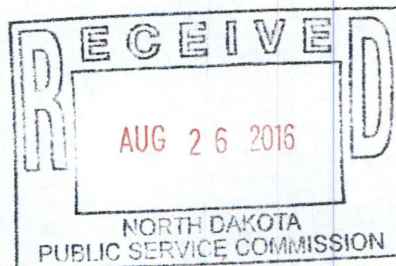




August 26, 2016



Ms. Julie Prescott
Public Utility Analyst
North Dakota Public Service Commission
600 E. Boulevard Avenue, Dept. 408
Bismarck, ND 58505-0480

**Subject: Glacier Ridge Wind Farm Application for Certificate of Site Compatibility, Case No. PU-16-539
Project Layout Mapbook**

Dear Ms. Prescott:

Please find enclosed an additional seven copies of the Glacier Ridge Layout Maps, three for the Commissioners, and two for you. An electronic copy of the report has also been emailed to ndpsc@nd.gov.

Please do not hesitate to contact me with any questions at 612-643-2237 or adam.holven@tetrattech.com.

Sincerely,

Adam Holven
Tetra Tech, Inc.
2001 Killebrew Drive, Suite 141
Bloomington, MN 55425

Enclosure (5) – Wetland Survey Report

21 **PU-16-539** Filed: 8/26/2016 Pages: 15
Project Layout Maps

Tetra Tech Ec. Inc.
Adam Holven

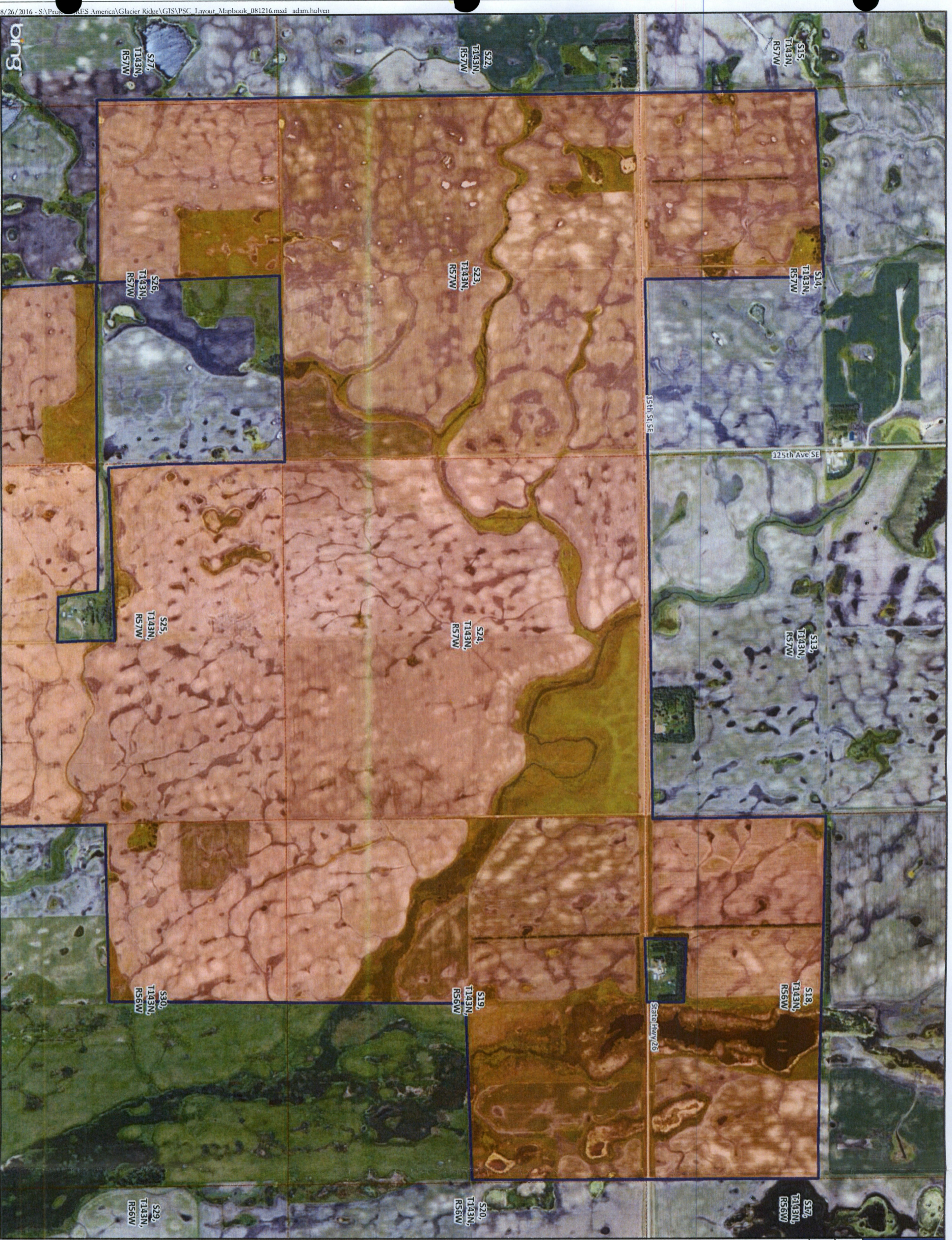
Tetra Tech Inc.

2001 Killebrew Drive, Suite 141, Bloomington, MN 55425
Tel 612-643-2200 Fax 612-643-2201 tetrattech.com

Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 1



Project Area

Proposed Project Area (7/1/16)

Proposed Project Facilities

Proposed Turbine (8/11/16)

Alternate Turbine (8/11/16)

Proposed Service Road (8/11/16)

Proposed Collection Line (8/11/16)

* Proposed Met Tower (6/13/16)

Proposed O&M Building (7/6/16)

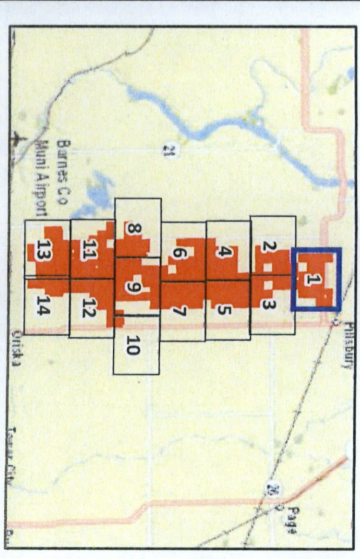
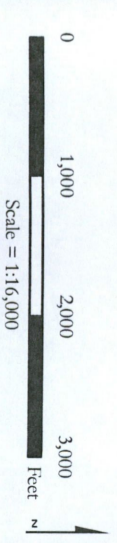
Residences

Participating (8/5/16)

Not Participating (8/5/16)

Non-Project Layers

PLSS Boundary



Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 2



Project Area

Proposed Project Area (7/1/16)

Proposed Project Facilities

Proposed Turbine (8/11/16)

