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## **Appendix C**

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### **Example of Approved Route Permit**

## **BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION**

LeRoy Koppendrayer  
Marshall Johnson  
Ken Nickolai  
Thomas Pugh  
Phyllis A. Reha

Chair  
Commissioner  
Commissioner  
Commissioner  
Commissioner

In the Matter of the Application for a  
Route Permit for the Appleton to Canby  
115kV High Voltage Transmission Line  
Project

ISSUE DATE: April 18, 2007

DOCKET NO. E017/TL-06-1265

ORDER ISSUING A ROUTE  
PERMIT

The above-captioned matter came before the Minnesota Public Utilities Commission (PUC) on March 6, 2007, acting on an application by Otter Tail Power Company (OTP or Company) for a Route Permit to rebuild a 42-mile, 41.6 kilovolt (kV) single circuit transmission line, to 115 kV specifications. The project includes necessary modifications to the Appleton, Louisburg Junction, Dawson, and Canby substations in Swift, Lac Qui Parle, and Yellow Medicine counties, Minnesota.

A joint Public Hearing was held on January 25, 2007, at the Dawson City Hall in Dawson, Minnesota. The hearing was presided over by Judge Raymond Krause, Chief Administrative Law Judge (ALJ) for the Minnesota Office of Administrative Hearings (OAH). The hearing continued until all persons who desired to speak had done so. The comment period closed on February 5, 2007, at 4:30 p.m.

Appearances: Jeffrey T. Haase appeared on behalf of the staff of the Minnesota Department of Commerce (DOC). Al Koeckeritz, Project Manager for Otter Tail Power Company, appeared on behalf of the applicant.

### **STATEMENT OF ISSUE**

Should Otter Tail Power Company be issued a Route Permit to rebuild to 115 kV specifications, a 42 mile, 41.6 kV high voltage transmission line (HVTL) from the Appleton Substation to the Canby Substation and make the necessary modifications to the Appleton, Louisburg Junction, Dawson, and Canby substations in Swift, Lac Qui Parle, and Yellow Medicine counties, Minnesota? If so, what conditions should be imposed?

Based upon all of the proceedings herein, the Commission makes the following:

## **FINDINGS OF FACT**

### **The Applicant**

1. The Applicant is Otter Tail Power Company (OTP), an investor-owned electric utility headquartered in Fergus Falls, MN.

### **The Project**

2. The proposed project consists of the following components, which collectively are referred to as the "Project."

(a) A rebuild to 115 kV specifications of an existing 42-mile, 41.6 kV, single circuit transmission line connecting the Appleton Substation to the Canby Substation.

(b) An expansion of the Dawson Substation to accommodate facilities associated with the new transmission line, and;

(c) Associated facilities required at the Appleton, Louisburg Junction, and Canby substations to accommodate the new transmission line.

3. The Project will use wood transmission structures (poles) with horizontal post insulators. OTP intends to place existing, new, or rebuilt distribution lines onto the 115 kV structures along a portion of the route, a practice called an "underbuild". Specialty transmission line structures including, but not limited to, steel or laminated wood post structures on concrete foundations may be used for long spans, road or waterway crossings, and when circumstances require them.

4. The Project will utilize the conductor that is currently in place on the 41.6 kV transmission line. Currently this is a mix of 266.8 (18/1) aluminum conductor steel reinforced (ACSR), 266.8 (26/7) ACSR and 266.8 (7 str.) all aluminum (AA) conductors.

5. The Project is located in Swift, Lac Qui Parle, and Yellow Medicine Counties, Minnesota.

### **Procedural History**

6. On August 14, 2006, OTP notified the PUC that it intended to apply for a Route Permit under the Alternative Permitting Procedures set forth in Minnesota Rules parts 4400.2000 to 4400.2950. Exhibit 1.

7. On September 7, 2006, OTP filed an Application for a Route Permit for the Appleton to Canby transmission project with the PUC. Exhibit 2.

8. The Application identified OTP 's preferred route for the line and the associated facilities:

- A. Rebuild to 115 kV approximately 42 miles of 41.6 kV transmission line between OTP's Appleton Substation in Appleton, MN and the relocated Canby Substation in Oshkosh Township.
- B. Modify the Appleton, Louisburg Junction, and Canby substations to accommodate the termination of the new line.
- C. Expand the Dawson Substation 5000 ft<sup>2</sup> (50 feet by 100 feet) on the west side of the current facility to accommodate the new 115 kV substation and associated facilities. A living snow fence consisting of shrubs or trees will be installed on one-acre of land to the north of the facility to control snow issues.

9. The DOC Staff recommended that the PUC accept the Application as complete, appoint a public advisor, and combine the environmental review and public hearings in this docket with the related Certificate of Need proceeding for the Project (E017/CN-06-677) in comments and recommendations dated September 13, 2006. Exhibit 3.

10. On September 12, 2006, OTP mailed a Notice of Proposed Transmission Line and Public Information Meeting to those persons whose name appeared on the PUC's general notification list, local officials and property owners in compliance with Minnesota Rule part 4400.1350, subpart 2. Exhibit 4.

11. OTP published Notice of Proposed Transmission Line and Public Information Meeting in the *Ortonville Independent* (September 13, 2006), the *Granite Falls-Clarkfield Advocate Tribune* (September 14, 2006), the *Montevideo American News* (September 14, 2006), and the *Appleton Press* (September 14, 2006), in compliance with Minnesota Rule 4400.1350. Exhibit 5.

12. On September 22, 2006, the Department of Commerce mailed Notice of Proposed Transmission Line and Public Information Meeting to those persons on the project mailing list. Exhibit 6.

13. On September 25, 2006, a Notice of Proposed Transmission Line and Public Information / EA Scoping Meeting was published in the *EQB Monitor*. Exhibit 7.

14. The PUC accepted the Application as complete, and combined the environmental review and Public Hearings in this docket with the related Certificate of Need docket (E017/CN-06-677) in its Order dated September 28, 2006. Exhibit 8.

15. A Public Information and EA Scoping meeting was held on October 4, 2006, at the Dawson City Hall in Dawson, Minnesota, in accordance with Minnesota Rule 4400.2500. Exhibit 9.

16. The DOC accepted public comments on the Scope of the EA until October 13, 2006. No comment letters were received.

17. On October 19, 2006, the Commissioner of the DOC issued a Scoping Decision establishing the content of and alternatives considered in the EA. Exhibit 11.

18. On October 20, 2006, the DOC mailed the Scoping Decision to persons on the PUC Appleton to Canby service and DOC project mailing lists. Exhibit 12.

19. On December 15, 2006, the DOC filed the EA with the PUC. The EA contained the information and analysis for the Route Permit Application and the Environmental Report required for the related Certificate of Need (E017/CN-06-677) docket. The DOC mailed Notice of Environmental Assessment Availability to the PUC Appleton to Canby service and DOC project mailing lists. Exhibits 13 & 14.

20. On January 9, 2007 DOC EFP staff post the Notice of Public Hearing on the Energy Facilities Permitting Website.

21. Pursuant to Minnesota Rule 4400.2850, OTP published Notice of Public Hearing in *The Canby News* (January 10, 2007), the *Swift County Monitor News* (January 10, 2007), *The Appleton Press* (January 10, 2007), the *Granite Falls-Clarkfield Advocate-Tribune* (January 11, 2007), the *Dawson Sentinel* (January 10, 2007), the *Marshall, MN Independent* (January 12, 2007), the *Morris Sun Tribune* (January 10, 2007), *The Ortonville Independent* (January 9, 2007), *The Montevideo American-News* (January 11, 2007). Exhibit 18.

22. On January 11, 2007, OTP mailed Notice of Public Hearing to those persons on the PUC Appleton to Canby service and DOC project mailing lists in accordance with Minnesota Statute 216E.03. Exhibit 18.

23. A joint Public Hearing was held on January 25, 2007, at the Dawson City Hall in Dawson, Minnesota. Administrative Law Judge Raymond Krause presided over the joint Public Hearing. The hearing considered comments and testimony on the Route Permit Application, and the related Certificate of Need docket (E017/CN-06-677).

24. Jeffrey Haase appeared at the joint Public Hearing on behalf of the DOC staff and pursuant to Minnesota Rule 4400.2850, subpart 3, provided a presentation describing the Certificate of Need and Route Permit process, the proposed Project, and the EA development.

25. Al Koeckeritz appeared at the joint Public Hearing on behalf of OTP and provided a presentation about the need for the Project, the proposed route, and other matters related to the project.

26. ALJ Krause provided a comment period open for receipt of written comments until February 5, 2007.

27. Transcripts of the hearing were filed with the PUC on January 30, 2006. Exhibits 19, 20.

28. On February 8, 2007, ALJ Krause filed a summary of comments at the joint Public Hearing, and written comments received during the comment period. One comment letter was submitted to ALJ Krause by Matt Langan, Environmental Planner for the Minnesota Department of Natural Resources. Exhibits 21.

### **Environmental Assessment Analysis of Proposed Route and Alternative Route**

29. The EA was prepared in accordance with Minnesota Rules Part 4400.2750 and contained an environmental report required in for the related Certificate of Need (E017/CN-06-677) as authorized by the Commission and pursuant to Minnesota Rules 4410.7035. The EA evaluated OTP's proposed route. Exhibit 12.

30. The route for which OTP is requesting a permit from the Commission exits OTP's Appleton Substation in the northwest corner of the city of Appleton, runs south, following section lines for three miles, paralleling MN State Highway 119. The line then cuts diagonally across section 33 of Appleton Township in Swift County and crosses the Minnesota River, where it again travels due south along MN State Highway 119 about twenty miles to the Dawson Substation. From the Dawson substation the line turns due west for about six miles along U.S. Highway 212. The line turns due south at the intersection of highway 212 and U.S. Highway 75. The line parallels U.S. Highway 75 for about twelve miles, where it cuts diagonally through Section 19 of Oshkosh Township in Yellow Medicine County and runs to the Canby Substation.

