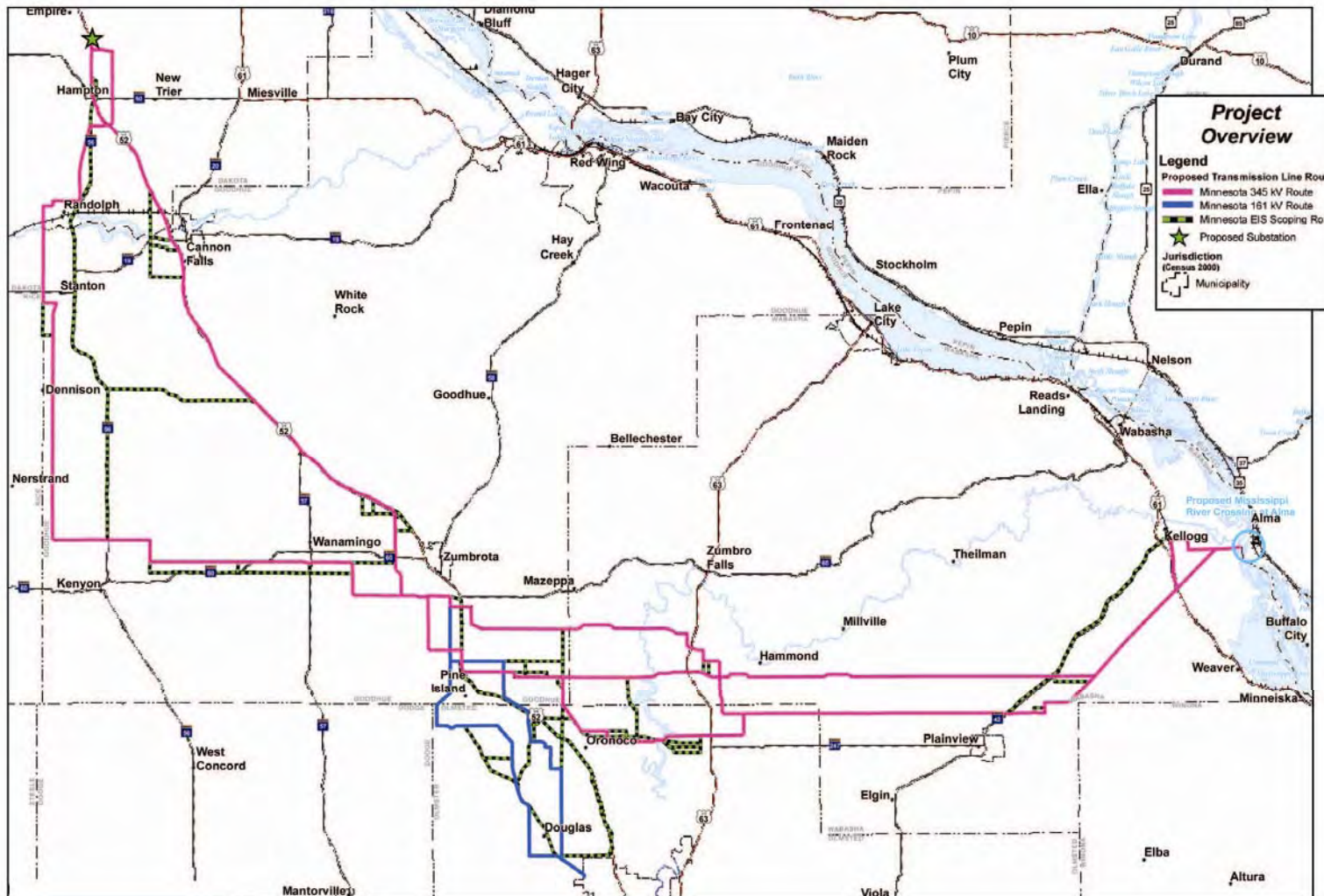


CapX2020

Oronoco Township Board Meeting

Monday, April 4, 2011



1648 Third Ave SE
Rochester, MN 55904
Phone: (507) 289.3919



State of Minnesota Office of Administrative Hearings



Public Utilities Commission

State of Minnesota

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Consumers

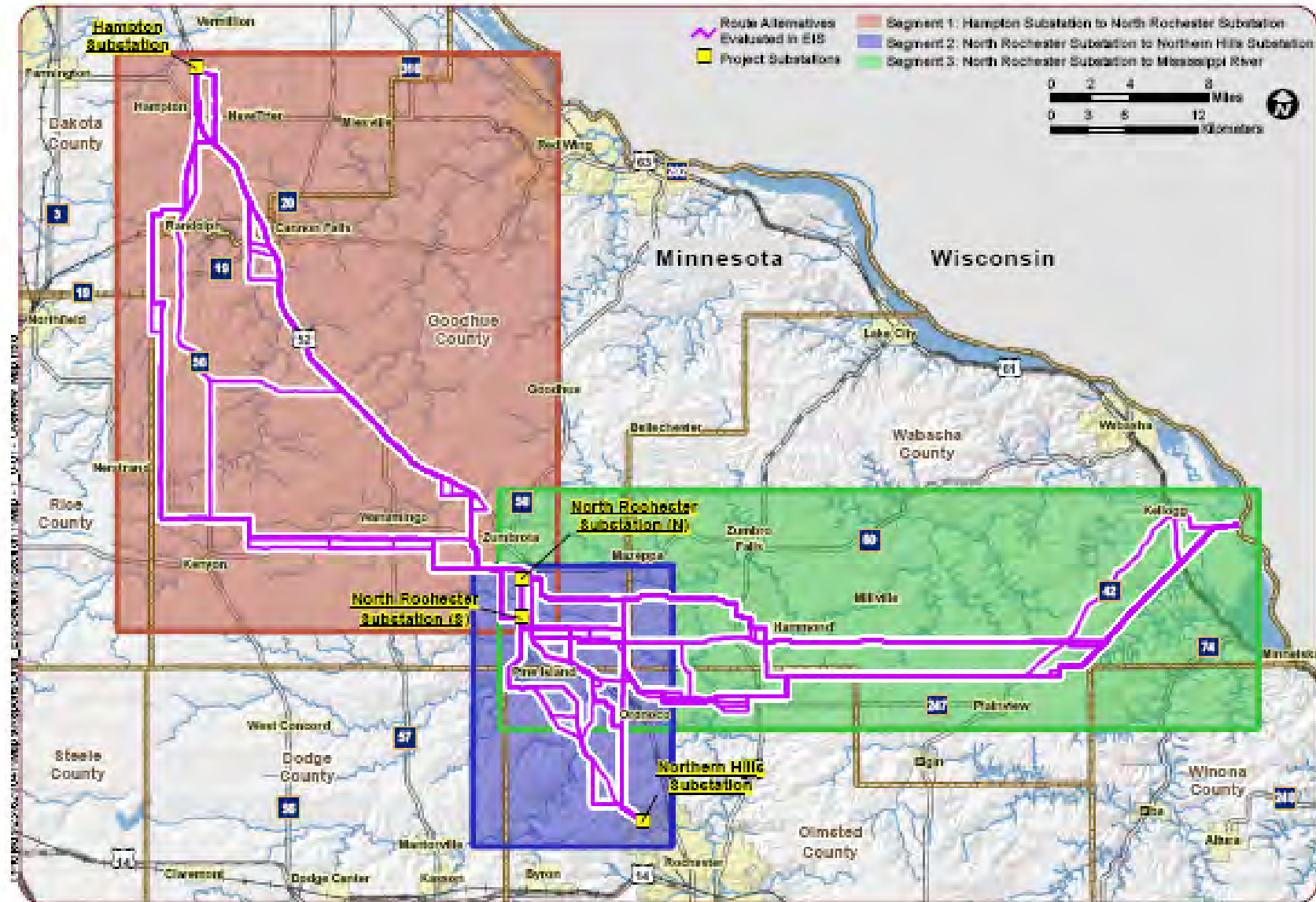
Electricity

Energy Facilities

Natural Gas

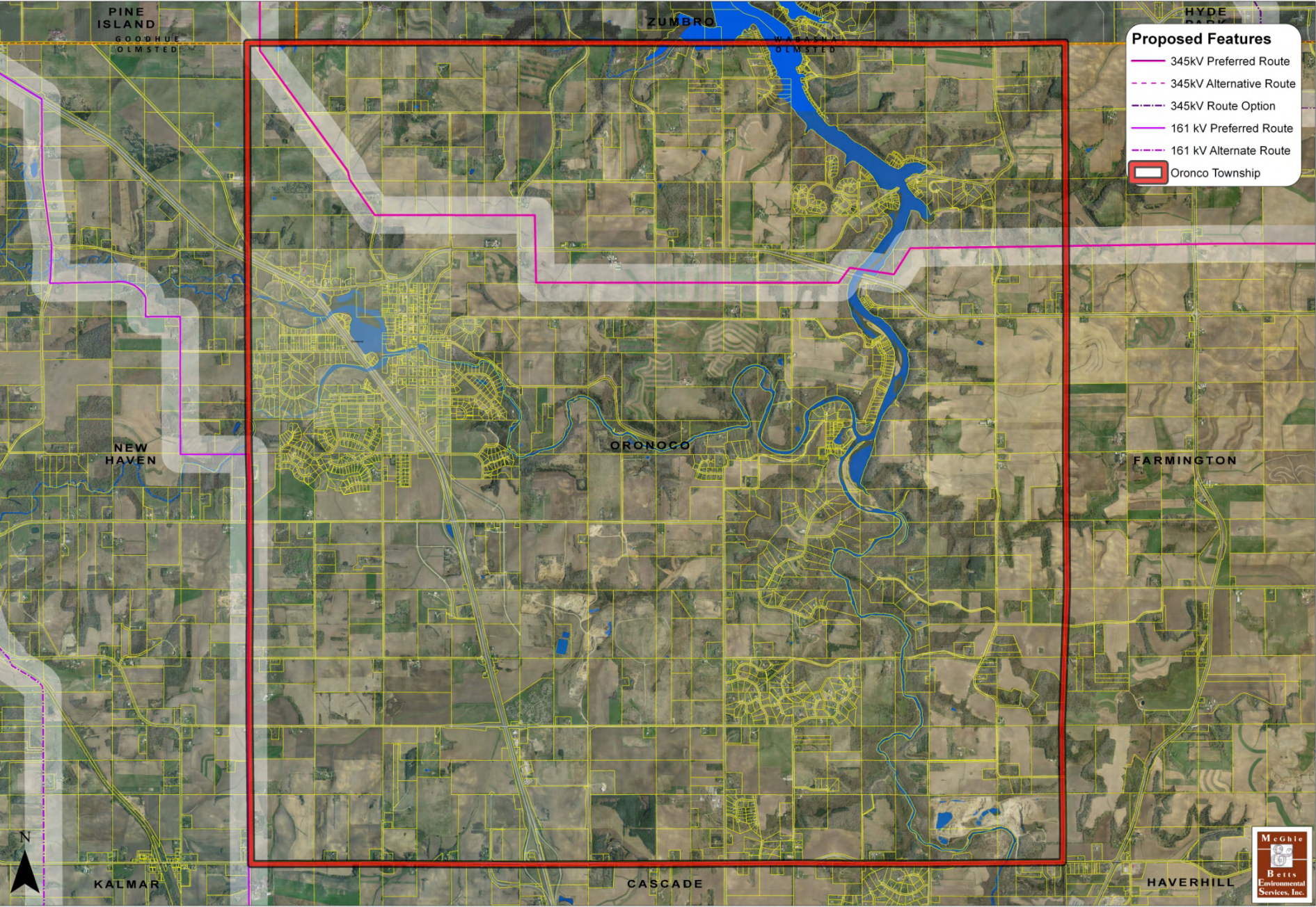
Telecom

Proposed Transmission Routes



Source: OES

CapX2020 Hampton - Rochester - La Crosse 345 kV Transmission Project



Applicability

- “large energy facility” - any high-voltage transmission line with a capacity of 200kV or more, and greater than 1,500 feet in length
