

Note:  
The Applicant will be issued a Route Permit with a specific route width. The proposed route widths are shown in Appendix S.

- Proposed Regeneration Site
- Visual Simulation Viewpoint

**Proposed Routes**

- Blue/Orange Route
- Blue Route
- Orange Route
- Segment Option

**Alternatives**

- Alignment Modification

**Existing Transmission Lines**

- 69 or 115 kV
- 230 kV
- 500 kV

- Residences Within 1,500 Feet of Anticipated Alignment
- Church
- + Cemetery
- ✈ Airstrip
- ✈ Airport
- ▲ Aggregate Source Location
- ⊕ Mineral Exploration/Engineering Drillhole
- ⊕ Communication Tower
- ⊕ County Well Index Within 1,500 Feet of Anticipated Alignment

**MPCA Database**

- Hazardous Waste
- ◆ Investigation and Cleanup
- ▲ Tanks and Leaks
- Multiple Activities
- Snowmobile Trail
- Active Mineral Lease
- Inactive Mineral Lease
- Indian Reservation Land
- USFWS Interest Lands

**State Fee Lands by Type**

- + Consolidated Conservation
- + Federal - State Lease
- + Other - Aquired, Tax Forfeit, Volstead
- + Trust Fund

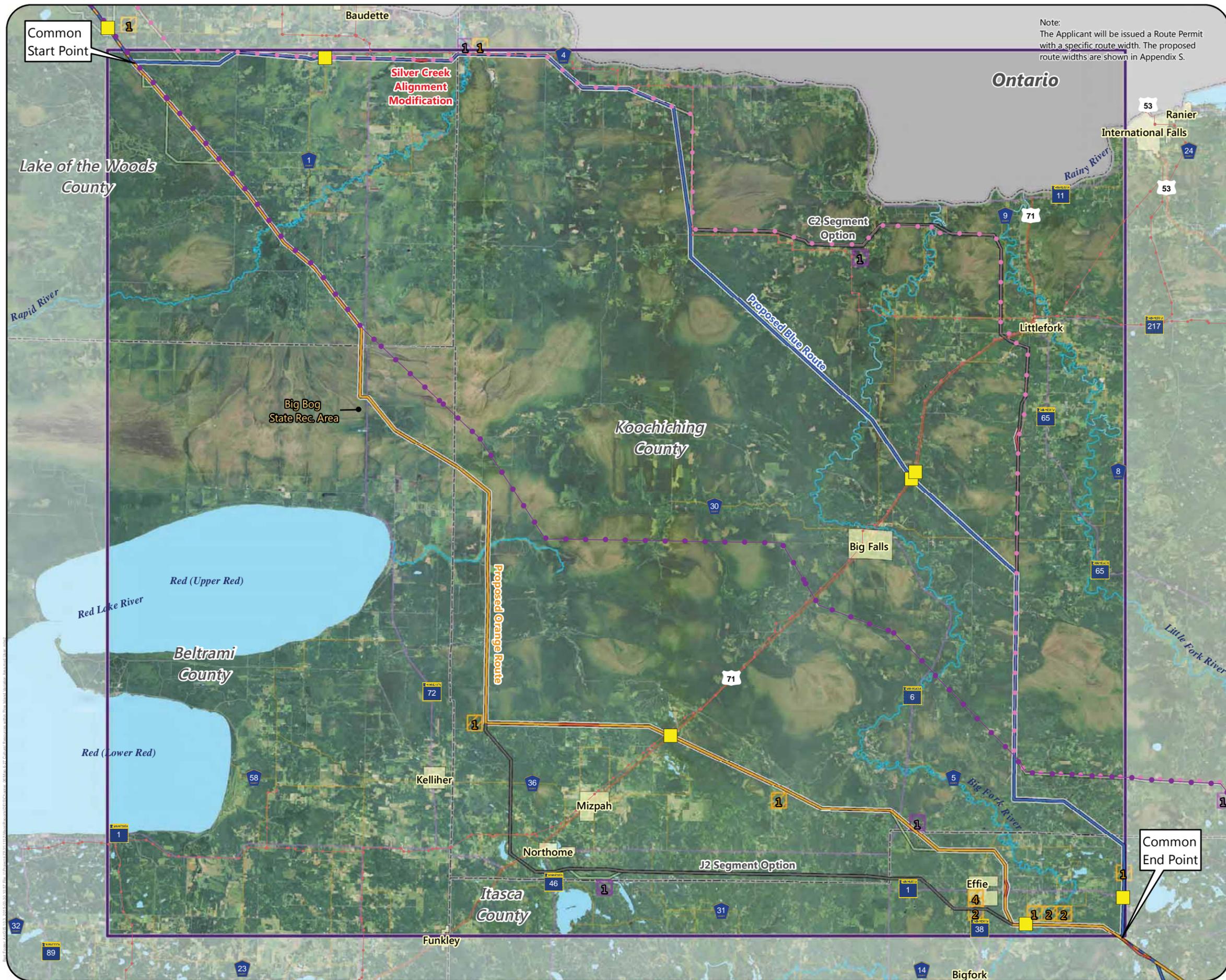
Miles

6.5      0      6.5

Map 6-26

**HUMAN SETTLEMENT WITHIN PINE ISLAND VARIATION AREA**  
Great Northern Transmission Line  
Draft Environmental Impact Statement

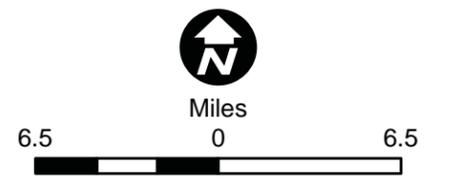


Note:  
The Applicant will be issued a Route Permit with a specific route width. The proposed route widths are shown in Appendix S.

