 28	152	89
22, 23, 24, 27, 28, 29, 30	153	90
25, 26, 27, 28, 29, 30	153	91
18, 19, 20, 21, 25, 26, 27, 28	153	92
1, 12, 13	153	93
7, 8, 9, 10, 11, 12, 13, 24, 25, 36	154	93
1, 12	154	94
5, 8, 17, 20, 21, 25, 26, 27, 28, 36	155	94
6, 7, 17, 18, 20, 29, 32	156	94
1	156	95
29, 32, 33	157	94

BEPC considered multiple route alignments to minimize impacts to cultural and natural resources. The natural resources discussed in this report are those associated with the Route of Focus. The Survey Corridor is 300 feet (ft) centered on the Route of Focus and contains 5,831.80 acres (ac).

Additional features surveyed for the Project include 86.12 mi of right-of-way (ROW) access trails (305.22 ac), a 40.9 ac proposed substation (Crane Creek Substation), and 50 pull lanes totaling 107.97 ac. The proposed Crane Creek Substation is located on the east side of the Project's Highway 8 crossing, approximately 7.5 mi northeast of New Town in the SW1/4 of Section 8, T153N, R91W. Collectively the surveyed features will be referred to as the Project Survey Area.

The pedestrian field surveys began on June 5, 2023, and are currently ongoing. This report summarizes data collected up to August 27, 2024, which is 93% overall survey completion for the Project. The remainder of the field surveys would be completed as landowner access is granted.

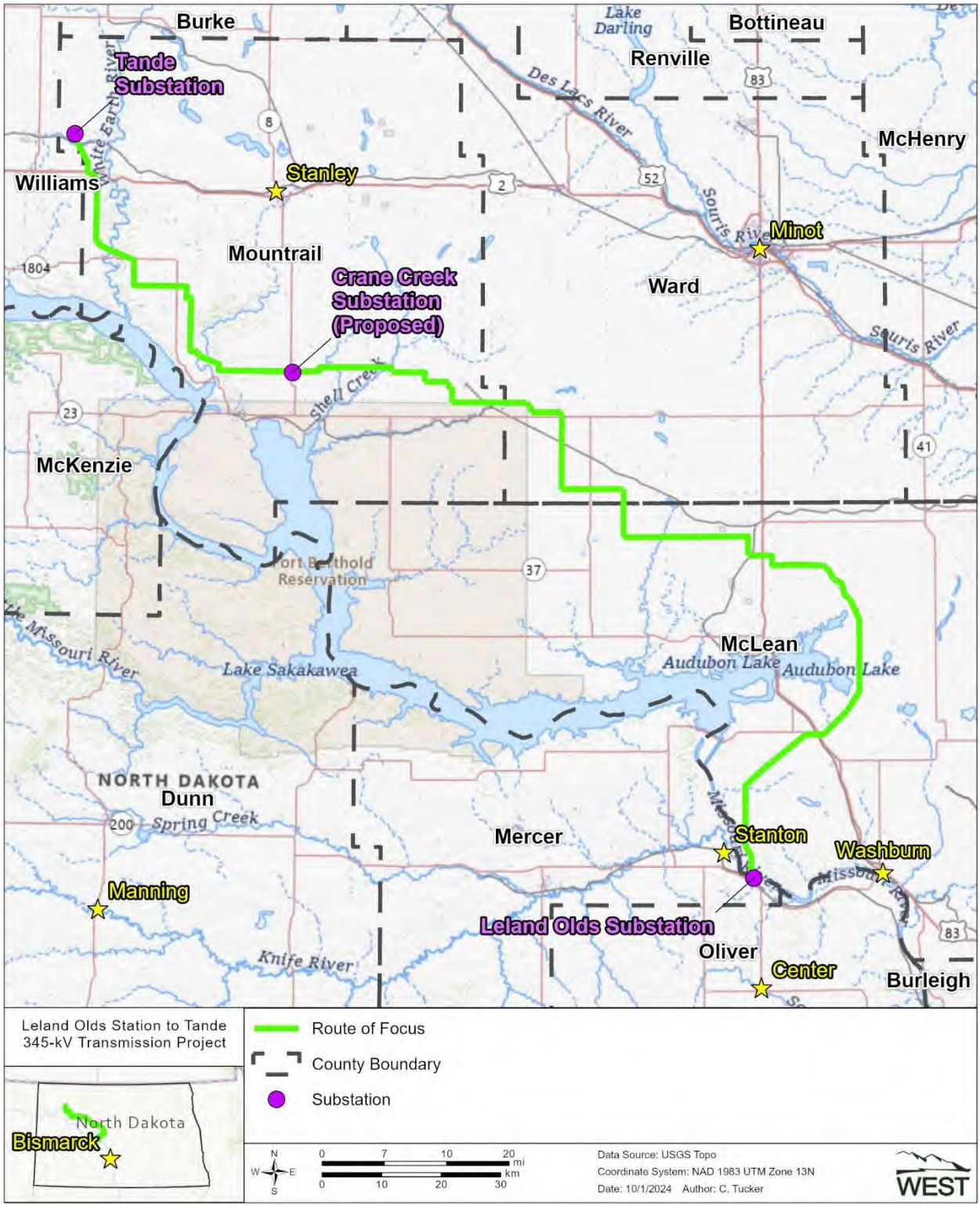

Figure 1. Location of the proposed Leland Olds Station to Tande 345-kilovolt Transmission.

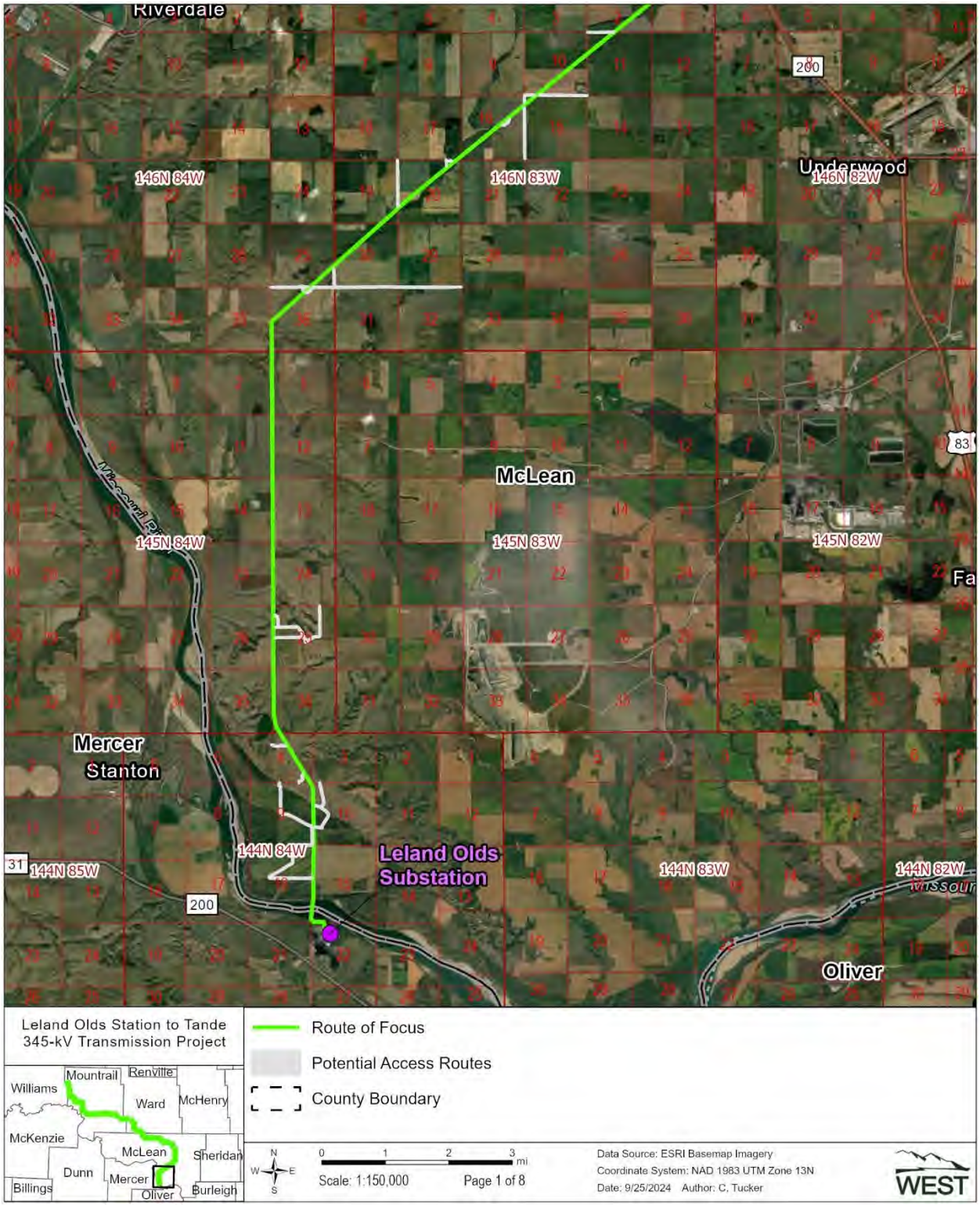

Figure 2 Detailed view of the proposed Leland Olds Station to Tande 345-kilovolt Transmission Project.

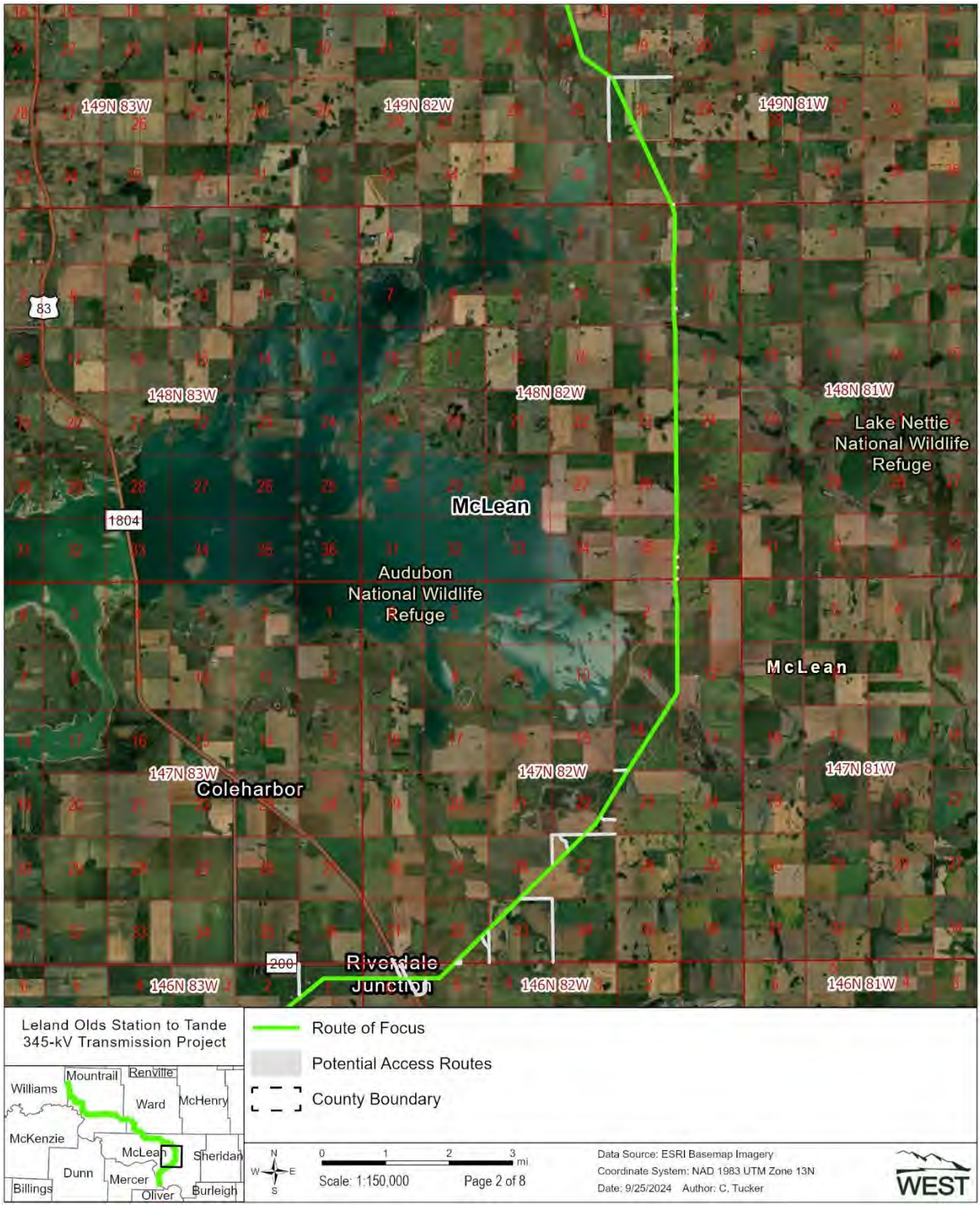

Figure 2 (continued). Detailed view of the proposed Leland Olds Station to Tande 345-kilovolt Transmission Project.

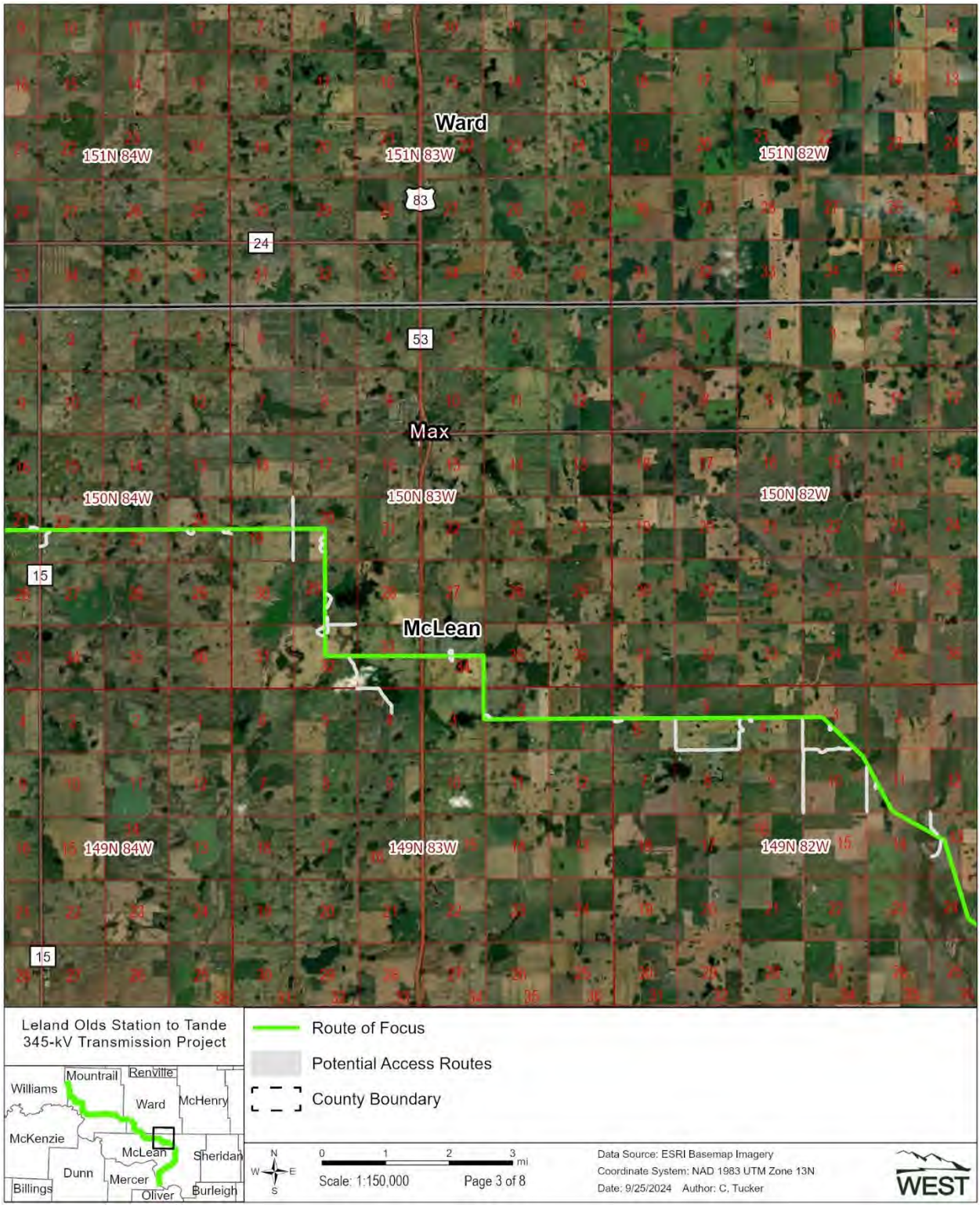

Figure 2 (continued). Detailed view of the proposed Leland Olds Station to Tande 345-kilovolt Transmission Project.

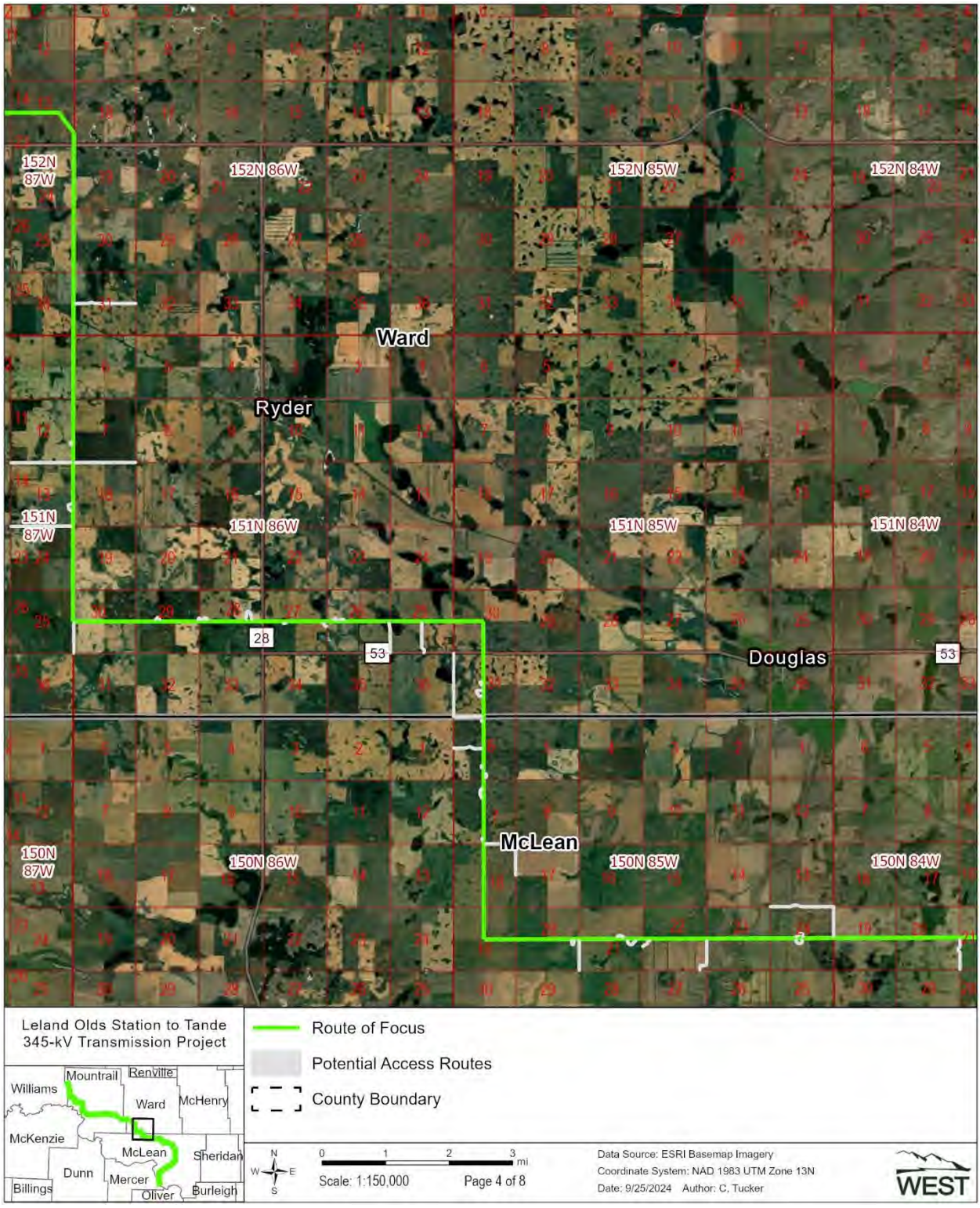

Figure 2 (continued). Detailed view of the proposed Leland Olds Station to Tande 345-kilovolt Transmission Project.

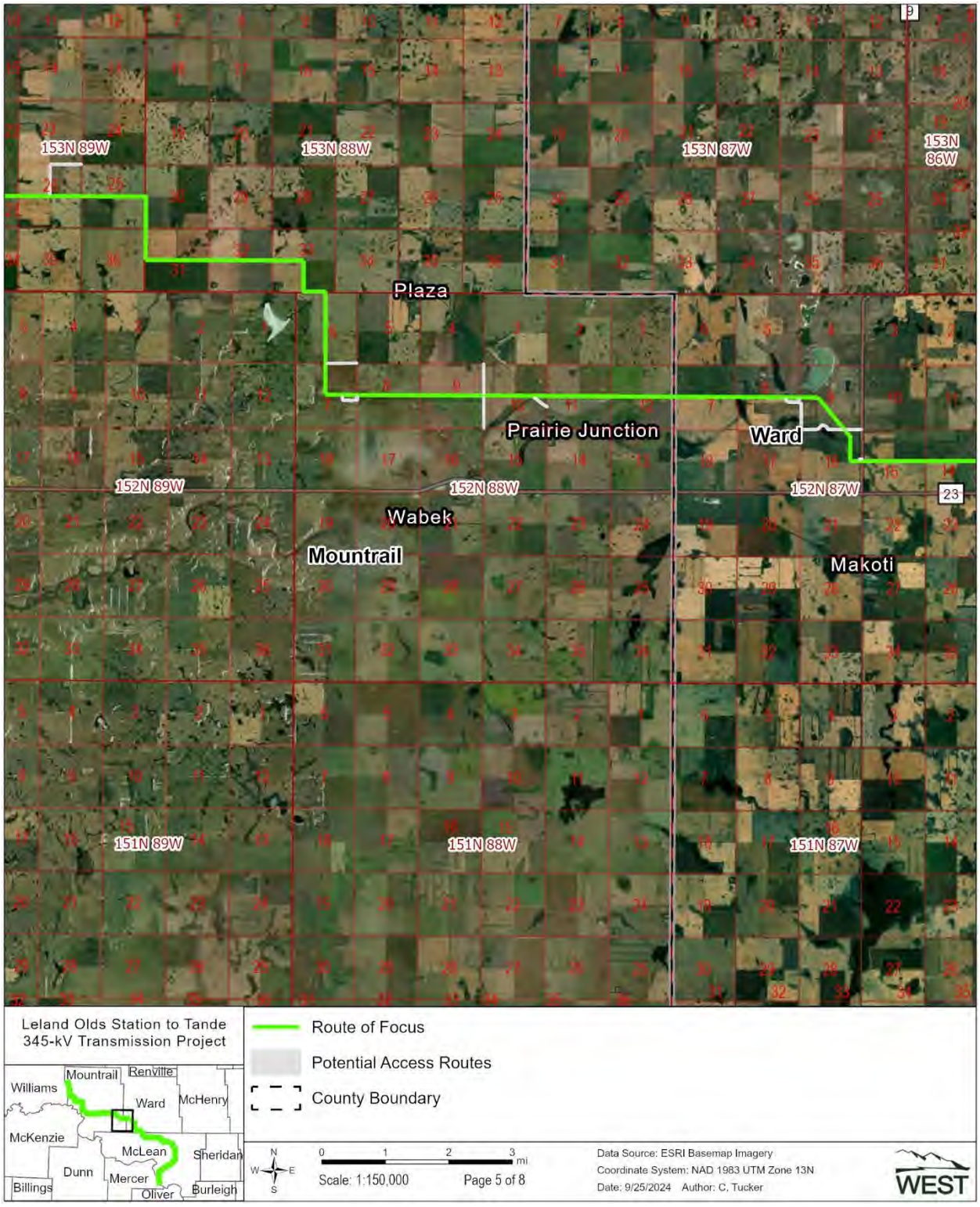

Figure 2 (continued). Detailed view of the proposed Leland Olds Station to Tande 345-kilovolt Transmission Project.

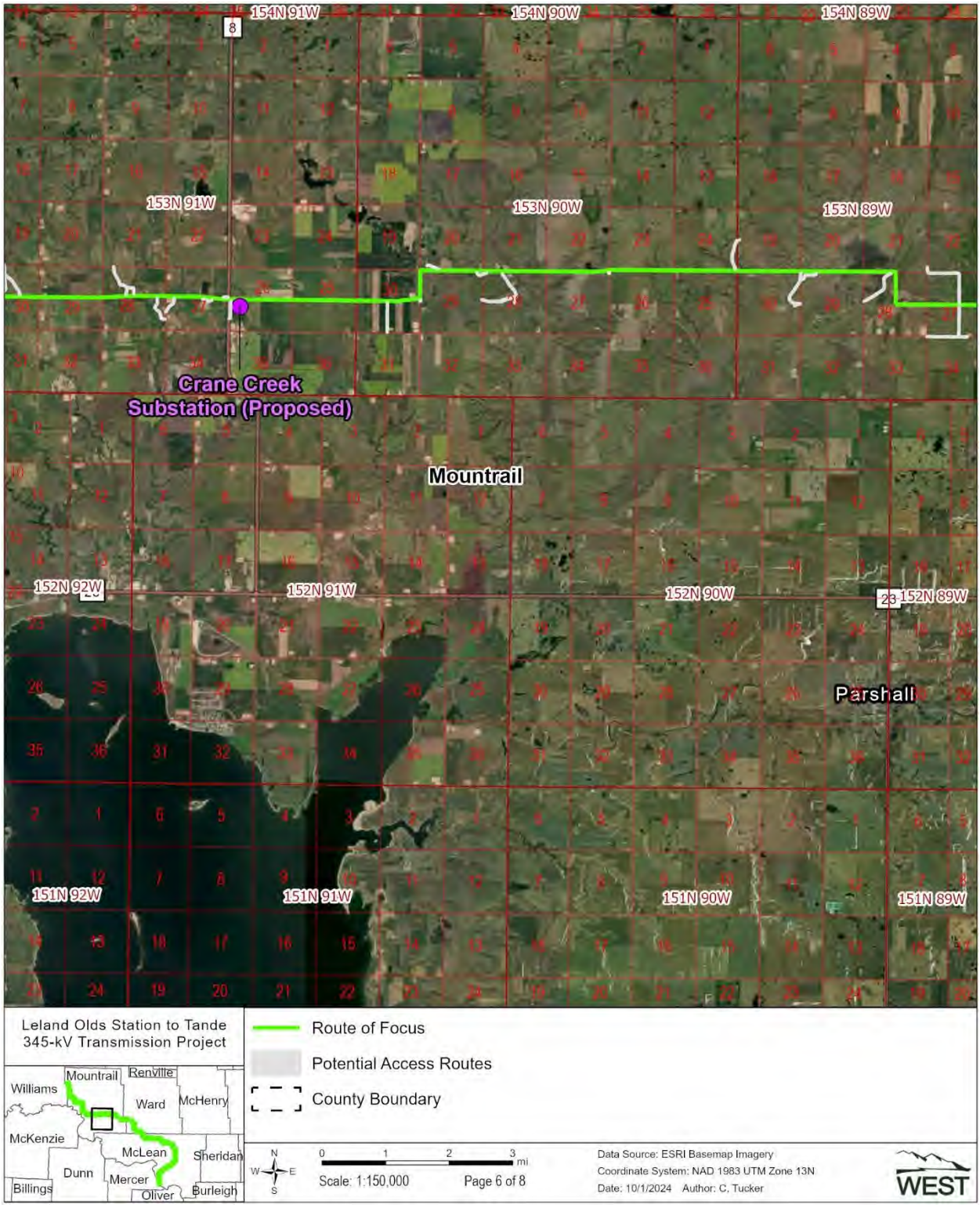

Figure 2 (continued). Detailed view of the proposed Leland Olds Station to Tande 345-kilovolt Transmission Project.

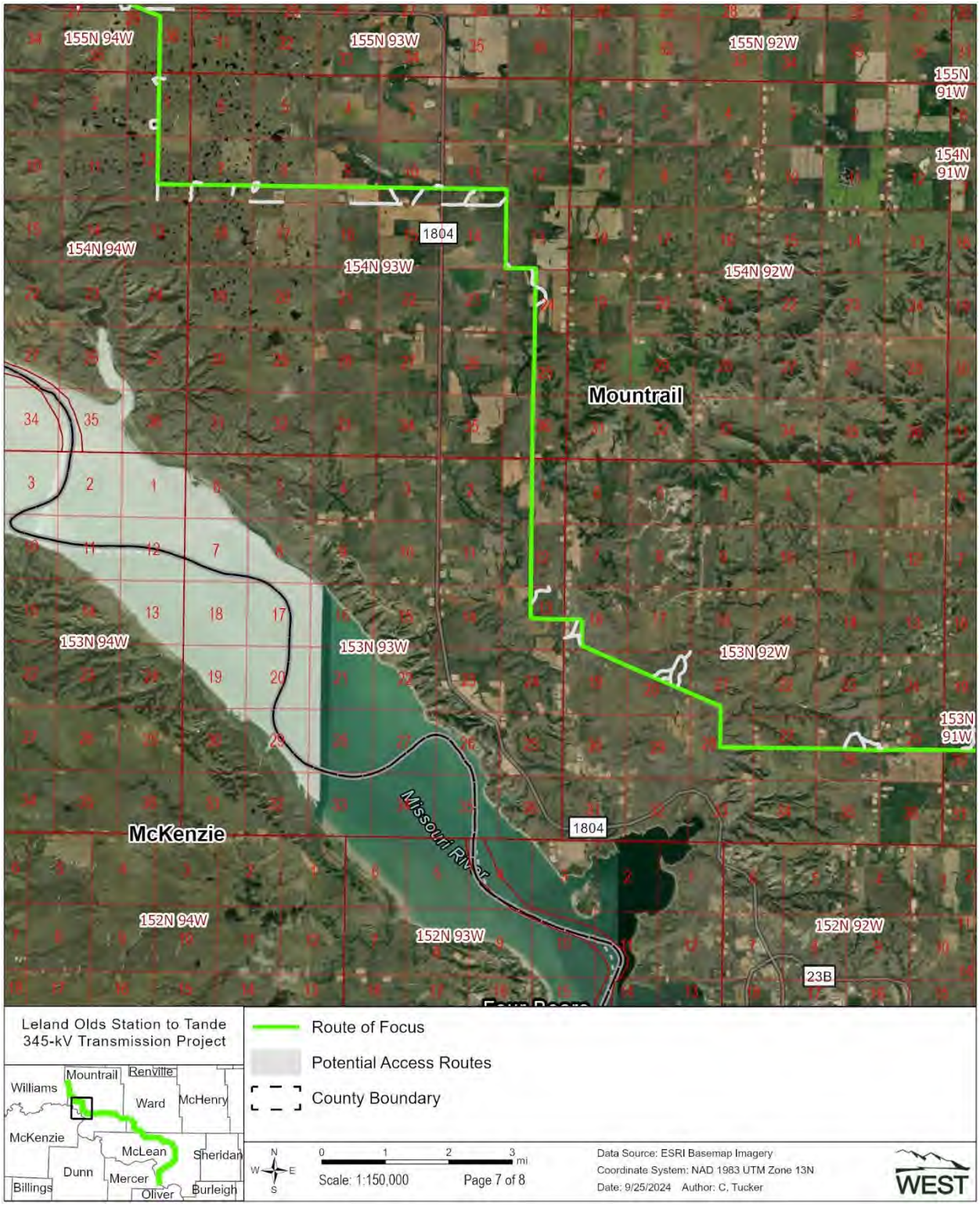

Figure 2 (continued). Detailed view of the proposed Leland Olds Station to Tande 345-kilovolt Transmission Project.

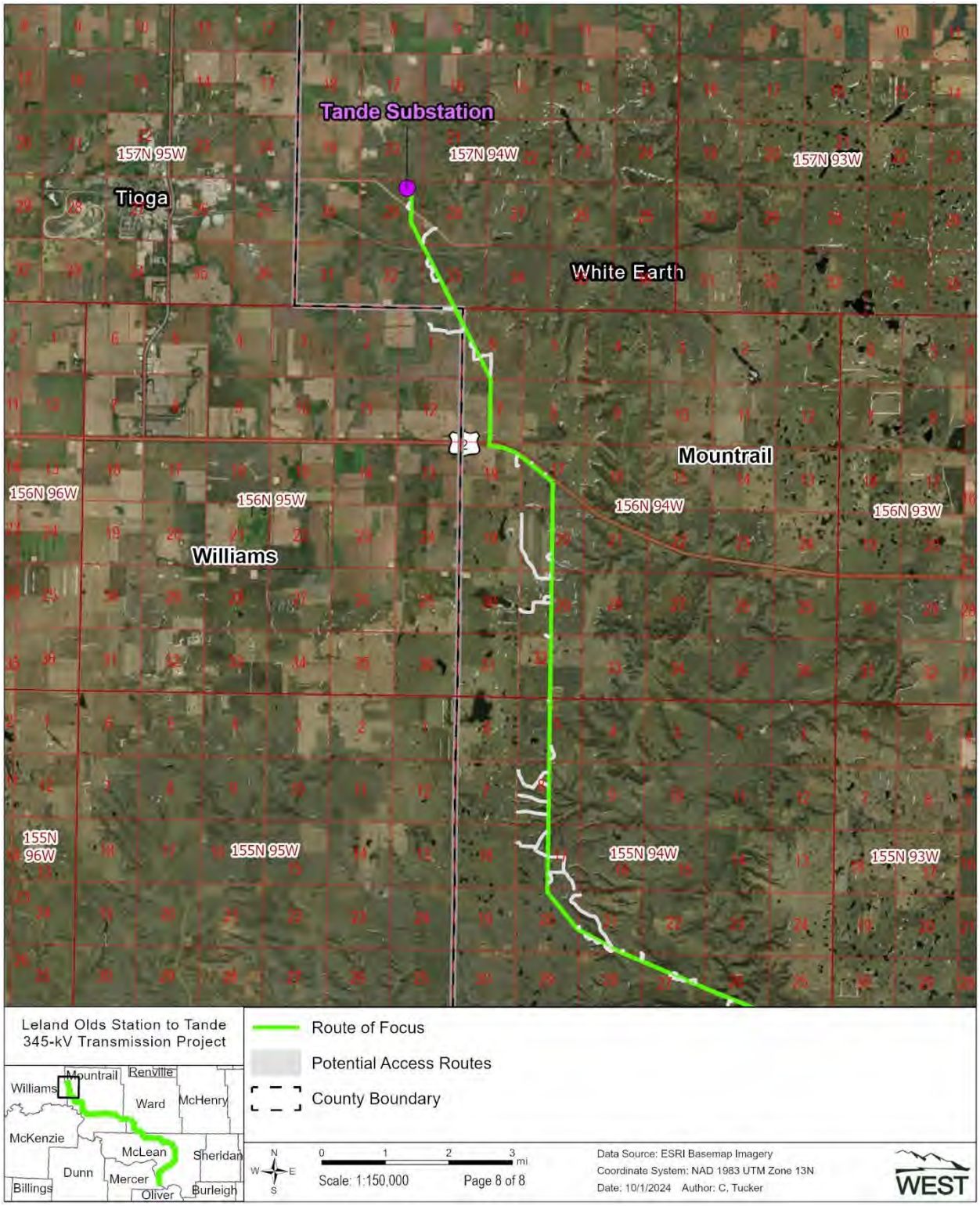

Figure 2 (continued). Detailed view of the proposed Leland Olds Station to Tande 345-kilovolt Transmission Project.

2.0 PROCEDURES

2.1 Wetland and Waterbody Field Determination

Wetland identification utilized the presence of hydrophytic vegetation and landscape hydrology and/or topographic position. Waterbody boundaries were recorded utilizing the criteria and definitions provided by the US Army Corps of Engineers (USACE) Ordinary High Water Mark criteria and definitions provided by the US Environmental Protection Agency (USEPA) in *Draft Guidance on Identifying Waters Protected by the Clean Water Act* (USEPA and USACE 2011). Wetlands and waterbodies were field classified in accordance with guidelines set forth in the *Classification of Wetlands and Deepwater Habitats of the United States* by the Federal Geographic Data Committee (2013). The following resources were reviewed prior to the wetland field determination to aid in identifying potential wetlands within the Survey Corridor. Dunn and McKenzie Counties National Agriculture Imagery Program aerial photographs (US Geological Survey [USGS] 2023); US Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI; USFWS NWI 2021); USGS National Hydrography Dataset (USGS 2023); and the US Department of Agriculture Natural Resources Conservation Service (USDA NRCS) digital Web Soil Survey (USDA NRCS 2024). The vegetation within the area surveyed was characterized using the hydrophytic criteria as outlined in the *National Wetland Plant List* (USACE 2020). No soil data was collected.

2.2 Federally Listed Wildlife Species Evaluation

The USFWS Information for Planning Consultation (IPaC) site was used to review federally listed species within the Survey Corridor (USFWS 2024). The review also included the USFWS designated critical habitat for threatened and endangered species geospatial data (2023a), along with known range, reported occurrences, and habitat needs for each species. Table 2 identifies the federally listed species with the potential for occurrence within the Survey Corridor. Field evaluations were conducted from June 5, 2023, to August 27, 2024 to confirm the presence or absence of potentially suitable habitat for federally listed species within the Project Survey Area. Background data was collected for preliminary review and to aid in the field inventory of biological resources. Minimization efforts for threatened or endangered species are discussed in Section 3.3.

Table 2. Federally listed threatened and endangered species.

Common Name	Scientific Name	Status
Northern long-eared bat	*Myotis septentrionalis*	Endangered
Whooping crane	*Grus americana*	Endangered
Dakota skipper	*Hesperia dacotae*	Threatened, Critical Habitat Designated
Piping plover	*Charadrius melodus*	Threatened, Critical Habitat Designated
Red knot (rufa)	*Calidris canutus rufa*	Threatened
Monarch butterfly	*Danaus plexippus*	Candidate

Source: US Fish and Wildlife Service 2024

2.3 Nesting Raptor Survey

An aerial survey for nesting raptors was conducted for the Project on May 8-9, 2024. A helicopter with a pilot and two observers was utilized to survey out to one mi on both sides of the Route of Focus.

2.4 Noxious Weed Inventory

North Dakota has 13 state-listed noxious weed species. The Mountrail, Ward, and Williams County Weed Control Districts list three additional species as invasive (North Dakota Department of Agriculture 2024). Table 3 provides a list of noxious and/or invasive weed species listed for the Project.

Table 3. North Dakota State and Project County listed noxious and invasive weeds.

North Dakota State Listed Noxious Weeds		Project County Invasive Weeds	
Common Name	**Scientific Name**	**Common Name**	**Scientific Name**
Absinth wormwood	*Aremisia absinthium*	**Mountrail County**	
Canada thistle	*Cirsium arvense*	Common tansy	*Tanacetum vulgare*
Dalmatian toadflax	*Linaria genistifolia*	**Ward County**	
Diffuse knapweed	*Centaurea diffusa*	False chamomile	*Matricaria perforata*
Houndstongue	*Cynoglossum officinale*	**Williams County**	
leafy spurge	*Euphorbia esula*	Hoary cress	*Lepidium draba*
Musk thistle	*Carduus nutans*		
Palmer amaranth	*Amaranthus palmeri*		
Purple loosestrife	*Lythrum salicaria*		
Russian knapweed	*Acroptilon repens*		
saltcedar	*Tamarix chinensis*		
Spotted knapweed	*Centaurea maculosa*		
Yellow toadflax	*Linaria vulgaris*		

2.5 Tree and Shrub Inventory

Once a right-of-way has been designated for the Project, WEST will conduct a tree and shrub inventory using methodology previously approved by the North Dakota Public Service Commission. The results of the inventory will be submitted in a stand-alone document.

2.6 U.S. Fish and Wildlife Service Conservation Easements.

The Survey Corridor was reviewed for USFWS Easement tracts. The desktop review used the USFWS National Realty Tracts database in comparison to the Survey Corridor to determine if Easements would be impacted.

3.0 RESULTS

3.1 Wetlands

A pre-survey review of the USFWS NWI database identified 545 wetlands within the Survey Corridor (USFWS NWI 2024). The field survey identified 434 wetlands, covering 354.2 ac (143.33 ha) within the Survey Corridor. This consisted of 412 palustrine emergent (PEM) wetlands and 22 palustrine aquatic bed (PAB) wetlands. Within project pull lanes 17 PEM wetlands and 1 PAB wetland, totaling 5.87 ac (2.38 ha), were identified. Additionally, 201 of the NWI signatures within the Survey Corridor were found to not exhibit wetland hydrology or contain hydric vegetation. Upland points were recorded at these sites to documents that the features had been surveyed and lacked wetland characteristics.

A pre-survey review of the USFWS NWI database identified 64 wetlands within the potential access road survey corridors (USFWS NWI 2024). The field survey identified 49 wetlands, covering 2.48 ac (1.00 ha). This comprised of 44 PEM wetlands and 5 PAB wetlands. Additionally,

32 of the NWI signatures within the access road survey corridors were found to not exhibit wetland hydrology or contain hydric vegetation. No NWI signatures are present at the Crane Creek Substation and there were no aquatic features identified during the field survey.

The portion of the Project Survey Area that has not been surveyed contains 56 freshwater emergent wetland NWI signatures that cover 9.48 ac (3.84 ha) and 10 freshwater forested/shrub NWI wetland signatures that cover 1.49 ac (0.60 ha). These areas will be surveyed for natural resources once access has been secured.

The wetland features and upland points are depicted in Appendix A - Natural Resource Inventory Figures. Attributes for the wetland are listed in Appendix B - Wetland Attributes. Photographs are included in Appendix C - Project Field Photographs.

3.2 Waterbodies

The pre-survey review of the USFWS NWI database indicated 159 signatures classified as riverine, freshwater pond, or lake. This includes 84 riverine signatures. five are classified as R2 (sub perennial), 78 signatures are classified as R4 (intermittent), and one signature is classified as R5 (perennial). Also included are eight lake signatures and 67 freshwater ponds signatures.

The field survey identified 37 waterbodies, totaling 19.55 ac (7.9 ha) within the Survey Corridor. Of the 37 waterbodies, 26 are classified as intermittent streams, four are perennial rivers, three ephemeral drains, one artificial stream, two permanent streams, and one PAB pond. Additionally, one permanent river and one permanent stream were documented within the project pull lanes, totaling 0.37 acres (0.15 ha).

The potential access road survey corridors cross 14 NWI riverine signatures, 13 are classified as R4 (intermittent) and one as R2 (lower perennial). The field survey identified one perennial river and two intermittent streams, totaling 0.08 ac (0.03 ha).

The portion of the Project Survey Area that has not been surveyed contains 17 NWI signatures that have a riverine or lake classification and are considered waterbodies. Nine of the signatures are classified as riverine and cover 0.47 ac (0.19 ha). Seven are classified as freshwater ponds and cover 1.65 ac (0.67 ha). One feature classified as a lake, containing 5.13 ac (2.08 ha) is also within the Survey Area. These areas will be surveyed for natural resources once access has been secured.

The waterbody features are depicted in Appendix A - Natural Resource Inventory Figures. Attributes for the waterbodies are listed in Appendix D - Waterbody Attributes. Photographs are included in Appendix C - Project Field PhotographsAppendix F - .

3.3 Threatened and Endangered Species Habitat Assessment

Threatened and endangered species that have been documented and/or that have the potential to occur within the Survey Corridor are listed in Table 2 along with designated critical habitat (USFWS 2023a, 2023b). A review of USFWS species information datasets, along with habitat data gathered from the field surveys, were used to aid in the determinations. Threatened and endangered species information gathered from the review is documented below in the species discussions.

During the field surveys, no federally listed species were observed. Numerous treed areas (more than three inches [in.] diameter at breast height [DBH]) with the potential to provide summer roosting habitat

for the northern long-eared bat were documented and suitable habitat for the Dakota skipper was documented in 61 locations.

3.3.1 Northern Long-eared Bat

The northern long-eared bat (*Myotis septentrionalis*) is a forest-dwelling mammal. The home range of the northern long-eared bat (NLEB) is approximately 150 ac, including a summer and winter habitat. In the summer, NLEB roost under bark or in crevices of trees, preferring to roost in tall trees with greater than three inches (in.; eight centimeters [cm]) DBH, and under the exfoliating bark of dead or dying trees. In the winter, NLEB hibernate in caves and mines. The NLEB prefers foraging in edge habitats and forests comprising trees with a diversity of life stages (USFWS 2014a).

Occurrences of the NLEB are uncertain in North Dakota. White-nose syndrome (WNS) currently remains the predominant threat to the NLEB. North Dakota is included in the current extent of WNS zone per the Endangered and Threatened Wildlife and Plants; Endangered Species Status for Northern Long-Eared Bat; Final Rule (Final Rule; 88 Federal Register [FR] 4908 [January 26, 2023]; USFWS 2023c). With the Final Rule reclassifying the NLEB as endangered, incidental take of the species is prohibited. To avoid incidental take, it is recommended to conduct tree clearing activities between November 1 to April 14 when bats have either migrated or are hibernating in underground caves.

A desktop analysis was conducted to determine impacts to tree habitat and determine what locations have a higher probability of providing habitat for the NLEB. A 1,000 ft buffer of the Survey Corridor was digitally analyzed for tree habitat. Tree habitat patches greater than 10 ac in size were selected as potential NLEB habitat. The 10 ac potential habitat patches were then buffered by 1,000 ft and all tree habitat within the buffer was classified as connected habitat. The review determined that 23.25 ac of potential treed habitat are located within the Survey Corridor. Table 4 lists the attributes of the connected habitat polygons. Maps depicting the results of the analysis are in Appendix E - Northern Long-eared Bat Habitat Analysis.

To reduce the potential to impact NLEB, BEPC has committed to conducting tree clearing activities from November 1 – April 14, outside of the active season for NLEB in North Dakota. If localized tree clearing activities cannot be conducted during this window, the USFWS will be consulted to determine the necessary action.

Table 4. NLEB Habitat within the Survey Corridor

NLEB Habitat	Location	Acres
Connected Habitat Buffer 1	Sec 15 &16-T144N-R84W	9.09
Connected Habitat Buffer 2	Sec 9 & 10-T144N-R84W	1.27
Connected Habitat Buffer 3	Sec 25-T145N-R84W	0.17
Connected Habitat Buffer 4	Sec 27 & 28-T153N-R92W	2.81
Connected Habitat Buffer 5	Sec 1-T153N-R93W	0.04
Connected Habitat Buffer 6	Sec 25-T154N-R93W	1.54
Connected Habitat Buffer 7	Sec 26-T155N-R94W	3.92
Connected Habitat Buffer 8	Sec. 21-T155N-R94W	2.08
Connected Habitat Buffer 9	Sec 8 & 17-T155N-R94W	2.24
Connected Habitat Buffer 10	Sec 20-T156N-R94W	0.09

N = North, R = Range; Sec = Section; T = Township; W = West.

3.3.2 Whooping Crane

The primary nesting area for the whooping crane (*Grus americana*) is in Canada's Wood Buffalo National Park. Aransas National Wildlife Refuge in Texas is the primary wintering area for whooping cranes. In the spring and fall, the cranes migrate, primarily along the Central Flyway. During the migration, whooping cranes make numerous stops, roosting in relatively large, shallow marshes and feeding and loafing in harvested grain fields. The primary threats to whooping cranes are power lines, illegal hunting, and habitat loss (USFWS 2023d).

The whooping crane is federally listed and has the potential to occur in all counties of North Dakota. The Project is located within the migration corridor where 75-95% of whooping cranes travel. Land use within the Project is a mixture of cropland and rangeland, and oil/gas development. The USFWS Database (USFWS 2022) shows the Project Counties (McLean, Mercer, Mountrail, Ward, and Williams) have 285 verified whooping crane sightings. The closest confirmed sighting to the Project was of two adult cranes in 2002 within the Project area in Sec. 11, T149N, R82W. The sighting locations are depicted on Figure 4.

The Project was analyzed using the model developed by the US Geological Survey (USGS) Northern Prairie Wildlife Research Center and the USFWS Habitat and Population Evaluation Team (HAPET). The Model predicts that 57% of the Project's Survey Corridor (3,350.35 ac) is within the 10th probability decile and 15% (893.32 ac) is within the 9th probability decile, on a 1-10 scale (Niemuth et al., 2018). The Model also predicts the relative probability of use of whooping cranes, the results of this analysis are displayed in Figure 3.

Noise and vehicle activity during construction activities may cause migratory cranes to divert from the area but would be unlikely to contribute to any indirect or direct effect that would result in an increase of fatalities and, therefore, would be considered insignificant. If a crane is sighted within 1.0 mi of the project area, construction activities utilizing heavy equipment would be suspended, and the sighting would be promptly reported to the USFWS. In coordination with the USFWS, suspended activities would resume once the bird(s) have left the area. Flight diverters will be installed on the transmission line to minimize bird strikes. BEPC's Avian and Bat Protection Plan is in Appendix F - Basin Electric Power Cooperative Avian and Bat Protection Plan.

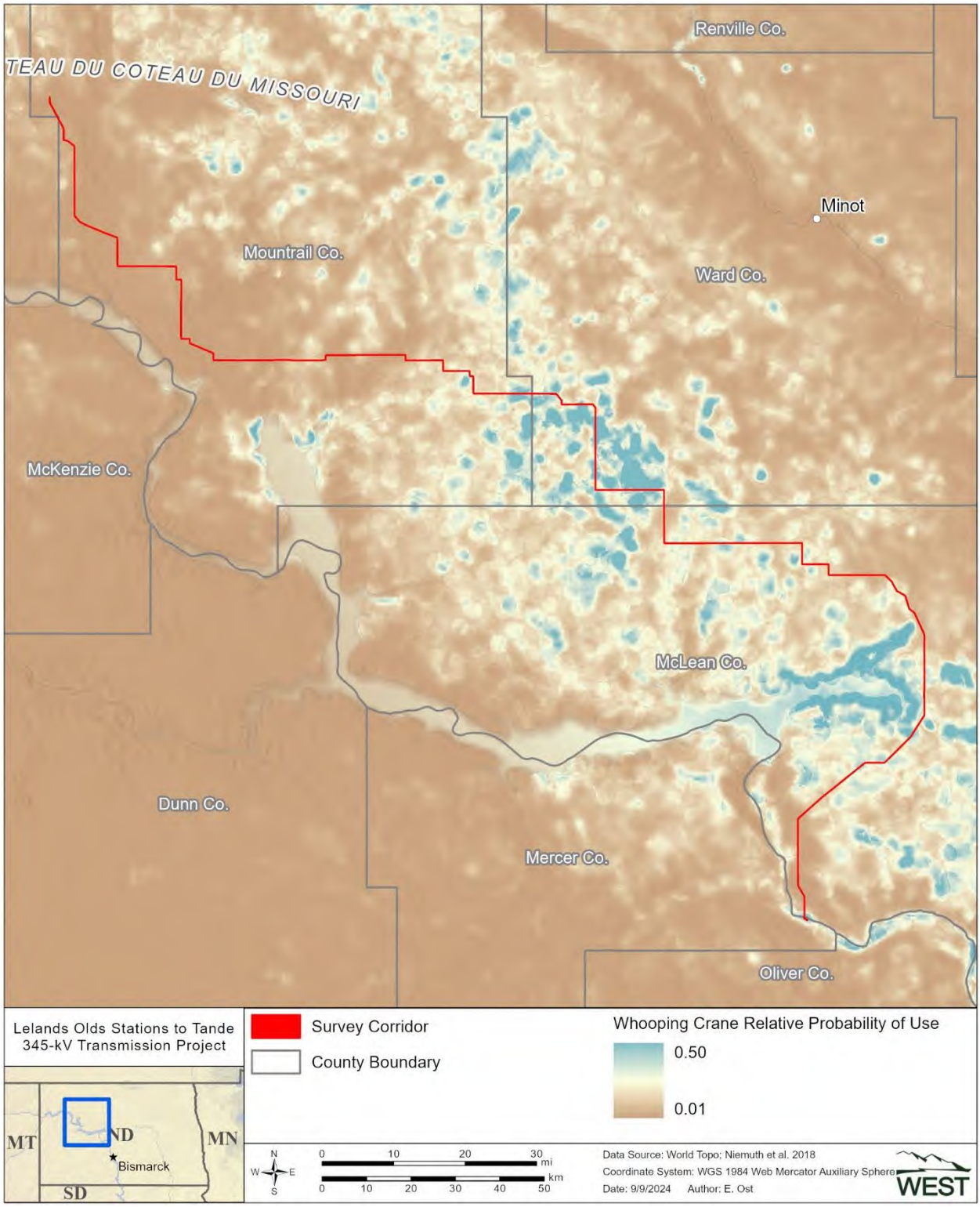

Figure 3. USGS / HAPET Model of Whooping Crane Relative Probability of Use.

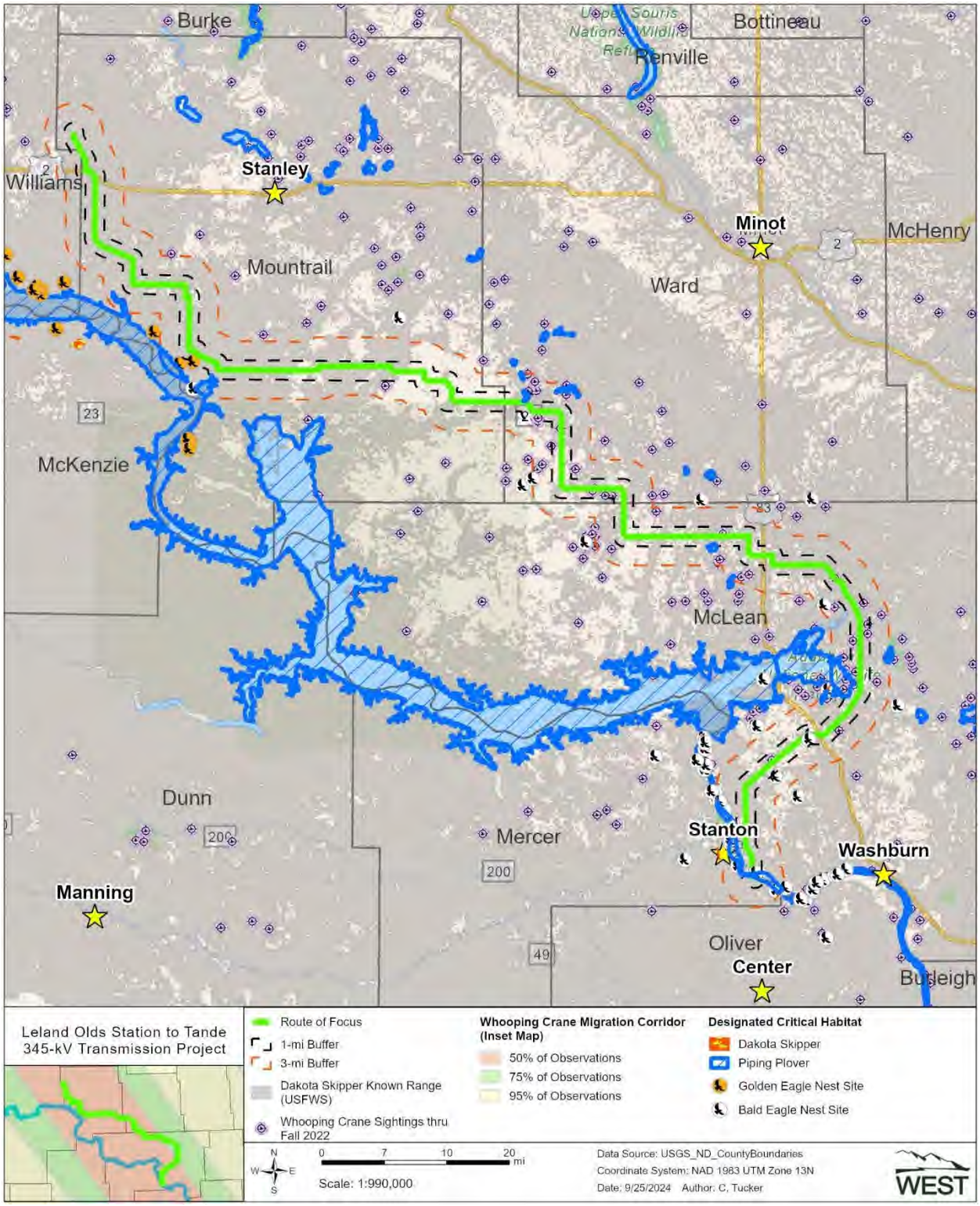

Figure 4. Known sightings, species range, and designated critical habitats in relation to the proposed Leland Olds Station to Tande 345-kilovolt Transmission Project.

3.3.3 Dakota Skipper

The Dakota skipper (*Hesperia dacotae*), a prairie obligate species, requires nectar-producing native flowers and native grasses. Historically, Dakota skippers (DASK) have been associated with relatively low, wet, prairie-dominated, high-quality, tall grass prairie habitat (Type A habitat). Researchers have found that DASK also use upland mixed grass prairie that is relatively dry and includes ridges and hillsides (Type B habitat; USFWS 2013a). These habitats often have small inclusions of areas with species more commonly typified with tall grass prairie. Larvae require grass components of mixed-grass prairie that include bluestem grasses (*Andropogon* spp.) and needlegrasses, while adults require nectar sources; therefore, suitable prairie must include nectar-producing forbs. These forbs may include purple coneflower (*Echinacea purpurea*), blue bells (*Campanula rotundifolia*), blanket flower (*Gaillardia aristata*), wood lily (*Lilium philadelphicum*), or other species that are in bloom during the adult life cycle of the DASK (Dana 1991). The nearest USFWS designated critical habitat for the DASK is located approximately 7.8 mi southwest of the Project (Figure 4). The species is known to occur in all Project Counties and the Project is within the USFWS's known range of the DASK (USFWS 2023a).

A desktop assessment of habitat within the surveyed portion of the Survey Corridor was used to divide habitat into one of two basic habitat groups: grassland habitat and unsuitable habitat. The assessment identified 1,822.87 ac (34%) of grassland habitat and 3,561 ac (66%) of unsuitable habitat. The field survey was conducted within the identified grassland habitat to determine if suitable habitat was present. Suitable habitat is defined as native grassland that contains one or more primary constituent elements for the skipper to complete its entire life cycle, including breeding, feeding/foraging, and sheltering behaviors (USFWS 2023e).

The field survey recorded 61 locations of suitable habitat, totaling 11.69 ac; less than 1% of the area within the Survey Corridor. An additional four locations of suitable habitat, totaling 0.42 acres, were recorded in the project pull lanes. Table 5 and Table 6 contain the attributes for the suitable habitat identified and Appendix G - DASK Habitat Buffers depicts the locations of the suitable habitat. The portion of the Project Survey Area that has not been surveyed contains 113.96 ac of unbroken grasslands, which was identified by a desktop evaluation using multiple years of aerial imagery. These areas are depicted on Appendix A - Natural Resource Inventory Figures. These areas will be surveyed once access is granted.

Table 5. Areas of suitable habitat for the Dakota skipper (DASK) within the Survey Corridor.

Name	Classification	Location	Latitude	Longitude	Acres
DASK 277	Potential DASK Habitat	Sec 27-T153N-R90W	48.05145223	-102.2416742	0.01
DASK 278	Potential DASK Habitat	Sec 27-T153N-R90W	48.05151916	-102.2418618	0.06
DASK 279	Potential DASK Habitat	Sec 29-T153N-R90W	48.04999354	-102.2882626	0.21
DASK 280	Potential DASK Habitat	Sec 29-T153N-R90W	48.04924309	-102.2884071	0.03
DASK 281	Potential DASK Habitat	Sec 29-T153N-R90W	48.04783871	-102.2885691	0.06
DASK 282	Potential DASK Habitat	Sec 29-T153N-R90W	48.0474988	-102.2886485	0.02
DASK 285	Potential DASK Habitat	Sec 21-T153N-R92W	48.05497641	-102.518479	0.26
DASK 286	Potential DASK Habitat	Sec 21-T153N-R92W	48.05517692	-102.5191414	0.14
DASK 287	Potential DASK Habitat	Sec 18-T153N-R92W	48.07418555	-102.5641022	0.00
DASK 288	Potential DASK Habitat	Sec 18-T153N-R92W	48.06895249	-102.5626265	0.02
DASK 290	Potential DASK Habitat	Sec 21-T153N-R92W	48.0573599	-102.5258233	0.10
DASK 291	Potential DASK Habitat	Sec 18-T153N-R92W	48.06847997	-102.5630738	0.18
DASK 292	Potential DASK Habitat	Sec 20-T153N-R92W	48.05755611	-102.5270076	0.35

Name	Classification	Location	Latitude	Longitude	Acres
DASK 293	Potential DASK Habitat	Sec 20-T153N-R92W	48.0577351	-102.5277433	0.06
DASK 294	Potential DASK Habitat	Sec 20-T153N-R92W	48.05919146	-102.5319005	0.13
DASK 295	Potential DASK Habitat	Sec 20-T153N-R92W	48.05992422	-102.5365033	0.04
DASK 297	Potential DASK Habitat	Sec 12-T154N-R94W	48.17618842	-102.7098219	0.09
DASK 298	Potential DASK Habitat	Sec 12-T154N-R94W	48.17567415	-102.7100051	0.10
DASK 299	Potential DASK Habitat	Sec 25-T155N-R94W	48.21257818	-102.7188702	0.03
DASK 300	Potential DASK Habitat	Sec 26-T155N-R94W	48.213287	-102.7226284	0.04
DASK 301	Potential DASK Habitat	Sec 26-T155N-R94W	48.21371211	-102.7229188	0.17
DASK 302	Potential DASK Habitat	Sec 26-T155N-R94W	48.21373518	-102.7247241	0.13
DASK 303	Potential DASK Habitat	Sec 26-T155N-R94W	48.21431624	-102.7256959	0.13
DASK 304	Potential DASK Habitat	Sec 26-T155N-R94W	48.21526942	-102.7278261	0.01
DASK 305	Potential DASK Habitat	Sec 26-T155N-R94W	48.21564272	-102.7304216	0.05
DASK 306	Potential DASK Habitat	Sec 20-T155N-R94W	48.23712191	-102.7927797	0.08
DASK 307	Potential DASK Habitat	Sec 20-T155N-R94W	48.23774497	-102.7930274	0.02
DASK 308	Potential DASK Habitat	Sec 20-T155N-R94W	48.23762192	-102.792839	0.05
DASK 309	Potential DASK Habitat	Sec 5-T155N-R94W	48.28228987	-102.7969195	0.02
DASK 476	Potential DASK Habitat	Sec 28-T153N-R89W	48.04506375	-102.1276716	0.29
DASK 506	Potential DASK Habitat	Sec 28-T153N-R91W	48.04507643	-102.3872089	0.07
DASK 508	Potential DASK Habitat	Sec 26-T153N-R92W	48.04509544	-102.4746224	0.67
DASK 509	Potential DASK Habitat	Sec 28-T153N-R92W	48.04486767	-102.5121151	1.82
DASK 543	Potential DASK Habitat	Sec 29-T157N-R94W	48.38827072	-102.843205	0.08
DASK 549	Potential DASK Habitat	Sec 6-T150N-R85W	47.83798821	-101.6039994	0.15
DASK 551	Potential DASK Habitat	Sec 6-T150N-R85W	47.84409017	-101.6047906	0.13
DASK 554	Potential DASK Habitat	Sec 6-T150N-R85W	47.84605989	-101.6047037	1.27
DASK 555	Potential DASK Habitat	Sec 7-T150N-R85W	47.83001851	-101.6044871	0.30
DASK 558	Potential DASK Habitat	Sec 7-T150N-R85W	47.82502344	-101.6045891	0.67
DASK 565	Potential DASK Habitat	Sec 31-T149N-R81W	47.6853613	-101.0863656	0.42
DASK 617	Potential DASK Habitat	Sec 7-T150N-R85W	47.82169886	-101.6038245	0.08
DASK 861	Potential DASK Habitat	Sec 26-T153N-R92W	48.04474524	-102.4684455	0.69
DASK 906	Potential DASK Habitat	Sec 8-T154N-R93W	48.17205029	-102.6771983	0.10
DASK 1408	Potential DASK Habitat	Sec 20-T153N-R89W	48.0526145	-102.1522967	0.03
DASK 1409	Potential DASK Habitat	Sec 19-T153N-R89W	48.05265609	-102.1602316	0.01
DASK 1411	Potential DASK Habitat	Sec 19-T153N-R89W	48.05238206	-102.167357	0.04
DASK 1412	Potential DASK Habitat	Sec 19-T153N-R89W	48.05220365	-102.1685922	0.12
DASK 1422	Potential DASK Habitat	Sec 24-T153N-R90W	48.05231048	-102.2002836	0.05
DASK 1427	Potential DASK Habitat	Sec 29-T153N-R91W	48.04465768	-102.4174813	0.17
DASK 1428	Potential DASK Habitat	Sec 30-T153N-R91W	48.04470977	-102.4219435	0.09
DASK 1429	Potential DASK Habitat	Sec 30-T153N-R91W	48.04470578	-102.426232	0.08
DASK 1433	Potential DASK Habitat	Sec 36-T145N-R84W	47.32831185	-101.3314842	0.03
DASK 1434	Potential DASK Habitat	Sec 36-T145N-R84W	47.32919133	-101.3324518	0.08
DASK 1435	Potential DASK Habitat	Sec 36-T145N-R84W	47.33099936	-101.3335598	0.30
DASK 1438	Potential DASK Habitat	Sec 36-T145N-R84W	47.32882345	-101.3325895	0.24
DASK 1439	Potential DASK Habitat	Sec 36-T145N-R84W	47.32884704	-101.3330389	0.07
DASK 1440	Potential DASK Habitat	Sec 4-T144N-R84W	47.32324384	-101.32794	0.38
DASK 1445	Potential DASK Habitat	Sec 1-T153N-R93W	48.09733984	-102.5811908	0.18

Name	Classification	Location	Latitude	Longitude	Acres
DASK 1446	Potential DASK Habitat	Sec 13-T153N-R93W	48.07351987	-102.5699081	0.15
DASK 1447	Potential DASK Habitat	Sec 13-T153N-R93W	48.07415458	-102.5713549	0.05
DASK 1473	Potential DASK Habitat	Sec 29-T153N-R91W	48.04471664	-102.4152035	0.28
				Total	**11.69**

N = north; R = Range; Sec. = Section; T = Township; W = west.

Table 6. Suitable habitat for the Dakota Skipper (DASK) within the pull lanes.

Name	Classification	Location	Latitude	Longitude	Acres
DASK 476	Potential DASK Habitat	Sec 28-T153N-R89W	48.04495	-102.127984	0.10
DASK 1432	Potential DASK Habitat	Sec 3-T144N-R84W	47.31704	-101.320927	0.05
DASK 1452	Potential DASK Habitat	Sec 19-T153N-R92W	48.066511	-102.563406	0.01
DASK 1453	Potential DASK Habitat	Sec 18-T153N-R92W	48.068234	-102.56789	0.26
				Total	**0.42**

N = north; R = Range; Sec. = Section; T = Township; W = west.

BEPC has designed the Project to minimize impacts to suitable habitat for the DASK. This includes routing access trails around potential habitat and placing pole structures outside of potential habitat. Identified DASK habitat will be avoided during all construction activities. A ½ mi buffer around identified DASK habitat has been established and native grassland habitat within the 1/2 mi buffer will be disturbed at the minimum level practical. To minimize the impacts to foraging or dispersing adult DASK, a 500-meter (m) avoidance buffer will be established around identified DASK habitat locations. Existing surfaced roads within the 500-m buffer may be used for travel, but construction within the 500-m buffers will not occur during the flight window. In addition, Dust abatement may be necessary on gravel surfaced roads during the flight window. The flight period is typically 14 days long between the dates of June 10 – July 25 and dates may be adjusted based on annual observations by the USFWS.

The ½ mi and 500 m DASK habitat avoidance buffers of the Project are depicted in Appendix G - DASK Habitat Buffers. Avoidance and minimization effort follows the guidance of the March 2023 *USFWS Timing/Buffer Recommendations* (USFWS 2023f).

3.3.4 Piping Plover

The piping plover (*Charadrius melodus*) is a migratory shorebird that breeds in North Dakota. Suitable nesting habitat for piping plovers includes alkaline wetlands and the shoreline of the Missouri River system; this habitat has been characterized as sparsely vegetated channel sandbars, sand and gravel beaches on islands, temporary pools on sandbars and islands, and island margins that interface with the river channel. The piping plover feeds on worms, insects, and mollusks. The decline of piping plover populations is due to the loss of habitat from river impoundment(s), as well as the degradation of habitat related to the channelization river systems, nest predation, and human disturbance (USFWS 1985).

Critical habitat for the Northern Great Plains piping plover has been designated on alkali lakes and wetlands, the Yellowstone River, and Missouri River in North Dakota. The physical and biological features that are essential to the conservation of the species, referred to as the primary constituent elements, require special consideration for protection. These include sparsely vegetated alkaline wetlands, sand and gravel beaches on islands, temporary pools on sandbars and islands, and island margins that interface with the river channel. This Project spans critical habitat, the Missouri River, at the south end of the Project. There are four additional locations of

the Project where critical habitat falls within 1 mile of the Route of Focus (Figure 4; USFWS 2023b) and 18 locations of critical habitat within 3.0 mi of the Route of Focus. The field survey documented that the Survey Corridor is predominantly cropland and contains wetlands and waterbodies that are well vegetated and do not provide bare ground suitable for nesting habitat. During the period of concern (April 15 to August 15, prior to construction, piping plover surveys will be conducted in suitable habitat within one half mile of the Project to document the presence or absence of piping plovers. Flight diverters will be installed on the transmission line to minimize bird strikes. BEPC's Avian and Bat Protection Plan is in Appendix F - Basin Electric Power Cooperative Avian and Bat Protection Plan.

3.3.5 Rufa Red Knot

The red knot (*Calidris canutus*) is a shorebird breeds in the central Canadian Arctic, with primary breeding grounds in Nunavut Territory, but some potential breeding habitat extending into the Northwest Territories (USFWS 2013b). The rufa red knot (*C, canutus rufa*) winters along the Atlantic coasts of Argentina and Chile (particularly the island of Tierra del Fuego), the north coast of Brazil, and further north into Mexico and the southeast United States (USFWS 2014b). During migration, the rufa red knot primarily follows the Atlantic coastline to and from breeding and wintering grounds. However, geolocator results from red knots wintering in Texas showed that a comparatively small population of birds migrate using the Central Flyway across the Midwestern US and may have a northern Great Plains stopover (USFWS 2013b). Rufa red knots spend two to three months annually on the breeding grounds located in northern Canada.

Red knots are specialized molluscivores, feeding primarily on hard-shelled mollusks in relatively soft, wet sand/sediment (USFWS 2014b). In addition to mollusks, red knots may feed upon shrimp, crabs, marine worms, horseshoe crab (*Limulus* spp.) eggs, and other similar invertebrates. On the breeding grounds, rufa red knots feed mostly on terrestrial invertebrates and grass shoots and seeds (USFWS 2013b).

The shoreline of the Missouri River provides stopover habitat for red knots utilizing a midcontinental migratory route during annual migrations. However, the species is rare and is not reported in North Dakota every year. Reported historical sightings since 1900 (Igl 2015) are primarily composed of single individuals or relatively small flocks; however, on rare occasions, larger flocks have been reported. Many of these sightings have been made in the prairie pothole region during the spring migration in late April through May. An increase in future sightings may result from an increase in public awareness.
The red knot migrates twice annually from its breeding grounds in the Artic to wintering habitat in southern climates. It does not nest in North Dakota but may use areas along the Missouri River as stopover habitat. The Project spans critical habitat, the Missouri River, in one location. The remainder of the Survey Corridor does not have suitable shoreline stopover habitat for the rufa red knot. Flight diverters will be installed on the transmission line to minimize bird strikes. BEPC's Avian and Bat Protection Plan is in Appendix F - Basin Electric Power Cooperative Avian and Bat Protection Plan.

3.3.6 Monarch Butterfly

The monarch butterfly (*Danaus plexippus*) is currently a candidate for listing under the Endangered Species Act (ESA), and a listing decision is currently anticipated in 2024. Candidate species do not receive statutory protections under the ESA, but are reevaluated annually for listing priority, and, therefore, are likely to be listed in the future.

The species occurs throughout the Great Plains and much of North America. Monarchs prefer open habitats with flowering plants and lay their eggs exclusively on milkweeds (*Asclepias* spp.), which the larvae feed on until pupation (U.S. Forest Service [USFS] 2021). Monarch butterflies will breed in North Dakota during the summer and migrate south to Mexico for the winter; eventually, the butterflies will make their way back to North Dakota during spring migration. Suitable habitat, including wetlands, roadsides with common milkweed (*Asclepias syriaca*), and upland grassland habitat with flowering species, was observed during the field survey. Much of the herbaceous habitat is rangeland used for livestock grazing or grasslands in roadside ditches. Due to the presence of suitable habitat, it is possible for this species to occur within the Survey Corridor.

3.4 Nesting Raptor Survey

An aerial survey of the Project Survey Corridor plus a one mi buffer on either side was conducted on May 10, 2024. Thirty-two active raptor nests were documented during the survey, two nests were bald eagles (*Haliaeetus leucocephalus*). One bald eagle nest is located in the S1/2 of Section 15, T144N, R84W. The nest is approximately 0.5 mi from the Project centerline. The other is in the S1/2 of Section 1, T146N, R83W and is approximately 0.4 mi from the Project centerline. The nest attributes are listed in Table 7 and locations of the nests discovered during the aerial survey are depicted in Appendix A - Natural Resource Inventory Figures. Figure 4 displays historic eagle nest sites from North Dakota Game and Fish Department's database.

Table 7. Raptor Nest Attributes.

Feature	Classification	Location	Latitude	Longitude
Bald Eagle Nest	Active Nest	S. 15, T144N, R84W	47.29143956	-101.3128231
Bald Eagle Nest	Active Nest	S. 1, T146N, R83W	47.49171414	-101.1932446
Unknown Nest	Inactive Nest	S. 7, T152N, R87W	48.00099453	-101.852269
Red-tailed Hawk Nest	Active Nest	S. 30, T153N, R91W	48.04408492	-102.4267214
Red-tailed Hawk Nest	Active Nest	S. 30, T153N, R91W	48.05129383	-102.4258211
Red-tailed Hawk Nest	Active Nest	S. 12, T153N, R93W	48.08659598	-102.5793731
Red-tailed Hawk Nest	Active Nest	S. 16, T154N, R93W	48.16718943	-102.6536711
Red-tailed Hawk Nest	Active Nest	S. 9, T154N, R93W	48.17644361	-102.637421
Unknown Nest	Inactive Nest	S. 7, T154N, R93W	48.17658209	-102.6954971
Ferruginous Hawk Nest	Active Nest	S. 1, T154N, R94W	48.18755466	-102.7113212
Red-tailed Hawk Nest	Active Nest	S. 32, T156N, R94W	48.2938535	-102.7977447
Red-tailed Hawk Nest	Active Nest	S. 34, T157N, R94W	48.37798815	-102.81924
Great Horned Owl Nest	Active Nest	S. 21, T153N, R90W	48.05361005	-102.2498768
Red-tailed Hawk Nest	Active Nest	S. 21, T153N, R90W	48.05416773	-102.2513664
Red-tailed Hawk Nest	Active Nest	S. 26, T153N, R89W	48.04815095	-102.0915251
Red-tailed Hawk Nest	Active Nest	S. 16, T152N, R87W	47.98542386	-101.8154513
Red-tailed Hawk Nest	Active Nest	S. 15, T152N, R87W	47.98849579	-101.7881959
Red-tailed Hawk Nest	Active Nest	S. 14, T152N, R87W	47.98302391	-101.7679297
Great Horned Owl Nest	Active Nest	S. 13, T152N, R87W	47.98236596	-101.745675
Red-tailed Hawk Nest	Active Nest	S. 13, T152N, R87W	47.97927106	-101.7481798
Red-tailed Hawk Nest	Active Nest	S. 19, T152N, R86W	47.96540762	-101.7418074
Great Horned Owl Nest	Active Nest	S. 25, T152N, R87W	47.9511755	-101.7499356
Red-tailed Hawk Nest	Active Nest	S. 31, T152N, R86W	47.93765918	-101.7382947
Red-tailed Hawk Nest	Active Nest	S. 31, T151N, R85W	47.85965314	-101.6090013
Red-tailed Hawk Nest	Active Nest	S. 20, T150N, R84W	47.79782953	-101.4545249
Red-tailed Hawk Nest	Active Nest	S. 30, T150N, R83W	47.76816091	-101.3039299
Red-tailed Hawk Nest	Active Nest	S. 3, T149N, R83W	47.74784679	-101.2759112

Feature	Classification	Location	Latitude	Longitude
Red-tailed Hawk Nest	Active Nest	S. 31, T149N, R81W	47.68431734	-101.083011
Red-tailed Hawk Nest	Active Nest	S. 2, T148N, R82W	47.66872687	-101.0826476
Red-tailed Hawk Nest	Active Nest	S. 14, T148N, R82W	47.64069553	-101.0809056
Great Horned Owl Nest	Active Nest	S. 33, T147N, R82W	47.51563604	-101.1260882
Red-tailed Hawk Nest	Active Nest	S. 32, T147N, R82W	47.50939131	-101.142633
Red-tailed Hawk Nest	Active Nest	S. 25, T145N, R84W	47.35356059	-101.3284902
Red-tailed Hawk Nest	Active Nest	S. 35, T145N, R84W	47.33784128	-101.3392803

N = north; R = Range; Sec. = Section; T = Township; W = west.

3.5 Noxious Weed Inventory

A pedestrian survey of the Survey Corridor was conducted for state and county listed noxious weeds. Twenty-one populations of absinth wormwood (*Artemisia absinthium*), 318 populations of Canada thistle (*Cirsium arvense*) and 26 populations of leafy spurge (*Euphorbia esula*) covering 209.77 ac total were documented. Additionally, 11 populations of Canada thistle and 1 population of leafy spurge, totaling 3.75 ac were identified within project pull lanes.

A pedestrian survey of the potential access road survey corridors documented two populations of absinth wormwood (*Artemisia absinthium*), eight populations of Canada thistle (*Cirsium arvense*) and one population of leafy spurge (*Euphorbia esula*) covering 0.36 ac total. Noxious weed attributes are depicted in Appendix A - Natural Resource Inventory Figures and listed in Appendix H - Noxious Weed Attributes.

3.6 Tree and Shrub Inventory

A tree and shrub inventory will be conducted once the construction right-of-way has been finalized. The results of the inventory will be submitted to the ND Public Service Commission in a separate report.

3.7 U.S. Fish and Wildlife Service Conservation Easements

The Project crosses three USFWS Wetland Management Districts (WMDs). They include Audubon WMD in McLean County, J. Clark Salyer WMD in Ward County, and Crosby-Lostwood WMD in Mountrail County. The review of the FWS National Realty Tracts database within the Survey Corridor determined that there are 1,073.26 ac under USFWS easement. The Project Survey Area contains 946.35 ac of wetland easements, 120.69 ac of grasslands easements, and 6.22 ac of Waterfowl Production Areas. Table 8 contains the totals of easement acres within each WMD along with wetland numbers, wetland acres, and structures counts. The easement locations are depicted in Appendix A - Natural Resource Inventory Figures. BEPC is currently working with the Crosby-Lostwood WMD to obtain a Compatibility Determination for crossing the grassland easements.

Table 8. U.S. Fish and Wildlife Service Easements in Survey Corridor

Easement Type	Location	Acres in Project Survey Area	Survey Completed	Wetland Count*	Wetland Acres	Structures
Audubon Wetland Management District – McLean County						
Grassland Easement	Sec 4 - T149N - R82W	3.12	Yes	N/A		0 Structures
Waterfowl Production Area	Sec 13 - T148N - R82W	4.19	Yes	N/A		0 Structures
Wetland Easement	Sec 1 & 2 - T146N - R83W	65.05	Yes	5	10.28	9 Structures
Wetland Easement	Sec 33 - T147N - R82W	23.41	Yes	3	0.68	4 Structures
Wetland Easement	Sec 1 & 2 - T147N - R82W	18.16	Yes	0		3 Structures
Wetland Easement	Sec 14 - T148N - R82W	12.91	Yes	2	0.33	3 Structures
Wetland Easement	Sec 31 - T149N - R81W	9.93	Yes	2	1.08	2 Structures
Wetland Easement	Sec 30 - T149N - R81W	41.97	Yes	0		6 Structures
Wetland Easement	Sec 11 - T149N - R82W	8.83	Yes	4	1.86	2 Structures
Wetland Easement	Sec 11 - T149N - R82W	5.81	Yes	1	1.57	1 Structure
Wetland Easement	Sec 6 - T149N - R82W	5.35	Yes	1	3.83	0 Structures
Wetland Easement	Sec 1 - T149N - R83W	5.64	No	3 NWI Signatures		0 Structures
Wetland Easement	Sec 4 & 5 - T149N - R82W	30.77	No		4.23	2 Structures
Wetland Easement	Sec 34 - T150N - R83W / Sec 2, 3 - T149N - R83W	86.26	Yes	8	14.53	9 Structures
Wetland Easement	Sec 33 - T150N - R83W	4.61	Yes	0		1 Structure
Wetland Easement	Sec 20, 29, 32, 33 - T150N - R83W	108.44	Yes	14	26.29	18 Structures
Wetland Easement	Sec 20 - T150N - R84W	36.48	No	3 NWI Signatures		5 Structures
Wetland Easement	Sec 21 - T150N - R84W	8.43	Yes	4	5.84	0 Structures
Wetland Easement	Sec 22, 23, 24 - T150N - R84W / Sec 19 - T150N - R83W	66.06	Yes	12	30.52	10 Structures
Wetland Easement	Sec 6, 7 - T150N - R85W	58.5	Yes	18	17.68	10 Structures
Grassland Easement	Sec 4, 5 - T149N - R82W	9.26	Yes	N/A		1 structure
Grassland Easement	Sec 6, 7 - T150N - R85W	52.8	Yes	N/A		9 structures
Totals	**Acres in Survey Corridor**	**678.56**	**Wetland Acres**		**121.34**	
J. Clark Salyer Wetland Management District – Ward County						
Grassland Easement	Sec 19 - T152N - R86W	0.97	Yes	N/A		0 Structures
Waterfowl Production Area	Sec 30 - T152N - R86W	2.03	Yes	N/A		0 Structures
Wetland Easement	Sec 31 - T151N - R85W	35.97	Yes	8	3.61	5 Structures
Wetland Easement	Sec 25 - T151N - R86W	10.57	Yes	2	9.01	2 Structures
Wetland Easement	Sec 29, 30 - T151N - R86W	34.68	Yes	4	5.15	3 structures
Wetland Easement	Sec 30 - T151N - R85W	13.71	Yes	2	10.6	1 structure
Wetland Easement	Sec 27, 28 - T151N - R86W	38.05	Yes	8	34.6	8 structures

Easement Type	Location	Acres in Project Survey Area	Survey Completed	Wetland Count*	Wetland Acres	Structures
Wetland Easement	Sec 19 - T151N - R86W	5.75	Yes	0		0 structures
Wetland Easement	Sec 7 - R151N - R86W	2.91	Yes	0 NWI		0 structures
Wetland Easement	Sec 1 - T151M - R87W	17.98	Partial	3	1	2 structures
Wetland Easement	Sec 25 - T152N - R87W	15.44	Yes	2	0.83	3 structures
Wetland Easement	Sec 24 - T152N - R87W / Sec 19 - T152N R86W	29.47	Partial	2	1.72	4 structures
Wetland Easement	Sec 15 - T152N - R87W	8	Yes	1	0.5	0 structures
Wetland Easement	Sec 13, 14 - T152N - R87W	32.6	Yes	6	16.53	4 Structures
Wetland Easement	Sec 13 - T152N - R87W	10.69	Yes	1	0.21	1 Structure
Totals	**Acres in Survey Corridor**	**258.82**	**Wetland Acres**		**89.43**	
	Lostwood Wetland Management District – Mountrail County					
Wetland Easement	Sec 6 - T152N R88W	12.97	Yes	1	0.11	0 structures
Wetland Easement	Sec 12 - 154N - R94W / Sec 7 - T154N - R93W	60.75	Partial	9	5.14	6 structures
Wetland Easement	Sec 1 - T154N - R94W	16.85	Yes	2	0.24	2 structures
Wetland Easement	Sec 32 - T156N - R94W	3.35	Yes	1	3	0 structures
Grassland Easement	Sec 12 - T154N - R94W	25.11	No	N/A		2 structures
Grassland Easement	Sec 1 - T154N - R94W	16.85	Yes	N/A		0 structures
Totals	**Acres in Survey Corridor**	**135.88**	**Wetland Acres**		**8.49**	
Overall Totals	**Acres in Survey Corridor**	**1073.26**	**Total Wetland Acres**		**219.26**	

*The USFWS NWI layer was used in areas not yet surveyed.
N=north; R=Range, Sec= Section; T=Township; W=West.

