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From the office of Miles F. Schumacher
e-mail address: mschumacher@lynnjackson.com

May 23, 2019

Via Electronic Filing

Ms. Patricia Van Gerpen, Executive Director
South Dakota Public Utilities Commission
Capitol Building, 1st Floor
500 East Capitol Avenue
Pierre, SD 57501-5070

Re: Docket #EL19-003
In the Matter of the Application by Crowned Ridge Wind, LLC
for an Energy Facility Permit of a Wind Energy Facility in
Grant and Codington Counties, South Dakota for Crowned Ridge
Wind Farm

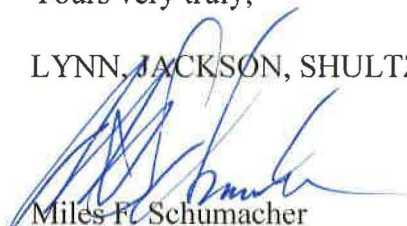
Dear Ms. Van Gerpen:

In connection with the above captioned matter, Crowned Ridge Wind, LLC (Crowned Ridge Wind) is submitting updated maps. The maps show removal of the Thompsons as participants, recognize that the one current participant will not likely renew when their option agreement expires, and make minor adjustments to infrastructure that move the collector line off of the Thompson's properties and also for participant land owner preferences. This minor adjustment can be seen at (1) the proposed shifts to access roads for turbines CR-122 through CR-126 at the requests of landowners; (2) minor revisions to collection routing were made on properties, which include collection routing identified at met towner SM01, turbine CR-105, between turbines CR-112 and CR-114, CR-115, CR-116, CR-163, CR-ALT7 and between CR-ALT20 and CR-ALT22.

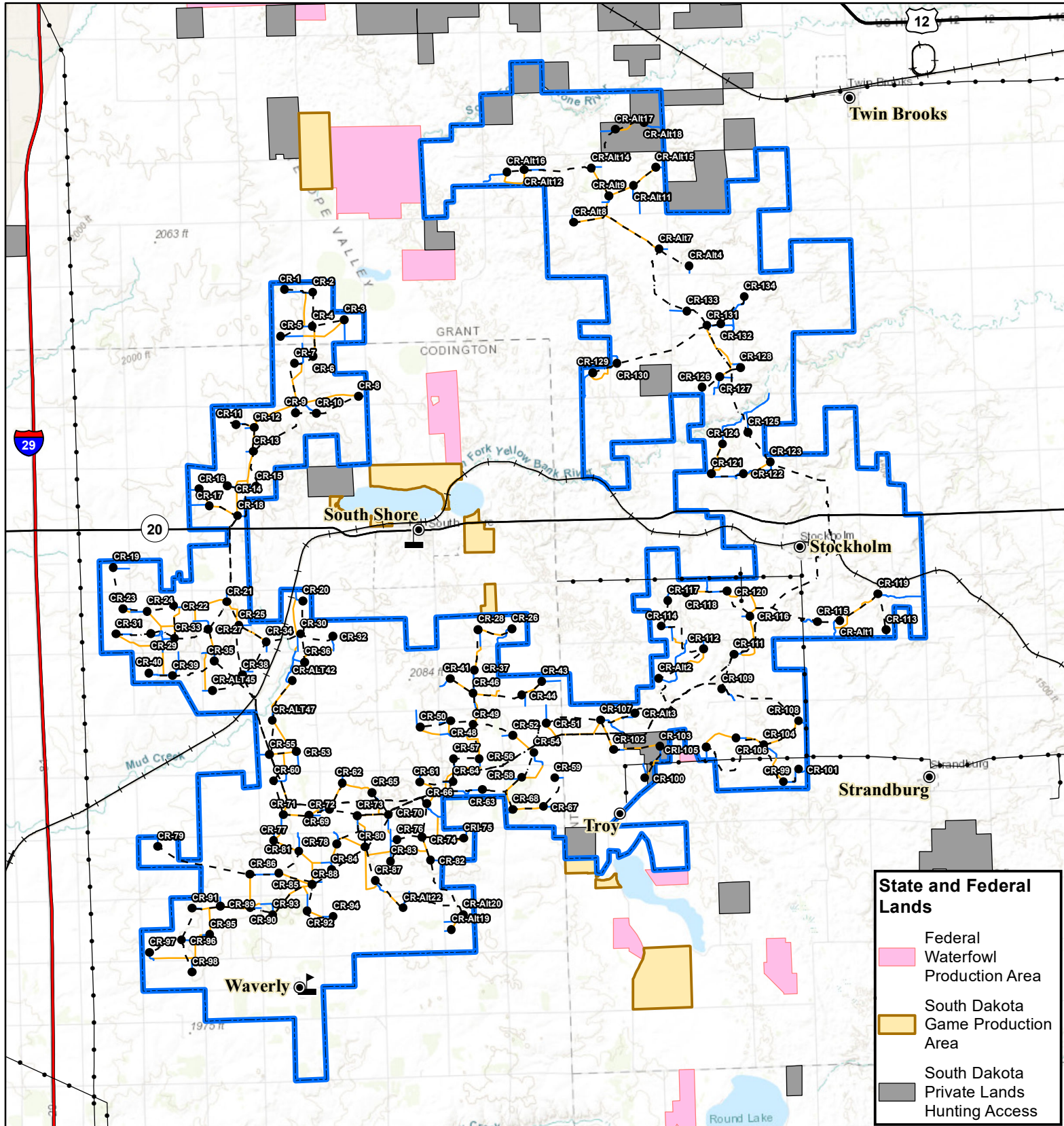
Ms. Patricia Van Gerpen, Executive Director
May 23, 2019
Page 2

Yours very truly,

LYNN, JACKSON, SHULTZ & LEBRUN, P.C.



Miles F. Schumacher
MFS:alf



0 5 10
Kilometers

0 2.5 5
Miles

Base Map: World Topographic Map
 Sources: Esri, HERE, Garmin, Intermap, increment P Corp.,
 GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,
 Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong),
 swisstopo, © OpenStreetMap contributors, and the GIS
 User Community
 Codington and Grant Counties, South Dakota

Projection: NAD 1983 UTM Zone 14N

003603 **SWCA**
 ENVIRONMENTAL CONSULTANTS

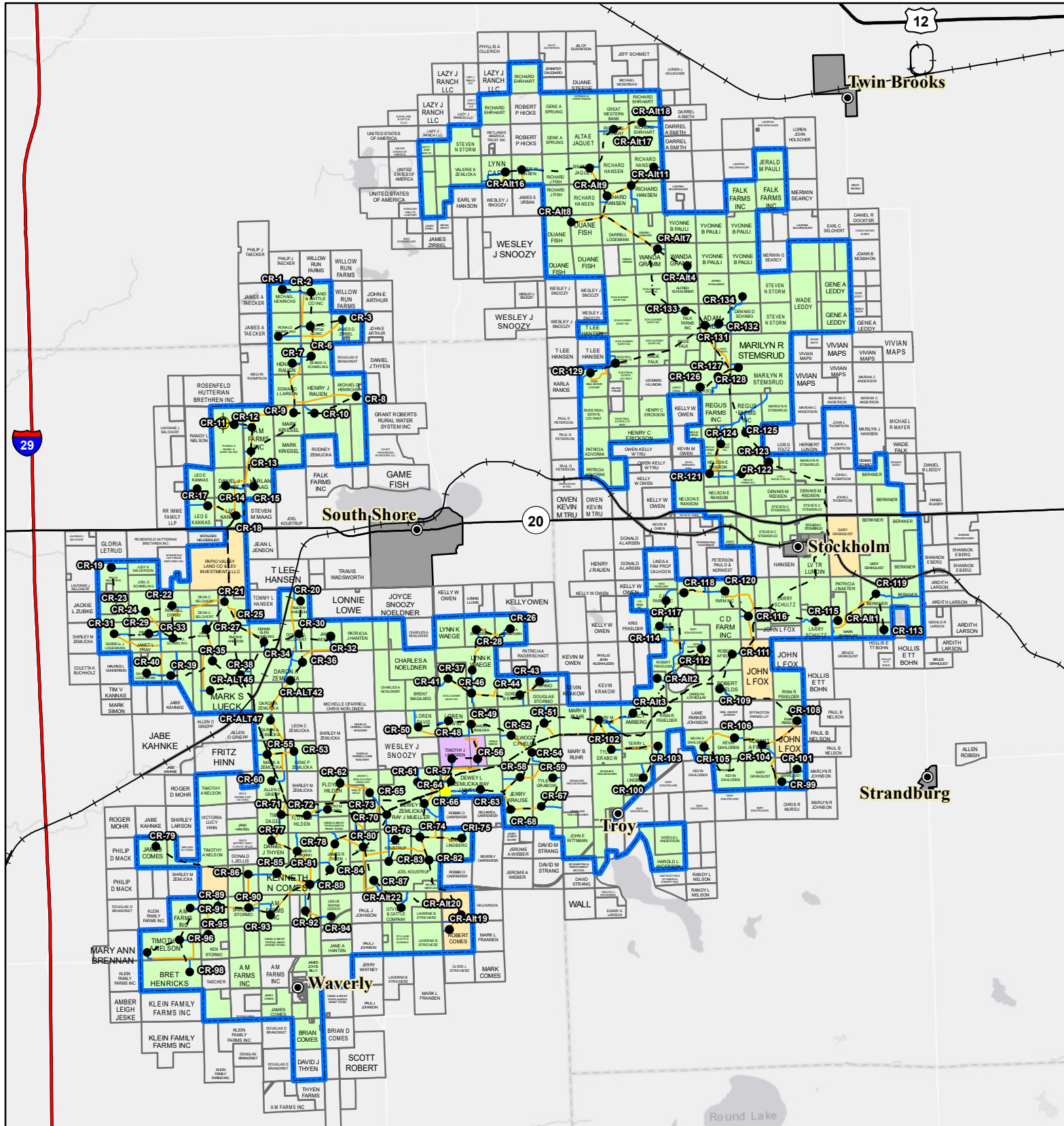
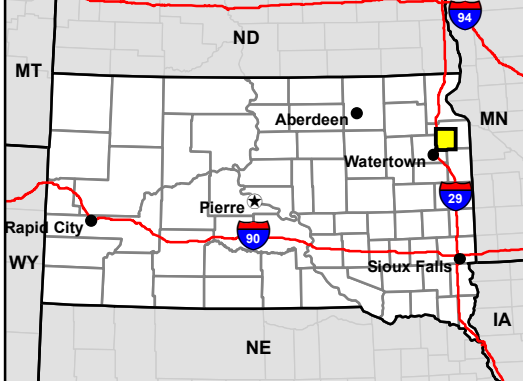


Figure 3a. Project Map

Crowned Ridge Wind Farm

- MET Tower
 - Turbine
 - City
 - Access Road
 - Collector Line
 - Crane Path
 - Railroad
 - Interstate Highway
 - U.S. Highway
 - State Highway
 - O&M Facility/ Substation
 - Town Boundary
 - Project Boundary
 - Parcel Boundary
- Lease Status**
- Leased, Signed
 - Pending Approval
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 2.5 5

Miles

0 2.5 5

Base Map: World Light Gray Canvas Base
 Sources: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
 Codington and Grant Counties, South Dakota

003604 **SWCA**
 ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

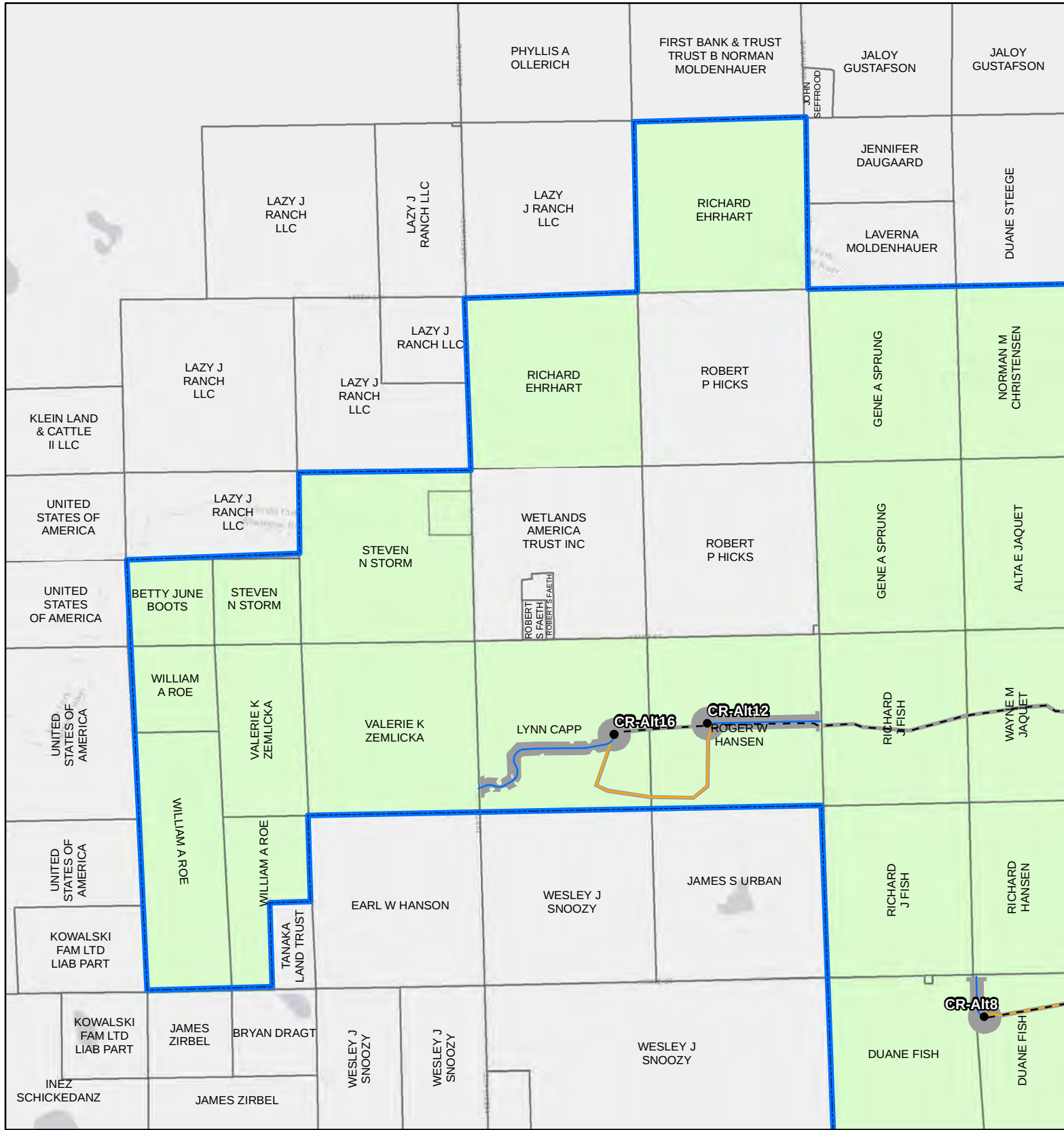
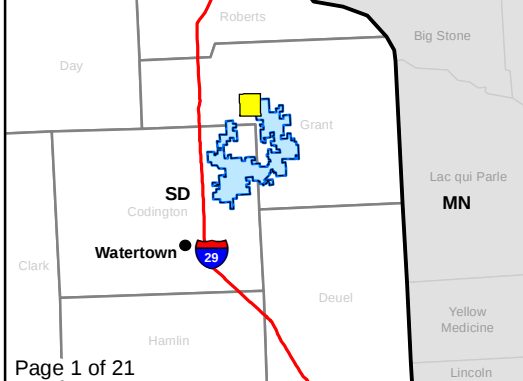


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Antelope Valley (1973), Twin Brooks (1973)

Township/Range: T120N, R51W, T120N, R50W

Grant County, South Dakota

003605 SWCA
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

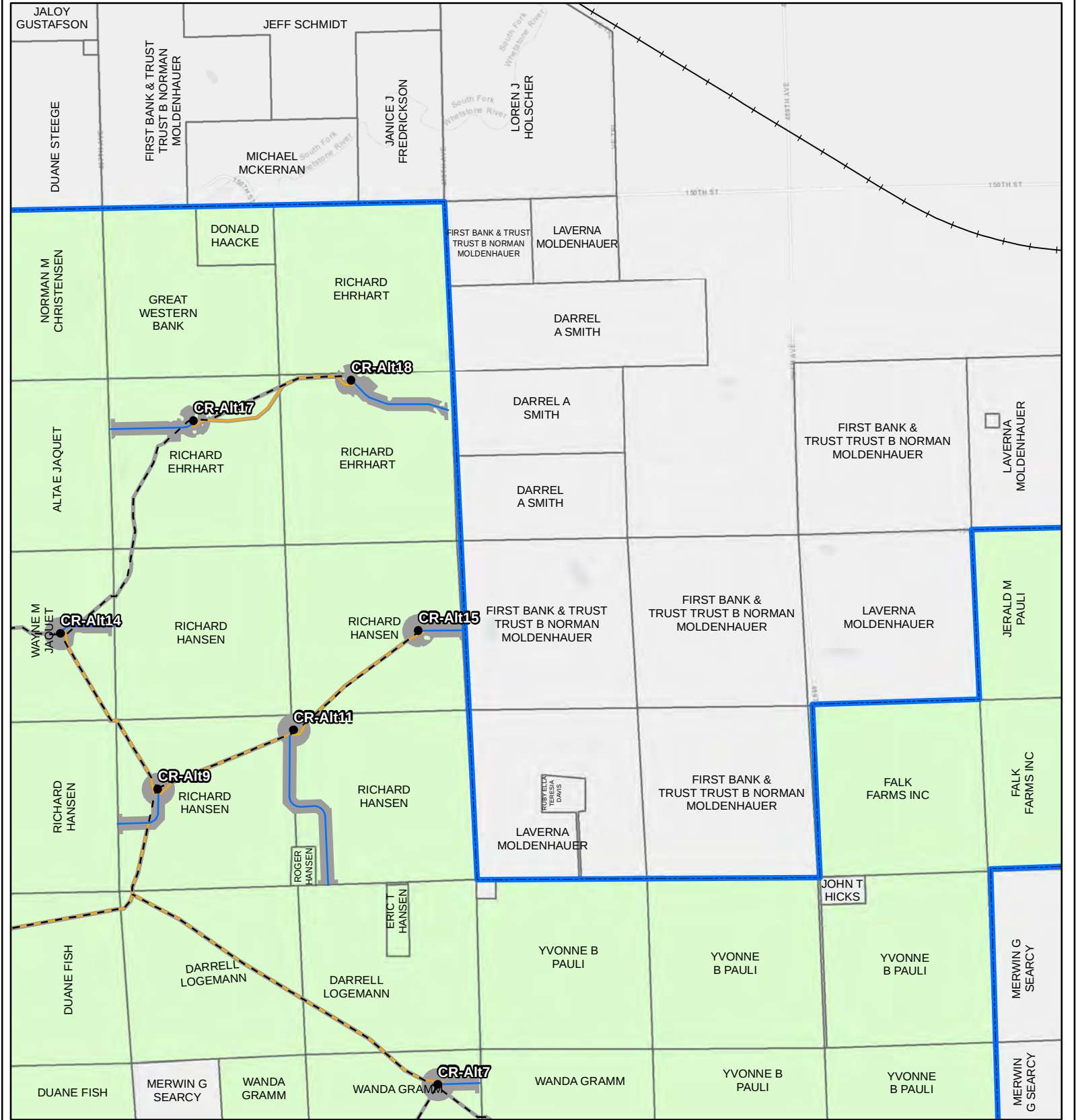
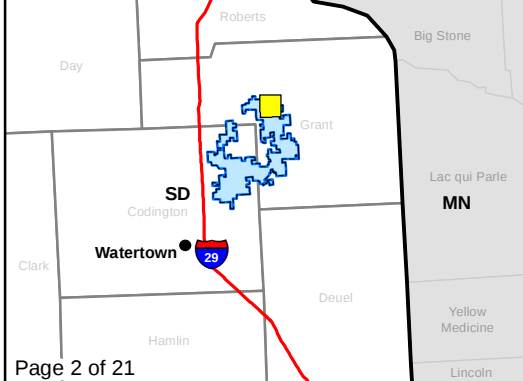


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Twin Brooks (1973)

Township/Range: T120N, R50W

Grant County, South Dakota

003606 **SWCA**

ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

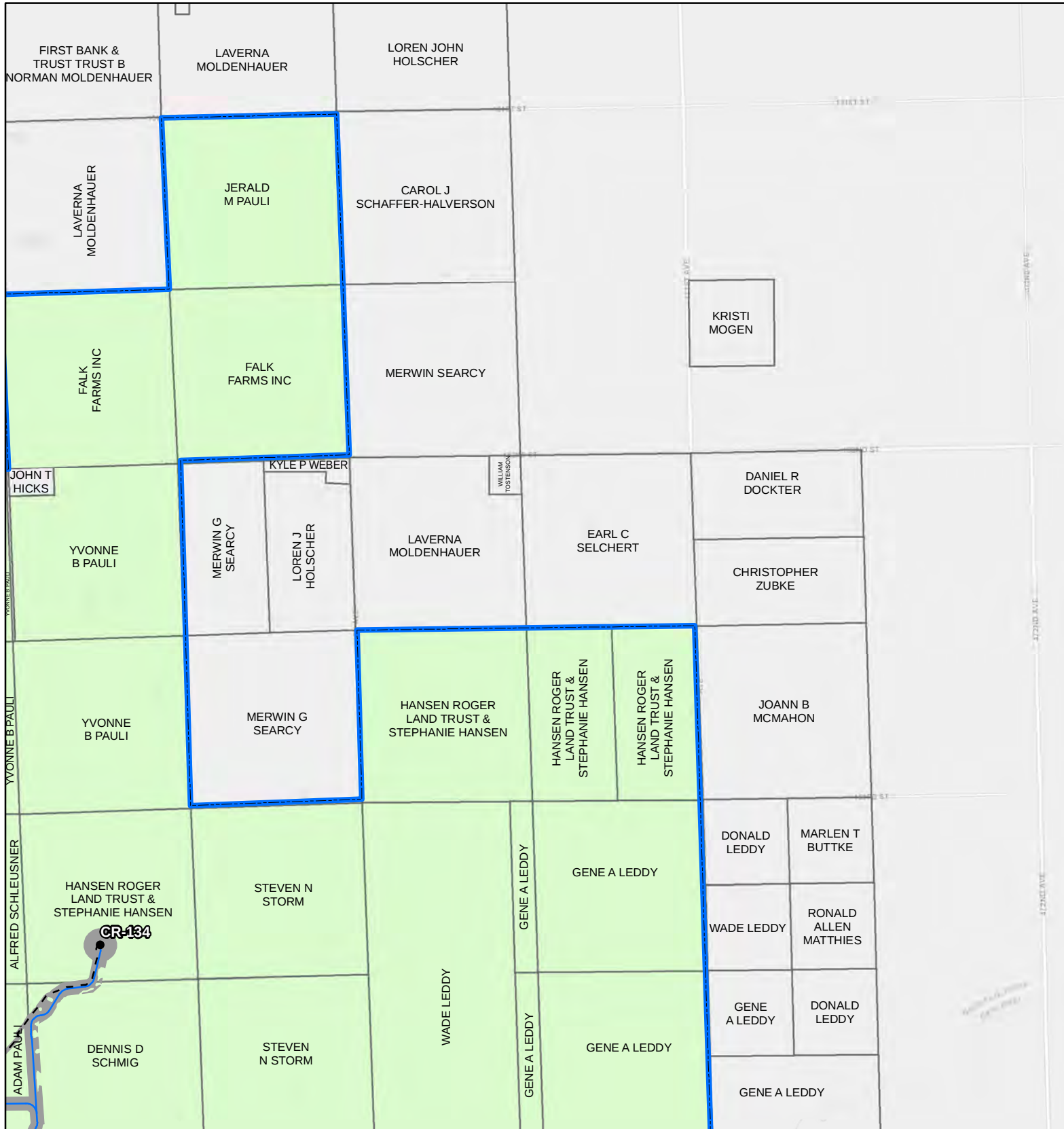
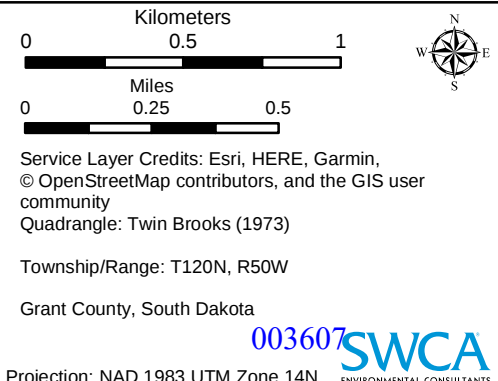
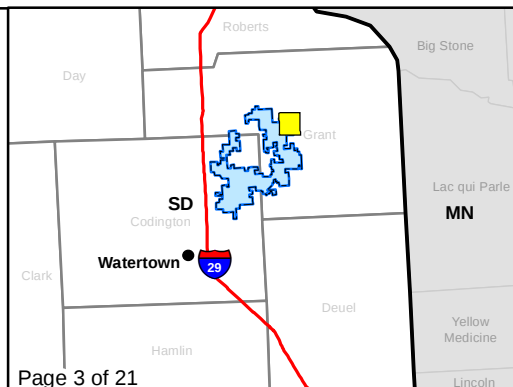
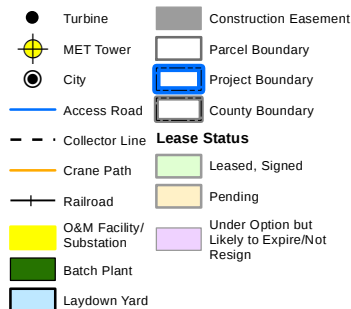


Figure 3a. Project Map
Crowned Ridge Wind Farm



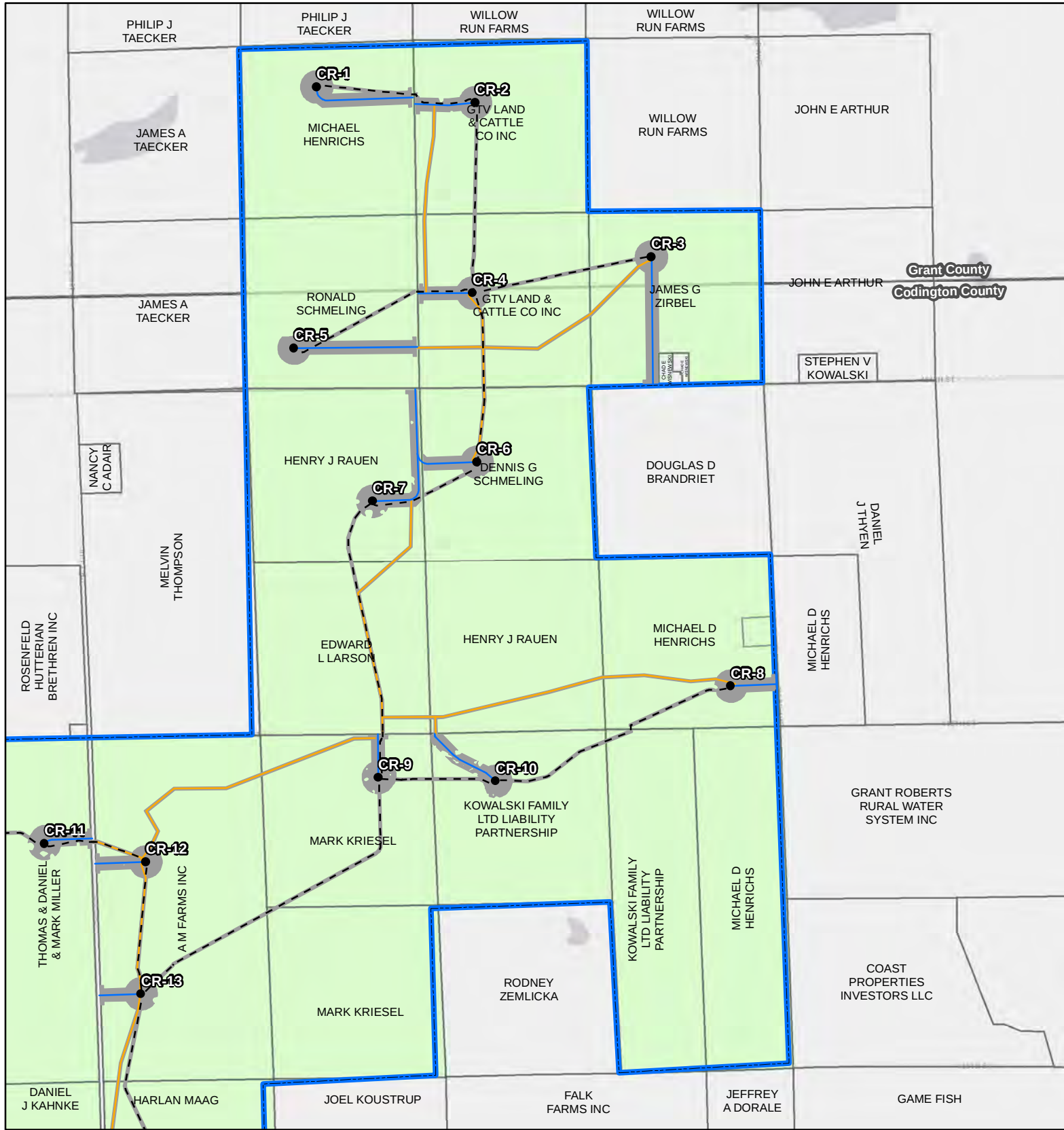


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers
0 0.5 1

Miles
0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
 Quadrangle: Antelope Valley (1973), South Shore (1973)
 Township/Range: T120N, R51W, T119N, R51W,
 Codington and Grant Counties, South Dakota

003608 SWCA
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

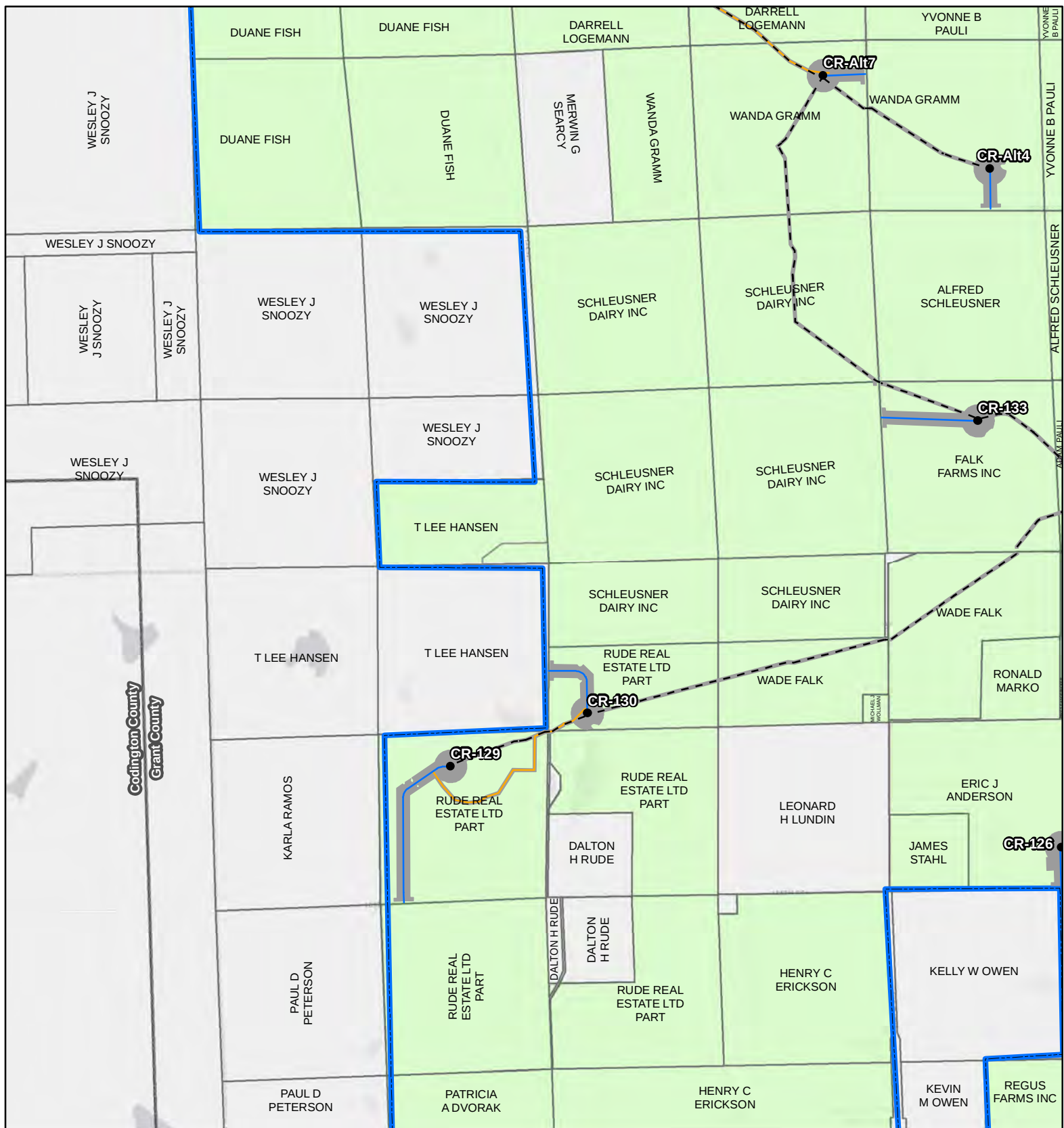
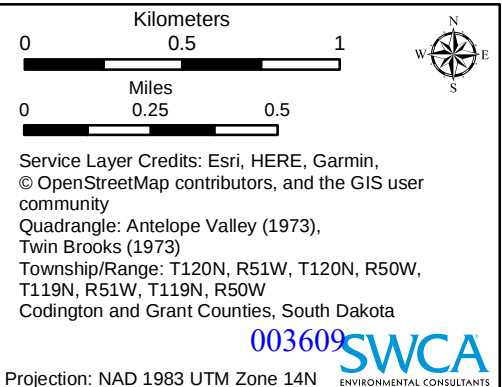
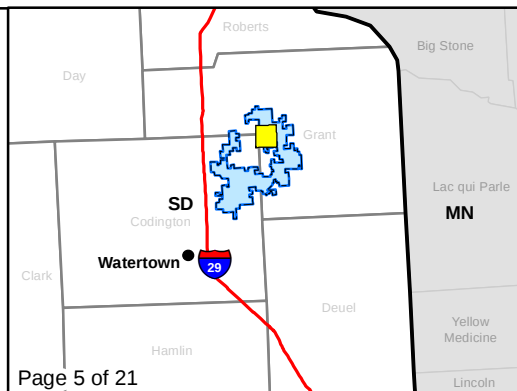
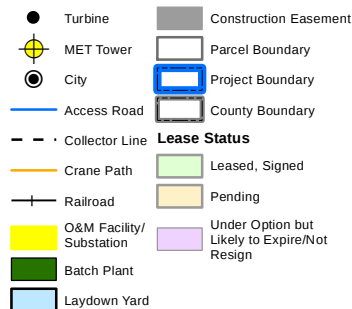
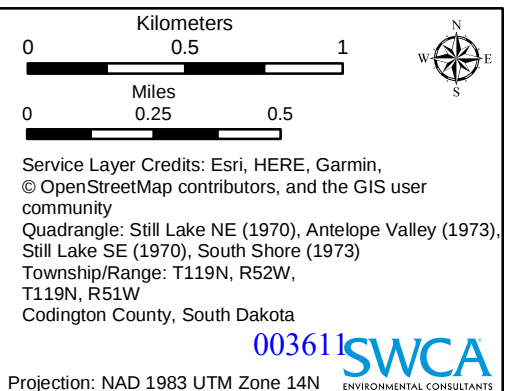
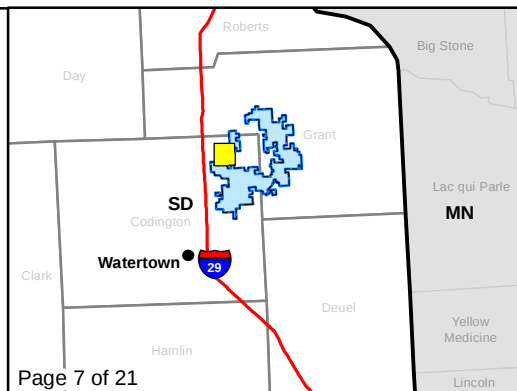
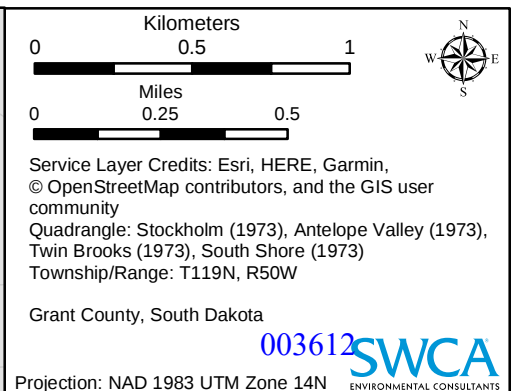


Figure 3a. Project Map
Crowned Ridge Wind Farm







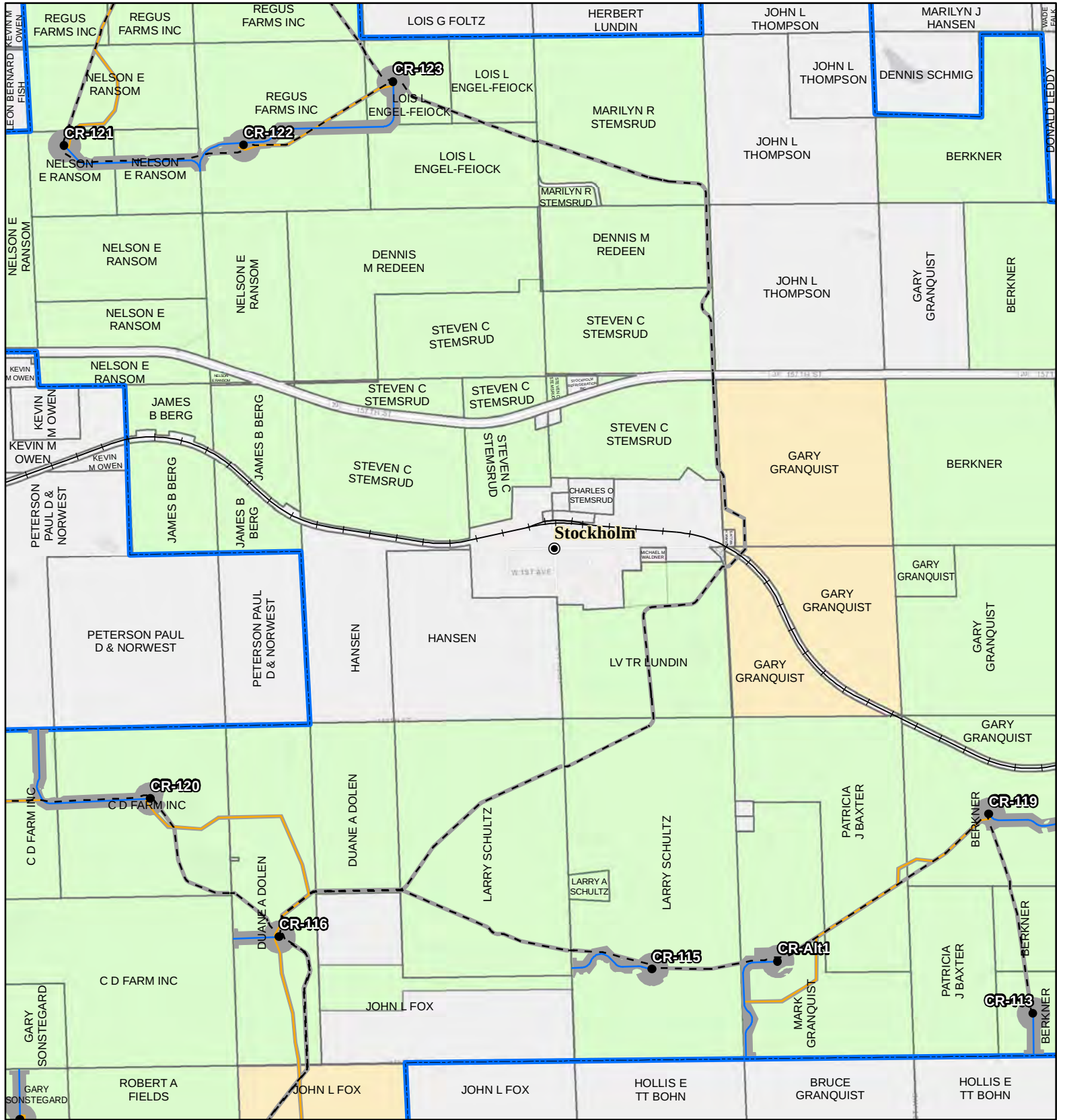
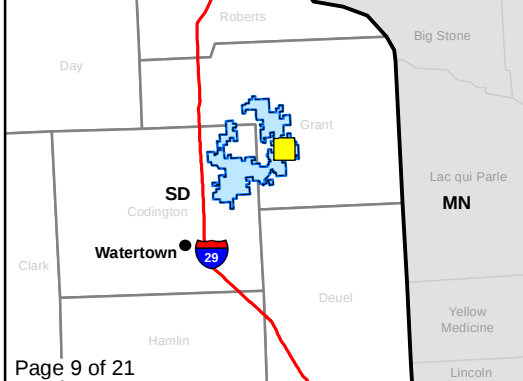


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Stockholm (1973)

Township/Range: T119N, R50W

Grant County, South Dakota

03613

SWCA

ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

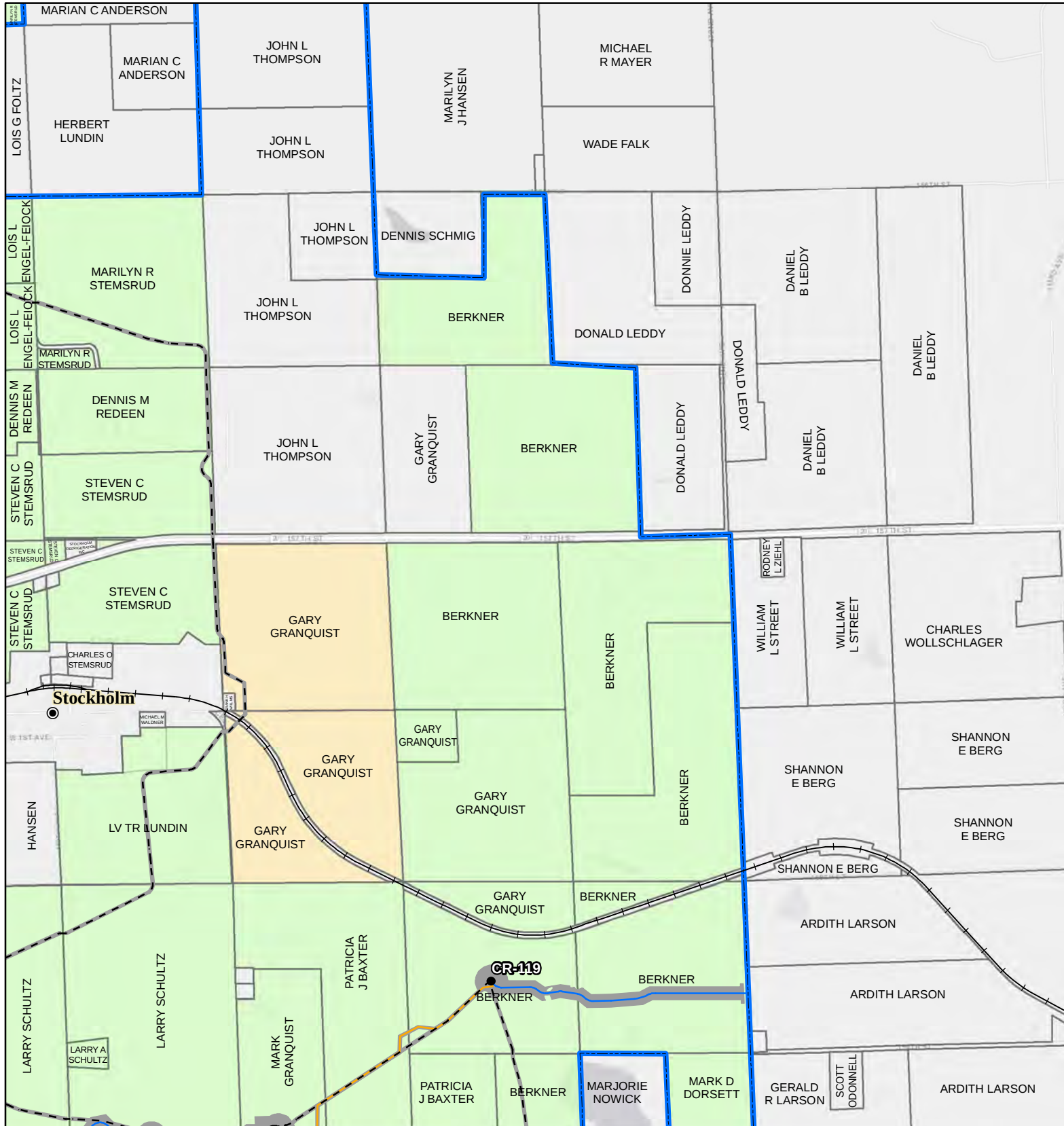
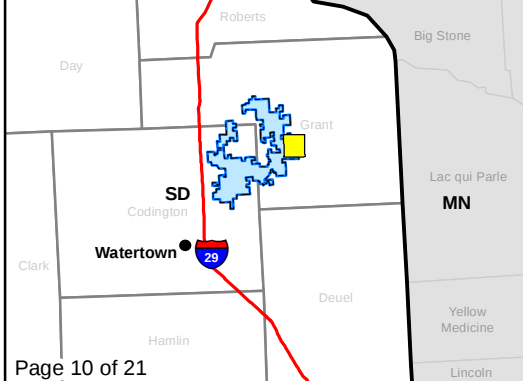


