

**Proposed Route
Alternatives Considered
Buffalo Ridge to White
115 kV Transmission Line
Xcel Energy
Windfarm Transmission
Improvement Projects**

Legend

-  Potential Locations for Proposed Yankee Substation
-  Existing Substations
-  Rejected Route Segments

Potential Route Segments

- | | |
|---|--|
|  A |  F |
|  B |  G |
|  C |  H |
|  D |  I |
|  E |  J |

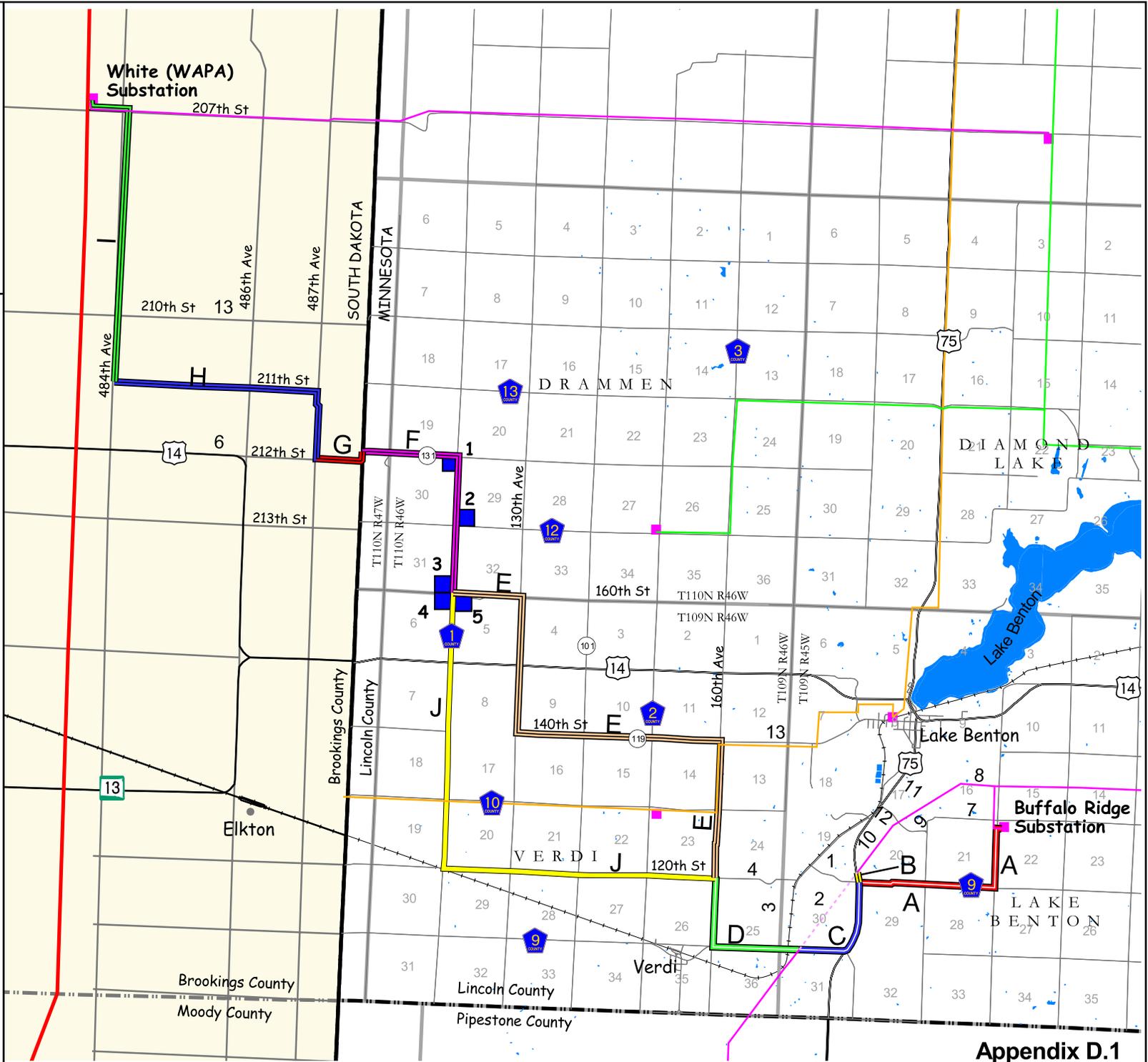
Existing Transmission Lines

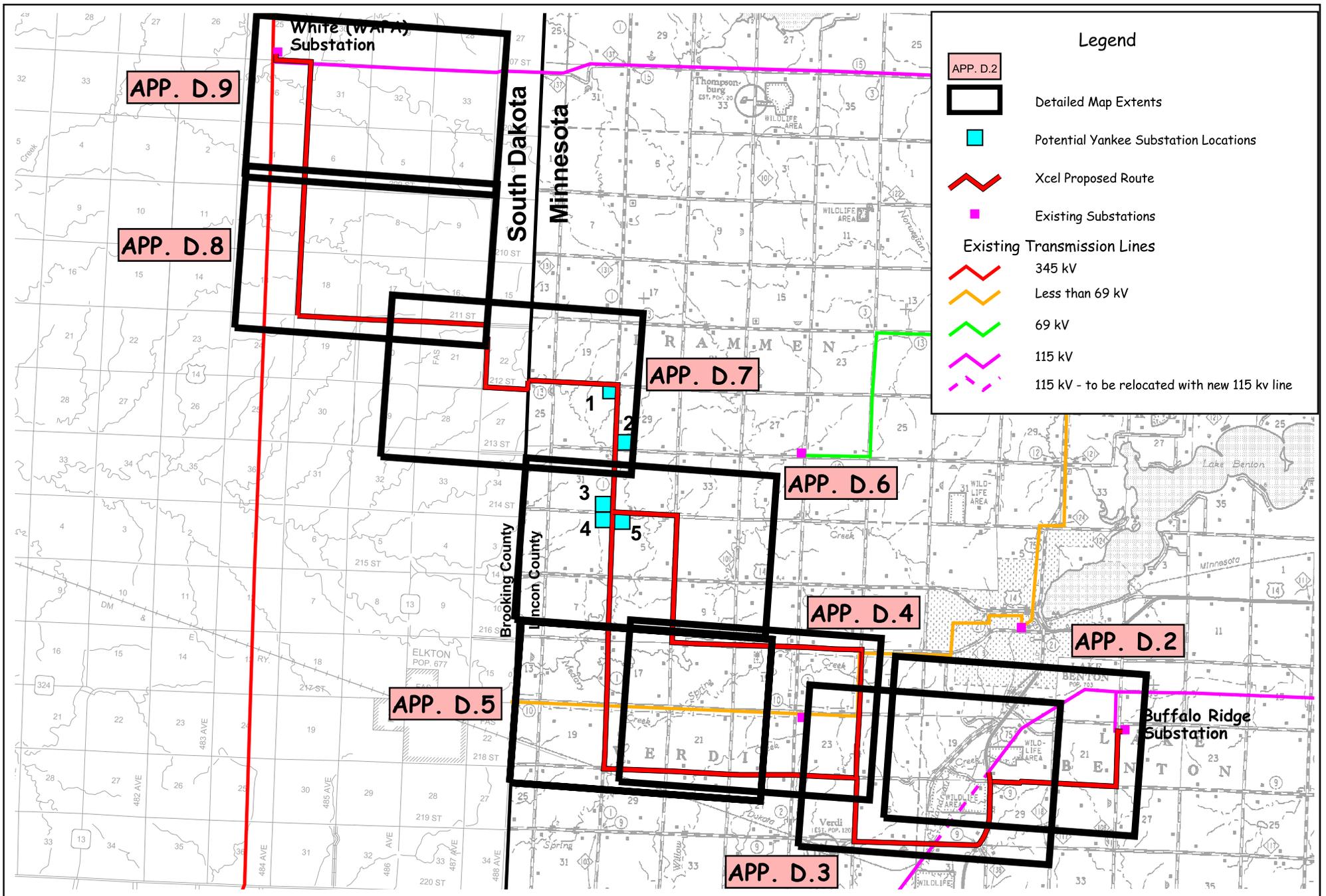
-  Less than 69 kV
-  69 kV
-  115 kV
-  115 kV - to be relocated with new 115 kv line
-  345 kV



