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Figure 11a. NWI Wetlands and Streams, Wind Farm Facility

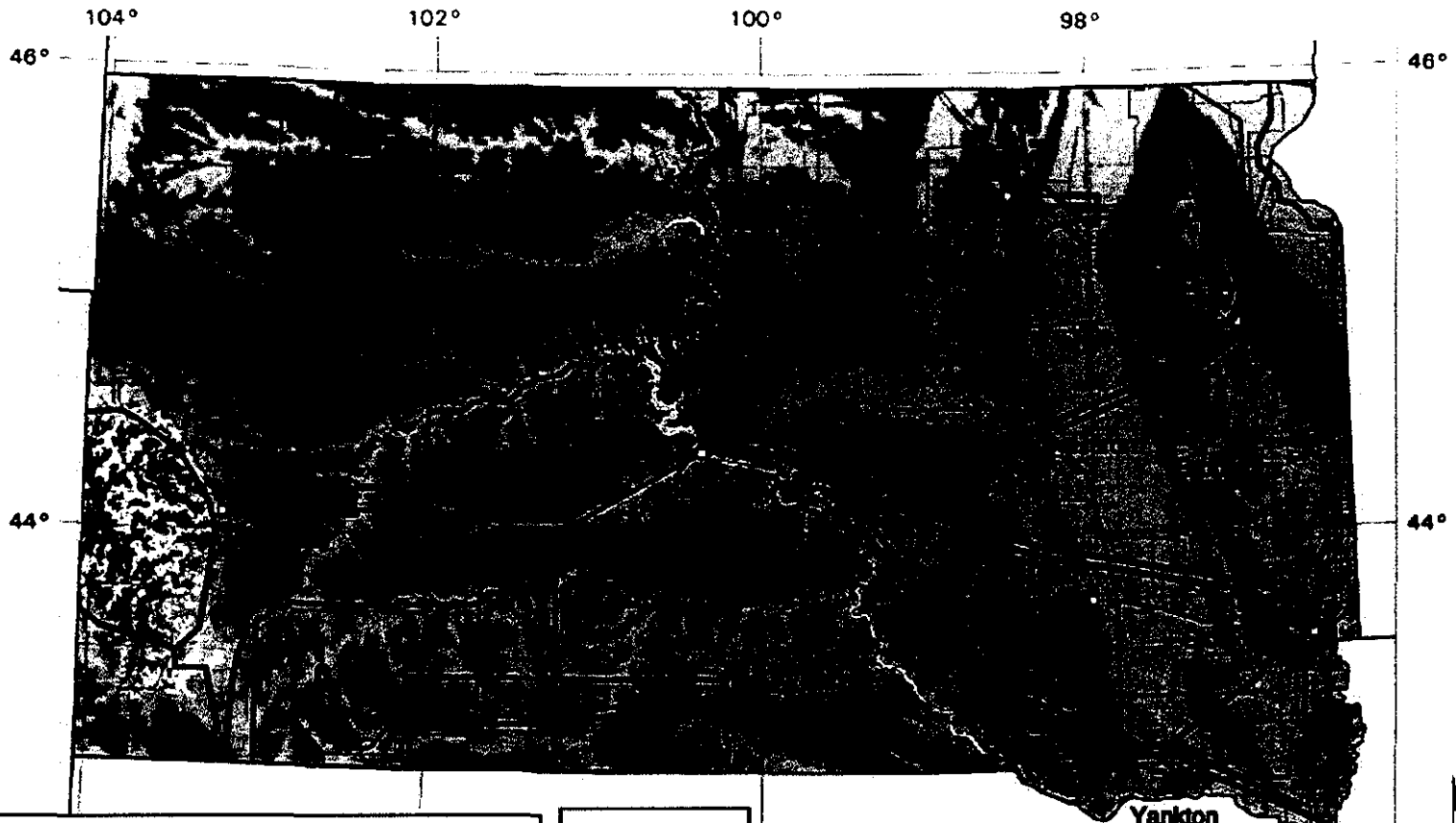
Figure 11b. NWI Wetlands and Streams, 115 kV Transmission Line Route

Figure 12a. Land Use and Public Lands, Wind Farm Facility

Figure 12b. Land Use and Public Lands, 115 kV Transmission Line Route

Figure 13. Typical Project Landscape

South Dakota - Wind Resource Map



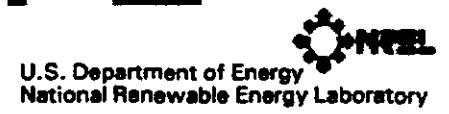
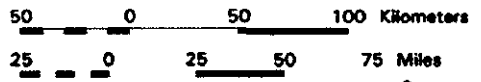
Wind Power Classification				
Wind Power Class	Resource Potential	Wind Power Density at 50 m W/m ²	Wind Speed ^a at 50 m m/s	Wind Speed ^a at 50 m mph
2	Marginal	200 - 300	5.6 - 6.4	12.5 - 14.3
3	Fair	300 - 400	6.4 - 7.0	14.3 - 15.7
4	Good	400 - 500	7.0 - 7.5	15.7 - 16.8
5	Excellent	500 - 600	7.5 - 8.0	16.8 - 17.9
6	Outstanding	600 - 800	8.0 - 8.8	17.9 - 19.7
7	Superb	800 - 1600	8.8 - 11.1	19.7 - 24.8

^a Wind speeds are based on a Weibull k value of 2.0

- Indian Reservations**
- 1 Standing Rock
 - 2 Cheyenne River
 - 3 Lake Traverse
 - 4 Lower Brule
 - 5 Crow Creek
 - 6 Pine Ridge
 - 7 Rosebud
 - 8 Yankton
 - 9 Flandreau

- ★ Meteorological Station with Wind Data
- City or Town

- Transmission Line Voltage**
- 89 Kilovolts
 - 115 Kilovolts
 - 230 Kilovolts
 - 345 Kilovolts

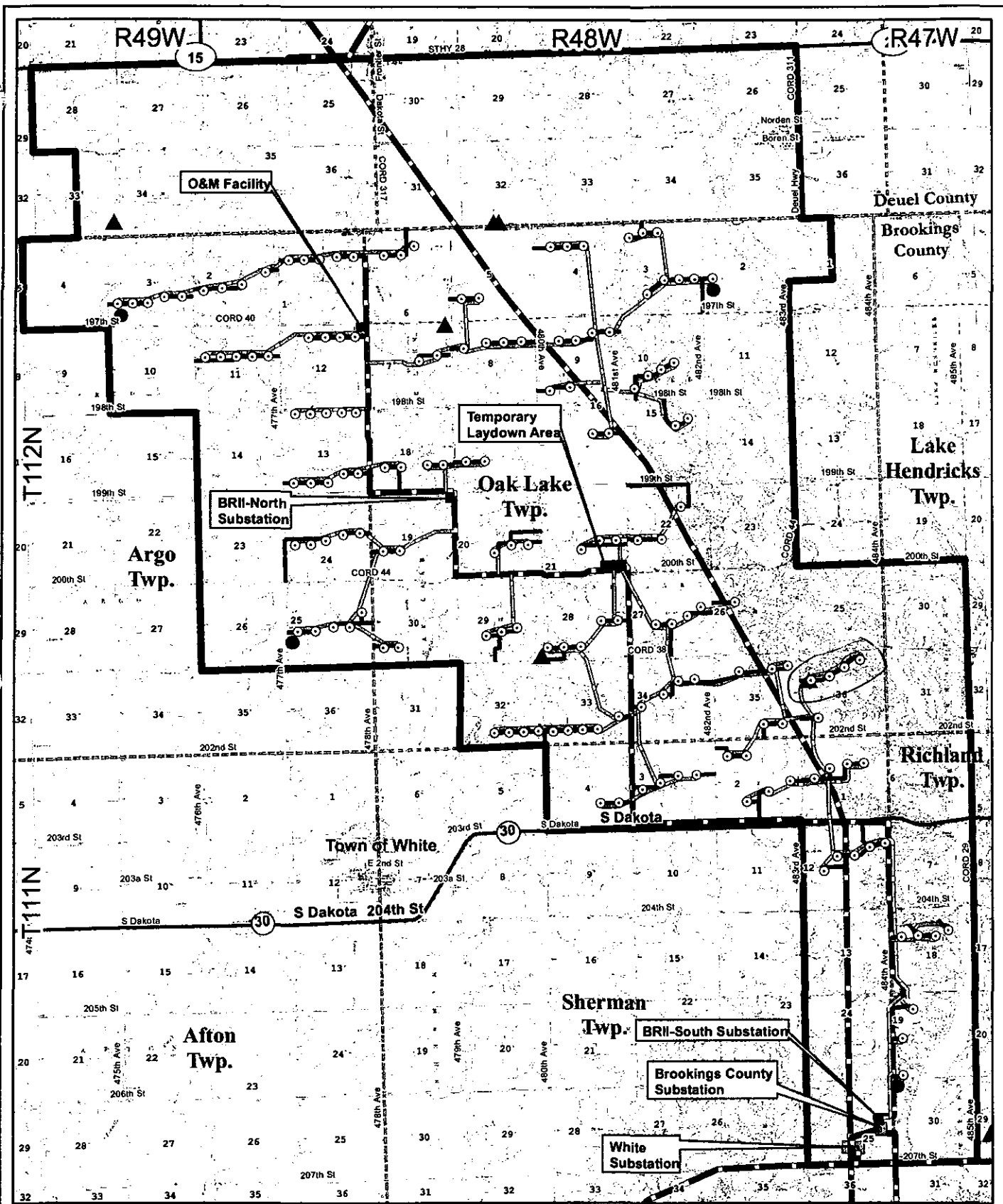


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Figure 2 - South Dakota Wind Resource Map
 Buffalo Ridge II Wind Farm
 Iberdrola Renewables
 Brookings and Deuel Counties, SD

