A REPORT FOR CLASS III ARCHAEOLOGICAL SURVEY

Badger Wind Project – 2023 Expansion Areas (Addendum Spring 2024 Fieldwork)

Logan and McIntosh Counties, North Dakota

MAY 24, 2024

SHPO REFERENCE NO. 22-0020 (ADDENDUM)

PREPARED FOR:

Ørsted

PREPARED BY:

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Westwood

Class III Archaeological Survey

Badger Wind Project – 2023 Expansion Areas (Addendum Spring 2024 Fieldwork)

Logan and McIntosh Counties, North Dakota

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Project Number: R0031120.00
Date: May 24, 2024
SHPO Reference No.: 22-0020 (Addendum)

Abstract

Ørsted Onshore North America, LLC (Ørsted) retained Westwood Professional Services, Inc. (Westwood), to conduct an archaeological survey in support of developing the Badger Wind Project (Project or Project Area) in Logan and McIntosh counties, North Dakota. This report is being provided to Ørsted as an addendum to previous work conducted by Westwood in October and November of 2023 (Glaab 2024). The work performed by Westwood in 2023 and 2024 is for an expansion of the Project and supplements previous surveys performed by Cultural Resource Analysts, Inc in 2022 (Ferriman and Thurman 2022; Thurman and Weston 2022). It is assumed the Project is being conducted at a state level review due to anticipated requirements of the Public Service Commission (PSC) as part of the Certificate of Site Compatibility (Site Permit) required under the North Dakota Energy Conversion and Transmission Facility Siting Act (North Dakota Century Code Chapter 49-22).

The North Dakota State Historic Preservation Office (SHPO) requires that cultural resource investigations be conducted by qualified archaeologists who meets the Secretary of the Interior's qualifications as outlined in 36 Code of Federal Regulations (C.F.R.) 61. Westwood archaeologist Rigden Glaab, Master of Arts (MA), Register of Professional Archaeologists (RPA), meets these qualifications and directly oversaw all cultural resource work. Ryan Grohnke, Bachelor of Arts (BA), Registered Archaeologist (RA), served as Cultural Resource Manager for the Project facilitating client interactions and budget management. Mr. Glaab and Mr. Grohnke are permitted to conduct archaeological investigations in North Dakota.

Fieldwork on the Project was carried out carried out May 8 and 9, 2024, over the course of one field session. Fieldwork was overseen by Principal Investigator Rigden Glaab, MA, RPA. Mr. Glaab utilized pedestrian survey to examine the APE, which are locations of proposed ground disturbance. The cultural resource surveys were conducted to comply with state permitting requirements. The archaeological survey was completed within the Area of Potential Effect (APE) of the Project as currently designed. The APE currently consists of locations of potential ground disturbance including the proposed locations of access roads, turbines, MET towers, and utility corridors (e.g., crane paths, collections lines, gen-tie, and fiber optic lines). The APE surveyed by Westwood in 2024 is 74.3 acres.

No new or previously recorded cultural resources were identified in the current APE. No further avoidance measures are recommended on behalf of Ørsted by Westwood. Should any proposed Project design be located outside of previously constructed or previously surveyed areas, that aspect of the design should first be surveyed for unrecorded cultural resources.

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1.0 Introduction

Ørsted Onshore North America, LLC (Ørsted) contracted Westwood Professional Services, Inc. (Westwood), to perform a Class III Archaeological Survey of the Badger Wind Project in Logan and McIntosh counties, North Dakota (Project or Project Area; **Exhibits 1** and **2**; **Appendix A**). The current inventory is an addendum to previous work conducted by Westwood in October and November of 2023 (Glaab 2024). The content of this document reflects the Project based on client layout in a KMZ dated to May 2024.

The Project's proposed 250 megawatts (MW) generating capacity is conceptually placed on 35,227 acres of leased land. In 2024, Westwood conducted a Class III Archaeological Survey of the Area of Potential Effects (APE), which is for additional expansion areas of the Project encompassing 74.3 acres in this conceptual area. This 74.3-acre APE currently covers aspects of Project developments including the proposed locations of access roads, turbines, MET towers, and utility corridors (e.g., crane paths, collections lines, gen-tie, and fiber optic lines). This work also supplements previous surveys performed for the Project by Cultural Resource Analysts, Inc. (CRA) in 2022 (Ferriman and Thurman 2022; Thurman and Weston 2022) as well as the 2023 Westwood investigations. This report is being provided to Ørsted to discuss the cultural resources present in the Project identified during Westwood's May 2024 survey. The Project is being conducted at a state-level review due to anticipated requirements of the Public Service Commission (PSC) as part of the Certificate of Site Compatibility (Site Permit) required under the North Dakota Energy Conversion and Transmission Facility Siting Act (North Dakota Century Code Chapter 49-22).

The Project surrounds the town of Wishek, North Dakota, in Logan and McIntosh counties. The legal location of the Project is listed in **Table 1** below.