Alternate Turbine (8/11/16)

Proposed Service Road (8/11/16)

Proposed Collection Line (8/11/16)

Proposed Met Tower (6/13/16)

Proposed O&M Building (7/6/16)

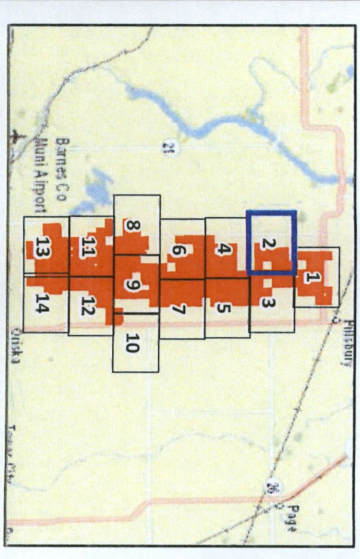
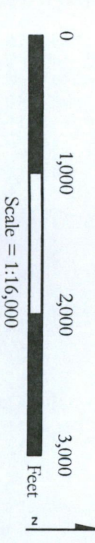
Residences

Participating (8/5/16)

Not Participating (8/5/16)

Non-Project Layers

PLSS Boundary



Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 3



Project Area

Proposed Project Area (7/1/16)

Proposed Project Facilities

Proposed Turbine (8/11/16)

Alternate Turbine (8/11/16)

Proposed Service Road (8/11/16)

Proposed Collection Line (8/11/16)

* Proposed Met Tower (6/13/16)

Proposed O&M Building (7/6/16)

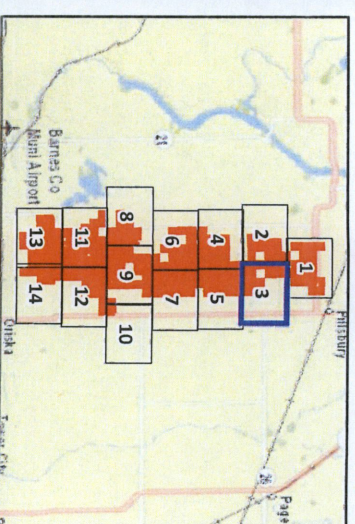
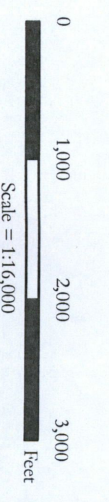
Residences

Participating (8/5/16)

Not Participating (8/5/16)

Non-Project Layers

PSSS Boundary



Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 4



Project Area
 Proposed Project Area (7/1/16)

Proposed Project Facilities

Proposed Turbine (8/11/16)

Alternate Turbine (8/11/16)

Proposed Service Road (8/11/16)

Proposed Collection Line (8/11/16)

Proposed Met Tower (6/13/16)

Proposed O&M Building (7/6/16)

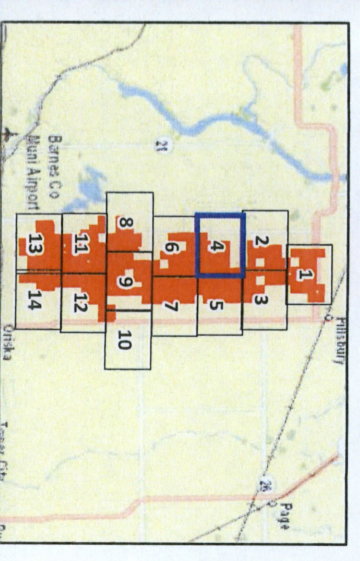
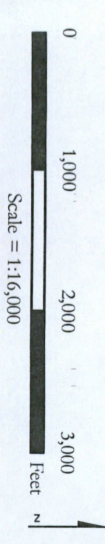
Residences

Participating (8/5/16)

Not Participating (8/5/16)