0 1 2 Miles

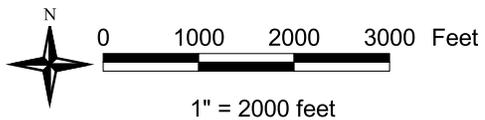
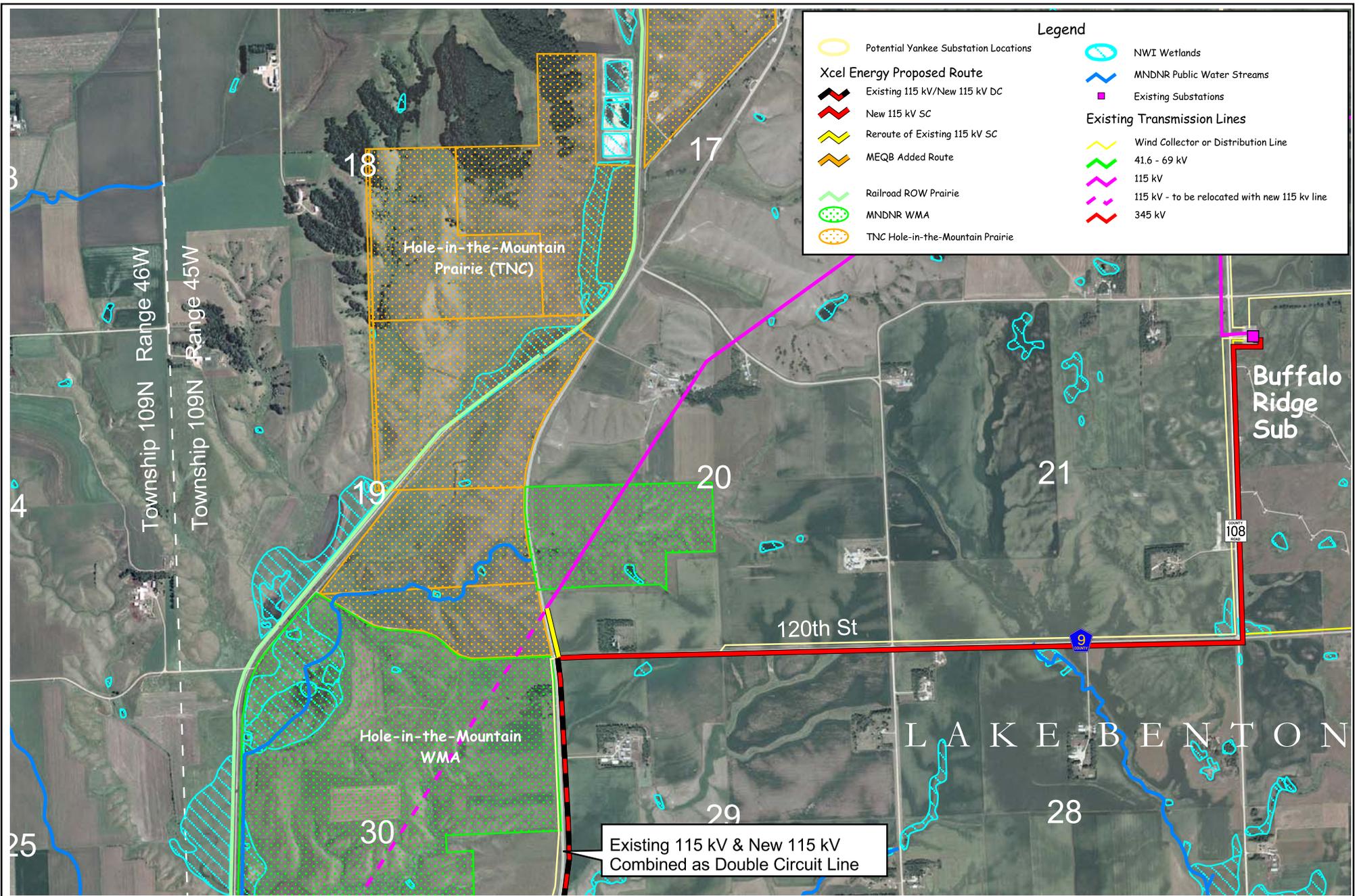
1" = 2 miles