Minn. Stat. § 216B.2421, subd.2 (2)
- The facility cannot be constructed or sited unless the Commission issues a Certificate of Need (CN)
Minn. Stat. § 216B.243, subd.2

History & Process of Public Utility Commission (PUC) Actions

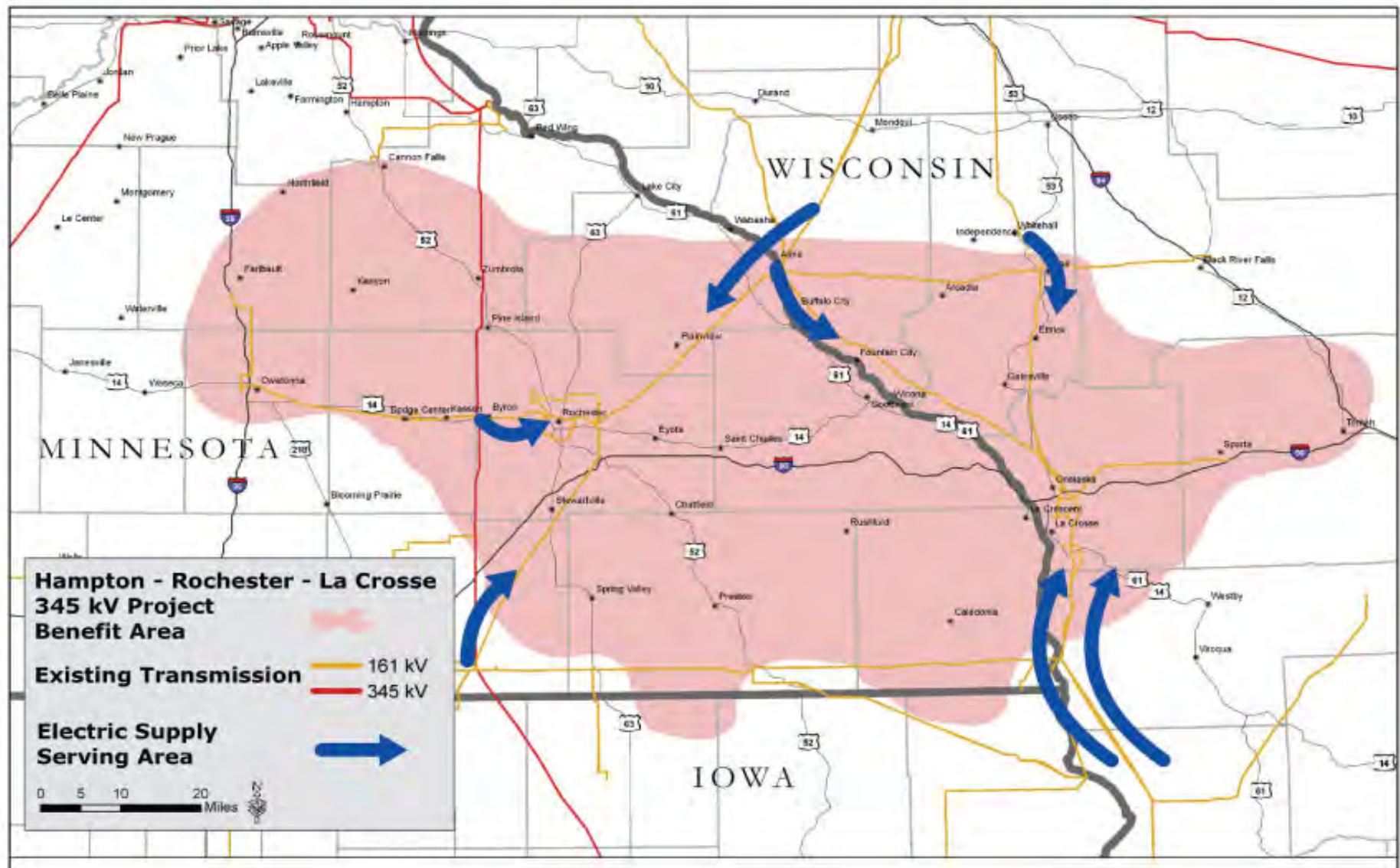
- Certificate of Need (CON) (Approved 5/22/09)
 - Justify the Project Need
- Route Permit Application (Submitted 1/15/11)
 - Review Preferred & Alternate Routes
 - Make determination of final route



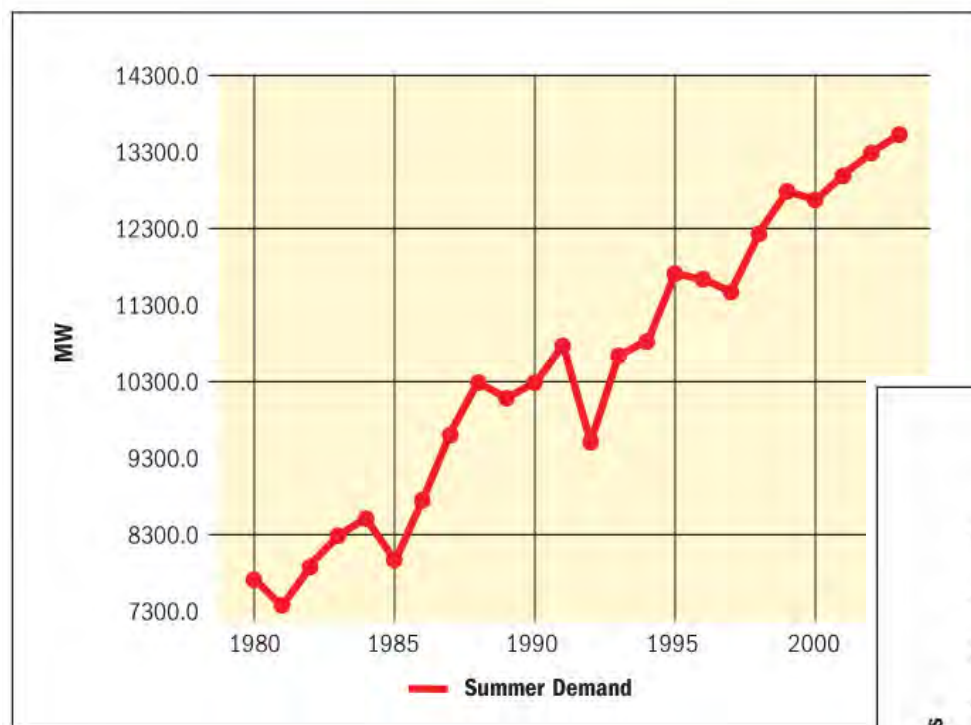
- Draft Environmental Impact Statement (EIS) (March 21, 2011)
 - Characterize, analyze, and compare routes and route segments based on environmental conditions