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Appendix A - Natural Resource Inventory Figures

Appendix B - Wetland Attributes

Wetlands Documented within the Survey Corridor

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 1	PEMC	Sec 25-T151N-R86W	47.86919925	-101.6241491	0.06
Wetland 2	PEMC	Sec 25-T151N-R86W	47.86956896	-101.6341403	6.10
Wetland 3	PEMC	Sec 26-T151N-R86W	47.86944986	-101.6380672	3.07
Wetland 4	PEMC	Sec 27-T151N-R86W	47.86953533	-101.6744757	7.63
Wetland 5a	PEMC	Sec 28-T151N-R86W	47.86967809	-101.6834742	2.20
Wetland 6	PEMA	Sec 28-T151N-R86W	47.8691422	-101.6890747	0.07
Wetland 7	PEMC	Sec 28-T151N-R86W	47.86947108	-101.695123	4.88
Wetland 8	PEMC	Sec 28-T151N-R86W	47.86963759	-101.6991451	0.55
Wetland 9	PEMC	Sec 29-T151N-R86W	47.86960937	-101.7188416	1.26
Wetland 10	PEMC	Sec 30-T151N-R86W	47.86917197	-101.7269471	0.30
Wetland 11	PEMC	Sec 24-T151N-R87W	47.88114859	-101.743957	0.10
Wetland 12	PEMC	Sec 18-T151N-R86W	47.89135574	-101.7429156	0.10
Wetland 13	PEMC	Sec 13-T151N-R87W	47.89549759	-101.7435887	1.88
Wetland 14	PEMA	Sec 19-T151N-R86W	47.88814527	-101.7430868	0.06
Wetland 15	PEMC	Sec 19-T151N-R86W	47.89084803	-101.7428575	0.02
Wetland 16	PEMC	Sec 18-T151N-R86W	47.90250775	-101.7432298	1.55
Wetland 17	PEMC	Sec 19-T151N-R86W	47.89109919	-101.7428906	0.02
Wetland 18	PEMC	Sec 12-T151N-R87W	47.91150916	-101.7433238	0.23
Wetland 19	PEMA	Sec 12-T151N-R87W	47.91894945	-101.7429744	0.15
Wetland 20	PEMC	Sec 12-T151N-R87W	47.91935494	-101.7435863	0.18
Wetland 21	PEMC	Sec 7-T151N-R86W	47.91572305	-101.7433051	0.33
Wetland 22	PEMA	Sec 12-T151N-R87W	47.91809238	-101.7433482	0.07
Wetland 23	PEMC	Sec 1-T151N-R87W	47.92119156	-101.7428609	0.06
Wetland 24	PEMC	Sec 1-T151N-R87W	47.92249931	-101.7434036	1.48
Wetland 25	PEMC	Sec 1-T151N-R87W	47.93194467	-101.7431539	0.21
Wetland 26	PEMA	Sec 25-T152N-R87W	47.96271498	-101.7436481	1.79
Wetland 27	PEMA	Sec 25-T152N-R87W	47.958944	-101.7432389	0.33
Wetland 28	PEMC	Sec 24-T152N-R87W	47.97461693	-101.7432099	0.56
Wetland 29	PEMA	Sec 25-T152N-R87W	47.95077255	-101.7436705	0.15
Wetland 30	PEMC	Sec 24-T152N-R87W	47.97642653	-101.7430074	0.73
Wetland 31	PEMA	Sec 13-T152N-R87W	47.97876771	-101.7430466	0.28
Wetland 32	PEMA	Sec 13-T152N-R87W	47.98395701	-101.7473517	0.21
Wetland 33	PEMA	Sec 13-T152N-R87W	47.98556868	-101.7524191	0.12
Wetland 34	PEMC	Sec 13-T152N-R87W	47.98543525	-101.7625496	3.55
Wetland 36	PEMC	Sec 15-T152N-R87W	47.98488099	-101.8043896	0.41
Wetland 37	PEMC	Sec 15-T152N-R87W	47.9853477	-101.8043212	0.37
Wetland 38	PEMC	Sec 15-T152N-R87W	47.98483103	-101.8071934	0.35
Wetland 39	PEMC	Sec 16-T152N-R87W	47.98981202	-101.8118816	0.86
Wetland 40	PEMA	Sec 9-T152N-R87W	47.99661385	-101.8183689	0.10
Wetland 41	PEMA	Sec 9-T152N-R87W	47.99817678	-101.8206085	0.12
Wetland 42	PEMC	Sec 7-T152N-R87W	47.99966168	-101.8562452	0.93
Wetland 43	PEMC	Sec 8-T152N-R87W	47.99976903	-101.8323533	4.67
Wetland 44	PEMC	Sec 12-T152N-R88W	47.99976069	-101.8761529	1.83
Wetland 45	PEMC	Sec 12-T152N-R88W	47.99974573	-101.8887188	5.88
Wetland 46	PEMA	Sec 11-T152N-R88W	47.99956446	-101.9114901	0.12
Wetland 48	PEMA	Sec 11-T152N-R88W	48.00000229	-101.9130772	0.06
Wetland 49	PEMC	Sec 11-T152N-R88W	48.00021243	-101.9139689	0.03
Wetland 50	PEMA	Sec 11-T152N-R88W	47.99997447	-101.9141085	0.10
Wetland 51	PEMC	Sec 8-T152N-R88W	48.00013655	-101.9773224	0.07

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 53	PEMC	Sec 8-T152N-R88W	48.00004438	-101.9695369	0.62
Wetland 54	PEMA	Sec 7-T152N-R88W	47.99974918	-101.9831716	0.94
Wetland 55	PEMC	Sec 7-T152N-R88W	48.00287921	-101.990809	0.00
Wetland 56	PEMC	Sec 28-T153N-R89W	48.05195898	-102.1378698	0.03
Wetland 57	PEMA	Sec 28-T153N-R89W	48.0519587	-102.1370407	1.66
Wetland 58	PEMA	Sec 28-T153N-R89W	48.051958	-102.1360146	0.22
Wetland 59	PEMCx	Sec 28-T153N-R89W	48.05196425	-102.1351361	0.13
Wetland 60	PEMCx	Sec 28-T153N-R89W	48.05195527	-102.1337531	0.01
Wetland 61	PEMC	Sec 28-T153N-R89W	48.05196413	-102.1316734	0.13
Wetland 63	PEMA	Sec 28-T153N-R89W	48.05197553	-102.1316494	0.45
Wetland 65	PEMA	Sec 28-T153N-R89W	48.05198968	-102.1301554	0.02
Wetland 66	PEMA	Sec 28-T153N-R89W	48.05197599	-102.1298093	0.84
Wetland 67	PEMA	Sec 30-T153N-R89W	48.0519148	-102.1799824	0.38
Wetland 68	PEMC	Sec 25-T153N-R90W	48.05190615	-102.1827422	1.08
Wetland 73	PEMC	Sec 21-T153N-R90W	48.05217545	-102.2538685	0.43
Wetland 75	PEMC	Sec 21-T153N-R90W	48.05213675	-102.2613877	3.07
Wetland 78	PEMC	Sec 30-T153N-R90W	48.04529114	-102.2902954	1.22
Wetland 79a	PEMA	Sec 27-T153N-R91W	48.04531834	-102.3624734	2.78
Wetland 82	PABFx	Sec 26-T153N-R92W	48.04457253	-102.4639106	0.30
Wetland 84	PEMC	Sec 25-T153N-R92W	48.04450707	-102.4577982	0.32
Wetland 85	PEMA	Sec 25-T153N-R92W	48.04451977	-102.460223	0.32
Wetland 87	PEMC	Sec 21-T153N-R92W	48.05572955	-102.5202295	1.50
Wetland 88	PEMC	Sec 20-T153N-R92W	48.05751824	-102.5266369	0.30
Wetland 90	PEMC	Sec 19-T153N-R92W	48.06542245	-102.5547951	4.23
Wetland 91	PEMA	Sec 20-T153N-R92W	48.05860907	-102.5315879	0.31
Wetland 92	PEMC	Sec 13-T153N-R93W	48.07870453	-102.5807156	0.24
Wetland 93	PEMA	Sec 36-T154N-R93W	48.11429796	-102.5809472	1.09
Wetland 94	PEMA	Sec 36-T154N-R93W	48.11288944	-102.580788	0.39
Wetland 96	PEMA	Sec 14-T154N-R93W	48.15758864	-102.5911011	0.09
Wetland 98	PEMC	Sec 8-T154N-R93W	48.17178665	-102.6760732	2.11
Wetland 99	PEMA	Sec 12-T154N-R94W	48.17782483	-102.7096424	0.11
Wetland 100	PEMC	Sec 1-T154N-R94W	48.19077742	-102.7098349	0.47
Wetland 102	PEMC	Sec 36-T155N-R94W	48.21051701	-102.7096797	0.05
Wetland 103	PEMA	Sec 17-T155N-R94W	48.25326625	-102.7959904	0.22
Wetland 105	PEMC	Sec 20-T156N-R94W	48.3156798	-102.7970653	<0.01
Wetland 106	PEMC	Sec 32-T156N-R94W	48.29108061	-102.7964269	3.73
Wetland 107	PEMA	Sec 32-T156N-R94W	48.29733912	-102.7962996	1.06
Wetland 108	PEMA	Sec 5-T155N-R94W	48.2723506	-102.7969318	0.04
Wetland 109	PEMC	Sec 31-T152N-R86W	47.94034592	-101.7430321	1.32
Wetland 110	PEMC	Sec 31-T152N-R86W	47.94694493	-101.7430012	0.04
Wetland 111	PEMA	Sec 36-T152N-R87W	47.93831935	-101.74392	0.06
Wetland 112	PEMC	Sec 36-T152N-R87W	47.93689423	-101.7438357	0.28
Wetland 113	PEMC	Sec 31-T152N-86W	47.93611023	-101.7428085	0.11
Wetland 114	PEMA	Sec 36-T152N-R87W	47.93548321	-101.743854	0.21
Wetland 115	PEMC	Sec 1-T151N-R87W	47.93395018	-101.7437589	0.61
Wetland 116	PEMA	Sec 31-T149N-R81W	47.68455628	-101.0868907	0.09
Wetland 120	PEMC	Sec 13-T151N-R87W	47.90242938	-101.7439959	0.02
Wetland 121	PEMC	Sec 1-T151N-R87W	47.92888441	-101.7429623	0.03
Wetland 123	PEMC	Sec 25-T152N-R87W	47.95396072	-101.7439524	0.05
Wetland 137	PABFx	Sec 8-T155N-R94W	48.25554861	-102.7959567	0.60

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 142	PEMC	Sec 20-T156N-R94W	48.3109255	-102.7970521	<0.01
Wetland 145	PEMC	Sec 30-T151N-R85W	47.86309425	-101.6048	0.83
Wetland 147	PEMA	Sec 31-T151N-R85W	47.86012116	-101.6050041	0.07
Wetland 148	PEMC	Sec 31-T151N-R85W	47.85954155	-101.6042839	0.86
Wetland 150	PEMC	Sec 31-T151N-R85W	47.85531517	-101.6047614	0.36
Wetland 151	PEMC	Sec 31-T151N-R85W	47.8528629	-101.604786	0.65
Wetland 152	PEMA	Sec 31-T151N-R85W	47.85037435	-101.6045896	0.47
Wetland 153	PEMC	Sec 31-T151N-R85W	47.84899371	-101.6048808	0.52
Wetland 154	PEMC	Sec 6-T150N-R85W	47.83936933	-101.6044675	1.69
Wetland 155	PEMC	Sec 6-T150N-R85W	47.83666413	-101.6041624	1.07
Wetland 156	PEMC	Sec 6-T150N-R85W	47.8390184	-101.6037982	<0.01
Wetland 157	PEMA	Sec 6-T150N-R85W	47.84077205	-101.6039129	0.15
Wetland 158	PEMA	Sec 6-T150N-R85W	47.8418283	-101.6042512	0.79
Wetland 162	PEMA	Sec 6-T150N-R85W	47.84500157	-101.6038592	0.04
Wetland 187	PEMA	Sec 7-T150N-R85W	47.83096657	-101.6046387	0.75
Wetland 188	PEMA	Sec 20-T150N-R85W	47.79697596	-101.5742279	0.38
Wetland 189	PEMC	Sec 20-T150N-R85W	47.79716257	-101.5835028	3.27
Wetland 190	PEMC	Sec 21-T150N-R85W	47.79735552	-101.5575056	0.80
Wetland 192	PEMC	Sec 21-T150N-R85W	47.79715621	-101.5530899	1.37
Wetland 193a	PEMC	Sec 22-T150N-R85W	47.79713584	-101.5482917	0.50
Wetland 194	PEMA	Sec 22-T150N-R85W	47.79681591	-101.5432543	0.02
Wetland 198	PEMC	Sec 24-T150N-R85W	47.79740104	-101.4980258	1.38
Wetland 199	PEMC	Sec 24-T150N-R85W	47.79730527	-101.4898002	6.79
Wetland 200	PEMA	Sec 19-T150N-R84W	47.79713874	-101.4661996	0.03
Wetland 202	PEMC	Sec 21-T150N-R84W	47.79719973	-101.424119	2.17
Wetland 203	PEMC	Sec 24-T150N-R84W	47.79745529	-101.359048	1.58
Wetland 204	PEMA	Sec 24-T150N-R84W	47.79782183	-101.3606424	0.07
Wetland 205	PEMA	Sec 24-T150N-R84W	47.79756844	-101.3674776	0.46
Wetland 206a	PEMC	Sec 24-T150N-R84W	47.79748914	-101.3710789	2.89
Wetland 207	PABF	Sec 24-T150N-R84W	47.79732547	-101.377071	2.98
Wetland 210	PEMC	Sec 20-T150N-R83W	47.79303693	-101.3253123	2.95
Wetland 216	PEMC	Sec 21-T150N-R84W	47.79760229	-101.436102	0.39
Wetland 217	PEMC	Sec 21-T150N-R84W	47.79729441	-101.4323432	1.64
Wetland 218	PABF	Sec 19-T150N-R83W	47.79770949	-101.3556382	1.88
Wetland 219	PEMC	Sec 19-T150N-R83W	47.79707518	-101.3548525	<0.01
Wetland 220	PABF	Sec 19-T150N-R83W	47.79723228	-101.3511788	0.91
Wetland 222	PEMC	Sec 20-T150N-R83W	47.79495868	-101.3252801	3.68
Wetland 223	PEMC	Sec 29-T150N-R83W	47.78099365	-101.3257126	7.28
Wetland 224a	PEMC	Sec 32-T150N-R83W	47.77463861	-101.3255776	2.14
Wetland 225	PEMC	Sec 32-T150N-R83W	47.77329783	-101.325223	0.45
Wetland 226	PEMC	Sec 32-T150N-R83W	47.77219857	-101.3262195	0.14
Wetland 227	PEMC	Sec 32-T150N-R83W	47.77132563	-101.3256949	0.18
Wetland 228	PEMC	Sec 32-T150N-R83W	47.76872931	-101.3171527	0.50
Wetland 229	PEMA	Sec 34-T150N-R83W	47.7682309	-101.2891355	0.18
Wetland 231	PEMA	Sec 2-T149N-R83W	47.7576215	-101.2716128	0.07
Wetland 232	PEMC	Sec 34-T150N-R83W	47.76844659	-101.2831264	0.75
Wetland 233	PEMC	Sec 3-T149N-R83W	47.75454317	-101.2723664	1.63
Wetland 234	PEMC	Sec 34-T150N-R83W	47.76661752	-101.2722244	1.16
Wetland 235	PEMC	Sec 35-T150N-R83W	47.76633708	-101.2716787	0.58
Wetland 236	PEMC	Sec 2-T149N-R83W	47.75405654	-101.2706326	3.02

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 237	PEMC	Sec 2-T149N-R83W	47.75370652	-101.2628557	1.05
Wetland 238	PABF	Sec 6-T149N-R82W	47.7542095	-101.2272198	3.94
Wetland 240	PEMC	Sec 3-T149N-R82W	47.75196026	-101.1547754	1.13
Wetland 243	PEMA	Sec 3-T149N-R82W	47.7543823	-101.1599093	0.07
Wetland 245	PEMA	Sec 30-T151N-R85W	47.86750527	-101.6038807	<0.01
Wetland 248	PEMA	Sec 16-T146N-R83W	47.46998172	-101.2515576	0.05
Wetland 250	PEMA	Sec 16-T146N-R83W	47.46845297	-101.2529	0.01
Wetland 251	PEMA	Sec 2-T146N-R83W	47.48845384	-101.2175402	0.20
Wetland 252a	PEMAx	Sec 6-T146N-R82W	47.49879107	-101.1718372	0.03
Wetland 253	PEMC	Sec 6-T146N-R82W	47.4986499	-101.17511	0.69
Wetland 255	PEMC	Sec 11-T146N-R83W	47.48209965	-101.2275809	0.02
Wetland 258	PEMC	Sec 11-T146N-R83W	47.48575513	-101.2216165	1.85
Wetland 263	PEMC	Sec 32-T150N-R83W	47.77677368	-101.3257843	3.55
Wetland 267	PEMC	Sec 19-T150N-R84W	47.79770169	-101.4711545	0.07
Wetland 274	PEMC	Sec 6-T150N-R85W	47.8477251	-101.6039903	0.68
Wetland 275	PEMC	Sec 25-T151N-R86W	47.86951583	-101.6202585	6.05
Wetland 428	PEMC	Sec 36-T146N-R84W	47.4235374	-101.3316524	0.51
Wetland 429	PEMA	Sec 30-T151N-R86W	47.86961912	-101.7391151	0.04
Wetland 433	PEMA	Sec 30-T151N-R86W	47.86962817	-101.7395567	0.06
Wetland 435	PEMA	Sec 25-T151N-R87W	47.87638289	-101.7436229	0.76
Wetland 436	PEMA	Sec 25-T151N-R87W	47.87247882	-101.7432252	0.07
Wetland 438	PEMC	Sec 1-T151N-R87W	47.92168081	-101.7435753	0.56
Wetland 439	PEMC	Sec 14-T152N-R87W	47.98550836	-101.7653576	0.96
Wetland 441	PEMA	Sec 13-T151N-R87W	47.89666186	-101.7440221	0.03
Wetland 442	PEMA	Sec 13-T151N-R87W	47.8981934	-101.7436056	0.53
Wetland 444	PEMA	Sec 24-T152N-R87W	47.96365614	-101.7436557	0.07
Wetland 448	PEMA	Sec 8-T152N-R87W	47.99954237	-101.8475754	0.46
Wetland 450	PEMC	Sec 9-T152N-R88W	47.99954847	-101.9526968	0.26
Wetland 451	PEMA	Sec 9-T152N-R88W	48.00014812	-101.9502818	0.12
Wetland 452	PEMC	Sec 9-T152N-R88W	48.00005224	-101.9479883	0.59
Wetland 453	PEMA	Sec 10-T152N-R88W	48.0000918	-101.9306994	0.24
Wetland 457	PEMC	Sec 8-T152N-R88W	47.99966089	-101.9580489	0.06
Wetland 459	PEMA	Sec 7-T152N-R88W	48.00685749	-101.9901453	0.02
Wetland 461	PEMA	Sec 7-T152N-R88W	48.00382182	-101.9896299	0.05
Wetland 463	PEMA	Sec 7-T152N-R88W	48.00012728	-101.985732	0.30
Wetland 465	PEMA	Sec 7-T152N-R88W	47.99996289	-101.9808763	0.45
Wetland 466	PEMA	Sec 7-T152N-R88W	47.99962506	-101.9797589	0.19
Wetland 467	PEMA	Sec 32-T153N-R88W	48.0304419	-102.008488	0.30
Wetland 468	PEMA	Sec 33-T153N-R88W	48.02706081	-101.9976973	1.51
Wetland 470	PEMA	Sec 8-T152N-R88W	47.99975558	-101.9687255	0.08
Wetland 471	PEMA	Sec 6-T152N-R88W	48.01503066	-101.9903347	0.11
Wetland 495	PEMA	Sec 30-T153N-R90W	48.04477592	-102.2989638	0.11
Wetland 496	PEMA	Sec 30-T153N-R90W	48.04472081	-102.2961994	0.05
Wetland 497	PEMA	Sec 30-T153N-R90W	48.04487321	-102.2926381	0.02
Wetland 499	PEMA	Sec 30-T153N-R90W	48.04498134	-102.2955358	0.12
Wetland 500	PEMA	Sec 30-T153N-R90W	48.04473963	-102.292897	0.06
Wetland 510	PEMA	Sec 27-T153N-R92W	48.0448677	-102.5014801	0.08
Wetland 515	PEMC	Sec 36-T154N-R93W	48.11792751	-102.5805138	0.93
Wetland 524	PEMC	Sec 7-T154N-R93W	48.17179656	-102.6911011	0.64
Wetland 525	PEMC	Sec 7-T154N-R93W	48.17183968	-102.6885781	0.42

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 526	PEMC	Sec 7-T154N-R93W	48.17164199	-102.6864492	0.36
Wetland 527	PEMC	Sec 7-T154N-R93W	48.17181153	-102.69393	0.28
Wetland 528	PEMC	Sec 7-T154N-R93W	48.17168388	-102.6832505	0.45
Wetland 529	PEMA	Sec 1-T154N-R94W	48.18858811	-102.7101007	0.12
Wetland 541	PEMAx	Sec 17-T156N-R94W	48.33541398	-102.7996945	0.26
Wetland 544	PEMCx	Sec 33-T157N-R94W	48.38578214	-102.8413832	0.15
Wetland 545	PEMC	Sec 33-T157N-R94W	48.38449354	-102.8404238	1.17
Wetland 546	PEMA	Sec 1-T156N-R95W	48.37093268	-102.8294381	0.01
Wetland 547	PEMA	Sec 6-T156N-R94W	48.3603035	-102.8208205	0.04
Wetland 553	PEMA	Sec 6-T150N-R85W	47.84534106	-101.6043892	0.09
Wetland 560	PEMA	Sec 6-T150N-R85W	47.84353487	-101.6043759	0.19
Wetland 561	PEMA	Sec 6-T150N-R85W	47.84271158	-101.6046394	0.10
Wetland 562	PEMA	Sec 6-T150N-R85W	47.84680627	-101.6044468	0.62
Wetland 563	PEMA	Sec 18-T150N-R85W	47.81630219	-101.6043187	0.47
Wetland 564	PEMA	Sec 18-T150N-R85W	47.81525424	-101.6047575	0.20
Wetland 569	PEMC	Sec 23-T145N-R84W	47.36073828	-101.3344664	0.05
Wetland 570	PEMA	Sec 24-T145N-R84W	47.36072524	-101.333894	0.58
Wetland 571	PEMC	Sec 25-T145N-R84W	47.35591422	-101.3340049	0.52
Wetland 572	PEMC	Sec 36-T146N-R84W	47.41634203	-101.3339516	0.42
Wetland 573	PEMC	Sec 36-T146N-R84W	47.4184295	-101.3340058	2.09
Wetland 574	PEMC	Sec 36-T146N-R84W	47.42082974	-101.3339459	0.40
Wetland 575	PEMC	Sec 35-T146N-R84W	47.41765599	-101.334689	0.07
Wetland 576	PEMC	Sec 36-T146N-R84W	47.42407856	-101.3313714	0.01
Wetland 577	PEMC	Sec 20-T146N-R83W	47.45787666	-101.2731315	0.53
Wetland 578	PEMC	Sec 20-T146N-R83W	47.44824749	-101.2894771	0.02
Wetland 579	PEMC	Sec 20-T146N-R83W	47.4474743	-101.2911679	0.35
Wetland 580	PEMC	Sec 19-T146N-R83W	47.44716307	-101.2923629	0.41
Wetland 581	PEMC	Sec 19-T146N-R83W	47.44645342	-101.2935212	0.23
Wetland 582	PEMC	Sec 19-T146N-R83W	47.44578343	-101.2952254	0.03
Wetland 583	PEMC	Sec 30-T146N-R83W	47.44269013	-101.2993617	0.58
Wetland 584	PEMC	Sec 30-T146N-R83W	47.44112938	-101.3019843	0.77
Wetland 585	PEMC	Sec 1-T146N-R83W	47.49839397	-101.1927569	1.28
Wetland 587	PEMC	Sec 2-T146N-R83W	47.49123088	-101.2108113	0.24
Wetland 588	PABF	Sec 2-T146N-R83W	47.49339445	-101.2075784	5.62
Wetland 589	PEMC	Sec 5-T146N-R82W	47.49965126	-101.15809	0.51
Wetland 590	PEMC	Sec 6-T146N-R82W	47.49867274	-101.1637747	3.59
Wetland 591	PEMC	Sec 33-T147N-R82W	47.5104579	-101.1406223	0.33
Wetland 592	PEMA	Sec 33-T147N-R82W	47.51359304	-101.1356271	0.17
Wetland 593	PEMA	Sec 25-T148N-R82W	47.61775401	-101.0788402	0.20
Wetland 594	PEMA	Sec 24-T148N-R82W	47.6307611	-101.077895	0.31
Wetland 595	PEMAx	Sec 23-T148N-R82W	47.63105127	-101.0782545	0.12
Wetland 597	PABF	Sec 1-T148N-R82W	47.66501027	-101.0778638	0.24
Wetland 598	PEMC	Sec 2-T148N-R82W	47.66480631	-101.0784389	1.00
Wetland 600	PEMC	Sec 3-T149N-R82W	47.74774574	-101.1479159	0.36
Wetland 601	PABF	Sec 29-T150N-R83W	47.77831662	-101.3252733	0.61
Wetland 602	PEMC	Sec 29-T150N-R83W	47.78679626	-101.3256917	1.25
Wetland 603	PEMA	Sec 29-T150N-R83W	47.78845572	-101.3251502	0.25
Wetland 604	PABF	Sec 22-T150N-R84W	47.79720255	-101.4070928	3.26
Wetland 605	PEMA	Sec 22-T150N-R84W	47.79704163	-101.4035087	0.01
Wetland 606	PABF	Sec 22-T150N-R84W	47.79744856	-101.4004487	1.67

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 607	PEMC	Sec 23-T150N-R84W	47.79780159	-101.3940607	0.28
Wetland 608	PEMC	Sec 23-T150N-R84W	47.79764216	-101.3913945	1.20
Wetland 609	PEMC	Sec 23-T150N-R84W	47.79747024	-101.3833642	1.74
Wetland 610	PEMA	Sec 24-T150N-R84W	47.79761327	-101.3684624	0.26
Wetland 611	PEMC	Sec 21-T150N-R84W	47.79760365	-101.422185	0.17
Wetland 612	PEMC	Sec 21-T150N-R84W	47.7977269	-101.4282573	0.61
Wetland 613	PEMC	Sec 23-T150N-R85W	47.79731344	-101.5230382	0.95
Wetland 614	PEMA	Sec 24-T150N-R85W	47.79704773	-101.4936313	0.48
Wetland 615	PEMC	Sec 7-T150N-R85W	47.82755322	-101.6037919	0.03
Wetland 616	PEMC	Sec 7-T150N-R85W	47.82689555	-101.6038749	0.08
Wetland 618	PEMC	Sec 7-T150N-R85W	47.81989576	-101.6041703	1.78
Wetland 619	PEMC	Sec 25-T151N-R86W	47.86994835	-101.6474839	0.02
Wetland 620	PEMC	Sec 28-T151N-R86W	47.86972626	-101.6917733	1.67
Wetland 621	PEMA	Sec 28-T151N-R86W	47.8691961	-101.6890389	0.01
Wetland 622	PEMC	Sec 28-T151N-R86W	47.86990658	-101.6890787	0.01
Wetland 623	PEMC	Sec 29-T151N-R86W	47.86965354	-101.7026726	0.21
Wetland 624	PEMC	Sec 29-T151N-R86W	47.86938133	-101.7149515	2.13
Wetland 626	PEMA	Sec 30-T151N-R86W	47.86937572	-101.7410967	0.03
Wetland 628	PEMA	Sec 16-T152N-R87W	47.98571953	-101.811302	0.03
Wetland 629	PEMA	Sec 30-T151N-R86W	47.86932899	-101.74305	0.02
Wetland 631	PEMC	Sec 30-T151N-R86W	47.86968312	-101.7266935	0.17
Wetland 638	PEMC	Sec 23-T148N-R82W	47.62694526	-101.0787042	0.94
Wetland 639	PEMA	Sec 11-T149N-R82W	47.73761574	-101.1384644	0.52
Wetland 640	PABF	Sec 11-T149N-R82W	47.735199	-101.1365963	4.44
Wetland 641	PEMC	Sec 11-T149N-R82W	47.73630728	-101.1380571	0.32
Wetland 642	PEMC	Sec 3-T149N-R82W	47.74924317	-101.1500225	0.31
Wetland 643	PABFh	Sec 5-T149N-R82W	47.75426331	-101.2002799	0.68
Wetland 644	PABF	Sec 33-T150N-R83W	47.76845836	-101.3138705	2.61
Wetland 645	PEMC	Sec 32-T150N-R83W	47.76825788	-101.3156936	0.72
Wetland 650	PEMC	Sec 25-T151N-R87W	47.86915384	-101.7437001	0.07
Wetland 664	PABFx	Sec 19-T146N-R83W	47.44523543	-101.295267	0.19
Wetland 680	PEMC	Sec 2-T146N-R83W	47.49079529	-101.2129234	0.78
Wetland 687	PEMC	Sec 2-T147N-R82W	47.58433981	-101.0788435	1.89
Wetland 689	PEMA	Sec 35-T148N-R82W	47.59528435	-101.0783477	0.28
Wetland 690	PEMA	Sec 35-T148N-R82W	47.59298298	-101.0788871	0.44
Wetland 692	PEMA	Sec 35-T148N-R82W	47.59810584	-101.0785117	0.17
Wetland 693	PEMA	Sec 35-T148N-R82W	47.60073751	-101.0787407	0.05
Wetland 694	PEMA	Sec 36-T148N-R82W	47.5998363	-101.0778936	0.03
Wetland 698	PEMC	Sec 33-T147N-R82W	47.51115674	-101.1408454	0.01
Wetland 702	PEMC	Sec 22-T147N-R82W	47.53454111	-101.1052155	1.56
Wetland 704	PEMC	Sec 11-T147N-R82W	47.5634806	-101.0786823	0.64
Wetland 709	PEMC	Sec 25-T148N-R82W	47.60882825	-101.0786801	1.70
Wetland 715	PEMC	Sec 24-T148N-R82W	47.6252971	-101.0778934	0.36
Wetland 718	PEMC	Sec 23-T148N-R82W	47.62517678	-101.0785632	1.05
Wetland 722	PEMA	Sec 14-T148N-R82W	47.63248576	-101.0786484	0.11
Wetland 724	PEMA	Sec 14-T148N-R82W	47.63341411	-101.0786115	0.23
Wetland 728	PEMC	Sec 13-T148N-R82W	47.64599352	-101.0778441	0.01
Wetland 729	PABFh	Sec 14-T148N-R82W	47.64642906	-101.0785894	1.28
Wetland 734	PEMC	Sec 31-T149N-R81W	47.67646989	-101.0812791	0.24
Wetland 735	PEMC	Sec 31-T149N-R81W	47.67781589	-101.0813478	0.51

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 737	PEMC	Sec 31-T149N-R81W	47.67891637	-101.0819288	0.14
Wetland 744	PEMA	Sec 11-T149N-R82W	47.73946677	-101.1402541	0.16
Wetland 749	PEMC	Sec 5-T149N-R82W	47.75392477	-101.2043028	1.62
Wetland 750	PEMC	Sec 5-T149N-R82W	47.75359034	-101.2026716	0.01
Wetland 753	PEMC	Sec 33-T150N-R83W	47.76816913	-101.2991043	0.18
Wetland 815	PEMC	Sec 35-T146N-R84W	47.41616673	-101.3346514	0.11
Wetland 825	PEMA	Sec 20-T150N-R85W	47.79740071	-101.5813991	0.51
Wetland 826	PEMC	Sec 18-T150N-R85W	47.81466413	-101.6047628	0.23
Wetland 827	PEMC	Sec 7-T150N-R85W	47.82306282	-101.6042406	2.50
Wetland 828	PEMA	Sec 7-T150N-R85W	47.82664335	-101.6047386	0.75
Wetland 829	PEMC	Sec 25-T151N-R86W	47.86965843	-101.6291472	1.11
Wetland 831	PEMC	Sec 8-T152N-R87W	47.99943512	-101.8413803	0.25
Wetland 832	PEMA	Sec 8-T152N-R87W	48.00010913	-101.8415249	0.04
Wetland 833	PEMC	Sec 8-T152N-R87W	48.0000128	-101.8471042	0.44
Wetland 834	PEMC	Sec 8-T152N-R87W	47.99943616	-101.8497169	0.46
Wetland 835	PEMA	Sec 12-T152N-R88W	47.99956292	-101.8850976	0.09
Wetland 836	PEMA	Sec 12-T152N-R88W	47.99962222	-101.885415	0.11
Wetland 837	PEMC	Sec 10-T152N-R88W	48.00000069	-101.9220414	5.57
Wetland 838	PEMC	Sec 10-T152N-R88W	48.00017737	-101.9196474	0.03
Wetland 839	PEMA	Sec 9-T152N-R88W	47.99962607	-101.9500702	0.37
Wetland 840	PEMC	Sec 9-T152N-R88W	48.00022226	-101.9562854	0.03
Wetland 841	PEMC	Sec 9-T152N-R88W	47.99975713	-101.957286	1.21
Wetland 842	PEMA	Sec 8-T152N-R88W	47.99955209	-101.9602379	0.25
Wetland 843	PEMC	Sec 8-T152N-R88W	47.99957784	-101.9613632	0.28
Wetland 844	PEMA	Sec 8-T152N-R88W	47.99944456	-101.9713096	0.02
Wetland 845	PEMC	Sec 8-T152N-R88W	47.99958575	-101.9751955	0.41
Wetland 846	PEMA	Sec 8-T152N-R88W	47.99950045	-101.9769376	0.05
Wetland 847	PEMA	Sec 7-T152N-R88W	48.00080637	-101.989737	0.33
Wetland 848	PEMA	Sec 7-T152N-R88W	48.002818	-101.9905821	0.03
Wetland 849	PEMA	Sec 6-T152N-R88W	48.01464905	-101.9898557	0.01
Wetland 850	PEMA	Sec 33-T153N-R88W	48.03003294	-102.0013428	0.29
Wetland 860	PEMC	Sec 28-T153N-R91W	48.04513401	-102.3903241	0.30
Wetland 862	PEMA	Sec 26-T153N-R92W	48.04499514	-102.4751577	0.05
Wetland 863	PEMC	Sec 26-T153N-R92W	48.04524876	-102.4828671	0.50
Wetland 865	PEMA	Sec 27-T153N-R92W	48.04538709	-102.4967792	0.04
Wetland 866	PEMA	Sec 27-T153N-R92W	48.04468244	-102.4988388	0.06
Wetland 903	PEMA	Sec 10-T154N-R93W	48.17158829	-102.6163654	0.02
Wetland 905	PEMC	Sec 8-T154N-R93W	48.17213325	-102.6701424	0.29
Wetland 907	PEMC	Sec 7-T154N-R93W	48.1714979	-102.6814099	0.57
Wetland 908	PEMC	Sec 7-T154N-R93W	48.17176737	-102.6903113	1.56
Wetland 909	PEMA	Sec 7-T154N-R93W	48.17217487	-102.693192	0.06
Wetland 910	PEMC	Sec 7-T154N-R93W	48.17172235	-102.696303	0.71
Wetland 912	PEMC	Sec 1-T154N-R94W	48.19275698	-102.709117	0.06
Wetland 913	PEMA	Sec 36-T155N-R94W	48.19758635	-102.7099538	0.68
Wetland 915	PEMC	Sec 21-T155N-R94W	48.22760001	-102.7740993	0.79
Wetland 916	PEMA	Sec 20-T155N-R94W	48.23143896	-102.7864955	0.00
Wetland 919	PEMA	Sec 29-T156N-R94W	48.30133074	-102.7960106	0.13
Wetland 920	PEMC	Sec 29-T156N-R94W	48.30332233	-102.7962417	1.39
Wetland 921	PEMC	Sec 29-T156N-R94W	48.31049362	-102.7964647	0.46
Wetland 922	PEMC	Sec 20-T156N-R94W	48.31574394	-102.7964148	0.23

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 923	PEMA	Sec 20-T156N-R94W	48.31769042	-102.7958557	0.01
Wetland 924	PEMC	Sec 20-T156N-R94W	48.3222351	-102.7964246	0.22
Wetland 925	PEMCx	Sec 17-T156N-R94W	48.33418226	-102.7973453	1.49
Wetland 926	PEMAx	Sec 6-T156N-R94W	48.3630107	-102.8226227	0.05
Wetland 928	PEMC	Sec 21-T150N-R84W	47.79731713	-101.4306657	1.58
Wetland 1308	PEMA	Sec 6-T150N-R85W	47.83449449	-101.6043644	1.34
Wetland 1309	PEMA	Sec 6-T150N-R85W	47.8410947	-101.6049324	0.13
Wetland 1310	PEMC	Sec 6-T150N-R85W	47.84594734	-101.6039397	0.07
Wetland 1312	PEMCx	Sec 15-T144N-R84W	47.2852876	-101.3212961	0.04
Wetland 1316	PEMA	Sec 16-T144N-R84W	47.28542127	-101.3220975	0.14
Wetland 1321	PEMC	Sec 15-T146N-R83W	47.47298706	-101.2449819	0.08
Wetland 1324	PEMCx	Sec 6-T146N-R82W	47.49820618	-101.169828	0.04
Wetland 1332	PEMAx	Sec 1-T147N-R82W	47.58444095	-101.0781318	0.10
Wetland 1333	PEMA	Sec 11-T148N-R82W	47.65106307	-101.0791454	0.09
Wetland 1334	PEMC	Sec 24-T149N-R82W	47.70739487	-101.1076136	0.29
Wetland 1335	PEMC	Sec 24-T149N-R82W	47.70976533	-101.1099107	13.61
Wetland 1336	PEMC	Sec 24-T149N-R82W	47.71697889	-101.1129458	2.18
Wetland 1337	PEMA	Sec 13-T149N-R82W	47.72551675	-101.1167584	0.20
Wetland 1339	PABF	Sec 11-T149N-R82W	47.74336936	-101.1428279	1.57
Wetland 1342	PEMC	Sec 14-T149N-R82W	47.72937883	-101.1272989	0.01
Wetland 1349	PEMC	Sec 5-T149N-R82W	47.75419448	-101.1935868	0.24
Wetland 1350	PEMC	Sec 5-T149N-R82W	47.75366241	-101.1975748	0.35
Wetland 1353	PEMA	Sec 4-T149N-R82W	47.75433416	-101.1674628	0.18
Wetland 1354	PEMA	Sec 4-T149N-R82W	47.75417194	-101.1705664	1.43
Wetland 1355	PEMC	Sec 4-T149N-R82W	47.7538312	-101.17266	0.28
Wetland 1356	PEMA	Sec 4-T149N-R82W	47.75416719	-101.1769636	1.01
Wetland 1357	PEMC	Sec 4-T149N-R82W	47.7536165	-101.1794593	0.05
Wetland 1358	PEMC	Sec 4-T149N-R82W	47.75430322	-101.179692	0.21
Wetland 1359	PABF	Sec 6-T149N-R82W	47.75429706	-101.2136474	0.35
Wetland 1360	PEMC	Sec 6-T149N-R82W	47.75374855	-101.2138599	0.51
Wetland 1361	PEMC	Sec 6-T149N-R82W	47.75372411	-101.2175323	0.90
Wetland 1366	PEMC	Sec 22-T150N-R84W	47.79760961	-101.4136099	0.69
Wetland 1367	PABF	Sec 22-T150N-R84W	47.79750383	-101.4192257	2.18
Wetland 1370	PEMA	Sec 31-T151N-R85W	47.85380387	-101.603846	0.01
Wetland 1371	PEMC	Sec 30-T151N-R85W	47.86988127	-101.6043606	0.30
Wetland 1373	PEMC	Sec 24-T151N-R87W	47.89095852	-101.7436144	0.22
Wetland 1374	PEMC	Sec 24-T151N-R87W	47.88815653	-101.7432049	0.24
Wetland 1375	PEMA	Sec 24-T151N-R87W	47.88550255	-101.7437844	1.90
Wetland 1376	PEMA	Sec 7-T151N-R86W	47.91108528	-101.7428042	0.00
Wetland 1382	PEMC	Sec 31-T153N-R88W	48.03063851	-102.0400783	0.45
Wetland 1383	PEMA	Sec 32-T153N-R88W	48.03065983	-102.0237041	0.07
Wetland 1391	PEMA	Sec 26-T153N-R89W	48.04509486	-102.0776643	0.17
Wetland 1392	PEMA	Sec 26-T153N-R89W	48.04463899	-102.0777295	0.12
Wetland 1394	PEMA	Sec 26-T153N-R89W	48.04456	-102.0814888	0.32
Wetland 1395	PEMA	Sec 26-T153N-R89W	48.0446645	-102.0836728	0.09
Wetland 1399	PEMC	Sec 20-T153N-R89W	48.05248963	-102.1473075	0.23
Wetland 1400	PEMC	Sec 20-T153N-R89W	48.05232827	-102.1486499	0.21
Wetland 1401	PEMA	Sec 21-T153N-R89W	48.05246775	-102.1345661	0.45
Wetland 1403	PEMAx	Sec 21-T153N-R89W	48.0523734	-102.131747	0.05
Wetland 1405	PEMCx	Sec 21-T153N-R89W	48.05235186	-102.1311362	0.09

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 1406	PEMC	Sec 20-T153N-R89W	48.05238739	-102.149444	0.21
Wetland 1410	PEMC	Sec 19-T153N-R89W	48.05232625	-102.1610096	0.44
Wetland 1417	PEMC	Sec 23-T153N-R90W	48.05234938	-102.210113	0.69
Wetland 1418	PABF	Sec 28-T153N-R90W	48.0516114	-102.2506846	0.58
Wetland 1421	PEMA	Sec 24-T153N-R90W	48.05237404	-102.1965957	0.13
Wetland 1423	PEMC	Sec 28-T153N-R90W	48.05168361	-102.2538965	0.90
Wetland 1424	PABF	Sec 28-T153N-R90W	48.0516351	-102.2565186	0.29
Wetland 1430	PEMA	Sec 30-T153N-R91W	48.04460538	-102.428582	0.04
Wetland 1441	PEMC	Sec 36-T152N-R87W	47.94519036	-101.7436523	0.19
Wetland 1443	PEMC	Sec 32-T152N-R86W	47.94696851	-101.7432198	0.60
Wetland 1448	PEMC	Sec 13-T153N-R93W	48.07407751	-102.5770502	0.13
Wetland 1450	PEMA	Sec 19-T153N-R92W	48.064394	-102.5513563	1.37
Wetland 1451	PEMA	Sec 19-T153N-R92W	48.06427798	-102.5503503	0.87
Wetland 1458	PEMC	Sec 13-T153N-R93W	48.07349266	-102.5765526	0.05
Wetland 1460	PEMA	Sec 17-T155N-R94W	48.24247237	-102.7964887	0.93
Wetland 1464	PEMA	Sec 1-T154N-R94W	48.19631044	-102.7092778	0.14
Wetland 1465	PEMC	Sec 1-T154N-R94W	48.19555411	-102.7095422	1.01
Wetland 1468	PEMC	Sec 12-T154N-R94W	48.17206224	-102.7099255	0.40
Wetland 1469	PEMC	Sec 10-T146N-R83W	47.48094575	-101.230272	4.36
Wetland 1470	PEMC	Sec 14-T149N-R82W	47.72819777	-101.123192	13.06
Wetland 1471	PEMC	Sec 4-T149N-R82W	47.75404317	-101.182319	1.12
Wetland 1472	PEMA	Sec 24-T153N-R90W	48.0524267	-102.1860694	0.49
Wetland 1479	PEMC	Sec 32-T147N-R82W	47.50878997	-101.1434866	1.98
Wetland 1480	PEMC	Sec 33-T147N-R82W	47.51413276	-101.1352472	0.82
Wetland 1481	PABH	Sec 11-T148N-R82W	47.64756018	-101.0788142	2.26
Wetland 1482	PEMA	Sec 11-T149N-R82W	47.73822624	-101.1394365	0.59
Wetland 35a	PEMC	Sec 14-T152N-R87W	47.98499028	-101.7693486	0.69
Wetland 35b	PEMC	Sec 14-T152N-R87W	47.98510624	-101.7720333	0.61
Wetland 35c	PEMC	Sec 14-T152N-R87W	47.98563656	-101.7689459	0.02
Wetland 35d	PEMC	Sec 14-T152N-R87W	47.98534516	-101.7705345	0.78
Wetland 62a	PEMC	Sec 28-T153N-R89W	48.04482203	-102.1253323	1.60
Wetland 62b	PEMC	Sec 28-T153N-R89W	48.04605041	-102.127265	2.51
Wetland 81a	PEMC	Sec 27-T153N-R91W	48.04549519	-102.3746668	2.15
Wetland 81b	PEMC	Sec 27-T153N-R91W	48.04583596	-102.3760646	0.01
Wetland 81c	PEMC	Sec 27-T153N-R91W	48.04549519	-102.3774016	0.43
				Total	**354.2**

N = north, PABF = palustrine aquatic bed semi-permanently flooded, PABFh = palustrine aquatic bed semi-permanently flooded and diked freshwater pond, PABFx = palustrine aquatic bed semi-permanently flooded excavated, PEMA = palustrine emergent temporarily flooded wetland ,PEMAx = palustrine emergent temporarily flooded wetland excavated, PEMC = palustrine emergent seasonally flooded wetland, PEMCx = palustrine emergent seasonally flooded wetland excavated, R = Range, Sec. = Section, T = Township, W = west.

Wetlands located within Project Pull Lanes

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 102	PEMC	Sec 36-T155N-R94W	48.21060997	-102.7096515	0.02
Wetland 119	PEMC	Sec 25-T151N-R87W	47.86826426	-101.7432579	0.09
Wetland 243	PEMA	Sec 3-T149N-R82W	47.75476104	-101.1594433	0.00
Wetland 1315	PEMCx	Sec 22-T144N-R84W	47.28425085	-101.3218524	0.18
Wetland 1316	PEMA	Sec 16-T144N-R84W	47.28504956	-101.3224488	0.49
Wetland 1335	PEMC	Sec 24-T149N-R82W	47.70857042	-101.1103645	0.87
Wetland 1344	PABF	Sec 11-T149N-R82W	47.73310689	-101.1362325	0.17
Wetland 1371	PEMC	Sec 30-T151N-R85W	47.87032959	-101.6044331	0.79
Wetland 1377	PEMC	Sec 9-T152N-R87W	48.00073696	-101.8238416	0.10
Wetland 1378	PEMC	Sec 13-T152N-R87W	47.98534162	-101.7464864	0.22
Wetland 1381	PEMA	Sec 7-T152N-R88W	47.99965569	-101.9916107	0.22
Wetland 1425	PEMA	Sec 29-T153N-R90W	48.04571538	-102.2875217	0.33
Wetland 1468	PEMC	Sec 12-T154N-R94W	48.17194866	-102.7104309	0.18
Wetland 233	PEMC	Sec 3-T149N-R83W	47.75413599	-101.2735777	0.24
Wetland 650	PEMC	Sec 25-T151N-R87W	47.86856171	-101.7435284	1.66
Wetland 39	PEMC	Sec 16-T152N-R87W	47.98959008	-101.8107911	0.04
Wetland 66	PEMA	Sec 21-T153N-R89W	48.05304036	-102.1274853	0.24
Wetland 925	PEMC	Sec 17-T156N-R94W	48.33281923	-102.7948649	0.03
				Total	**5.87**

N = north, PABF = palustrine aquatic bed semi-permanently flooded, PEMA = palustrine emergent temporarily flooded wetland, PEMC = palustrine emergent seasonally flooded wetland, R = Range, Sec. = Section, T = Township, W = west.

Wetlands located within Potential Access Road Survey Corridors

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 5b	PABF	Sec 28-T151N-R86W	47.87106933	-101.6838822	0.01
Wetland 47	PEMC	Sec 10-T152N-R88W	47.99898921	-101.918264	0.04
Wetland 79b	PEMA	Sec 27-T153N-R91W	48.04468991	-102.361734	0.24
Wetland 97	PEMC	Sec 7-T154N-R93W	48.16907037	-102.6980994	0.02
Wetland 104	PEMC	Sec 29-T156N-R94W	48.30399192	-102.8067864	0.02
Wetland 118	PEMC	Sec 30-T151N-R86W	47.86745749	-101.743096	0.04
Wetland 119	PEMC	Sec 25-T151N-R87W	47.86811093	-101.7432005	0.00
Wetland 122	PEMC	Sec 31-T152N-R86W	47.94186539	-101.7395213	0.01
Wetland 124	PABF	Sec 9-T152N-R87W	47.99246088	-101.819325	0.02
Wetland 127	PEMA	Sec 7-T152N-R88W	47.99865568	-101.9837447	0.16
Wetland 128	PEMA	Sec 7-T152N-R88W	48.00710852	-101.9800439	0.01
Wetland 131	PEMC	Sec 28-T153N-R91W	48.04280725	-102.3787411	0.02
Wetland 151	PEMC	Sec 31-T151N-R85W	47.85362398	-101.6060328	0.02
Wetland 191	PEMA	Sec 20-T150N-R85W	47.79004942	-101.572124	0.00
Wetland 192	PEMC	Sec 21-T150N-R85W	47.79612169	-101.5544335	0.04
Wetland 201	PEMA	Sec 21-T150N-R84W	47.79037048	-101.4434235	0.01
Wetland 203b	PEMC	Sec 24-T150N-R84W	47.79675338	-101.35896	0.01
Wetland 206b	PEMC	Sec 24-T150N-R84W	47.79659922	-101.3702362	0.03
Wetland 214	PEMC	Sec 24-T150N-R85W	47.80435105	-101.4862106	0.02
Wetland 221	PEMA	Sec 19-T150N-R83W	47.80244179	-101.336435	0.02
Wetland 224b	PEMC	Sec 32-T150N-R83W	47.77495209	-101.3249564	0.01
Wetland 232	PEMC	Sec 34-T150N-R83W	47.76953483	-101.2835384	0.00
Wetland 236	PEMC	Sec 2-T149N-R83W	47.75467395	-101.2706318	0.18

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 238	PABF	Sec 6-T149N-R82W	47.75341515	-101.2271196	0.20
Wetland 239	PEMC	Sec 10-T149N-R82W	47.74622762	-101.157927	0.41
Wetland 241	PEMC	Sec 10-T149N-R82W	47.7470073	-101.1523282	0.04
Wetland 242	PEMC	Sec 10-T149N-R82W	47.74671119	-101.1502791	0.01
Wetland 252b	PEMA	Sec 6-T146N-R82W	47.49904796	-101.1722776	0.01
Wetland 259	PEMA	Sec 22-T147N-R82W	47.53094623	-101.1186356	0.03
Wetland 260	PEMA	Sec 22-T147N-R82W	47.53095825	-101.1048767	0.04
Wetland 269	PEMC	Sec 24-T150N-R85W	47.80447152	-101.4963106	0.01
Wetland 270	PEMC	Sec 24-T150N-R85W	47.8045451	-101.4964069	0.03
Wetland 271	PABF	Sec 24-T150N-R85W	47.80474572	-101.499159	0.03
Wetland 272	PEMC	Sec 24-T150N-R85W	47.80475794	-101.5000404	0.00
Wetland 824	PEMC	Sec 6-T146N-R82W	47.49935724	-101.1726396	0.07
Wetland 193d	PEMC	Sec 22-T150N-R85W	47.79586159	-101.5500758	0.01
Wetland 193c	PEMC	Sec 22-T150N-R85W	47.79606087	-101.5493821	0.01
Wetland 193b	PEMC	Sec 22-T150N-R85W	47.79669119	-101.5486694	0.02
Wetland 1348	PEMC	Sec 4-T149N-R82W	47.75105553	-101.1849693	0.01
Wetland 1351	PEMC	Sec 4-T149N-R82W	47.74765274	-101.1646405	0.12
Wetland 1462	PEMA	Sec 17-T155N-R94W	48.244368	-102.7951237	0.01
Wetland 1459	PABFx	Sec 11-T154N-R93W	48.169564	-102.6039814	0.10
Wetland 1475	PEMC	Sec 10-T149N-R82W	47.73351167	-101.1432267	0.04
Wetland 1474	PEMC	Sec 11-T149N-R82W	47.73355741	-101.1430611	0.02
Wetland 1476	PEMC	Sec 10-T149N-R82W	47.73990524	-101.1429813	0.08
Wetland 1477	PEMC	Sec 10-T149N-R82W	47.7399967	-101.1309383	0.02
Wetland 1341	PEMC	Sec 13-T149N-R82W	47.72240867	-101.1203008	0.01
Wetland 1340	PEMC	Sec 25-T149N-R82W	47.69464998	-101.1003537	0.05
Wetland 1386	PEMA	Sec 26-T153N-R89W	48.052138	-102.0739767	0.003
Wetland 1479	PEMC	Sec 32-T147N-R82W	47.50660983	-101.1425668	0.15
Wetland 1322	PEMC	Sec 6-T146N-R82W	47.50115654	-101.1709074	0.02
				Total	**2.48**

N = north, PABF = palustrine aquatic bed semi-permanently flooded, PEMA = palustrine emergent temporarily flooded wetland, PEMC = palustrine emergent seasonally flooded wetland, R = Range, Sec. = Section, T = Township, W = west.

Appendix C - Project Field Photographs

Appendix D - Waterbody Attributes

Waterbodies documented within the Survey Corridor

Name	Classification	Location	Latitude	Longitude	Acres
Waterbody 64	Intermittent stream	Sec 28-T153N-R89W	48.05196233	-102.1307593	0.58
Waterbody 70	Intermittent stream	Sec 30-T153N-R89W	48.05193021	-102.1602767	0.05
Waterbody 72	Intermittent stream	Sec 21-T153N-R90W	48.05221616	-102.2503688	0.04
Waterbody 74	Intermittent stream	Sec 21-T153N-R90W	48.05214342	-102.2565017	0.09
Waterbody 80	Intermittent stream	Sec 28-T153N-R91W	48.04548167	-102.3805384	0.20
Waterbody 83	Intermittent stream	Sec 26-T153N-R92W	48.04438704	-102.4625604	0.33
Waterbody 86	Intermittent stream	Sec 18-T153N-R92W	48.07367475	-102.5689908	0.25
Waterbody 89	Intermittent stream	Sec 19-T153N-R92W	48.06510364	-102.5534013	0.58
Waterbody 95	Intermittent stream	Sec 13-T154N-R93W	48.15386472	-102.5875175	0.18
Waterbody 117	Intermittent stream	Sec 16-T146N-R83W	47.46549566	-101.2597219	0.03
Waterbody 130	Intermittent stream	Sec 27-T153N-R90W	48.05167365	-102.2376463	0.22
Waterbody 132	Intermittent stream	Sec 28-T153N-R92W	48.04683949	-102.5152188	0.21
Waterbody 133	Intermittent stream	Sec 28-T153N-R92W	48.049948	-102.5155318	0.45
Waterbody 136	Perennial River	Sec 27-T155N-R94W	48.22000317	-102.7457913	0.03
Waterbody 138	Intermittent stream	Sec 8-T155N-R94W	48.25877234	-102.7958247	0.05
Waterbody 139	Intermittent stream	Sec 8-T155N-R94W	48.26151281	-102.7959883	0.32
Waterbody 140	Intermittent stream	Sec 8-T155N-R94W	48.26955777	-102.7965187	0.64
Waterbody 244	Intermittent stream	Sec 3-T149N-R82W	47.75061299	-101.1523559	0.03
Waterbody 247	Intermittent stream	Sec 16-T146N-R83W	47.46618554	-101.2578144	0.34
Waterbody 276	Intermittent stream	Sec 16-T146N-R83W	47.46715336	-101.2556002	0.78
Waterbody 649	Ephemeral stream	Sec 3-T149N-R82W	47.74992362	-101.1522386	0.04
Waterbody 658	Intermittent stream	Sec 36-T146N-R84W	47.42332434	-101.3318313	0.33
Waterbody 665	Intermittent stream	Sec 19-T146N-R83W	47.44557324	-101.2952396	0.02
Waterbody 668	Intermittent stream	Sec 19-T146N-R83W	47.44542046	-101.2949039	0.14
Waterbody 695	Intermittent stream	Sec 32-T147N-R82W	47.50964047	-101.1429366	0.05
Waterbody 705	Artificial stream	Sec 11-T147N-R82W	47.56062015	-101.0808878	0.58
Waterbody 706	PABF Pond	Sec 25-T148N-R82W	47.60905335	-101.0789316	0.33
Waterbody 816	Intermittent stream	Sec 11-T145N-R84W	47.39035757	-101.3346226	0.04
Waterbody 817	Intermittent stream	Sec 12-T145N-R84W	47.39038134	-101.3339544	0.03
Waterbody 864	Ephemeral stream	Sec 28-T153N-R92W	48.04480849	-102.5051344	0.41
Waterbody 867	Ephemeral stream	Sec 27-T153N-R92W	48.04535055	-102.4882958	0.07
Waterbody 868	Permanent stream	Sec 28-T153N-R92W	48.04468813	-102.5153518	0.13
Waterbody 869	Permanent stream	Sec 28-T153N-R92W	48.04506711	-102.5141486	0.18
Waterbody 914	Perennial River	Sec 27-T155N-R94W	48.21927587	-102.7452594	0.88
Waterbody 927	Perennial River	Sec 33-T157N-R94W	48.38497431	-102.8408463	0.25
Waterbody 1311	Perennial River	Sec 15-T144N-R84W	47.28800758	-101.3213955	10.45
Waterbody 1449	Intermittent stream	Sec 19-T53N-R92W	48.06429604	-102.5507685	0.27
				Total	**19.55**

N = north, PABF = palustrine aquatic bed semi-permanently flooded, R = Range, Sec. = Section, T = Township, W = west.

Waterbodies Documented within Pull Lanes

Name	Classification	Location	Latitude	Longitude	Acres
Waterbody 1313	Permanent River	Sec 15-T144N-R84W	48.28570066	-101.3174583	0.05
Waterbody 868	Permanent stream	Sec 28-T153N-R92W	47.04421252	-102.5156825	0.32
				Total	**0.37**

N = north, R = Range, Sec. = Section, T = Township, W = west.

Waterbodies Documented within Potential Access Road Survey Corridors

Name	Classification	Location	Latitude	Longitude	Acres
Waterbody 136	Perennial River	Sec 27-T155N-R94W	48.220247	-102.745433	0.05
Waterbody 257	Intermittent stream	Sec 25-T146N-R84W	47.429854	-101.324182	0.02
Waterbody 276	Intermittent stream	Sec 16-T146N-R83W	47.466378	-101.255893	0.01
				Total	**0.08**

N = north, R = Range, Sec. = Section, T = Township, W = west.

Appendix E - Northern Long-eared Bat Habitat Analysis

Appendix F - Basin Electric Power Cooperative Avian and Bat Protection Plan

Appendix G - DASK Habitat Buffers

Appendix H - Noxious Weed Attributes

Noxious Weeds Documented within the Survey Corridor

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 310	Canada thistle			State listed	Sec 25-T151N-R86W	0.01
Weed 312	Canada thistle			State listed	Sec 26-T151N-R86W	0.27
Weed 313	Canada thistle			State listed	Sec 26-T151N-R86W	0.06
Weed 314	Canada thistle			State listed	Sec 30-T151N-R86W	0.05
Weed 315	Canada thistle			State listed	Sec 30-T151N-R86W	0.08
Weed 316	Canada thistle			State listed	Sec 19-T151N-R86W	0.52
Weed 317	Canada thistle			State listed	Sec 19-T151N-R86W	0.25
Weed 318	Canada thistle			State listed	Sec 19-T151N-R86W	1.76
Weed 319	Canada thistle			State listed	Sec 13-T151N-R87W	0.64
Weed 320	Leafy spurge			State listed	Sec 13-T151N-R87W	0.07
Weed 321	Canada thistle			State listed	Sec 12-T151N-R87W	0.07
Weed 322	Canada thistle			State listed	Sec 12-T151N-R87W	0.07
Weed 323	Canada thistle	Leafy spurge		State listed	Sec 24-T152N-R87W	6.47
Weed 324	Canada thistle			State listed	Sec 30-T152N-R86W	2.11
Weed 325	Absinth wormwood	Canada thistle		State listed	Sec 13-T152N-R87W	0.17
Weed 326	Canada thistle			State listed	Sec 25-T152N-R87W	0.06
Weed 327	Canada thistle	Leafy spurge		State listed	Sec 13-T152N-R87W	0.83
Weed 328	Leafy spurge	Canada thistle		State listed	Sec 15-T152N-R87W	8.08
Weed 329	Canada thistle			State listed	Sec 15-T152N-R87W	0.53
Weed 330	Canada thistle			State listed	Sec 9-T152N-R87W	0.24
Weed 331	Canada thistle			State listed	Sec 9-T152N-R87W	0.49
Weed 332	Canada thistle			State listed	Sec 9-T152N-R87W	0.63
Weed 333	Canada thistle			State listed	Sec 8-T152N-R87W	0.52
Weed 334	Canada thistle			State listed	Sec 8-T152N-R87W	0.43
Weed 335	Canada thistle	Leafy spurge		State listed	Sec 7-T152N-R87W	2.86
Weed 336	Canada thistle			State listed	Sec 8-T152N-R87W	0.87
Weed 337	Canada thistle	Leafy spurge		State listed	Sec 12-T152N-R88W	14.12
Weed 338	Canada thistle			State listed	Sec 11-T152N-R88W	2.34
Weed 339	Canada thistle			State listed	Sec 11-T152N-R88W	0.11
Weed 340	Canada thistle			State listed	Sec 25-T153N-R90W	0.62
Weed 341	Canada thistle			State listed	Sec 11-T146N-R83W	2.24
Weed 342	Canada thistle			State listed	Sec 35-T150N-R83W	0.71
Weed 343	Canada thistle			State listed	Sec 34-T150N-R83W	1.28
Weed 344	Canada thistle			State listed	Sec 34-T150N-R83W	0.88
Weed 345	Canada thistle			State listed	Sec 33-T150N-R83W	0.11
Weed 346	Canada thistle	Absinth wormwood		State listed	Sec 32-T150N-R83W	2.48
Weed 347	Canada thistle			State listed	Sec 20-T150N-R83W	0.11
Weed 348	Canada thistle			State listed	Sec 20-T150N-R83W	1.31
Weed 349a	Canada thistle			State listed	Sec 24-T150N-R84W	1.52
Weed 350	Canada thistle			State listed	Sec 24-T150N-R84W	3.30
Weed 351	Canada thistle	Absinth wormwood		State listed	Sec 21-T150N-R84W	1.96

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 352	Canada thistle			State listed	Sec 30-T153N-R90W	1.23
Weed 353	Canada thistle	Absinth wormwood		State listed	Sec 27-T153N-R91W	0.48
Weed 354	Leafy Spurge			State listed	Sec 21-T153N-R92W	0.00
Weed 355	Leafy Spurge			State listed	Sec 21-T153N-R92W	0.45
Weed 356	Canada thistle			State listed	Sec 11-T154N-R93W	1.02
Weed 357	Canada thistle			State listed	Sec 11-T154N-R93W	0.25
Weed 358	Canada thistle			State listed	Sec 10-T154N-R93W	0.80
Weed 359	Canada thistle			State listed	Sec 9-T154N-R93W	1.40
Weed 360	Canada thistle			State listed	Sec 9-T154N-R93W	0.25
Weed 361	Canada thistle			State listed	Sec 9-T154N-R93W	1.04
Weed 362	Canada thistle			State listed	Sec 12-T154N-R94W	0.75
Weed 363	Canada thistle			State listed	Sec 20-T155N-R94W	0.20
Weed 364	Canada thistle			State listed	Sec 17-T155N-R94W	0.08
Weed 365	Canada thistle			State listed	Sec 20-T155N-R94W	0.17
Weed 366	Canada thistle			State listed	Sec 5-T155N-R94W	0.03
Weed 367	Absinth wormwood			State listed	Sec 32-T156N-R94W	0.10
Weed 368	Absinth wormwood			State listed	Sec 32-T156N-R94W	0.70
Weed 369	Canada thistle			State listed	Sec 32-T156N-R94W	0.19
Weed 370	Canada thistle			State listed	Sec 32-T156N-R94W	0.08
Weed 371	Canada thistle			State listed	Sec 32-T156N-R94W	0.07
Weed 372	Canada thistle			State listed	Sec 32-T156N-R94W	0.11
Weed 373	Canada thistle			State listed	Sec 32-T156N-R94W	0.04
Weed 374	Canada thistle			State listed	Sec 32-T156N-R94W	0.19
Weed 375	Canada thistle			State listed	Sec 32-T156N-R94W	0.09
Weed 376	Canada thistle			State listed	Sec 31-T152N-R86W	1.08
Weed 377	Absinth wormwood			State listed	Sec 36-T152N-R87W	0.03
Weed 378	Canada thistle			State listed	Sec 36-T152N-R87W	0.13
Weed 379	Canada thistle	Absinth wormwood		State listed	Sec 31-T149N-R81W	7.86
Weed 380	Absinth wormwood	Canada thistle		State listed	Sec 30-T151N-R85W	0.05
Weed 381	Absinth wormwood	Canada thistle		State listed	Sec 30-T151N-R85W	0.15
Weed 382	Absinth wormwood	Canada thistle		State listed	Sec 30-T151N-R85W	0.24
Weed 383	Canada thistle			State listed	Sec 30-T151N-R85W	0.01
Weed 384	Absinth wormwood	Canada thistle		State listed	Sec 30-T151N-R85W	0.07
Weed 385	Canada thistle	Absinth wormwood		State listed	Sec 31-T151N-R85W	0.07
Weed 386	Canada thistle			State listed	Sec 31-T151N-R85W	0.01
Weed 387	Canada thistle			State listed	Sec 31-T151N-R85W	0.10
Weed 388	Canada thistle	Absinth wormwood		State listed	Sec 6-T150N-R85W	0.06
Weed 389	Canada thistle			State listed	Sec 20-T150N-R85W	2.68
Weed 390	Canada thistle			State listed	Sec 21-T150N-R85W	0.02
Weed 391	Canada thistle			State listed	Sec 21-T150N-R84W	1.01

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 392	Canada thistle			State listed	Sec 21-T150N-R84W	0.17
Weed 393	Canada thistle			State listed	Sec 19-T150N-R83W	1.22
Weed 394	Canada thistle			State listed	Sec 20-T150N-R83W	0.11
Weed 395	Canada thistle			State listed	Sec 20-T150N-R83W	0.05
Weed 396	Canada thistle			State listed	Sec 20-T150N-R83W	0.23
Weed 397	Canada thistle			State listed	Sec 20-T150N-R83W	0.05
Weed 399	Canada thistle			State listed	Sec 33-T150N-R83W	0.03
Weed 400	Canada thistle			State listed	Sec 33-T150N-R83W	0.06
Weed 401	Canada thistle			State listed	Sec 3-T149N-R83W	0.04
Weed 402	Canada thistle			State listed	Sec 3-T149N-R83W	0.42
Weed 403	Canada thistle			State listed	Sec 3-T149N-R83W	0.08
Weed 404	Canada thistle			State listed	Sec 2-T149N-R83W	0.82
Weed 405	Canada thistle			State listed	Sec 2-T149N-R83W	0.52
Weed 406	Canada thistle			State listed	Sec 2-T149N-R83W	0.10
Weed 407	Canada thistle			State listed	Sec 2-T149N-R83W	0.22
Weed 408	Canada thistle			State listed	Sec 6-T149N-R82W	0.86
Weed 409	Canada thistle			State listed	Sec 17-T146N-R83W	0.32
Weed 410	Canada thistle			State listed	Sec 2-T146N-R83W	0.17
Weed 411	Canada thistle			State listed	Sec 11-T146N-R83W	0.17
Weed 412	Canada thistle	Absinth wormwood	Leafy spurge	State listed	Sec 6-T146N-R82W	3.41
Weed 413	Canada thistle			State listed	Sec 11-T146N-R83W	0.07
Weed 414	Canada thistle			State listed	Sec 11-T146N-R83W	0.21
Weed 415	Canada thistle			State listed	Sec 16-T146N-R83W	0.21
Weed 416	Leafy spurge			State listed	Sec 15-T144N-R84W	9.82
Weed 417	Canada thistle	Leafy spurge		State listed	Sec 16-T144N-R84W	0.45
Weed 419	Canada thistle			State listed	Sec 34-T150N-R83W	2.29
Weed 420	Canada thistle			State listed	Sec 34-T150N-R83W	0.74
Weed 421	Canada thistle			State listed	Sec 32-T150N-R83W	0.44
Weed 422	Canada thistle	Absinth wormwood		State listed	Sec 32-T150N-R83W	2.52
Weed 423	Canada thistle	Absinth wormwood		State listed	Sec 19-T150N-R84W	0.58
Weed 424	Canada thistle			State listed	Sec 24-T150N-R85W	0.17
Weed 425	Canada thistle	Absinth wormwood		State listed	Sec 21-T150N-R85W	0.04
Weed 426	Canada thistle	Absinth wormwood		State listed	Sec 21-T150N-R85W	1.41
Weed 427	Canada thistle	Absinth wormwood		State listed	Sec 21-T150N-R85W	1.85
Weed 430	Canada thistle			State listed	Sec 25-T151N-R87W	0.12
Weed 434	Canada thistle			State listed	Sec 30-T151N-R86W	0.02
Weed 437	Canada thistle			State listed	Sec 25-T151N-R87W	0.15
Weed 443	Canada thistle			State listed	Sec 1-T151N-R87W	0.04
Weed 446	Canada thistle			State listed	Sec 13-T152N-R87W	5.87
Weed 447	Canada thistle			State listed	Sec 14-T152N-R87W	0.04
Weed 449	Canada thistle			State listed	Sec 8-T152N-R87W	11.68

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 455	Canada thistle			State listed	Sec 9-T152N-R88W	0.04
Weed 456	Canada thistle	Leafy spurge		State listed	Sec 9-T152N-R88W	0.20
Weed 458	Canada thistle			State listed	Sec 8-T152N-R88W	0.76
Weed 460	Canada thistle			State listed	Sec 7-T152N-R88W	0.22
Weed 462	Canada thistle			State listed	Sec 7-T152N-R88W	0.37
Weed 464	Canada thistle			State listed	Sec 7-T152N-R88W	0.54
Weed 469	Canada thistle	Leafy spurge		State listed	Sec 33-T153N-R88W	0.38
Weed 472	Leafy spurge			State listed	Sec 33-T153N-R88W	0.06
Weed 491	Canada thistle			State listed	Sec 26-T153N-R91W	0.64
Weed 492	Leafy spurge			State listed	Sec 26-T153N-R91W	0.02
Weed 493	Canada thistle			State listed	Sec 25-T153N-R91W	1.30
Weed 494	Canada thistle			State listed	Sec 25-T153N-R91W	0.13
Weed 501	Canada thistle			State listed	Sec 30-T153N-R90W	0.46
Weed 502	Canada thistle			State listed	Sec 26-T153N-R91W	0.02
Weed 503	Canada thistle	Leafy spurge		State listed	Sec 26-T153N-R91W	0.22
Weed 504	Canada thistle			State listed	Sec 28-T153N-R91W	0.42
Weed 505	Canada thistle			State listed	Sec 28-T153N-R91W	0.31
Weed 507	Canada thistle			State listed	Sec 27-T153N-R91W	0.27
Weed 516	Canada thistle			State listed	Sec 36-T154N-R93W	4.18
Weed 518	Canada thistle			State listed	Sec 24-T154N-R93W	0.50
Weed 521	Canada thistle			State listed	Sec 10-T154N-R93W	0.19
Weed 522	Canada thistle			State listed	Sec 11-T154N-R93W	0.39
Weed 523	Canada thistle			State listed	Sec 9-T154N-R93W	1.38
Weed 530	Canada thistle			State listed	Sec 1-T154N-R94W	5.25
Weed 531	Canada thistle			State listed	Sec 21-T155N-R94W	0.20
Weed 533	Canada thistle	Leafy spurge		State listed	Sec 32-T156N-R94W	0.37
Weed 534	Canada thistle	Leafy spurge		State listed	Sec 32-T156N-R94W	5.35
Weed 535	Canada thistle			State listed	Sec 20-T156N-R94W	0.31
Weed 536	Canada thistle			State listed	Sec 29-T156N-R94W	0.42
Weed 537	Canada thistle			State listed	Sec 29-T156N-R94W	0.10
Weed 538	Canada thistle			State listed	Sec 7-T156N-R94W	0.37
Weed 539	Canada thistle			State listed	Sec 7-T156N-R94W	0.54
Weed 540	Canada thistle			State listed	Sec 18-T156N-R94W	5.68
Weed 542	Canada thistle			State listed	Sec 17-T156N-R94W	4.02
Weed 548	Canada thistle			State listed	Sec 6-T150N-R85W	0.06
Weed 550	Canada thistle			State listed	Sec 6-T150N-R85W	0.26
Weed 552	Canada thistle			State listed	Sec 6-T150N-R85W	0.05
Weed 556	Canada thistle			State listed	Sec 7-T150N-R85W	0.18
Weed 557	Canada thistle			State listed	Sec 7-T150N-R85W	2.29
Weed 559	Canada thistle			State listed	Sec 18-T150N-R85W	0.16
Weed 568	Canada thistle			State listed	Sec 31-T149N-R81W	9.19
Weed 625	Canada thistle			State listed	Sec 30-T151N-R86W	0.09
Weed 630	Canada thistle			State listed	Sec 30-T151N-R86W	0.02
Weed 633	Canada thistle			State listed	Sec 16-T152N-R87W	4.13
Weed 637	Canada thistle			State listed	Sec 23-T150N-R84W	0.08

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 651	Canada thistle			State listed	Sec 25-T145N-R84W	0.02
Weed 652	Canada thistle	Leafy spurge		State listed	Sec 26-T145N-R84W	0.02
Weed 653	Canada thistle	Leafy spurge		State listed	Sec 25-T145N-R84W	0.02
Weed 654	Canada thistle			State listed	Sec 35-T146N-R84W	0.01
Weed 655	Canada thistle			State listed	Sec 36-T146N-R84W	0.09
Weed 656	Canada thistle			State listed	Sec 36-T146N-R84W	0.08
Weed 657	Canada thistle			State listed	Sec 36-T146N-R84W	0.05
Weed 659	Canada thistle			State listed	Sec 36-T146N-R84W	0.02
Weed 660	Canada thistle			State listed	Sec 20-T146N-R83W	0.08
Weed 661	Canada thistle			State listed	Sec 20-T146N-R83W	0.03
Weed 662	Canada thistle			State listed	Sec 19-T146N-R83W	0.04
Weed 663	Canada thistle			State listed	Sec 19-T146N-R83W	0.02
Weed 666	Canada thistle			State listed	Sec 19-T146N-R83W	0.02
Weed 667	Canada thistle			State listed	Sec 19-T146N-R83W	0.03
Weed 669	Canada thistle			State listed	Sec 19-T146N-R83W	0.01
Weed 670	Canada thistle			State listed	Sec 30-T146N-R83W	0.04
Weed 671	Canada thistle			State listed	Sec 30-T146N-R83W	0.42
Weed 672	Canada thistle			State listed	Sec 30-T146N-R83W	0.06
Weed 673	Canada thistle			State listed	Sec 30-T146N-R83W	0.19
Weed 674	Canada thistle			State listed	Sec 30-T146N-R83W	0.24
Weed 675	Leafy Spurge			State listed	Sec 30-T146N-R83W	0.02
Weed 676	Canada thistle			State listed	Sec 30-T146N-R83W	0.04
Weed 677	Canada thistle			State listed	Sec 19-T146N-R83W	0.06
Weed 678	Leafy spurge			State listed	Sec 1-T146N-R83W	0.01
Weed 679	Canada thistle			State listed	Sec 1-T146N-R83W	0.09
Weed 681	Canada thistle			State listed	Sec 2-T146N-R83W	0.06
Weed 682	Canada thistle			State listed	Sec 2-T146N-R83W	0.02
Weed 683	Canada thistle			State listed	Sec 5-T146N-R82W	0.01
Weed 684	Canada thistle			State listed	Sec 6-T146N-R82W	0.12
Weed 685	Leafy spurge			State listed	Sec 5-T146N-R82W	0.02
Weed 686	Canada thistle			State listed	Sec 6-T146N-R82W	0.19
Weed 688	Canada thistle			State listed	Sec 2-T147N-R82W	0.13
Weed 697	Canada thistle			State listed	Sec 32-T147N-R82W	0.09
Weed 699	Canada thistle			State listed	Sec 33-T147N-R82W	0.09
Weed 700	Canada thistle			State listed	Sec 33-T147N-R82W	0.07
Weed 701	Canada thistle			State listed	Sec 27-T147N-R82W	0.07
Weed 703	Canada thistle			State listed	Sec 22-T147N-R82W	0.14
Weed 707	Canada thistle			State listed	Sec 2-T147N-R82W	0.05
Weed 708	Canada thistle			State listed	Sec 11-T147N-R82W	0.07
Weed 710	Canada thistle			State listed	Sec 25-T148N-R82W	0.17
Weed 711	Canada thistle			State listed	Sec 25-T148N-R82W	0.04
Weed 712	Canada thistle			State listed	Sec 25-T148N-R82W	0.04
Weed 713	Canada thistle			State listed	Sec 25-T148N-R82W	0.03
Weed 714	Canada thistle			State listed	Sec 23-T148N-R82W	0.08
Weed 716	Canada thistle			State listed	Sec 24-T148N-R82W	0.03

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 717	Canada thistle			State listed	Sec 24-T148N-R82W	0.09
Weed 719	Canada thistle			State listed	Sec 23-T148N-R82W	0.16
Weed 720	Canada thistle			State listed	Sec 23-T148N-R82W	0.17
Weed 721	Canada thistle			State listed	Sec 23-T148N-R82W	0.16
Weed 723	Canada thistle			State listed	Sec 14-T148N-R82W	0.05
Weed 725	Canada thistle			State listed	Sec 14-T148N-R82W	0.10
Weed 726	Canada thistle			State listed	Sec 13-T148N-R82W	0.04
Weed 730	Canada thistle			State listed	Sec 11-T148N-R82W	0.04
Weed 731	Canada thistle			State listed	Sec 11-T148N-R82W	0.02
Weed 732	Canada thistle			State listed	Sec 31-T149N-R81W	0.02
Weed 733	Canada thistle			State listed	Sec 1-T148N-R82W	0.04
Weed 736	Canada thistle			State listed	Sec 31-T149N-R81W	0.07
Weed 738	Canada thistle			State listed	Sec 31-T149N-R81W	0.05
Weed 740	Canada thistle			State listed	Sec 11-T149N-R82W	0.11
Weed 741	Canada thistle			State listed	Sec 11-T149N-R82W	0.10
Weed 742	Canada thistle			State listed	Sec 11-T149N-R82W	0.01
Weed 743	Canada thistle			State listed	Sec 11-T149N-R82W	0.02
Weed 745	Canada thistle			State listed	Sec 11-T149N-R82W	0.03
Weed 746	Canada thistle			State listed	Sec 11-T149N-R82W	0.05
Weed 747	Canada thistle			State listed	Sec 3-T149N-R82W	0.02
Weed 748	Canada thistle			State listed	Sec 3-T149N-R82W	0.05
Weed 752	Canada thistle			State listed	Sec 33-T150N-R83W	0.03
Weed 762	Canada thistle			State listed	Sec 29-T150N-R83W	0.06
Weed 763	Canada thistle			State listed	Sec 29-T150N-R83W	0.32
Weed 764	Canada thistle			State listed	Sec 29-T150N-R83W	0.04
Weed 765	Canada thistle			State listed	Sec 29-T150N-R83W	0.67
Weed 766	Canada thistle			State listed	Sec 29-T150N-R83W	0.07
Weed 767	Canada thistle			State listed	Sec 29-T150N-R83W	0.02
Weed 768	Canada thistle			State listed	Sec 23-T150N-R84W	0.02
Weed 769	Canada thistle			State listed	Sec 23-T150N-R84W	0.10
Weed 770	Canada thistle			State listed	Sec 23-T150N-R84W	0.05
Weed 771	Canada thistle			State listed	Sec 24-T150N-R84W	0.03
Weed 772	Canada thistle			State listed	Sec 24-T150N-R84W	0.10
Weed 773	Canada thistle			State listed	Sec 21-T150N-R84W	0.02
Weed 775	Canada thistle			State listed	Sec 21-T150N-R84W	0.01
Weed 776	Canada thistle			State listed	Sec 21-T150N-R84W	0.01
Weed 777	Canada thistle			State listed	Sec 19-T150N-R84W	0.02
Weed 778	Canada thistle			State listed	Sec 24-T150N-R85W	0.05
Weed 779	Canada thistle			State listed	Sec 24-T150N-R85W	0.05
Weed 780	Canada thistle			State listed	Sec 24-T150N-R85W	0.17
Weed 781	Canada thistle			State listed	Sec 23-T150N-R85W	0.06
Weed 782	Canada thistle			State listed	Sec 24-T150N-R85W	0.11
Weed 783	Canada thistle			State listed	Sec 24-T150N-R85W	0.02
Weed 784	Canada thistle			State listed	Sec 23-T150N-R85W	0.08
Weed 785	Canada thistle			State listed	Sec 23-T150N-R85W	0.01

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 786	Canada thistle			State listed	Sec 23-T150N-R85W	0.08
Weed 787	Canada thistle			State listed	Sec 24-T150N-R85W	0.48
Weed 788	Canada thistle			State listed	Sec 24-T150N-R85W	0.11
Weed 789	Canada thistle			State listed	Sec 24-T150N-R85W	0.07
Weed 790	Canada thistle			State listed	Sec 22-T150N-R85W	0.16
Weed 791	Canada thistle			State listed	Sec 7-T150N-R85W	0.05
Weed 792	Canada thistle			State listed	Sec 7-T150N-R85W	0.27
Weed 793	Canada thistle			State listed	Sec 7-T150N-R85W	0.10
Weed 794	Canada thistle			State listed	Sec 7-T150N-R85W	0.06
Weed 795	Canada thistle			State listed	Sec 7-T150N-R85W	0.05
Weed 796	Canada thistle			State listed	Sec 25-T151N-R86W	0.05
Weed 797	Canada thistle			State listed	Sec 25-T151N-R86W	0.05
Weed 798	Canada thistle			State listed	Sec 25-T151N-R86W	0.08
Weed 799	Canada thistle			State listed	Sec 25-T151N-R86W	0.11
Weed 800	Canada thistle			State listed	Sec 27-T151N-R86W	0.07
Weed 801	Canada thistle			State listed	Sec 27-T151N-R86W	0.15
Weed 802	Canada thistle			State listed	Sec 27-T151N-R86W	0.13
Weed 803	Canada thistle			State listed	Sec 28-T151N-R86W	0.04
Weed 804	Canada thistle			State listed	Sec 28-T151N-R86W	0.07
Weed 805	Canada thistle			State listed	Sec 28-T151N-R86W	0.18
Weed 806	Canada thistle			State listed	Sec 28-T151N-R86W	0.05
Weed 807	Canada thistle			State listed	Sec 28-T151N-R86W	0.05
Weed 808	Canada thistle			State listed	Sec 28-T151N-R86W	0.02
Weed 809	Canada thistle			State listed	Sec 29-T151N-R86W	0.03
Weed 810	Canada thistle			State listed	Sec 29-T151N-R86W	0.07
Weed 811	Canada thistle			State listed	Sec 29-T151N-R86W	0.14
Weed 812	Canada thistle			State listed	Sec 29-T151N-R86W	0.08
Weed 818	Canada thistle			State listed	Sec 23-T150N-R85W	0.03
Weed 819	Canada thistle			State listed	Sec 23-T150N-R85W	0.01
Weed 820	Leafy spurge			State listed	Sec 16-T144N-R84W	0.21
Weed 821	Canada thistle			State listed	Sec 16-T144N-R84W	0.32
Weed 822	Canada thistle	Leafy spurge		State listed	Sec 30-T146N-R83W	0.37
Weed 823	Leafy spurge			State listed	Sec 30-T146N-R83W	0.05
Weed 904	Canada thistle			State listed	Sec 10-T154N-R93W	0.14
Weed 911	Canada thistle			State listed	Sec 7-T154N-R93W	0.04
Weed 1317	Leafy spurge	Canada thistle		State listed	Sec 21-T144N-R84W	0.02
Weed 1320	Canada thistle			State listed	Sec 16-T146N-R83W	0.07
Weed 1323	Canada thistle			State listed	Sec 6-T146N-R82W	0.11
Weed 1331	Canada thistle			State listed	Sec 11-T147N-R82W	0.00
Weed 1343	Canada thistle			State listed	Sec 14-T149N-R82W	0.32
Weed 418	Canada thistle	Absinth wormwood		State listed	Sec 6-T149N-R82W	0.34
Weed 1362	Canada thistle			State listed	Sec 20-T150N-R83W	0.06
Weed 1363	Canada thistle			State listed	Sec 20-T150N-R83W	0.05
Weed 1364	Canada thistle			State listed	Sec 20-T150N-R83W	0.02

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 1365	Canada thistle			State listed	Sec 20-T150N-R83W	0.05
Weed 1372	Canada thistle			State listed	Sec 30-T151N-R85W	0.05
Weed 1379	Canada thistle			State listed	Sec 14-T152N-R87W	0.06
Weed 1380	Canada thistle			State listed	Sec 10-T152N-R88W	0.17
Weed 1384	Canada thistle			State listed	Sec 32-T153N-R88W	0.08
Weed 1388	Canada thistle			State listed	Sec 25-T153N-R89W	1.50
Weed 1389	Canada thistle			State listed	Sec 25-T153N-R89W	0.68
Weed 1393	Canada thistle			State listed	Sec 26-T153N-R89W	0.09
Weed 1396	Canada thistle			State listed	Sec 26-T153N-R89W	0.07
Weed 1397	Canada thistle			State listed	Sec 25-T153N-R89W	0.87
Weed 1398	Canada thistle			State listed	Sec 26-T153N-R89W	0.04
Weed 1402	Canada thistle			State listed	Sec 21-T153N-R89W	0.28
Weed 1404	Canada thistle			State listed	Sec 21-T153N-R89W	0.02
Weed 1413	Canada thistle			State listed	Sec 19-T153N-R89W	0.02
Weed 1416	Canada thistle			State listed	Sec 26-T153N-R90W	0.74
Weed 1419	Canada thistle			State listed	Sec 24-T153N-R90W	0.02
Weed 1420	Canada thistle			State listed	Sec 24-T153N-R90W	0.05
Weed 1426	Canada thistle			State listed	Sec 29-T153N-R91W	0.14
Weed 1442	Canada thistle			State listed	Sec 36-T152N-R87W	0.12
Weed 1467	Canada thistle			State listed	Sec 1-T154N-R94W	0.22
Weed 398	Canada thistle			State listed	Sec 20-T150N-R83W	0.20
Weed 454	Canada thistle			State listed	Sec 10-T152N-R88W	8.26
Weed 311a	Canada thistle			State listed	Sec 26-T151N-R86W	0.07
Weed 311b	Canada thistle			State listed	Sec 26-T151N-R86W	0.06
					Total	**209.77**

N = north; R = Range; Sec. = Section; T = Township; W = west.

Noxious Weeds Documented within Project Pull Lanes

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 332	Canada thistle			State listed	Sec 9-T152N-R87W	<0.01
Weed 431	Canada thistle			State listed	Sec 25-T151N-R87W	0.20
Weed 446	Canada thistle			State listed	Sec 13-T152N-R87W	0.20
Weed 633	Canada thistle			State listed	Sec 16-T152N-R87W	0.61
Weed 821	Canada thistle			State listed	Sec 16-T144N-R84W	0.01
Weed 1314	Canada thistle			State listed	Sec 15-T144N-R84W	0.01
Weed 1317	Canada thistle	Leafy spurge		State listed	Sec 21-T144N-R84W	2.18
Weed 1318	Canada thistle			State listed	Sec 36-T146N-R84W	0.09
Weed 1331	Canada thistle			State listed	Sec 11-T147N-R82W	0.21
Weed 1345	Canada thistle			State listed	Sec 11-T149N-R82W	0.07
Weed 398	Canada thistle			State listed	Sec 20-T150N-R83W	0.17
					Total	**3.75**

N = north; R = Range; Sec. = Section; T = Township; W = west.

Noxious Weeds Documented within Potential Access Road Survey Corridors

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 336	Canada thistle			State listed	Sec 8-T152N-R87W	0.00

Weed 344	Canada thistle			State listed	Sec 34-T150N-R83W	0.06
Weed 346	Canada thistle	Absinth wormwood		State listed	Sec 32-T150N-R83W	0.07
Weed 349b	Canada thistle			State listed	Sec 24-T150N-R84W	0.05
Weed 412	Canada thistle	Absinth wormwood	Leafy spurge	State listed	Sec 6-T146N-R82W	0.01
Weed 633	Canada thistle			State listed	Sec 16-T152N-R87W	0.14
Weed 636	Canada thistle			State listed	Sec 16-T152N-R87W	0.01
Weed 1387	Canada thistle			State listed	Sec 26-T153N-R89W	0.02
					Total	**0.36**

N = north; R = Range; Sec. = Section; T = Township; W = west.

Appendix A - Natural Resource Inventory Figures

377-019 (345)
377-019 (230
377-018 (345)
377-018 (230)
9
144N 84W
10
144N 84W
377-017
Weed 417
377-016
377-015
377-014
15
144N 84W
15
144N 84W
Weed 416
2,006 ft
to RoF
377-013
Missouri River
Missouri River
Missouri River
Missouri River
Waterbody
1311
Weed
821
Weed 820
Weed 1314
377-012
Upland
Pt. 196
Wetland
1312
Upland Pt
197
377-010
Weed 1317
Wetland 1316
Wetland
1315
Waterbody 1313
Wetland 1316
377-011
Upland
Pt. 194
377-009
Upland
Pt. 193
Upland
Pt. 198
377-008
22
144N 84W
377-007
Missouri River
200
9th St SW
40th Av

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker
0 0.2 0.4 mi
Scale: 1:12,000 Page 1 of 66

- Route of Focus
- Survey Corridor (300-ft)
- Pull Lane Survey Area
- Access Road Survey Corridor (30-ft)
- Field Survey Not Conducted
- Unbroken Grasslands (Not Surveyed)
- NWI Signature (Not Surveyed)
- NWI Signature

USFWS Easement

- Wetland Easement
- Grassland Easement
- Waterfowl Production Area

Delineated Field Features

- DASK
- Noxious Weed
- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 2 of 66

- Route of Focus
- Survey Corridor (300-ft)
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USFWS Easement

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- Grassland Easement
- Waterfowl Production Area

Delineated Field Features

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- Wetland

Aerial Raptor Survey Points

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- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

377-040
377-039
377-038
377-037
377-036
377-035
377-034
377-033
377-032
Upland Pt. 195
36th Ave SW
4 1/2 St SW
26 145N 84W
25 145N 84W
35 145N 84W
36 145N 84W
Missouri River
Upland Pt. 202
Upland Pt. 166
DASK 1435

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker
0 0.2 0.4 mi
Scale: 1:12,000 Page 3 of 66

Route of Focus
Survey Corridor (300-ft)
Access Road Survey Corridor (30-ft)
Field Survey Not Conducted
Unbroken Grasslands (Not Surveyed)
NWI Signature (Not Surveyed)
NWI Signature

USFWS Easement
Wetland Easement
Grassland Easement
Waterfowl Production Area

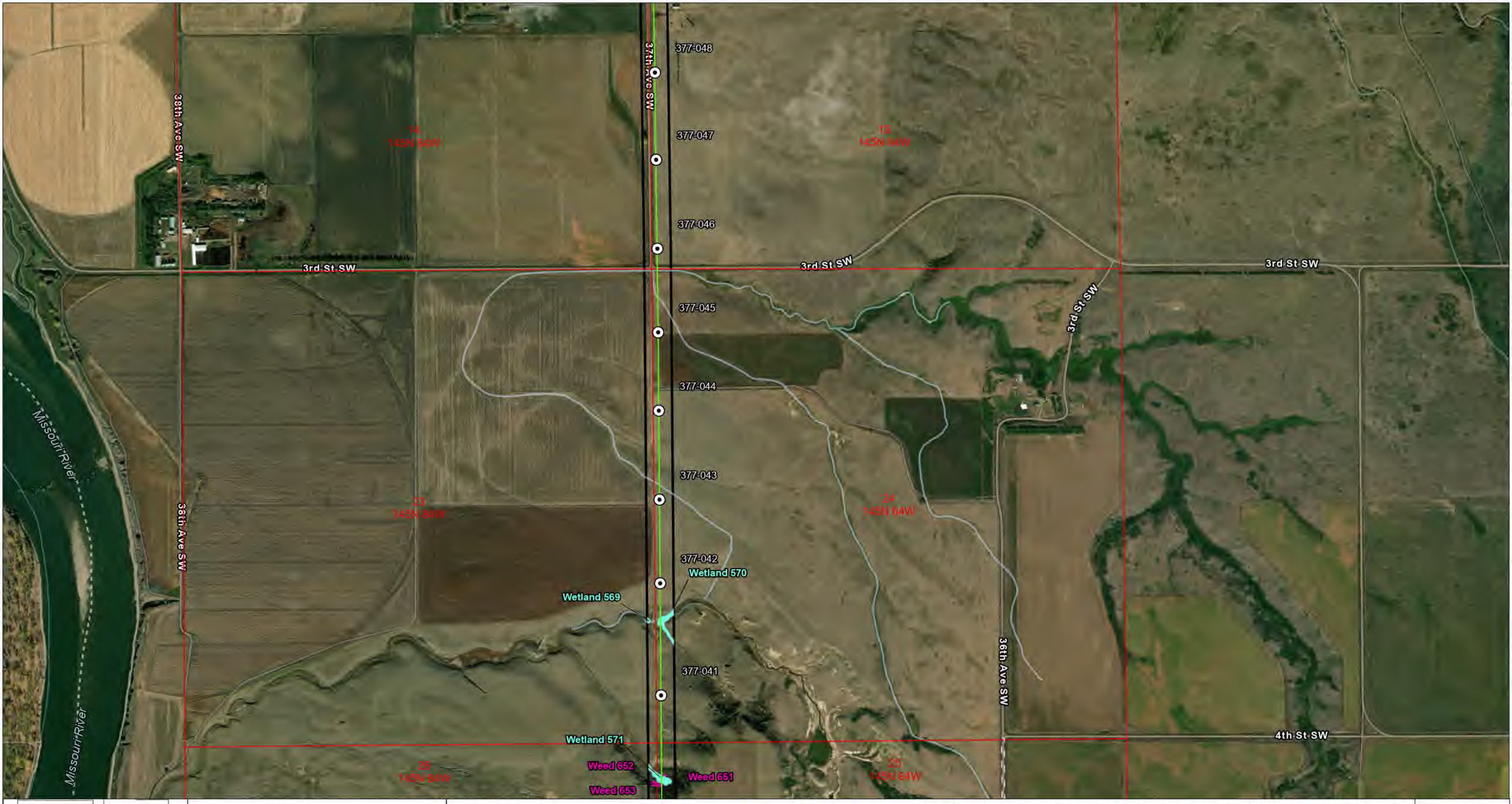
Delineated Field Features
DASK
Noxious Weed
Waterbody
Wetland

Aerial Raptor Survey Points
Bald Eagle Nest
Ferruginous Hawk Nest
Great Horned Owl Nest
Red-tailed Hawk Nest
Unknown Nest

Upland Point
Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 4 of 66

- Route of Focus
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- NWI Signature

USFWS Easement

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- Bald Eagle Nest
- Ferruginous Hawk Nest
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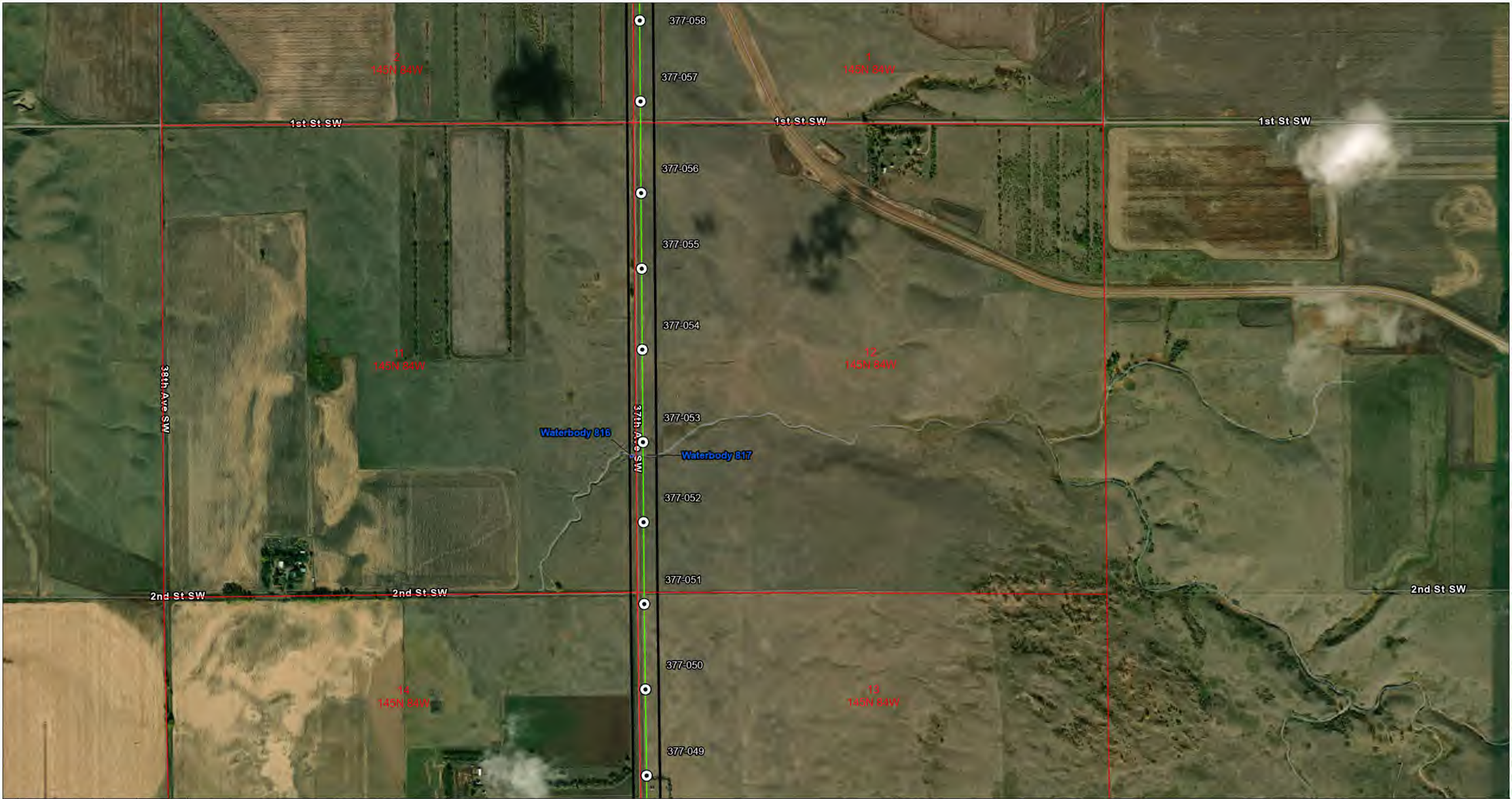
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

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Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

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- NWI Signature

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- Bald Eagle Nest
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- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

377-070
377-069
Wetland 428
377-068
Wetland 576
377-067
Weed 659
Waterbody 658
377-066
Weed 1318
Wetland 574
35
146N 84W
36
146N 84W
Weed 657
377-065
Weed 656
Wetland 575
Wetland 573
377-064
Weed 655
Weed 654
Wetland 815
Wetland 572
377-063
Center St
377-062
377-061
2
145N 84W
1
145N 84W
377-060
377-059
38th Ave SW
37th Ave SW
36th Ave SW

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 6 of 66

- Route of Focus
- Survey Corridor (300-ft)
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- Access Road Survey Corridor (30-ft)
- Field Survey Not Conducted
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- NWI Signature

USFWS Easement

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- Grassland Easement
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Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

37th Ave NW
35th Ave NW
34th Ave NW
2nd St NW
1st St NW
29 146N 83W
30 146N 83W
25 146N 84W
36 146N 84W
377-084
377-083
377-082
377-081
377-080
377-079
377-078
377-077
377-076
377-075 (345)
377-074 (345)
377-075 (230)
377-074 (230)
377-073
377-072
377-071
Wetland 580
Wetland 578
Wetland 582
Wetland 579
Wetland 581
Wetland 664
Wetland 583
Wetland 584
Waterbody 665
Waterbody 668
Waterbody 257
Weed 662
Weed 663
Weed 666
Weed 661
Weed 667
Weed 677
Weed 676
Weed 675
Weed 823
Weed 669
Weed 670
Weed 671
Weed 672
Weed 822
Weed 673
Weed 674
Upland Pt. 189
Upland Pt. 188
Upland Pt. 190

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000

Route of Focus
Survey Corridor (300-ft)
Access Road Survey Corridor (30-ft)
Field Survey Not Conducted
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NWI Signature (Not Surveyed)
NWI Signature

USFWS Easement
Wetland Easement
Grassland Easement
Waterfowl Production Area

Delineated Field Features
DASK
Noxious Weed
Waterbody
Wetland

Aerial Raptor Survey Points
Bald Eagle Nest
Ferruginous Hawk Nest
Great Horned Owl Nest
Red-tailed Hawk Nest
Unknown Nest

Upland Point
Structure

N W E S

WEST

377-098
377-097
10
146N 83W
11
146N 83W
377-096
4th St NW
4th St NW
4th St NW
Upland
Pt. 201
Wetland 1321
377-095
Wetland 248
Upland
Pt. 200
377-094
Wetland 250
377-093
377-092
Waterbody 117
Waterbody 276
Waterbody 247
17
146N 83W
16
146N
83W
Weed 1320
377-091
15
146N 83W
36th Ave NW
34th Ave NW
32nd Ave NW
377-090
Weed 415
377-089
Wetland 577
Weed 660
377-088
3rd St NW
377-087
3rd St NW
3rd St NW
Longfellow
Weed 409
377-086
20
146N 83W
19
146N
83W
377-085

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 8 of 66

- Route of Focus
- Survey Corridor (300-ft)
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- Field Survey Not Conducted
- Unbroken Grasslands (Not Surveyed)
- NWI Signature (Not Surveyed)
- NWI Signature

