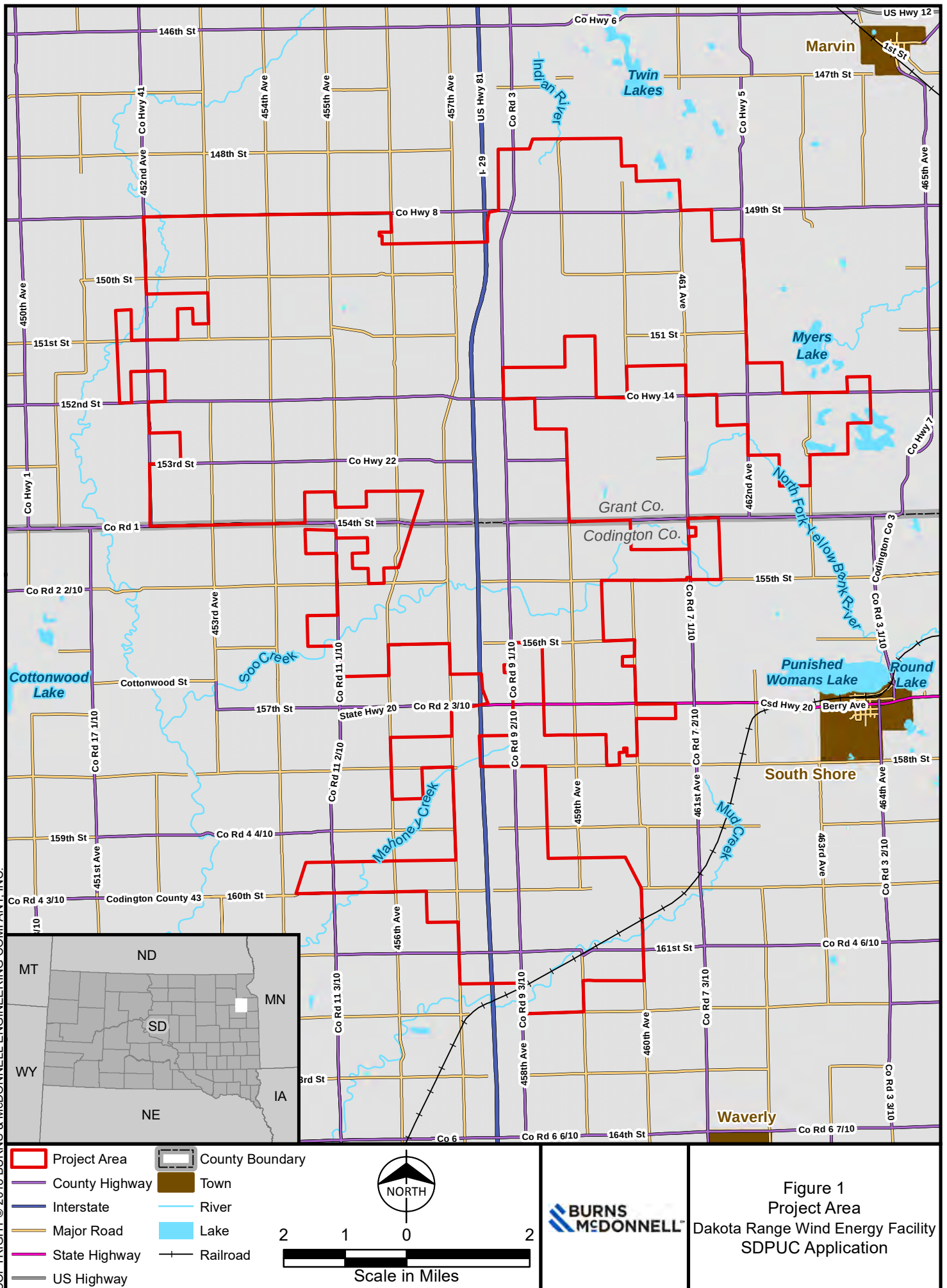




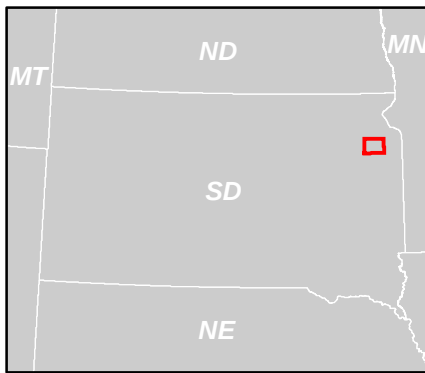


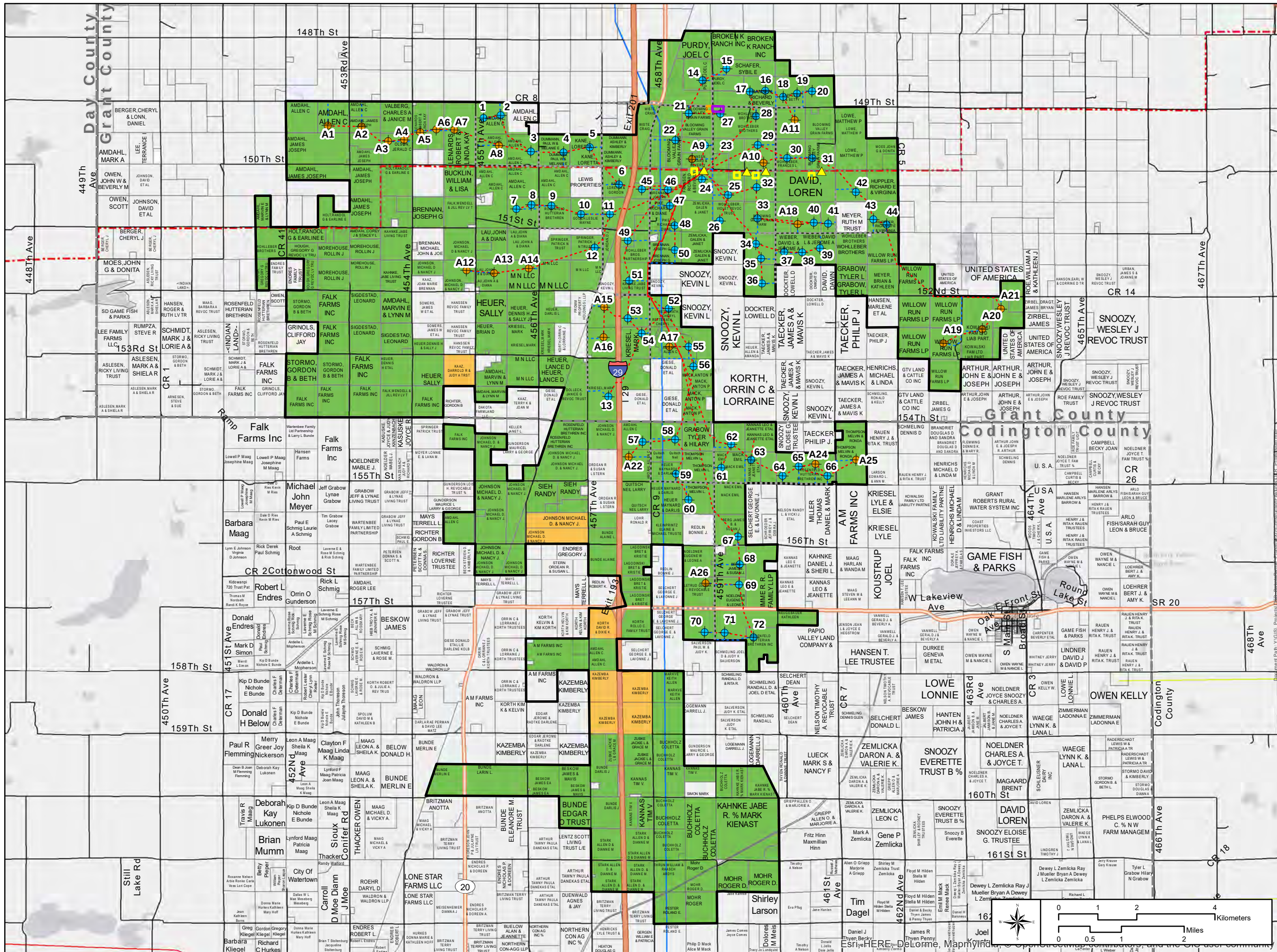
Figure 2
Dakota Range
Project Map

- Project Boundary
- County Boundary
- Parcel Boundary
- Primary Turbine
- Spare Turbine
- Private Access Road
- Public Road
- Underground Collection
- Potential Laydown
- Potential O&M
- Potential Substations
- Potential Point of Interconnect