Non-Project Layers

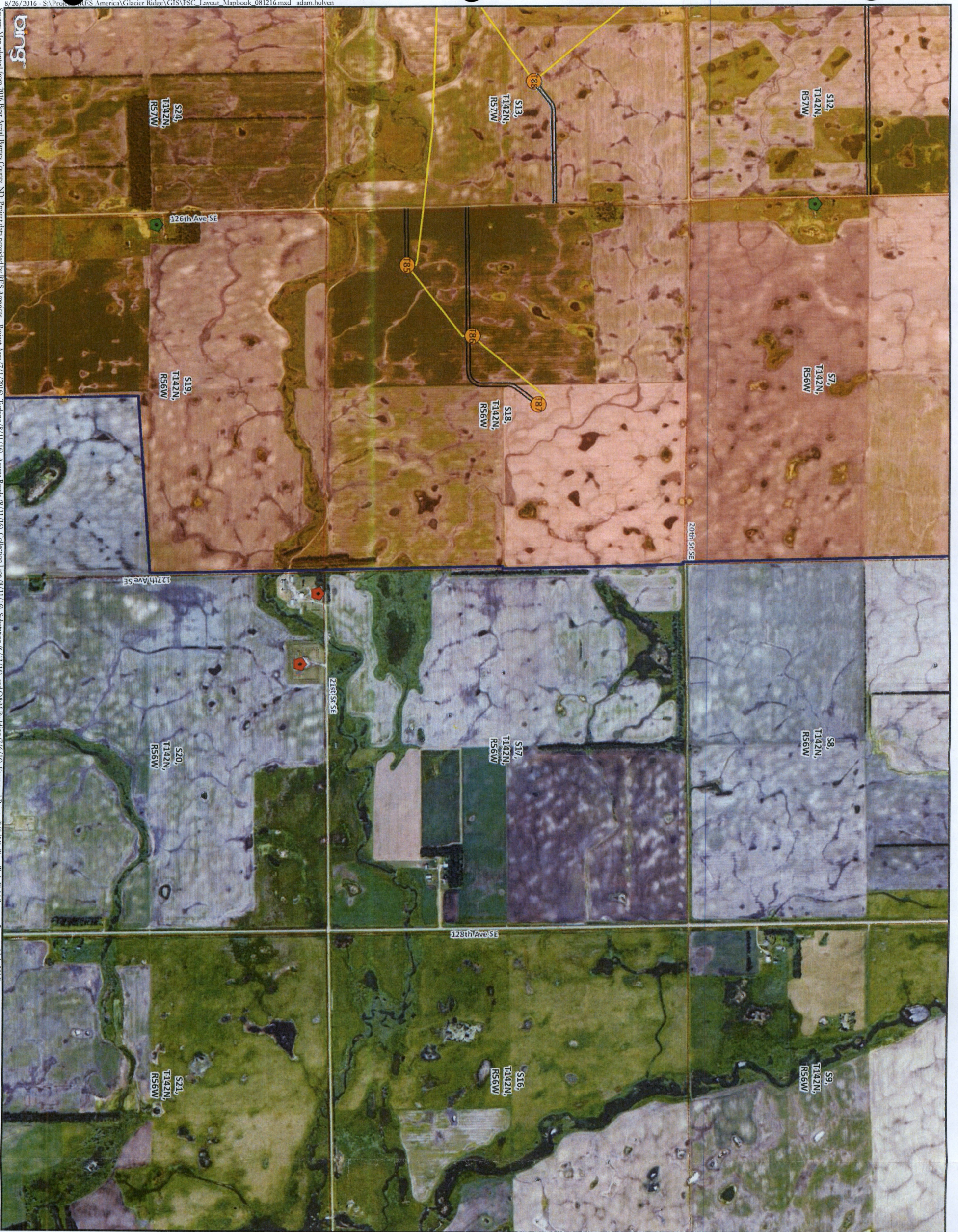
PLSS Boundary



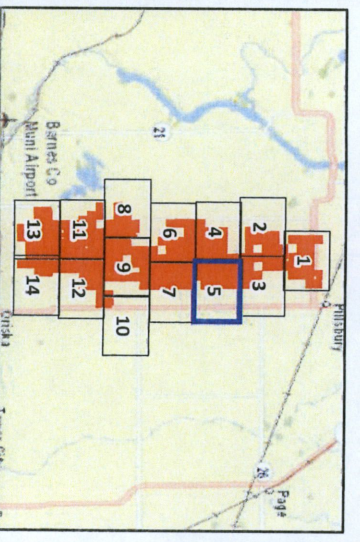
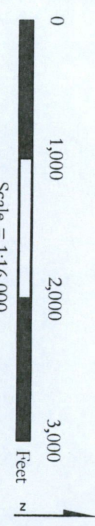
Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 5



- Project Area
- Proposed Project Area (7/1/16)
- Proposed Project Facilities**
- Proposed Turbine (8/11/16)
- Alternate Turbine (8/11/16)
- == Proposed Service Road (8/11/16)
- Proposed Collection Line (8/11/16)
- * Proposed Met Tower (6/13/16)
- ▨ Proposed O&M Building (7/6/16)
- Residences**
- ◆ Participating (8/5/16)
- ◆ Not Participating (8/5/16)
- Non-Project Layers
- PLSS Boundary



Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 6



Project Area

■ Proposed Project Area (7/1/16)

Proposed Project Facilities

● Proposed Turbine (8/11/16)

● Alternate Turbine (8/11/16)

══ Proposed Service Road (8/11/16)

— Proposed Collection Line (8/11/16)

* Proposed Met Tower (6/13/16)

▨ Proposed O&M Building (7/6/16)

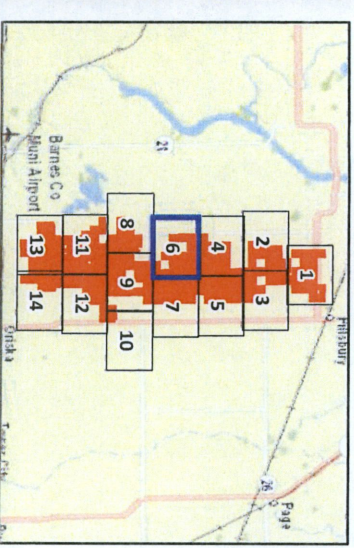
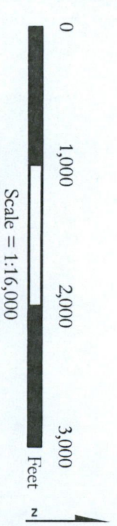
Residences

● Participating (8/5/16)

● Not Participating (8/5/16)

Non-Project Layers

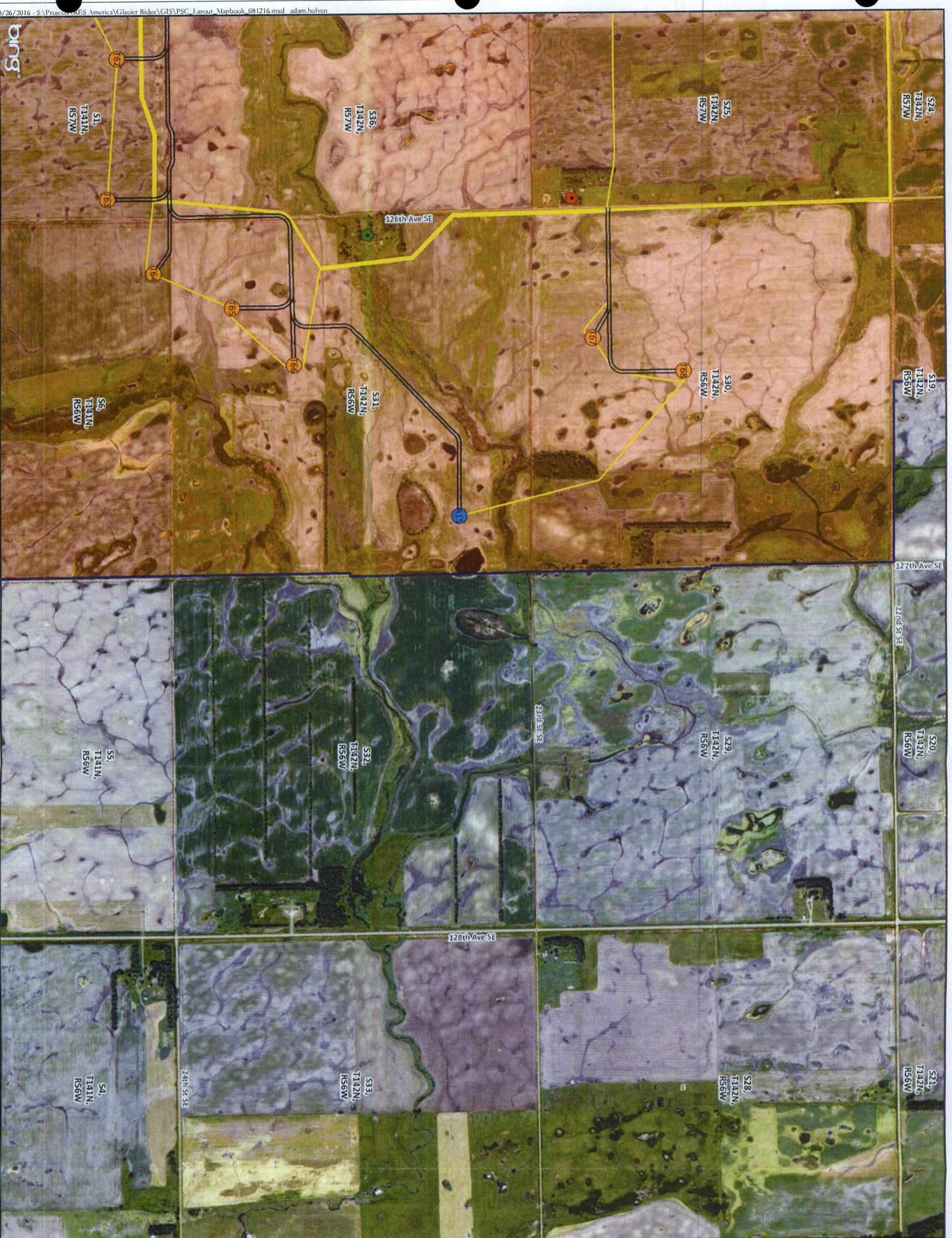
▭ PLS Boundary



Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 7



Project Area

■ Proposed Project Area (7/1/16)