USFWS Easement

- Wetland Easement
- Grassland Easement
- Waterfowl Production Area

Delineated Field Features

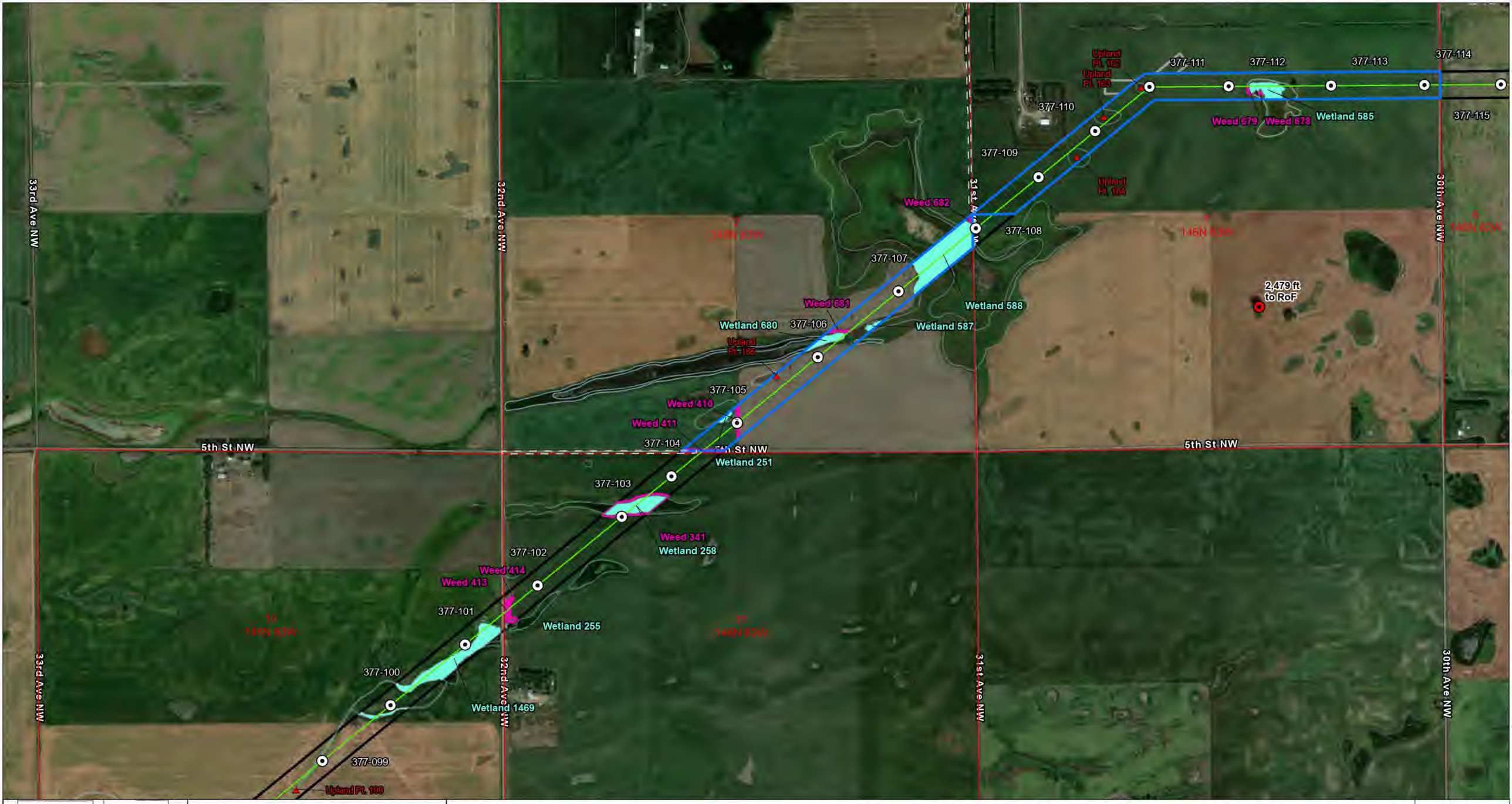
- DASK
- Noxious Weed
- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000

- Route of Focus
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- NWI Signature

USFWS Easement

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Delineated Field Features

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- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000

- Route of Focus
- Survey Corridor (300-ft)
- Pull Lane Survey Area
- Access Road Survey Corridor (30-ft)
- Field Survey Not Conducted
- Unbroken Grasslands (Not Surveyed)
- NWI Signature (Not Surveyed)
- NWI Signature

USFWS Easement

- Wetland Easement
- Grassland Easement
- Waterfowl Production Area

Delineated Field Features

- DASK
- Noxious Weed
- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST

Leland Olds Station to Tande 345-kV Transmission Project

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- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST

377-154
377-153
Wetland 704
Weed 708
Weed 1331
377-152
Waterbody 705
McClusky Canal
11
147N 82W
12
147N 82W
10th St NW
10th St NW
377-151
377-150
24th Ave NW
26th Ave NW
377-149
14
147N
82W
Upland
Pt. 167
377-148
McClusky Canal
27th Ave NW
377-147
377-146
9th St NW
9th St NW
377-145
22
147N 82W
23
147N 82W
377-144

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker
0 0.2 0.4 mi
Scale: 1:12,000 Page 12 of 66

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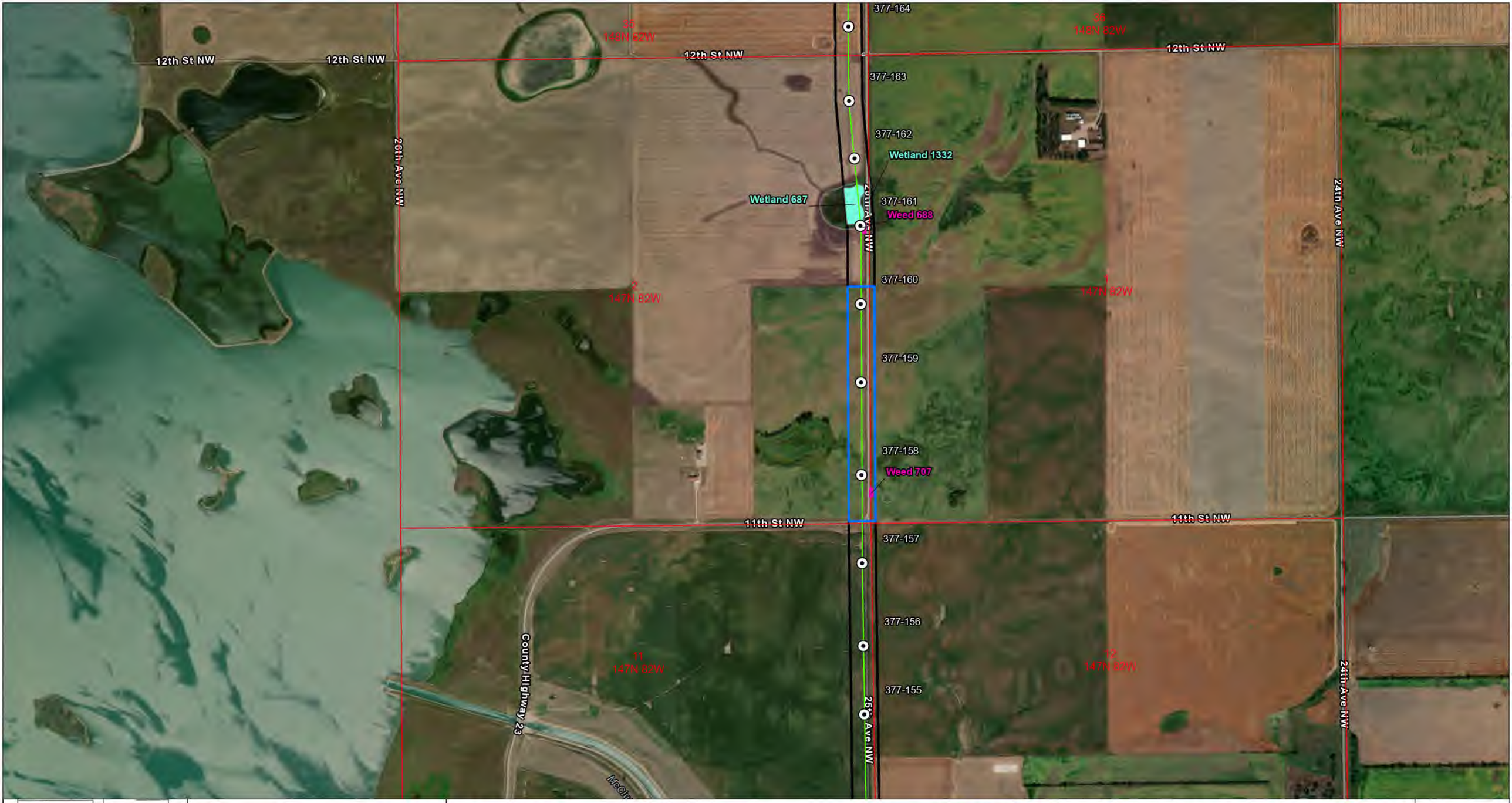
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

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Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

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N W E S

WEST

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 14 of 66

- Route of Focus
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- Red-tailed Hawk Nest
- Unknown Nest
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- Structure

N W E S

WEST

377-193
Weed 733
2 148N 82W
1 148N 82W
17th St NW
17th St NW
377-192
17th St NW
377-191
26th Ave NW
25th Ave NW
24th Ave NW
377-190
377-189
Weed 731
11 148N 82W
12 148N 82W
377-188
Upland Pt. 152
Wetland 1333
377-187
377-186
Weed 730
16th St NW
Wetland 1481
16th St NW
Wetland 728
16th St NW
377-185
Wetland 729
26th Ave NW
25th Ave NW
14 148N 82W
377-184
13 148N 82W
Weed 726

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 16 of 66

- Route of Focus
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- DASK
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- Waterbody
- Wetland

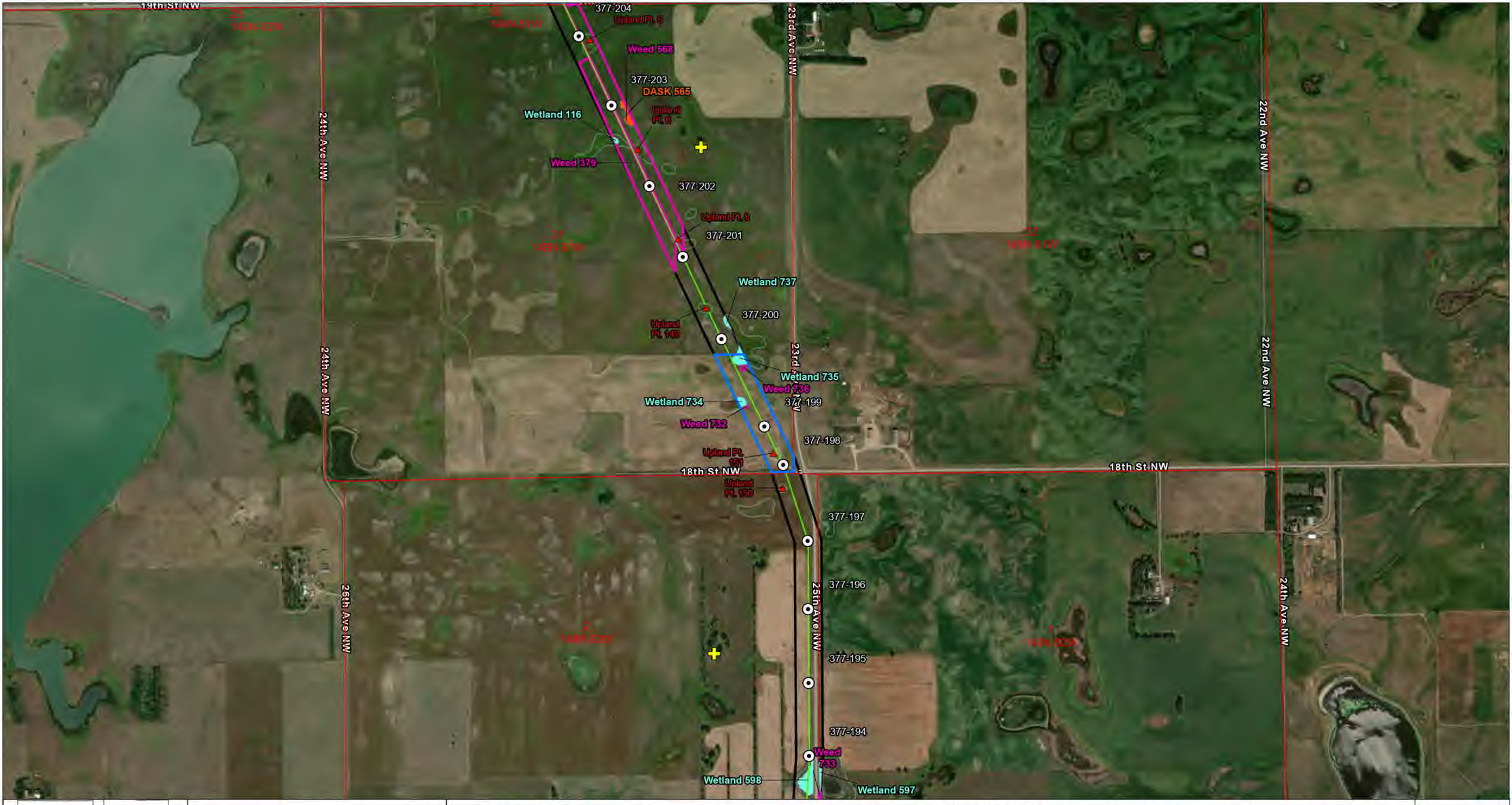
Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST



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Date: 10/1/2024 Author: C. Tucker

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Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST

377-215
377-214
Wetland 1335
Wetland 1335
24
149N 82W
377-213
Upland
Pt. 202
377-212
Wetland 1334
377-211
19
149N 81W
377-210
20th St NW
20th St NW
20th St NW
26th Ave NW
377-209
377-208
25
149N 82W
30
149N
81W
377-207
Wetland 1340
377-206
26th Ave NW
Upland Pt. 148
Weed 738
377-205
Upland
Pt. 147

Leland Olds Station to Tande 345-kV Transmission Project

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Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

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- Noxious Weed
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- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

Wetland 1482
Wetland 639
Weed 742
Weed 743
377-227
Wetland 641
Weed 741
Weed 740
Weed 746
Wetland 640
377-226
10
149N 82W
11
149N 82W
Wetland 1475
Wetland 1474
Weed 1345
Wetland 1344
377-225
377-224
22nd St NW
22nd St NW
22nd St NW
26th Ave NW
25th Ave NW
27th Ave NW
377-223
Wetland 1342
377-222
Weed 1343
377-221
Wetland 1470
377-220
Wetland 1337
12
149N 82W
14
149N 82W
377-219
Wetland 1341
377-218
Upland
PL-203
377-217
Wetland 1336
377-216
21st St NW
24
149N 82W
Wetland
1335

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 19 of 66

- Route of Focus
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USFWS Easement

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Delineated Field Features

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Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

24th St NW
26th Ave NW
Wetland 1349
377-244
377-243
377-242
Wetland 1471
Wetland 1358
377-241
Wetland 1356
377-240
Wetland 1354
377-239
Wetland 1353
377-238
Wetland 243
377-237
Wetland 243
377-236
5
149N 82W
4
149N 82W
377-235
Wetland 1357
Wetland 1355
Wetland 1348
Waterbody 244
377-234
Wetland 642
Weed 747
Wetland 240
Waterbody 649
Weed 748
377-233
Wetland 600
27th Ave NW
Wetland 1351
Wetland 241
Wetland 242
377-232
Upland
FL 206
Upland
FL 207
23rd St NW
Wetland 239
23rd St NW
377-231
Wetland 1339
377-230
Upland
FL 187
10
149N 82W
11
149N 82W
377-229
Wetland
744
Wetland 1476
Wetland 1477
Weed 745
377-228

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker
0 0.2 0.4 mi
Scale: 1:12,000 Page 20 of 66

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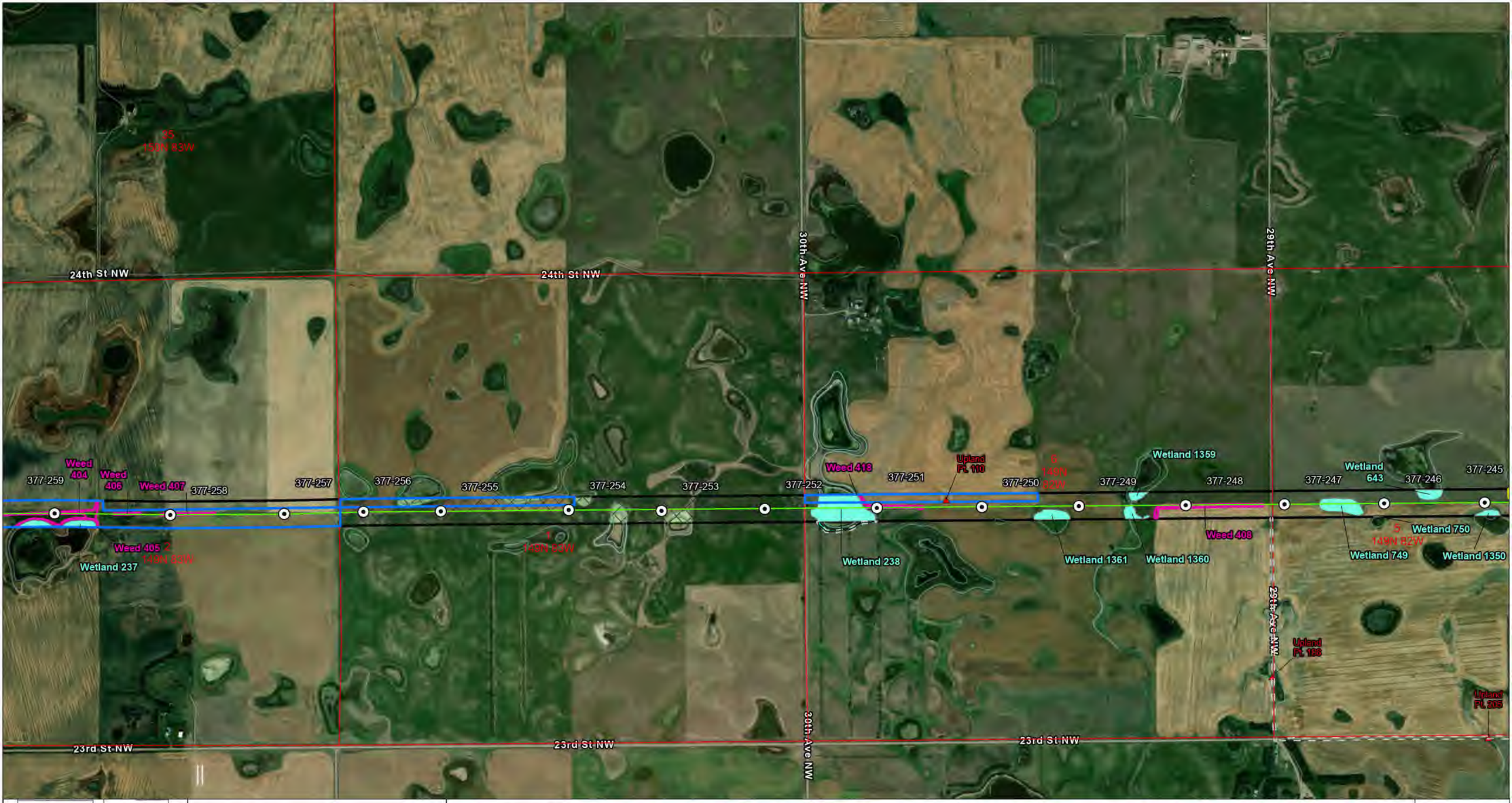
- Noxious Weed
- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 21 of 66

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Delineated Field Features

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Aerial Raptor Survey Points

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- Ferruginous Hawk Nest
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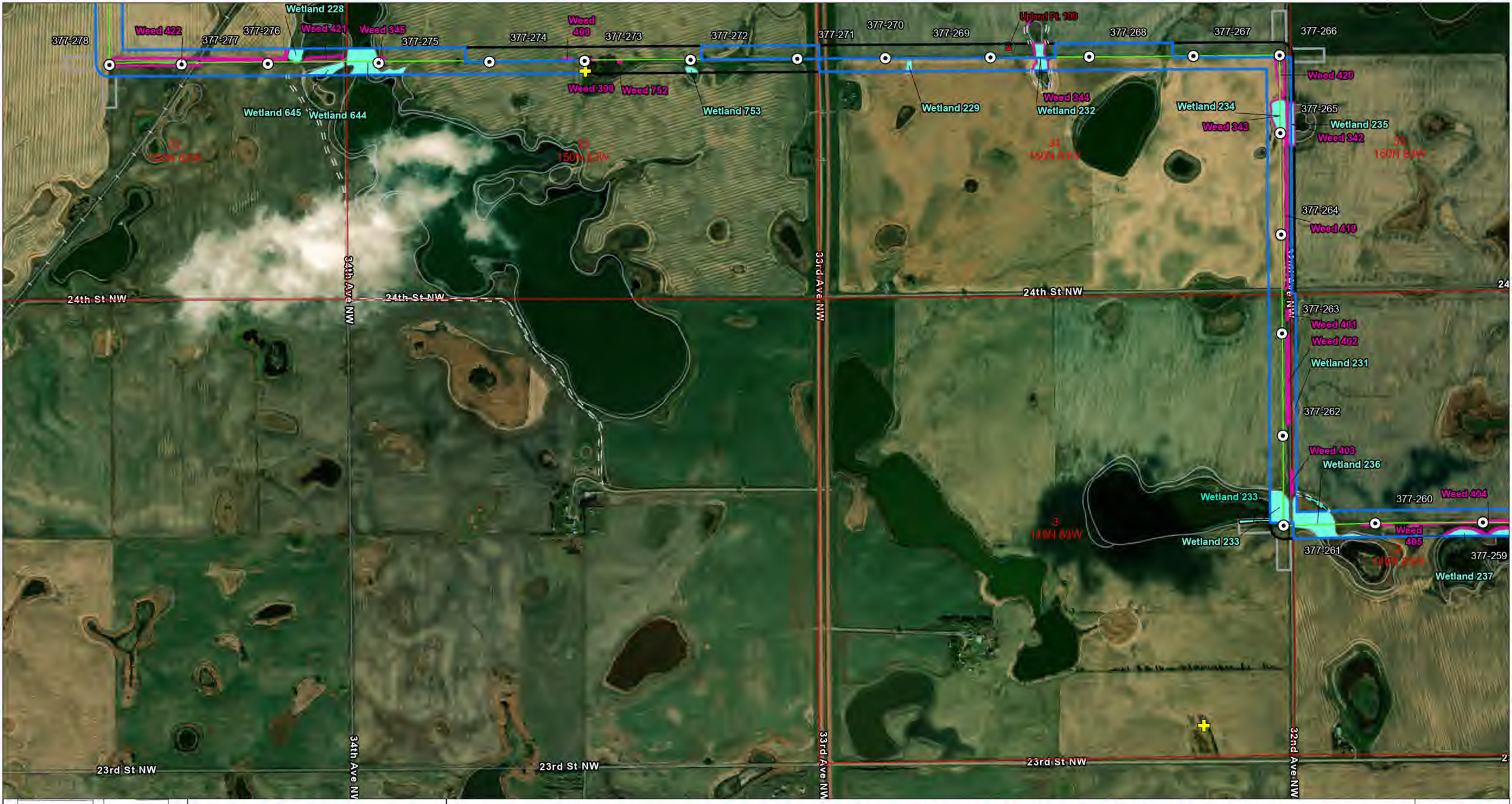
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

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0 0.2 0.4 mi

Scale: 1:12,000 Page 22 of 66

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- Unknown Nest
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N W E S

WEST

Wetland 222
Weed 1363
377-287
Wetland 210
Upland Pt. 105
Weed 1362
Upland Pt. 203
Weed 348
20
150N 83W
Upland Pt. 108
Upland Pt. 104
26th St NW
Weed 347
377-286
Upland Pt. 146
Weed 767
Wetland 603
377-285
Wetland 602
Weed 766
377-284
29
150N 83W
377-283
Upland Pt. 195
Wetland 223
Weed 765
377-282
Weed 764
377-281
Wetland 601
Wetland 263
Weed 762
Weed 763
25th St NW
Wetland 224b
Wetland 224
377-280
Weed 346
Wetland 225
32
150N 83W
Wetland 226
377-279
Wetland 227
Shallow Lake
36th Ave NW
35th Ave NW
34th Ave NW
33rd Ave NW
26th
25th St NW
33
150N 83W
34
150N 83W
24
150N 84W
19
150N 83W

Leland Olds Station to Tande 345-kV Transmission Project

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0 0.2 0.4 mi
Scale: 1:12,000 Page 23 of 66

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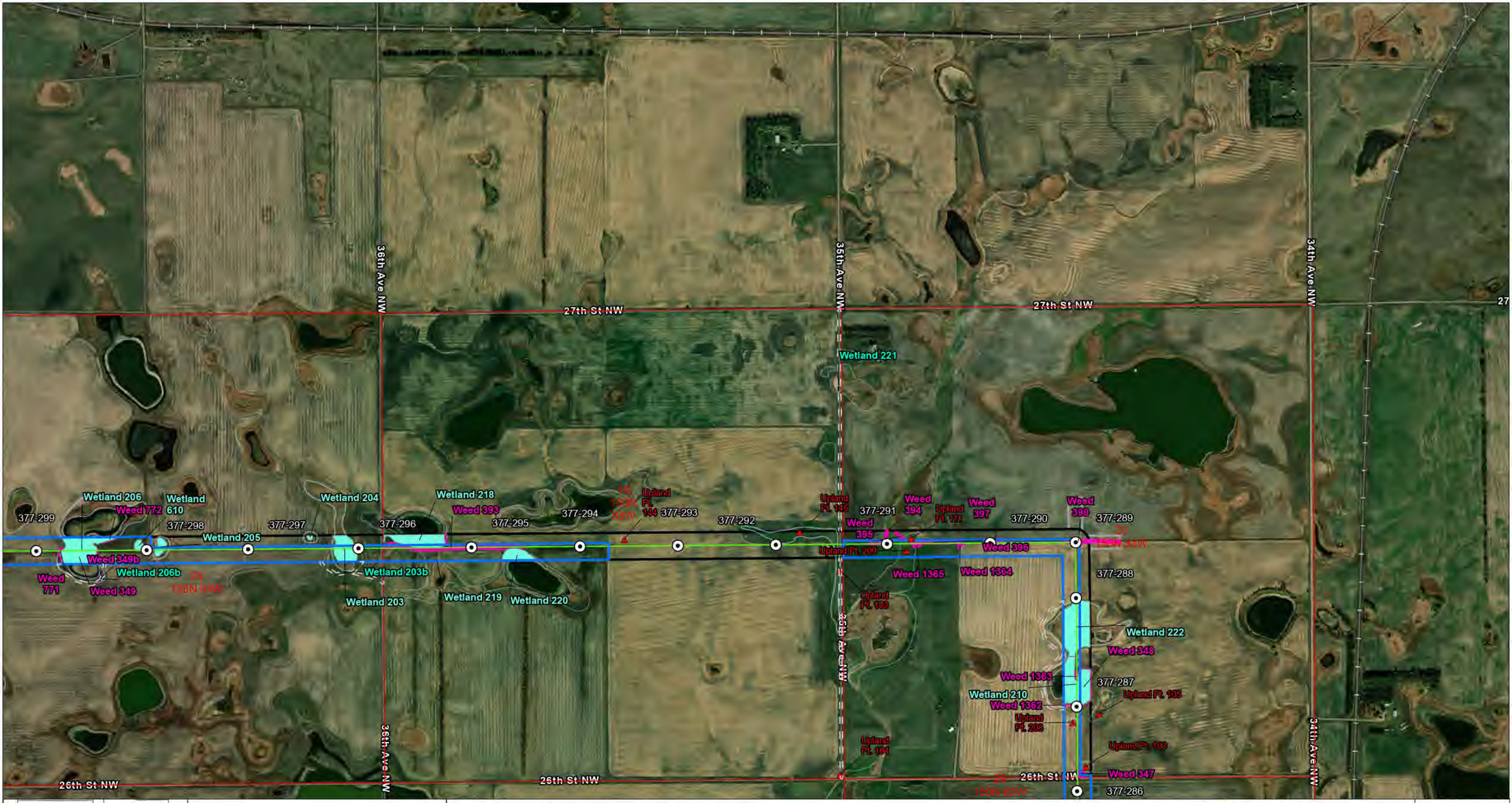
N W E S

WEST



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Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 25 of 66

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- Ferruginous Hawk Nest
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- Unknown Nest

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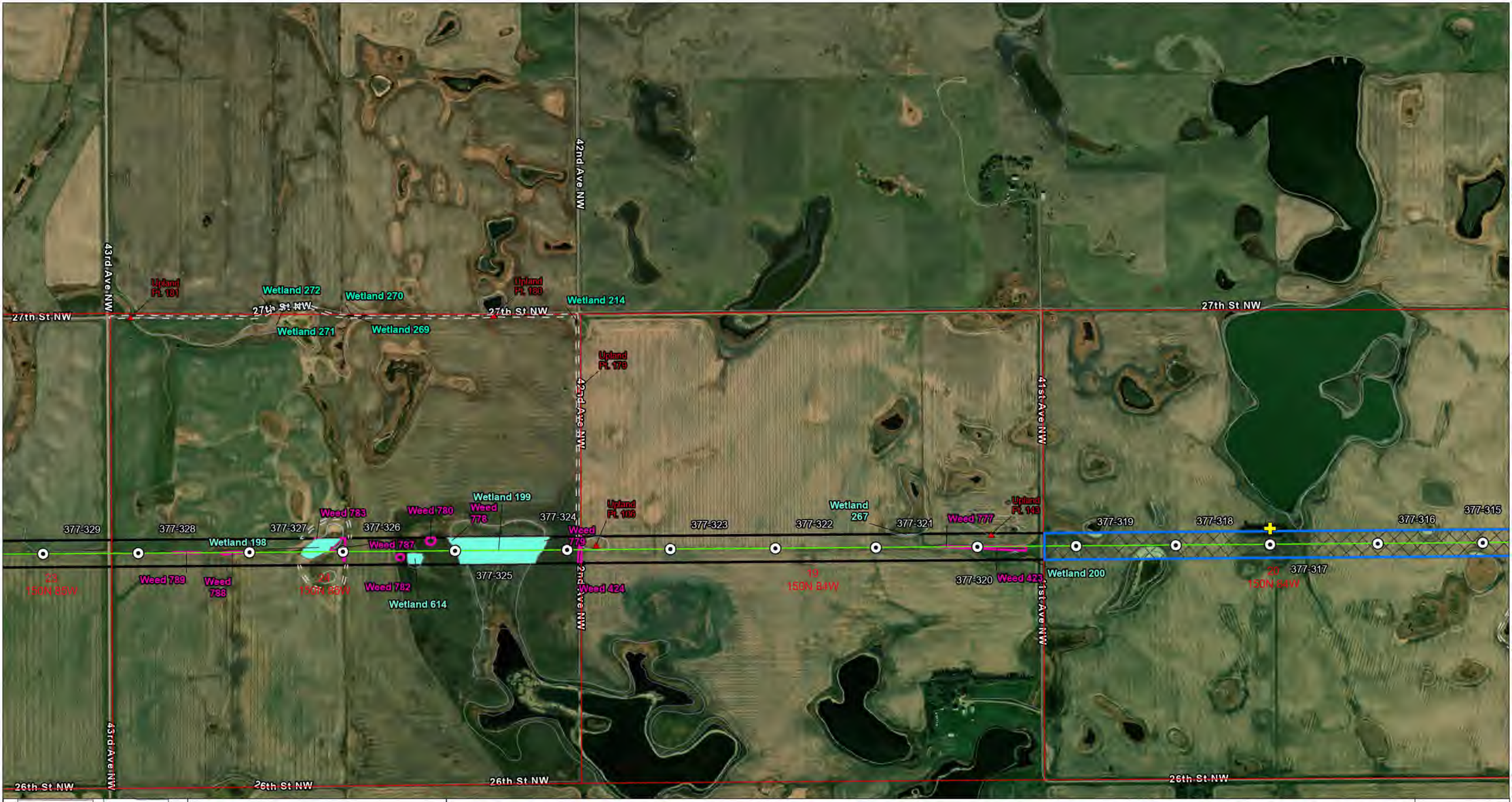
- Structure

N W E S

WEST



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Data Source: ESRI Basemap

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Scale: 1:12,000

Route of Focus

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Access Road Survey Corridor (30-ft)

Field Survey Not Conducted

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NWI Signature (Not Surveyed)

NWI Signature

USFWS Easement

Wetland Easement

Grassland Easement

Waterfowl Production Area

Delineated Field Features

DASK

Noxious Weed

Waterbody

Wetland

Aerial Raptor Survey Points

Bald Eagle Nest

Ferruginous Hawk Nest

Great Horned Owl Nest

Red-tailed Hawk Nest

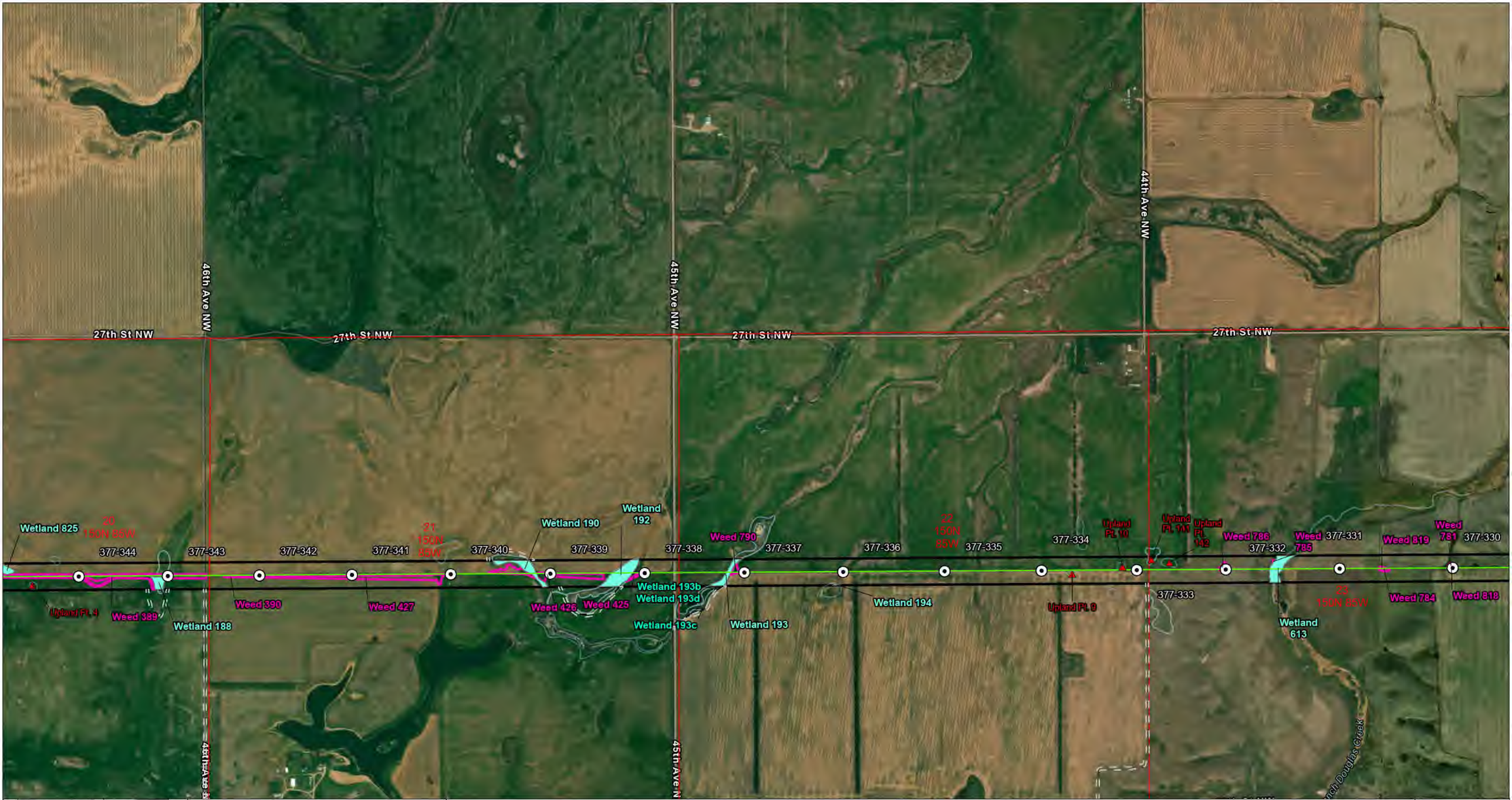
Unknown Nest

Upland Point

Structure

N W E S

WEST



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N W E S

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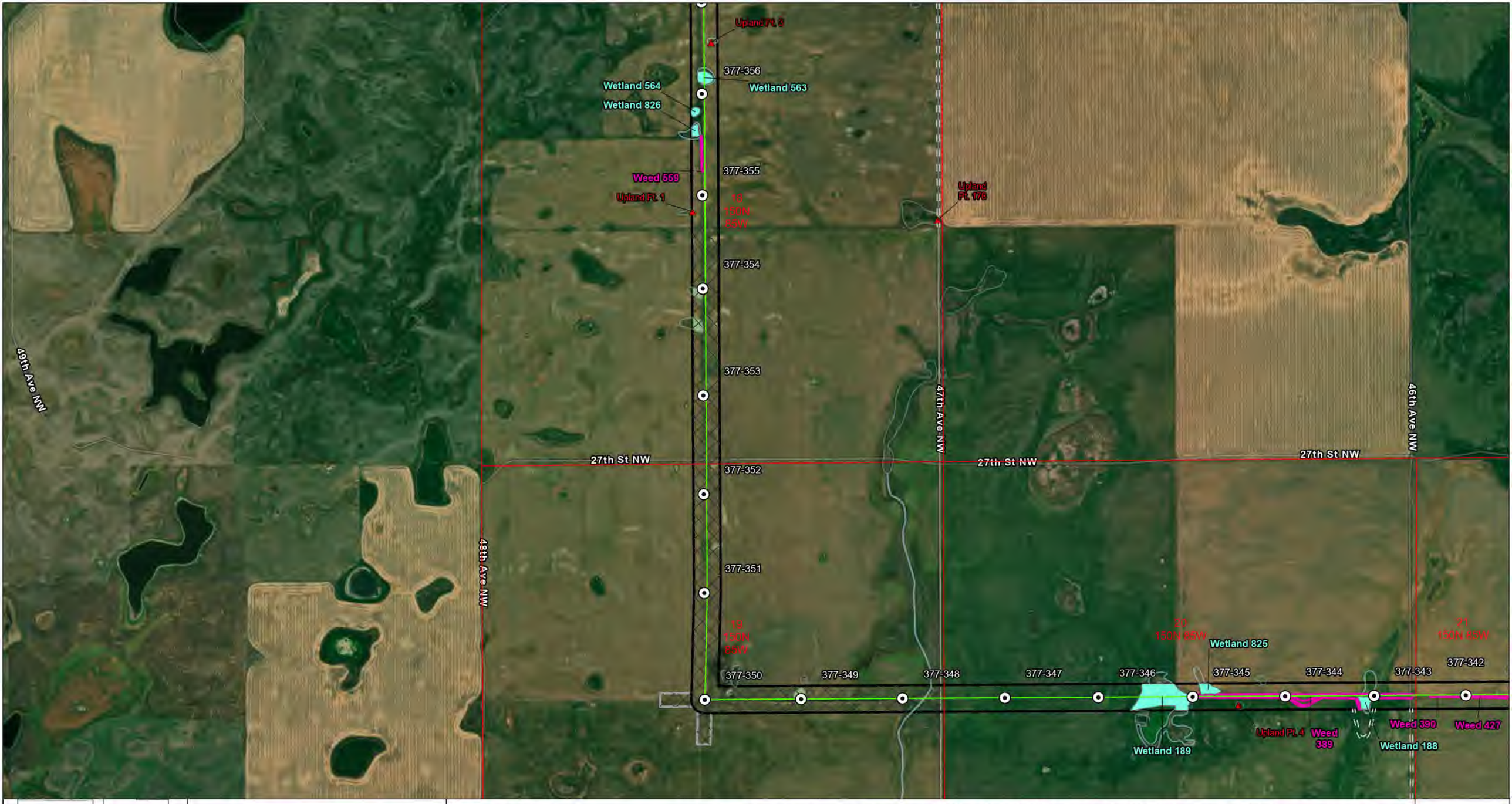

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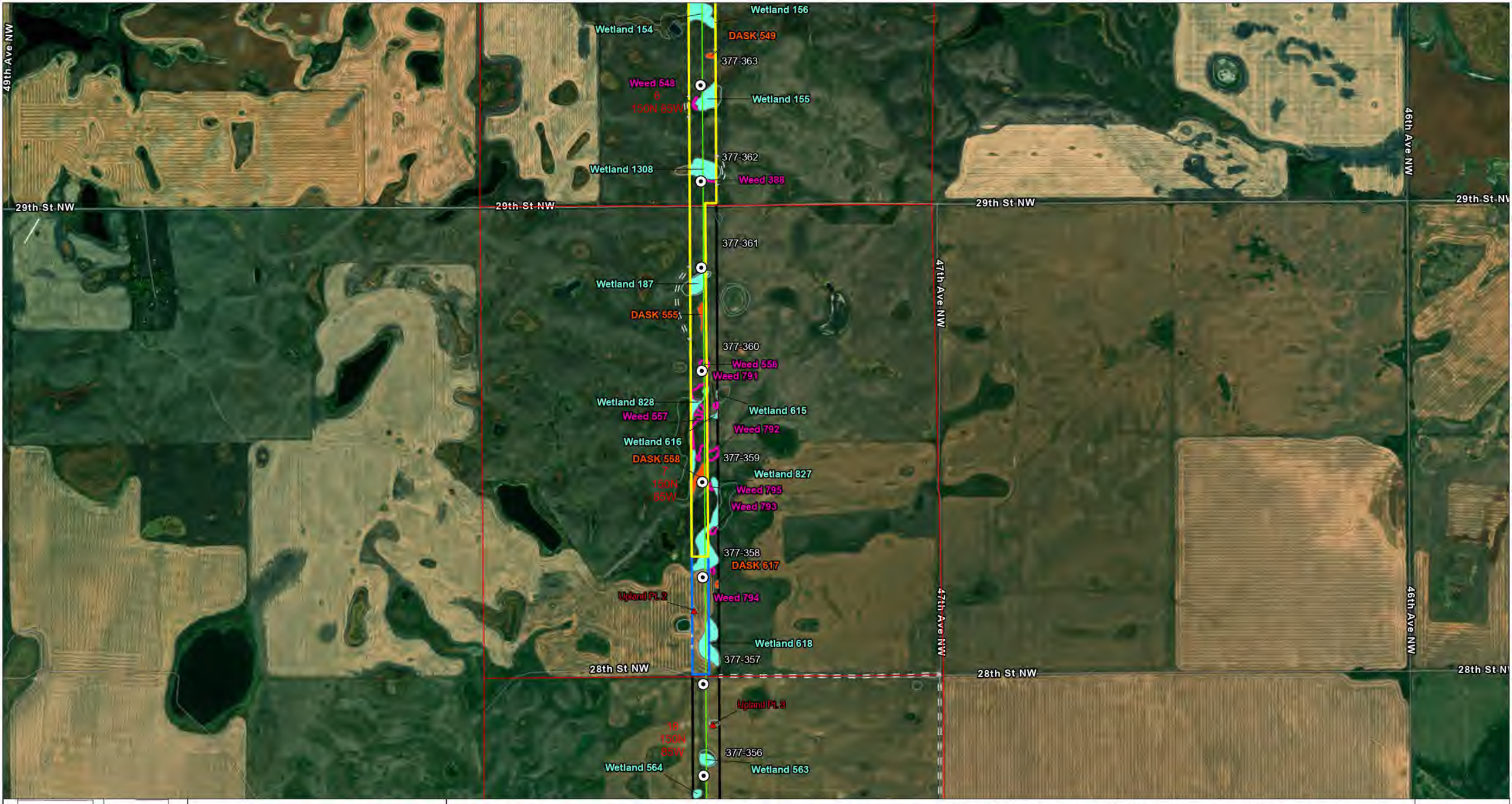
N W E S

WEST



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Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 29 of 66

- Route of Focus
- Survey Corridor (300-ft)
- Access Road Survey Corridor (30-ft)
- Field Survey Not Conducted
- Unbroken Grasslands (Not Surveyed)
- NWI Signature (Not Surveyed)
- NWI Signature

USFWS Easement

- Wetland Easement
- Grassland Easement
- Waterfowl Production Area

Delineated Field Features

- DASK
- Noxious Weed
- Waterbody
- Wetland

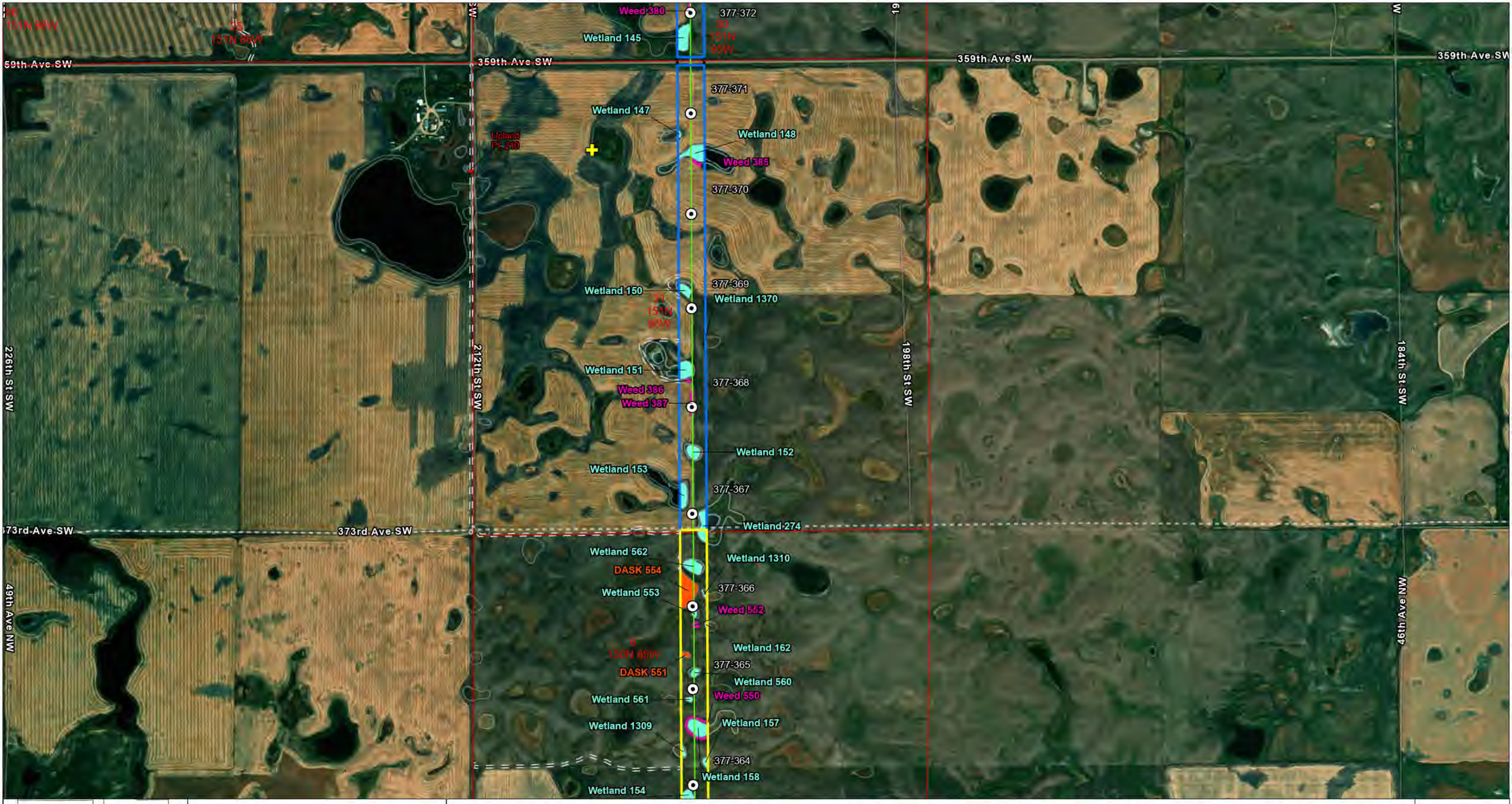
Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 30 of 66

- Route of Focus
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USFWS Easement

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Delineated Field Features

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- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

240th St SW
226th St SW
212th St SW
345th Ave SW
359th Ave SW
377-388
377-387
377-386
377-384
377-383
377-382
377-381
377-380
377-379
377-378
377-377
377-376
377-375
377-374
377-373
377-372
Upland Pt. 129
Upland Pt. 128
Upland Pt. 52
Upland Pt. 51
Upland Pt. 130
Upland Pt. 50
Upland Pt. 49
Upland Pt. 48
Upland Pt. 98
Upland Pt. 131
Upland Pt. 127
Upland Pt. 132
Upland Pt. 133
Upland Pt. 134
Upland Pt. 136
Upland Pt. 135
Upland Pt. 172
Upland Pt. 11
Upland Pt. 139
Weed 800
Weed 313
Weed 312
Weed 311
Weed 799
Weed 798
Weed 797
Weed 796
Weed 310
Weed 1372
Weed 384
Weed 383
Weed 382
Weed 381
Weed 380
Wetland 619
Wetland 2
Wetland 3
Wetland 829
Wetland 1
Wetland 275
Wetland 1371
Wetland 245
Wetland 145
27 151N 86W
28 151N 86W
29 151N 86W
30 151N 85W
31 151N 85W

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 31 of 66

- Route of Focus
- Survey Corridor (300-ft)
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USFWS Easement

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- Grassland Easement
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Delineated Field Features

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- Noxious Weed
- Waterbody
- Wetland

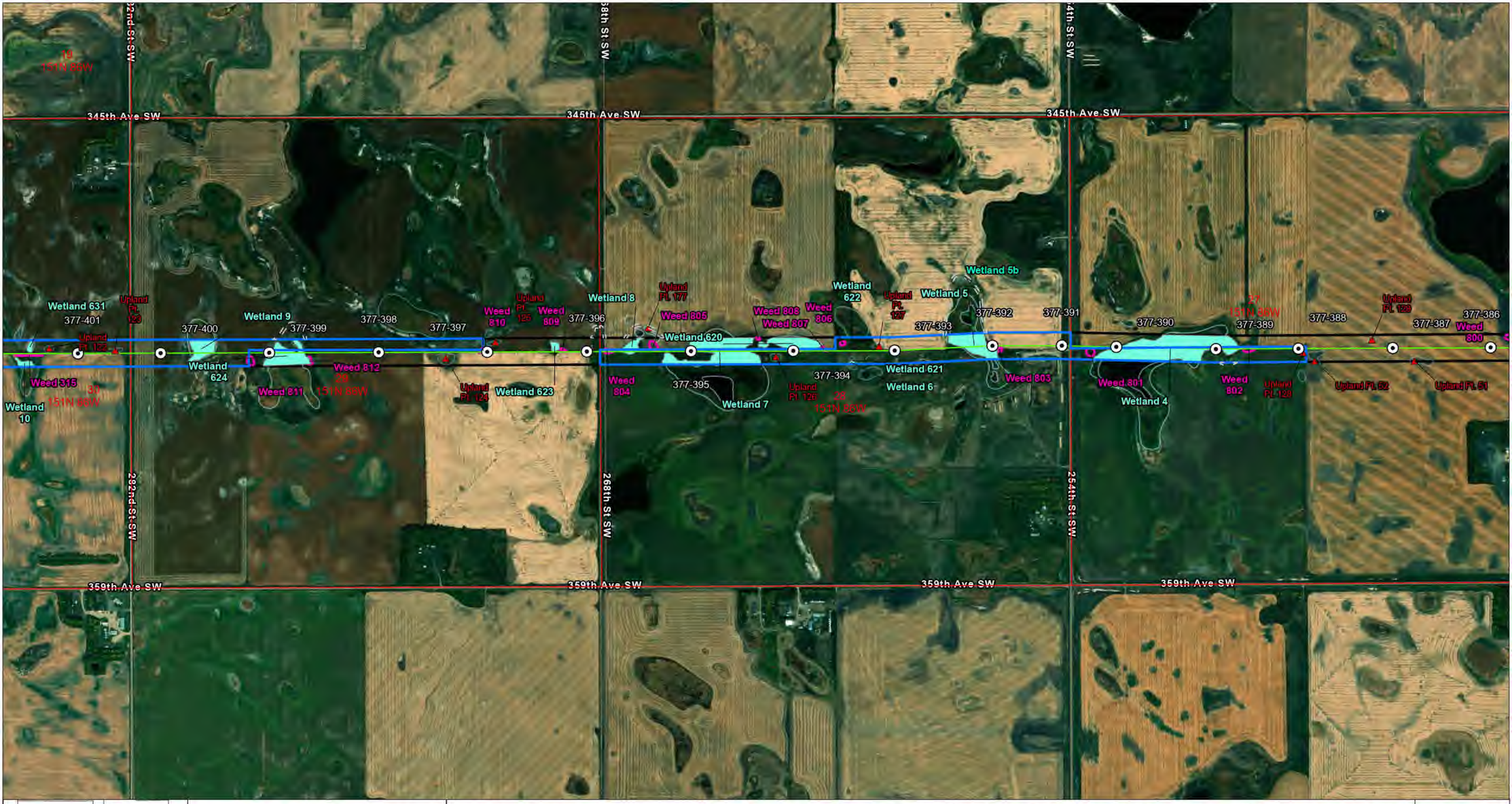
Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

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Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

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USFWS Easement

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- Red-tailed Hawk Nest
- Unknown Nest

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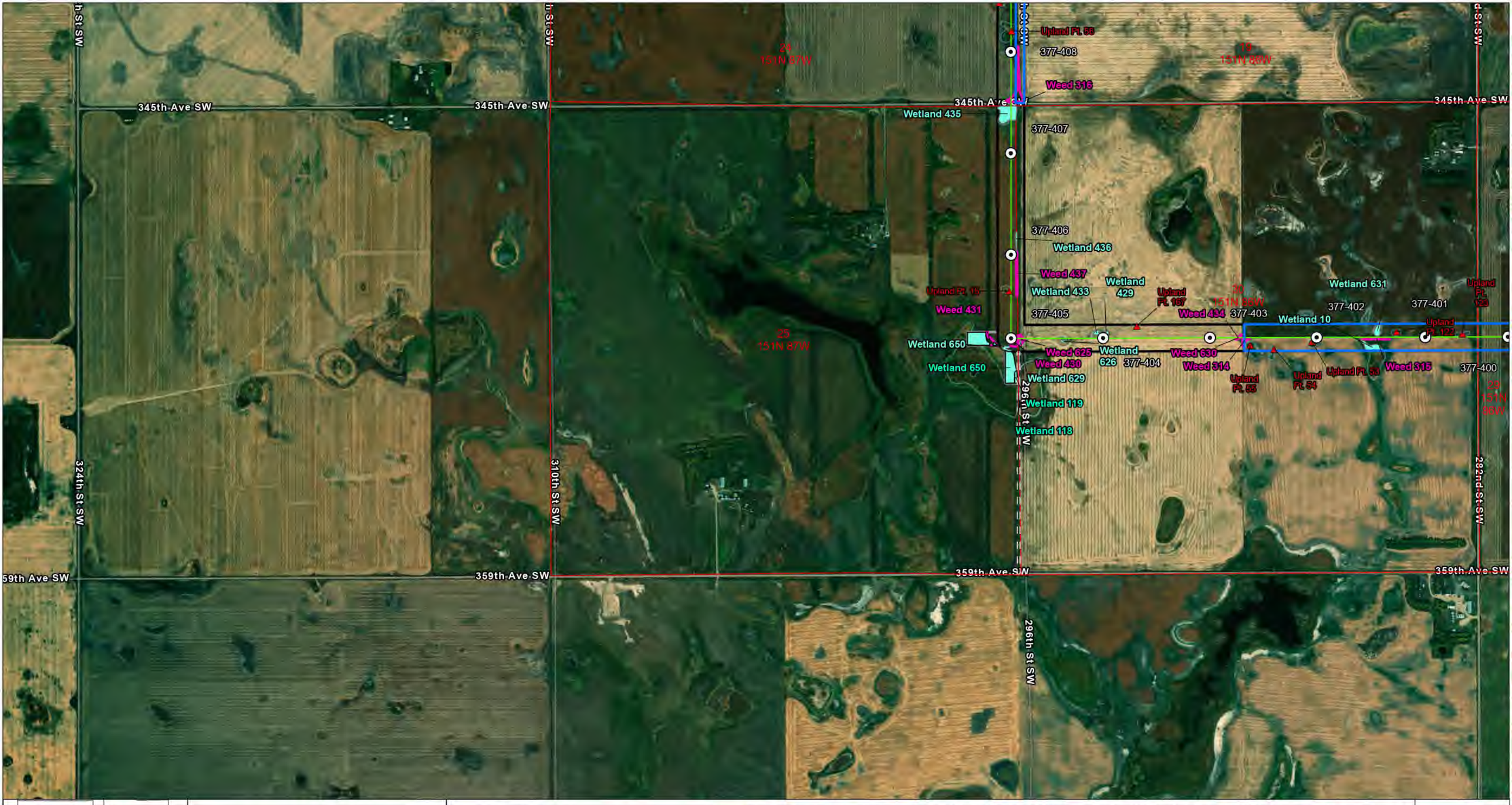
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 33 of 66

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- Upland Point
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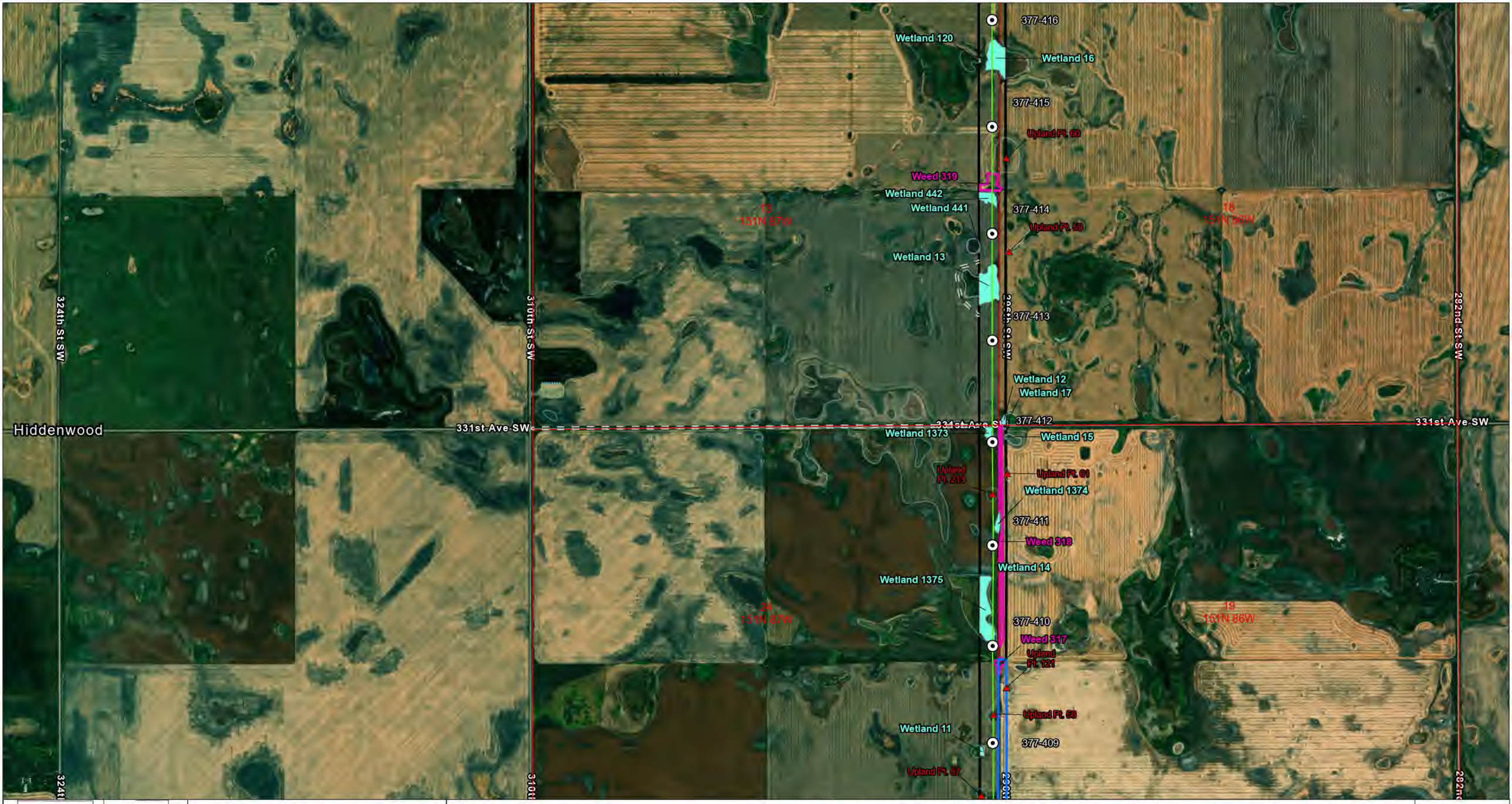
N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

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Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 34 of 66

- Route of Focus
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- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST

Wetland 121
377-425
377-424
377-423
377-422
377-421
377-420
377-419
377-418
377-417
Wetland 24
Weed 443
Wetland 438
Wetland 23
Upland Pt. 17
Wetland 20
Wetland 19
Wetland 22
Upland Pt. 68
Wetland 21
Upland Pt. 171
Wetland 18
Upland Pt. 67
Wetland 1376
Weed 322
Upland Pt. 65
Upland Pt. 66
Upland Pt. 64
Upland Pt. 63
Weed 321
Weed 320
Upland Pt. 62
Upland Pt. 175
Upland Pt. 176
1 151N 87W
6 151N 86W
12 151N 87W
7 151N 86W
13 151N 87W
18 151N 86W
324th St SW
310th St SW
296th St SW
282nd St SW
303rd Ave SW
317th Ave SW

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 35 of 66

Route of Focus
Survey Corridor (300-ft)
Access Road Survey Corridor (30-ft)
Field Survey Not Conducted
Unbroken Grasslands (Not Surveyed)
NWI Signature (Not Surveyed)
NWI Signature

USFWS Easement
Wetland Easement
Grassland Easement
Waterfowl Production Area

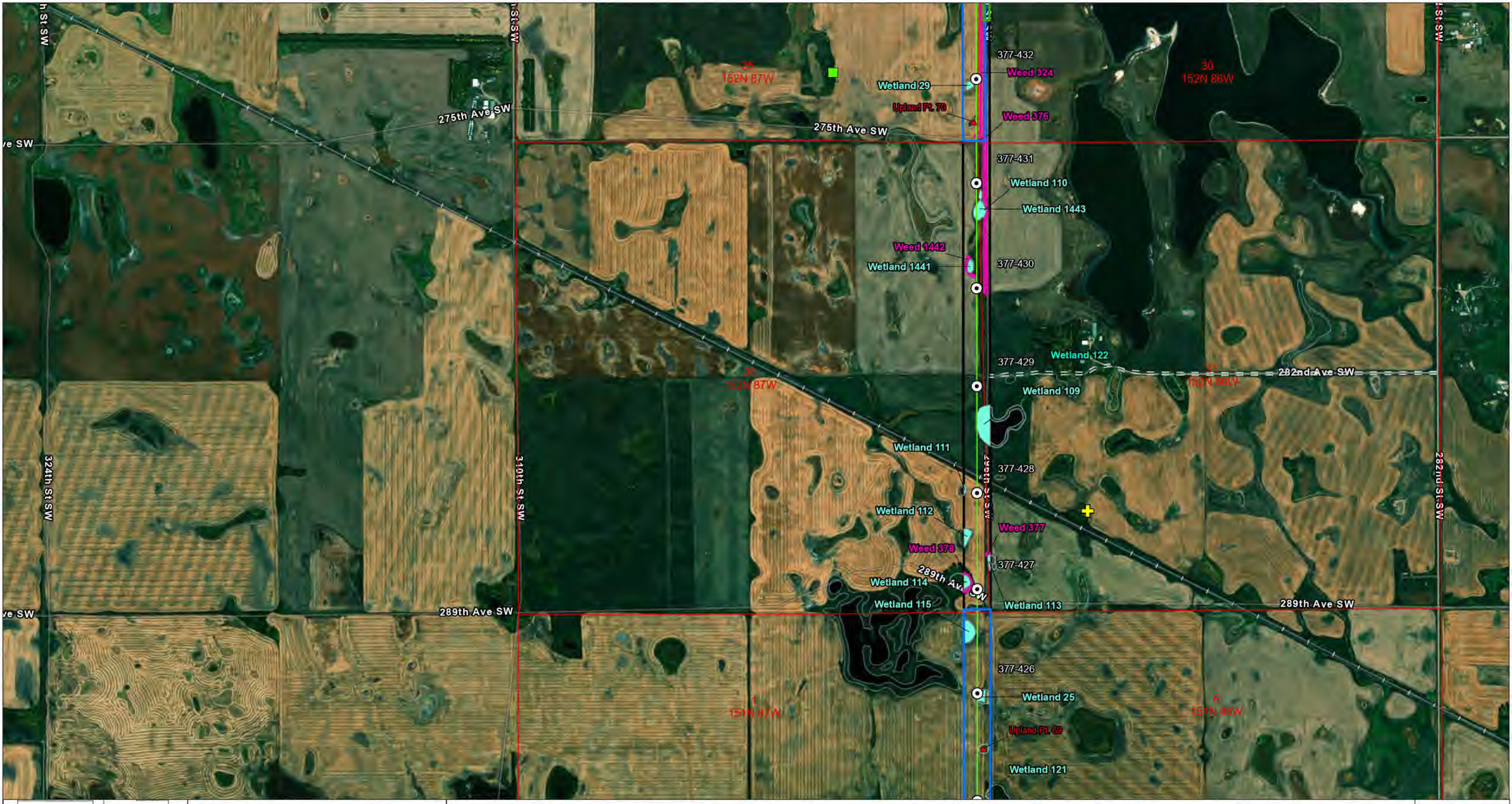
Delineated Field Features
DASK
Noxious Weed
Waterbody
Wetland

Aerial Raptor Survey Points
Bald Eagle Nest
Ferruginous Hawk Nest
Great Horned Owl Nest
Red-tailed Hawk Nest
Unknown Nest

Upland Point
Structure

N
W E
S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

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USFWS Easement

- Wetland Easement
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Delineated Field Features

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- Waterbody
- Wetland

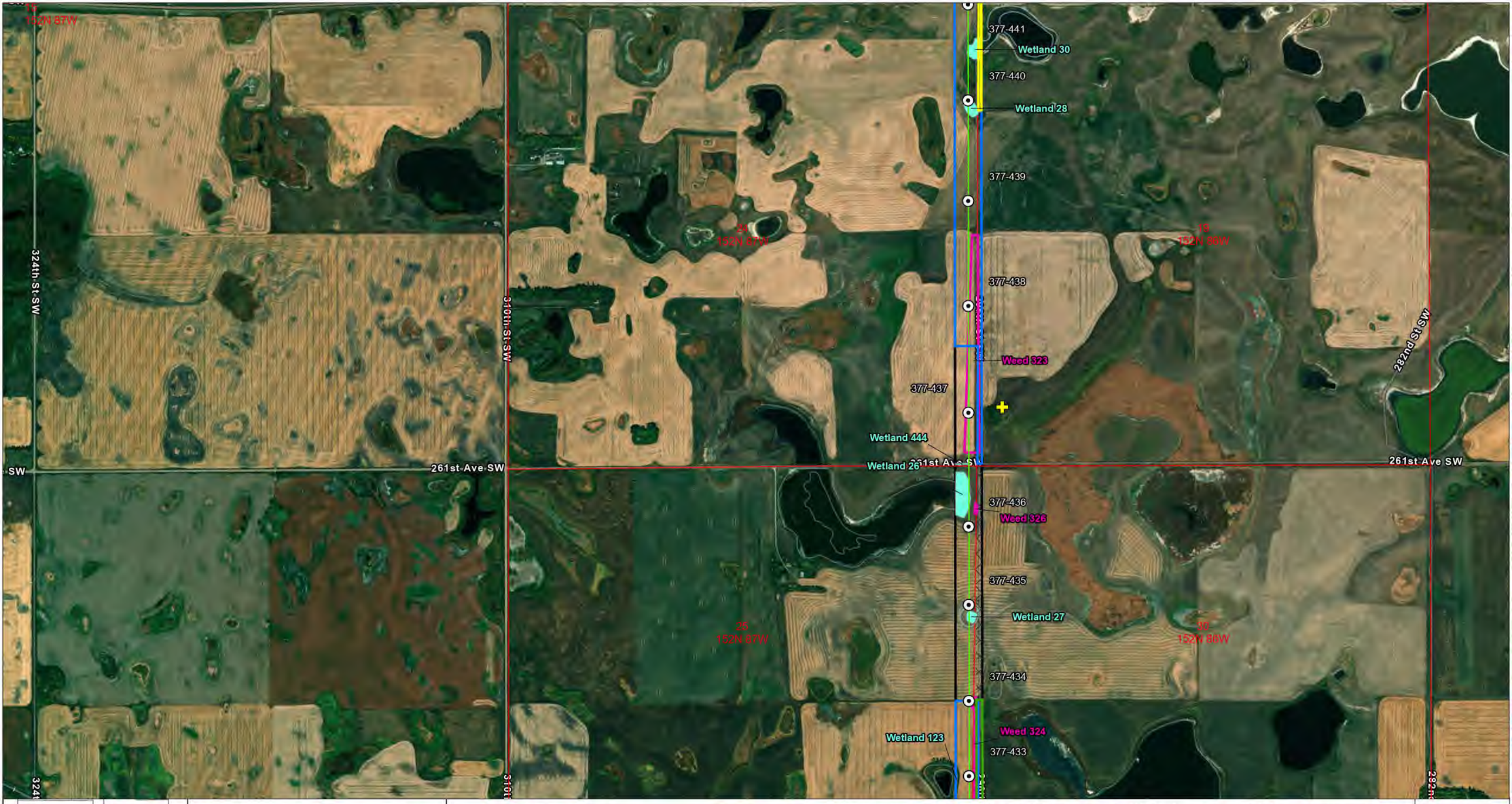
Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

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Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 37 of 66

- Route of Focus
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Aerial Raptor Survey Points

- Bald Eagle Nest
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- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

324th St SW
310th St SW
296th St SW
233rd Ave SW
247th Ave SW
377-454
377-453
377-452
377-451
377-450
377-449
377-448
377-447
377-446
377-445
377-444
377-443
377-442
377-441
Weed 328
15
152N 87W
Upland Pt. 72
Upland Pt. 214
Weed 1379
14
152N 87W
Upland Pt. 20
Weed 447
Wetland 35
Upland Pt. 19
Wetland 439
Wetland 34
13
152N 87W
Wetland 33
Wetland 1378
13
152N 86W
Upland Pt. 71
Weed 327
Wetland 32
Weed 446
Wetland 31
Weed 325
Wetland 30
24
152N 87W
19
152N 86W

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000

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USFWS Easement

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- Bald Eagle Nest
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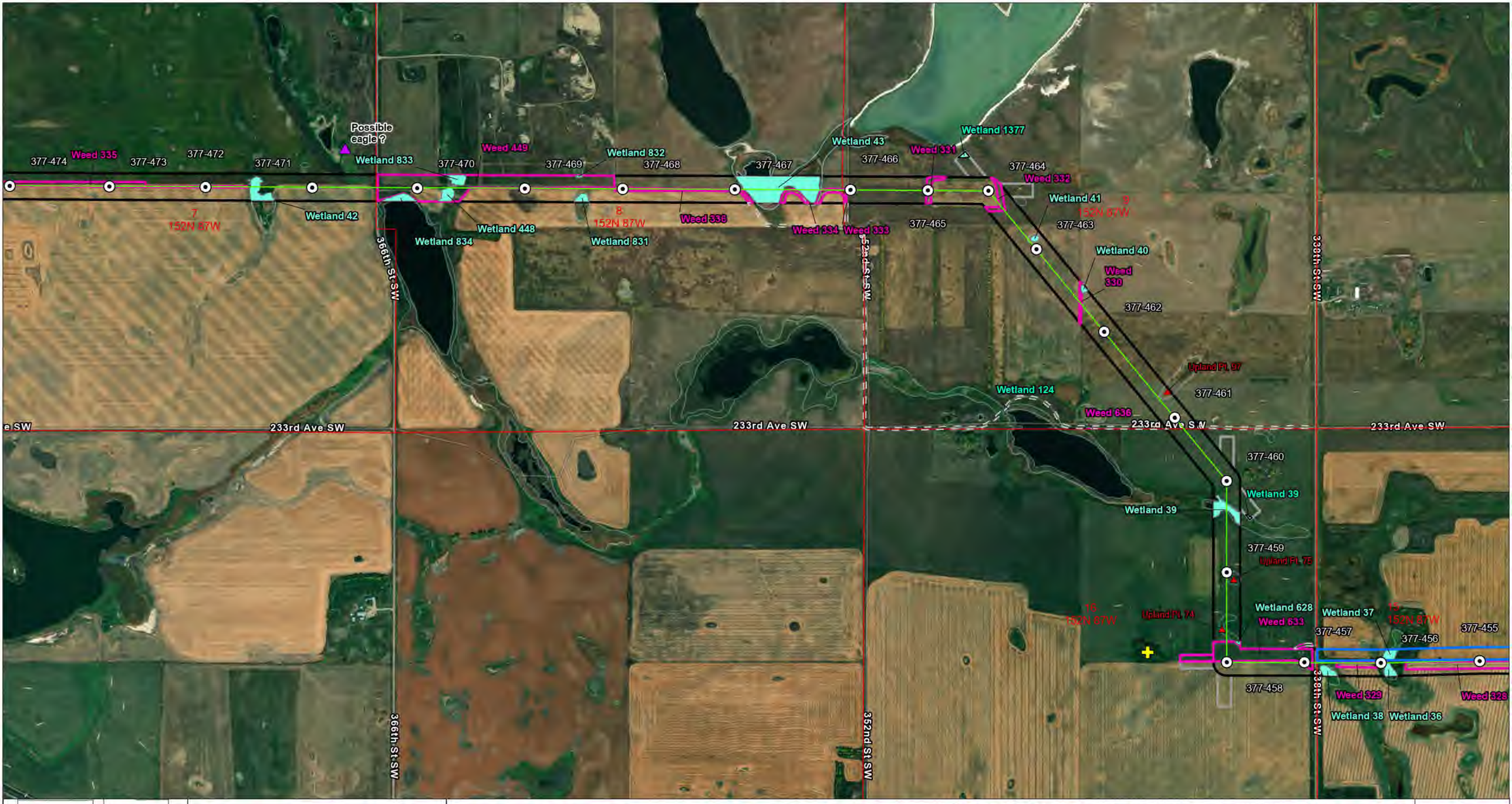
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

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0 0.2 0.4 mi

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- Bald Eagle Nest
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- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

63rd Ave NW
62nd Ave NW
61st Ave NW
380th St SW
41st St NW
219th Av
9
152N 88W
Weed 456
Wetland 453
377-489
377-488
Wetland 838
Weed 454
377-487
377-486
Wetland 49
Wetland 48
377-485
377-484
Wetland 50
Weed 339
377-483
377-482
377-481
377-480
Wetland 45
377-479
377-478
377-477
377-476
377-475
Weed 335
63rd Ave NW
Weed 1380
10
152N 88W
Wetland 837
Wetland 47
Wetland 46
11
152W 88W
Weed 338
Weed 337
Wetland 835
12
152N 88W
Wetland 836
Wetland 44
380th St SW
7
152N 87W
East Fork Shell Creek
66th St NW
40th St NW
233rd Av
Prairie Junction

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

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USFWS Easement

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Delineated Field Features

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Aerial Raptor Survey Points

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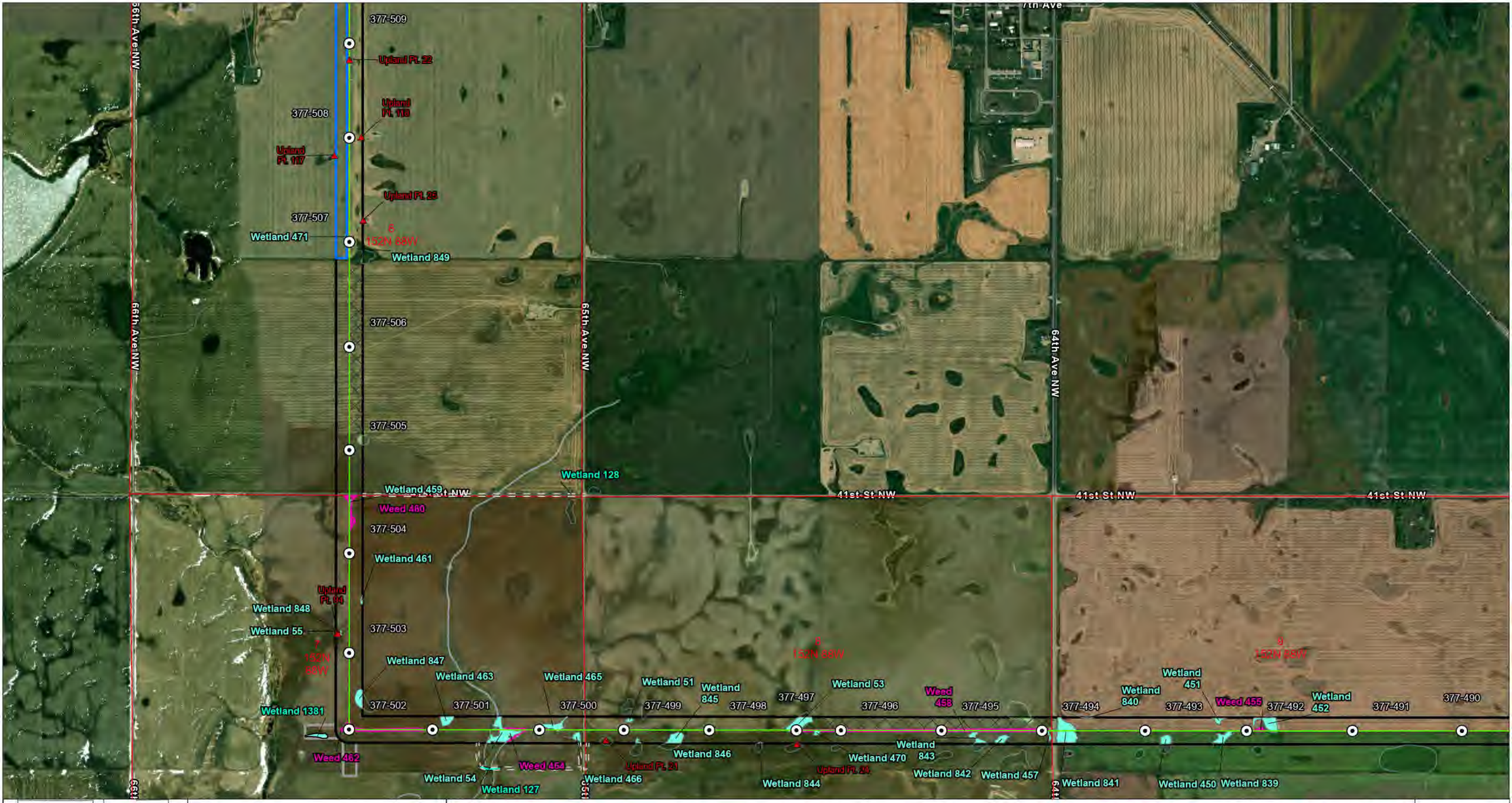
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 41 of 66

- Route of Focus
- Survey Corridor (300-ft)
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USFWS Easement

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Delineated Field Features

- DASK
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- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

30
153N 88W
65th Ave NW
64th Ave NW
63rd Ave NW
43rd St NW
43rd St NW
43rd St NW
Upland Pt. 215
Upland Pt. 220
Upland Pt. 219
Upland Pt. 221
Upland Pt. 222
Wetland 1383
Upland Pt. 223
Weed 1384
Upland Pt. 224
377-524
377-523
377-519
377-518
Wetland 467
377-517
377-516
377-515
35
153N 88W
31
153N 88W
377-522
377-521
32
153N 88W
377-520
Upland Pt. 26
Upland Pt. 27
Upland Pt. 23
Wetland 850
377-514
Wetland 468
Weed 472
377-513
Weed 489
377-512
377-511
377-510
42nd St NW
42nd St NW
42nd St NW
42nd St NW
152N 88W

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 42 of 66

- Route of Focus
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USFWS Easement

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- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST

44th St NW
Wetland 1386
Noxious Weed 1387
Upland Pt. 246
Upland Pt. 245
Upland Pt. 249
Upland Pt. 248
377-544
377-543
377-542
377-541
377-540
Upland Pt. 242
Upland Pt. 240
Upland Pt. 239
377-538
Wetland 1391
Upland Pt. 238
Weed 1398
Weed 1396
Wetland 1395
377-539
Weed 1393
Upland Pt. 247
Upland Pt. 246
Upland Pt. 243
Upland Pt. 241
Wetland 1394
Wetland 1392
Upland Pt. 237
377-537
Upland Pt. 244
Upland Pt. 236
Upland Pt. 235
Upland Pt. 233
Upland Pt. 232
Upland Pt. 231
Upland Pt. 230
Upland Pt. 229
377-536
377-535
Weed 1397
Weed 1389
Upland Pt. 228
Upland Pt. 227
377-534
377-533
377-532
377-531
377-530
377-529
Weed 1388
27
153N 89W
26
153N 89W
25
153N 89W
30
153N 88W
68 1/2 Ave NW
67th Ave NW
43rd St NW
377-528
377-527
377-526
377-525
Wetland 1382
377-524
Upland Pt. 218
Upland Pt. 219
Upland Pt. 217
36
153N 89W
31
153N 88W
68th Ave
67th Ave

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 43 of 66

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USFWS Easement

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Delineated Field Features

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- Waterbody
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Aerial Raptor Survey Points

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- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST

19
153N 89W
20
153N 89W
21
153N 89W
30
153N 89W
29
153N 89W
28
153N 89W
27
153N 89W
Wetland 1410
DASK 1411
377-563
377-562
377-561
377-560
DASK 1409
377-559
DASK 1408
377-558
Wetland 1406
Wetland 1400
Upland Pt. 253
Upland Pt. 252
377-556
Wetland 57
377-555
Wetland 59
Weed 1402
377-554
Wetland 1403
Weed 1404
Wetland 1405
Wetland 66
Wetland 66
377-552
Waterbody 64
Weed 1413
DASK 1412
Waterbody 70
377-557
Wetland 1399
Wetland 58
Wetland 56
Wetland 61
Wetland 60
Wetland 1401
Wetland 65
377-553
Wetland 63
Upland Pt. 174
377-551
377-550
Wetland 62
DASK 476
377-549
377-548
377-547
377-546
377-545
70th Ave NW
Ave NW
71st Ave NW
43rd St NW
43rd St NW
43rd St NW
NW
Upland Pt. 250
Upland Pt. 251
69th Ave NW

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker
0 0.2 0.4 mi
Scale: 1:12,000 Page 44 of 66

- Route of Focus
- Survey Corridor (300-ft)
- Pull Lane Survey Area
- Access Road Survey Corridor (30-ft)
- Field Survey Not Conducted
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USFWS Easement

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Delineated Field Features

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Aerial Raptor Survey Points

- Bald Eagle Nest
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- Great Horned Owl Nest
- Red-tailed Hawk Nest
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- Structure

N W E S

WEST

Leland Olds Station to Tande 345-kV Transmission Project

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Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

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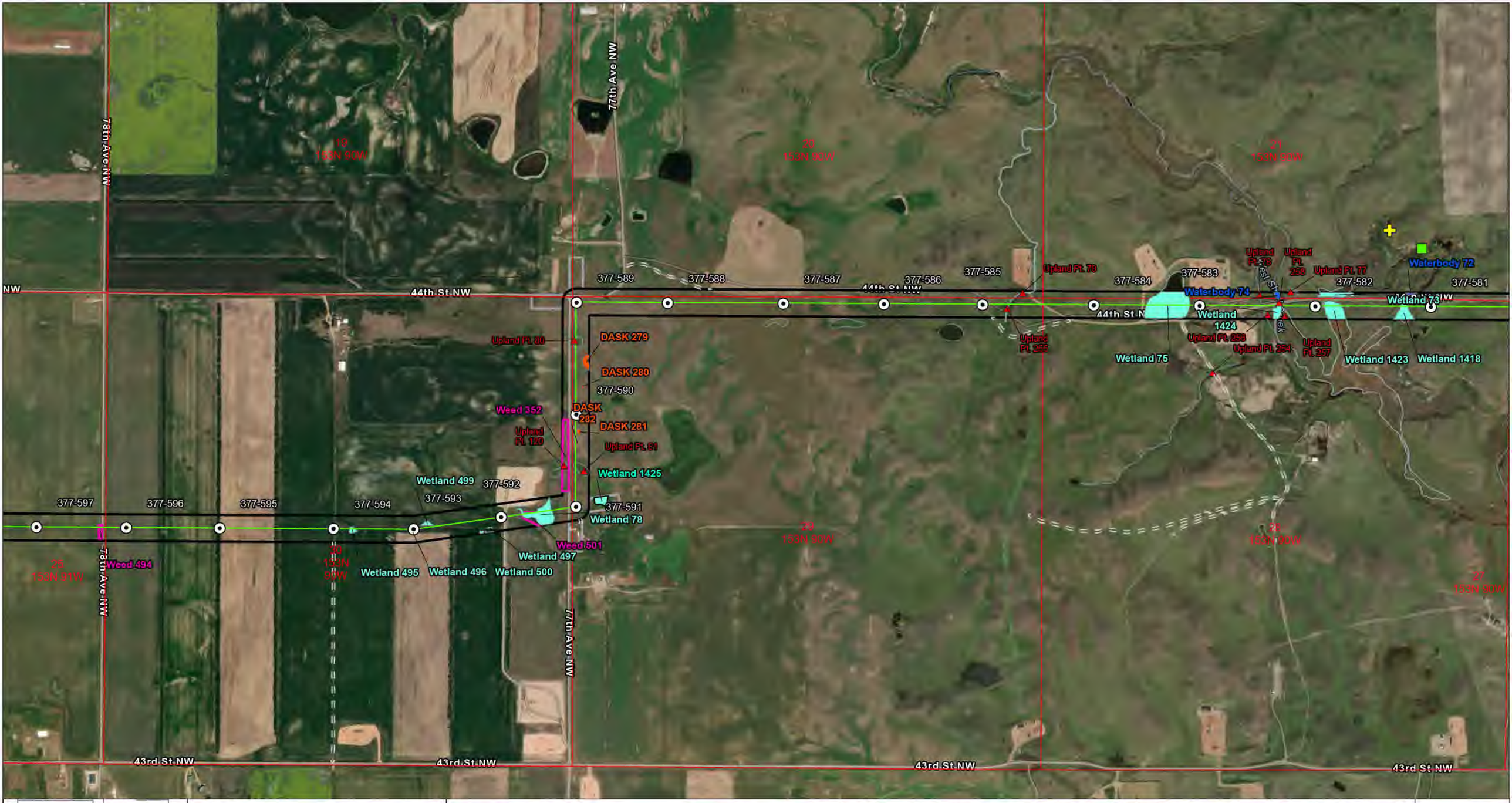
- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000

- Route of Focus
- Survey Corridor (300-ft)
- Pull Lane Survey Area
- Access Road Survey Corridor (30-ft)
- Field Survey Not Conducted
- Unbroken Grasslands (Not Surveyed)
- NWI Signature (Not Surveyed)
- NWI Signature

USFWS Easement

- Wetland Easement
- Grassland Easement
- Waterfowl Production Area

Delineated Field Features

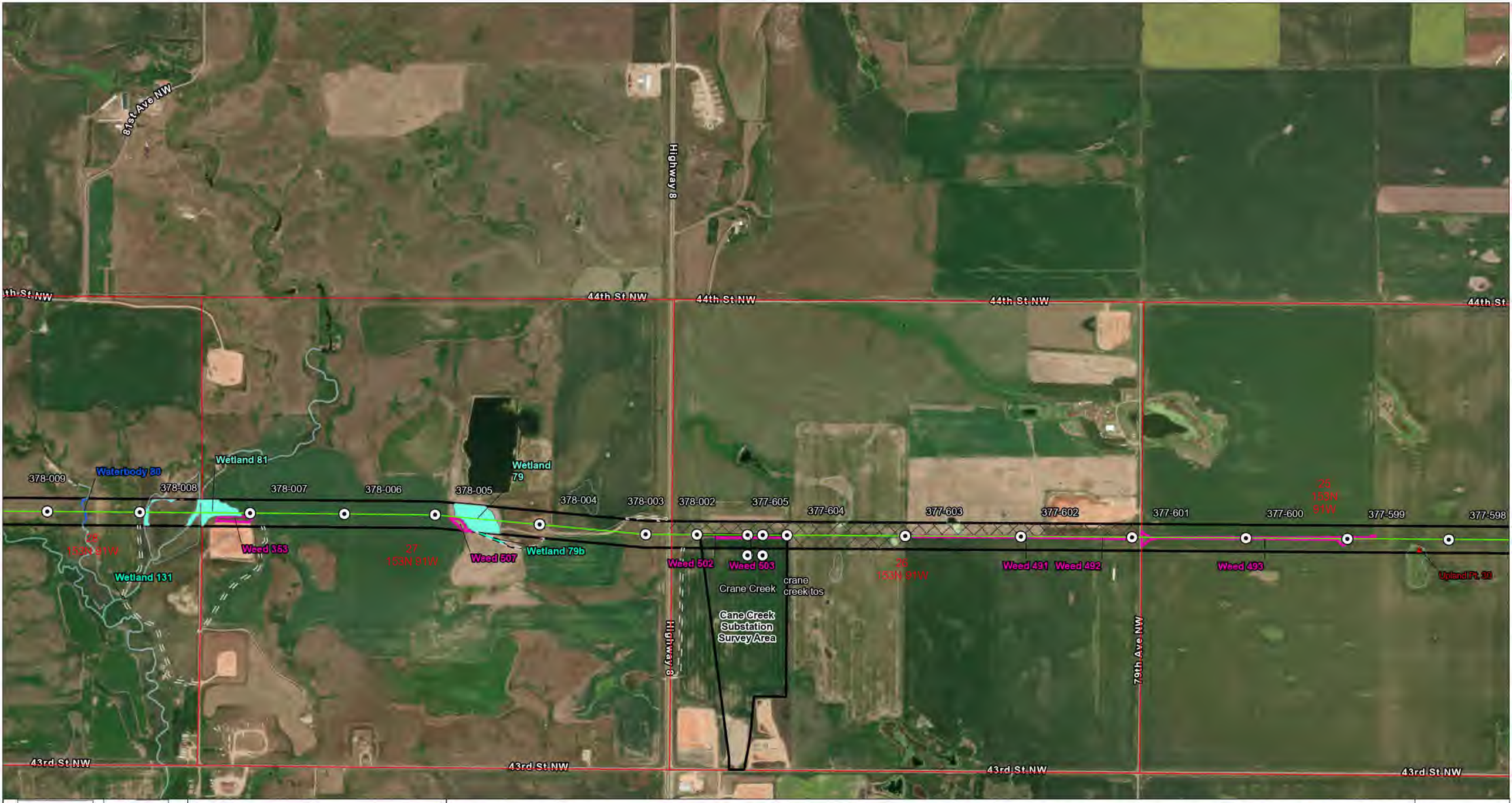
- DASK
- Noxious Weed
- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 47 of 66

- Route of Focus
- Survey Corridor (300-ft)
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Aerial Raptor Survey Points

- Bald Eagle Nest
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- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

84th Ave NW
82nd Ave NW
44th St NW
Crane Creek
43rd St NW
Upland Pt. 24
378-025
378-024
378-023
378-022
Upland Pt. 261
378-021
378-020
378-019
378-018
378-017
378-016
Upland Pt. 259
378-015
378-014
378-013
378-012
378-011
378-010
25
153N 92W
30
153N 91W
DASK 1429
Wetland 1430
DASK 1428
Upland Pt. 258
DASK 1427
DASK 1473
Upland Pt. 260
Weed 1426
29
153N 91W
Weed 504
28
153N 91W
Wetland 860
Weed 505
DASK 506

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000

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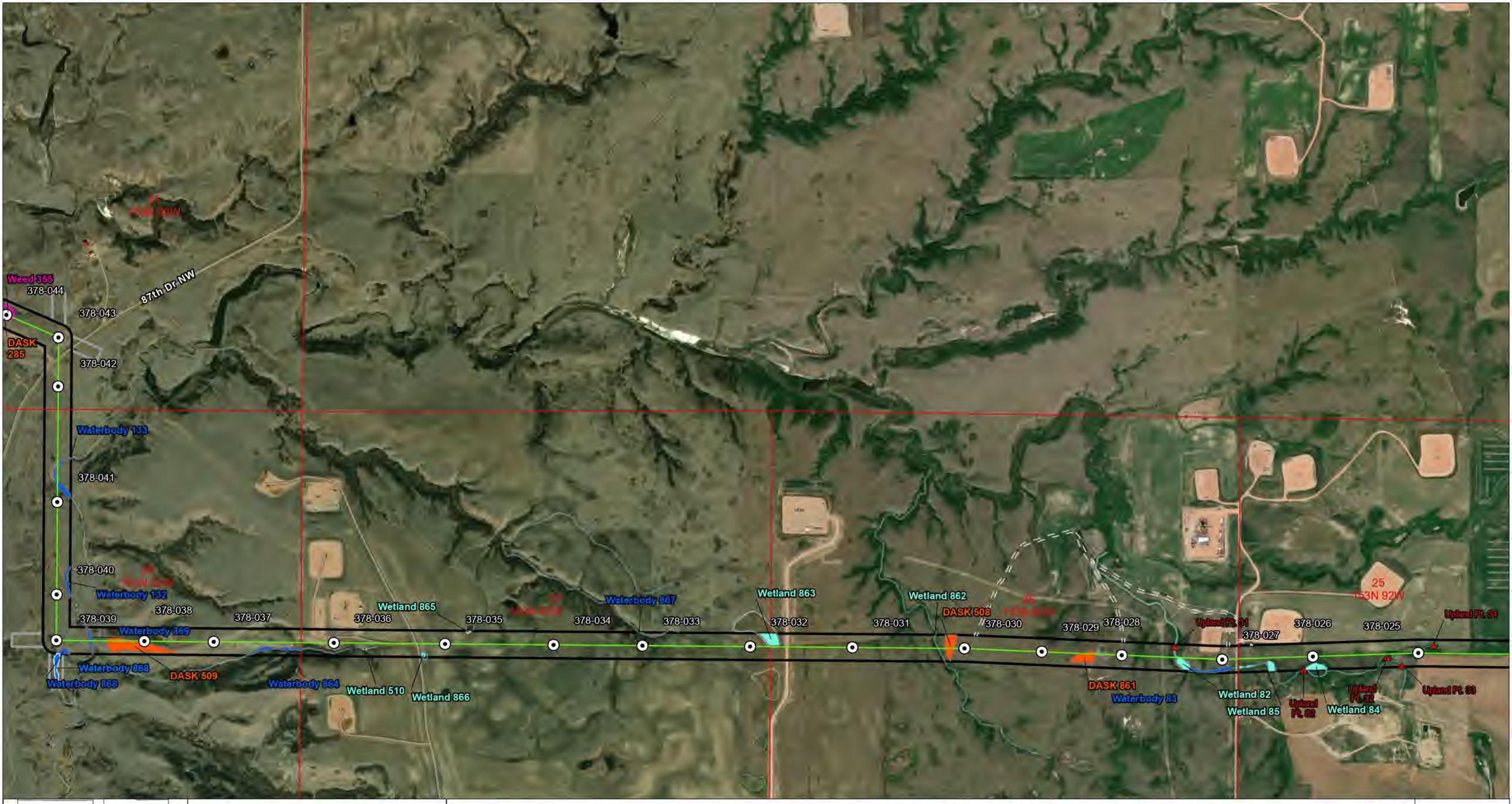
- Waterbody
- Wetland