- Lease Status**
- Lease, Signed
 - Collection Easement, Signed

- Existing Transmission**
- 34kV5 - 69kV
 - 240kV - 345kV
 - 100kV - 138kV

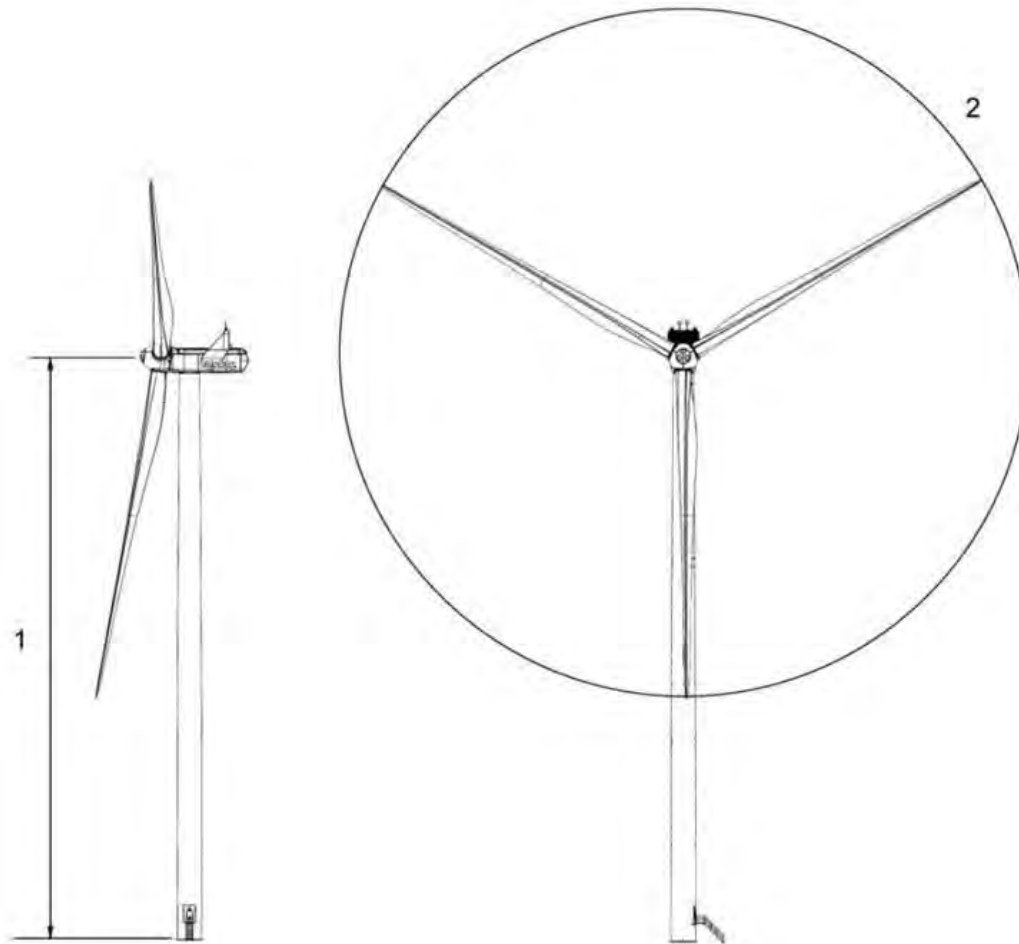
- Proposed Transmission**
- 240kV - 345kV



Date: 1/5/2018 Author: MR
Coordinate System: NAD 1983 StatePlane South Dakota North FIPS 4001 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US



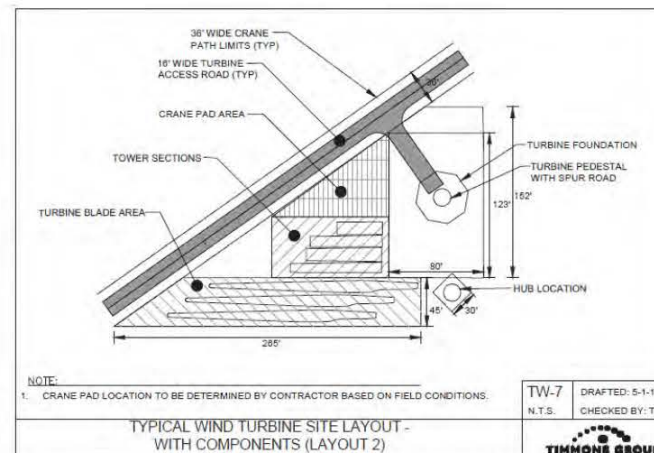
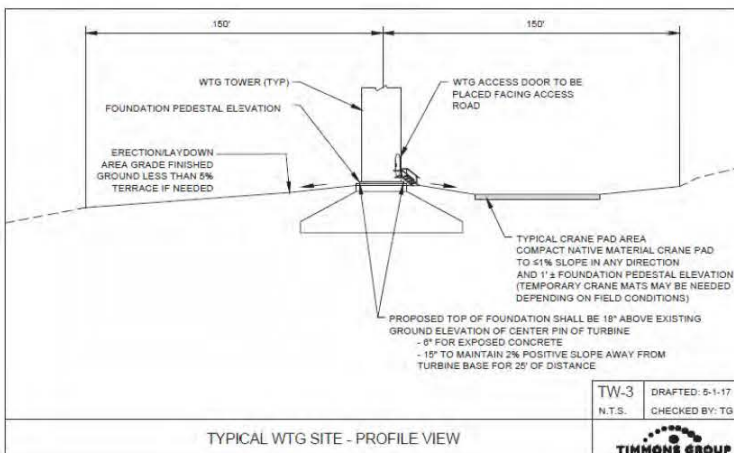
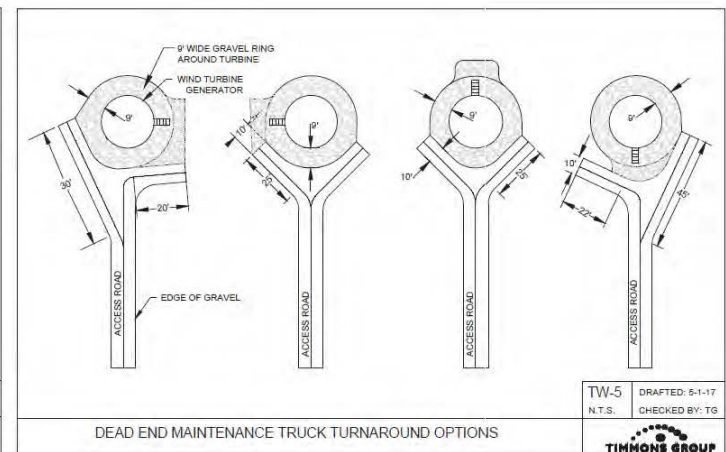
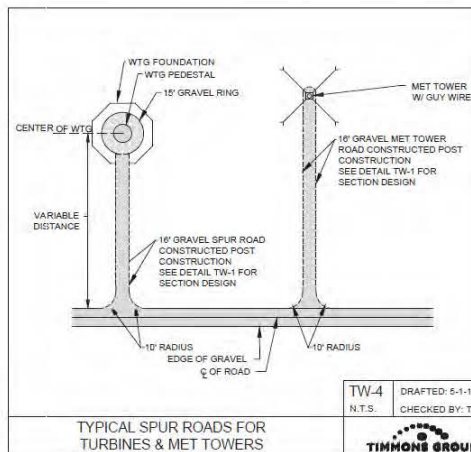
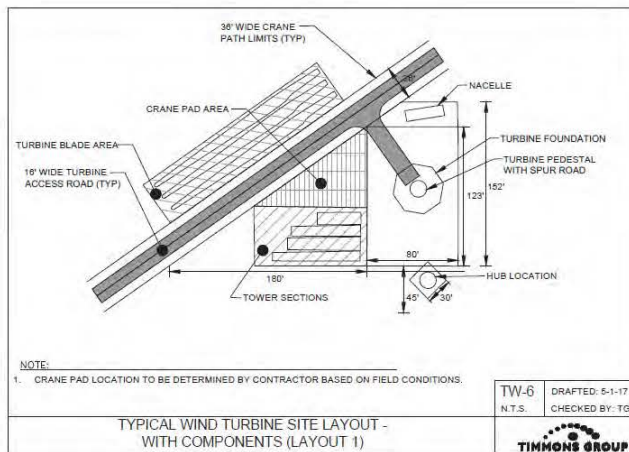
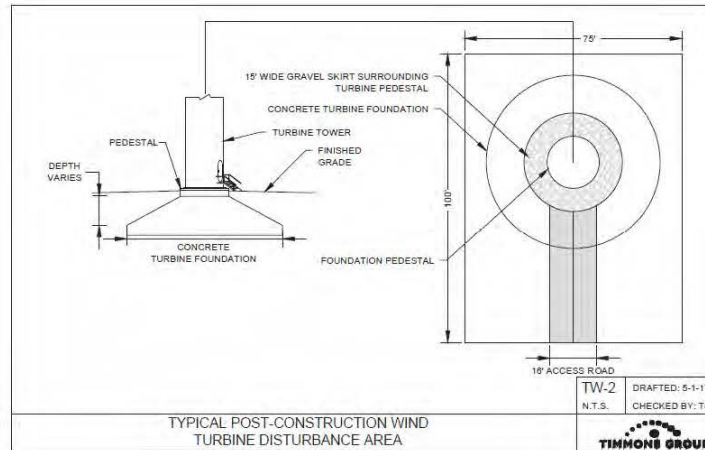
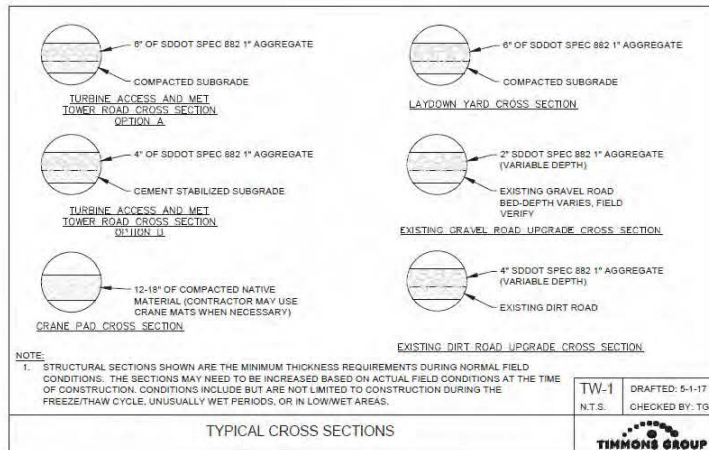
Figure 3: Typical Wind Turbine Diagram