- Proposed Regeneration Site
- Proposed Routes**
- ▬ Blue Orange Route
- ▬ Blue Route
- ▬ Orange Route
- ▬ Segment Option
- Alternatives**
- ▬ Alignment Modification
- Existing Transmission Lines**
- ▬ 69 or 115 kV
- ▬ 230 kV
- ▬ 500 kV
- Section Containing Cultural Resource\***
- Historic Architectural Sites
- Archaeological Sites

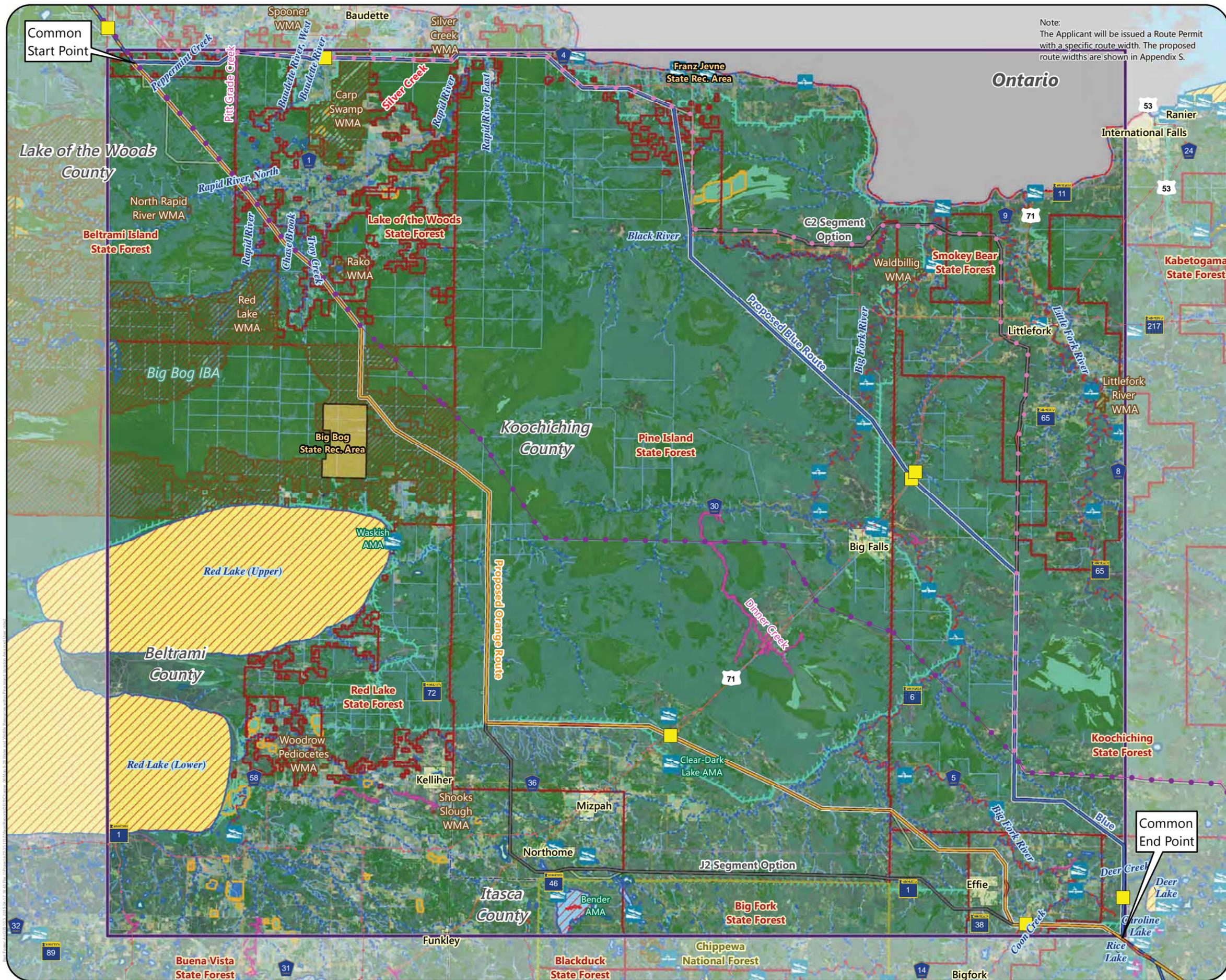
\*Note: Labeled with number of records found by inventory type.



Map 6-27

**CULTURAL RESOURCES WITHIN PINE ISLAND VARIATION AREA**  
Great Northern Transmission Line  
Draft Environmental Impact Statement





Note:  
The Applicant will be issued a Route Permit with a specific route width. The proposed route widths are shown in Appendix S.

**Proposed Regeneration Site**  
 Proposed Regeneration Site

**Proposed Routes**  
 Blue/Orange Route  
 Blue Route  
 Orange Route  
 Segment Option

**Alternatives**  
 Alignment Modification

**Existing Transmission Lines**  
 69 or 115 kV  
 230 kV  
 500 kV

**NHD Watercourse**  
 NHD Watercourse  
 PWI Watercourse  
 Trout Stream  
 MPCA Impaired Stream

**NHD Waterbody**  
 NHD Waterbody  
 PWI Waterbody  
 Trout Lake  
 MPCA Impaired Waterbody  
 DNR Wild Rice Lake  
 Shallow Lake  
 Aquatic Management Area  
 Wildlife Management Area (WMA)  
 State Park