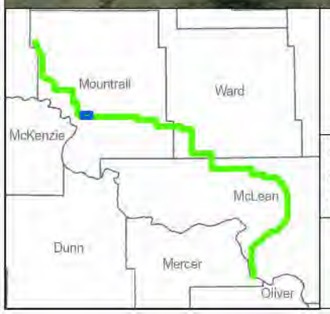
Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST





Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

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USFWS Easement

- Wetland Easement
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Delineated Field Features

- DASK
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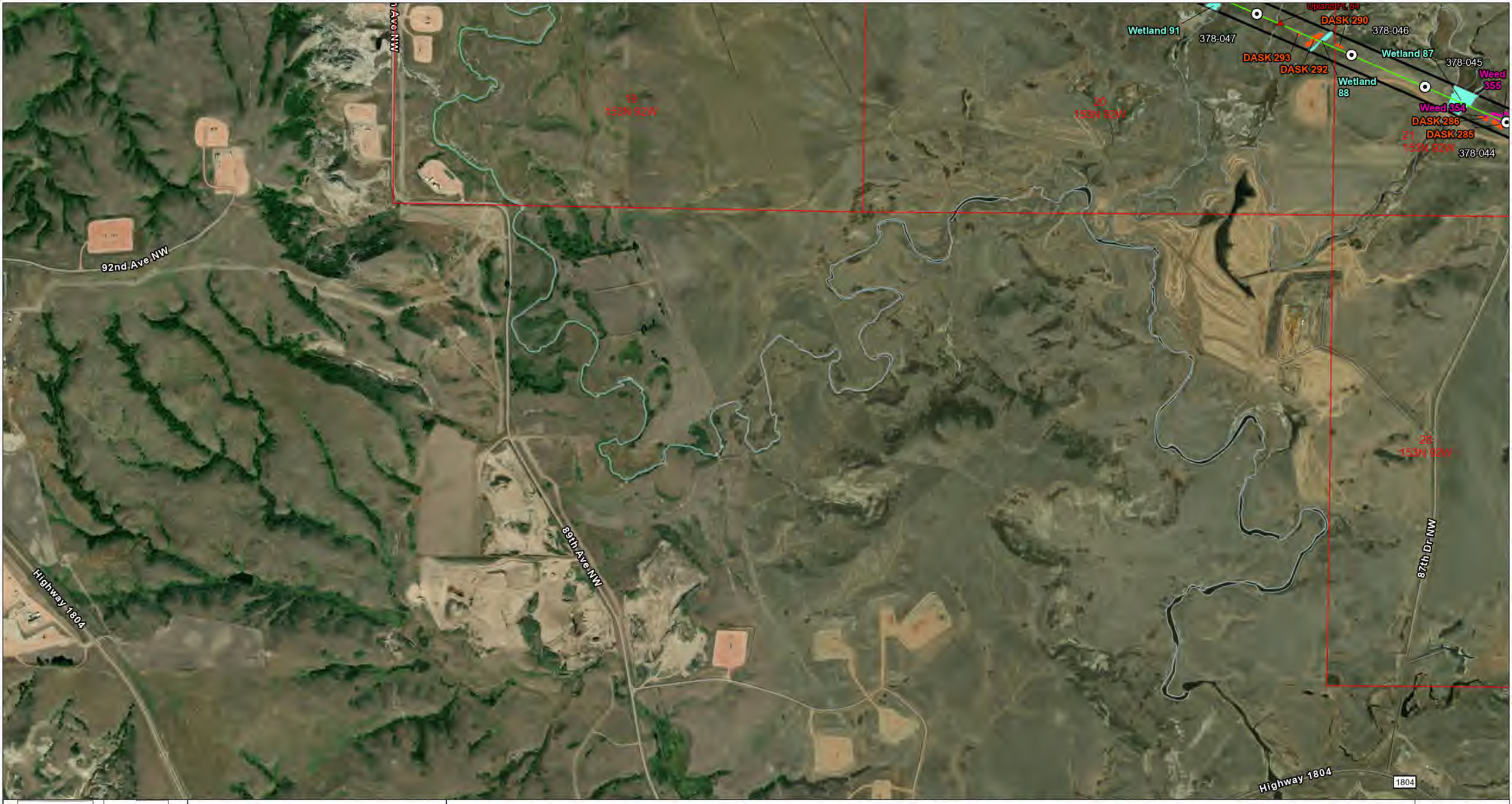
- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 50 of 66

- Route of Focus
- Survey Corridor (300-ft)
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USFWS Easement

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Delineated Field Features

- DASK
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- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

46th St NW
12
153N 92W
Wetland 92
378-065
378-064
Wetland 1448
378-063
378-062
Upland Pt. 265
DASK 1447
Upland Pt. 83
378-060
DASK 287
378-059
18
153N 92W
13
153N 92W
DASK 1446
378-061
Waterbody 86
378-058
Wetland 1458
90th Ave NW
378-057
DASK 288
DASK 1453
DASK 291
378-056
378-055
DASK 1452
378-054
Waterbody 89
378-053
Wetland 1451
Wetland 90
378-052
Wetland 1450
Waterbody 1449
378-051
19
153N 92W
Upland Pt. 115
20
153N 92W
378-050
21
153N 92W
378-049
DASK 294
378-048
Upland Pt. 98
DASK 295
378-047
Upland Pt. 84
DASK 292
Wetland 88
Wetland 91
DASK 293

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker
0 0.2 0.4 mi
Scale: 1:12,000 Page 51 of 66

- Route of Focus
- Survey Corridor (300-ft)
- Pull Lane Survey Area
- Access Road Survey Corridor (30-ft)
- Field Survey Not Conducted
- Unbroken Grasslands (Not Surveyed)
- NWI Signature (Not Surveyed)
- NWI Signature

USFWS Easement
- Wetland Easement
- Grassland Easement
- Waterfowl Production Area

Delineated Field Features
- DASK
- Noxious Weed
- Waterbody
- Wetland

Aerial Raptor Survey Points
- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

378-073

378-072

1
153N
93W

378-071

DASK 1445

47th St NW

378-070

47th St NW

378-069

12
153N 93W

Upland Pt. 264

Upland Pt. 85

378-068

378-067

90th Ave NW

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000

Route of Focus

Survey Corridor (300-ft)

Access Road Survey Corridor (30-ft)

Field Survey Not Conducted

Unbroken Grasslands (Not Surveyed)

NWI Signature (Not Surveyed)

NWI Signature

USFWS Easement

Wetland Easement

Grassland Easement

Waterfowl Production Area

Delineated Field Features

DASK

Noxious Weed

Waterbody

Wetland

Aerial Raptor Survey Points

Bald Eagle Nest

Ferruginous Hawk Nest

Great Horned Owl Nest

Red-tailed Hawk Nest

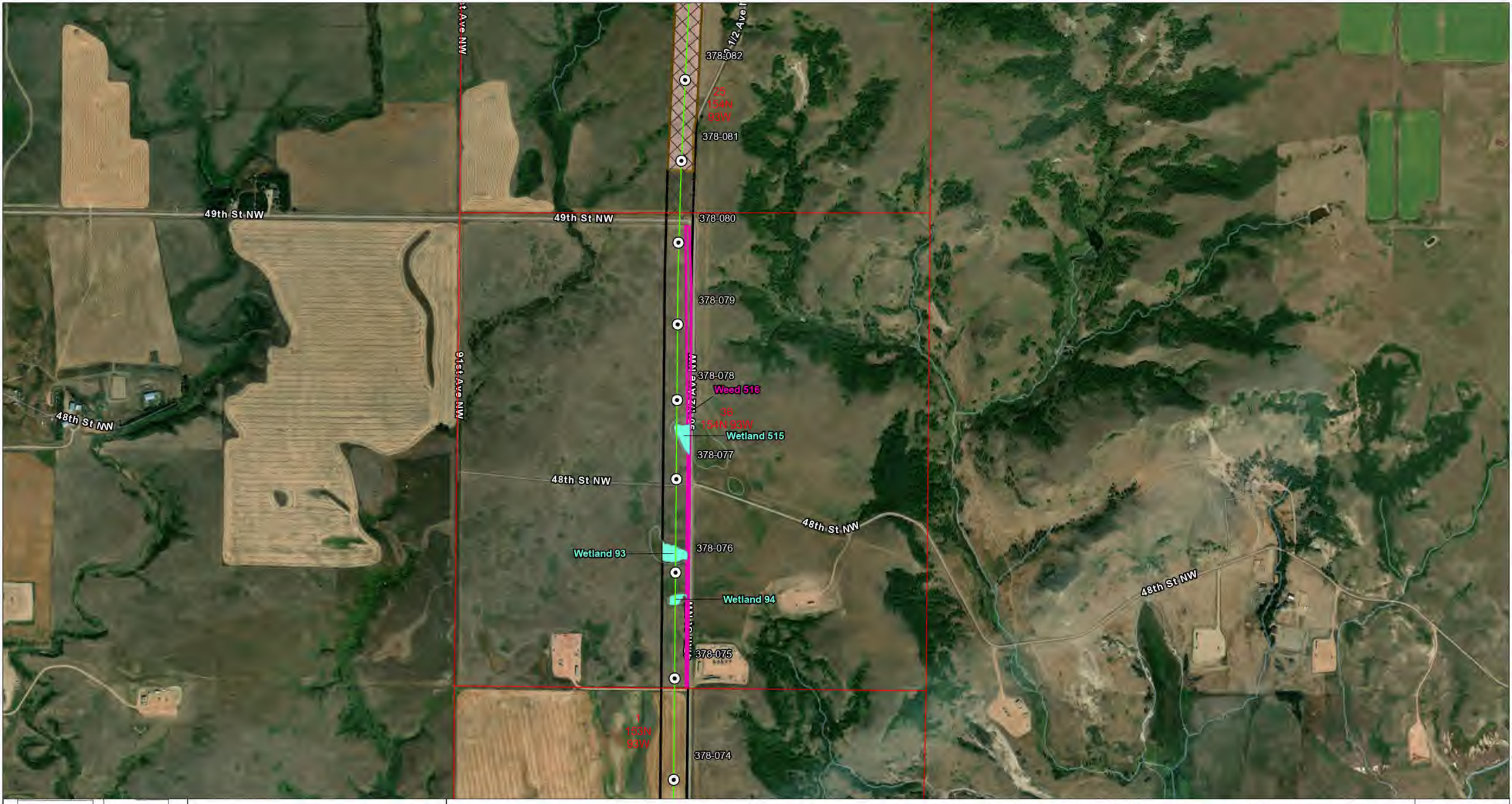
Unknown Nest

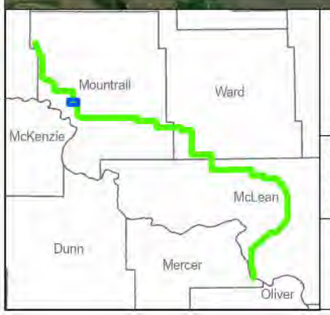
Upland Point

Structure

N
W E
S

WEST





Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000

- Route of Focus
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USFWS Easement

- Wetland Easement
- Grassland Easement
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Delineated Field Features

- DASK
- Noxious Weed
- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST

14
154N 93W
Waterbody 95
378-094
378-093
378-092
13
154N
93W
378-091
51st St NW
51st St NW
Weed 518
378-090
378-089
24
154N
93W
23
154N 93W
378-088
91st Ave NW
90th Ave NW
50 1/2 St NW
89th Ave NW
378-087
378-086
50th St NW
50th St NW
378-085
25
154N
93W
378-084
378-083

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker
0 0.2 0.4 mi
Scale: 1:12,000 Page 54 of 66

- Route of Focus
- Survey Corridor (300-ft)
- Pull Lane Survey Area
- Access Road Survey Corridor (30-ft)
- Field Survey Not Conducted
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- NWI Signature (Not Surveyed)
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USFWS Easement
- Wetland Easement
- Grassland Easement
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Delineated Field Features
- DASK
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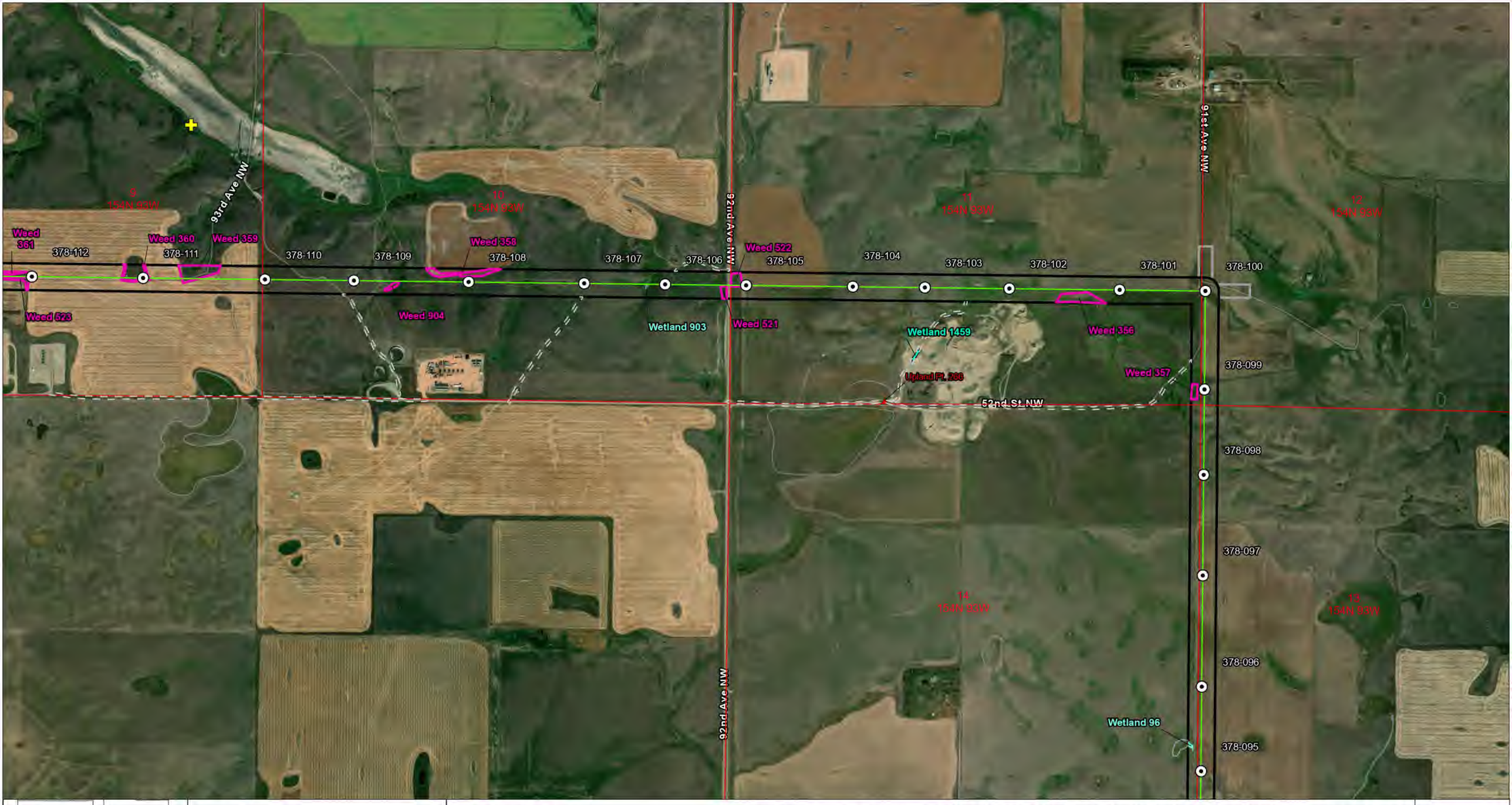
- Wetland

Aerial Raptor Survey Points
- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000

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- Bald Eagle Nest
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- Unknown Nest
- Upland Point
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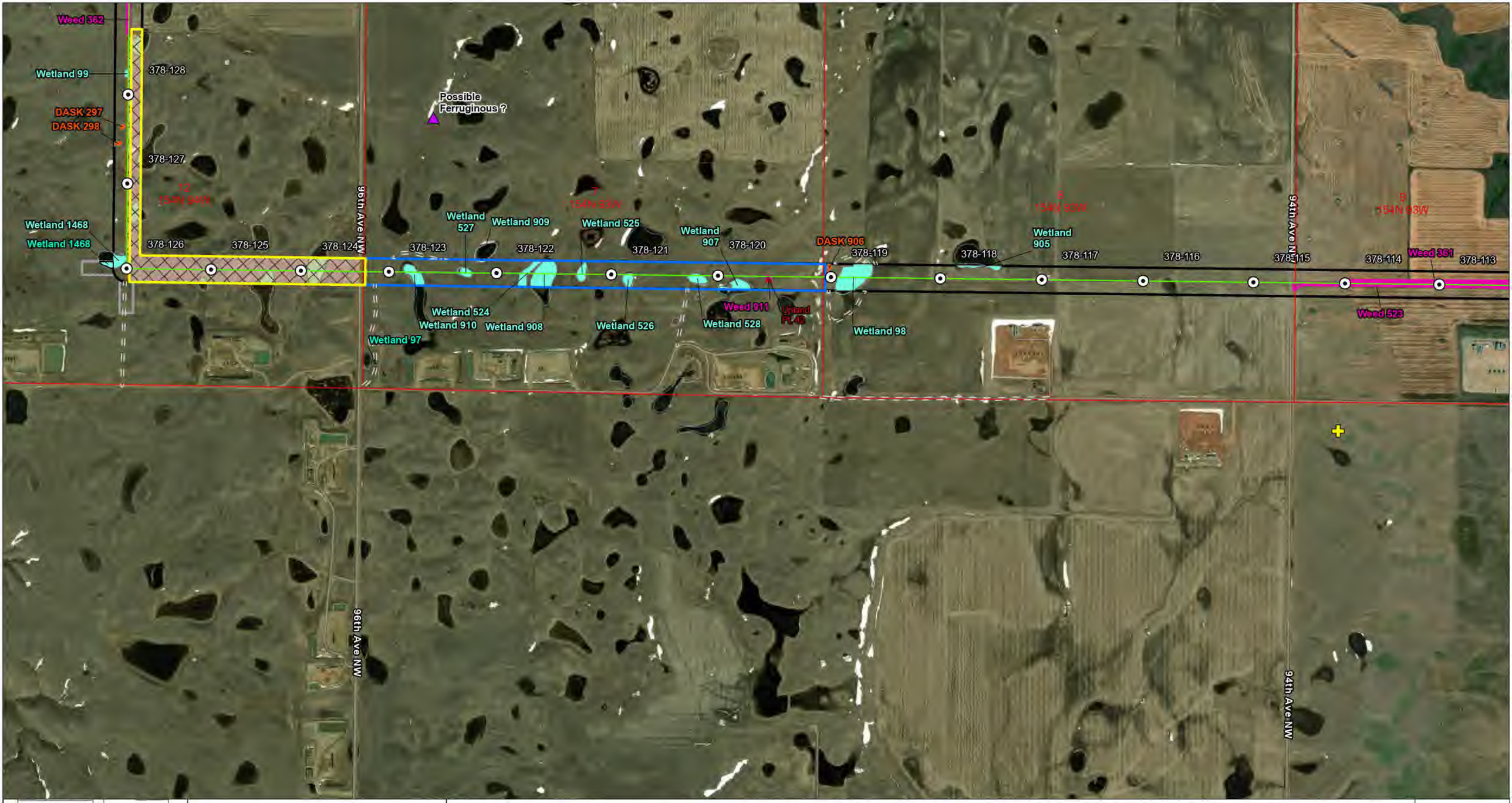
N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

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- DASK
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- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

Upland Pt. 43
378-136
36
155N 94W
Upland
Pt. 170
Wetland 913
378-135
Wetland 1464
378-134
Wetland 1465
Wetland 912
378-133
Weed 530
1
154N
94W
Wetland 100
378-132
Wetland 529
378-131
Weed 1467
378-130
53rd St NW
53rd St NW
Upland
Pt. 267
12
154N
94W
Weed 362
378-129
96th Ave NW
96th Ave NW
53rd St NW
7
154N 93W
8
154N 93W

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 57 of 66

- Route of Focus
- Survey Corridor (300-ft)
- Access Road Survey Corridor (30-ft)
- Field Survey Not Conducted
- Unbroken Grasslands (Not Surveyed)
- NWI Signature (Not Surveyed)
- NWI Signature

USFWS Easement

- Wetland Easement
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Delineated Field Features

- DASK
- Noxious Weed
- Waterbody
- Wetland

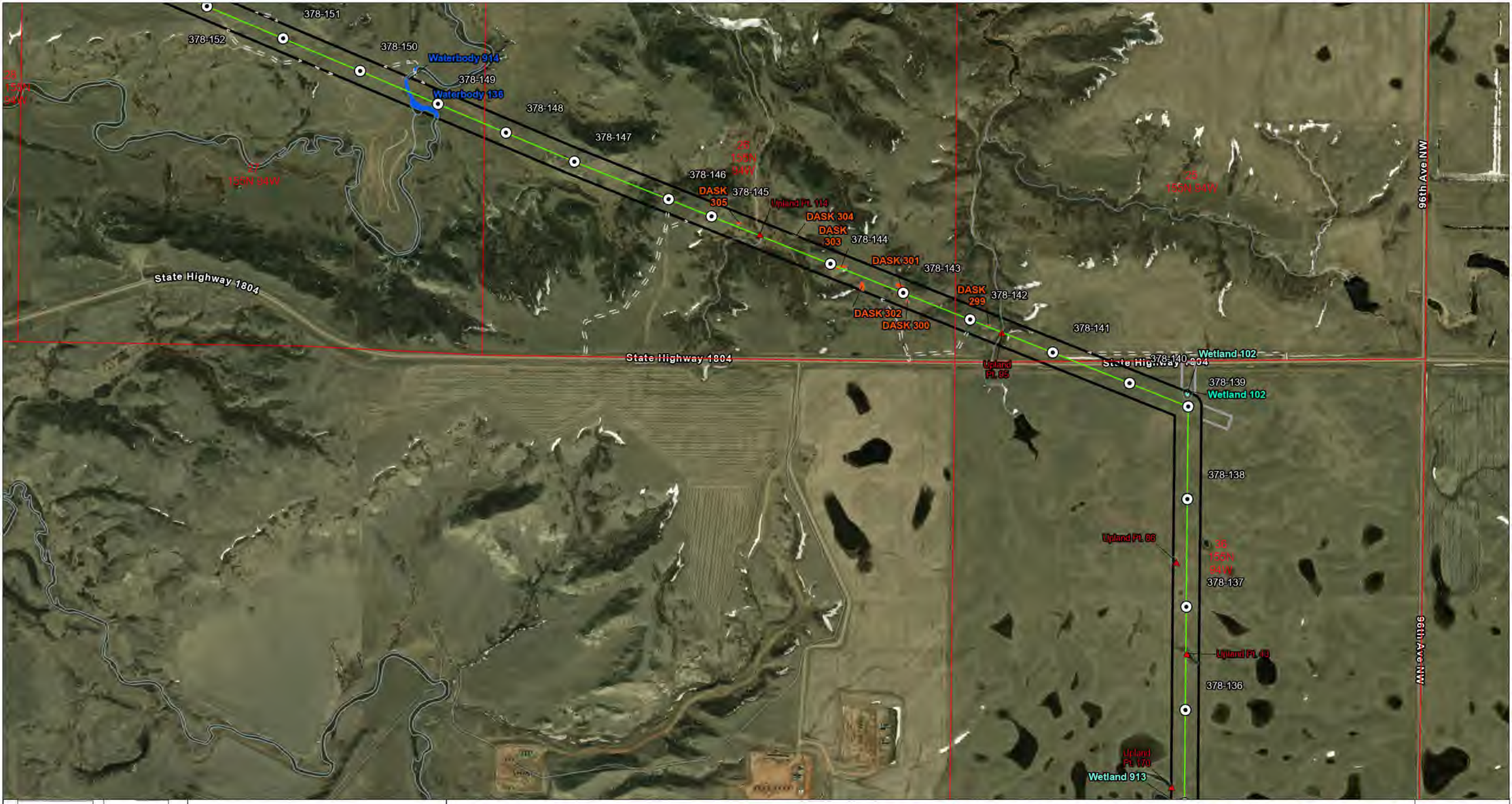
Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 58 of 66

- Route of Focus
- Survey Corridor (300-ft)
- Pull Lane Survey Area
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USFWS Easement

- Wetland Easement
- Grassland Easement
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Delineated Field Features

- DASK
- Noxious Weed
- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

Wetland 1460
17
155N
94W
378-165
57th St NW
378-164
57th St NW
DASK
308
DASK 307
DASK 306
Weed 365
378-163
57th St NW
378-162
Weed 363
378-161
20
155N 94W
21
155N 94W
101st Ave NW
Wetland 916
378-160
378-159
378-158
99th Ave NW
378-157
Wetland 915
378-156
Weed 531
378-155
378-154
378-153
27
155N 94W
378-152
26
155N 94W
378-151
378-150

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker
0 0.2 0.4 mi
Scale: 1:12,000 Page 59 of 66

- Route of Focus
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N W E S

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Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 60 of 66

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N W E S

WEST

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000

Route of Focus

Survey Corridor (300-ft)

Access Road Survey Corridor (30-ft)

Field Survey Not Conducted

Unbroken Grasslands (Not Surveyed)

NWI Signature (Not Surveyed)

NWI Signature

USFWS Easement

Wetland Easement

Grassland Easement

Waterfowl Production Area

Delineated Field Features

DASK

Noxious Weed

Waterbody

Wetland

Aerial Raptor Survey Points

Bald Eagle Nest

Ferruginous Hawk Nest

Great Horned Owl Nest

Red-tailed Hawk Nest

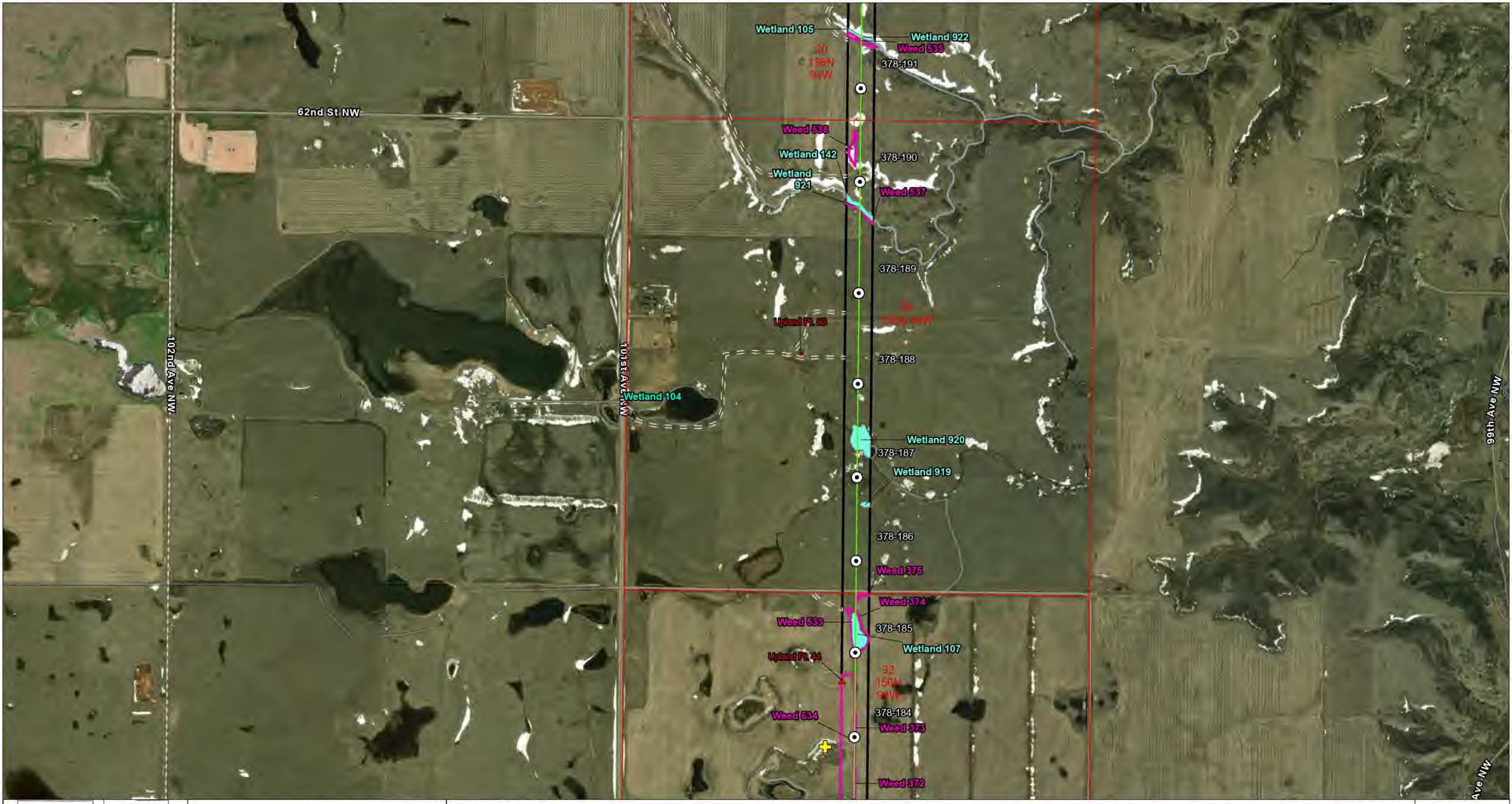
Unknown Nest

Upland Point

Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 62 of 66

- Route of Focus
- Survey Corridor (300-ft)
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- Field Survey Not Conducted
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- NWI Signature

USFWS Easement

- Wetland Easement
- Grassland Easement
- Waterfowl Production Area

Delineated Field Features

- DASK
- Noxious Weed
- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

378-202
Weed 540
378-203
378-201
Weed 542
378-200
Wetland 541
US Highway 2
378-199
Wetland 925
17
156N 94W
378-198
Wetland 925
Upland Pt. 14
2
18
156N 94W
102nd Ave NW
101st Ave NW
378-197
378-196
US Highway 2
County Highway 2
99th Ave NW
Myrtle
378-195
US Highway 2
378-194
20
156N 94W
Wetland 924
378-193
101st Ave NW
378-192
Wetland 923

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker
0 0.2 0.4 mi
Scale: 1:12,000 Page 63 of 66

- Route of Focus
- Survey Corridor (300-ft)
- Pull Lane Survey Area
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- Field Survey Not Conducted
- Unbroken Grasslands (Not Surveyed)
- NWI Signature (Not Surveyed)
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USFWS Easement

- Wetland Easement
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- Noxious Weed
- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest
- Upland Point
- Structure

N W E S

WEST

378-214
378-213
Wetland 926
378-212
156N 95W
156N 94W
Wetland 547
378-211
Upland Pt. 0
378-210
378-209
378-208
Weed 538
102nd Ave NW
378-207
156N 94W
Upland Pt. 13
378-206
Weed 539
378-205
US Highway 2
378-204
Weed 540
156N 94W
65th St NW
65th St NW
99th Ave NW
99th Ave NW

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 64 of 66

- Route of Focus
- Survey Corridor (300-ft)
- Pull Lane Survey Area
- Access Road Survey Corridor (30-ft)
- Field Survey Not Conducted
- Unbroken Grasslands (Not Surveyed)
- NWI Signature (Not Surveyed)
- NWI Signature

USFWS Easement

- Wetland Easement
- Grassland Easement
- Waterfowl Production Area

Delineated Field Features

- DASK
- Noxious Weed
- Waterbody
- Wetland

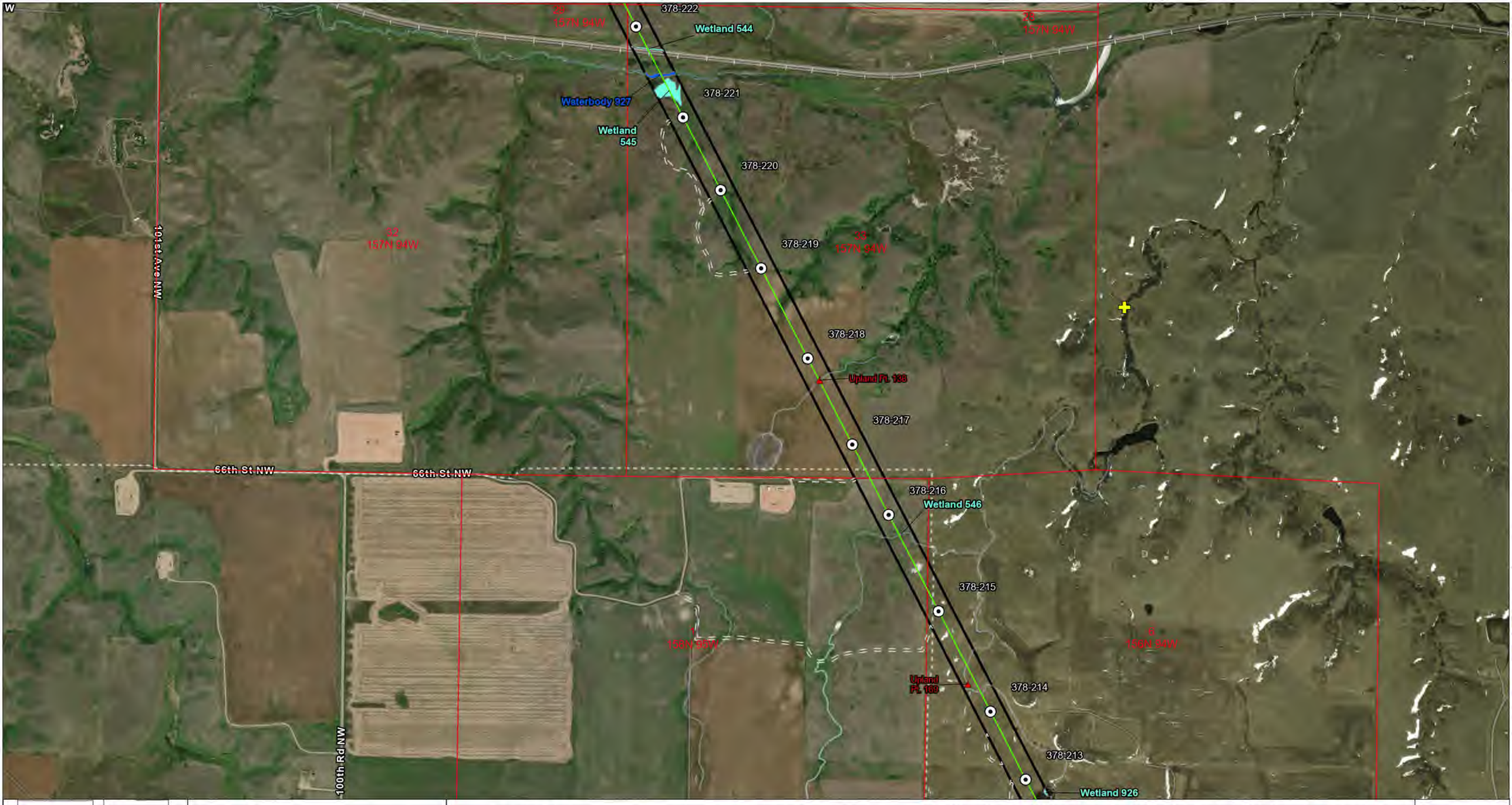
Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000 Page 65 of 66

- Route of Focus
- Survey Corridor (300-ft)
- Access Road Survey Corridor (30-ft)
- Field Survey Not Conducted
- Unbroken Grasslands (Not Surveyed)
- NWI Signature (Not Surveyed)
- NWI Signature

USFWS Easement

- Wetland Easement
- Grassland Easement
- Waterfowl Production Area

Delineated Field Features

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Aerial Raptor Survey Points

- Bald Eagle Nest
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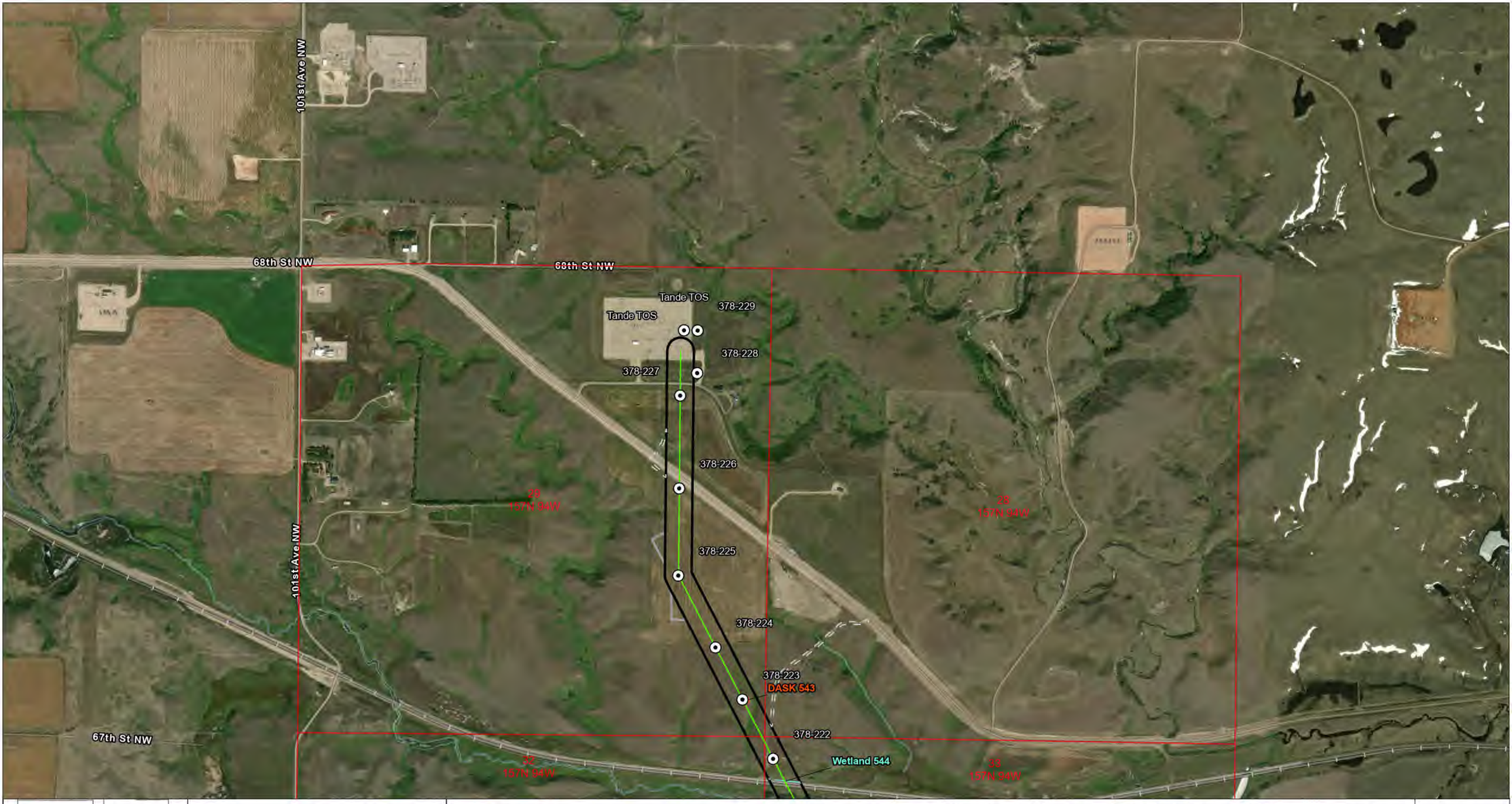
N W E S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: ESRI Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/1/2024 Author: C. Tucker

0 0.2 0.4 mi

Scale: 1:12,000

- Route of Focus
- Survey Corridor (300-ft)
- Pull Lane Survey Area
- Access Road Survey Corridor (30-ft)
- Field Survey Not Conducted
- Unbroken Grasslands (Not Surveyed)
- NWI Signature (Not Surveyed)
- NWI Signature

USFWS Easement

- Wetland Easement
- Grassland Easement
- Waterfowl Production Area

Delineated Field Features

- DASK
- Noxious Weed
- Waterbody
- Wetland

Aerial Raptor Survey Points

- Bald Eagle Nest
- Ferruginous Hawk Nest
- Great Horned Owl Nest
- Red-tailed Hawk Nest
- Unknown Nest

- Upland Point
- Structure

N W E S

WEST

Appendix B - Wetland Attributes

Wetlands documented within the Survey Corridor

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 1	PEMC	Sec 25-T151N-R86W	47.86919925	-101.6241491	0.06
Wetland 2	PEMC	Sec 25-T151N-R86W	47.86956896	-101.6341403	6.10
Wetland 3	PEMC	Sec 26-T151N-R86W	47.86944986	-101.6380672	3.07
Wetland 4	PEMC	Sec 27-T151N-R86W	47.86953533	-101.6744757	7.63
Wetland 5a	PEMC	Sec 28-T151N-R86W	47.86967809	-101.6834742	2.20
Wetland 6	PEMA	Sec 28-T151N-R86W	47.8691422	-101.6890747	0.07
Wetland 7	PEMC	Sec 28-T151N-R86W	47.86947108	-101.695123	4.88
Wetland 8	PEMC	Sec 28-T151N-R86W	47.86963759	-101.6991451	0.55
Wetland 9	PEMC	Sec 29-T151N-R86W	47.86960937	-101.7188416	1.26
Wetland 10	PEMC	Sec 30-T151N-R86W	47.86917197	-101.7269471	0.30
Wetland 11	PEMC	Sec 24-T151N-R87W	47.88114859	-101.743957	0.10
Wetland 12	PEMC	Sec 18-T151N-R86W	47.89135574	-101.7429156	0.10
Wetland 13	PEMC	Sec 13-T151N-R87W	47.89549759	-101.7435887	1.88
Wetland 14	PEMA	Sec 19-T151N-R86W	47.88814527	-101.7430868	0.06
Wetland 15	PEMC	Sec 19-T151N-R86W	47.89084803	-101.7428575	0.02
Wetland 16	PEMC	Sec 18-T151N-R86W	47.90250775	-101.7432298	1.55
Wetland 17	PEMC	Sec 19-T151N-R86W	47.89109919	-101.7428906	0.02
Wetland 18	PEMC	Sec 12-T151N-R87W	47.91150916	-101.7433238	0.23
Wetland 19	PEMA	Sec 12-T151N-R87W	47.91894945	-101.7429744	0.15
Wetland 20	PEMC	Sec 12-T151N-R87W	47.91935494	-101.7435863	0.18
Wetland 21	PEMC	Sec 7-T151N-R86W	47.91572305	-101.7433051	0.33
Wetland 22	PEMA	Sec 12-T151N-R87W	47.91809238	-101.7433482	0.07
Wetland 23	PEMC	Sec 1-T151N-R87W	47.92119156	-101.7428609	0.06
Wetland 24	PEMC	Sec 1-T151N-R87W	47.92249931	-101.7434036	1.48
Wetland 25	PEMC	Sec 1-T151N-R87W	47.93194467	-101.7431539	0.21
Wetland 26	PEMA	Sec 25-T152N-R87W	47.96271498	-101.7436481	1.79
Wetland 27	PEMA	Sec 25-T152N-R87W	47.958944	-101.7432389	0.33
Wetland 28	PEMC	Sec 24-T152N-R87W	47.97461693	-101.7432099	0.56
Wetland 29	PEMA	Sec 25-T152N-R87W	47.95077255	-101.7436705	0.15
Wetland 30	PEMC	Sec 24-T152N-R87W	47.97642653	-101.7430074	0.73
Wetland 31	PEMA	Sec 13-T152N-R87W	47.97876771	-101.7430466	0.28
Wetland 32	PEMA	Sec 13-T152N-R87W	47.98395701	-101.7473517	0.21
Wetland 33	PEMA	Sec 13-T152N-R87W	47.98556868	-101.7524191	0.12
Wetland 34	PEMC	Sec 13-T152N-R87W	47.98543525	-101.7625496	3.55
Wetland 36	PEMC	Sec 15-T152N-R87W	47.98488099	-101.8043896	0.41
Wetland 37	PEMC	Sec 15-T152N-R87W	47.9853477	-101.8043212	0.37
Wetland 38	PEMC	Sec 15-T152N-R87W	47.98483103	-101.8071934	0.35
Wetland 39	PEMC	Sec 16-T152N-R87W	47.98981202	-101.8118816	0.86
Wetland 40	PEMA	Sec 9-T152N-R87W	47.99661385	-101.8183689	0.10
Wetland 41	PEMA	Sec 9-T152N-R87W	47.99817678	-101.8206085	0.12
Wetland 42	PEMC	Sec 7-T152N-R87W	47.99966168	-101.8562452	0.93
Wetland 43	PEMC	Sec 8-T152N-R87W	47.99976903	-101.8323533	4.67
Wetland 44	PEMC	Sec 12-T152N-R88W	47.99976069	-101.8761529	1.83
Wetland 45	PEMC	Sec 12-T152N-R88W	47.99974573	-101.8887188	5.88
Wetland 46	PEMA	Sec 11-T152N-R88W	47.99956446	-101.9114901	0.12
Wetland 48	PEMA	Sec 11-T152N-R88W	48.00000229	-101.9130772	0.06
Wetland 49	PEMC	Sec 11-T152N-R88W	48.00021243	-101.9139689	0.03
Wetland 50	PEMA	Sec 11-T152N-R88W	47.99997447	-101.9141085	0.10
Wetland 51	PEMC	Sec 8-T152N-R88W	48.00013655	-101.9773224	0.07

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 53	PEMC	Sec 8-T152N-R88W	48.00004438	-101.9695369	0.62
Wetland 54	PEMA	Sec 7-T152N-R88W	47.99974918	-101.9831716	0.94
Wetland 55	PEMC	Sec 7-T152N-R88W	48.00287921	-101.990809	0.00
Wetland 56	PEMC	Sec 28-T153N-R89W	48.05195898	-102.1378698	0.03
Wetland 57	PEMA	Sec 28-T153N-R89W	48.0519587	-102.1370407	1.66
Wetland 58	PEMA	Sec 28-T153N-R89W	48.051958	-102.1360146	0.22
Wetland 59	PEMCx	Sec 28-T153N-R89W	48.05196425	-102.1351361	0.13
Wetland 60	PEMCx	Sec 28-T153N-R89W	48.05195527	-102.1337531	0.01
Wetland 61	PEMC	Sec 28-T153N-R89W	48.05196413	-102.1316734	0.13
Wetland 63	PEMA	Sec 28-T153N-R89W	48.05197553	-102.1316494	0.45
Wetland 65	PEMA	Sec 28-T153N-R89W	48.05198968	-102.1301554	0.02
Wetland 66	PEMA	Sec 28-T153N-R89W	48.05197599	-102.1298093	0.84
Wetland 67	PEMA	Sec 30-T153N-R89W	48.0519148	-102.1799824	0.38
Wetland 68	PEMC	Sec 25-T153N-R90W	48.05190615	-102.1827422	1.08
Wetland 73	PEMC	Sec 21-T153N-R90W	48.05217545	-102.2538685	0.43
Wetland 75	PEMC	Sec 21-T153N-R90W	48.05213675	-102.2613877	3.07
Wetland 78	PEMC	Sec 30-T153N-R90W	48.04529114	-102.2902954	1.22
Wetland 79a	PEMA	Sec 27-T153N-R91W	48.04531834	-102.3624734	2.78
Wetland 82	PABFx	Sec 26-T153N-R92W	48.04457253	-102.4639106	0.30
Wetland 84	PEMC	Sec 25-T153N-R92W	48.04450707	-102.4577982	0.32
Wetland 85	PEMA	Sec 25-T153N-R92W	48.04451977	-102.460223	0.32
Wetland 87	PEMC	Sec 21-T153N-R92W	48.05572955	-102.5202295	1.50
Wetland 88	PEMC	Sec 20-T153N-R92W	48.05751824	-102.5266369	0.30
Wetland 90	PEMC	Sec 19-T153N-R92W	48.06542245	-102.5547951	4.23
Wetland 91	PEMA	Sec 20-T153N-R92W	48.05860907	-102.5315879	0.31
Wetland 92	PEMC	Sec 13-T153N-R93W	48.07870453	-102.5807156	0.24
Wetland 93	PEMA	Sec 36-T154N-R93W	48.11429796	-102.5809472	1.09
Wetland 94	PEMA	Sec 36-T154N-R93W	48.11288944	-102.580788	0.39
Wetland 96	PEMA	Sec 14-T154N-R93W	48.15758864	-102.5911011	0.09
Wetland 98	PEMC	Sec 8-T154N-R93W	48.17178665	-102.6760732	2.11
Wetland 99	PEMA	Sec 12-T154N-R94W	48.17782483	-102.7096424	0.11
Wetland 100	PEMC	Sec 1-T154N-R94W	48.19077742	-102.7098349	0.47
Wetland 102	PEMC	Sec 36-T155N-R94W	48.21051701	-102.7096797	0.05
Wetland 103	PEMA	Sec 17-T155N-R94W	48.25326625	-102.7959904	0.22
Wetland 105	PEMC	Sec 20-T156N-R94W	48.3156798	-102.7970653	<0.01
Wetland 106	PEMC	Sec 32-T156N-R94W	48.29108061	-102.7964269	3.73
Wetland 107	PEMA	Sec 32-T156N-R94W	48.29733912	-102.7962996	1.06
Wetland 108	PEMA	Sec 5-T155N-R94W	48.2723506	-102.7969318	0.04
Wetland 109	PEMC	Sec 31-T152N-R86W	47.94034592	-101.7430321	1.32
Wetland 110	PEMC	Sec 31-T152N-R86W	47.94694493	-101.7430012	0.04
Wetland 111	PEMA	Sec 36-T152N-R87W	47.93831935	-101.74392	0.06
Wetland 112	PEMC	Sec 36-T152N-R87W	47.93689423	-101.7438357	0.28
Wetland 113	PEMC	Sec 31-T152N-86W	47.93611023	-101.7428085	0.11
Wetland 114	PEMA	Sec 36-T152N-R87W	47.93548321	-101.743854	0.21
Wetland 115	PEMC	Sec 1-T151N-R87W	47.93395018	-101.7437589	0.61
Wetland 116	PEMA	Sec 31-T149N-R81W	47.68455628	-101.0868907	0.09
Wetland 120	PEMC	Sec 13-T151N-R87W	47.90242938	-101.7439959	0.02
Wetland 121	PEMC	Sec 1-T151N-R87W	47.92888441	-101.7429623	0.03
Wetland 123	PEMC	Sec 25-T152N-R87W	47.95396072	-101.7439524	0.05
Wetland 137	PABFx	Sec 8-T155N-R94W	48.25554861	-102.7959567	0.60

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 142	PEMC	Sec 20-T156N-R94W	48.3109255	-102.7970521	<0.01
Wetland 145	PEMC	Sec 30-T151N-R85W	47.86309425	-101.6048	0.83
Wetland 147	PEMA	Sec 31-T151N-R85W	47.86012116	-101.6050041	0.07
Wetland 148	PEMC	Sec 31-T151N-R85W	47.85954155	-101.6042839	0.86
Wetland 150	PEMC	Sec 31-T151N-R85W	47.85531517	-101.6047614	0.36
Wetland 151	PEMC	Sec 31-T151N-R85W	47.8528629	-101.604786	0.65
Wetland 152	PEMA	Sec 31-T151N-R85W	47.85037435	-101.6045896	0.47
Wetland 153	PEMC	Sec 31-T151N-R85W	47.84899371	-101.6048808	0.52
Wetland 154	PEMC	Sec 6-T150N-R85W	47.83936933	-101.6044675	1.69
Wetland 155	PEMC	Sec 6-T150N-R85W	47.83666413	-101.6041624	1.07
Wetland 156	PEMC	Sec 6-T150N-R85W	47.8390184	-101.6037982	<0.01
Wetland 157	PEMA	Sec 6-T150N-R85W	47.84077205	-101.6039129	0.15
Wetland 158	PEMA	Sec 6-T150N-R85W	47.8418283	-101.6042512	0.79
Wetland 162	PEMA	Sec 6-T150N-R85W	47.84500157	-101.6038592	0.04
Wetland 187	PEMA	Sec 7-T150N-R85W	47.83096657	-101.6046387	0.75
Wetland 188	PEMA	Sec 20-T150N-R85W	47.79697596	-101.5742279	0.38
Wetland 189	PEMC	Sec 20-T150N-R85W	47.79716257	-101.5835028	3.27
Wetland 190	PEMC	Sec 21-T150N-R85W	47.79735552	-101.5575056	0.80
Wetland 192	PEMC	Sec 21-T150N-R85W	47.79715621	-101.5530899	1.37
Wetland 193a	PEMC	Sec 22-T150N-R85W	47.79713584	-101.5482917	0.50
Wetland 194	PEMA	Sec 22-T150N-R85W	47.79681591	-101.5432543	0.02
Wetland 198	PEMC	Sec 24-T150N-R85W	47.79740104	-101.4980258	1.38
Wetland 199	PEMC	Sec 24-T150N-R85W	47.79730527	-101.4898002	6.79
Wetland 200	PEMA	Sec 19-T150N-R84W	47.79713874	-101.4661996	0.03
Wetland 202	PEMC	Sec 21-T150N-R84W	47.79719973	-101.424119	2.17
Wetland 203	PEMC	Sec 24-T150N-R84W	47.79745529	-101.359048	1.58
Wetland 204	PEMA	Sec 24-T150N-R84W	47.79782183	-101.3606424	0.07
Wetland 205	PEMA	Sec 24-T150N-R84W	47.79756844	-101.3674776	0.46
Wetland 206a	PEMC	Sec 24-T150N-R84W	47.79748914	-101.3710789	2.89
Wetland 207	PABF	Sec 24-T150N-R84W	47.79732547	-101.377071	2.98
Wetland 210	PEMC	Sec 20-T150N-R83W	47.79303693	-101.3253123	2.95
Wetland 216	PEMC	Sec 21-T150N-R84W	47.79760229	-101.436102	0.39
Wetland 217	PEMC	Sec 21-T150N-R84W	47.79729441	-101.4323432	1.64
Wetland 218	PABF	Sec 19-T150N-R83W	47.79770949	-101.3556382	1.88
Wetland 219	PEMC	Sec 19-T150N-R83W	47.79707518	-101.3548525	<0.01
Wetland 220	PABF	Sec 19-T150N-R83W	47.79723228	-101.3511788	0.91
Wetland 222	PEMC	Sec 20-T150N-R83W	47.79495868	-101.3252801	3.68
Wetland 223	PEMC	Sec 29-T150N-R83W	47.78099365	-101.3257126	7.28
Wetland 224a	PEMC	Sec 32-T150N-R83W	47.77463861	-101.3255776	2.14
Wetland 225	PEMC	Sec 32-T150N-R83W	47.77329783	-101.325223	0.45
Wetland 226	PEMC	Sec 32-T150N-R83W	47.77219857	-101.3262195	0.14
Wetland 227	PEMC	Sec 32-T150N-R83W	47.77132563	-101.3256949	0.18
Wetland 228	PEMC	Sec 32-T150N-R83W	47.76872931	-101.3171527	0.50
Wetland 229	PEMA	Sec 34-T150N-R83W	47.7682309	-101.2891355	0.18
Wetland 231	PEMA	Sec 2-T149N-R83W	47.7576215	-101.2716128	0.07
Wetland 232	PEMC	Sec 34-T150N-R83W	47.76844659	-101.2831264	0.75
Wetland 233	PEMC	Sec 3-T149N-R83W	47.75454317	-101.2723664	1.63
Wetland 234	PEMC	Sec 34-T150N-R83W	47.76661752	-101.2722244	1.16
Wetland 235	PEMC	Sec 35-T150N-R83W	47.76633708	-101.2716787	0.58
Wetland 236	PEMC	Sec 2-T149N-R83W	47.75405654	-101.2706326	3.02

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 237	PEMC	Sec 2-T149N-R83W	47.75370652	-101.2628557	1.05
Wetland 238	PABF	Sec 6-T149N-R82W	47.7542095	-101.2272198	3.94
Wetland 240	PEMC	Sec 3-T149N-R82W	47.75196026	-101.1547754	1.13
Wetland 243	PEMA	Sec 3-T149N-R82W	47.7543823	-101.1599093	0.07
Wetland 245	PEMA	Sec 30-T151N-R85W	47.86750527	-101.6038807	<0.01
Wetland 248	PEMA	Sec 16-T146N-R83W	47.46998172	-101.2515576	0.05
Wetland 250	PEMA	Sec 16-T146N-R83W	47.46845297	-101.2529	0.01
Wetland 251	PEMA	Sec 2-T146N-R83W	47.48845384	-101.2175402	0.20
Wetland 252a	PEMAx	Sec 6-T146N-R82W	47.49879107	-101.1718372	0.03
Wetland 253	PEMC	Sec 6-T146N-R82W	47.4986499	-101.17511	0.69
Wetland 255	PEMC	Sec 11-T146N-R83W	47.48209965	-101.2275809	0.02
Wetland 258	PEMC	Sec 11-T146N-R83W	47.48575513	-101.2216165	1.85
Wetland 263	PEMC	Sec 32-T150N-R83W	47.77677368	-101.3257843	3.55
Wetland 267	PEMC	Sec 19-T150N-R84W	47.79770169	-101.4711545	0.07
Wetland 274	PEMC	Sec 6-T150N-R85W	47.8477251	-101.6039903	0.68
Wetland 275	PEMC	Sec 25-T151N-R86W	47.86951583	-101.6202585	6.05
Wetland 428	PEMC	Sec 36-T146N-R84W	47.4235374	-101.3316524	0.51
Wetland 429	PEMA	Sec 30-T151N-R86W	47.86961912	-101.7391151	0.04
Wetland 433	PEMA	Sec 30-T151N-R86W	47.86962817	-101.7395567	0.06
Wetland 435	PEMA	Sec 25-T151N-R87W	47.87638289	-101.7436229	0.76
Wetland 436	PEMA	Sec 25-T151N-R87W	47.87247882	-101.7432252	0.07
Wetland 438	PEMC	Sec 1-T151N-R87W	47.92168081	-101.7435753	0.56
Wetland 439	PEMC	Sec 14-T152N-R87W	47.98550836	-101.7653576	0.96
Wetland 441	PEMA	Sec 13-T151N-R87W	47.89666186	-101.7440221	0.03
Wetland 442	PEMA	Sec 13-T151N-R87W	47.8981934	-101.7436056	0.53
Wetland 444	PEMA	Sec 24-T152N-R87W	47.96365614	-101.7436557	0.07
Wetland 448	PEMA	Sec 8-T152N-R87W	47.99954237	-101.8475754	0.46
Wetland 450	PEMC	Sec 9-T152N-R88W	47.99954847	-101.9526968	0.26
Wetland 451	PEMA	Sec 9-T152N-R88W	48.00014812	-101.9502818	0.12
Wetland 452	PEMC	Sec 9-T152N-R88W	48.00005224	-101.9479883	0.59
Wetland 453	PEMA	Sec 10-T152N-R88W	48.0000918	-101.9306994	0.24
Wetland 457	PEMC	Sec 8-T152N-R88W	47.99966089	-101.9580489	0.06
Wetland 459	PEMA	Sec 7-T152N-R88W	48.00685749	-101.9901453	0.02
Wetland 461	PEMA	Sec 7-T152N-R88W	48.00382182	-101.9896299	0.05
Wetland 463	PEMA	Sec 7-T152N-R88W	48.00012728	-101.985732	0.30
Wetland 465	PEMA	Sec 7-T152N-R88W	47.99996289	-101.9808763	0.45
Wetland 466	PEMA	Sec 7-T152N-R88W	47.99962506	-101.9797589	0.19
Wetland 467	PEMA	Sec 32-T153N-R88W	48.0304419	-102.008488	0.30
Wetland 468	PEMA	Sec 33-T153N-R88W	48.02706081	-101.9976973	1.51
Wetland 470	PEMA	Sec 8-T152N-R88W	47.99975558	-101.9687255	0.08
Wetland 471	PEMA	Sec 6-T152N-R88W	48.01503066	-101.9903347	0.11
Wetland 495	PEMA	Sec 30-T153N-R90W	48.04477592	-102.2989638	0.11
Wetland 496	PEMA	Sec 30-T153N-R90W	48.04472081	-102.2961994	0.05
Wetland 497	PEMA	Sec 30-T153N-R90W	48.04487321	-102.2926381	0.02
Wetland 499	PEMA	Sec 30-T153N-R90W	48.04498134	-102.2955358	0.12
Wetland 500	PEMA	Sec 30-T153N-R90W	48.04473963	-102.292897	0.06
Wetland 510	PEMA	Sec 27-T153N-R92W	48.0448677	-102.5014801	0.08
Wetland 515	PEMC	Sec 36-T154N-R93W	48.11792751	-102.5805138	0.93
Wetland 524	PEMC	Sec 7-T154N-R93W	48.17179656	-102.6911011	0.64
Wetland 525	PEMC	Sec 7-T154N-R93W	48.17183968	-102.6885781	0.42

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 526	PEMC	Sec 7-T154N-R93W	48.17164199	-102.6864492	0.36
Wetland 527	PEMC	Sec 7-T154N-R93W	48.17181153	-102.69393	0.28
Wetland 528	PEMC	Sec 7-T154N-R93W	48.17168388	-102.6832505	0.45
Wetland 529	PEMA	Sec 1-T154N-R94W	48.18858811	-102.7101007	0.12
Wetland 541	PEMAx	Sec 17-T156N-R94W	48.33541398	-102.7996945	0.26
Wetland 544	PEMCx	Sec 33-T157N-R94W	48.38578214	-102.8413832	0.15
Wetland 545	PEMC	Sec 33-T157N-R94W	48.38449354	-102.8404238	1.17
Wetland 546	PEMA	Sec 1-T156N-R95W	48.37093268	-102.8294381	0.01
Wetland 547	PEMA	Sec 6-T156N-R94W	48.3603035	-102.8208205	0.04
Wetland 553	PEMA	Sec 6-T150N-R85W	47.84534106	-101.6043892	0.09
Wetland 560	PEMA	Sec 6-T150N-R85W	47.84353487	-101.6043759	0.19
Wetland 561	PEMA	Sec 6-T150N-R85W	47.84271158	-101.6046394	0.10
Wetland 562	PEMA	Sec 6-T150N-R85W	47.84680627	-101.6044468	0.62
Wetland 563	PEMA	Sec 18-T150N-R85W	47.81630219	-101.6043187	0.47
Wetland 564	PEMA	Sec 18-T150N-R85W	47.81525424	-101.6047575	0.20
Wetland 569	PEMC	Sec 23-T145N-R84W	47.36073828	-101.3344664	0.05
Wetland 570	PEMA	Sec 24-T145N-R84W	47.36072524	-101.333894	0.58
Wetland 571	PEMC	Sec 25-T145N-R84W	47.35591422	-101.3340049	0.52
Wetland 572	PEMC	Sec 36-T146N-R84W	47.41634203	-101.3339516	0.42
Wetland 573	PEMC	Sec 36-T146N-R84W	47.4184295	-101.3340058	2.09
Wetland 574	PEMC	Sec 36-T146N-R84W	47.42082974	-101.3339459	0.40
Wetland 575	PEMC	Sec 35-T146N-R84W	47.41765599	-101.334689	0.07
Wetland 576	PEMC	Sec 36-T146N-R84W	47.42407856	-101.3313714	0.01
Wetland 577	PEMC	Sec 20-T146N-R83W	47.45787666	-101.2731315	0.53
Wetland 578	PEMC	Sec 20-T146N-R83W	47.44824749	-101.2894771	0.02
Wetland 579	PEMC	Sec 20-T146N-R83W	47.4474743	-101.2911679	0.35
Wetland 580	PEMC	Sec 19-T146N-R83W	47.44716307	-101.2923629	0.41
Wetland 581	PEMC	Sec 19-T146N-R83W	47.44645342	-101.2935212	0.23
Wetland 582	PEMC	Sec 19-T146N-R83W	47.44578343	-101.2952254	0.03
Wetland 583	PEMC	Sec 30-T146N-R83W	47.44269013	-101.2993617	0.58
Wetland 584	PEMC	Sec 30-T146N-R83W	47.44112938	-101.3019843	0.77
Wetland 585	PEMC	Sec 1-T146N-R83W	47.49839397	-101.1927569	1.28
Wetland 587	PEMC	Sec 2-T146N-R83W	47.49123088	-101.2108113	0.24
Wetland 588	PABF	Sec 2-T146N-R83W	47.49339445	-101.2075784	5.62
Wetland 589	PEMC	Sec 5-T146N-R82W	47.49965126	-101.15809	0.51
Wetland 590	PEMC	Sec 6-T146N-R82W	47.49867274	-101.1637747	3.59
Wetland 591	PEMC	Sec 33-T147N-R82W	47.5104579	-101.1406223	0.33
Wetland 592	PEMA	Sec 33-T147N-R82W	47.51359304	-101.1356271	0.17
Wetland 593	PEMA	Sec 25-T148N-R82W	47.61775401	-101.0788402	0.20
Wetland 594	PEMA	Sec 24-T148N-R82W	47.6307611	-101.077895	0.31
Wetland 595	PEMAx	Sec 23-T148N-R82W	47.63105127	-101.0782545	0.12
Wetland 597	PABF	Sec 1-T148N-R82W	47.66501027	-101.0778638	0.24
Wetland 598	PEMC	Sec 2-T148N-R82W	47.66480631	-101.0784389	1.00
Wetland 600	PEMC	Sec 3-T149N-R82W	47.74774574	-101.1479159	0.36
Wetland 601	PABF	Sec 29-T150N-R83W	47.77831662	-101.3252733	0.61
Wetland 602	PEMC	Sec 29-T150N-R83W	47.78679626	-101.3256917	1.25
Wetland 603	PEMA	Sec 29-T150N-R83W	47.78845572	-101.3251502	0.25
Wetland 604	PABF	Sec 22-T150N-R84W	47.79720255	-101.4070928	3.26
Wetland 605	PEMA	Sec 22-T150N-R84W	47.79704163	-101.4035087	0.01
Wetland 606	PABF	Sec 22-T150N-R84W	47.79744856	-101.4004487	1.67

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 607	PEMC	Sec 23-T150N-R84W	47.79780159	-101.3940607	0.28
Wetland 608	PEMC	Sec 23-T150N-R84W	47.79764216	-101.3913945	1.20
Wetland 609	PEMC	Sec 23-T150N-R84W	47.79747024	-101.3833642	1.74
Wetland 610	PEMA	Sec 24-T150N-R84W	47.79761327	-101.3684624	0.26
Wetland 611	PEMC	Sec 21-T150N-R84W	47.79760365	-101.422185	0.17
Wetland 612	PEMC	Sec 21-T150N-R84W	47.7977269	-101.4282573	0.61
Wetland 613	PEMC	Sec 23-T150N-R85W	47.79731344	-101.5230382	0.95
Wetland 614	PEMA	Sec 24-T150N-R85W	47.79704773	-101.4936313	0.48
Wetland 615	PEMC	Sec 7-T150N-R85W	47.82755322	-101.6037919	0.03
Wetland 616	PEMC	Sec 7-T150N-R85W	47.82689555	-101.6038749	0.08
Wetland 618	PEMC	Sec 7-T150N-R85W	47.81989576	-101.6041703	1.78
Wetland 619	PEMC	Sec 25-T151N-R86W	47.86994835	-101.6474839	0.02
Wetland 620	PEMC	Sec 28-T151N-R86W	47.86972626	-101.6917733	1.67
Wetland 621	PEMA	Sec 28-T151N-R86W	47.8691961	-101.6890389	0.01
Wetland 622	PEMC	Sec 28-T151N-R86W	47.86990658	-101.6890787	0.01
Wetland 623	PEMC	Sec 29-T151N-R86W	47.86965354	-101.7026726	0.21
Wetland 624	PEMC	Sec 29-T151N-R86W	47.86938133	-101.7149515	2.13
Wetland 626	PEMA	Sec 30-T151N-R86W	47.86937572	-101.7410967	0.03
Wetland 628	PEMA	Sec 16-T152N-R87W	47.98571953	-101.811302	0.03
Wetland 629	PEMA	Sec 30-T151N-R86W	47.86932899	-101.74305	0.02
Wetland 631	PEMC	Sec 30-T151N-R86W	47.86968312	-101.7266935	0.17
Wetland 638	PEMC	Sec 23-T148N-R82W	47.62694526	-101.0787042	0.94
Wetland 639	PEMA	Sec 11-T149N-R82W	47.73761574	-101.1384644	0.52
Wetland 640	PABF	Sec 11-T149N-R82W	47.735199	-101.1365963	4.44
Wetland 641	PEMC	Sec 11-T149N-R82W	47.73630728	-101.1380571	0.32
Wetland 642	PEMC	Sec 3-T149N-R82W	47.74924317	-101.1500225	0.31
Wetland 643	PABFh	Sec 5-T149N-R82W	47.75426331	-101.2002799	0.68
Wetland 644	PABF	Sec 33-T150N-R83W	47.76845836	-101.3138705	2.61
Wetland 645	PEMC	Sec 32-T150N-R83W	47.76825788	-101.3156936	0.72
Wetland 650	PEMC	Sec 25-T151N-R87W	47.86915384	-101.7437001	0.07
Wetland 664	PABFx	Sec 19-T146N-R83W	47.44523543	-101.295267	0.19
Wetland 680	PEMC	Sec 2-T146N-R83W	47.49079529	-101.2129234	0.78
Wetland 687	PEMC	Sec 2-T147N-R82W	47.58433981	-101.0788435	1.89
Wetland 689	PEMA	Sec 35-T148N-R82W	47.59528435	-101.0783477	0.28
Wetland 690	PEMA	Sec 35-T148N-R82W	47.59298298	-101.0788871	0.44
Wetland 692	PEMA	Sec 35-T148N-R82W	47.59810584	-101.0785117	0.17
Wetland 693	PEMA	Sec 35-T148N-R82W	47.60073751	-101.0787407	0.05
Wetland 694	PEMA	Sec 36-T148N-R82W	47.5998363	-101.0778936	0.03
Wetland 698	PEMC	Sec 33-T147N-R82W	47.51115674	-101.1408454	0.01
Wetland 702	PEMC	Sec 22-T147N-R82W	47.53454111	-101.1052155	1.56
Wetland 704	PEMC	Sec 11-T147N-R82W	47.5634806	-101.0786823	0.64
Wetland 709	PEMC	Sec 25-T148N-R82W	47.60882825	-101.0786801	1.70
Wetland 715	PEMC	Sec 24-T148N-R82W	47.6252971	-101.0778934	0.36
Wetland 718	PEMC	Sec 23-T148N-R82W	47.62517678	-101.0785632	1.05
Wetland 722	PEMA	Sec 14-T148N-R82W	47.63248576	-101.0786484	0.11
Wetland 724	PEMA	Sec 14-T148N-R82W	47.63341411	-101.0786115	0.23
Wetland 728	PEMC	Sec 13-T148N-R82W	47.64599352	-101.0778441	0.01
Wetland 729	PABFh	Sec 14-T148N-R82W	47.64642906	-101.0785894	1.28
Wetland 734	PEMC	Sec 31-T149N-R81W	47.67646989	-101.0812791	0.24
Wetland 735	PEMC	Sec 31-T149N-R81W	47.67781589	-101.0813478	0.51

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 737	PEMC	Sec 31-T149N-R81W	47.67891637	-101.0819288	0.14
Wetland 744	PEMA	Sec 11-T149N-R82W	47.73946677	-101.1402541	0.16
Wetland 749	PEMC	Sec 5-T149N-R82W	47.75392477	-101.2043028	1.62
Wetland 750	PEMC	Sec 5-T149N-R82W	47.75359034	-101.2026716	0.01
Wetland 753	PEMC	Sec 33-T150N-R83W	47.76816913	-101.2991043	0.18
Wetland 815	PEMC	Sec 35-T146N-R84W	47.41616673	-101.3346514	0.11
Wetland 825	PEMA	Sec 20-T150N-R85W	47.79740071	-101.5813991	0.51
Wetland 826	PEMC	Sec 18-T150N-R85W	47.81466413	-101.6047628	0.23
Wetland 827	PEMC	Sec 7-T150N-R85W	47.82306282	-101.6042406	2.50
Wetland 828	PEMA	Sec 7-T150N-R85W	47.82664335	-101.6047386	0.75
Wetland 829	PEMC	Sec 25-T151N-R86W	47.86965843	-101.6291472	1.11
Wetland 831	PEMC	Sec 8-T152N-R87W	47.99943512	-101.8413803	0.25
Wetland 832	PEMA	Sec 8-T152N-R87W	48.00010913	-101.8415249	0.04
Wetland 833	PEMC	Sec 8-T152N-R87W	48.0000128	-101.8471042	0.44
Wetland 834	PEMC	Sec 8-T152N-R87W	47.99943616	-101.8497169	0.46
Wetland 835	PEMA	Sec 12-T152N-R88W	47.99956292	-101.8850976	0.09
Wetland 836	PEMA	Sec 12-T152N-R88W	47.99962222	-101.885415	0.11
Wetland 837	PEMC	Sec 10-T152N-R88W	48.00000069	-101.9220414	5.57
Wetland 838	PEMC	Sec 10-T152N-R88W	48.00017737	-101.9196474	0.03
Wetland 839	PEMA	Sec 9-T152N-R88W	47.99962607	-101.9500702	0.37
Wetland 840	PEMC	Sec 9-T152N-R88W	48.00022226	-101.9562854	0.03
Wetland 841	PEMC	Sec 9-T152N-R88W	47.99975713	-101.957286	1.21
Wetland 842	PEMA	Sec 8-T152N-R88W	47.99955209	-101.9602379	0.25
Wetland 843	PEMC	Sec 8-T152N-R88W	47.99957784	-101.9613632	0.28
Wetland 844	PEMA	Sec 8-T152N-R88W	47.99944456	-101.9713096	0.02
Wetland 845	PEMC	Sec 8-T152N-R88W	47.99958575	-101.9751955	0.41
Wetland 846	PEMA	Sec 8-T152N-R88W	47.99950045	-101.9769376	0.05
Wetland 847	PEMA	Sec 7-T152N-R88W	48.00080637	-101.989737	0.33
Wetland 848	PEMA	Sec 7-T152N-R88W	48.002818	-101.9905821	0.03
Wetland 849	PEMA	Sec 6-T152N-R88W	48.01464905	-101.9898557	0.01
Wetland 850	PEMA	Sec 33-T153N-R88W	48.03003294	-102.0013428	0.29
Wetland 860	PEMC	Sec 28-T153N-R91W	48.04513401	-102.3903241	0.30
Wetland 862	PEMA	Sec 26-T153N-R92W	48.04499514	-102.4751577	0.05
Wetland 863	PEMC	Sec 26-T153N-R92W	48.04524876	-102.4828671	0.50
Wetland 865	PEMA	Sec 27-T153N-R92W	48.04538709	-102.4967792	0.04
Wetland 866	PEMA	Sec 27-T153N-R92W	48.04468244	-102.4988388	0.06
Wetland 903	PEMA	Sec 10-T154N-R93W	48.17158829	-102.6163654	0.02
Wetland 905	PEMC	Sec 8-T154N-R93W	48.17213325	-102.6701424	0.29
Wetland 907	PEMC	Sec 7-T154N-R93W	48.1714979	-102.6814099	0.57
Wetland 908	PEMC	Sec 7-T154N-R93W	48.17176737	-102.6903113	1.56
Wetland 909	PEMA	Sec 7-T154N-R93W	48.17217487	-102.693192	0.06
Wetland 910	PEMC	Sec 7-T154N-R93W	48.17172235	-102.696303	0.71
Wetland 912	PEMC	Sec 1-T154N-R94W	48.19275698	-102.709117	0.06
Wetland 913	PEMA	Sec 36-T155N-R94W	48.19758635	-102.7099538	0.68
Wetland 915	PEMC	Sec 21-T155N-R94W	48.22760001	-102.7740993	0.79
Wetland 916	PEMA	Sec 20-T155N-R94W	48.23143896	-102.7864955	0.00
Wetland 919	PEMA	Sec 29-T156N-R94W	48.30133074	-102.7960106	0.13
Wetland 920	PEMC	Sec 29-T156N-R94W	48.30332233	-102.7962417	1.39
Wetland 921	PEMC	Sec 29-T156N-R94W	48.31049362	-102.7964647	0.46
Wetland 922	PEMC	Sec 20-T156N-R94W	48.31574394	-102.7964148	0.23

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Wetland 923	PEMA	Sec 20-T156N-R94W	48.31769042	-102.7958557	0.01
Wetland 924	PEMC	Sec 20-T156N-R94W	48.3222351	-102.7964246	0.22
Wetland 925	PEMCx	Sec 17-T156N-R94W	48.33418226	-102.7973453	1.49
Wetland 926	PEMAx	Sec 6-T156N-R94W	48.3630107	-102.8226227	0.05
Wetland 928	PEMC	Sec 21-T150N-R84W	47.79731713	-101.4306657	1.58
Wetland 1308	PEMA	Sec 6-T150N-R85W	47.83449449	-101.6043644	1.34
Wetland 1309	PEMA	Sec 6-T150N-R85W	47.8410947	-101.6049324	0.13
Wetland 1310	PEMC	Sec 6-T150N-R85W	47.84594734	-101.6039397	0.07
Wetland 1312	PEMCx	Sec 15-T144N-R84W	47.2852876	-101.3212961	0.04
Wetland 1316	PEMA	Sec 16-T144N-R84W	47.28542127	-101.3220975	0.14
Wetland 1321	PEMC	Sec 15-T146N-R83W	47.47298706	-101.2449819	0.08
Wetland 1324	PEMCx	Sec 6-T146N-R82W	47.49820618	-101.169828	0.04
Wetland 1332	PEMAx	Sec 1-T147N-R82W	47.58444095	-101.0781318	0.10
Wetland 1333	PEMA	Sec 11-T148N-R82W	47.65106307	-101.0791454	0.09
Wetland 1334	PEMC	Sec 24-T149N-R82W	47.70739487	-101.1076136	0.29
Wetland 1335	PEMC	Sec 24-T149N-R82W	47.70976533	-101.1099107	13.61
Wetland 1336	PEMC	Sec 24-T149N-R82W	47.71697889	-101.1129458	2.18
Wetland 1337	PEMA	Sec 13-T149N-R82W	47.72551675	-101.1167584	0.20
Wetland 1339	PABF	Sec 11-T149N-R82W	47.74336936	-101.1428279	1.57
Wetland 1342	PEMC	Sec 14-T149N-R82W	47.72937883	-101.1272989	0.01
Wetland 1349	PEMC	Sec 5-T149N-R82W	47.75419448	-101.1935868	0.24
Wetland 1350	PEMC	Sec 5-T149N-R82W	47.75366241	-101.1975748	0.35
Wetland 1353	PEMA	Sec 4-T149N-R82W	47.75433416	-101.1674628	0.18
Wetland 1354	PEMA	Sec 4-T149N-R82W	47.75417194	-101.1705664	1.43
Wetland 1355	PEMC	Sec 4-T149N-R82W	47.7538312	-101.17266	0.28
Wetland 1356	PEMA	Sec 4-T149N-R82W	47.75416719	-101.1769636	1.01
Wetland 1357	PEMC	Sec 4-T149N-R82W	47.7536165	-101.1794593	0.05
Wetland 1358	PEMC	Sec 4-T149N-R82W	47.75430322	-101.179692	0.21
Wetland 1359	PABF	Sec 6-T149N-R82W	47.75429706	-101.2136474	0.35
Wetland 1360	PEMC	Sec 6-T149N-R82W	47.75374855	-101.2138599	0.51
Wetland 1361	PEMC	Sec 6-T149N-R82W	47.75372411	-101.2175323	0.90
Wetland 1366	PEMC	Sec 22-T150N-R84W	47.79760961	-101.4136099	0.69
Wetland 1367	PABF	Sec 22-T150N-R84W	47.79750383	-101.4192257	2.18
Wetland 1370	PEMA	Sec 31-T151N-R85W	47.85380387	-101.603846	0.01
Wetland 1371	PEMC	Sec 30-T151N-R85W	47.86988127	-101.6043606	0.30
Wetland 1373	PEMC	Sec 24-T151N-R87W	47.89095852	-101.7436144	0.22
Wetland 1374	PEMC	Sec 24-T151N-R87W	47.88815653	-101.7432049	0.24
Wetland 1375	PEMA	Sec 24-T151N-R87W	47.88550255	-101.7437844	1.90
Wetland 1376	PEMA	Sec 7-T151N-R86W	47.91108528	-101.7428042	0.00
Wetland 1382	PEMC	Sec 31-T153N-R88W	48.03063851	-102.0400783	0.45
Wetland 1383	PEMA	Sec 32-T153N-R88W	48.03065983	-102.0237041	0.07
Wetland 1391	PEMA	Sec 26-T153N-R89W	48.04509486	-102.0776643	0.17
Wetland 1392	PEMA	Sec 26-T153N-R89W	48.04463899	-102.0777295	0.12
Wetland 1394	PEMA	Sec 26-T153N-R89W	48.04456	-102.0814888	0.32
Wetland 1395	PEMA	Sec 26-T153N-R89W	48.0446645	-102.0836728	0.09
Wetland 1399	PEMC	Sec 20-T153N-R89W	48.05248963	-102.1473075	0.23
Wetland 1400	PEMC	Sec 20-T153N-R89W	48.05232827	-102.1486499	0.21
Wetland 1401	PEMA	Sec 21-T153N-R89W	48.05246775	-102.1345661	0.45
Wetland 1403	PEMAx	Sec 21-T153N-R89W	48.0523734	-102.131747	0.05
Wetland 1405	PEMCx	Sec 21-T153N-R89W	48.05235186	-102.1311362	0.09

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 1406	PEMC	Sec 20-T153N-R89W	48.05238739	-102.149444	0.21
Wetland 1410	PEMC	Sec 19-T153N-R89W	48.05232625	-102.1610096	0.44
Wetland 1417	PEMC	Sec 23-T153N-R90W	48.05234938	-102.210113	0.69
Wetland 1418	PABF	Sec 28-T153N-R90W	48.0516114	-102.2506846	0.58
Wetland 1421	PEMA	Sec 24-T153N-R90W	48.05237404	-102.1965957	0.13
Wetland 1423	PEMC	Sec 28-T153N-R90W	48.05168361	-102.2538965	0.90
Wetland 1424	PABF	Sec 28-T153N-R90W	48.0516351	-102.2565186	0.29
Wetland 1430	PEMA	Sec 30-T153N-R91W	48.04460538	-102.428582	0.04
Wetland 1441	PEMC	Sec 36-T152N-R87W	47.94519036	-101.7436523	0.19
Wetland 1443	PEMC	Sec 32-T152N-R86W	47.94696851	-101.7432198	0.60
Wetland 1448	PEMC	Sec 13-T153N-R93W	48.07407751	-102.5770502	0.13
Wetland 1450	PEMA	Sec 19-T153N-R92W	48.064394	-102.5513563	1.37
Wetland 1451	PEMA	Sec 19-T153N-R92W	48.06427798	-102.5503503	0.87
Wetland 1458	PEMC	Sec 13-T153N-R93W	48.07349266	-102.5765526	0.05
Wetland 1460	PEMA	Sec 17-T155N-R94W	48.24247237	-102.7964887	0.93
Wetland 1464	PEMA	Sec 1-T154N-R94W	48.19631044	-102.7092778	0.14
Wetland 1465	PEMC	Sec 1-T154N-R94W	48.19555411	-102.7095422	1.01
Wetland 1468	PEMC	Sec 12-T154N-R94W	48.17206224	-102.7099255	0.40
Wetland 1469	PEMC	Sec 10-T146N-R83W	47.48094575	-101.230272	4.36
Wetland 1470	PEMC	Sec 14-T149N-R82W	47.72819777	-101.123192	13.06
Wetland 1471	PEMC	Sec 4-T149N-R82W	47.75404317	-101.182319	1.12
Wetland 1472	PEMA	Sec 24-T153N-R90W	48.0524267	-102.1860694	0.49
Wetland 1479	PEMC	Sec 32-T147N-R82W	47.50878997	-101.1434866	1.98
Wetland 1480	PEMC	Sec 33-T147N-R82W	47.51413276	-101.1352472	0.82
Wetland 1481	PABH	Sec 11-T148N-R82W	47.64756018	-101.0788142	2.26
Wetland 1482	PEMA	Sec 11-T149N-R82W	47.73822624	-101.1394365	0.59
Wetland 35a	PEMC	Sec 14-T152N-R87W	47.98499028	-101.7693486	0.69
Wetland 35b	PEMC	Sec 14-T152N-R87W	47.98510624	-101.7720333	0.61
Wetland 35c	PEMC	Sec 14-T152N-R87W	47.98563656	-101.7689459	0.02
Wetland 35d	PEMC	Sec 14-T152N-R87W	47.98534516	-101.7705345	0.78
Wetland 62a	PEMC	Sec 28-T153N-R89W	48.04482203	-102.1253323	1.60
Wetland 62b	PEMC	Sec 28-T153N-R89W	48.04605041	-102.127265	2.51
Wetland 81a	PEMC	Sec 27-T153N-R91W	48.04549519	-102.3746668	2.15
Wetland 81b	PEMC	Sec 27-T153N-R91W	48.04583596	-102.3760646	0.01
Wetland 81c	PEMC	Sec 27-T153N-R91W	48.04549519	-102.3774016	0.43
				Total	**354.2**

N = north, PABF = palustrine aquatic bed semi-permanently flooded, PABFh = palustrine aquatic bed semi-permanently flooded and diked freshwater pond, PABFx = palustrine aquatic bed semi-permanently flooded excavated, PEMA = palustrine emergent temporarily flooded wetland ,PEMAx = palustrine emergent temporarily flooded wetland excavated, PEMC = palustrine emergent seasonally flooded wetland, PEMCx = palustrine emergent seasonally flooded wetland excavated, R = Range, Sec. = Section, T = Township, W = west.

Wetlands located within Project Pull Lanes

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 102	PEMC	Sec 36-T155N-R94W	48.21060997	-102.7096515	0.02
Wetland 119	PEMC	Sec 25-T151N-R87W	47.86826426	-101.7432579	0.09
Wetland 243	PEMA	Sec 3-T149N-R82W	47.75476104	-101.1594433	0.00
Wetland 1315	PEMCx	Sec 22-T144N-R84W	47.28425085	-101.3218524	0.18
Wetland 1316	PEMA	Sec 16-T144N-R84W	47.28504956	-101.3224488	0.49
Wetland 1335	PEMC	Sec 24-T149N-R82W	47.70857042	-101.1103645	0.87
Wetland 1344	PABF	Sec 11-T149N-R82W	47.73310689	-101.1362325	0.17
Wetland 1371	PEMC	Sec 30-T151N-R85W	47.87032959	-101.6044331	0.79
Wetland 1377	PEMC	Sec 9-T152N-R87W	48.00073696	-101.8238416	0.10
Wetland 1378	PEMC	Sec 13-T152N-R87W	47.98534162	-101.7464864	0.22
Wetland 1381	PEMA	Sec 7-T152N-R88W	47.99965569	-101.9916107	0.22
Wetland 1425	PEMA	Sec 29-T153N-R90W	48.04571538	-102.2875217	0.33
Wetland 1468	PEMC	Sec 12-T154N-R94W	48.17194866	-102.7104309	0.18
Wetland 233	PEMC	Sec 3-T149N-R83W	47.75413599	-101.2735777	0.24
Wetland 650	PEMC	Sec 25-T151N-R87W	47.86856171	-101.7435284	1.66
Wetland 39	PEMC	Sec 16-T152N-R87W	47.98959008	-101.8107911	0.04
Wetland 66	PEMA	Sec 21-T153N-R89W	48.05304036	-102.1274853	0.24
Wetland 925	PEMC	Sec 17-T156N-R94W	48.33281923	-102.7948649	0.03
				Total	**5.87**

N = north, PABF = palustrine aquatic bed semi-permanently flooded, PEMA = palustrine emergent temporarily flooded wetland, PEMC = palustrine emergent seasonally flooded wetland, R = Range, Sec. = Section, T = Township, W = west.

Wetlands located within Potential Access Road Survey Corridors

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 5b	PABF	Sec 28-T151N-R86W	47.87106933	-101.6838822	0.01
Wetland 47	PEMC	Sec 10-T152N-R88W	47.99898921	-101.918264	0.04
Wetland 79b	PEMA	Sec 27-T153N-R91W	48.04468991	-102.361734	0.24
Wetland 97	PEMC	Sec 7-T154N-R93W	48.16907037	-102.6980994	0.02
Wetland 104	PEMC	Sec 29-T156N-R94W	48.30399192	-102.8067864	0.02
Wetland 118	PEMC	Sec 30-T151N-R86W	47.86745749	-101.743096	0.04
Wetland 119	PEMC	Sec 25-T151N-R87W	47.86811093	-101.7432005	0.00
Wetland 122	PEMC	Sec 31-T152N-R86W	47.94186539	-101.7395213	0.01
Wetland 124	PABF	Sec 9-T152N-R87W	47.99246088	-101.819325	0.02
Wetland 127	PEMA	Sec 7-T152N-R88W	47.99865568	-101.9837447	0.16
Wetland 128	PEMA	Sec 7-T152N-R88W	48.00710852	-101.9800439	0.01
Wetland 131	PEMC	Sec 28-T153N-R91W	48.04280725	-102.3787411	0.02
Wetland 151	PEMC	Sec 31-T151N-R85W	47.85362398	-101.6060328	0.02
Wetland 191	PEMA	Sec 20-T150N-R85W	47.79004942	-101.572124	0.00
Wetland 192	PEMC	Sec 21-T150N-R85W	47.79612169	-101.5544335	0.04
Wetland 201	PEMA	Sec 21-T150N-R84W	47.79037048	-101.4434235	0.01
Wetland 203b	PEMC	Sec 24-T150N-R84W	47.79675338	-101.35896	0.01
Wetland 206b	PEMC	Sec 24-T150N-R84W	47.79659922	-101.3702362	0.03
Wetland 214	PEMC	Sec 24-T150N-R85W	47.80435105	-101.4862106	0.02
Wetland 221	PEMA	Sec 19-T150N-R83W	47.80244179	-101.336435	0.02
Wetland 224b	PEMC	Sec 32-T150N-R83W	47.77495209	-101.3249564	0.01
Wetland 232	PEMC	Sec 34-T150N-R83W	47.76953483	-101.2835384	0.00
Wetland 236	PEMC	Sec 2-T149N-R83W	47.75467395	-101.2706318	0.18

Name	Classification	Location	Latitude	Longitude	Acres
Wetland 238	PABF	Sec 6-T149N-R82W	47.75341515	-101.2271196	0.20
Wetland 239	PEMC	Sec 10-T149N-R82W	47.74622762	-101.157927	0.41
Wetland 241	PEMC	Sec 10-T149N-R82W	47.7470073	-101.1523282	0.04
Wetland 242	PEMC	Sec 10-T149N-R82W	47.74671119	-101.1502791	0.01
Wetland 252b	PEMA	Sec 6-T146N-R82W	47.49904796	-101.1722776	0.01
Wetland 259	PEMA	Sec 22-T147N-R82W	47.53094623	-101.1186356	0.03
Wetland 260	PEMA	Sec 22-T147N-R82W	47.53095825	-101.1048767	0.04
Wetland 269	PEMC	Sec 24-T150N-R85W	47.80447152	-101.4963106	0.01
Wetland 270	PEMC	Sec 24-T150N-R85W	47.8045451	-101.4964069	0.03
Wetland 271	PABF	Sec 24-T150N-R85W	47.80474572	-101.499159	0.03
Wetland 272	PEMC	Sec 24-T150N-R85W	47.80475794	-101.5000404	0.00
Wetland 824	PEMC	Sec 6-T146N-R82W	47.49935724	-101.1726396	0.07
Wetland 193d	PEMC	Sec 22-T150N-R85W	47.79586159	-101.5500758	0.01
Wetland 193c	PEMC	Sec 22-T150N-R85W	47.79606087	-101.5493821	0.01
Wetland 193b	PEMC	Sec 22-T150N-R85W	47.79669119	-101.5486694	0.02
Wetland 1348	PEMC	Sec 4-T149N-R82W	47.75105553	-101.1849693	0.01
Wetland 1351	PEMC	Sec 4-T149N-R82W	47.74765274	-101.1646405	0.12
Wetland 1462	PEMA	Sec 17-T155N-R94W	48.244368	-102.7951237	0.01
Wetland 1459	PABFx	Sec 11-T154N-R93W	48.169564	-102.6039814	0.10
Wetland 1475	PEMC	Sec 10-T149N-R82W	47.73351167	-101.1432267	0.04
Wetland 1474	PEMC	Sec 11-T149N-R82W	47.73355741	-101.1430611	0.02
Wetland 1476	PEMC	Sec 10-T149N-R82W	47.73990524	-101.1429813	0.08
Wetland 1477	PEMC	Sec 10-T149N-R82W	47.7399967	-101.1309383	0.02
Wetland 1341	PEMC	Sec 13-T149N-R82W	47.72240867	-101.1203008	0.01
Wetland 1340	PEMC	Sec 25-T149N-R82W	47.69464998	-101.1003537	0.05
Wetland 1386	PEMA	Sec 26-T153N-R89W	48.052138	-102.0739767	0.003
Wetland 1479	PEMC	Sec 32-T147N-R82W	47.50660983	-101.1425668	0.15
Wetland 1322	PEMC	Sec 6-T146N-R82W	47.50115654	-101.1709074	0.02
				Total	**2.48**

N = north, PABF = palustrine aquatic bed semi-permanently flooded, PEMA = palustrine emergent temporarily flooded wetland, PEMC = palustrine emergent seasonally flooded wetland, R = Range, Sec. = Section, T = Township, W = west.

Appendix C - Project Field Photographs

Photo 1. View of Wetland 87, facing Northeast.

Photo 2. View of PEMC Wetland 88, facing Southwest.

Photo 3. View of DASK 285 facing Northwest, dominated by little bluestem and needle and thread grass.

Photo 4. View of PEMC Wetland 928 facing West.

Photo 5. View of PEMC Wetland 56 facing West.

Photo 6. View of PEMA Wetland 825, facing Northwest.

Photo 7. View of PABF Wetland 220 facing East.

Photo 8. View of PEMC Wetland 148 facing Northwest.

Photo 9. View of DASK 283, dominated by needle and thread grass, facing South.

Photo 10. View of DASK 278, dominated by needle and thread grass, facing Southeast.

Photo 11. View of DASK 294, dominated by little bluestem, facing Northwest.