1 Hub height:
82 m

2 Diameter:
136 m

Figure 4: Typical Turbine Construction Site Layout



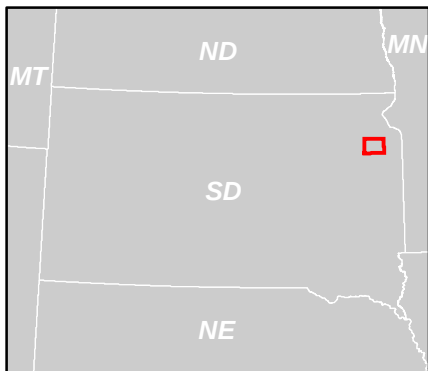
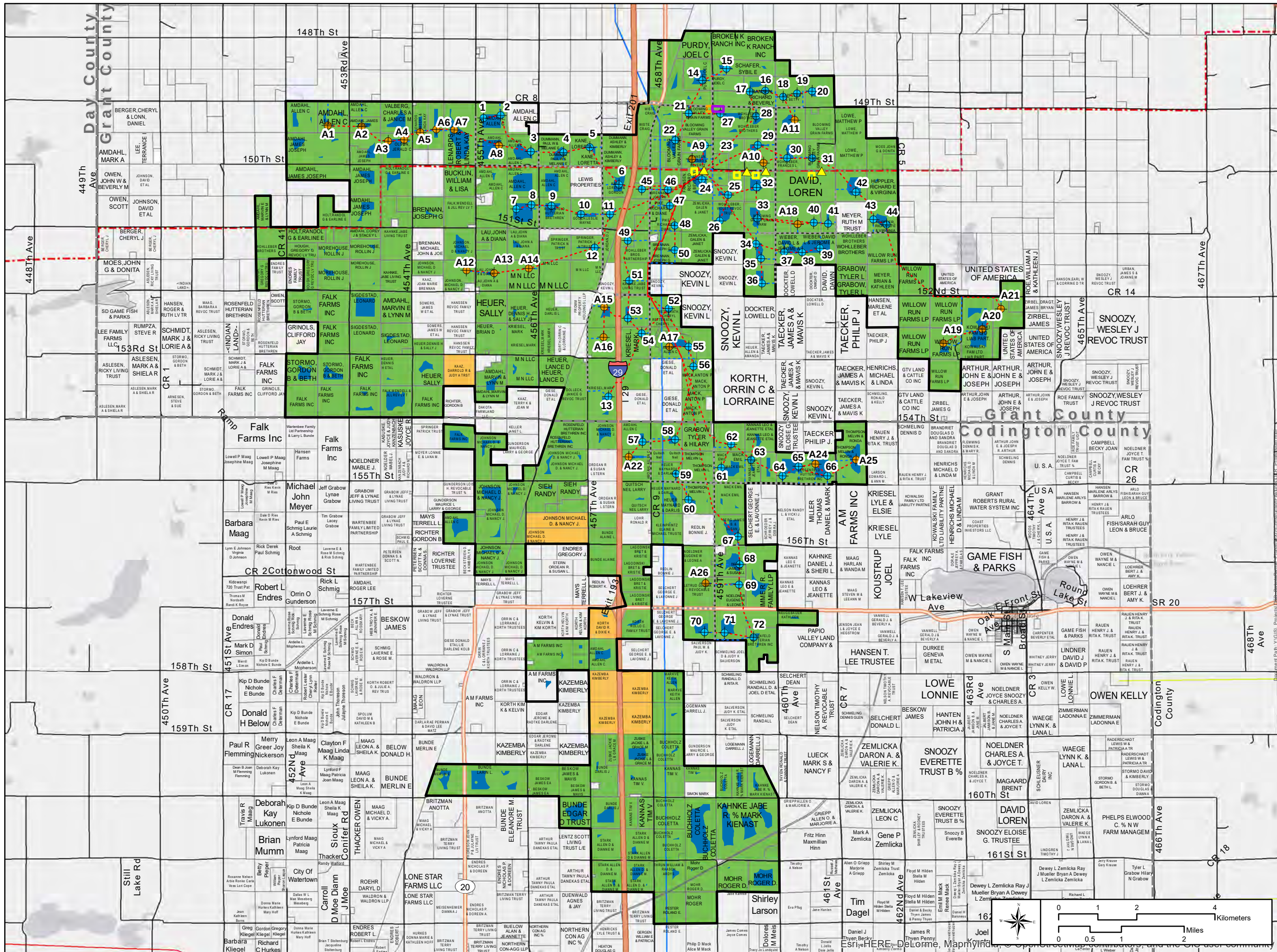