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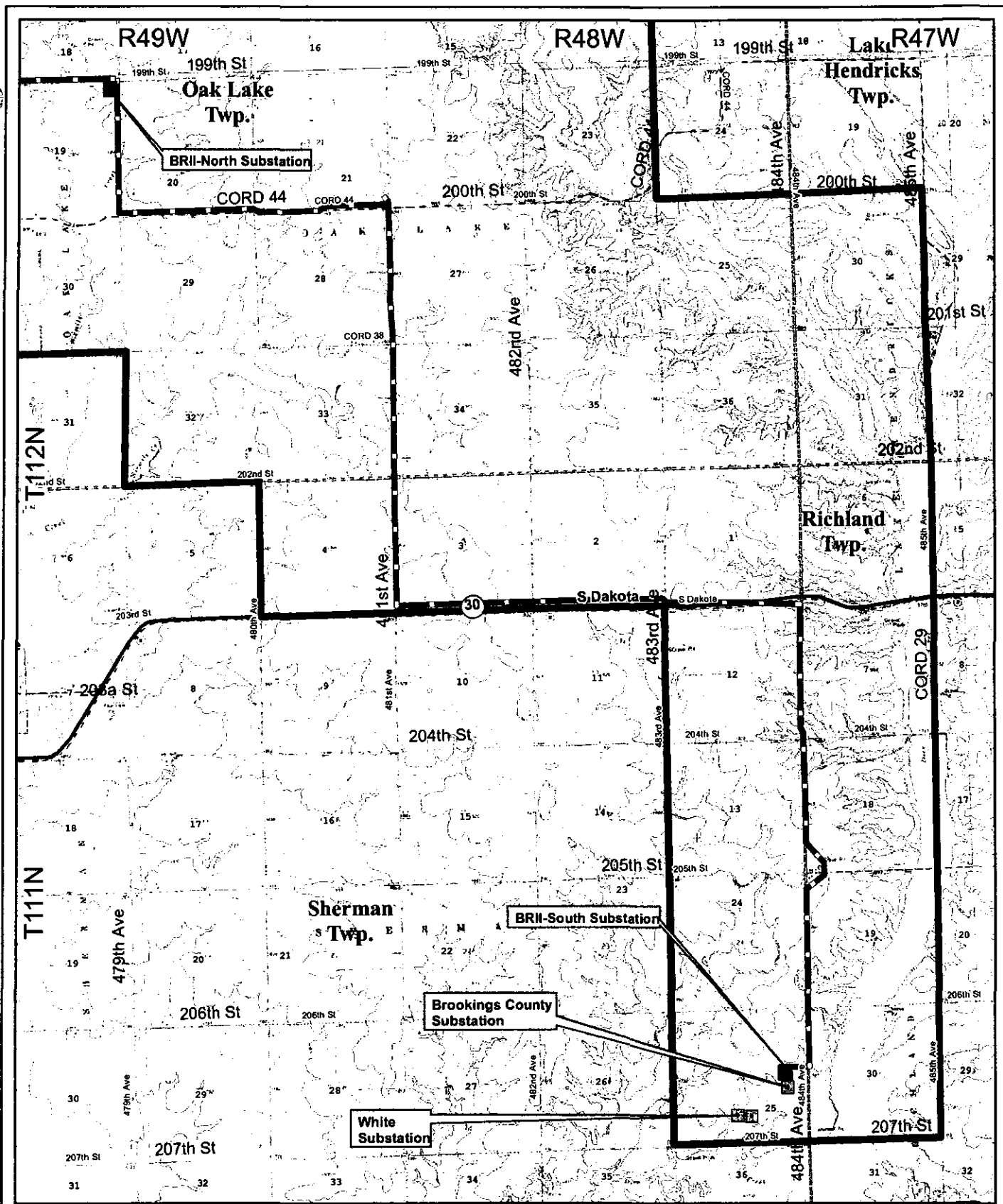


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Figure 3a - Proposed Wind Farm Project Layout
 Buffalo Ridge II Wind Farm
 Iberdrola Renewables
 Brookings and Deuel Counties, SD

Legend	
	Site Boundary
	Turbine
	Temporary Laydown Area
	O&M Facility
	Project Substation
	Temporary Met Towers
	Permanent Met Towers
	Access Roads
	Underground Cabling
	Proposed Overhead Transmission Line
	115 kV
	34.5 kV
	Existing Transmission Line
	115 kV
	34.5 kV



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Figure 3b - Proposed 115 kV Transmission Line Route
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD

Legend	
	Proposed Overhead Transmission Line
	Site Boundary
	Project Substation
	115 kV
	34.5 kV



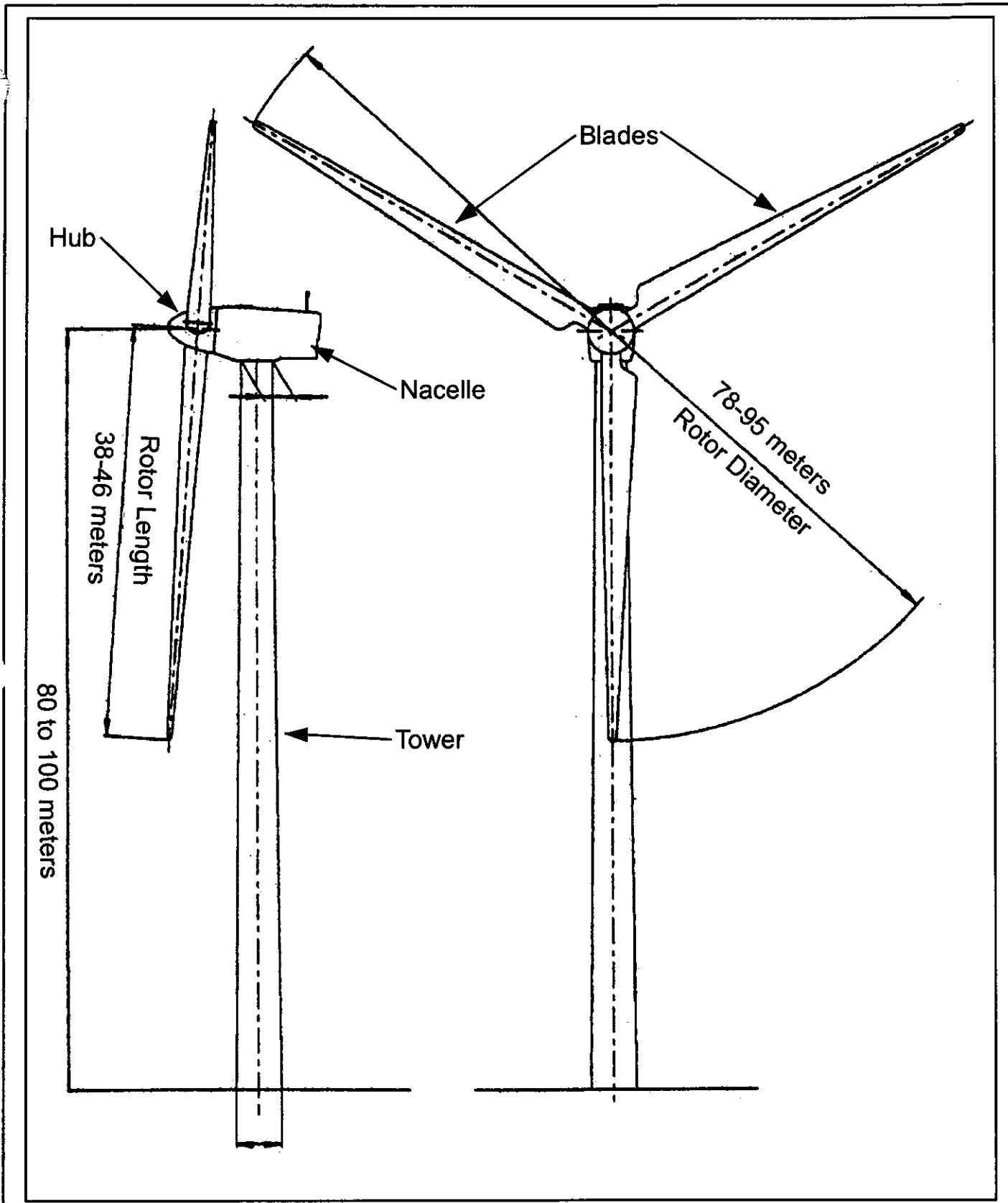


Figure 4 - Wind Turbine Generator Typical Dimensions
 Buffalo Ridge II Wind Farm
 Iberdrola Renewables
 Brookings and Deuel Counties, SD

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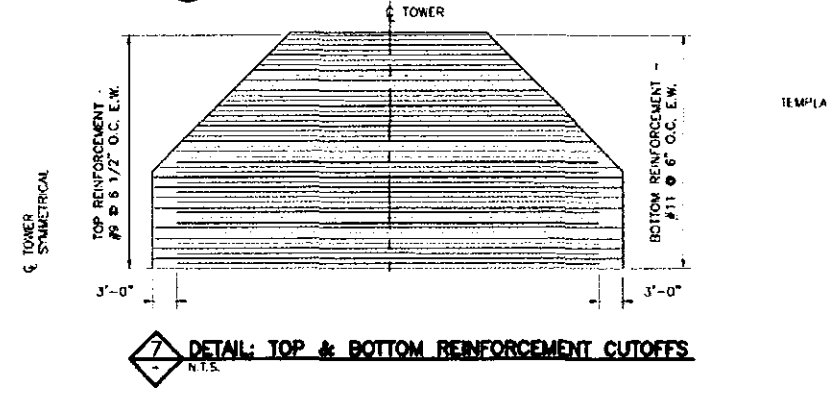
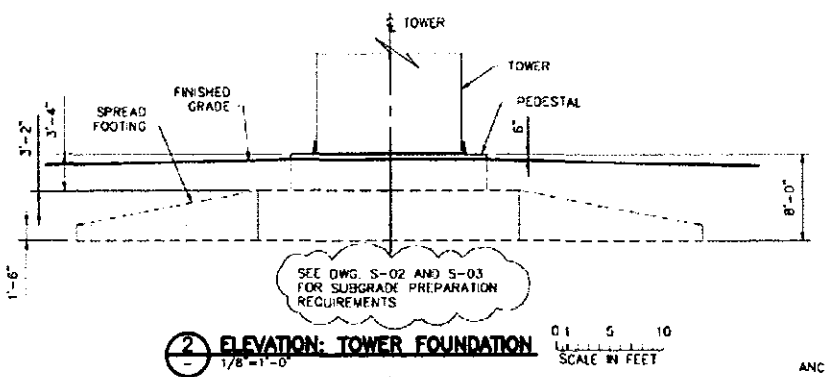
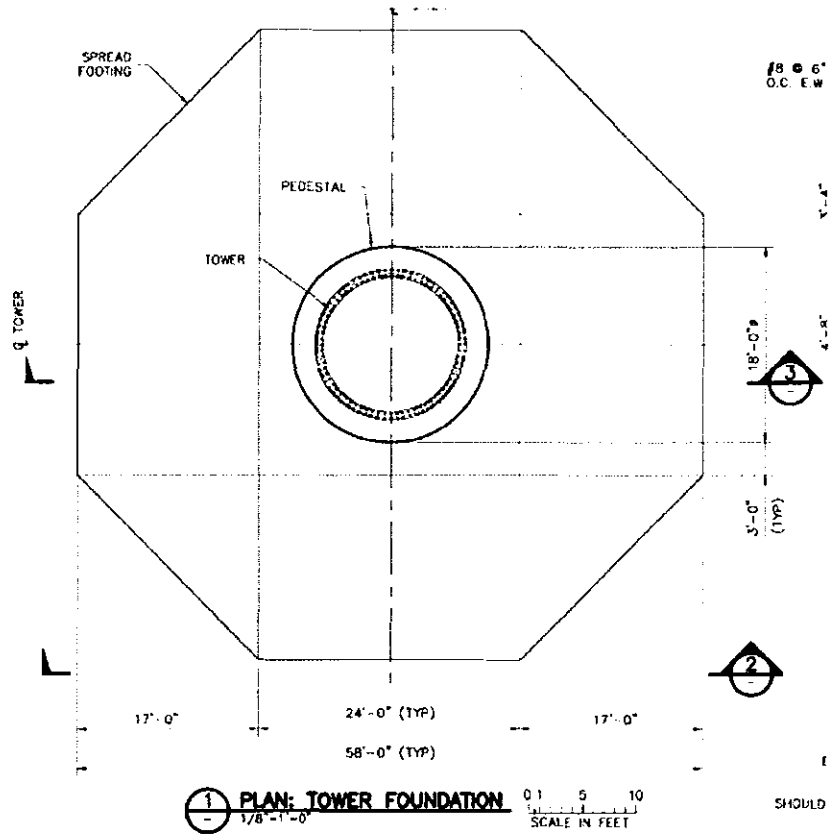