Appendix D - Waterbody Attributes

Waterbodies documented within the Survey Corridor

Name	Classification	Location	Latitude	Longitude	Acres
Waterbody 64	Intermittent stream	Sec 28-T153N-R89W	48.05196233	-102.1307593	0.58
Waterbody 70	Intermittent stream	Sec 30-T153N-R89W	48.05193021	-102.1602767	0.05
Waterbody 72	Intermittent stream	Sec 21-T153N-R90W	48.05221616	-102.2503688	0.04
Waterbody 74	Intermittent stream	Sec 21-T153N-R90W	48.05214342	-102.2565017	0.09
Waterbody 80	Intermittent stream	Sec 28-T153N-R91W	48.04548167	-102.3805384	0.20
Waterbody 83	Intermittent stream	Sec 26-T153N-R92W	48.04438704	-102.4625604	0.33
Waterbody 86	Intermittent stream	Sec 18-T153N-R92W	48.07367475	-102.5689908	0.25
Waterbody 89	Intermittent stream	Sec 19-T153N-R92W	48.06510364	-102.5534013	0.58
Waterbody 95	Intermittent stream	Sec 13-T154N-R93W	48.15386472	-102.5875175	0.18
Waterbody 117	Intermittent stream	Sec 16-T146N-R83W	47.46549566	-101.2597219	0.03
Waterbody 130	Intermittent stream	Sec 27-T153N-R90W	48.05167365	-102.2376463	0.22
Waterbody 132	Intermittent stream	Sec 28-T153N-R92W	48.04683949	-102.5152188	0.21
Waterbody 133	Intermittent stream	Sec 28-T153N-R92W	48.049948	-102.5155318	0.45
Waterbody 136	Perennial River	Sec 27-T155N-R94W	48.22000317	-102.7457913	0.03
Waterbody 138	Intermittent stream	Sec 8-T155N-R94W	48.25877234	-102.7958247	0.05
Waterbody 139	Intermittent stream	Sec 8-T155N-R94W	48.26151281	-102.7959883	0.32
Waterbody 140	Intermittent stream	Sec 8-T155N-R94W	48.26955777	-102.7965187	0.64
Waterbody 244	Intermittent stream	Sec 3-T149N-R82W	47.75061299	-101.1523559	0.03
Waterbody 247	Intermittent stream	Sec 16-T146N-R83W	47.46618554	-101.2578144	0.34
Waterbody 276	Intermittent stream	Sec 16-T146N-R83W	47.46715336	-101.2556002	0.78
Waterbody 649	Ephemeral stream	Sec 3-T149N-R82W	47.74992362	-101.1522386	0.04
Waterbody 658	Intermittent stream	Sec 36-T146N-R84W	47.42332434	-101.3318313	0.33
Waterbody 665	Intermittent stream	Sec 19-T146N-R83W	47.44557324	-101.2952396	0.02
Waterbody 668	Intermittent stream	Sec 19-T146N-R83W	47.44542046	-101.2949039	0.14
Waterbody 695	Intermittent stream	Sec 32-T147N-R82W	47.50964047	-101.1429366	0.05
Waterbody 705	Artificial stream	Sec 11-T147N-R82W	47.56062015	-101.0808878	0.58
Waterbody 706	PABF Pond	Sec 25-T148N-R82W	47.60905335	-101.0789316	0.33
Waterbody 816	Intermittent stream	Sec 11-T145N-R84W	47.39035757	-101.3346226	0.04
Waterbody 817	Intermittent stream	Sec 12-T145N-R84W	47.39038134	-101.3339544	0.03
Waterbody 864	Ephemeral stream	Sec 28-T153N-R92W	48.04480849	-102.5051344	0.41
Waterbody 867	Ephemeral stream	Sec 27-T153N-R92W	48.04535055	-102.4882958	0.07
Waterbody 868	Permanent stream	Sec 28-T153N-R92W	48.04468813	-102.5153518	0.13
Waterbody 869	Permanent stream	Sec 28-T153N-R92W	48.04506711	-102.5141486	0.18
Waterbody 914	Perennial River	Sec 27-T155N-R94W	48.21927587	-102.7452594	0.88
Waterbody 927	Perennial River	Sec 33-T157N-R94W	48.38497431	-102.8408463	0.25
Waterbody 1311	Perennial River	Sec 15-T144N-R84W	47.28800758	-101.3213955	10.45
Waterbody 1449	Intermittent stream	Sec 19-T53N-R92W	48.06429604	-102.5507685	0.27
				Total	**19.55**

N = north, PABF = palustrine aquatic bed semi-permanently flooded, R = Range, Sec. = Section, T = Township, W = west.

Waterbodies Documented within Pull Lanes

Name	Classification	Location	Latitude	Longitude	Acres
Waterbody 1313	Permanent River	Sec 15-T144N-R84W	48.28570066	-101.3174583	0.05
Waterbody 868	Permanent stream	Sec 28-T153N-R92W	47.04421252	-102.5156825	0.32
				Total	**0.37**

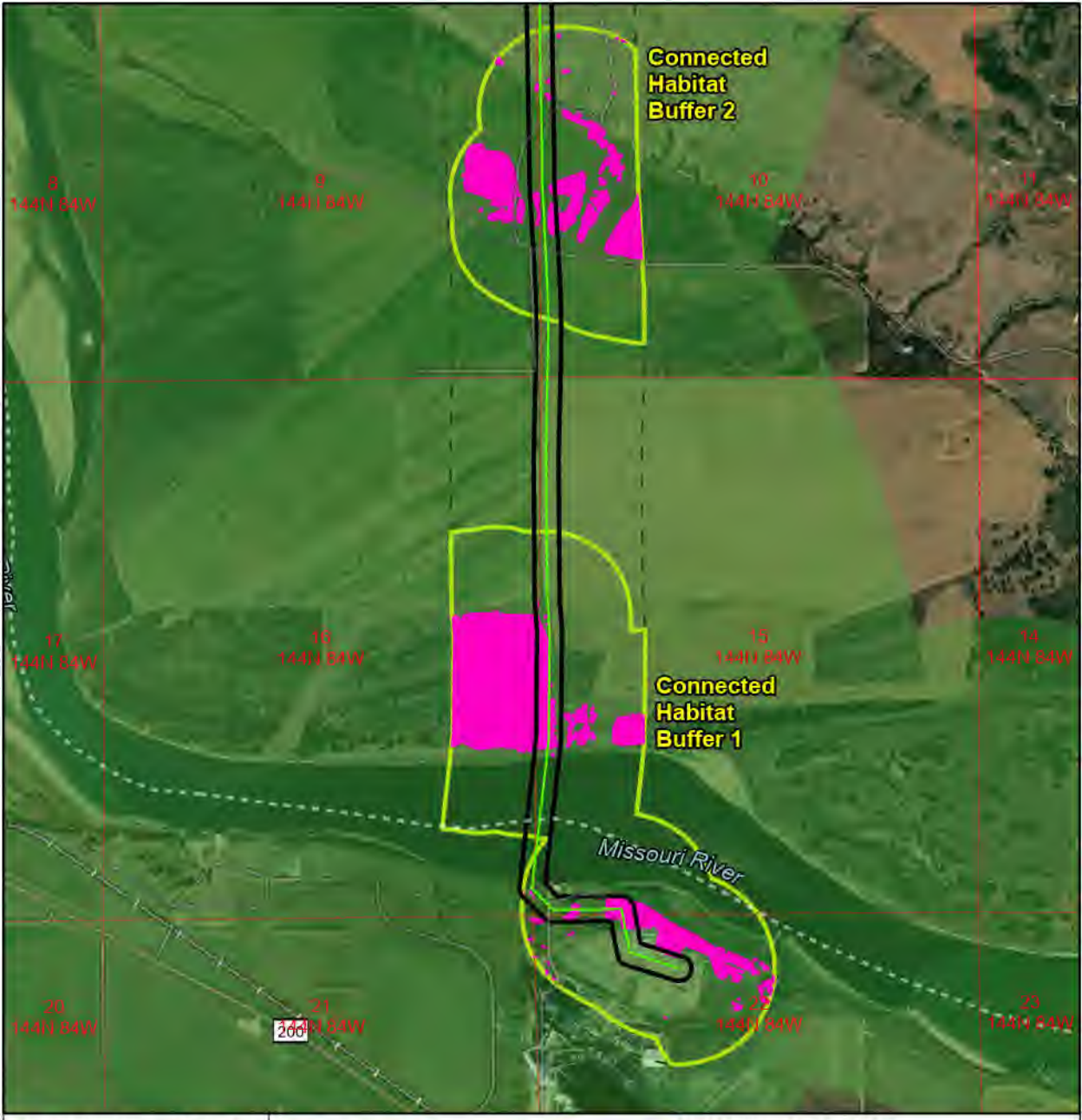
N = north, R = Range, Sec. = Section, T = Township, W = west.

Waterbodies Documented within Potential Access Road Survey Corridors

Name	Classification	Location	Latitude	Longitude	Acres
Waterbody 136	Perennial River	Sec 27-T155N-R94W	48.220247	-102.745433	0.05
Waterbody 257	Intermittent stream	Sec 25-T146N-R84W	47.429854	-101.324182	0.02
Waterbody 276	Intermittent stream	Sec 16-T146N-R83W	47.466378	-101.255893	0.01
				Total	**0.08**

N = north, R = Range, Sec. = Section, T = Township, W = west.

Appendix E - Northern Long-eared Bat Habitat Analysis



Leland Olds Station to Tande 345-kV Transmission Project

Route of Focus

Survey Corridor (300-ft)

1,000-ft Buffer of Survey Corridor

1,000-ft Connected Habitat Buffer

Potential NLEB Summer Roost Habitat

USFWS NLEB Range

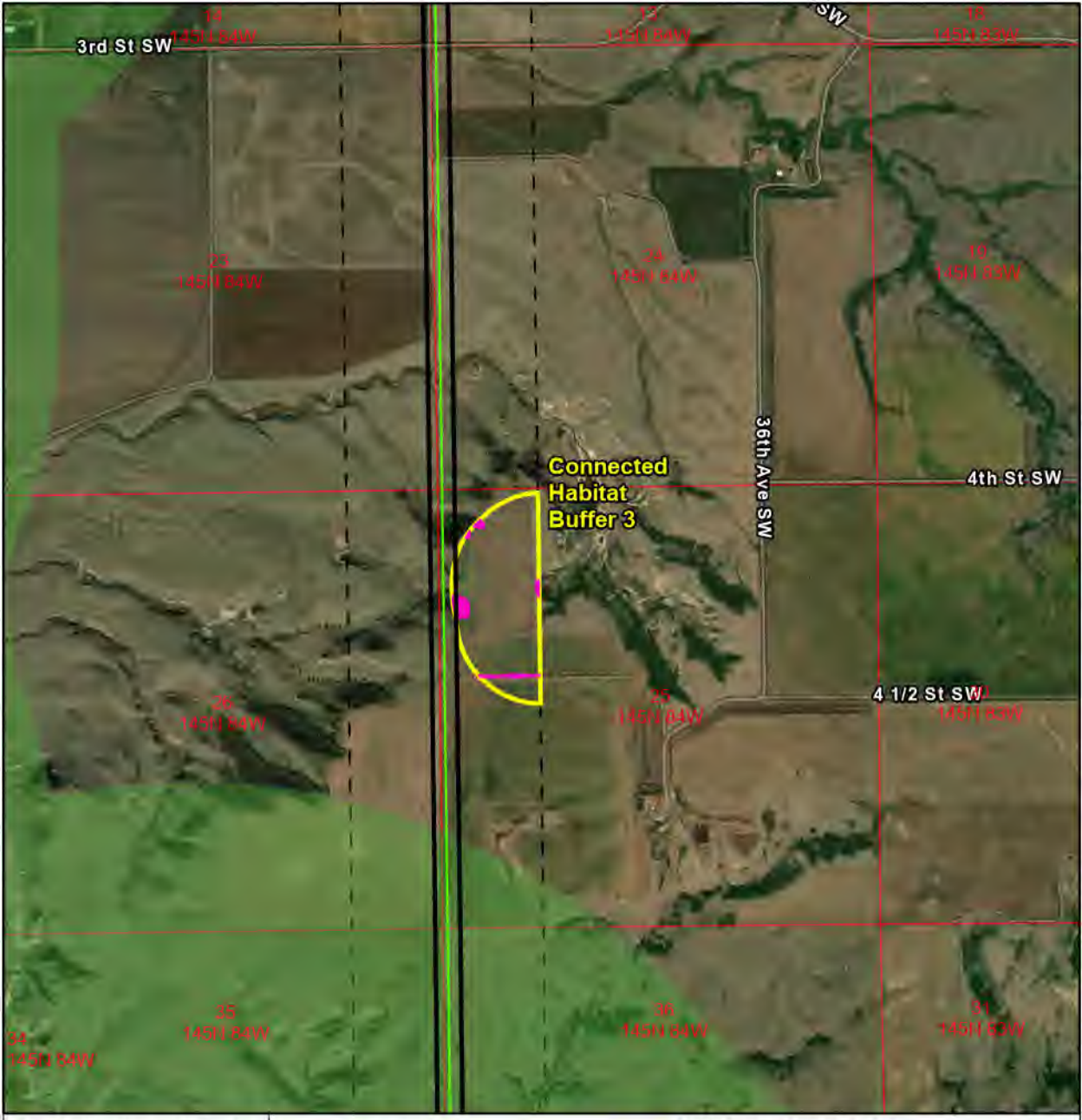
N W E S

0 0.1 0.3 0.4 mi

Page Number: 1

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 9/24/2024 Author: C. Tucker

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Route of Focus

Survey Corridor (300-ft)

1,000-ft Buffer of Survey Corridor

1,000-ft Connected Habitat Buffer

Potential NLEB Summer Roost Habitat

USFWS NLEB Range

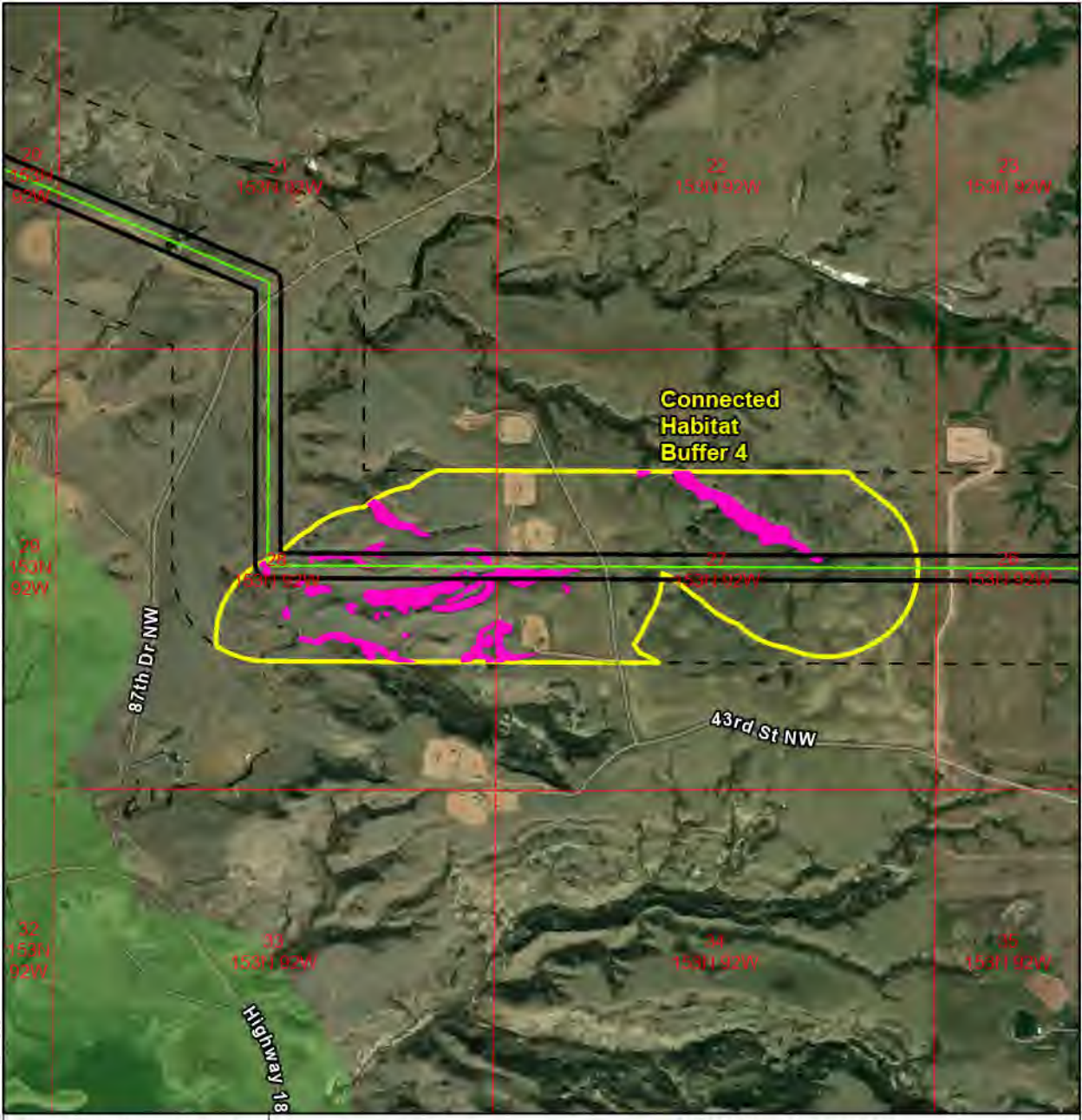
N W E S

0 0.1 0.3 0.4 mi

Page Number: 2

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 9/24/2024 Author: C. Tucker

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Route of Focus

Survey Corridor (300-ft)

1,000-ft Buffer of Survey Corridor

1,000-ft Connected Habitat Buffer

Potential NLEB Summer Roost Habitat

USFWS NLEB Range

N W E S

0 0.1 0.3 0.4 mi

Page Number: 3

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 9/24/2024 Author: C. Tucker

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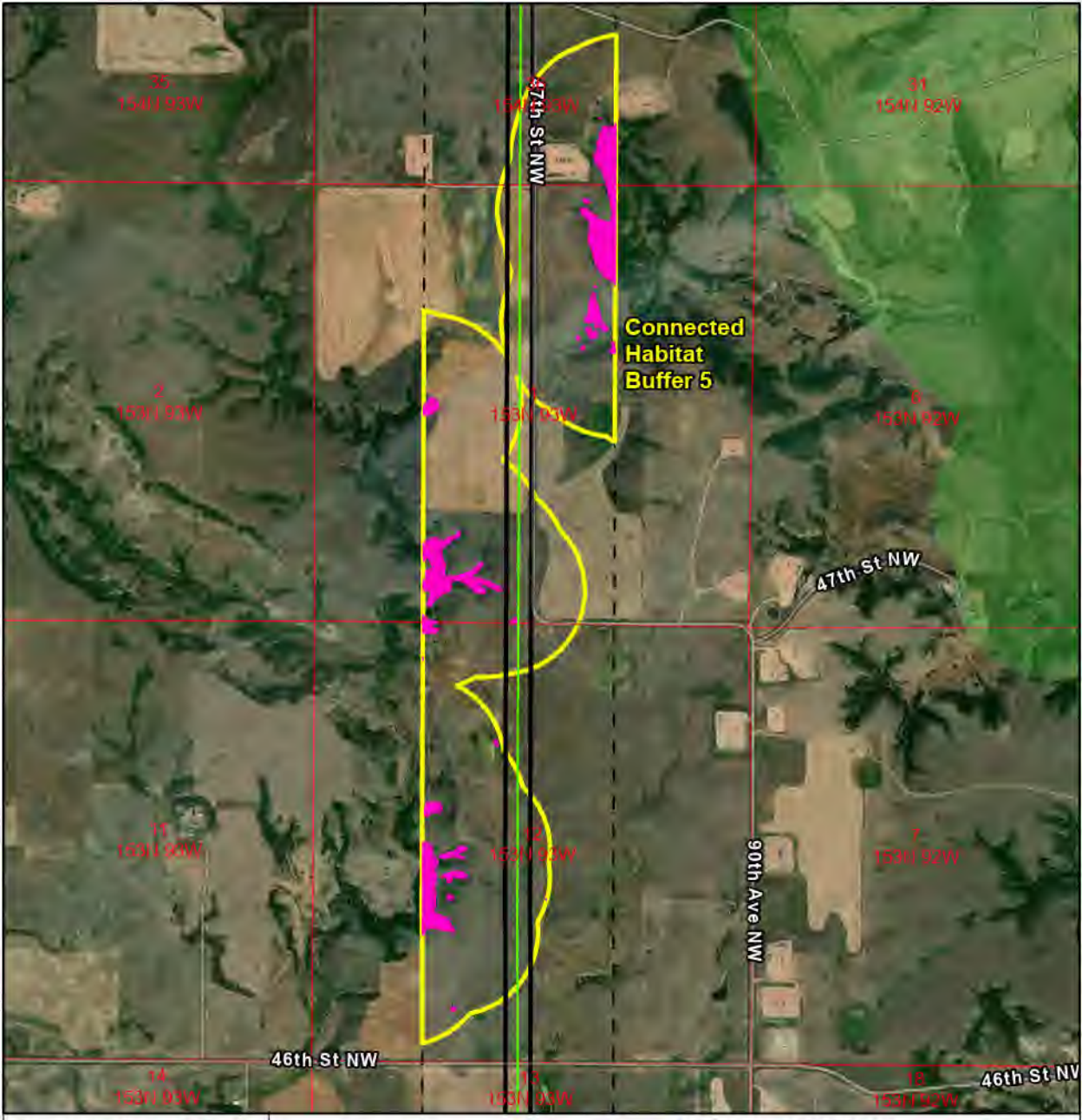


Leland Olds Station to Tande 345-kV Transmission Project

Route of Focus

Survey Corridor (300-ft)

1,000-ft Buffer of Survey Corridor

1,000-ft Connected Habitat Buffer

Potential NLEB Summer Roost Habitat

USFWS NLEB Range

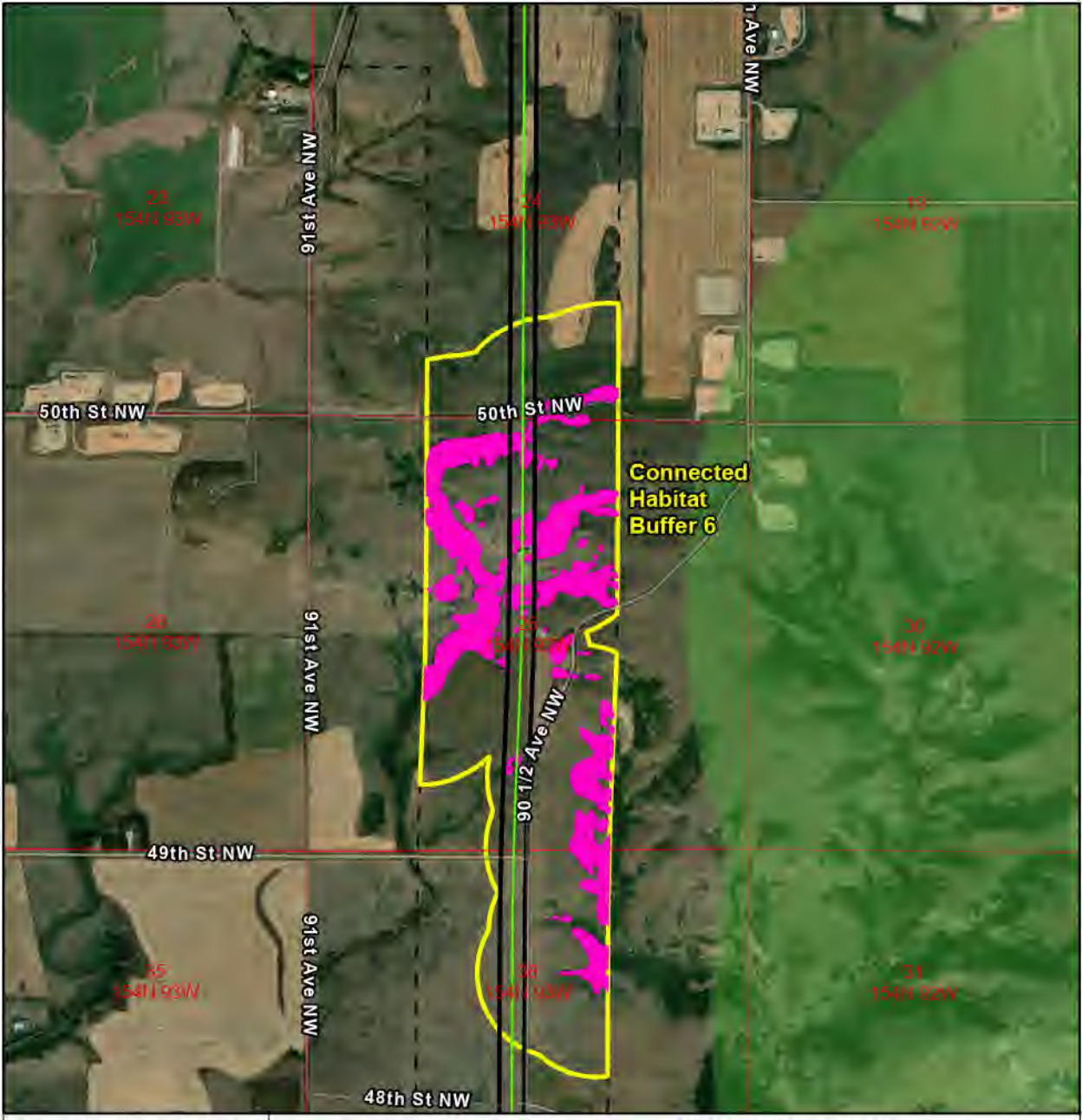
N W E S

0 0.1 0.3 0.4 mi

Page Number: 4

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 9/24/2024 Author: C. Tucker

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Route of Focus

Survey Corridor (300-ft)

1,000-ft Buffer of Survey Corridor

1,000-ft Connected Habitat Buffer

Potential NLEB Summer Roost Habitat

USFWS NLEB Range

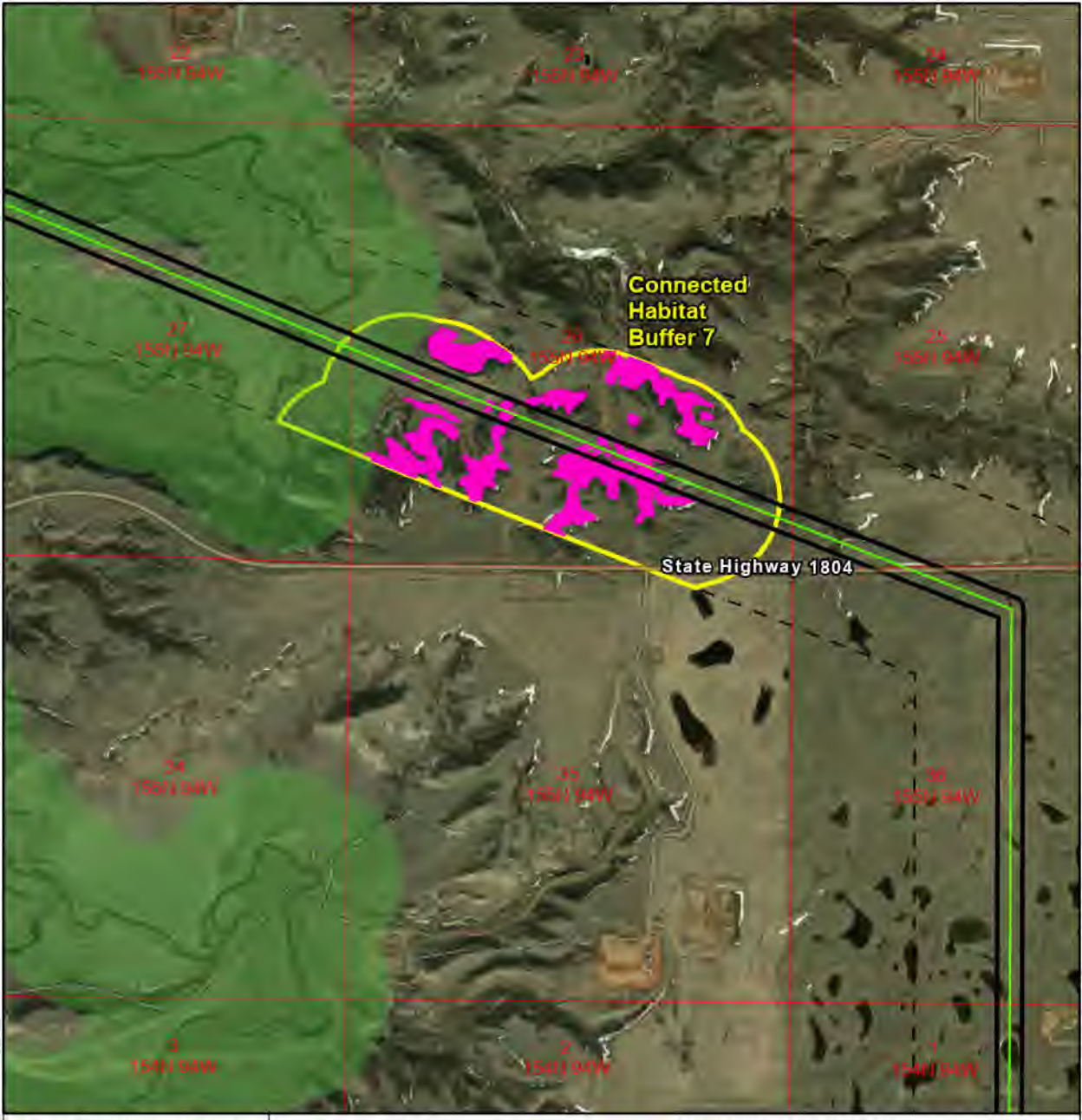
N W E S

0 0.1 0.3 0.4 mi

Page Number: 5

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 9/24/2024 Author: C. Tucker

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Route of Focus

Survey Corridor (300-ft)

1,000-ft Buffer of Survey Corridor

1,000-ft Connected Habitat Buffer

Potential NLEB Summer Roost Habitat

USFWS NLEB Range

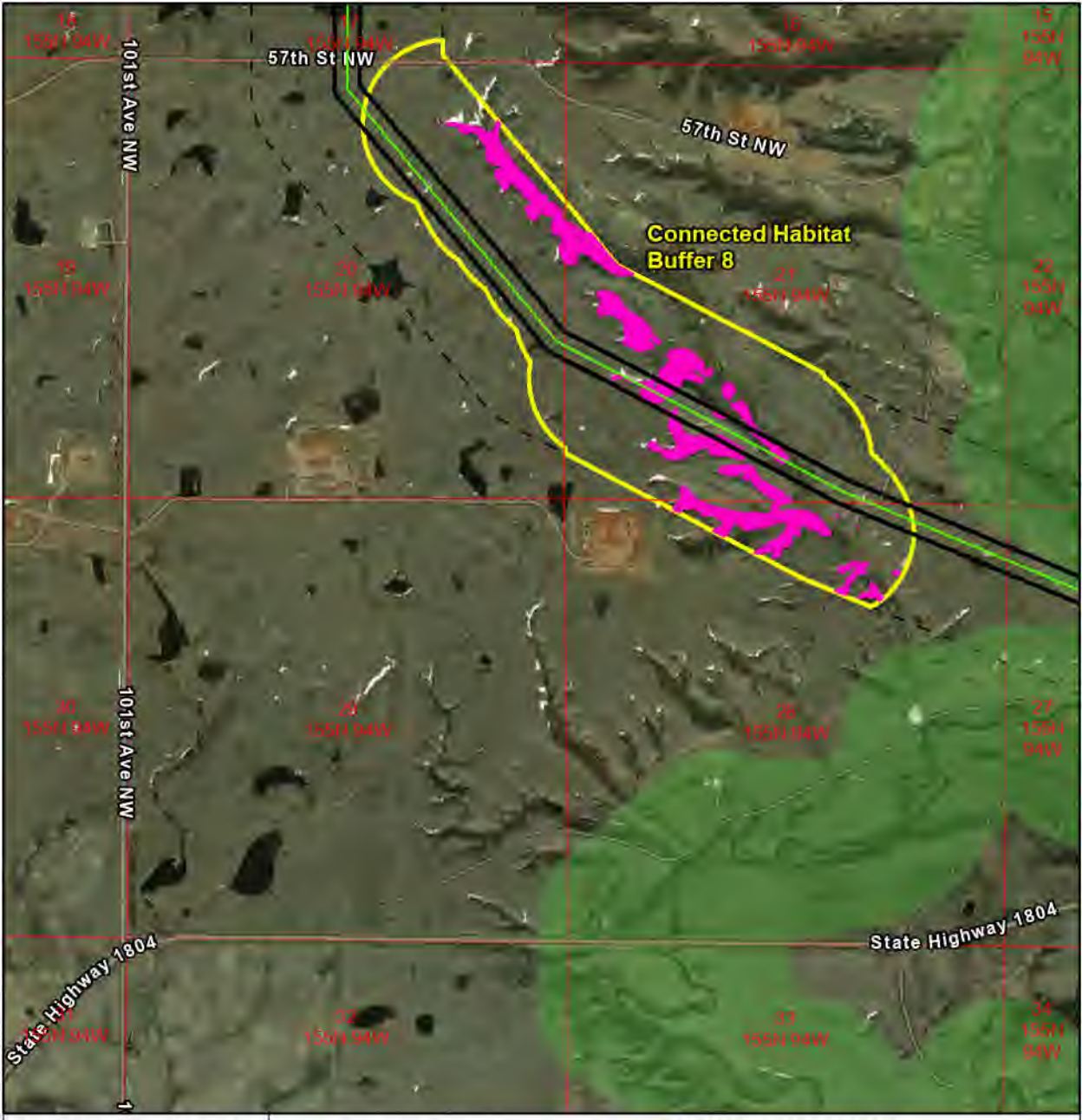
N W E S

0 0.1 0.3 0.4 mi

Page Number: 6

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 9/24/2024 Author: C. Tucker

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Route of Focus

Survey Corridor (300-ft)

1,000-ft Buffer of Survey Corridor

1,000-ft Connected Habitat Buffer

Potential NLEB Summer Roost Habitat

USFWS NLEB Range

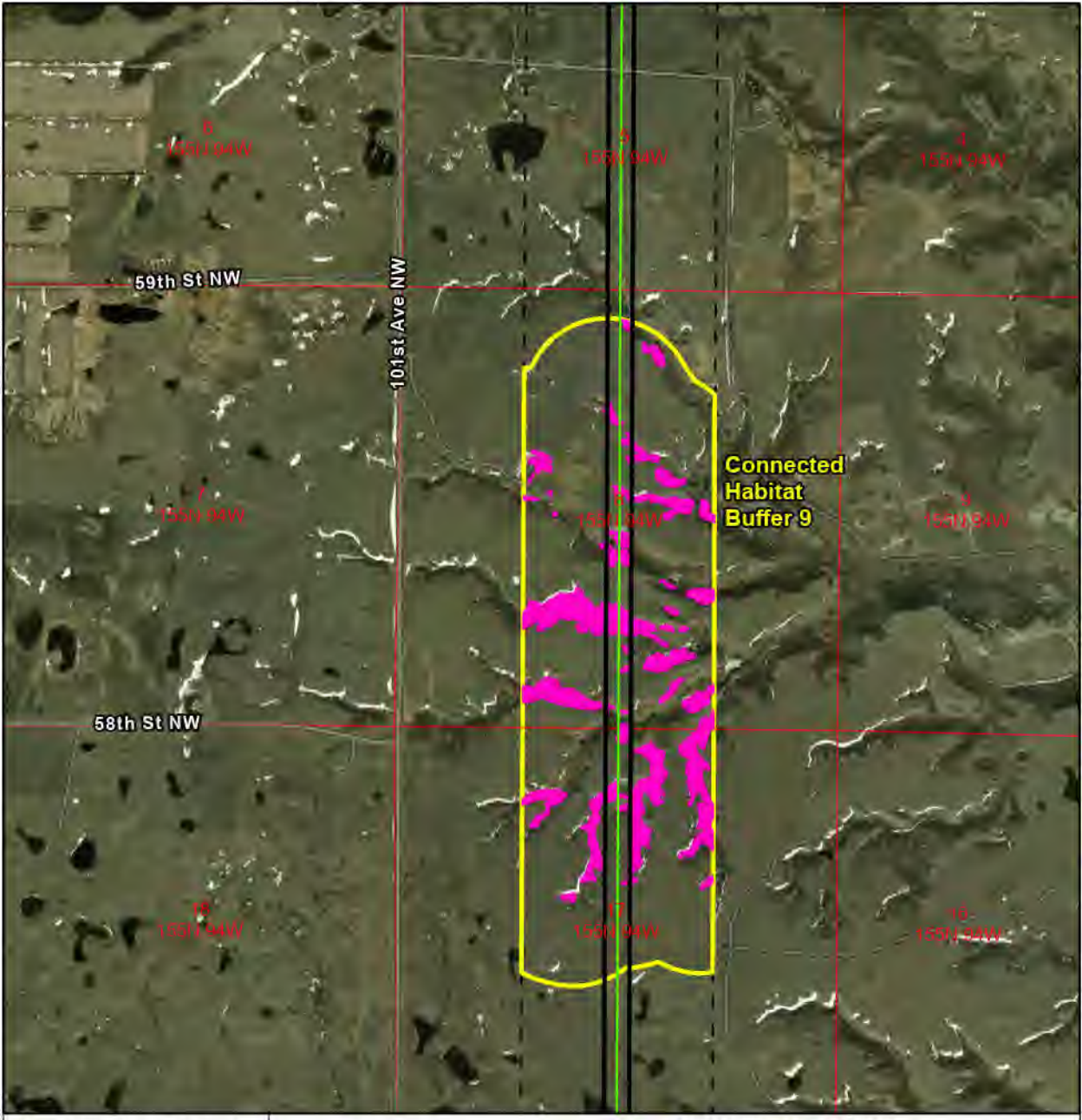
N W E S

0 0.1 0.3 0.4 mi

Page Number: 7

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 9/24/2024 Author: C. Tucker

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Route of Focus

Survey Corridor (300-ft)

1,000-ft Buffer of Survey Corridor

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Potential NLEB Summer Roost Habitat

USFWS NLEB Range

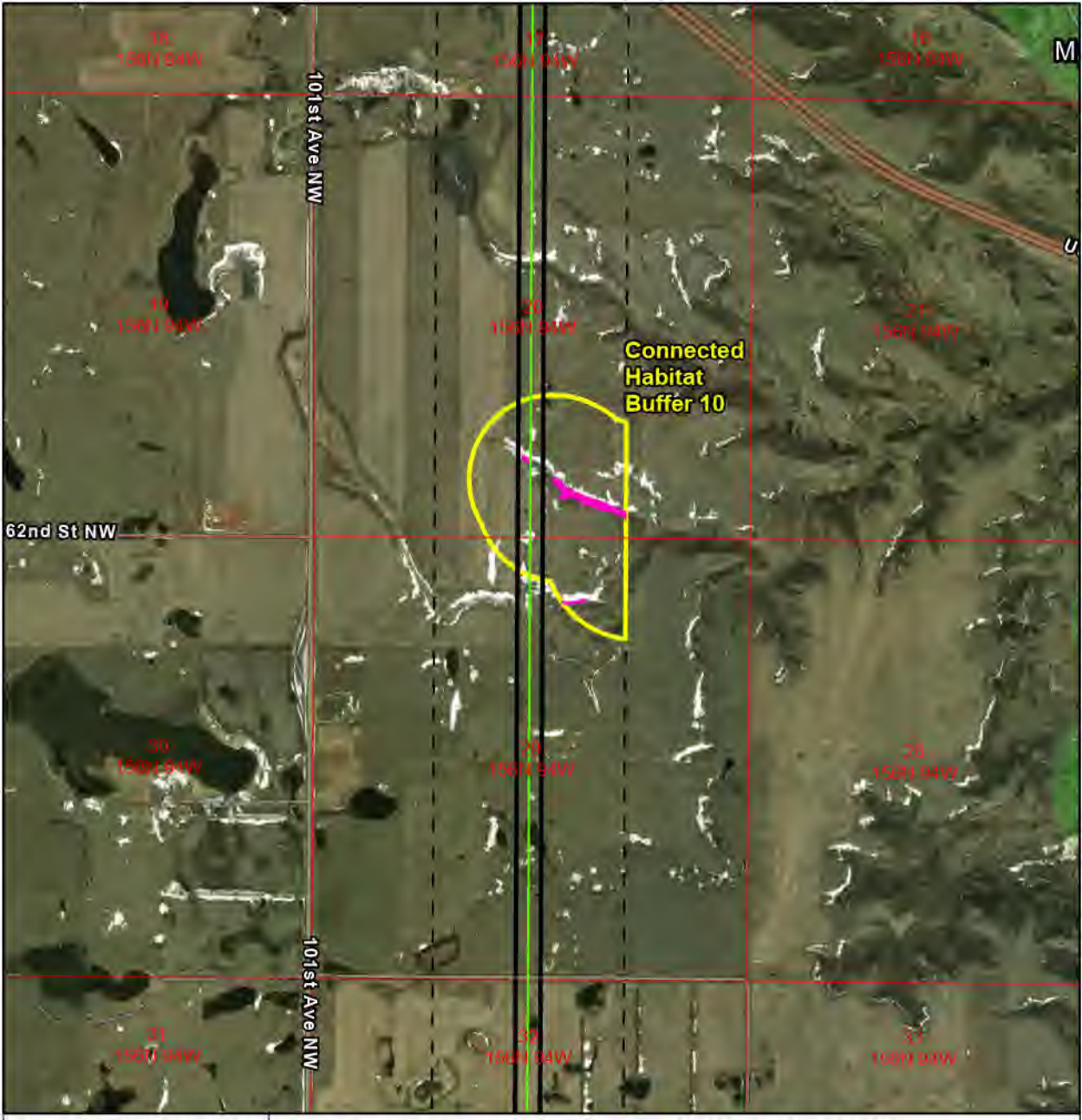
N W E S

0 0.1 0.3 0.4 mi

Page Number: 8

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 9/24/2024 Author: C. Tucker

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Route of Focus

Survey Corridor (300-ft)

1,000-ft Buffer of Survey Corridor

1,000-ft Connected Habitat Buffer

Potential NLEB Summer Roost Habitat

USFWS NLEB Range

N W E S

0 0.1 0.3 0.4 mi

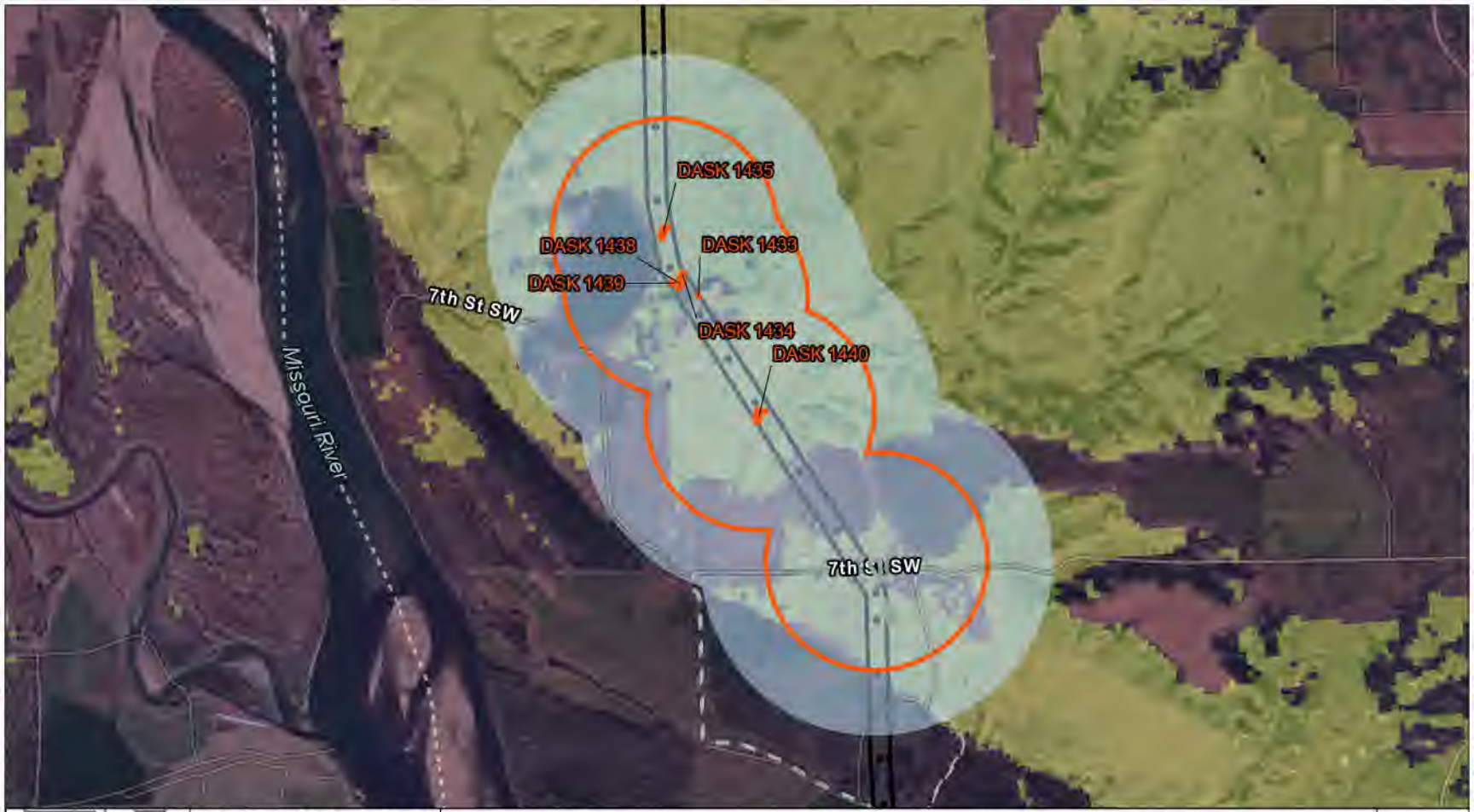
Page Number: 9

Data Source: ESRI Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 9/24/2024 Author: C. Tucker

WEST

Appendix F - Basin Electric Power Cooperative Avian and Bat Protection Plan

Appendix G - DASK Habitat Buffers



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: Esri Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/2/2024 Author: E. Matykiewicz

0 0.3 mi
Scale: 1:30,000

Survey Corridor (300-ft)
Pull Lane Survey Area
Access Road Survey Corridor (30-ft)
DASK Habitat (Field Delineated)
DASK Flight Window Avoidance Buffer (500-m.)
1/2 Mi DASK Habitat Buffer (Minimal Disturbance Area)

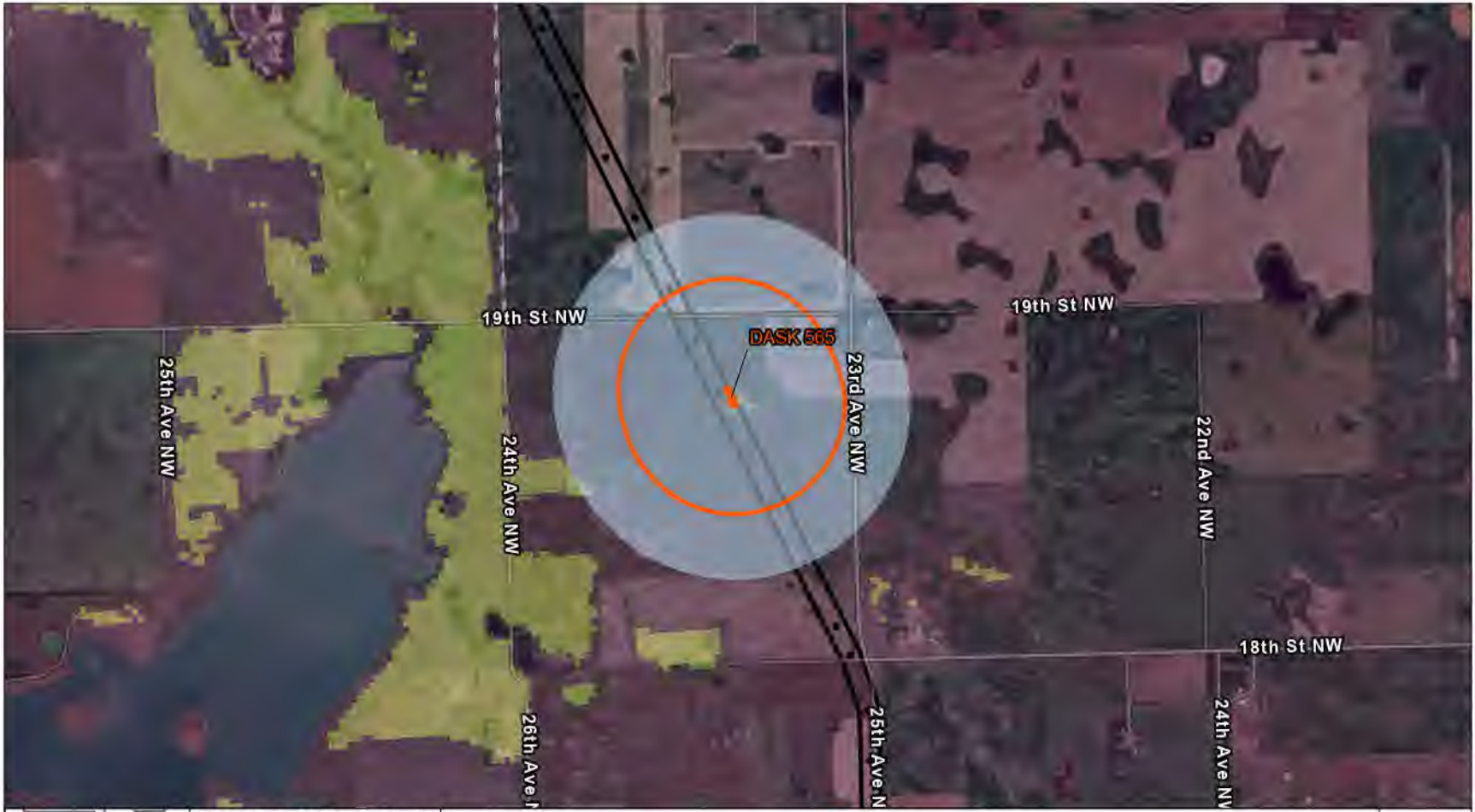
USFWS DASK Point 2022
Structures

DASK Classified Habitat Suitability (USFWS Model)

Potentially Suitable
Potentially Unsuitable

N
W E
S

WEST



Leland Olds Station to Tande 345-kV Transmission Project

Data Source: Esri Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/2/2024 Author: E. Matykiewicz

0 0.3 mi
Scale: 1:30,000

Survey Corridor (300-ft)
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DASK Habitat (Field Delineated)
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USFWS DASK Point 2022
Structures

DASK Classified Habitat Suitability (USFWS Model)

Potentially Suitable
Potentially Unsuitable

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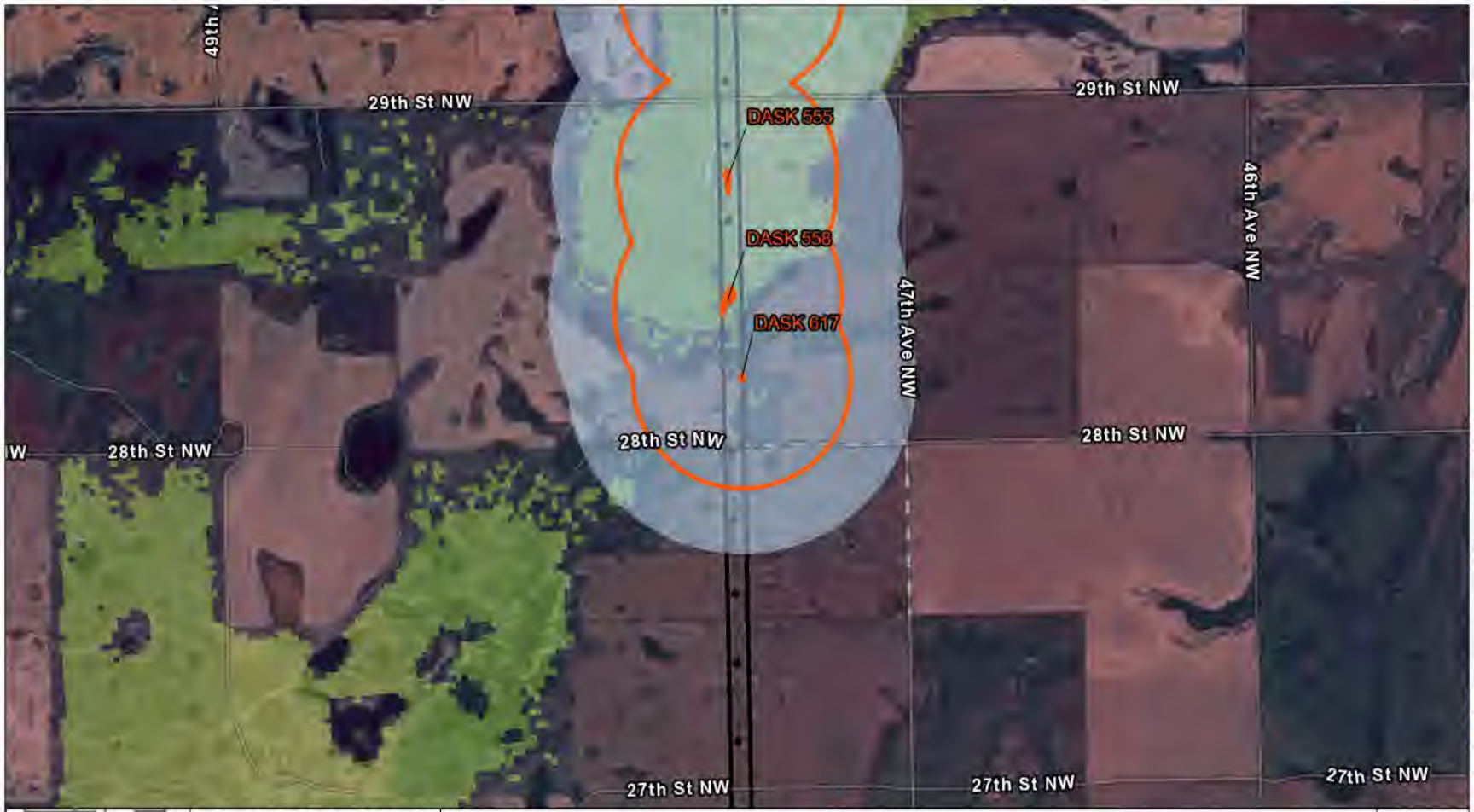

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: Esri Basemap
Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/2/2024 Author: E. Matykiewicz

0 0.3 mi
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1/2 Mi DASK Habitat Buffer (Minimal Disturbance Area)

USFWS DASK Point 2022
Structures

DASK Classified Habitat Suitability (USFWS Model)

Potentially Suitable
Potentially Unsuitable

N W E S

WEST

359th Ave SW

226th St SW

212th St SW

198th St SW

184th St SW

373rd Ave SW

DASK 554

DASK 551

DASK 549

49th Ave NW

29th St NW

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: Esri Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/2/2024 Author: E. Matykiewicz

0 0.3 mi

Scale: 1:30,000

Survey Corridor (300-ft)

Pull Lane Survey Area

Access Road Survey Corridor (30-ft)

DASK Habitat (Field Delineated)

DASK Flight Window Avoidance Buffer (500-m.)

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USFWS DASK Point 2022

Structures

DASK Classified Habitat Suitability (USFWS Model)

Potentially Suitable

Potentially Unsuitable

N W E S

WEST

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: Esri Basemap
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Date: 10/2/2024 Author: E. Matykiewicz

0 0.3 mi
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USFWS DASK Point 2022
Structures

DASK Classified Habitat Suitability (USFWS Model)

Potentially Suitable
Potentially Unsuitable

N
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WEST

Leland Olds Station to Tande 345-kV Transmission Project

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0 0.3 mi
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USFWS DASK Point 2022
Structures

DASK Classified Habitat Suitability (USFWS Model)

Potentially Suitable
Potentially Unsuitable

N
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WEST

Leland Olds Station to Tande 345-kV Transmission Project

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Date: 10/2/2024 Author: E. Matykiewicz

0 0.3 mi
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USFWS DASK Point 2022
Structures

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Potentially Suitable
Potentially Unsuitable

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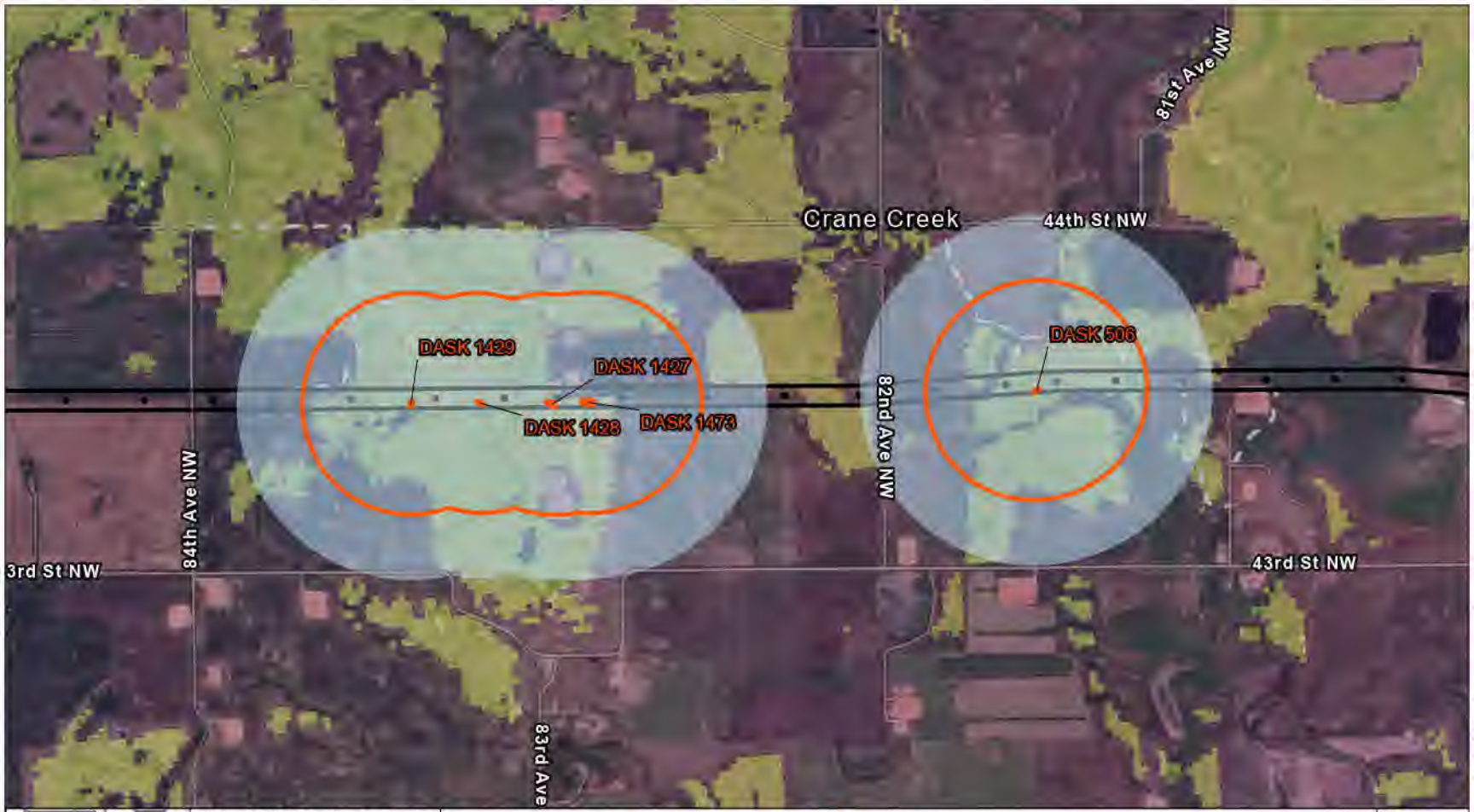
WEST



Leland Olds Station to Tande 345-kV Transmission Project

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Coordinate System: NAD 1983 UTM Zone 13N
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0 0.3 mi
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USFWS DASK Point 2022
Structures

DASK Classified Habitat Suitability (USFWS Model)

Potentially Suitable
Potentially Unsuitable

N
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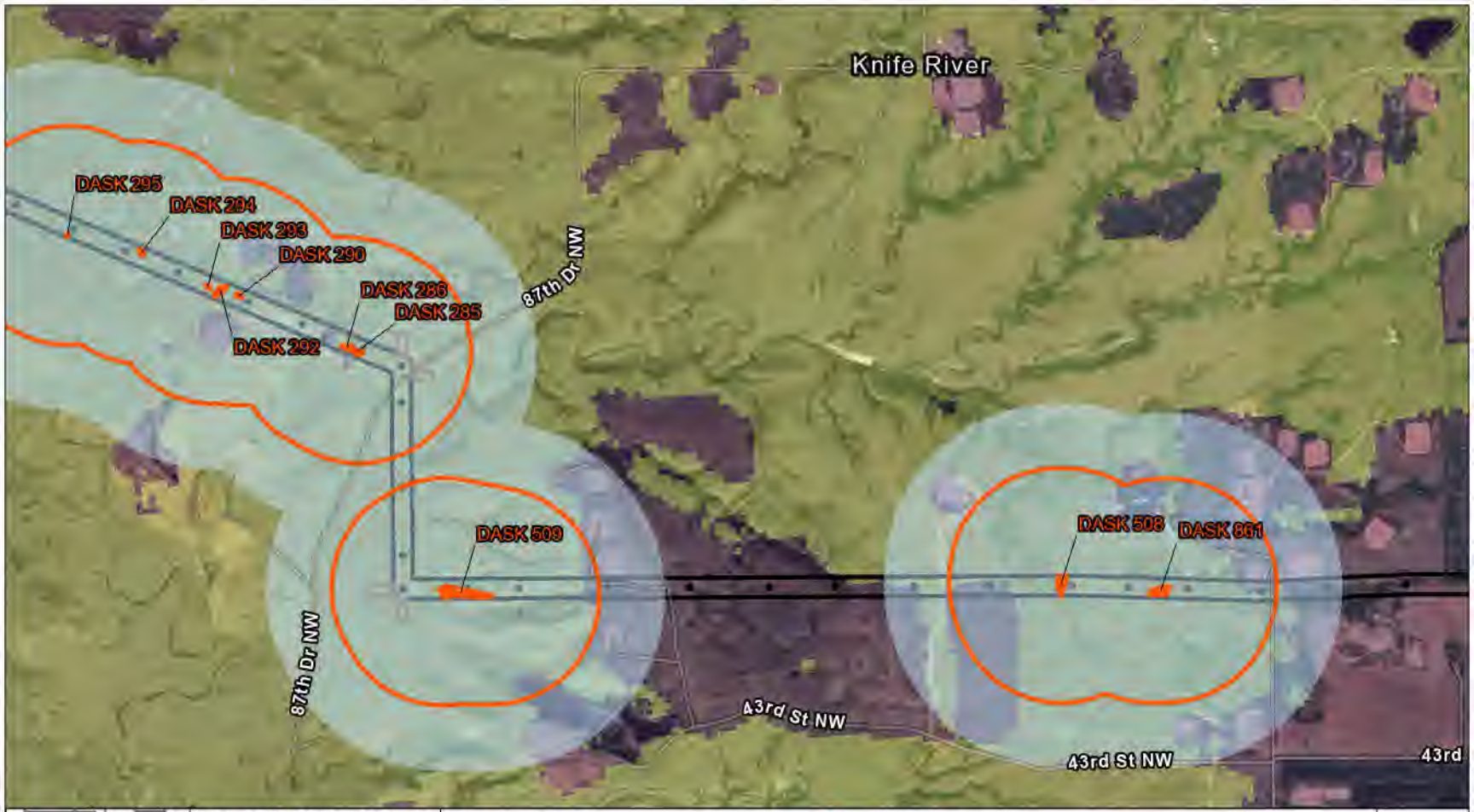

Leland Olds Station to Tande 345-kV Transmission Project

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Coordinate System: NAD 1983 UTM Zone 13N
Date: 10/2/2024 Author: E. Matykiewicz

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1/2 Mi DASK Habitat Buffer (Minimal Disturbance Area)

USFWS DASK Point 2022
Structures

DASK Classified Habitat Suitability (USFWS Model)

Potentially Suitable
Potentially Unsuitable

N
W E
S

WEST

46th St NW

46th St NW

46th St NW

46th St NW

1804

DASK 1447

DASK 287

DASK 1446

DASK 288

DASK 291

90th Ave NW

Highway 1804

DASK 295

DASK 293

DASK 294

DASK 292

DASK 290

Leland Olds Station to Tande 345-kV Transmission Project

Data Source: Esri Basemap

Coordinate System: NAD 1983 UTM Zone 13N

Date: 10/2/2024 Author: E. Matykiewicz

0 0.3 mi

Scale: 1:30,000

Page 10 of 16

Survey Corridor (300-ft)

Pull Lane Survey Area

Access Road Survey Corridor (30-ft)

DASK Habitat (Field Delineated)

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1/2 Mi DASK Habitat Buffer (Minimal Disturbance Area)

USFWS DASK Point 2022

Structures

DASK Classified Habitat Suitability (USFWS Model)

Potentially Suitable

Potentially Unsuitable

N

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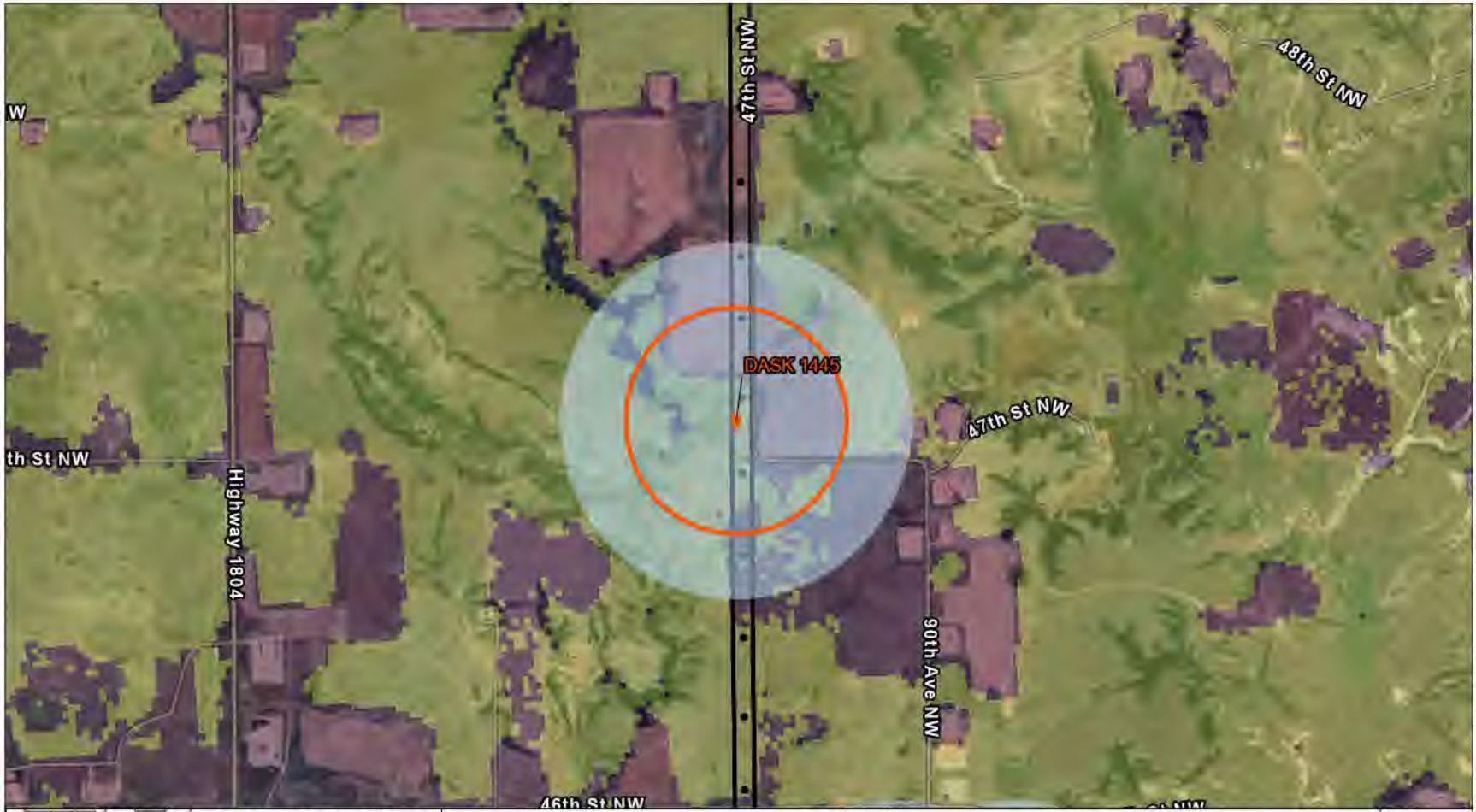

Leland Olds Station to Tande 345-kV Transmission Project

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USFWS DASK Point 2022
Structures

DASK Classified Habitat Suitability (USFWS Model)

Potentially Suitable
Potentially Unsuitable

N
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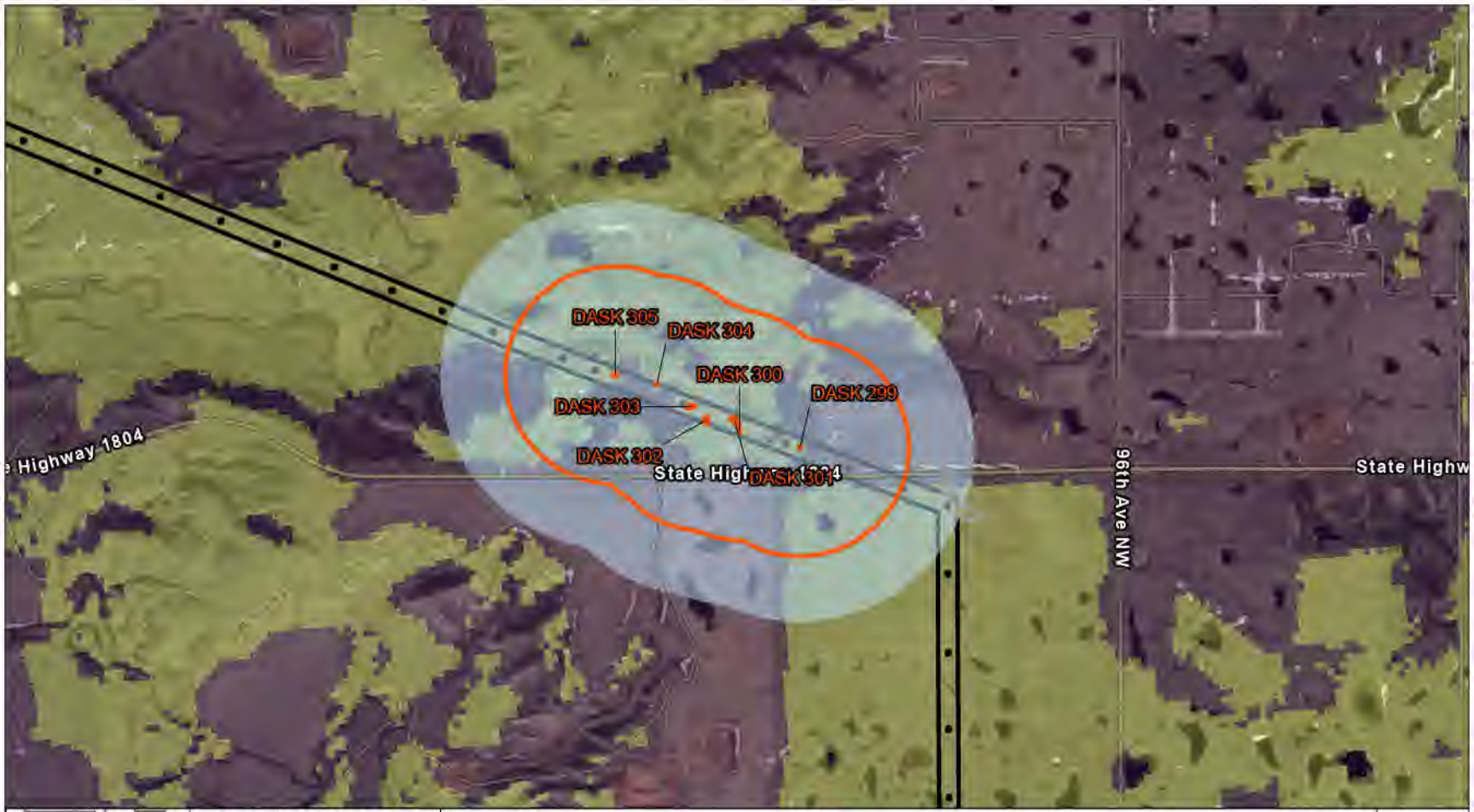

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USFWS DASK Point 2022
Structures

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Potentially Suitable
Potentially Unsuitable

N
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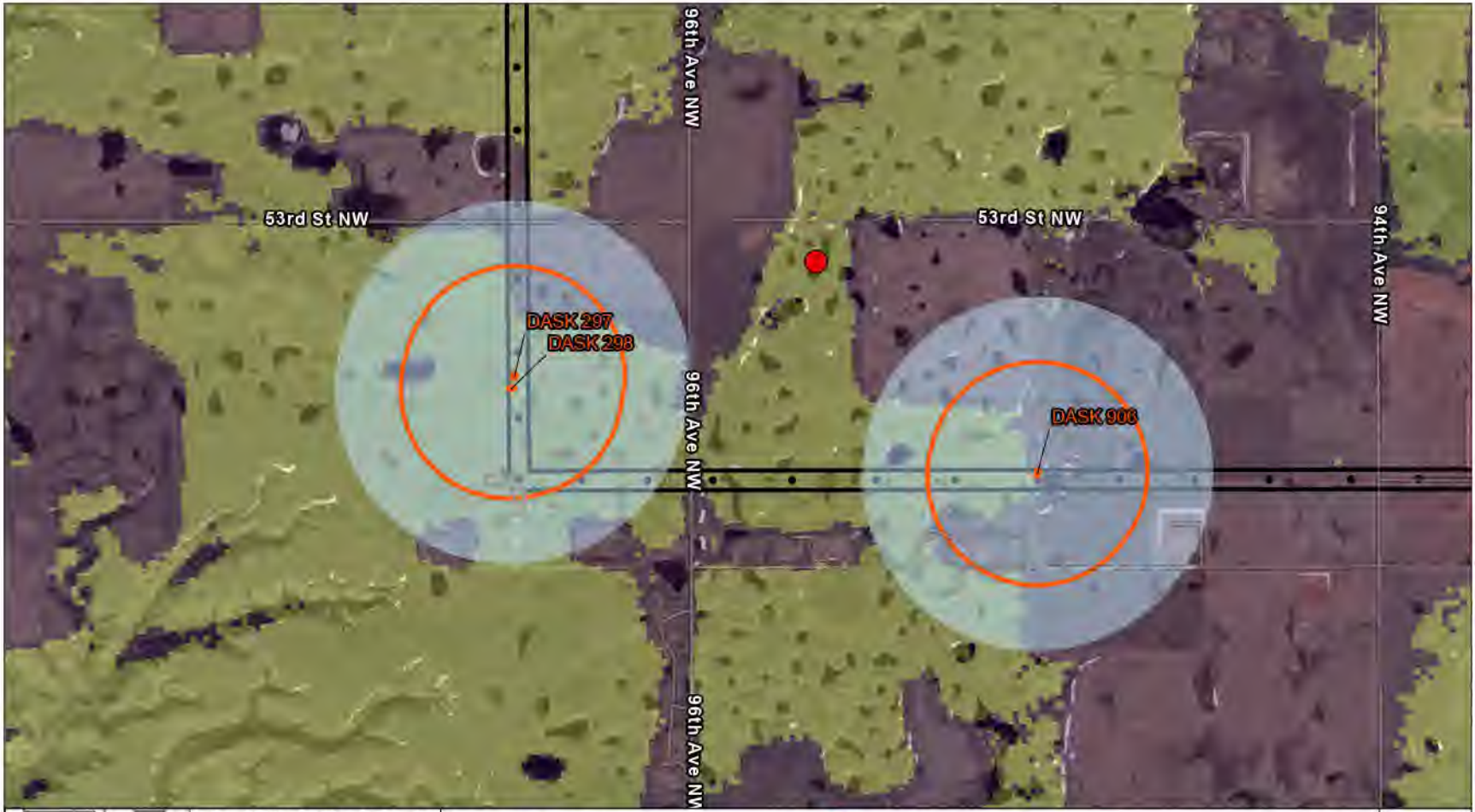

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USFWS DASK Point 2022
Structures

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Potentially Suitable
Potentially Unsuitable

N
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WEST

Leland Olds Station to Tande 345-kV Transmission Project

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USFWS DASK Point 2022
Structures

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Potentially Suitable
Potentially Unsuitable

N
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WEST

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USFWS DASK Point 2022
Structures

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Potentially Suitable
Potentially Unsuitable

N
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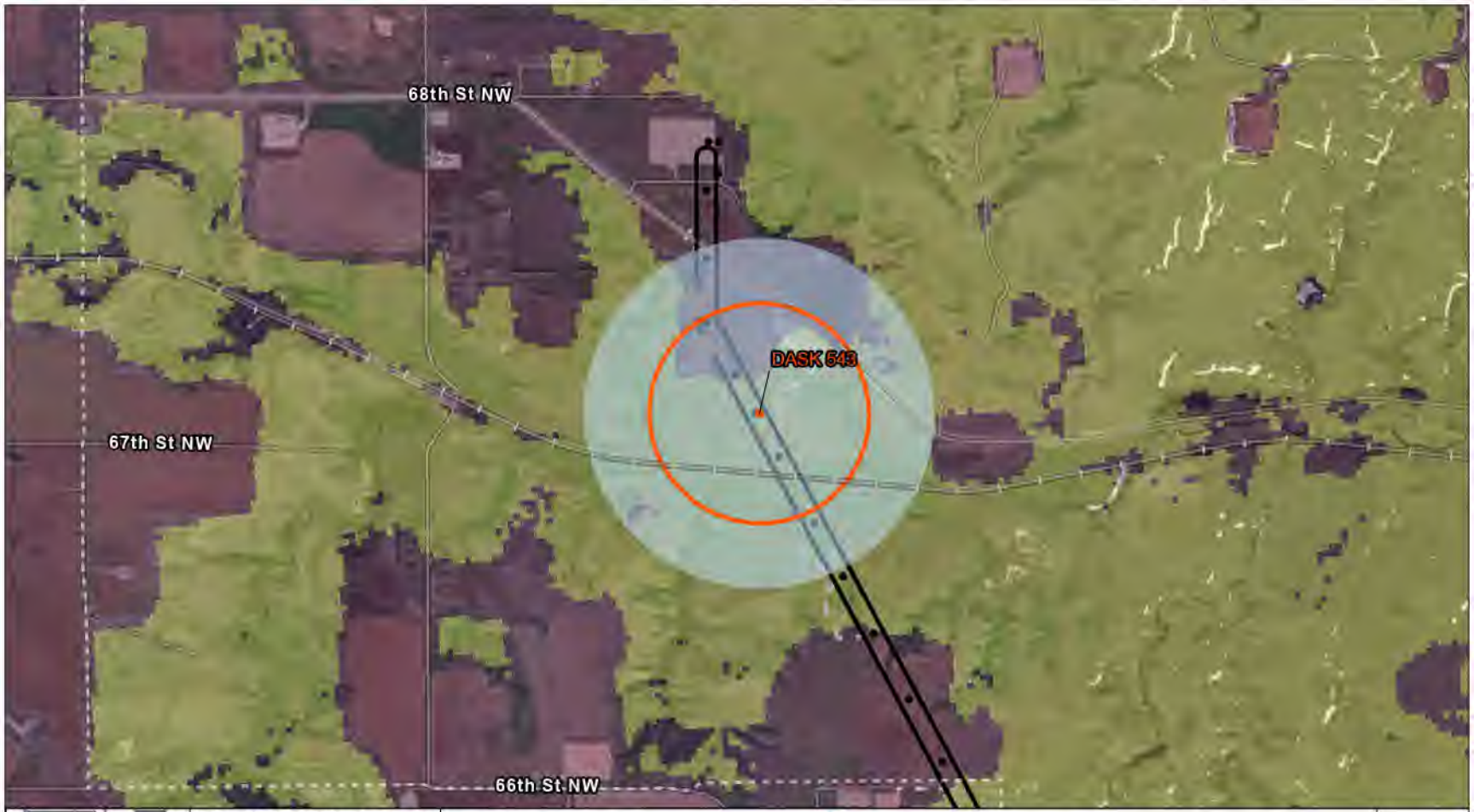
WEST



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USFWS DASK Point 2022
Structures

DASK Classified Habitat Suitability (USFWS Model)

Potentially Suitable
Potentially Unsuitable

N
W E
S

WEST

Appendix H - Noxious Weed Attributes

Noxious Weeds Documented within the Survey Corridor

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 310	Canada thistle			State listed	Sec 25-T151N-R86W	0.01
Weed 312	Canada thistle			State listed	Sec 26-T151N-R86W	0.27
Weed 313	Canada thistle			State listed	Sec 26-T151N-R86W	0.06
Weed 314	Canada thistle			State listed	Sec 30-T151N-R86W	0.05
Weed 315	Canada thistle			State listed	Sec 30-T151N-R86W	0.08
Weed 316	Canada thistle			State listed	Sec 19-T151N-R86W	0.52
Weed 317	Canada thistle			State listed	Sec 19-T151N-R86W	0.25
Weed 318	Canada thistle			State listed	Sec 19-T151N-R86W	1.76
Weed 319	Canada thistle			State listed	Sec 13-T151N-R87W	0.64
Weed 320	Leafy spurge			State listed	Sec 13-T151N-R87W	0.07
Weed 321	Canada thistle			State listed	Sec 12-T151N-R87W	0.07
Weed 322	Canada thistle			State listed	Sec 12-T151N-R87W	0.07
Weed 323	Canada thistle	Leafy spurge		State listed	Sec 24-T152N-R87W	6.47
Weed 324	Canada thistle			State listed	Sec 30-T152N-R86W	2.11
Weed 325	Absinth wormwood	Canada thistle		State listed	Sec 13-T152N-R87W	0.17
Weed 326	Canada thistle			State listed	Sec 25-T152N-R87W	0.06
Weed 327	Canada thistle	Leafy spurge		State listed	Sec 13-T152N-R87W	0.83
Weed 328	Leafy spurge	Canada thistle		State listed	Sec 15-T152N-R87W	8.08
Weed 329	Canada thistle			State listed	Sec 15-T152N-R87W	0.53
Weed 330	Canada thistle			State listed	Sec 9-T152N-R87W	0.24
Weed 331	Canada thistle			State listed	Sec 9-T152N-R87W	0.49
Weed 332	Canada thistle			State listed	Sec 9-T152N-R87W	0.63
Weed 333	Canada thistle			State listed	Sec 8-T152N-R87W	0.52
Weed 334	Canada thistle			State listed	Sec 8-T152N-R87W	0.43
Weed 335	Canada thistle	Leafy spurge		State listed	Sec 7-T152N-R87W	2.86
Weed 336	Canada thistle			State listed	Sec 8-T152N-R87W	0.87
Weed 337	Canada thistle	Leafy spurge		State listed	Sec 12-T152N-R88W	14.12
Weed 338	Canada thistle			State listed	Sec 11-T152N-R88W	2.34
Weed 339	Canada thistle			State listed	Sec 11-T152N-R88W	0.11
Weed 340	Canada thistle			State listed	Sec 25-T153N-R90W	0.62
Weed 341	Canada thistle			State listed	Sec 11-T146N-R83W	2.24
Weed 342	Canada thistle			State listed	Sec 35-T150N-R83W	0.71
Weed 343	Canada thistle			State listed	Sec 34-T150N-R83W	1.28
Weed 344	Canada thistle			State listed	Sec 34-T150N-R83W	0.88
Weed 345	Canada thistle			State listed	Sec 33-T150N-R83W	0.11
Weed 346	Canada thistle	Absinth wormwood		State listed	Sec 32-T150N-R83W	2.48
Weed 347	Canada thistle			State listed	Sec 20-T150N-R83W	0.11
Weed 348	Canada thistle			State listed	Sec 20-T150N-R83W	1.31
Weed 349a	Canada thistle			State listed	Sec 24-T150N-R84W	1.52
Weed 350	Canada thistle			State listed	Sec 24-T150N-R84W	3.30
Weed 351	Canada thistle	Absinth wormwood		State listed	Sec 21-T150N-R84W	1.96

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 352	Canada thistle			State listed	Sec 30-T153N-R90W	1.23
Weed 353	Canada thistle	Absinth wormwood		State listed	Sec 27-T153N-R91W	0.48
Weed 354	Leafy Spurge			State listed	Sec 21-T153N-R92W	0.00
Weed 355	Leafy Spurge			State listed	Sec 21-T153N-R92W	0.45
Weed 356	Canada thistle			State listed	Sec 11-T154N-R93W	1.02
Weed 357	Canada thistle			State listed	Sec 11-T154N-R93W	0.25
Weed 358	Canada thistle			State listed	Sec 10-T154N-R93W	0.80
Weed 359	Canada thistle			State listed	Sec 9-T154N-R93W	1.40
Weed 360	Canada thistle			State listed	Sec 9-T154N-R93W	0.25
Weed 361	Canada thistle			State listed	Sec 9-T154N-R93W	1.04
Weed 362	Canada thistle			State listed	Sec 12-T154N-R94W	0.75
Weed 363	Canada thistle			State listed	Sec 20-T155N-R94W	0.20
Weed 364	Canada thistle			State listed	Sec 17-T155N-R94W	0.08
Weed 365	Canada thistle			State listed	Sec 20-T155N-R94W	0.17
Weed 366	Canada thistle			State listed	Sec 5-T155N-R94W	0.03
Weed 367	Absinth wormwood			State listed	Sec 32-T156N-R94W	0.10
Weed 368	Absinth wormwood			State listed	Sec 32-T156N-R94W	0.70
Weed 369	Canada thistle			State listed	Sec 32-T156N-R94W	0.19
Weed 370	Canada thistle			State listed	Sec 32-T156N-R94W	0.08
Weed 371	Canada thistle			State listed	Sec 32-T156N-R94W	0.07
Weed 372	Canada thistle			State listed	Sec 32-T156N-R94W	0.11
Weed 373	Canada thistle			State listed	Sec 32-T156N-R94W	0.04
Weed 374	Canada thistle			State listed	Sec 32-T156N-R94W	0.19
Weed 375	Canada thistle			State listed	Sec 32-T156N-R94W	0.09
Weed 376	Canada thistle			State listed	Sec 31-T152N-R86W	1.08
Weed 377	Absinth wormwood			State listed	Sec 36-T152N-R87W	0.03
Weed 378	Canada thistle			State listed	Sec 36-T152N-R87W	0.13
Weed 379	Canada thistle	Absinth wormwood		State listed	Sec 31-T149N-R81W	7.86
Weed 380	Absinth wormwood	Canada thistle		State listed	Sec 30-T151N-R85W	0.05
Weed 381	Absinth wormwood	Canada thistle		State listed	Sec 30-T151N-R85W	0.15
Weed 382	Absinth wormwood	Canada thistle		State listed	Sec 30-T151N-R85W	0.24
Weed 383	Canada thistle			State listed	Sec 30-T151N-R85W	0.01
Weed 384	Absinth wormwood	Canada thistle		State listed	Sec 30-T151N-R85W	0.07
Weed 385	Canada thistle	Absinth wormwood		State listed	Sec 31-T151N-R85W	0.07
Weed 386	Canada thistle			State listed	Sec 31-T151N-R85W	0.01
Weed 387	Canada thistle			State listed	Sec 31-T151N-R85W	0.10
Weed 388	Canada thistle	Absinth wormwood		State listed	Sec 6-T150N-R85W	0.06
Weed 389	Canada thistle			State listed	Sec 20-T150N-R85W	2.68
Weed 390	Canada thistle			State listed	Sec 21-T150N-R85W	0.02
Weed 391	Canada thistle			State listed	Sec 21-T150N-R84W	1.01

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 392	Canada thistle			State listed	Sec 21-T150N-R84W	0.17
Weed 393	Canada thistle			State listed	Sec 19-T150N-R83W	1.22
Weed 394	Canada thistle			State listed	Sec 20-T150N-R83W	0.11
Weed 395	Canada thistle			State listed	Sec 20-T150N-R83W	0.05
Weed 396	Canada thistle			State listed	Sec 20-T150N-R83W	0.23
Weed 397	Canada thistle			State listed	Sec 20-T150N-R83W	0.05
Weed 399	Canada thistle			State listed	Sec 33-T150N-R83W	0.03
Weed 400	Canada thistle			State listed	Sec 33-T150N-R83W	0.06
Weed 401	Canada thistle			State listed	Sec 3-T149N-R83W	0.04
Weed 402	Canada thistle			State listed	Sec 3-T149N-R83W	0.42
Weed 403	Canada thistle			State listed	Sec 3-T149N-R83W	0.08
Weed 404	Canada thistle			State listed	Sec 2-T149N-R83W	0.82
Weed 405	Canada thistle			State listed	Sec 2-T149N-R83W	0.52
Weed 406	Canada thistle			State listed	Sec 2-T149N-R83W	0.10
Weed 407	Canada thistle			State listed	Sec 2-T149N-R83W	0.22
Weed 408	Canada thistle			State listed	Sec 6-T149N-R82W	0.86
Weed 409	Canada thistle			State listed	Sec 17-T146N-R83W	0.32
Weed 410	Canada thistle			State listed	Sec 2-T146N-R83W	0.17
Weed 411	Canada thistle			State listed	Sec 11-T146N-R83W	0.17
Weed 412	Canada thistle	Absinth wormwood	Leafy spurge	State listed	Sec 6-T146N-R82W	3.41
Weed 413	Canada thistle			State listed	Sec 11-T146N-R83W	0.07
Weed 414	Canada thistle			State listed	Sec 11-T146N-R83W	0.21
Weed 415	Canada thistle			State listed	Sec 16-T146N-R83W	0.21
Weed 416	Leafy spurge			State listed	Sec 15-T144N-R84W	9.82
Weed 417	Canada thistle	Leafy spurge		State listed	Sec 16-T144N-R84W	0.45
Weed 419	Canada thistle			State listed	Sec 34-T150N-R83W	2.29
Weed 420	Canada thistle			State listed	Sec 34-T150N-R83W	0.74
Weed 421	Canada thistle			State listed	Sec 32-T150N-R83W	0.44
Weed 422	Canada thistle	Absinth wormwood		State listed	Sec 32-T150N-R83W	2.52
Weed 423	Canada thistle	Absinth wormwood		State listed	Sec 19-T150N-R84W	0.58
Weed 424	Canada thistle			State listed	Sec 24-T150N-R85W	0.17
Weed 425	Canada thistle	Absinth wormwood		State listed	Sec 21-T150N-R85W	0.04
Weed 426	Canada thistle	Absinth wormwood		State listed	Sec 21-T150N-R85W	1.41
Weed 427	Canada thistle	Absinth wormwood		State listed	Sec 21-T150N-R85W	1.85
Weed 430	Canada thistle			State listed	Sec 25-T151N-R87W	0.12
Weed 434	Canada thistle			State listed	Sec 30-T151N-R86W	0.02
Weed 437	Canada thistle			State listed	Sec 25-T151N-R87W	0.15
Weed 443	Canada thistle			State listed	Sec 1-T151N-R87W	0.04
Weed 446	Canada thistle			State listed	Sec 13-T152N-R87W	5.87
Weed 447	Canada thistle			State listed	Sec 14-T152N-R87W	0.04
Weed 449	Canada thistle			State listed	Sec 8-T152N-R87W	11.68

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 455	Canada thistle			State listed	Sec 9-T152N-R88W	0.04
Weed 456	Canada thistle	Leafy spurge		State listed	Sec 9-T152N-R88W	0.20
Weed 458	Canada thistle			State listed	Sec 8-T152N-R88W	0.76
Weed 460	Canada thistle			State listed	Sec 7-T152N-R88W	0.22
Weed 462	Canada thistle			State listed	Sec 7-T152N-R88W	0.37
Weed 464	Canada thistle			State listed	Sec 7-T152N-R88W	0.54
Weed 469	Canada thistle	Leafy spurge		State listed	Sec 33-T153N-R88W	0.38
Weed 472	Leafy spurge			State listed	Sec 33-T153N-R88W	0.06
Weed 491	Canada thistle			State listed	Sec 26-T153N-R91W	0.64
Weed 492	Leafy spurge			State listed	Sec 26-T153N-R91W	0.02
Weed 493	Canada thistle			State listed	Sec 25-T153N-R91W	1.30
Weed 494	Canada thistle			State listed	Sec 25-T153N-R91W	0.13
Weed 501	Canada thistle			State listed	Sec 30-T153N-R90W	0.46
Weed 502	Canada thistle			State listed	Sec 26-T153N-R91W	0.02
Weed 503	Canada thistle	Leafy spurge		State listed	Sec 26-T153N-R91W	0.22
Weed 504	Canada thistle			State listed	Sec 28-T153N-R91W	0.42
Weed 505	Canada thistle			State listed	Sec 28-T153N-R91W	0.31
Weed 507	Canada thistle			State listed	Sec 27-T153N-R91W	0.27
Weed 516	Canada thistle			State listed	Sec 36-T154N-R93W	4.18
Weed 518	Canada thistle			State listed	Sec 24-T154N-R93W	0.50
Weed 521	Canada thistle			State listed	Sec 10-T154N-R93W	0.19
Weed 522	Canada thistle			State listed	Sec 11-T154N-R93W	0.39
Weed 523	Canada thistle			State listed	Sec 9-T154N-R93W	1.38
Weed 530	Canada thistle			State listed	Sec 1-T154N-R94W	5.25
Weed 531	Canada thistle			State listed	Sec 21-T155N-R94W	0.20
Weed 533	Canada thistle	Leafy spurge		State listed	Sec 32-T156N-R94W	0.37
Weed 534	Canada thistle	Leafy spurge		State listed	Sec 32-T156N-R94W	5.35
Weed 535	Canada thistle			State listed	Sec 20-T156N-R94W	0.31
Weed 536	Canada thistle			State listed	Sec 29-T156N-R94W	0.42
Weed 537	Canada thistle			State listed	Sec 29-T156N-R94W	0.10
Weed 538	Canada thistle			State listed	Sec 7-T156N-R94W	0.37
Weed 539	Canada thistle			State listed	Sec 7-T156N-R94W	0.54
Weed 540	Canada thistle			State listed	Sec 18-T156N-R94W	5.68
Weed 542	Canada thistle			State listed	Sec 17-T156N-R94W	4.02
Weed 548	Canada thistle			State listed	Sec 6-T150N-R85W	0.06
Weed 550	Canada thistle			State listed	Sec 6-T150N-R85W	0.26
Weed 552	Canada thistle			State listed	Sec 6-T150N-R85W	0.05
Weed 556	Canada thistle			State listed	Sec 7-T150N-R85W	0.18
Weed 557	Canada thistle			State listed	Sec 7-T150N-R85W	2.29
Weed 559	Canada thistle			State listed	Sec 18-T150N-R85W	0.16
Weed 568	Canada thistle			State listed	Sec 31-T149N-R81W	9.19
Weed 625	Canada thistle			State listed	Sec 30-T151N-R86W	0.09
Weed 630	Canada thistle			State listed	Sec 30-T151N-R86W	0.02
Weed 633	Canada thistle			State listed	Sec 16-T152N-R87W	4.13
Weed 637	Canada thistle			State listed	Sec 23-T150N-R84W	0.08

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 651	Canada thistle			State listed	Sec 25-T145N-R84W	0.02
Weed 652	Canada thistle	Leafy spurge		State listed	Sec 26-T145N-R84W	0.02
Weed 653	Canada thistle	Leafy spurge		State listed	Sec 25-T145N-R84W	0.02
Weed 654	Canada thistle			State listed	Sec 35-T146N-R84W	0.01
Weed 655	Canada thistle			State listed	Sec 36-T146N-R84W	0.09
Weed 656	Canada thistle			State listed	Sec 36-T146N-R84W	0.08
Weed 657	Canada thistle			State listed	Sec 36-T146N-R84W	0.05
Weed 659	Canada thistle			State listed	Sec 36-T146N-R84W	0.02
Weed 660	Canada thistle			State listed	Sec 20-T146N-R83W	0.08
Weed 661	Canada thistle			State listed	Sec 20-T146N-R83W	0.03
Weed 662	Canada thistle			State listed	Sec 19-T146N-R83W	0.04
Weed 663	Canada thistle			State listed	Sec 19-T146N-R83W	0.02
Weed 666	Canada thistle			State listed	Sec 19-T146N-R83W	0.02
Weed 667	Canada thistle			State listed	Sec 19-T146N-R83W	0.03
Weed 669	Canada thistle			State listed	Sec 19-T146N-R83W	0.01
Weed 670	Canada thistle			State listed	Sec 30-T146N-R83W	0.04
Weed 671	Canada thistle			State listed	Sec 30-T146N-R83W	0.42
Weed 672	Canada thistle			State listed	Sec 30-T146N-R83W	0.06
Weed 673	Canada thistle			State listed	Sec 30-T146N-R83W	0.19
Weed 674	Canada thistle			State listed	Sec 30-T146N-R83W	0.24
Weed 675	Leafy Spurge			State listed	Sec 30-T146N-R83W	0.02
Weed 676	Canada thistle			State listed	Sec 30-T146N-R83W	0.04
Weed 677	Canada thistle			State listed	Sec 19-T146N-R83W	0.06
Weed 678	Leafy spurge			State listed	Sec 1-T146N-R83W	0.01
Weed 679	Canada thistle			State listed	Sec 1-T146N-R83W	0.09
Weed 681	Canada thistle			State listed	Sec 2-T146N-R83W	0.06
Weed 682	Canada thistle			State listed	Sec 2-T146N-R83W	0.02
Weed 683	Canada thistle			State listed	Sec 5-T146N-R82W	0.01
Weed 684	Canada thistle			State listed	Sec 6-T146N-R82W	0.12
Weed 685	Leafy spurge			State listed	Sec 5-T146N-R82W	0.02
Weed 686	Canada thistle			State listed	Sec 6-T146N-R82W	0.19
Weed 688	Canada thistle			State listed	Sec 2-T147N-R82W	0.13
Weed 697	Canada thistle			State listed	Sec 32-T147N-R82W	0.09
Weed 699	Canada thistle			State listed	Sec 33-T147N-R82W	0.09
Weed 700	Canada thistle			State listed	Sec 33-T147N-R82W	0.07
Weed 701	Canada thistle			State listed	Sec 27-T147N-R82W	0.07
Weed 703	Canada thistle			State listed	Sec 22-T147N-R82W	0.14
Weed 707	Canada thistle			State listed	Sec 2-T147N-R82W	0.05
Weed 708	Canada thistle			State listed	Sec 11-T147N-R82W	0.07
Weed 710	Canada thistle			State listed	Sec 25-T148N-R82W	0.17
Weed 711	Canada thistle			State listed	Sec 25-T148N-R82W	0.04
Weed 712	Canada thistle			State listed	Sec 25-T148N-R82W	0.04
Weed 713	Canada thistle			State listed	Sec 25-T148N-R82W	0.03
Weed 714	Canada thistle			State listed	Sec 23-T148N-R82W	0.08
Weed 716	Canada thistle			State listed	Sec 24-T148N-R82W	0.03

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 717	Canada thistle			State listed	Sec 24-T148N-R82W	0.09
Weed 719	Canada thistle			State listed	Sec 23-T148N-R82W	0.16
Weed 720	Canada thistle			State listed	Sec 23-T148N-R82W	0.17
Weed 721	Canada thistle			State listed	Sec 23-T148N-R82W	0.16
Weed 723	Canada thistle			State listed	Sec 14-T148N-R82W	0.05
Weed 725	Canada thistle			State listed	Sec 14-T148N-R82W	0.10
Weed 726	Canada thistle			State listed	Sec 13-T148N-R82W	0.04
Weed 730	Canada thistle			State listed	Sec 11-T148N-R82W	0.04
Weed 731	Canada thistle			State listed	Sec 11-T148N-R82W	0.02
Weed 732	Canada thistle			State listed	Sec 31-T149N-R81W	0.02
Weed 733	Canada thistle			State listed	Sec 1-T148N-R82W	0.04
Weed 736	Canada thistle			State listed	Sec 31-T149N-R81W	0.07
Weed 738	Canada thistle			State listed	Sec 31-T149N-R81W	0.05
Weed 740	Canada thistle			State listed	Sec 11-T149N-R82W	0.11
Weed 741	Canada thistle			State listed	Sec 11-T149N-R82W	0.10
Weed 742	Canada thistle			State listed	Sec 11-T149N-R82W	0.01
Weed 743	Canada thistle			State listed	Sec 11-T149N-R82W	0.02
Weed 745	Canada thistle			State listed	Sec 11-T149N-R82W	0.03
Weed 746	Canada thistle			State listed	Sec 11-T149N-R82W	0.05
Weed 747	Canada thistle			State listed	Sec 3-T149N-R82W	0.02
Weed 748	Canada thistle			State listed	Sec 3-T149N-R82W	0.05
Weed 752	Canada thistle			State listed	Sec 33-T150N-R83W	0.03
Weed 762	Canada thistle			State listed	Sec 29-T150N-R83W	0.06
Weed 763	Canada thistle			State listed	Sec 29-T150N-R83W	0.32
Weed 764	Canada thistle			State listed	Sec 29-T150N-R83W	0.04
Weed 765	Canada thistle			State listed	Sec 29-T150N-R83W	0.67
Weed 766	Canada thistle			State listed	Sec 29-T150N-R83W	0.07
Weed 767	Canada thistle			State listed	Sec 29-T150N-R83W	0.02
Weed 768	Canada thistle			State listed	Sec 23-T150N-R84W	0.02
Weed 769	Canada thistle			State listed	Sec 23-T150N-R84W	0.10
Weed 770	Canada thistle			State listed	Sec 23-T150N-R84W	0.05
Weed 771	Canada thistle			State listed	Sec 24-T150N-R84W	0.03
Weed 772	Canada thistle			State listed	Sec 24-T150N-R84W	0.10
Weed 773	Canada thistle			State listed	Sec 21-T150N-R84W	0.02
Weed 775	Canada thistle			State listed	Sec 21-T150N-R84W	0.01
Weed 776	Canada thistle			State listed	Sec 21-T150N-R84W	0.01
Weed 777	Canada thistle			State listed	Sec 19-T150N-R84W	0.02
Weed 778	Canada thistle			State listed	Sec 24-T150N-R85W	0.05
Weed 779	Canada thistle			State listed	Sec 24-T150N-R85W	0.05
Weed 780	Canada thistle			State listed	Sec 24-T150N-R85W	0.17
Weed 781	Canada thistle			State listed	Sec 23-T150N-R85W	0.06
Weed 782	Canada thistle			State listed	Sec 24-T150N-R85W	0.11
Weed 783	Canada thistle			State listed	Sec 24-T150N-R85W	0.02
Weed 784	Canada thistle			State listed	Sec 23-T150N-R85W	0.08
Weed 785	Canada thistle			State listed	Sec 23-T150N-R85W	0.01

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 786	Canada thistle			State listed	Sec 23-T150N-R85W	0.08
Weed 787	Canada thistle			State listed	Sec 24-T150N-R85W	0.48
Weed 788	Canada thistle			State listed	Sec 24-T150N-R85W	0.11
Weed 789	Canada thistle			State listed	Sec 24-T150N-R85W	0.07
Weed 790	Canada thistle			State listed	Sec 22-T150N-R85W	0.16
Weed 791	Canada thistle			State listed	Sec 7-T150N-R85W	0.05
Weed 792	Canada thistle			State listed	Sec 7-T150N-R85W	0.27
Weed 793	Canada thistle			State listed	Sec 7-T150N-R85W	0.10
Weed 794	Canada thistle			State listed	Sec 7-T150N-R85W	0.06
Weed 795	Canada thistle			State listed	Sec 7-T150N-R85W	0.05
Weed 796	Canada thistle			State listed	Sec 25-T151N-R86W	0.05
Weed 797	Canada thistle			State listed	Sec 25-T151N-R86W	0.05
Weed 798	Canada thistle			State listed	Sec 25-T151N-R86W	0.08
Weed 799	Canada thistle			State listed	Sec 25-T151N-R86W	0.11
Weed 800	Canada thistle			State listed	Sec 27-T151N-R86W	0.07
Weed 801	Canada thistle			State listed	Sec 27-T151N-R86W	0.15
Weed 802	Canada thistle			State listed	Sec 27-T151N-R86W	0.13
Weed 803	Canada thistle			State listed	Sec 28-T151N-R86W	0.04
Weed 804	Canada thistle			State listed	Sec 28-T151N-R86W	0.07
Weed 805	Canada thistle			State listed	Sec 28-T151N-R86W	0.18
Weed 806	Canada thistle			State listed	Sec 28-T151N-R86W	0.05
Weed 807	Canada thistle			State listed	Sec 28-T151N-R86W	0.05
Weed 808	Canada thistle			State listed	Sec 28-T151N-R86W	0.02
Weed 809	Canada thistle			State listed	Sec 29-T151N-R86W	0.03
Weed 810	Canada thistle			State listed	Sec 29-T151N-R86W	0.07
Weed 811	Canada thistle			State listed	Sec 29-T151N-R86W	0.14
Weed 812	Canada thistle			State listed	Sec 29-T151N-R86W	0.08
Weed 818	Canada thistle			State listed	Sec 23-T150N-R85W	0.03
Weed 819	Canada thistle			State listed	Sec 23-T150N-R85W	0.01
Weed 820	Leafy spurge			State listed	Sec 16-T144N-R84W	0.21
Weed 821	Canada thistle			State listed	Sec 16-T144N-R84W	0.32
Weed 822	Canada thistle	Leafy spurge		State listed	Sec 30-T146N-R83W	0.37
Weed 823	Leafy spurge			State listed	Sec 30-T146N-R83W	0.05
Weed 904	Canada thistle			State listed	Sec 10-T154N-R93W	0.14
Weed 911	Canada thistle			State listed	Sec 7-T154N-R93W	0.04
Weed 1317	Leafy spurge	Canada thistle		State listed	Sec 21-T144N-R84W	0.02
Weed 1320	Canada thistle			State listed	Sec 16-T146N-R83W	0.07
Weed 1323	Canada thistle			State listed	Sec 6-T146N-R82W	0.11
Weed 1331	Canada thistle			State listed	Sec 11-T147N-R82W	0.00
Weed 1343	Canada thistle			State listed	Sec 14-T149N-R82W	0.32
Weed 418	Canada thistle	Absinth wormwood		State listed	Sec 6-T149N-R82W	0.34
Weed 1362	Canada thistle			State listed	Sec 20-T150N-R83W	0.06
Weed 1363	Canada thistle			State listed	Sec 20-T150N-R83W	0.05
Weed 1364	Canada thistle			State listed	Sec 20-T150N-R83W	0.02

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 1365	Canada thistle			State listed	Sec 20-T150N-R83W	0.05
Weed 1372	Canada thistle			State listed	Sec 30-T151N-R85W	0.05
Weed 1379	Canada thistle			State listed	Sec 14-T152N-R87W	0.06
Weed 1380	Canada thistle			State listed	Sec 10-T152N-R88W	0.17
Weed 1384	Canada thistle			State listed	Sec 32-T153N-R88W	0.08
Weed 1388	Canada thistle			State listed	Sec 25-T153N-R89W	1.50
Weed 1389	Canada thistle			State listed	Sec 25-T153N-R89W	0.68
Weed 1393	Canada thistle			State listed	Sec 26-T153N-R89W	0.09
Weed 1396	Canada thistle			State listed	Sec 26-T153N-R89W	0.07
Weed 1397	Canada thistle			State listed	Sec 25-T153N-R89W	0.87
Weed 1398	Canada thistle			State listed	Sec 26-T153N-R89W	0.04
Weed 1402	Canada thistle			State listed	Sec 21-T153N-R89W	0.28
Weed 1404	Canada thistle			State listed	Sec 21-T153N-R89W	0.02
Weed 1413	Canada thistle			State listed	Sec 19-T153N-R89W	0.02
Weed 1416	Canada thistle			State listed	Sec 26-T153N-R90W	0.74
Weed 1419	Canada thistle			State listed	Sec 24-T153N-R90W	0.02
Weed 1420	Canada thistle			State listed	Sec 24-T153N-R90W	0.05
Weed 1426	Canada thistle			State listed	Sec 29-T153N-R91W	0.14
Weed 1442	Canada thistle			State listed	Sec 36-T152N-R87W	0.12
Weed 1467	Canada thistle			State listed	Sec 1-T154N-R94W	0.22
Weed 398	Canada thistle			State listed	Sec 20-T150N-R83W	0.20
Weed 454	Canada thistle			State listed	Sec 10-T152N-R88W	8.26
Weed 311a	Canada thistle			State listed	Sec 26-T151N-R86W	0.07
Weed 311b	Canada thistle			State listed	Sec 26-T151N-R86W	0.06
					Total	**209.77**

N = north; R = Range; Sec. = Section; T = Township; W = west.