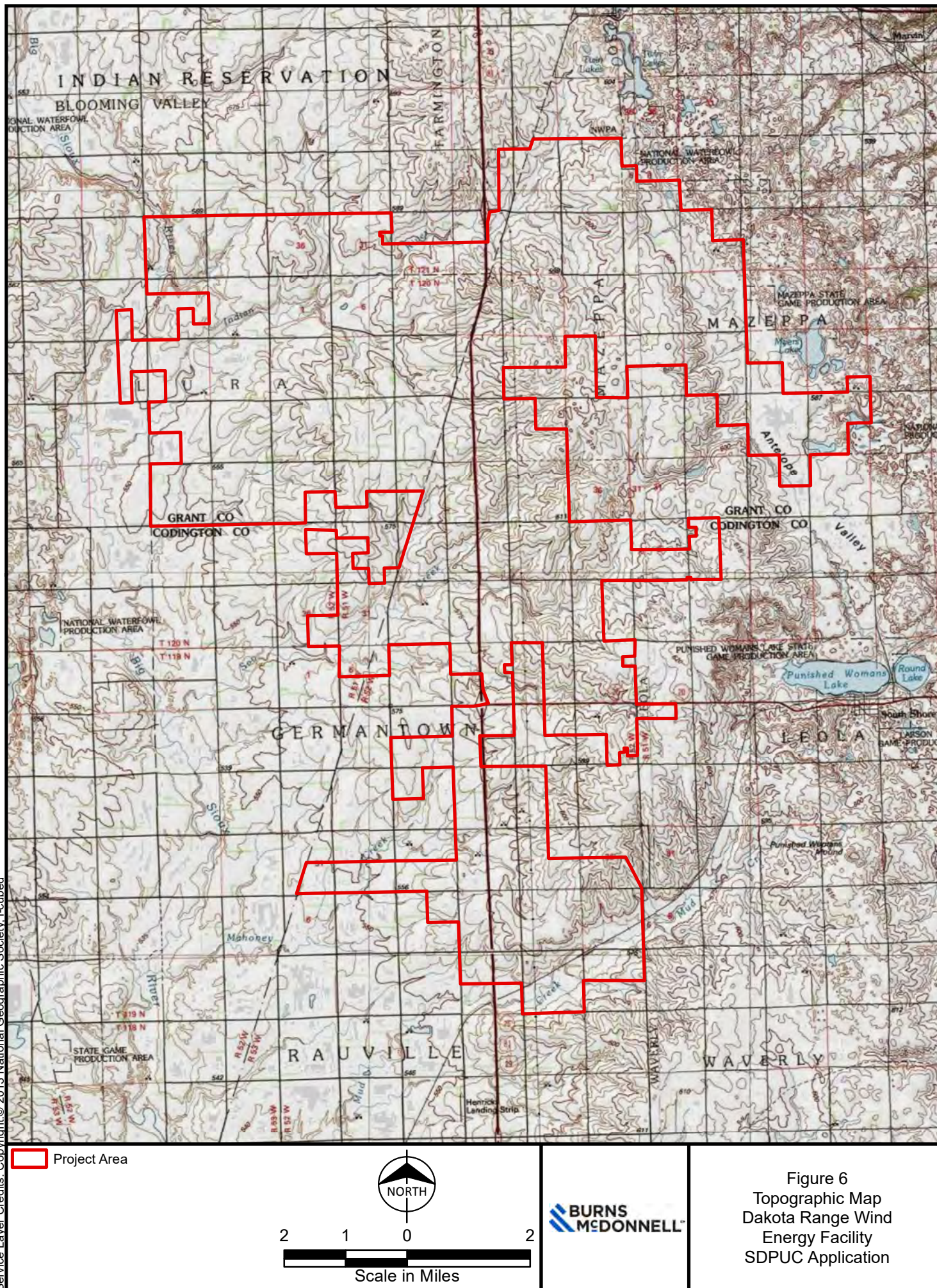
Figure 5
Dakota Range
Constraints Map

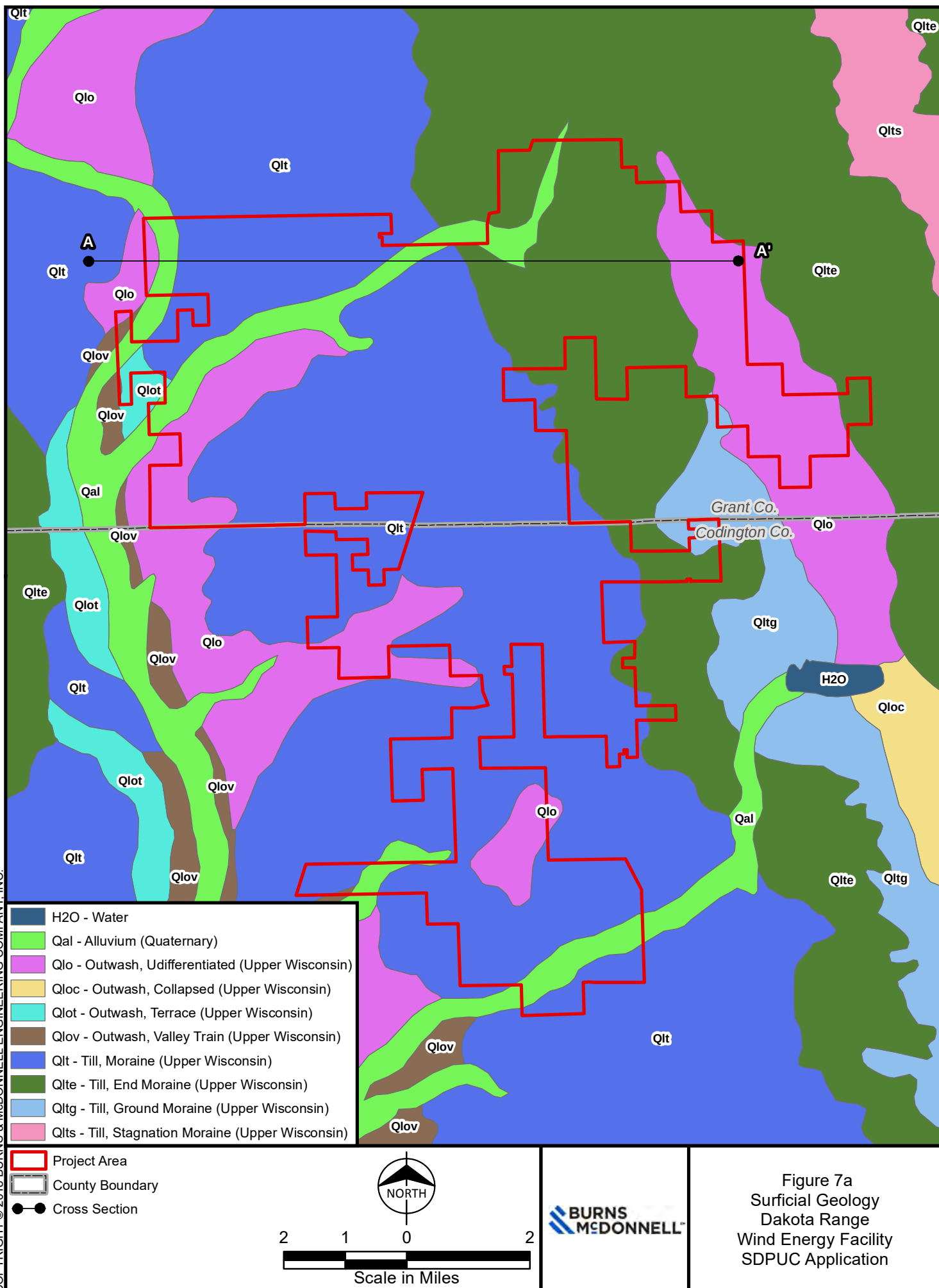
- Project Boundary
 - County Boundary
 - Parcel Boundary
 - Buildable Area
 - Primary Turbine
 - Spare Turbine
 - Private Access Road
 - Public Road
 - Underground Collection
 - Potential Laydown
 - Potential O&M
 - Potential Substations
 - Potential Point of Interconnect
- Lease Status**
- Lease, Signed
 - Collection Easement, Signed
- Existing Transmission**
- 34kV5 - 69kV
 - 240kV - 345kV
 - 100kV - 138kV
- Proposed Transmission**
- 240kV - 345kV