Figure 5 - Wind Turbine Typical Foundation Drawing
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD

PRELIMINARY CONCEPT

DESIGN ASSUMPTIONS:

- 1272 KCMIL "BITTERN" ACSR
- 250' MAX SPAN

NOTES:

1. STRUCTURE DIMENSIONS ARE APPROXIMATE. ACTUAL DIMENSIONS MAY VARY.
2. DIMENSIONS ARE TO ATTACHMENT HOLES.
3. DRAWING IS NOT TO EXACT SCALE

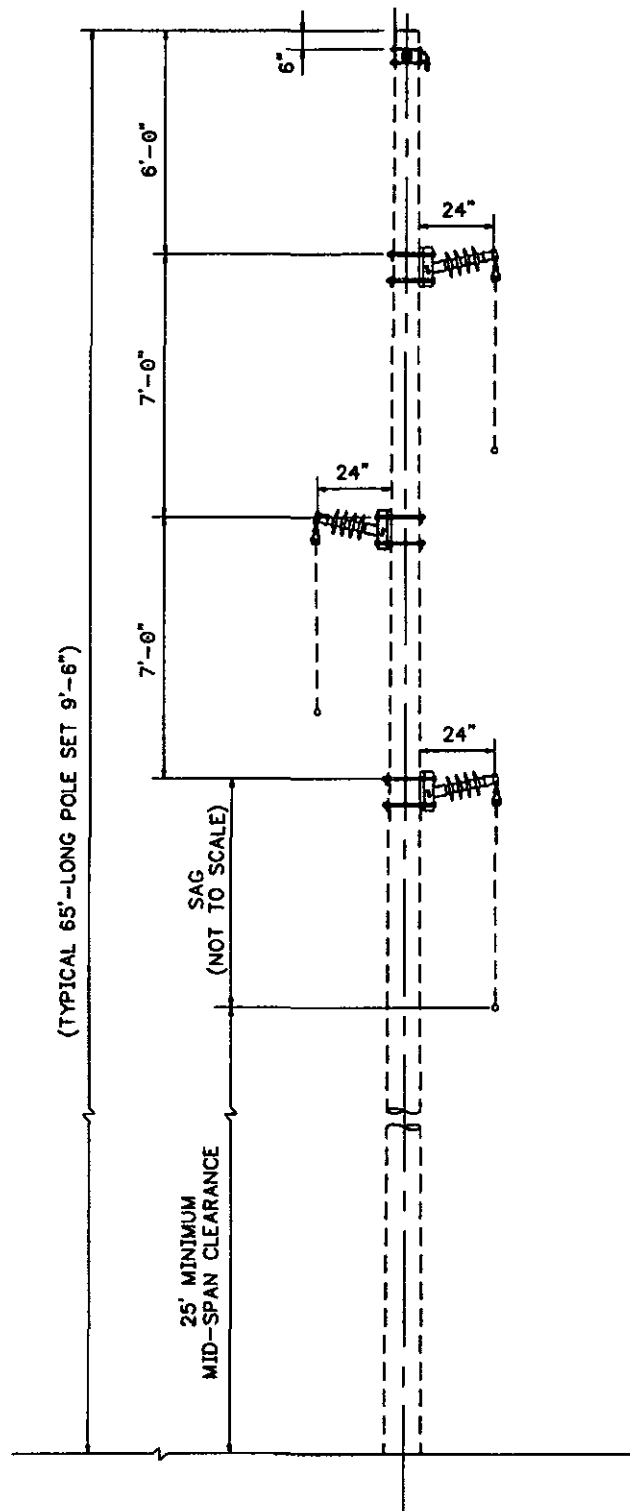


Figure 6a - Typical 34.5kV Horizontal Line Post
Tangent Single Circuit Structure
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD



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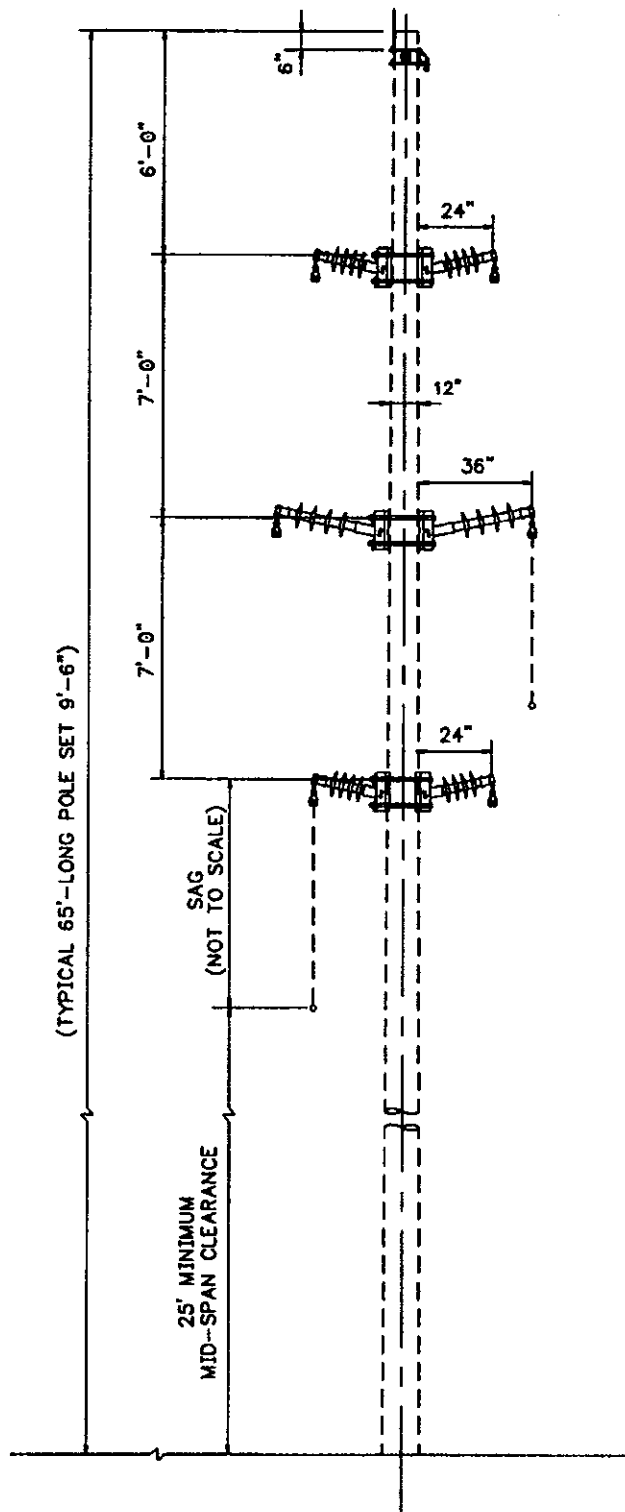
PRELIMINARY CONCEPT

DESIGN ASSUMPTIONS:

- 1272 KCMIL "BITTERN" ACSR
- 250' MAX SPAN

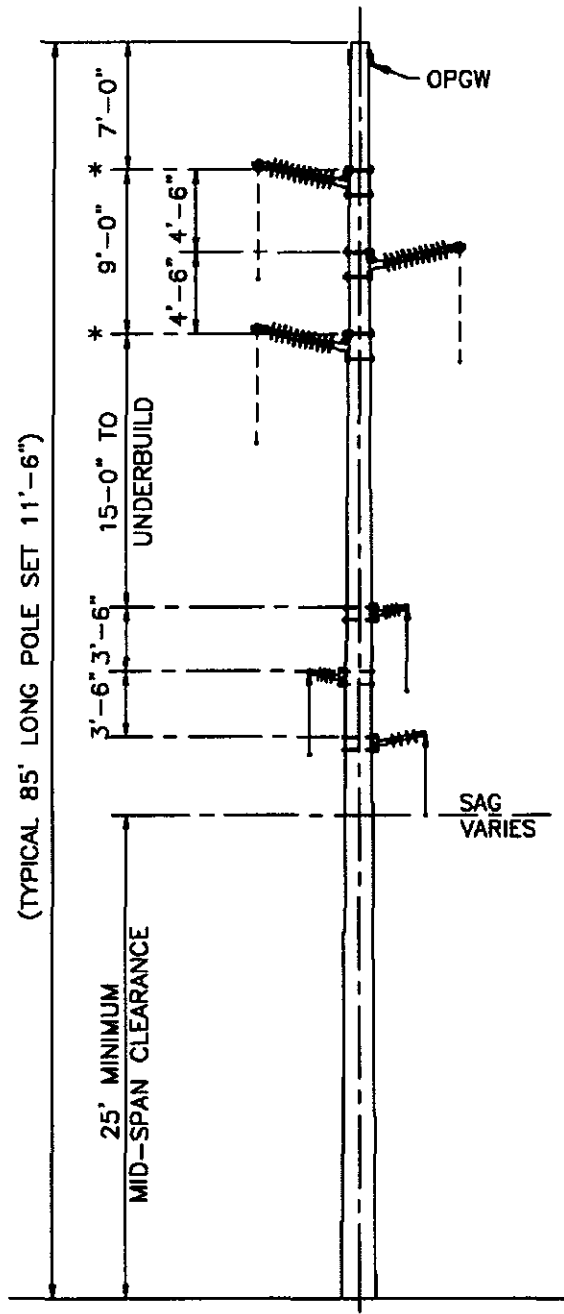
NOTES:

1. STRUCTURE DIMENSIONS ARE APPROXIMATE. ACTUAL DIMENSIONS MAY VARY.
2. DIMENSIONS ARE TO ATTACHMENT HOLES.
3. DRAWING IS NOT TO EXACT SCALE



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Figure 6b - Typical 34.5kV Horizontal Line Post
Tangent Double Circuit Structure
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD



PRELIMINARY CONCEPT

DESIGN ASSUMPTIONS:

- MAXIMUM SPAN: 250'
- 115-kV CONDUCTOR:
795 KCMIL 26/7 ACSR "DRAKE"
- 34.5-kV CONDUCTOR:
1272 KCMIL ACSR "PHEASANT"

* DIMENSIONS ARE TO ATTACHMENT HOLE.