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - ▬ Construction Easement
 - ▬ Parcel Boundary
 - ▬ Project Boundary
 - ▬ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Twin Brooks (1973), Stockholm (1973)

Township/Range: T119N, R50W, T119N, R49W

Grant County, South Dakota

003614 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

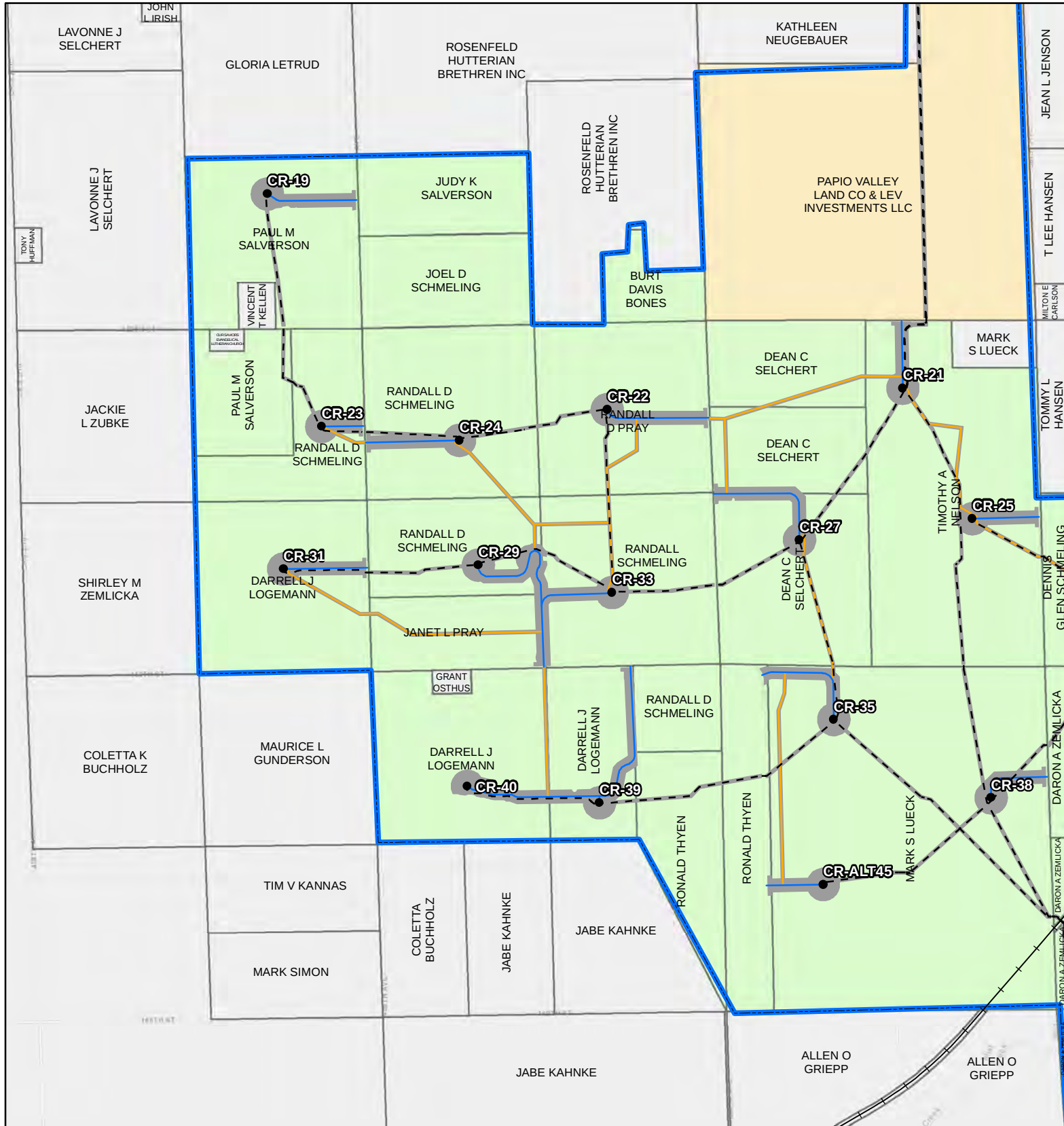
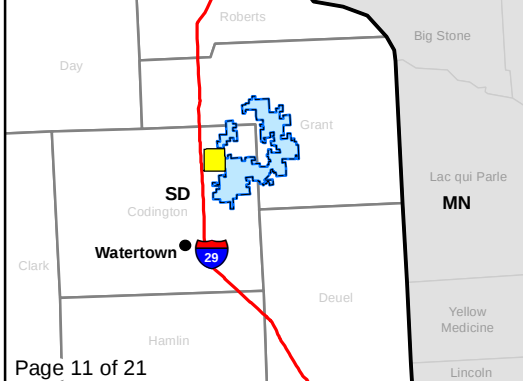


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Scale

Kilometers: 0, 0.5, 1

Miles: 0, 0.25, 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Still Lake SE (1970), South Shore (1973)

Township/Range: T119N, R52W, T119N, R51W, T118N, R52W, T118N, R51W

Codington County, South Dakota

003615 **SWCA**

ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

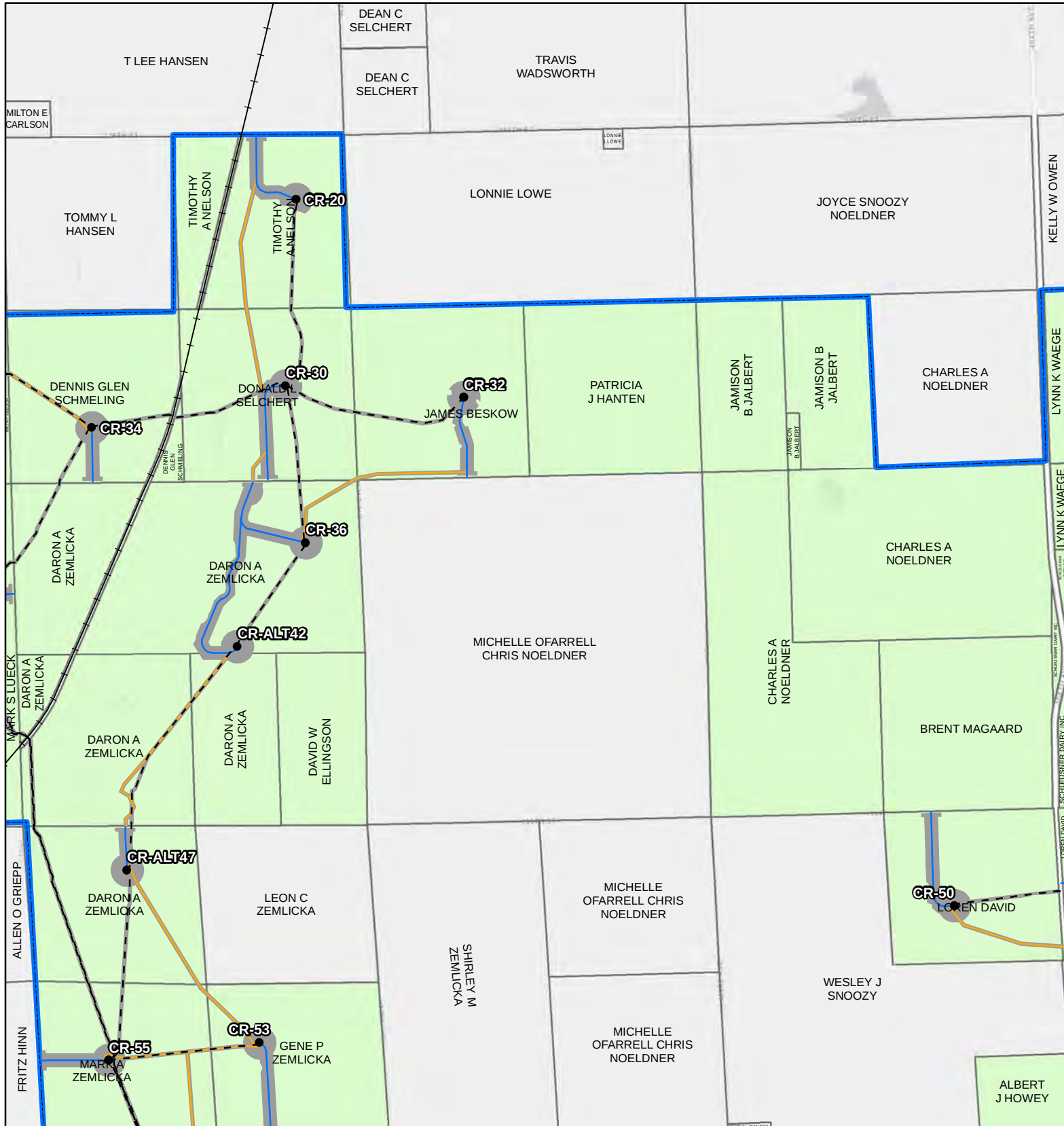
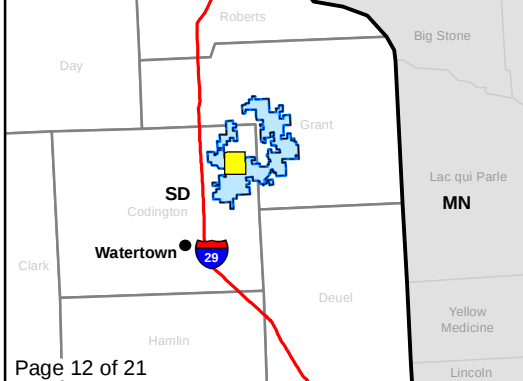


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - ▨ Construction Easement
 - ▨ Parcel Boundary
 - ▨ Project Boundary
 - ▨ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Scale

Kilometers: 0, 0.5, 1

Miles: 0, 0.25, 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: South Shore (1973)

Township/Range: T119N, R51W, T118N, R51W

Codington County, South Dakota

003616 **SWCA**

ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

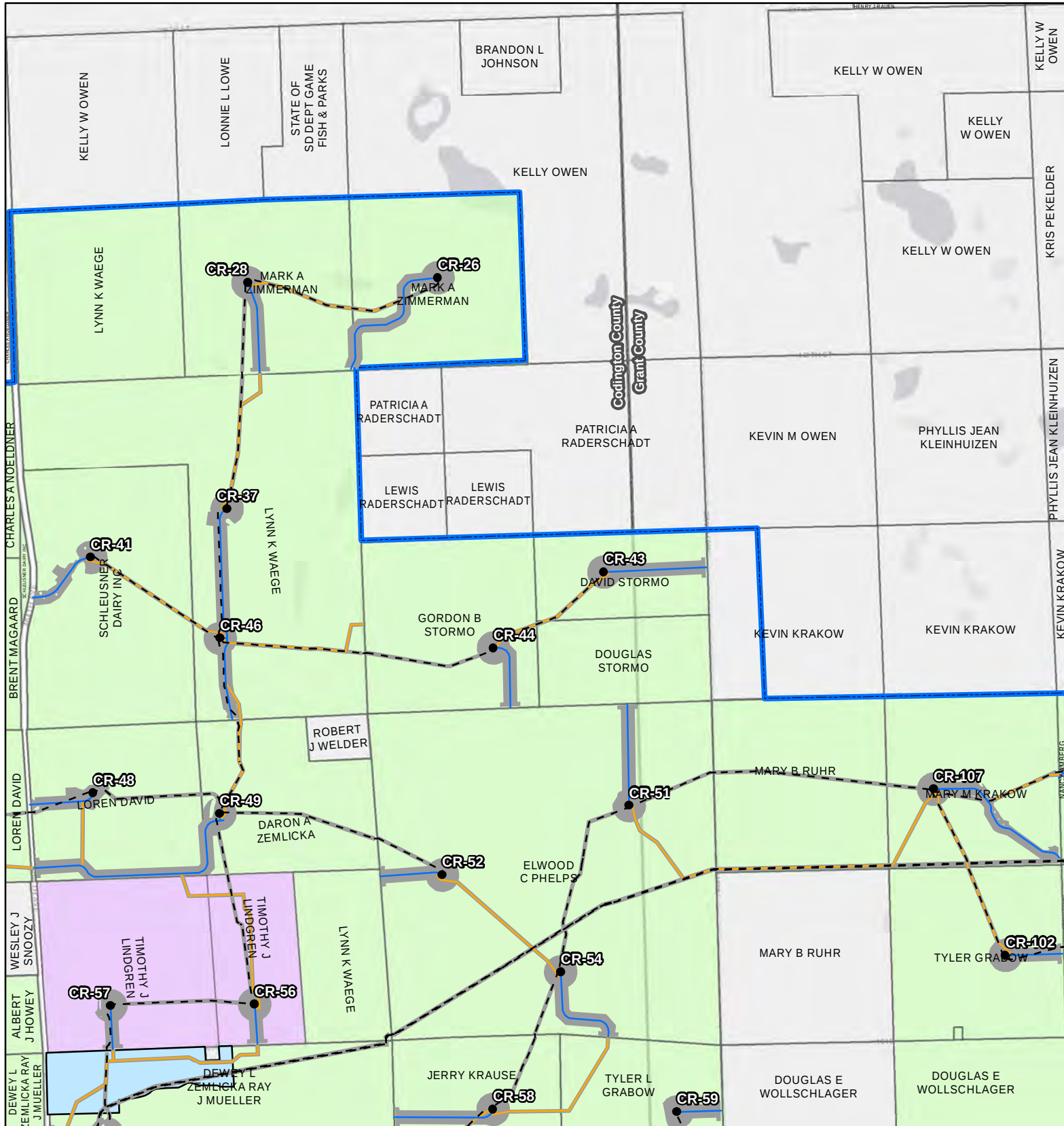
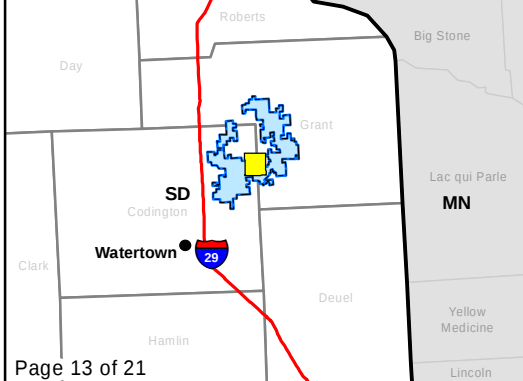


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: South Shore (1973), Stockholm (1973)

Township/Range: T119N, R51W, T119N, R50W, T118N, R51W, T118N, R50W

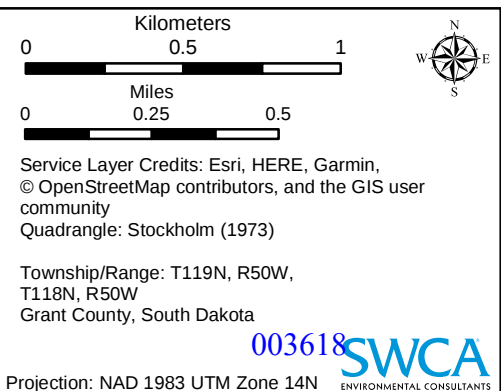
Codington and Grant Counties, South Dakota

003617 SWCA
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N



-
- Map of Watertown, SD, showing its location relative to surrounding counties and states. Watertown is marked with a black dot and labeled. A red line indicates a route passing through the city, with a blue and red shield for Highway 29. Surrounding counties include Roberts, Grant, Deuel, Hamlin, Clark, Day, and Big Stone. The state boundary between South Dakota (SD) and Minnesota (MN) is shown to the east.



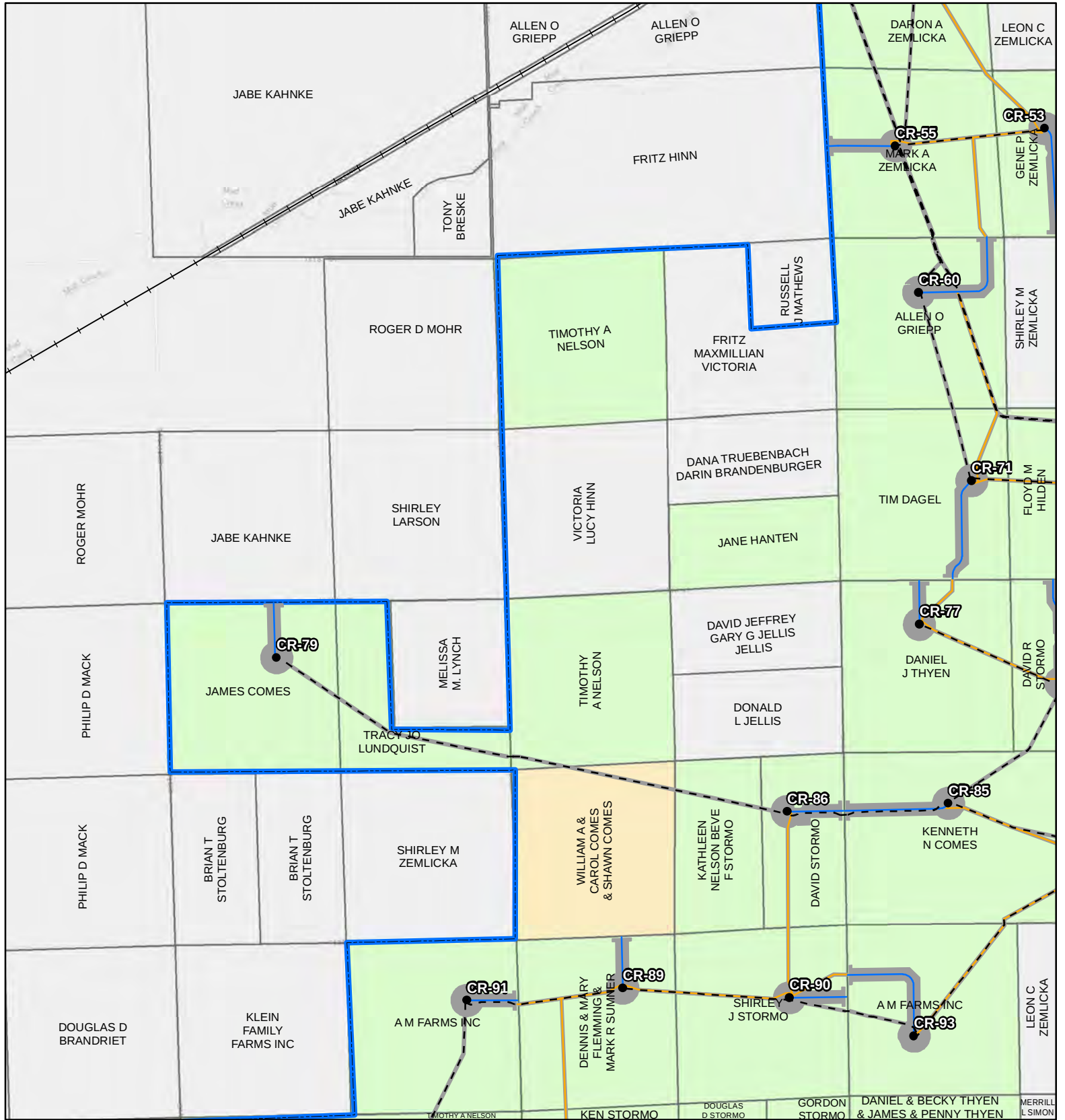
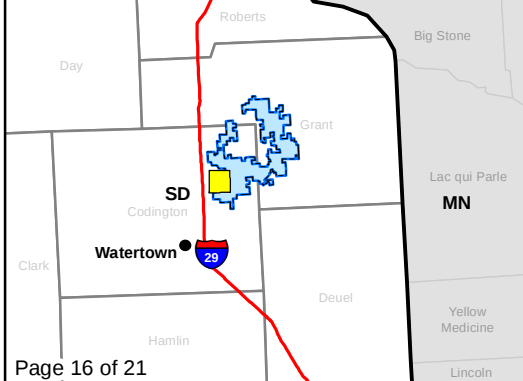


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

N
W E
S

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Still Lake SE (1970), South Shore (1973)

Township/Range: T118N, R52W, T118N, R51W

Codington County, South Dakota

003620 **SWCA**
 ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

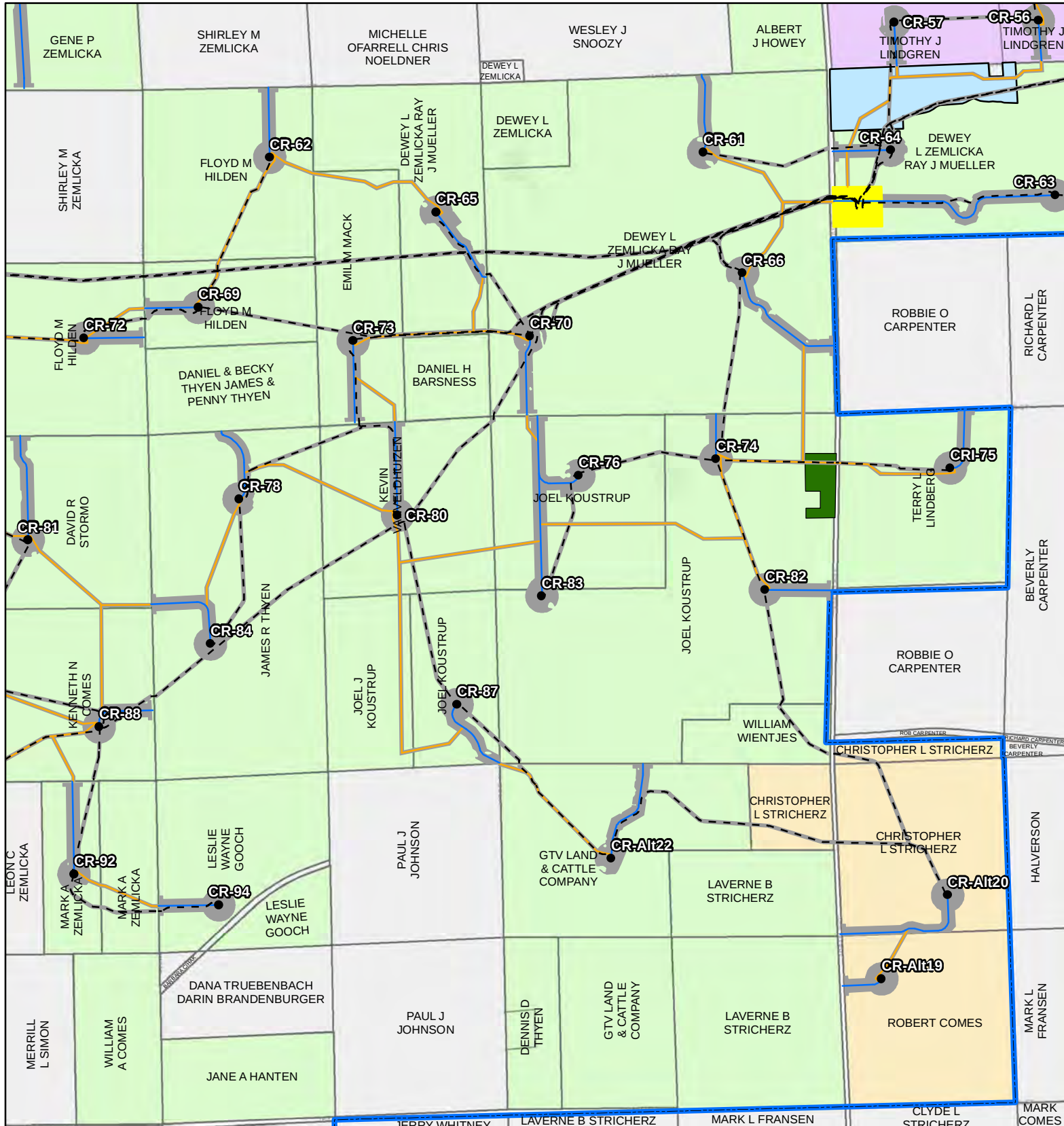
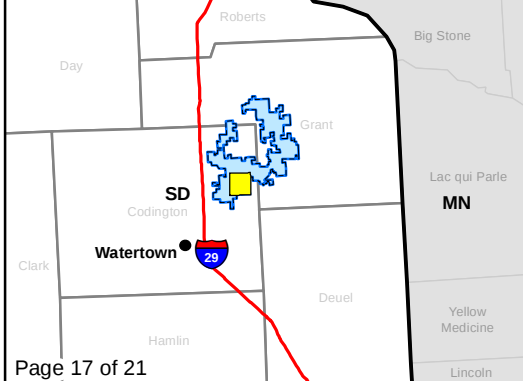


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers
0 0.5 1

Miles
0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
Quadrangle: South Shore (1973)

Township/Range: T118N, R51W

Codington County, South Dakota

003621 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

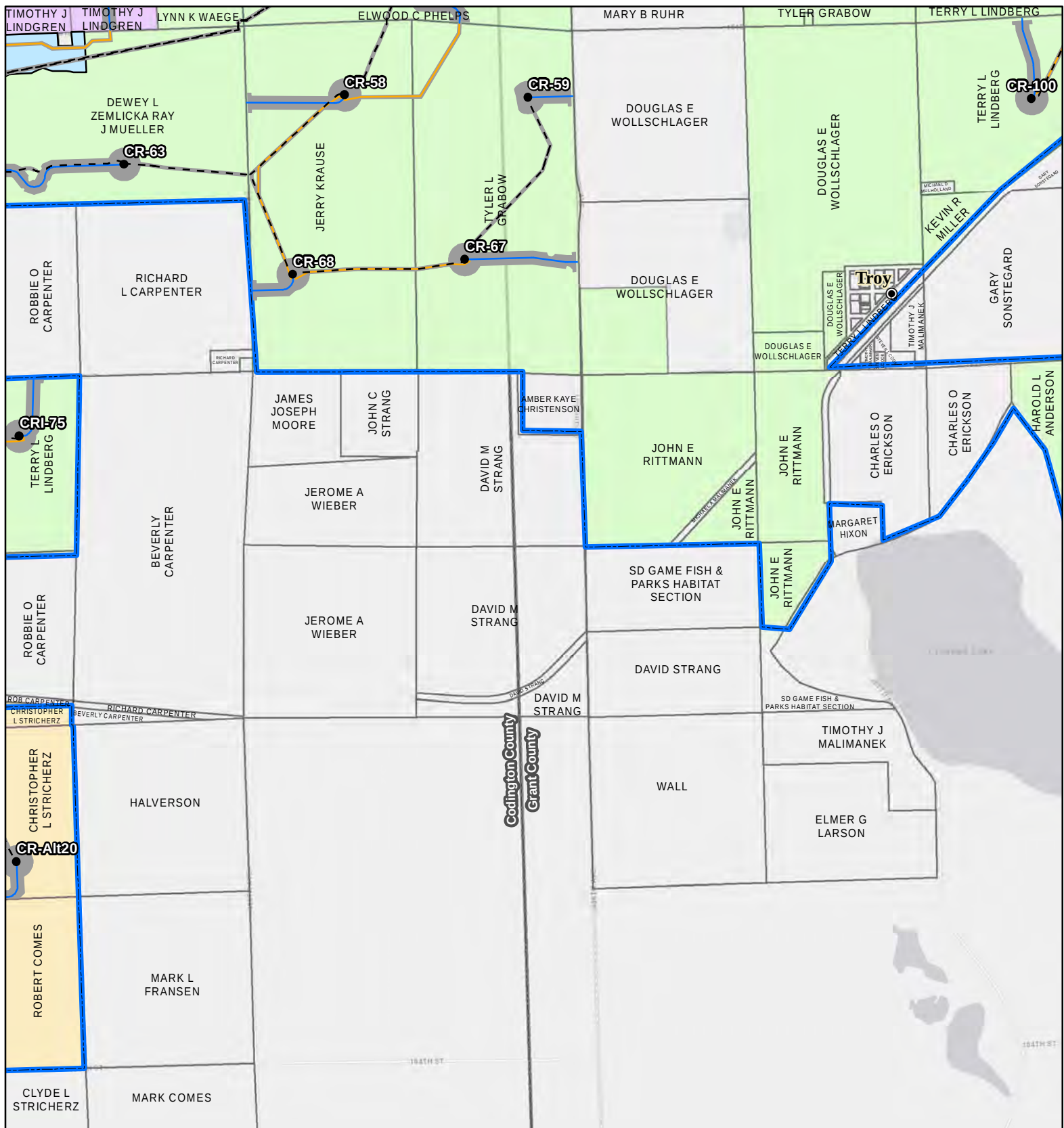
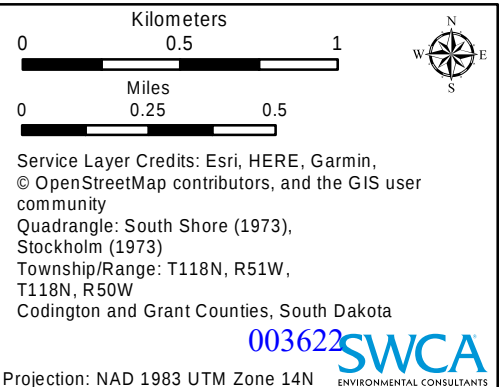
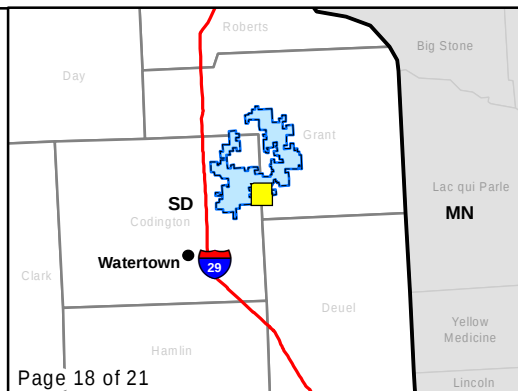
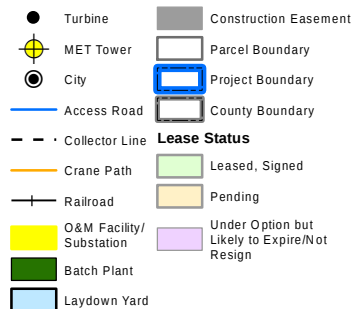


Figure 3a. Project Map
Crowned Ridge Wind Farm



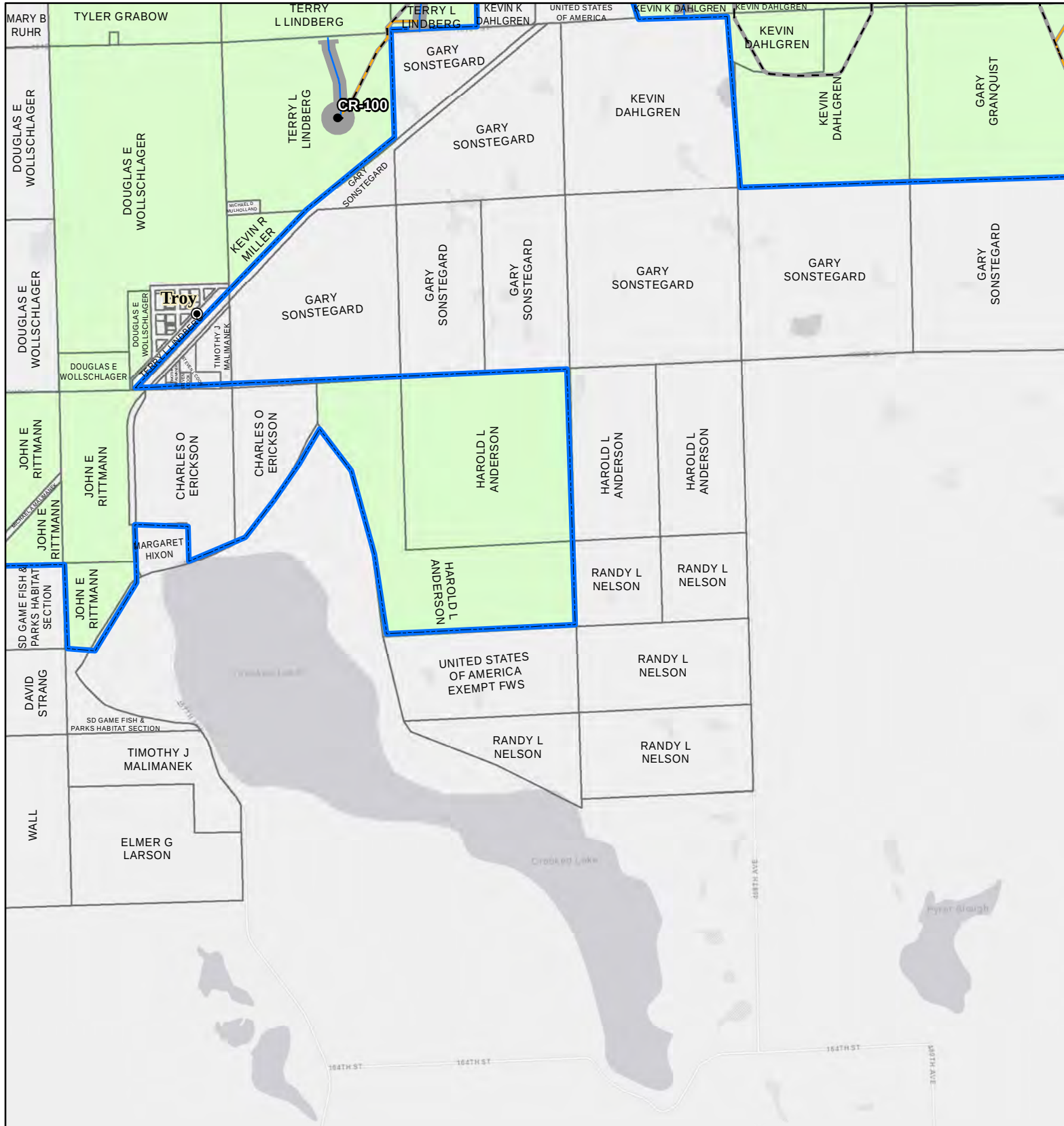
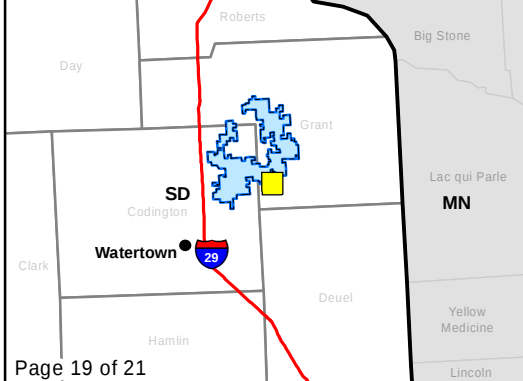


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
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 - Under Option but Likely to Expire/Not Resign



0 0.5 1
Kilometers

0 0.25 0.5
Miles

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: South Shore (1973), Stockholm (1973)

Township/Range: T118N, R50W

Grant County, South Dakota

003623 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

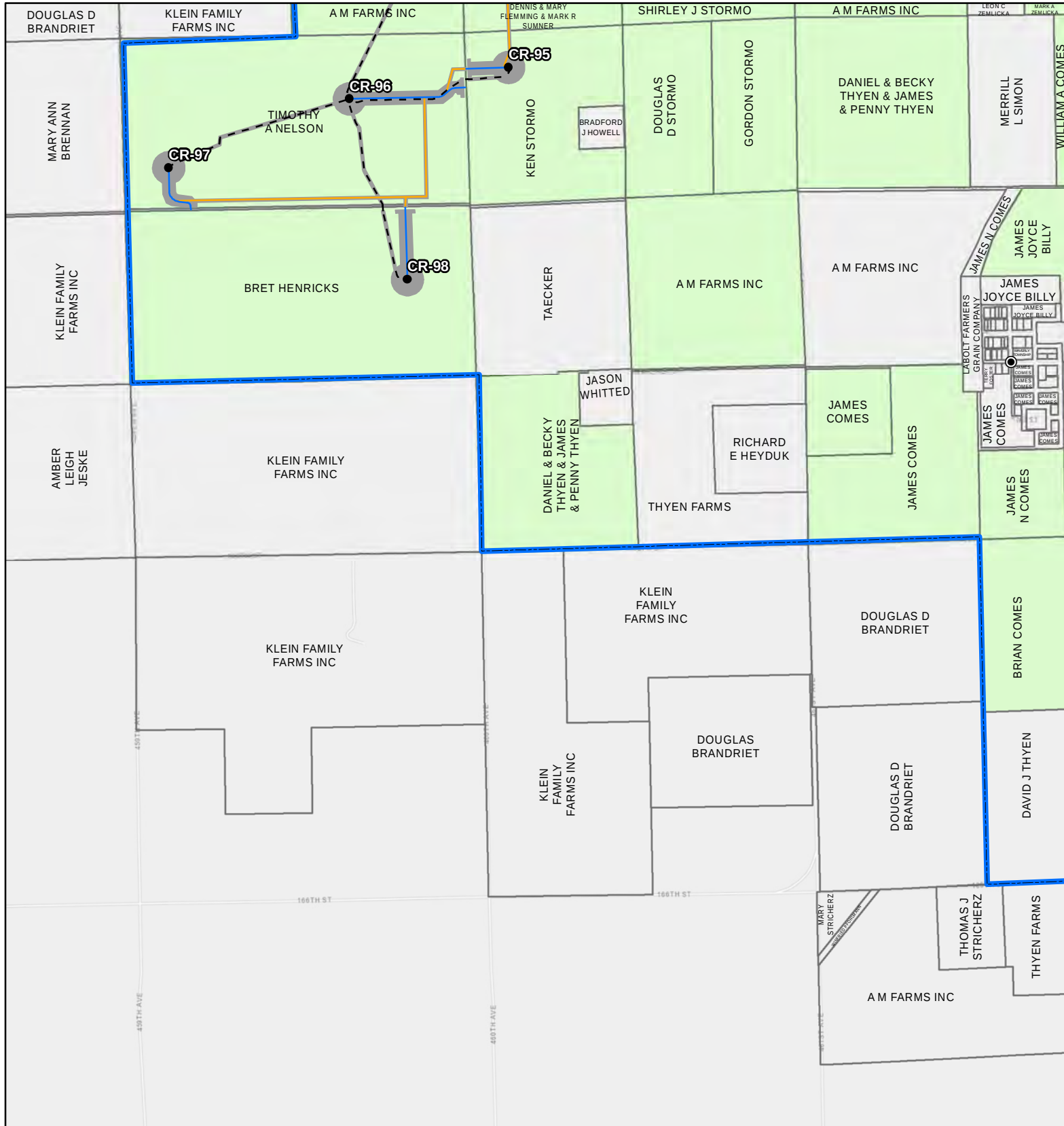
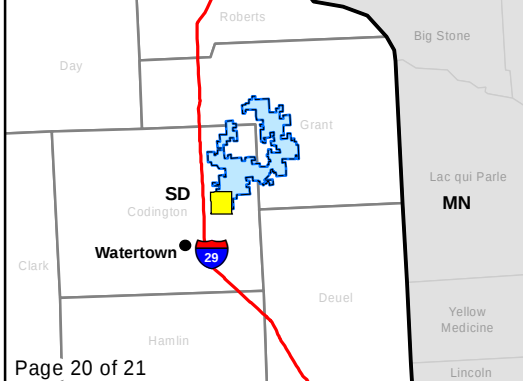


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
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- Lease Status**
- Leased, Signed
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 - Under Option but Likely to Expire/Not Resign



0 0.5 1
Kilometers

0 0.25 0.5
Miles

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Still Lake SE (1970), Watertown East (1969), South Shore (1973), Kranzburg (1970)

