

**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

**APPLICANT’S RESPONSES TO
STAFF’S FOURTH SET OF
DATA REQUESTS TO
CROWNED RIDGE WIND, LLC**

Attached, please find Applicant’s Responses to Staff’s Fourth Set of Data
Requests to Crowned Ridge Wind, LLC (“Crowned Ridge” or “Company”).

4-1) Referring to Crowned Ridge's response to Staff data request 3-3, please provide the following:

- i) An explanation as to why section 3 of the Sound Study (Appendix H to the Application) did not identify that Dakota Range I&II was included in the noise model,

Response: The Sound Study filed with the Application did not include the effects from the Dakota Range I & II wind project, as the Study focused on the sound resulting for the proposed Crowned Ridge Wind project. Subsequently, the effects of the Dakota Range I and II project were set forth on page 4 of Haley's Supplemental testimony.

- ii) An explanation as to why the sound pressure contours in Appendix D of the Sound Study do not appear to factor in the noise levels of the Dakota Range I & II wind turbines; and

Response: The sound pressure contours in Appendix D submitted with the Application only showed the effects of the proposed Crowned Ridge Wind project, as it focused on the effect from the proposed project. The results tables in the Sounds Study, however, did include the effects of all Dakota Range I and II and Crowned Ridge Wind II wind turbines.