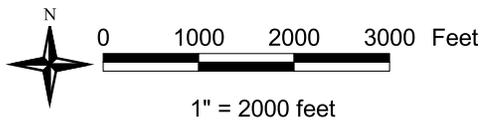
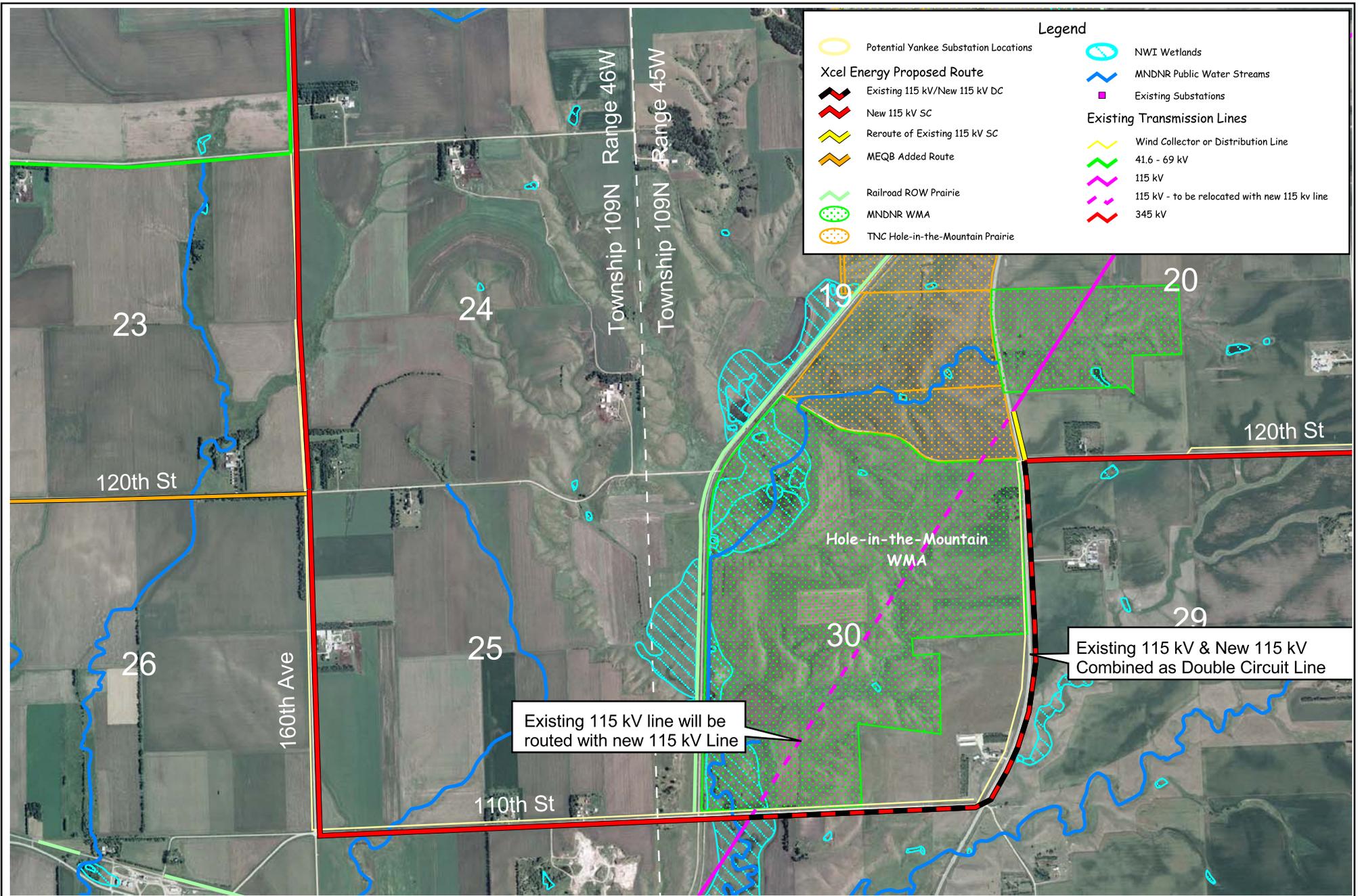
**Buffalo Ridge to White 115 kV Transmission Line
Xcel Energy
Windfarm Transmission Improvement Projects**

APPENDIX D.1A
PROJECT LOCATION MAP

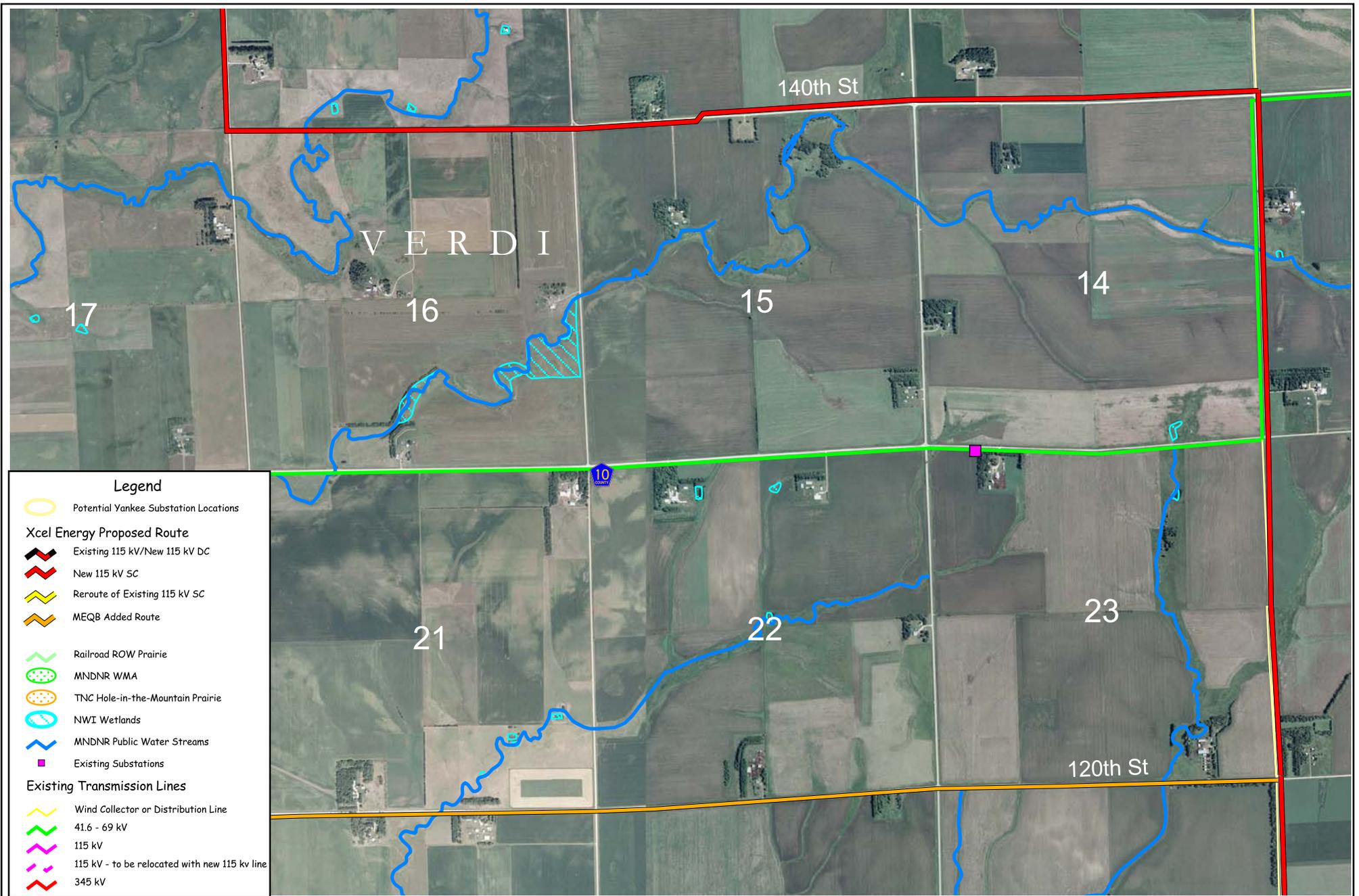


Buffalo Ridge to White 115 kV Transmission Line
Xcel Energy
Windfarm Transmission Improvement Projects