### **Potential Impacts and Mitigation**

31. The total amount of agricultural land that will be permanently impacted by the Project is approximately 0.18 acres. Permanent impacts will occur due to the placement of the transmission line poles and expansion of the substation. The Project will result in approximately 21.5 acres of temporary impacts to agricultural land. Temporary impacts may include soil compaction and crop damages within the transmission line right-of-way (ROW). Landowners will be compensated for the use of their land through easement payments. By rebuilding along existing transmission ROW, impacts will be minimized. OTP will compensate landowners for crop damage and soil compaction that occur as a result of the Project.

32. The proposed transmission lines will be designed to meet or exceed all requirements of the National Electric Safety Code, which is the utility safety standard that applies to all transmission lines. In addition, the substation facilities will be fenced, and access will be limited to authorized personnel.

33. The Project will create only nominal corona or noise impacts and mitigative measures are not necessary.

34. There are no homes within 100 feet of the centerline of the route. There are five homes within 300 feet of the route. The route will not displace any homes or businesses.

35. The transmission line and structures will follow the existing transmission line route, but will be 10 feet taller than the existing structures along the route.

36. Socioeconomic impacts will be primarily positive. The Project will create short-term construction expenditures in the area and increased electric service reliability in the Project area and the surrounding region.

37. The Project is near several recreational opportunities, including the Minnesota River Valley, U.S. Fish and Wildlife Service Waterfowl Protection Areas and the Lac Qui Parle Wildlife Management Area (WMA). The route will cross the Minnesota River and the Lac Qui Parle WMA at the same location that the existing route currently crosses these features.

38. Traffic levels may be slightly impacted during construction of the Project, with no impacts anticipated during facility operation, and no mitigation will be necessary. The operation of the transmission line will have no impact on traffic patterns or usage.

39. The proposed transmission line will not impact active mining operations.

40. The proposed route and alternative route do not contain prohibited sites, including National Parks; national historic sites and landmarks, national historic districts; national wildlife refuges; national monuments; national wild, scenic and recreational river ways; state wild, scenic, and recreational rivers and their land use districts; state parks; nature conservancy preserves; state scientific and natural areas; and state and national wilderness areas.

41. Construction of the transmission line will result in no disturbances to the bedrock geology beneath the Project route. Soils exposed during construction may be vulnerable to erosion until stabilized. Some compaction of surface soils will result from the use of heavy construction equipment. OTP will implement best management practices (BMP) during construction activities to reduce and minimize soil erosion and compaction.

42. One previously recorded archeological site was identified within 500 feet of the route in Hamlin Township. In addition, 64 previously inventoried standing structures have been recorded within one mile of the route. In the event that an impact to archaeological and historic resources were to occur OTP will consult with SHPO and invited consulting parties on whether or not the resource is eligible for listing in the NRHP. No impacts are anticipated to these resources.

43. There is potential for displacement of wildlife during construction of the Project and the loss of small amounts of habitat from the transmission line route. Displacement of fauna is anticipated to be temporary in nature. Because no long-term population-level effects are anticipated no mitigation will be required.

44. To reduce potential avian power line collisions associated with the Project the Minnesota Department of Natural Resources (DNR) is recommending, through comments submitted to the ALJ in this proceeding, that Swan Flight Diverters (SFDs) be

installed along a 6.5-mile portion of the transmission line. OTP will work closely with the DNR on the appropriate number and placement of SFDs in this area of the line. Additionally, OTP will continue to coordinate with the DNR to address potential avian issues associated with the Project.

45. Electric and magnetic field (EMF) exposure was discussed in the EA. There are no state or federal health-based exposure standards. The Minnesota Department of Health recommends avoiding exposures about which there are questions of safety or health, at least to the extent that an activity can be avoided easily or cheaply. The Department of Health has stated that it is prudent to continue to monitor research in this area. The electric field generated by the Project will not exceed the limits on exposure to magnetic fields previously permitted by the Commission.

46. Impacts to air quality will be minimal, temporary, and associated only with rebuild of the line.

47. Construction of the Project will not directly affect surface water resources. During construction, there is a possibility of sediment reaching surface waters as the ground is disturbed by excavation, grading and construction traffic. Though no permanent impacts to water bodies or wetlands are anticipated, OTP will minimize impacts to wetlands and other water resources by using standard erosion control measures and BMPs. A National Pollution Discharge Elimination System permit and Storm Water Pollution Prevention Plan will be prepared for the Project. Once the Project is complete it will have no impact on surface water quality. No additional mitigation is necessary.

48. The DNR searched the Minnesota Natural Heritage Database and 60 known occurrences of rare species or native plant communities have been identified in the project area. The DNR and the U. S. Fish and Wildlife Service indicate that the Project could affect these species if BMPs are not utilized. OTP will continue to coordinate with the DNR and FWS to ensure that sensitive species associated with the Minnesota River are not impacted by the Project.

49. The route analyzed in the EA is not expected to cause an irreversible or irretrievable commitment of resources.

50. The Project is proposed to resolve existing load serving issues in the Yellow Medicine, Lac Qui Parle, Chippewa, Big Stone, and Swift county areas. Load growth in this area has caused electrical facilities to exceed allowable capacities under certain conditions.

### **Applicable Statutory Conditions and Rules**

51. The project qualifies as a Large Energy Facility under Minnesota Statute 216B.2421, and requires a Certificate of Need from the Commission. The OTP Certificate of Need for this Project is found in PUC docket number E017/CN-06-677. Minnesota Rule 4400.2950, Subpart 3, requires a Certificate of Need to be issued prior to making a final decision a Route Permit application.

52. The Project is eligible for the Alternative Routing Process of the Power Plant Siting Act, Minnesota Statute 216E.04 and Minnesota Rule 4400.2000.

53. Minnesota Statute 216E.03, subdivision 7 and Minnesota Rules 4400.3150 provide considerations in designating sites and routes and determining whether to issue a permit for a large electric power generating plant or a high voltage transmission line.

### **Costs**

54. OTP estimates that the transmission line, Dawson Substation expansion and upgrades at the Appleton, Louisburg Junction, and Canby substations will cost \$2.6 million.

### **Environmental Assessment**

55. The EA addressed the issues identified in the Commissioner's Scoping Decision.

Based on the foregoing Findings of Fact, the PUC makes the following:

## **CONCLUSIONS**

1. Any of the foregoing Findings more properly designated as Conclusions are hereby adopted as such.

2. The PUC has jurisdiction over the subject matter of this proceeding pursuant to Minnesota Statute 216E.03, subdivision 2.

3. The Project is a Large Energy Facility under Minnesota Statute 216B.2421, and requires a Certificate of Need from the Commission.

4. The Project qualifies for review under the Alternative Review Process of Minnesota Statute 216E.04 and Minnesota Rules parts 4400.2000 to 4000.2950.

5. The Applicant, the DOC and the PUC have complied with all procedural requirements required by law.

6. The DOC has completed an Environmental Assessment on this Project as required by Minnesota Statute 216E.04, subdivision 5, Minnesota Rule 4400.2750.

7. The PUC has considered all the pertinent factors relative to its determination of whether a Route Permit should be approved as required by Minnesota Statute 216E.03, subdivision 7 and Minnesota Rule 4410.3150.

8. The conditions included in the Route Permit are reasonable and appropriate.

Based on the Findings of Fact and Conclusions contained herein and the entire record of this proceeding, the PUC hereby makes the following:

**ORDER**

A Route Permit is hereby issued to OTP to rebuild to 115 kV specifications an existing 41.6kV transmission line from the Appleton Substation to the Canby Substation and to expand the existing Dawson Substation in Swift, Lac Qui Parle and Yellow Medicine Counties, Minnesota. The route shall follow OTP's existing 41.6 kV route, subject to conditions in the attached Route Permit. The route begins at the Appleton Substation in the northwest corner of the city of Appleton, runs south, following section lines for three miles paralleling MN State Highway 119. The line then cuts diagonally across section 33 of Appleton Township in Swift County and crosses the Minnesota River, where it again travels due south along MN State Highway 119 about twenty miles to the Dawson Substation. From the Dawson substation the line turns due west for about six miles along U.S. Highway 212. The line turns due south at the intersection of highway 212 and U.S. Highway 75. The line parallels U.S. Highway 75 for about twelve miles, where it cuts diagonally through Section 19 of Oshkosh Township in Yellow Medicine County and runs to the Canby Substation. The Route Permit shall be issued in the form attached hereto, with a map showing the approved route.

Approved and adopted this \_\_\_\_\_ day of April, 2007.

BY ORDER OF THE COMMISSION

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Burl W. Haar,  
Executive Secretary

(SEAL)

**PROPOSED ROUTE PERMIT FOR CONSTRUCTION OF A  
HIGH VOLTAGE TRANSMISSION LINE**

**IN**

**SWIFT, LAC QUI PARLE, & YELLOW MEDICINE  
COUNTIES, MINNESOTA**

**ISSUED TO**

**Otter Tail Power Company**

**PUC DOCKET NO. E017/TL-06-1265**

In accordance with the requirements of Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 4400, this Route Permit is hereby issued to:

**Otter Tail Power Company**

Otter Tail Power Company is authorized by this route permit to rebuild a 42 mile, single circuit, transmission line from 41.6 kilovolts to 115 kilovolts, expand Dawson Substation, and add associated facilities at the Appleton, Louisburg Junction, and Canby Substations to accommodate the new transmission line as proposed in the Company's Route Permit Application, dated September 7, 2006. This Route Permit also authorizes the removal of the Appleton TV Substation, and the removal of approximately two miles of 41.6 kilovolt transmission line east of MN State Highway 119 in Appleton Township.