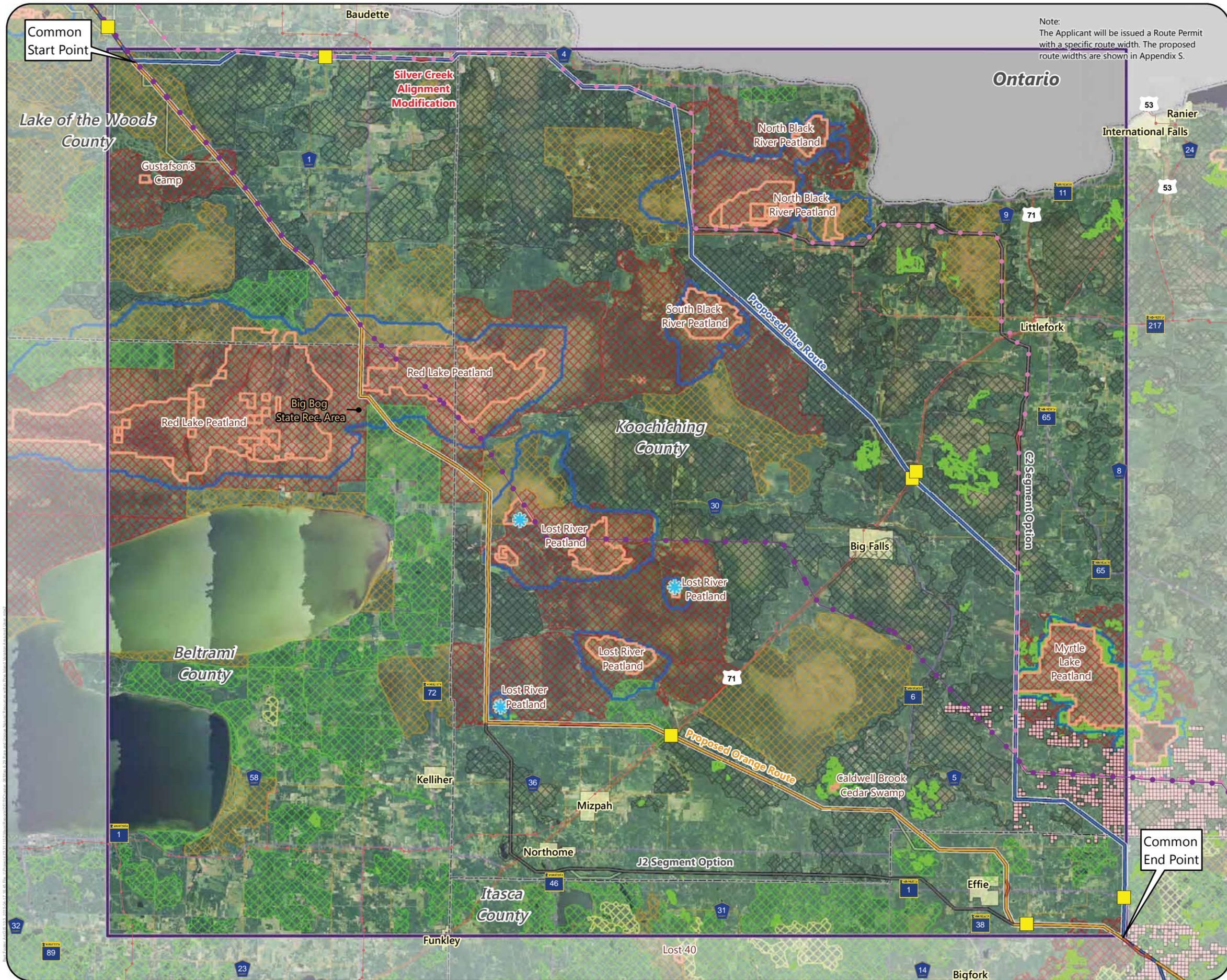
**National Forest Boundary**  
 National Forest Boundary  
 State Forest Boundary  
 Grassland Bird Conservation Core Areas  
 Audubon Society Important Bird Areas

**National Wetland Inventory**  
 PAB, Freshwater Pond  
 PUB, Freshwater Pond & Other  
 PUS, Other  
 PEM, Freshwater Emergent Wetland  
 PFO, Freshwater Forested/Shrub Wetland  
 PSS, Freshwater Forested/Shrub Wetland  
 Lake  
 Riverine

Miles  
 6.5 0 6.5  
 Map 6-28

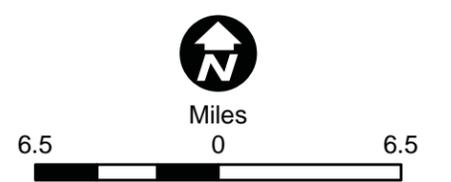
**WATER AND WILDLIFE RESOURCES  
 WITHIN PINE ISLAND VARIATION AREA**  
 Great Northern Transmission Line  
 Draft Environmental Impact Statement

U.S. DEPARTMENT OF ENERGY  
 MINNESOTA DEPARTMENT OF COMMERCE



Note:  
The Applicant will be issued a Route Permit with a specific route width. The proposed route widths are shown in Appendix S.