Township/Range: T118N, R52W, T118N, R51W, T117N, R52W, T117N, R51W

Codington County, South Dakota

003624 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

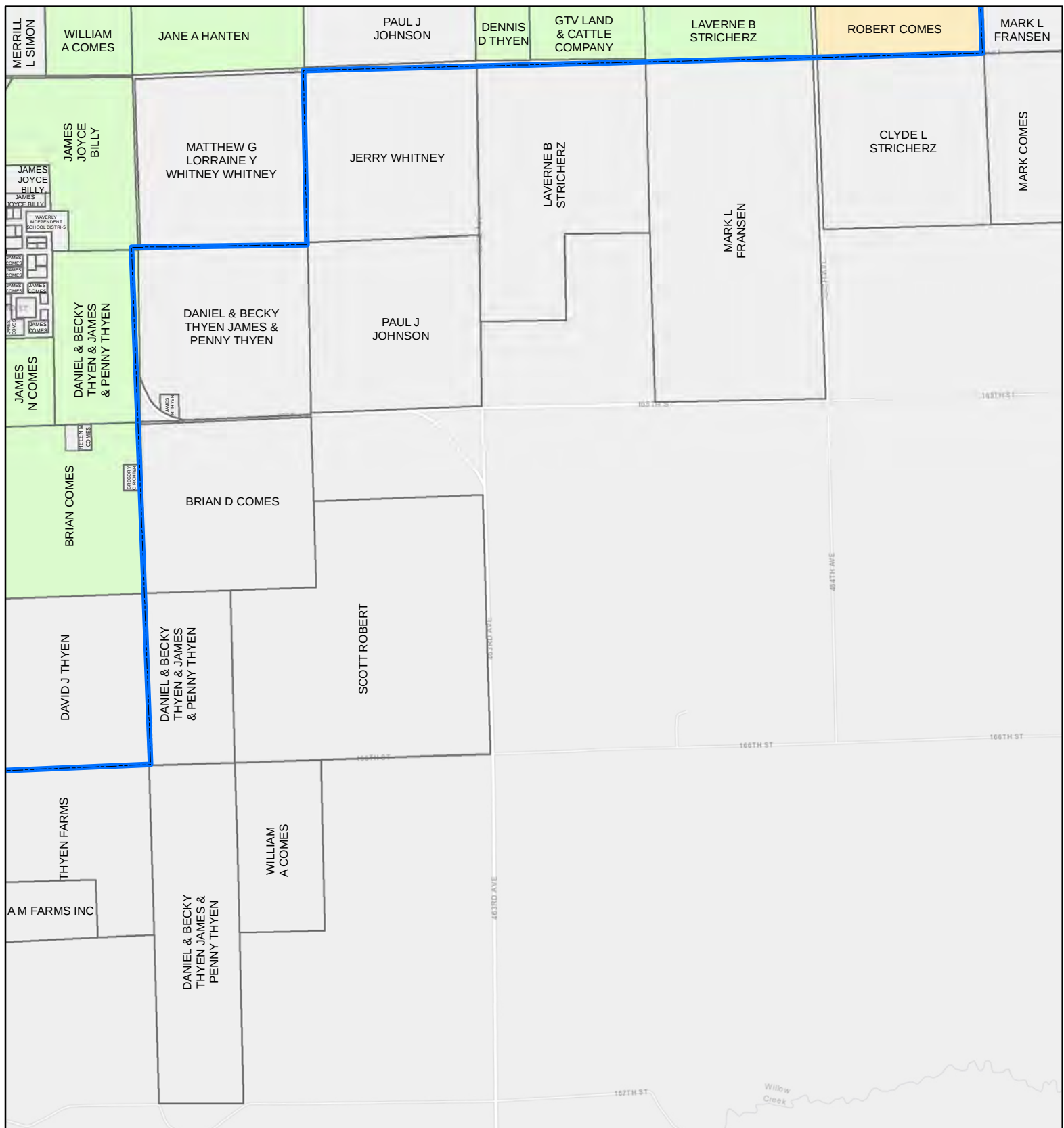
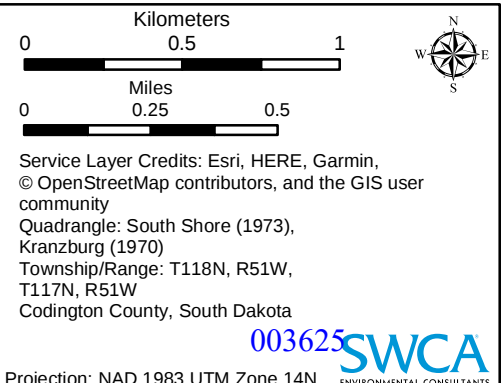
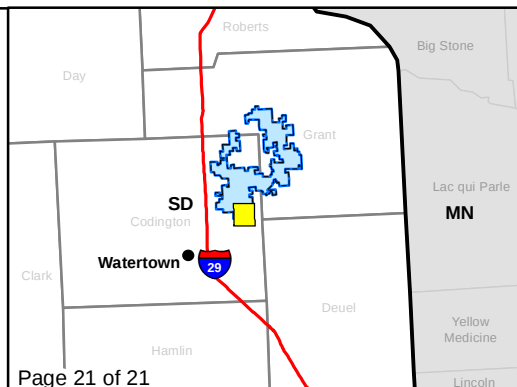
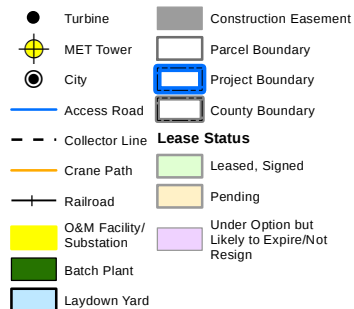


Figure 3a. Project Map
Crowned Ridge Wind Farm



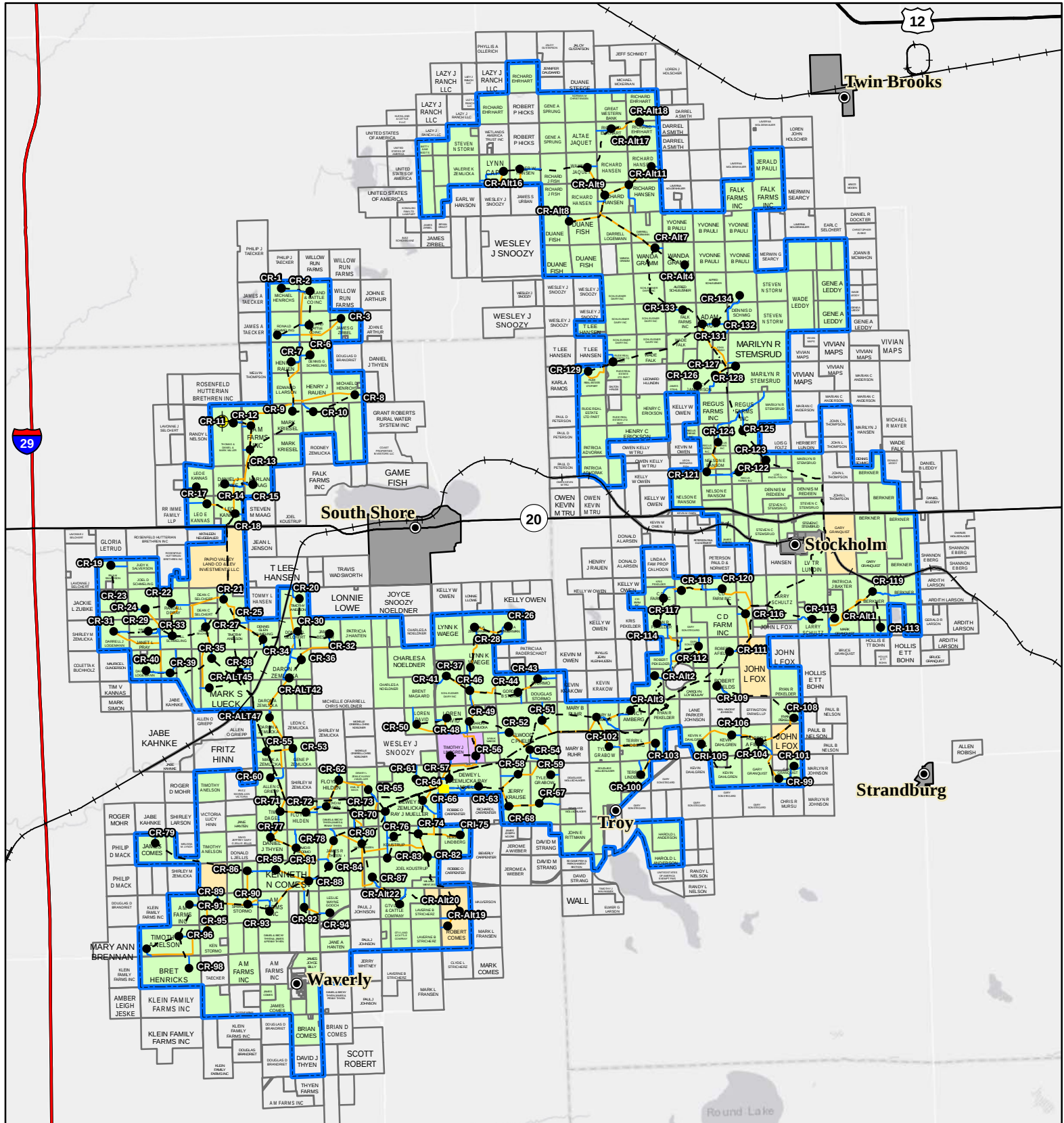
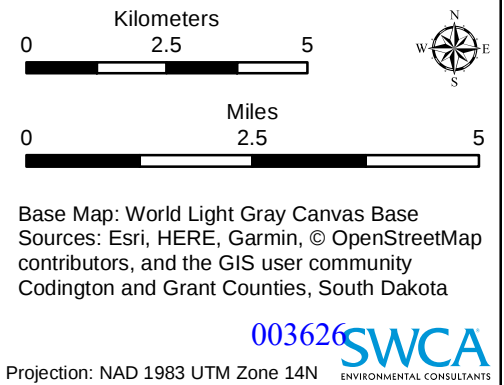
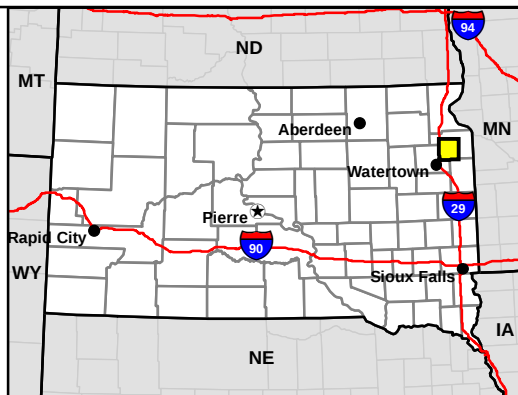
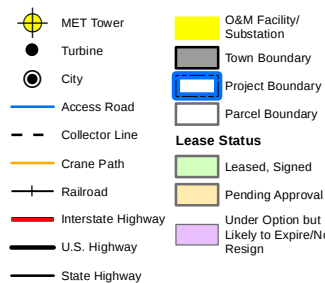


Figure 3a. Project Map

Crowned Ridge Wind Farm



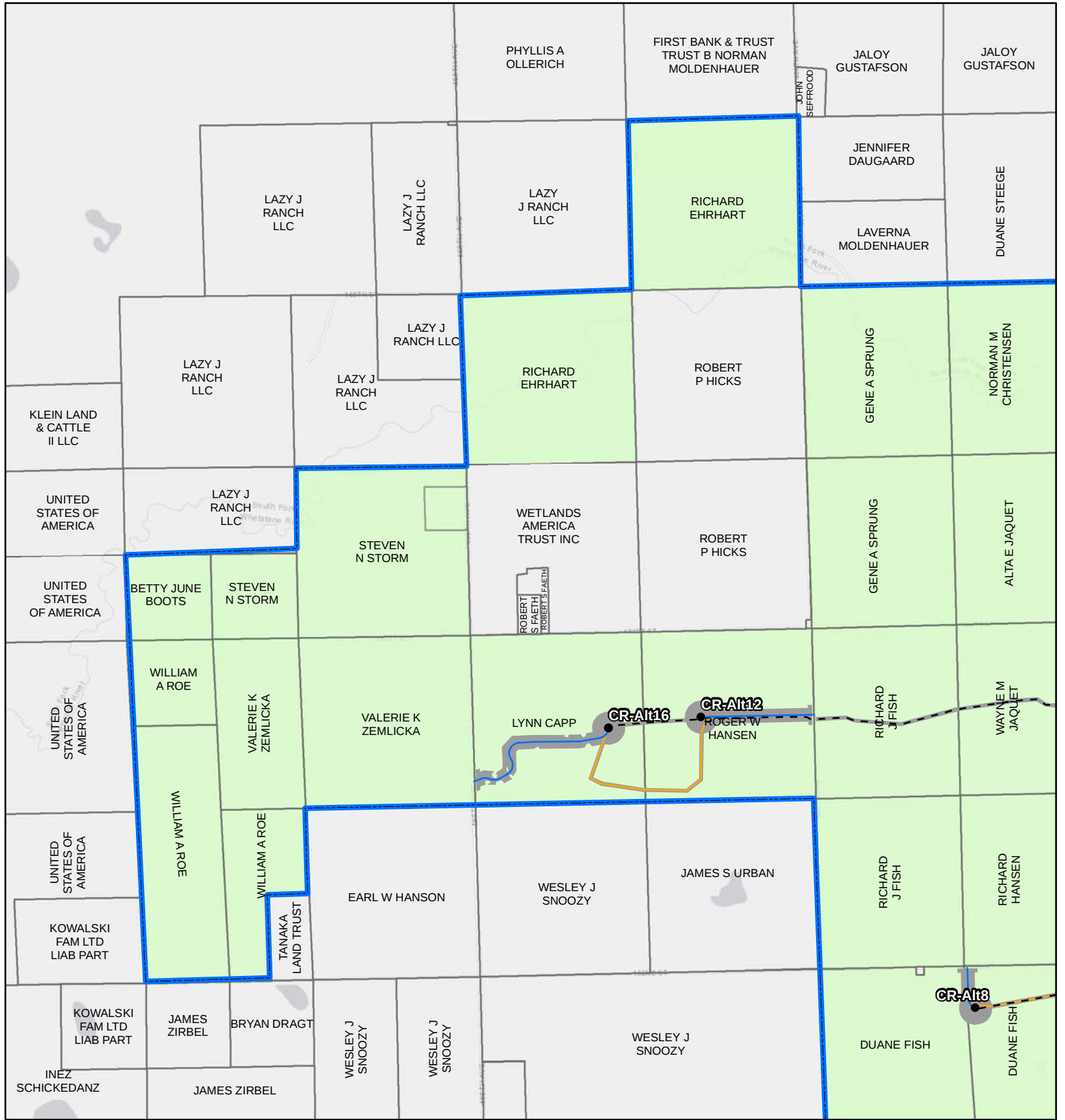
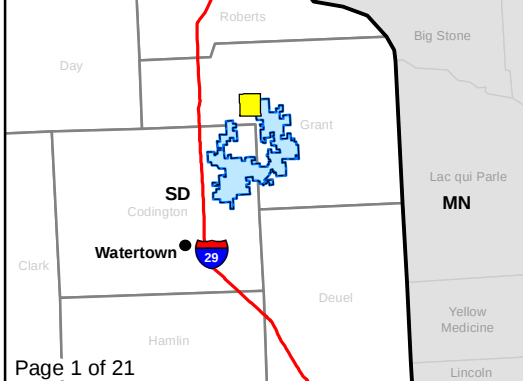


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers
0 0.5 1

Miles
0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
Quadrangle: Antelope Valley (1973), Twin Brooks (1973)
Township/Range: T120N, R51W, T120N, R50W
Grant County, South Dakota

003627 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

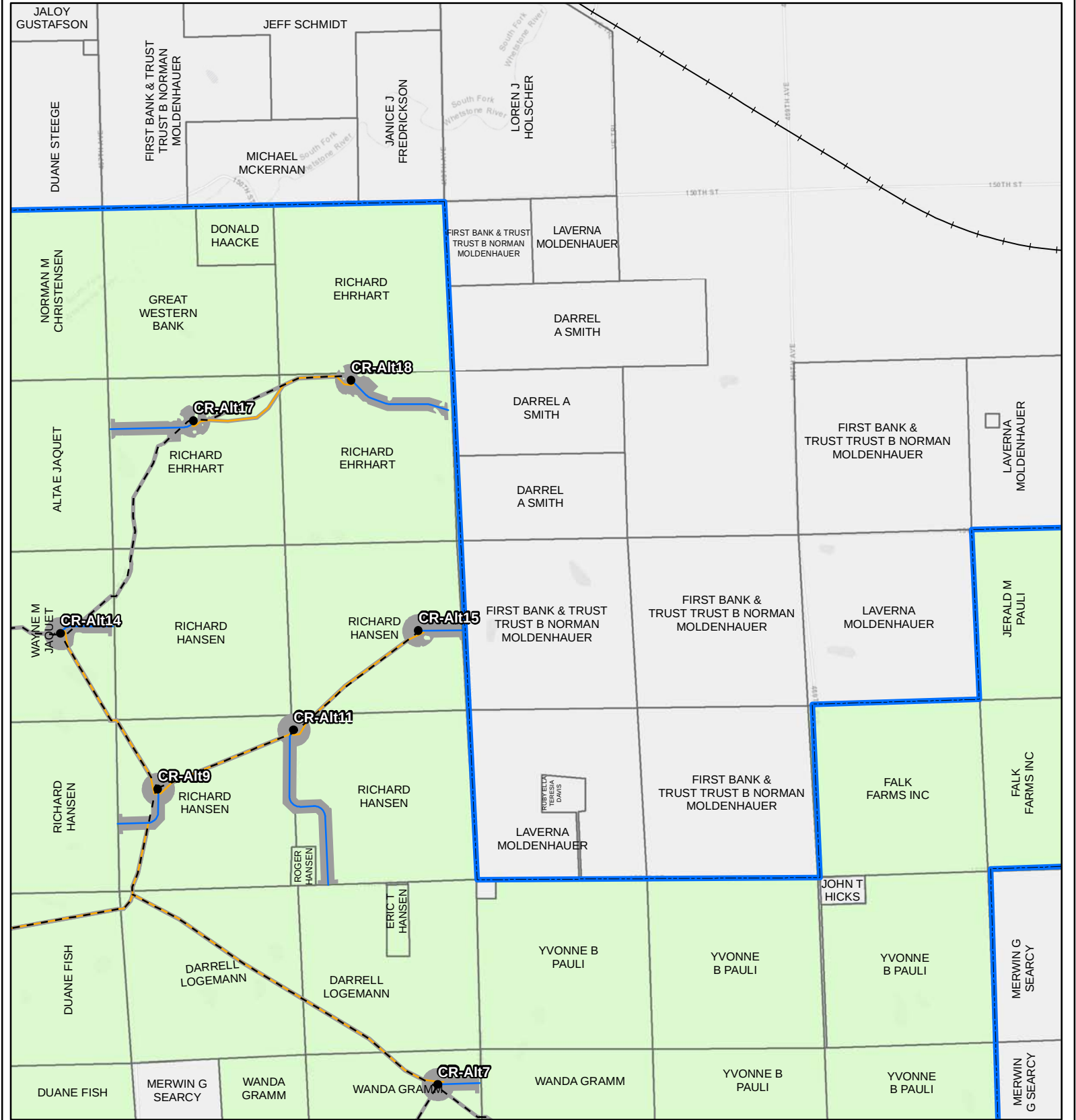
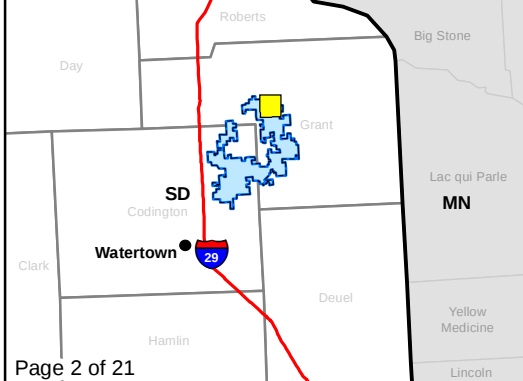


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
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 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Twin Brooks (1973)

Township/Range: T120N, R50W

Grant County, South Dakota

003628 **SWCA**
 ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

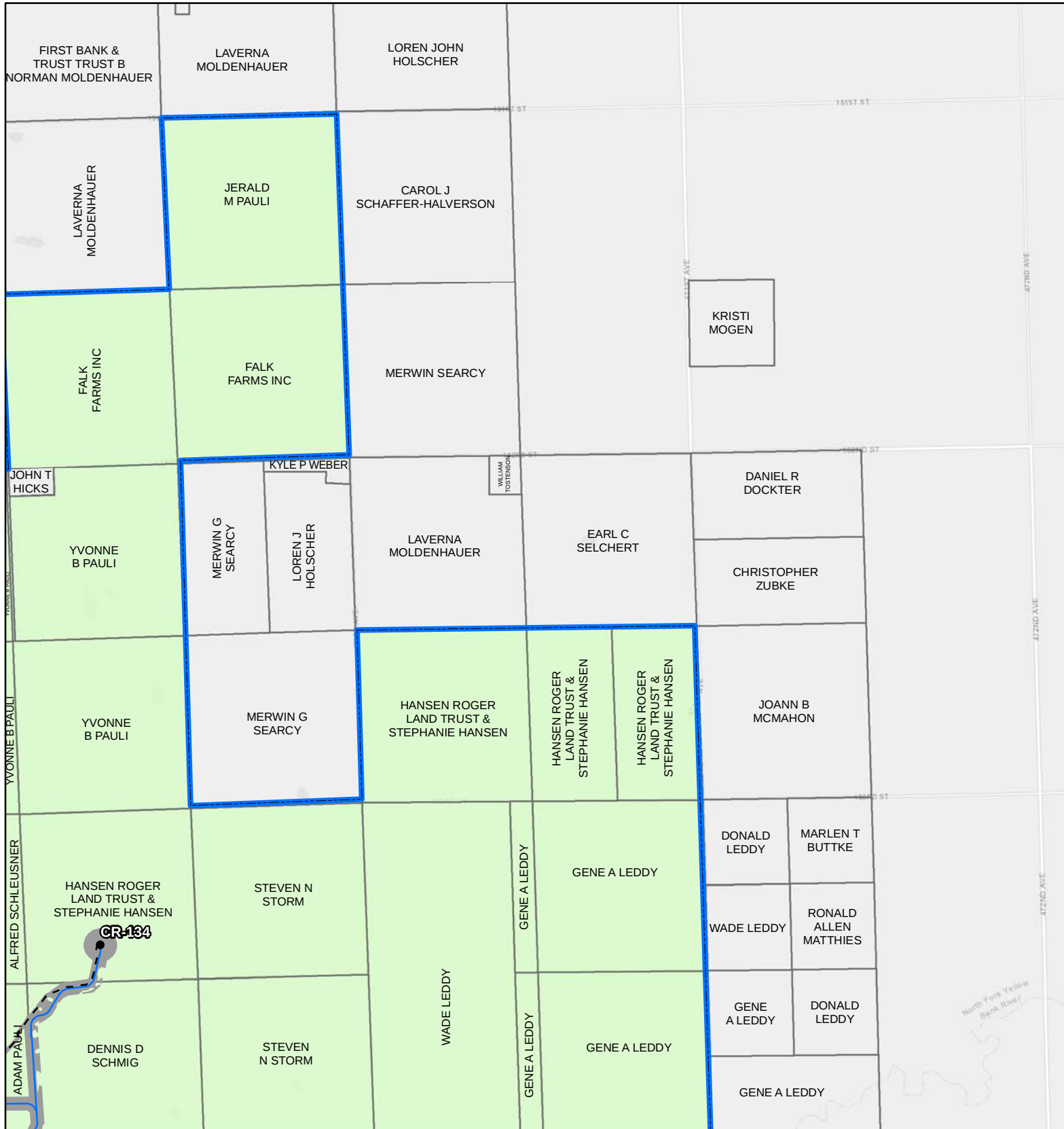
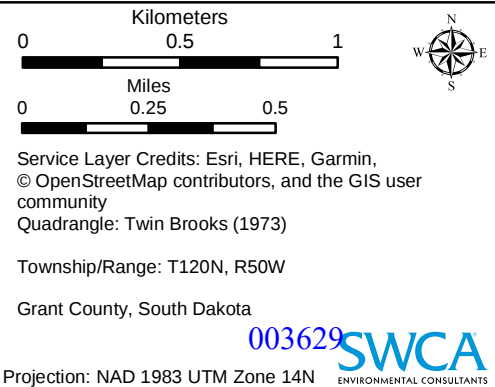
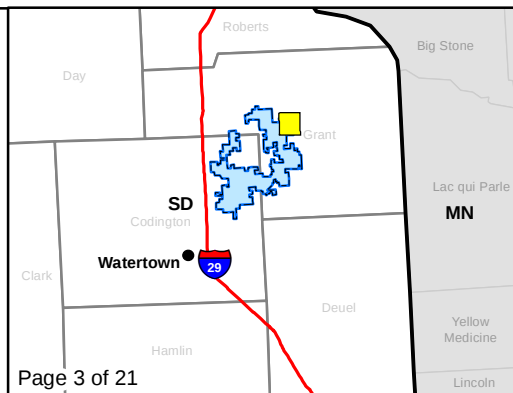
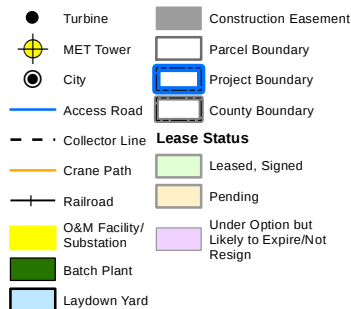


Figure 3a. Project Map
Crowned Ridge Wind Farm



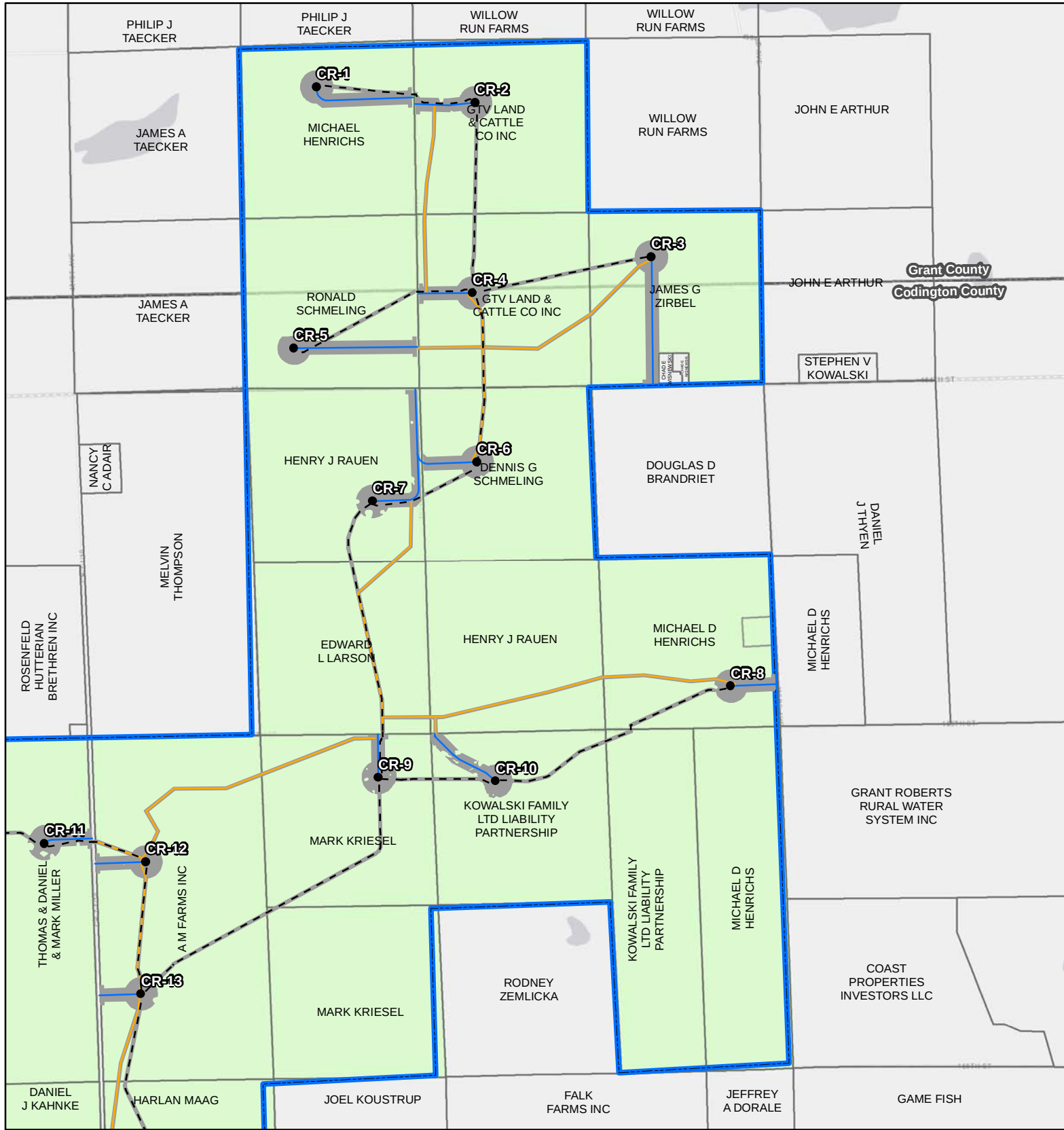


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
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 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Antelope Valley (1973), South Shore (1973)

Township/Range: T120N, R51W, T119N, R51W, Codington and Grant Counties, South Dakota

003630 SWCA
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

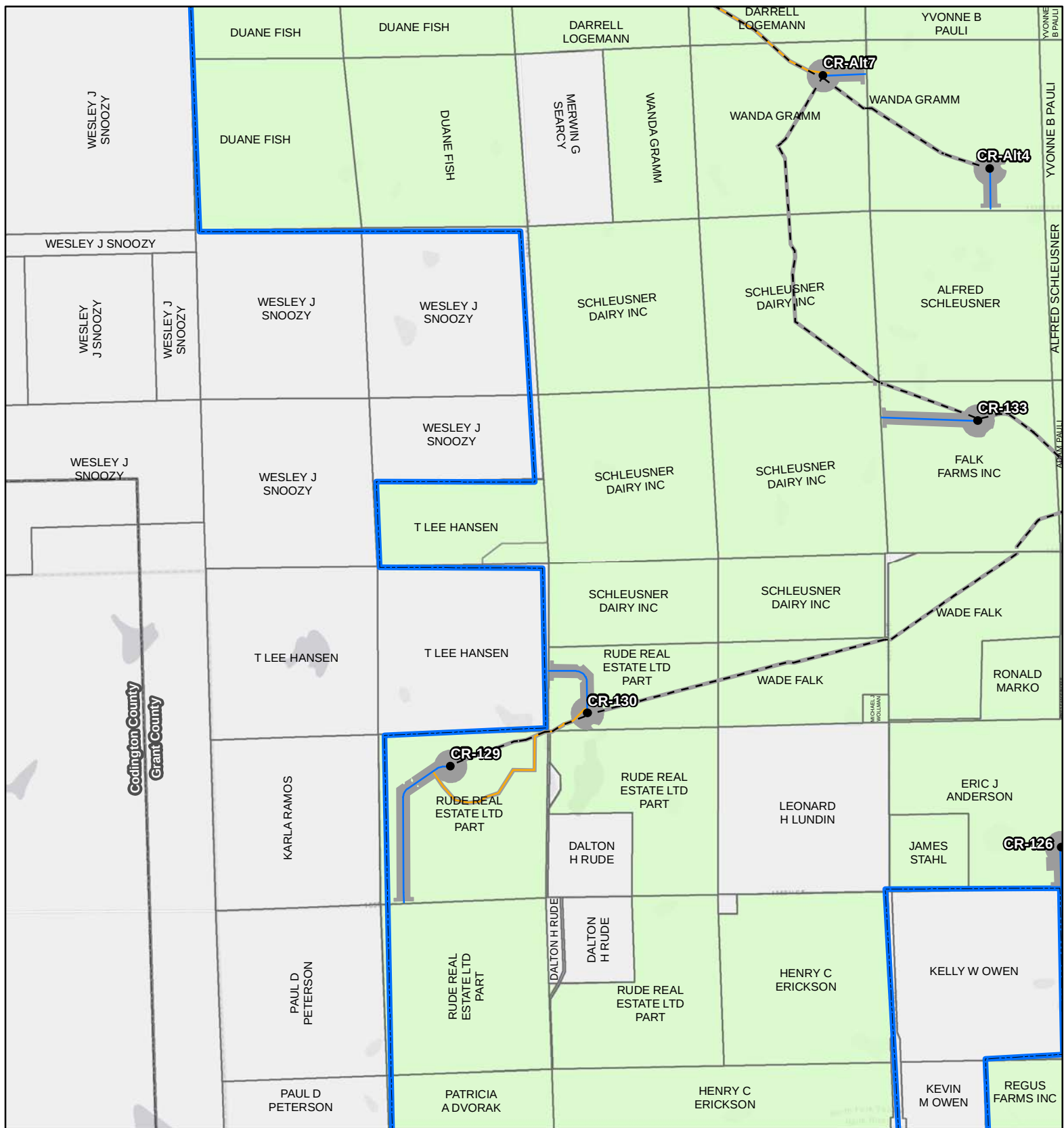
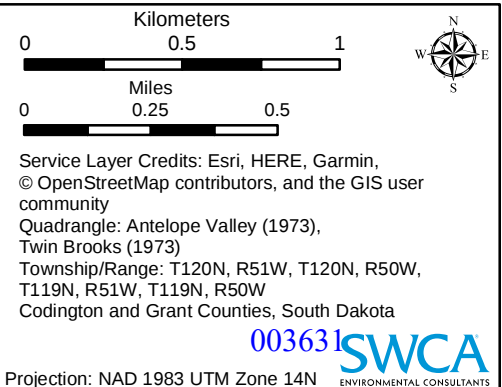
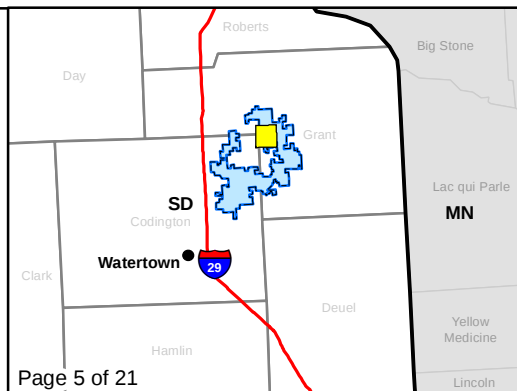
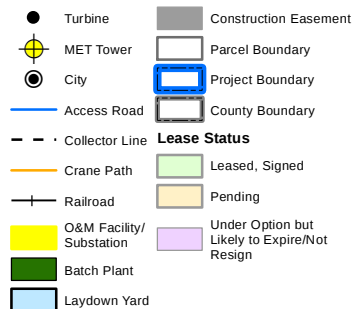


Figure 3a. Project Map
Crowned Ridge Wind Farm



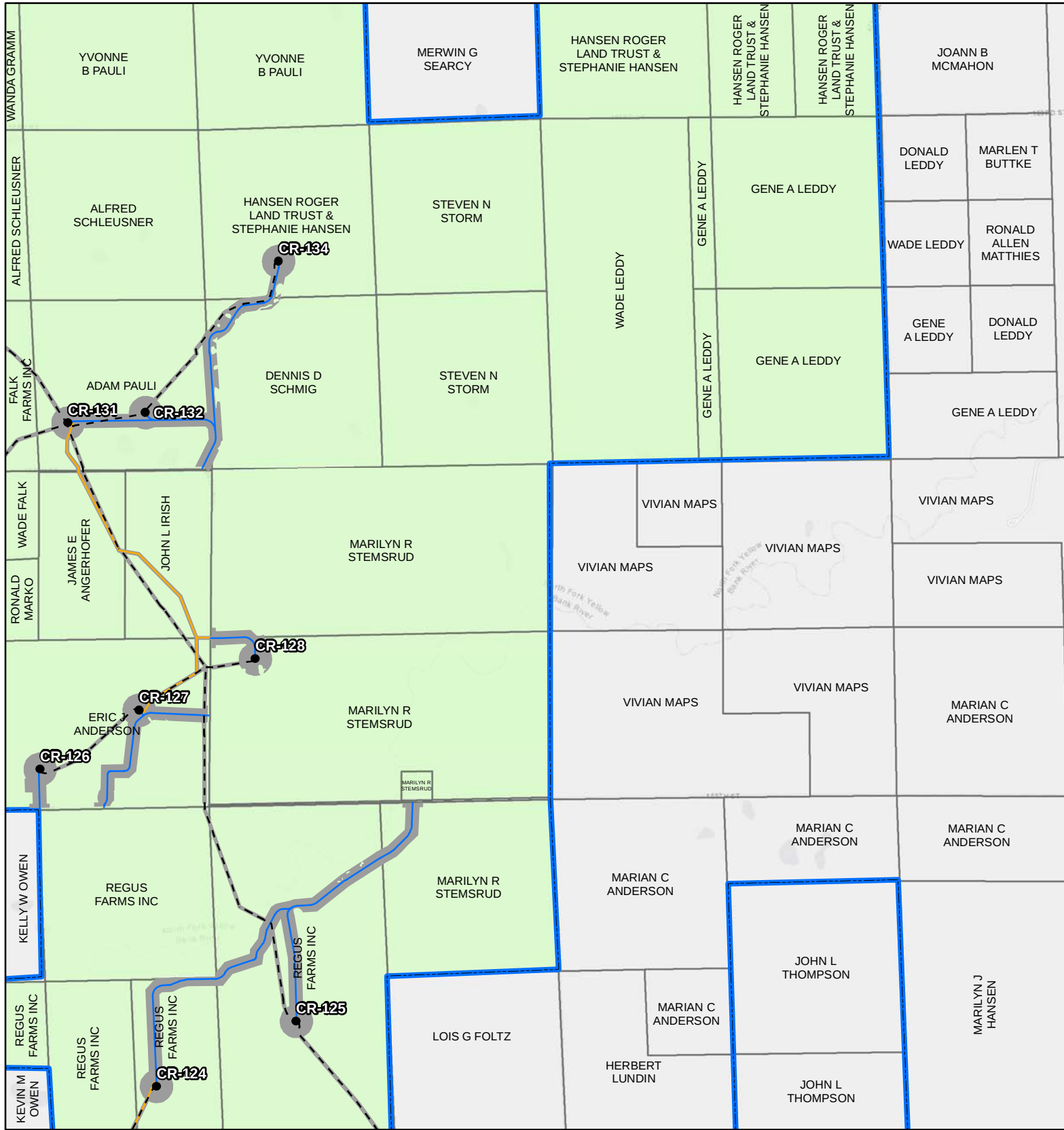
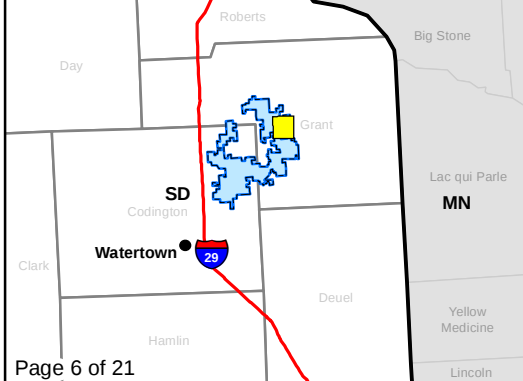


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Twin Brooks (1973), Stockholm (1973)

Township/Range: T120N, R50W, T119N, R50W

Grant County, South Dakota

003632 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

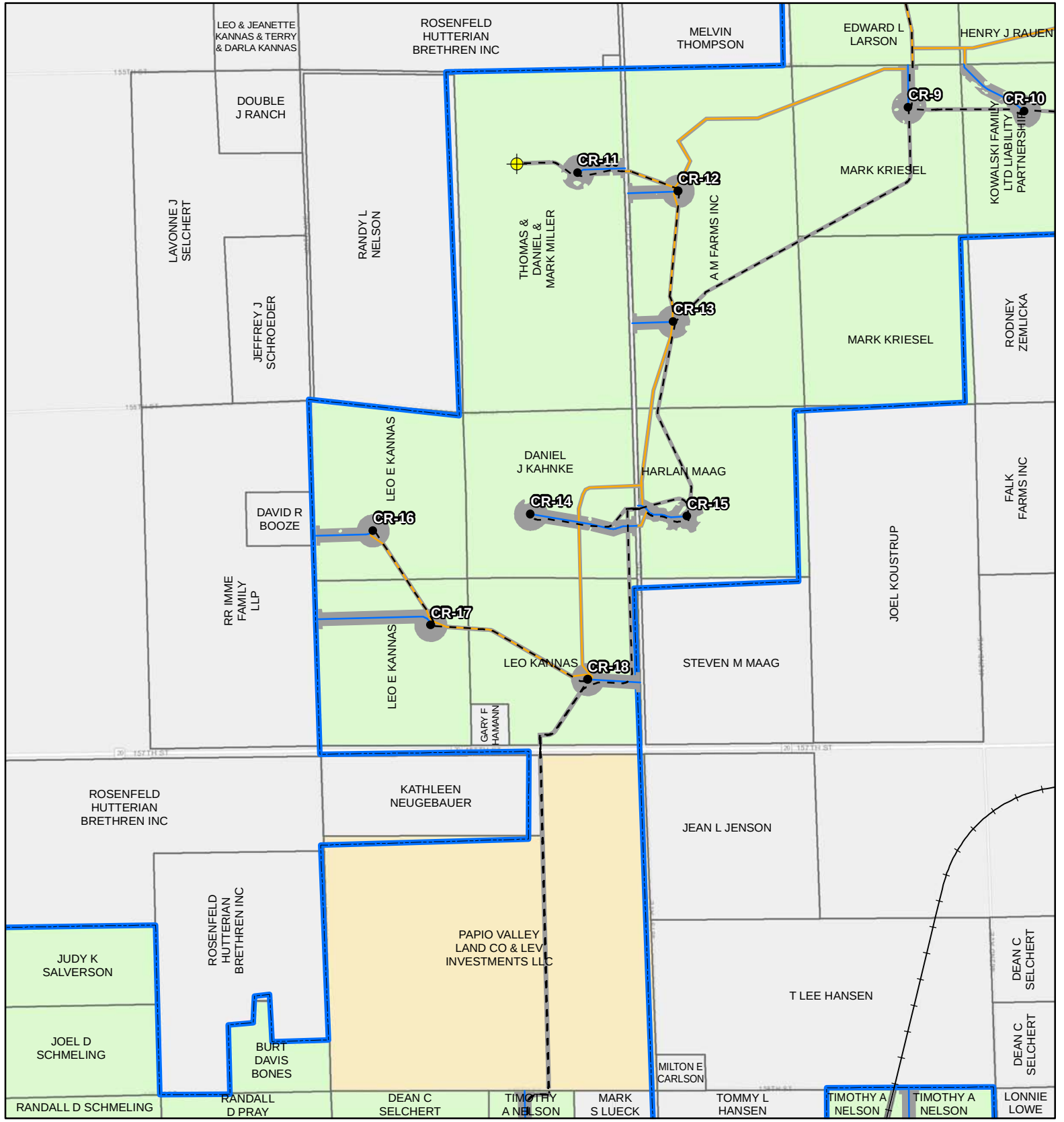
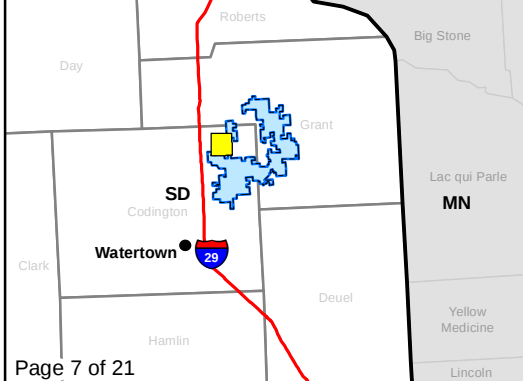


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



0 0.5 1
Kilometers

0 0.25 0.5
Miles

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
 Quadrangle: Still Lake NE (1970), Antelope Valley (1973), Still Lake SE (1970), South Shore (1973)
 Township/Range: T119N, R52W, T119N, R51W
 Codington County, South Dakota

003633 **SWCA**
 ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N



-

0 0.5 1
Kilometers

0 0.25 0.5
Miles

Service Layer Credits: Esri, HERE, Garmin,
© OpenStreetMap contributors, and the GIS user
community

Quadrangle: Stockholm (1973), Antelope Valley (1973),
Twin Brooks (1973), South Shore (1973)
Township/Range: T119N, R50W