Table 1: Legal Location of the Badger Project (Spring 2024 Survey Areas)

Township (T)	Range (R)	Section	County	Study Unit
132 N	70 W	7	McIntosh	SM
132 N	71 W	7, 8, 19, 21, 30, 33	McIntosh	SM
132 N	72 W	2, 10, 11	McIntosh	SM
133 N	70 W	17, 18, 29, 32	Logan	SM
133 N	71 W	5, 18, 31	Logan	SM
133 N	72 W	25, 36	Logan	SM

The North Dakota State Historic Preservation Office (SHPO) requires that archaeological investigations be conducted by a qualified archaeologist who meets the Secretary of the Interior's qualifications as outlined in 36 Code of Federal Regulations (C.F.R.) 61. The North Dakota SHPO also outlines standards and guidelines for conducting work in the state. Rigden Glaab, Master of Arts (MA), Register of Professional Archaeologists (RPA), of Westwood meets the Secretary of Interior's Professional Standards for Archaeology, as stipulated in 36 C.F.R. Part 61, and served as Principal Investigator for the archaeological survey. Mr. Glaab resides in North Dakota and has performed cultural resource inventories in the state since 2011. Westwood's Cultural Resources Manager, Ryan Grohnke, provided administrative oversight in schedule development and client communication.

2.0 Scope of Work

A Class III Archaeological Survey was conducted to determine whether any undocumented, significant archaeological resources are present within the proposed Project's APE and to define vertical and horizontal boundaries of identified sites. If new sites are identified, archaeologists assess proposed construction impacts and provide recommendations on avoidance or additional work. The APE for this Project is any location where ground disturbance could occur, including the entire 74.3-acre APE surveyed by Westwood in May of 2024 (**Exhibits 1** and **2**). This APE surveyed by Westwood excludes all areas previously surveyed.

3.0 Survey Methods

Project survey methods included background research, a literature review, and field investigations in the form of pedestrian survey. Environmental background and historic contexts were used to assess site probability and determine site types most likely to be encountered in the area. A catalog of previously identified and recorded cultural resources for the area was compiled from the records maintained at the North Dakota SHPO. The data collected from these sources includes the state archaeological site files, historic property files, the North Dakota National Register inventory, and archival collections of published and unpublished reports of previous cultural resource investigations. (See **Section 5: Literature Review**.)

The Class III Archaeological Survey of the Project consisted of reviewing minor changes to the design layout that were previously surveyed by Westwood (Glaab 2024). Westwood inspected proposed turbines (250-foot radius), access roads (100 feet wide), collection lines/crane walks (75 feet wide), and turning radii (150-foot buffer). Crane walks were assumed to be along same corridors as collection lines. No shovel testing was performed due to the excellent ground surface visibility (GSV) across the project (e.g., 75–95 percent). Potential locations excluded from survey were wetlands, terrain with a significant slope (greater than 20 percent), and obviously disturbed areas. GPS equipment was utilized for project mapping.

4.0 Results of Background Investigations

4.1 Environmental Background

The Project is located in a sparsely populated agricultural region of south-central North Dakota in Logan and McIntosh counties surrounding the town of Wishek (**Exhibits 1** and **2**). The entirety of the Project is located on agricultural land with corn, wheat, hay, and soybeans being the dominant crops. Rocky fields unsuitable for cultivation are also commonly used for livestock pasture. GSV throughout the Project ranged from 60 percent to 95 percent.

4.1.1 Landscape and Climate

The Project is located in the Southern Missouri River Study Unit as defined by the North Dakota SHPO in Logan and McIntosh counties (Gregg et al. 2021:5.6). This study unit is located in the Glaciated Missouri Plateau Subsection of the Missouri Plateau Section of the Great Plains physiographic province (Bluemle 2016). The Project region broadly encompasses aspects of the Missouri Coteau and Coteau Slope east of the Missouri River Trench. The Coteau region was

formed by glacial dead-ice moraines and ice-disintegration features, which also includes potholes and sloughs. Beaver Creek is the largest drainage in the Project Area, which is located north and northwest of the Project (Gregg et al. 2021:5.7).

The climate of the Project Area is characterized as a semiarid continental type with significant seasonal fluctuation in temperatures. For example, the mean temperature in January is 9° Fahrenheit (F), while the mean temperature in July is 72° F (Gregg et al. 2021:5.7). The Project Area receives an average of 14 to 17 inches (in) per year (Gregg et al. 2021:5.7). Temperatures during Westwood's October and November 2023 fieldwork ranged from 20° F to 45° F that included intermittent snowstorms. Westwood field measurements in 2023 were taken using weather applications, such as WeatherBug.

4.1.2 Flora and Fauna

Prior to European settlement in the region, grasses would have dominated a Prairie Grassland Biome. Forested areas in the region tend to be concentrated along the major drainages (e.g., Beaver Creek, Missouri River). Common native trees in these locations include cottonwoods (*Populus* sp.), bur oak (*Quercus* sp.), willow (*Salix* sp.), box elder (*Acer negundo*), and green ash (*Fraxinus lanceolate*; Gregg et al. 2021:5.9). Endemic prairie grasses are green needlegrass (*Stipa viridula*), blue grama (*Bouteloua gracilis*), and western wheatgrass (*Agropyron smithii*). Prairie turnip (*Psoralea esculenta*) was an important vegetal food source for Native Americans in the past.