The transmission line shall be built within the route identified in this permit and as portrayed on the attached official route map, and in compliance with the conditions specified in this permit.

Approved and adopted this \_\_\_\_\_ day of April, 2007

BY ORDER OF THE COMMISSION

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Burl W. Haar,  
Executive Secretary

(SEAL)

## **I. ROUTE PERMIT**

The Minnesota Public Utilities Commission (PUC) hereby issues this route permit to Otter Tail Power Company pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 4400. This permit authorizes the Otter Tail Power Company (OTP or Permittee) to rebuild a 42 mile, 46.1 kilovolt (kV) high voltage transmission line (HVTL) to 115 kV specifications, expand the Dawson Substation, and add associated electrical equipment necessary for connection of the permitted line at the Appleton, Louisburg Junction and Canby substations.

## **II. PROJECT DESCRIPTION**

OTP is authorized to rebuild a 42 mile, 41.6 kV transmission line to 115 kV specifications, expand its Dawson Substation, and add associated electrical equipment necessary for connection of the permitted line at the Appleton, Louisburg Junction and Canby substations.

The 115 kV route shall follow the same route as the existing 41.6 kV transmission line.

The transmission line authorized by this permit will utilize the conductors that are currently in place on the 41.6 kV HVTL. The existing conductor is a mix of 266.8 (18/1) aluminum conductor steel reinforced (ACSR), 266.8 (26/7) ACSR, and 266.8 (7 str.) all aluminum (AA) conductors. The line will be constructed on wood transmission structures (poles) with horizontal post insulators. OTP is authorized to place existing, new, or rebuilt distribution lines onto the 115 kV structures along the route, a practice called an “underbuild”. Specialty transmission line structures including, but not limited to, steel or laminated wood post structures on concrete foundations are authorized for long spans, road or waterway crossings, and when circumstances require.

## **III. DESIGNATED ROUTE**

The route designated by the Commission in this permit comprises the segments as described in detail below, as analyzed in the EA, and shown on the Official Route Maps attached to this permit. The existing 41.6 kV transmission line represents the centerline for the approved 115 kV route. A route width of 100 feet on either side of the stated route centerline is approved, with the exception of the Lac Qui Parle Wildlife Management Area (WMA) and the Minnesota River Crossing where the route width will be limited to 50 feet on either side of the centerline. The approved right-of-way (ROW) widths for the selected segments are up to 40 feet where the route is adjacent to existing roadway ROW, and up to 80 feet where the route travels “cross-country.”

**Segment 1 (Appleton Substation to Dawson Substation):** The route follows the same route as the existing 41.6 kV line follows, with the exception of the connection to the relocated Canby substation. The route begins at the Appleton Substation in the northwest corner of the city of Appleton (northeast corner of section 16 in Appleton Township). From the Appleton substation the line follows section lines due south for 3 miles, paralleling MN State Highway 119. The line then intersects with MN State Highway 119, following the Highway where it cuts diagonally across Section 33 of Appleton

Township and crosses the Minnesota River, where it again travels due south along MN State Highway 119 about 20 miles to the Dawson Substation.

**Segment 2 (Dawson Substation to Canby Substation):** No physical changes will occur along the southern half of the line, with the exception of one mile of the line west of the Dawson substation and east of U.S. Highway 75 and a short segment near the relocated Canby Substation. From the Dawson substation the line turns due west for about 6 miles along U.S. Highway 212, then turns due south at the intersection of Highway 212 and U.S. Highway 75. The line parallels Highway 75 for about 12 miles, where it cuts diagonally through Section 19 of Oshkosh Township in Yellow Medicine County and runs to the relocated Canby Substation located to the west of Highway 75 in the southwest corner of Section 19 of Oshkosh Township.

**Associated Facilities:** OTP has proposed relocating the Canby Substation as part of the Big Stone Transmission Project, PUC Docket No. 05-1275. The Appleton to Canby HVTL will be routed adjacent to the new substation site for connection with that facility upon its completion. The Dawson Substation will be expanded to accommodate the higher voltage line. Equipment to accommodate the interconnection of the new transmission line at the Appleton and Louisburg Junction substations is permitted.

#### IV. PERMIT CONDITIONS

The Permittee shall comply with the following conditions during construction of the transmission line and associated facilities and the life of this permit.

**A. Plan and Profile.** At least 14 calendar days before right-of-way preparation for construction begins, the Permittee shall provide the PUC with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, cleanup, and restoration for the transmission line. The Permittee may not commence construction until the 14 days has expired or until the PUC has advised the Permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this permit. If the Permittee intend to make any significant changes in its plan and profile or the specifications and drawings after submission to the PUC, the Permittee shall notify the PUC at least five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this permit.

#### **B. Construction Practices.**

**1. Application.** The Permittee shall follow those specific construction practices and material specifications described in the OTP application to the PUC for a route permit, dated September 7, 2006, and as described in the associated Environmental Assessment (EA) unless this permit establishes a different requirement in which case this permit shall prevail.

**2. Field Representative.** At least 10 days prior to commencing construction, the Permittee shall advise the PUC in writing of the person or persons designated to be the field representative for the Permittee with the responsibility to oversee compliance with

the conditions of this Permit during construction. This person's address, phone number, and emergency phone number shall be provided to the PUC, which may make the information available to local residents and public officials and other interested persons. The Permittee may change its field representative at any time upon written notice to the PUC.

**3. Cleanup.** All waste and scrap that is the product of construction shall be removed from the area and properly disposed of upon completion of each task. Personal litter, including bottles, cans, and paper, from construction activities shall be removed on a daily basis.

**4. Vegetation Removal.** The Permittee shall minimize the number of trees to be removed in selecting the right-of-way. As part of construction, low growing brush or tree species are allowable at the outer limits of the easement area. Taller tree species that endanger the safe and reliable operation of the transmission facility need to be removed. To the extent practical, low growing vegetation that will not pose a threat to the transmission facility or impede construction should remain in the easement area.

**5. Erosion Control.** The Permittee shall implement reasonable measures to minimize runoff during construction and shall plant or seed non-agricultural areas that were disturbed where structures are installed.

**6. Temporary Work Space.** The Permittee shall limit temporary easements to special construction access needs and additional staging or lay-down areas required outside of the authorized ROW.

**7. Restoration.** The Permittee shall restore all temporary work spaces, access roads, abandoned ROW, and other private lands affected by construction of the transmission line. Restoration must be compatible with the safe operation, maintenance, and inspection of the transmission line. Within 60 days after completion of all restoration activities, the Permittee shall advise the PUC in writing of the completion of such activities.

**8. Notice of Permit.** The Permittee shall inform all employees, contractors, and other persons involved in the construction of the transmission line of the terms and conditions of this permit.

**C. Periodic Status Reports.** Upon request, the Permittee shall report to the PUC on progress regarding finalization of the route, design of structures, and construction of the transmission line. The Permittee need not report more frequently than quarterly.

**D. Complaint Procedure.** Prior to the start of construction, the Permittee shall submit to the PUC the company's procedures to be used to receive and respond to complaints. The procedures shall be in accordance with the requirements set forth in the complaint procedures attached to this permit.

**E. Notification to Landowners.** The Permittee shall provide all affected landowners with a copy of this permit at the time of the first contact with the landowners after issuance of this permit.

**F. Completion of Construction.**

**1. Notification to PUC.** At least three days before the line is to be placed into service, the Permittee shall notify the PUC of the date on which the line will be placed into service and the date on which construction was complete.

**2. As-Builts.** The Permittee shall submit copies of all the final as-built plans and specifications developed during the project to the PUC.

**3. GPS Data.** Within 60 days after completion of construction, the Permittee shall submit to the PUC, in a mutually agreeable data format with the PUC, geo-spatial information (GIS compatible maps, GPS coordinates, etc.) for all above ground structures associated with the transmission lines, each switch, and each substation connected.

**G. Electrical Performance Standards.**

**1. Grounding.** The Permittee shall design, construct, and operate the transmission line in such a manner that the maximum steady-state short-circuit current shall be limited to five milliamperes rms alternating current between the ground and any non-stationary object within the ROW including but not limited to, large motor vehicles and agricultural equipment. All fixed metallic objects on or off the ROW, except electric fences that parallel or cross the right-of-way, shall be grounded to the extent necessary to limit the short circuit current between ground and the object so as not to exceed one milliamperes rms under steady state conditions of the transmission line and to comply with the ground fault conditions specified in the National Electric Safety Code.

**2. Electric Field.** The transmission line shall be designed, constructed, and operated in such a manner that the electric field measured one meter above ground level immediately below the transmission line shall not exceed 8.0 kV/m rms.

**3. Interference with Communication Devices.** If interference with radio or television, satellite or other communication devices is caused by the presence or operation of the transmission line, the Permittee shall take whatever action is prudently feasible to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the line.

**H. Other Requirements.**

**1. Applicable Codes.** The Permittee shall comply with applicable North American Electric Reliability Council (NERC) construction standards and requirements of the National Electric Safety Code (NESC) including clearances to ground, clearance to crossing utilities, clearance to buildings, ROW widths, erecting power poles, and stringing of transmission line conductors.

**2. Other Permits.** The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the project and comply with the conditions of these permits. A list of the required permits is included in the permit application and the environmental assessment. The Permittee shall submit a copy of such permits to the PUC upon request.

**3. Protection of Sensitive Resources.** Specific mitigation measures are necessary to protect the sensitive resources that are impacted by the construction and operation of this project as outlined below:

**A. Avian Mitigation.** Prior to construction the Permittee shall obtain concurrence from the Minnesota Department of Natural Resources on appropriate mitigation measures to address avian impacts during the construction and operation of the transmission line.