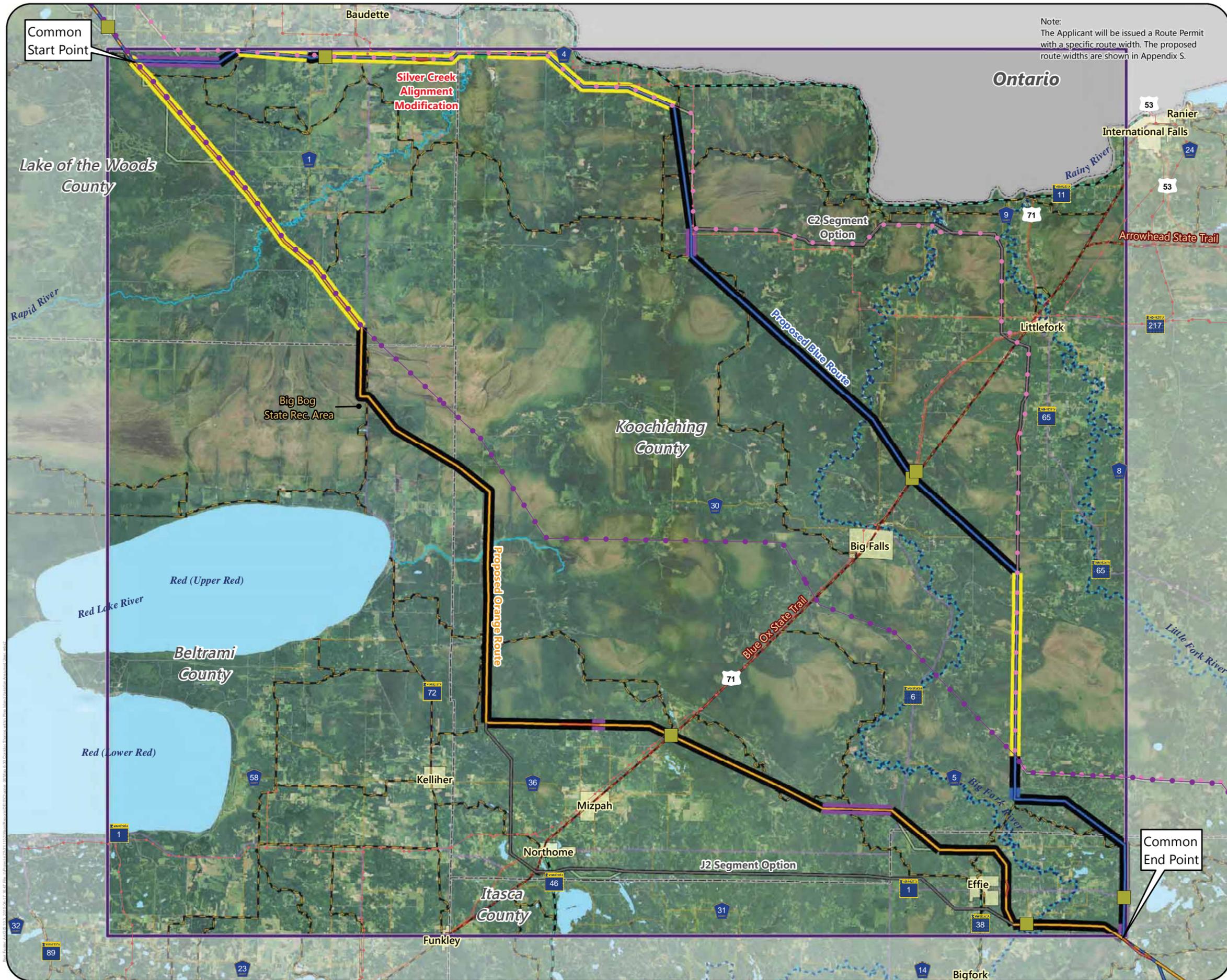
- Proposed Regeneration Site
- Proposed Routes**
- Blue/Orange Route
- Blue Route
- Orange Route
- Segment Option
- Alternatives**
- Alignment Modification
- Existing Transmission Lines**
- 69 or 115 kV
- 230 kV
- 500 kV
- Approximate Calcareous Fen Location
- State Conservation Easement
- Scientific and Natural Area (SNA)
- Preliminary Peatland SNA Watershed Protection Area
- Ecologically Important Lowland Conifers
- Site of Biodiversity Significance (All Ranks Preliminary)**
- Rank Unknown
- Below Minimum Significance
- Moderate Significance
- High Significance
- Outstanding Significance
- Municipal Boundary
- County Boundary
- International Boundary



Map 6-29

**RARE AND UNIQUE NATURAL RESOURCES WITHIN PINE ISLAND VARIATION AREA**  
Great Northern Transmission Line  
Draft Environmental Impact Statement





Note:  
The Applicant will be issued a Route Permit with a specific route width. The proposed route widths are shown in Appendix S.

- Proposed Regeneration Site
- Proposed Routes**
- Blue/Orange Route
- Blue Route
- Orange Route
- Segment Option
- Alternatives**
- Alignment Modification
- Existing Transmission Lines**
- 69 or 115 kV
- 230 kV
- 500 kV
- Snowmobile Trail
- Scenic Byway
- State Trail
- State Water Trail
- Corridor Sharing by Category\***
- Existing Transmission Line
- Road
- Existing Transmission Line & Road
- Field Line, Section Line, or Trail
- None
- Municipal Boundary
- County Boundary
- International Boundary

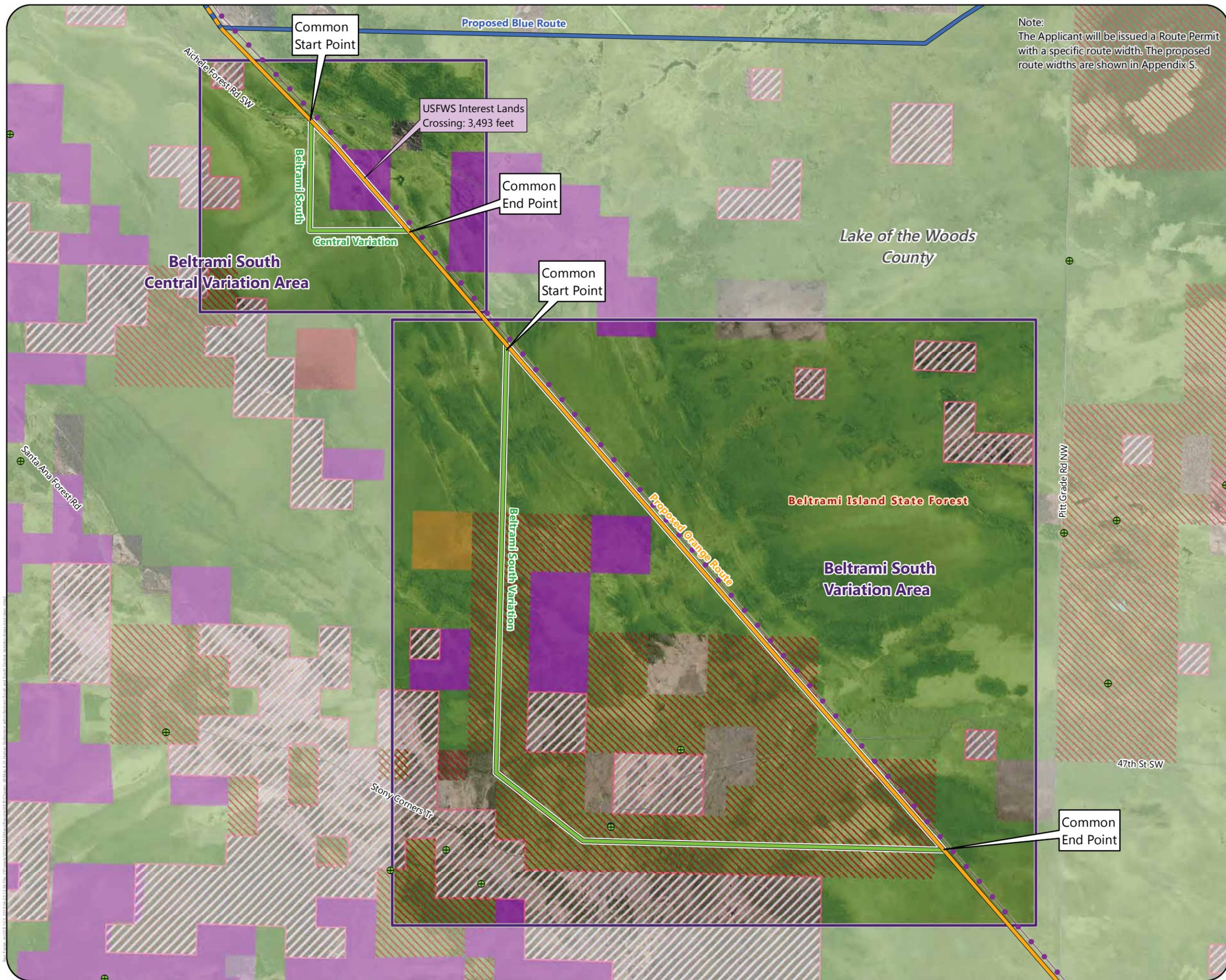
\*Note: Not all corridor sharing combinations shown