Common large mammals historically in the Project Area were white-tailed deer (*Odocoileus virginianus*), mule deer (*Odocoileus hemionus*), bison (*Bison bison*), elk (*Cervus elaphus*), and antelope (*Antilocapra americana*). Predators include wolf (*Canis lupis*), coyote (*Canis latrans*), and fox (*Vulpes* sp.). Catfish (*Ictalurus* sp.) was a common fish that would have been available to Native Americans in the Project Area. Various turtles and mussels would have been procured along drainages. Eagles, hawks, owls, pelicans, and a diverse assortment of waterfowl are also present seasonally across the Project today.

4.1.3 Soils

Westwood, and Thurman and Weston (2022) reviewed the Project Area in the Web Soil Survey database, which is maintained by the Natural Resources Conservation Service (NRCS 2023). The Project Area is characterized by loams overlaying horizons of clay loams that cover a substrate of gravely and sandy loams. Common soil series across the Project are Typic Calciustolls, Typic Pachic Argiustolls, and Typic Pachic Haplustolls (NRCS 2023). Soils of these types develop in very deep, well-drained contexts of till and alluvium on glacial plains and moraines (Thurman and Weston 2022).

4.1.4 Geology and Geomorphology

According to macrostrat.org (2023), the bedrock geology of the Project Area is comprised of the Hell Creek Formation and Fox Hills Formation, which are Late Cretaceous-age (100.5–66 million years ago) stratigraphic units. Pierre Formation shales are also present. The major lithology of the Hell Creek Formation is sandstone, siltstone, and claystone, while the Fox Hills Formation is made up of principally shale. These layers formed during the retreat of the Western Interior Seaway. The geomorphology of the Project Area surface is comprised of rolling hills with interspersed pothole lakes and wetlands (Wilk et al. 2022:4–5). Glacial deposits from the

Pleistocene cover the region and consist of sand and gravel outwash ranging in thickness from 0 to 50 feet (Wilk et al. 2022:4–5).

4.2 Cultural History

In general, there are five major archaeological traditions in North Dakota that consist of the Paleoindian, Plains Archaic, Plains Woodland, Plains Village, and the Contact and Post-Contact periods (Gregg et al. 2021). These traditions represent varying degrees of cultural adaptations to changing environmental conditions, endemic population growth, and the movement of Native American and Euroamerican groups in the past. The following cultural context presents a brief interpretation of this history based on current archaeological research and broadly accepted models for Pre-Contact and Post-Contact social lifeways. Gregg et al. (2021) have synthesized this work in the *Southern Missouri River Study Unit* of the *North Dakota Comprehensive Plan for Historic Preservation: Archaeological Component*.

4.2.1 Paleoindian Period (13,000 to 9000 Before Present [B.P.])

The Paleoindian Period represents the earliest evidence of human occupation in North Dakota. This is typically separated into an Early Paleoindian (13,000–12,500 B.P.) and Late Paleoindian (12,500–9000 B.P.) periods (Frison 1998; Gregg et al. 2021). Spear technology is important during this time frame, as opposed to the emphasis on atlatl and bow and arrow lithic technology seen during later periods. This reflects a subsistence strategy focused on large game hunting and high mobility (Gregg et al. 2021:5.61).

Clovis culture is commonly regarded as the earliest occupation in North Dakota during the Early Paleoindian Period. Its signature implement, the Clovis projectile point, is made from high quality lithic materials, and has a central channel flake that extends part way up the proximal shaft of the tool (Frison 1998). Folsom is another technology that temporally follows Clovis during the Paleoindian Period. Its projectile point is typically also made from high quality materials; however, the central channel flake extends the entire length of the implement to the distal tip (Hofman 1995).

The Late Paleoindian Period in North Dakota is characterized by an unfluted variety of projectile points similar to earlier lanceolate forms that are associated with the Plano Complex (Dobbs 1990). Agate Basin, Eden, Hell Gap, and Scottsbluff are varieties of projectile points found during this time, which are often associated with bison kill sites (Gregg et al. 2021:5.62).

4.2.2 Plains Archaic Period (9000 to 2500 B.P.)

Approximately 9000 B.P., a new mode of subsistence strategy began to emerge in the archaeological record across North America (Emerson et al. 2011). The general pattern of this change is the replacement of lanceolate spear points used during the Paleoindian Period, and the adoption of atlatl technology with the presence of some ground stone implements. This represents a fundamental difference from earlier forager behavior with a diversification of economy that incorporated more plants into the diets of Native Americans (Gregg et al. 2021:5.62–5.63).

Xeric environmental conditions began around 9000 B.P. with the spread of prairie grassland across much of North Dakota and western Minnesota (Anfinson 1997). Many of the lakes that had been created as a product of Pleistocene glaciation started to dry during this time leading to

a reduction in game (e.g., bison, fish, birds, etc.) dependent on these resources. These environmental transformations promoted a diversification in hunting strategies, which differed dramatically from the Paleoindian Period (Gregg et al. 2021:5.62–5.63). The Plains Archaic Period is found across North Dakota and western parts of Minnesota representing an adaption to grassland environments.

4.2.3 Plains Woodland Tradition (3000 B.P. to 950 B.P.)

Substantial cultural changes began to occur in North Dakota approximately 2,500 to 3,000 years ago with Native American adaptations mirroring broader trends across the southern and eastern US (Arzigian 2008). This timeframe, known as the Woodland Period, is marked by the presence of burial mounds, pottery, bow and arrow technology (ca. 1450 B.P.), and intensive plant cultivation. Archaeological settlement patterns show Native American groups beginning to aggregate into larger populations along lakes, rivers, and associated drainages. The "Three Sisters" of squash, beans, and corn were grown in small garden plots, which were further supplemented with other resources, such as fish and aquatic mammals (Gregg et al. 2021:5.70–5.71).