- Minnesota EIS → PUC)
- Federal EIS (MN & WI) → USDA Rural Utilities Service)

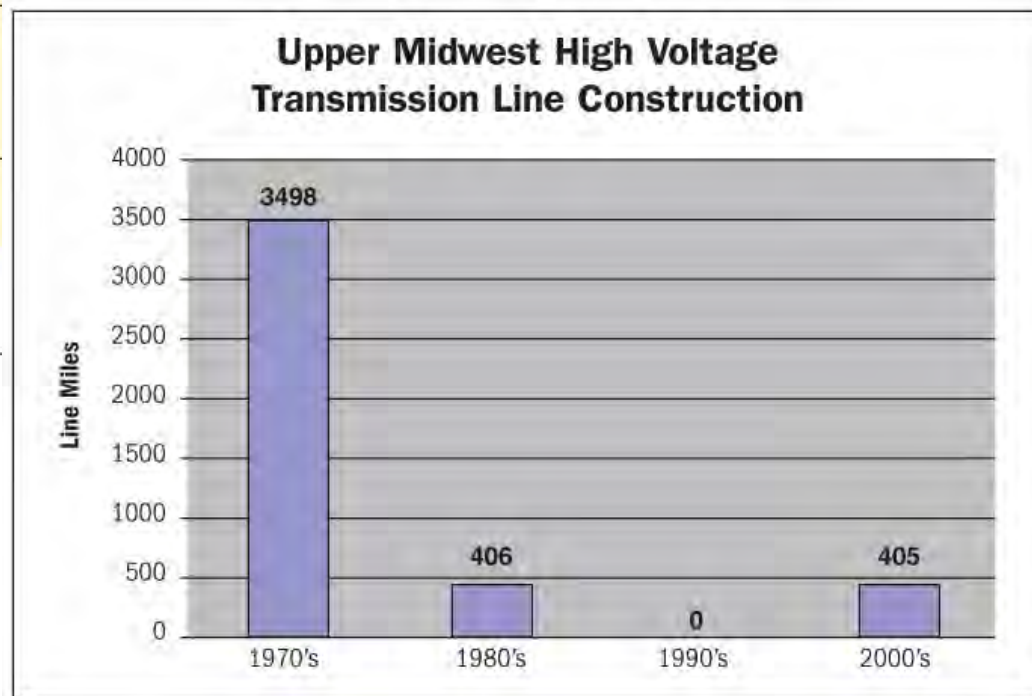
Increasing Community Reliability

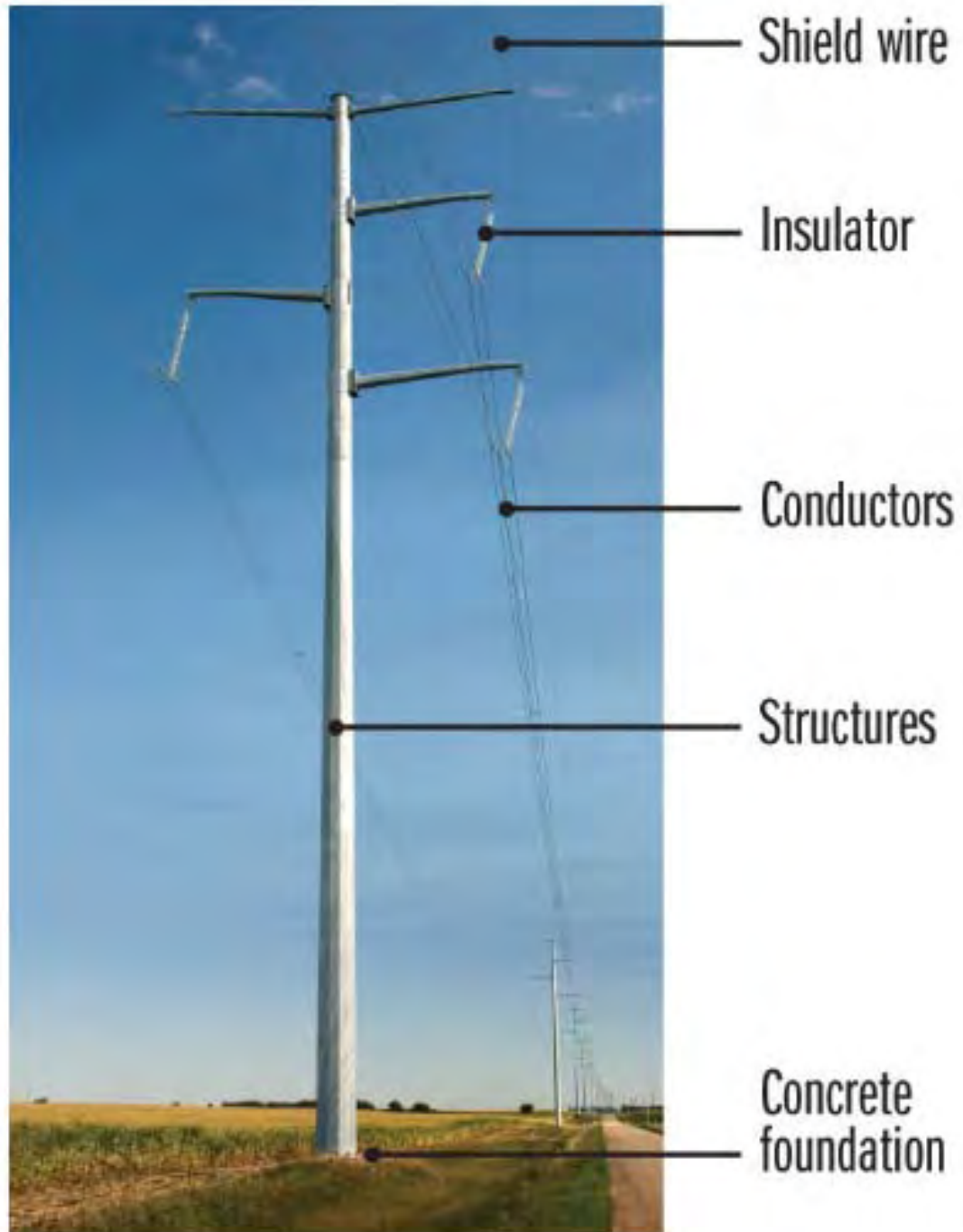


Load Growth Has Out-Paced Transmission Investment



Electricity demand
has increased 80%
since the 1980s

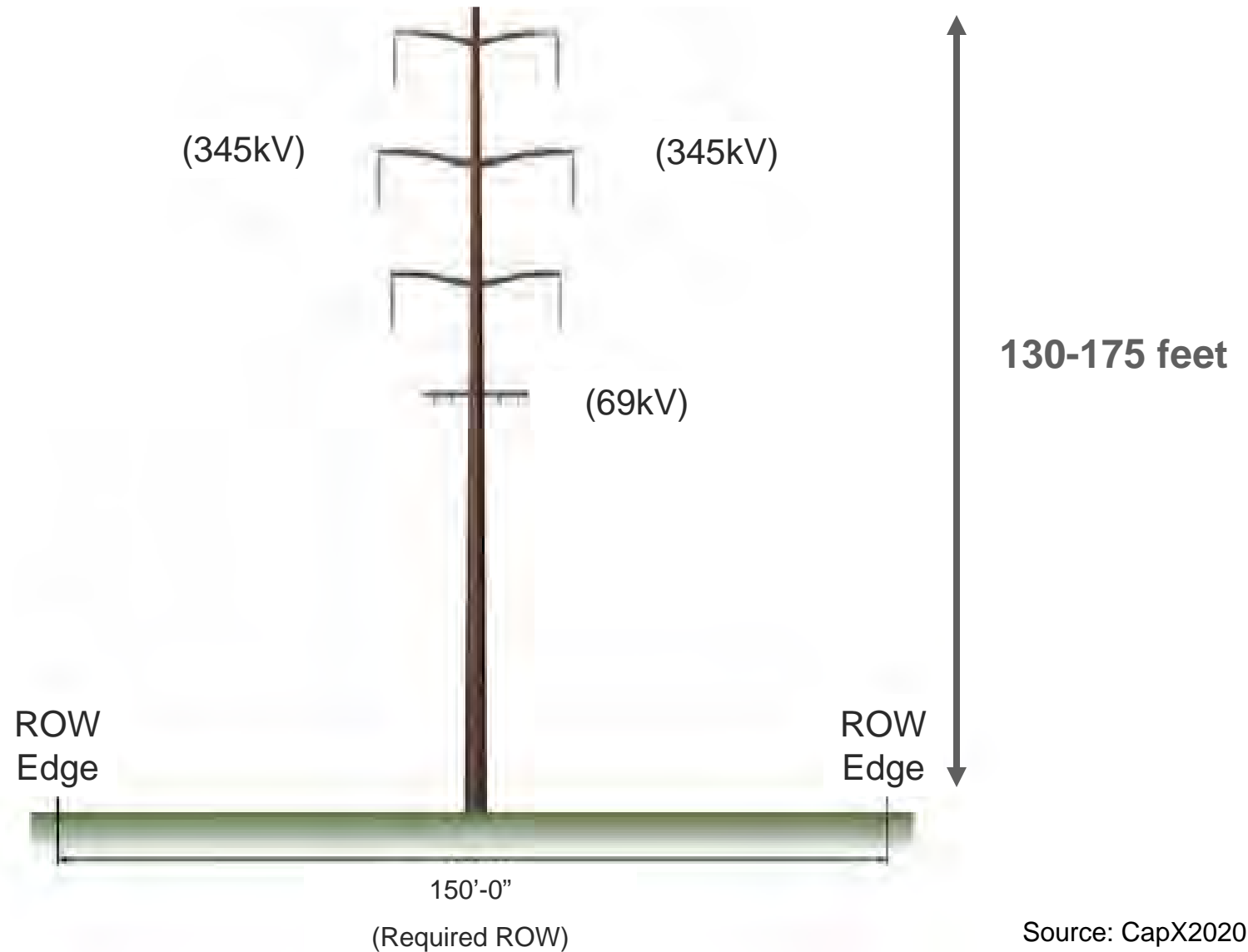




Source: CapX2020

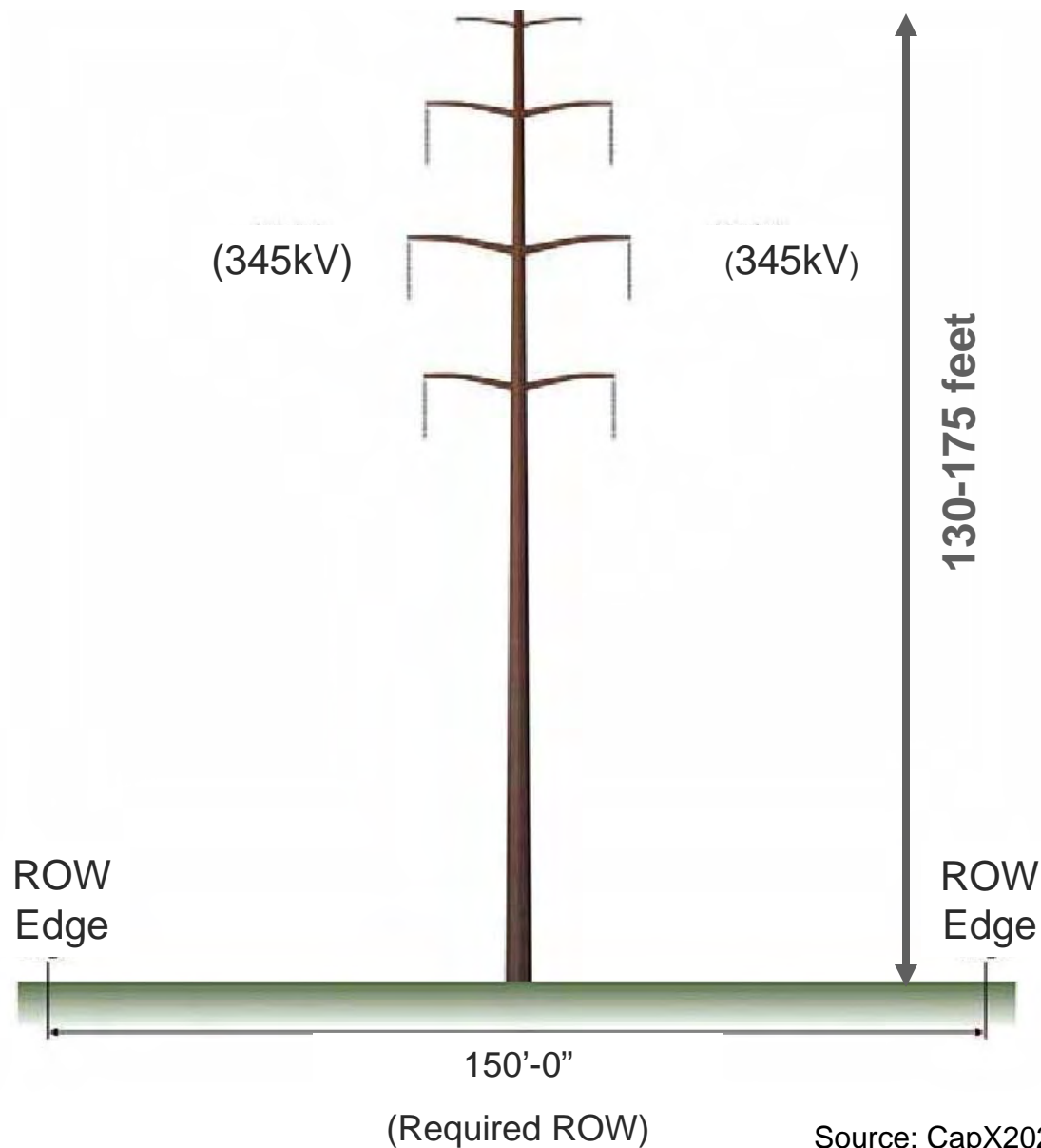
Double-Circuit 345kV with 69kV Underbuild