NOTES:

1. STRUCTURE DIMENSIONS ARE APPROXIMATE. ACTUAL DIMENSIONS MAY VARY.
2. DIMENSIONS ARE TO ATTACHMENT HOLES.
3. DRAWING IS NOT TO EXACT SCALE

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Figure 6c - Typical 115 kV Single Circuit
with 34.5kV Underbuild Structure
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD

PRELIMINARY CONCEPT

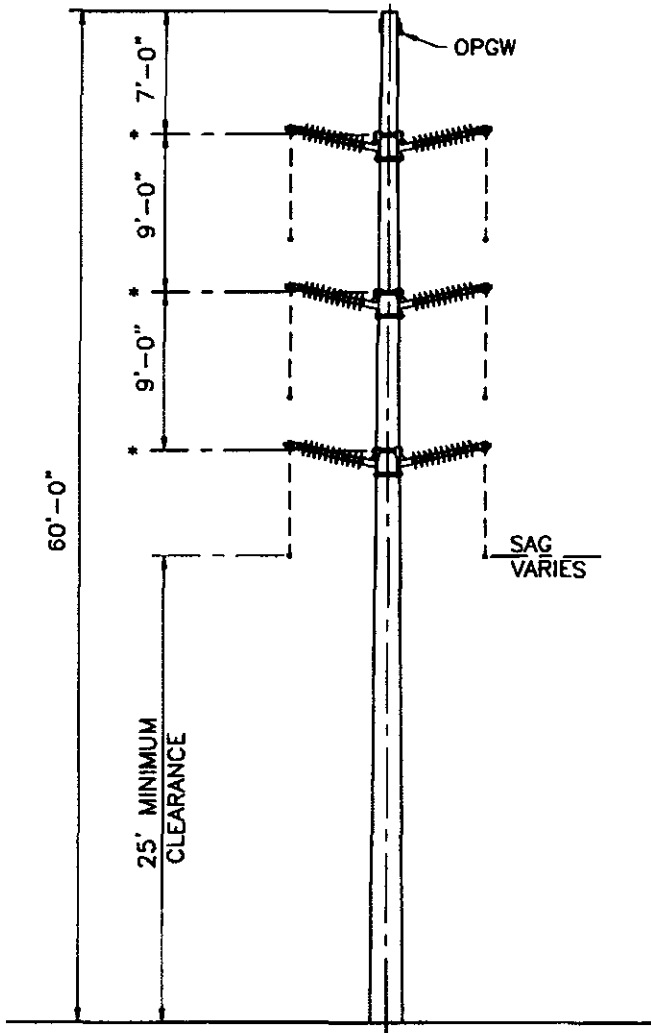
DESIGN ASSUMPTIONS:

- MAXIMUM SPAN: 500'
- 795 KCMIL 26/7 ACSR "DRAKE"

* DIMENSIONS ARE TO ATTACHMENT HOLE.

NOTES:

1. STRUCTURE DIMENSIONS ARE APPROXIMATE. ACTUAL DIMENSIONS MAY VARY.
2. DIMENSIONS ARE TO ATTACHMENT HOLES.
3. DRAWING IS NOT TO EXACT SCALE



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Figure 6d - Typical 115 kV Double Circuit Structure
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD

PRELIMINARY CONCEPT

DESIGN ASSUMPTIONS:

- MAXIMUM SPAN: 500'
- 795 KCMIL 26/7 ACSR "DRAKE"

* DIMENSIONS ARE TO ATTACHMENT HOLE.

NOTES:

1. STRUCTURE DIMENSIONS ARE APPROXIMATE. ACTUAL DIMENSIONS MAY VARY.
2. DIMENSIONS ARE TO ATTACHMENT HOLES.
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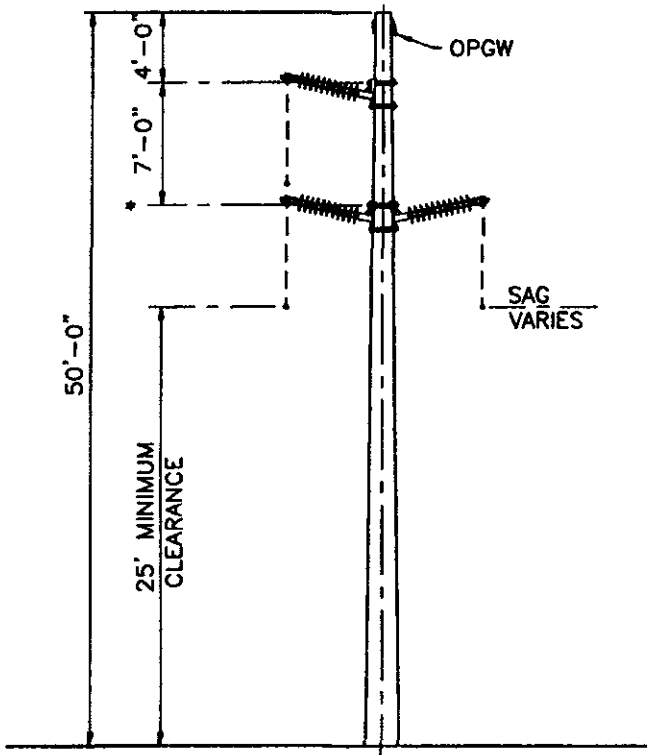


Figure 6e - Typical 115 kV Single Circuit Structure
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD

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PRELIMINARY CONCEPT

DESIGN ASSUMPTIONS:

- MAXIMUM SPAN: 250'
- 795 KCMIL 26/7 ACSR "DRAKE"

* DIMENSIONS ARE TO ATTACHMENT HOLE.

NOTES:

1. STRUCTURE DIMENSIONS ARE APPROXIMATE. ACTUAL DIMENSIONS MAY VARY.
2. DIMENSIONS ARE TO ATTACHMENT HOLES.
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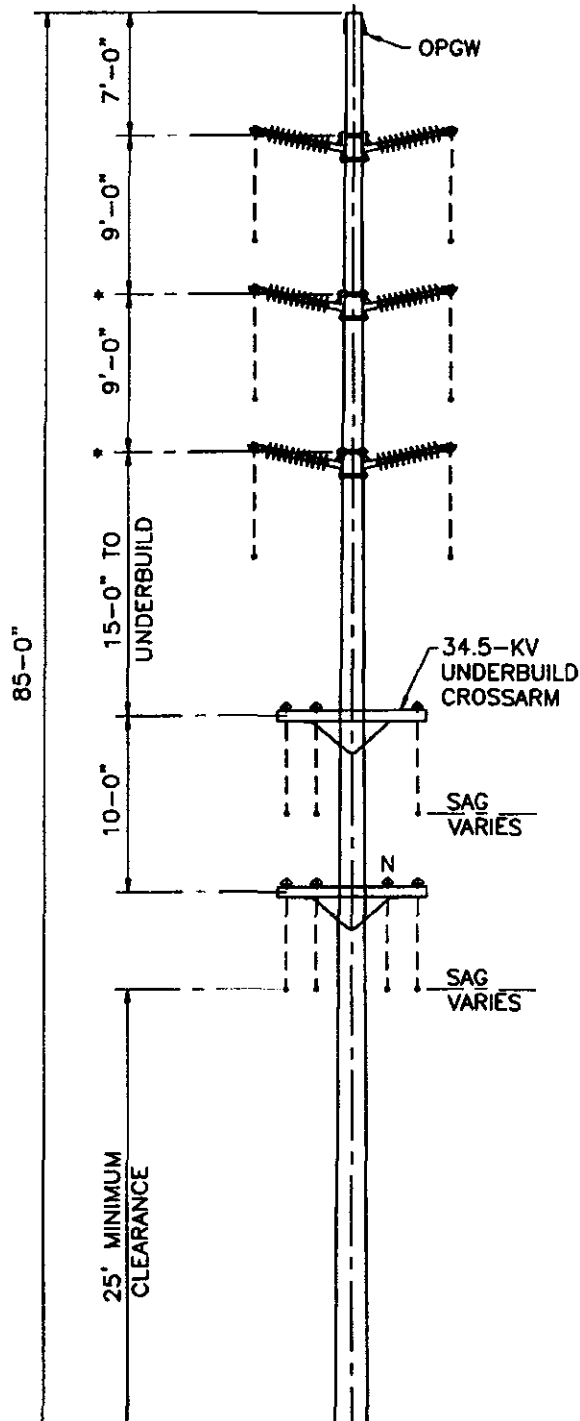
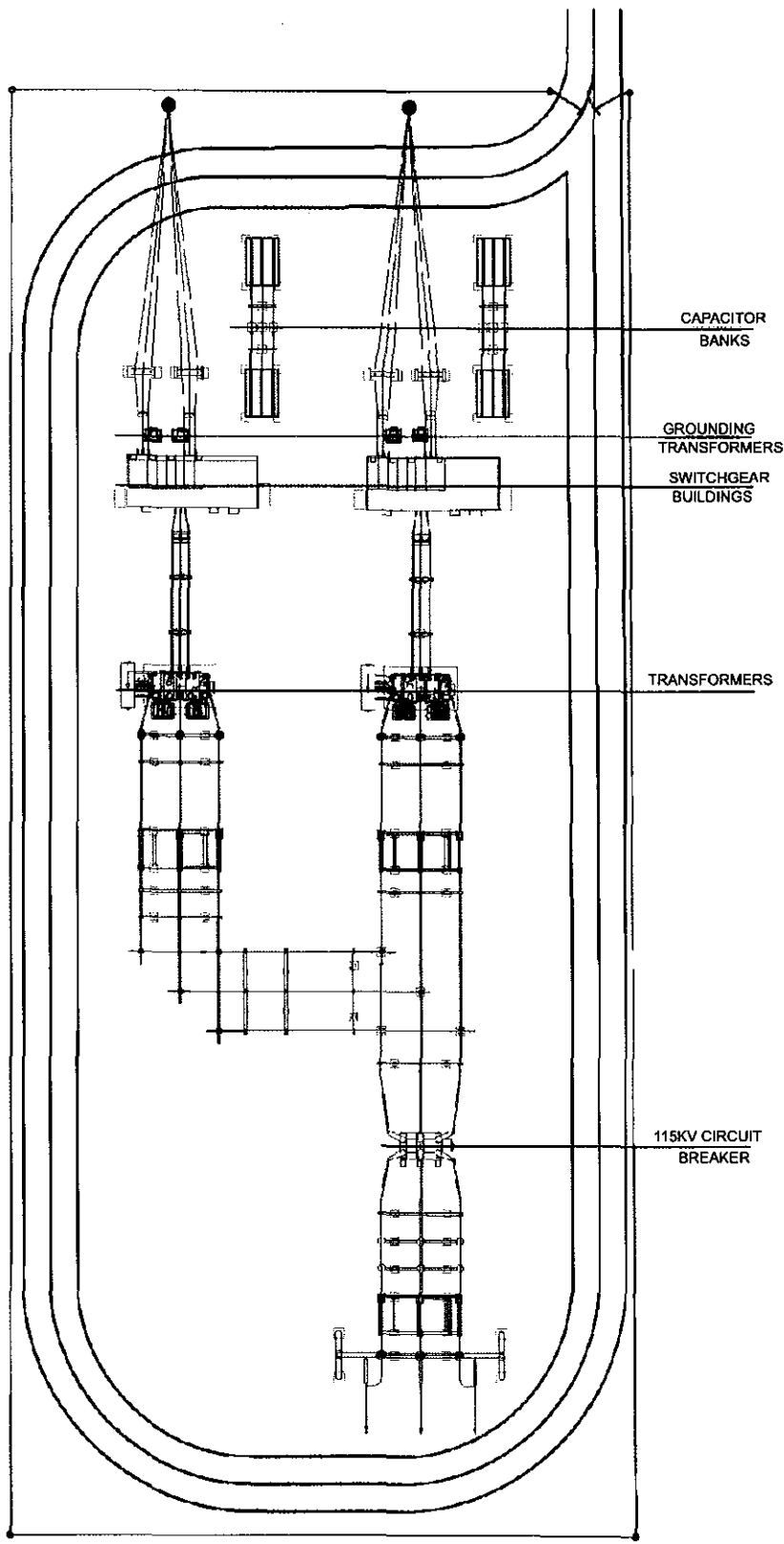