Woodland archaeological sites are often broken into one of a classic tripartite temporal division of Early Woodland (3000–2150 B.P.), Middle Woodland (2150–1450 B.P.), and Late Woodland (1450–950 B.P.) periods (Emerson et al. 2008). Traditionally, variations in the Woodland Period across time and space are argued to derive from broader influences that shaped significant trends in cultural practices. These interaction spheres include the Adena (Early Woodland Period), Hopewell (Middle Woodland Period), and Mississippian (Late Woodland Period) cultures (Anfinson 1997; Gibbon 2012; Gregg et al. 2021).

4.2.4 Plains Village Period (950 B.P. to European Contact)

The Woodland Period ends throughout most of North Dakota and surrounding regions around 950 B.P. (Arzigian 2008; Gibbon 2012). The dominant major regional influence was the site of Cahokia in the American Bottom near the modern city of St. Louis, Missouri, on the Mississippi River (Pauketat 2009). A widespread cultural complex called Oneota to the east of North Dakota is concurrent with the regional influences of Cahokia lasting from approximately 950 B.P. until the time of French contact (Gibbon 2012). These mobile groups shared Middle Mississippian traits that included corn horticulture and shell-tempered ceramics (e.g., globular vessels with high rims), but lacked permanent structures such as burial mounds (Gregg et al. 2021:5.77–5.79).

Plains Village groups from the region of the Missouri River in the Dakotas began to interact with the Oneota in western Minnesota after 950 B.P. (Anfinson 1997; Ahler and Kay 2007). These groups hunted bison and practiced corn horticulture and lived within earth-lodges protected within palisaded forts. Globular-shaped ceramic jars with crushed rock temper are a hallmark technology of this period. Psinomani groups are believed to be the ancestors of the modern Dakota people who lived in east-central Minnesota (Gibbon 2012).

4.2.5 Contact Period and Post-Contact (A.D. 1700 to Present)

The introduction of the horse had a profound effect on Native American lifeways beginning in the early-1700s in North Dakota (Gregg et al. 2021:5.82). This period is also referred to as protohistoric, a time when the indigenous people were coming into contact with and being influenced by European culture (Gregg et al. 2021:5.82). This contact was not always direct

interaction between Native and Euro-American peoples, but sometimes through contact with items of Euro-American cultural material being traded throughout the area (Gregg et al. 2021:5.82).

Later in the 1800s, Euro-Americans pushed westward and increasingly settled in the Dakotas. Although North and South Dakota were initially within the Missouri Territory, the Dakota Territory was eventually established in 1861 and encompassed North Dakota, South Dakota, and much of Montana and Wyoming (North Dakota History-American Settlement 2024). Dakota Territory was opened to homesteaders in 1862 (North Dakota History-American Settlement 2024). Following the opening of the Dakota Territory several railroads that served the territory, including the Dakota Southern and Manitoba (known later as the Great Northern) Railways, were built, and the Gold Rush of 1876 began (North Dakota History-Statehood 2024). These events led to massive Euro-American settlement of the Dakota Territory between 1872 and 1887 (North Dakota History-Statehood 2024). This period is known as the Great Dakota Boom; a severe drought brought the Boom to an end between 1886 and 1887 (North Dakota History-Statehood 2024).

In 1889 North and South Dakota were admitted to the Union as the 39th and 40th states, in no particular order (North Dakota History-Statehood 2024). The states were the leading producers of wheat until the drought and Great Depression in the 1930s, and railroads continued to expand and run until the collapse of the farming industry in the 1980s (North Dakota History-Postwar Economics and Politics 2024). Significant events witnessed by residents of North and South Dakota throughout the twentieth century included discovering oil in 1927 and 1951, enduring record blizzards, creating numerous military bases and nuclear missile silos, and constructing dams (North Dakota History-Postwar Economics and Politics 2024).

5.0 Literature Review

The Project Area has been subject to several intensive cultural resource literature reviews from 2020 to present on behalf of Ørsted (Bring and Freshwater 2021; Ferriman and Thurman 2022; Thurman and Weston 2022; Wilk et al. 2022). These reviews led to Project-related archaeological fieldwork during three separate surveys (Ferriman and Thurman 2022; Thurman and Weston 2022; Wilk et al. 2022). The archaeological work conducted by CRA, over the summer of 2022 reflects the Project layout closest to Westwood's 2023-2024 inventories (Ferriman and Thurman 2022; Glaab 2024; Thurman and Weston 2022).

The Class I Literature Review performed by Atwell, LLC (Atwell), encompasses a broad study area (57,413 acres), which generally overlaps all iterations of Project layout subsequently surveyed by Atwell, CRA, and Westwood (Wilk et al. 2022). Previously recorded resources identified by this literature review consist of nine historic architectural sites, 11 historic archaeological sites, one prehistoric archaeological site, and 36 previous cultural resource inventories in the Project Area. In addition, Atwell's Class III Archaeological Survey that followed documented seven historic archaeological sites, one site historic cemetery site lead, and two prehistoric isolated finds (Wilk et al. 2022).