Map 6-30

**CORRIDOR SHARING WITHIN PINE ISLAND VARIATION AREA**  
Great Northern Transmission Line  
Draft Environmental Impact Statement





Note:  
The Applicant will be issued a Route Permit with a specific route width. The proposed route widths are shown in Appendix S.

- Proposed Routes**
  - Blue/Orange Route
  - Blue Route
  - Orange Route
- Alternatives**
  - Route Variation
  - Mineral Exploration/Engineering Drillhole
  - County Well Index Within 1,500 Feet of Anticipated Alignment
- Existing Transmission Lines**
  - 500 kV
  - Inactive Mineral Lease
  - Indian Reservation Land
  - USFWS Interest Lands
- State Fee Lands by Type**
  - Consolidated Conservation
  - Federal - State Lease
  - Other - Aquired, Tax Forfeit, Volstead
  - Trust Fund



Map 6-31

**HUMAN SETTLEMENT WITHIN BELTRAMI SOUTH & SOUTH CENTRAL VARIATION AREAS**  
Great Northern Transmission Line  
Draft Environmental Impact Statement





Note:  
The Applicant will be issued a Route Permit with a specific route width. The proposed route widths are shown in Appendix S.

- Proposed Routes**
- Blue/Orange Route
  - Blue Route
  - Orange Route
- Alternatives**
- Route Variation
- Existing Transmission Lines**
- 500 kV
  - County Boundary

\*Note: There were no cultural resources found within one mile of the Beltrami South Central or Beltrami South Variation Areas.



Map 6-32

**CULTURAL RESOURCES WITHIN BELTRAMI SOUTH & SOUTH CENTRAL VARIATION AREAS**  
Great Northern Transmission Line  
Draft Environmental Impact Statement





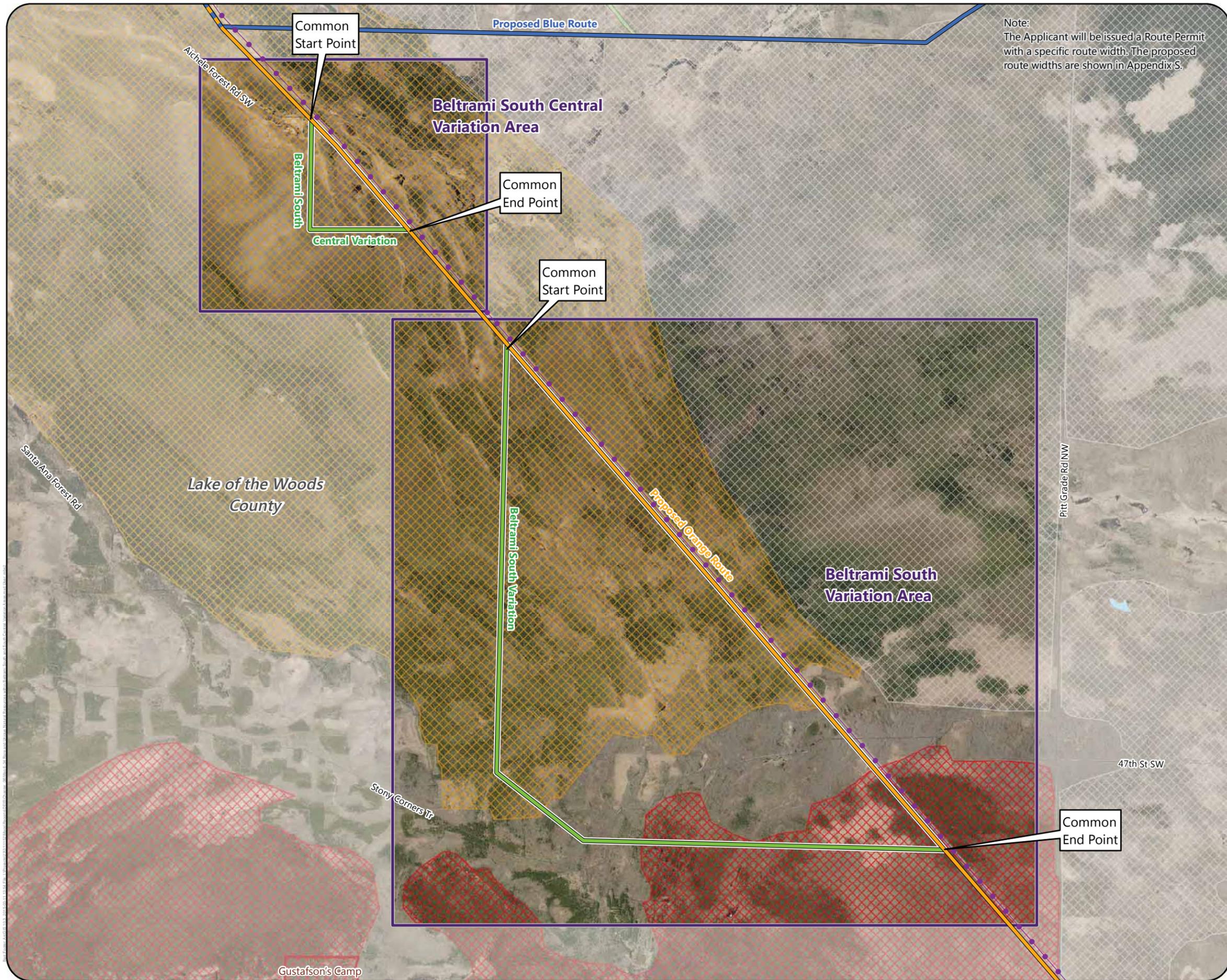
- Proposed Routes**
- Blue/Orange Route
  - Blue Route
  - Orange Route
- Alternatives**
- Route Variation
- Existing Transmission Lines**
- 500 kV
  - NHD Watercourse
  - PWI Watercourse
  - Trout Stream
  - PWI Waterbody
  - State Forest Boundary
  - Audubon Society Important Bird Areas
- National Wetland Inventory**
- PUB, Freshwater Pond & Other
  - PEM, Freshwater Emergent Wetland
  - PFO, Freshwater Forested/Shrub Wetland
  - PSS, Freshwater Forested/Shrub Wetland