**B. Rare Species and Natural Plant Communities.** The Permittee shall follow Best Management Practices as specified by the Minnesota Department of Natural Resources and the U.S. Fish and Wildlife Service to protect rare species and native plant communities potentially affected by the construction and operation of the transmission line.

**4. Pre-emption.** Pursuant to Minnesota Statutes 216E.10, subdivisions 1 and 2, this route permit shall be the sole route approval required to be obtained by the Permittee and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose government.

**I. Delay in Construction.** If the Permittee has not commenced construction or improvement of the route within four years after the date of issuance of this permit, the PUC shall consider suspension of the permit in accordance with Minnesota Rules part 4400.3750.

## **V. PERMIT AMENDMENT**

The permit conditions in Section IV may be amended at any time by the PUC. Any person may request an amendment of the conditions of this permit by submitting a request to the PUC in writing describing the amendment sought and the reasons for the amendment. The PUC will mail notice of receipt of the request to the Permittee. The PUC may amend the conditions after affording the Permittee and interested persons such process as is required.

## **VI. TRANSFER OF PERMIT**

The Permittee may request at any time that the PUC transfer this permit to another person or entity. The Permittee shall provide the name and description of the person or entity to whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer. The person to whom the permit is to be transferred shall provide the PUC with such information as the PUC shall require to determine whether the new permittee can comply with the conditions of the permit. The PUC may

authorize transfer of the permit after affording the Permittee, the new permittee, and interested persons such process as is required.

## **VII. REVOCATION OR SUSPENSION OF THE PERMIT**

The PUC may initiate action to revoke or suspend this permit at any time. The PUC shall act in accordance with the requirements of Minnesota Rules part 4400.3950 to revoke or suspend the permit.

**PUBLIC UTILITIES COMMISSION  
COMPLAINT REPORT PROCEDURES FOR  
HIGH VOLTAGE TRANSMISSION LINES**

1. Purpose

To establish a uniform and timely method of reporting complaints received by the Permittees concerning the permit conditions for right-of-way preparation, construction, cleanup and restoration, and resolution of such complaints.

2. Scope

This reporting plan encompasses complaint report procedures and frequency.

3. Applicability

The procedures shall be used for all complaints received by the Permittees.

4. Definitions

Complaint - A statement presented by a person expressing dissatisfaction, resentment, or discontent as a direct result of right-of-way preparation, construction, cleanup and restoration. Complaints do not include requests, inquiries, questions, or general comments.

Substantial Complaint - Any complaints submitted to the Permittees in writing that, if substantiated, could result in permit modification or suspension pursuant to the applicable regulations.

Person - An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private, however organized.

5. Responsibilities

Everyone involved with right-of-way preparation, construction, cleanup and restoration is responsible to ensure expeditious and equitable resolution of all complaints. It is therefore, necessary to establish a uniform method for documenting and handling complaints directed to this project. The following procedures will satisfy this requirement:

- A. The Permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:
1. Name of the permittee and project.
  2. Name of complainant, address and phone number.
  3. Precise property description or tract number (where applicable).
  4. Nature of complaint.
  5. Response given.
  6. Name of person receiving complaint and date of receipt.
  7. Name of person reporting complaint to the DOC and phone number.
  8. Final disposition and date.
- B. The Permittee shall assign an individual to summarize complaints for transmittal to the PUC.

6. Requirements

The Permittee shall report all complaints to the DOC according to the following schedule:

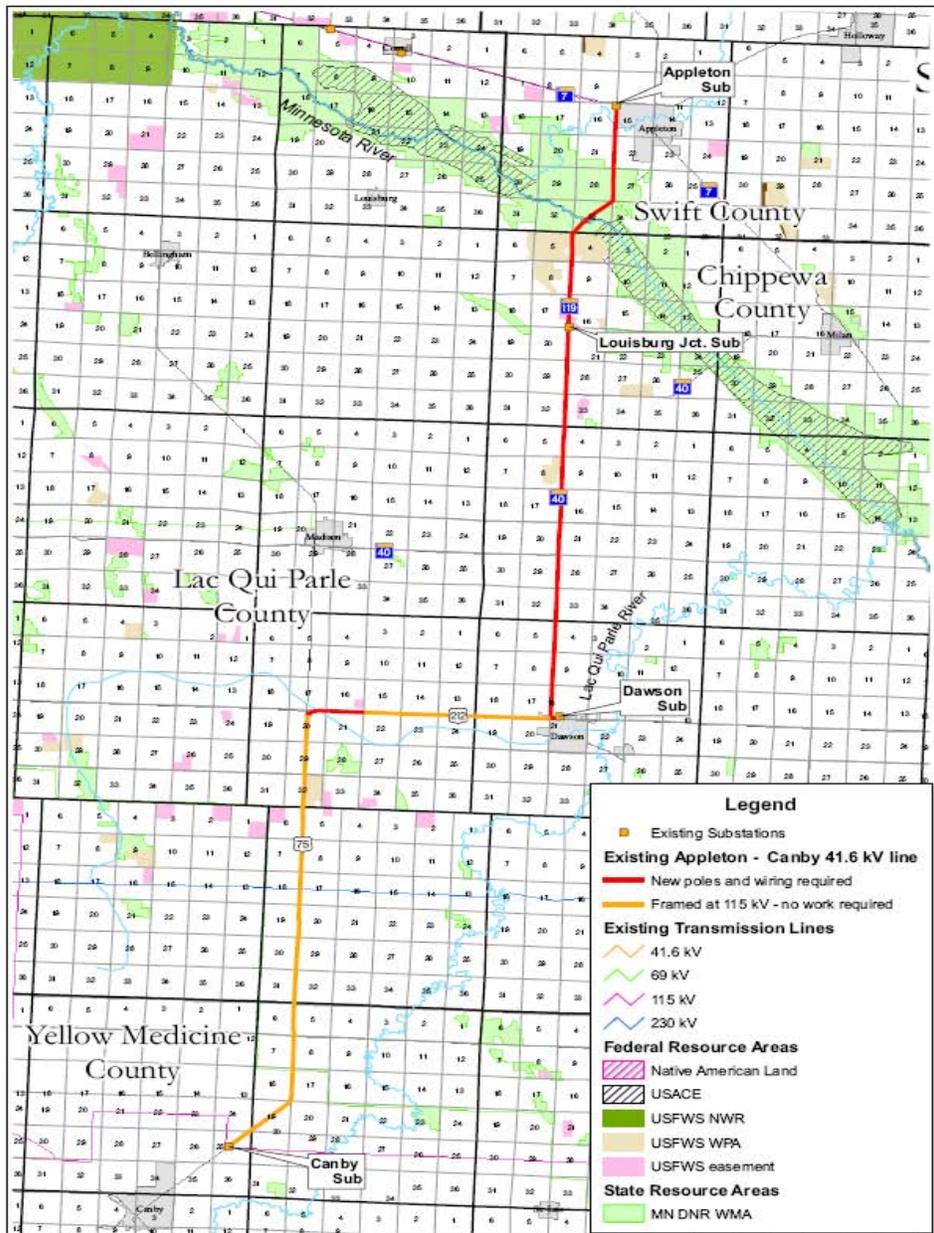
Immediate Reports - All substantial complaints shall be reported to the DOC by phone the same day received (or on the following working day for complaints received after working hours) at 651-296-2096.

Monthly Reports

By the 15th of each month, a summary of all complaints, including substantial complaints received or resolved during the proceeding month, and a copy of each complaint shall be sent to Minnesota Department of Commerce, 85 East 7<sup>th</sup> Place, Suite 500, Saint Paul, MN 55101.