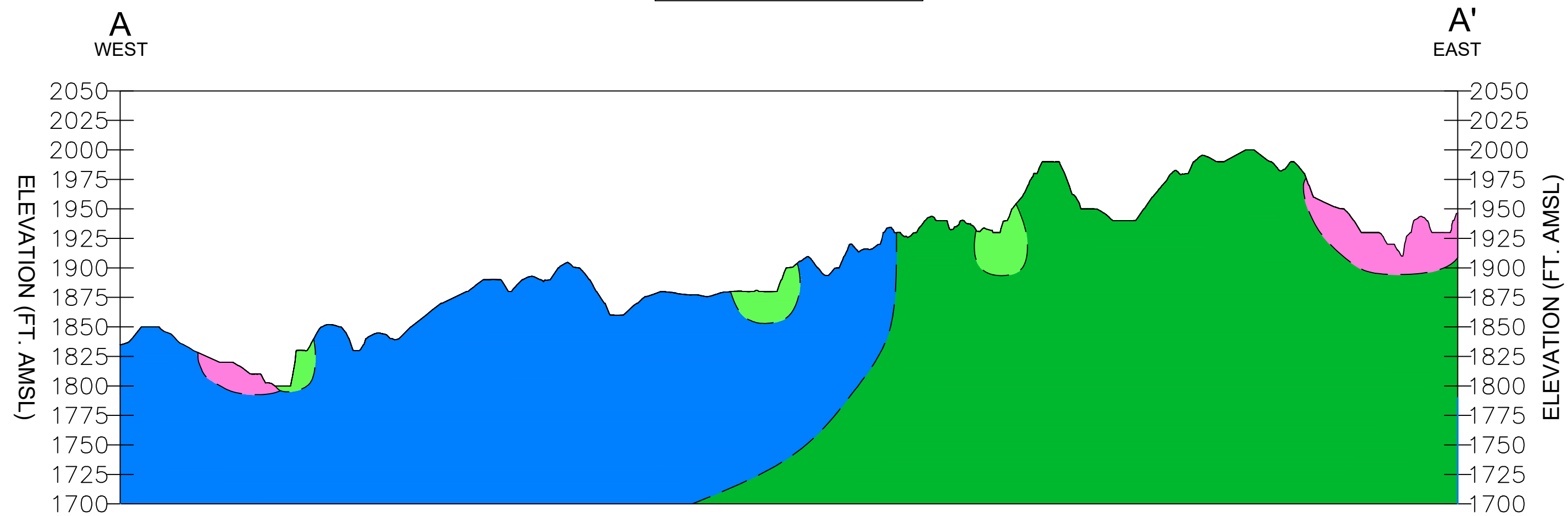
Date: 1/5/2018 Author: MR
Coordinate System: NAD 1983 StatePlane South Dakota North FIPS 4001 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US







A-A' PROFILE



LEGEND

- QAL - ALLUVIUM (QUATERNARY)
- QLO - OUTWASH, UNDIFFERENTIATED (UPPER WISCONSIN)
- QLT - TILL, MORaine (UPPER WISCONSIN)
- QLTE - TILL, END MORaine (UPPER WISCONSIN)
- — INFERRED CORRELATION

NOTES:
1. CORRELATION OF UNITS IS AN INTERPRETATION AND NOT NECESSARILY A DELINEATION OF ACTUAL EXTENT AND THICKNESS OF INDIVIDUAL UNITS.

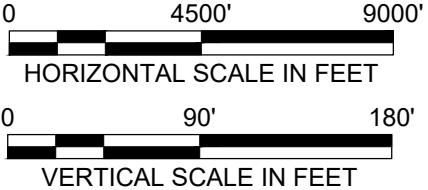
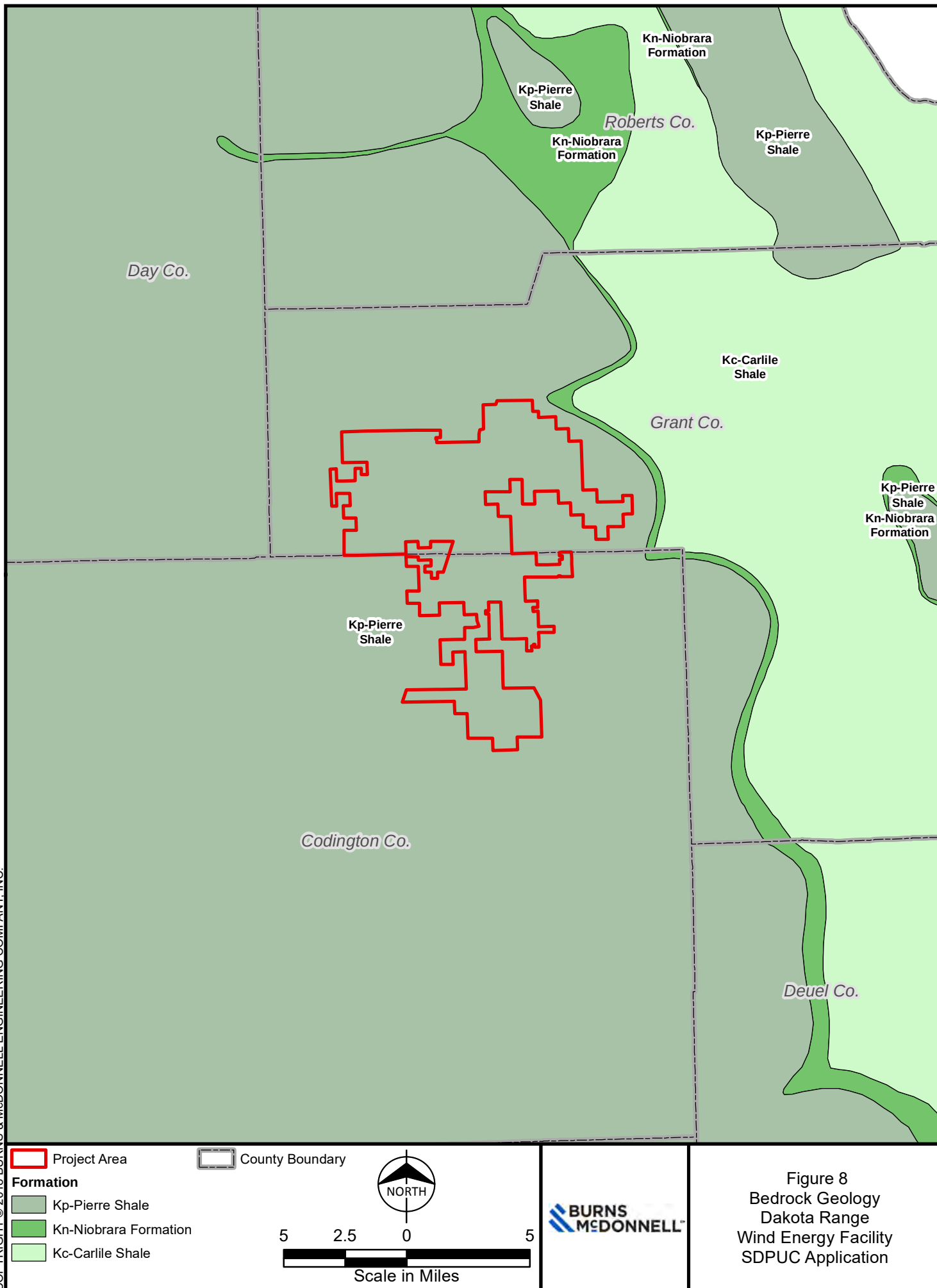
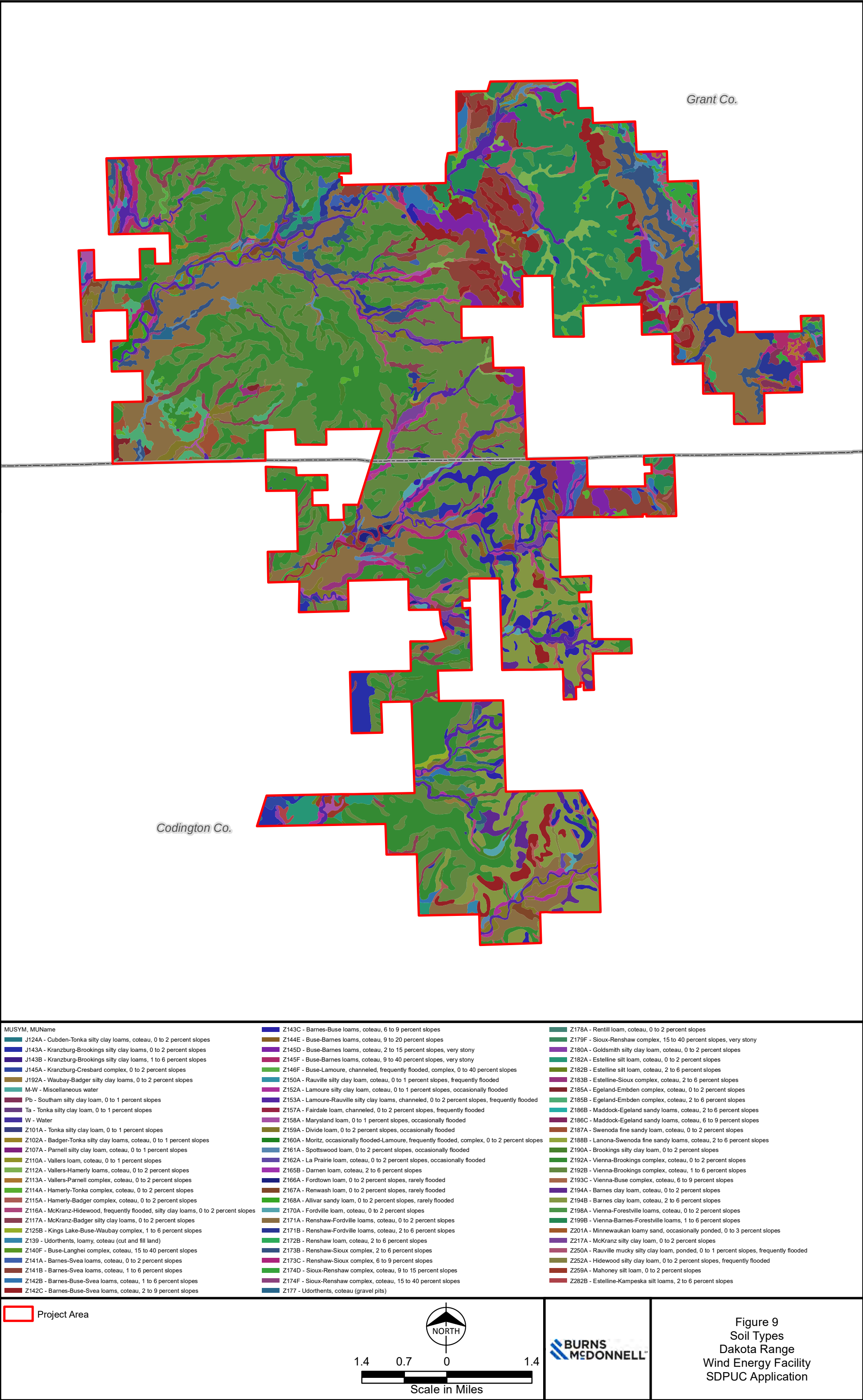