Figure 6f - Typical 115 kV Double Circuit
with Double 34.5 kV Underbuild Structure
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD

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CAPACITOR BANKS

GROUNDING TRANSFORMERS

SWITCHGEAR BUILDINGS

TRANSFORMERS

115KV CIRCUIT BREAKER

0
50
100
SCALE IN FEET



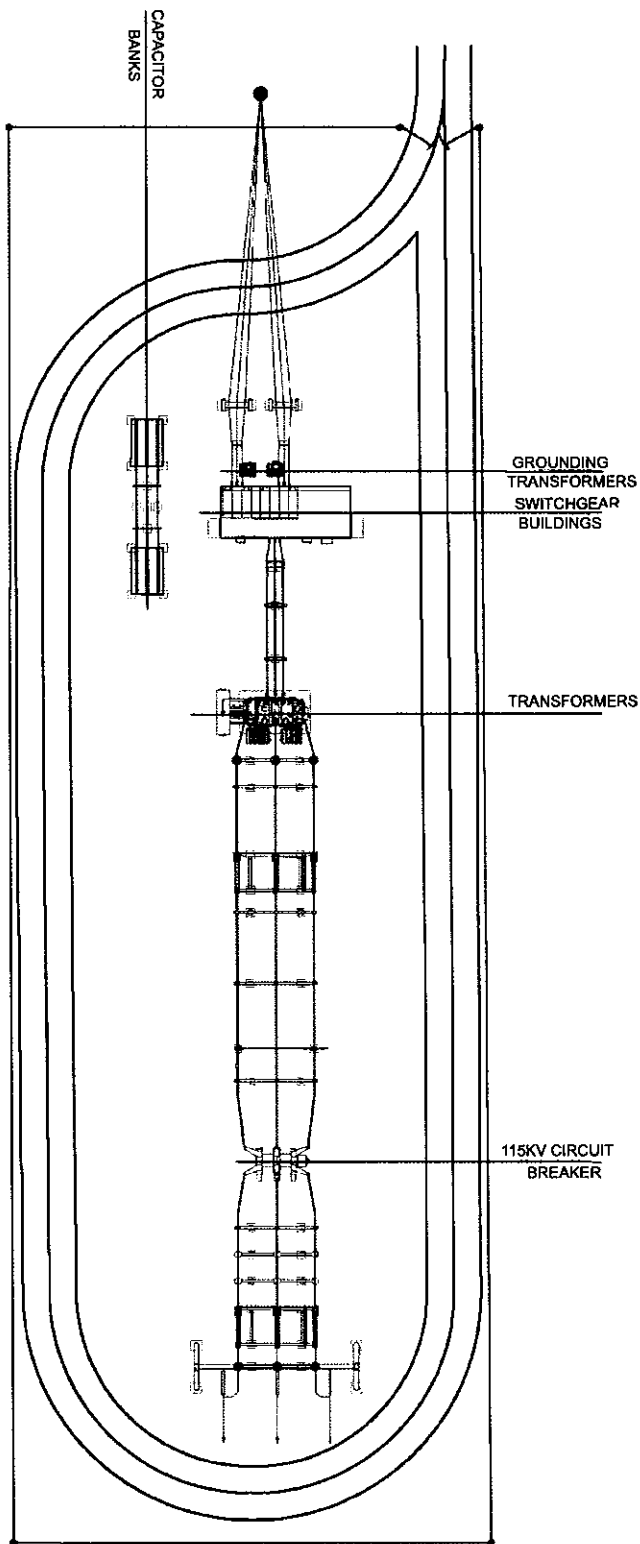
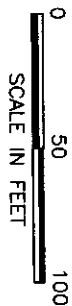
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Figure 7a - BRIA-North Substation - Preliminary Layout
 Buffalo Ridge II Wind Farm
 Iberdrola Renewables
 Brookings and Deuel Counties, SD



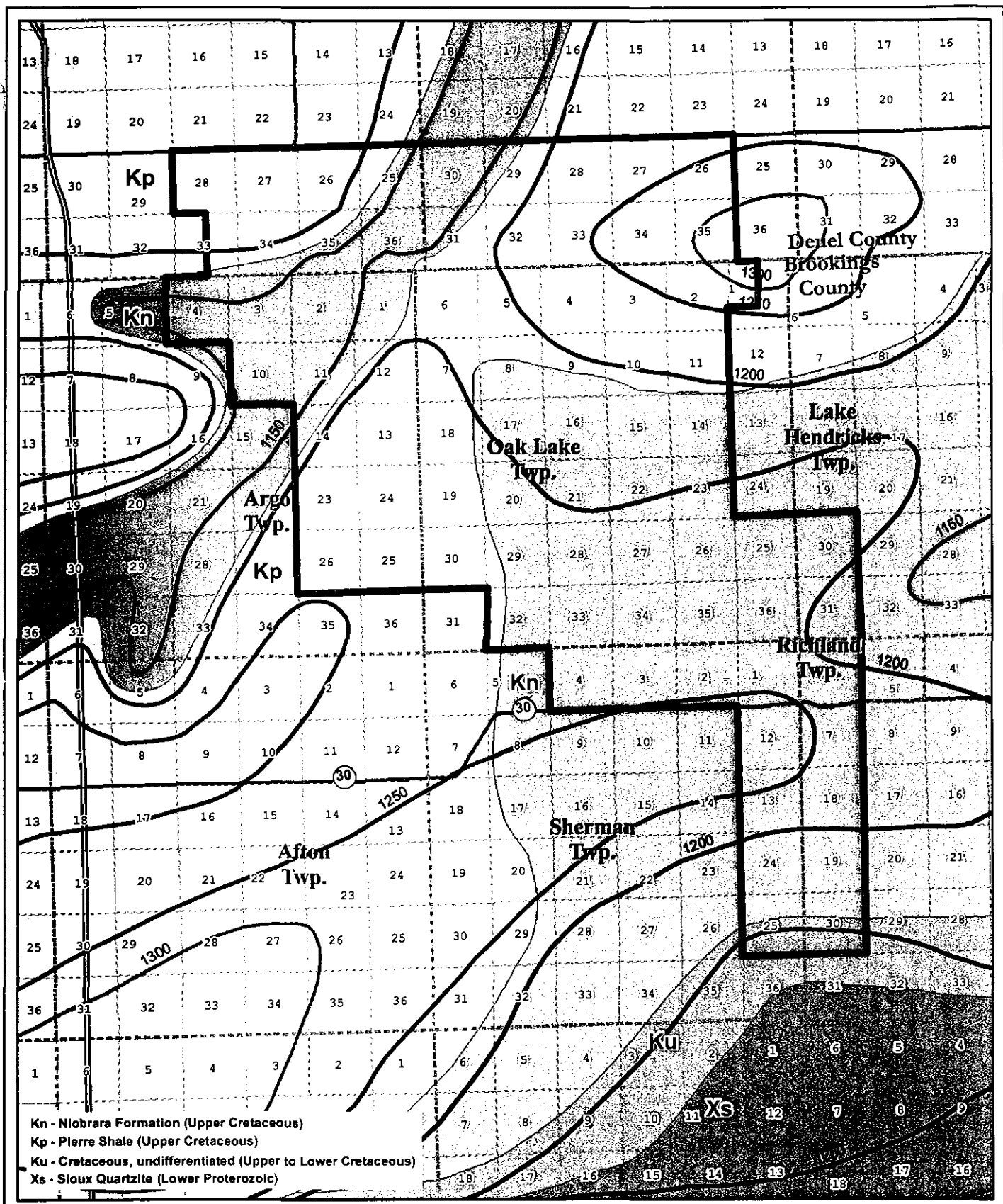
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Figure 7b - BRII-South Substation - Preliminary Layout
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD

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Kn - Niobrara Formation (Upper Cretaceous)
 Kp - Pierre Shale (Upper Cretaceous)
 Ku - Cretaceous, undifferentiated (Upper to Lower Cretaceous)
 Xs - Sioux Quartzite (Lower Proterozoic)