Grant County, South Dakota

003634 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

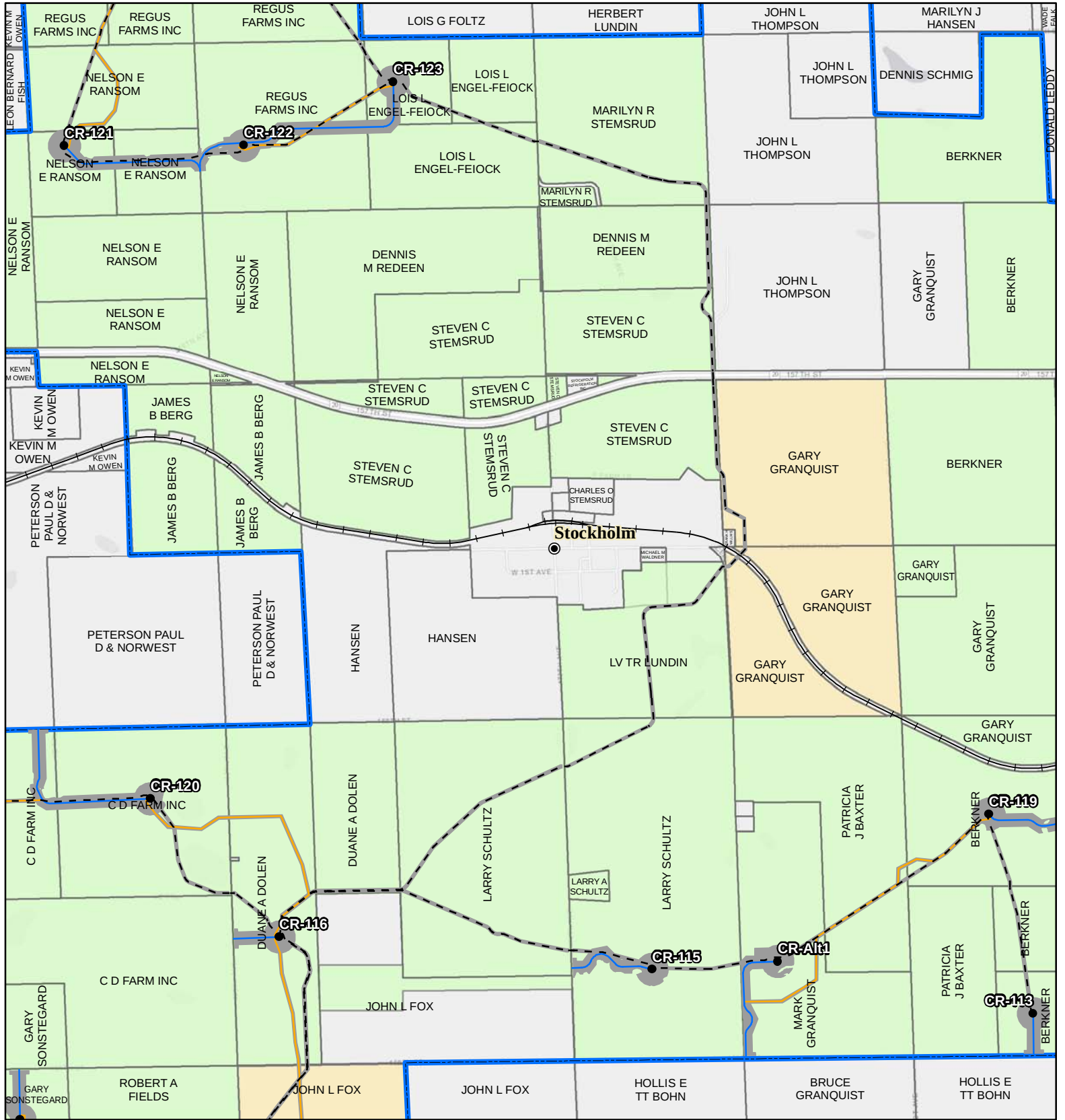
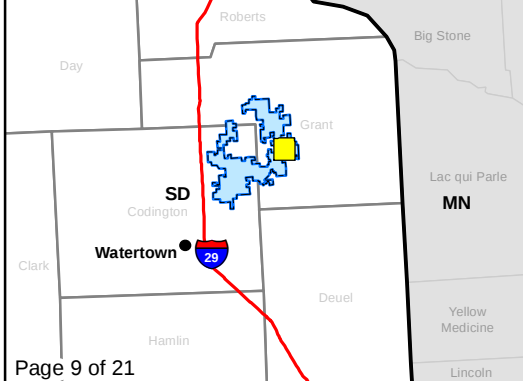


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Stockholm (1973)

Township/Range: T119N, R50W

Grant County, South Dakota

003635 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

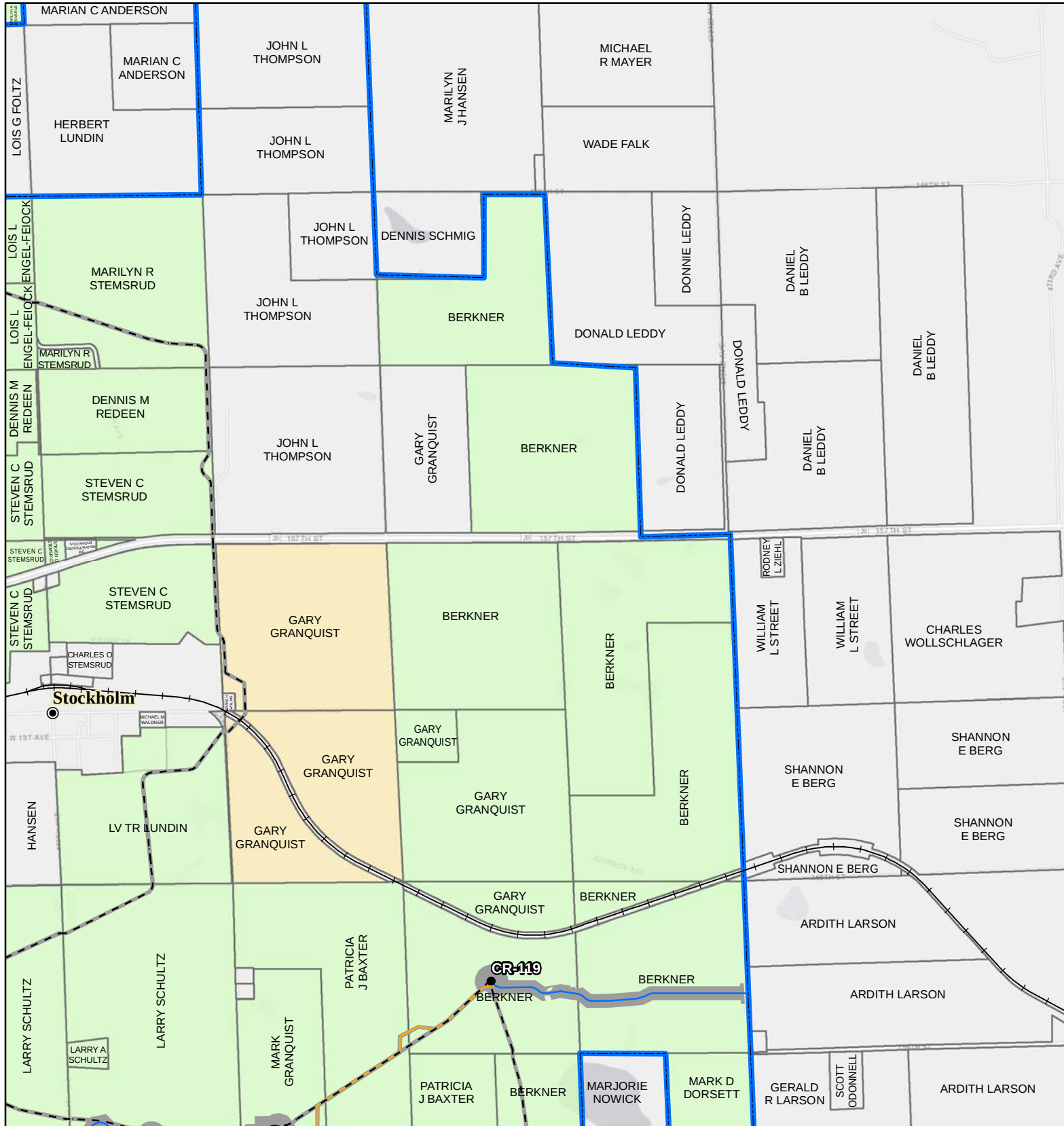
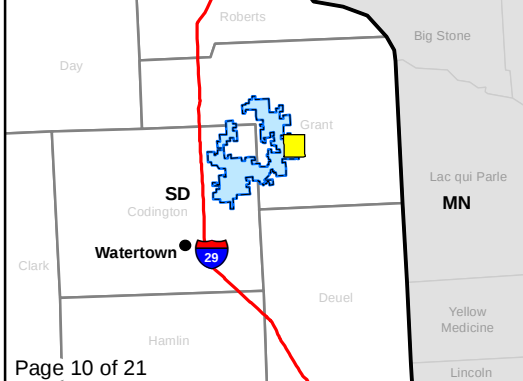


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - ▬ Construction Easement
 - ▬ Parcel Boundary
 - ▬ Project Boundary
 - ▬ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Twin Brooks (1973), Stockholm (1973)

Township/Range: T119N, R50W, T119N, R49W

Grant County, South Dakota

03636 SWCA

ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

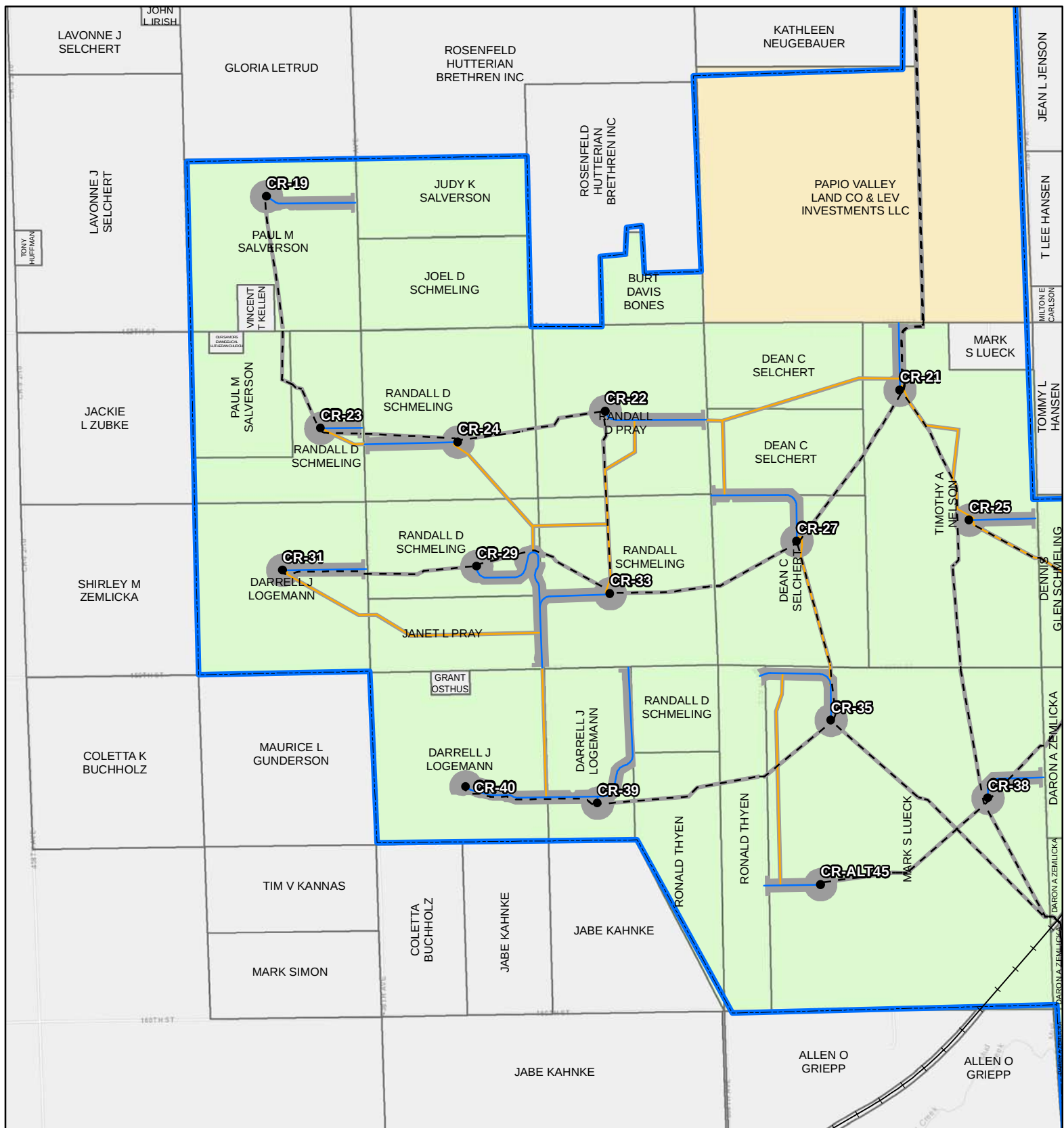
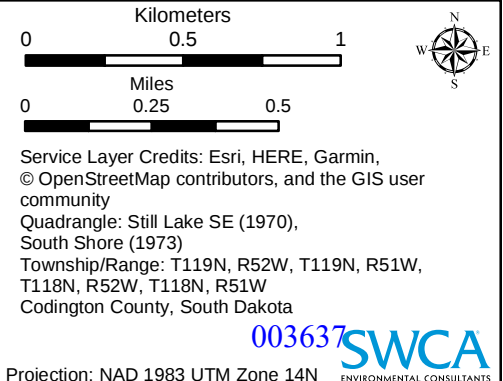
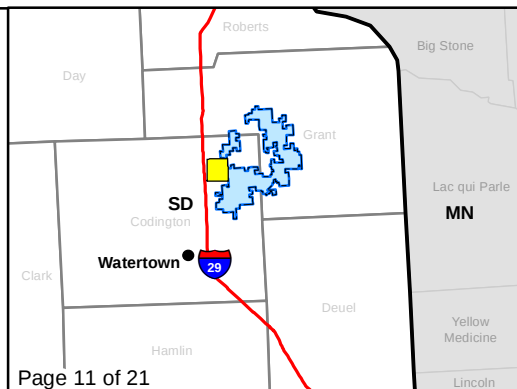
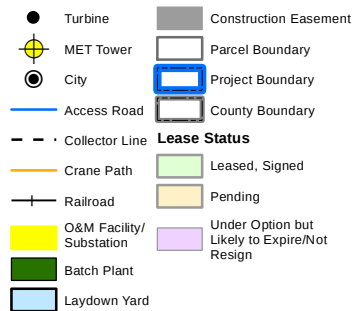


Figure 3a. Project Map
Crowned Ridge Wind Farm



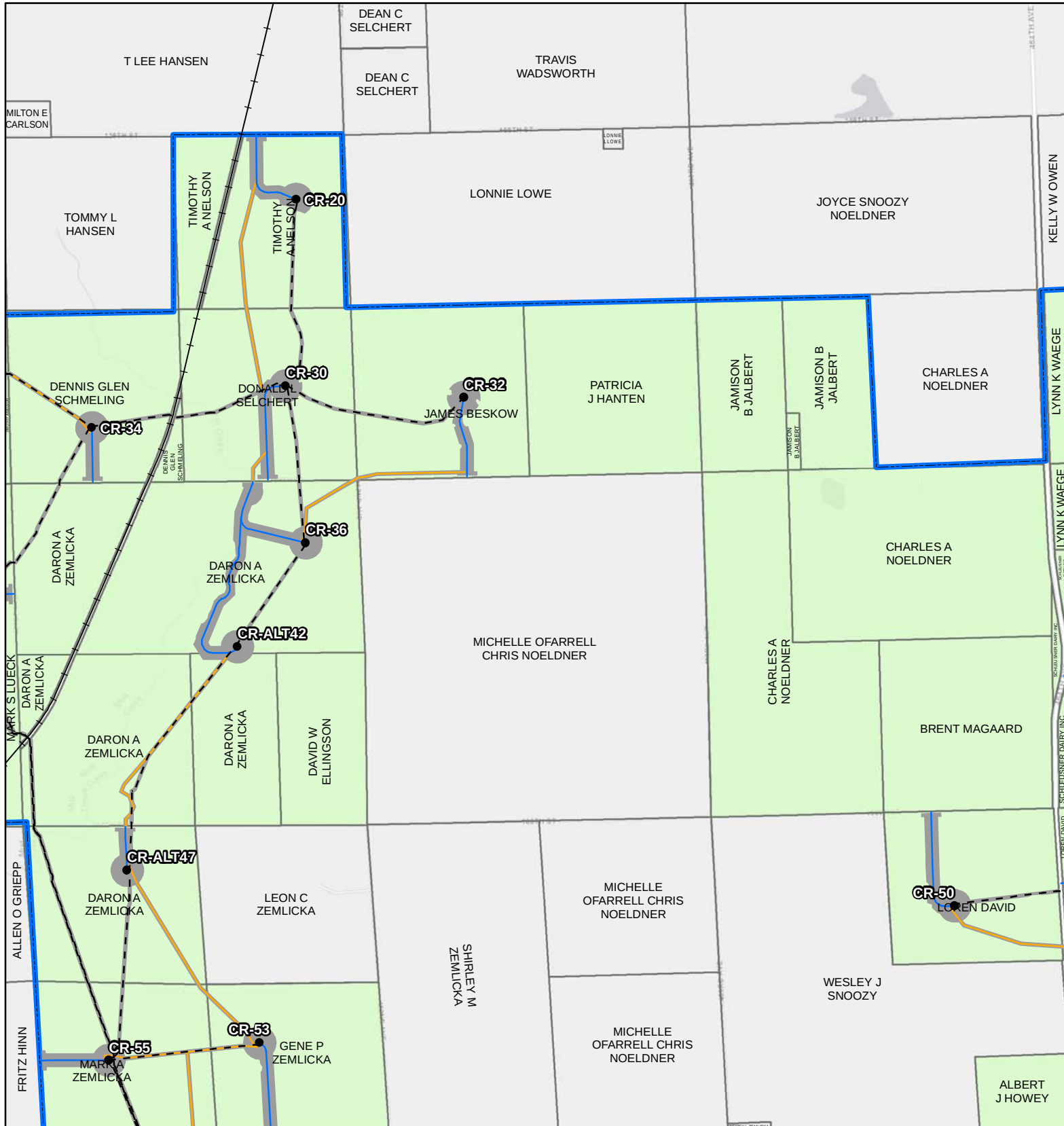
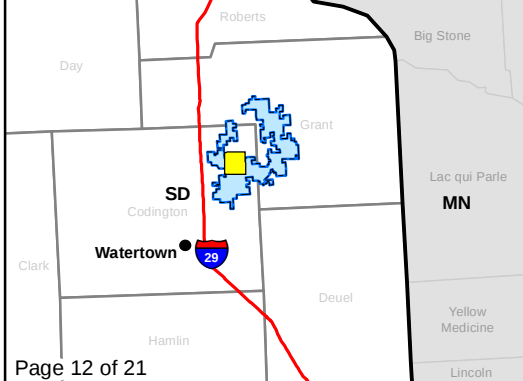


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - ▨ Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: South Shore (1973)

Township/Range: T119N, R51W, T118N, R51W

Codington County, South Dakota

003638 SWCA
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

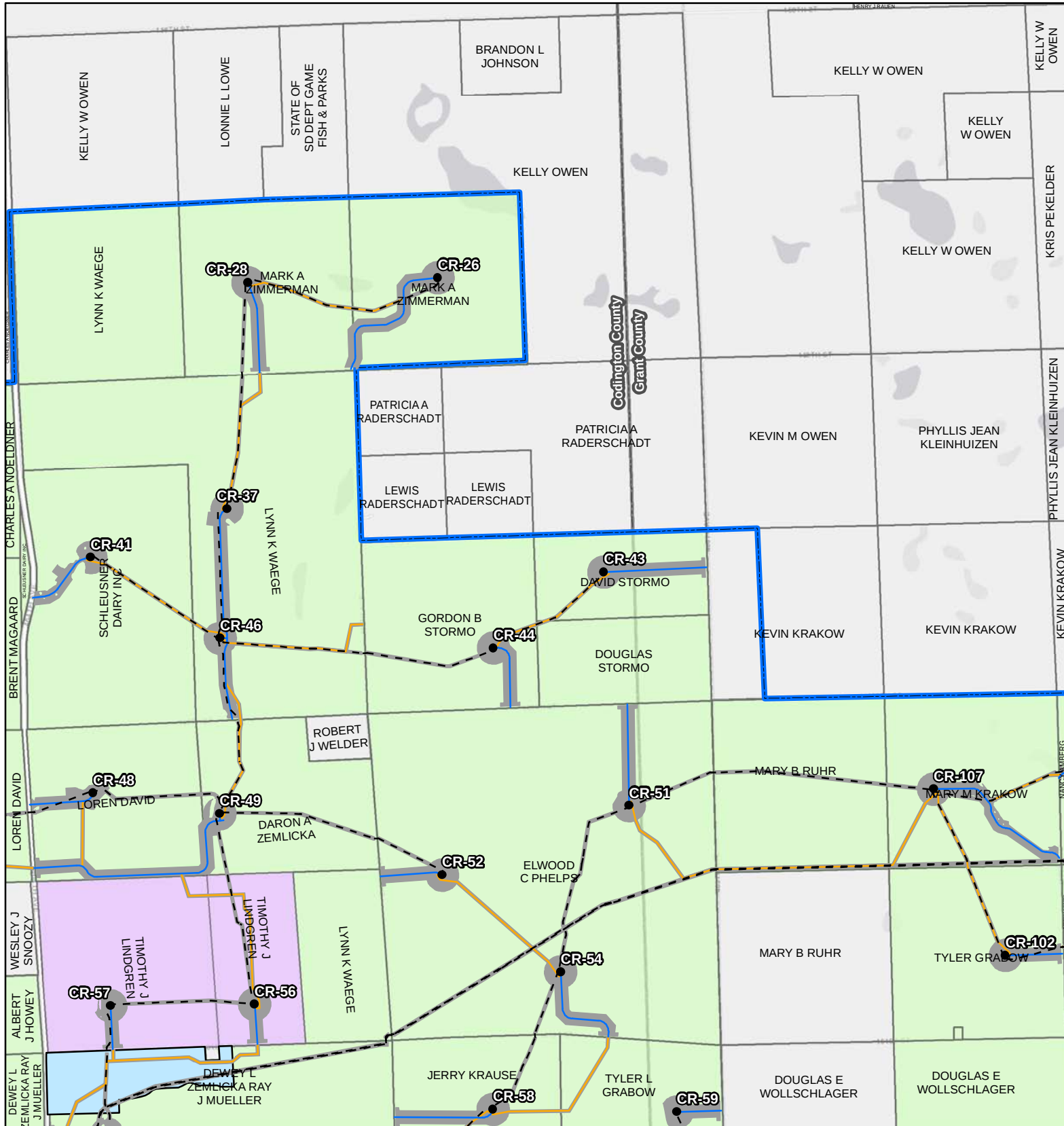
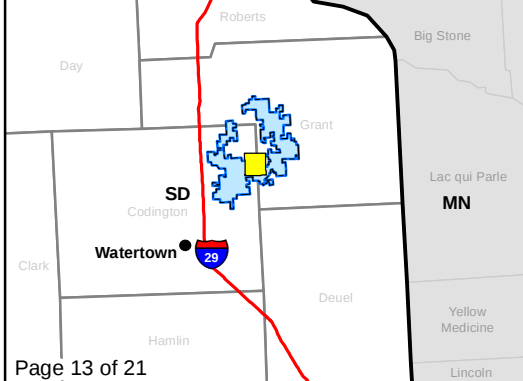


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: South Shore (1973), Stockholm (1973)

Township/Range: T119N, R51W, T119N, R50W, T118N, R51W, T118N, R50W

Codington and Grant Counties, South Dakota

003639 **SWCA**

ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

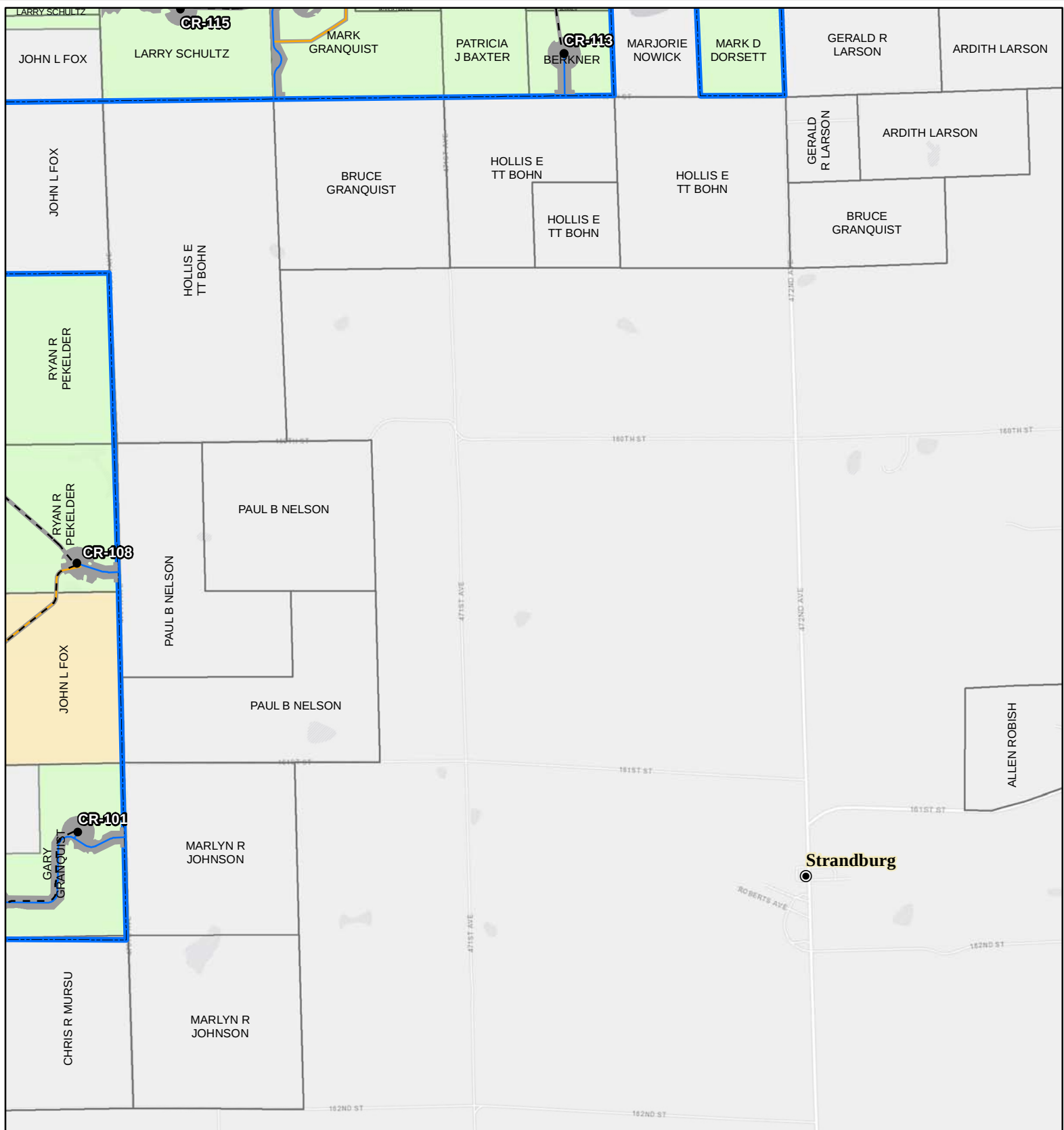
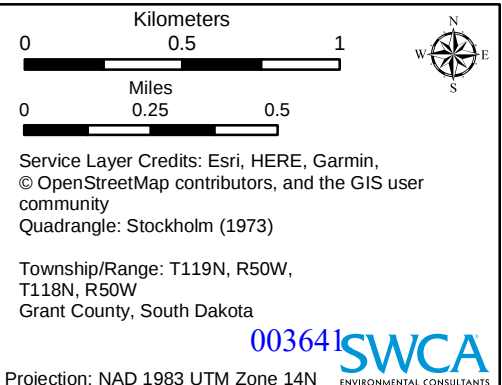
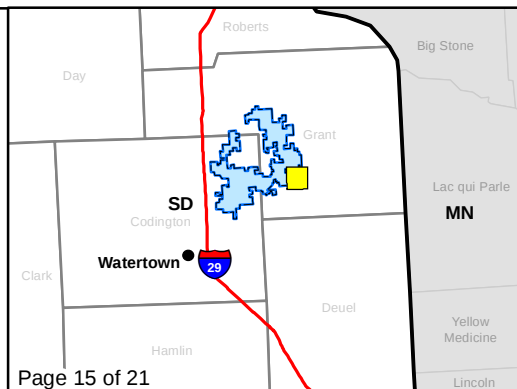
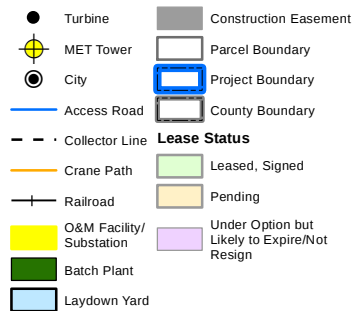


Figure 3a. Project Map
Crowned Ridge Wind Farm



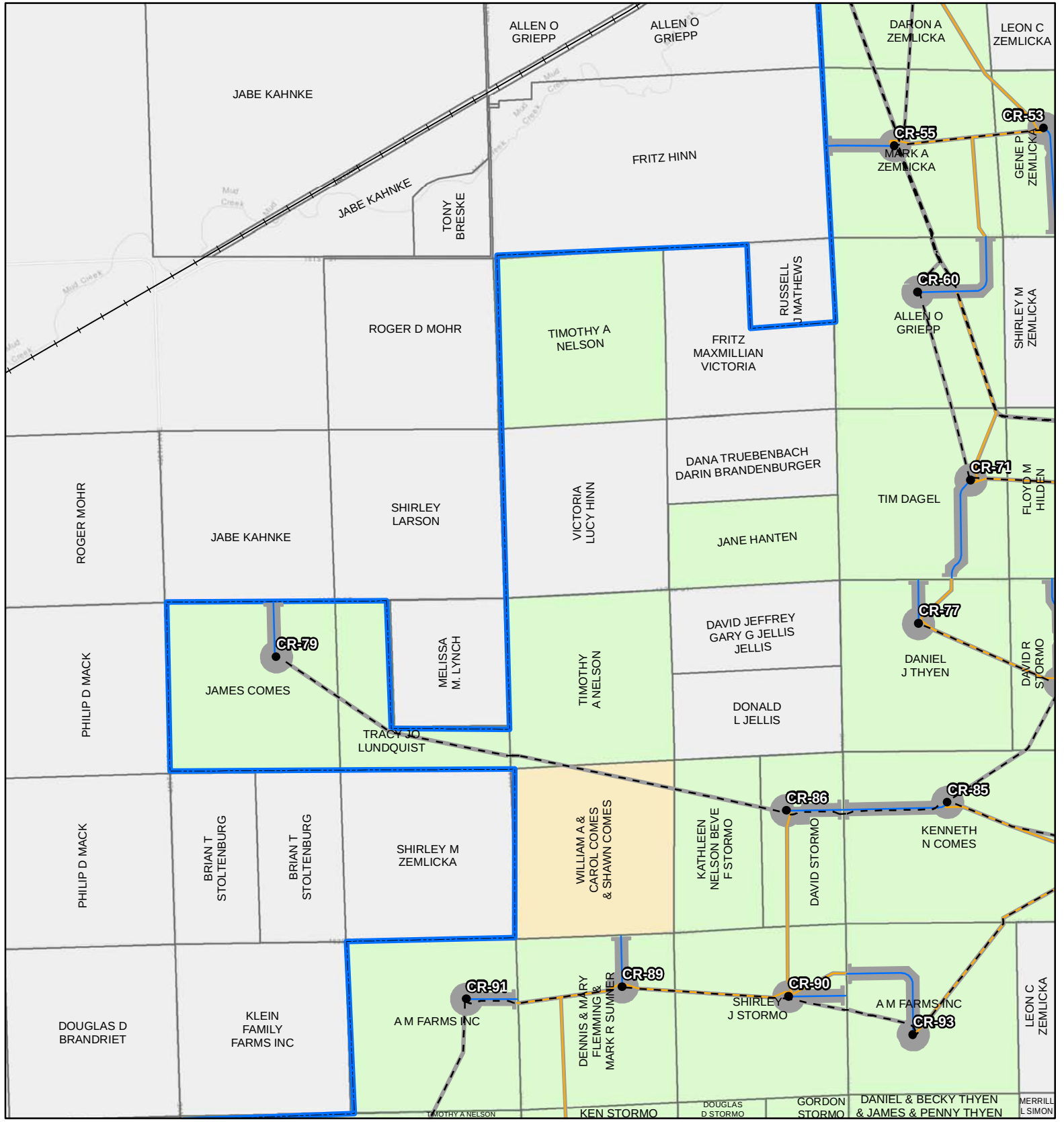
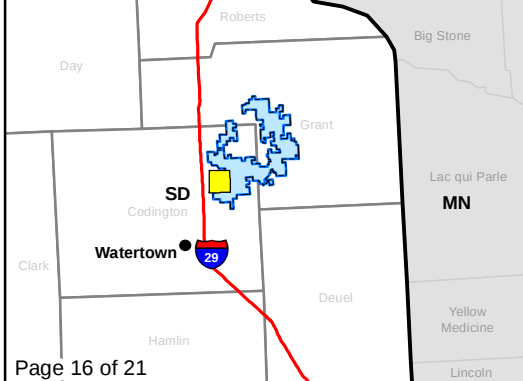


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
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 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



0 0.5 1
 Kilometers

0 0.25 0.5
 Miles

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
 Quadrangle: Still Lake SE (1970), South Shore (1973)
 Township/Range: T118N, R52W, T118N, R51W
 Codington County, South Dakota

003642 **SWCA**
 ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

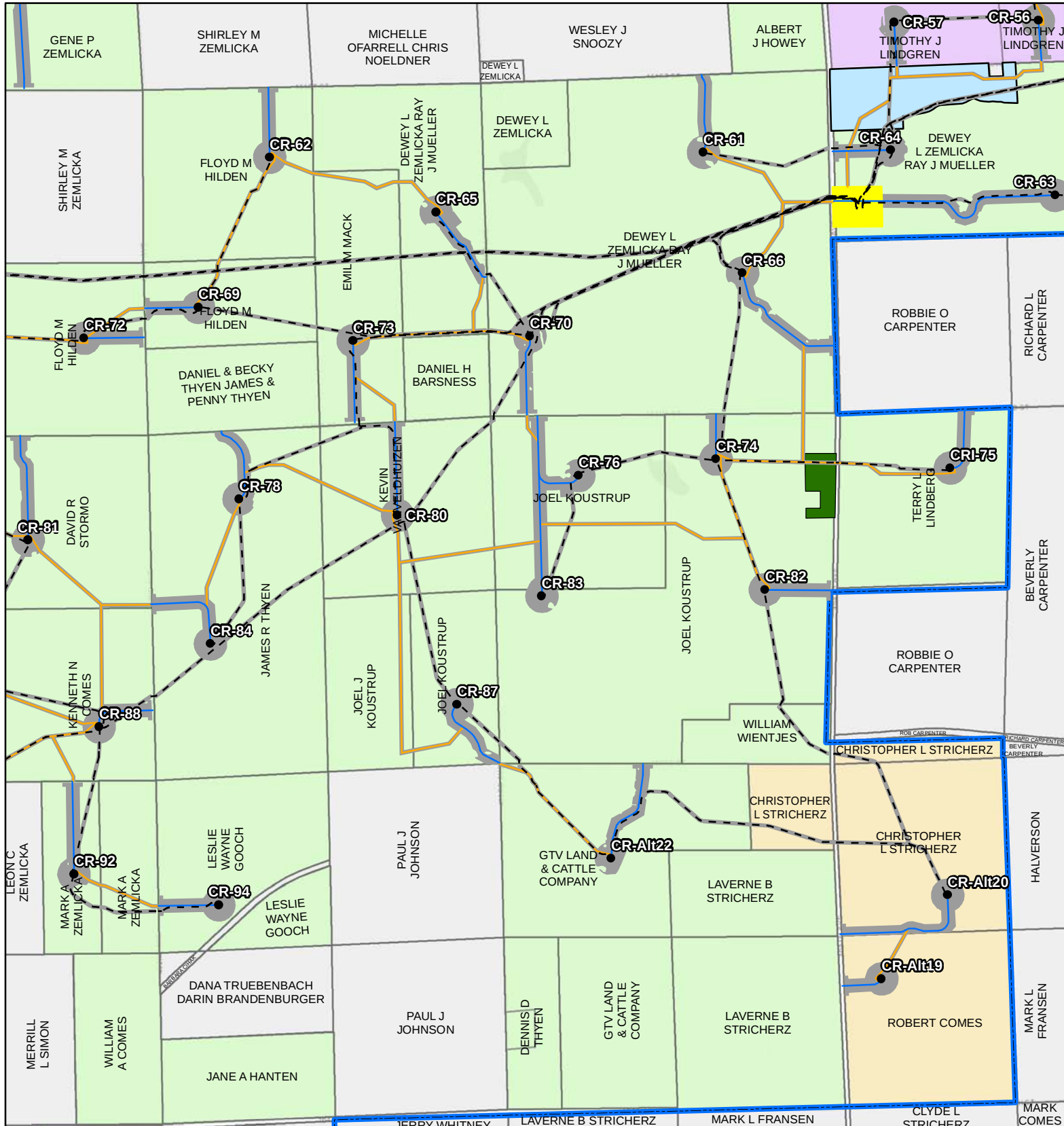
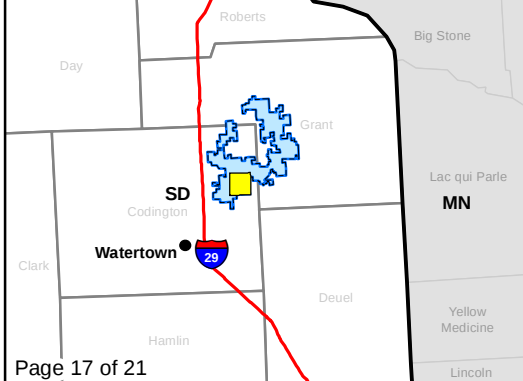


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers
0 0.5 1

Miles
0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
Quadrangle: South Shore (1973)

Township/Range: T118N, R51W

Codington County, South Dakota

003643 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

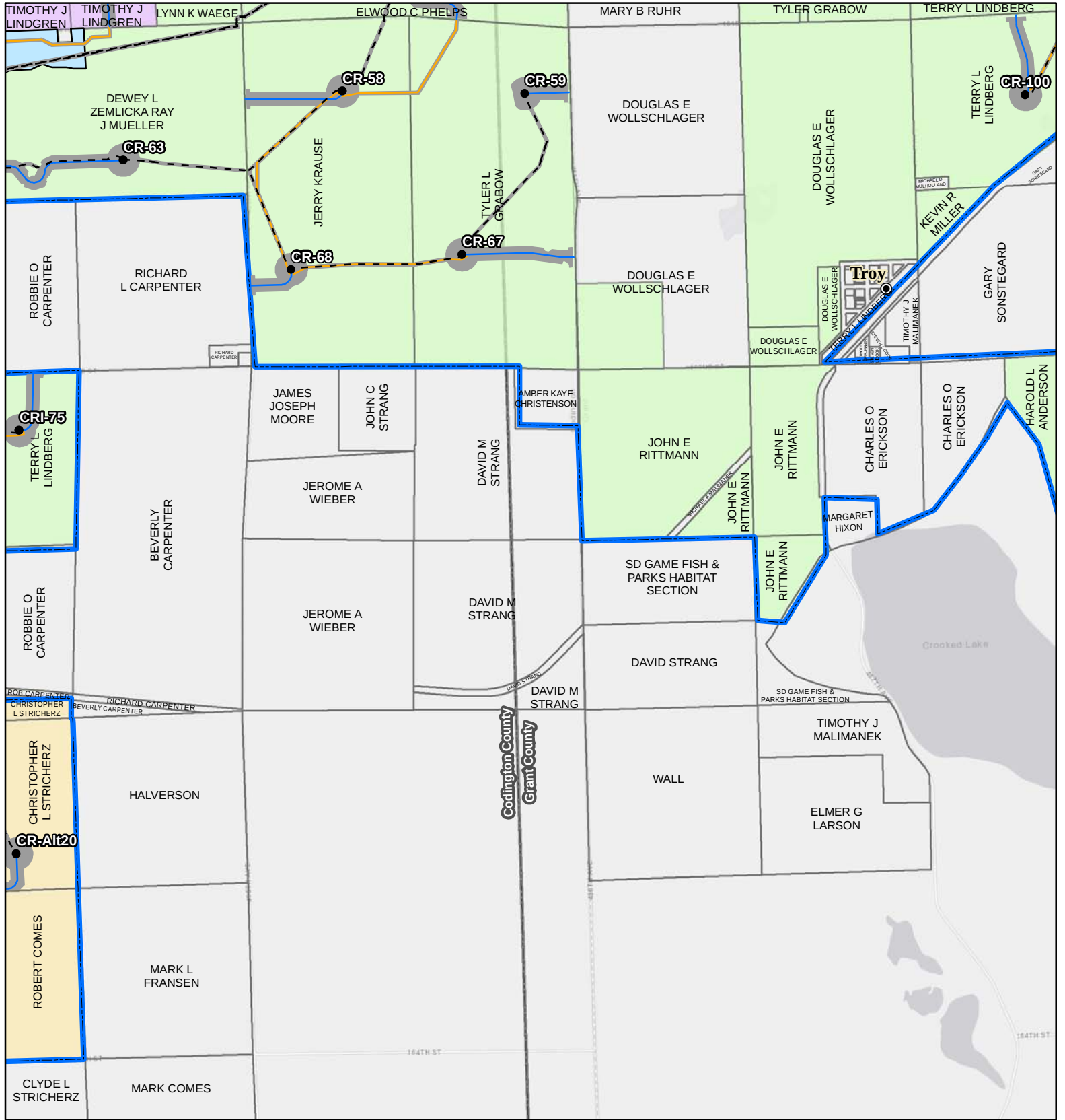
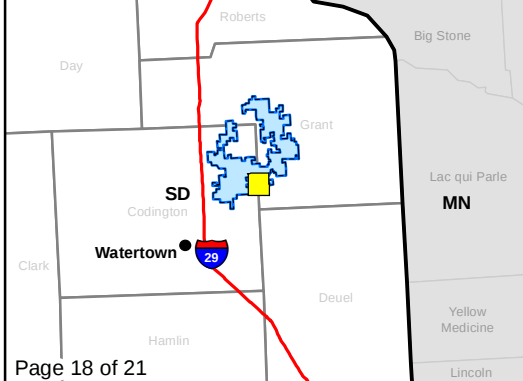


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
- ⊕ MET Tower
- City
- Access Road
- - - Collector Line
- Crane Path
- Railroad
- O&M Facility/ Substation
- Batch Plant
- Laydown Yard
- Construction Easement
- ▭ Parcel Boundary
- ▭ Project Boundary
- ▭ County Boundary
- Lease Status**
- Leased, Signed
- Pending
- Under Option but Likely to Expire/Not Resign



0 0.5 1
Kilometers

0 0.25 0.5
Miles

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
Quadrangle: South Shore (1973), Stockholm (1973)
Township/Range: T118N, R51W, T118N, R50W
Codington and Grant Counties, South Dakota
003644 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