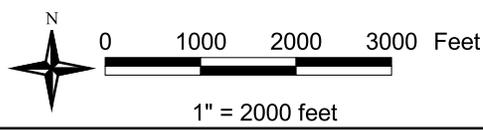
APPENDIX D.2 
DETAILED ROUTE MAP



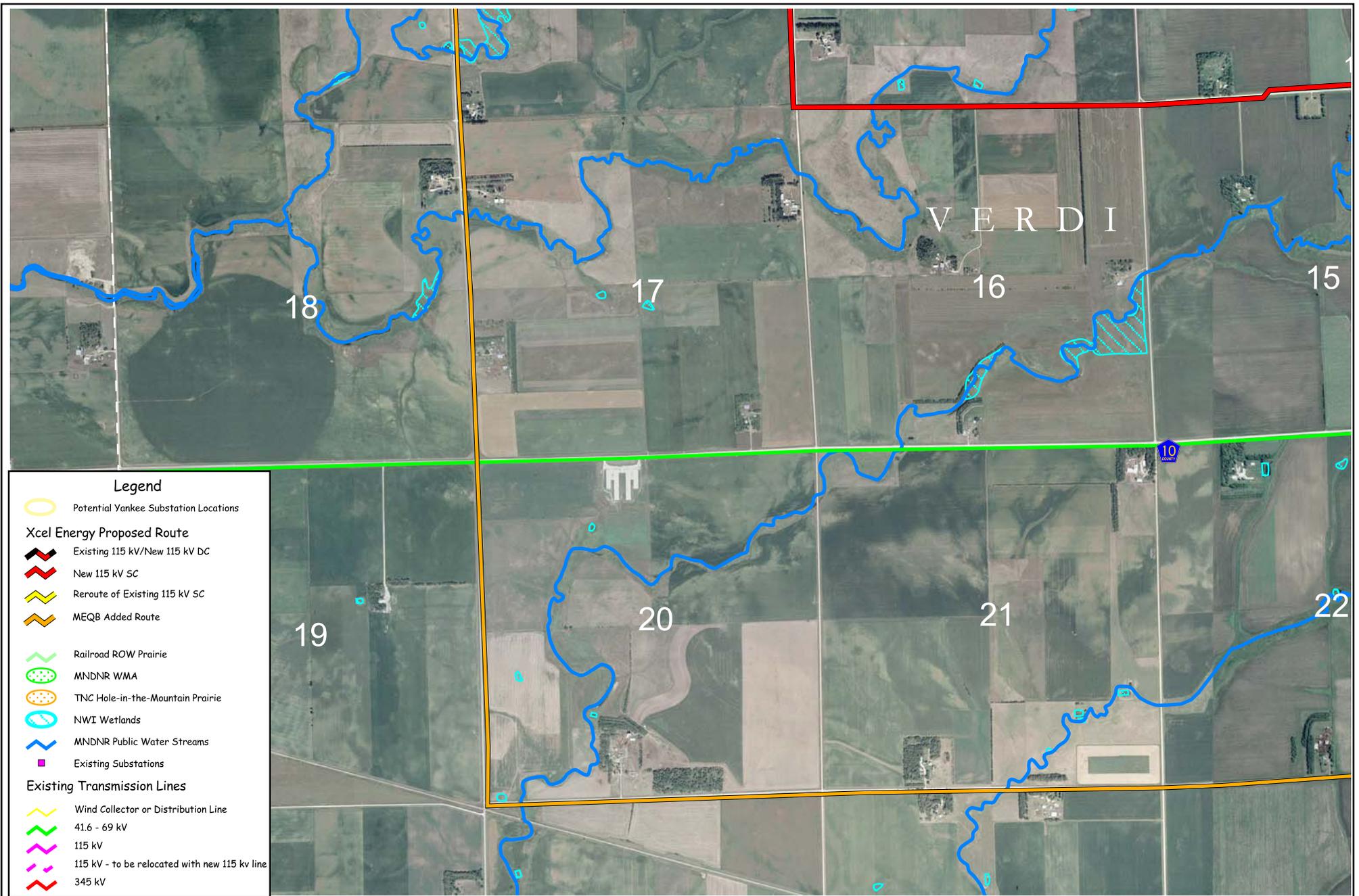
Buffalo Ridge to White 115 kV Transmission Line
Xcel Energy
Windfarm Transmission Improvement Projects



- Legend**
- Potential Yankee Substation Locations
 - Xcel Energy Proposed Route**
 - Existing 115 kV/New 115 kV DC
 - New 115 kV SC
 - Reroute of Existing 115 kV SC
 - MEQB Added Route
 - Railroad ROW Prairie
 - MNDNR WMA
 - TNC Hole-in-the-Mountain Prairie
 - NWI Wetlands
 - MNDNR Public Water Streams
 - Existing Substations
 - Existing Transmission Lines**
 - Wind Collector or Distribution Line
 - 41.6 - 69 kV
 - 115 kV
 - 115 kV - to be relocated with new 115 kv line
 - 345 kV

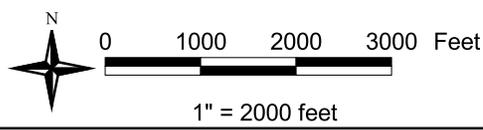


Buffalo Ridge to White 115 kV Transmission Line
Xcel Energy
Windfarm Transmission Improvement Projects