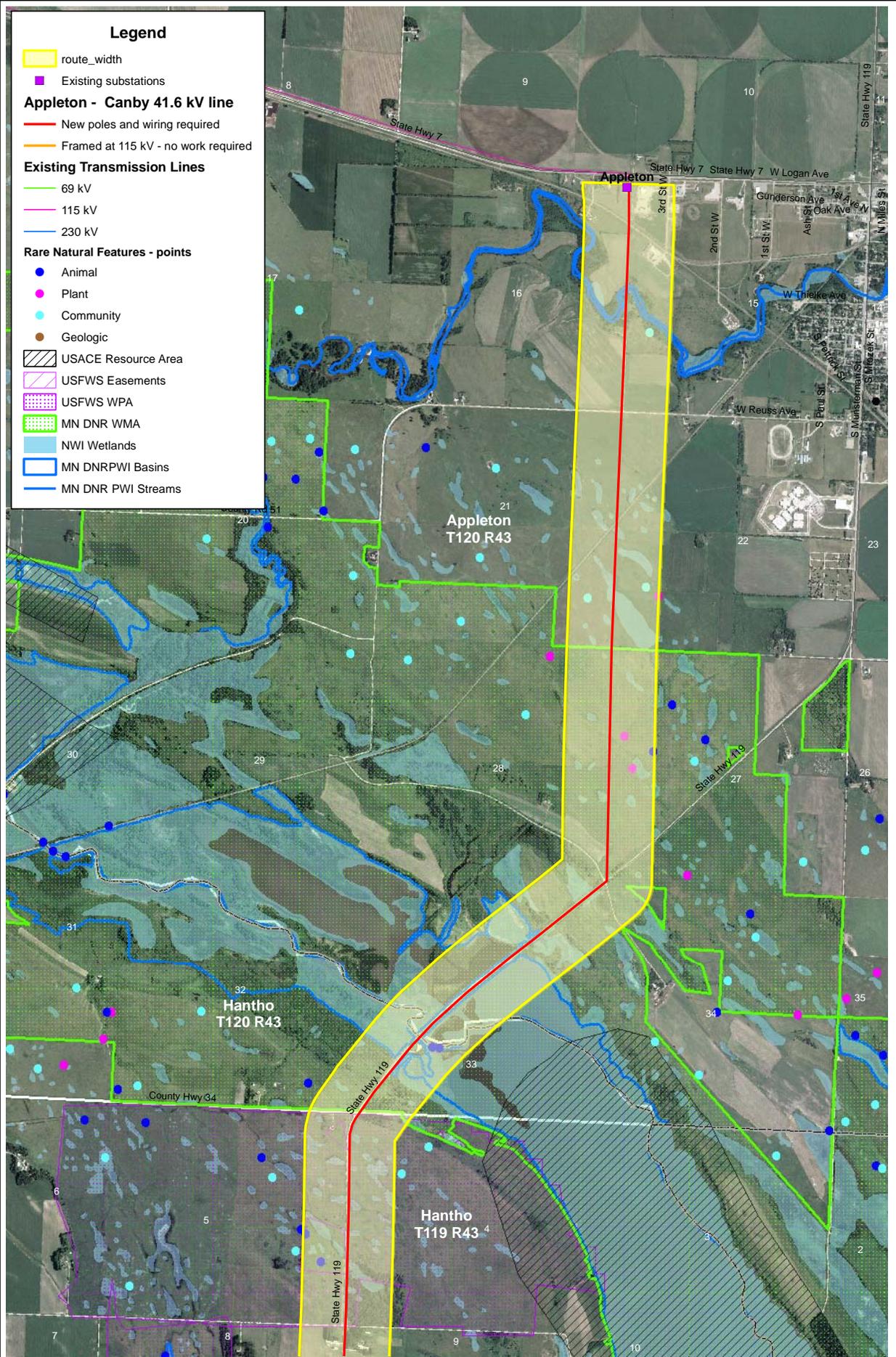
7. Complaints Received by the DOC

Copies of complaints received directly by the DOC from aggrieved persons regarding right-of-way preparation, construction, cleanup and restoration shall be promptly sent to the Permittee.



Project Overview Map  
 Appleton - Canby  
 Transmission Line Project

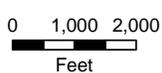




**Legend**

- route\_width
- Existing substations
- Appleton - Canby 41.6 kV line**
- New poles and wiring required
- Framed at 115 kV - no work required
- Existing Transmission Lines**
- 69 kV
- 115 kV
- 230 kV
- Rare Natural Features - points**
- Animal
- Plant
- Community
- Geologic
- USACE Resource Area
- USFWS Easements
- USFWS WPA
- MN DNR WMA
- NWI Wetlands
- MN DNR PWI Basins
- MN DNR PWI Streams

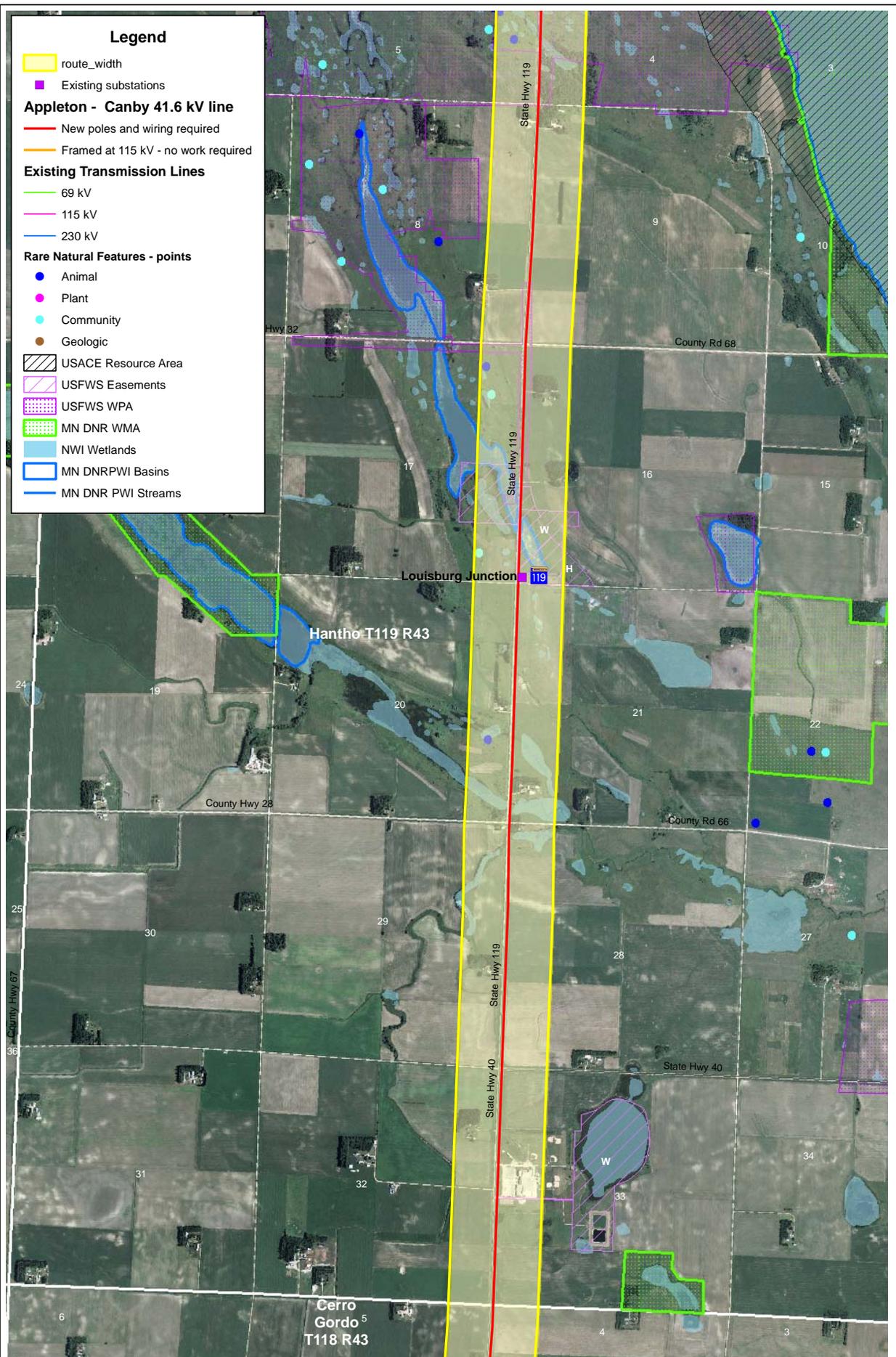
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Detailed Project Maps  
 Appleton - Canby  
 Transmission Line Project

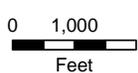
Map 1





- Legend**
- route\_width
  - Existing substations
- Appleton - Canby 41.6 kV line**
- New poles and wiring required
  - Framed at 115 kV - no work required
- Existing Transmission Lines**
- 69 kV
  - 115 kV
  - 230 kV
- Rare Natural Features - points**
- Animal
  - Plant
  - Community
  - Geologic
- USACE Resource Area**
- USACE Resource Area
- USFWS Easements**
- USFWS Easements
- USFWS WPA**
- USFWS WPA
- MN DNR WMA**
- MN DNR WMA
- NWI Wetlands**
- NWI Wetlands
- MN DNR PWI Basins**
- MN DNR PWI Basins
- MN DNR PWI Streams**
- MN DNR PWI Streams

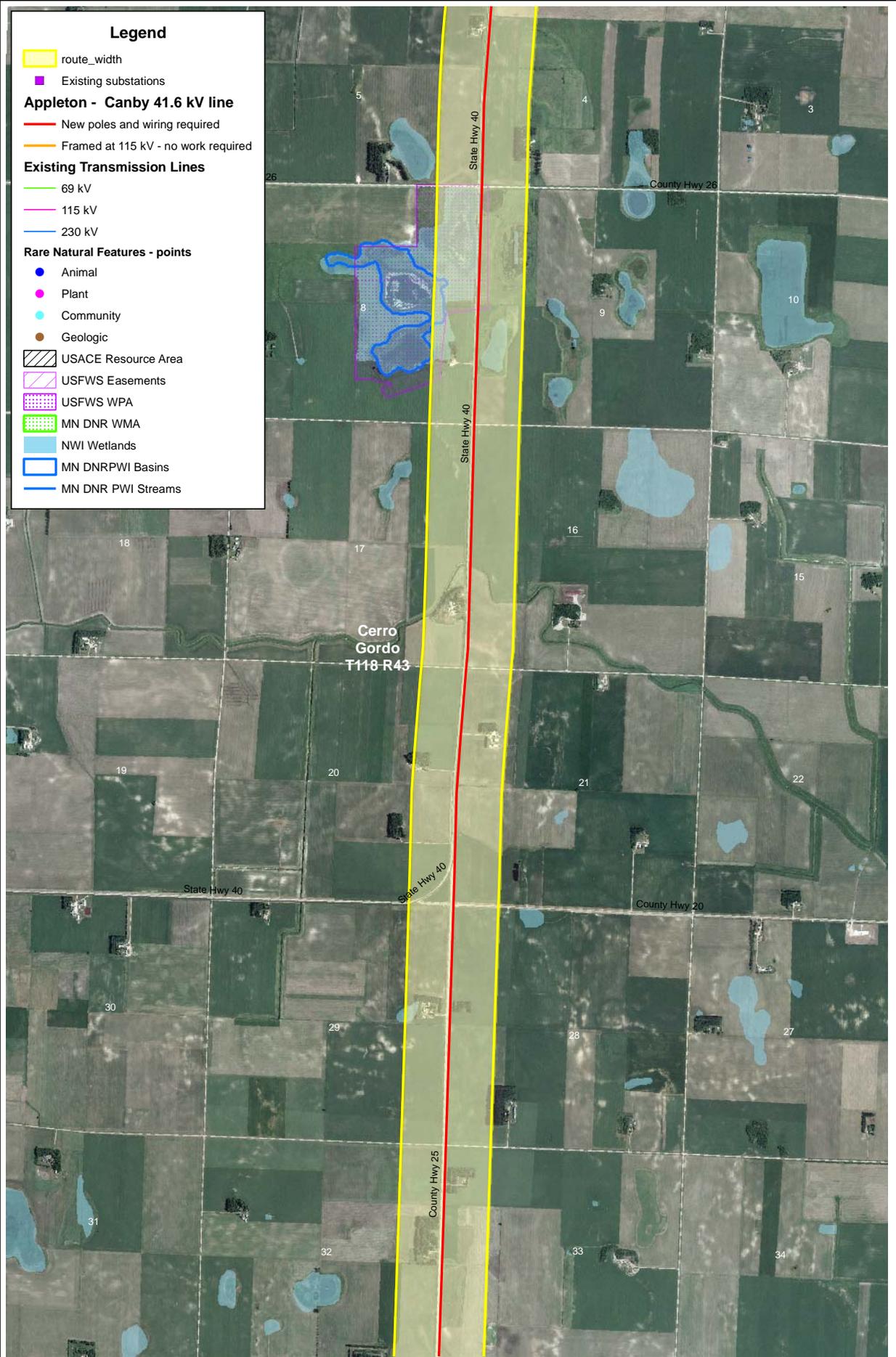
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Detailed Project Maps  
Appleton - Canby  
Transmission Line Project