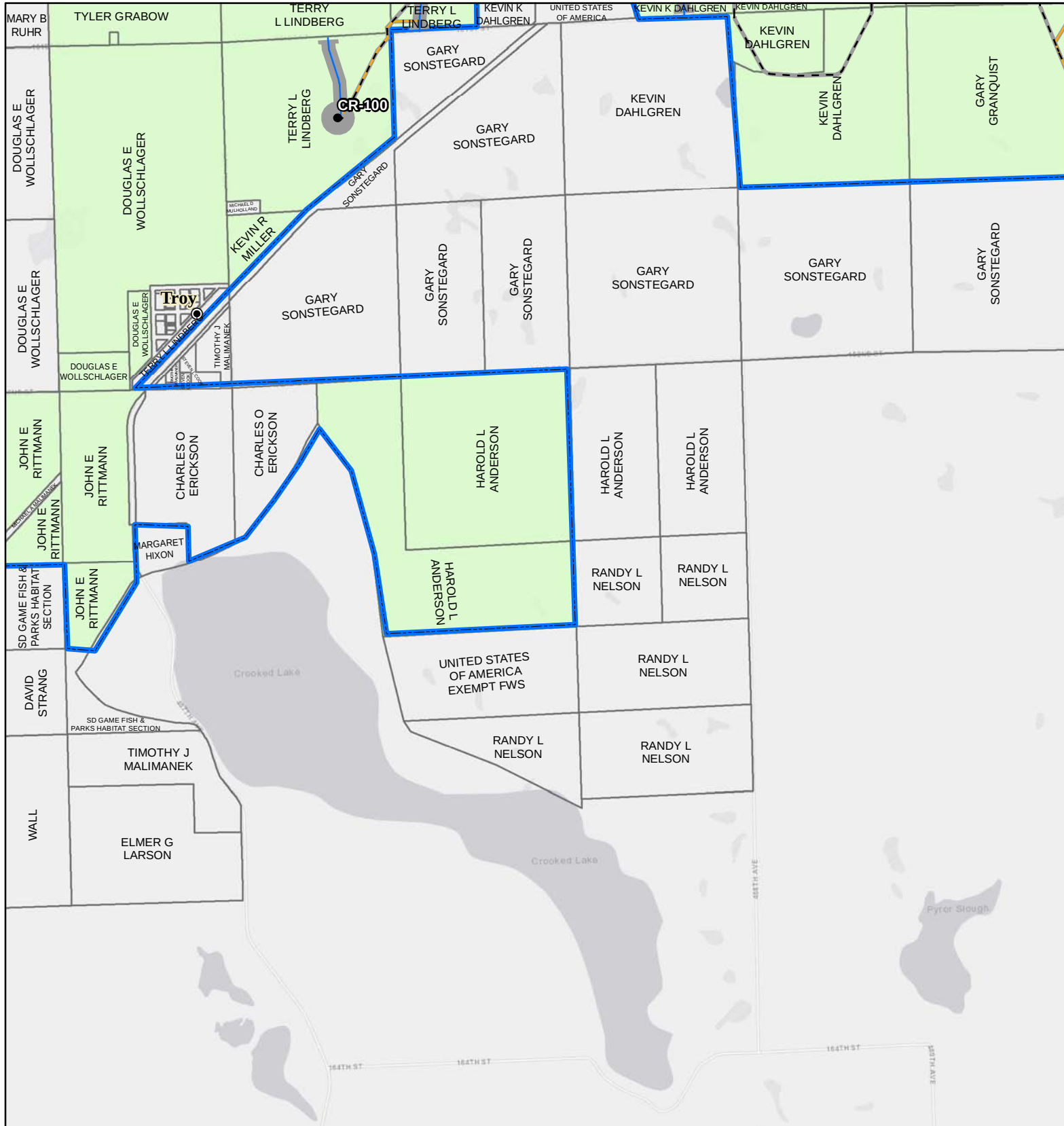


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
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 - Construction Easement
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 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



0 0.5 1

Kilometers

0 0.25 0.5

Miles

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: South Shore (1973), Stockholm (1973)

Township/Range: T118N, R50W

Grant County, South Dakota

003645 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

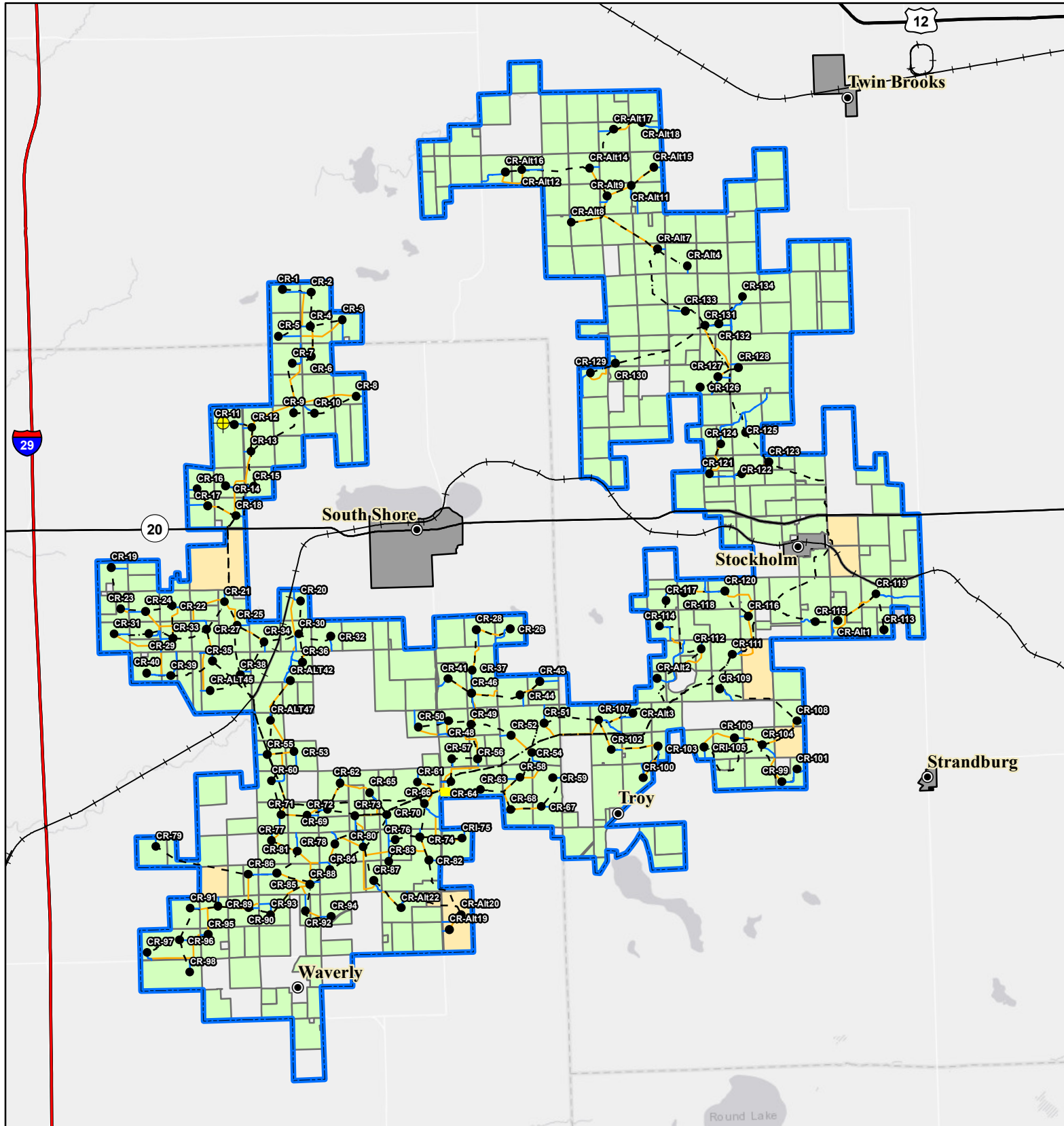
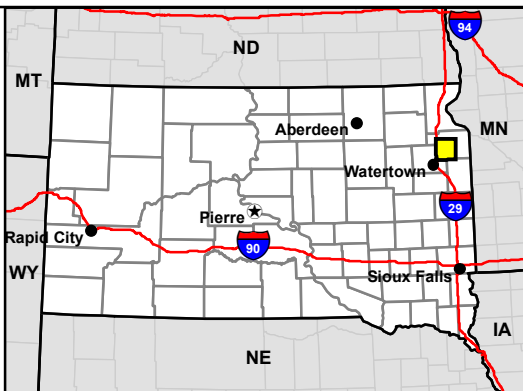


Figure 3. Project Map
Crowned Ridge Wind Farm

- | | | | |
|--|--------------------|---------------------|-----------------------------|
| | MET Tower | | U.S. Highway |
| | Turbine | | State Highway |
| | City | | O&M Facility/
Substation |
| | Access Road | | Town Boundary |
| | Collector Line | | Project Boundary |
| | Crane Path | Lease Status | |
| | Railroad | | Leased, Signed |
| | Interstate Highway | | Pending Approval |



Kilometers
0 2.5 5

Miles
0 2.5 5

Base Map: World Light Gray Canvas Base
Sources: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
Codington and Grant Counties, South Dakota

003648 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

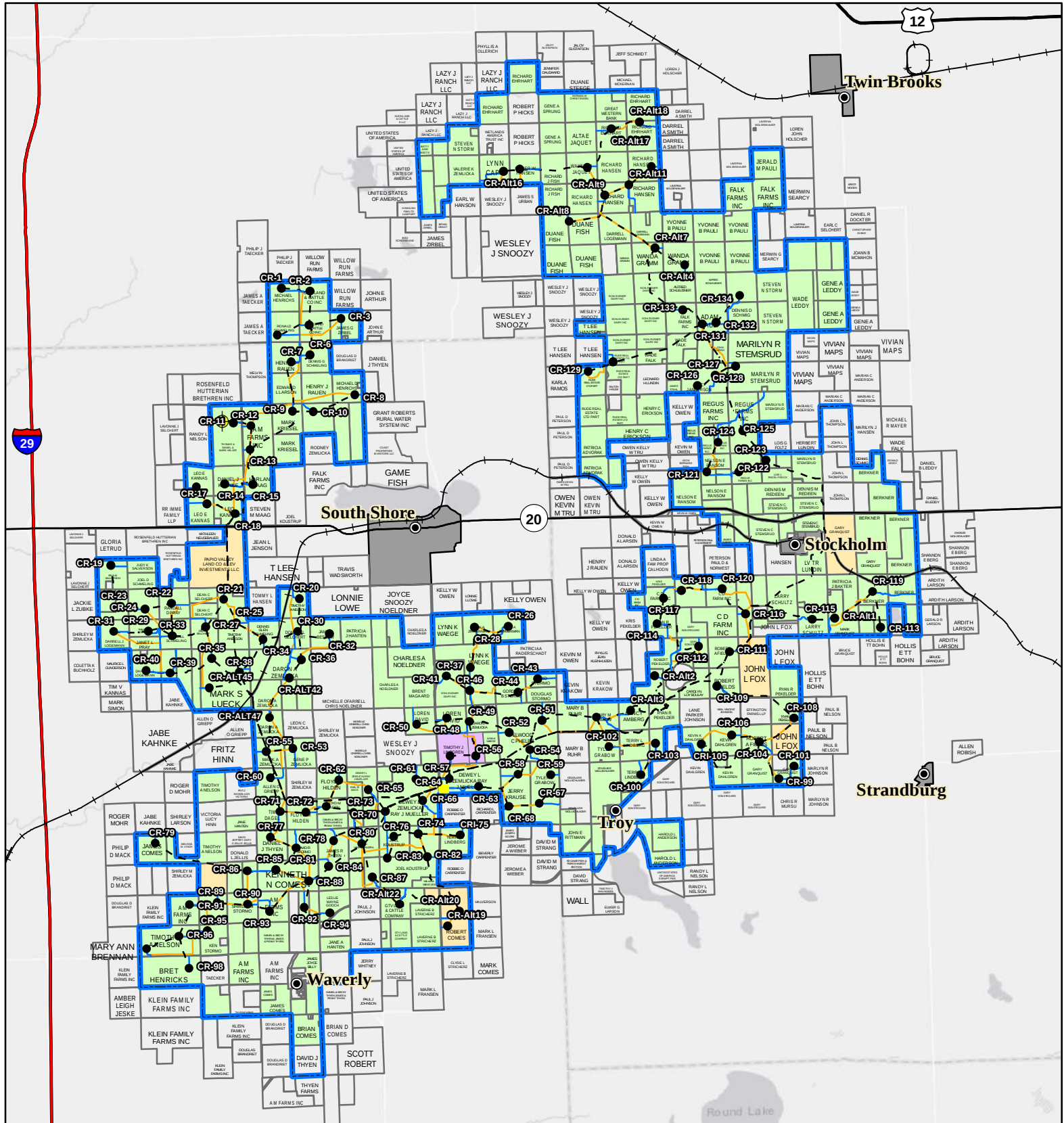
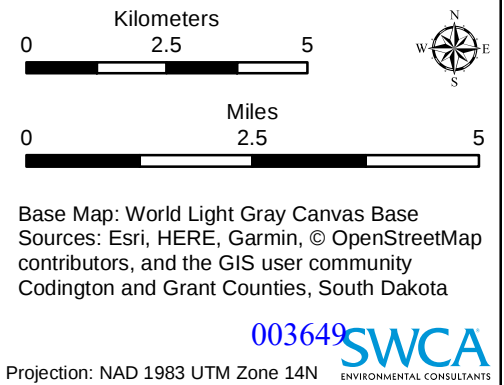
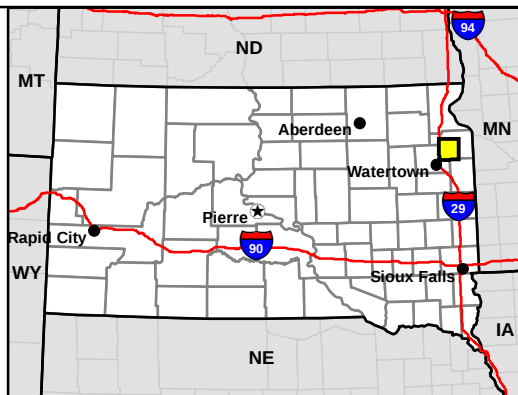


Figure 3a. Project Map

Crowned Ridge Wind Farm

- MET Tower
 - Turbine
 - City
 - Access Road
 - Collector Line
 - Crane Path
 - Railroad
 - Interstate Highway
 - U.S. Highway
 - State Highway
 - O&M Facility/Substation
 - Town Boundary
 - Project Boundary
 - Parcel Boundary
- Lease Status**
- Leased, Signed
 - Pending Approval
 - Under Option but Likely to Expire/Not Resign



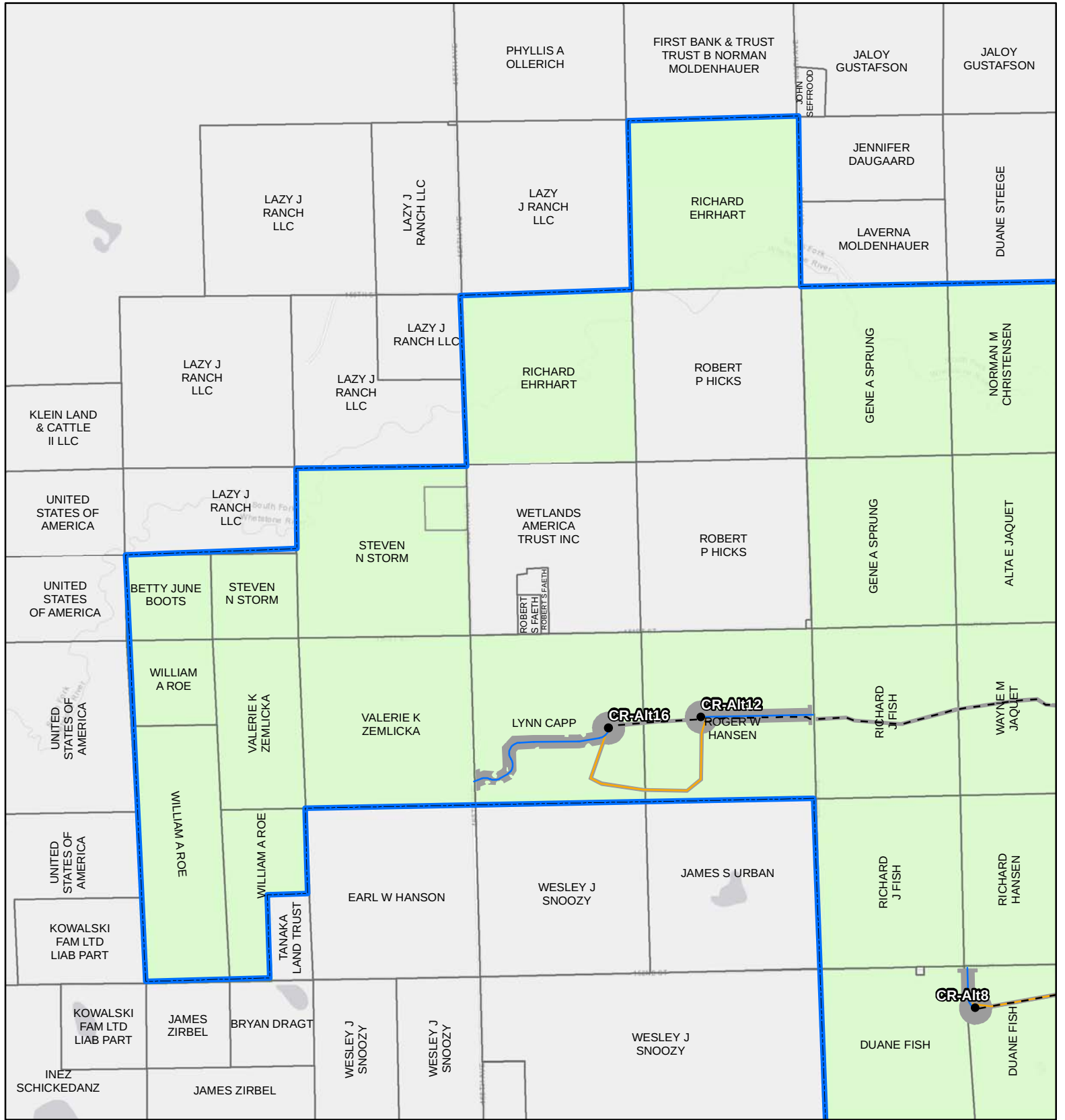
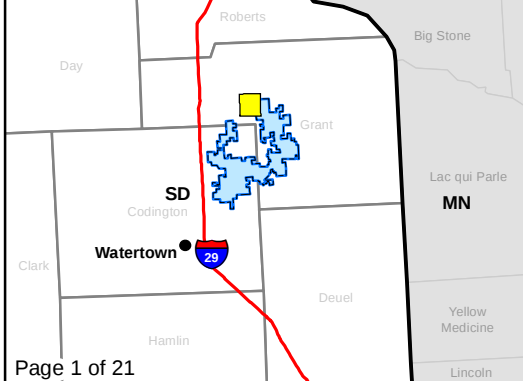


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers
0 0.5 1

Miles
0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
Quadrangle: Antelope Valley (1973), Twin Brooks (1973)
Township/Range: T120N, R51W, T120N, R50W
Grant County, South Dakota

003650 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

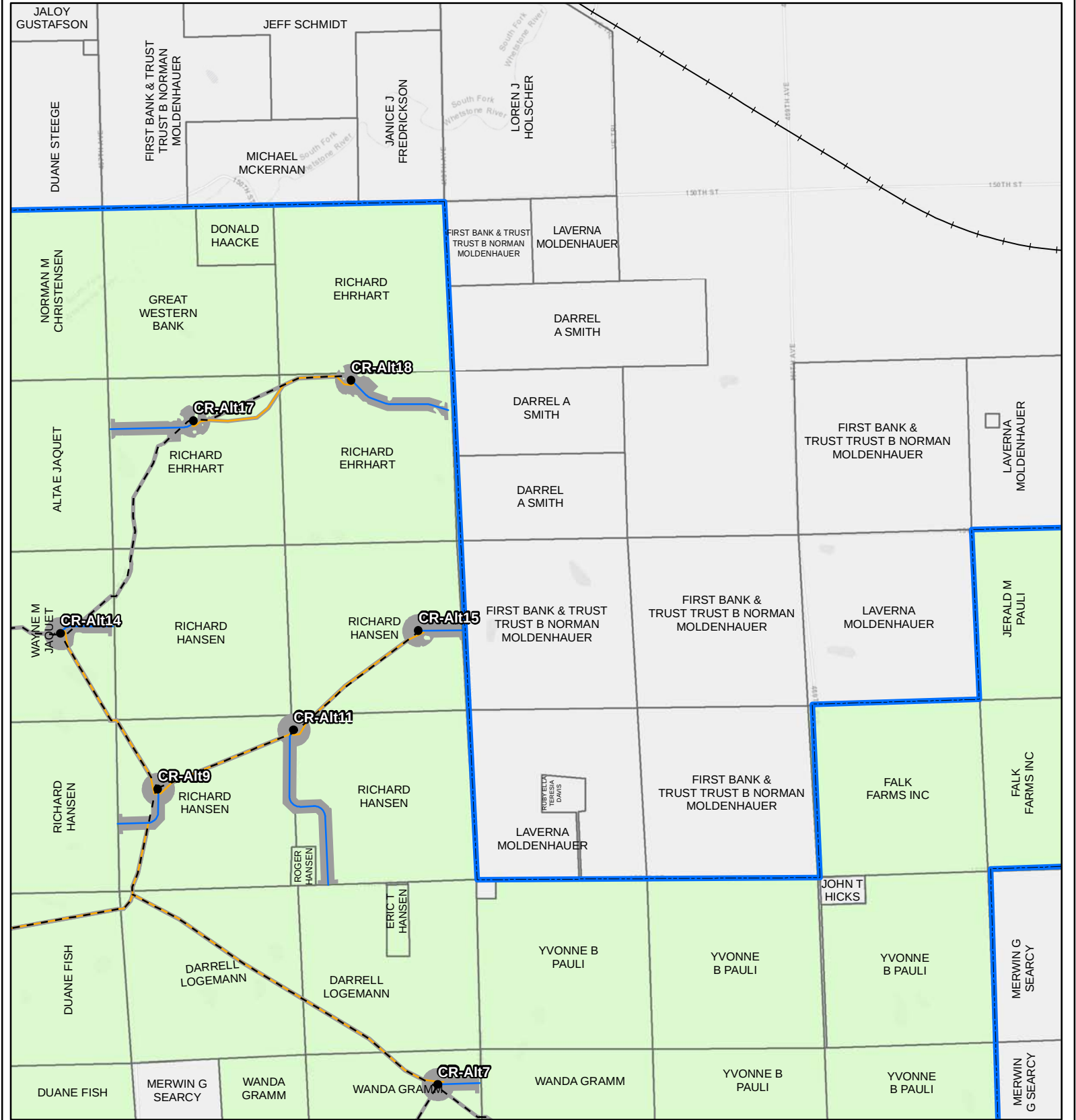
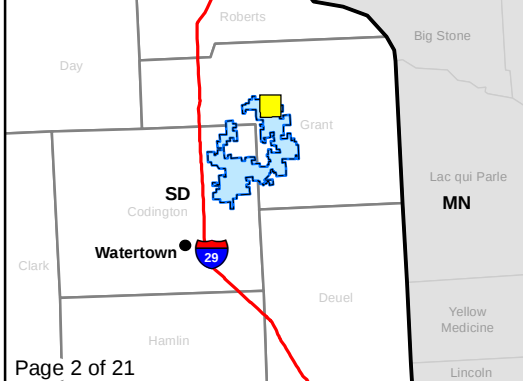


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Twin Brooks (1973)

Township/Range: T120N, R50W

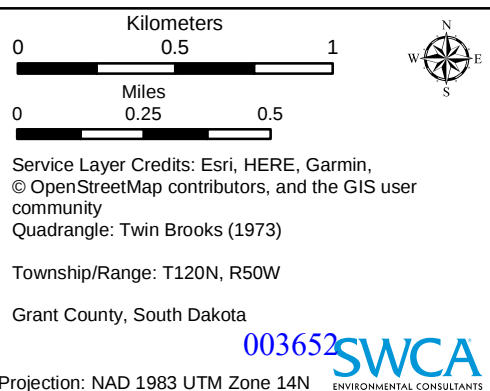
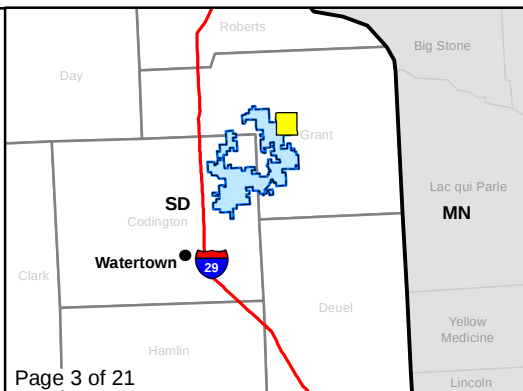
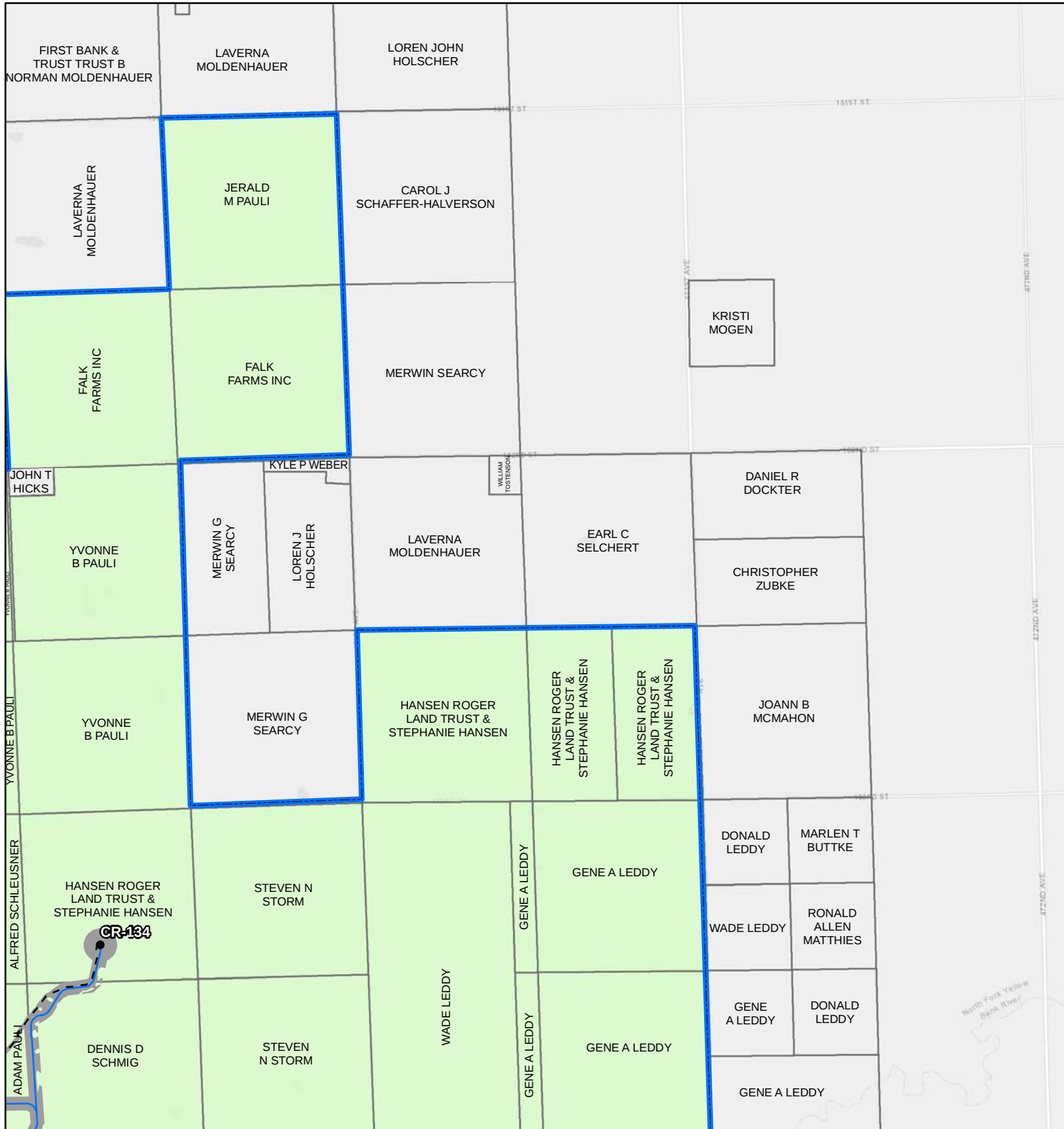
Grant County, South Dakota

003651

SWCA

ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N



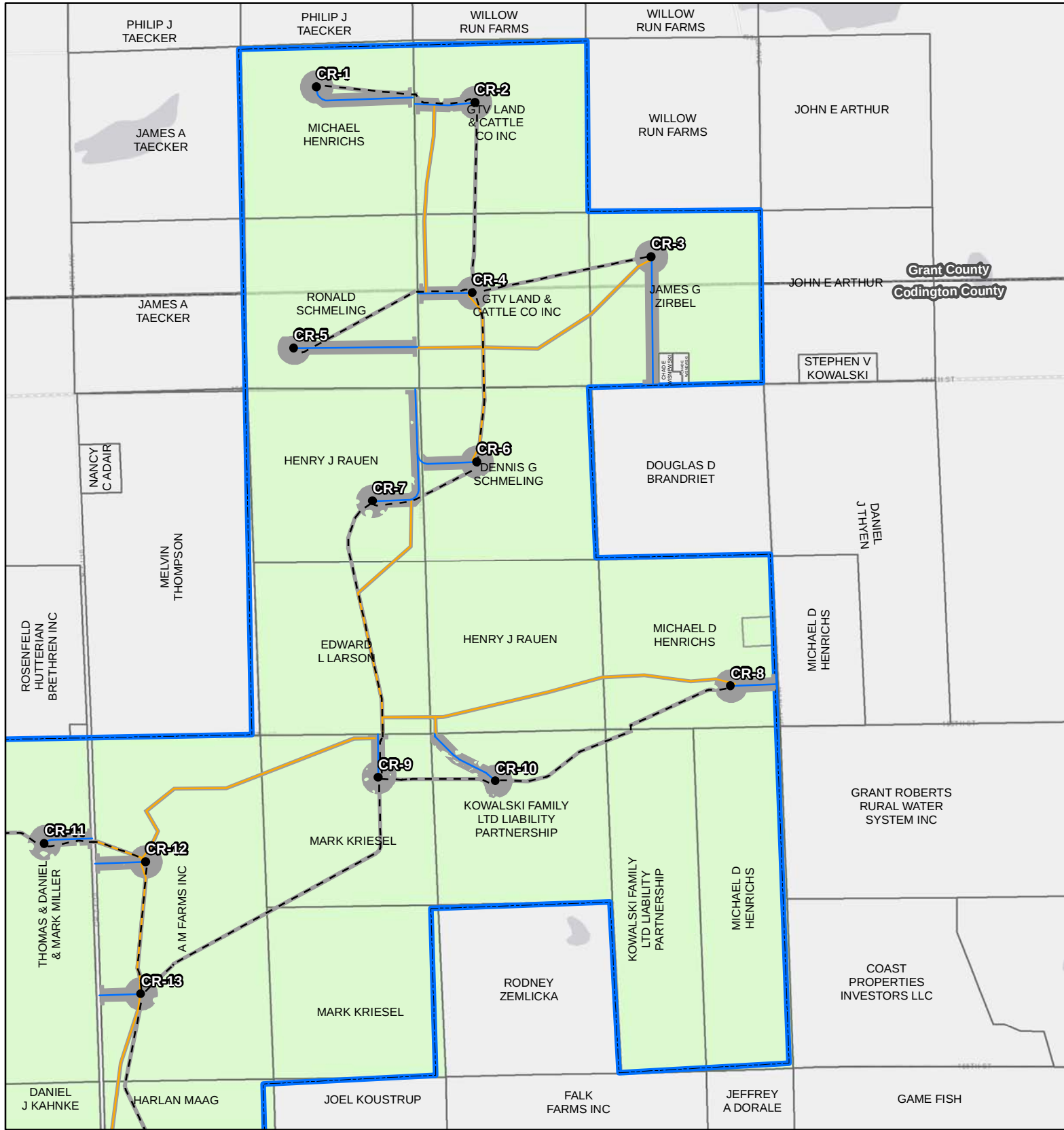


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers
0 0.5 1

Miles
0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
Quadrangle: Antelope Valley (1973), South Shore (1973)
Township/Range: T120N, R51W, T119N, R51W, Codington and Grant Counties, South Dakota

003653 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

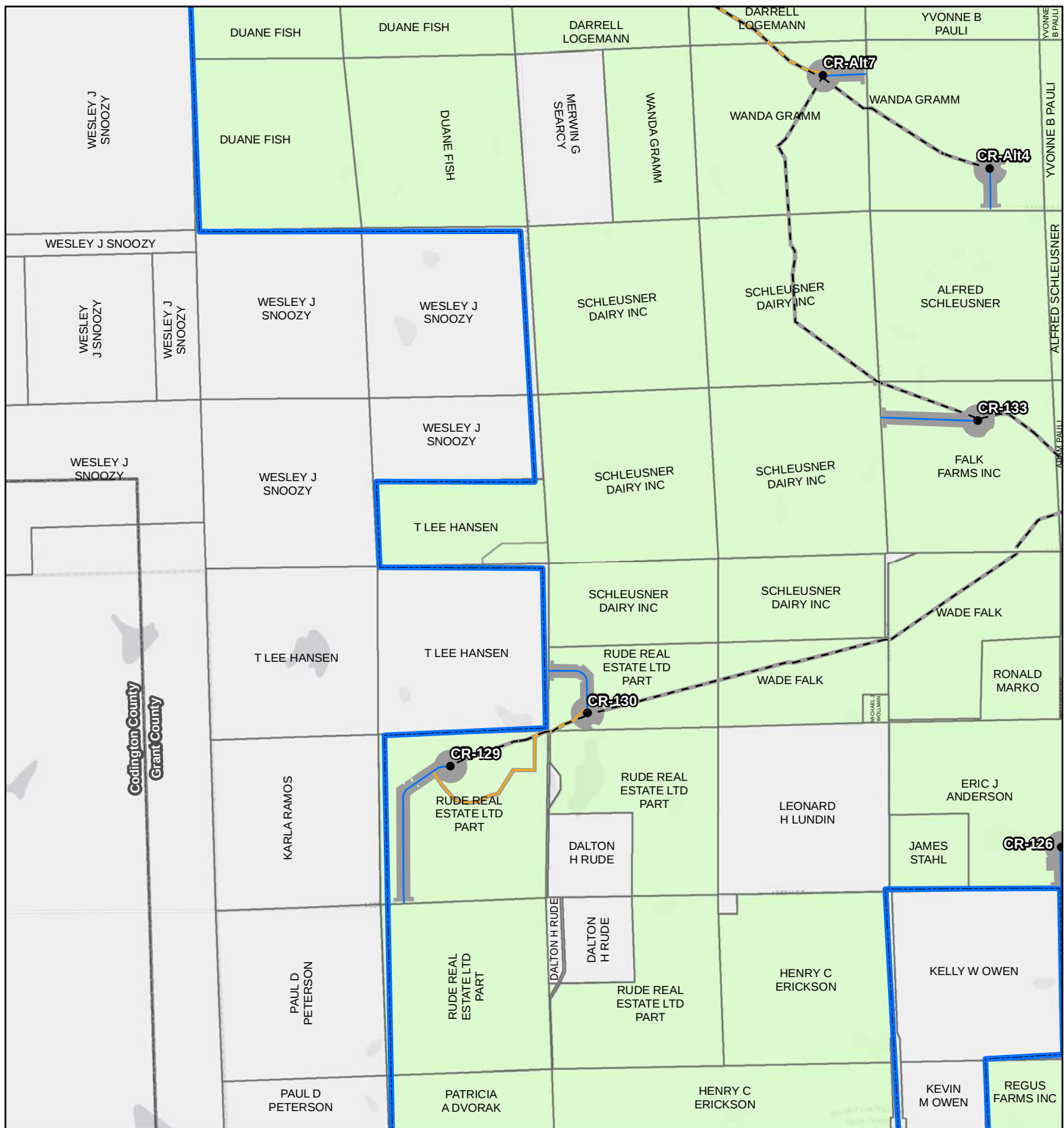
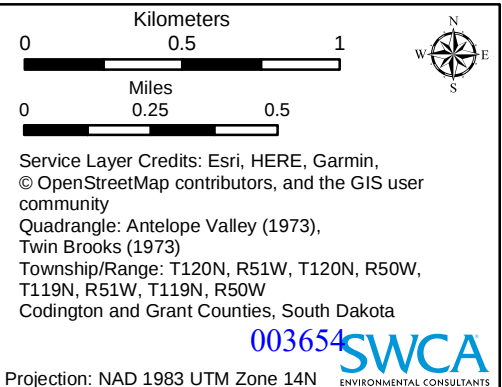
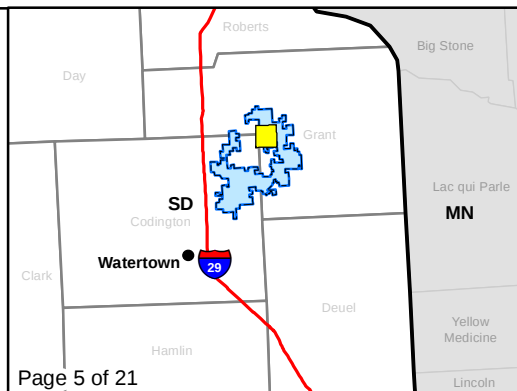
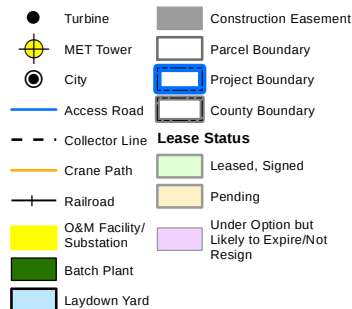


Figure 3a. Project Map
Crowned Ridge Wind Farm



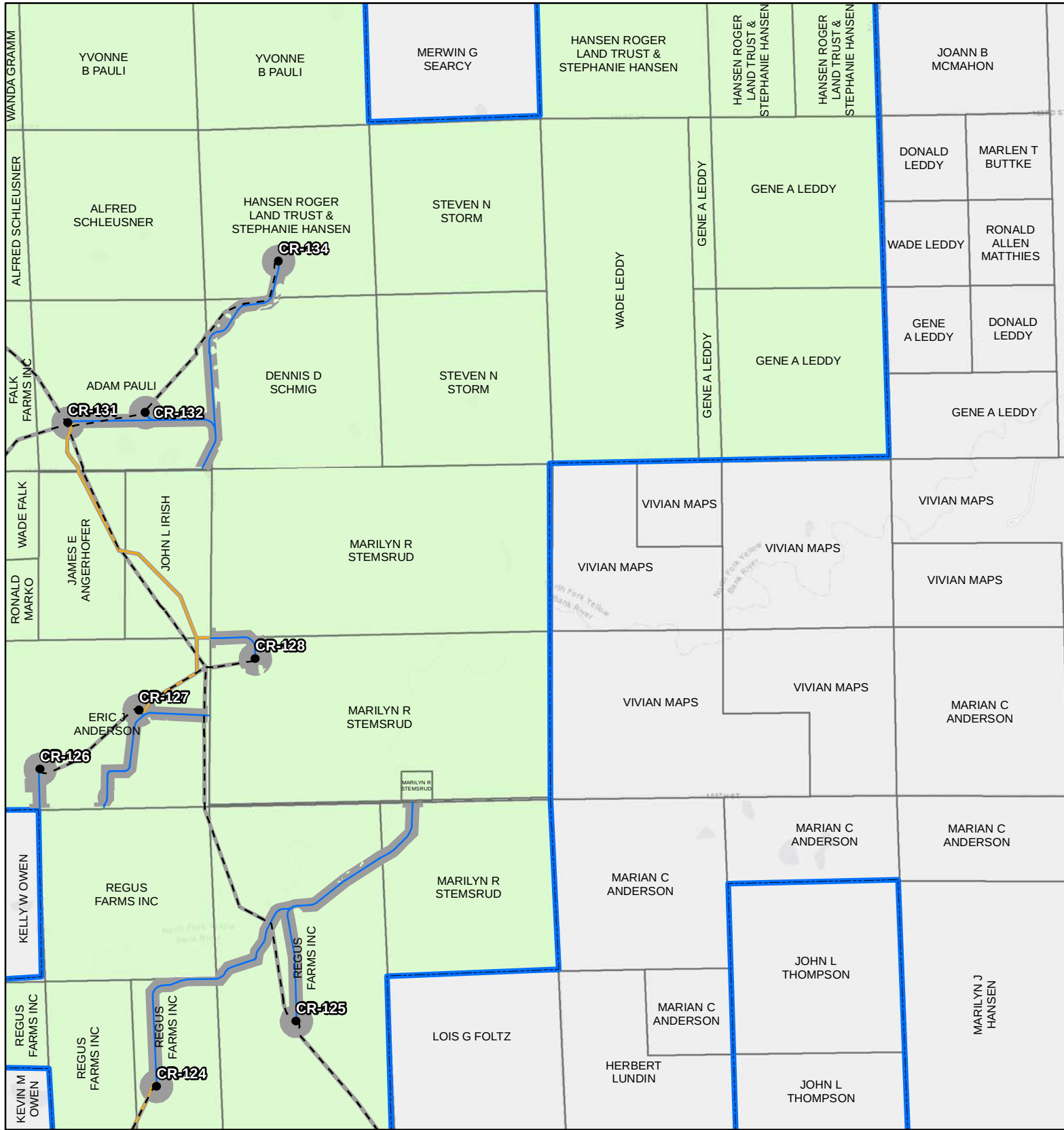
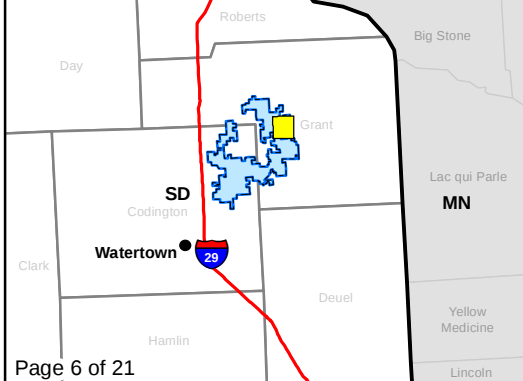


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - ▨ Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Twin Brooks (1973), Stockholm (1973)

Township/Range: T120N, R50W, T119N, R50W

Grant County, South Dakota

003655 SWCA
 ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

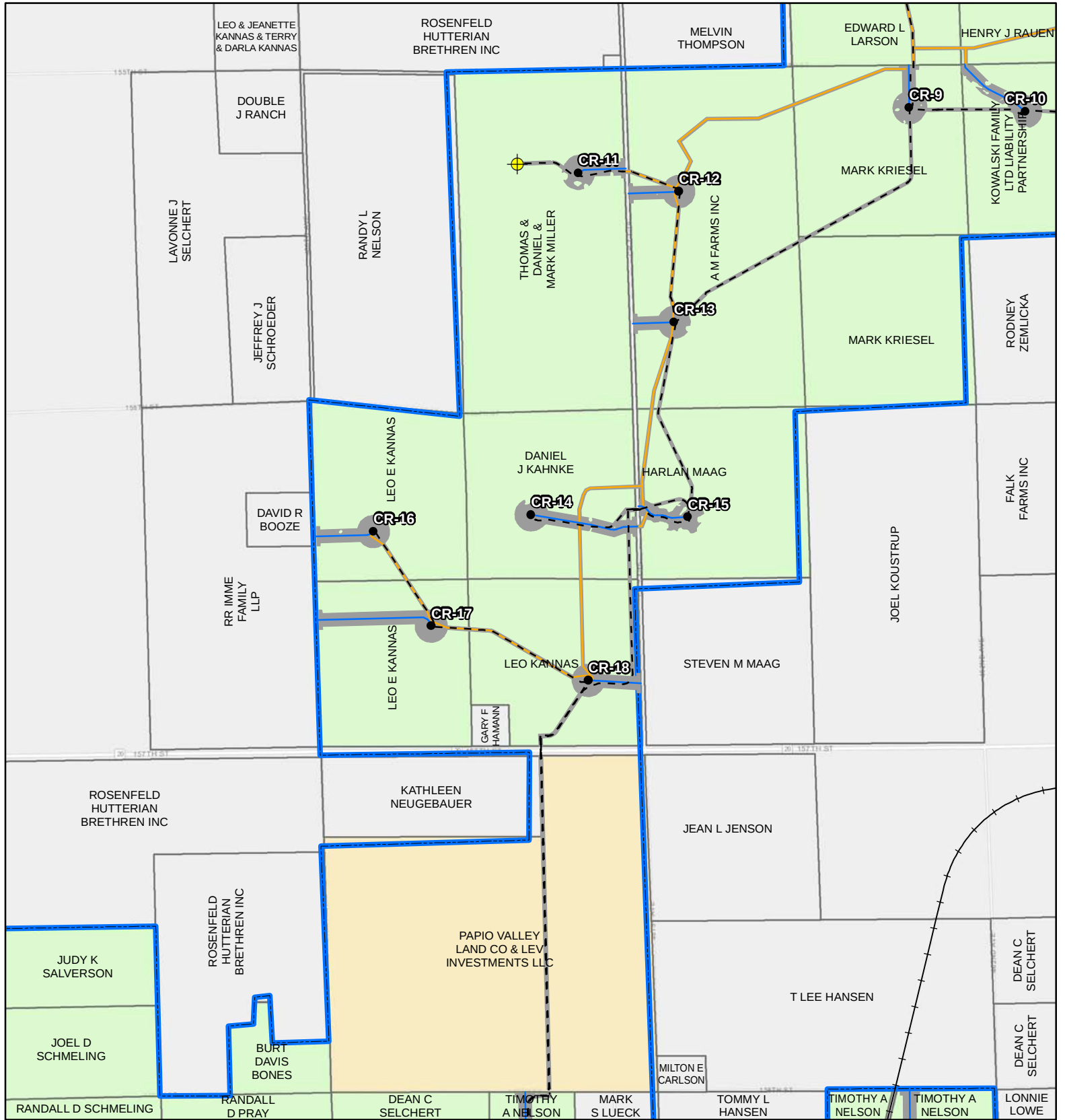
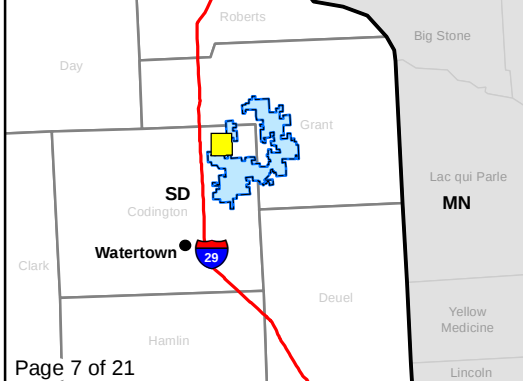