Map 6-33

**WATER AND WILDLIFE RESOURCES  
WITHIN BELTRAMI SOUTH & SOUTH  
CENTRAL VARIATION AREAS**  
Great Northern Transmission Line  
Draft Environmental Impact Statement





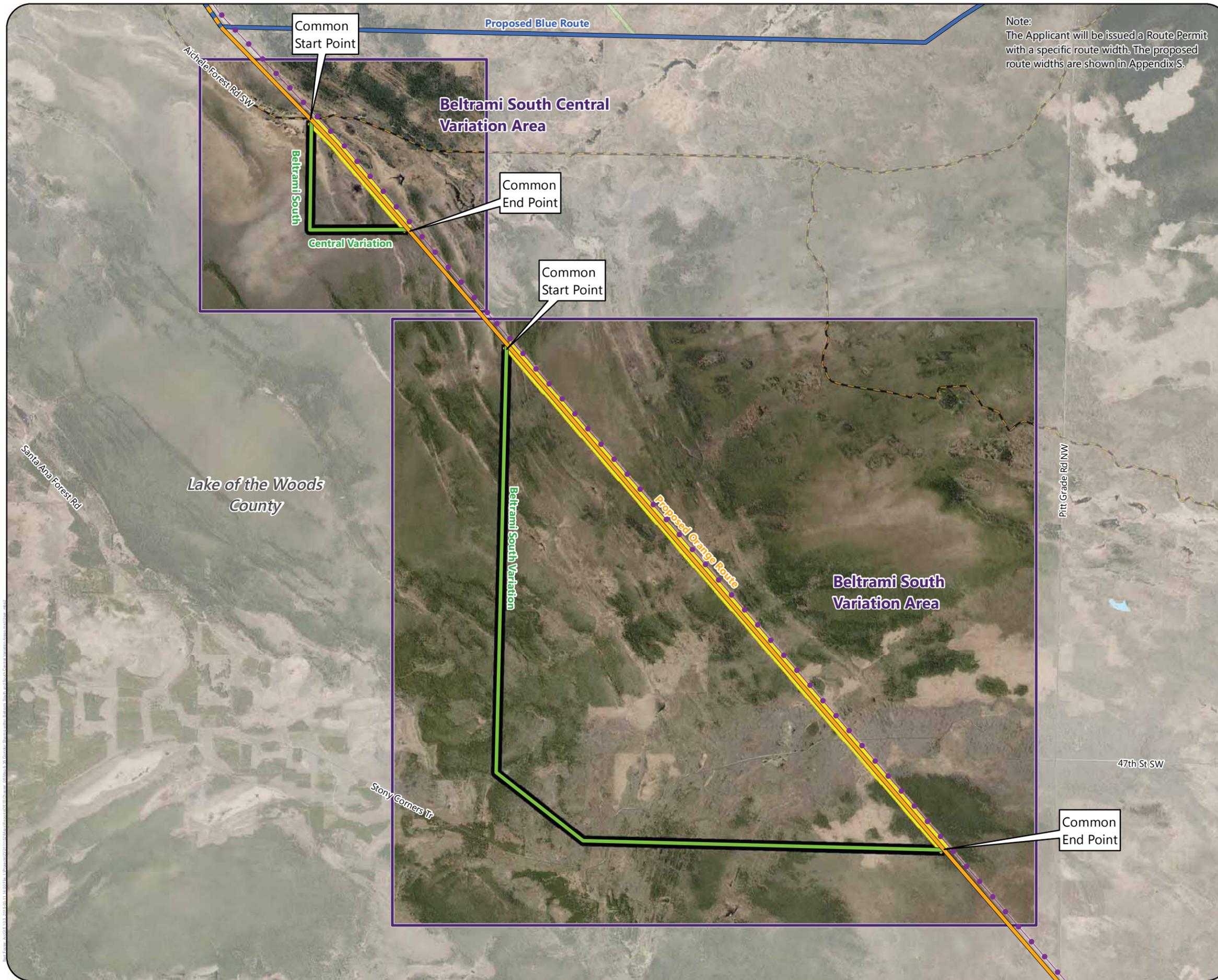
- Proposed Routes**
- Blue/Orange Route
  - Blue Route
  - Orange Route
- Alternatives**
- Route Variation
- Existing Transmission Lines**
- 500 kV
  - Scientific and Natural Area (SNA)
- Site of Biodiversity Significance (All Ranks Preliminary)**
- Rank Unknown
  - High Significance
  - Outstanding Significance



Map 6-34

**RARE AND UNIQUE NATURAL RESOURCES WITHIN BELTRAMI SOUTH & SOUTH CENTRAL VARIATION AREAS**  
Great Northern Transmission Line  
Draft Environmental Impact Statement