Noxious Weeds Documented within Project Pull Lanes

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 332	Canada thistle			State listed	Sec 9-T152N-R87W	<0.01
Weed 431	Canada thistle			State listed	Sec 25-T151N-R87W	0.20
Weed 446	Canada thistle			State listed	Sec 13-T152N-R87W	0.20
Weed 633	Canada thistle			State listed	Sec 16-T152N-R87W	0.61
Weed 821	Canada thistle			State listed	Sec 16-T144N-R84W	0.01
Weed 1314	Canada thistle			State listed	Sec 15-T144N-R84W	0.01
Weed 1317	Canada thistle	Leafy spurge		State listed	Sec 21-T144N-R84W	2.18
Weed 1318	Canada thistle			State listed	Sec 36-T146N-R84W	0.09
Weed 1331	Canada thistle			State listed	Sec 11-T147N-R82W	0.21
Weed 1345	Canada thistle			State listed	Sec 11-T149N-R82W	0.07
Weed 398	Canada thistle			State listed	Sec 20-T150N-R83W	0.17
					Total	**3.75**

N = north; R = Range; Sec. = Section; T = Township; W = west.

Noxious Weeds Documented within Potential Access Road Survey Corridors

Name	Species 1	Species 2	Species 3	Class	Location	Acres
Weed 336	Canada thistle			State listed	Sec 8-T152N-R87W	0.00

Weed 344	Canada thistle			State listed	Sec 34-T150N-R83W	0.06
Weed 346	Canada thistle	Absinth wormwood		State listed	Sec 32-T150N-R83W	0.07
Weed 349b	Canada thistle			State listed	Sec 24-T150N-R84W	0.05
Weed 412	Canada thistle	Absinth wormwood	Leafy spurge	State listed	Sec 6-T146N-R82W	0.01
Weed 633	Canada thistle			State listed	Sec 16-T152N-R87W	0.14
Weed 636	Canada thistle			State listed	Sec 16-T152N-R87W	0.01
Weed 1387	Canada thistle			State listed	Sec 26-T153N-R89W	0.02
					Total	**0.36**

N = north; R = Range; Sec. = Section; T = Township; W = west.

Appendix H

Agency Notification Letters and Responses

Summary of Agency Comments

Agency	Notification Date	Response Date	Comment Summary	Basin Electric Response
Aeronautics Commission	7/25/2024	No response received		
Attorney General	7/25/2024	No response received		
Bureau of Land Management	7/25/2024	7/25/2024	Where will the line be located exactly in T. 153 N, R 93 W., sec 13?	Provided details regarding where line is in requested section to show the Project does not cross BLM property.
Federal Aviation Administration	7/25/2024	8/5/2024	The FAA has a web site to determine who shall file in FAA web site OE/AAA om accordance to heights above ground or locations near a public airport. You must file with the FAA at least 45 days prior to construction if one of eight parameters are met.	Basin Electric inputted each structure location and height into the FAA web site. 27 structures were filed for, with all having a Determination of No Hazard to Air Navigation.
Governor's Office	7/25/2024	No response received		
Grand Forks Air Force Base	7/25/2024	No response received		
Jobs Service North Dakota	7/25/2024	No response received		
McLean County Commission	7/25/2024	No response received		
Mercer County Commission	7/25/2024	No response received		
Military Aviation and Installation Assurance Siting Clearinghouse	7/25/2024	7/25/2024	Please provide the structure heights and a shapefile or kmz for mapping the project.	Provided requested information.
Minot Air Force Base	7/25/2024	No response received		In previous correspondence between Basin Electric, the Minot Air Force Base, and the Military Siting Clearinghouse, detailed route and structure information was provided, and a minimal impacts determination was given.
Mountrail County Commission	7/25/2024	7/25/2024	A Conditional Use Permit will be needed for both the transmission line and the substation. All easements will be required along with a map book of the location and route.	Basin Electric will apply for Conditional Use Permits for both the transmission line and the substation.

Summary of Agency Comments				
Agency	**Notification Date**	**Response Date**	**Comment Summary**	**Basin Electric Response**
Natural Resources Conservation Service	7/25/2024	8/1/2024	A review concluded the Project is not supported by federal funding; therefore, Farmland Protection Policy Act does not apply. The Project will have minimal impacts to wetlands if disturbance to wetlands is temporary, and no wetlands are drained or filled.	
ND Department of Agriculture	7/25/2024	No response received		
ND Department of Career and Technical Education	7/25/2024	No response received		
ND Department of Commerce	7/25/2024	No response received		
ND Department of Environmental Quality	7/25/2024	8/12/2024	Necessary measures should be taken to minimize fugitive dust created during construction; care is to be be taken near any water of the state to minimize adverse effects on a water body; caution must be taken to prevent spills of oil and grease that may reach the receiving water; projects disturbing one or more acres are required to have a permit to discharge stormwater runoff until the site is stabilized by re-establishment of vegetation; the Project overlies six aquifers and care should be taken to avoid spills of any materials that may have an adverse effect on groundwater quality; report all spills; all solid waste materials must be managed and transported in accordance with the state's solid and hazardous waste rules. The proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.	
ND Department of Health	7/25/2024	No response received		
ND Department of Human Services	7/25/2024	No response received		
ND Department of Labor and Human Rights	7/25/2024	No response received		
ND Department of Transportation	7/25/2024	No response received		
ND Department of Trust Lands (Minerals Management)	7/25/2024	No response received		
ND Department of Trust Lands (School/Surface Trust)	7/25/2024	7/31/2024	Basin Electric has applied for an Above Ground Electrical Transmission Line Right-of-Way across land in McLean, Mountrail, and Ward. Onsite meeting reviews have not been held with NDDTL to determine and acceptable route across NDDTL land.	Basin Electric met NDDTL at each NDDTL parcel and determined Project routing and access.
ND Energy Infrastructure and Impact Office	7/25/2024	No response received		
ND Forest Service	7/25/2024	No response received		

Summary of Agency Comments				
Agency	**Notification Date**	**Response Date**	**Comment Summary**	**Basin Electric Response**
ND Game and Fish Department	7/25/2024	8/22/2024	A primary concern is the disturbance of native prairie. NDGF asks that work within these areas be avoided to the extent possible, and disturbed areas be reclaimed to pre-project conditions. NDGF recommends avoiding construction during sharp-tailed grouse lekking and nesting season (March 15-July 15). Steps should be taken to protect any wetlands that cannot be avoided, no alterations should be made to existing drainage patterns and above-ground appurtenances should not be placed in wetlands. Unavoidable destruction or degradation of wetland acres should be mitigated in kind. NDGF recommends that overhead lines be marked when placed over perennial streams or near large wetland complexes. Aerial surveys should be conducted for raptor nests before construction begins. NDGF does not believe the Project will have significant adverse effects provided these recommendations are implemented, where appropriate.	
ND Geological Survey	7/25/2024	No response received		
ND Indian Affairs Commission	7/25/2024	No response received		
ND Industrial Commission	7/25/2024	No response received		
ND Parks and Recreation Department	7/25/2024	No response received		
ND Pipeline Authority	7/25/2024	No response received		
ND State Water Commission (Department of Water Resources)	7/25/2024	8/16/2024	The Project does not require a conditional or temporary permit for water appropriation. If a DWR observation well is encountered during construction and must be removed, contact the Water Appropriation Division. The DWR requests to be notified regarding a proposed Project's impacts, if any, to water resources, including wetlands, as alterations may require a drainage permit. Please work directly with the local floodplain administrator of the zoning authority impacted to achieve NFIP compliance.	Basin Electric has notified DWR about the impacts of the two structures within a wetland and their associated USACE permitting.
ND Transmission Authority	7/25/2024	No response received		
State historical Society of North Dakota	7/25/2024	7/25/2024	SHSND recommends a Class III of cultural resources in the Project area.	Basin Electric, through their consultant, Metcalf Archaeological Consultants, are completing a Class III of the Project area.
Twentieth Airforce Ninety-First Missile Wing	7/25/2024	No response received		

Summary of Agency Comments				
Agency	**Notification Date**	**Response Date**	**Comment Summary**	**Basin Electric Response**
US Army Corps of Engineers	7/25/2024	8/30/2024	A Section 10 permit would be required for work impacting navigable waters, including the Missouri River. A section 404 permit would be required for the discharge of dredge or fill material in water of the US.	Basin Electric has applied for a Section 10 and Section 404 permit.
US Department of Defense	7/25/2024	No response received		
US Fish and Wildlife Service	7/25/2024	7/25/2024	Please refer to our standard buffer and timing document for trust resources that may be present within the vicinity of the Project. Please consider using the IPaC database for compliance with the Endangered Species Act. Please review all BGEPA guidelines to determine if an eagle permit is necessary. For NLEB, all tree clearing should be done outside of the active season. If not possible, surveys should be conducted. For Dakota skipper, habitat should be delineated in all native grasslands within a half mile of the route. Delineated habitat is to be avoided during construction and all other grassland should be disturbed at the minimum levels possible. For Whooping Crane, review and determine whether take coverage for the Project is needed by using the habitat suitability model developed by Neimuth et al. 2018. Mark all new line within 1 mile of potentially suitable habitat. For Piping Plover, prior to construction, surveys should be conducted within suitable habitat within one half mile of the route. For migratory birds, all suitable areas should be surveyed for ground nesting birds prior to construction. Please work with the Audubon Wetland Management District to determine permitting for impacted grassland easements.	Basin Electric has submitted a Natural Resource report and concurrence request letter to USFWS that details avoidance and mitigation measures for each item.
Ward County Commission	7/25/2024	No response received		
Williams County Commission	7/25/2024	No response received		
Williams County Auditor	9/10/2024	No response received		
State Representative - District 2	9/10/2024	No response received		
State Representative - District 2	9/10/2024	No response received		
State Senator - District 2	9/10/2024	No response received		
Ward County Auditor	9/10/2024	No response received		
Mountrail County Auditor	9/10/2024	No response received		
Mercer County Auditor	9/10/2024	No response received		
McLean County Auditor	9/10/2024	No response received		
State Representative - District 4	9/10/2024	No response received		
State Senator - District 4	9/10/2024	No response received		
State Representative - District 6	9/10/2024	No response received		

Summary of Agency Comments				
Agency	**Notification Date**	**Response Date**	**Comment Summary**	**Basin Electric Response**
State Representative - District 6	9/10/2024	No response received		
State Senator - District 6	9/10/2024	No response received		
State Representative - District 33	9/10/2024	No response received		
State Representative - District 33	9/10/2024	No response received		
State Senator - District 33	9/10/2024	No response received		

BASIN ELECTRIC POWER COOPERATIVE
A Touchstone Energy® Cooperative

>>October 15, 2024

>>Name<<
>>Title<<
>>Agency<<
>>Address<<

Re: Notification of Basin Electric Power Cooperative's Proposed Leland Olds Station to Tande 345-kV Transmission Line Project

Dear >>Title, Name<<,

Basin Electric Power Cooperative (Basin Electric) is proposing to develop the Leland Olds Station (LOS) to Tande 345-kilovolt (kV) Transmission Line Project (Project) in Mercer, McLean, Ward, Mountrail, and Williams Counties, North Dakota. The purpose of this letter is to provide notification of the Project per North Dakota Administrative Code Section 69-06-01-05. Basin Electric plans to submit a consolidated application for a Certificate of Corridor Compatibility and Transmission Facility Route Permit for the Project to the North Dakota Public Service Commission (NDPSC). Construction of the Project is anticipated to begin in the fall of 2025.

The Project consists of approximately 160 miles of 345-kV electric transmission line with approximately 30.5 miles being built as a double-circuit. The Project starts at the Basin Electric owned Leland Olds Station substation, located east of Stanton, ND, proceeds around the east side of Lake Audubon, and terminates at the Basin Electric owned Tande Substation, east of Tioga, ND. The Project would be constructed using single-pole and H-frame self-supporting steel structures with concrete foundations; guy wires will not be utilized. A 150-foot-wide right-of-way will be required for all route segments.

The purpose and need of the Project is to provide energy load support to the region. The benefits of the Project include adding critical electrical delivery capacity to facilitate economic growth and add critical redundancy to reduce the potential for load shedding or electric outages. This Project was selected to address regional and local transmission reliability deficiencies in the 2021 Interregional Transmission Planning (ITP) study from Southwest Power Pool (SPP), the jurisdictional Regional Transmission Organization (RTO). SPP has directed Basin Electric, as the area transmission owner, to construct the transmission line through a Notice to Construct (NTC) in 2022.

Basin Electric is solicitating input from your agency regarding any sensitive resources, current or planned development, or property interests your agency may have in or around the Project area that should be considered as the Project moves forward with development. In addition, Basin Electric asks that you provide information regarding any applicable permits that may be required from your office. Basin Electric requests the consideration of the legal descriptions provided in the table below and shown on the attached maps.

Leland Olds Station to Tande 345-kV Transmission Line Project
Public Land Survey System Locations

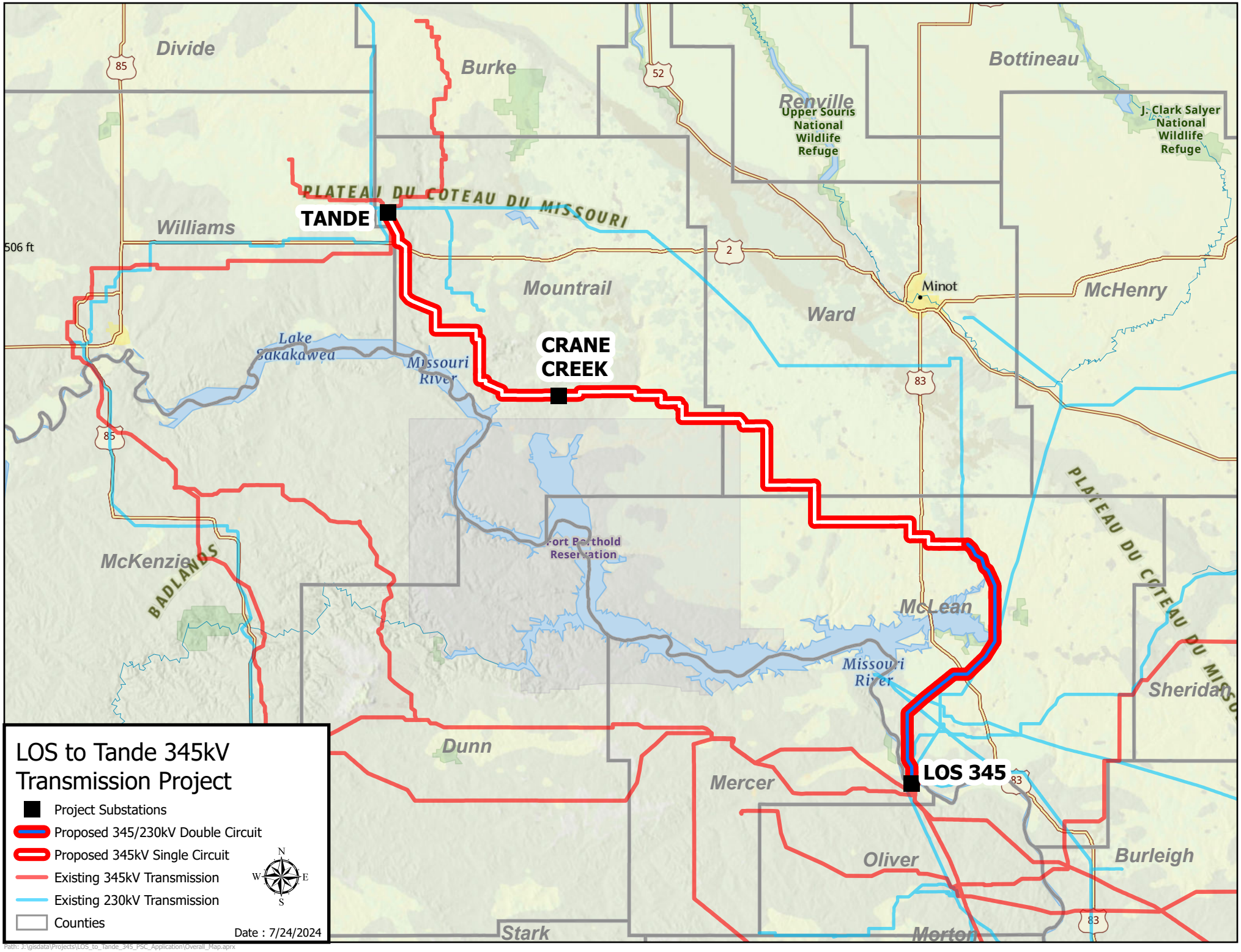
County	Township	Range	Section
Mercer	144N	84W	15, 16, 21, 22
McLean	144N	84W	4, 9, 10, 15, 16
	145N	84W	1, 12, 13, 24, 25, 36
	146N	84W	25, 36
	146N	83W	1, 2, 10, 11, 15, 16, 17, 19, 20, 30
	146N	82W	5, 6
	147N	82W	2, 11, 14, 22, 23, 27, 28, 32, 33
	148N	82W	2, 11, 14, 23, 26, 35
	149N	81W	19, 30, 31
	149N	82W	3, 4, 5, 6, 10, 11, 13, 14, 24
	149N	83W	1, 2, 3
	150N	83W	19, 20, 29, 32, 33, 34
	150N	84W	19, 20, 21, 22, 23, 24
	150N	85W	6, 7, 18, 19, 20, 21, 22, 23, 24
Ward	151N	85W	30, 31
	151N	86W	25, 26, 27, 28, 29, 30
	151N	87W	1, 12, 13, 24, 25
	152N	87W	7, 8, 9, 13, 14, 15, 16, 24, 25, 36
Mountrail	152N	88W	6, 7, 8, 9, 10, 11, 12
	153N	88W	30, 31 ,32, 33
	153N	89W	19, 20, 21, 25, 26, 27, 28,
	153N	90W	22, 23, 24, 26, 27, 28, 29, 30
	153N	91W	25, 26, 27, 28, 29, 30
	153N	92W	18, 19, 20, 21, 25, 26, 27, 28
	153N	93W	1, 12, 13
	154N	93W	7, 8, 9, 10, 11, 12, 13, 24, 25, 36
	154N	94W	1, 12
	155N	94W	5, 8, 17, 20, 21, 25, 26, 27, 28, 36
	156N	94W	6, 7, 17, 18, 20, 29, 32
	157N	94W	29, 32, 33
Williams	156N	95W	1

Basin Electric respectfully requests your response within 30 days of receipt of this letter. If no reply is received, it will be assumed that you have no comment on the Project. Copies of all

correspondence received in response to this letter will be included with the NDPSC application. If further information is desired or if you have comments regarding the Project, please contact me by email at rking@bepc.com, by phone at 701-557-5558, or by mail at 1717 East Interstate Avenue, Bismarck, ND 58503.

Sincerely,

Ryan King
Environmental Coordinator


LOS to Tande 345kV Transmission Project
Project Substations
Proposed 345/230kV Double Circuit
Proposed 345kV Single Circuit
Existing 345kV Transmission
Existing 230kV Transmission
Counties
Date : 7/24/2024
TANDE
CRANE CREEK
LOS 345
Divide
Burke
Renville
Bottineau
Williams
Mountrail
Ward
McHenry
McKenzie
McLean
Sheridan
Dunn
Mercer
Oliver
Burleigh
Stark
Morton
Minot
Upper Souris National Wildlife Refuge
J. Clark Salyer National Wildlife Refuge
PLATEAU DU COTEAU DU MISSOURI
BADLANDS
Lake Sakakawea
Missouri River
Fort Berthold Reservation
506 ft
85
52
2
83

Bureau of Land Management

From:	McKenzie, Chelsie J
To:	Ryan King
Subject:	Re: [External] External: Basin Electric Leland Olds Station to Tande 345-kV Transmission Project – Consultation Request – NDPSC Project
Date:	Friday, July 26, 2024 9:07:16 AM
Attachments:	image001.png image002.jpg

Ryan,

Thank you for getting this to me, that is all I needed to see. I looked through the rest of the land descriptions and it looks like BLM is pretty well avoided so I won't provide any formal comments. Let me know if for some reason anything changes.

Chelsie McKenzie
Realty Specialist
Bureau of Land Management
North Dakota Field Office
99 23rd Avenue West, Suite A
Dickinson, ND 58601
Office: 701-227-7702
Cell: 701-502-1271

From: Ryan King <RKing@bepc.com>
Sent: Friday, July 26, 2024 6:37 AM
To: McKenzie, Chelsie J <cmckenzie@blm.gov>
Subject: RE: [External] External: Basin Electric Leland Olds Station to Tande 345-kV Transmission Project – Consultation Request – NDPSC Project

Good morning, Chelsie,

Here is sec 13. I turned the BLM layer on for convenience. Let me know if you have any other questions!

Thank you,

Ryan King | Environmental Coordinator
Direct: 701.557.5558 | Cell: 701.426.9469

From: McKenzie, Chelsie J <cmckenzie@blm.gov>
Sent: Thursday, July 25, 2024 3:19 PM
To: Ryan King <RKing@bepc.com>
Subject: [External] External: Basin Electric Leland Olds Station to Tande 345-kV Transmission Project – Consultation Request – NDPSC Project

External Email - Use caution clicking links or opening attachments

Ryan,

I just received the notification for this project this morning, I just had a quick question. Where will the line be located exactly in T. 153 N, R 93 W., sec 13?

Thank you

Chelsie McKenzie
Realty Specialist
Bureau of Land Management
North Dakota Field Office
99 23rd Avenue West, Suite A
Dickinson, ND 58601
Office: 701-227-7702
Cell: 701-502-1271

Federal Aviation Administration

From:	Anderson, David P (FAA)
To:	Ryan King
Subject:	[External] External: RE: Basin Electric Leland Olds Station to Tande 345-kV Transmission Project – Consultation Request – NDPSC Project
Date:	Thursday, July 25, 2024 9:48:03 AM
Attachments:	image001.png

External Email - Use caution clicking links or opening attachments

Good morning Ryan,

I have forwarded your request to the Program Managers for that area along with our Environmental Specialists to provide comments as necessary.

If you have any questions, please let me know

Thanks!

Dave Anderson
Deputy Manager
Dakota-Minnesota Airports District Office
Bismarck, ND
(701) 323-7385 – Office
(701) 400-4162 - Cell

From: Ryan King <RKing@bepc.com>
Sent: Thursday, July 25, 2024 8:44 AM
To: Anderson, David P (FAA) <David.P.Anderson@faa.gov>
Subject: Basin Electric Leland Olds Station to Tande 345-kV Transmission Project – Consultation Request – NDPSC Project

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Anderson,

Please see the attached consultation letter requesting review of Basin Electric's Leland Olds Station (LOS) to Tande 345-kilovolt (kV) Transmission Line Project (Project). The Project involves construction of approximately 160 miles of 345-kV electric transmission line with about 30.5 miles being built as a double-circuit. The Project is located in Mercer, McLean, Ward, Mountrail, and Williams Counties, North Dakota. Due to the Project schedule, I am respectfully requesting a review of the material within 30 days.
If you have any questions or need additional information, please contact me directly at 701-557-5558 or RKing@bepc.com.

Thank you,

Ryan King
Environmental Coordinator
Basin Electric Power Cooperative

From:	Holzer, Mark (FAA)
To:	Ryan King
Cc:	Jenny, Melissa M (FAA); Probert, Thomas G (FAA); Anderson, David P (FAA); Schmit, Travis L (FAA); Hahn, Robert (FAA)
Subject:	[External] External: FAA review Basin Electric Leland Olds Station to Tande 345-kV Transmission Project – NDPSC Project
Date:	Monday, August 5, 2024 4:28:55 PM
Attachments:	image001.png image003.png We sent you safe versions of your files.msg Federal Aviation Administration_BEPC LOS to Tande 345-kV Transmission Line Notification.pdf

External Email - Use caution clicking links or opening attachments
Mimecast Attachment Protection has deemed this file to be safe, but always exercise caution when opening files.

Ryan

Good afternoon,

FAA reviews proposed transmission line projects in regards to the safe and efficient use of public airports and airspace within this study area.

FAA has a web site pasted below to determine who shall file in FAA web site OE/AAA om accordance to heights above ground or locations near a public airport.

https://oeaaa.faa.gov/oeaaa/external/portal.jsp

The following is the guidance as to who needs to file.

Who Must File?

§ 77.9 — Any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA:

Any construction or alteration exceeding 200 ft above ground level
Any construction or alteration
within 20,000 ft of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 ft.
within 10,000 ft of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 ft.
within 5,000 ft of a public use heliport which exceeds a 25:1 surface
Any highway, railroad or other traverse way whose prescribed adjusted height would exceed that above noted standards
When requested by the FAA
Any construction or alteration located on a public use airport or heliport regardless of height or location
Persons failing to comply with the provisions of FAR Part 77 are subject to Civil Penalty under Section 902 of the Federal Aviation Act of 1958, as amended and pursuant to 49 U.S.C. Section 46301(a).

Filing notice tool can be found here:

https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm

The location of public airports in ND can be found using ND Aeronautics Commission aeronautical chart as per link below.

https://aero.nd.gov/image/cache/454569_Chart.pdf

Once you have the powerline area mapped, you can verify its location near any public use airports by reviewing the ND link above along with sending me a copy to verify airports along this corridor. We hope this information provides a starting place for the possible impacts to airports or airspace near an airport.

Mark J. Holzer
Program Manager
Federal Aviation Administration
Dakota Minnesota Airports District Office
2301 University Drive, Bldg 23B
Bismarck, ND 58504
701.323.7393

From: Ryan King <RKing@bepc.com>
Sent: Thursday, July 25, 2024 8:44 AM
To: Anderson, David P (FAA) <David.P.Anderson@faa.gov>
Subject: Basin Electric Leland Olds Station to Tande 345-kV Transmission Project – Consultation Request – NDPSC Project

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Anderson,

Please see the attached consultation letter requesting review of Basin Electric's Leland Olds Station (LOS) to Tande 345-kilovolt (kV) Transmission Line Project (Project). The Project involves construction of approximately 160 miles of 345-kV electric transmission line with about 30.5 miles being built as a double-circuit. The Project is located in Mercer, McLean, Ward, Mountrail, and Williams Counties, North Dakota. Due to the Project schedule, I am respectfully requesting a review of the material within 30 days.
If you have any questions or need additional information, please contact me directly at 701-557-5558 or RKing@bepc.com.

Thank you,

Ryan King
Environmental Coordinator
Basin Electric Power Cooperative
1717 E Interstate Avenue | Bismarck, ND 58503
Direct: 701.557.5558 | Cell: 701.426.9469
RKing@bepc.com | basinelectric.com

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11604-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-110.pol
Location:	White Earth, ND
Latitude:	48-17-38.98N NAD 83
Longitude:	102-47-47.04W
Heights:	2331 feet site elevation (SE)
	110 feet above ground level (AGL)
	2441 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11604-OE.

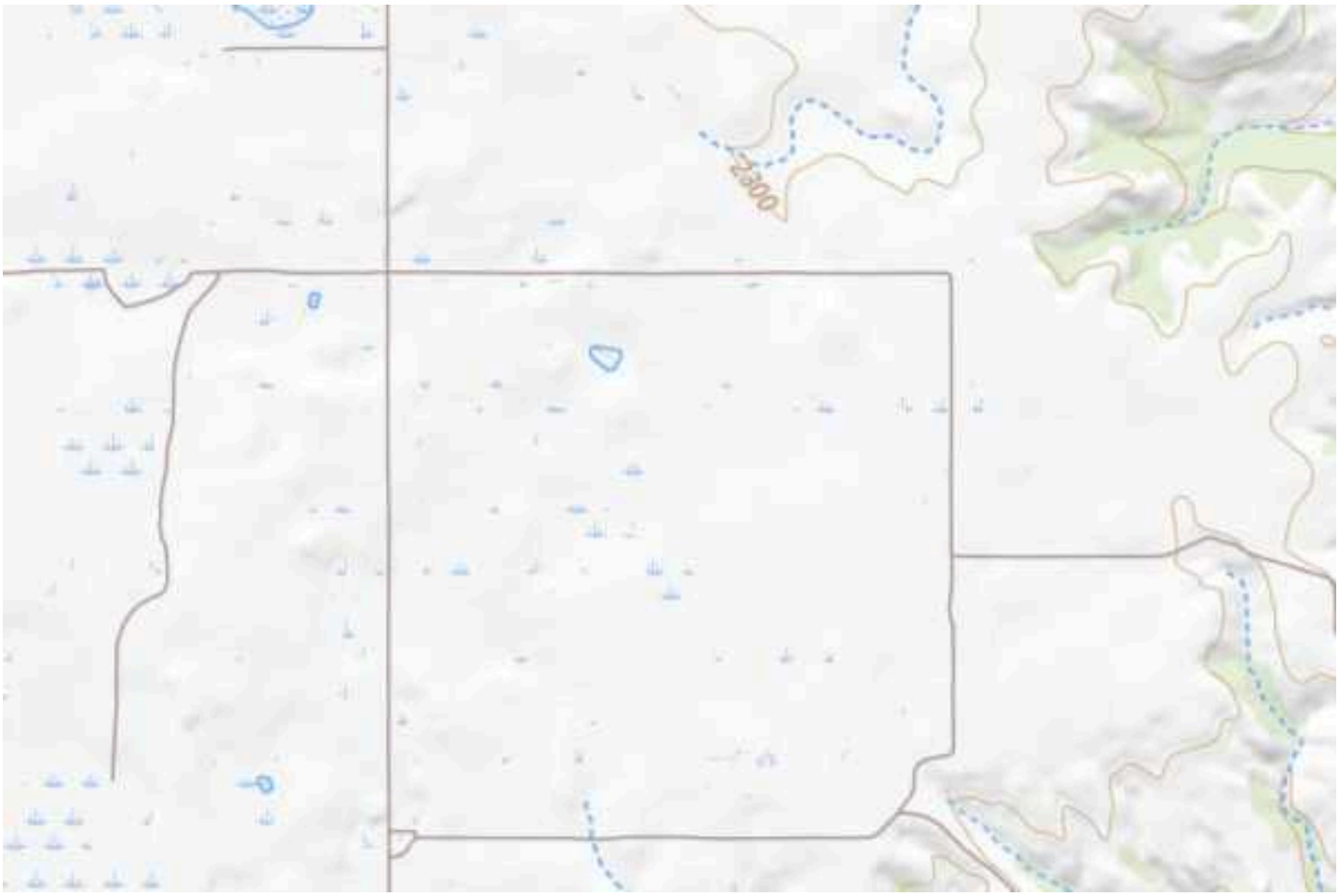
Signature Control No: 631022545-632735513 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

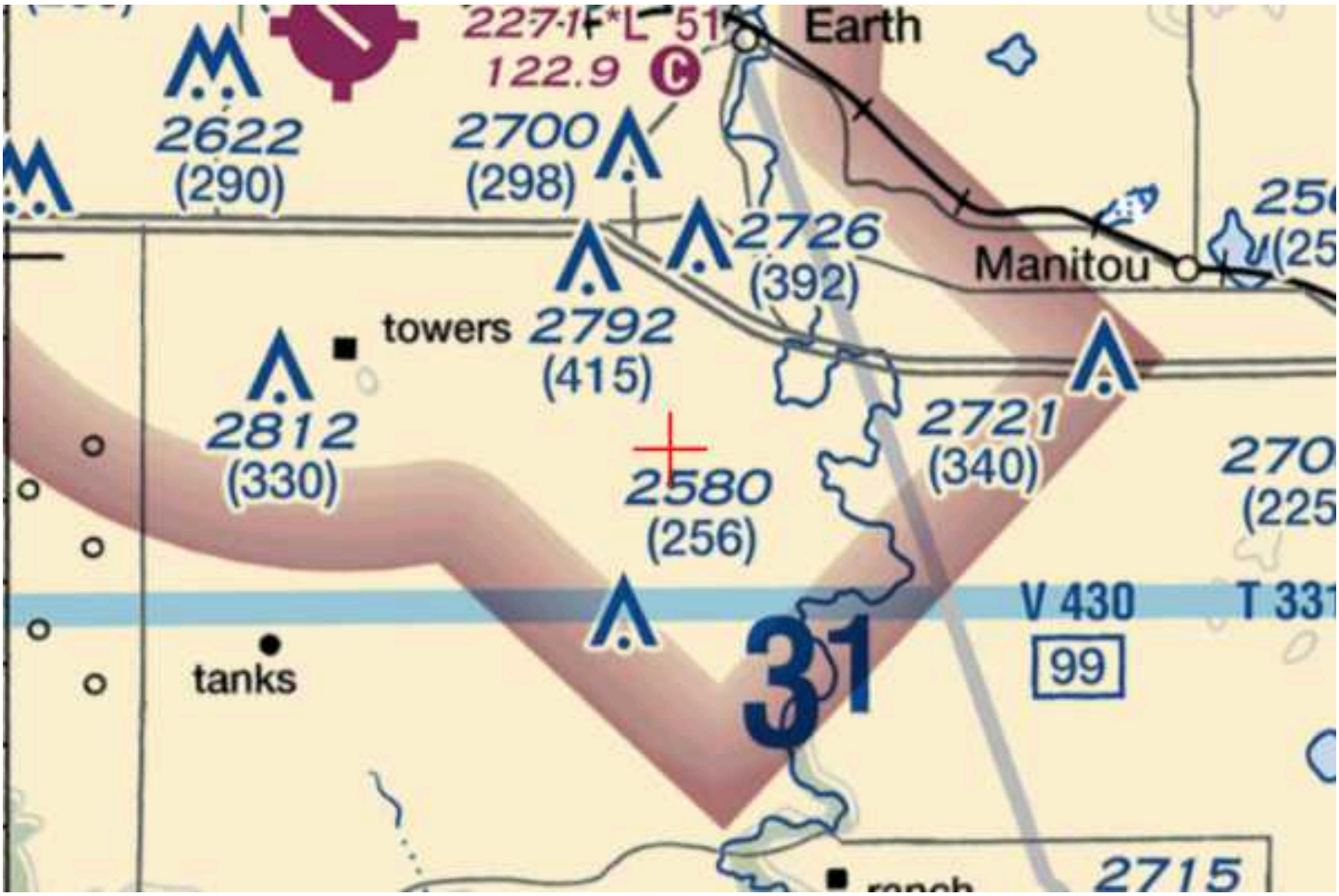
cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11604-OE



Sectional Map for ASN 2024-AGL-11604-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11605-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-120.pol
Location:	White Earth, ND
Latitude:	48-17-48.36N NAD 83
Longitude:	102-47-47.06W
Heights:	2322 feet site elevation (SE) 120 feet above ground level (AGL) 2442 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11605-OE.

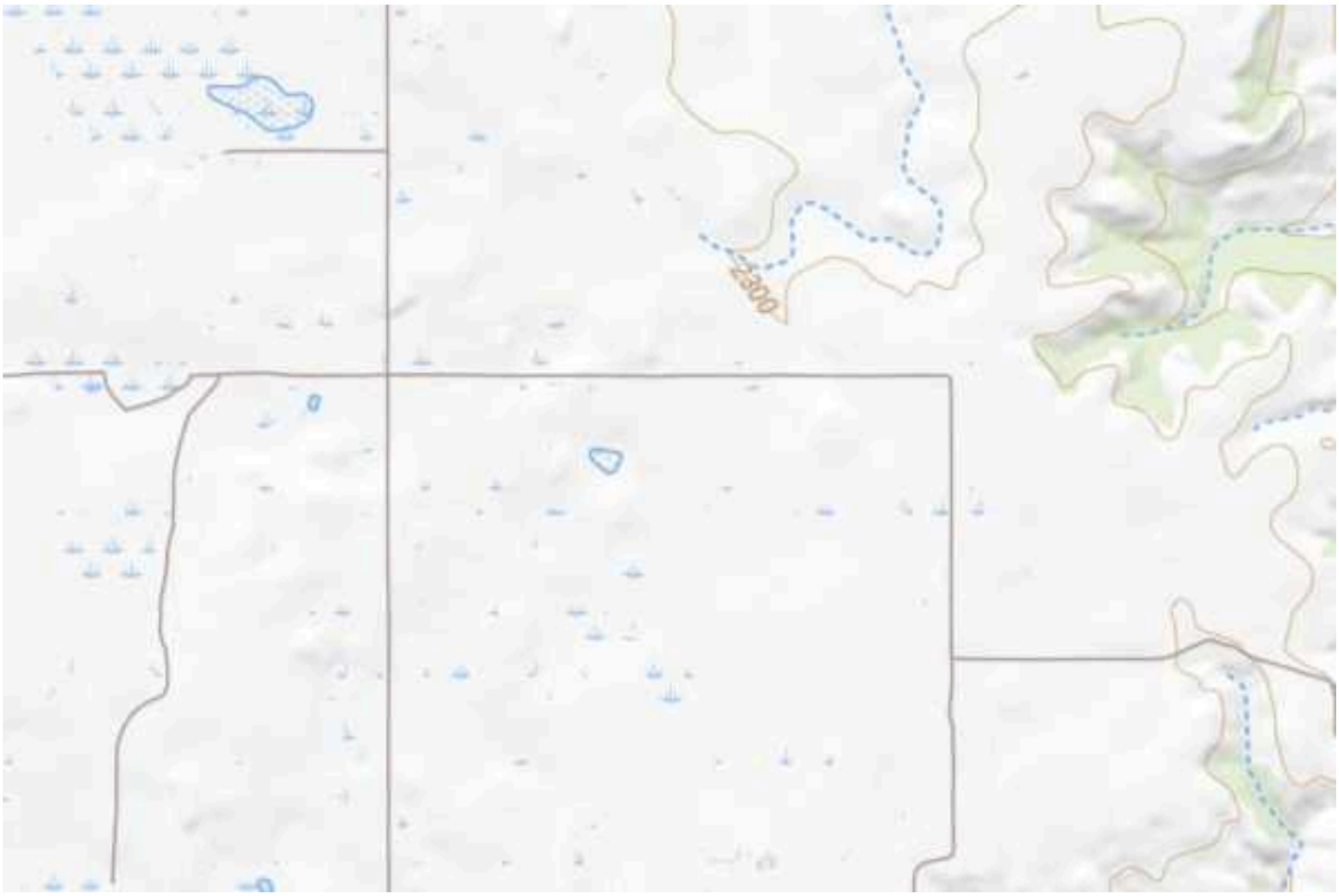
Signature Control No: 631022547-632735516 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

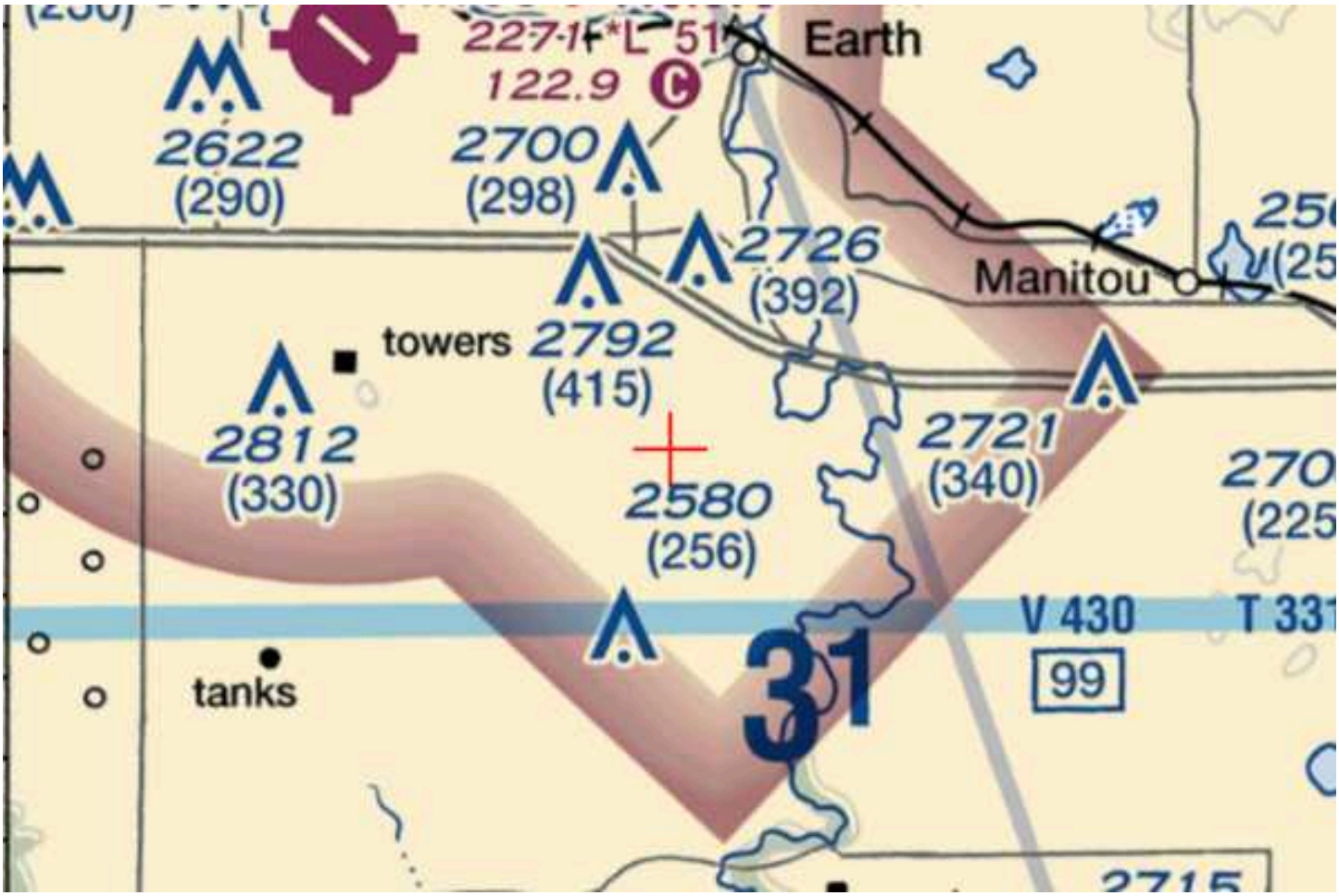
cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11605-OE



Sectional Map for ASN 2024-AGL-11605-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11606-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-120-2.pol
Location:	White Earth, ND
Latitude:	48-17-58.52N NAD 83
Longitude:	102-47-47.08W
Heights:	2322 feet site elevation (SE) 120 feet above ground level (AGL) 2442 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
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SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

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A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11606-OE.

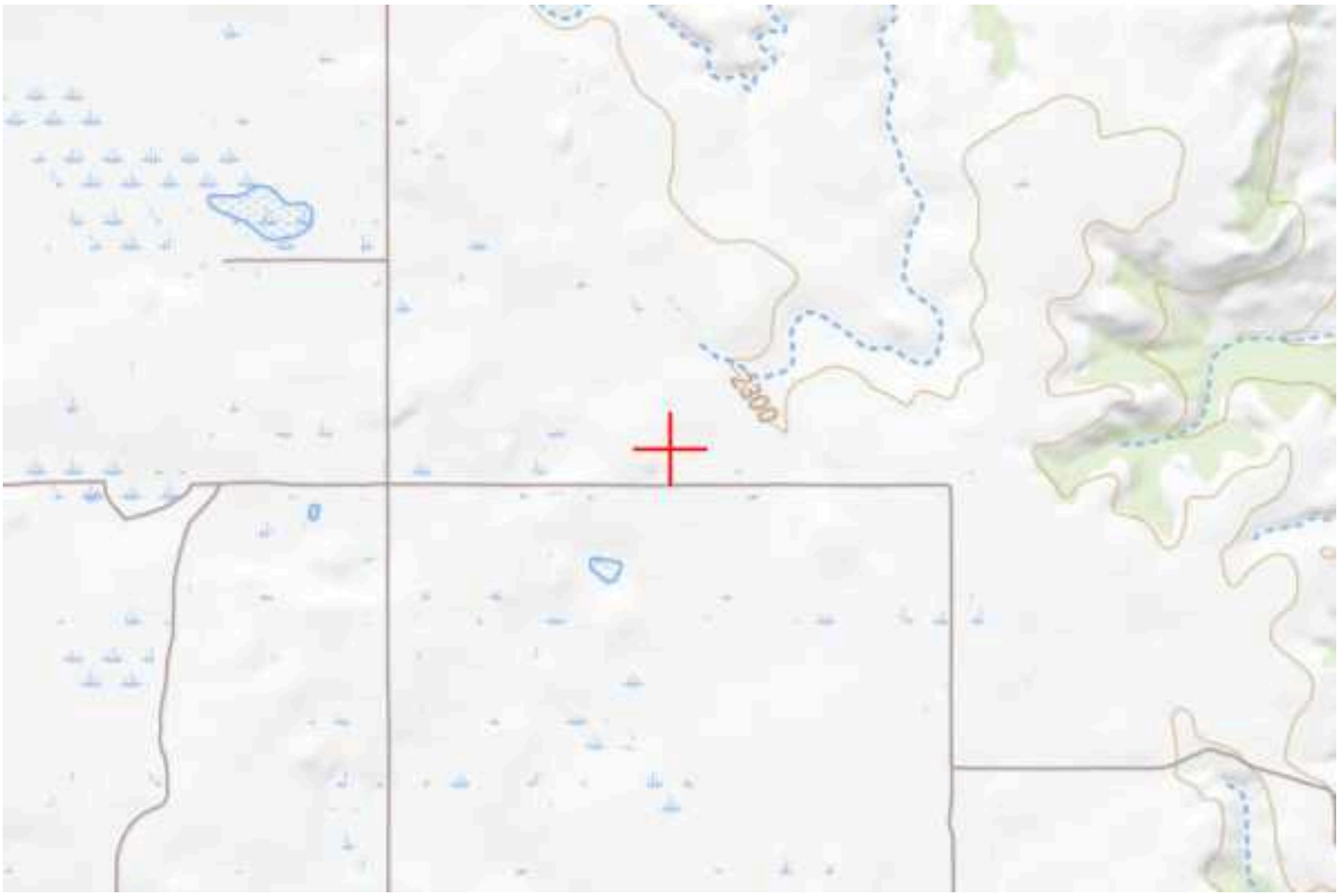
Signature Control No: 631022548-632735528 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

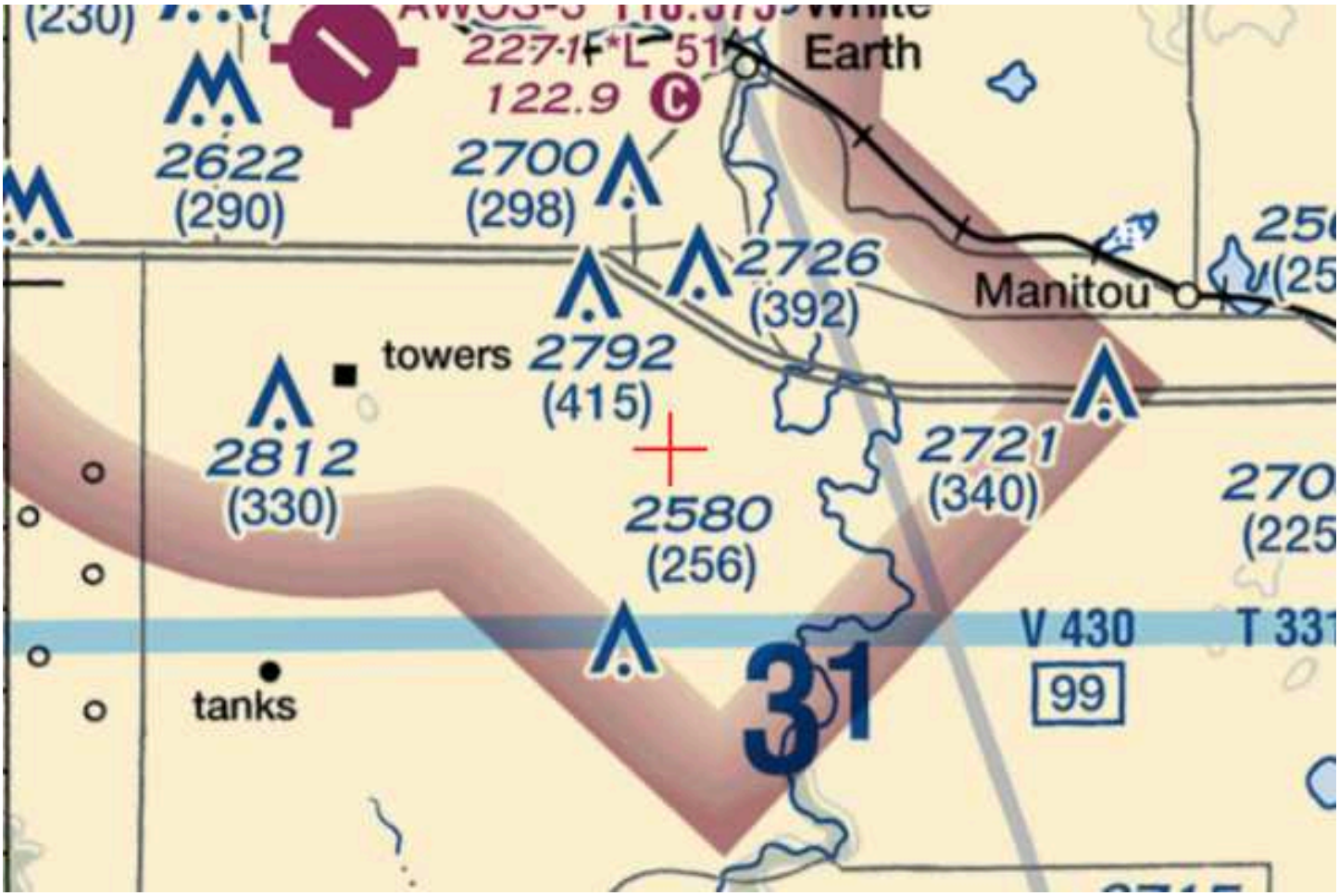
cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11606-OE



Sectional Map for ASN 2024-AGL-11606-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11607-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-125.pol
Location:	White Earth, ND
Latitude:	48-18-07.80N NAD 83
Longitude:	102-47-47.10W
Heights:	2310 feet site elevation (SE) 125 feet above ground level (AGL) 2435 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
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A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11607-OE.

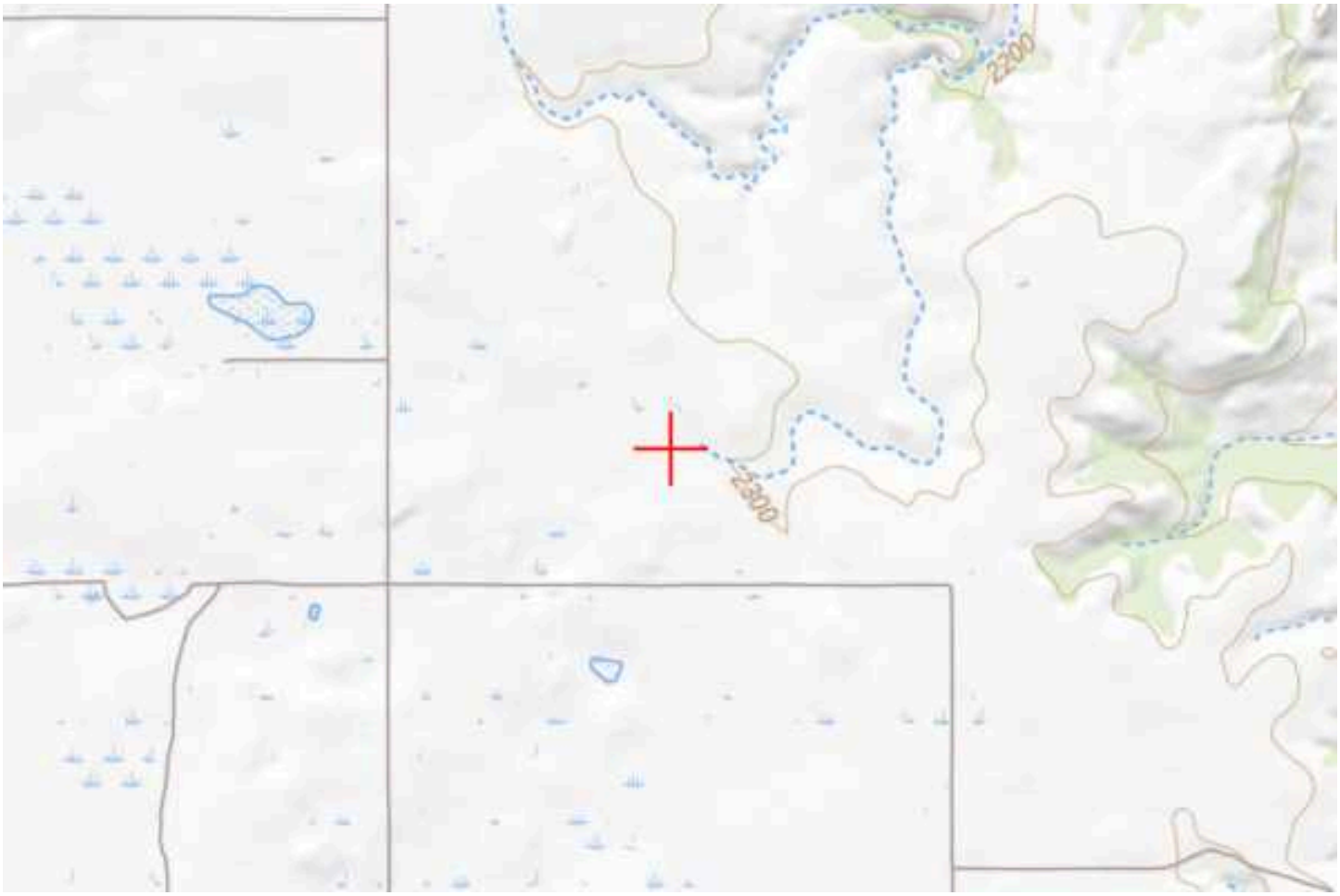
Signature Control No: 631022549-632735520 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

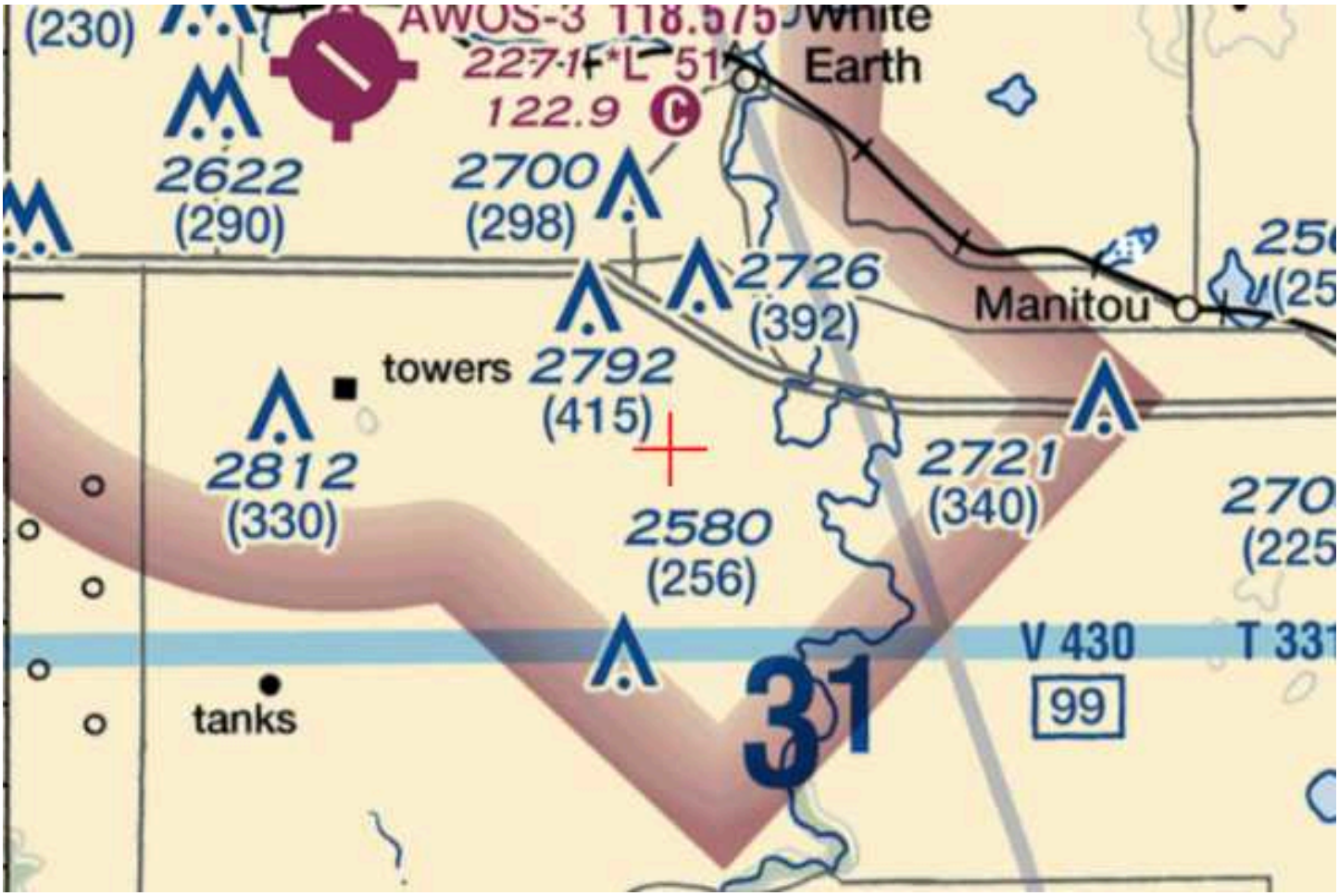
cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11607-OE



Sectional Map for ASN 2024-AGL-11607-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11608-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-115.pol
Location:	White Earth, ND
Latitude:	48-18-18.16N NAD 83
Longitude:	102-47-47.12W
Heights:	2308 feet site elevation (SE) 115 feet above ground level (AGL) 2423 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

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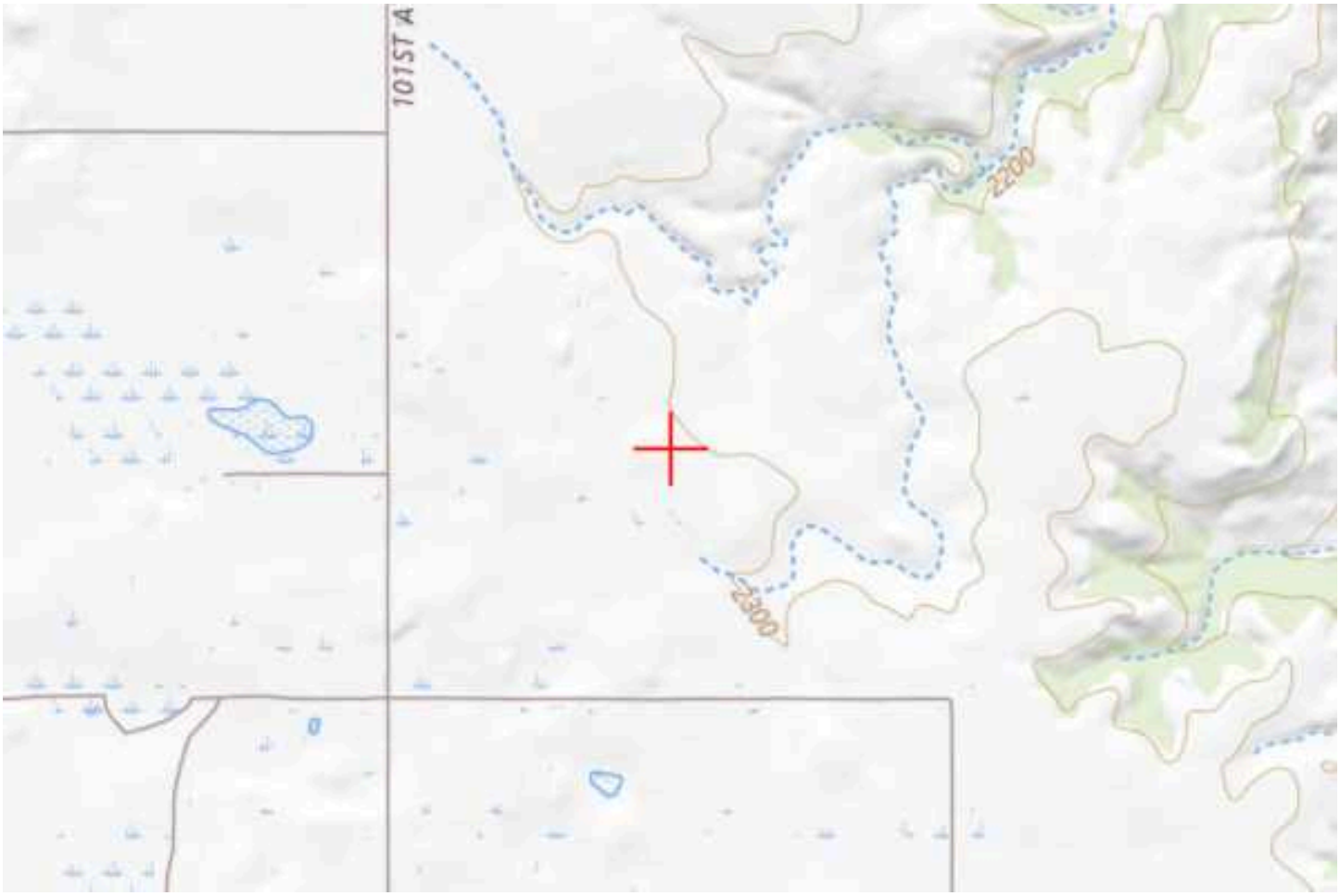
Signature Control No: 631022550-632735510 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11608-OE



Sectional Map for ASN 2024-AGL-11608-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11609-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-125-2.pol
Location:	White Earth, ND
Latitude:	48-18-28.23N NAD 83
Longitude:	102-47-47.15W
Heights:	2296 feet site elevation (SE) 125 feet above ground level (AGL) 2421 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

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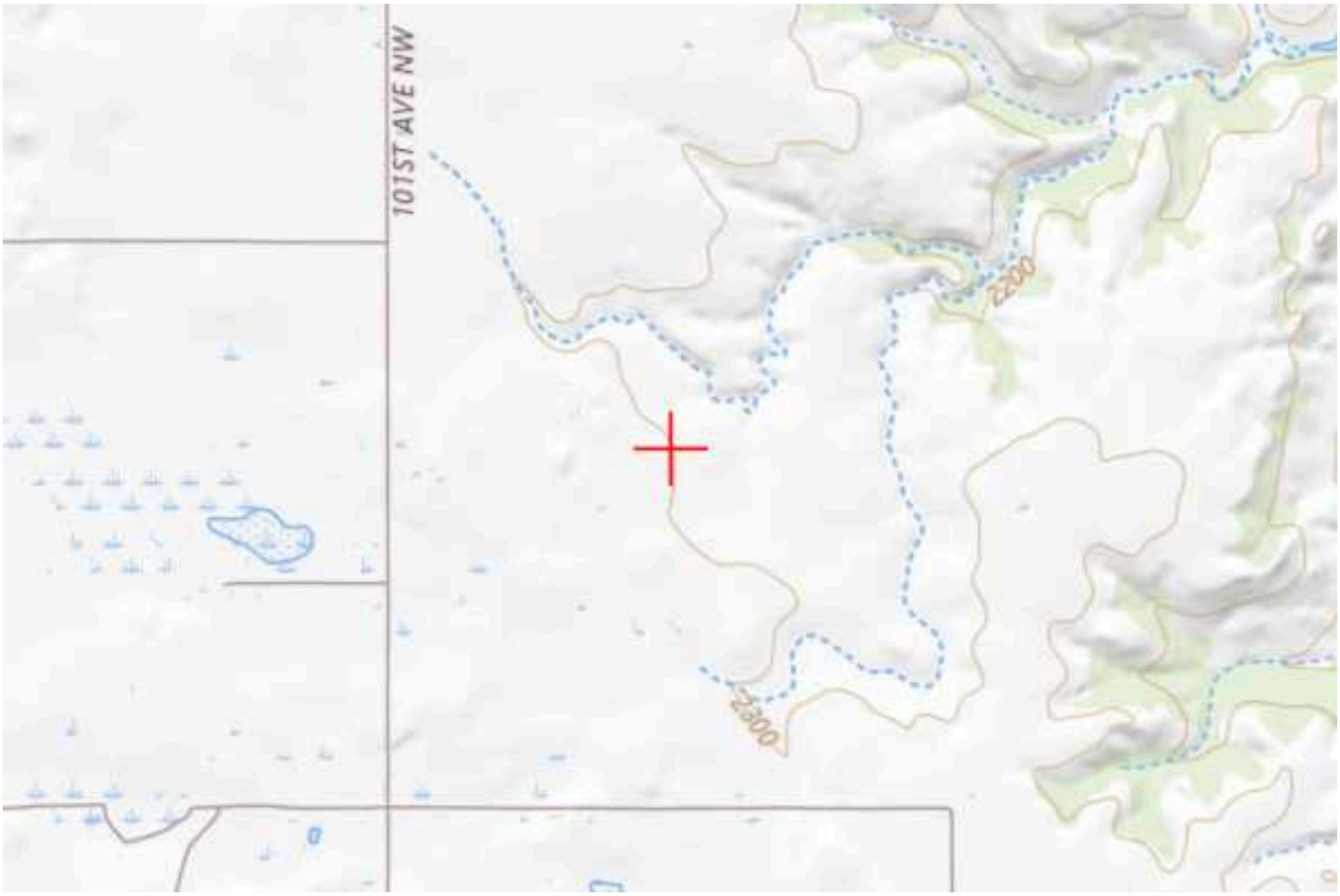
Signature Control No: 631022551-632735511 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11609-OE



Sectional Map for ASN 2024-AGL-11609-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11610-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-140.pol
Location:	White Earth, ND
Latitude:	48-18-40.56N NAD 83
Longitude:	102-47-47.18W
Heights:	2288 feet site elevation (SE) 140 feet above ground level (AGL) 2428 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

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If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11610-OE.

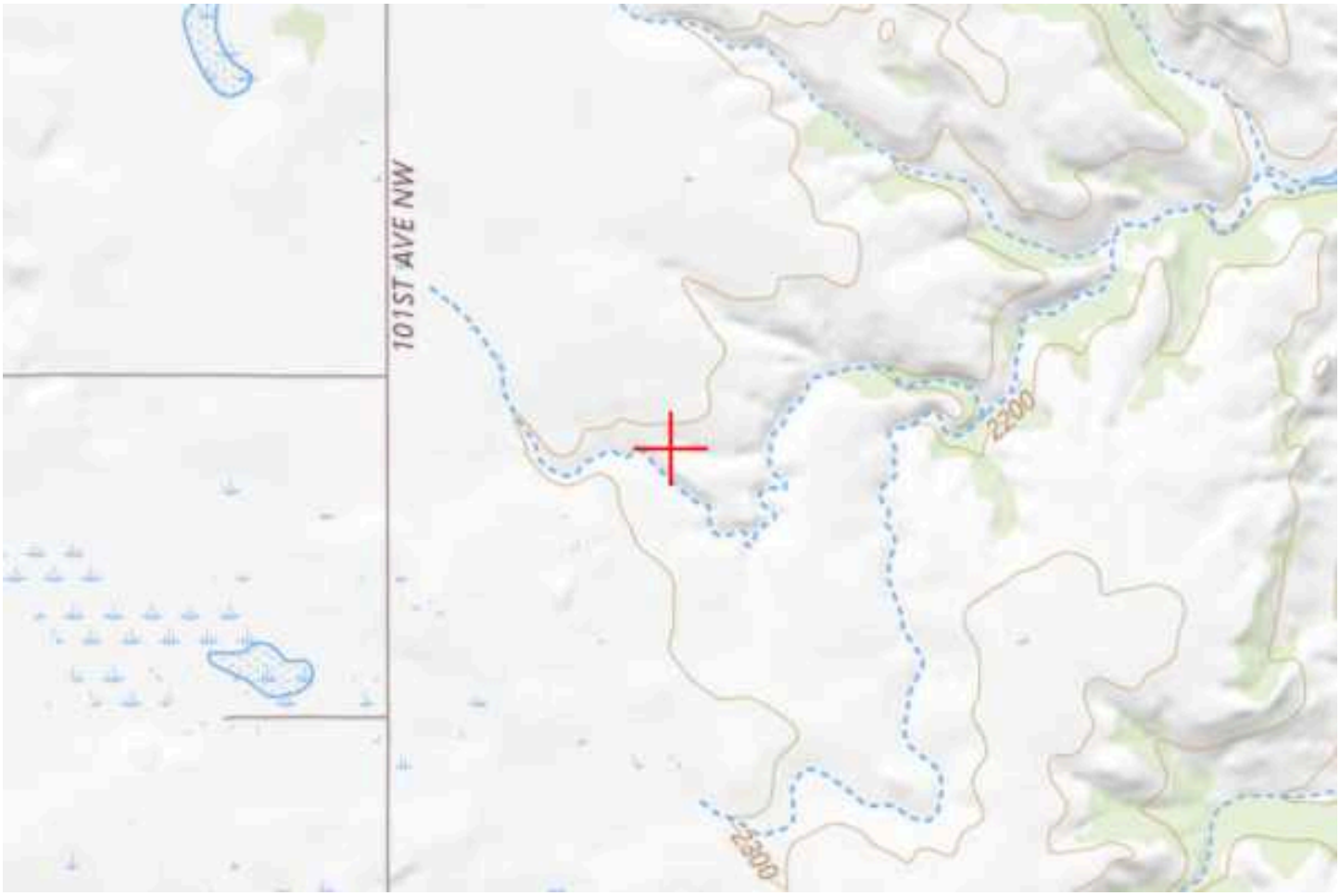
Signature Control No: 631022552-632735522 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11610-OE



Sectional Map for ASN 2024-AGL-11610-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11611-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

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Structure:	Tower 3st2-120-3.pol
Location:	White Earth, ND
Latitude:	48-18-50.92N NAD 83
Longitude:	102-47-47.20W
Heights:	2326 feet site elevation (SE) 120 feet above ground level (AGL) 2446 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

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NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11611-OE.

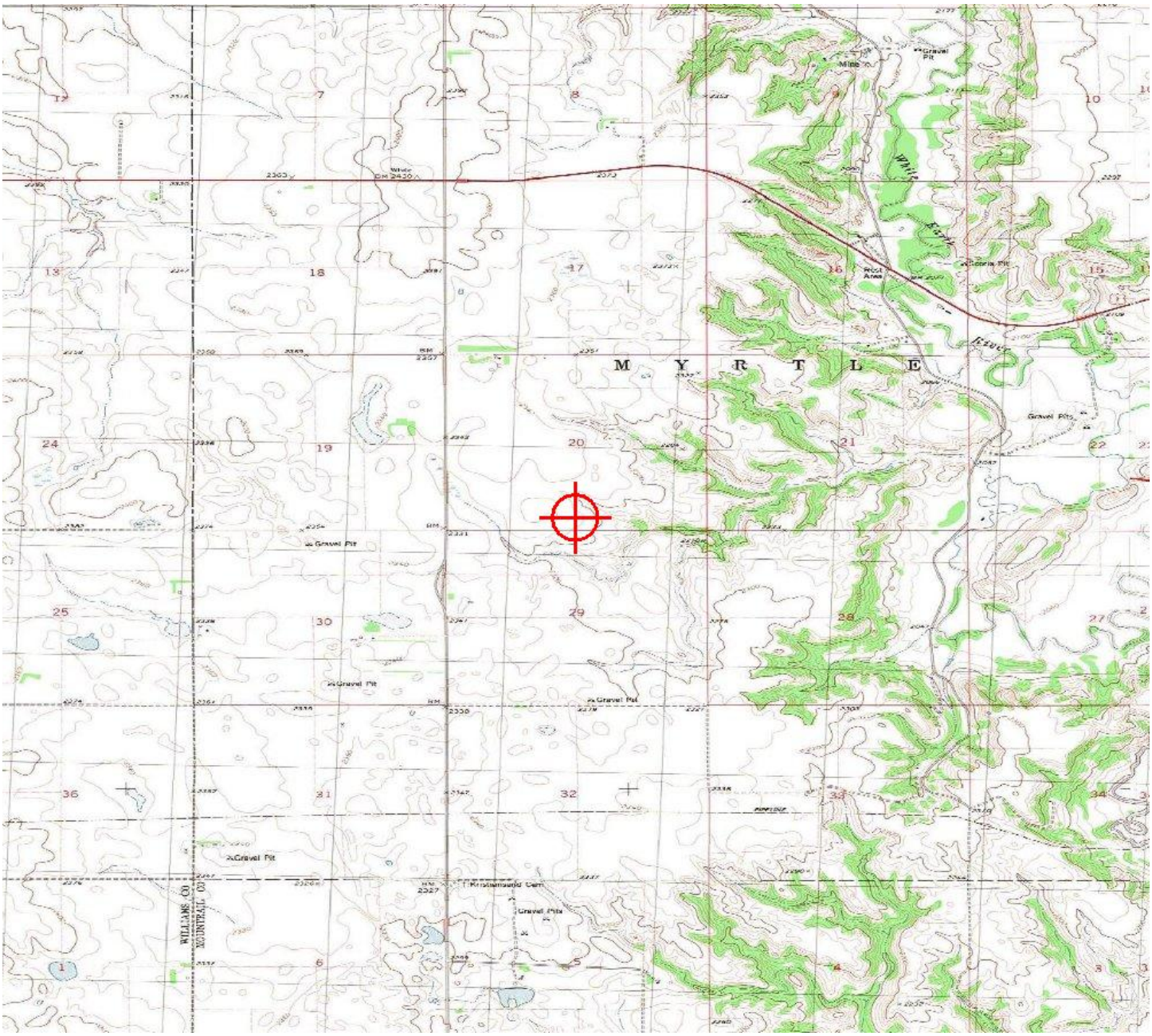
Signature Control No: 631022553-632735512 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11611-OE



Sectional Map for ASN 2024-AGL-11611-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11612-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-120-4.pol
Location:	White Earth, ND
Latitude:	48-19-02.97N NAD 83
Longitude:	102-47-47.23W
Heights:	2344 feet site elevation (SE) 120 feet above ground level (AGL) 2464 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

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A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11612-OE.

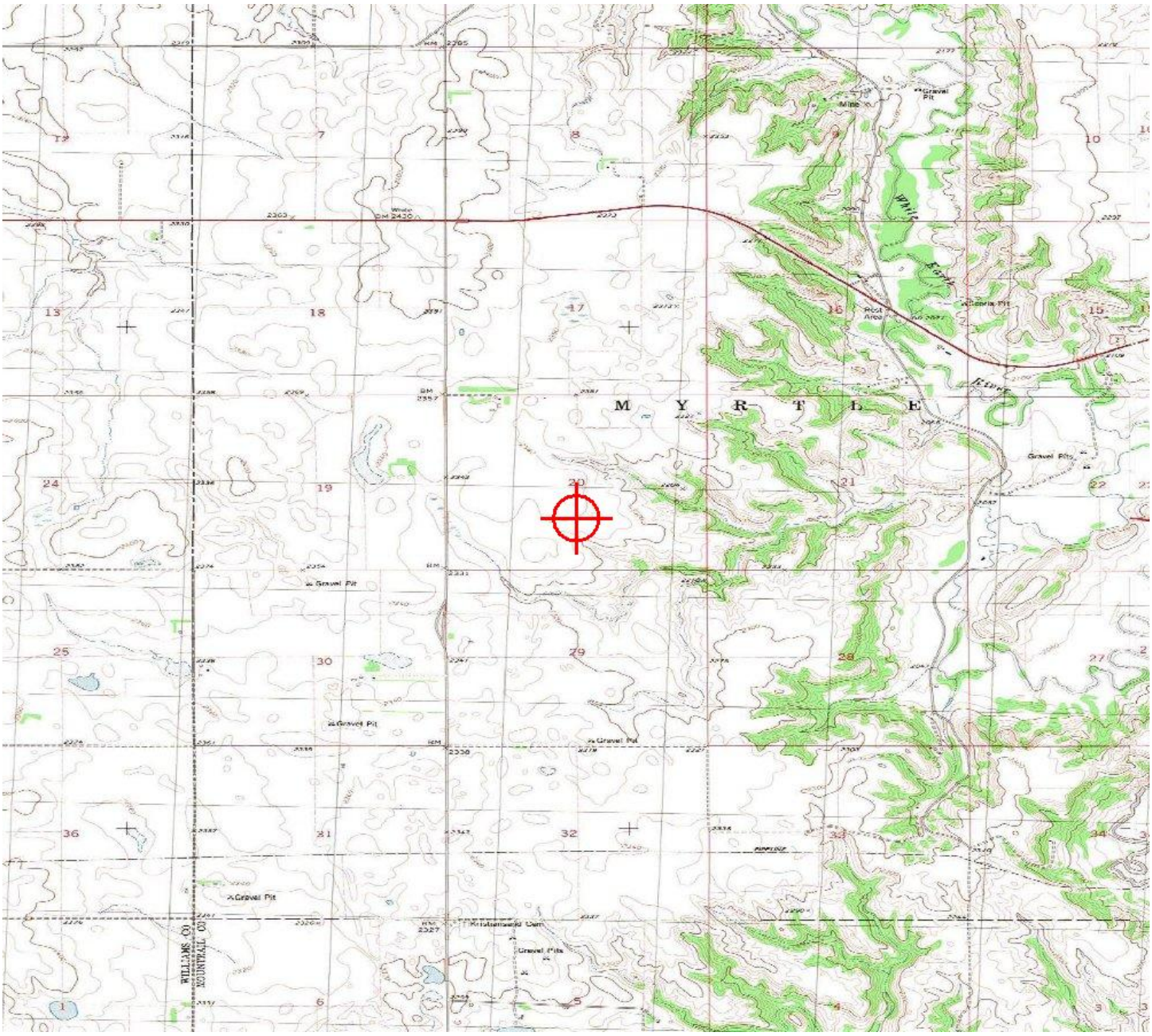
Signature Control No: 631022554-632735515 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

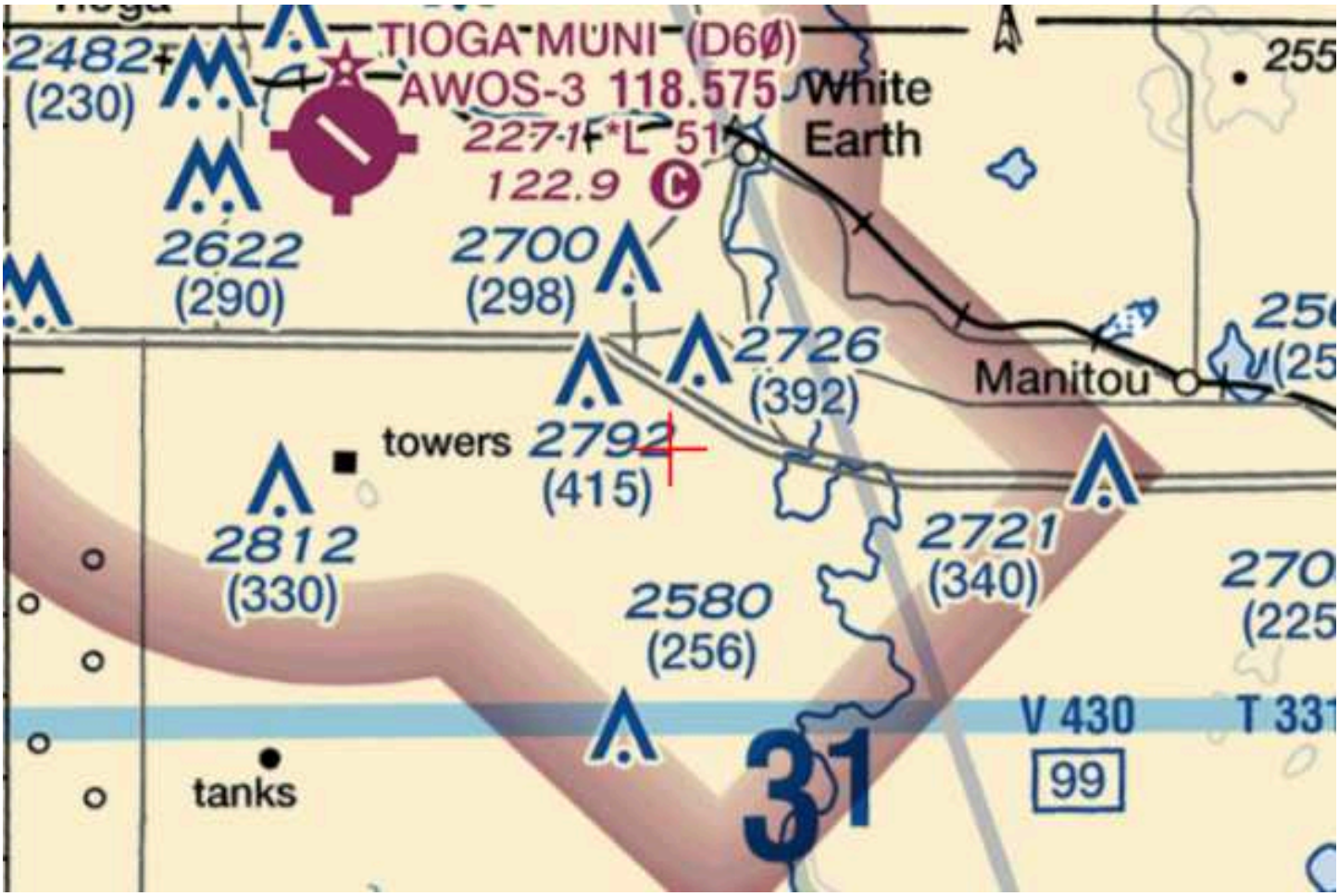
cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11612-OE



Sectional Map for ASN 2024-AGL-11612-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11613-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-125-3.pol
Location:	White Earth, ND
Latitude:	48-19-13.03N NAD 83
Longitude:	102-47-47.25W
Heights:	2345 feet site elevation (SE) 125 feet above ground level (AGL) 2470 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11613-OE.