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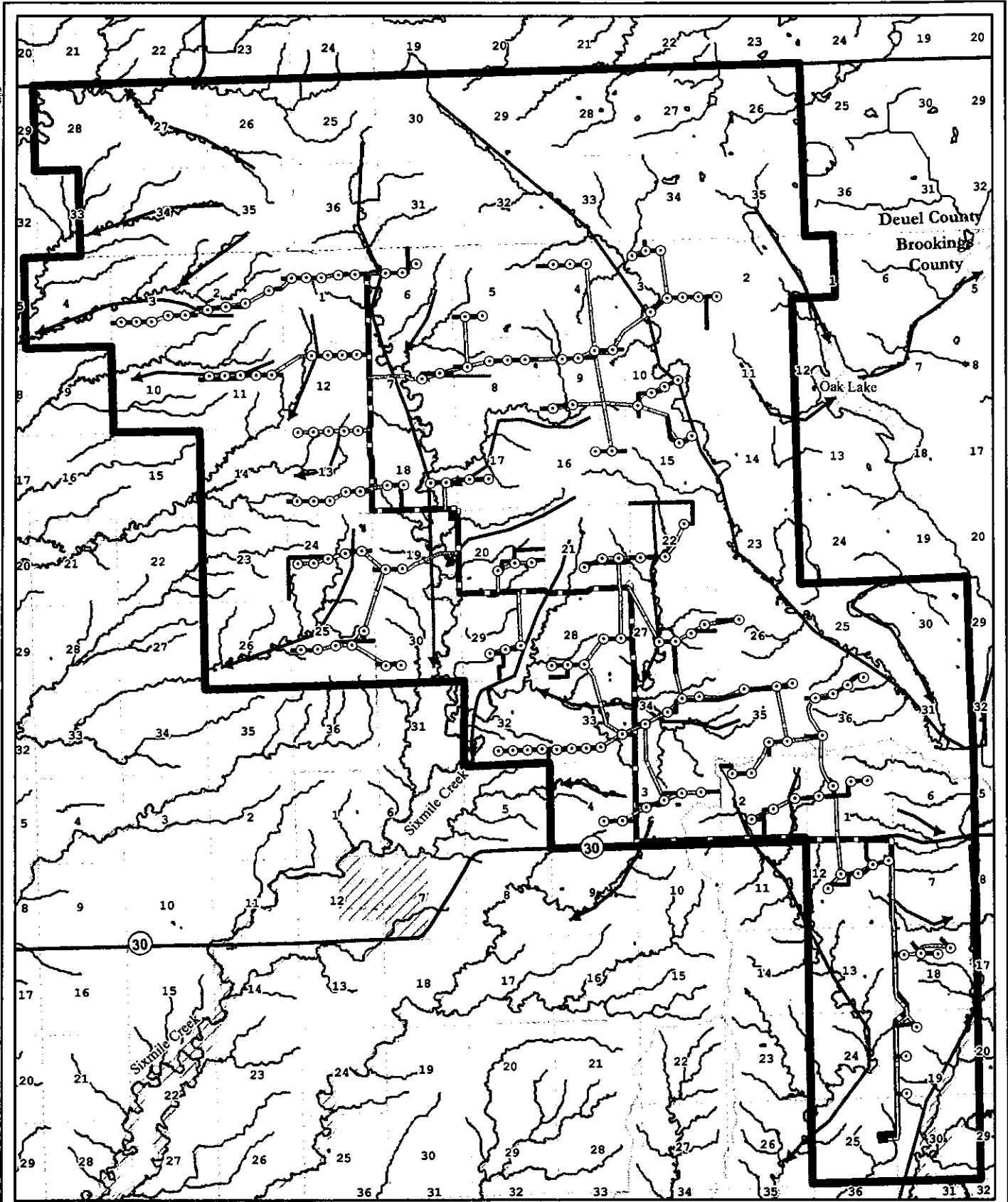
0 0.5 1 2 Miles

Figure 8 - Bedrock Geology
 Buffalo Ridge II Wind Farm
 Iberdrola Renewables
 Brookings and Deuel Counties, SD

Legend	
	Site Boundary
	Kn
	Kp
	Ku
	Xs
	Contours
	Elevation (Ft)
	1150
	1200
	1250
	1300

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Figure 9a - Water Resources
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD

Legend	
Site Boundary	Drainage Lines
Turbine	Streams
Project Substation	100 year Floodplain
Access Roads	Watershed Boundary
Underground Cabling	Lac Qui Parle River
Proposed Overhead T-Line	Upper Big Sioux (Deer/Medary Creek)
115 kV	Upper Big Sioux (North Deer/Sixmile Creek)
34.5 kV	