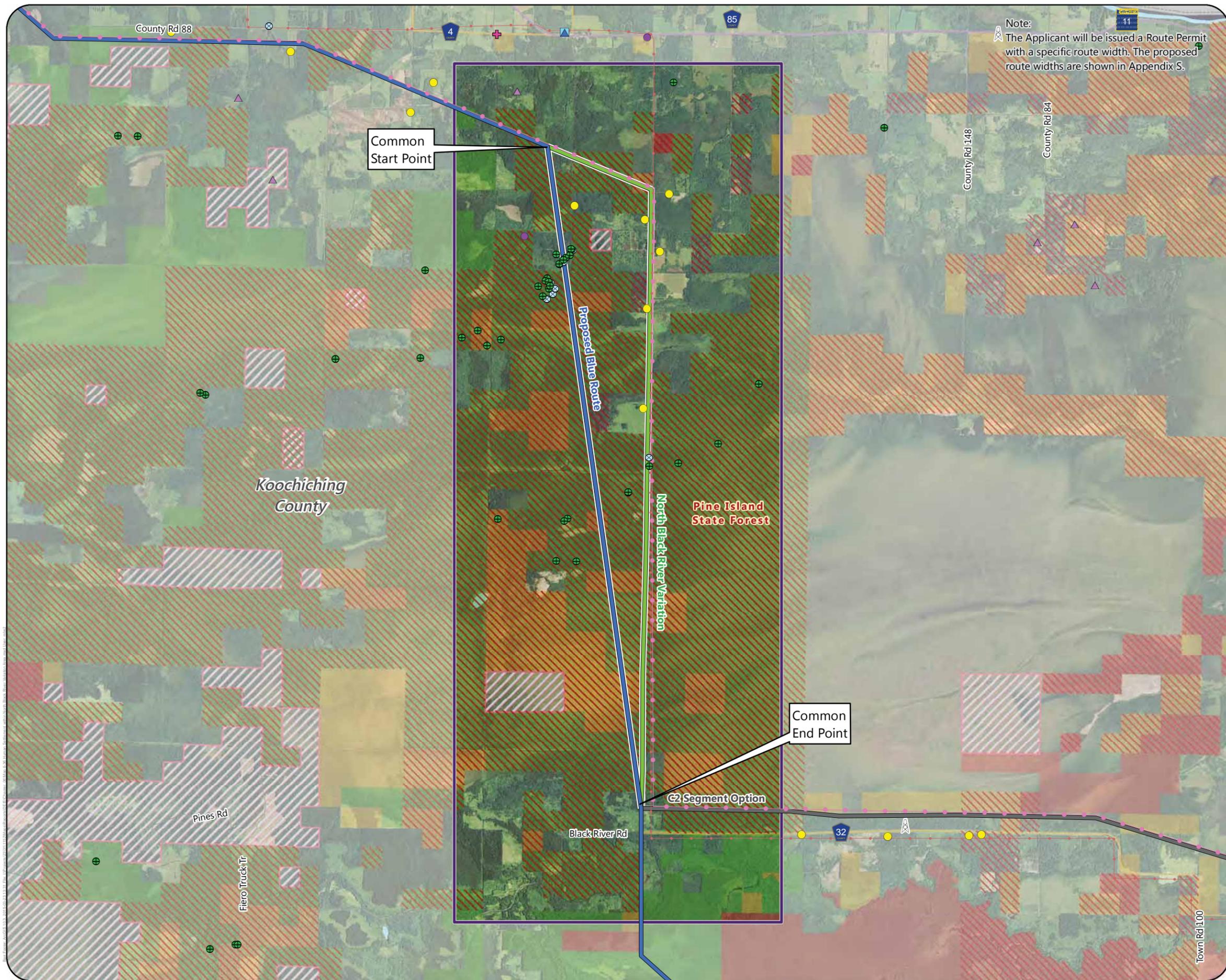
- Proposed Routes**
- Blue/Orange Route
  - Blue Route
  - Orange Route
- Alternatives**
- Route Variation
- Existing Transmission Lines**
- 500 kV
  - Snowmobile Trail
- Corridor Sharing by Category\***
- Existing Transmission Line
  - None
  - County Boundary
- \*Note: Not all corridor sharing combinations shown



Map 6-35

**CORRIDOR SHARING WITHIN BELTRAMI SOUTH & SOUTH CENTRAL VARIATION AREAS**  
 Great Northern Transmission Line  
 Draft Environmental Impact Statement





- Proposed Routes**
- Blue Route
  - Segment Option
- Alternatives**
- Route Variation
  - Residences Within 1,500 Feet of Anticipated Alignment
  - Cemetery
  - Aggregate Source Location
  - County Well Index Within 1,500 Feet of Anticipated Alignment
  - Mineral Exploration/Engineering Drillhole
  - Communication Tower
- MPCA Database**
- Hazardous Waste
  - Tanks and Leaks
  - Multiple Activities
- Existing Transmission Lines**
- 69 or 115 kV
  - 230 kV
  - Inactive Mineral Lease
  - Indian Reservation Land
- State Fee Lands by Type**
- Consolidated Conservation
  - Other - Acquired, Tax Forfeit, Volstead
  - Trust Fund



Map 6-36

**HUMAN SETTLEMENT WITHIN NORTH BLACK RIVER VARIATION AREA**  
Great Northern Transmission Line  
Draft Environmental Impact Statement