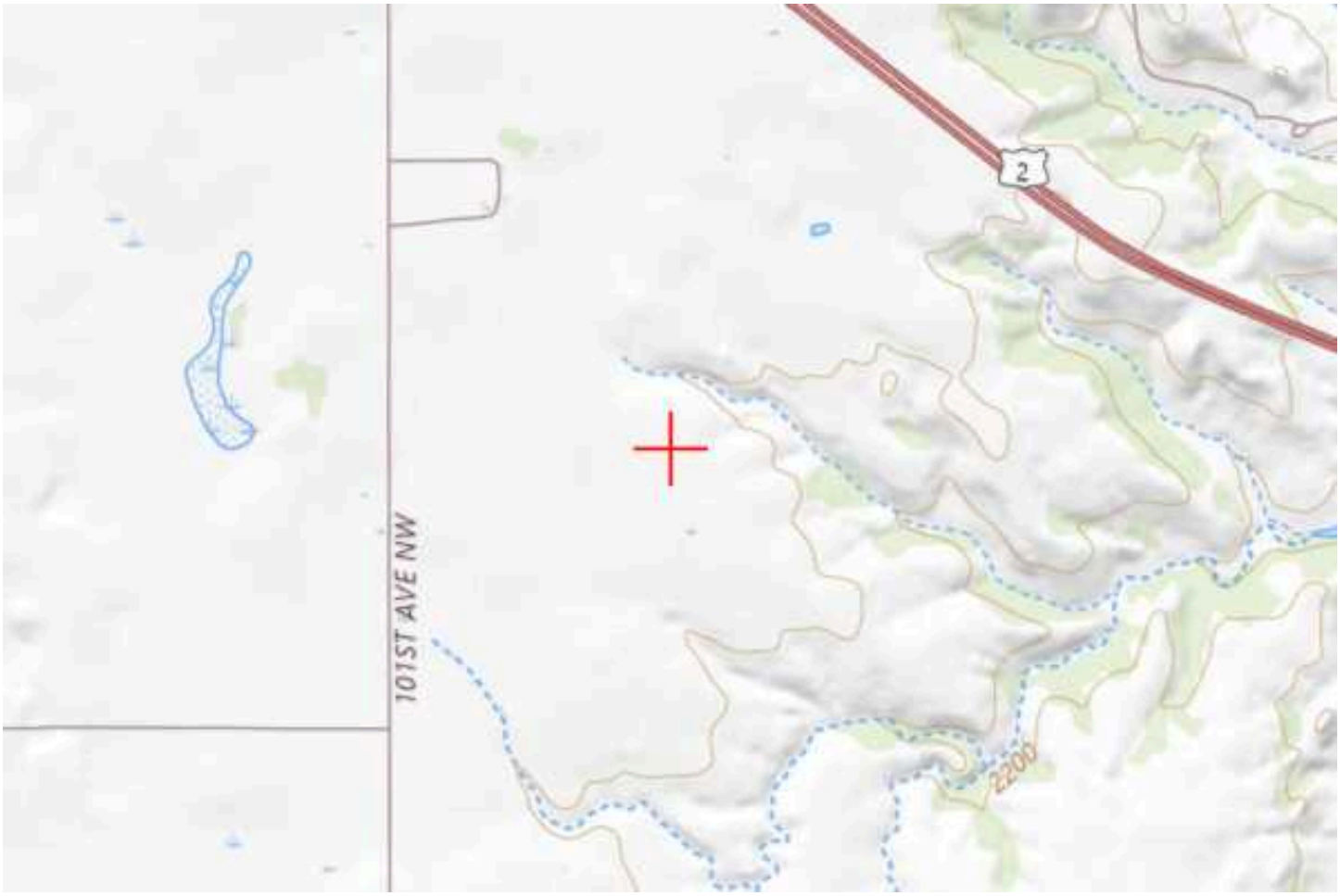
Signature Control No: 631022555-632735521 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

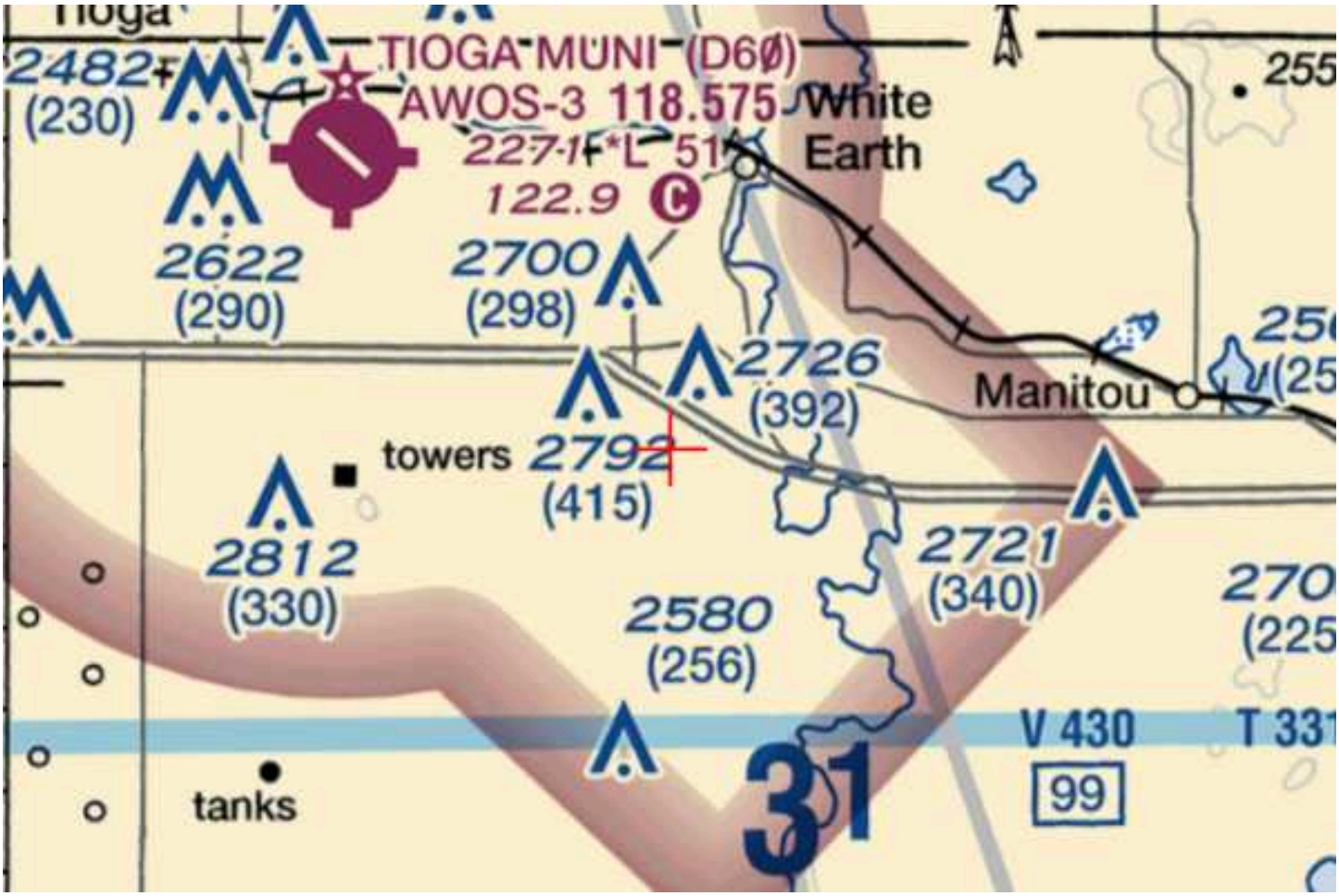
cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11613-OE



Sectional Map for ASN 2024-AGL-11613-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11614-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-120-5.pol
Location:	White Earth, ND
Latitude:	48-19-24.57N NAD 83
Longitude:	102-47-47.28W
Heights:	2344 feet site elevation (SE) 120 feet above ground level (AGL) 2464 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11614-OE.

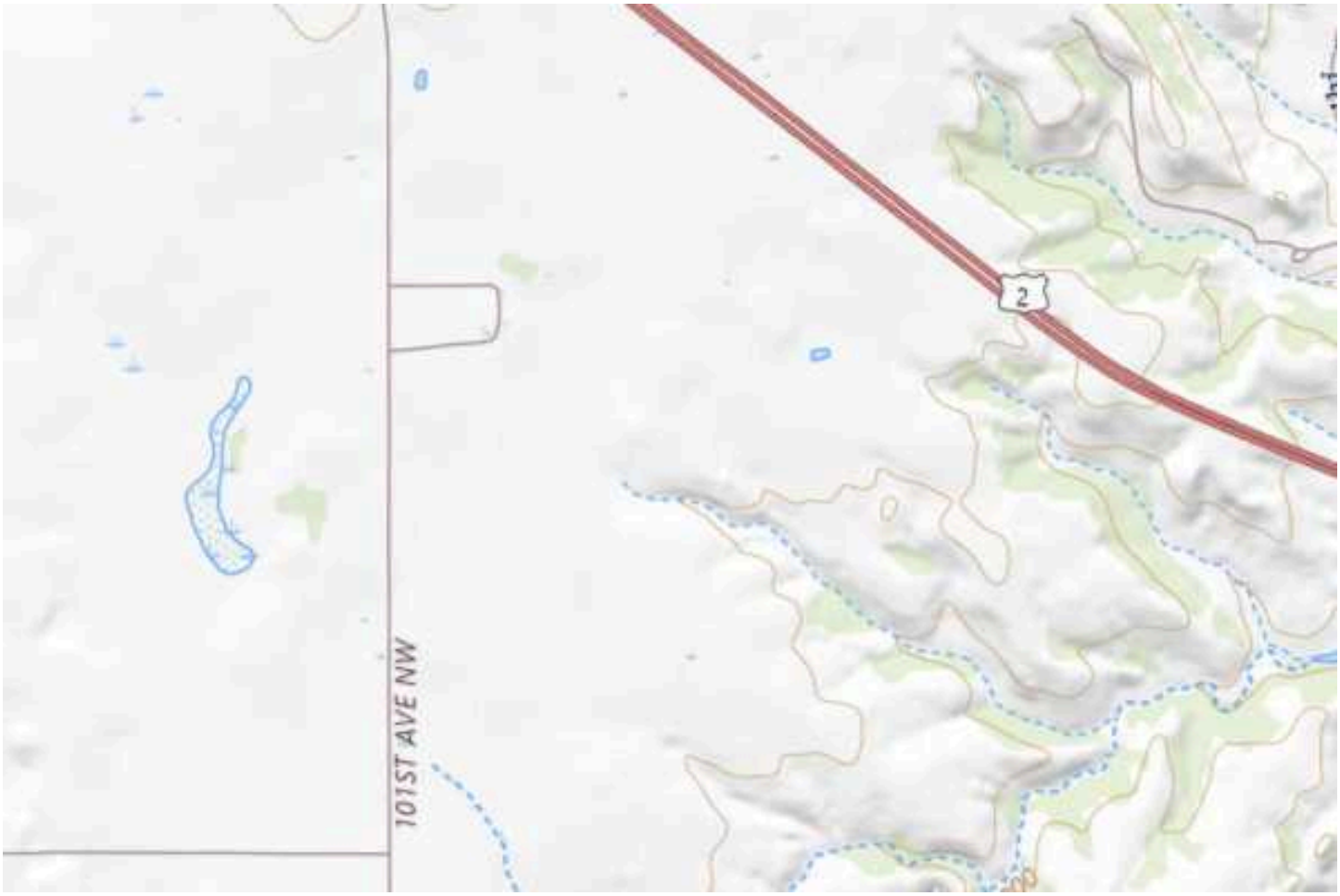
Signature Control No: 631022556-632735523 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

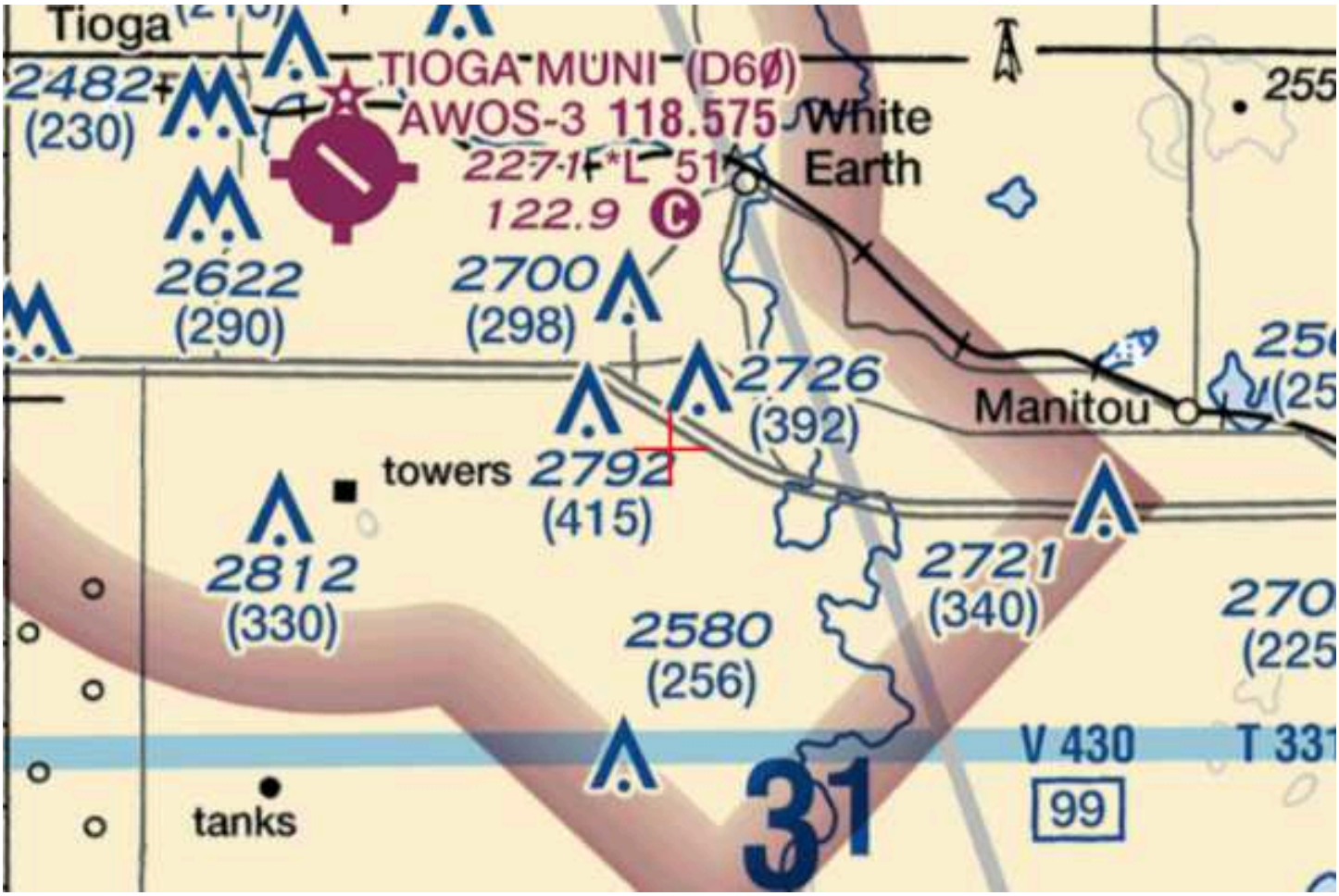
cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11614-OE



Sectional Map for ASN 2024-AGL-11614-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11615-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-090.pol
Location:	White Earth, ND
Latitude:	48-19-33.16N NAD 83
Longitude:	102-47-47.29W
Heights:	2373 feet site elevation (SE) 90 feet above ground level (AGL) 2463 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
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A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11615-OE.

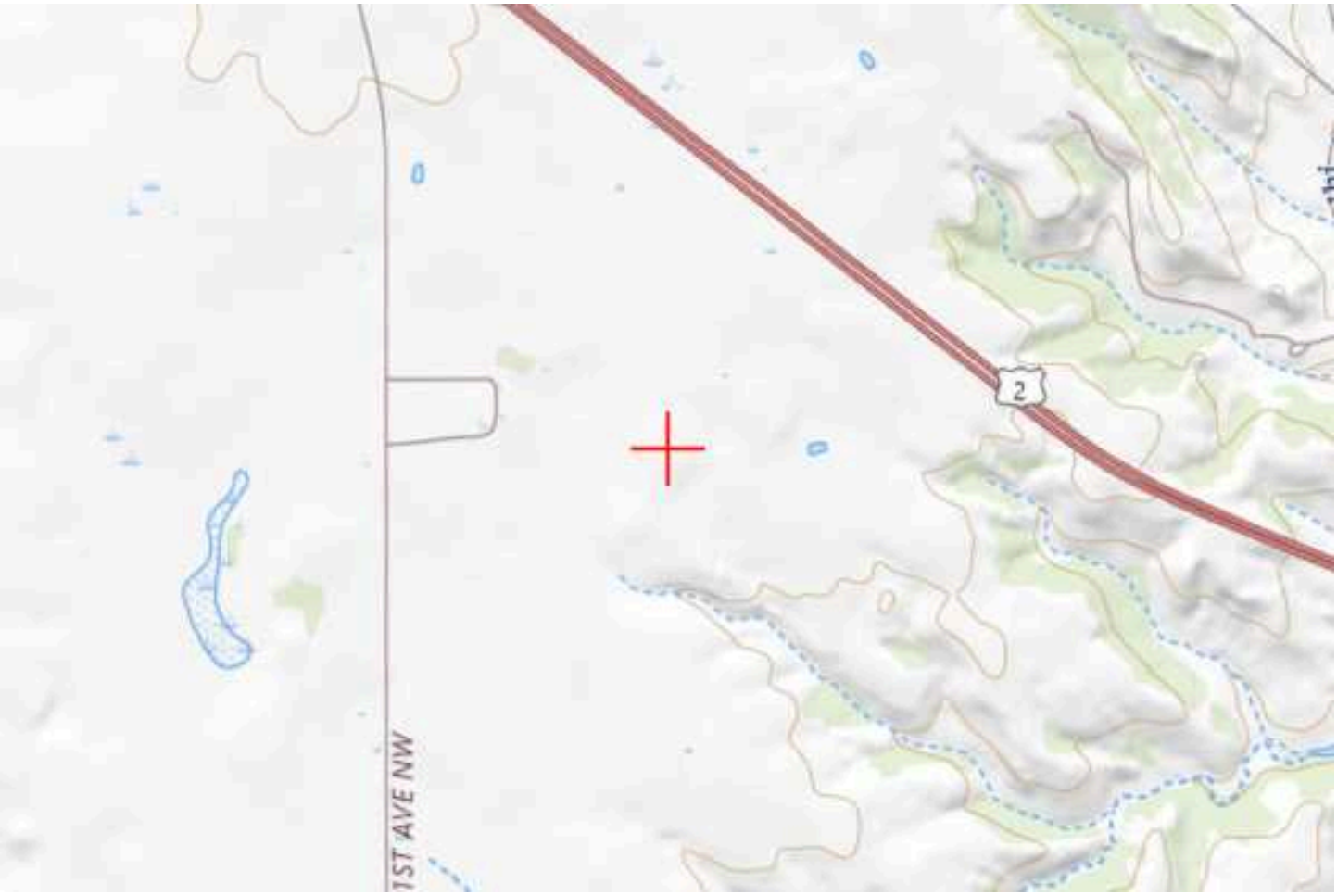
Signature Control No: 631022557-632735526 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

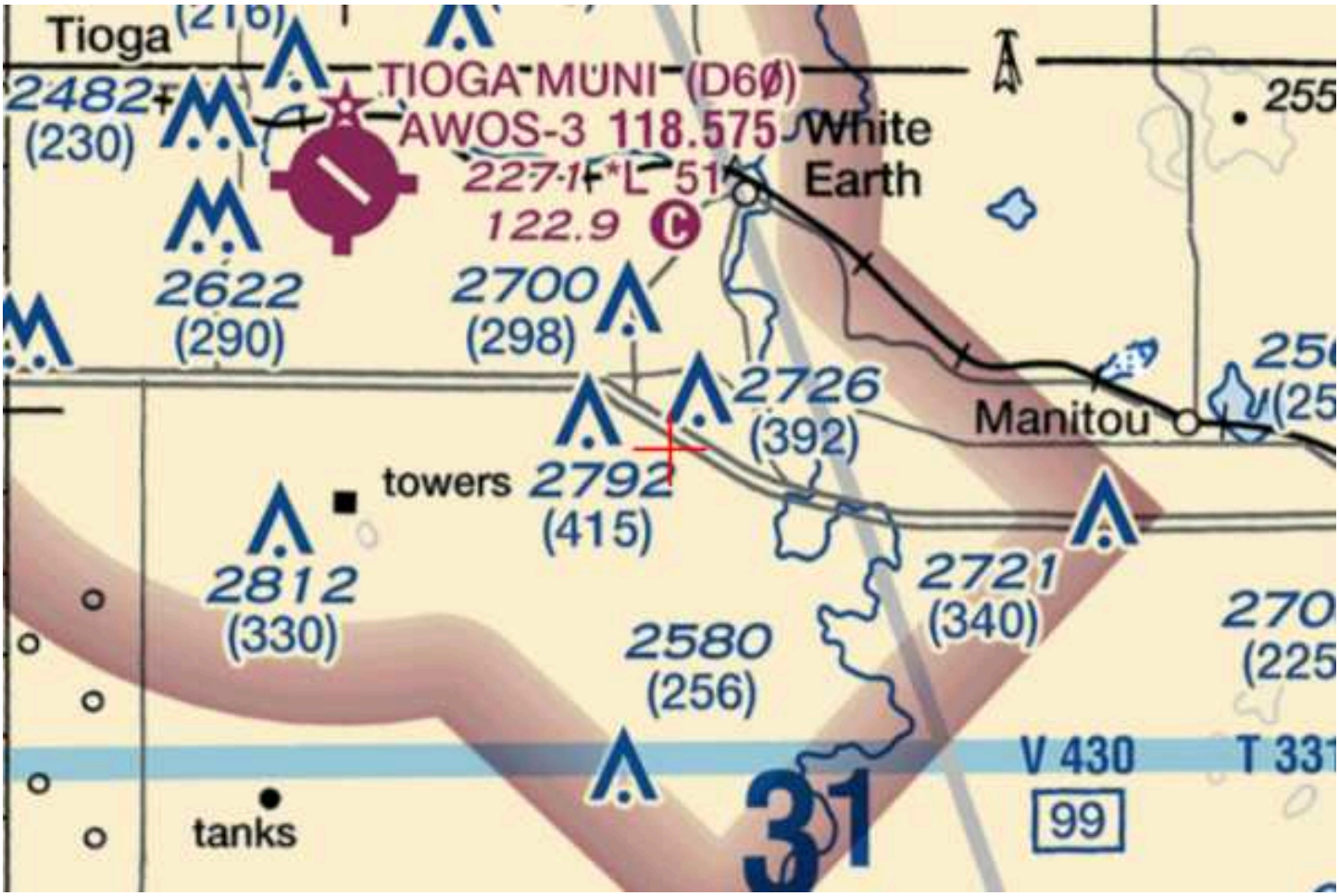
cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11615-OE



Sectional Map for ASN 2024-AGL-11615-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11616-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-110-2.pol
Location:	White Earth, ND
Latitude:	48-19-42.44N NAD 83
Longitude:	102-47-47.32W
Heights:	2363 feet site elevation (SE) 110 feet above ground level (AGL) 2473 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

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A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11616-OE.

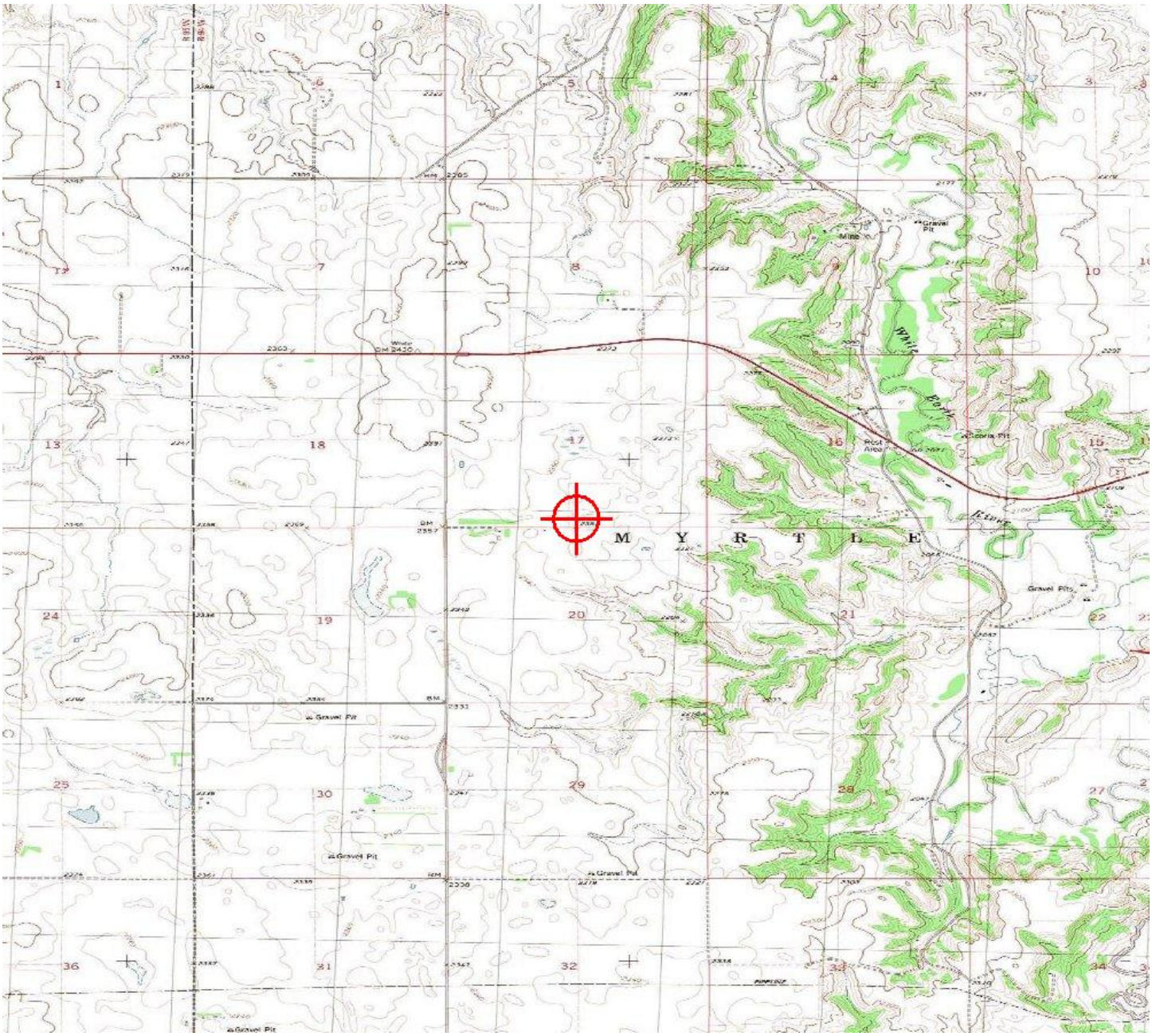
Signature Control No: 631022558-632735514 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

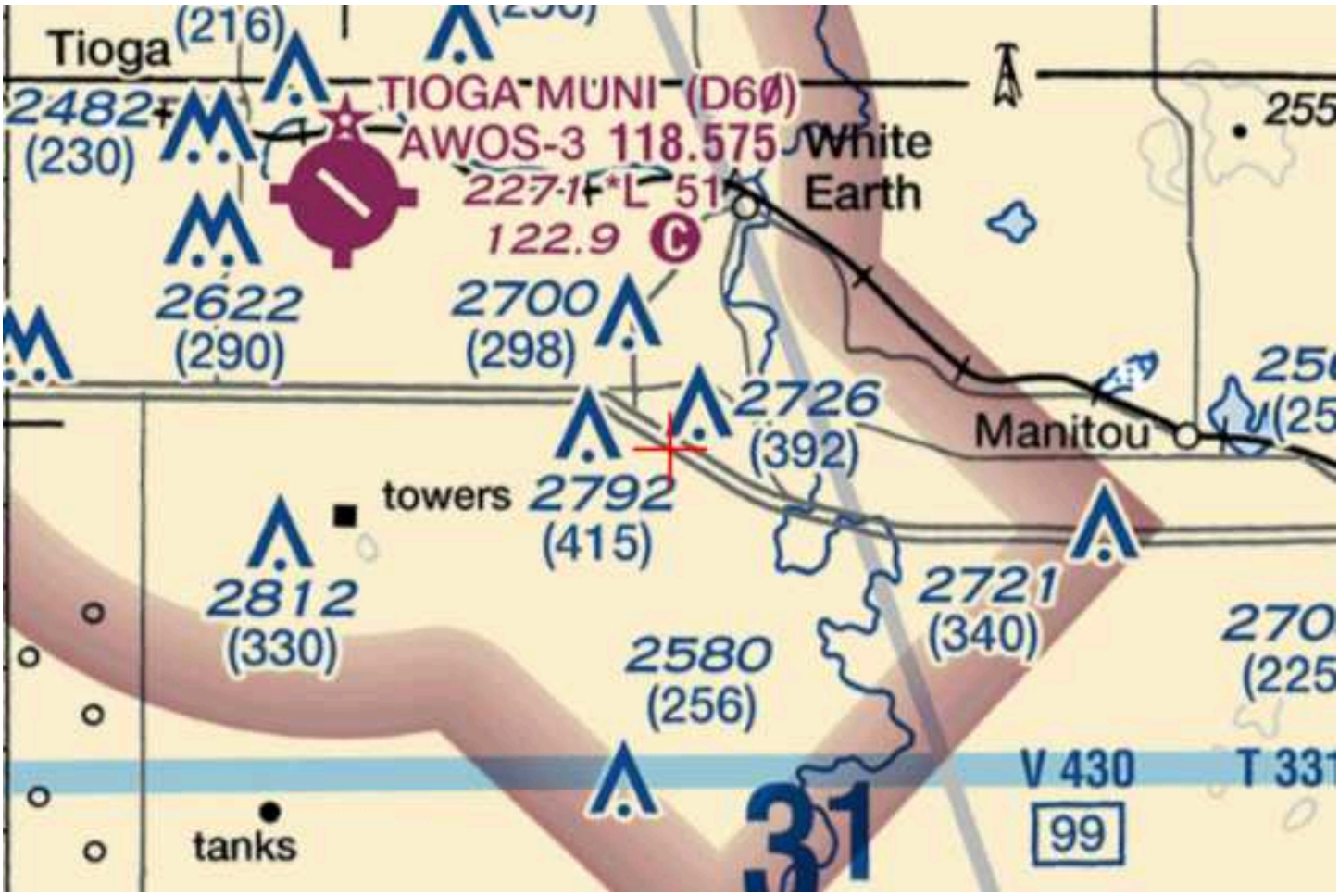
cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11616-OE



Sectional Map for ASN 2024-AGL-11616-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11617-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-115-2.pol
Location:	White Earth, ND
Latitude:	48-19-51.91N NAD 83
Longitude:	102-47-47.34W
Heights:	2359 feet site elevation (SE) 115 feet above ground level (AGL) 2474 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
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NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11617-OE.

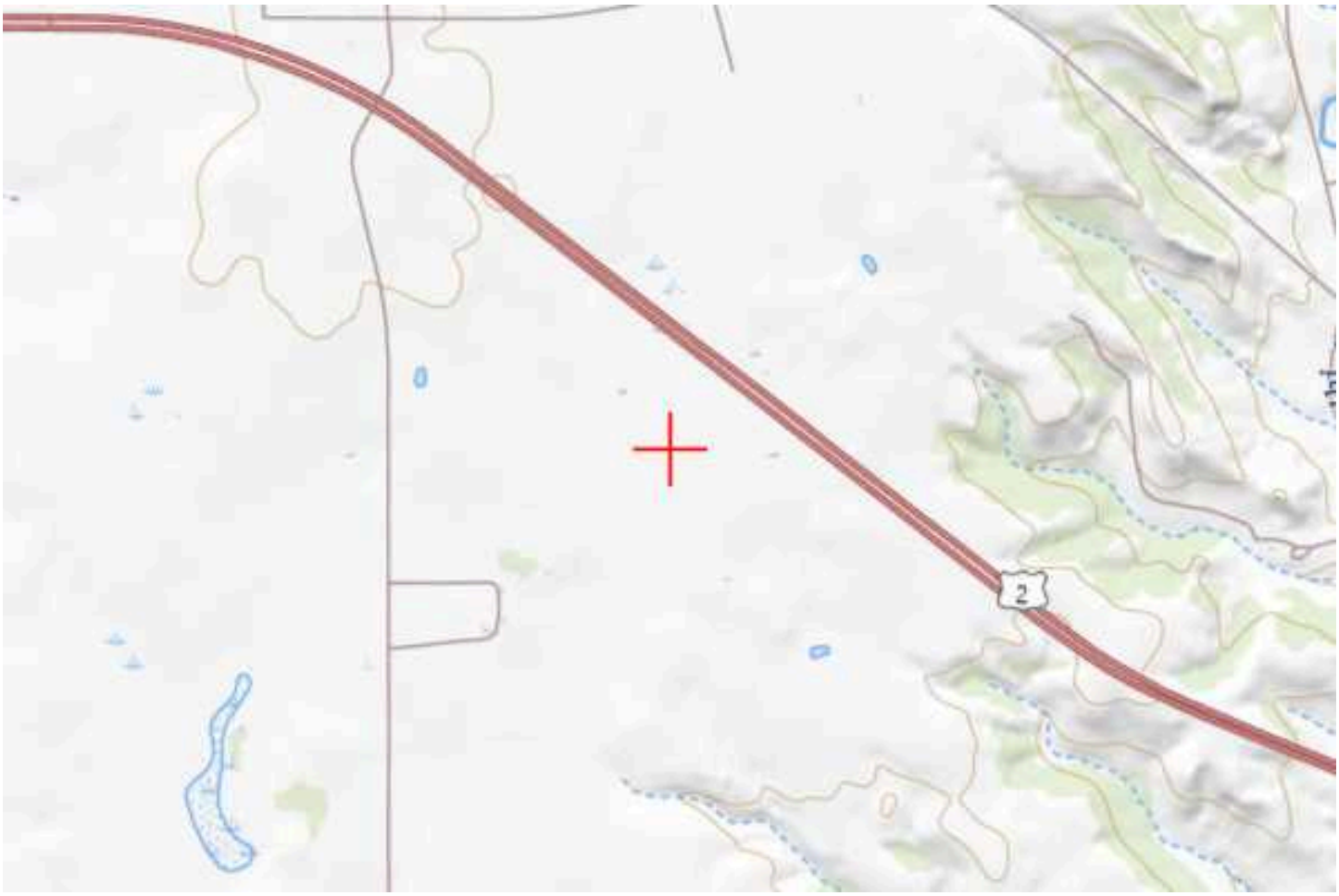
Signature Control No: 631022559-632735518 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11617-OE



Sectional Map for ASN 2024-AGL-11617-OE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11618-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3sda90-106.pol
Location:	White Earth, ND
Latitude:	48-20-00.30N NAD 83
Longitude:	102-47-47.36W
Heights:	2368 feet site elevation (SE) 106 feet above ground level (AGL) 2474 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11618-OE.

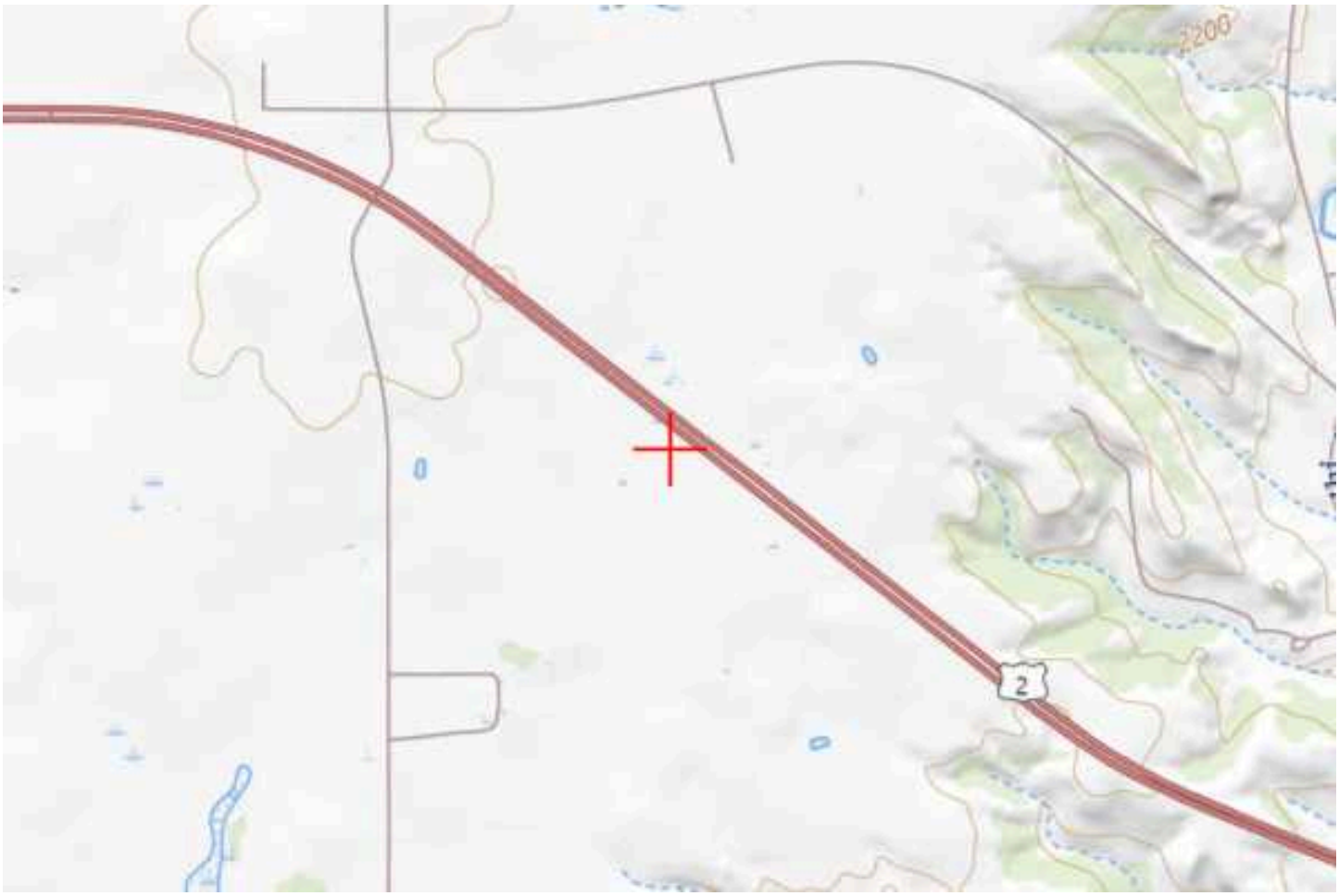
Signature Control No: 631022560-632735524 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

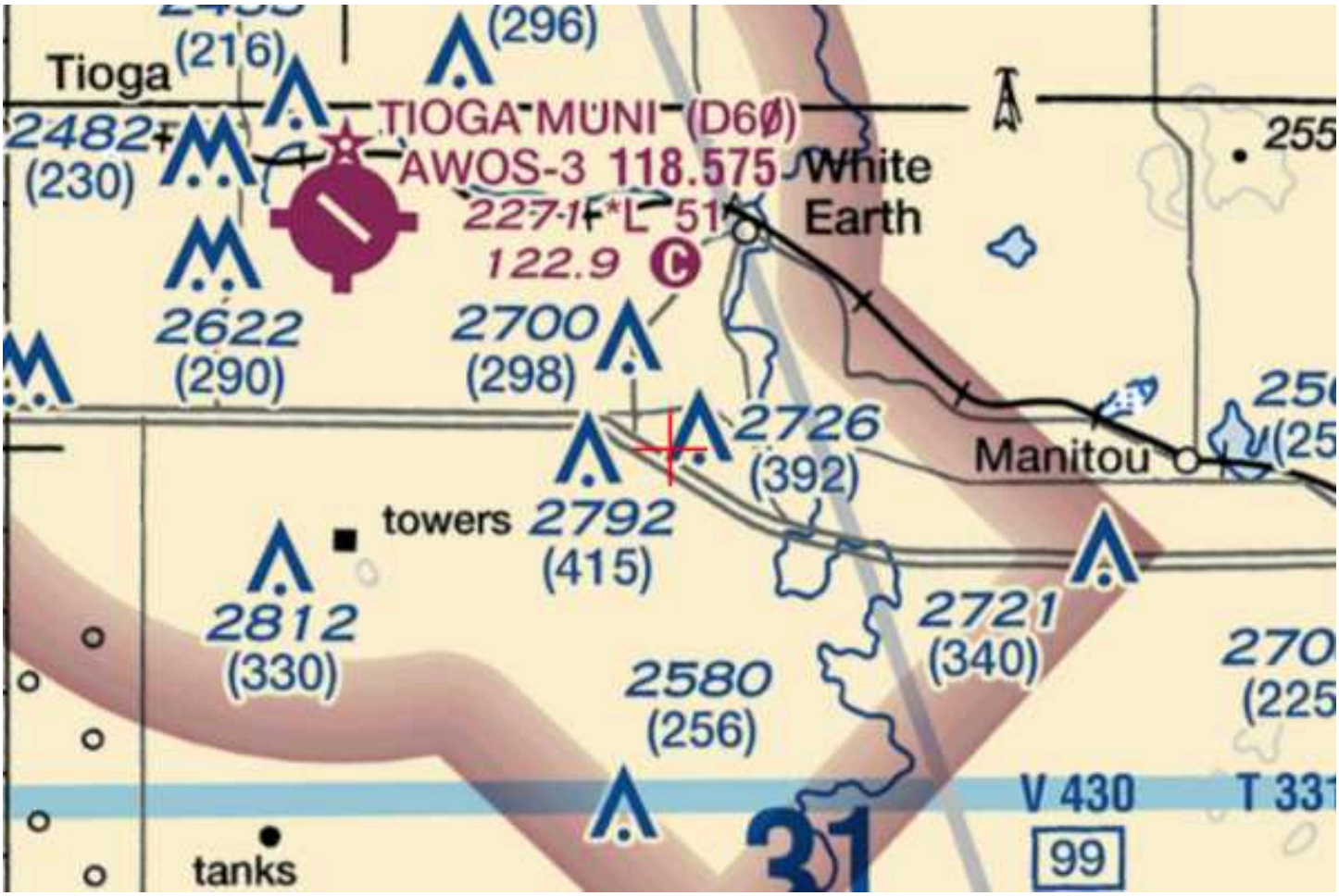
cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11618-OE



Sectional Map for ASN 2024-AGL-11618-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11619-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-125-4.pol
Location:	White Earth, ND
Latitude:	48-20-05.33N NAD 83
Longitude:	102-47-57.03W
Heights:	2370 feet site elevation (SE) 125 feet above ground level (AGL) 2495 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11619-OE.

Signature Control No: 631022561-632735527 (DNE)
Timothy Waychoff
Specialist

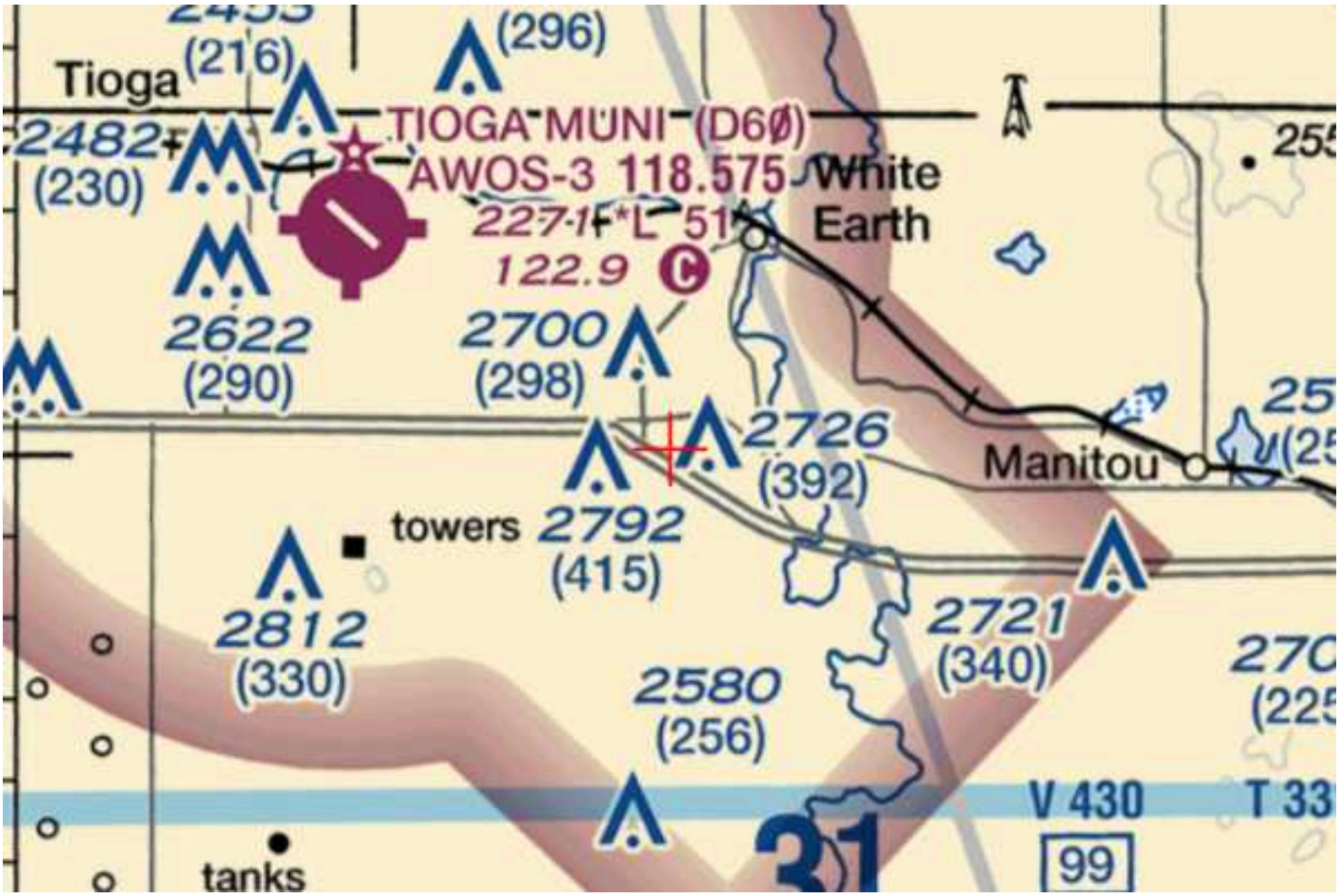
Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11619-OE

Sectional Map for ASN 2024-AGL-11619-OE



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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11620-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-130.pol
Location:	White Earth, ND
Latitude:	48-20-12.01N NAD 83
Longitude:	102-48-09.87W
Heights:	2396 feet site elevation (SE)
	130 feet above ground level (AGL)
	2526 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

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(b) extended, revised, or terminated by the issuing office.
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A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11620-OE.

Signature Control No: 631022562-632735529 (DNE)
Timothy Waychoff
Specialist

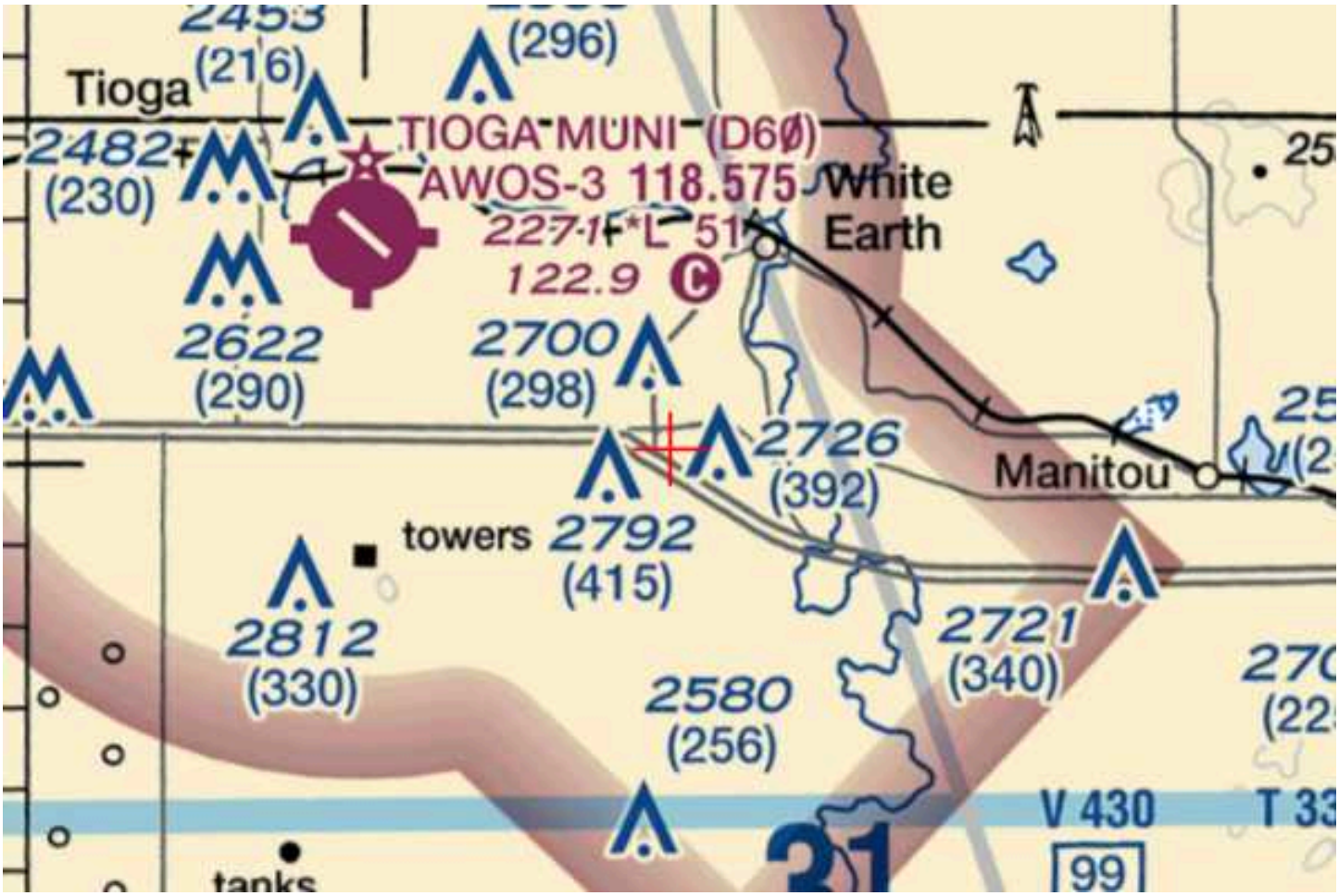
Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11620-OE

Sectional Map for ASN 2024-AGL-11620-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11621-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3SA08L-130.POL
Location:	White Earth, ND
Latitude:	48-20-18.94N NAD 83
Longitude:	102-48-23.17W
Heights:	2419 feet site elevation (SE) 130 feet above ground level (AGL) 2549 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

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A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11621-OE.

Signature Control No: 631022563-632735517 (DNE)
Timothy Waychoff
Specialist

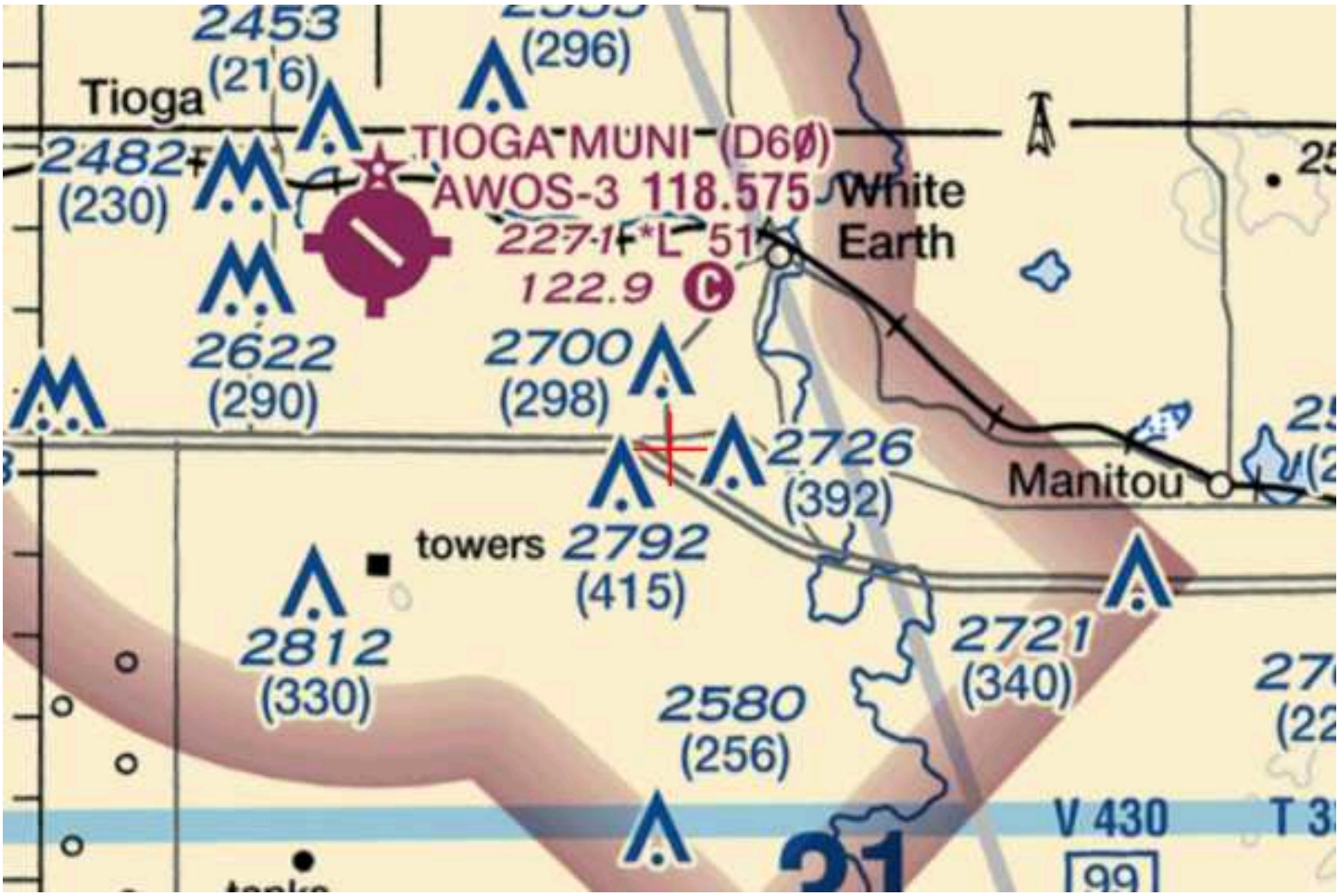
Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11621-OE

Sectional Map for ASN 2024-AGL-11621-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11622-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3SA15-140.POL
Location:	White Earth, ND
Latitude:	48-20-24.31N NAD 83
Longitude:	102-48-35.60W
Heights:	2423 feet site elevation (SE)
	151 feet above ground level (AGL)
	2574 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11622-OE.

Signature Control No: 631022564-632735519 (DNE)
Timothy Waychoff
Specialist

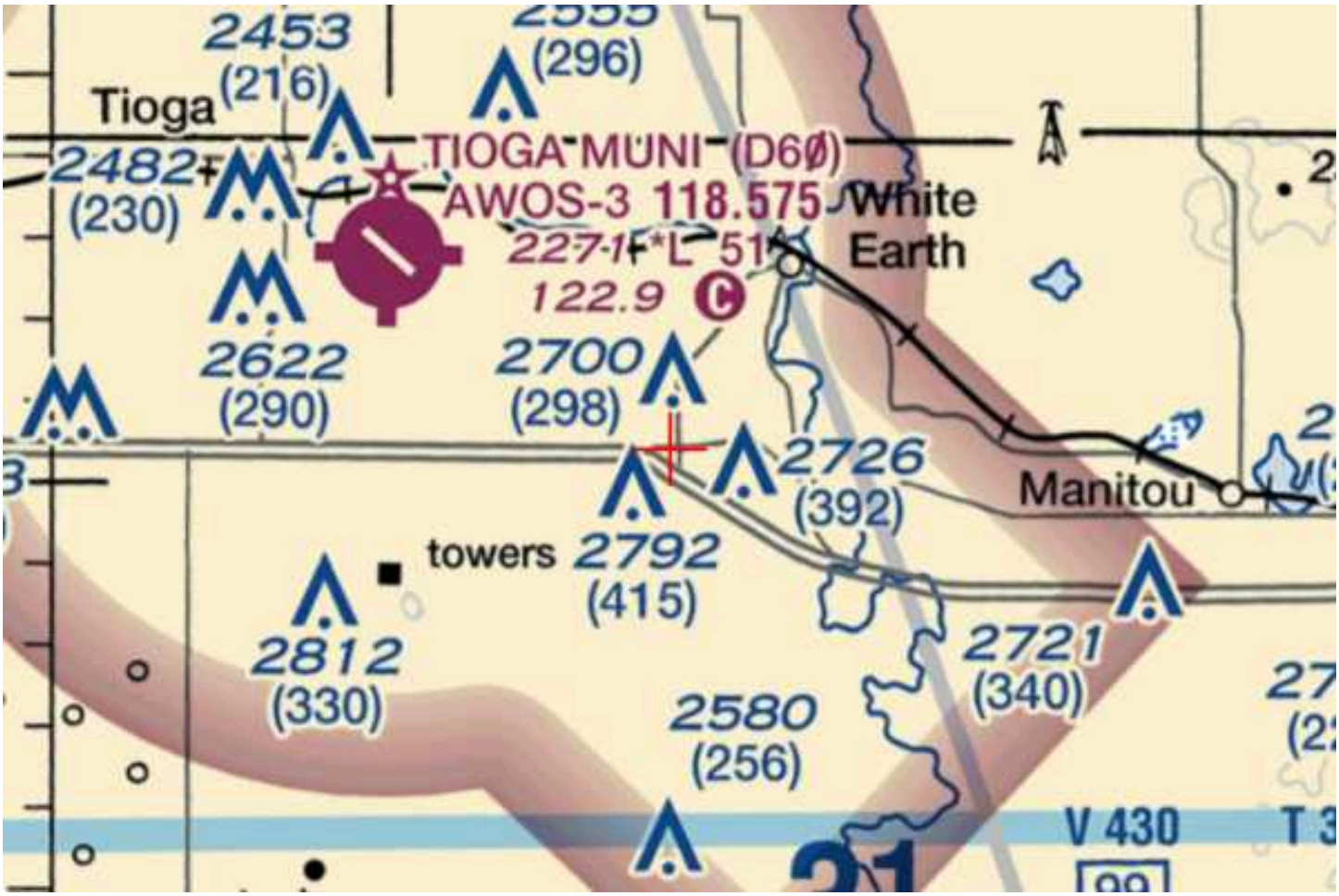
Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11622-OE

Sectional Map for ASN 2024-AGL-11622-OE



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Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11623-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3SA30-145.POL
Location:	White Earth, ND
Latitude:	48-20-28.00N NAD 83
Longitude:	102-48-50.10W
Heights:	2392 feet site elevation (SE)
	156 feet above ground level (AGL)
	2548 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

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A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11623-OE.

Signature Control No: 631022565-632735525 (DNE)
Timothy Waychoff
Specialist

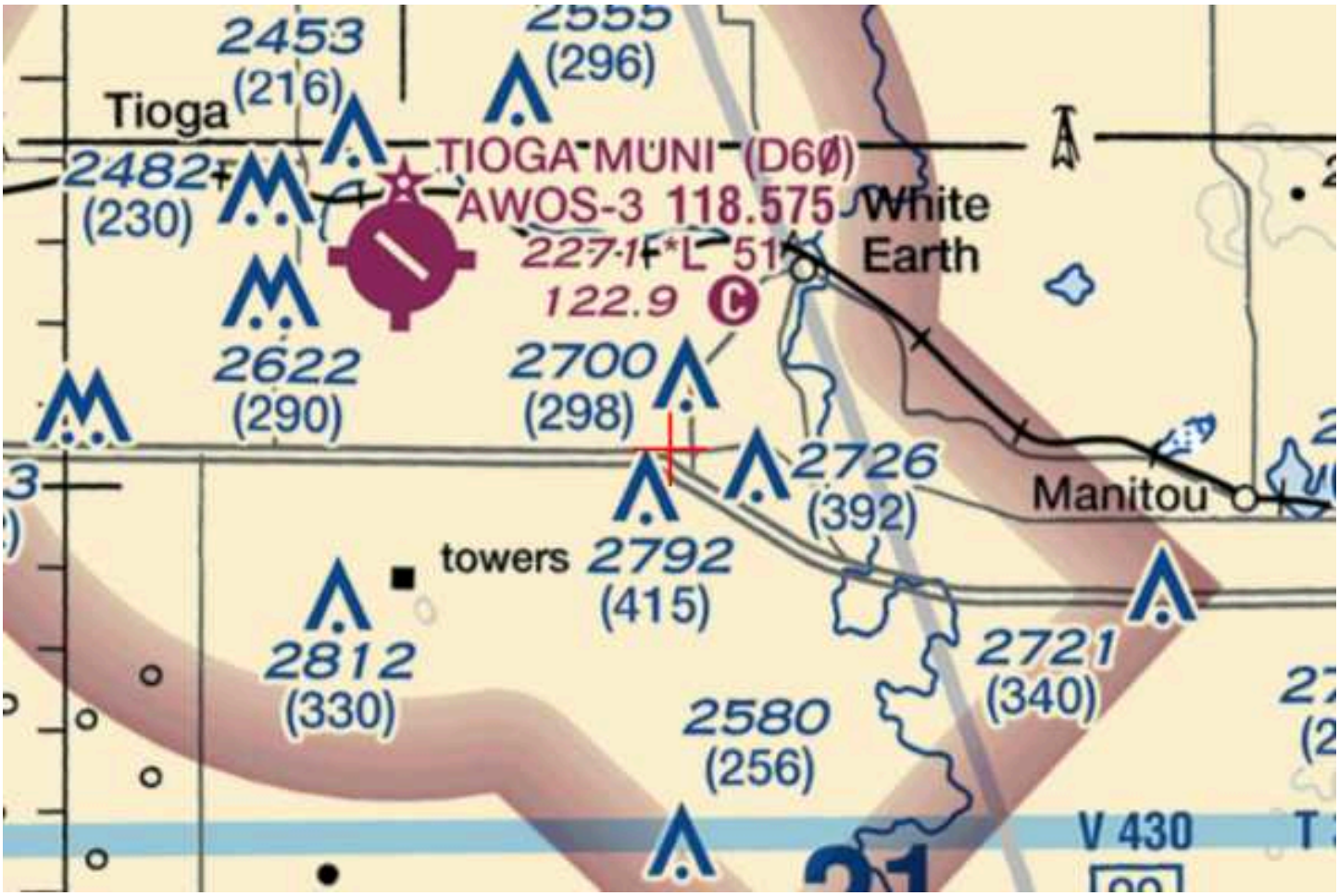
Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11623-OE

Sectional Map for ASN 2024-AGL-11623-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11624-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3sda90-115.pol
Location:	White Earth, ND
Latitude:	48-20-29.06N NAD 83
Longitude:	102-49-06.55W
Heights:	2366 feet site elevation (SE) 120 feet above ground level (AGL) 2486 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11624-OE.

Signature Control No: 631022566-632737698 (DNE)
Timothy Waychoff
Specialist

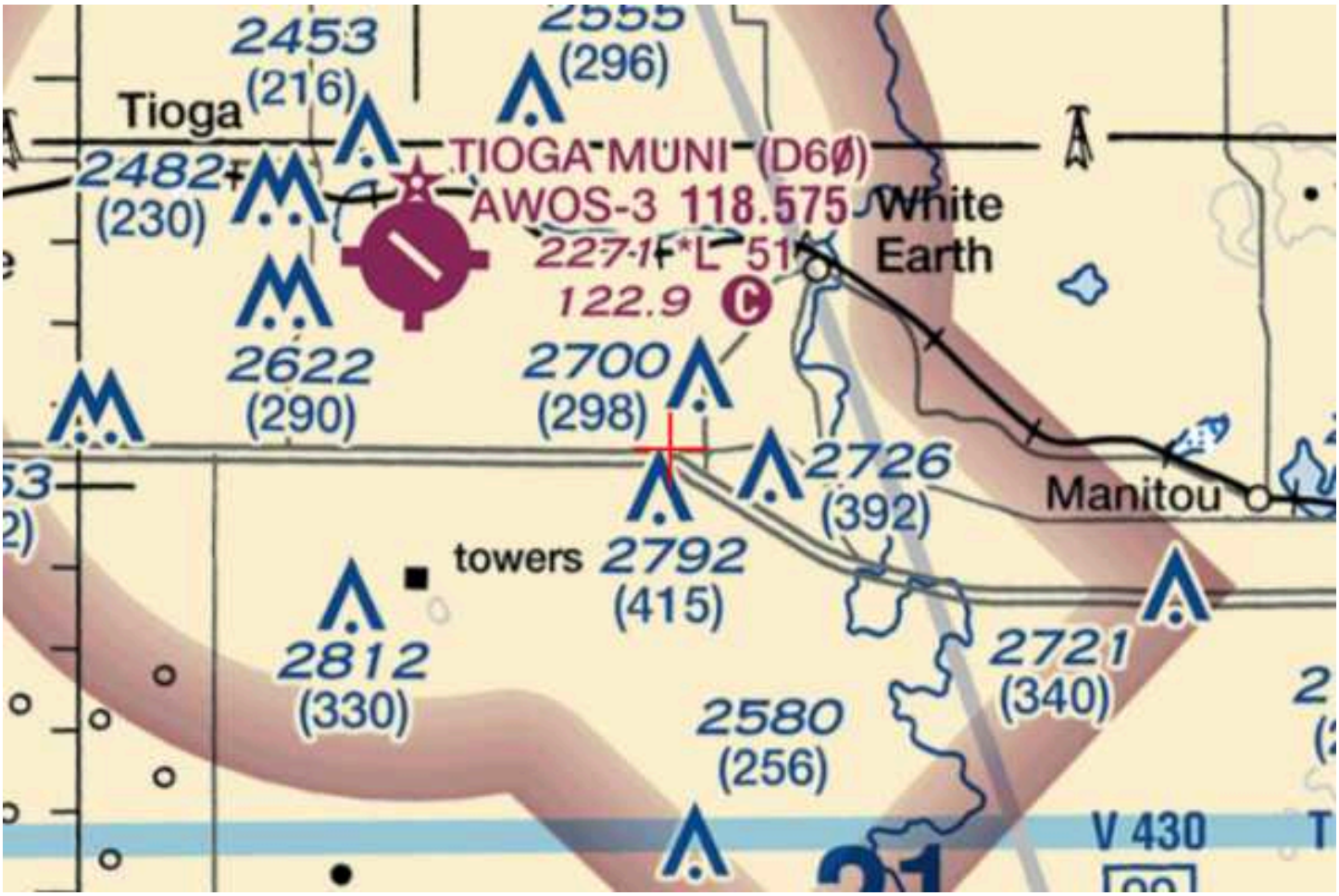
Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11624-OE

Sectional Map for ASN 2024-AGL-11624-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11625-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3SA08L-135.POL
Location:	White Earth, ND
Latitude:	48-20-37.27N NAD 83
Longitude:	102-49-05.51W
Heights:	2373 feet site elevation (SE) 130 feet above ground level (AGL) 2503 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

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If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11625-OE.

Signature Control No: 631022567-632737696 (DNE)
Timothy Waychoff
Specialist

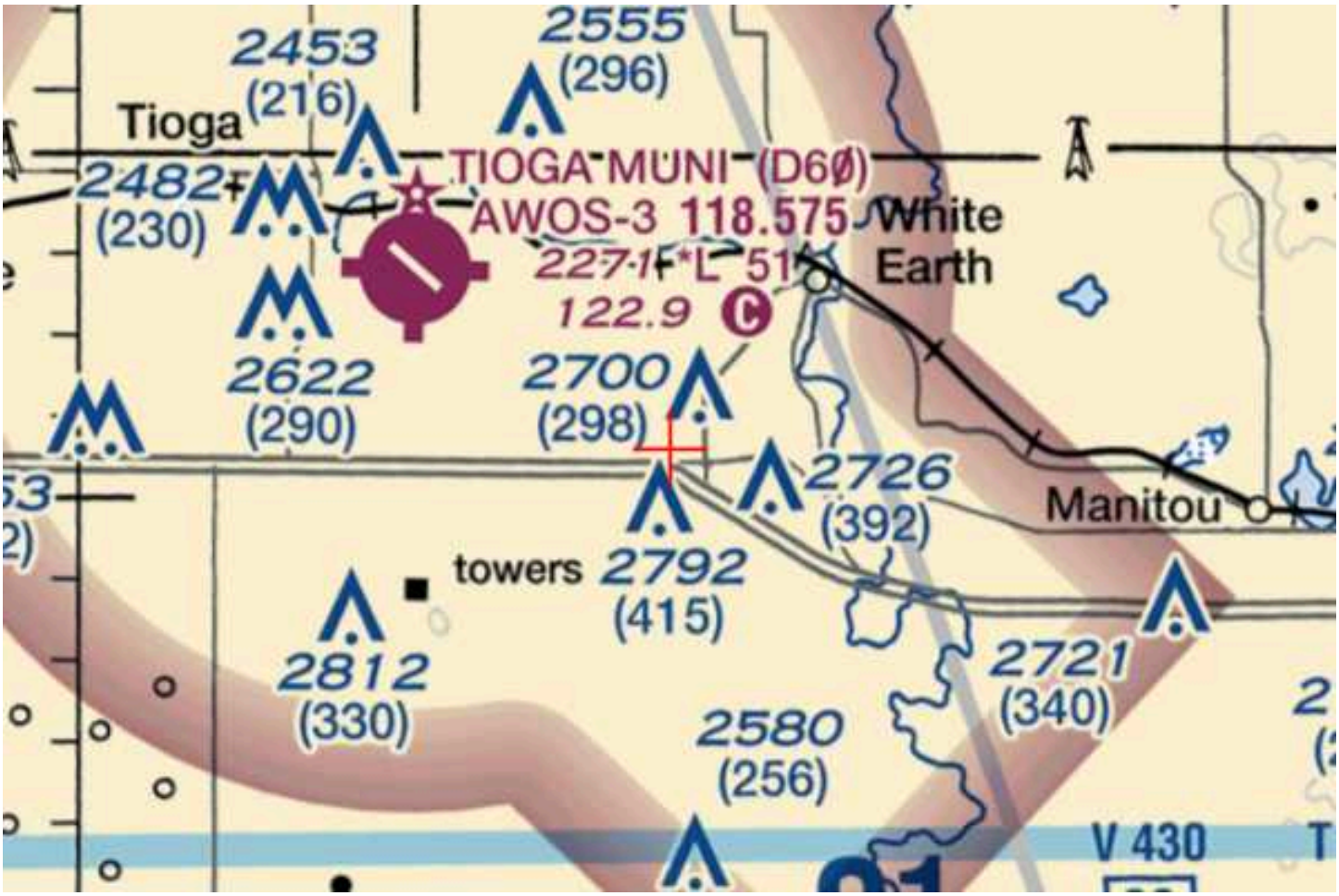
Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11625-OE

Sectional Map for ASN 2024-AGL-11625-OE



Mail Processing Center
Federal Aviation Administration
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Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11626-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-130-2.pol
Location:	White Earth, ND
Latitude:	48-20-45.96N NAD 83
Longitude:	102-49-05.42W
Heights:	2364 feet site elevation (SE) 130 feet above ground level (AGL) 2494 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

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A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11626-OE.

Signature Control No: 631022568-632737701 (DNE)
Timothy Waychoff
Specialist

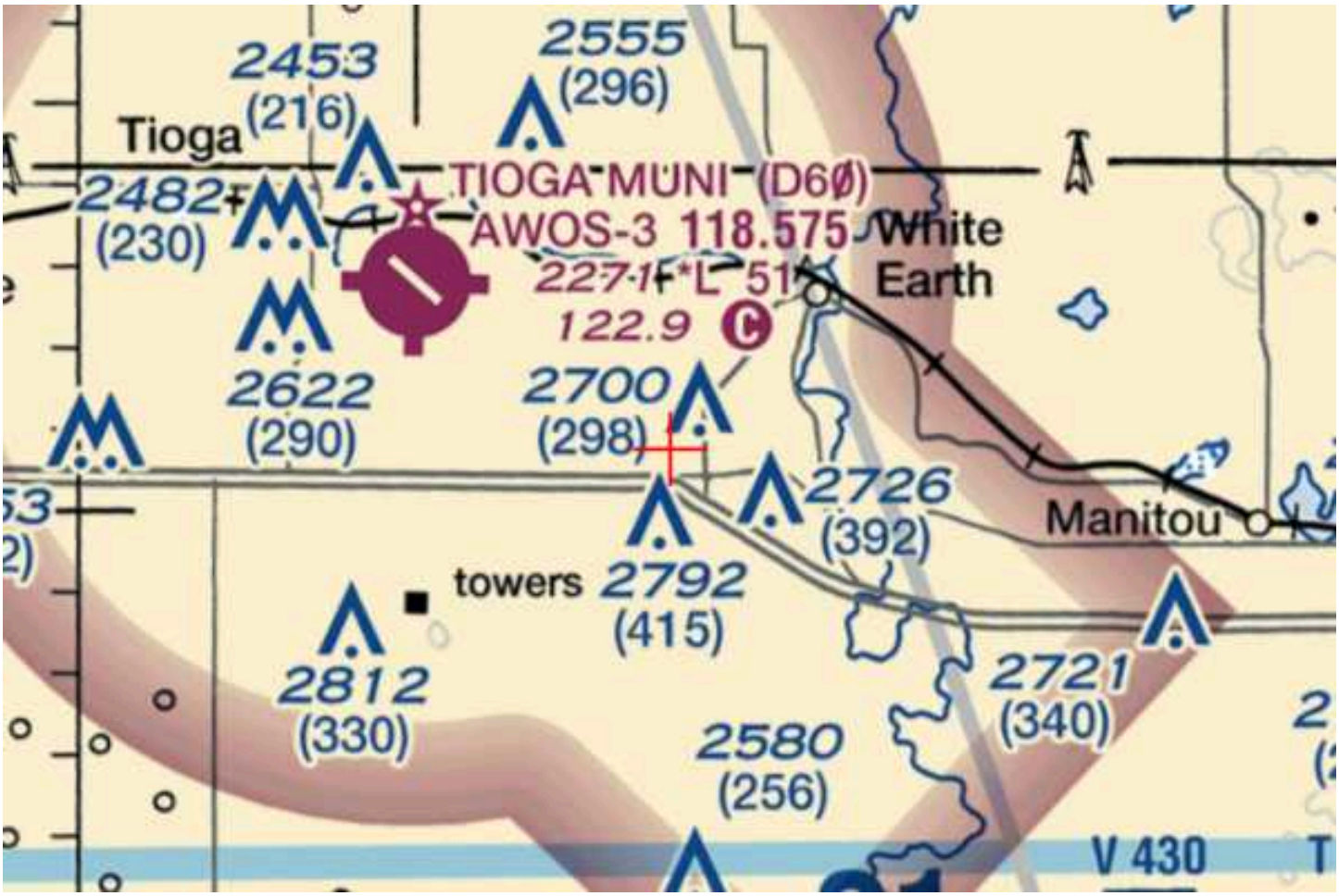
Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11626-OE

Sectional Map for ASN 2024-AGL-11626-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11627-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-115-3.pol
Location:	White Earth, ND
Latitude:	48-20-55.23N NAD 83
Longitude:	102-49-05.32W
Heights:	2370 feet site elevation (SE) 115 feet above ground level (AGL) 2485 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

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A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11627-OE.

Signature Control No: 631022569-632737700 (DNE)
Timothy Waychoff
Specialist

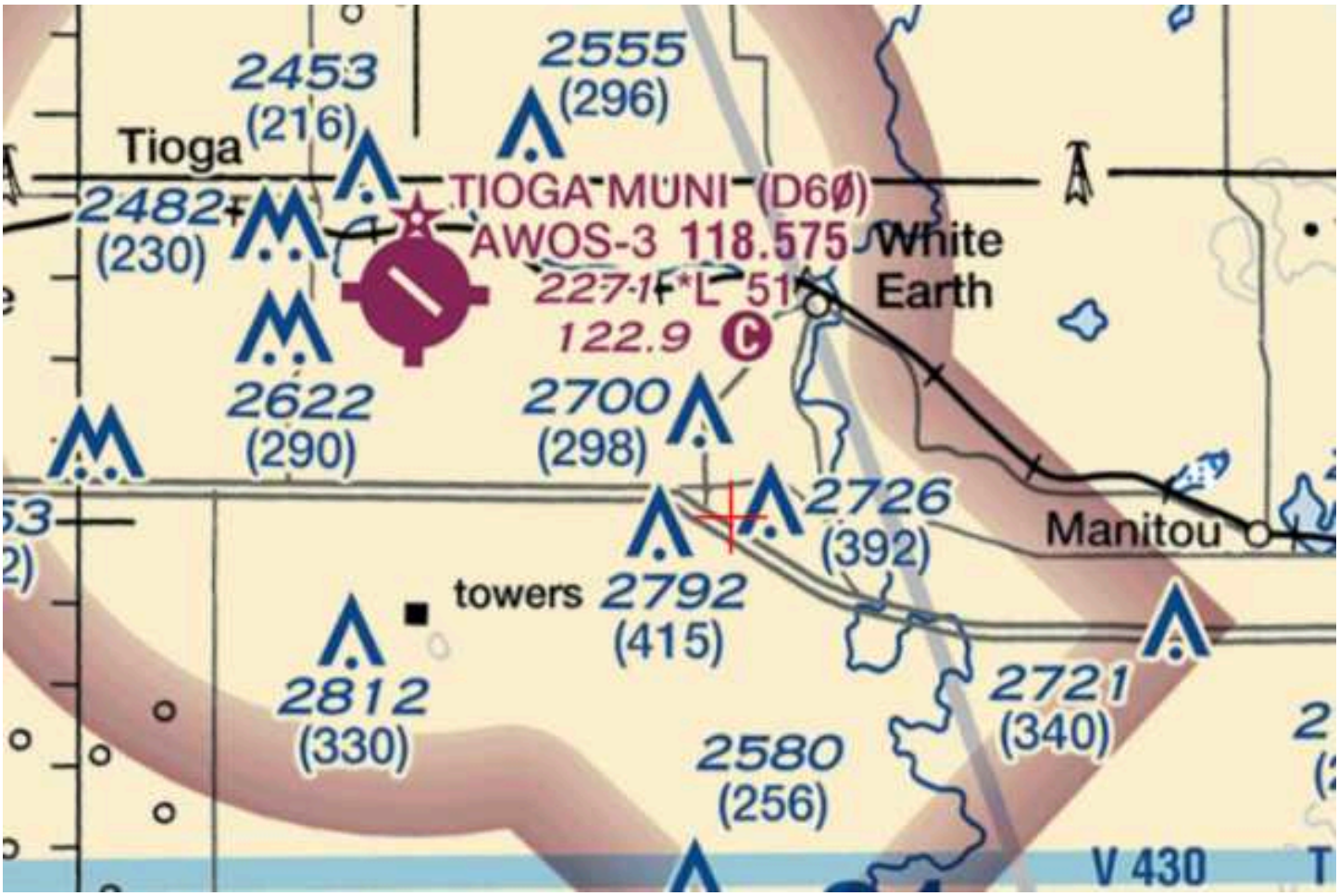
Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11627-OE

Sectional Map for ASN 2024-AGL-11627-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11628-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-115-4.pol
Location:	White Earth, ND
Latitude:	48-21-05.20N NAD 83
Longitude:	102-49-05.45W
Heights:	2360 feet site elevation (SE) 115 feet above ground level (AGL) 2475 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

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Signature Control No: 631022570-632737699 (DNE)
Timothy Waychoff
Specialist

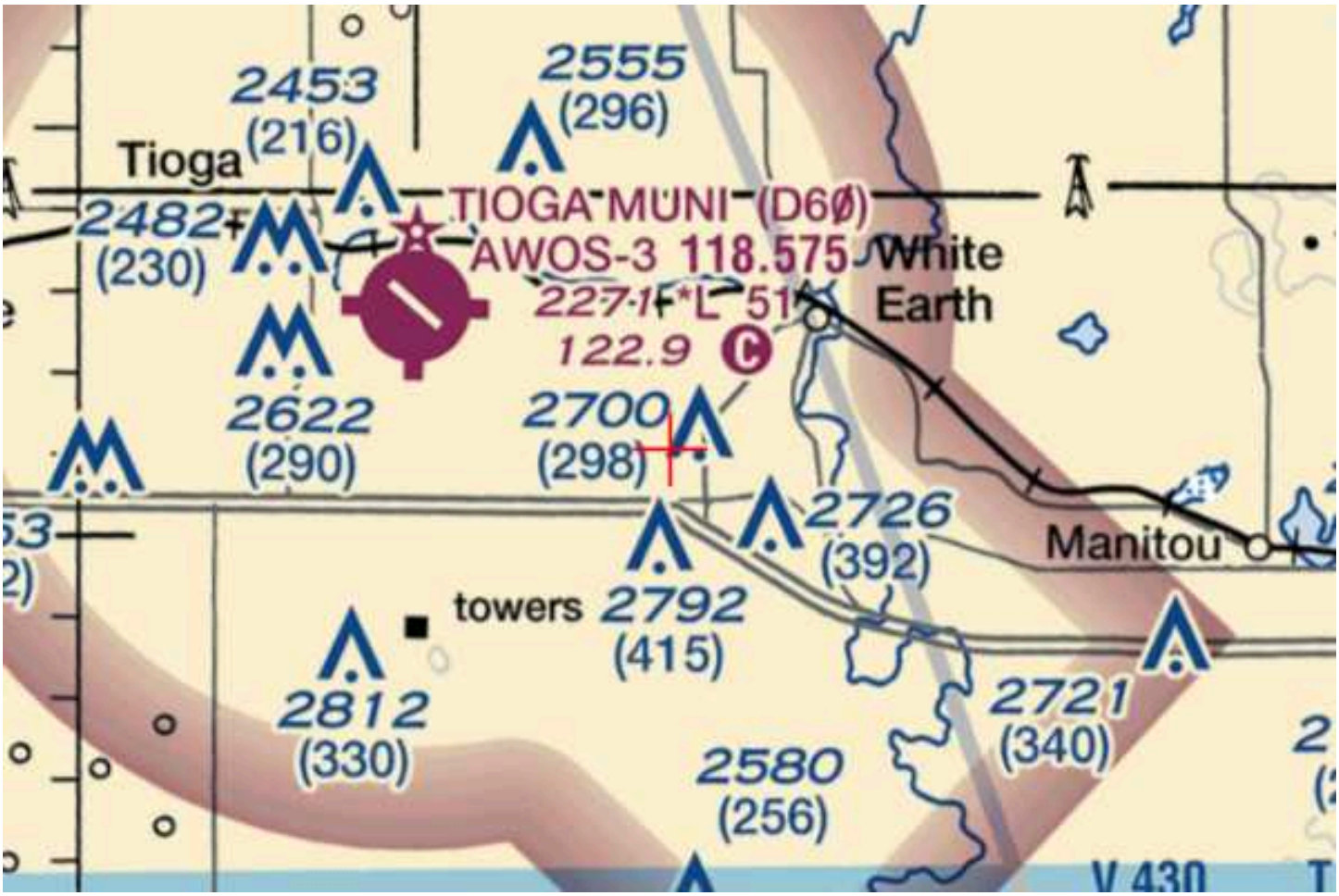
Attachment(s)
Case Description
Map(s)

cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11628-OE

Sectional Map for ASN 2024-AGL-11628-OE



Mail Processing Center
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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11629-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Tower 3st2-125-5.pol
Location:	White Earth, ND
Latitude:	48-22-34.68N NAD 83
Longitude:	102-50-01.91W
Heights:	2262 feet site elevation (SE) 125 feet above ground level (AGL) 2387 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

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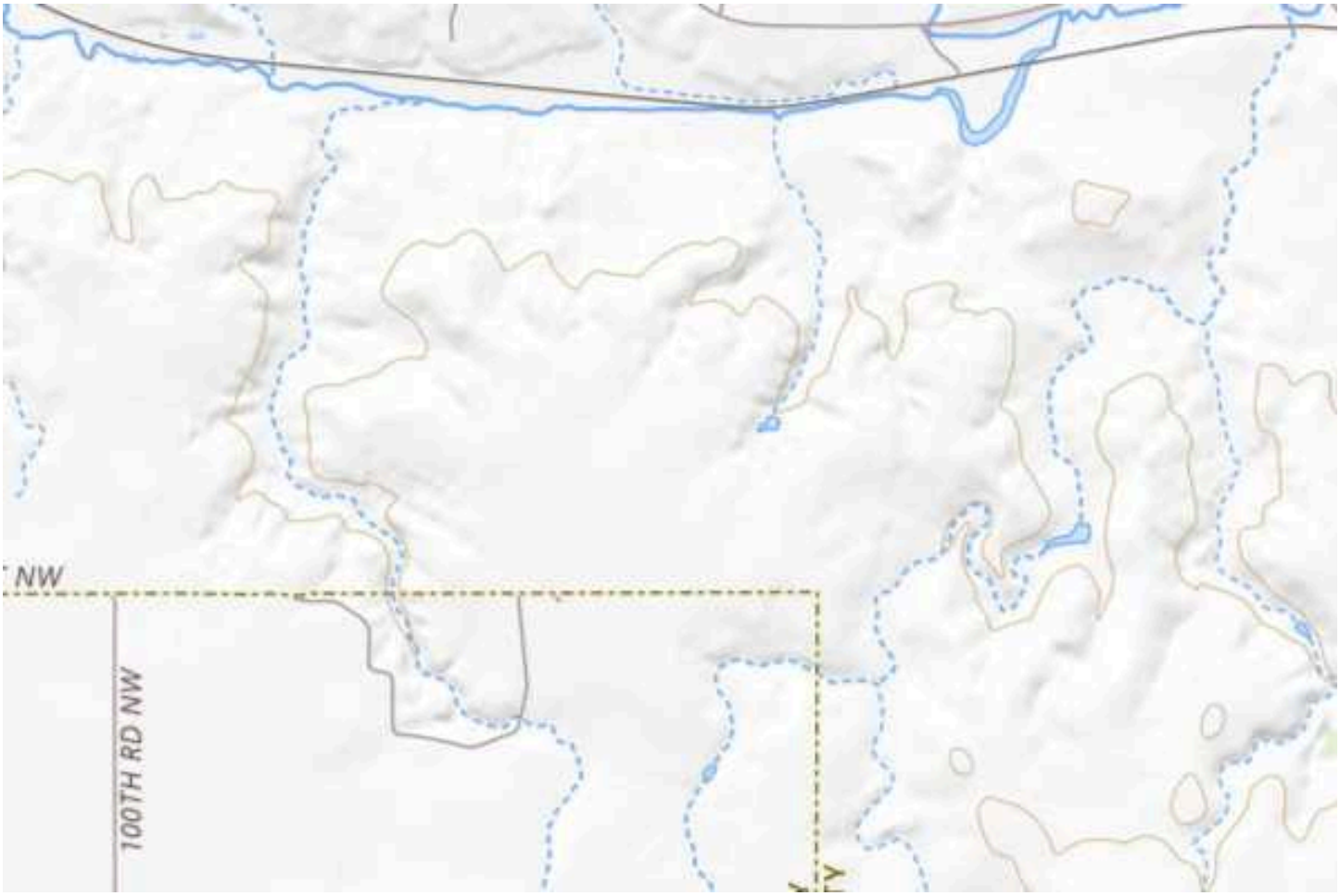
Signature Control No: 631022571-632737697 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

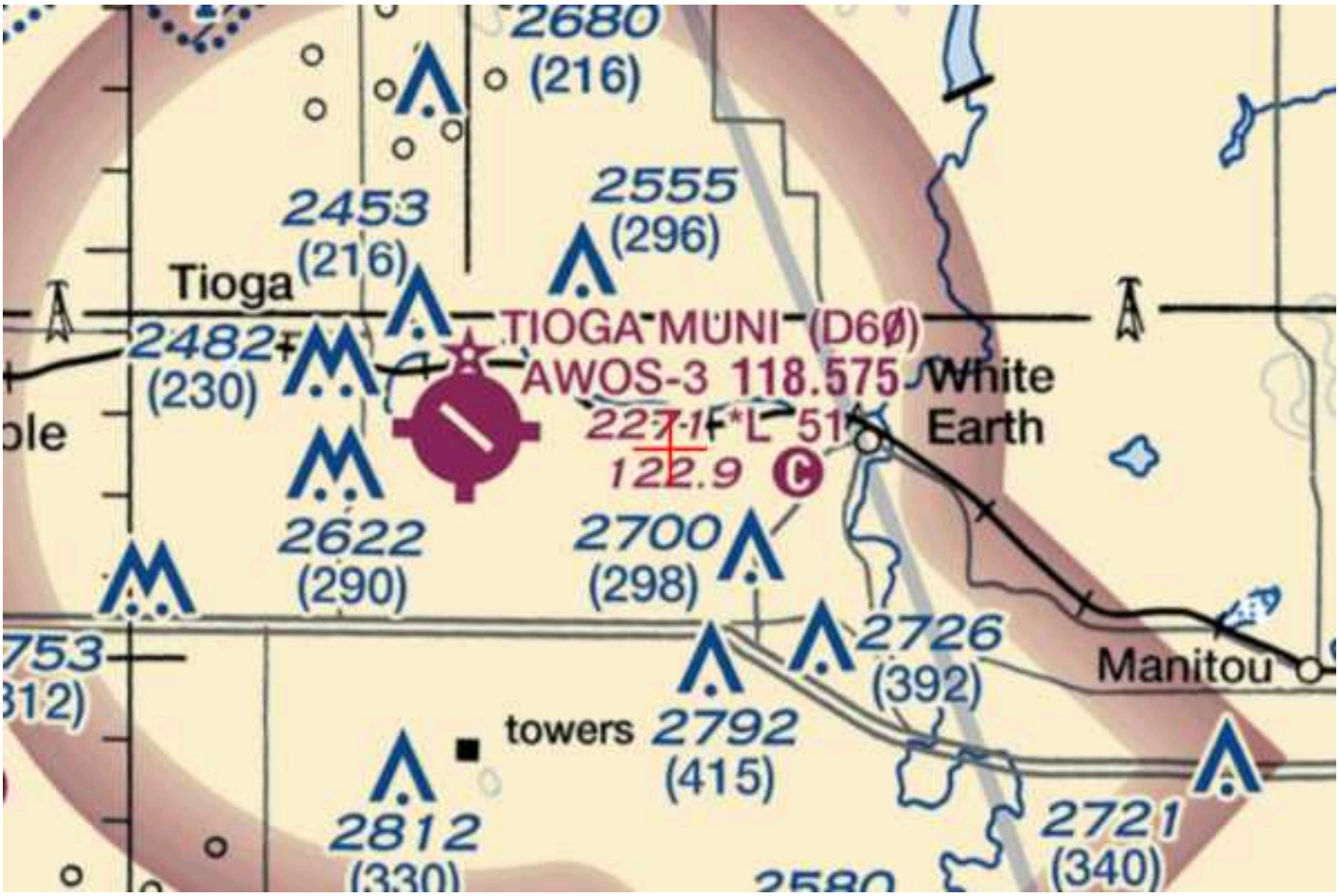
cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11629-OE



Sectional Map for ASN 2024-AGL-11629-OE



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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AGL-11630-OE

Issued Date: 09/11/2024

Steven Mundahl
Basin Electric Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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Structure:	Tower 3st2-140-2.pol
Location:	White Earth, ND
Latitude:	48-23-41.13N NAD 83
Longitude:	102-50-47.36W
Heights:	2214 feet site elevation (SE) 140 feet above ground level (AGL) 2354 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 .

This determination expires on 03/11/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AGL-11630-OE.