- iii) Provide updated Standard Resolution Sound Maps as found in Appendix D of the Sound Study that includes on the map the Dakota Range I & II wind turbines that influence sound levels for receptors studied in the Crowned Ridge Project.

Response: Attached are updated maps that include rge iso-lines for both Dakota Range Wind I and II and Crowned Ridge Wind II turbines within 2 kilometers of Crowned Ridge Wind receptors.

Respondent: Jay Haley, Wind Engineer



www.eapc.net | 701.775.3000

**Crowned Ridge Wind Farm
Sound Pressure Iso-Lines
Overview Map**

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with occupied structures and parcel boundaries within 2 km.

Predicted sound pressure levels at existing residences and land parcel boundaries.

Additional 2 dBA added.

Location: Watertown, SD
Project #: 20174431

Issue Dates

#	Description	Date
1	Original	2019.05.03

Drawn By: AS *Checked By:* JH

Legend

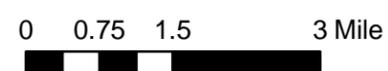
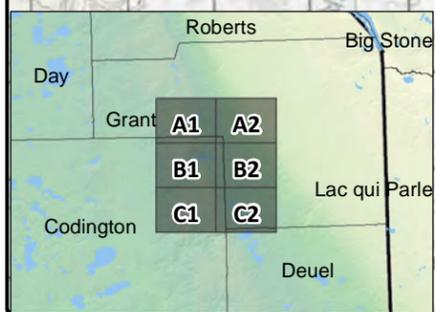
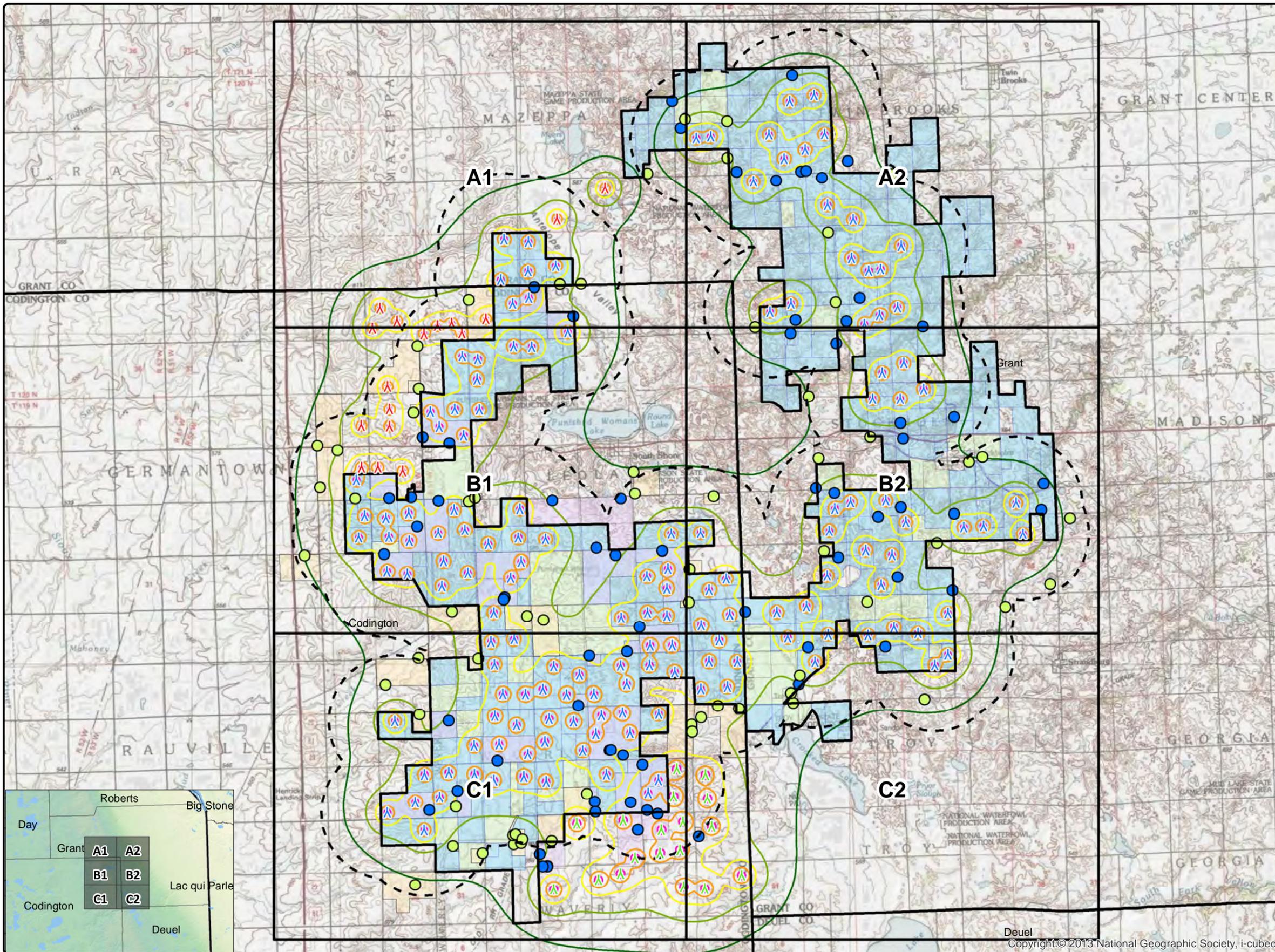
- Crowned Ridge Wind Turbines
- Crowned Ridge II Wind Turbines
- Dakota Range Wind Turbines
- 2 km Turbine Buffer
- County Lines
- CR1 Project Boundary
- Non-Participants
- Participants