A cultural resource literature of the Project Area was performed by CRA in May and July of 2022, which included archaeological surveys that summer (Ferriman and Thurman 2022; Thurman and Weston 2022). The larger, May 2022 search identified 18 previous inventories, one isolated find,

20 archaeological sites, and one site lead. In addition, a related literature review cataloged 578 architectural resources principally concentrated in the town of Wishek, North Dakota (see Dickerson and Ball 2022). The 2022 inventories by CRA recorded two new historic sites, one historic isolated find, and three prehistoric isolated finds.

A search of Bureau of Land Management (BLM) General Land Office (GLO) records was conducted by Thurman and Weston (2022) to assess the potential for historic resources to be present in earlier configurations of the Project. Westwood performed a GLO search specific to the Project area that was surveyed in 2023 and is overlapped by CRA's study (BLM GLO 2023). GLO maps published from 1868 to 1902 have been digitized and provided by the North Dakota Department of Water Resources (NDDWR) and were viewed in ArcPro GIS software (NDDWR 2023). There are several small and intermittent unnamed streams crisscrossing the Project, but the GLO maps do not show indications of settlement or land claims. Bluffs are indicated along many of the creek beds. One road is depicted in T 133, R 71 on the Logan County map: it runs along a southeasterly route through sections (from the northwest corner) 18, 17, 20, 29, 28, 33, and 34. The road begins five miles northwest of the Project where it runs southeast from an east-west route along the south side of Beaver Creek. The road does not continue south onto the McIntosh County (T 132) map. The roadway is not depicted in later maps such as the 1916 Logan County atlas and topographic maps published since 1953 (USGS 2023). By 1916, the county atlas shows the Minneapolis, St. Paul & Sault Ste. Marie railroad corridor had been laid through the center of T (s) 132 and 133, Range 71 along a northerly track (Ogle 1916).

Ørsted has used these data discussed above to aid in creating the current Project layout, which avoids all known cultural resources in relation to the APE (**Exhibits 1** and **2**). Out of due diligence, Mr. Glaab performed a check of the North Dakota SHPO records in Bismarck on October 23, 2023. No additional cultural resources have been documented in the current APE since the 2022 review by CRA. No previously recorded resources were present in the APE surveyed by Westwood in 2024. The previous literature reviews and surveys indicated the Project's potential for architectural (e.g., houses, farmstead structures, sheds), prehistoric archaeological (e.g., stone features, lithic scatters, isolated tools), and historic archaeological (e.g., trash scatters [older than 50 years], foundations, collapsed structures) sites to be present. The locations of the Spring 2024 survey areas fall within the boundary of the larger, earlier file searches. There are no previously recorded archaeological sites present in the Spring 2024 areas reviewed for the Project.

Westwood performed fieldwork for the Project from October 23 through November 22, 2023, over the course of three field sessions (Glaab 2024). Westwood archaeologists identified a total of one new historic site (32LO174) and one new prehistoric isolated find (32LOX76) in the Project APE. Site 32LO174 is a historic farmstead consisting of three structure foundations and associated trash from the 1940s through 1970s. Isolated Find 32LOX76 is a prehistoric utilized flake made from Knife River flint (KRF). A second piece of KRF shatter was identified to the northwest of the utilized flake. These resources were recommended *not eligible* for inclusion in the National Register of Historic Places (NRHP). No further avoidance measures were recommended on behalf of Ørsted. Westwood received a concurrence letter for these recommendations from the North Dakota SHPO on April 11, 2024 (Reference No. 22-0020).

6.0 Field Investigations

Spring 2024 fieldwork on the Project was carried out May 8 and 9, 2024, by Westwood Principal Investigator Rigden Glaab, MA, RPA (**Exhibit 1** and **Exhibit 2**; **Appendix A**). Pedestrian survey was utilized to examine the APE, which are locations of proposed ground disturbance. As noted above, the APE consists of the latest wind development layout as of May 2024 and excludes locations previously surveyed. No cultural resources were identified during the course of the current survey.

7.0 Summary and Recommendations

Westwood did not identify any cultural resources during the addendum survey of Project design changes for the Badger Wind Project. Fieldwork was conducted of 74.3 acres on May 8 and 9, 2024. No further work is recommended on behalf of Ørsted. Westwood stresses that if construction plans are altered to include areas not previously surveyed, those locations must be examined for cultural resources. Although an archaeological survey was completed, the possibility of unidentified resources remains. If unrecorded archaeological sites are discovered during construction, all ground-disturbing activities in the area should stop and archaeologists should be contacted. Further, if human remains are encountered during construction activities, all ground-disturbing activity must cease, and local law enforcement along with professional archaeologists, must be notified.