Proposed Project Facilities

● Proposed Turbine (8/11/16)

● Alternate Turbine (8/11/16)

≡ Proposed Service Road (8/11/16)

— Proposed Collection Line (8/11/16)

* Proposed Met Tower (6/13/16)

▨ Proposed O&M Building (7/6/16)

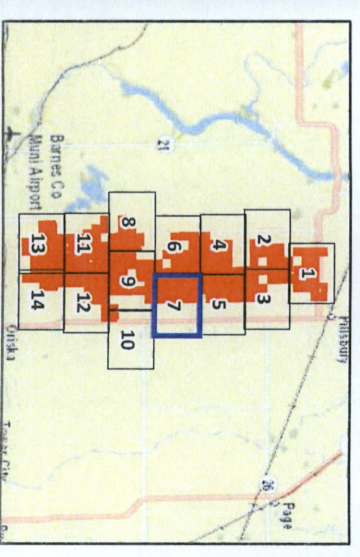
Residences

■ Participating (8/5/16)

■ Not Participating (8/5/16)

Non-Project Layers

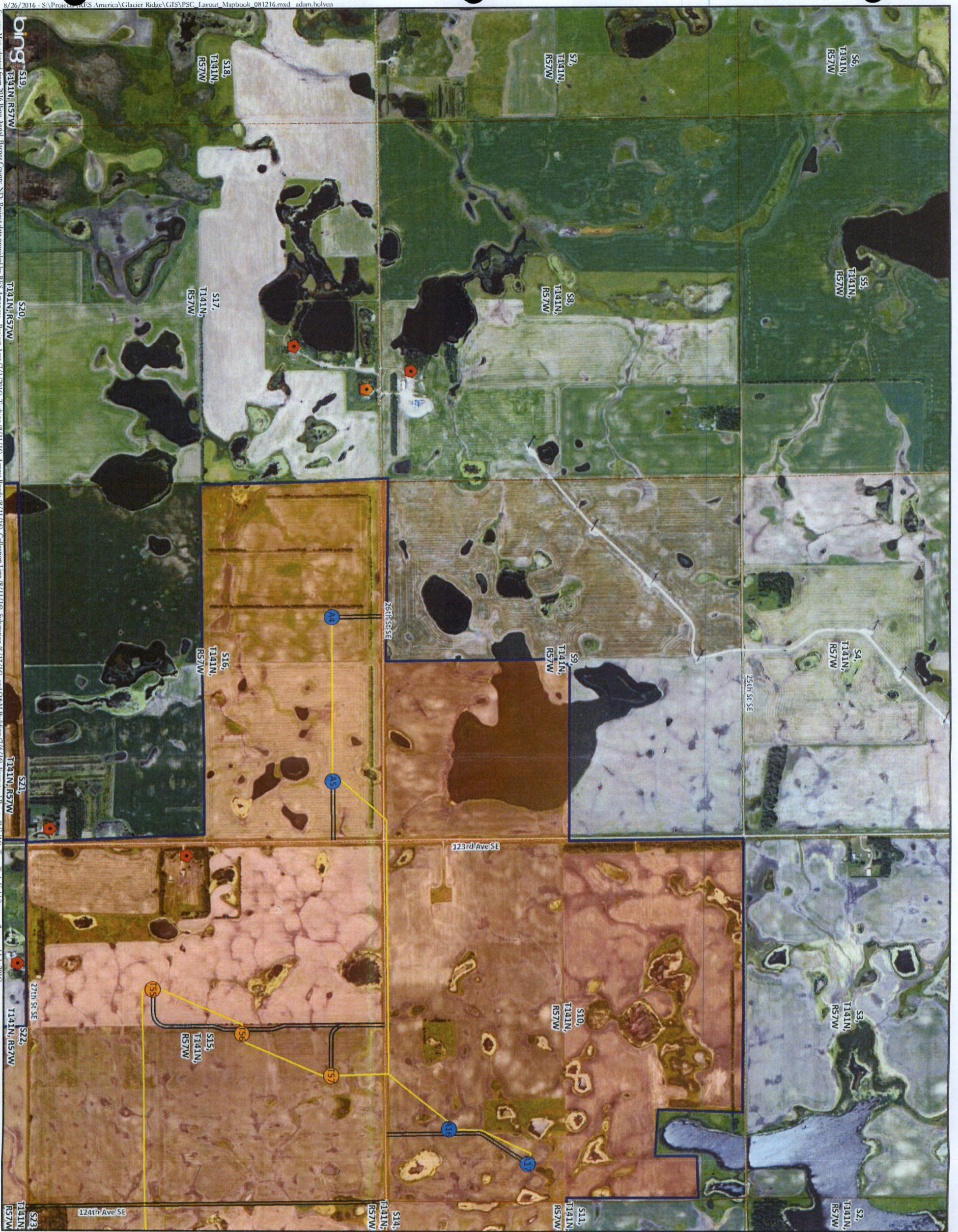
□ PLSS Boundary



Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 8



Project Area

Proposed Project Area (7/1/16)

Proposed Project Facilities

Proposed Turbine (8/11/16)

Alternate Turbine (8/11/16)

Proposed Service Road (8/11/16)

Proposed Collection Line (8/11/16)

* Proposed Met Tower (6/13/16)

Proposed O&M Building (7/6/16)

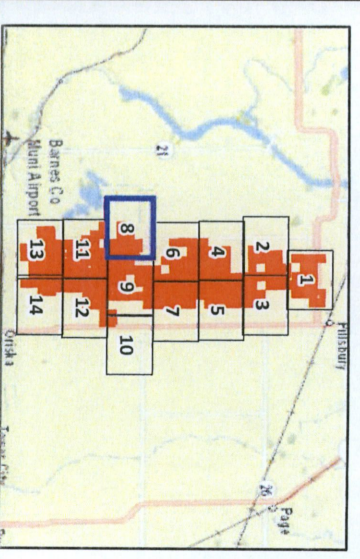
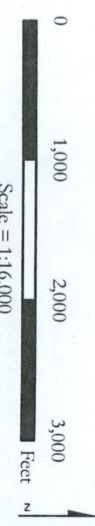
Residences

Participating (8/5/16)

Not Participating (8/5/16)