Map 2





**Legend**

- route\_width
- Existing substations

**Appleton - Canby 41.6 kV line**

- New poles and wiring required
- Framed at 115 kV - no work required

**Existing Transmission Lines**

- 69 kV
- 115 kV
- 230 kV

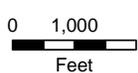
**Rare Natural Features - points**

- Animal
- Plant
- Community
- Geologic

**USACE Resource Area**

- USACE Resource Area
- USFWS Easements
- USFWS WPA
- MN DNR WMA
- NWI Wetlands
- MN DNR PWI Basins
- MN DNR PWI Streams

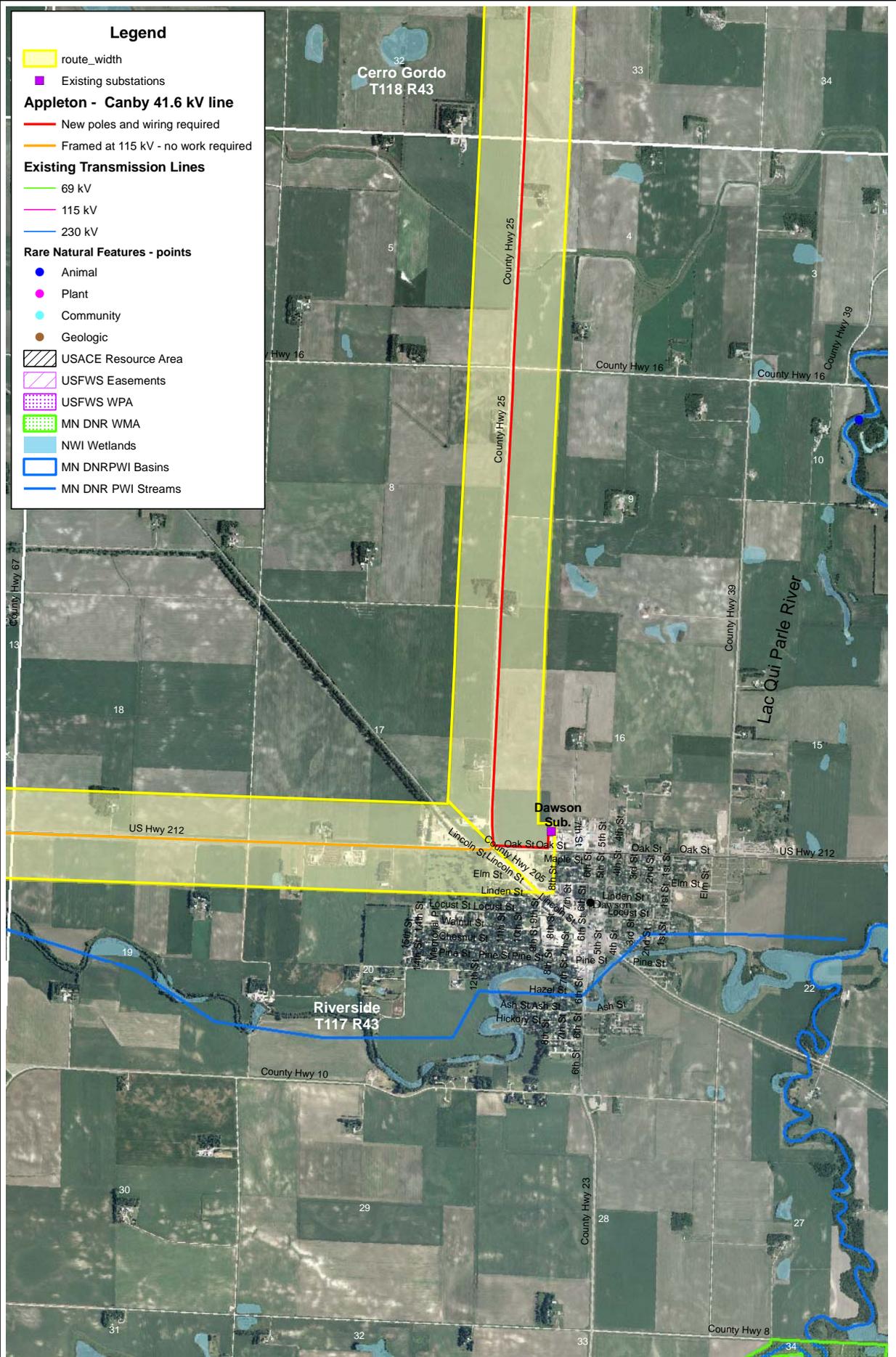
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Detailed Project Maps  
 Appleton - Canby  
 Transmission Line Project

Map 3





**Legend**

- route\_width
- Existing substations

**Appleton - Canby 41.6 kV line**

- New poles and wiring required
- Framed at 115 kV - no work required

**Existing Transmission Lines**

- 69 kV
- 115 kV
- 230 kV

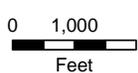
**Rare Natural Features - points**

- Animal
- Plant
- Community
- Geologic

**USACE Resource Area**

- USACE Resource Area
- USFWS Easements
- USFWS WPA
- MN DNR WMA
- NWI Wetlands
- MN DNR PWI Basins
- MN DNR PWI Streams

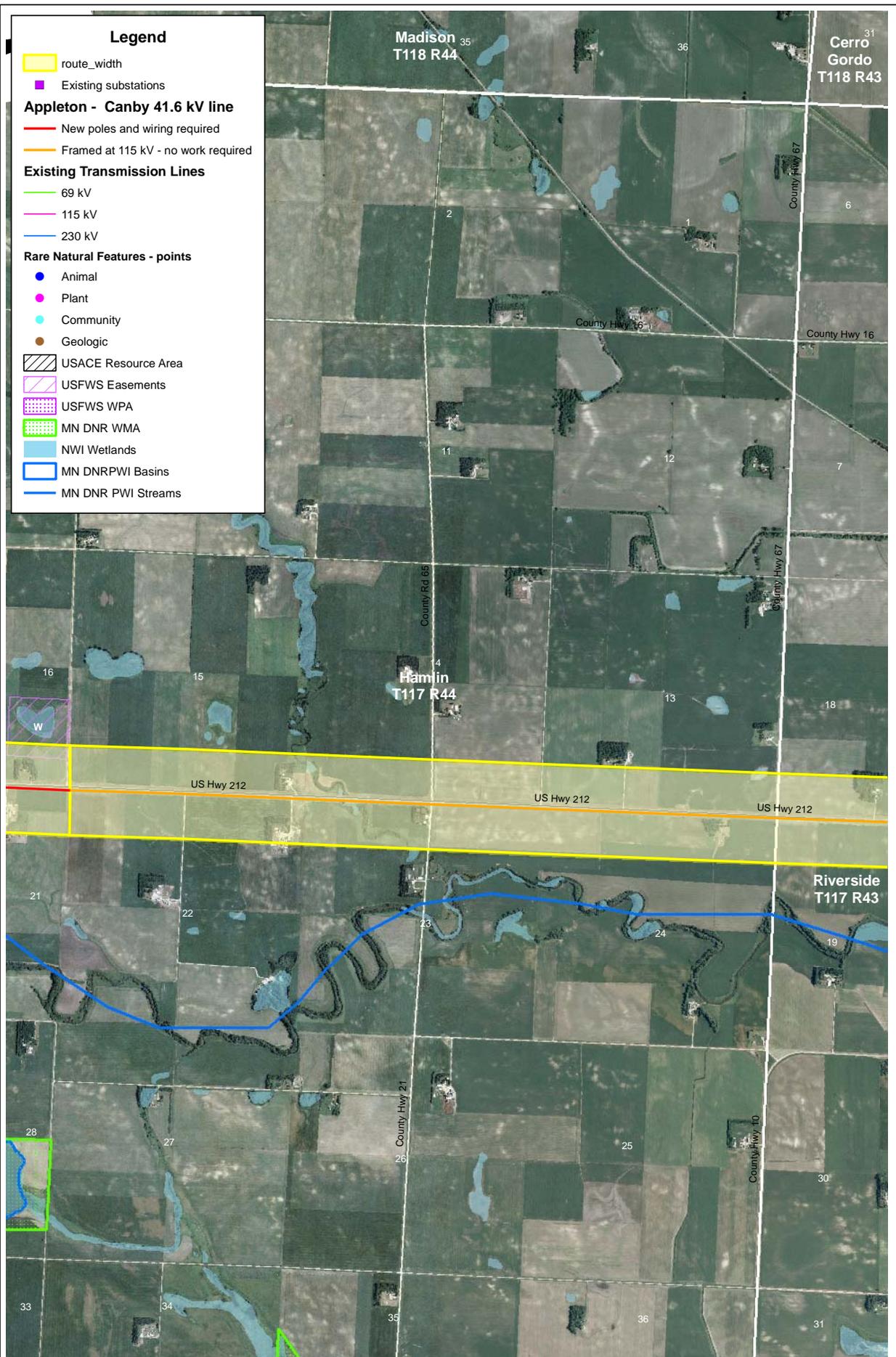
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Detailed Project Maps  
Appleton - Canby  
Transmission Line Project