Sound Pressure Level (dBA)

- 35
- 40
- 45
- 50
- 55

- Participating Codington Parcels
- Non-Part. Codington Parcels
- Participating Land Parcels
- Non-Participating Land Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.



Neither EAPC nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information disclosed on this drawing; or (b) assumes any liability with respect to the use of any information or methods disclosed on this drawing. Any recipient of this document, by their acceptance or use of this document, releases EAPC, its parent corporations and its affiliates, from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise, and irrespective of fault, negligence, and strict liability. The responsibilities for the applications and use of the material contained in this document remain solely with the client.



www.eapc.net | 701.775.3000

**Crowned Ridge Wind Farm
Sound Pressure Iso-Lines**

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with occupied structures and parcel boundaries within 2 km.

Predicted sound pressure levels at existing residences and land parcel boundaries.

Additional 2 dBA added.

Location: Watertown, SD
Project #: 20174431

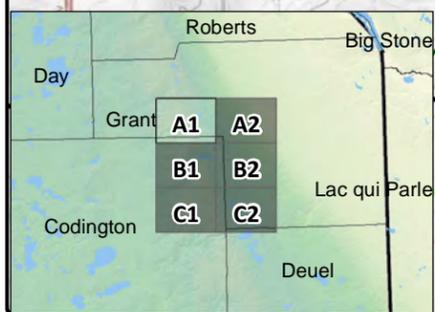
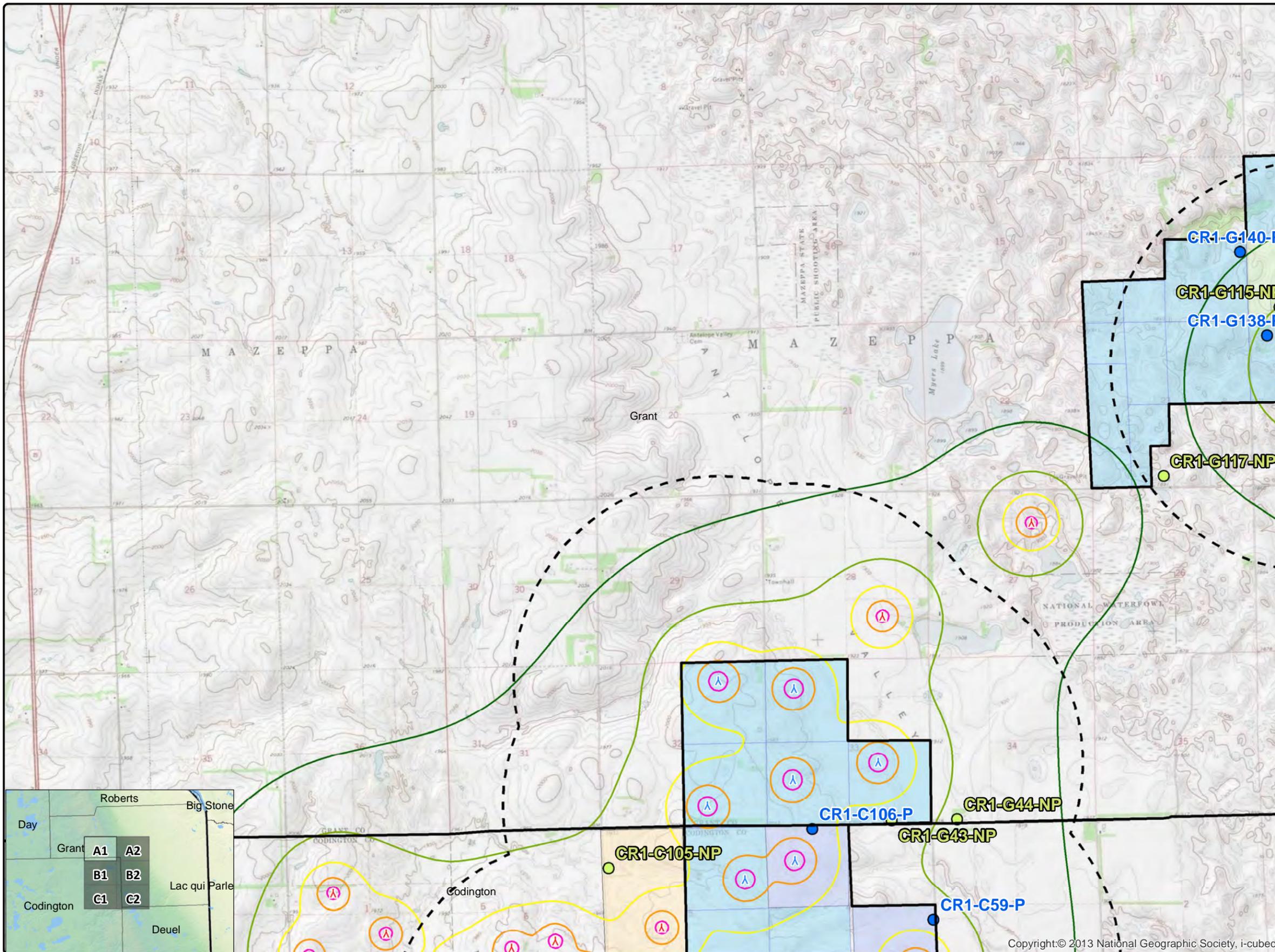
Issue Dates