0 0.5 1 2 Miles

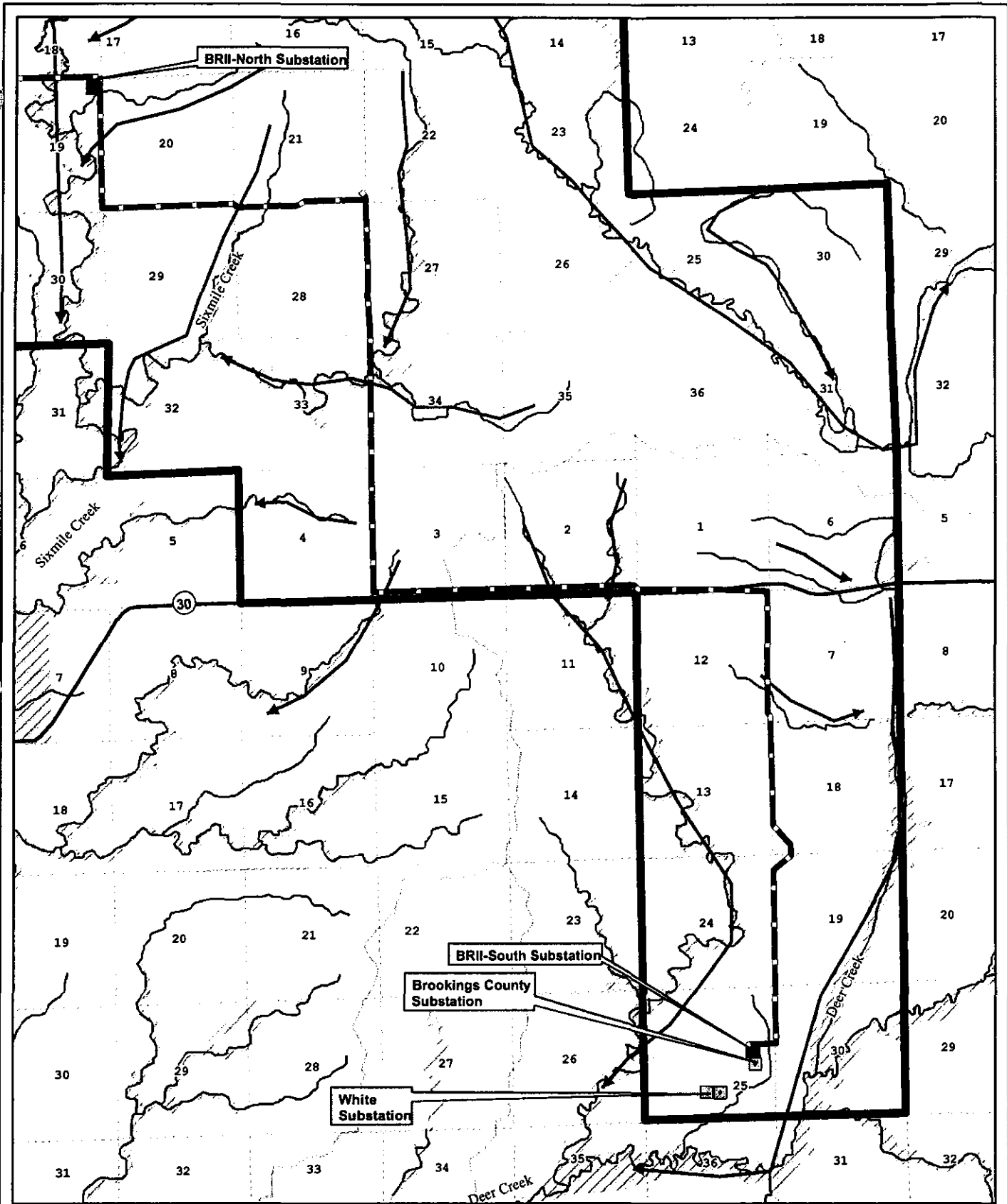


Figure 9b - Water Resources, 115 kV Transmission Line

Buffalo Ridge II Wind Farm

Iberdrola Renewables

Brookings and Deuel Counties, SD

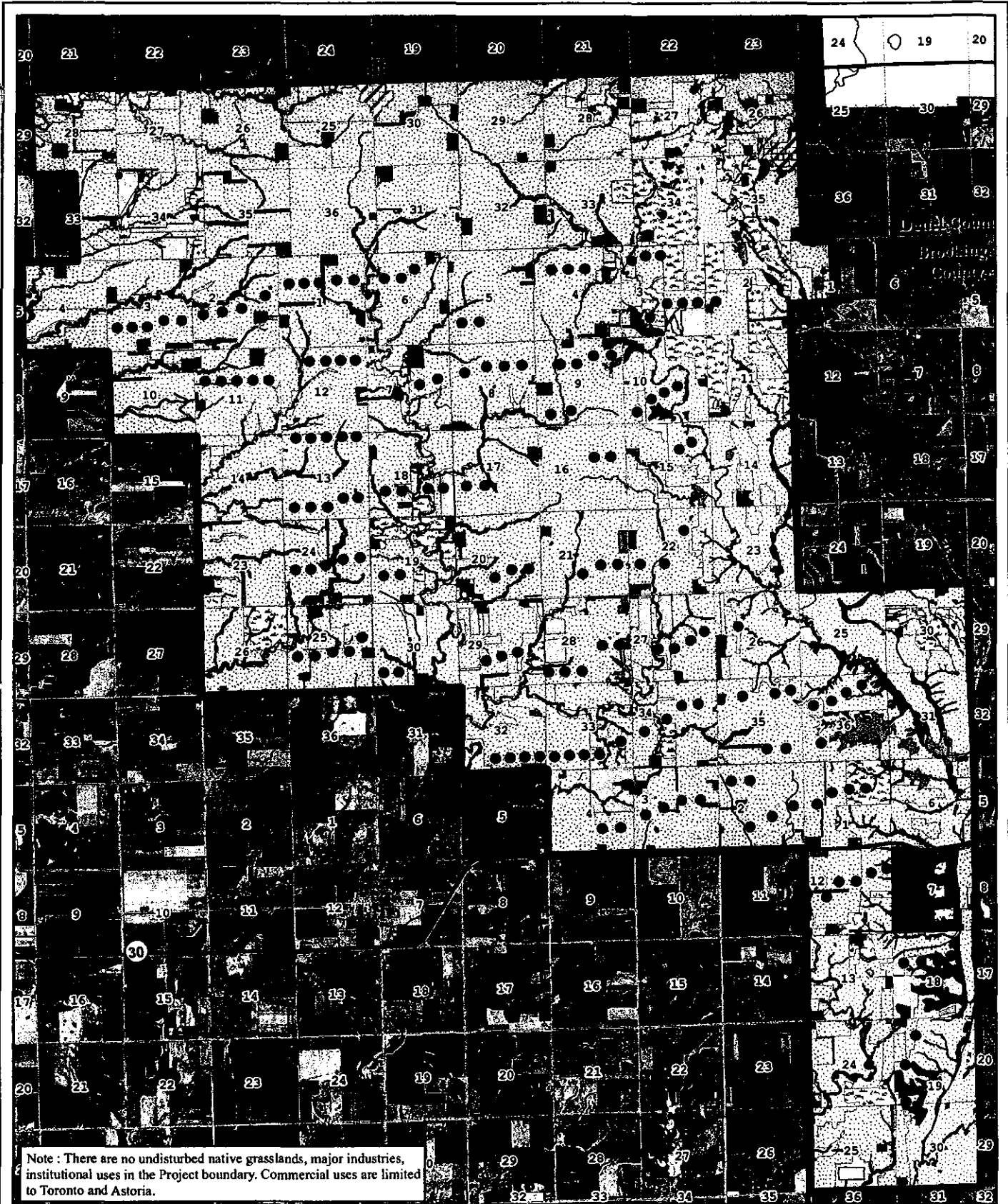


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0 0.25 0.5 1 Miles

- | | |
|----------------------------|--|
| Site Boundary | 100 year Floodplain |
| Project Substation | Watershed Boundary |
| Proposed Overhead T - Line | Lac Qui Parle River |
| 115 kV | Upper Big Sioux (Deer/Medary Creek) |
| 34.5 kV | Upper Big Sioux (North Deer/Sixmile Creek) |
| Drainage Lines | |
| Streams | |



Note : There are no undisturbed native grasslands, major industries, institutional uses in the Project boundary. Commercial uses are limited to Toronto and Astoria.



Figure 10a - Vegetation & Landcover, Wind Farm Facility
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD



Legend			
	Site Boundary		planted grassland
	Turbine		rangeland
	Project Substation		road
	Streams		stock pond
	Industrial		tilled agriculture
	Residential		utility
	cemetary		wetland
	farmstead		woodland
	gravel pit		
	hayland		
	lake		
	pasture		

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Note : There are no undisturbed native grasslands, major industries, institutional uses in the Project boundary. Commercial uses are limited to Toronto and Astoria.



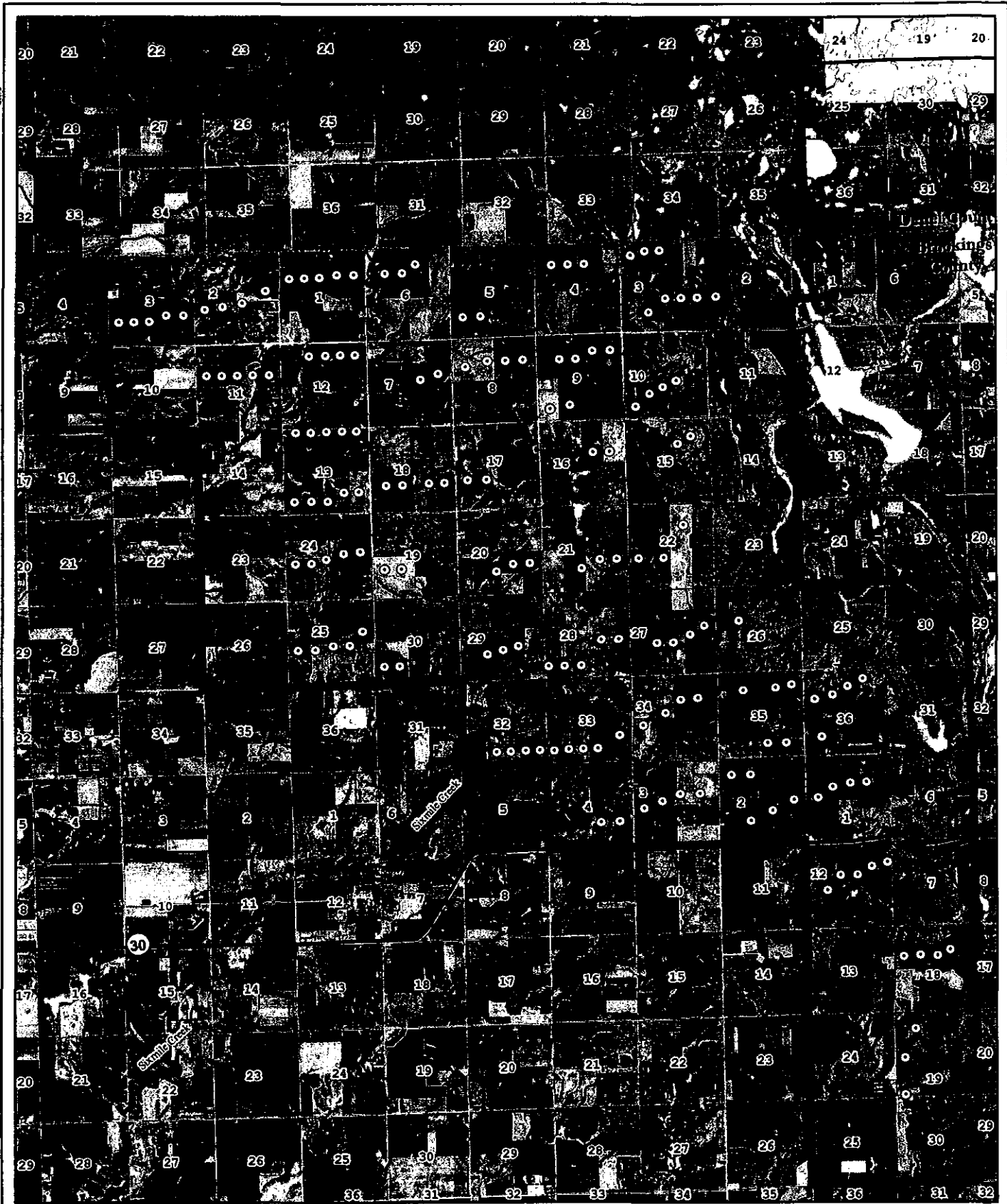
Figure 10b - Vegetation & Landcover, 115 kV Transmission Line
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD



0 0.25 0.5 1 Miles

Legend	
	Site Boundary
	Project Substation
	Proposed Overhead T-Line
	115 kV
	34.5 kV
	Streams
	Industrial
	Residential
	cemetery
	farms/feed
	gravel pit
	hayland
	lake
	pasture
	planted grassland
	rangeland
	road
	stock pond
	tilled agriculture
	utility
	wetland
	woodland

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0 0.5 1 2 Miles

Figure 11a - NWI Wetlands & Streams, Wind Farm Facility
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD

Legend	
	Site Boundary
	Turbine
	NWI Wetlands
	Streams

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Figure 11b - NWI Wetlands & Streams, 115 kV Transmission Line

Buffalo Ridge II Wind Farm

Iberdrola Renewables

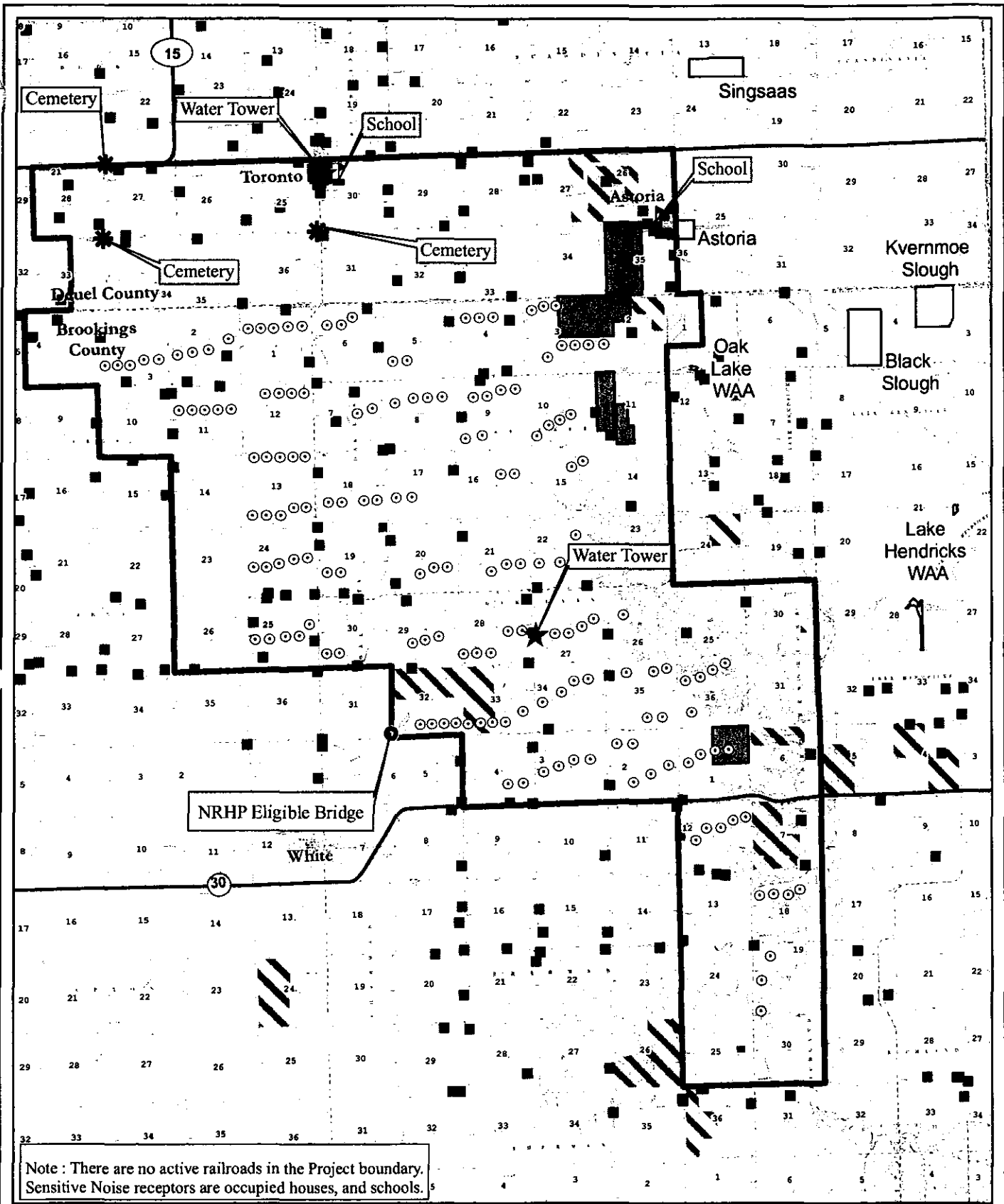
Brookings and Deuel Counties, SD

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Miles
0 0.25 0.5 1

Legend

	Site Boundary		Proposed Overhead T - Line
	NWI Wetlands		115 kV
	Project Substation		34.5 kV
	Streams		