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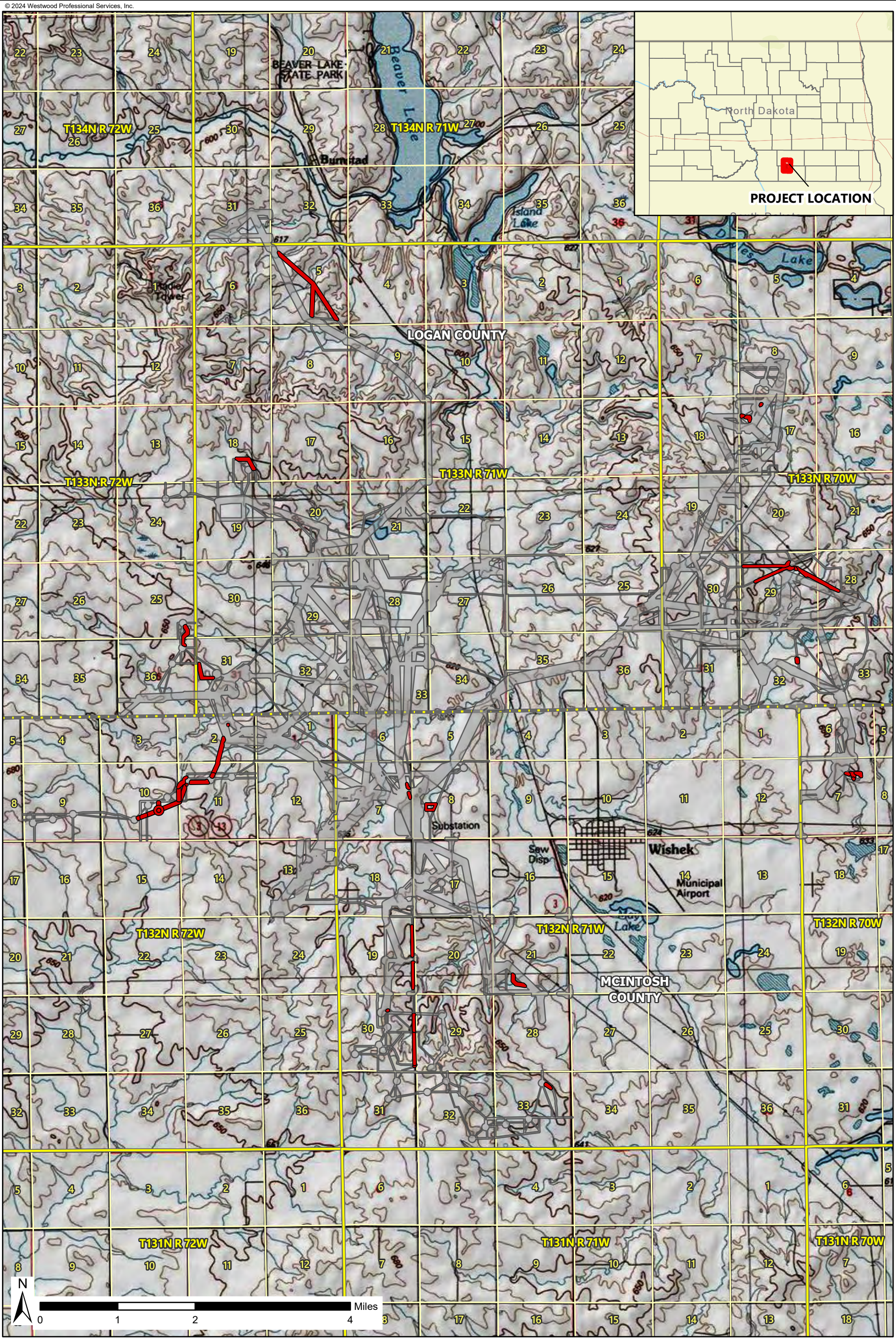


Scale: 1:75,000

Data Source(s): Westwood (2024); USGS topographic maps (2013); ESRI WMS National Geographic & World Streets Basemaps (Accessed 2022); Census Bureau (2020).

- Current Survey APE
- Previously Surveyed APE
- PLS Section
- PLS Township
- County Line