Single Pole Structure (Davit Arm)



Source: CapX2020

Double Circuit 345kV Single Pole Structure (Davit Arm)



Source: CapX2020



345kV Double-Circuit Single-Pole
Structure (Self-Weathering)



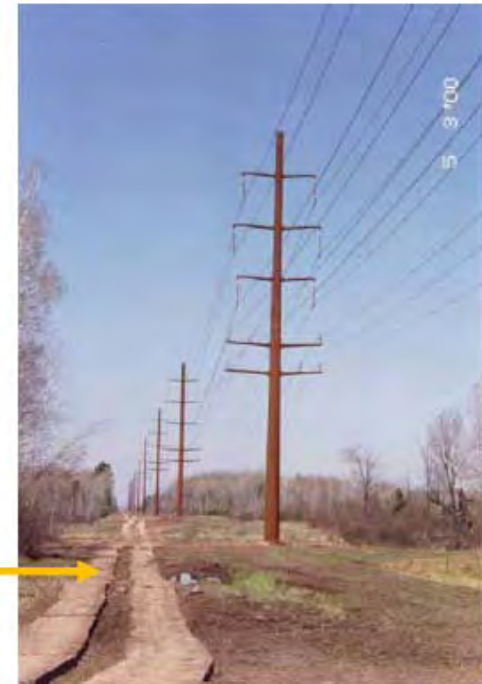
Concrete Pier Foundation
with Anchor Belts



H-frame structure

- Wood or steel
- Embedded directly into the ground
- 100 to 150 feet in height
- 900 to 1200 feet between structures
- 150 foot wide right-of-way