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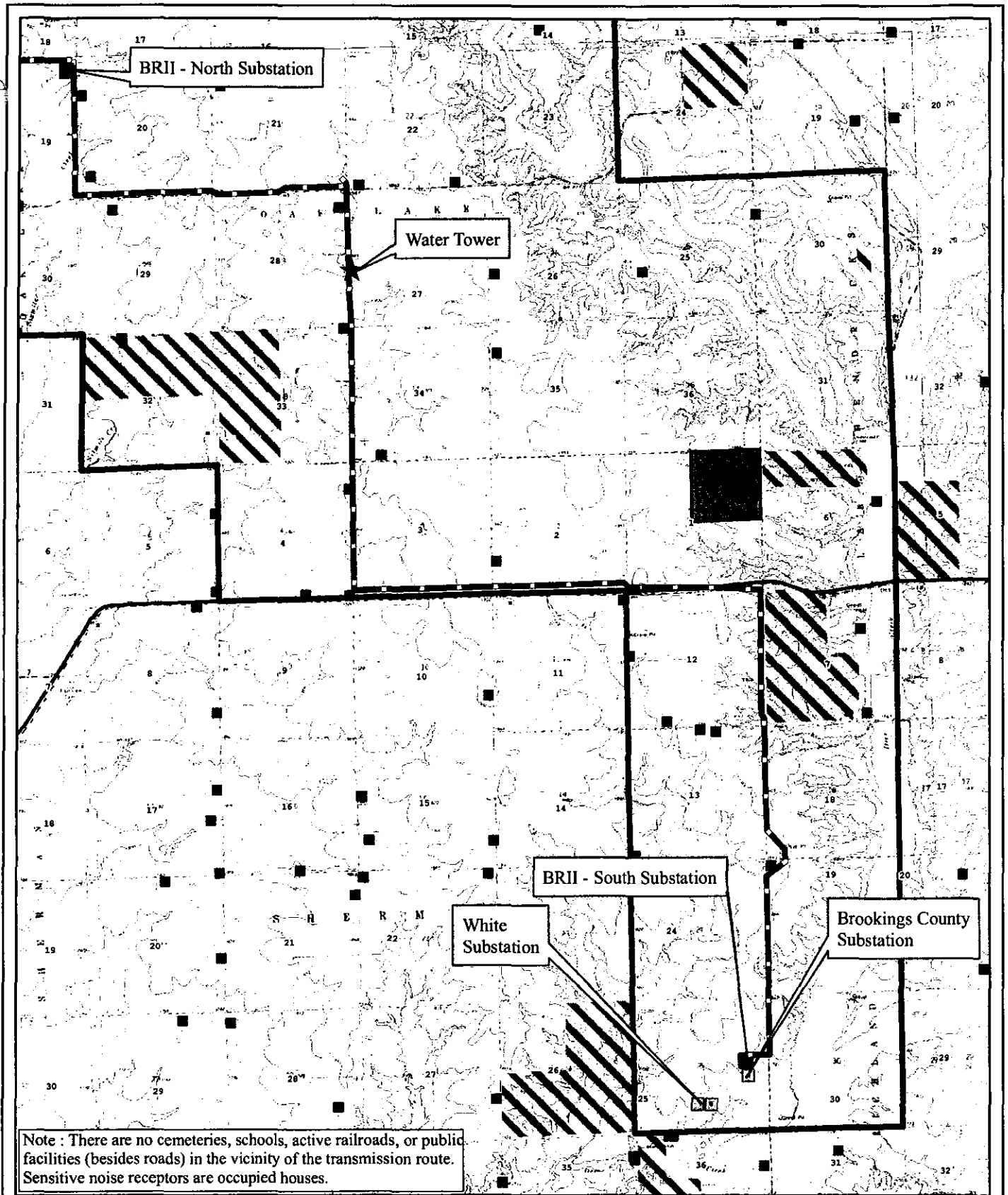
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Figure 12a - Land Use & Public Lands, Wind Farm Facility
Buffalo Ridge II Wind Farm
 Iberdrola Renewables
 Brookings and Deuel Counties, SD

Legend	
	Site Boundary
	Turbine
	Project Substation
	Sensitive Noise Receptors
	Walk-in-Area
	USFWS Easements Wellland
	USFWS Easements Grassland
	USFWS Easements WPA
	SD Game & Parks
	NRHP Eligible Bridge





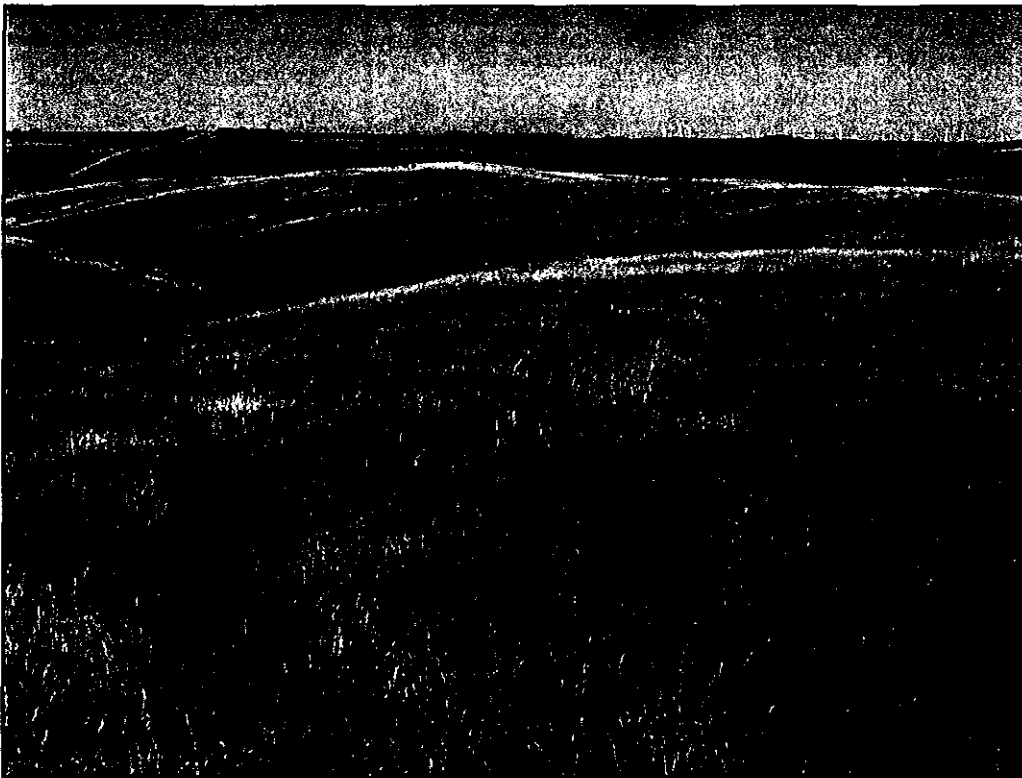
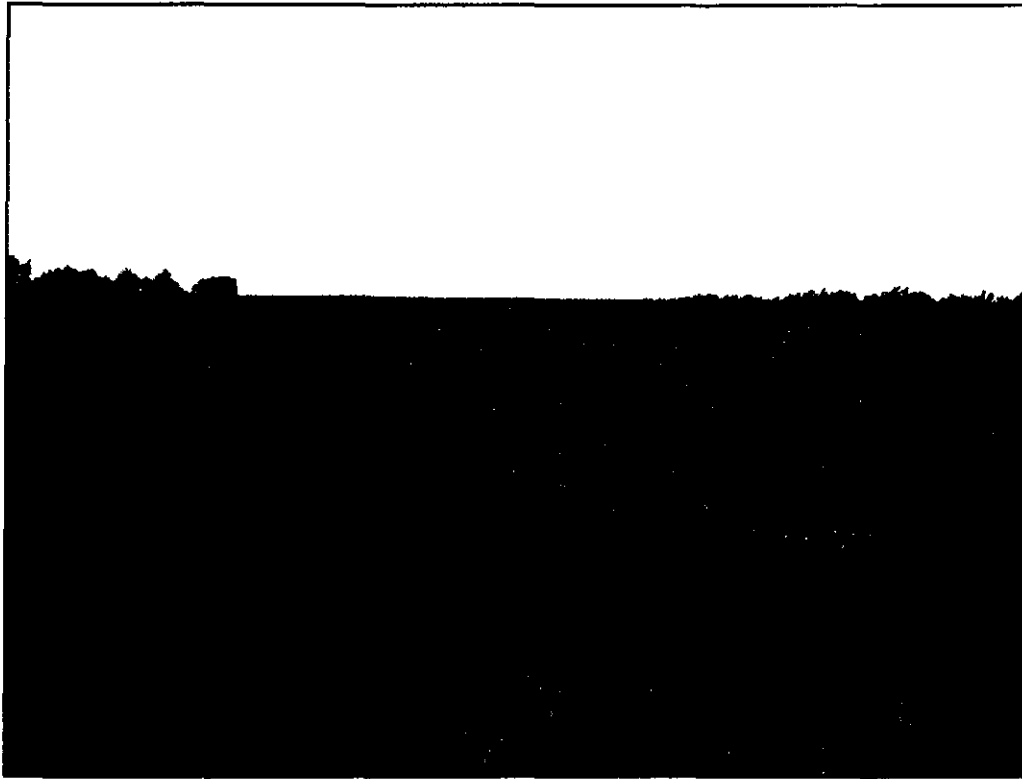
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Figure 12b - Land Use & Public Lands, 115 kV Transmission Line
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD



Legend	
	Site Boundary
	Project Substation
	Substation Location
	Sensitive Noise Receptors
	Proposed Overhead T-Line
	115 kV
	34.5 kV
	USFWS Easements
	Wetland
	Grassland
	Walk-in-Area



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Figure 13 - Typical Project Landscape
Buffalo Ridge II Wind Farm
Iberdrola Renewables
Brookings and Deuel Counties, SD