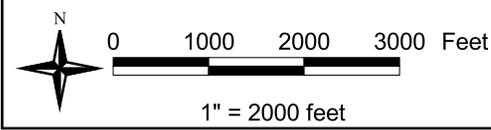
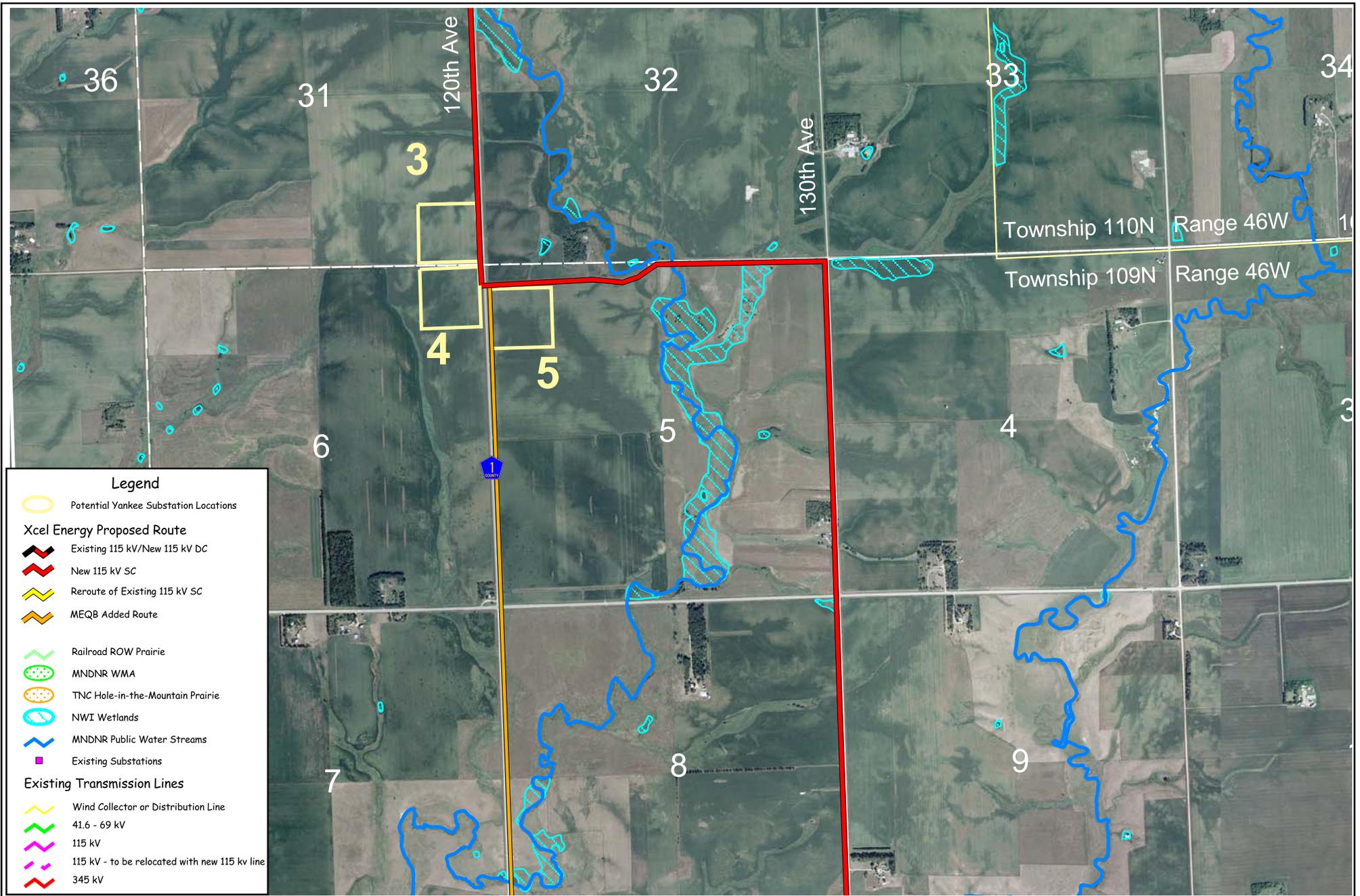


Legend

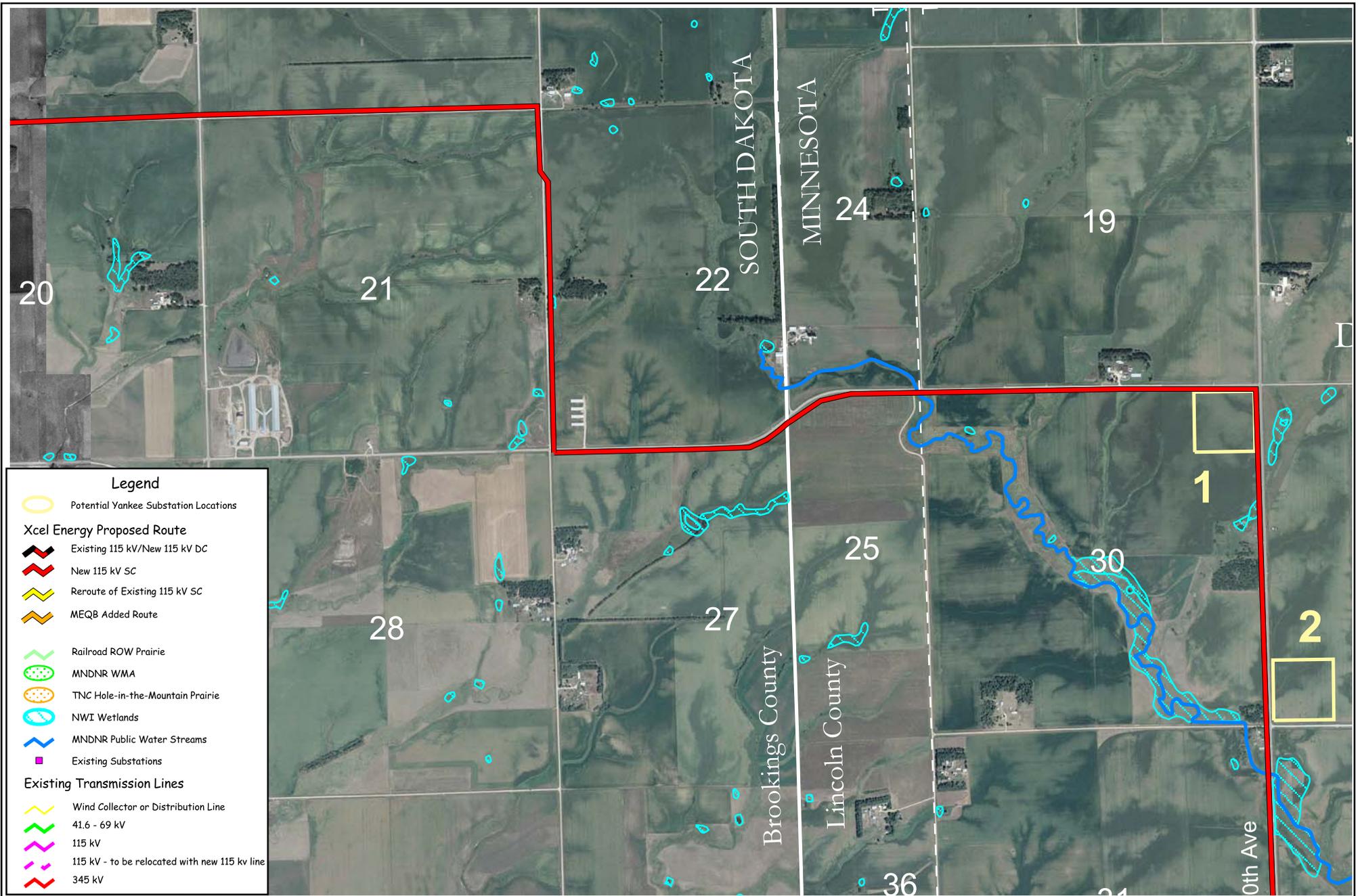
- Potential Yankee Substation Locations
- Xcel Energy Proposed Route**
- Existing 115 kV/New 115 kV DC
- New 115 kV SC
- Reroute of Existing 115 kV SC
- MEQB Added Route
- Railroad ROW Prairie
- MNDNR WMA
- TNC Hole-in-the-Mountain Prairie
- NWI Wetlands
- MNDNR Public Water Streams
- Existing Substations
- Existing Transmission Lines**
- Wind Collector or Distribution Line
- 41.6 - 69 kV
- 115 kV
- 115 kV - to be relocated with new 115 kv line
- 345 kV