Typical Transmission Line Construction Activities



Project quick facts

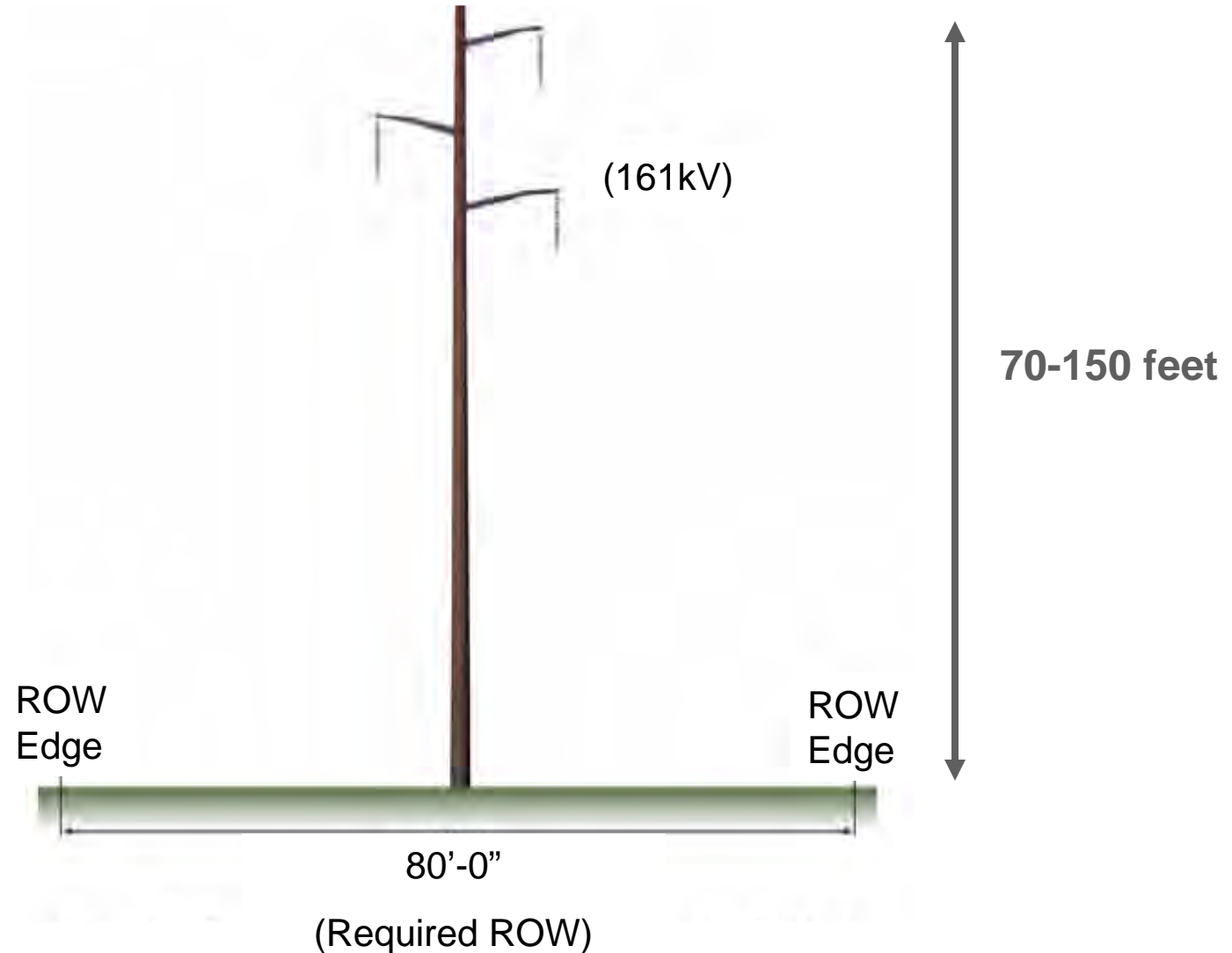
345 kV line - 120-140 miles

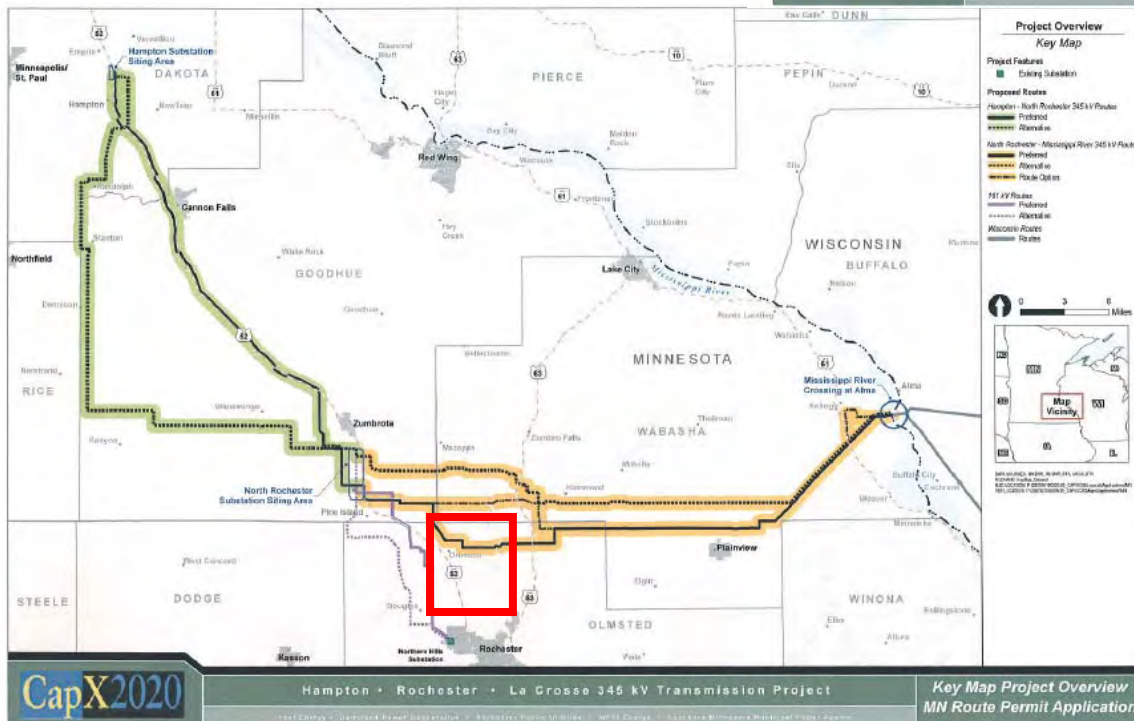
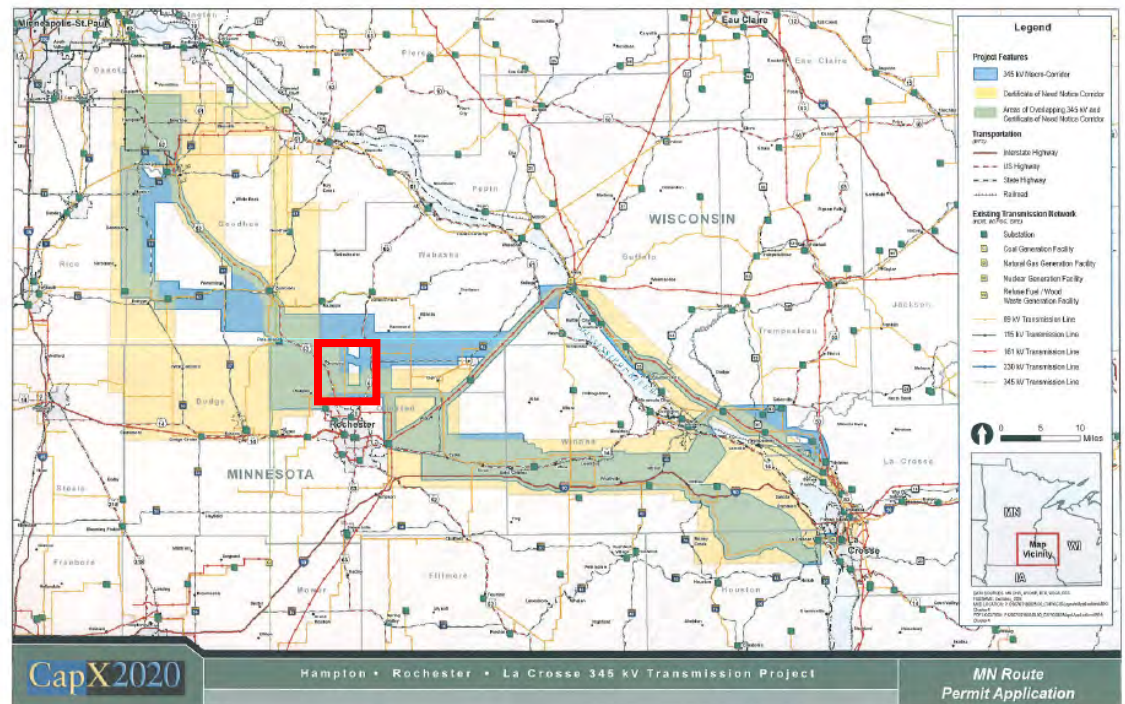
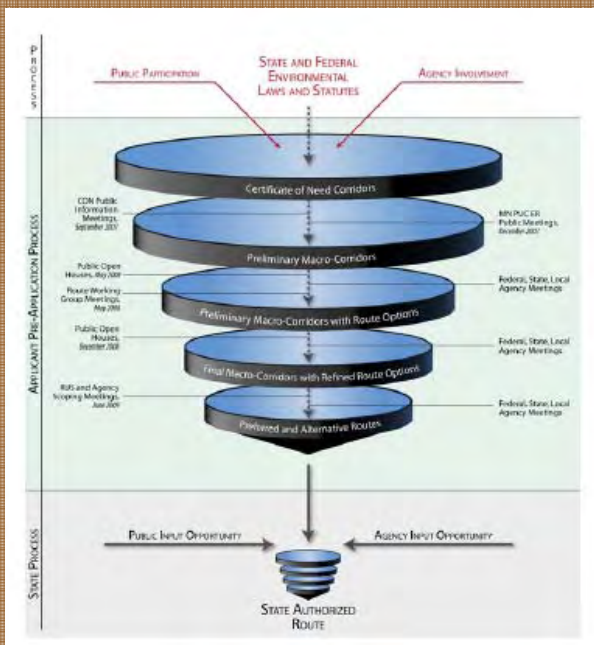
161 kV line - 20-30 miles