**Proposed Routes**  
 Blue Route  
 Segment Option

**Alternatives**  
 Route Variation

**Existing Transmission Lines**  
 69 or 115 kV  
 230 kV  
 County Boundary

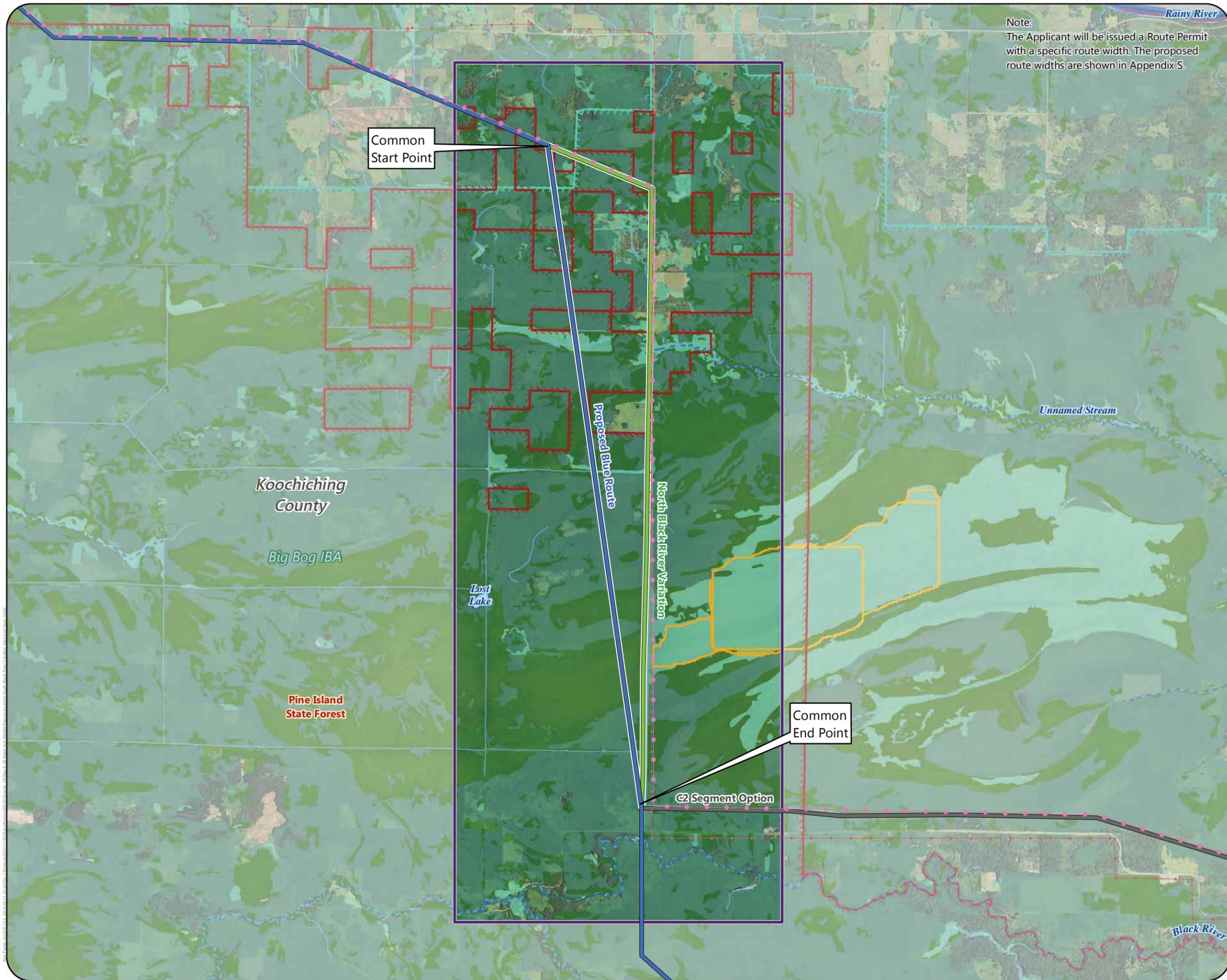
\*Note: There were no cultural resources found within one mile of the North Black River Variation



Map 6-37

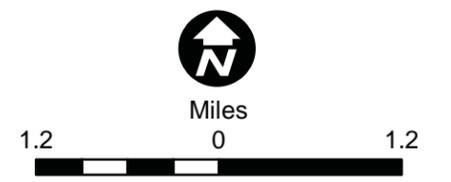
**CULTURAL RESOURCES WITHIN NORTH BLACK RIVER VARIATION AREA**  
 Great Northern Transmission Line  
 Draft Environmental Impact Statement





Note:  
The Applicant will be issued a Route Permit with a specific route width. The proposed route widths are shown in Appendix S.

- Proposed Routes**
- Blue Route
  - Segment Option
- Alternatives**
- Route Variation
- Existing Transmission Lines**
- 69 or 115 kV
  - 230 kV
  - NHD Watercourse
  - PWI Watercourse
  - MPCA Impaired Stream
  - NHD Waterbody
  - PWI Waterbody
  - State Forest Boundary
  - Grassland Bird Conservation Core Areas
  - Audubon Society Important Bird Areas
- National Wetland Inventory**
- PUB, Freshwater Pond & Other
  - PEM, Freshwater Emergent Wetland
  - PFO, Freshwater Forested/Shrub Wetland
  - PSS, Freshwater Forested/Shrub Wetland
  - Riverine
  - County Boundary



Map 6-38

**WATER AND WILDLIFE  
RESOURCES WITHIN NORTH BLACK  
RIVER VARIATION AREA**  
Great Northern Transmission Line  
Draft Environmental Impact Statement





Note:  
The Applicant will be issued a Route Permit with a specific route width. The proposed route widths are shown in Appendix S.

- Proposed Routes**
  - Blue Route
  - Segment Option
- Alternatives**
  - Route Variation
- Existing Transmission Lines**
  - 69 or 115 kV
  - 230 kV
- Scientific and Natural Area (SNA)**
  - Scientific and Natural Area (SNA)
  - Preliminary Peatland SNA Watershed Protection Area
- Site of Biodiversity Significance (All Ranks Preliminary)**
  - Rank Unknown
  - Moderate Significance
  - High Significance
  - Outstanding Significance



Map 6-39

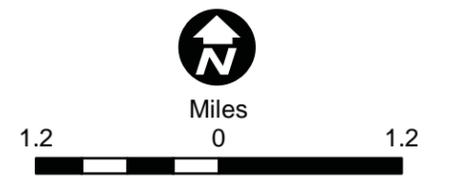
**RARE AND UNIQUE NATURAL RESOURCES WITHIN NORTH BLACK RIVER VARIATION AREA**  
Great Northern Transmission Line  
Draft Environmental Impact Statement





- Proposed Routes**
- Blue Route
  - Segment Option
- Alternatives**
- Route Variation
- Existing Transmission Lines**
- 69 or 115 kV
  - 230 kV
  - Snowmobile Trail
  - Scenic Byway
- Corridor Sharing by Category\***
- Existing Transmission Line
  - Existing Transmission Line & Road
  - None
  - County Boundary

\*Note: Not all corridor sharing combinations shown



Map 6-40

**CORRIDOR SHARING WITHIN  
NORTH BLACK RIVER VARIATION AREA**  
Great Northern Transmission Line  
Draft Environmental Impact Statement