Badger Wind Project

Logan and McIntosh Counties, North Dakota

Project Location

EXHIBIT 1

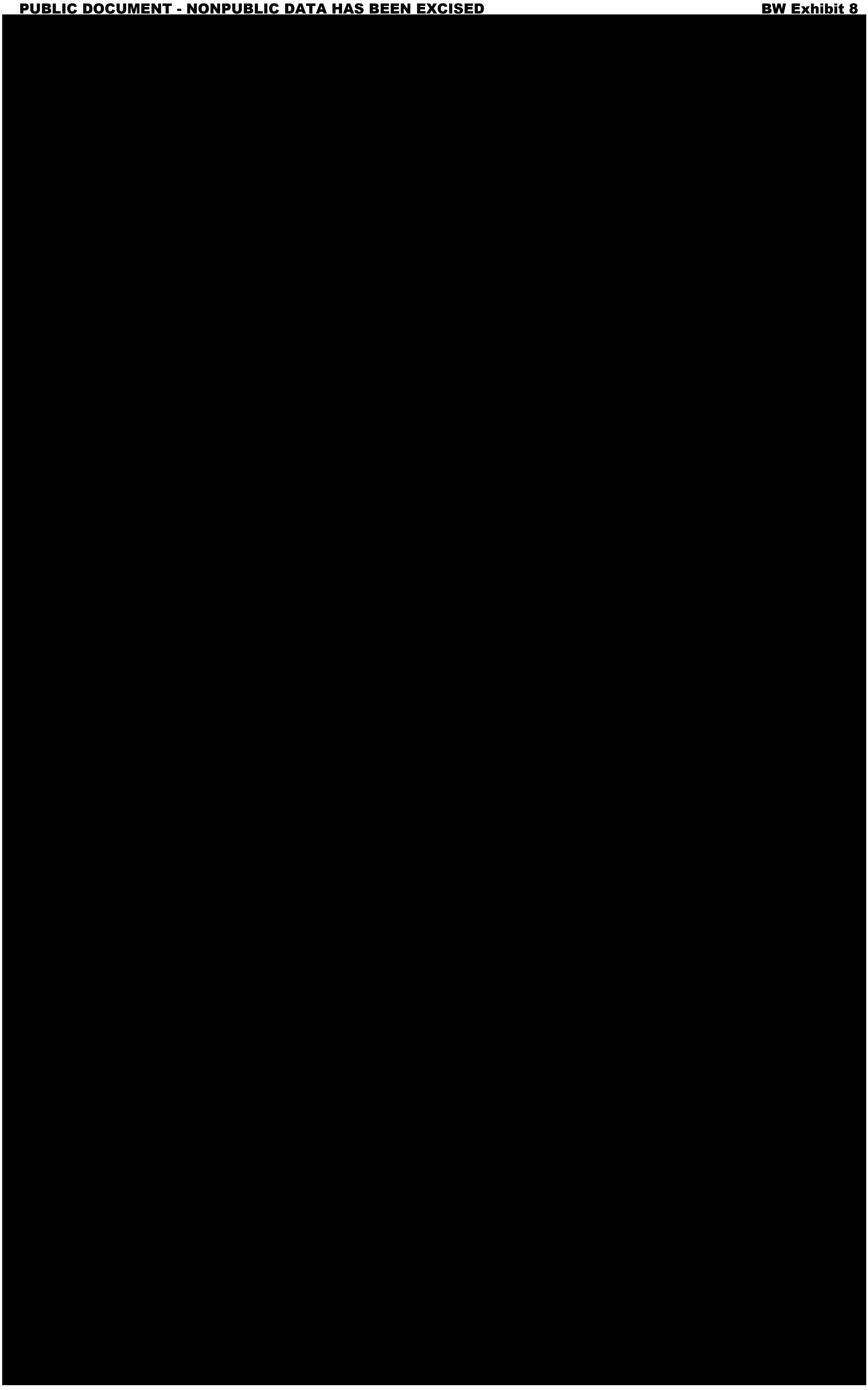
Westwood

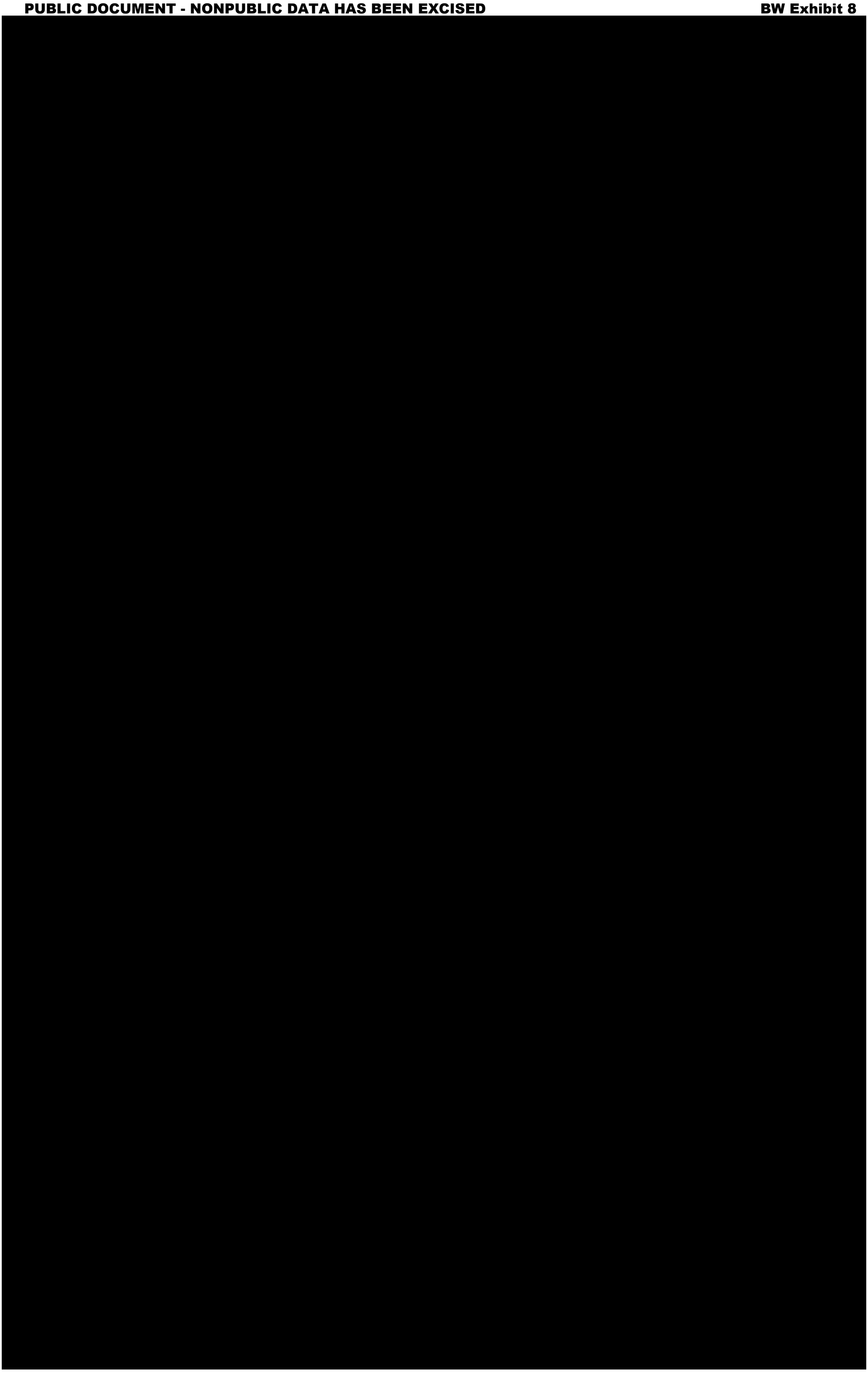
Phone (952) 937-5150
Fax (952) 937-5822
Toll Free (888) 937-5150