Non-Project Layers

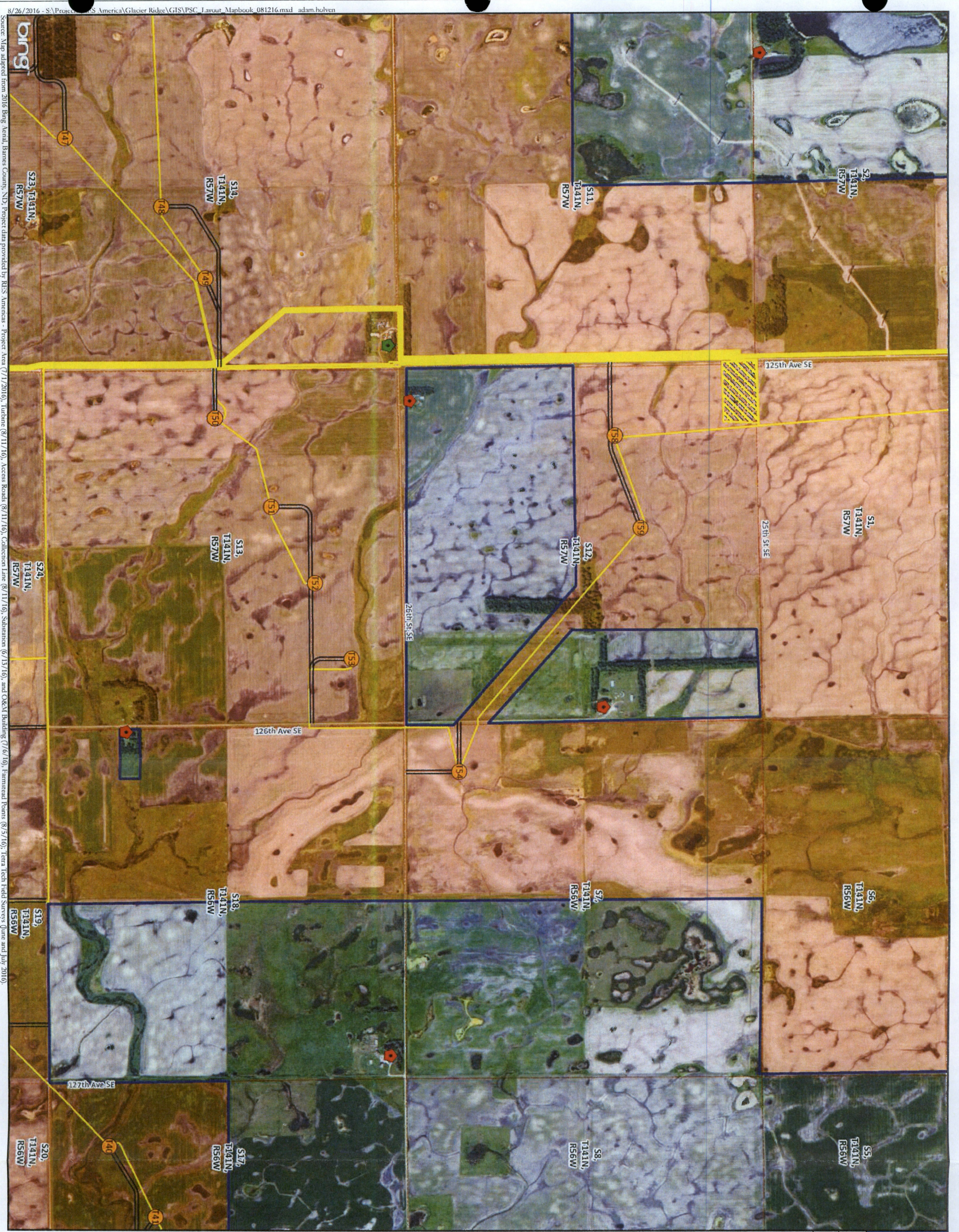
PLSS Boundary



Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 9



8/26/2016 - S:\Projects\GIS\America\Glacier Ridge\GIS\PSC_Layout_Mapbook_081216.mxd adam.hulven
Source: Map adapted from 2016 Bing Aerial, Barnes County, ND; Project data provided by RES Americas - Project Area (7/1/2016), Turbine (8/11/16), Access Roads (8/11/16), Collection Line (8/11/16), Substation (6/13/16), and O&M Building (7/6/16); Farmland Points (8/5/16); Terra Tech Field Surveys (June and July 2016).

- Project Area**
- Proposed Project Area (7/1/16)

Proposed Project Facilities

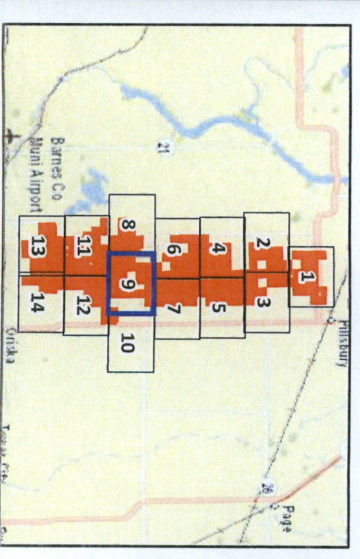
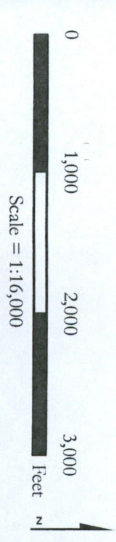
- Proposed Turbine (8/11/16)
- Alternate Turbine (8/11/16)
- Proposed Service Road (8/11/16)
- Proposed Collection Line (8/11/16)
- * Proposed Met Tower (6/13/16)
- ▨ Proposed O&M Building (7/6/16)

Residences

- ◆ Participating (8/5/16)
- ◆ Not Participating (8/5/16)