Map 4

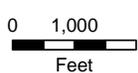




**Legend**

- route\_width
- Existing substations
- Appleton - Canby 41.6 kV line**
- New poles and wiring required
- Framed at 115 kV - no work required
- Existing Transmission Lines**
- 69 kV
- 115 kV
- 230 kV
- Rare Natural Features - points**
- Animal
- Plant
- Community
- Geologic
- USACE Resource Area
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- MN DNR PWI Streams

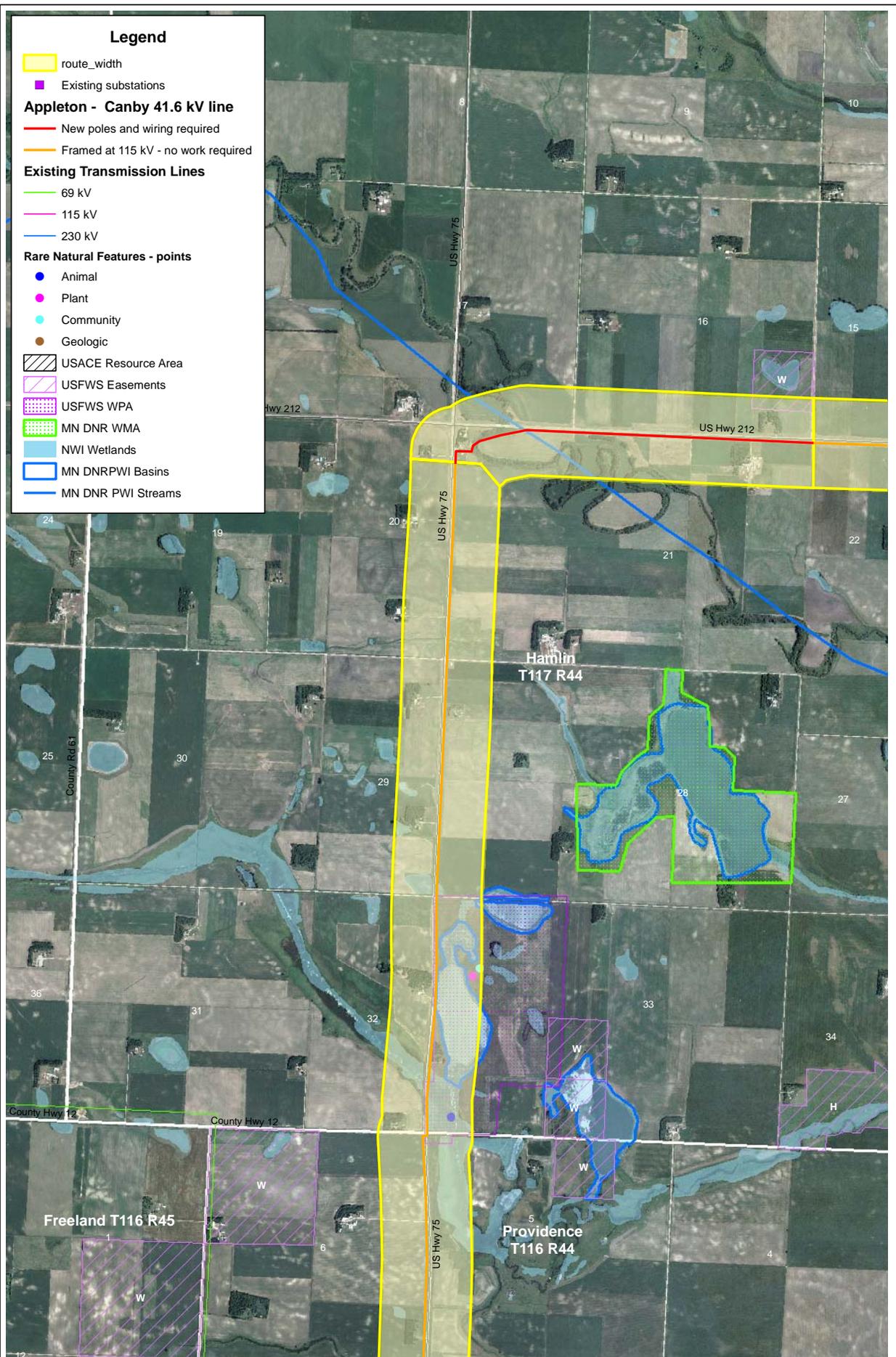
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Detailed Project Maps  
Appleton - Canby  
Transmission Line Project

Map 5





- Legend**
- route\_width
  - Existing substations
  - Appleton - Canby 41.6 kV line**
  - New poles and wiring required
  - Framed at 115 kV - no work required
  - Existing Transmission Lines**
  - 69 kV
  - 115 kV
  - 230 kV
  - Rare Natural Features - points**
  - Animal
  - Plant
  - Community
  - Geologic
  - USACE Resource Area
  - USFWS Easements
  - USFWS WPA
  - MN DNR WMA
  - NWI Wetlands
  - MN DNR PWI Basins
  - MN DNR PWI Streams

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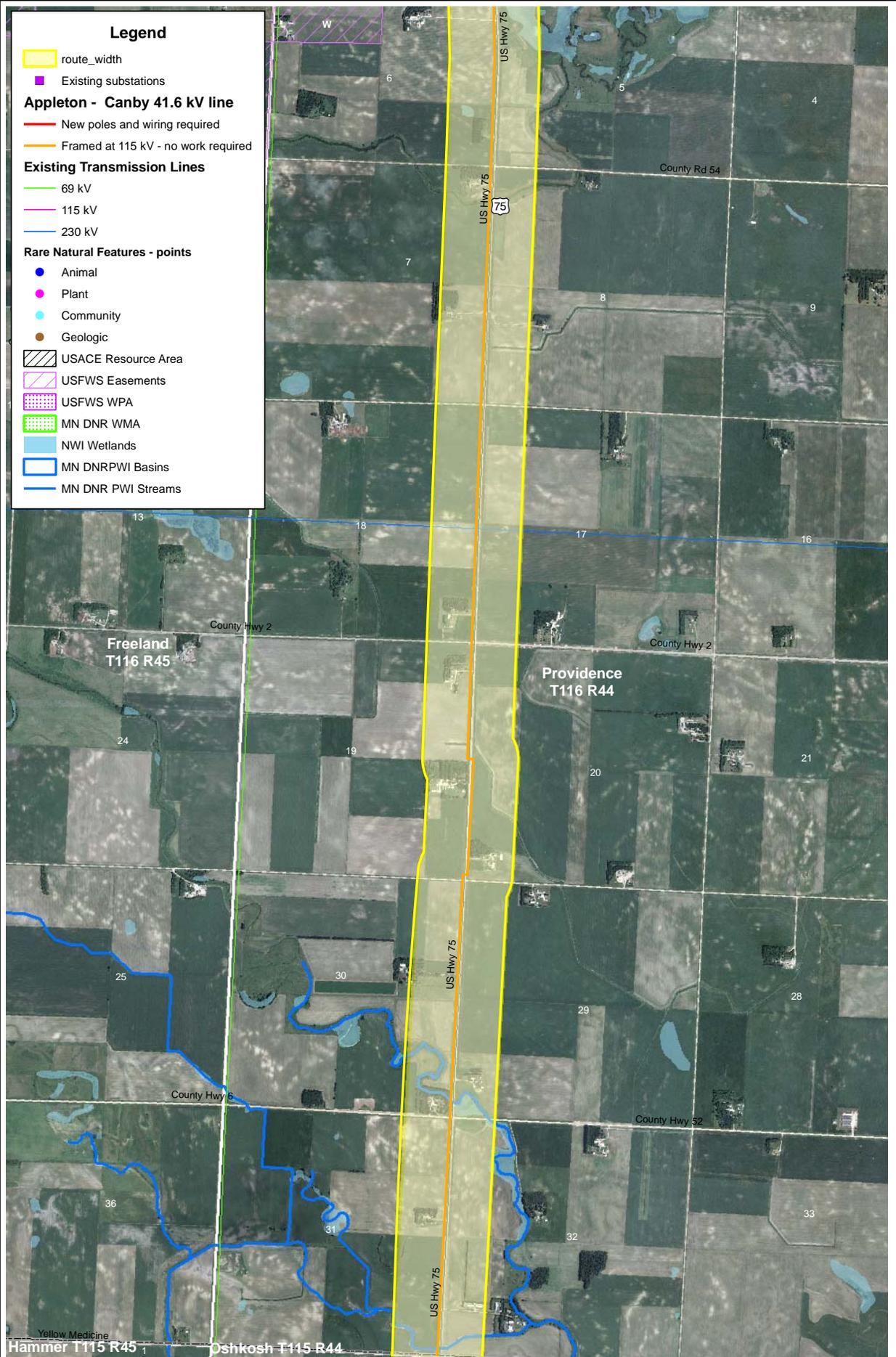
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Detailed Project Maps  
Appleton - Canby  
Transmission Line Project