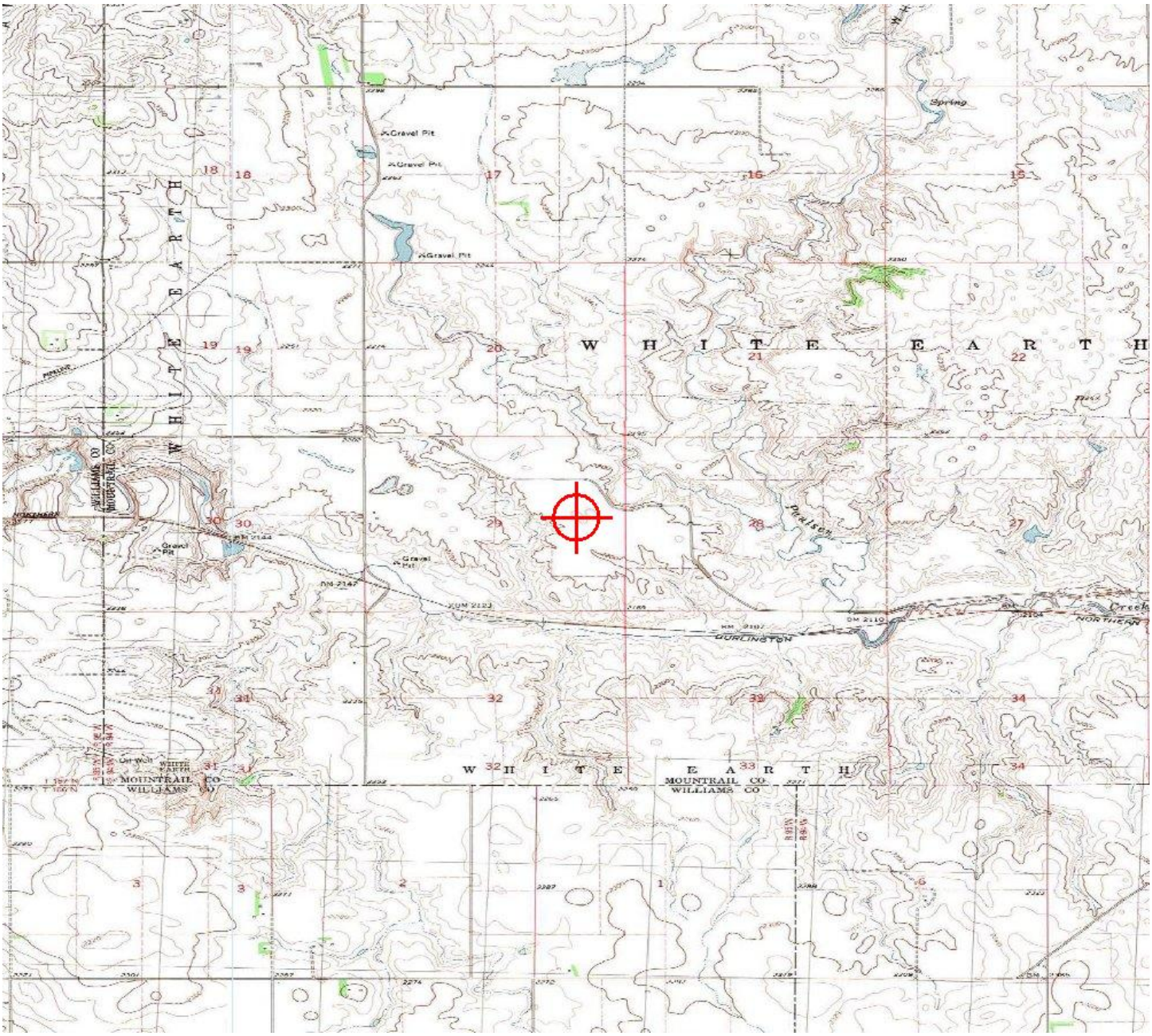
Signature Control No: 631022572-632737695 (DNE)
Timothy Waychoff
Specialist

Attachment(s)
Case Description
Map(s)

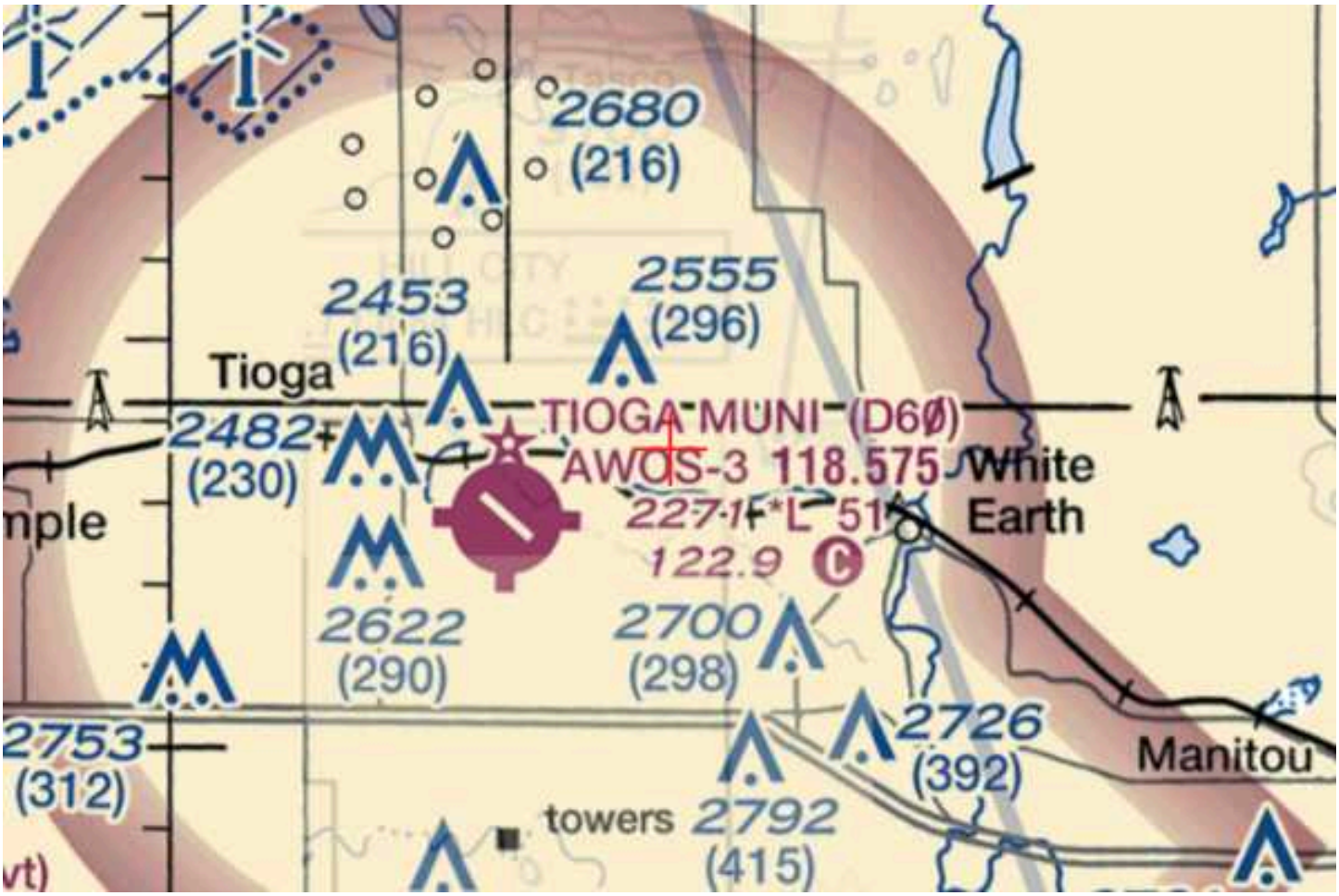
cc: FCC

Adding new towers to complete East Loop Project

TOPO Map for ASN 2024-AGL-11630-OE



Sectional Map for ASN 2024-AGL-11630-OE



Military Aviation and Installation Assurance Siting Clearinghouse

From:	OSD Pentagon OUSD A-S Mailbox ASD EIE-RP-SC
To:	Ryan King
Cc:	OSD Pentagon OUSD A-S Mailbox ASD EIE-RP-SC
Subject:	RE: [External] External: RE: Basin Electric Leland Olds Station to Tande 345-kV Transmission Project – Consultation Request – NDPSC Project
Date:	Thursday, July 25, 2024 11:09:59 AM
Attachments:	image001.jpg image002.png

Hello Ryan,

Thank you. We should be able to work with what you provided.

I have informed Clearinghouse leadership of the short window (30-days) and we will do what we can to "push" the military services at the installation level. While we can't guarantee they will complete the review in 30 days, we will do our best.

Thanks again for the opportunity to review the project.

Respectfully,

Dan Townes
Military Aviation and Installation Assurance Siting Clearinghouse
Office of the Assistant Secretary of Defense (Energy, Installations and Environment)
Desk: 571-372-8414 *(limited access/shared line)*
NIPR: daniel.w.townes.ctr@mail.mil

From: Ryan King <RKing@bepc.com>
Sent: Thursday, July 25, 2024 11:42 AM
To: OSD Pentagon OUSD A-S Mailbox ASD EIE-RP-SC <osd.pentagon.ousd-a-s.mbx.asd-eie-rp-sc@mail.mil>
Subject: RE: [External] External: RE: Basin Electric Leland Olds Station to Tande 345-kV Transmission Project – Consultation Request – NDPSC Project

Good morning, Dan.

Thank you for the quick response. I have attached a shapefile of our route. This should have the route centerline, structure locations, and substation locations. Please let me know if that doesn't work for you and I can try sending through a different method.
Below are our current design components to help your review process:
Voltage – 345-kV
Length of transmission line – 160 miles
Number of structures – 822
Minimum structure height – 105 feet
Maximum structure height – 165 feet
Average structure height – 120 feet

Minimum structure to structure span – 200 feet
Maximum structure to structure span – 1,250 feet
Average structure to structure span – 900 feet

If you need more information, feel free to reach back out.

Thank you,

Ryan King | Environmental Coordinator
Direct: 701.557.5558 | Cell: 701.426.9469

From: OSD Pentagon OUSD A-S Mailbox ASD EIE-RP-SC <osd.pentagon.ousd-a-s.mbx.asd-eie-rp-sc@mail.mil>
Sent: Thursday, July 25, 2024 9:46 AM
To: Ryan King <RKing@bepc.com>
Cc: OSD Pentagon OUSD A-S Mailbox ASD EIE-RP-SC <osd.pentagon.ousd-a-s.mbx.asd-eie-rp-sc@mail.mil>
Subject: [External] External: RE: Basin Electric Leland Olds Station to Tande 345-kV Transmission Project – Consultation Request – NDPSC Project

Good morning Mr. King,

In lieu of completing the form … if you can provide the structure (pole) heights or maximum pole height and a shapefile or kmz file for mapping the project, we can this out to the military services for review right away. Thank you.

Respectfully,

Dan Townes
Military Aviation and Installation Assurance Siting Clearinghouse
Office of the Assistant Secretary of Defense (Energy, Installations and Environment)
Desk: 571-372-8414 *(limited access/shared line)*
NIPR: daniel.w.townes.ctr@mail.mil

From: OSD Pentagon OUSD A-S Mailbox ASD EIE-RP-SC <osd.pentagon.ousd-a-s.mbx.asd-eie-rp-sc@mail.mil>
Sent: Thursday, July 25, 2024 9:55 AM
To: Ryan King <RKing@bepc.com>
Cc: OSD Pentagon OUSD A-S Mailbox ASD EIE-RP-SC <osd.pentagon.ousd-a-s.mbx.asd-eie-rp-sc@mail.mil>
Subject: RE: Basin Electric Leland Olds Station to Tande 345-kV Transmission Project – Consultation

Request – NDPSC Project

Mr. King,

Please complete the attached form and return it to the Clearinghouse along with the associated/requested documentation. Thank you.

Very Respectfully,

The Clearinghouse
Military Aviation and Installation Assurance Siting Clearinghouse
Office of the Assistant Secretary of Defense (Energy, Installations and Environment)
Email: osd.pentagon.ousd-a-s.mbx.asd-eie-rp-sc@mail.mil

From: Ryan King <RKing@bepc.com>
Sent: Thursday, July 25, 2024 9:47 AM
To: OSD Pentagon OUSD A-S Mailbox ASD EIE-RP-SC <osd.pentagon.ousd-a-s.mbx.asd-eie-rp-sc@mail.mil>
Subject: Basin Electric Leland Olds Station to Tande 345-kV Transmission Project – Consultation Request – NDPSC Project

To Whom it May Concern,

Please see the attached consultation letter requesting review of Basin Electric's Leland Olds Station (LOS) to Tande 345-kilovolt (kV) Transmission Line Project (Project). The Project involves construction of approximately 160 miles of 345-kV electric transmission line with about 30.5 miles being built as a double-circuit. The Project is located in Mercer, McLean, Ward, Mountrail, and Williams Counties, North Dakota. Due to the Project schedule, I am respectfully requesting a review of the material within 30 days.
If you have any questions or need additional information, please contact me directly at 701-557-5558 or RKing@bepc.com.

Thank you,

Ryan King
Environmental Coordinator
Basin Electric Power Cooperative
1717 E Interstate Avenue | Bismarck, ND 58503
Direct: 701.557.5558 | Cell: 701.426.9469
RKing@bepc.com | basinelectric.com

Mountrail County

From:	Melissa Vachal
To:	Ryan King
Subject:	[External] External: RE: Basin Electric LOS to Tande 345-kV Transmission Line - Mountrail County
Date:	Thursday, July 25, 2024 4:18:56 PM
Attachments:	image001.png image002.png We sent you safe versions of your files.msg 455088_Images.pdf

External Email - Use caution clicking links or opening attachments
Mimecast Attachment Protection has deemed this file to be safe, but always exercise caution when opening files.

Good morning Mr. King,

So we have a few things, first a CUP is needed for the electrical Substation itself to be permitted. Then for the transmission line that's another CUP. I will need the legal description of where the project will be starting along with all applications for the transmission line. We have our CUP application online at www.co.mountrail.nd.us under Planning & Zoning. We have a deadline for the application of being August 2nd, 2024 at 11:00 to make it onto our August 27, 2024 agenda.

All easements will be required along with a route map book of the location and route of each structure of where the transmission line will be.

I've also attached our Land Development Code regulation on our Utilities. Should you have questions I'll be in the office next Tuesday we can visit regarding anything that you may have for me as I'm out of the office for a couple of days for appointments

Melissa Vachal

MOUNTRAIL COUNTY PLANNING & ZONING ADMINISTRATOR
PO Box 248
Stanley ND 58784
701-628-2945
Melissav@co.mountrail.nd.us
Our employees are what make us different. We're hiring!

From: Ryan King <RKing@bepc.com>
Sent: Wednesday, July 24, 2024 1:05 PM
To: Melissa Vachal <melissav@co.mountrail.nd.us>
Subject: (Caution External Email) Basin Electric LOS to Tande 345-kV Transmission Line - Mountrail County

Good afternoon,

Basin Electric is planning a 345-kV transmission line which will run through a portion of Mountrail

County (see screenshot below). By law, we are required to send the county commission a letter detailing the project (I plan to do so this afternoon). For planning and zoning, I plan to submit a Conditional use permit application, to include better maps and more information, and am wondering if anything else will be required from your office.

Thank you,

Ryan King
Environmental Coordinator
Basin Electric Power Cooperative
1717 E Interstate Avenue | Bismarck, ND 58503
Direct: 701.557.5558 | Cell: 701.426.9469
RKing@bepc.com | basinelectric.com

ND Department of Environmental Quality

August 12, 2024

Ryan King
Environmental Coordinator
Basin Electric Power Cooperative
1717 East Interstate Ave.
Bismarck, ND 58503

Re: Leland Olds Station to Tande 345-kV Transmission Line Project in McLean, Mercer, Mountrail, Ward, and Williams Counties

Dear Mr. King:

The North Dakota Department of Environmental Quality (Department) has reviewed the information concerning the above-referenced project received at the Department on July 25, 2024, with respect to possible environmental impacts.

1. Necessary measures should be taken to minimize fugitive dust emissions created during construction activities. Any complaints that may arise should be dealt with in an efficient and effective manner.

2. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.

3. Projects disturbing one or more acres are required to have a permit to discharge stormwater runoff until the site is stabilized by the re-establishment of vegetation or other permanent cover. Further information on the stormwater permit may be obtained from the Department's website or by calling the Division of Water Quality at 701-328-5210. Also, cities may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local stormwater management considerations are addressed. Stormwater runoff from the project area discharges to a 303(d) listed water body (Little Knife River). Extra care should be taken to ensure construction activity does not affect the water body.

4. The construction project overlies the Fort Mandan, Weller Slough, Lake Nettie Snake Creek, Ryder Ridge, Shell Creek-White Lake and White Earth aquifers. Care should be taken to avoid spills of any materials that may have an adverse effect on groundwater

quality. All spills must be immediately reported to this Department and appropriate remedial actions performed.

5. All solid waste materials must be managed and transported in accordance with the state's solid and hazardous waste rules. Appropriate efforts to reduce, reuse and/or recycle waste materials are strongly encouraged. As appropriate, segregation of inert waste from non-inert waste can generally reduce the cost of waste management. Further information on waste management and recycling is available from the Department's Division of Waste Management at 701-328-5166.

These comments are based on the information provided about the project in the above-referenced submittal. The U.S. Army Corps of Engineers may require a water quality certification from this Department for the project if the project is subject to their Section 404 permitting process. Any additional information which may be required by the U.S. Army Corps of Engineers under the process will be considered by this Department in our determination regarding the issuance of such a certification.

The Department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,

L. David Glatt, P.E., Director
North Dakota Department of Environmental Quality

LDG:ll
Attach.

Construction and Environmental Disturbance Requirements

The following are the minimum requirements of the North Dakota Department of Environmental Quality (Department) for projects that involve construction and environmental disturbance in or near waters of the State of North Dakota. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect waters of the state. All projects must be constructed to minimize the loss of soil, vegetative cover, and pollutants (chemical or biological) from a site.

Soils

Prevent the erosion and sediment loss using erosion and sediment controls. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, and land resources must be prohibited against compaction, vegetation loss and unnecessary damage.

Surface Waters

All construction must be managed to minimize impacts to aquatic systems. Follow safe storage and handling procedures to prevent the contamination of water from fuel spills, lubricants, and chemicals. Stream bank and stream bed disturbances must be contained to minimize silt movement, nutrient upsurges, plant dislocations, and any physical chemicals, or biological disruption. The use of pesticides or herbicides in or near surface waters is allowed under the Department's pesticide application permit with notification to the Department.

Fill Material

Any fill material placed below the ordinary high-water mark must be free of topsoil, decomposable materials, and persistent synthetic organic compounds, including, but not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill material. All temporary fills must be removed. Debris and solid waste must be properly disposed or recycled. Impacted areas must be restored to near original condition.

ND Department of Health and Human Services

From: -Info-DHS Executive Office
To: Ryan King
Subject: [External] External: Thank you for contacting the Department of Health and Human Services
Date: Thursday, July 25, 2024 9:12:48 AM
Attachments: image003.png

External Email - Use caution clicking links or opening attachments

Thank you for contacting the Department of Health and Human Services (HHS). You have reached the general inbox. Due to the volume of emails, inquiries are answered in the order they are received.

Please contact the Department of Health and Human Services' (HHS) **Customer Support Center** directly if you are inquiring about the status of your benefit's application or have other questions regarding Medicaid, SNAP, Child Care Assistance, Economic Assistance programs, etc.

Call ONE number:	**866.614.6005**	*(Wait times will vary. Your patience is appreciated!)*
Send to ONE email address:	applyforhelp@nd.gov	
Visit ONE website:	applyforhelp.nd.gov	

Please do not submit confidential documents to this email (i.e., social security cards, birth certificates, etc.) Contact the Human Service Zone office in the County in which you live (see contact information below) or email applyforhelp@nd.gov to submit confidential documents for Medicaid and/or Economic Assistance programs.

You may also find the answer you're looking for by visiting the Health & Human Services website (click on the link or type hhs.nd.gov into your browser).

Thank you!

Direct Phone Numbers for Common Inquiries:

701.328.2076	Adoption Services:
701.328.4649	Adults & Aging Services
701.328.7575	(Criminal) Background checks:
701.328.8920	Behavioral Health: *(Addiction, Mental Health, Gambling, Peer Support, etc.)*
701.328.3538	Child Protection Services:

To Report child abuse or neglect, please call 833.958.3500

701.328.5440	Child Support:

701.328.8930 Developmental Disabilities
(ND Home and Community Based Services)

701.328.2115 Early Childhood:

701.328.2332 Economic (Financial) Assistance:
(LIHEAP, SNAP, TANF, Child Care Assist. (CCAP), etc.)

701.328.2316 Foster Care:

TO REPORT FRAUD:

Human Services *(Use the toll-free **hotline**.)* **800.472.2622**

701.328.7068 Medicaid

To pick up a Medicaid application or for general inquiries, contact your local County Human Service Zone Office

(Click on the link above for a list of locations and phone numbers.)

Technical issues with the online portal: mmisinfo@nd.gov

Open Records Requests: dhsopenrecords@nd.gov

701.328.2372 Public Health
(Immunizations, Emergency Preparedness & Response, Vital Records, etc.)

701.328.2360 Vital Records
(Birth / death certificates, marriage licenses, etc.)

ND Department of Trust Lands (ROW)

NORTH Dakota | Trust Lands

Be Legendary.™

July 31, 2024

RE: NOTIFICATION OF BASIN ELECTRIC POWER COOPERATIVE'S PROPOSED LELAND OLDS STATION TO TANDE 345-KV TRANSMISSION LINE PROJECT (R-10163 / R-10164 / R-10165)

To Whom it May Concern:

Trust Lands were granted to the state of North Dakota through the Enabling Act of 1889 from the United States for the sole purpose of generating revenue for the beneficiaries defined by the North Dakota Constitution. Through our state constitution, the Board of University and School lands (Board), is charged with managing these Trust Lands in a way that is in the best interest of the trusts' beneficiaries (i.e. various schools). The North Dakota Department of Trust Lands (NDDTL) manages these lands on behalf of the Board. All proposed projects crossing NDDTL managed property are subject to review and approval by the Board or through the Board's agent, the Commissioner.

Basin Electric Power Cooperative (Basin) has applied for a Above Ground Electric Transmission Line Right-of-Way across land in McLean (R-10163) and Mountrail (R-10164) Counties which are managed by the North Dakota Department of Trust Lands (NDDTL) and are highlighted green on the attached tract list (from page 2 of the received letter). Basin had also initially applied for a tract of land in Ward county (R-10165; T152-R87-36) but recent correspondence indicates that the parcel managed by NDDTL is no longer requested to be included in the proposed project.

Onsite meeting reviews have not been held with NDDTL and Basin to determine an acceptable route across NDDTL land at this time.

Any questions can be forwarded to NDDTL ROW staff by phone (701-328-2800) or email (landrow@nd.gov).

Respectfully,

Surface Division – Rights of Ways Staff
North Dakota Department of Trust Lands

Joseph A. Heringer COMMISSIONER
1707 N 9th St | Bismarck ND 58506-5523
PHONE: 701-328-2800 | FAX: 701-328-3650 | WEB: https://land.nd.gov

BASIN ELECTRIC POWER COOPERATIVE
A Touchstone Energy® Cooperative

July 25, 2024

Joseph Stegmiller
Director, Rights-of-Way Management
ND Department of Trust Lands
1707 N 9th Street
Bismarck, ND 58501

Re: Notification of Basin Electric Power Cooperative's Proposed Leland Olds Station to Tande 345-kV Transmission Line Project

Dear Director Stegmiller,

Basin Electric Power Cooperative (Basin Electric) is proposing to develop the Leland Olds Station (LOS) to Tande 345-kilovolt (kV) Transmission Line Project (Project) in Mercer, McLean, Ward, Mountrail, and Williams Counties, North Dakota. The purpose of this letter is to provide notification of the Project per North Dakota Administrative Code Section 69-06-01-05. Basin Electric plans to submit a consolidated application for a Certificate of Corridor Compatibility and Transmission Facility Route Permit for the Project to the North Dakota Public Service Commission (NDPSC). Construction of the Project is anticipated to begin in the fall of 2025.

The Project consists of approximately 160 miles of 345-kV electric transmission line with approximately 30.5 miles being built as a double-circuit. The Project starts at the Basin Electric owned Leland Olds Station substation, located east of Stanton, ND, proceeds around the east side of Lake Audubon, and terminates at the Basin Electric owned Tande Substation, east of Tioga, ND. The Project would be constructed using single-pole and H-frame self-supporting steel structures with concrete foundations; guy wires will not be utilized. A 150-foot-wide right-of-way will be required for all route segments.

The purpose and need of the Project is to provide energy load support to the region. The benefits of the Project include adding critical electrical delivery capacity to facilitate economic growth and add critical redundancy to reduce the potential for load shedding or electric outages. This Project was selected to address regional and local transmission reliability deficiencies in the 2021 Interregional Transmission Planning (ITP) study from Southwest Power Pool (SPP), the jurisdictional Regional Transmission Organization (RTO). SPP has directed Basin Electric, as the area transmission owner, to construct the transmission line through a Notice to Construct (NTC) in 2022.

Basin Electric is solicitating input from your agency regarding any sensitive resources, current or planned development, or property interests your agency may have in or around the Project area that should be considered as the Project moves forward with development. In addition, Basin Electric asks that you provide information regarding any applicable permits that may be required from your office. Basin Electric requests the consideration of the legal descriptions provided in the table below and shown on the attached maps.

Leland Olds Station to Tande 345-kV Transmission Line Project
Public Land Survey System Locations

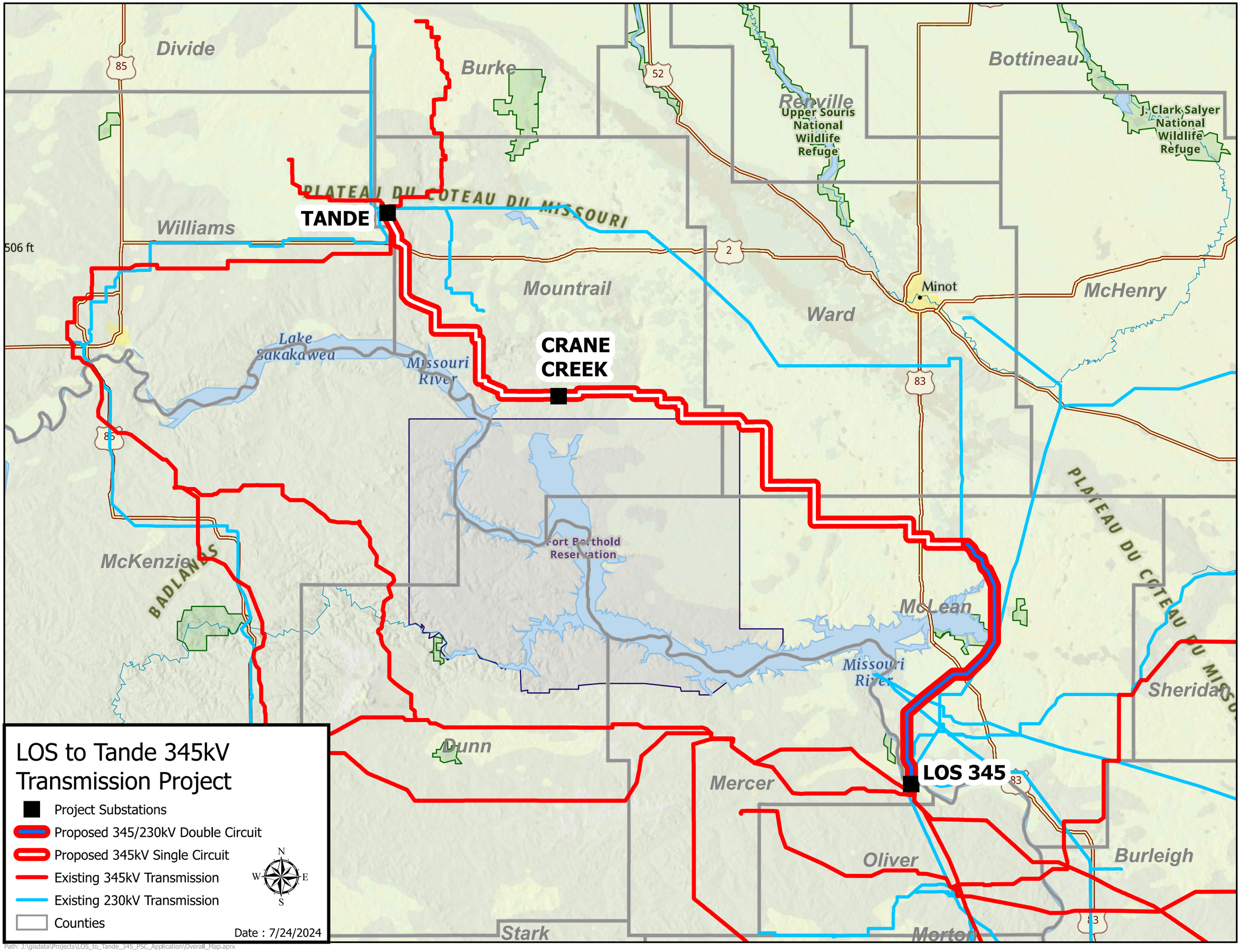
County	Township	Range	Section
Mercer	144N	84W	15, 16, 21, 22
McLean	144N	84W	4, 9, 10, 15, 16
	145N	84W	1, 12, 13, 24, 25, 36
	146N	84W	25, 36
	146N	83W	1, 2, 10, 11, 15, 16, 17, 19, 20, 30
	146N	82W	5, 6
	147N	82W	2, 11, 14, 22, 23, 27, 28, 32, 33
	148N	82W	2, 11, 14, 23, 26, 35
	149N	81W	19, 30, 31
	149N	82W	3, 4, 5, 6, 10, 11, 13, 14, 24
	149N	83W	1, 2, 3
	150N	83W	19, 20, 29, 32, 33, 34
	150N	84W	19, 20, 21, 22, 23, 24
	150N	85W	6, 7, 18, 19, 20, 21, 22, 23, 24
Ward	151N	85W	30, 31
	151N	86W	25, 26, 27, 28, 29, 30
	151N	87W	1, 12, 13, 24, 25
	152N	87W	7, 8, 9, 13, 14, 15, 16, 24, 25, 36
Mountrail	152N	88W	6, 7, 8, 9, 10, 11, 12
	153N	88W	30, 31 ,32, 33
	153N	89W	19, 20, 21, 25, 26, 27, 28,
	153N	90W	22, 23, 24, 26, 27, 28, 29, 30
	153N	91W	25, 26, 27, 28, 29, 30
	153N	92W	18, 19, 20, 21, 25, 26, 27, 28
	153N	93W	1, 12, 13
	154N	93W	7, 8, 9, 10, 11, 12, 13, 24, 25, 36
	154N	94W	1, 12
	155N	94W	5, 8, 17, 20, 21, 25, 26, 27, 28, 36
	156N	94W	6, 7, 17, 18, 20, 29, 32
	157N	94W	29, 32, 33
Williams	156N	95W	1

Basin Electric respectfully requests your response within 30 days of receipt of this letter. If no reply is received, it will be assumed that you have no comment on the Project. Copies of all

correspondence received in response to this letter will be included with the NDPSC application. If further information is desired or if you have comments regarding the Project, please contact me by email at rking@bepc.com, by phone at 701-557-5558, or by mail at 1717 East Interstate Avenue, Bismarck, ND 58503.

Sincerely,

Ryan King
Environmental Coordinator



Path: J:\gisdata\Projects\LOS_to_Tande_345_PSC_Application\Overall_Map.aprx

ND Department of Water Resources

August 16, 2024

Mr. Ryan King
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, North Dakota 58503
rking@bepc.com
701-557-5558

Dear Mr. King

This is in response to your request for a review of the environmental impacts associated with the Notification of Basin Electric Power Cooperative's Proposed Leland Olds Station to Tande 345-kV Transmission Line Project.

The proposed project has been reviewed by Department of Water Resources (DWR), and the following comments are provided:

-Initial review indicates the project does not require a conditional or temporary permit for water appropriation. However, if surface water or groundwater will be diverted for construction of any future projects identified in the plan, a water permit will be required per North Dakota Century Code § 61-04-02. Please consult with the DWR Water Appropriation Division if you have any questions at (701) 328-2754 or appropinfo@nd.gov.

-The DWR maintains a network of observation wells across the state for monitoring the water levels and quality in glacial and bedrock aquifers. These wells are often installed in road and highway rights-of-way to limit inconvenience to the adjacent landowners. DWR observation wells have a yellow protective casing extending between 1 and 3 feet above ground surface, and their locations are marked with a stake. If an observation well is encountered during project activities and must be removed, please contact the Water Appropriation Division. The DWR hopes to keep all observation wells, but otherwise will ensure the well is properly abandoned.

-Water Resource Districts and the DWR Regulatory Division's Engineering and Permitting Section are responsible for regulating drainage and water management in North Dakota. The DWR Engineering and Permitting Section also regulates the construction and modification of any dike, diversion, restoration, or other device. Consequently, the DWR requests to be notified regarding a proposed project's impacts, if any, to water resources, such as watercourses (i.e. streams or rivers), agricultural drains, wetlands (i.e. ponds, sloughs, lakes, or any series thereof), and dikes, diversions, restorations, and other water control devices, as any alterations, modifications, improvements, or impacts may require a drainage permit(s) or construction permit(s). For more information on these requirements, please visit the Regulation & Appropriation tab on the DWR website (dwr.nd.gov), or contact the Regulatory Division directly at 701-328-2750 or dwrregpermits@nd.gov.

-There is a FEMA National Flood Insurance Program (NFIP) regulatory floodplain identified or mapped where this proposed project is to take place. Impacted areas are designated to be in NFIP Zone A. The State of North Dakota has no formal NFIP permitting authority, as all NFIP permitting decisions are considered by impacted NFIP participating communities, which is the community with zoning authority for the area in question. Please work directly with the local floodplain administrator of the zoning authority impacted to achieve NFIP and community compliance.
-Any work within the ordinary high water mark (OHWM) of the Missouri River requires a sovereign land permit from the Department. For more information, feel free to contact Jerry Heiser, Sovereign Land Manager, at 701-328-4935 or gheiser@nd.gov or Amy Winkelman, Sovereign Land Specialist, at 701-328-4988 or awinkelman@nd.gov.

Thank you for the opportunity to provide review comments. Should you have further questions, please contact me at 701-328-4970 or kyrkoski@nd.gov

Sincerely,

Kyle Yrkoski
Planner III

KY:dm/1570

ND Game and Fish Department

NORTH Dakota | Game and Fish

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August 22, 2024

Ryan King
Environmental Coordinator
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, ND 58503

Dear Mr. King:

RE: Proposed Leland Olds Station to Tande 345-kV Transmission Line Project

Basin Electric Power Cooperative is proposing to develop an approximately 160-mile-long transmission line starting at the Basin Electric owned Leland Olds Station substation and terminating at the Basin Electric owned Tande Substation. The North Dakota Game and Fish Department has reviewed this project for wildlife concerns.

A primary concern is the possible disturbance of native prairie associated with construction of the transmission line and associated access roads. Avoidance of native prairie areas reduces impacts to a number of grassland species including many of the species of conservation priority. We ask that work within these areas be avoided to the extent possible, and disturbed areas be reclaimed to pre-project conditions.

We recommend structure siting be avoided in nesting habitat within a 1-mile buffer of any Sharp-tailed Grouse lek, and construction within these buffer zones be restricted during the lekking and nesting seasons (March 15-July 15). Mr. Jesse Kolar, Upland Game Management Supervisor, may be contacted at 701-690-5711 for additional information regarding best management practices for prairie grouse.

The National Wetland Inventory indicates a variety of wetlands within the proposed project corridor. Steps should be taken to protect any wetlands that cannot be avoided, no alterations should be made to existing drainage patterns, and above-ground appurtenances should not be placed in wetland areas. Unavoidable destruction or degradation of wetland acres should be mitigated in kind.

The project route crosses several Classified fisheries including the Missouri River, White Earth River, Little Knife River, and Shell Creek. We recommend that overhead lines be marked when placed over perennial streams or sited in close proximity to large wetland complexes to minimize possible avian impacts. The publication "Reducing Avian Collisions with Power Lines: the State of the Art in 2012" provides a range of management options which can be used to reduce avian losses.

Aerial surveys should be conducted for raptor nests before construction begins. We recommend that a ½-mile construction buffer be implemented around active eagle nest sites (known occupied within the past 5 years). Ms. Sandra Johnson, Conservation Biologist, may be contacted at 701-328-6327 for additional information on nesting eagles in the state.

We do not believe this project will have significant adverse effects on wildlife or wildlife habitat, including species of conservation priority, provided these recommendations are implemented where appropriate.

Sincerely,

(for) Greg Link
Chief
Conservation & Communications Division

State Historical Society of North Dakota

July 25, 2024

Ryan King
Basin Power Cooperative
1717 E Interstate Ave
Bismarck, ND 58503

SHSND Ref.: 24-9097 Basin Electric Leland Olds Station to Tande 345-kV Transmission Project in portions of 181 sections in McLean, Mercer, Mountrail, Ward, and Williams Counties, North Dakota

Dear Ryan,

We reviewed SHSND Ref.: 24-9097 Basin Electric Leland Olds Station to Tande 345-kV Transmission Project in portions of 181 sections in McLean, Mercer, Mountrail, Ward, and Williams Counties, North Dakota. We recommend a Class III (pedestrian survey) of cultural resources in the project area. The survey must follow "North Dakota SHPO Guidelines Manual for Cultural Resource Inventory Projects," which is available at https://www.history.nd.gov/hp/hpforms.html.

Thank you for the opportunity to review this project to date. We look forward to review of the Class III survey for archaeological resources. If you have any questions please contact Lorna Meidinger, Lead Historic Preservation Specialist at (701) 328-2089 or lbmeidinger@nd.gov.

Sincerely,

for William D. Peterson, PhD
Director, State Historical Society of North Dakota

24-9097

US Army Corps of Engineers

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NORTH DAKOTA REGULATORY OFFICE
3319 UNIVERSITY DRIVE
BISMARCK, NORTH DAKOTA 58504-7565

August 30, 2024

NWO-2024-868-BIS

Basin Electric Power Cooperative
Attn: Mr. Ryan King
1717 East Interstate Avenue
Bismarck, North Dakota 58503

Dear Mr. King:

This is in response to information received on July 25, 2024 regarding the proposed Leland Olds Station to Tande 345-kV Transmission Line Project. The project is located in the following locations throughout North Dakota.

County	Township	Range	Section
Mercer	144N	84W	15, 16, 21, 22
McLean	144N	84W	4, 9, 10, 15, 16
	145N	84W	1, 12, 13, 24, 25, 36
	146N	84W	25, 36
	146N	83W	1, 2, 10, 11, 15, 16, 17, 19, 20, 30
	146N	82W	5, 6
	147N	82W	2, 11, 14, 22, 23, 27, 28, 32, 33
	148N	82W	2, 11, 14, 23, 26, 35
	149N	81W	19, 30, 31
	149N	82W	3, 4, 5, 6, 10, 11, 13, 14, 24
	149N	83W	1, 2, 3
	150N	83W	19, 20, 29, 32, 33, 34
	150N	84W	19, 20, 21, 22, 23, 24
	150N	85W	6, 7, 18, 19, 20, 21, 22, 23, 24
Ward	151N	85W	30, 31
	151N	86W	25, 26, 27, 28, 29, 30
	151N	87W	1, 12, 13, 24, 25
	152N	87W	7, 8, 9, 13, 14, 15, 16, 24, 25, 36
Mountrail	152N	88W	6, 7, 8, 9, 10, 11, 12
	153N	88W	30, 31 ,32, 33
	153N	89W	19, 20, 21, 25, 26, 27, 28,
	153N	90W	22, 23, 24, 26, 27, 28, 29, 30
	153N	91W	25, 26, 27, 28, 29, 30
	153N	92W	18, 19, 20, 21, 25, 26, 27, 28
	153N	93W	1, 12, 13

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Mountrail	154N	93W	7, 8, 9, 10, 11, 12, 13, 24, 25, 36
	154N	94W	1, 12
	155N	94W	5, 8, 17, 20, 21, 25, 26, 27, 28, 36
	156N	94W	6, 7, 17, 18, 20, 29, 32
	157N	94W	29, 32, 33
Williams	156N	95W	1

U. S. Army Corps of Engineers Regulatory Offices administer Section 10 of the Rivers and Harbors Act (Section 10) and Section 404 of the Clean Water Act (Section 404). A Section 10 permit would be required for work impacting navigable waters, this includes work over, through, or under Section 10 waters. Section 10 waters in North Dakota are the Missouri River (including Lake Sakakawea), Yellowstone River, James River (south of the railroad tracks in Jamestown, North Dakota), Bois de Sioux River, Red River of the North, and Upper Des Lacs Lake. A Section 404 permit would be required for the discharge of dredge or fill material (temporarily or permanently) in waters of the United States. Waters of the United States may include, but are not limited to, rivers, streams, ditches, coulees, lakes, ponds, and their adjacent wetlands. Fill material includes, but is not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mines or other excavation activities and materials used to create any structure or infrastructure in waters of the United States.

Based on the information contained in your letter, the Corps has determined that your proposed project may require a Section 10 and/or Section 404 permit. The permit application and instructions for completing the application are enclosed and may also be found at: http://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Obtain-a-Permit. Be sure to accurately describe all proposed work and construction methodology. Once the application is complete, mail it to the letterhead address or to the email address below.

The North Dakota Regulatory office prefers that all submissions are sent electronically to the following email address: CENWO-OD-RND@usace.army.mil instead of a hard copy by mail. Please split large attachments (>25 MB) into multiple emails if needed.

Please refer to identification number NWO-2024-868-BIS in any correspondence concerning this project. If you have any questions, please contact Jason Renschler at U.S. Army Corps of Engineers, North Dakota Regulatory Office, 3319 University Drive, Bismarck, North Dakota 58504-7565, by email at *Jason.J.Renschler@usace.army.mil*, or telephone at (701) 255-0015 ext. 2010. For more information regarding our program, please visit our website at *http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/NorthDakota.aspx*.

Sincerely,

Jason Renschler
Sr. Project Manager
North Dakota

US Fish and Wildlife Service

United States Department of the Interior

FISH AND WILDLIFE SERVICE
North Dakota Ecological Services
3425 Miriam Avenue
Bismarck, North Dakota 58501

August 21, 2024

In reply, please refer to:
Leland Olds Station to Tande Transmission Line

Ryan King, Environmental Coordinator
Basin Electric Power Cooperative
Via email to: RKing@bepc.com

Dear Mr. King,

Thank you for the opportunity to review and provide comments on Basin Electric Power Cooperative's (BEPC) proposed Leland Olds Station to Tande 345 kV Transmission Line Project. Based on our initial review of this project, there are significant U.S. Fish and Wildlife Service (FWS) trust wildlife resources along the proposed project route. Therefore, please find the information below to assist you in minimizing impacts to these resources:

1. General Wildlife Recommendations – Please refer to our standard buffer and timing document describing our general recommendations for trust resources that may be present in the vicinity of the Project (USFWS Timing/Buffer Recommendations, 1/2024; enclosed).
2. For compliance with the Endangered Species Act, please consider using the Information for Planning and Consultation (IPaC) database (http://ecos.fws.gov/ipac). The database provides guidance to help determine if endangered species may be present within the action area, and if the project and associated actions may affect listed species. The North Dakota Ecological Services webpage (https://www.fws.gov/office/north-dakota-ecological-services/library) contains step-by-step guidance for navigating IPaC and determination keys that you may choose to use.
3. Bald and Golden Eagles - To understand the distribution of bald and golden eagles along the project alignment, which are protected under the Bald and Golden Eagle Protection Act (BGEPA; 16 U.S.C. 668–668d). The BGEPA, enacted in 1940 and amended several times, prohibits take of bald eagles and golden eagles, including their parts, nests, young, or eggs, except where otherwise permitted pursuant to federal regulations. Incidental take of eagles from actions such as electrocutions from power lines or wind turbine strikes are prohibited unless specifically authorized via an eagle incidental take permit from US Fish and Wildlife Service (Service). The Service has developed guidance for the public regarding means to avoid take of bald and golden eagles:
    - The 2007 *National Bald Eagle Management Guidelines* serve to advise landowners, land managers, and others who share public and private lands with bald eagles when and under what circumstances the protective provisions of BGEPA may apply. They provide conservation recommendations to help people avoid and/or minimize such impacts to bald eagles, particularly where they may constitute "disturbance," which is prohibited by the BGEPA. https://www.fws.gov/sites/default/files/documents/national-bald-eagle-management-guidelines.pdf

In 2024, the Service has also developed new permit regulations under BGEPA:

- Eagle permit regulations, as allowed under BGEPA, were promulgated by the Service in 2009 (74 FR 46836; Sept. 11, 2009), revised in 2016 (81 FR 91494; Dec. 16, 2016), and again in 2024 (89 FR 9920; Feb. 12, 2024). Generally, these regulations authorize the limited take of bald and golden eagles where the take to be authorized is associated with otherwise lawful activities. The regulations also establish permit provisions for intentional take of eagle nests where necessary to ensure public health and safety, in addition to other limited circumstances. The 2024 revisions are intended to increase the efficiency and effectiveness of permitting, facilitate and improve compliance, and increase the conservation benefit for eagles. They include a new system of general permits in addition to the specific-permit situations the Service has authorized in the past. These general permits are designed for situations with low risks to eagles and are an alternative approach to authorize certain wind-energy generation projects, power-line infrastructure, activities that may disturb breeding bald eagles, and bald eagle nest take. The Service will continue to review specific permits for situations that have high or uncertain risks to eagles, thus meeting the preservation standard for eagles. https://www.fws.gov/program/eagle-management

We also recommend contacting Sandra Johnson, Conservation Biologist with the North Dakota Game and Fish Department at sajohnson@nd.gov for historic locations of bald eagles in the vicinity of the project.

4. Northern long-eared bat - The first approximately 45 miles and last 17 miles are in the NLEB range. While we do not yet know where tree clearing will take place, the proposed route appears to require tree clearing near the White Earth River and Missouri River. All tree clearing should be done outside of the active season. If not possible, then surveys should be conducted following our standard protocols to determine NLEB use in the area.
5. Dakota skipper- The proposed route intersects habitat with confirmed recent Dakota skipper observations nearby in Mountrail County just north of White Earth Bay. The proposed route also goes through a significant amount of suitable Dakota skipper habitat as classified by the Dakota skipper suitability model. The most significant sections of overlap occur between Tioga and Sanish Bay, but other less contiguous habitat would also be affected along the route after that point. Dakota skipper habitat is to be delineated in all native grasslands within a half mile of the proposed route. Delineated habitat is to be avoided and all other native grassland habitat within a half mile of delineated habitat is to be disturbed at the minimum levels practicable. If suitable habitat cannot be avoided, then presence/absence surveys need to be conducted by a permitted surveyor.
6. Whooping crane- In the broader region, there is increasing development within the whooping crane migratory corridor and the Service has concerns that cumulatively these development projects are reducing the recovery potential for this species. The proposed Project would cross through the whooping crane migratory corridor and there are numerous historic observations along the proposed project route. Without a federal nexus, we recognize that project proponents of proposed transmission facilities that are within the migratory corridor for the whooping crane have questions and concerns on ESA compliance. To address these concerns, the Service is in the early stages of developing a streamlined Section 10 approach to address incidental take of whooping crane. This approach is intended to provide a consistent method to issue incidental take coverage for all renewable energy development within the migratory corridor that fully offset impacts of the take of whooping crane and listed bat species and is being developed in lieu of individual project Habitat Conservation Plans. When the Section 10 tools are completed, we would encourage Basin Electric to review and determine whether take coverage for the Project is

needed. In the interim, we recommend the following considerations and minimization measures to analyze and reduce effects to the whooping crane:

- Within a 2km buffer from the proposed Project centerline, quantify potential impacts to habitat using the whooping crane habitat suitability model developed by Neimuth et al. 2018 https://pubs.usgs.gov/publication/70196575, available for download at: https://ecos.fws.gov/ServCat/Reference/Profile/148840. Depending on the level of impacts to suitable habitat, habitat mitigation may be recommended.
- Based on previous legal reviews of transmission lines with whooping crane impacts, clearly document indirect effects of other development that may result from the Project. This may include, but is not limited to, a description of power generation projects that may interconnect with the project, and grid upgrades that may be needed to support the additional transmission capacity.
- Mark all new, replacement, or upgraded lines within 1.0 mile of potentially suitable habitat and an equal amount of existing line within 1.0 mile of potentially suitable habitat according to the Service recommendations described in APLIC 2012. Monitor and maintain the markers in perpetuity to ensure effectiveness.

7. Piping Plover- There is one historic piping plover nest within a half mile of where the proposed route would cross the Missouri River. The proposed route also is near multiple saline lakes used by piping plovers with one (in Orlien WPA) occurring within half a mile of the proposed route. Prior to construction, piping plover surveys should be conducted within suitable habitat to document the presence or absence of piping plovers within half a mile of construction areas during the nesting season.
8. Migratory birds- Grassland habitat appears to be impacted by project development. All suitable areas should be surveyed for ground nesting birds if ground disturbing activities will be conducted during nesting season. Any nests found will require a buffer in place around the nests. Buffer distance can be discussed with the North Dakota Field Office at the time the nests are found.
9. FWS Land Interests – This project occurs in the vicinity of FWS easements managed under the National Wildlife Refuge System for the primary purpose of wildlife conservation. We recommend contacting the Service's Audubon Wetland Management District (WMD) which administers existing easements in the counties within the proposed project area. To determine the exact locations of easements and any additional considerations or restrictions that may apply regarding those sites, please contact Kathy Baer, the Audubon Refuge Manager can be contacted at: Kathy_baer@fws.gov 701-442-5474 x114, or 3275 11th St. NW, Coleharbor, ND 58531

We appreciate your efforts to ensure the conservation of listed species as part of our joint responsibilities under the ESA. If changes are made in the project plans or operating criteria, or if additional information becomes available, the Service should be informed so that the above determinations can be reconsidered. We appreciate the opportunity to provide comments. If you have any questions on these comments, please contact Seth Jones at seth_jones@fws.gov, Luke Toso, Deputy Field Supervisor, at luke_toso@fws.gov or myself at christopher_swanson@fws.gov.

Sincerely,

CHRISTOPHER SWANSON Digitally signed by CHRISTOPHER SWANSON Date: 2024.08.21 17:26:21 -05'00'

Christopher Swanson
Field Supervisor
North and South Dakota Field Offices

Enclosure: USFWS Timing/Buffer Recommendations, 1/2024

Cc: Kathy Baer, USFWS Audubon Refuge Manager
Greg Link, c/o Bruce Kreft, North Dakota Game and Fish Department

United States Department of the Interior

FISH AND WILDLIFE SERVICE
North Dakota Ecological Services Field Office
3425 Miriam Avenue
Bismarck, North Dakota 58501
(701) 250-4481, ndfieldoffice@fws.gov

USFWS Timing/Buffer Recommendations[1]

1/2024

Species/ Type	Recommended Buffer	Additional Specific Measures	Period of Concern
Bald Eagle[2]	660 ft if activity visible from nest 330 ft if visual screen	Aerial survey recommended in the spring, before leaf-out	Feb. 1 – July 15
Dakota skipper	250m – 500m	Survey Period	June 10 – July 25
Golden Eagle[3]	No visual buffer – ½ mile buffer Visual buffer – 660 feet Avoid activities during the nesting season (Feb. 1 – July15)	Aerial survey recommended in the spring, before leaf-out	Feb. 1 – July 15
Grassland Ground-nesting bird[4]			May 1 – July 15 (some species may nest longer)
Northern Long Eared Bat		Suggested Tree Removal Period – Nov. 1 to April 14	April 15 – Oct. 31
Piping plover	0.5 mile during nesting season		April 15 – Aug. 15
Pallid sturgeon		Migration and Spawning Period	April 1 – July 31
Whooping Crane	1 mile no-activity zone when present	General Migration Periods	March 15 – May 15 Sept. 10 – Nov. 15

[1] These recommendations should only be used as part of an existing consultation with the USFWS North Dakota Ecological Services Field Office (NDFO). If you have not consulted with the NDFO regarding the use of this document, your activity may not be in compliance with federal law, as applicable. For more information, contact the NDFO at ndfieldoffice@fws.gov or (701)355-8500.

[2] USFWS. May 2007. National Bald Eagle Management Guidelines. Available at http://www.fws.gov/midwest/eagle/guidelines/NationalBaldEagleManagementGuidelines.pdf.
[3] Romin, L.A. & Muck, J.A. 1999. Utah field office guidelines for raptor protection from human and land use disturbances. USFWS. Salt Lake City, UT. 42 pp.
[4] Jones, S. L., Dieni, J. S., & Gouse, P. J. 2010. Reproductive biology of a grassland songbird community in northcentral Montana. The Wilson Journal of Ornithology, 122(3), 455–464. http://www.jstor.org/stable/40962167

Dakota Skipper

- Dakota skipper flight period is **June 10 – July 25**.
- A buffer of 250 m should be maintained between a project and suitable Dakota skipper habitat and a 500 m buffer between occupied suitable habitat and/or designated critical habitat and the proposed project.[5]
- Occupancy surveys are conducted during the flight period and are performed within identified patches of suitable habitat. The habitat patches should be mapped (location and size) in order to evaluate the landscape habitat connectivity.
- The initiation date for surveys by a permitted surveyor is a critical component of data reliability for the Dakota skipper. Multiple surveys (minimum of three (3) during each flight period) are necessary to determine the species' likelihood of occurrence at a site.
- Occupancy is best determined with two consecutive seasons of surveys during the flight season, if only one season is available for survey for a project, then a minimum of 250 m of habitat around a site should be surveyed. When a known Dakota skipper site is located within 0.6 mile of a proposed project, then the buffer survey distance should be increased to 500 m. During occupancy surveys total numbers and locations of individuals should be recorded for the entire action area.

Determining if Dakota skipper habitat is present requires an assessment of the vegetation by a qualified biologist. Sites containing native prairie grassland and having features indicative of Dakota skipper habitat, described on pages 7-9 of the survey protocol document, may harbor the species. Dakota skippers are not likely to be present in cropped areas.

Persons with sufficient expertise in prairie ecology, Dakota skipper ecology, or both should preview sites before the flight period to delineate survey areas. Pre-survey reconnaissance of action area and adjacent habitat could facilitate efficient use of limited surveyor time by delineating habitat patches that should be surveyed during the flight period. In some cases, occupancy surveys may be limited to those habitat patches directly affected by the footprint of the action.

Occupancy survey results from prior years may be available for the site, section, or township of interest. This may be sufficient to inform the likelihood of occupancy at the site. We recommend that you coordinate with the NDFO to ensure survey results being considered are reliable regarding the Dakota skipper's status at a site.

Please contact the North Dakota Field Office at ndfieldoffice@fws.gov for the 2022 Dakota Skipper (*Hesperia dacotae*) North Dakota Survey Protocol**.**

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[5] Skadsen, D.R. 1999a. Addendum to a report on the results of a survey for Dakota skipper [Hesperia dacotae (Skinner 1911)] in northeast South Dakota: 1998 flight period. Unpublished report, South Dakota Department of Game, Fish, and Parks. Pierre, SD. 25 March 1999. 12+pp

Northern Long-eared Bat

- **Recommended Tree Removal Period for ND: November 1 – April 14**
- Active Season: April 15 – October 31
- Pup Season: June 1 – August 15
- Spring Staging: April 15 – May 14
- Fall Swarming: August 16 – October 31

Currently, there are no know northern long-eared bat (NLEB) maternity roosts or hibernacula in North Dakota. Until April 1, 2024, if a project is determined to be NLAA via IPaC, any incidental take that may occur as a result of otherwise lawful activities would not be prohibited. Be advised that this could change as new information and/or survey results become available, therefore project proponents should check the below website often to ensure the most current recommendations. If formal consultation is determined, reach out to your local Field Office (FO) for guidance on a template BA and surveys.

Guidelines will change April 2024.
https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis

The following are recommended conservation measures for the NLEB:

- Conduct tree removal activities between November 1 and April 14 to ensure NLEB are not present.
- Any take resulting from the removal of a known occupied NLEB maternity roost tree, from tree removal activities within 150 feet of a known occupied NLEB maternity roost tree from June 1 through August 15, or tree removal activities within 0.25 mile of a NLEB hibernaculum at any time is prohibited.
- Avoid clearing suitable spring staging and fall swarming habitat/s/ within a 5-mile radius of known or assumed NLEB hibernacula during the staging and swarming seasons *OR* within an area that intersects a known occurrence location. Contact your local FO for occurrence data.
- Perform any bridge/culvert repair, retrofit, maintenance, and rehabilitation work outside of the NLEB active season in areas where NLEBs are known to roost on structures or where such use is likely. If the active season cannot be avoided, conduct bat use surveys before structure repair/removal.
    - Bridge/Structure Bat Assessment Form Guidance: https://www.fws.gov/sites/default/files/documents/appendix-d-bridge-structure-bat-assessment-form-guidance-april-2020.pdf
    - Bridge/Structure Bat Assessment Form: https://www.fws.gov/sites/default/files/documents/appendix-d-bridge-culvert-bat-assessment-form-april-2020.pdf
- Do not use military smoke and obscurants within forested suitable northern long-eared bat habitat during the pup season or the active season (https://pubs.er.usgs.gov/publication/70039214).

Pallid Sturgeon

- Avoid in-stream work in waters occupied by pallid sturgeon, if possible, from **April 1-July 31** during the migration and spawning season.
- If pallid sturgeon is documented (remote tracking data, etc.) at or near the project site, particularly during construction, the USFWS will be contacted immediately.

Cooling Water Intake Recommendations

- EPA requires owners or operators to comply with one of following BTA Standards for impingement mortality, explained in detail in 40 CFR 125.94(c) and summarized below:
    - Closed-cycle recirculating system and daily monitoring of actual intake flows; or
    - Demonstrated ≤ 0.5 ft/sec through-screen design velocity: or
    - Demonstrated ≤ 0.5 ft/sec through-screen actual velocity and daily monitoring of velocity: or
    - Existing offshore velocity cap and daily monitoring of intake flow; or
    - Modified traveling screens, optimized to minimize impingement mortality; or
    - BTA systems of technology, management practices, and operational measures; or
    - 12-month impingement mortality performance standard and monthly monitoring: # fish killed or # fish impinged < 24 percent

General Intake Recommendations

- FWS recommends that intake velocities should not exceed 0.5 feet per second (fps).
- Mesh size at intake screens should have a maximum mesh opening of 1/4 inch to reduce the size of aquatic organisms that can be entrained (Environmental Protection Agency 1976).
- A Johnson (or Johnson type) screen/intake should be used if feasible.

Additional Intake Recommendations for Pallid Sturgeon in the Yellowstone River and in that portion of the Missouri River above river mile 1519 in Williams and McKenzie Counties (Potential Reproduction Areas).

- When possible floating intakes should be installed
- Intakes shall be located over water with a minimum depth of 20 feet.
- If the 20 foot depth is not attainable, the intake shall be located over the deepest water available at the start of the irrigation season.
- If the water depth falls below 6 feet the intake shall be moved to deeper water or maximum intake velocity limited to ¼ foot per second, with intake placed over maximum practicable attainable depth.

Piping Plover

- Piping plover Nesting Period **April 15 – August 15.**
- Surveys must begin 7 days prior to any onsite activities.
  - Survey in the morning, prior to the start of project/construction activities for the day and record a start and stop time.
  - Surveys must be conducted when there is adequate light to detect and identify birds. If cloudy or foggy, take additional time to ensure a good quality survey.
  - Surveys will be conducted daily.
- Survey will be conducted within 0.5 miles of proposed activity.
  - If suitable habitat is identified, a qualified wildlife biologist will conduct daily surveys of the identified areas to monitor for the **presence** of piping plovers.
  - From a good vantage point, survey areas within 0.5 miles of where project/construction activities will occur. Use binoculars or spotting scope to survey for a minimum of 20 minutes in each viewing area.
  - Look specifically for bird movements along sandbars in the middle of the channel, along the shoreline, and on recently formed floodplain sand deposits.
- Nesting behavior: copulations, birds returning to the same place, sitting on the sand for a long period of time, or nest exchange (males and females will generally take 20-minute shifts to incubate).
- Foraging behavior: looking for food along sandbar, probing the sand, hovering over river channel, and diving into water for fish, and bringing back fish to sandbar.
- If nesting activity is not observed, project/construction activities may commence.
- If a possible sighting occurs, then further investigation may be needed from a different vantage point or using higher-powered optics to verify if a nest, eggs, or chicks are present. Landowner permission must be obtained by the contractor if entering private land.

If at any time, an active nest, chick or adult bird is observed within 0.5 miles of the project:

- Do not attempt to disturb or remove the birds or nests.
- Do not conduct construction activities that could result in adults abandoning the nest.
- Do not start or continue construction activity within 0.5 miles of the nest.
- Immediately contact (within 1 hour) the USFWS for direction on continuation of work in the area.
- Do not resume construction activity within .5 mile of the nest until individuals leave the site or it is determined by the USFWS that there is no risk for disturbance.

Rufa Red Knot

- If a rufa red knot is sighted within 0.6 mile of the action area during plan activities, the USFWS should be contacted immediately at 701-250-4481 or ndfieldoffice@fws.gov. In coordination with the USFWS, work may resume after the bird(s) leave the area.

Western Prairie Fringed Orchid

- If a project is proposed in Ransom or Richland counties or near the Sheyenne National Grasslands in North Dakota, and includes herbicide application, water drainage or other water/wetland alteration, breaking native prairie, or burning, please contact the USFWS at 701-250-4481 or ndfieldoffice@fws.gov for measures to avoid or minimize impacts to western prairie fringed orchids.

Whooping Crane

- Whooping Crane migration is generally **March 15-May 15** and **September 10-November 15**.
  - If project activities were to occur during this timeframe and whooping cranes were to occupy the area within 1 mile of construction or other activity, then the activity could cause whooping cranes to be disturbed and leave the area. If this were to occur, it would most likely occur first thing in the morning, as whooping cranes overnight in one area before continuing the next morning. Disturbance, such as flushing the cranes, stresses them at critical times of the year, including migration.
  - If any whooping cranes do stopover, sightings within a mile of the project should also be reported to this office 701-250-4481 or ndfieldoffice@fws.gov

Migratory Bird Treaty Act (MBTA)

- The Migratory Bird Treaty Act 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.
  - A complete list of species that are covered as well as not covered under MBTA can be found here: https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php
  - For projects that may impact migratory birds or if further information is needed concerning migratory birds, please contact the Service at 701-250-4481 or ndfieldoffice@fws.gov

Bald and Golden Eagle Protection Act (BGEPA)

- The Bald and Golden Eagle Protection Act prohibits anyone, without a permit issued by the Service, from "taking" bald or golden eagles, including their parts, nests, or eggs.
  - The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part*, nest, or egg thereof."
  - The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."
  - "Disturb" means: "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

Bald Eagles

To avoid/minimize impacts to nesting bald eagles from construction activities, the Service recommends: (1) keeping a minimum 660-foot buffer between the activity and any bald eagle nest if no landscape buffer exists; (2) keeping a minimum 330-foot buffer and maintaining a landscape buffer or natural areas between the activity and around nest trees; and (3) avoiding activities during the bald eagle breeding season (**February 1 – July 15**).

The National Bald Eagle Management Guidelines can be found at: https://www.fws.gov/midwest/eagle/pdf/NationalBaldEagleManagementGuidelines.pdf

Golden Eagles

Unlike bald eagles, whose numbers have clearly increased in recent years, golden eagle populations appear to be slightly decreasing. We believe this is due to several factors, including susceptibility to human disturbance, especially during breeding. We recommend that your analysis consider possible effects to golden eagles if there is a nest within ½ mile of your project. For projects that may impact Bald or Golden Eagles or if further information is needed concerning eagles, please contact the Service at 701-250-4481 or ndfieldoffice@fws.gov

US Department of Agriculture – Natural Resources Conservation Service

USDA
United States Department of Agriculture

Natural Resources
Conservation Service

Bismarck State Office
PO Box 1458
Bismarck, ND
58502-1458

Voice 701.530.2000
Fax 855-813-7556

August 1, 2024

Ryan King, Environmental Coordinator
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, ND 58503

Dear Mr. King:

The Natural Resources Conservation Service (NRCS) has reviewed your letter dated July 24, 2024, regarding the Basin Electric Power Cooperative's Proposed Leland Olds Station to Tande 345-kV Transmission Line Project.

Farmland Protection Policy Act

NRCS has a major responsibility with the Farmland Protection Policy Act (FPPA) in documenting conversion of farmland (i.e., Prime, Statewide Importance and/or Local Importance) to non-agricultural use. It appears your proposed project is not supported by federal funding; therefore, FPPA does not apply, and no further action is needed.

Wetlands

The Wetland Conservation Provisions of the 1985 Food Security Act, as amended, provide that if a USDA participant converts a wetland for the purpose or to have the effect of making agricultural production possible, loss of USDA benefits could occur. NRCS has developed the following guidelines for the installation of permanent structures where wetlands occur. If these guidelines are followed the impacts to the wetland will be considered minimal allowing USDA participants to continue to receive USDA benefits. Following are the requirements:

- Disturbance to the wetland must be temporary.
- No drainage of wetland is allowed (temporary or permanent).
- Mechanized landscaping necessary for installation is kept to a minimum and preconstruction contours are maintained.
- Temporary side cast material must be placed in such a manner not to be dispersed in the wetland.
- All trenches must be backfilled to the original wetland bottom elevation.

NRCS recommends that impacts to wetlands be avoided.

If you have additional questions pertaining to FPPA, please contact Wade Bott, State Soil Scientist, NRCS, Bismarck, North Dakota, at (701) 530-2021.

Sincerely,

WADE BOTT

Digitally signed by WADE BOTT
Date: 2024.08.01 15:46:10 -05'00'

WADE D. BOTT
State Soil Scientist

Appendix I

Intercontinental Ballistic Missile Setback Approvals

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 5TH BOMB WING (AFGSC)
MINOT AIR FORCE BASE NORTH DAKOTA

22 June 2023

MEMORANDUM FOR BASIN ELECTRIC POWER COOPERATIVE

FROM: 5 BW/CC

SUBJECT: Leland Olds Station to Tande 345kV Transmission Line Project (the Project)

1. It is appreciated that Basin Electric Power Cooperative (BEPC) sought Minot AFB's input for the Project.

2. Minot AFB's understanding of the Project is as follows:

a. The proposed Extra High Voltage (EHV) transmission line will increase the resiliency of the bulk transmission infrastructure in the Project area and therefore benefit the electric service for delivery points to Air Force infrastructure in this territory.

b. The final path of the transmission line is shown on the drawing titled: "Permitting Location(s) Minot Air Force Base Minot, North Dakota" and dated 5/2/2023.

c. All new transmission lines shall be located 1,400 feet from the fence line of Launch Facilities (LF) and Missile Alert Facilities (MAF) except as noted in 2.D.

d. New transmission lines running by LFs C-07 and C-08 will be no closer than 500 feet from the fence lines.

e. Transmission line support structures shall be no higher than 130'-0" AGL.

f. Location of the transmission line support structures have not been determined by BEPC.

3. Unresolved issues for Minot AFB:

a. Impact of the Project on the Hardened Intersite Cable System (HICS) cannot be determined until final transmission line support structures have been located.

b. Impact of the Project on the Remote Visual Assessment (RVA) cannot be determined until final transmission line support structures have been located.

c. Impact of the Project on communication systems cannot be determined until the final transmission line is in place and operating.

4. Minot AFB will not object to the Project with the following stipulations:

a. No item in numbers 2.A through 2.E above is changed without Minot AFB's prior approval.

b. BEPC will resolve item 3.A to the satisfaction of Minot AFB's Cable Affairs Office.

c. BEPC will resolve item 3.B and 3.C to the satisfaction of Minot AFB's Spectrum and RVA Office.

5. Questions may be directed to Minot AFB Community Planner: Sam Warren, samuele.warren@us.af.mil, commercial phone: 701-723-1969.

DANIEL S. HOADLEY, Colonel, USAF
Commander

Public Service Commission
State of North Dakota

COMMISSIONERS
Randy Christmann
Sheri Haugen-Hoffart
Julie Fedorchak

600 East Boulevard, Dept. 408
Bismarck, North Dakota 58505-0480
Web: www.psc.nd.gov
E-mail: ndpsc@nd.gov
Phone: 701-328-2400
ND Toll Free: 1-877-245-6685
Fax: 701-328-2410
TDD: 800-366-6888 or 711

November 29, 2023

Anine A. Merkens, Senior Staff Counsel
Basin Electric Power Cooperative
1717 E. Interstate Ave.
Bismarck, ND 58503

RE: Request for Exemption from Exclusion Area Criteria

Dear Mrs. Merkens:

The Commission received your October 24 letter on behalf of Basin Electric Power Cooperative (Basin) requesting an exemption from the Commission's 1,200-foot setback from the geographic center of an intercontinental ballistic missile (ICBM) launch or launch control facility. The exemption is sought in connection with the reconstruction of a 230kV line as a double-circuit 345/230kV line aimed at alleviating congestion (Project).

On November 29, 2023, the Commission discussed your request at the administrative matters portion of its regular meeting and asked me to respond to you. The Commission concluded that, based on the information you provided, the reconstructed portion of the Project will not be subject to the strict exclusion setback outline in N.D. Admin. Code. Ch. 69-06-08. However, the reconstructed portion of the transmission line will be evaluated to ensure that the Project will result in minimal adverse impacts.

Basin plans to submit a siting application to the Commission for the 345kV transmission circuit on the east and north sides of Lake Sakakawea from its Leland Olds Station near Stanton to its Tande substation near Tioga. To minimize impacts on landowners in the region already subject to "significant existing transmission," Basin plans to reconstruct the portion of an existing 230kV circuit as a double-circuit 345/230kV line. The existing 230kV is located approximately 600 feet from two ICBM sites. Basin consulted and received conditional approval from Minot Air Force Base. Additionally, an informal review from the Military Aviation and Installation Assurance Siting Clearinghouse indicates that the proposed project will have minimal impact on military operations in the area.

It is noted that the existing 230kV line, as described, was not subject to the standards outlined in the Siting Act and resulting regulations at the time of construction. Under the Siting Act, an exclusion area should be excluded from the route suitability process and given an appropriate buffer zone to protect the integrity of the area from impacts. Given the route already exists and is in use, the reconstruction of an existing route typically aligns with the overarching objective of the Siting Act to minimize impacts on the public and environment.

Due to the reconstruction of preexisting infrastructure on an existing route, the route will not impact an exclusion area or will have de minimis impacts relative to the current facility.

Best Regards,

John M. Schuh
Special Assistant Attorney General

LOS to Tande 345-kV Transmission Project

East Audubon Area

[redacted]

T149N - R82W

C-09

T149N - R81W

C-01

Possible reconstruction to double circuit

C-08

T148N - R82W

T148N - R81W

Possible reconstruction to double circuit

C-07

T147N - R81W

Map Features

- ICBM Sites
- Potential Transmission Routes
- 115-kV Transmission
- 230-kV Transmission
- 345-kV Transmission

N
W E
S

Date: 11/4/2022

0 1 2 4 Miles

Appendix J

Project Information Pamphlet for Landowners

After Construction

Construction crews will work to minimize potential damage to property during construction. After construction, work areas and access roads not required for line maintenance will be restored to their previous condition, as possible. Construction refuse and scrap material will also be removed.

Landowners will be compensated for crop and for property damage that occurs as a result of construction or maintenance of the transmission line. If a landowner believes that damage has occurred and has not been remediated, they should contact their assigned right-of-way agent.

Maintenance

After the line is energized, maintenance crews will periodically inspect, repair, and maintain its components. Transmission lines are inspected from the air and on the ground. Aerial inspections are routinely performed, particularly after wind, ice, or lightning storms. Ground inspections are usually performed annually to detect items needing repair or replacement that are not found by aerial inspections.

Contact Information

If you have any questions, concerns, or would like a map showing the line route in your area, please contact:

Nathan Kleyer
Right-of-Way Lead, Basin Electric
701-557-5456
NKleyer@bepc.com

Bobby Nasset
Project Manager, Basin Electric
701-557-5673
RNasset@bepc.com

Aimie Mims
Right-of-Way Project Manager, HDR, Inc.
763-260-0962
aimie.mims@hdrinc.com

BASIN ELECTRIC POWER COOPERATIVE
A Touchstone Energy® Cooperative

1717 East Interstate Avenue
Bismarck, ND 58503-0564
basinelectric.com

Project information for landowners along the proposed Leland Olds-to-Tande 345-kilovolt Electric Transmission Line Project

Leland Olds-to-Tande 345-kilovolt Electric Transmission Line Project

About Basin Electric Power Cooperative

Basin Electric Power Cooperative is an electric power generation and transmission cooperative, headquartered in Bismarck, North Dakota. Basin Electric generates and transmits wholesale electricity to 131-member rural electric cooperatives located in a nine-state service area, and serves 3 million customers.

Project Purpose & Overview

The proposed Leland Olds-to-Tande 345-kV (kilovolt) electric transmission line project will enhance the transmission load serving capability in the region and mitigate reliability constraints. The project includes approximately 175 miles of new 345-kV electric transmission line between the existing Leland Olds 345-kV substation and the existing Tande 345-kV substation. A new substation will also be constructed along the proposed transmission alignment south of Belden, North Dakota to accommodate local electrical power delivery. The proposed transmission line route is east of Lake Sakakawea and Lake Audubon.

Southwest Power Pool (SPP) is the regional transmission organization that administers bulk electric transmission system reliability upgrades and generation interconnections. The project was approved by the SPP 2021 Integrated Transmission Planning (ITP) study process and provided Basin Electric an Approved Reliability Network upgrade notice in 2022. Basin Electric is the designated transmission owner for the upgrade.

Pending permit and easement acquisition, construction is scheduled to begin in 2024. It is anticipated that construction will take approximately 18 months.

Permitting

Per the North Dakota Public Service Commission (NDPSC), the project requires environmental, engineering, land use, economics, electrical, reliability, existing electric transmission facilities, biological, cultural resources, and land survey evaluation to help determine the final transmission line route. Permitting-associated work is scheduled to begin in the summer of 2022.

Once the transmission line route is determined, structure locations and configurations are selected to satisfy structural design and electrical clearance criteria and to minimize impacts to the property.

Landowner Outreach & Engagement

A right-of-way agent will be assigned to work with landowners potentially impacted by the project. The agent will explain the steps involved in route and pole location selection, land rights acquisition, and construction and work to answer any questions landowners may have. Landowner input is encouraged and welcomed throughout this process.

As a first step, for landowners along the preliminary routes, a right-of-way agent will request permission for crews to enter a portion of the property to conduct surveys and studies. This work may be performed by Basin Electric employees or by those under contract to Basin Electric. The work will be conducted in a manner that minimizes disturbances to the landowner or tenant. Should damage to crops, fences, or other property occur as a result of these surveys and studies, the landowner will be fairly compensated or the damage will be repaired.

The right-of-way agent will then work with landowners along the preferred route to acquire a 150-foot-wide easement for the transmission line. In addition, easements for access roads, typically 30-feet wide, may be acquired in certain areas. Easements are needed to construct, operate, and maintain the transmission line and will be purchased through negotiations with landowners.

The landowner retains title to the land and only easement rights would be granted to Basin Electric. If proposed construction activities may interfere with land use, the right-of-way agent will discuss those concerns with the landowner, discuss with the project team, and work to accommodate landowner's concerns as possible.

Landowners will be presented with a written offer based on a market analysis of similar type and use of property in the project area. The right-of-way agent will work with landowners to explain the easement agreement and offer of compensation as the basis for payment. Every effort is made to obtain an agreement that is fair and reasonable to both parties. Once the conditions of the agreement are met, the transactions are processed as efficiently as possible. Basin Electric will make full payment or annual installments for up to five years for easements to landowners and pay fees for recording the easement including title insurance.

Landowners may continue to use the portion of the property encumbered by an easement in ways that are compatible with the transmission line as long as care is taken to prevent damage and maintain access to transmission line structures. No buildings or structures may be erected within the easement area as they may impede the safe operation of the line or interfere with access needed for line maintenance. For safety reasons, pumps, wells, swimming pools, and flammables must not be placed in the easement area. Basin Electric has other requirements for transmission rights-of-way to maintain system reliability, such as federal regulations on vegetation management intended to prevent trees on the right of way from causing fires or transmission line outages.

Design and Construction

Basin Electric designs, constructs, operates, and maintains transmission lines and substation facilities to meet or exceed the requirements of the National Electric Safety Code. These standards provide for the safety and protection of landowners and their property, the public, and utility employees.

Basin Electric will keep landowners apprised of the construction schedule. Reasonable attempts will be made to account for the use and condition of the land, such as planting, irrigation and harvest schedules, to minimize inconvenience to landowners. Preparing the right-of-way for construction may require gates and culverts be installed, vegetation cleared, trees trimmed or removed, and structures removed that reduce adequate ground clearance for the conductors or access to the right of way. It may also be necessary to build access roads in hilly or rough terrain.

Where required, foundations are constructed by digging or drilling holes, which are filled with steel-reinforced concrete. Steel tower components are then transferred to the site and assembled. Completed towers are raised by a crane and set on foundations or directly embedded in the ground. Finally, conductor wires are installed.

Appendix K

Landowner Waiver

Return Recorded Document to:
Casey Jacobson
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, ND 58503-0564
cjacobson@bepc.com
Phone (701) 557-5413

ACKNOWLEDGMENT AND WAIVER

This agreement made this 14 day of March, 20 4

WHEREAS, Basin Electric Power Cooperative is developing an overhead 345kV transmission line project ("**Project**") to be located in McLean County, North Dakota;

That a Transmission Line Easement, dated 3/1/2024 has been granted by Marcia Gaertner, John D. Bauer, Joel J. Bauer, and Jay B. Bauer unto Basin Electric, covering a tract of land in the Southeast Quarter of the Southeast Quarter (SE1/4SE1/4), of Section 11, Township 148 North, Range 82 West, McLean County, North Dakota and more particularly described as follows:

LEGAL DESCRIPTION – PARCEL 377-0680

A 150.00 FOOT WAIDE STRIP OF LAND LOCATED IN THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER (SE1/4SE1/4) OF SECTION 11, TOWNSHIP 148 NORTH, RANGE 82 WEST OF THE 5TH PRINCIPAL MERIDIAN, MCLEAN COUNTY, NORTH DAKOTA. SAID STRIP HAVING SIDELINES LYING 75.00 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 11; THENCE N89°43'22"W ON THE SOUTH LINE OF SAID SE1/4SE1/4 A DISTANCE OF 75.00 FEET TO THE POINT OF BEGINNING, THENCE N00°20'03"E A DISTANCE OF 548.93 FEET; THENCE N02°44'31"W A DISTANCE OF 771.83 FEET TO THE NORTH LINE OF SAID SE1/4SE1/4 AND THEREBY TERMINATING. SAID POINT OF TERMINATION BEARS S05°22'30"W A DISTANCE OF 1324.95 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION 11.

THE SIDELINES OF SAID STRIP ARE TO BE LENGTHENED OR SHORTENED TO INTERSECT WITH EASEMENT, PROPERTY AND SECTION LINES.

THE ABOVE DESCRIBED STRIP BEING 1320.76 FEET (80.05 RODS) IN LENGTH. SAID STRIP CONTAINS 4.55 ACRES, MORE OR LESS.

WHEREAS, the North Dakota Energy Conversion and Transmission Facility Siting Act provides that areas within five hundred (500) feet of an inhabited rural residence must be designated avoidance areas and further provides that this requirement may be waived by the owner of the inhabited rural residence in writing;

WHEREAS, Jerry Blotter and Rita Blotter wishes to grant a Waiver to Basin Electric Power Cooperative to allow them to place the transmission line within 500 feet, but no closer than 400 feet of the occupied rural residence.

The following is acknowledged:

1. Jerry Blotter and Rita Blotter are the owner(s) of real property located in the West Half of the Southwest Quarter (W1/2SW1/4) in Section 12, Township 148 North, Range 82 West, McLean County, North Dakota.

2. Jerry Blotter and Rita Blotter acknowledges that N.D.C.C. § 49-22-05.1 provides that, "Except for transmission lines in existence before July 1, 1983, areas within five hundred feet of an inhabited rural residence must be designated avoidance areas."

3. Jerry and Rita Blotter further acknowledges that this avoidance area requirement may be waived by the owner of the inhabited rural residence in writing.

4. Jerry Blotter and Rita Blotter agrees to Basin Electric Power Cooperative locating an overhead 345kV transmission line within five hundred feet of an inhabited rural residence in the area of land described above.

Name: Jerry Blotter

Signature: Jerry Blotter

Date: 3-14-2024

Name: Rita Blotter

Signature: Rita Blotter

Date: 3-14-2024

STATE OF North Dakota)
)ss
COUNTY OF Mclean)

On this 14 day of March, 2024, before me personally appeared Jerry Blotter and Rita Blotter, known to me to be the person(s) who is/are described in and who executed the within instrument, and acknowledged to me that he/she/they executed the same.

Wade G. Whitworth

(SEAL) Notary Public

WADE G. WHITWORTH
NOTARY PUBLIC
STATE OF NORTH DAKOTA
My Commission Expires Sept. 2, 2025

Return Recorded Document to:
Casey Jacobson
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, ND 58503-0564
cjacobson@bepc.com
Phone (701) 557-5413

ACKNOWLEDGMENT AND WAIVER

This agreement made this 18 day of June, 2024.

WHEREAS, Basin Electric Power Cooperative is developing an overhead 345kV transmission line project ("**Project**") to be located in McLean County, North Dakota;

That a Transmission Line Easement, dated June 18, 2024 has been granted by Tammy Evenson unto Basin Electric, covering a tract of land in the Southeast Quarter of Section 23, Township 148 North, Range 82 W, McLean County, North Dakota and more particularly described as follows:

LEGAL DESCRIPTION - PARCEL 377-0640

THE EAST 150.00 FEET OF THE EAST HALF OF THE SOUTHEAST QUARTER (E1/2SE1/4), SECTION 23, TOWNSHIP 148 NORTH, RANGE 82 WEST OF THE 5TH PRINCIPAL MERIDIAN, MCLEAN COUNTY, NORTH DAKOTA.

CONTAINS 9.09 ACRES, MORE OR LESS.

WHEREAS, the North Dakota Energy Conversion and Transmission Facility Siting Act provides that areas within five hundred (500) feet of an inhabited rural residence must be designated avoidance areas and further provides that this requirement may be waived by the owner of the inhabited rural residence in writing;

WHEREAS, Tim Eslinger, Manager, Audubon Land Holdings, LLP wishes to grant a Waiver to Basin Electric Power Cooperative to allow them to place the transmission line within 500 feet, but no closer than 400 feet of the occupied rural residence.

The following is acknowledged:

1. Tim Eslinger, Manager, Audubon Land Holdings, LLP is owner(s) of real property located in the Southwest Quarter (SW4) of Section 24, Township 148N, Range 82 West, McLean County, North Dakota.

2. Tim Eslinger, Manager, Audubon Land Holdings, LLP acknowledges that N.D.C.C. § 49-22-05.1 provides that, "Except for transmission lines in existence before July 1, 1983, areas within five hundred feet of an inhabited rural residence must be designated avoidance areas."

3. Tim Eslinger, Manager, Audubon Land Holdings, LLP further acknowledges that this avoidance area requirement may be waived by the owner of the inhabited rural residence in writing.

4. Tim Eslinger, Manager, Audubon Land Holdings, LLP agrees to Basin Electric Power Cooperative locating an overhead 345kV transmission line within five hundred feet of an inhabited rural residence in the area of land described above.

Name: Tim Eslinger, Manager
Audubon Land Holdings, LLP

Signature: Tim L - Manager

Date: 3-13-2024

STATE OF North Dakota)
)ss
COUNTY OF Mclean)

On this 13 day of March, 2024, before me personally appeared Tim Eslinger, Manager, Audubon Land Holdings, LLP known to me to be the person(s) who is/are described in and who executed the within instrument and acknowledged to me that he/she/they executed the same.

Wade G. Whitworth

(SEAL) Notary Public

WADE G. WHITWORTH
NOTARY PUBLIC
STATE OF NORTH DAKOTA
My Commission Expires Sept. 2, 2025

Return Recorded Document to:
Casey Jacobson
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, ND 58503-0564
cjacobson@bepc.com
Phone (701) 557-5413

ACKNOWLEDGMENT AND WAIVER

This agreement made this 27 day of February, 2024.

WHEREAS, Basin Electric Power Cooperative is developing an overhead 345kV transmission line project ("**Project**") to be located in McLean County, North Dakota;

That a Transmission Line Easement, dated 2/27/24 has been granted by Audubon Land Holdings, LLP unto Basin Electric, covering a tract of land in the East Half of the Southeast Quarter (E1/2SE1/4), of Section 14, Township 148 North, Range 82 W, McLean County, North Dakota and more particularly described as follows:

LEGAL DESCRIPTION – PARCEL 377-0660

THE EAST 150.00 FEET OF THE EAST HALF OF THE SOUTHEAST QUARTER (E1/2SE1/4), SECTION 14, TOWNSHIP 148 NORTH, RANGE 82 WEST OF THE 5TH PRINICIPAL MERIDIAN, MCLEAN COUNTY, NORTH DAKOTA.

CONTAINS 9.10 ACRES MORE OR LESS.

WHEREAS, the North Dakota Energy Conversion and Transmission Facility Siting Act provides that areas within five hundred (500) feet of an inhabited rural residence must be designated avoidance areas and further provides that this requirement may be waived by the owner of the inhabited rural residence in writing;

WHEREAS, Larry D. Fast and Valerie Marie Fast (LE); Troy D. Fast and Lori J. Fast, Remainderman wishes to grant a Waiver to Basin Electric Power Cooperative to allow them to place the transmission line within 500 feet, but no closer than 400 feet of the occupied rural residence.

The following is acknowledged:

1. Larry D. Fast and Valerie Marie Fast (LE); Troy D. Fast and Lori J. Fast, Remainderman are the owner(s) of real property located in the Southwest Quarter in Section 13, Township 148N, Range 82 West, McLean County, North Dakota.

2. Larry D. Fast and Valerie Marie Fast (LE); Troy D. Fast and Lori J. Fast, Remainderman acknowledges that N.D.C.C. § 49-22-05.1 provides that, "Except for transmission lines in existence before July 1, 1983, areas within five hundred feet of an inhabited rural residence must be designated avoidance areas."

3. Larry D. Fast and Valerie Marie Fast (LE); Troy D. Fast and Lori J. Fast, Remainderman further acknowledges that this avoidance area requirement may be waived by the owner of the inhabited rural residence in writing.

4. Larry D. Fast and Valerie Marie Fast (LE); Troy D. Fast and Lori J. Fast, Remainderman agrees to Basin Electric Power Cooperative locating an overhead 345kV transmission line within five hundred feet of an inhabited rural residence in the area of land described above.

Name: Larry D. Fast

Signature: Larry D. Fast

Date: 2-21-2024

Name: Valerie Marie Fast

Signature: Valerie Marie Fast

Date: 2-21-2024

STATE OF TEXAS)
)ss
COUNTY OF KERR)

On this 21 day of February, 2024, before me personally appeared Larry D. Fast and Valerie Marie Fast, known to me to be the person(s) who is/are described in and who executed the within instrument, and acknowledged to me that he/she/they executed the same.

Susan Thomerson James
Notary Public

(SEAL)

SUSAN THOMERSON JAMES
Notary Public, State of Texas
Comm. Expires 07-01-2025
Notary ID 7658206

Name: Troy D. Fast

Signature: Troy D. Fast

Date: 2/26/2024

STATE OF North Dakota)
)ss
COUNTY OF Burleigh)

On this 26th day of February, 2024, before me personally appeared Troy D. Fast, known to me to be the person(s) who is/are described in and who executed the within instrument, and acknowledged to me that he/she/they executed the same.

(SEAL)

JENNA JAHNER
Notary Public
State of North Dakota
My Commission Expires Oct 15, 2025

Notary Public

Name: Lori J. Fast

Signature: Lori J. Fast

Date: 2/20/2024

STATE OF North Dakota)
)ss
COUNTY OF Cass)

On this 20 day of February, 2024, before me personally appeared Lori J. Fast, known to me to be the person(s) who is/are described in and who executed the within instrument, and acknowledged to me that he/she/they executed the same.

Wade G. Whitworth

(SEAL) Notary Public

WADE G. WHITWORTH
NOTARY PUBLIC
STATE OF NORTH DAKOTA
My Commission Expires Sept. 2, 2025

ACKNOWLEDGMENT AND WAIVER

This agreement made this 24 day of September, 2024.

WHEREAS, Basin Electric Power Cooperative is developing an overhead 345kV transmission line project ("**Project**") to be located in McLean County, North Dakota;

That a Transmission Line Easement, dated 5/7/2024 has been granted by James E. Hansen and Loretta Ann Hansen unto Basin Electric, covering a tract of land in the East Half of the Northeast Quarter (E1/2NE1/4), of Section 35, Township 148 North, Range 82 W, McLean County, North Dakota and more particularly described as follows:

LEGAL DESCRIPTION - PARCEL 377-0610

A 150.00 FOOT WIDE STRIP OF LAND LOCATED IN THE EAST HALF OF THE EAST HALF (E1/2E1/2) OF SECTION 35, TOWNSHIP 148 NORTH, RANGE 82 WEST OF THE 5TH PRINCIPAL MERIDIAN, MCLEAN COUNTY, NORTH DAKOTA. SAID STRIP HAVING SIDELINES LYING 75.00 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 35; THENCE N89°40'06'W ON THE SOUTH LINE OF SAID E1/2E1/2 A DISTANCE OF 204.00 FEET TO THE POINT OF BEGINNING; THENCE N00°30'58"E A DISTANCE OF 1841.86 FEET; THENCE N05°23'02"E A DISTANCE OF 1575.77 FEET; THENCE N00°35'44"E A DISTANCE OF 1864.09 FEET TO THE NORTH LINE OF SAID SECTION 35 AND THEREBY TERMINATING. SAID POINT OF TERMINATION BEARS N89°31'40"W A DISTANCE OF 75.00 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 35.

THE SIDELINES OF SAID STRIP ARE TO BE LENGTHENED OR SHORTENED TO INTERSECT WITH EASEMENT, PROPERTY AND SECTION LINES.

THE ABOVE DESCRIBED STRIP BEING 5281.72 FEET (320.10 RODS) IN LENGTH. SAID STRIP CONTAINS 18.19 ACRES, MORE OR LESS.

WHEREAS, the North Dakota Energy Conversion and Transmission Facility Siting Act provides that areas within five hundred (500) feet of an inhabited rural residence must be designated avoidance areas and further provides that this requirement may be waived by the owner of the inhabited rural residence in writing;

WHEREAS, James E. Hansen and Loretta Ann Hansen wishes to grant a Waiver to Basin Electric Power Cooperative to allow them to place the transmission line within 500 feet, but no closer than 400 feet of the occupied rural residence.

The following is acknowledged:

1. James E. Hansen & Loretta Ann Hansen are the owner(s) of real property located in the Northeast Quarter in Section 35, Township 148N, Range 82 West, McLean County, North Dakota.

2. James E. Hansen & Loretta Ann Hansen acknowledges that N.D.C.C. § 49-22-05.1 provides that, "Except for transmission lines in existence before July 1, 1983, areas within five hundred feet of an inhabited rural residence must be designated avoidance areas."

3. James E. Hansen & Loretta Ann Hansen further acknowledges that this avoidance area requirement may be waived by the owner of the inhabited rural residence in writing.

4. James E. Hansen & Loretta Ann Hansen agrees to Basin Electric Power Cooperative locating an overhead 345kV transmission line within five hundred feet of an inhabited rural residence in the area of land described above.

Name: James E. Hansen

Signature: James E. Hansen

Date: 9/24/2024

Name: Loretta Ann Hansen

Signature: Loretta Ann Hansen

Date: 9/24/2024

ACKNOWLEDGMENT AND WAIVER

This agreement made this 22 day of August, 2024.

WHEREAS, Basin Electric Power Cooperative is developing an overhead 345kV transmission line project ("**Project**") to be located in Mountrail County, North Dakota;

That a Transmission Line Option for Easement, dated February 5th, 2024, has been granted by Arlene M. Stone, Trustee of the Robert R. Stone and Arlene M. Stone Trust, dated October 5, 2001, restate September 21, 2017, unto Basin Electric, covering a tract of land in the SE1/4NE1/4, Less Outlot 1 thereof; NE1/4SE1/4 of Section 29, Township 157 North, Range 94 West of the 5th P.M., Mountrail County, North Dakota.

WHEREAS, the North Dakota Energy Conversion and Transmission Facility Siting Act provides that areas within five hundred (500) feet of an inhabited rural residence must be designated avoidance areas and further provides that this requirement may be waived by the owner of the inhabited rural residence in writing.

WHEREAS, Theresa Wiedmer wishes to grant a Waiver to Basin Electric Power Cooperative to allow them to place the transmission line within 500 feet of an occupied rural residence.

The following is acknowledged:

1. Theresa Wiedmer is the owner of real property located in Outlot 1 of S1/2NE1/4 of Section 29, Township 157 North, Range 94 West, Mountrail County, North Dakota.

2. Theresa Wiedmer acknowledges that N.D.C.C. § 49-22-05.1 provides that, "Except for transmission lines in existence before July 1, 1983, areas within five hundred feet of an inhabited rural residence must be designated avoidance areas."

3. Theresa Wiedmer further acknowledges that this avoidance area requirement may be waived by the owner of the inhabited rural residence in writing.

4. Theresa Wiedmer agrees to Basin Electric Power Cooperative locating an overhead 345kV transmission line within five hundred feet of an inhabited rural residence in the area of land described above.

Sign: Theresa Wiedmer
Theresa Wiedmer

ACKNOWLEDGMENT AND WAIVER

This agreement made this 8th day of August, 2024.

WHEREAS, Basin Electric Power Cooperative is developing an overhead 345 kV transmission line project ("**Project**") to be located in McLean County, North Dakota.

That a Transmission Line Easement, dated February 27th, 2024, has been granted by Audubon Land Holdings, LLP unto Basin Electric, covering a tract of land in Part of the E1/2NE1/4, of Section 23, Township 148N, Range 82W, McLean County, North Dakota and more particularly described as follows:

THE EAST 150.00 FEET OF THE EAST HALF OF THE NORTHEAST QUARTER (E1/2NE1/4), SECTION 23, TOWNSHIP 148 NORTH, RANGE 82 WEST OF THE 5TH PRINCIPAL MERIDIAN, MCLEAN COUNTY, NORTH DAKOTA

WHEREAS, the North Dakota Energy Conversion and Transmission Facility Siting Act provides that areas within five hundred (500) feet of an inhabited rural residence must be designated avoidance areas and further provides that this requirement may be waived by the owner of the inhabited rural residence in writing:

WHEREAS, Donald Westman and Sandra L. Westman, husband and wife, as joint tenants, wishes to grant a Waiver to Basin Electric Power Cooperative to allow them to place the transmission line within 500 feet of an occupied rural residence.

The following is acknowledged:

1. Donald Westman and Sandra L. Westman is/are the owner(s) of real property located in N1/2S1/2N1/2 of Section 24, Township 148 North, Range 82 West of the 5th P.M., McLean County, North Dakota.

2. Donald Westman and Sandra L. Westman acknowledges that N.D.C.C. § 49-22-05.1 provides that, "Except for transmission lines in existence before July 1, 1983, areas within five hundred feet of an inhabited rural residence must be designated avoidance areas."

3. Donald Westman and Sandra L. Westman further acknowledges that this avoidance area requirement may be waived by the owner of the inhabited rural residence in writing.

4. Donald Westman and Sandra L. Westman agrees to Basin Electric Power Cooperative locating an overhead 345 kV transmission line within five hundred feet of an inhabited rural residence in the area of land described above.

Sign: Donald Westman
Donald Westman

Sign: Sandra L. Westman
Sandra L. Westman