#	Description	Date
1	Original	2019.05.03

Drawn By: AS Checked By: JH

- Legend**
- Crowned Ridge Wind Turbines
 - Crowned Ridge II Wind Turbines
 - Dakota Range Wind Turbines
 - 2 km Turbine Buffer
 - County Lines
 - CR1 Project Boundary
 - Non-Participants
 - Participants
- Sound Pressure Level (dBA)**
- 35
 - 40
 - 45
 - 50
 - 55
- Participating Codington Parcels
 - Non-Part. Codington Parcels
 - Participating Land Parcels
 - Non-Participating Land Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.



Neither EAPC nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information disclosed on this drawing; or (b) assumes any liability with respect to the use of any information or methods disclosed on this drawing. Any recipient of this document, by their acceptance or use of this document, releases EAPC, its parent corporations and its affiliates, from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise, and irrespective of fault, negligence, and strict liability. The responsibilities for the applications and use of the material contained in this document remain solely with the client.



www.eapc.net | 701.775.3000

**Crowned Ridge Wind Farm
Sound Pressure Iso-Lines**

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with occupied structures and parcel boundaries within 2 km.

Predicted sound pressure levels at existing residences and land parcel boundaries.

Additional 2 dBA added.

Location: Watertown, SD
Project #: 20174431

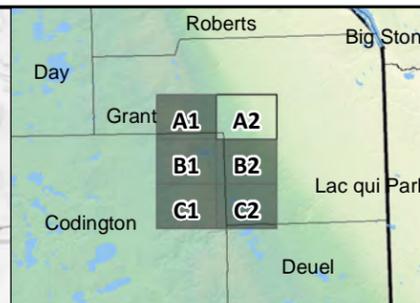
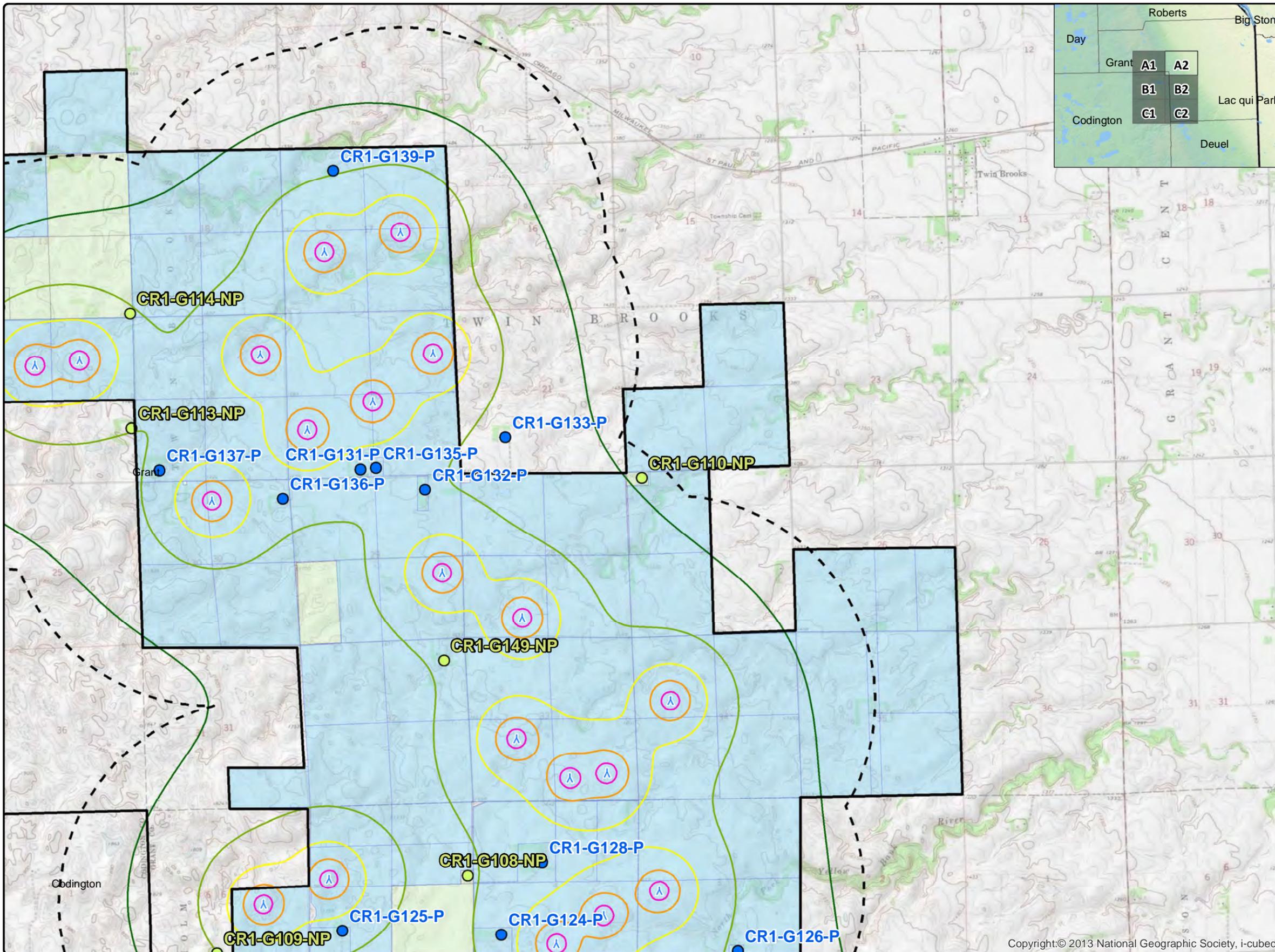
Issue Dates

#	Description	Date
1	Original	2019.05.03

Drawn By: AS Checked By: JH

- Legend**
- Crowned Ridge Wind Turbines
 - Crowned Ridge II Wind Turbines
 - Dakota Range Wind Turbines
 - 2 km Turbine Buffer
 - County Lines
 - CR1 Project Boundary
 - Non-Participants
 - Participants
- Sound Pressure Level (dBA)**
- 35
 - 40
 - 45
 - 50
 - 55
- Participating Codington Parcels
 - Non-Part. Codington Parcels
 - Participating Land Parcels
 - Non-Participating Land Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.



Neither EAPC nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information disclosed on this drawing; or (b) assumes any liability with respect to the use of any information or methods disclosed on this drawing. Any recipient of this document, by their acceptance or use of this document, releases EAPC, its parent corporations and its affiliates, from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise, and irrespective of fault, negligence, and strict liability. The responsibilities for the applications and use of the material contained in this document remain solely with the client.



www.eapc.net | 701.775.3000

**Crowned Ridge Wind Farm
Sound Pressure Iso-Lines**

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with occupied structures and parcel boundaries within 2 km.

Predicted sound pressure levels at existing residences and land parcel boundaries.

Additional 2 dBA added.