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Scale

Kilometers: 0, 0.5, 1

Miles: 0, 0.25, 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Still Lake NE (1970), Antelope Valley (1973), Still Lake SE (1970), South Shore (1973)

Township/Range: T119N, R52W, T119N, R51W

Codington County, South Dakota

03656 **SWCA**

ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N



-

0 0.5 1
Kilometers

0 0.25 0.5
Miles

Service Layer Credits: Esri, HERE, Garmin,
© OpenStreetMap contributors, and the GIS user
community

Quadrangle: Stockholm (1973), Antelope Valley (1973),
Twin Brooks (1973), South Shore (1973)
Township/Range: T119N, R50W

Grant County, South Dakota

003657 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

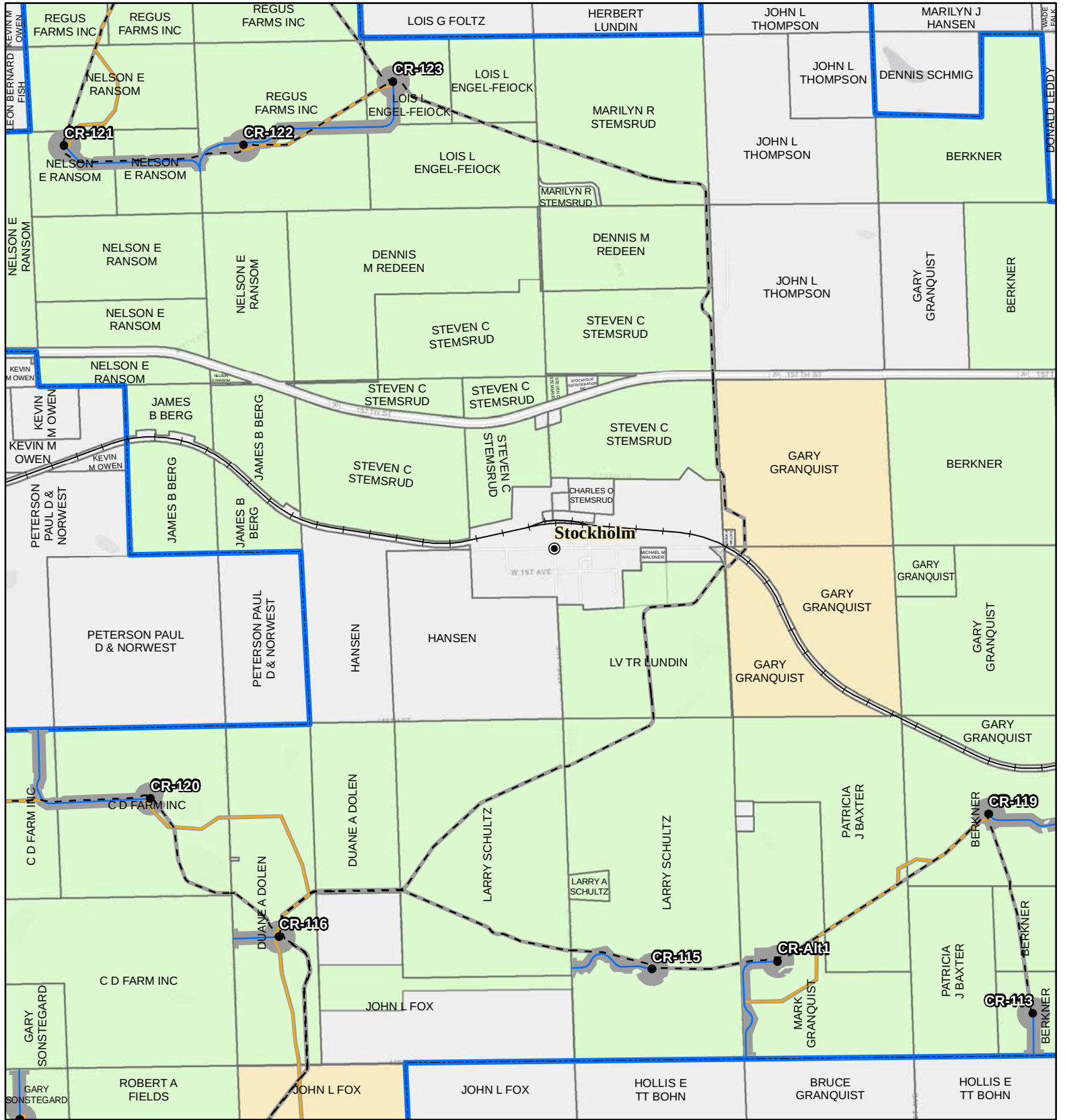
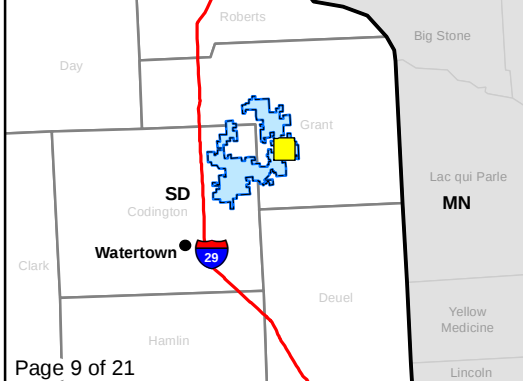


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



0 0.5 1
Kilometers

0 0.25 0.5
Miles

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
Quadrangle: Stockholm (1973)

Township/Range: T119N, R50W

Grant County, South Dakota

003658 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

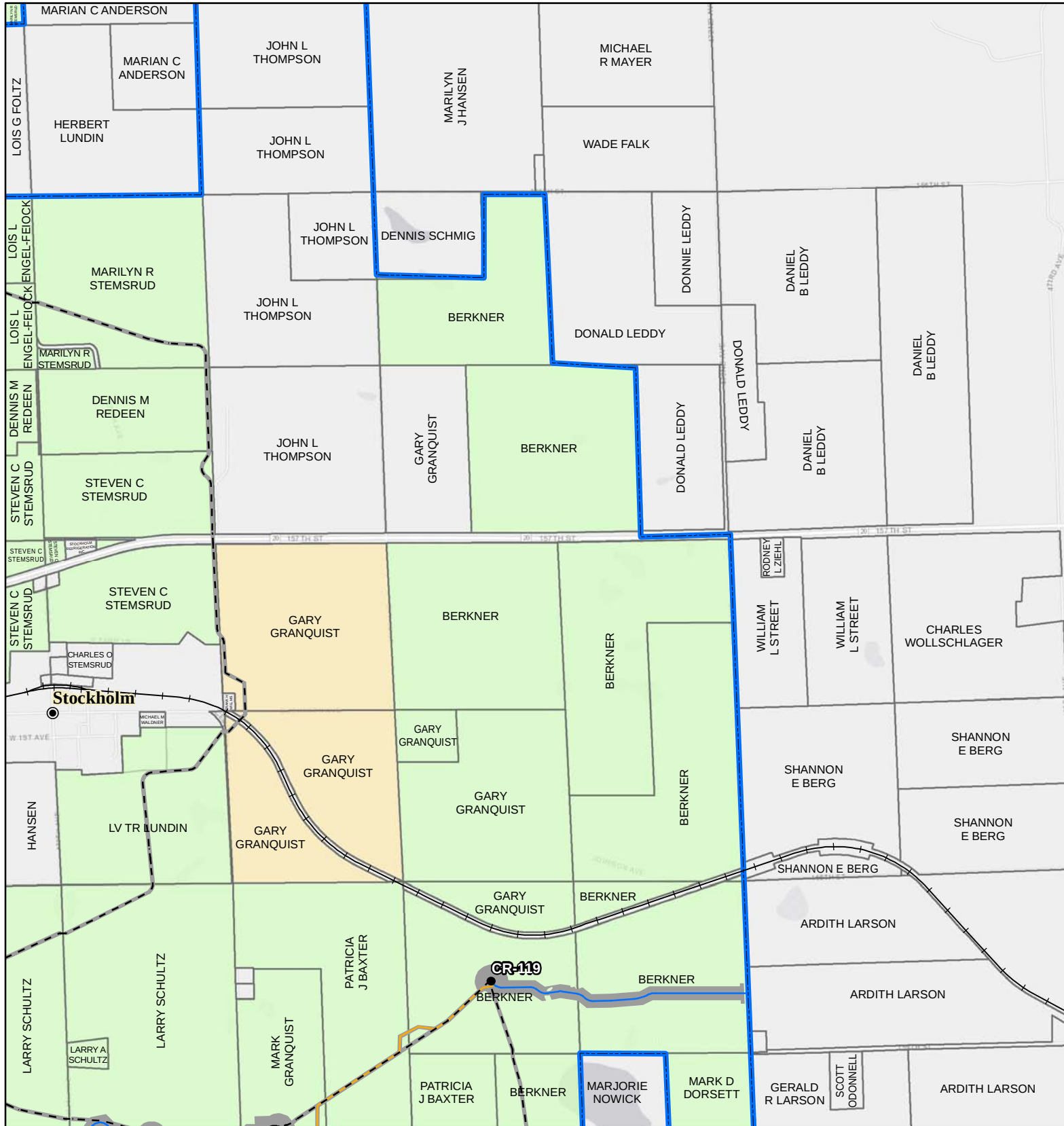
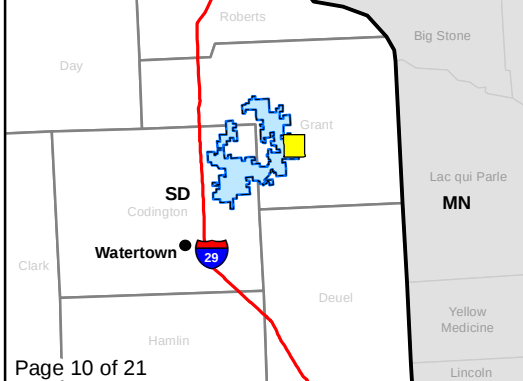


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - ▬ Construction Easement
 - ▬ Parcel Boundary
 - ▬ Project Boundary
 - ▬ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Twin Brooks (1973), Stockholm (1973)

Township/Range: T119N, R50W, T119N, R49W

Grant County, South Dakota

003659 SWCA
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

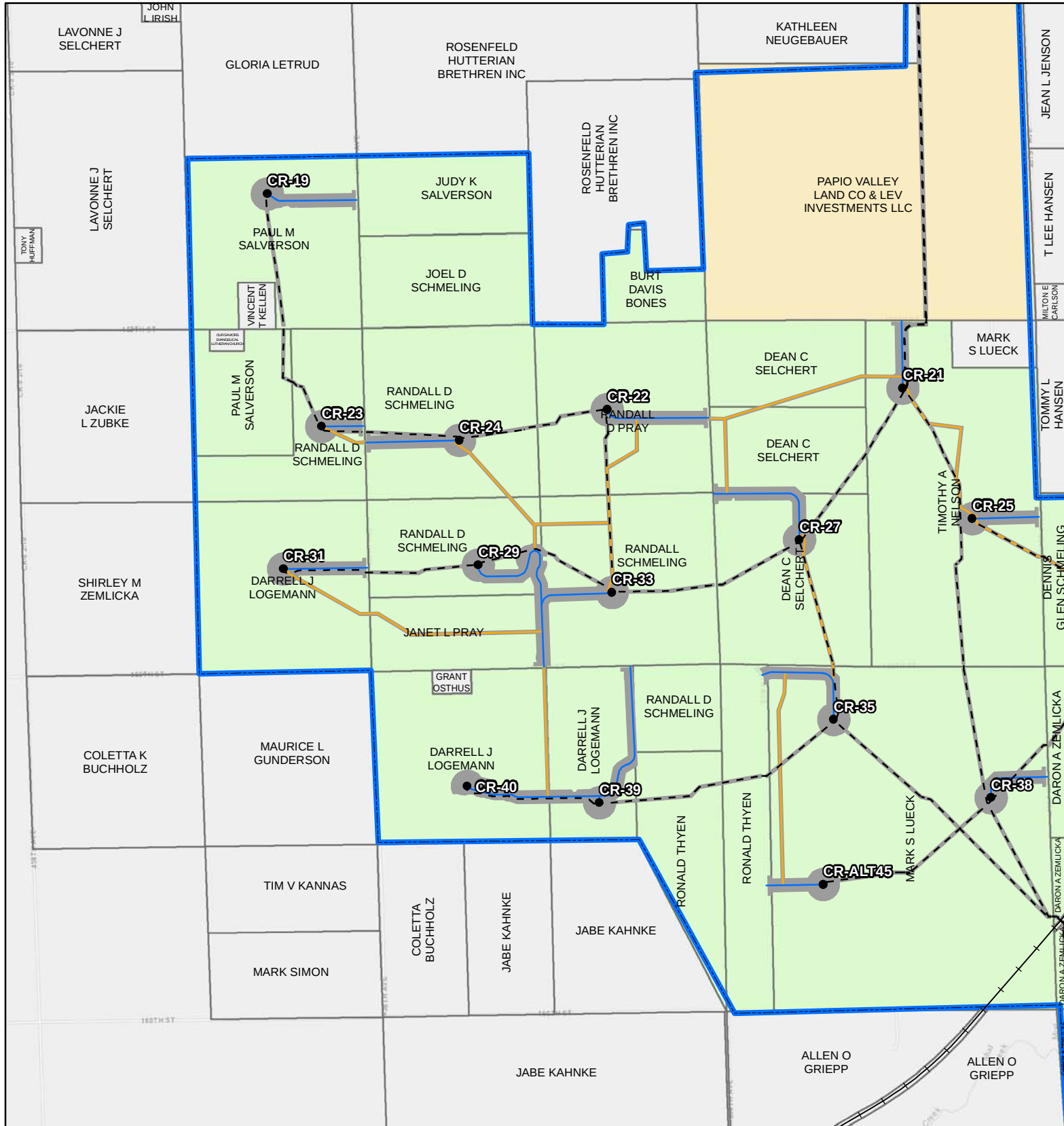
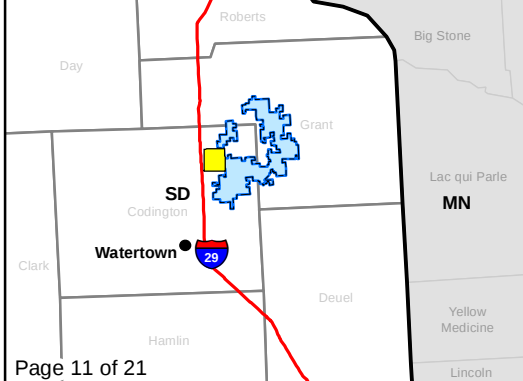


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Still Lake SE (1970), South Shore (1973)

Township/Range: T119N, R52W, T119N, R51W, T118N, R52W, T118N, R51W

Codington County, South Dakota

003660 **SWCA**

ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

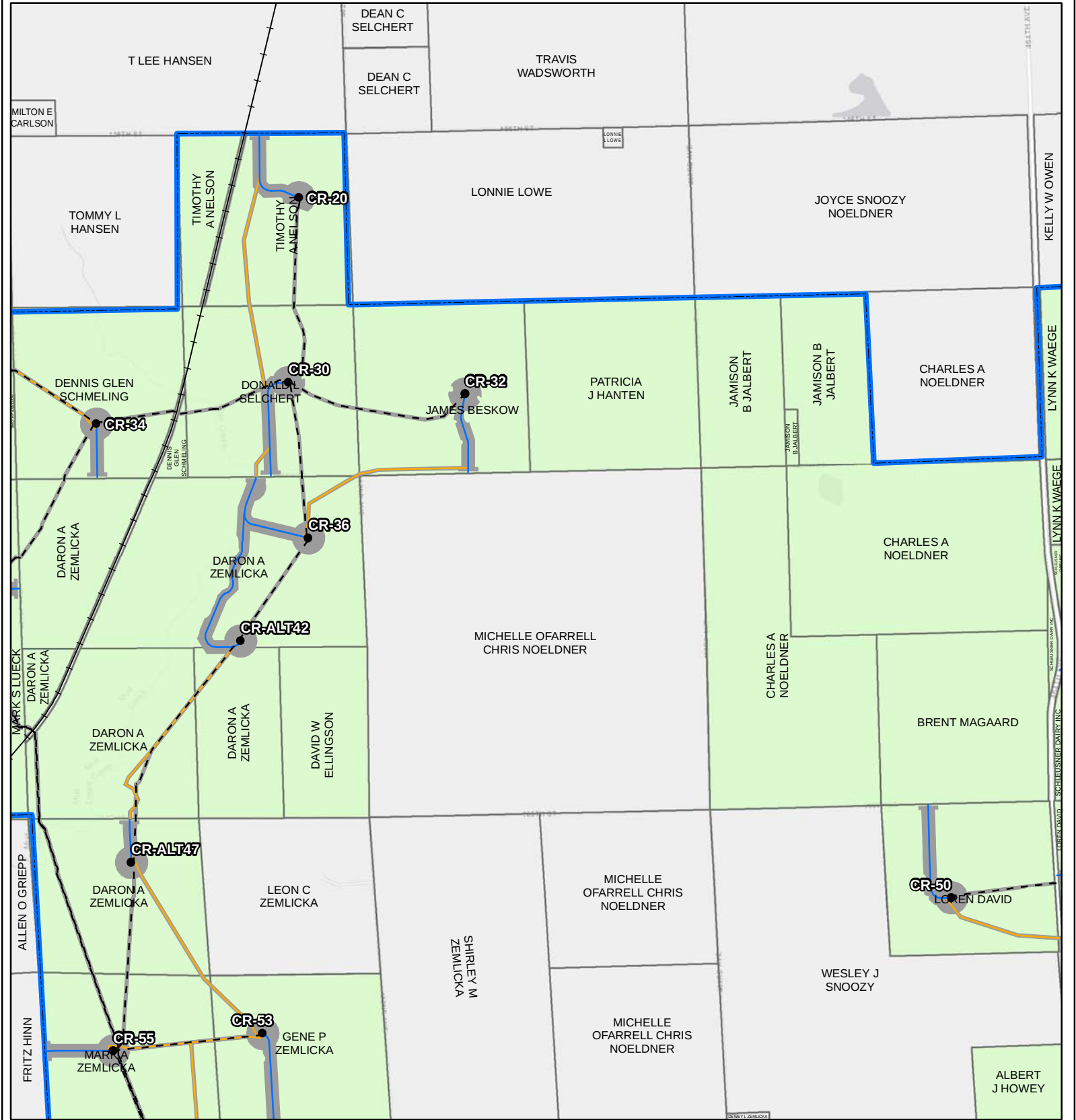
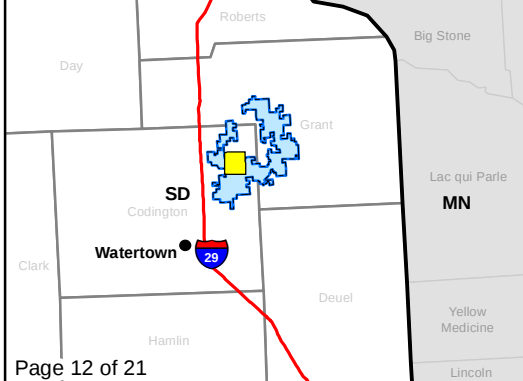


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



0 0.5 1
Kilometers

0 0.25 0.5
Miles

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
Quadrangle: South Shore (1973)

Township/Range: T119N, R51W, T118N, R51W
Codington County, South Dakota

003661 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

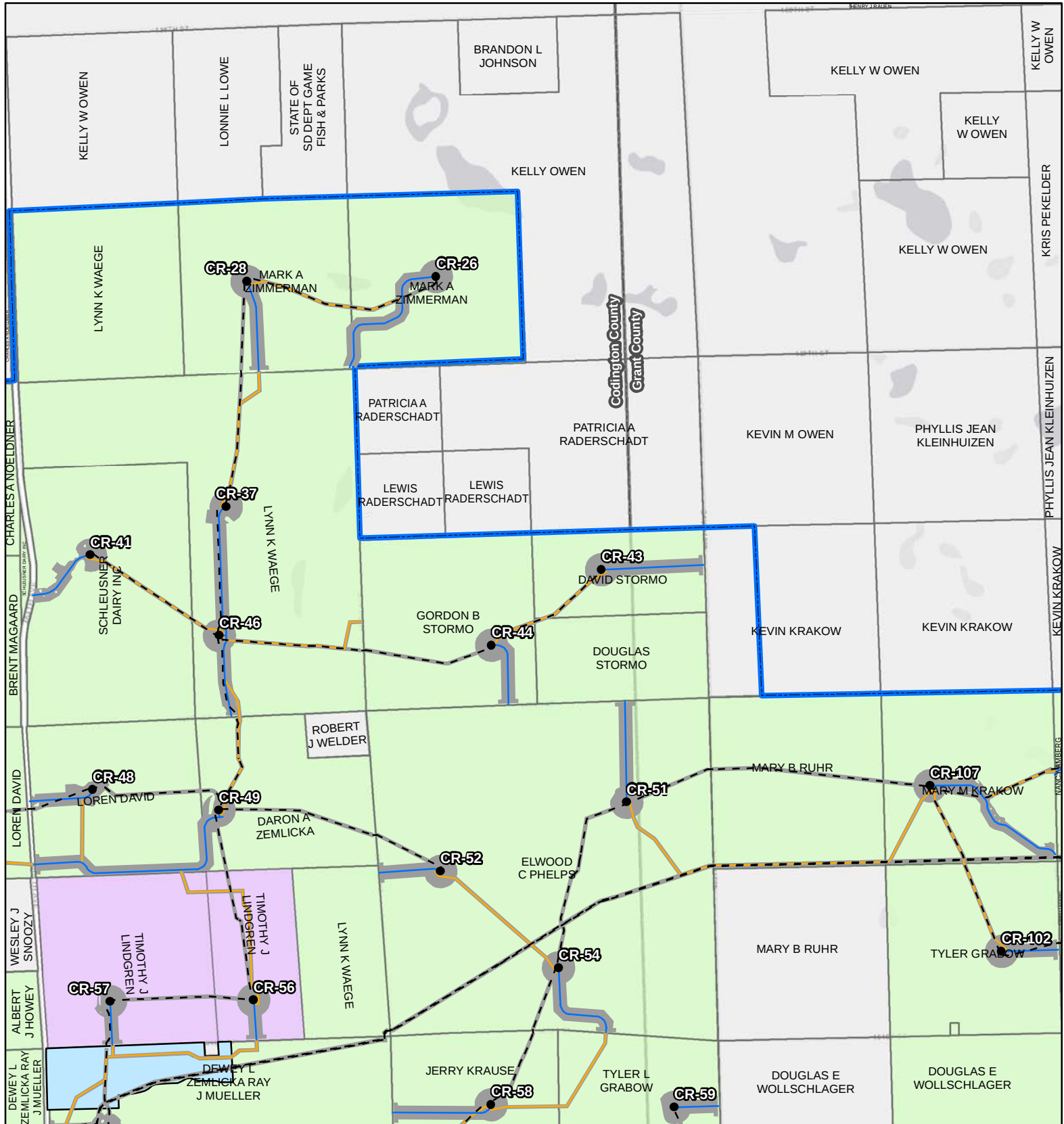
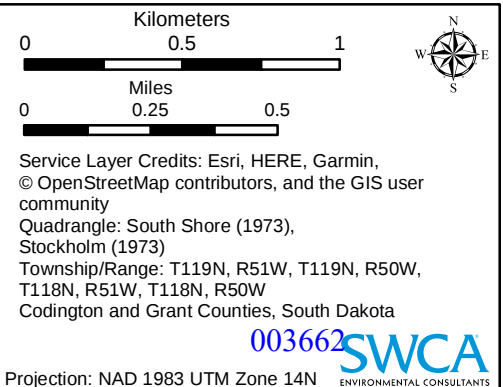
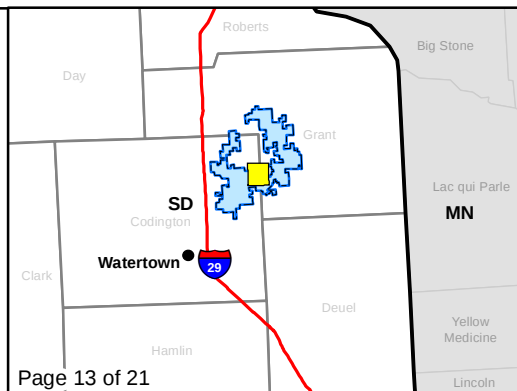
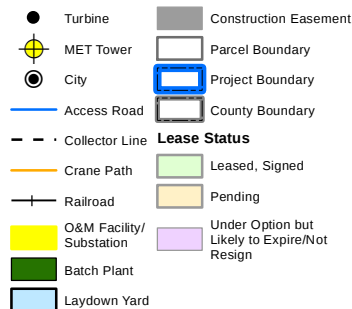


Figure 3a. Project Map
Crowned Ridge Wind Farm



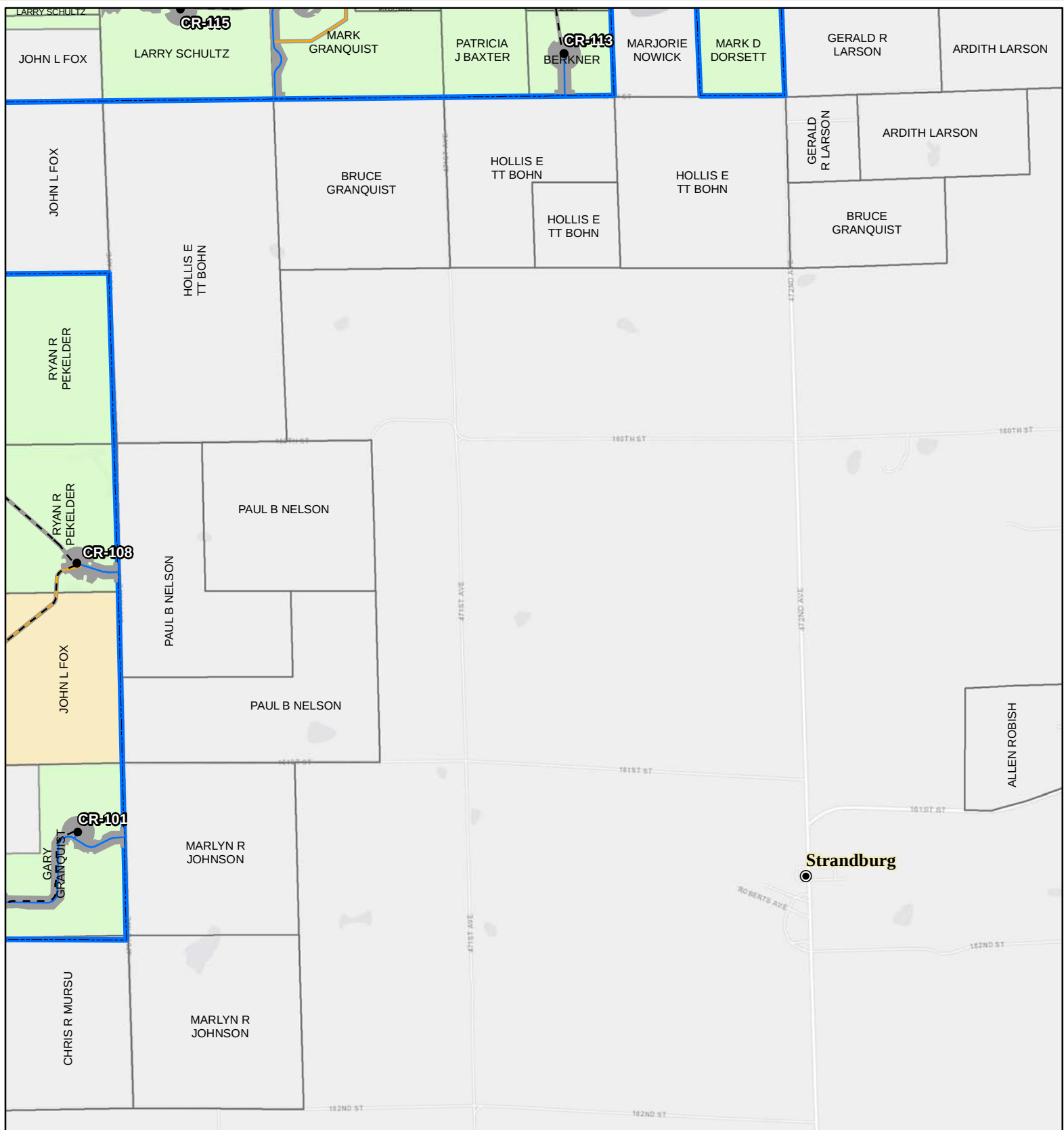
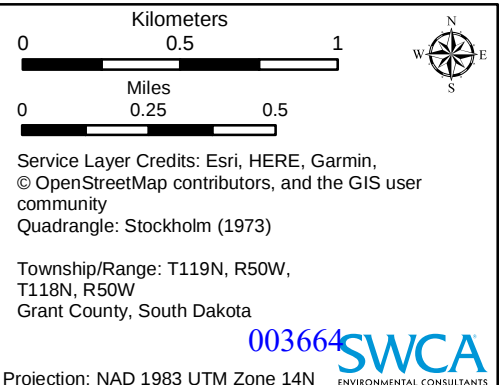
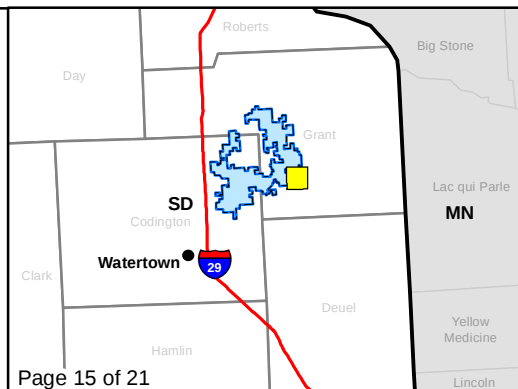
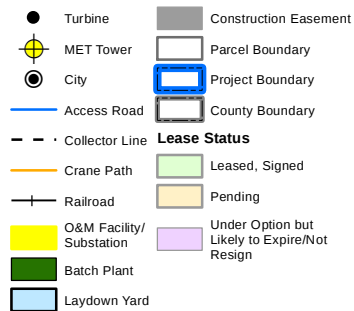


Figure 3a. Project Map
Crowned Ridge Wind Farm



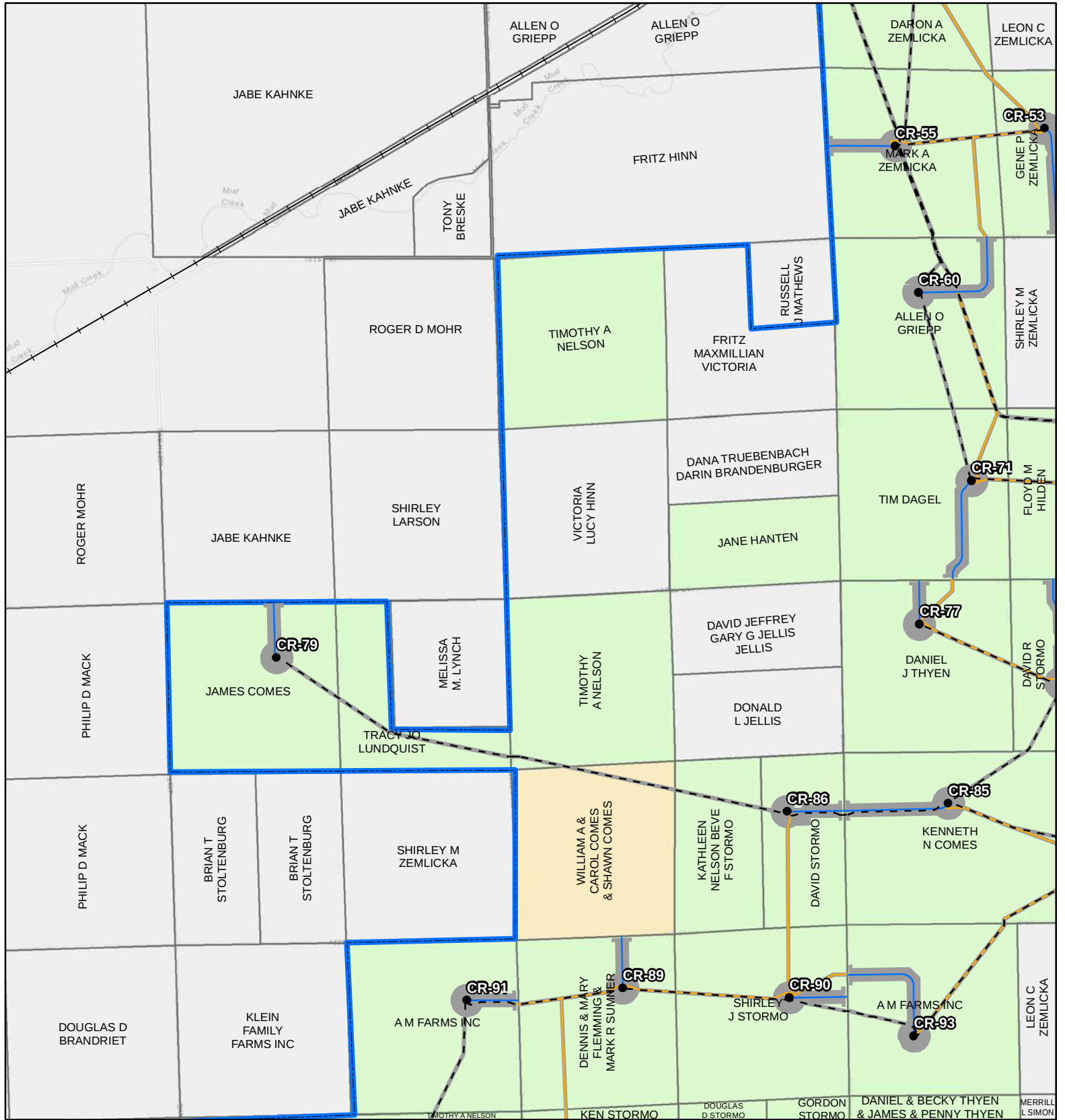
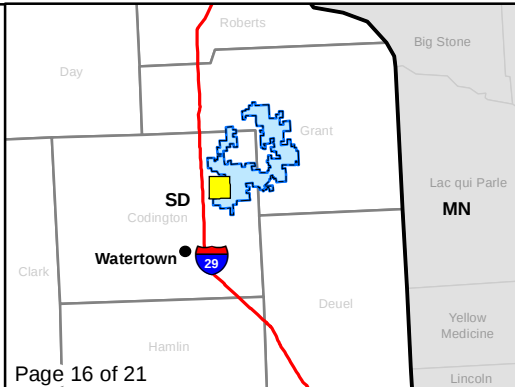


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/ Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



0 0.5 1
Kilometers

0 0.25 0.5
Miles

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: Still Lake SE (1970), South Shore (1973)

Township/Range: T118N, R52W, T118N, R51W

Codington County, South Dakota

003665 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

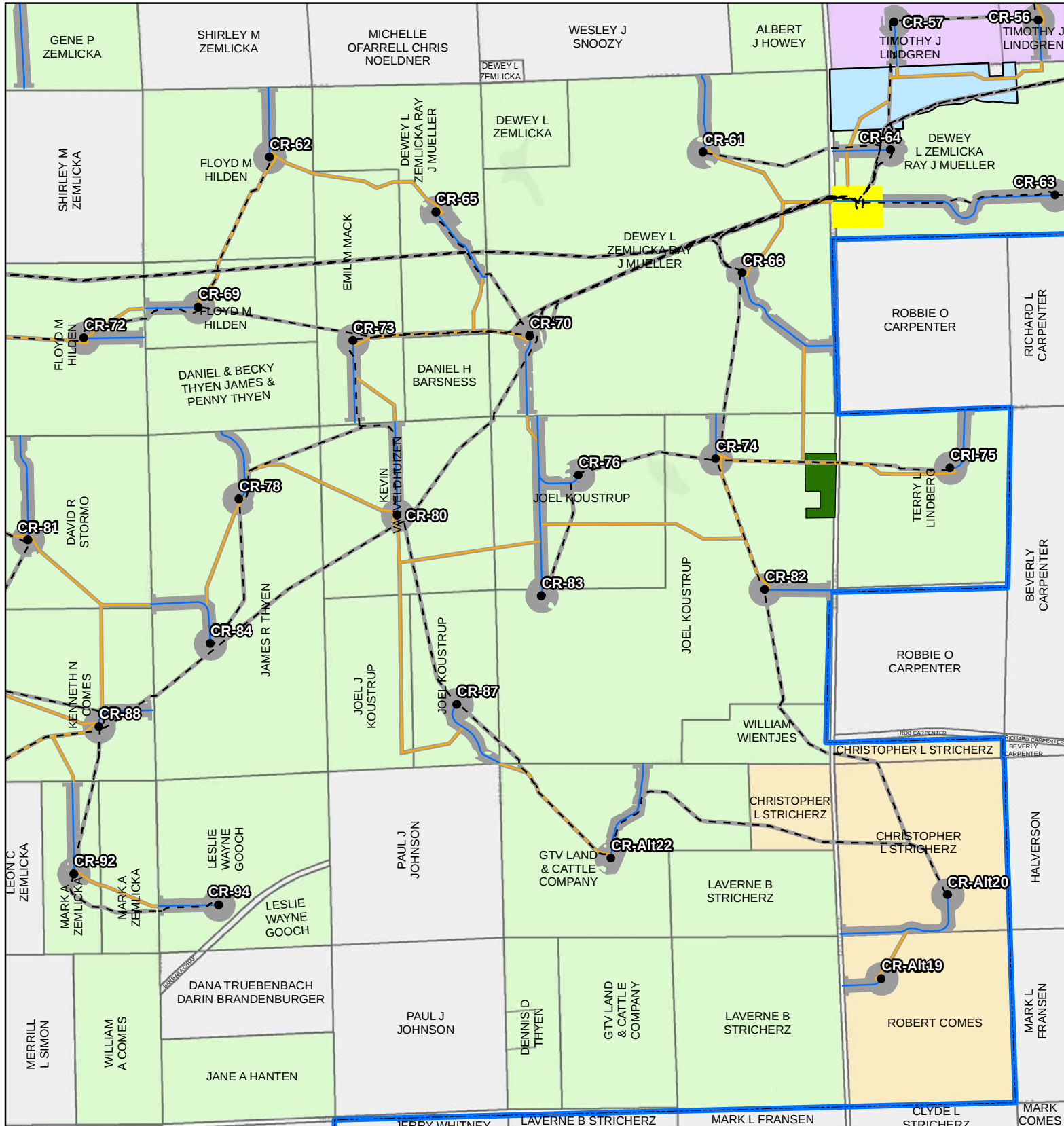
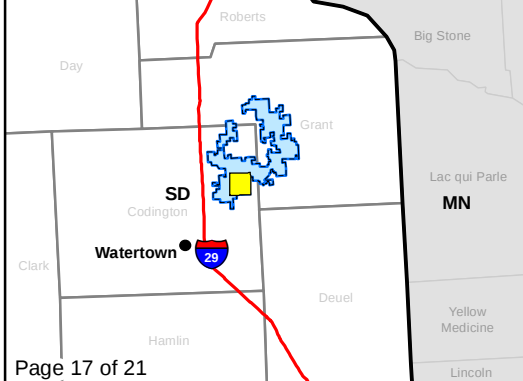


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



Kilometers

0 0.5 1

Miles

0 0.25 0.5

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Quadrangle: South Shore (1973)