Buffalo Ridge to White 115 kV Transmission Line
Xcel Energy
Windfarm Transmission Improvement Projects

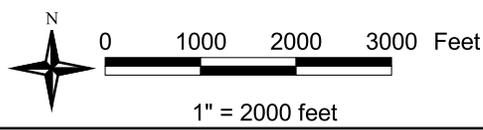


Buffalo Ridge to White 115 kV Transmission Line
Xcel Energy
Windfarm Transmission Improvement Projects



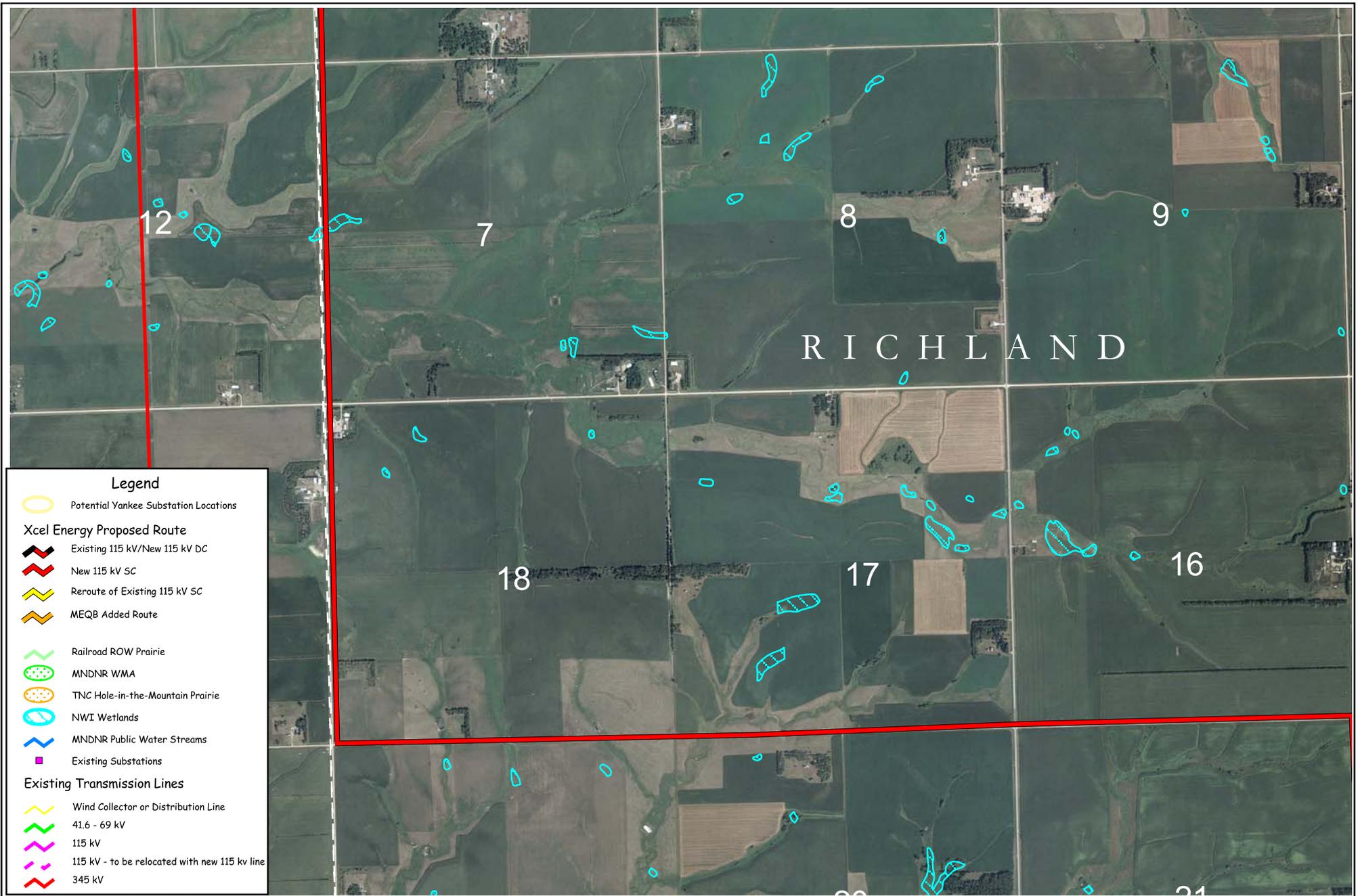
Legend

- Potential Yankee Substation Locations
- Xcel Energy Proposed Route**
- Existing 115 kV/New 115 kV DC
- New 115 kV SC
- Reroute of Existing 115 kV SC
- MEQB Added Route
- Railroad ROW Prairie
- MNDNR WMA
- TNC Hole-in-the-Mountain Prairie
- NWI Wetlands
- MNDNR Public Water Streams
- Existing Substations
- Existing Transmission Lines**
- Wind Collector or Distribution Line
- 41.6 - 69 kV
- 115 kV
- 115 kV - to be relocated with new 115 kv line
- 345 kV



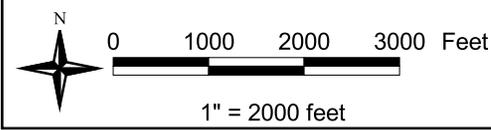
Buffalo Ridge to White 115 kV Transmission Line
Xcel Energy
Windfarm Transmission Improvement Projects