Location: Watertown, SD
Project #: 20174431

Issue Dates

#	Description	Date
1	Original	2019.05.03

Drawn By: AS Checked By: JH

Legend

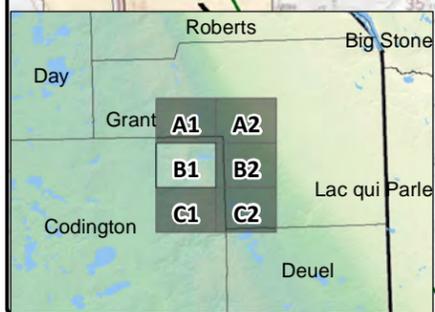
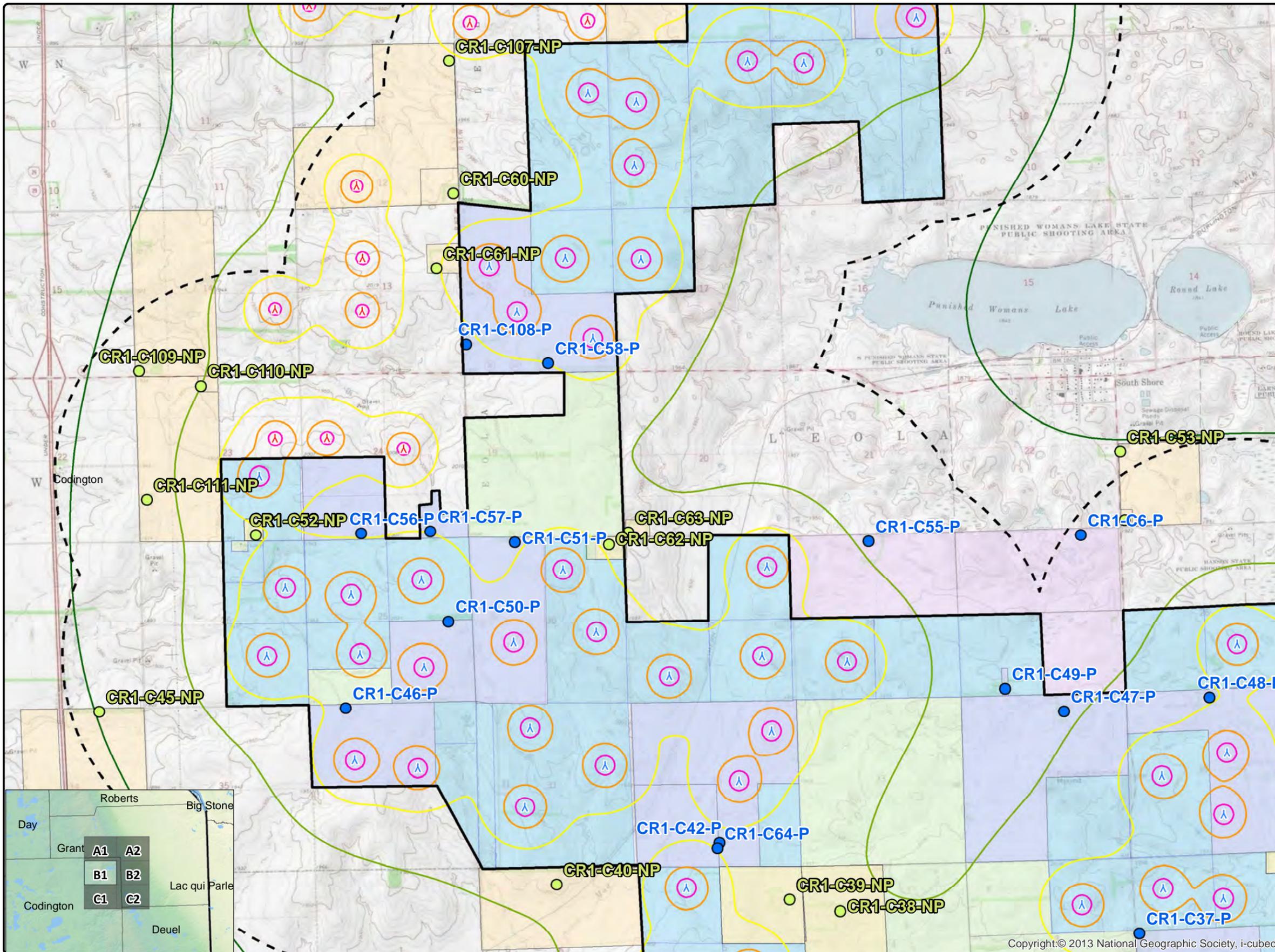
- Crowned Ridge Wind Turbines
- Crowned Ridge II Wind Turbines
- Dakota Range Wind Turbines
- 2 km Turbine Buffer
- County Lines
- CR1 Project Boundary
- Non-Participants
- Participants

Sound Pressure Level (dBA)

- 35
- 40
- 45
- 50
- 55

- Participating Codington Parcels
- Non-Part. Codington Parcels
- Participating Land Parcels
- Non-Participating Land Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.



Neither EAPC nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information disclosed on this drawing; or (b) assumes any liability with respect to the use of any information or methods disclosed on this drawing. Any recipient of this document, by their acceptance or use of this document, releases EAPC, its parent corporations and its affiliates, from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise, and irrespective of fault, negligence, and strict liability. The responsibilities for the applications and use of the material contained in this document remain solely with the client.



www.eapc.net | 701.775.3000

**Crowned Ridge Wind Farm
Sound Pressure Iso-Lines**

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with occupied structures and parcel boundaries within 2 km.

Predicted sound pressure levels at existing residences and land parcel boundaries.

Additional 2 dBA added.