Township/Range: T118N, R51W

Codington County, South Dakota

003666 **SWCA**

ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

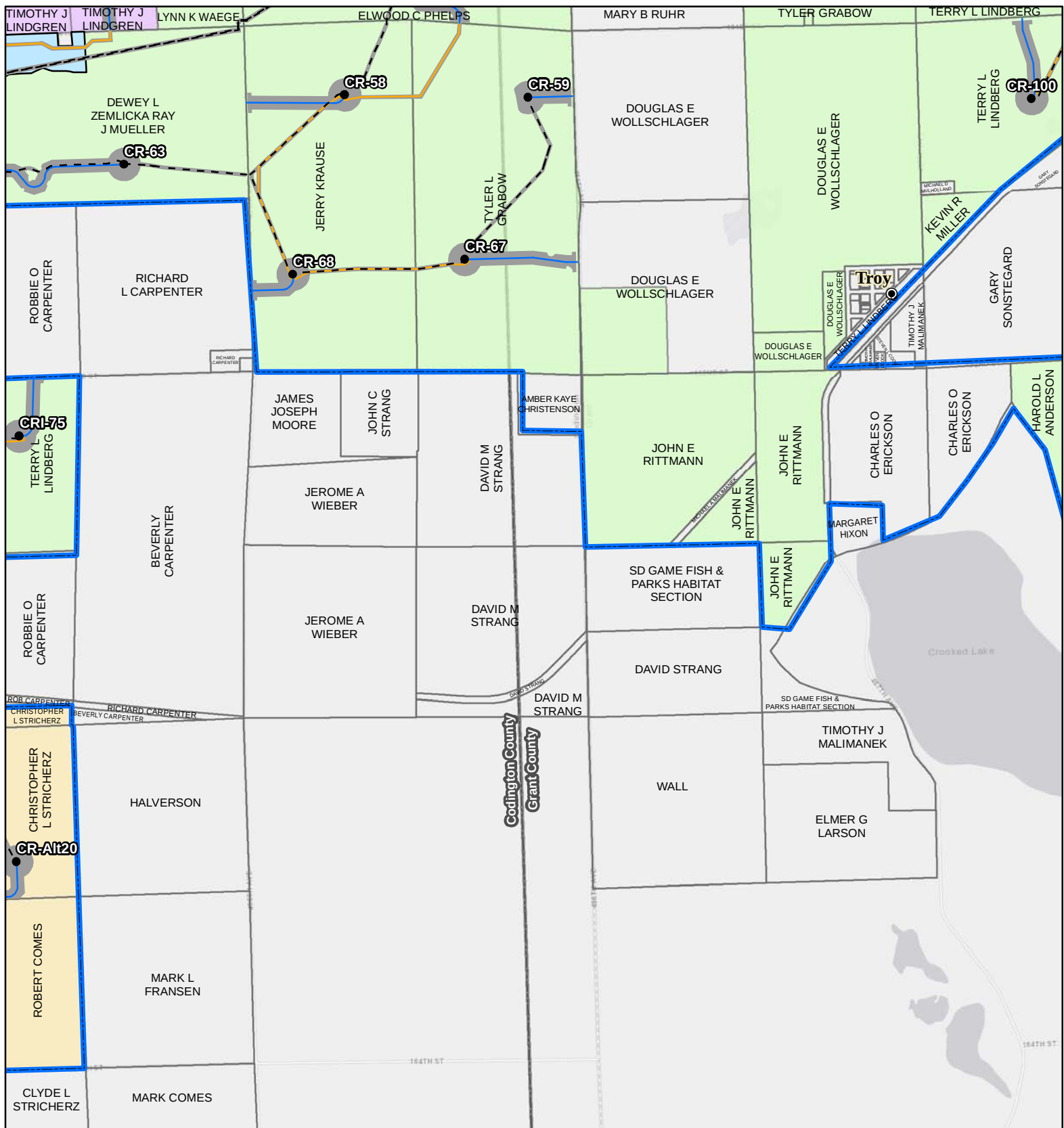
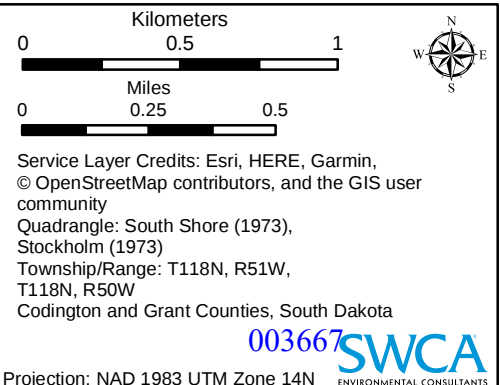
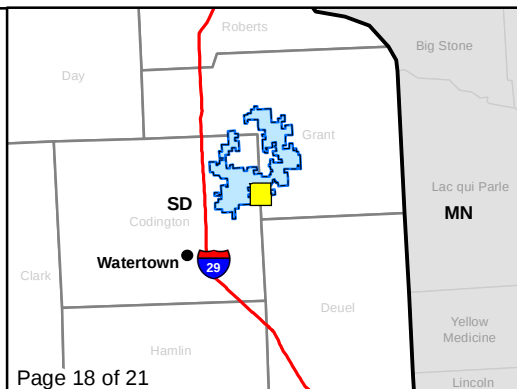
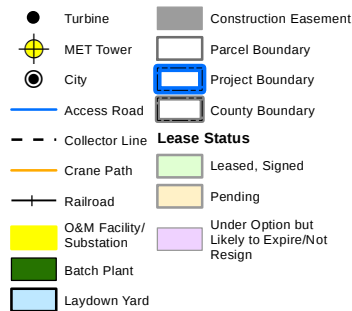


Figure 3a. Project Map
Crowned Ridge Wind Farm



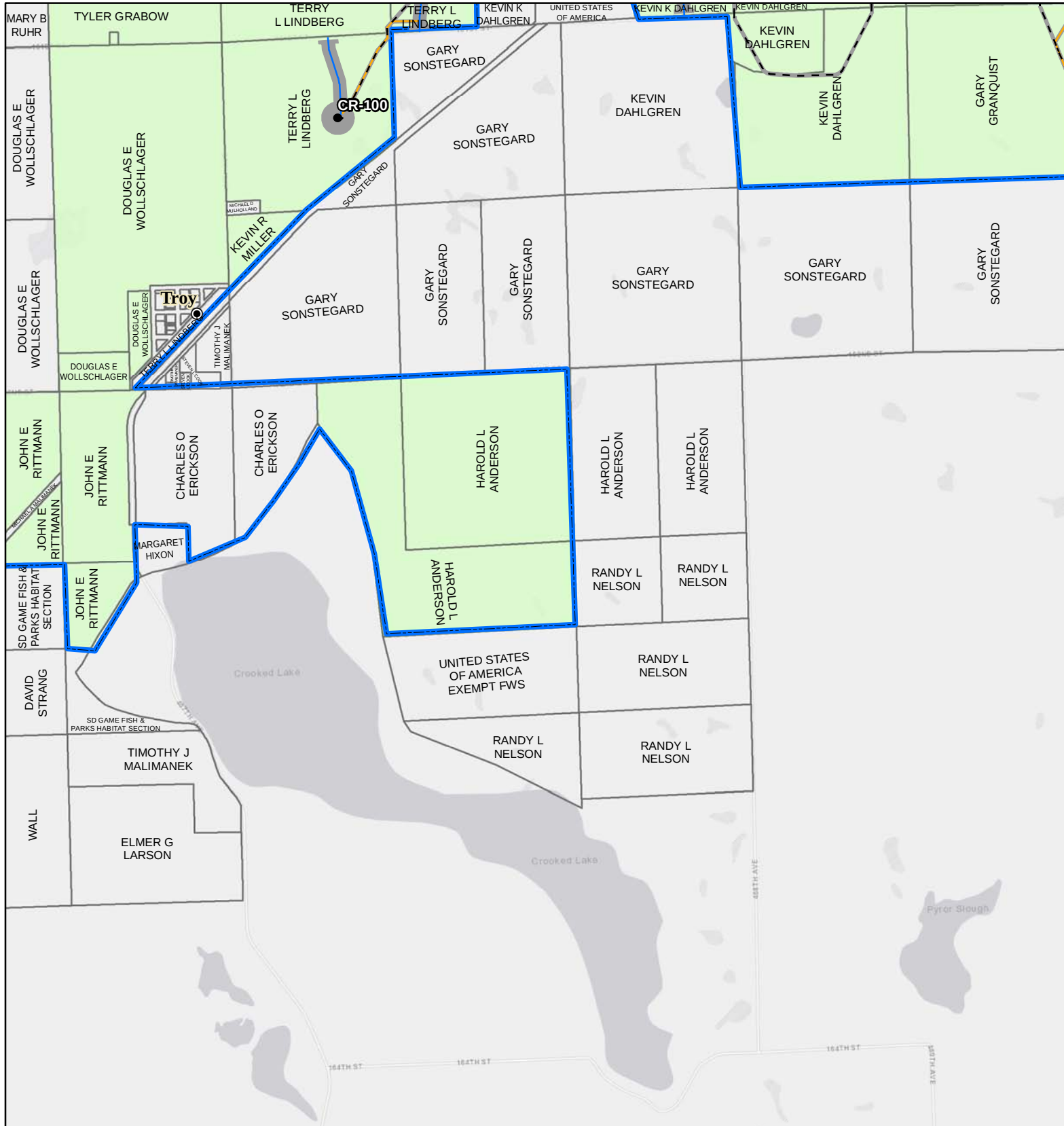


Figure 3a. Project Map
Crowned Ridge Wind Farm

- Turbine
 - ⊕ MET Tower
 - City
 - Access Road
 - - - Collector Line
 - Crane Path
 - Railroad
 - O&M Facility/Substation
 - Batch Plant
 - Laydown Yard
 - Construction Easement
 - ▭ Parcel Boundary
 - ▭ Project Boundary
 - ▭ County Boundary
- Lease Status**
- Leased, Signed
 - Pending
 - Under Option but Likely to Expire/Not Resign



0 0.5 1
Kilometers

0 0.25 0.5
Miles

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
Quadrangle: South Shore (1973), Stockholm (1973)
Township/Range: T118N, R50W

Grant County, South Dakota

003668 **SWCA**
ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

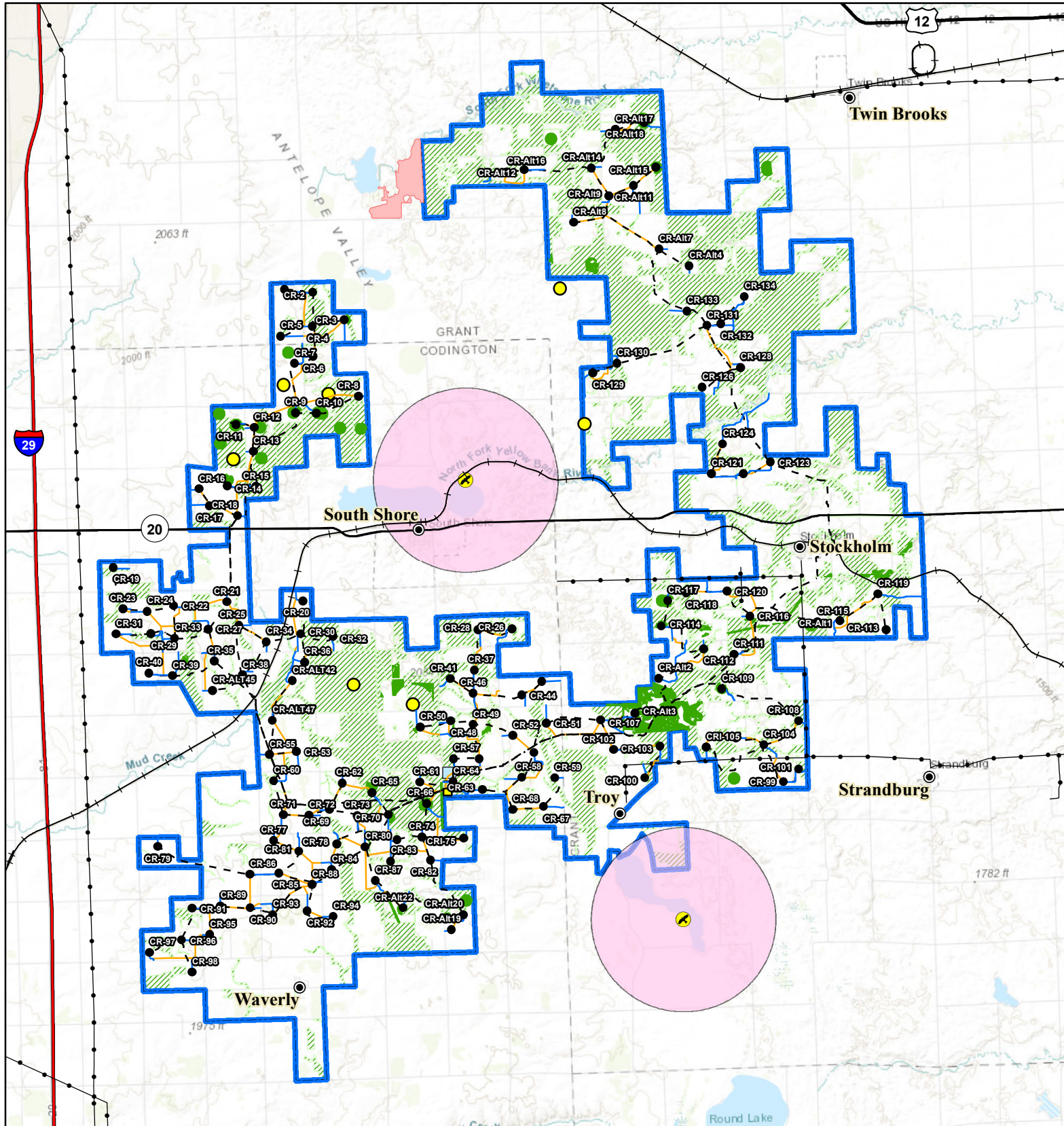
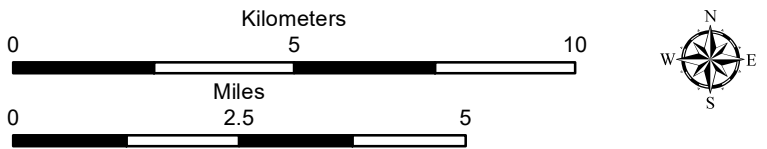


Figure 6. Environmental Constraints

Crowned Ridge Wind Farm

- | | | |
|--------------------------|-------------------------|---|
| Bald Eagle Nest Location | Electrical Line | Field Assessed Dakota Skipper Habitat |
| Turbine | Railroad | 1.5-mile Bald Eagle Nest Buffer |
| Lek Location | Interstate Highway | USFWS Critical Habitat |
| City | U.S. Highway | Undisturbed Native Grasslands (Bauman 2013) |
| Access Road | State Highway | Project Boundary |
| Collector Line | O&M Facility/Substation | |
| Crane Path | Laydown Yard | |



Base Map: World Topographic Map
 Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community
 Codington and Grant Counties, South Dakota

003671 **SWCA**
 ENVIRONMENTAL CONSULTANTS

Projection: NAD 1983 UTM Zone 14N

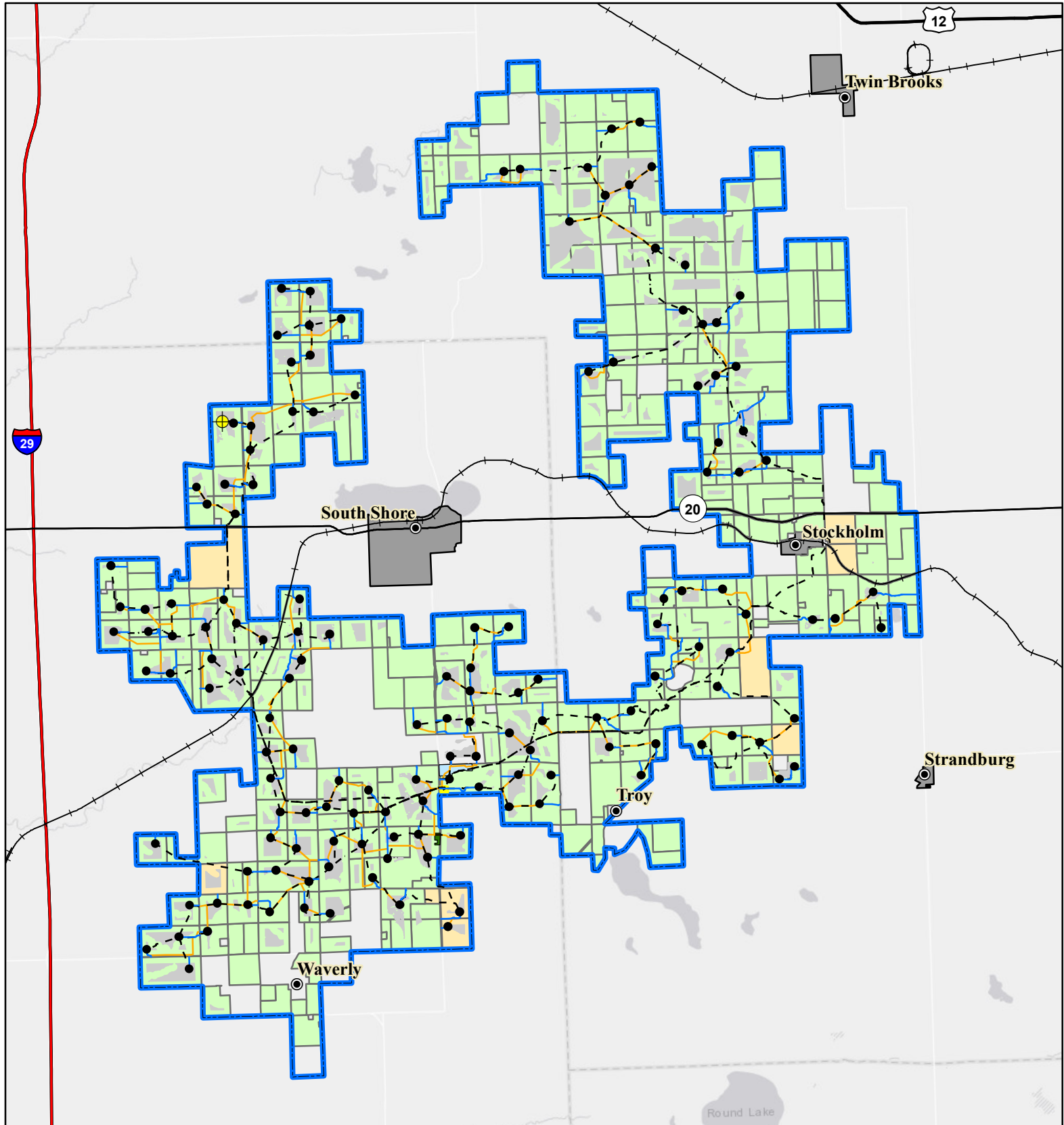
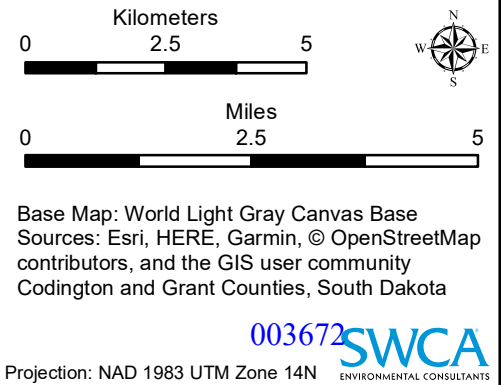
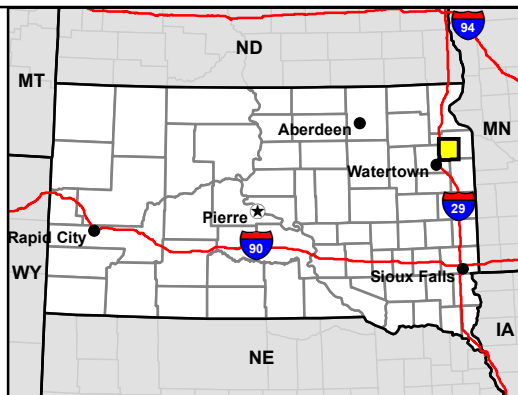


Figure 7. Constraints Map

Crowned Ridge Wind Farm

- | | | | |
|--|--------------------|---------------------|-------------------------------|
| | MET Tower | | Batch Plant |
| | Turbine | | Laydown Yard |
| | City | | O & M Facility/
Substation |
| | Railroad | | Available Land |
| | Access Road | | Town Boundary |
| | Collector Line | | Project Boundary |
| | Crane Path | Lease Status | |
| | Interstate Highway | | Leased, Signed |
| | U.S. Highway | | Pending Approval |
| | State Highway | | |



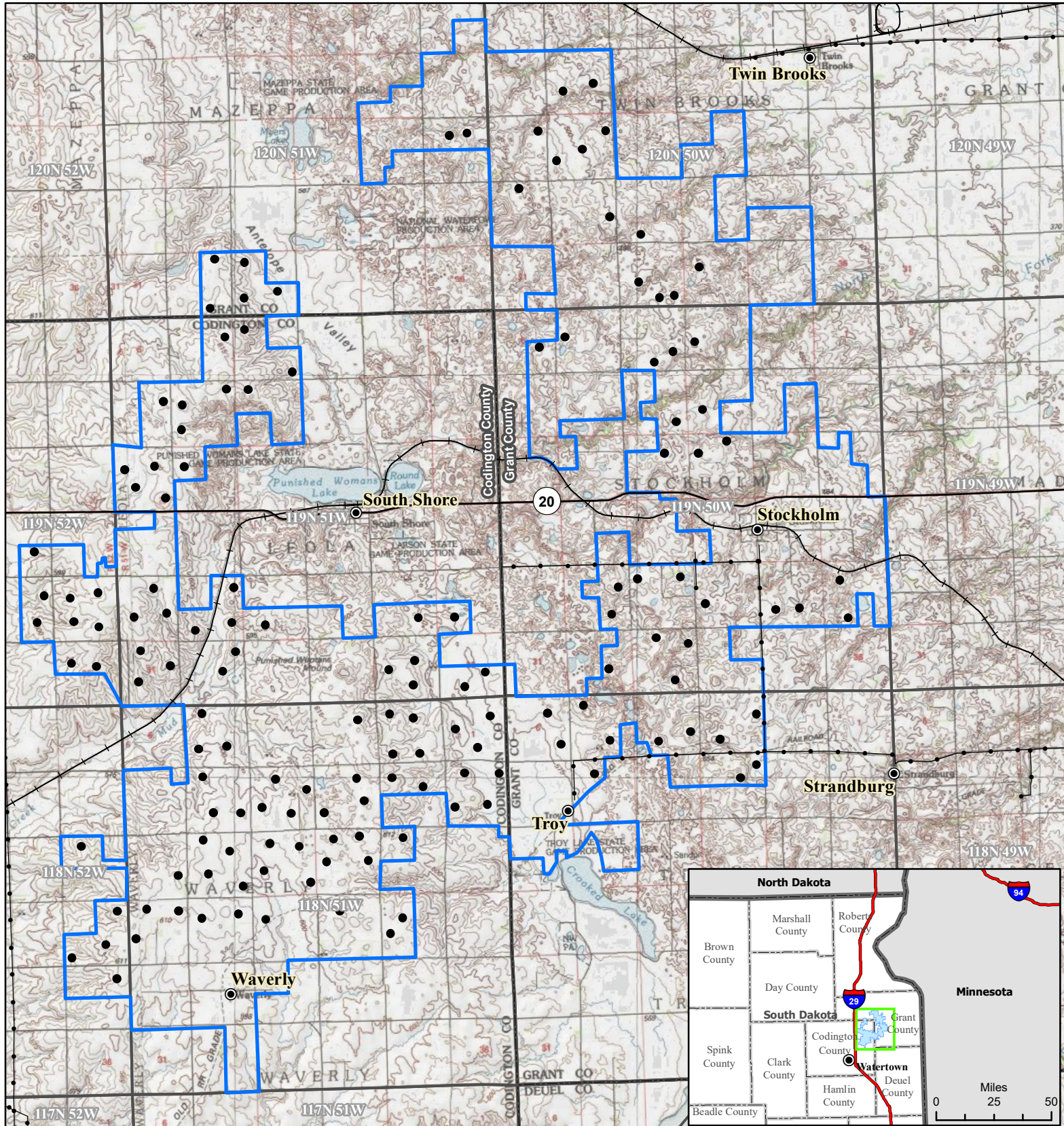
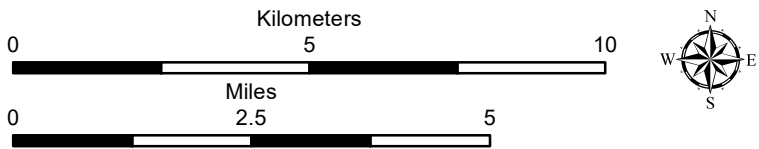


Figure 8. Topographic Map
Crowned Ridge Wind Farm

- Turbine
- City
- +—+— Railroad
- Electrical Line
- State Highway
- Project Boundary
- County Boundary
- Township/Range Boundary



Base Map: USGS 7.5' Topographic Map
Source: Copyright: ©2014 National Geographic Society, i-cubed
Codington and Grant Counties, South Dakota

Projection: NAD 1983 UTM Zone 14N



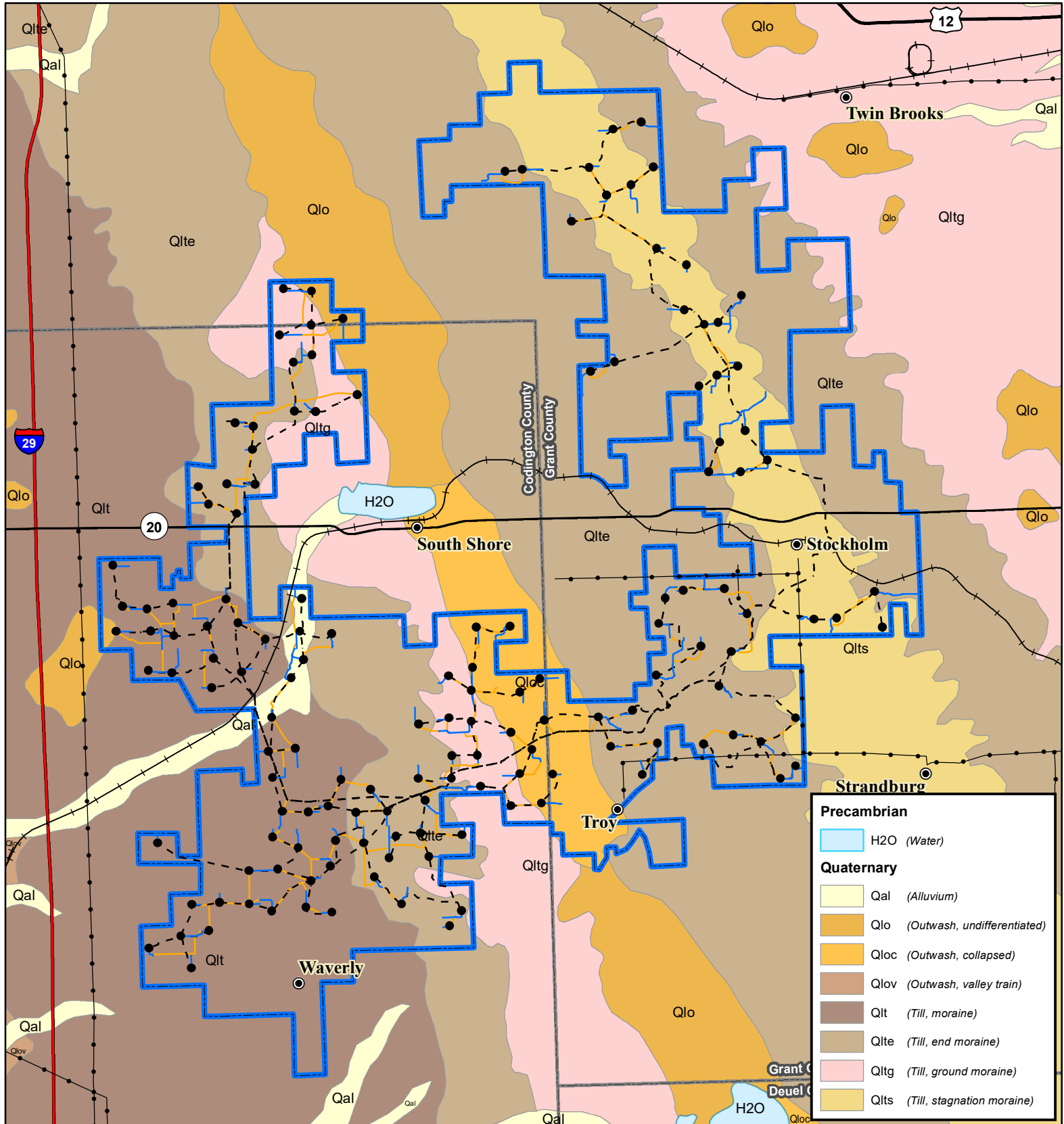
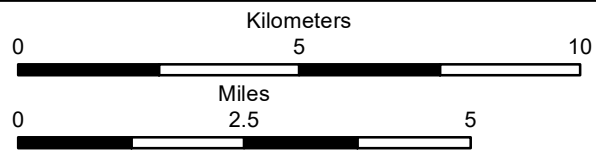


Figure 9a. Surficial Geology

Crowned Ridge Wind Farm

- City
- Turbine
- Access Road
- - - Collector Line
- Crane Path
- Electrical Line
- +— Railroad
- Interstate Highway
- U.S. Highway
- State Highway
- Project Boundary
- County Boundary

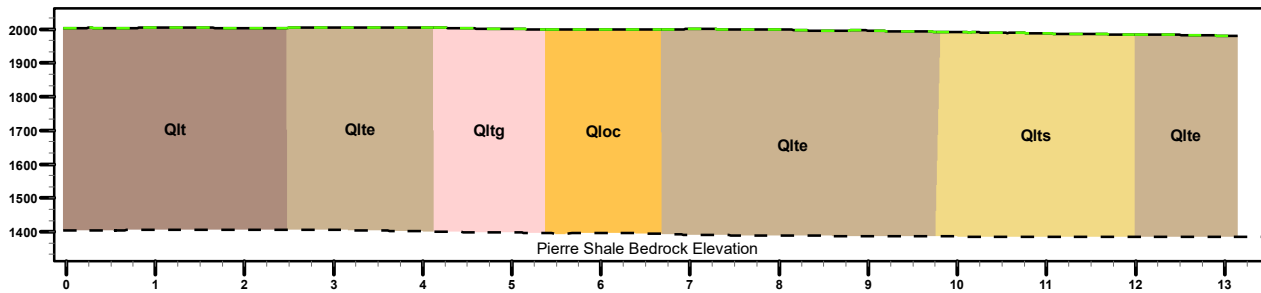
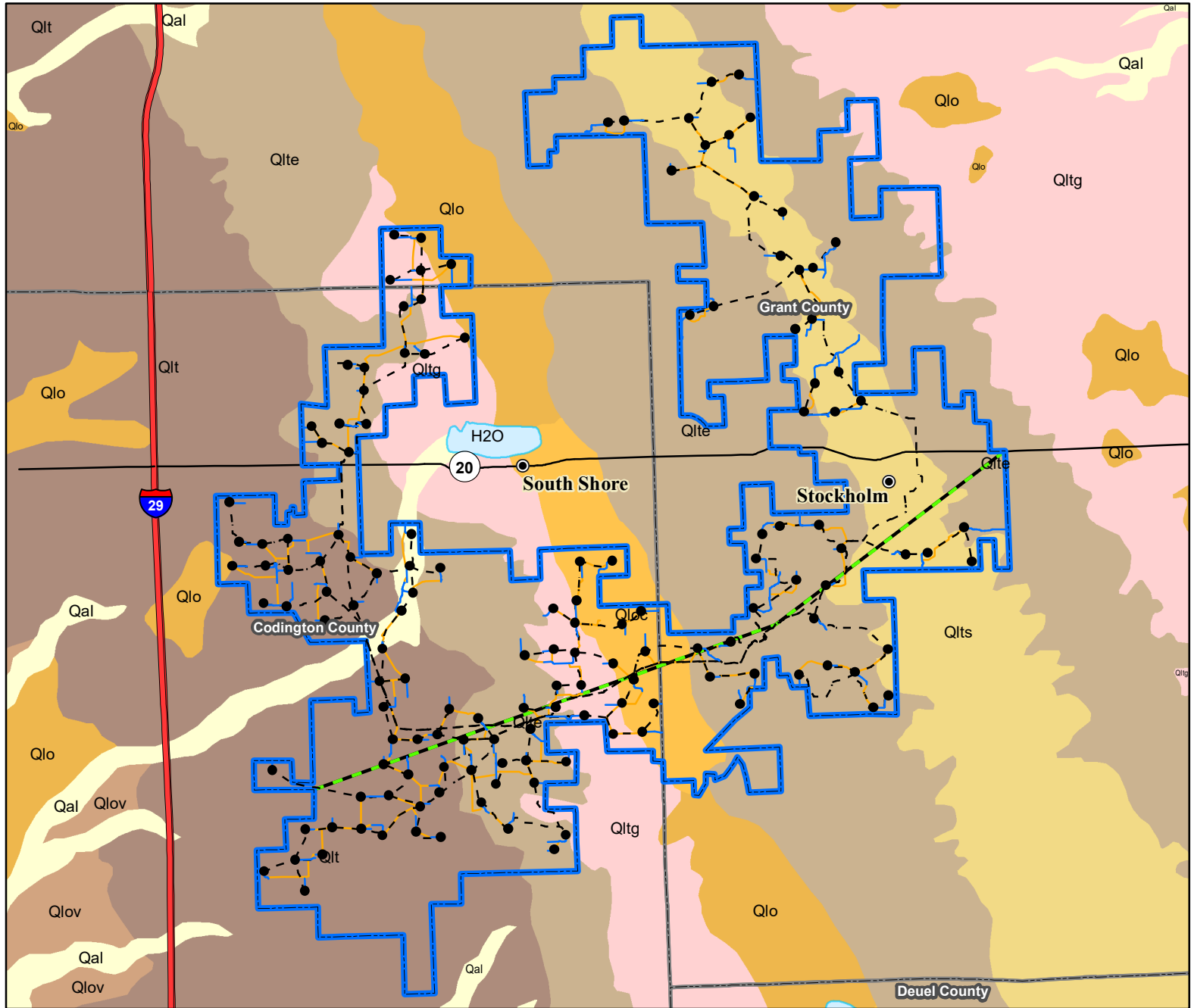


Base Map: Surficial Geology
 Source: South Dakota Geological Survey via
 State of South Dakota GIS
 Codington and Grant Counties, South Dakota

Projection: NAD 1983 UTM Zone 14N

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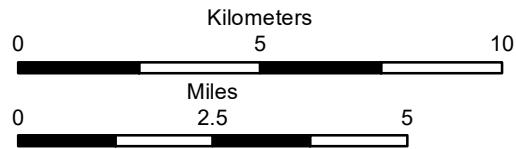


*Vertical axis in feet above sea level; Horizontal axis in miles

Figure 9b. Geology Cross Sections

Crowned Ridge Wind Farm

- City
- Turbine
- Access Road
- - Collector Line
- Crane Path
- Cross Section
- Interstate Highway
- State Highway
- Project Boundary
- County Boundary
- Surficial Geology**
- Precambrian**
- H2O (Water)
- Quaternary**
- Qal (Alluvium)
- Qlo (Outwash, undifferentiated)
- Qloc (Outwash, collapsed)
- Qlov (Outwash, valley train)
- Qlt (Till, moraine)
- Qlte (Till, end moraine)
- Qltg (Till, ground moraine)
- Qlts (Till, stagnation moraine)



Base Map: Surficial Geology
Source: South Dakota Geological Survey via
State of South Dakota GIS
Codington and Grant Counties, South Dakota

Projection: NAD 1983 UTM Zone 14N

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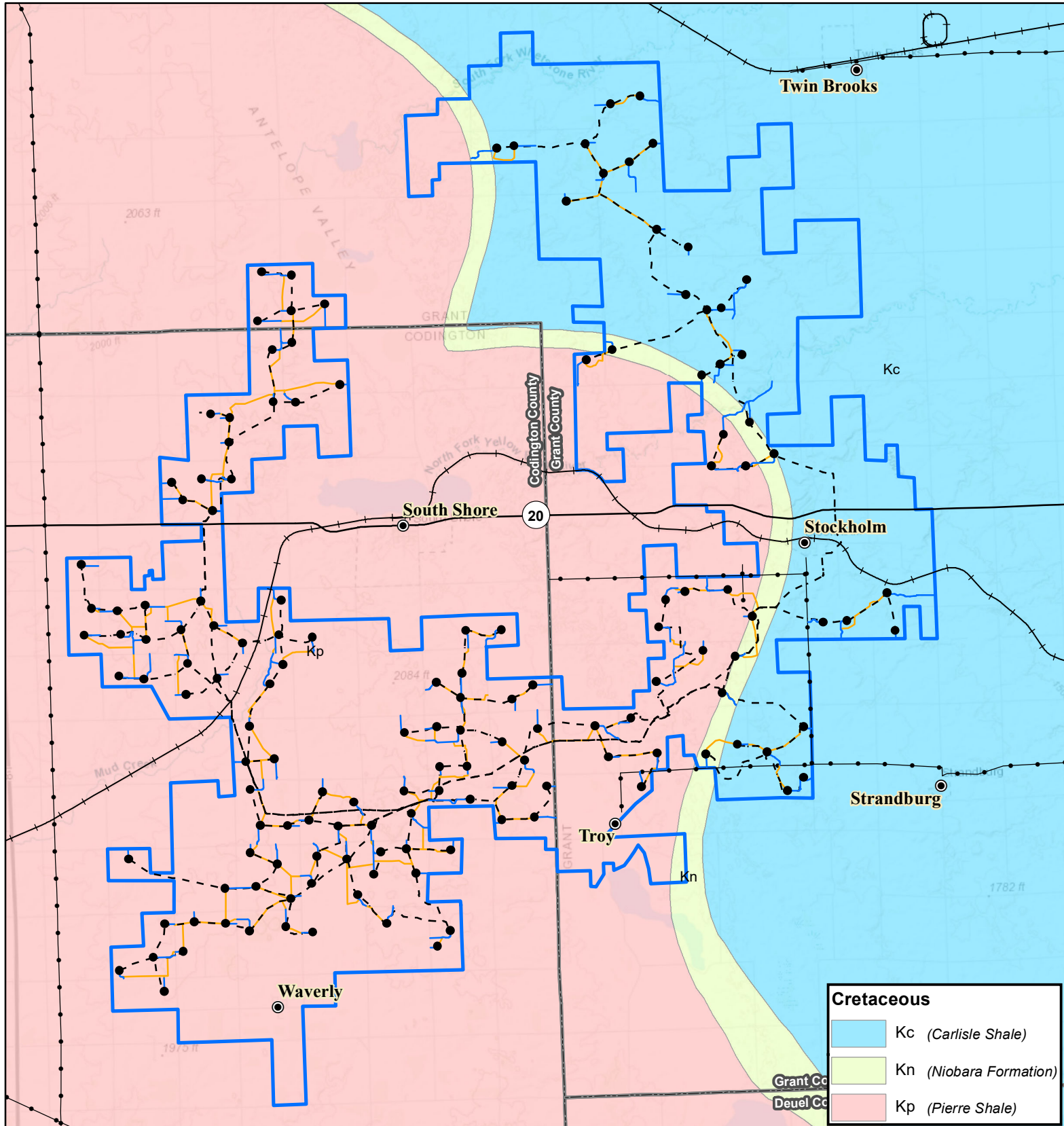
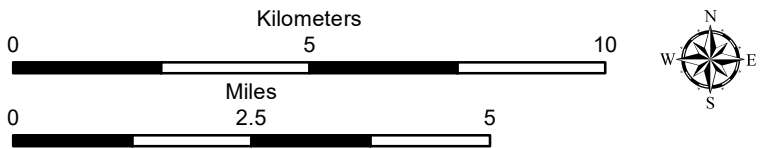


Figure 10. Bedrock Geology
 Crowned Ridge Wind Farm

- City
- Turbine
- Access Road
- - - Collector Line
- Crane Path
- +— Railroad
- Electrical Line
- State Highway
- Project Boundary
- County Boundary

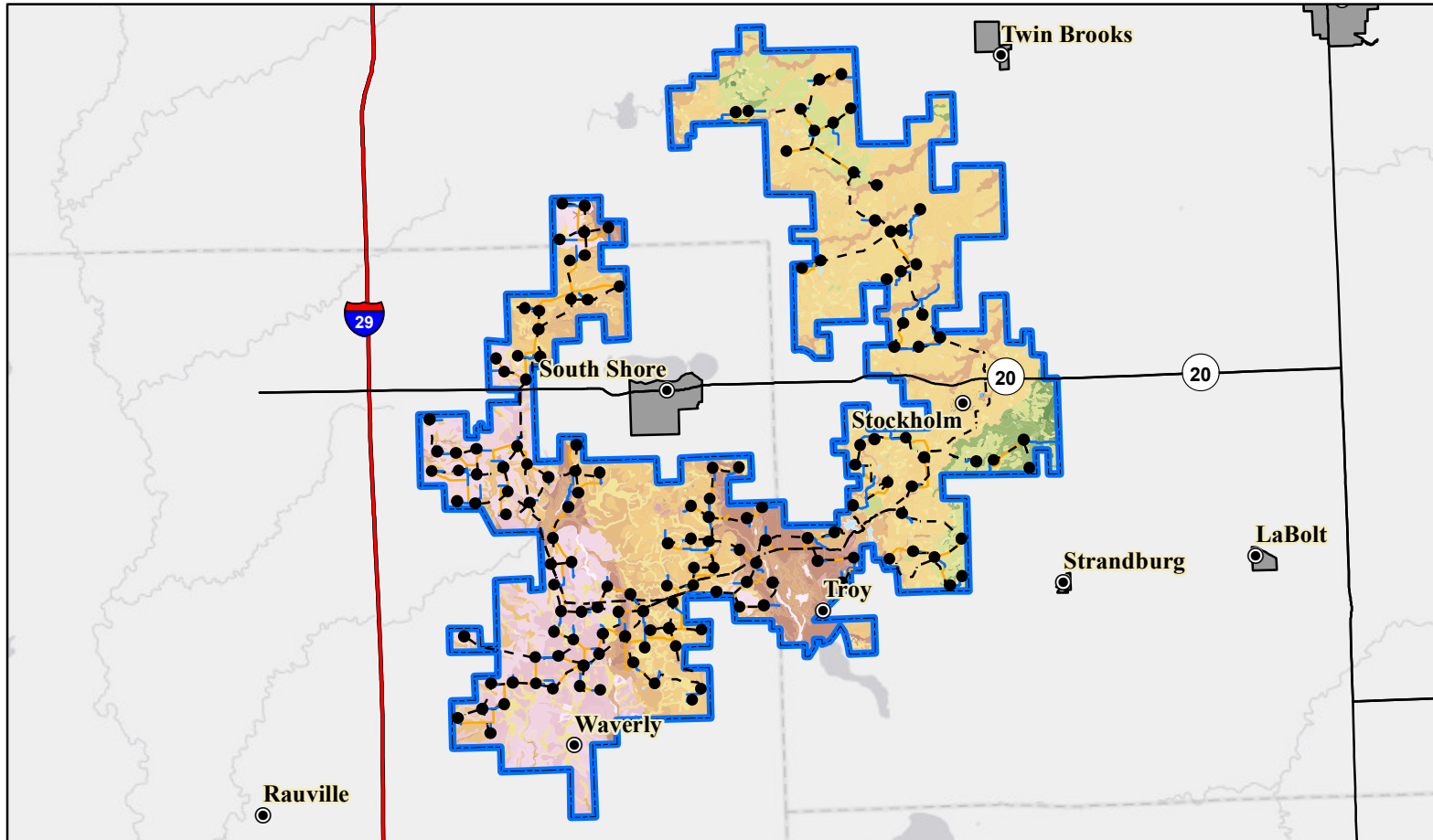


Base Map: World Topographic Map
 Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community
 Codington and Grant Counties, South Dakota

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Projection: NAD 1983 UTM Zone 14N



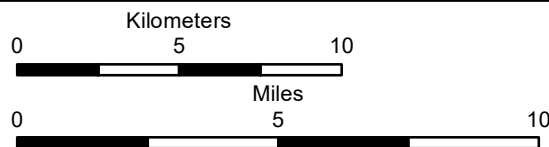
MUSYM (Soil Type)