APPENDIX D.7 **Xcel Energy**
NORTHERN STATES POWER
DETAILED ROUTE MAP

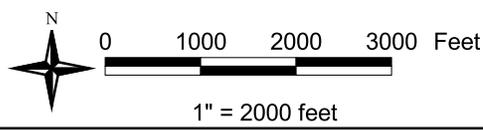
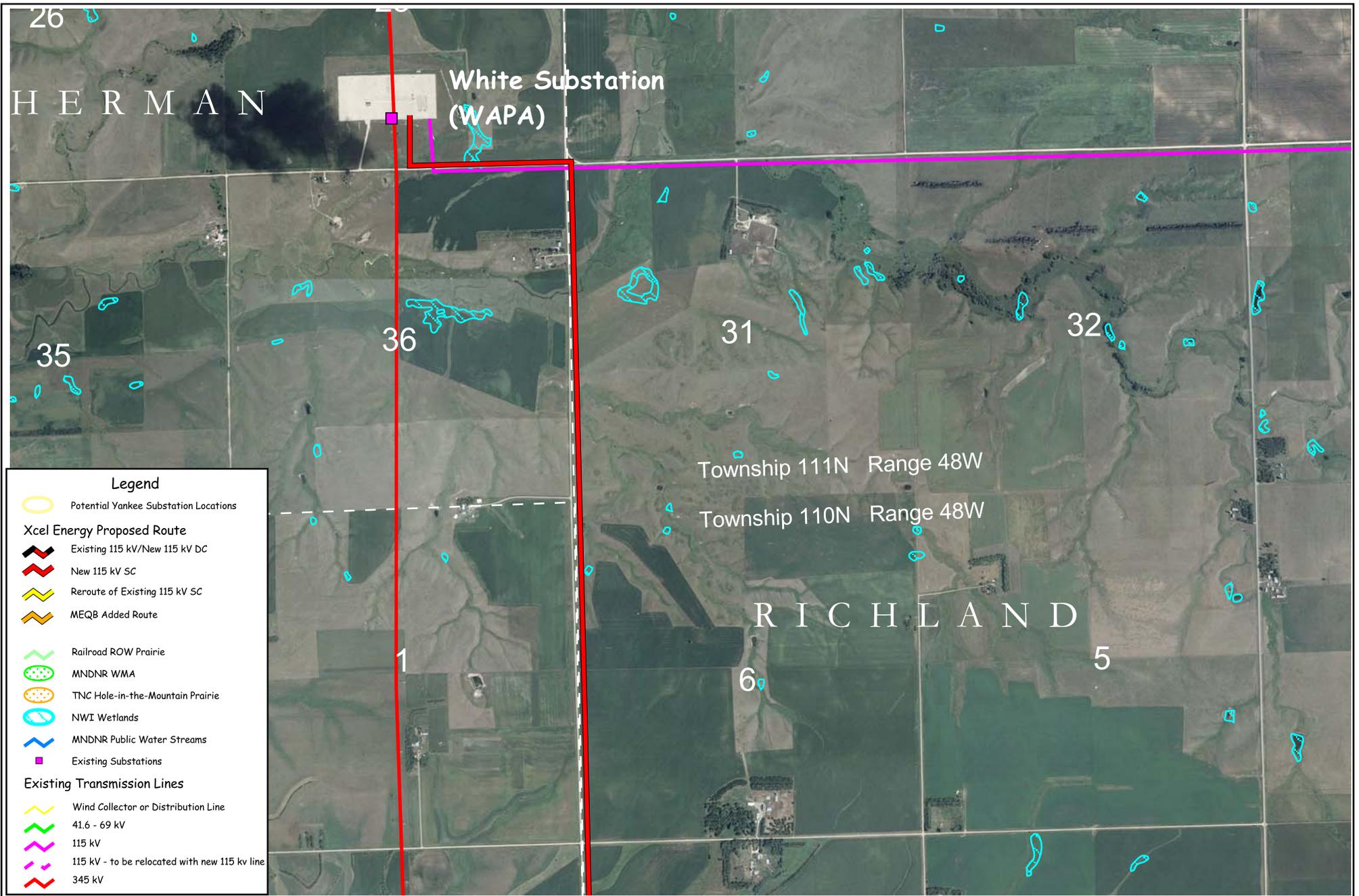


Legend

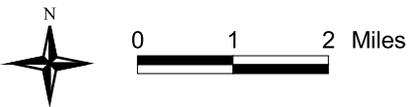
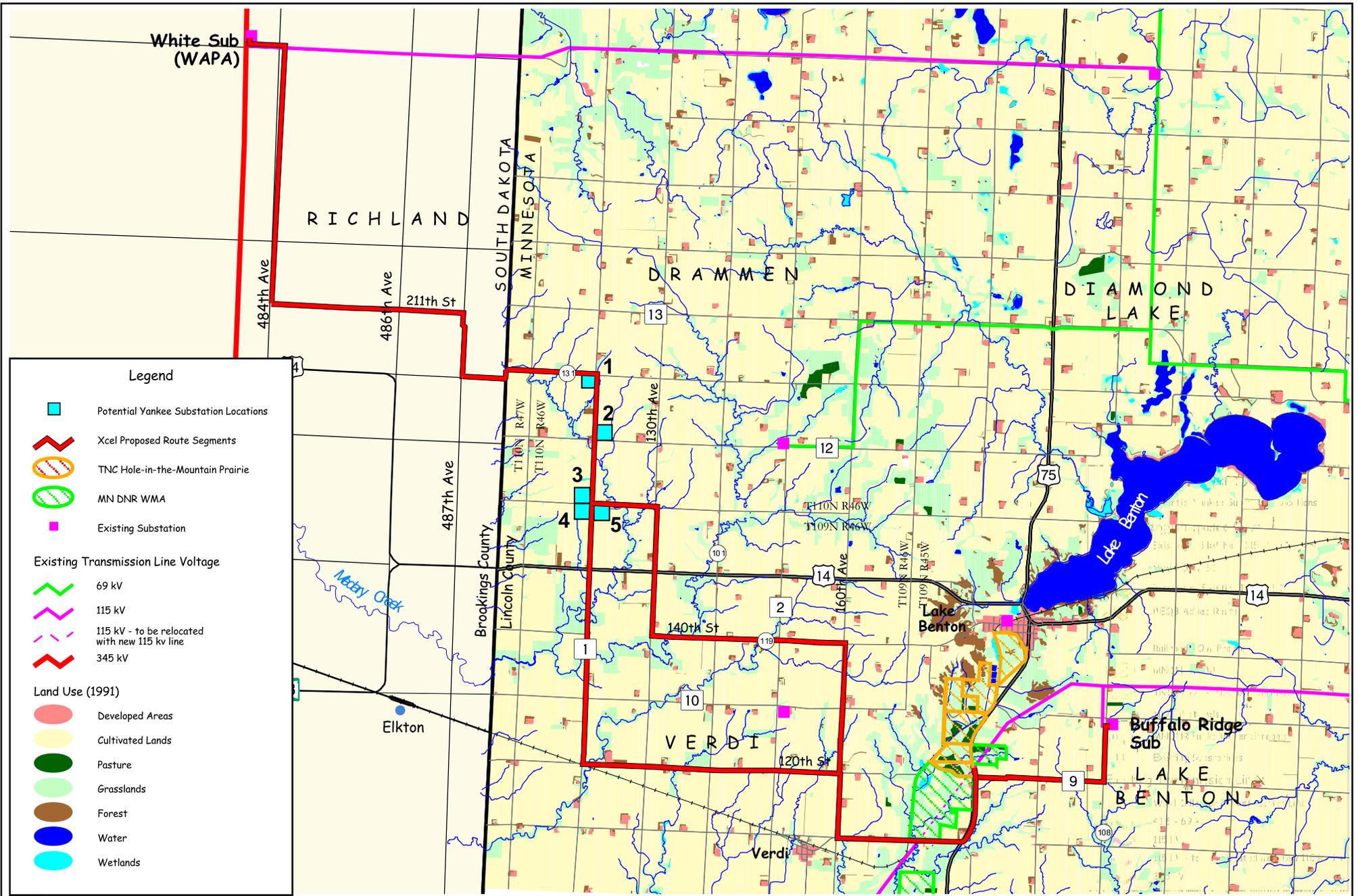
- Potential Yankee Substation Locations
- Xcel Energy Proposed Route**
- Existing 115 kV/New 115 kV DC
- New 115 kV SC
- Reroute of Existing 115 kV SC
- MEQB Added Route
- Railroad ROW Prairie
- MNDNR WMA
- TNC Hole-in-the-Mountain Prairie
- NWI Wetlands
- MNDNR Public Water Streams
- Existing Substations
- Existing Transmission Lines**
- Wind Collector or Distribution Line
- 41.6 - 69 kV
- 115 kV
- 115 kV - to be relocated with new 115 kv line
- 345 kV