Location: Watertown, SD
Project #: 20174431

Issue Dates

#	Description	Date
1	Original	2019.05.03

Drawn By: AS Checked By: JH

Legend

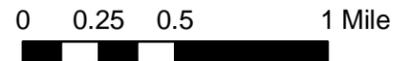
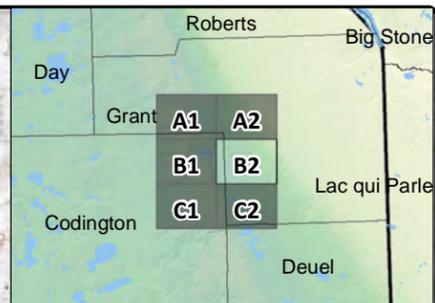
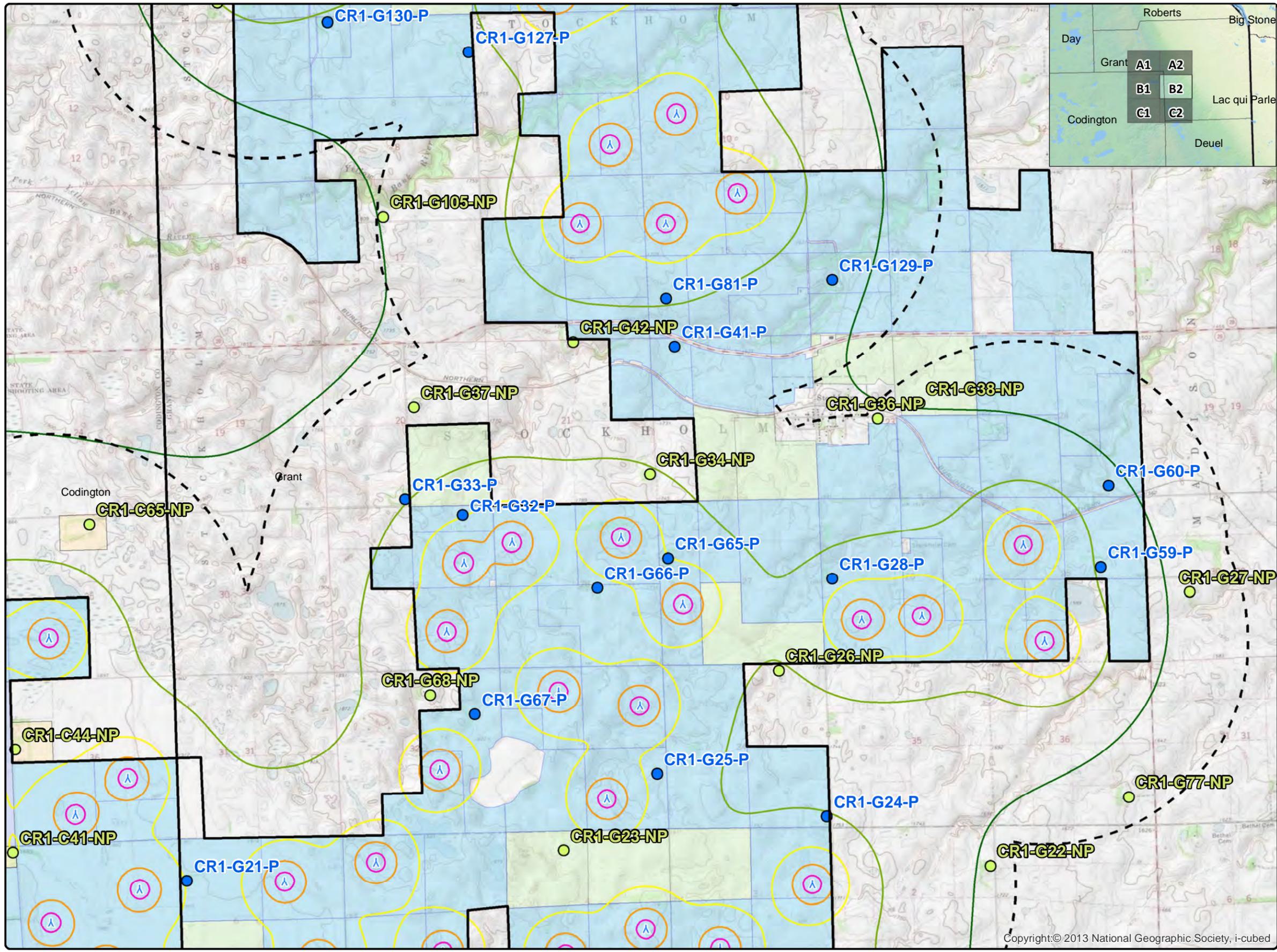
- Crowned Ridge Wind Turbines
- Crowned Ridge II Wind Turbines
- Dakota Range Wind Turbines
- 2 km Turbine Buffer
- County Lines
- CR1 Project Boundary
- Non-Participants
- Participants

Sound Pressure Level (dBA)

- 35
- 40
- 45
- 50
- 55

- Participating Codington Parcels
- Non-Part. Codington Parcels
- Participating Land Parcels
- Non-Participating Land Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.



Neither EAPC nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information disclosed on this drawing; or (b) assumes any liability with respect to the use of any information or methods disclosed on this drawing. Any recipient of this document, by their acceptance or use of this document, releases EAPC, its parent corporations and its affiliates, from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise, and irrespective of fault, negligence, and strict liability. The responsibilities for the applications and use of the material contained in this document remain solely with the client.



www.eapc.net | 701.775.3000

**Crowned Ridge Wind Farm
Sound Pressure Iso-Lines**

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with occupied structures and parcel boundaries within 2 km.

Predicted sound pressure levels at existing residences and land parcel boundaries.

Additional 2 dBA added.