Targeted in-service - 2013-2015

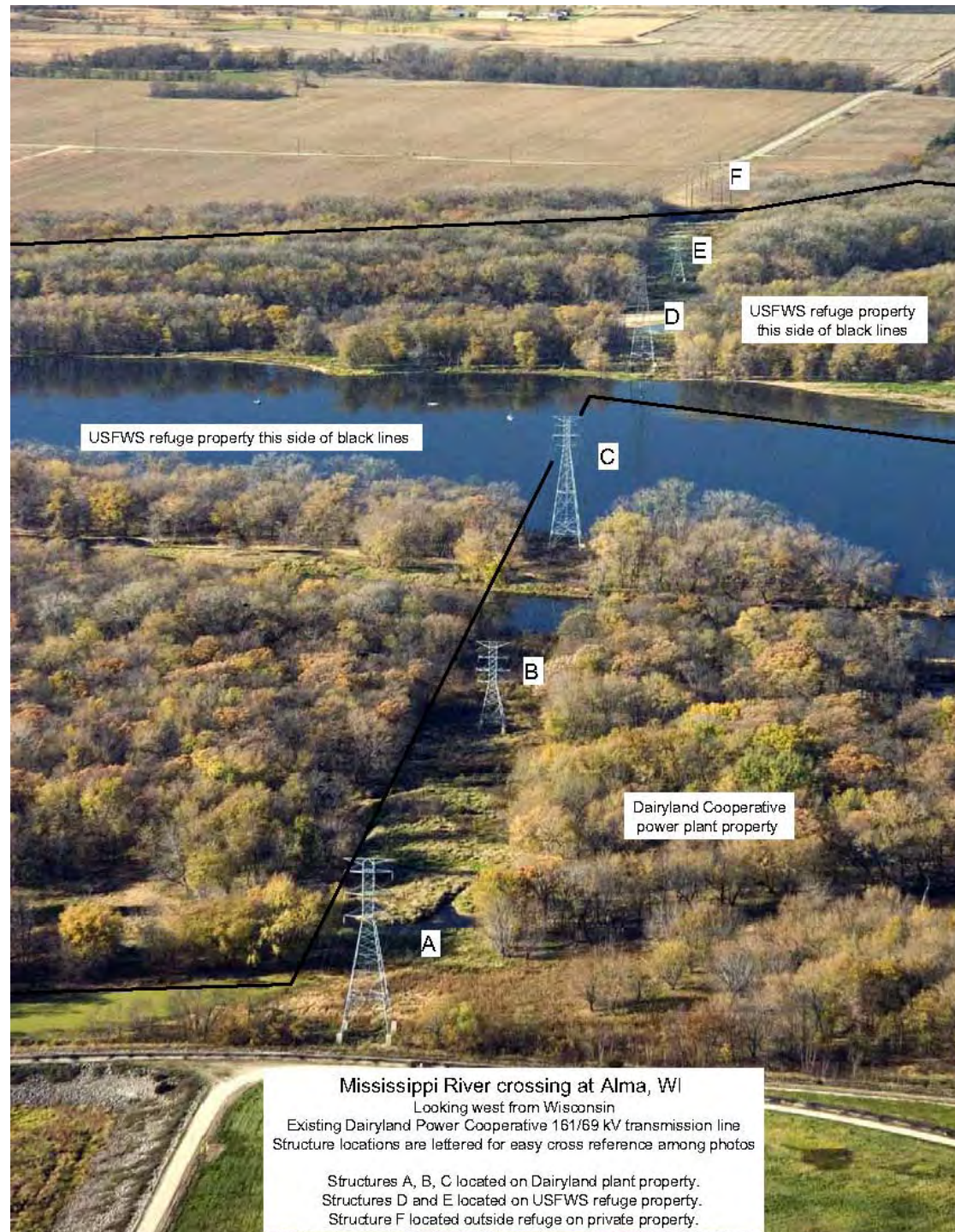
Single Circuit 161kV

Single Pole Structure (Davit Arm)