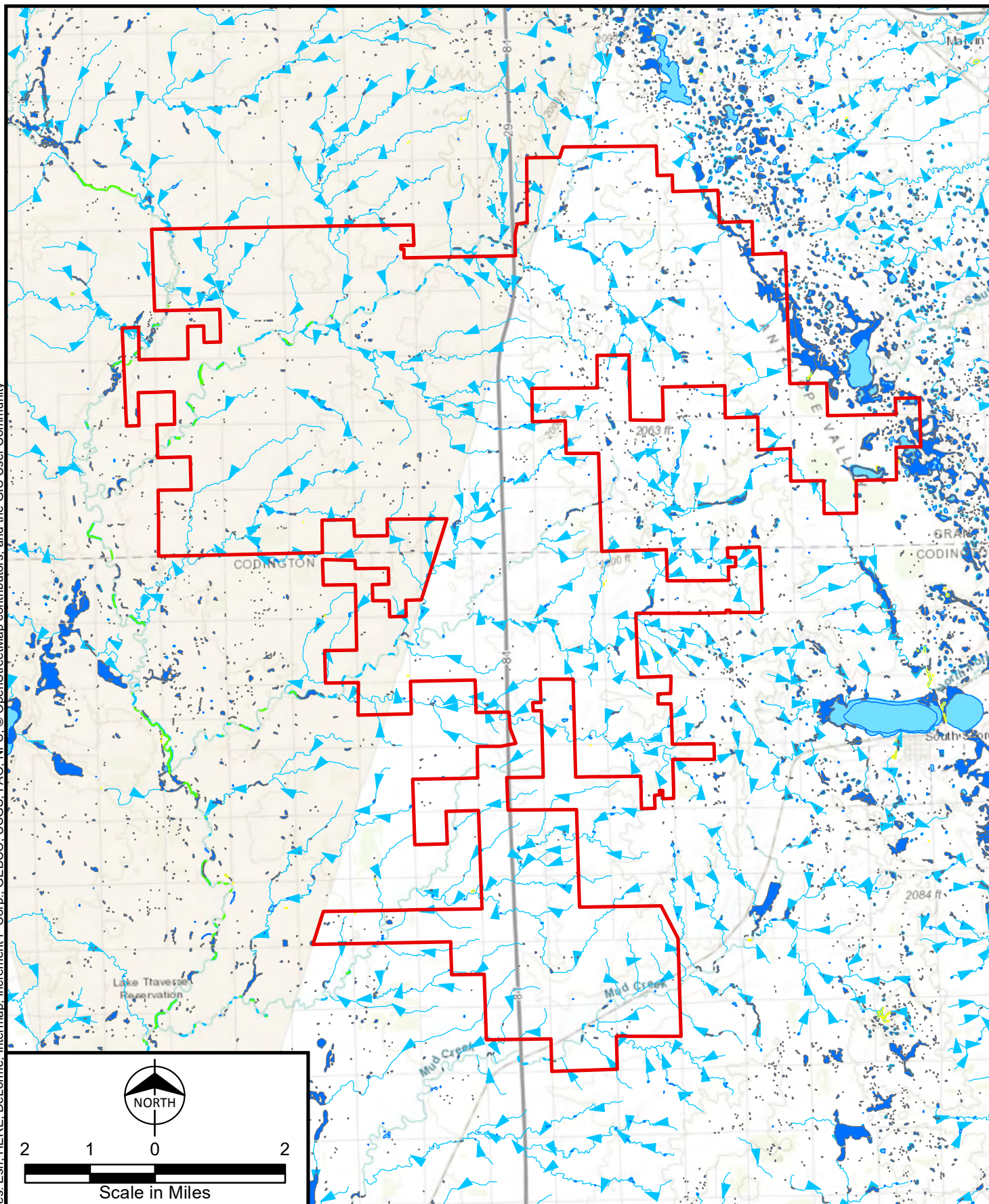
FIGURE 7B
GEOLOGIC CROSS SECTION A-A'

SOUTH DAKOTA
WIND ENERGY FACILITY
SDPUC APPLICATION



Path: Z:\Clients\ENS\ApexCleanEnr\199035_DakotaRange\Studies\Geospatial\DataFiles\ArcDocs\99035_DakotaRange_Fig9_Soils.mxd kdboatright 1/9/2018
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- | | |
|--|---|
| Project | Freshwater Pond/Lake |
| Named NHD Flowline with Flow Direction | Other Wetland (Palustrine Unconsolidated Shore) |
| Freshwater Emergent Wetland | Riverine |
| Freshwater Forested/Shrub Wetland | NHD Waterbody/Area |



Figure 10
 Water Resources
 Dakota Range
 Wind Energy Facility
 SDPUC Application