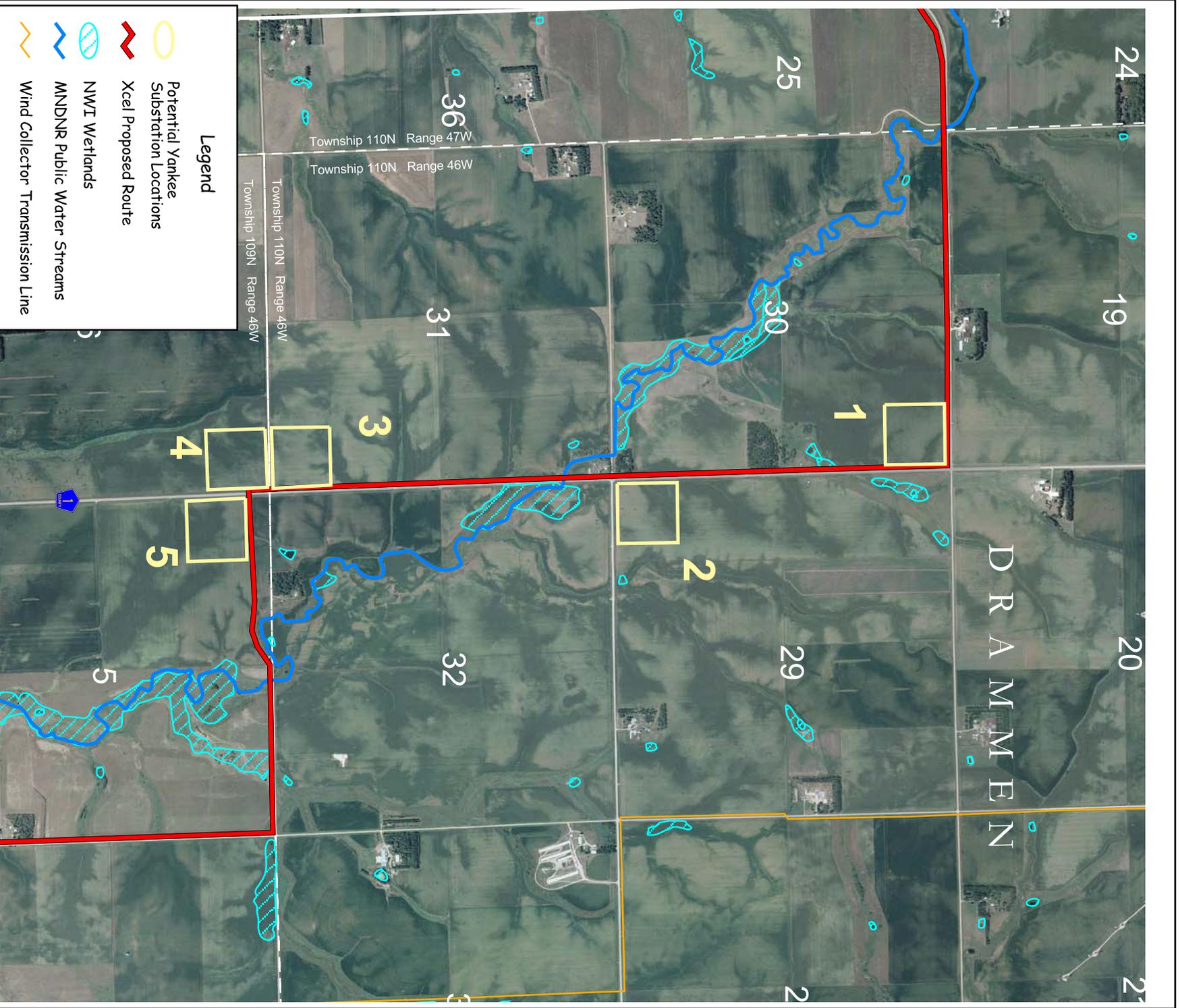
Buffalo Ridge to White 115 kV Transmission Line
Xcel Energy
Windfarm Transmission Improvement Projects



Buffalo Ridge to White 115 kV Transmission Line
Xcel Energy
Windfarm Transmission Improvement Projects



**Buffalo Ridge to White 115 kV Transmission Line
Xcel Energy
Windfarm Transmission Improvement Projects**



- Legend**
-  Potential Yankee Substation Locations
 -  Xcel Proposed Route
 -  NWT Wetlands
 -  MNDNR Public Water Streams
 -  Wind Collector Transmission Line



1" = 2000 feet

**Buffalo Ridge to White
115 kV Transmission Line**
Xcel Energy
Windfarm Transmission Improvement Projects

APPENDIX D.11
SUBSTATION
LOCATION MAP



Dec 2004