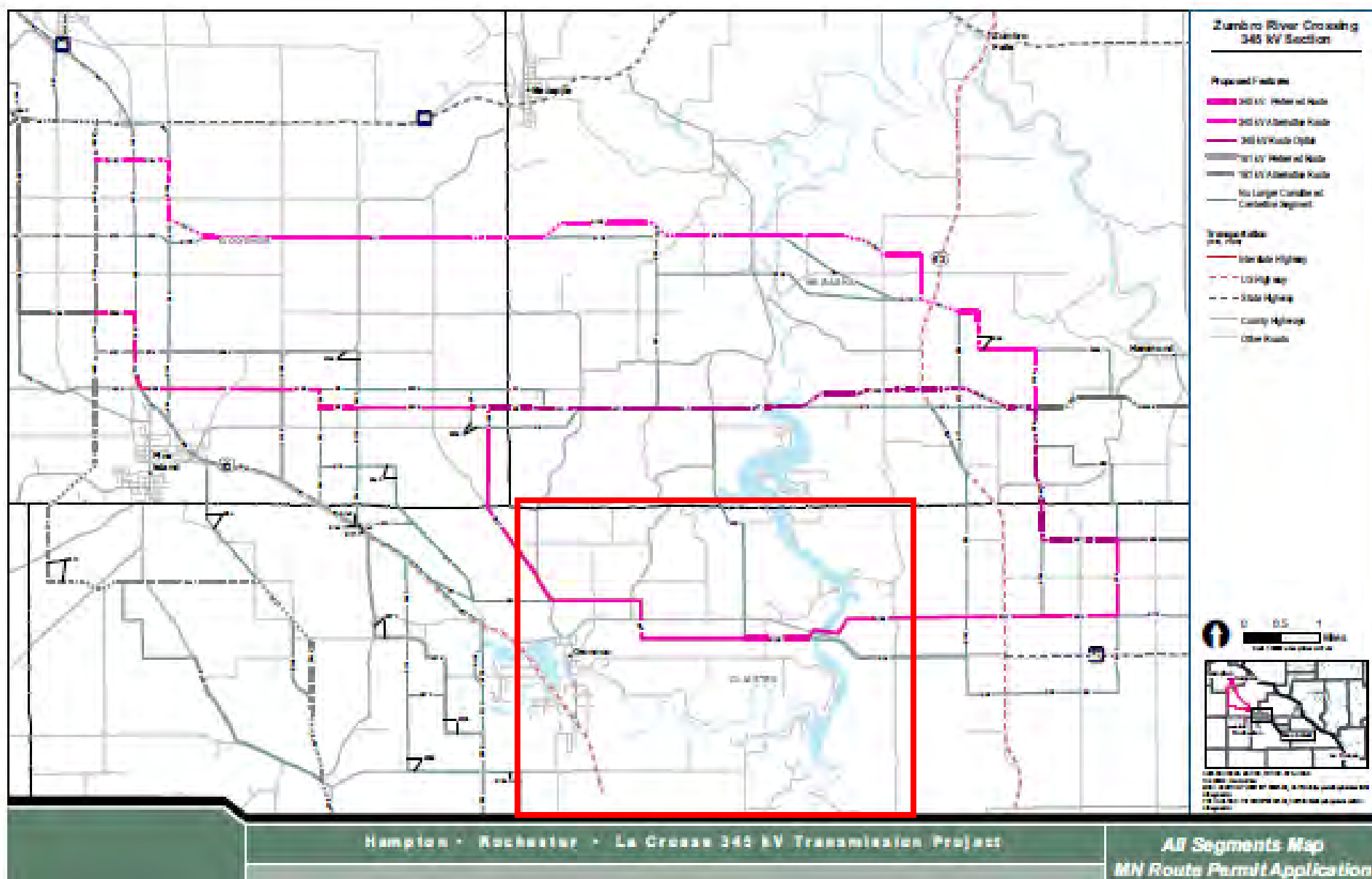




Route Funneling Process

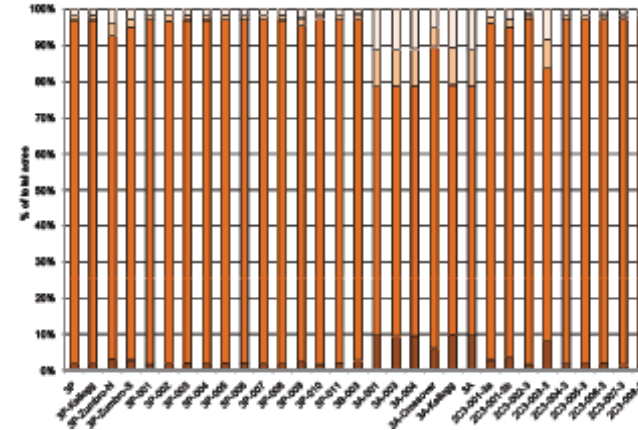
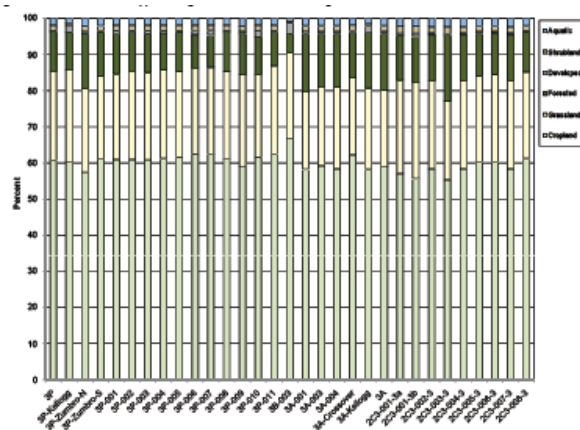
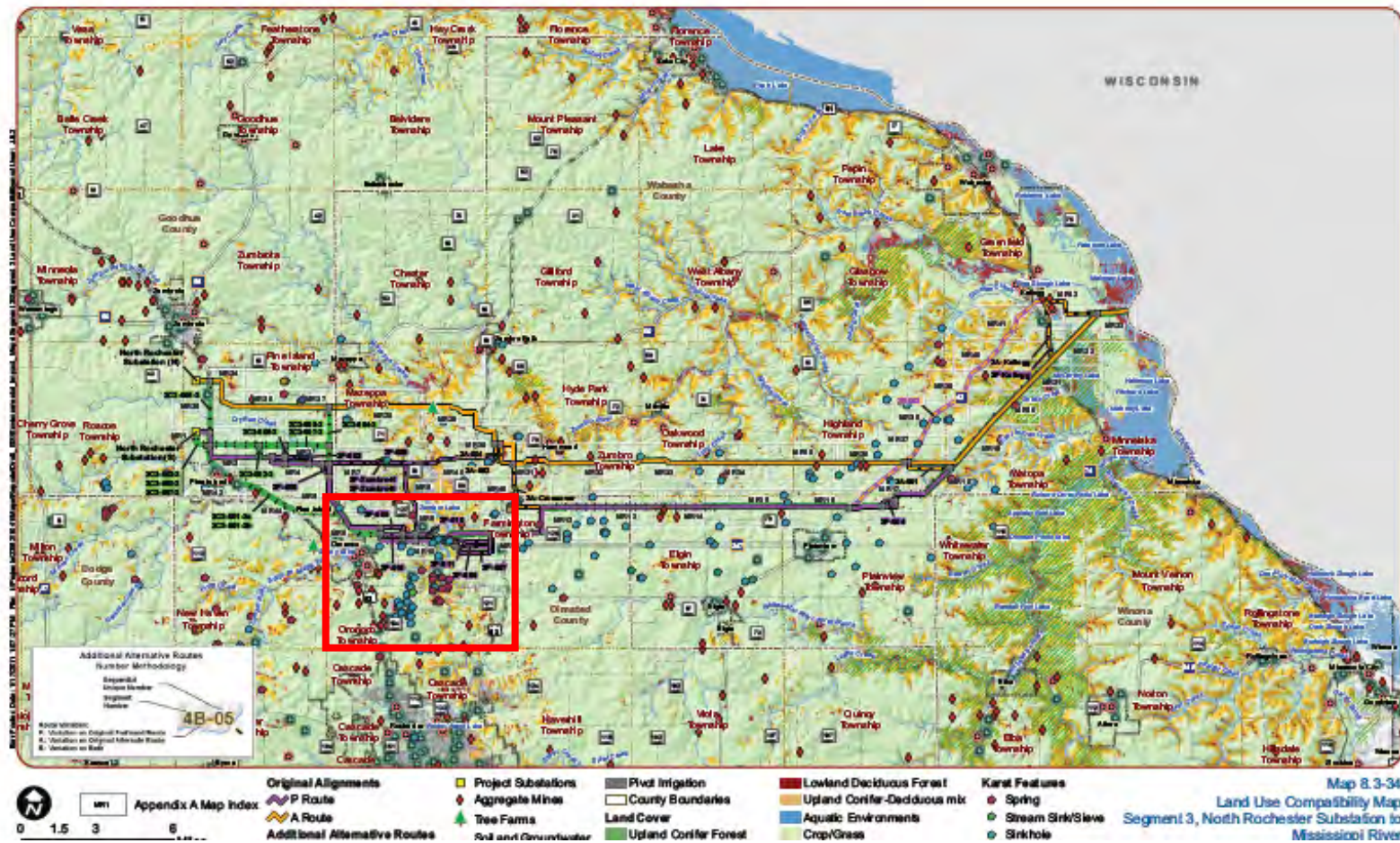


Source: OES



Source: CapX2020

Considerations	Route Permit Application	Environmental Impact Statement
Engineering, Operation, Design, Construction	✓	✓
Construction	✓	✓
Human Settlement (including displacement, noise, aesthetics, proximity to structures, cultural values, recreation)	✓	✓
Public Services (Airports, Roadways, Railroads)	✓	✓
Public Health and Safety (including Electric & Magnetic Fields, Stray Voltage)	✓	✓
Property Values	✓	✓
Existing Utilities	✓	✓
Land Use	✓	✓
Land-Based Economics (Agriculture, Forestry, Mining)	✓	✓
Rare & Unique Natural Resources	✓	✓
Flora & Fauna	✓	✓
Water and Air Quality	✓	✓
Cultural Resources	✓	✓
Use of large electric power generation plant sites	✓	
Electric System Reliability	✓	
Irreversible Commitment of Resources	✓	
Design & Design Options to Max. Efficiencies	✓	
Cost	✓	