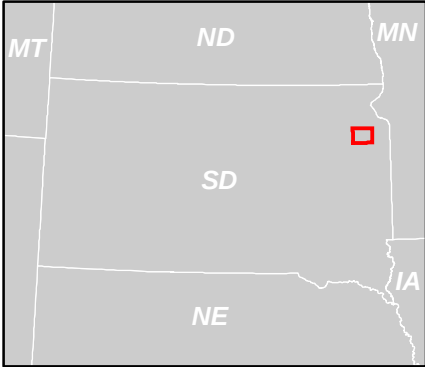
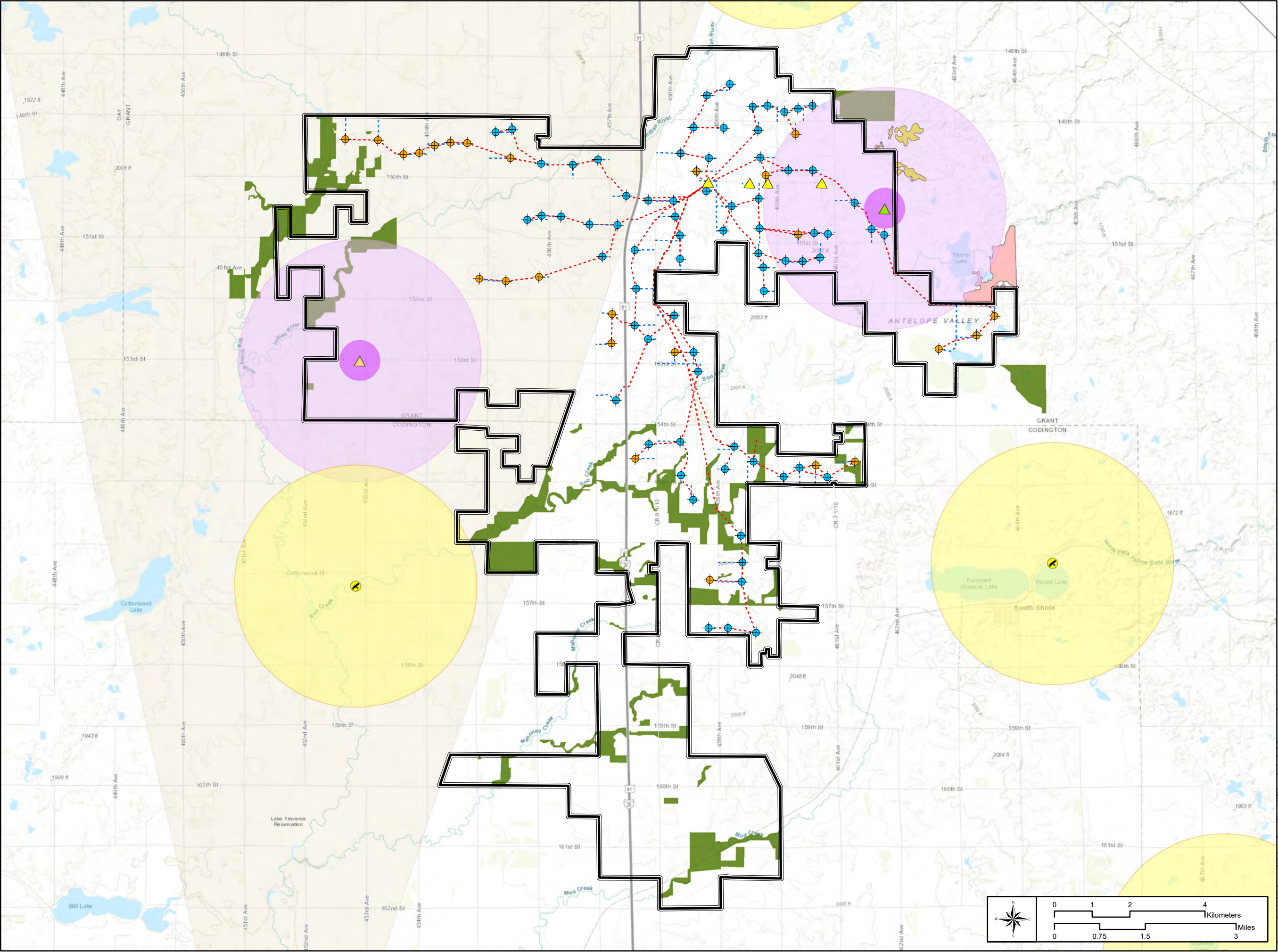
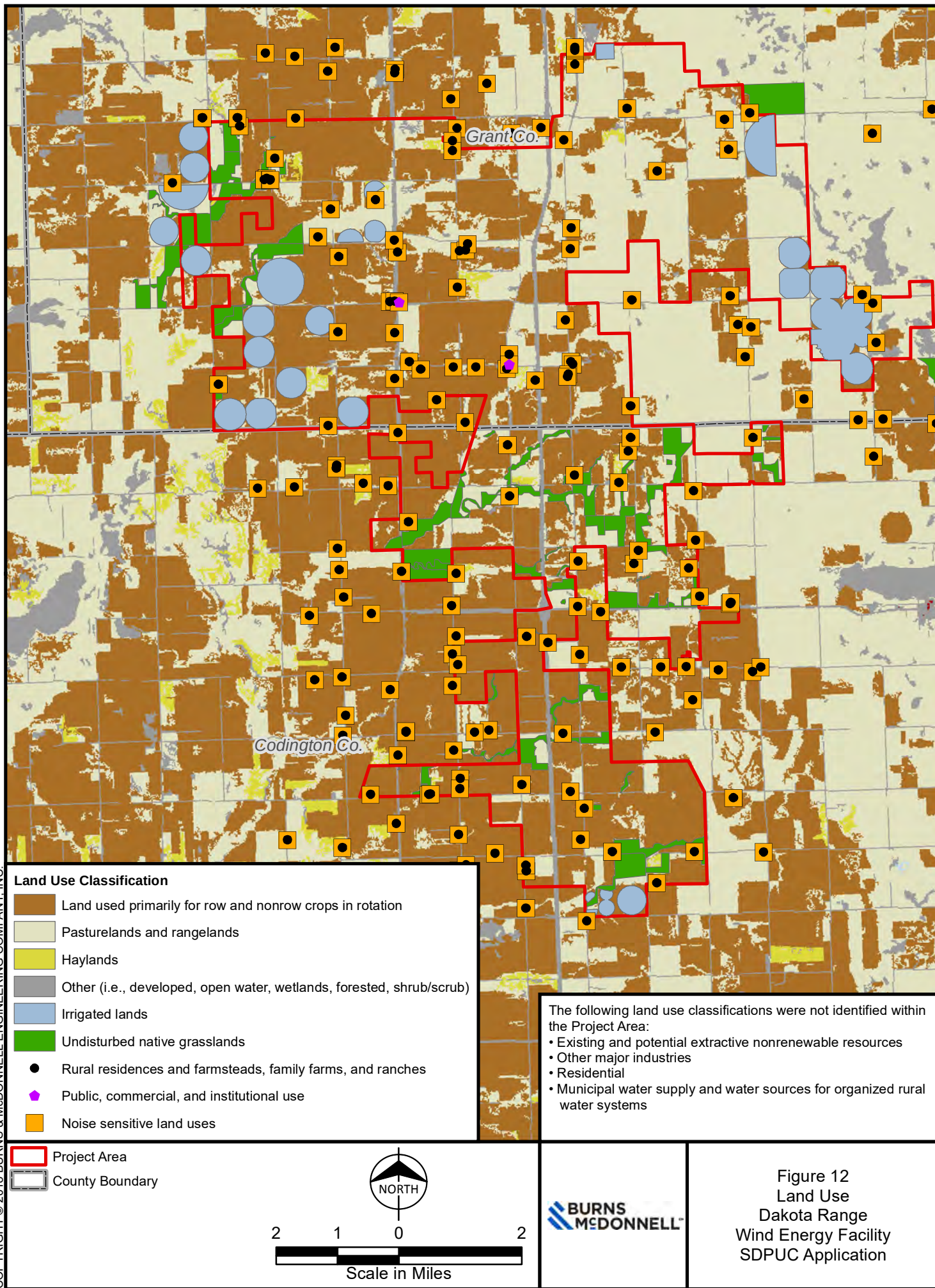