Location: Watertown, SD
Project #: 20174431

Issue Dates

#	Description	Date
1	Original	2019.05.03

Drawn By: AS Checked By: JH

Legend

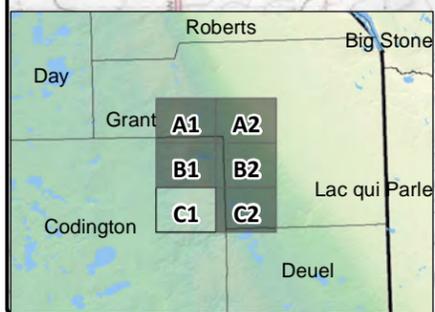
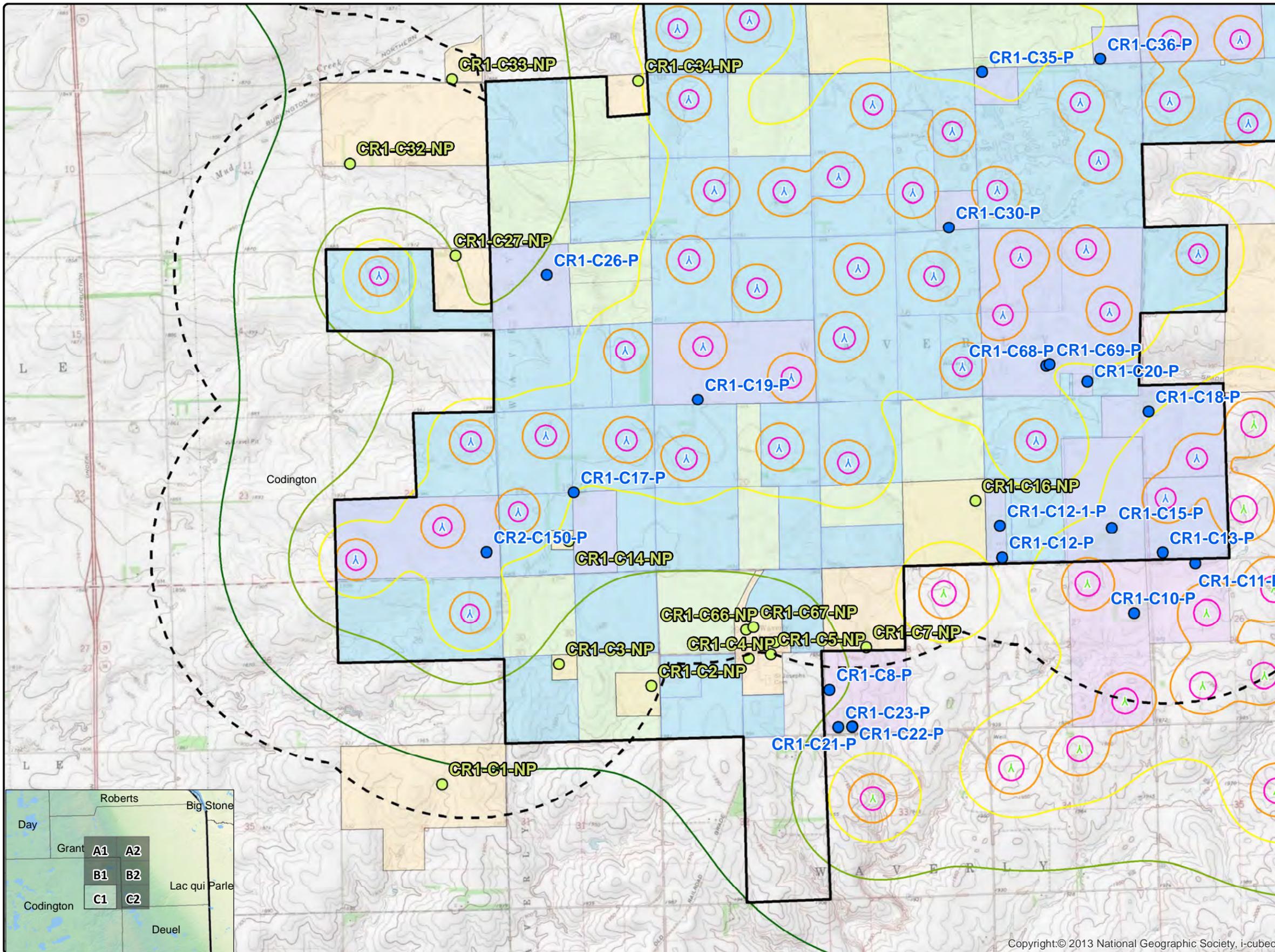
- Crowned Ridge Wind Turbines
- Crowned Ridge II Wind Turbines
- Dakota Range Wind Turbines
- 2 km Turbine Buffer
- County Lines
- CR1 Project Boundary
- Non-Participants
- Participants

Sound Pressure Level (dBA)

- 35
- 40
- 45
- 50
- 55

- Participating Codington Parcels
- Non-Part. Codington Parcels
- Participating Land Parcels
- Non-Participating Land Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.





www.eapc.net | 701.775.3000

**Crowned Ridge Wind Farm
Sound Pressure Iso-Lines**

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with occupied structures and parcel boundaries within 2 km.

Predicted sound pressure levels at existing residences and land parcel boundaries.

Additional 2 dBA added.