Source: OES

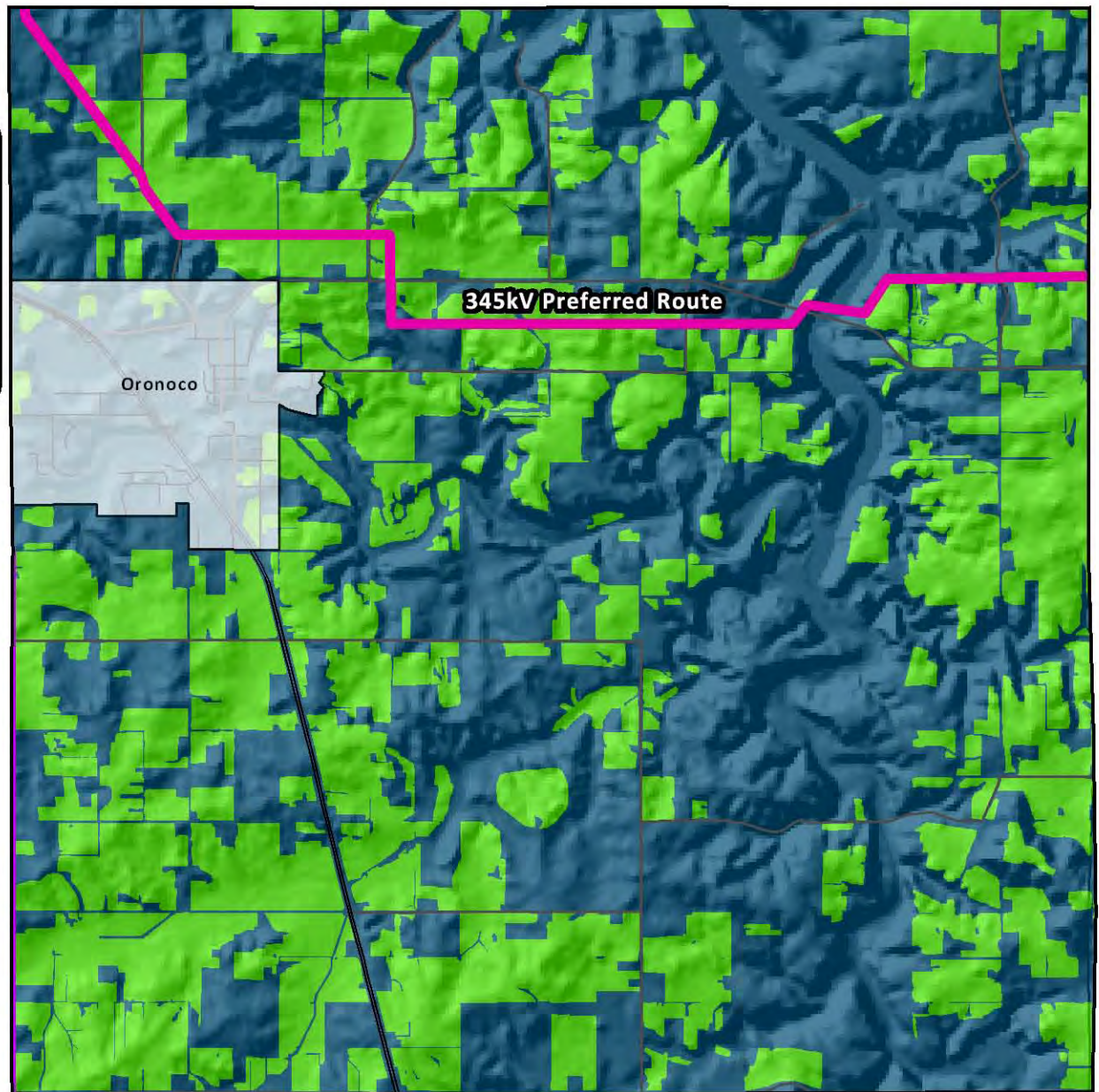
Oronco Landuse



Other

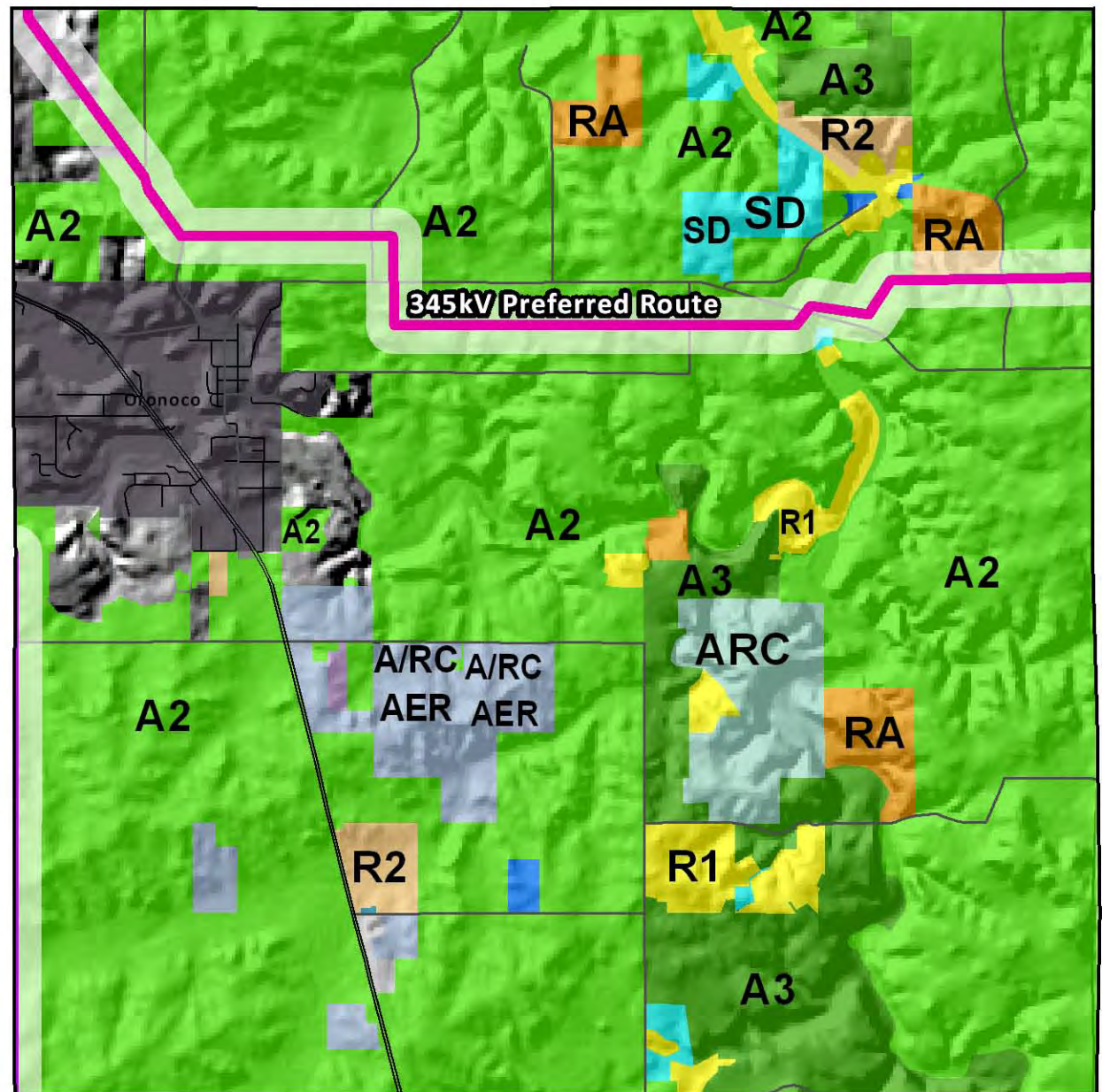


Cultivated Land



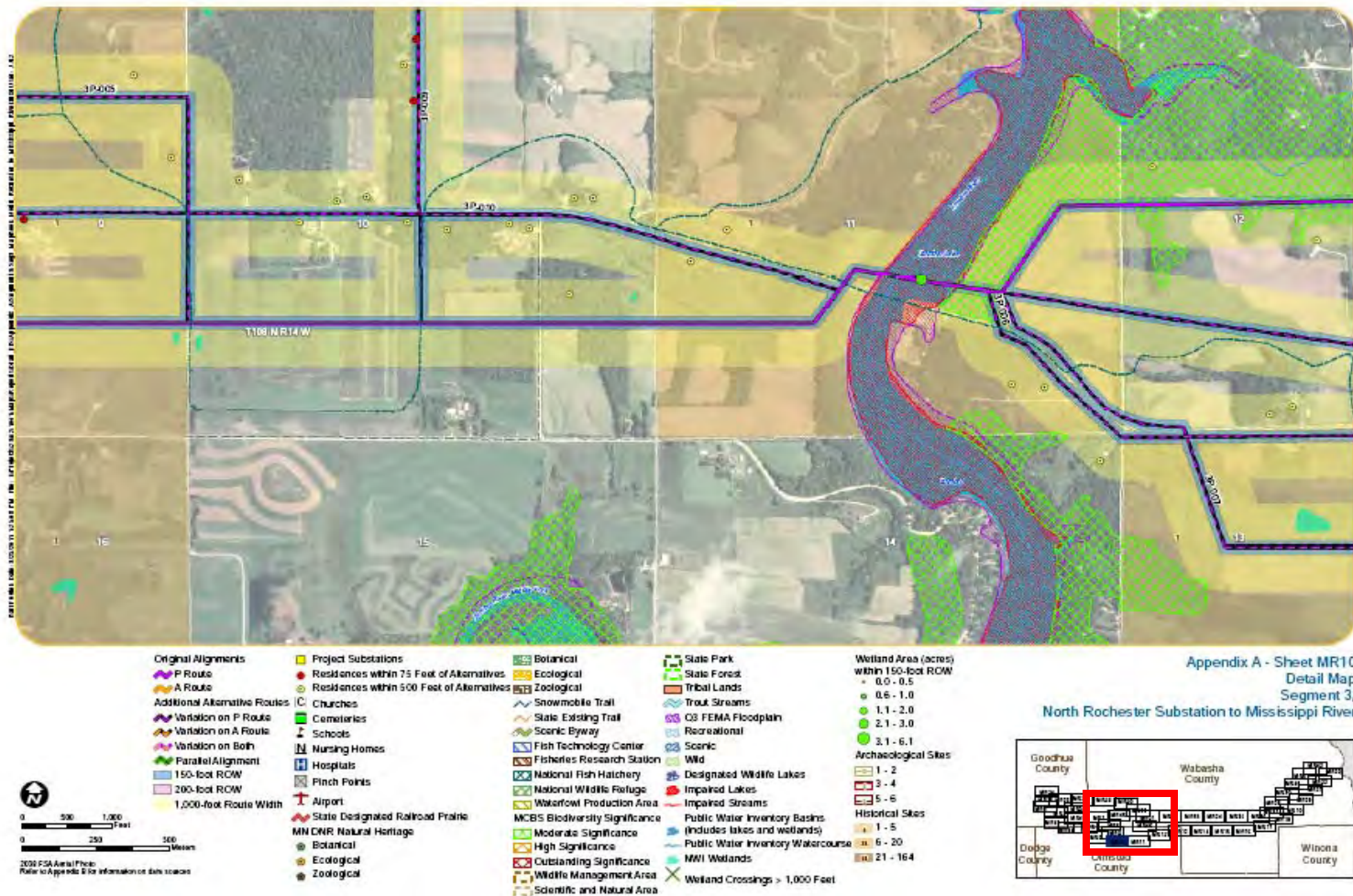
Oronoco Township Zoning

	A/RC AER
	A/RC LILI
	A1
	A2
	A3
	A4
	ARC
	AgRM
	HC
	I
	I2
	MI
	R1
	R2
	RA
	RC
	RSD
	SD



Oronoco Township Response

- Need for technical, legal and political analysis



Source: CapX2020

Potential Outcomes

- Mitigation Action
 - Route selection
 - Pole placement
 - Site specific impacts (i.e. soil and rock removal, drain tile repair, temporary roads for construction, etc.)
- Public can request additional information for clarification
 - For example, CapX2020 will be required to provide additional information on the WI Draft EIS that specifically addresses the WDNR's concerns including:
 - Proposed route impacts on existing DNR management plans
 - Requested table of all state properties affected
 - Requested more information on wetland impacts

Key Dates

- Draft EIS
 - Public Meetings: April 12, 13, 14
 - **Public Comment Period Deadline: April 29, 2011**
- Route Permit Application
 - Intervention Deadline: May 2, 2011
 - Testimony of Intervenors: May 20, 2011
 - Public ALJ Hearings (3 locations): Week of June 13
 - ALJ Hearing St. Paul: week of June 20
 - **Public Comment Period Deadline: June 30, 2011**

CapX2020 Proposed Route - Zumbro River Crossing @ White Bridge

County Rd 118 (Fisherman)

Zumbro River

County Hwy 12 (White Bridge)

721 ft.

1,716 ft.

1,186 ft.

Potential Pole Locations

Proposed Route

0 250 500 Feet

Date: 3/31/2011

Date: 3/31/2011