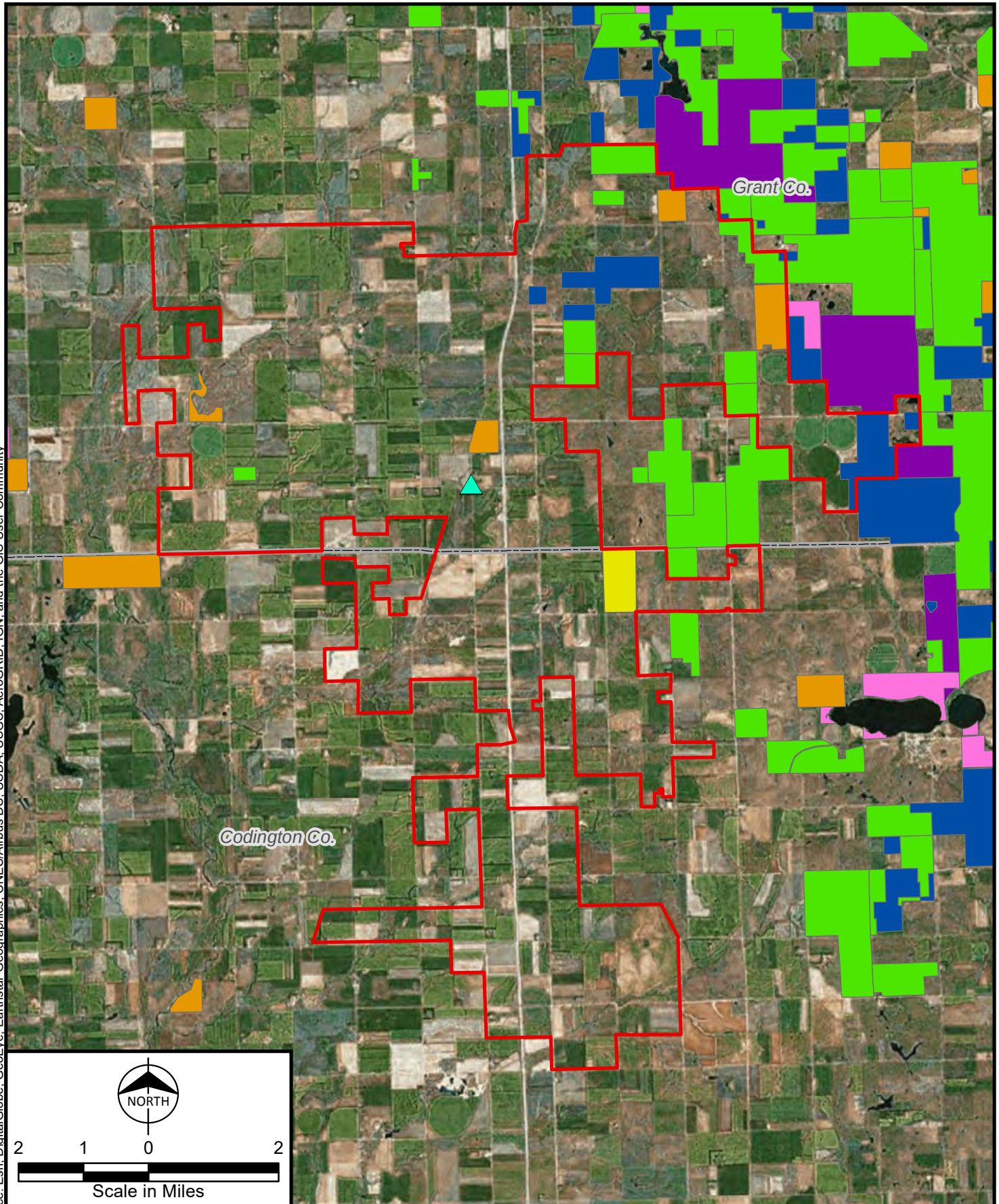
Figure 11
Dakota Range
Environmental Constraints

- Project Boundary
- Proposed POI
- Primary Turbine
- Spare Turbine
- Private Access Road
- Underground Collection
- BAEA, Occupied and Active
- 2-mi BAEA Nest Buffer
- STG, Confirmed 2017 Lek
- STG, Potential 2017 Lek
- Lek Avoidance Buffer (1/3-mi)
- Lek Construction Timing Buffer (2-mi)
- USFWS Critical Habitat
- Potentially Suitable DASK Habitat
- Untilled Grassland

Date: 1/5/2018 Author: MR
Coordinate System: NAD 1983 2011 StatePlane South Dakota North FIPS 4001 Ft US
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Units: Foot US



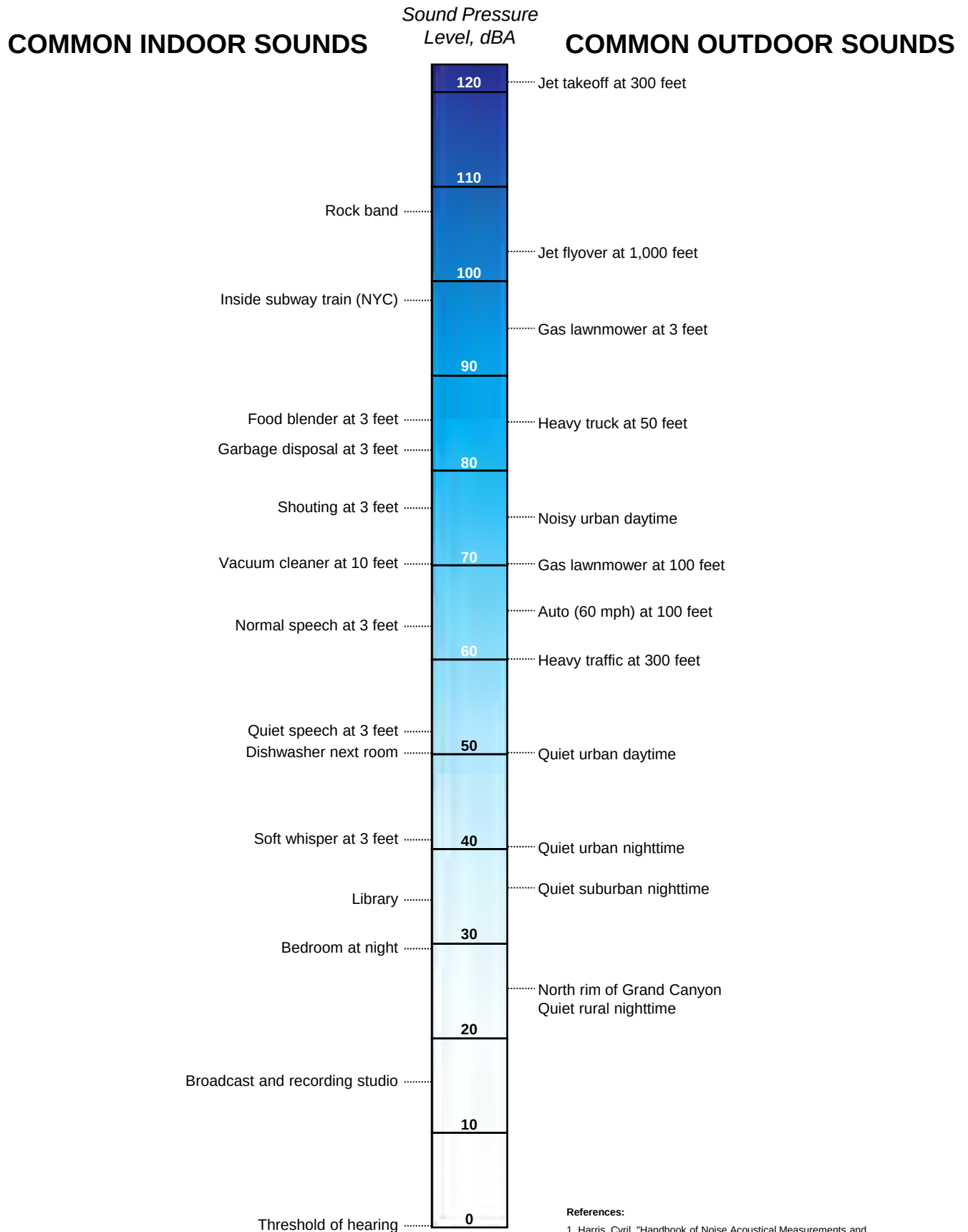




- | | |
|-----------------------------|------------------------------------|
| Project Area | Public Lands and Facilities |
| County Boundary | USFWS Wetland Easements |
| SDGFP Game Production Areas | USFWS Grassland Easements |
| SDGFP Walk-In-Areas | USFWS Conservation Easements |
| Church and Cemetery | Waterfowl Production Areas |



Figure 13
 Public Lands and Facilities
 Dakota Range
 Wind Energy Facility
 SDPUC Application



References:

1. Harris, Cyril, "Handbook of Noise Acoustical Measurements and Noise Control", p 1-10., 1998
2. "Controlling Noise", USAF, AFMC, AFDTC, Elgin AFB, Fact Sheet, August 1996
3. California Dept. of Trans., "Technical Noise Supplement", Oct, 1998