BeF (Buse-Forman loams, 25-40% slopes)	PeB (Peever clay loam, 2 to 6% slopes)	Z132B (Forman-Buse-Aastad loams, coteau, 1 to 6% slopes)	Z152A (Lamoure silty clay loam, coteau, occasionally flooded, 0 to 1% slopes)	Z176C (Arvilla-Sandberg sandy loams, coteau, 6 to 9% slopes)
BfD (Buse-Forman-Aastad loams, 4-15% slopes)	Ph (Playmoor silty clay loam)	Z132C (Forman-Buse-Aastad loams, coteau, 2 to 9% slopes)	Z153A (Lamoure-Rauville silty clay loams, channeled, frequently flooded, 0 to 2% slopes)	Z177 (Udorthents, coteau (gravel pits))
Fa (Flom Clay loam)	Ta (Tonka silty clay loam, 0 to 1% slopes)	Z132D (Forman-Buse-Aastad loams, coteau, 2 to 15% slopes)	Z157A (Fairdale loam, channeled, frequently flooded, 0 to 2% slopes)	Z178A (Rentil loam, coteau, 0 to 2% slopes)
FdB (Forman-Aastad loams, 1-6% slopes)	Vb (Vallers-Parnell complex)	Z135D (Forman-Buse loams, very stony, 2 to 15% slopes)	Z158A (Maryland loam, occasionally flooded, 0 to 1% slopes)	Z179F (Sioux-Renshaw complex, very stony, 15 to 40% slopes)
FdC (Forman-Aastad loams, 3-9% slopes)	W (Water)	Z136F (Buse-Langhei complex, very stony, 9 to 40% slopes)	Z159A (Divide loam, occasionally flooded, 0 to 2% slopes)	Z184E (Maddock loamy fine sand, 9 to 25% slopes)
FdD (Forman-Aastad loams, 4-15% slopes)	Z101A (Tonka silty clay loam, 0 to 1% slopes)	Z137F (Buse-Forman loams, very stony, 15 to 40% slopes)	Z160A (Moritz, occasionally flooded-Lamoure, frequently flooded, complex, 0 to 2% slopes)	Z185A (Egeland-Embsen complex, coteau, 0 to 2% slopes)
FgC (Forman-Buse loams, 6-9% slopes)	Z102A (Badger-Tonka silty clay loam, 0 to 1% slopes)	Z140F (Buse-Langhei complex, coteau, 15 to 40% slopes)	Z161A (Spottswood loam, occasionally flooded, 0 to 2% slopes)	Z185B (Egeland-Embsen complex, coteau, 2 to 6% slopes)
FgE (Forman-Buse loams, 15-25% slopes)	Z105A (Oldham silty clay loam, coteau, 0 to 1% slopes)	Z141A (Barnes-Svea loams, coteau, 0 to 2% slopes)	Z162A (La Prairie loam, coteau, occasionally flooded, 0 to 2% slopes)	Z186B (Maddock-Egeland sandy loams, coteau, 2 to 6% slopes)
FhE (Forman-Buse extremely stony loams, 9-40% slopes)	Z106A (Southam silty clay loam, 0 to 1% slopes)	Z141B (Barnes-Svea loams, coteau, 1 to 6% slopes)	Z166A (Forttown loam, rarely flooded, 0 to 2% slopes)	Z186C (Maddock-Egeland sandy loams, coteau, 6 to 9% slopes)
HaD (Hattie clay loam, 9 to 15% slopes)	Z107A (Parnell silty clay loam, coteau, 0 to 1% slopes)	Z142B (Barnes-Buse-Svea loams, coteau, 2 to 9% slopes)	Z167A (Renwash loam, rarely flooded, 0 to 2% slopes)	Z190A (Brookings silty clay loam, 0 to 2% slopes)
HaE (Hattie clay loam, 15 to 40% slopes)	Z110A (Vallers loam, coteau, 0 to 1% slopes)	Z142C (Barnes-Buse-Svea loams, coteau, 2 to 9% slopes)	Z171A (Renshaw-Fordville loams, coteau, 0 to 2% slopes)	Z192A (Vienna-Brookings complex, coteau, 0 to 2% slopes)
J119E (Buse-Sioux complex, 9 to 40% slopes)	Z112A (Vallers-Hamerly loams, coteau, 0 to 2% slopes)	Z143C (Barnes-Buse loams, coteau, 6 to 9% slopes)	Z171B (Renshaw-Fordville loams, coteau, 2 to 6% slopes)	Z192B (Vienna-Brookings complex, coteau, 1 to 6% slopes)
J136A (Great Bend-Beolia silt loams, 0 to 2% slopes)	Z113A (Vallers-Parnell complex, coteau, 0 to 2% slopes)	Z144E (Buse-Barnes loams, coteau, 9 to 20% slopes)	Z172A (Renshaw loam, coteau, 0 to 2% slopes)	Z193C (Vienna-Buse complex, coteau, 6 to 9% slopes)
J225B (Forman-Aastad complex)	Z114A (Hamerly-Tonka complex, coteau, 0 to 2% slopes)	Z145D (Buse-Barnes loams, coteau, very stony, 2 to 15% slopes)	Z172B (Renshaw loam, coteau, 2 to 6% slopes)	Z194A (Barnes clay loam, coteau, 0 to 2% slopes)
Lb (LaDelle silt loam, channeled)	Z115A (Hamerly-Badger complex, coteau, 0 to 2% slopes)	Z145F (Buse-Barnes loams, coteau, very stony, 9 to 40% slopes)	Z173B (Renshaw-Sioux complex, coteau, 2 to 6% slopes)	Z194B (Barnes clay loam, coteau, 2 to 6% slopes)
Lc (Ludden silty clay)	Z116A (McKranz-Hidwood, frequently flooded, silty clay loams, 0 to 2% slopes)	Z146F (Buse-Lamoure, channeled, frequently flooded, complex, 0 to 40% slopes)	Z173C (Renshaw-Sioux complex, coteau, 6 to 9% slopes)	Z198A (Vienna-Forestville loams, coteau, 0 to 2% slopes)
M-W Miscellaneous Water	Z117A (McKranz-Badger silty clay loams, 0 to 2% slopes)	Z148F (Buse very stony-Lamoure, channeled, frequently flooded, complex, 0 to 40% slopes)	Z174D (Sioux-Renshaw complex, coteau, 9 to 15% slopes)	Z199B (Vienna-Barnes-Forestville loams, 1 to 6% slopes)
Pa (Parnell silty clay loam)	Z119A (Hamerly-Balaton loams, coteau, 0 to 3% slopes)	Z149F (Buse-Langhei, very stony-La Prairie, channeled, occasionally flooded, complex, 0 to 60% slopes)	Z174F (Sioux-Renshaw complex, coteau, 15 to 40% slopes)	Z205B (Mauvais clay loam, occasionally ponded, extremely stony, 2 to 6% slopes)
Pb (Southern silty clay loam, 0 to 1% slopes)	Z128B (Hettland silty clay loam, 2 to 6% slopes)	Z150A (Rauville silty clay loam, coteau, frequently flooded, 0 to 1% slopes)	Z175D (Renshaw-Sioux complex, very stony, 2 to 15% slopes)	Z217A (McKranz silty clay loam, 0 to 2% slopes)
PcA (Peever clay loam, coteau, 0 to 2% slopes)	Z131A (Forman-Aastad loams, coteau, 0 to 2% slopes)			Z250A (Rauville mucky silty clay loam, ponded, frequently flooded, 0 to 1% slopes)
PcB (Peever clay loam, coteau, 2 to 6% slopes)	Z131B (Forman-Aastad loams, coteau, 1 to 6% slopes)			Z252A (Hidewood silty clay loam, frequently flooded, 0 to 2% slopes)
PcC (Peever clay loam, 6 to 9% slopes)				

Figure 11. Soil Types

Crowned Ridge Wind Farm

- City
- Turbine
- Access Road
- - - Collector Line
- Crane Path
- Interstate Highway
- State Highway
- Town Boundary
- Project Boundary



Base Map: World Light Gray Canvas Base
Sources: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
Codington and Grant Counties, South Dakota

Projection: NAD 1983 UTM Zone 14N

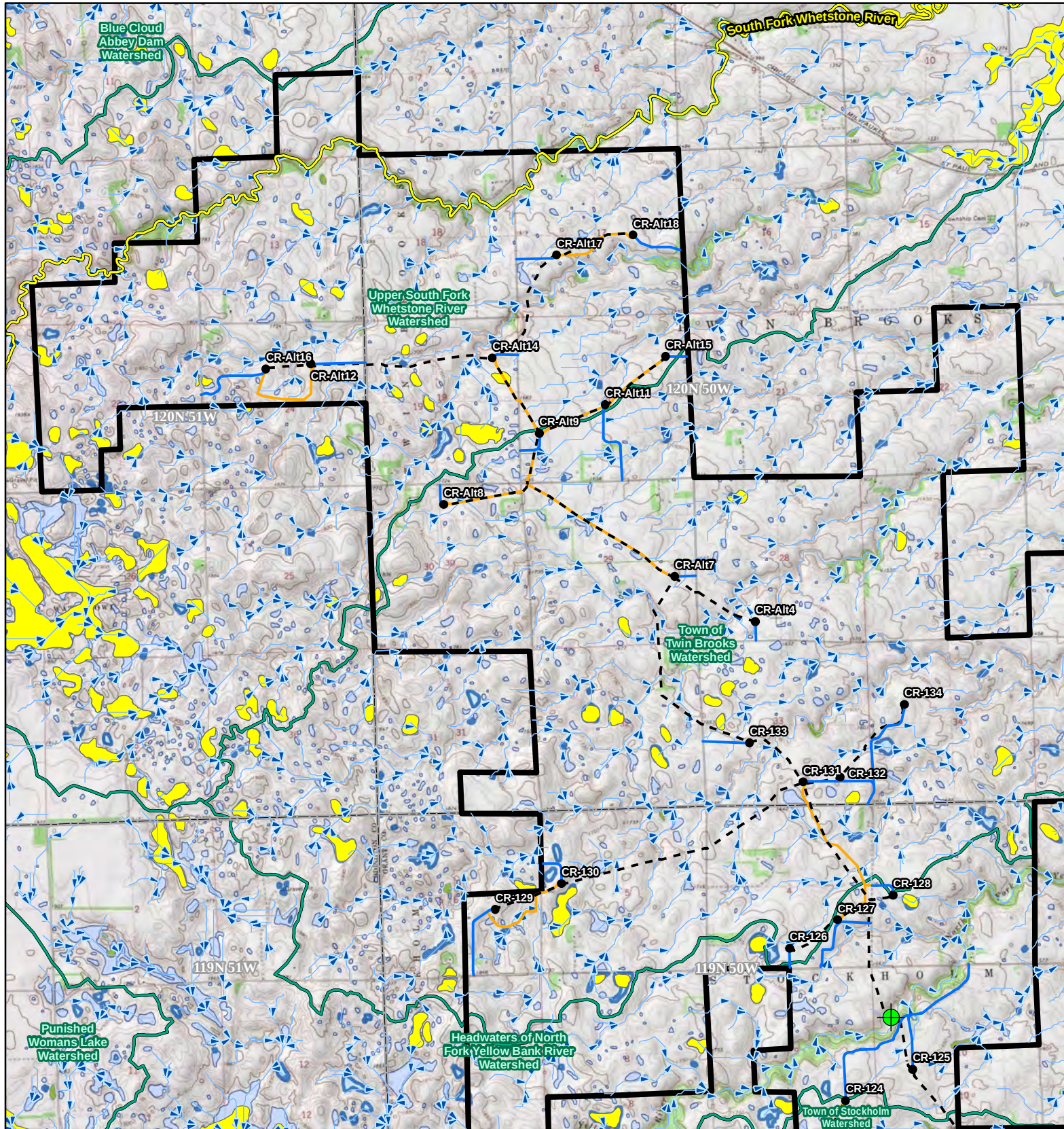
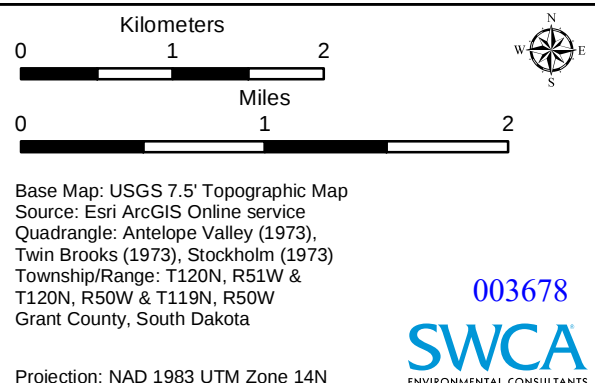
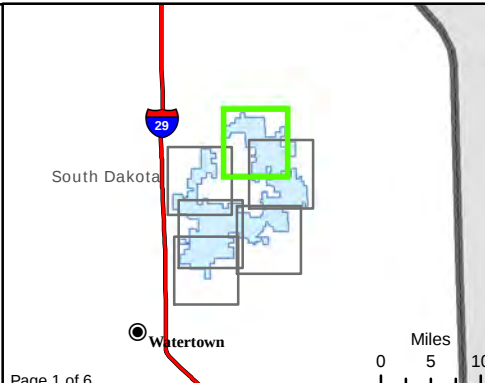
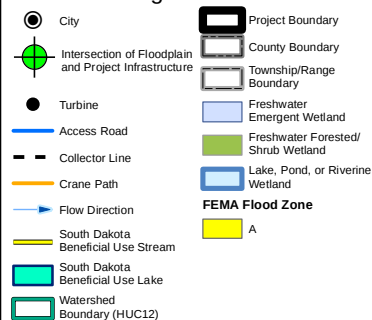


Figure 12. Water Resources
Crowned Ridge Wind Farm



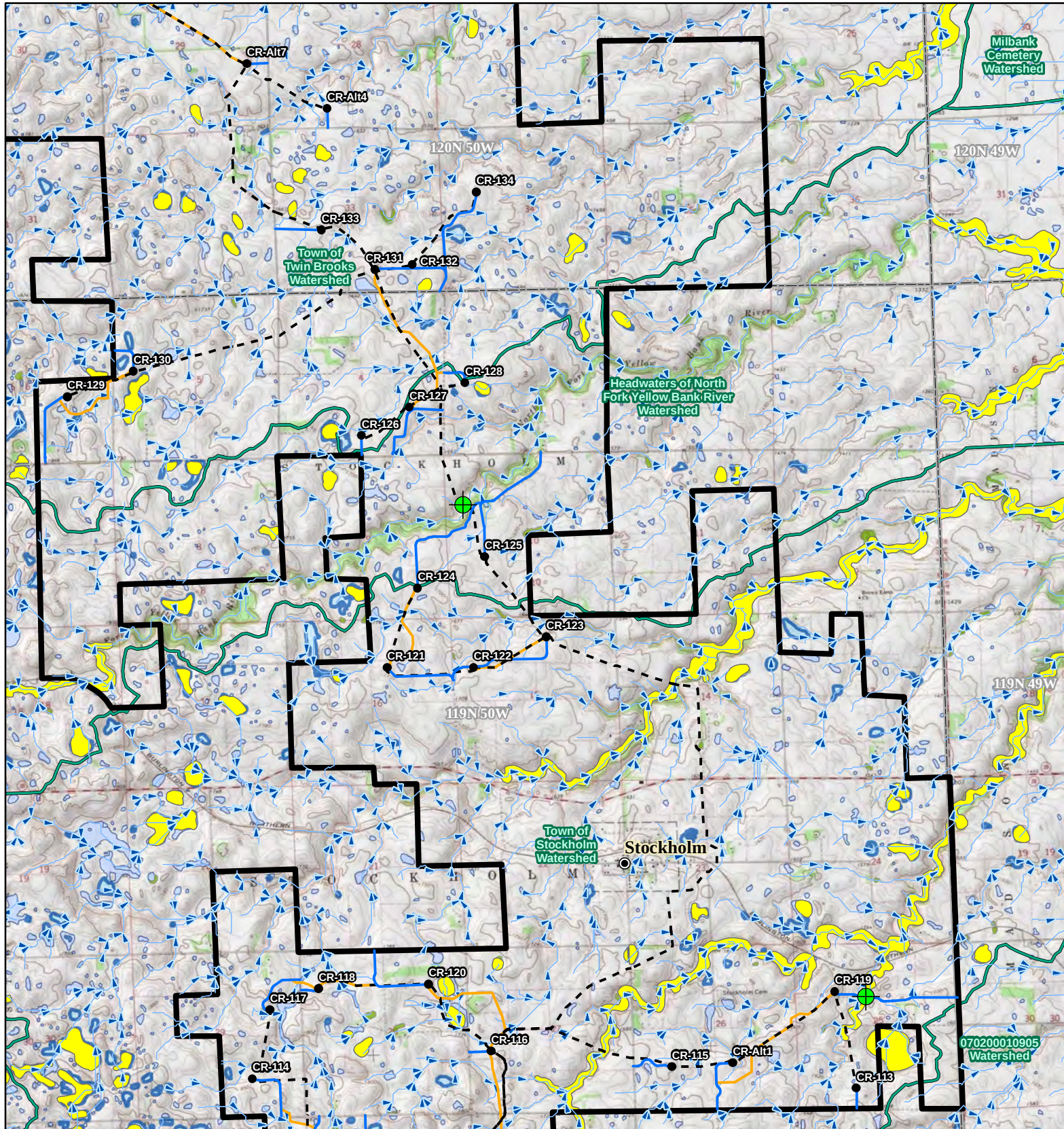
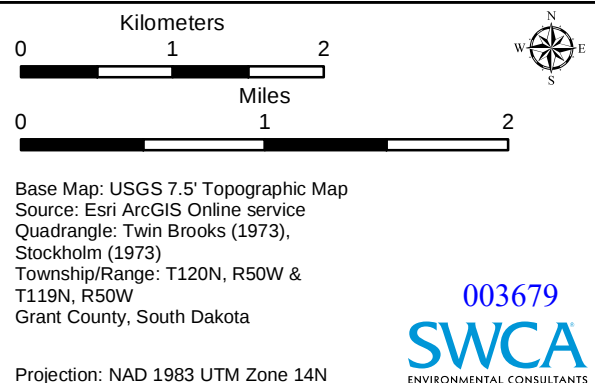
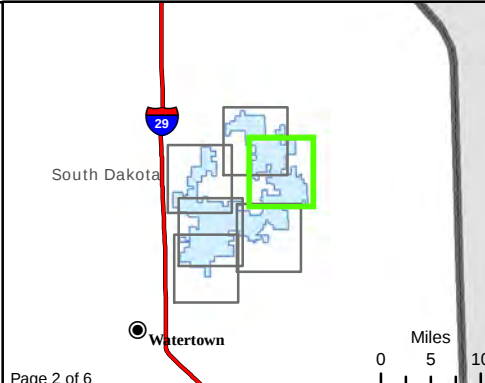
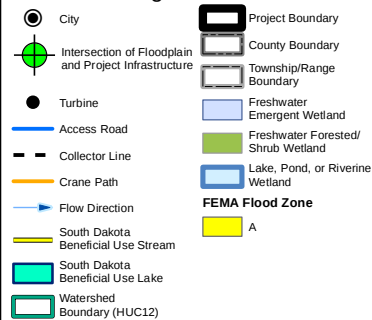


Figure 12. Water Resources
Crowned Ridge Wind Farm



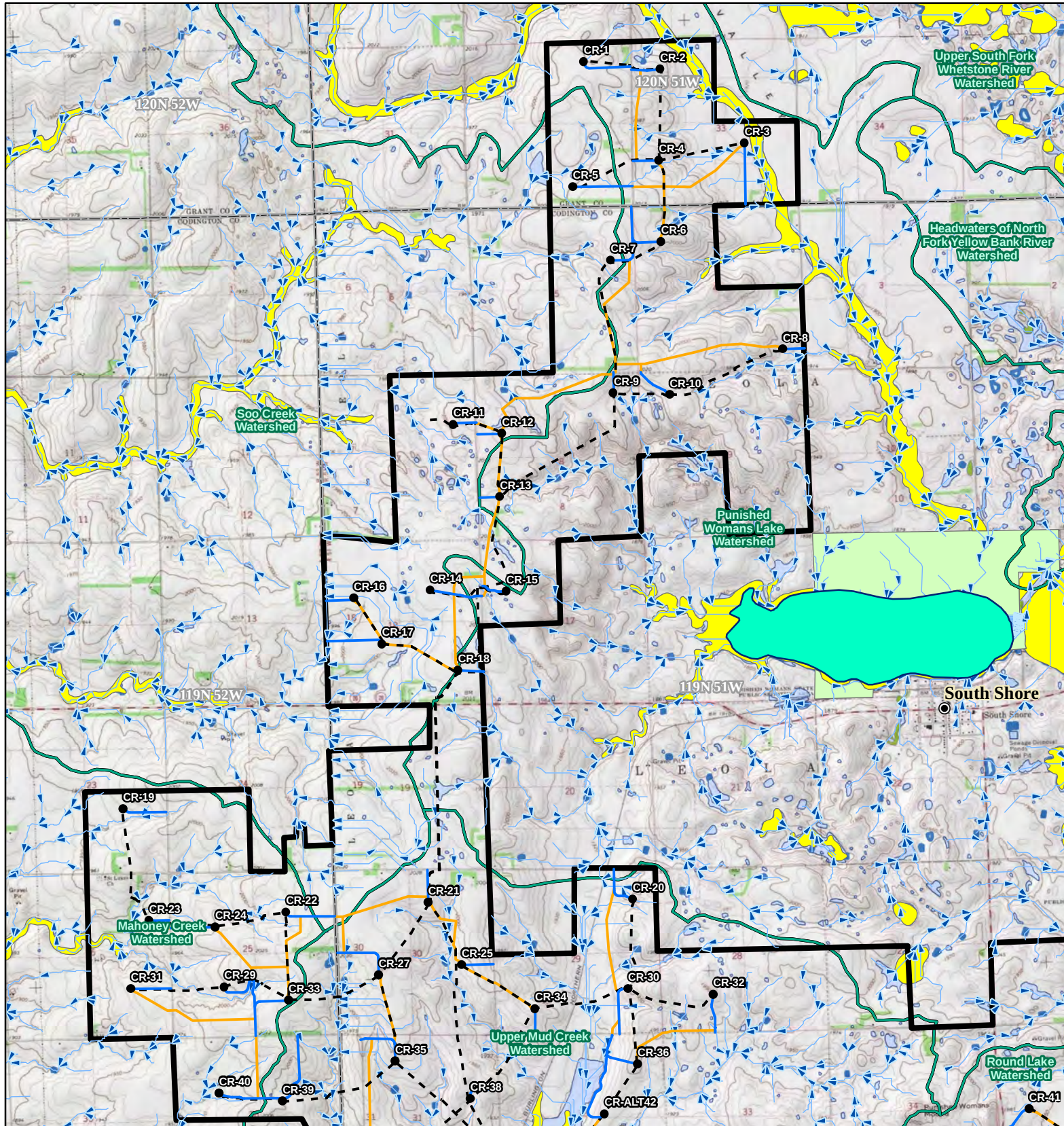
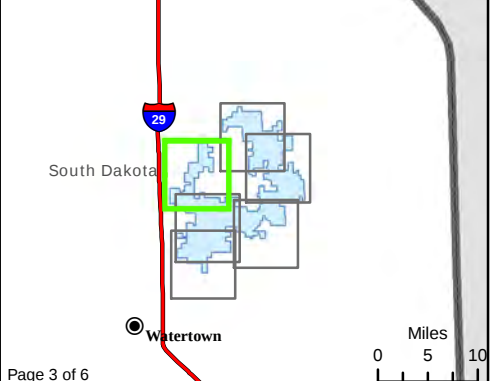


Figure 12. Water Resources
Crowned Ridge Wind Farm

- City
- Intersection of Floodplain and Project Infrastructure
- Turbine
- Access Road
- - Collector Line
- Crane Path
- Flow Direction
- South Dakota Beneficial Use Stream
- South Dakota Beneficial Use Lake
- Watershed Boundary (HUC12)
- Project Boundary
- County Boundary
- Township/Range Boundary
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Lake, Pond, or Riverine Wetland
- FEMA Flood Zone**
 - A
 - D



Kilometers

0 1 2

Miles

0 1 2

Base Map: USGS 7.5' Topographic Map
Source: Esri ArcGIS Online service
Quadrangle: Antelope Valley (1973),
Still Lake SE (1970), South Shore (1973)
Township/Range: T120N, R51W &
T119N, R52W & T119N, R51W
Codington and Grant Counties, South Dakota

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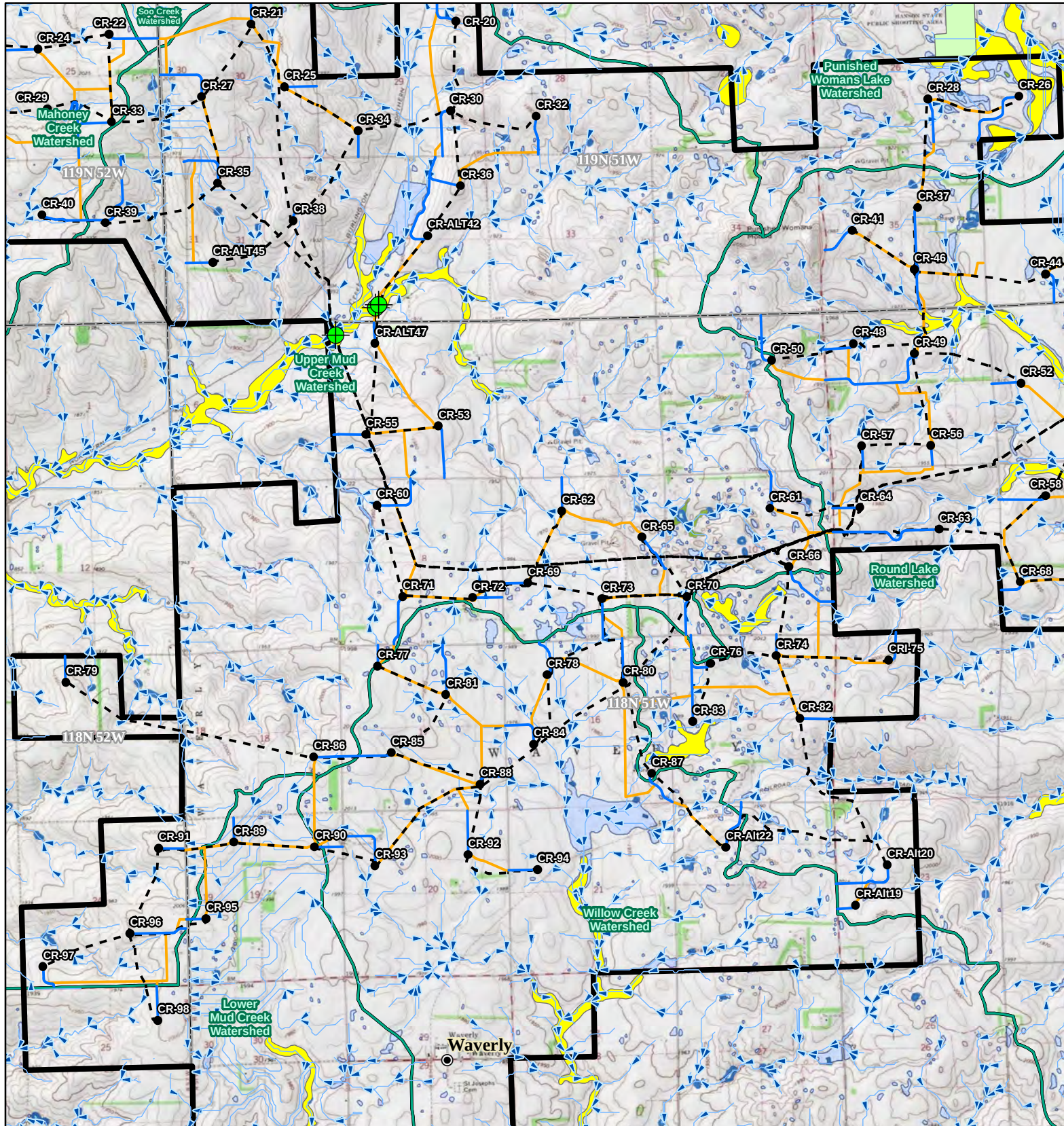
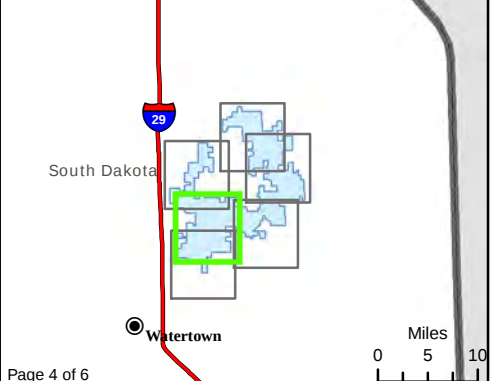


Figure 12. Water Resources
Crowned Ridge Wind Farm

- City
- Intersection of Floodplain and Project Infrastructure
- Turbine
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- South Dakota Beneficial Use Stream
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- FEMA Flood Zone**
 - A
 - D



Kilometers

0 1 2

Miles

0 1 2

Base Map: USGS 7.5' Topographic Map
 Source: Esri ArcGIS Online service
 Quadrangle: Still Lake SE (1970), South Shore (1973),
 Watertown East (1969), Kranzburg (1970)
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 Codington County, South Dakota

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Projection: NAD 1983 UTM Zone 14N

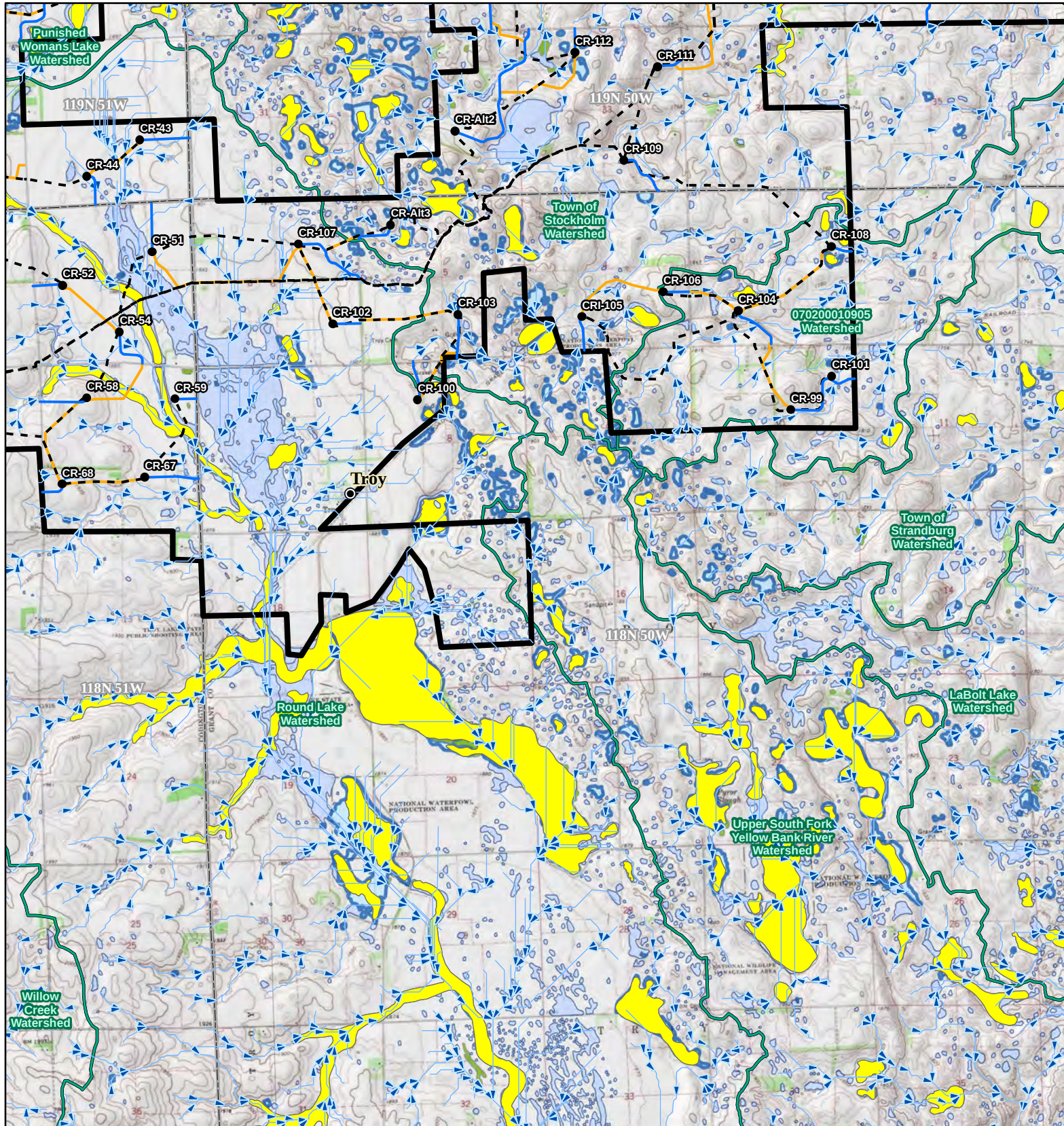
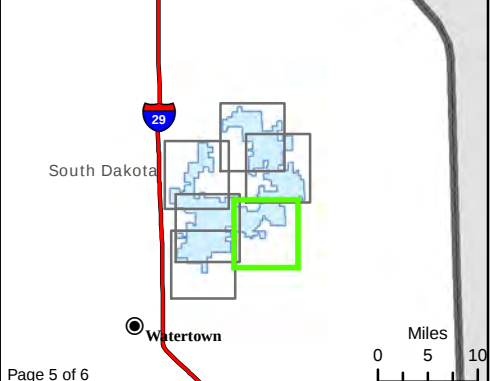


Figure 12. Water Resources
Crowned Ridge Wind Farm

- City
- Intersection of Floodplain and Project Infrastructure
- Turbine
- Access Road
- - Collector Line
- Crane Path
- Flow Direction
- South Dakota Beneficial Use Stream
- South Dakota Beneficial Use Lake
- Watershed Boundary (HUC12)
- ▬ Project Boundary
- ▬ County Boundary
- ▬ Township/Range Boundary
- ▬ Freshwater Emergent Wetland
- ▬ Freshwater Forested/Shrub Wetland
- ▬ Lake, Pond, or Riverine Wetland
- ▬ FEMA Flood Zone A



Kilometers

0 1 2

Miles

0 1 2

N
W E
S

Base Map: USGS 7.5' Topographic Map
 Source: Esri ArcGIS Online service
 Quadrangle: South Shore (1973),
 Stockholm (1973)
 Township/Range: T119N, R51W & T119N, R50W &
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 Codington and Grant Counties, South Dakota

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Projection: NAD 1983 UTM Zone 14N

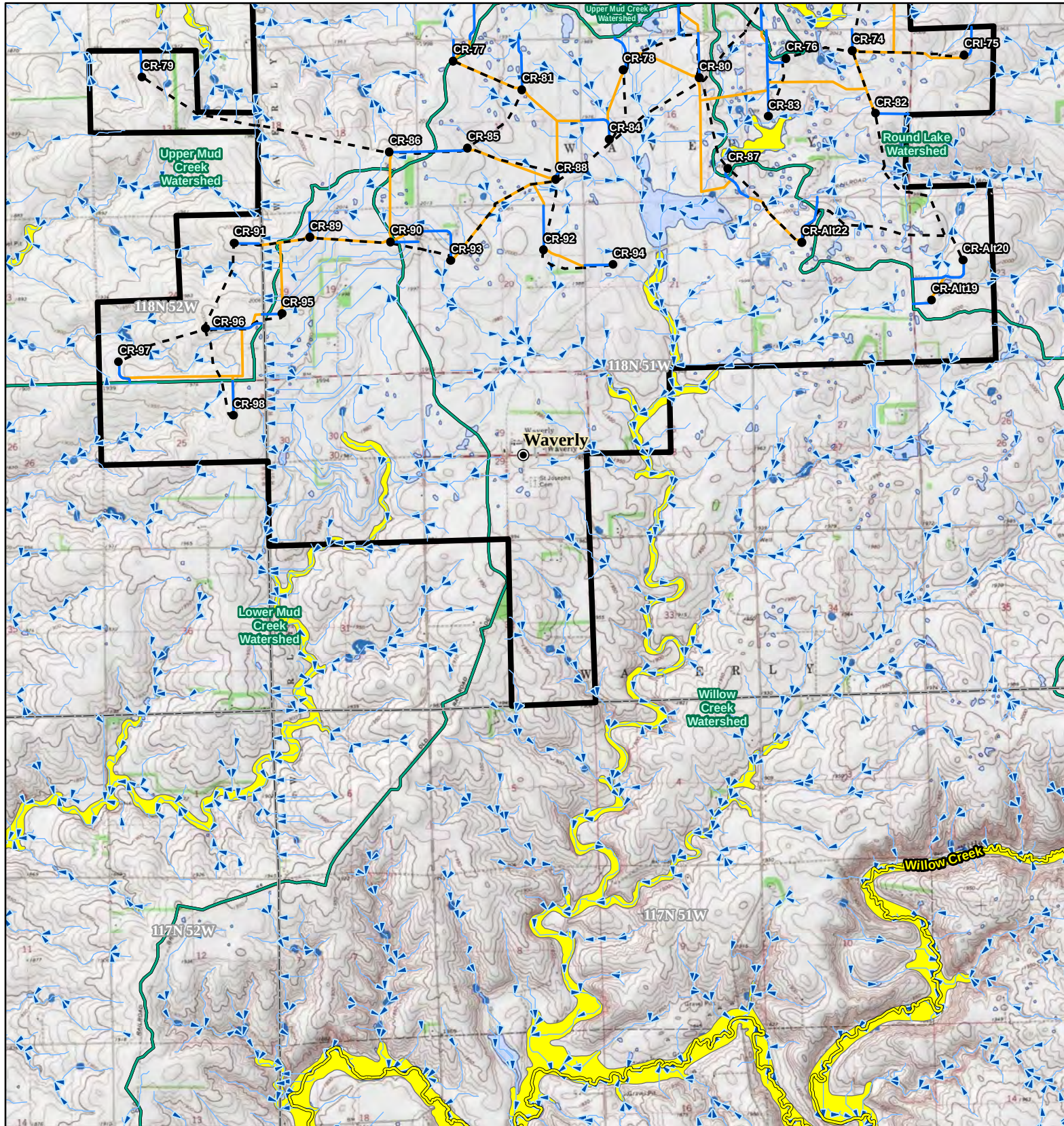
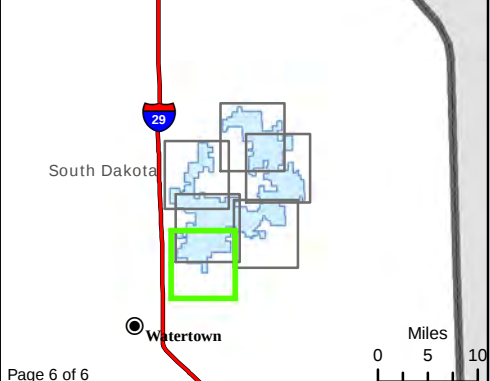


Figure 12. Water Resources
Crowned Ridge Wind Farm

- City
- Intersection of Floodplain and Project Infrastructure
- Turbine
- Access Road
- Collector Line
- Crane Path
- Flow Direction
- South Dakota Beneficial Use Stream
- South Dakota Beneficial Use Lake
- Watershed Boundary (HUC12)
- ▬ Project Boundary
- ▬ County Boundary
- ▬ Township/Range Boundary
- ▬ Freshwater Emergent Wetland
- ▬ Freshwater Forested/Shrub Wetland
- ▬ Lake, Pond, or Riverine Wetland
- ▬ FEMA Flood Zone A



Kilometers

0 1 2

Miles

0 1 2

Base Map: USGS 7.5' Topographic Map
 Source: Esri ArcGIS Online service
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 Watertown East (1969), Kranzburg (1970)
 Township/Range: T118N, R52W &
 T118N, R51W
 Codington County, South Dakota

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Projection: NAD 1983 UTM Zone 14N

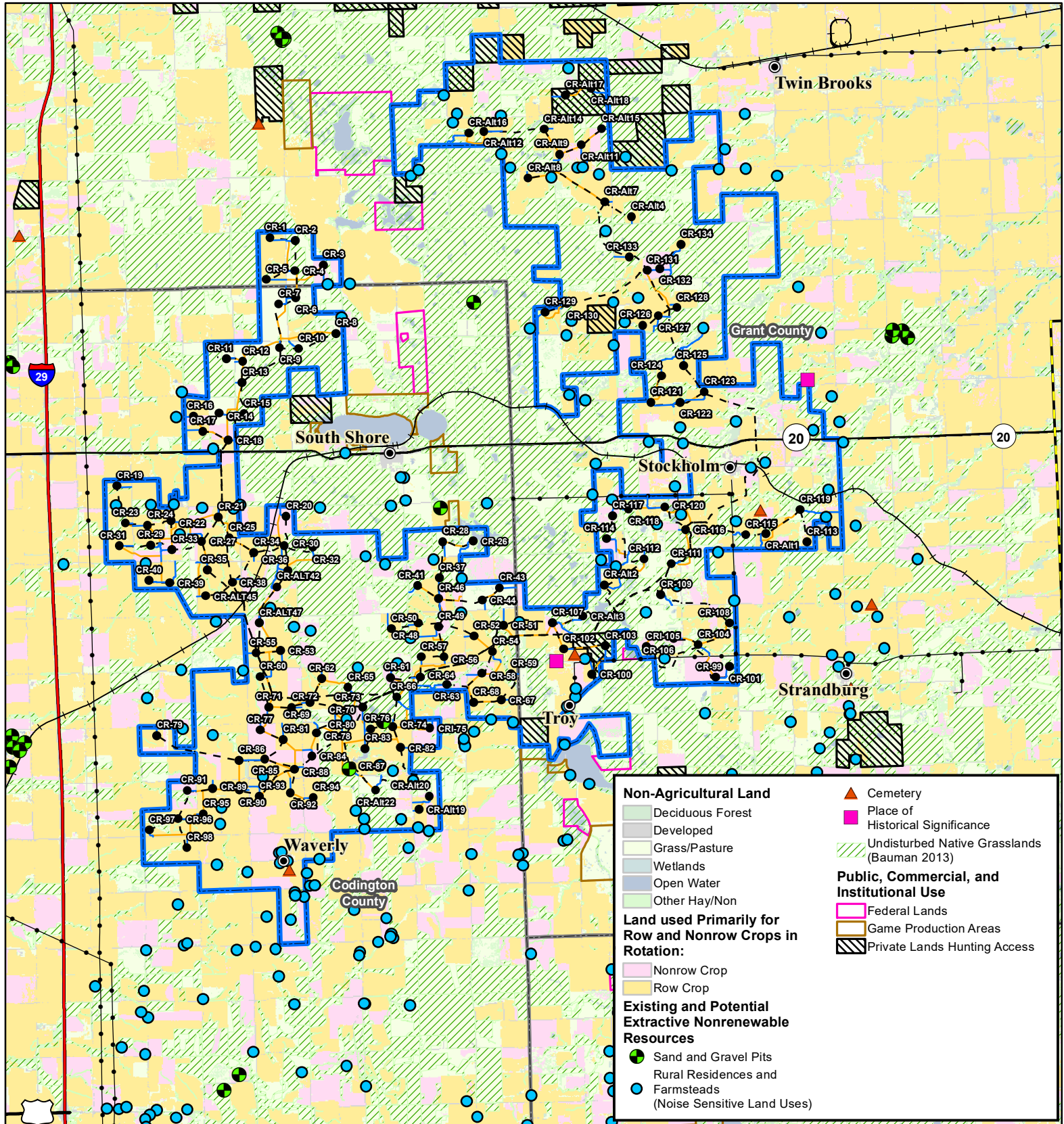
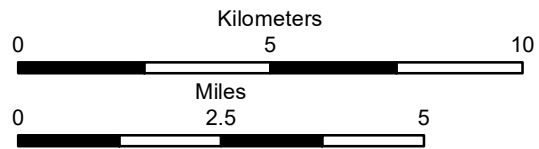


Figure 13. Land Use

Crowned Ridge Wind Farm

- City
- Turbine
- Access Road
- Collector Line
- Crane Path
- Electrical Line
- Natural Gas Line
- Railroad
- Interstate Highway
- U.S. Highway
- State Highway
- Project Boundary
- County Boundary



Base Map: 2017 South Dakota Cropland Data Layer | NASS/USDA
 Source: United States Department of Agriculture (USDA),
 National Agricultural Statistics Service (NASS),
 Research and Development Division (RDD),
 Geospatial Information Branch (GIB),
 Spatial Analysis Research Section (SARS); 2017 Edition
 Codington, Deuel, and Grant Counties, South Dakota

Projection: NAD 1983 UTM Zone 14N

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

IN THE MATTER OF THE APPLICATION)
BY CROWNED RIDGE WIND, LLC FOR A)
PERMIT OF A WIND ENERGY FACILITY)
IN GRANT AND CODINGTON COUNTIES)
)

EL19-003

CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of Miles F. Schumacher's letter and updated map attachments in this matter were served electronically to the parties listed below on the 23rd day of May, 2019, addressed to:

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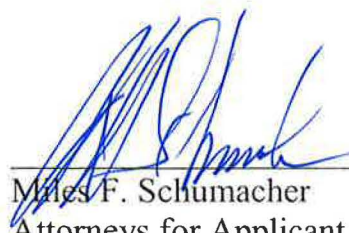
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