Map 6





**Legend**

- route\_width
- Existing substations

**Appleton - Canby 41.6 kV line**

- New poles and wiring required
- Framed at 115 kV - no work required

**Existing Transmission Lines**

- 69 kV
- 115 kV
- 230 kV

**Rare Natural Features - points**

- Animal
- Plant
- Community
- Geologic

**USACE Resource Area**

- USACE Resource Area

**USFWS Easements**

- USFWS Easements

**USFWS WPA**

- USFWS WPA

**MN DNR WMA**

- MN DNR WMA

**NWI Wetlands**

- NWI Wetlands

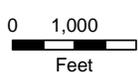
**MN DNR PWI Basins**

- MN DNR PWI Basins

**MN DNR PWI Streams**

- MN DNR PWI Streams

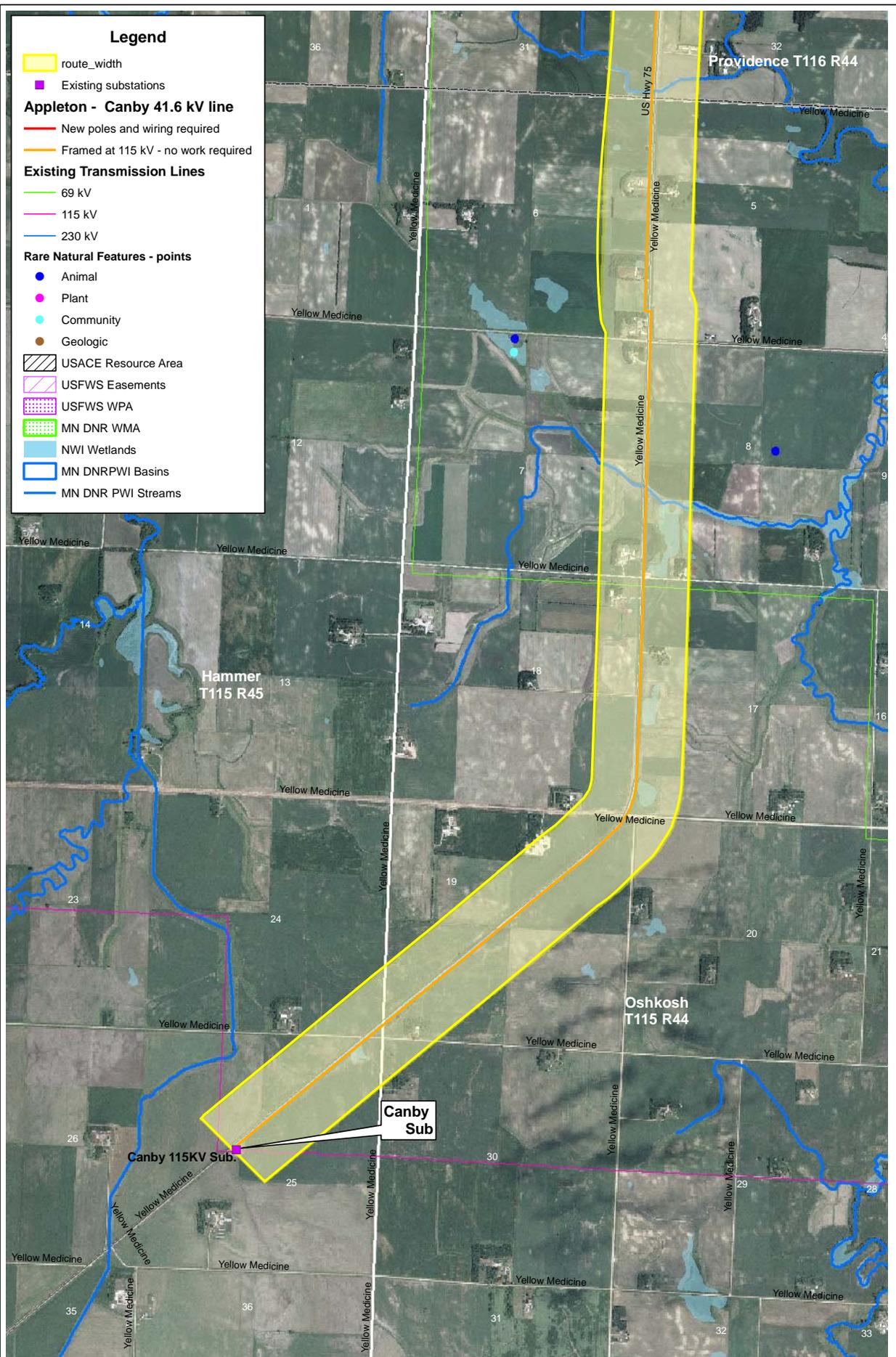
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Detailed Project Maps  
Appleton - Canby  
Transmission Line Project

Map 7





**Legend**

- route\_width
- Existing substations

**Appleton - Canby 41.6 kV line**

- New poles and wiring required
- Framed at 115 kV - no work required

**Existing Transmission Lines**

- 69 kV
- 115 kV
- 230 kV

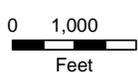
**Rare Natural Features - points**

- Animal
- Plant
- Community
- Geologic

**USACE Resource Area**

- USACE Resource Area
- USFWS Easements
- USFWS WPA
- MN DNR WMA
- NWI Wetlands
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- MN DNR PWI Streams

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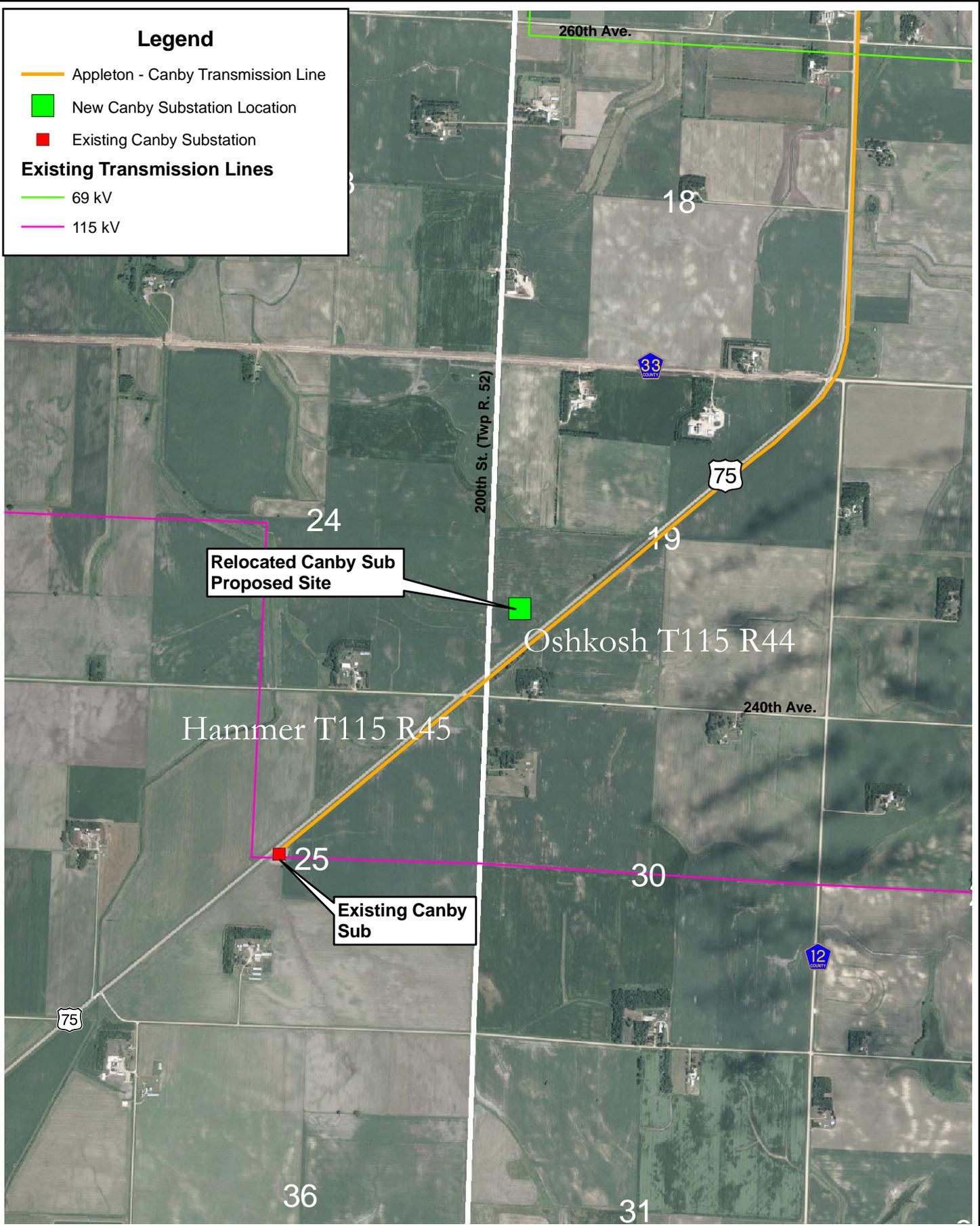
Detailed Project Maps  
 Appleton - Canby  
 Transmission Line Project

Map 8



### Legend

- Appleton - Canby Transmission Line
  - New Canby Substation Location
  - Existing Canby Substation
- Existing Transmission Lines**
- 69 kV
  - 115 kV



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Feet

Canby Substation Map  
Appleton - Canby  
Transmission Line Project