Non-Project Layers

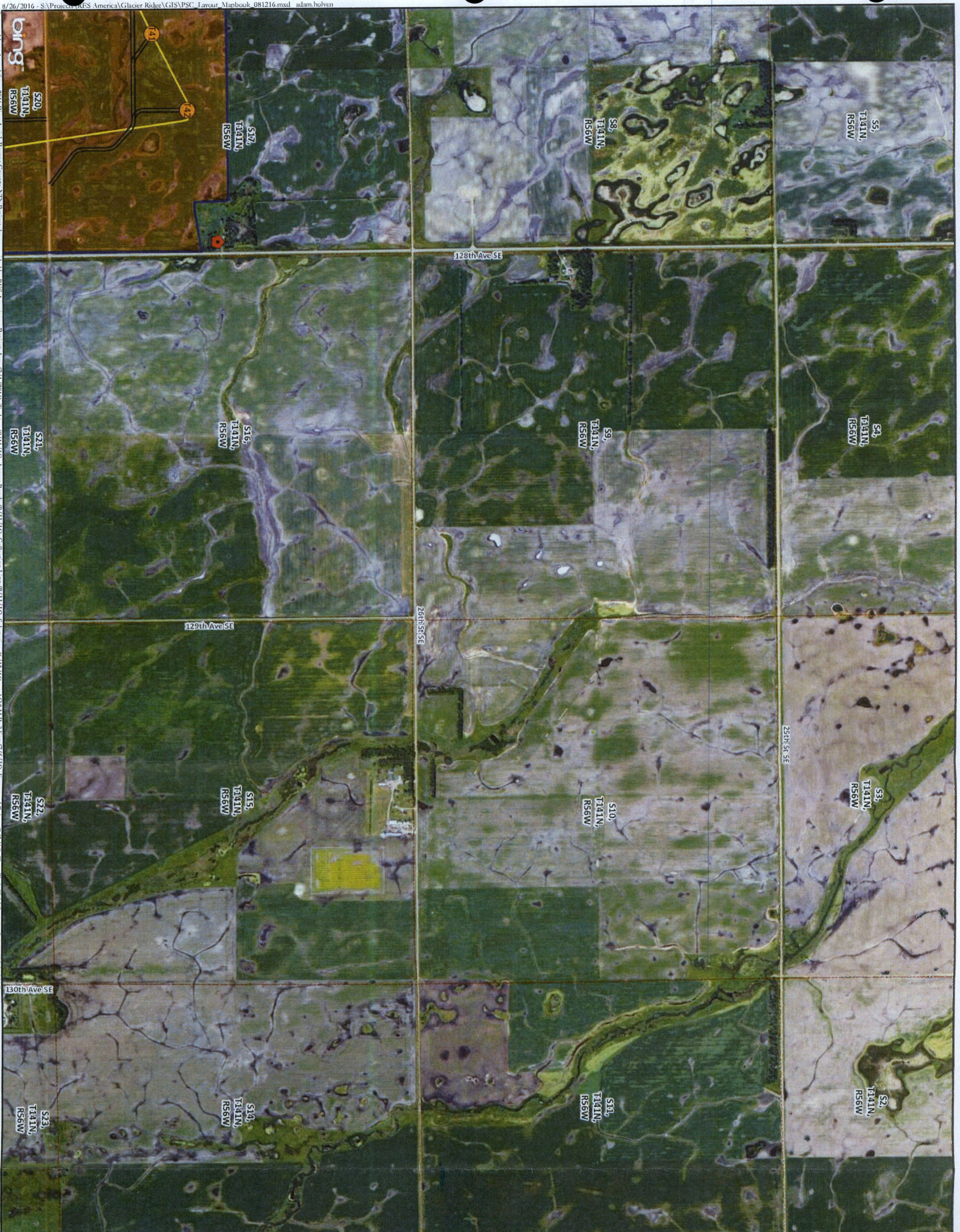
- PLSS Boundary



Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 10



Project Area

Proposed Project Area (7/1/16)

Proposed Project Facilities

Proposed Turbine (8/11/16)

Alternate Turbine (8/11/16)

Proposed Service Road (8/11/16)

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Proposed O&M Building (7/6/16)

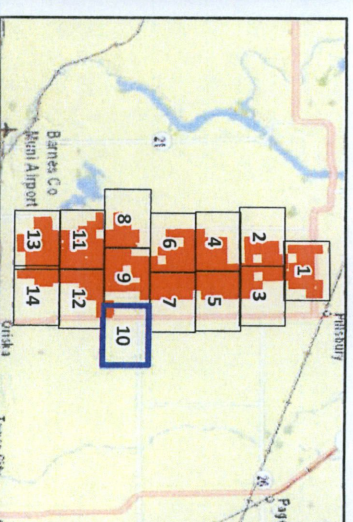
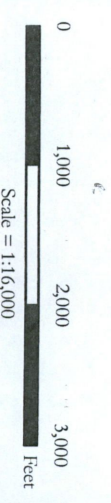
Residences

Participating (8/5/16)

Not Participating (8/5/16)