Location: Watertown, SD
Project #: 20174431

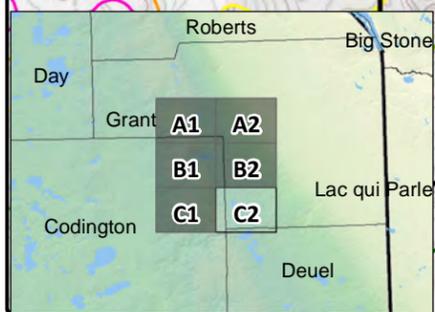
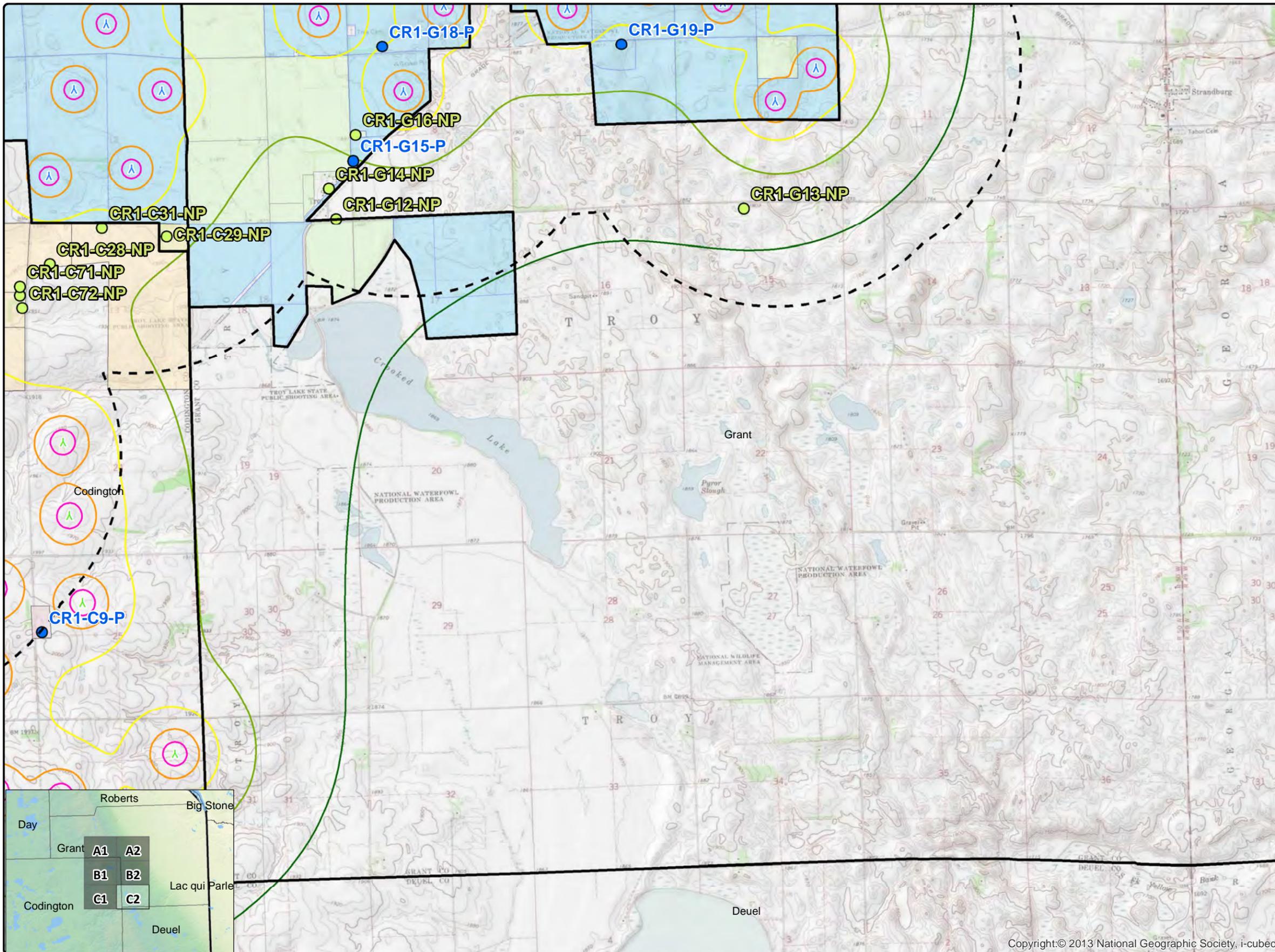
Issue Dates

#	Description	Date
1	Original	2019.05.03

Drawn By: AS *Checked By:* JH

- Legend**
- Crowned Ridge Wind Turbines
 - Crowned Ridge II Wind Turbines
 - Dakota Range Wind Turbines
 - 2 km Turbine Buffer
 - County Lines
 - CR1 Project Boundary
 - Non-Participants
 - Participants
- Sound Pressure Level (dBA)**
- 35
 - 40
 - 45
 - 50
 - 55
- Participating Codington Parcels
 - Non-Part. Codington Parcels
 - Participating Land Parcels
 - Non-Participating Land Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.



Copyright:© 2013 National Geographic Society, i-cubed

Neither EAPC nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information disclosed on this drawing; or (b) assumes any liability with respect to the use of any information or methods disclosed on this drawing. Any recipient of this document, by their acceptance or use of this document, releases EAPC, its parent corporations and its affiliates, from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise, and irrespective of fault, negligence, and strict liability. The responsibilities for the applications and use of the material contained in this document remain solely with the client.