Non-Project Layers

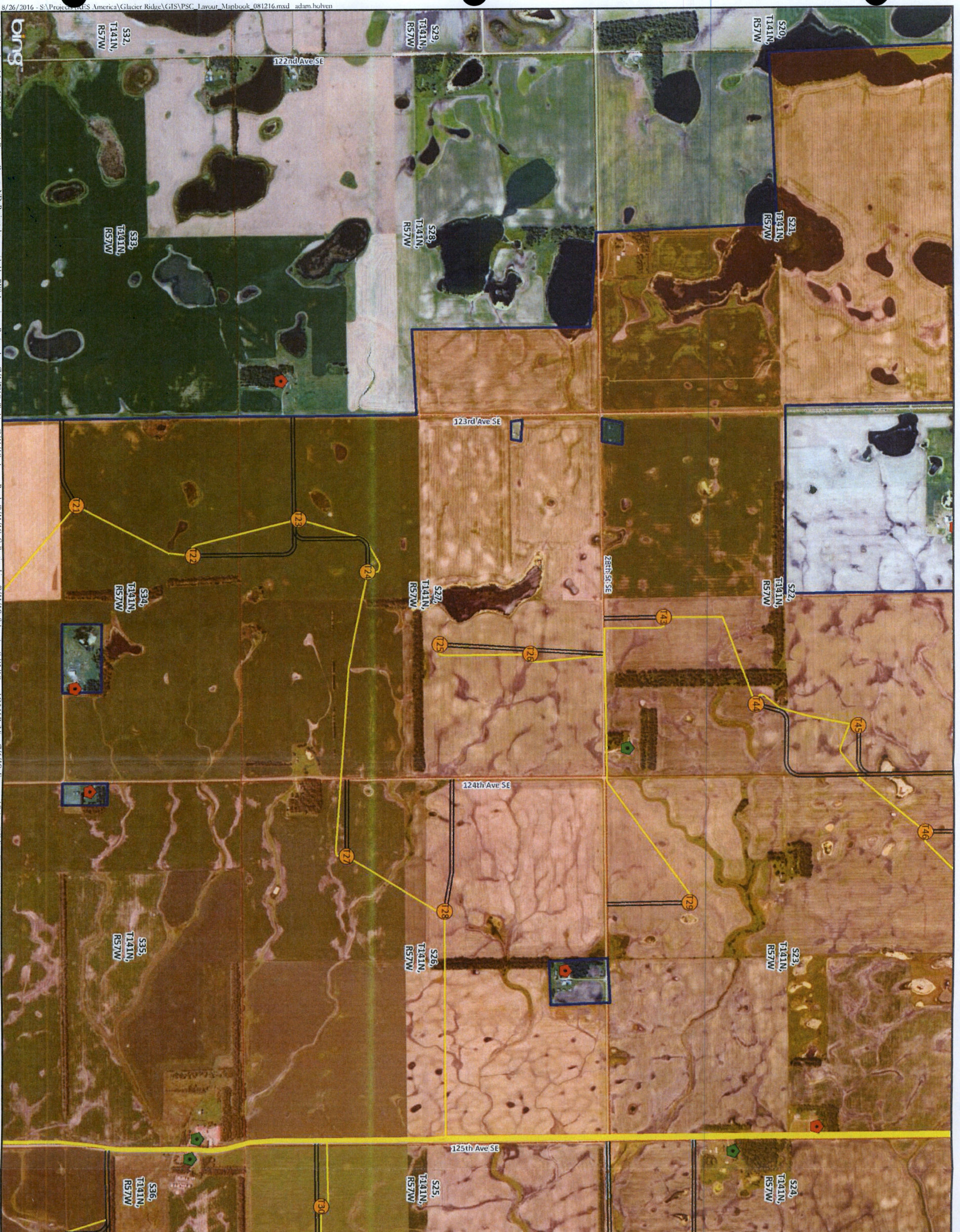
PLSS Boundary



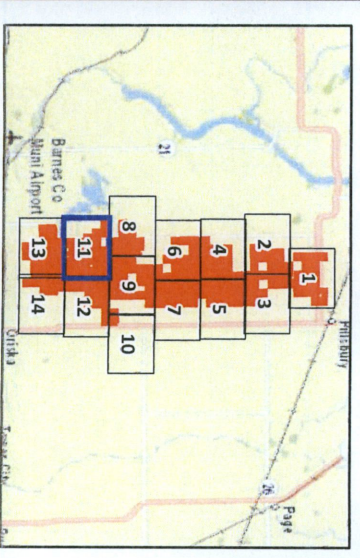
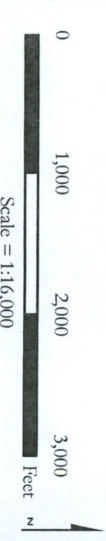
Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 11



- Project Area
- Proposed Project Area (7/1/16)
- Proposed Project Facilities**
- Proposed Turbine (8/11/16)
- Alternate Turbine (8/11/16)
- ══ Proposed Service Road (8/11/16)
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- Residences**
- ◆ Participating (8/5/16)
- ◆ Not Participating (8/5/16)
- Non-Project Layers
- PLSS Boundary



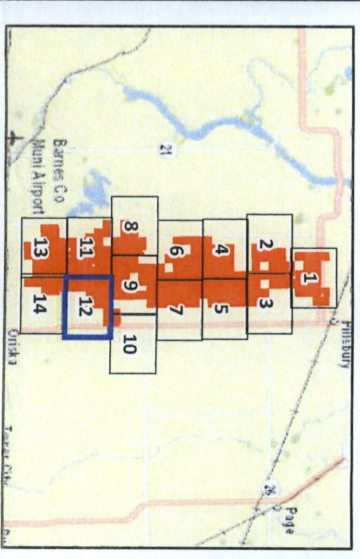
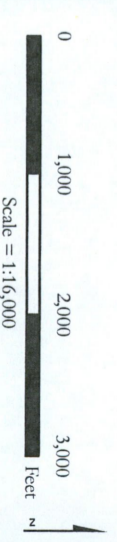
Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 12



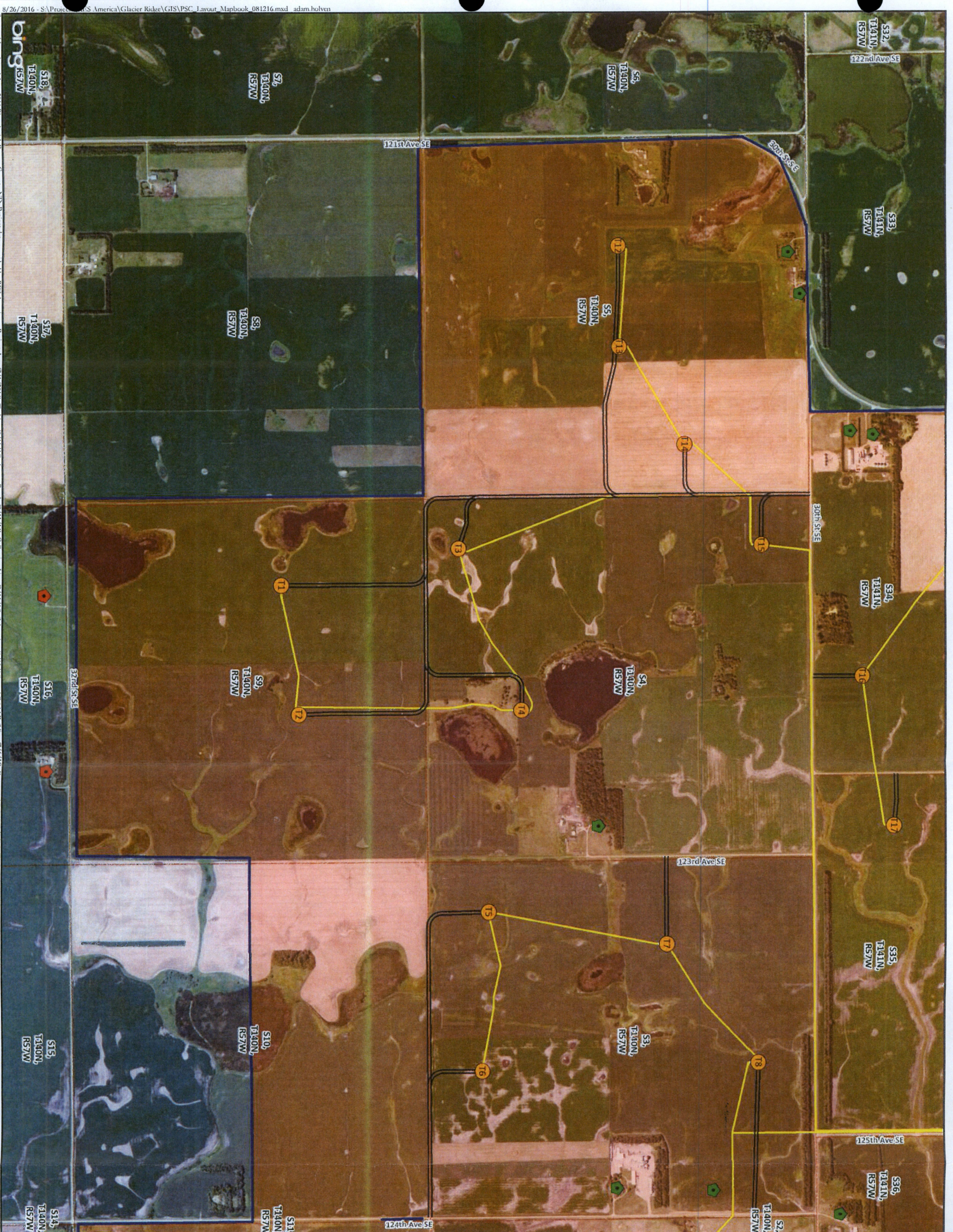
- Project Area
- Proposed Project Area (7/1/16)
- Proposed Project Facilities
- Proposed Turbine (8/11/16)
- Alternate Turbine (8/11/16)
- Proposed Service Road (8/11/16)
- Proposed Collection Line (8/11/16)
- * Proposed Met Tower (6/13/16)
- ▨ Proposed O&M Building (7/6/16)
- ◆ Residences
- ◆ Participating (8/5/16)
- ◆ Not Participating (8/5/16)
- Non-Project Layers
- PLS Boundary



Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 13



Project Area

Proposed Project Area (7/1/16)

Proposed Project Facilities

Proposed Turbine (8/11/16)

Alternate Turbine (8/11/16)

Proposed Service Road (8/11/16)

Proposed Collection Line (8/11/16)

* Proposed Met Tower (6/13/16)

Proposed O&M Building (7/6/16)

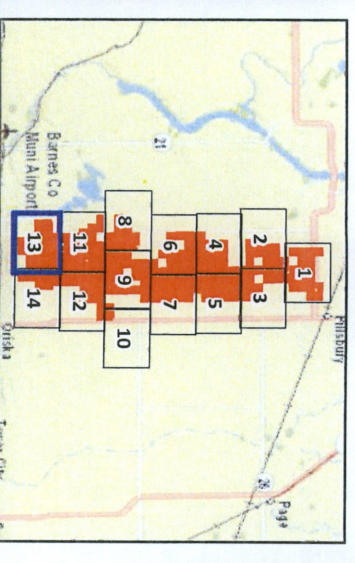
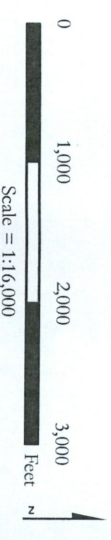
Residences

Participating (8/5/16)

Not Participating (8/5/16)

Non-Project Layers

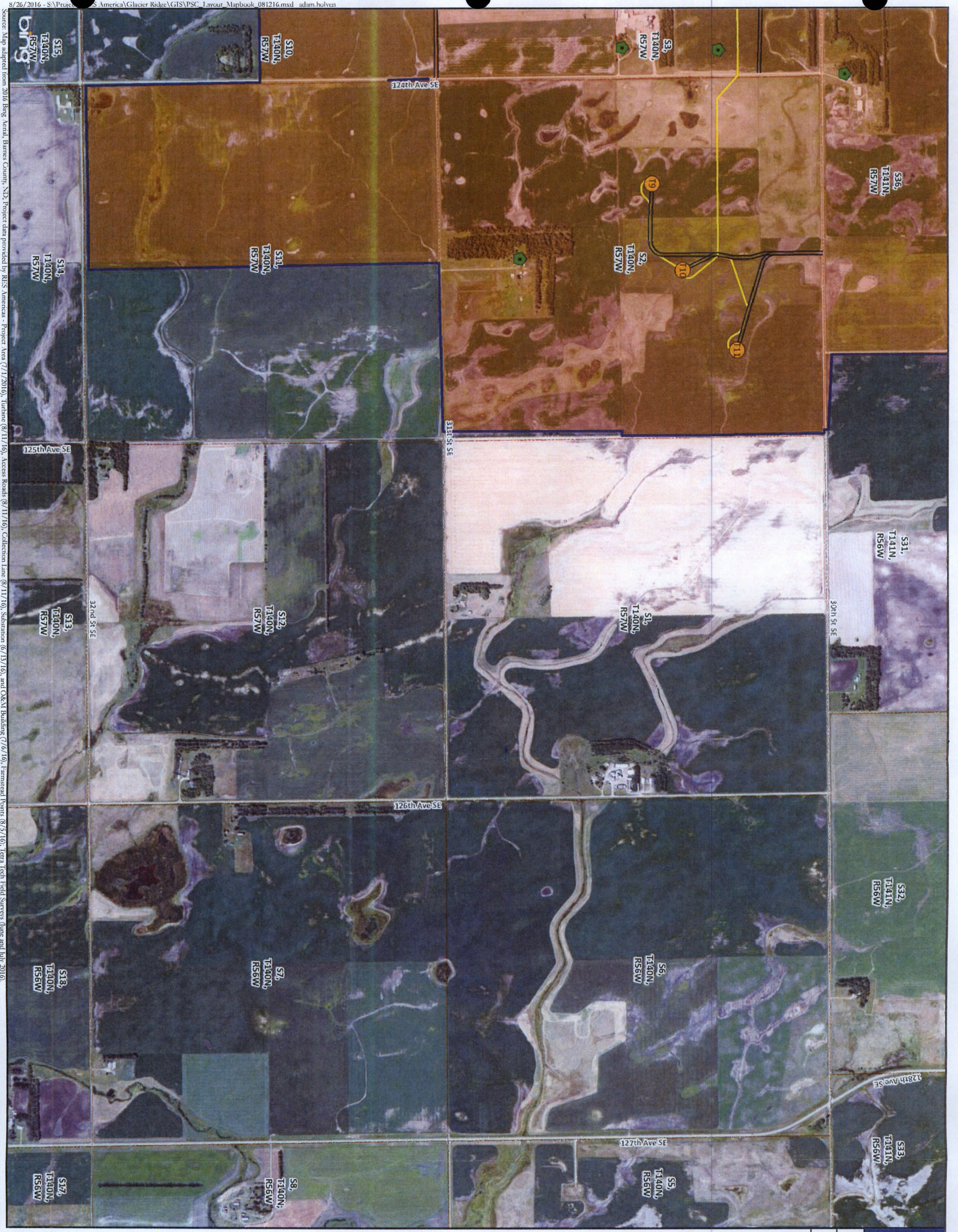
PLSS Boundary



Glacier Ridge Wind Farm

Barnes County, North Dakota

Map Page - 14



8/26/2016 - S:\Projects\USA\Glacier Ridge\GIS\PSC_Layout_Mapbook_081216.mxd adam.holven
Source: Map adapted from 2016 Bing, Aerial, Barnes County, ND. Project data provided by RLS Americas - Project Area (7/1/2016), Turbine (8/11/16), Access Roads (8/11/16), Collection Line (8/11/16), Substation (6/13/16), and O&M Building (7/6/16). Transient Points (8/5/16), Terra Tech Field Surveys (June and July 2016).

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- Proposed Project Facilities
- Proposed Turbine (8/11/16)
- Alternate Turbine (8/11/16)
- Proposed Service Road (8/11/16)
- Proposed Collection Line (8/11/16)
- * Proposed Met Tower (6/13/16)
- Proposed O&M Building (7/6/16)
- Residences
- Participating (8/5/16)
- Not Participating (8/5/16)
- Non-Project Layers
- PLSS Boundary

0 1,000 2,000 3,000 Feet

Scale = 1:16,000