12701 Whitewater Drive, Suite #300
Minnetonka, MN 55343
westwoodps.com

Westwood Professional Services, Inc.

N:\0031120.00_GIS_Working\2024-04-09_RG_CRM\R0031120_BadgerWind_CRM_FieldUpdates_240409.aprx | CRM_Exhibit1_11x17p_210330 - Badger CRM Results Map | 5/13/2024 11:09 AM | SJNelson





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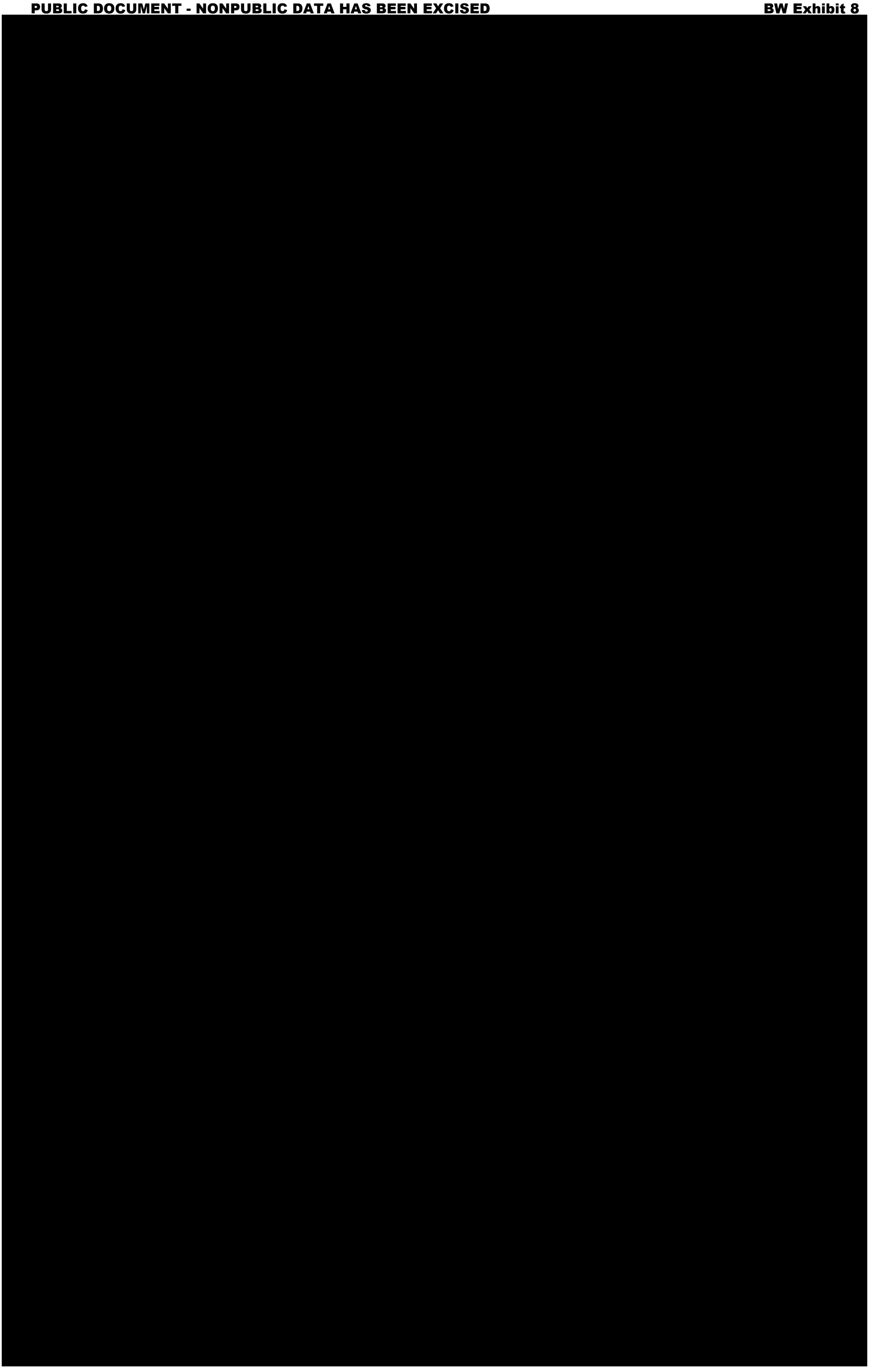

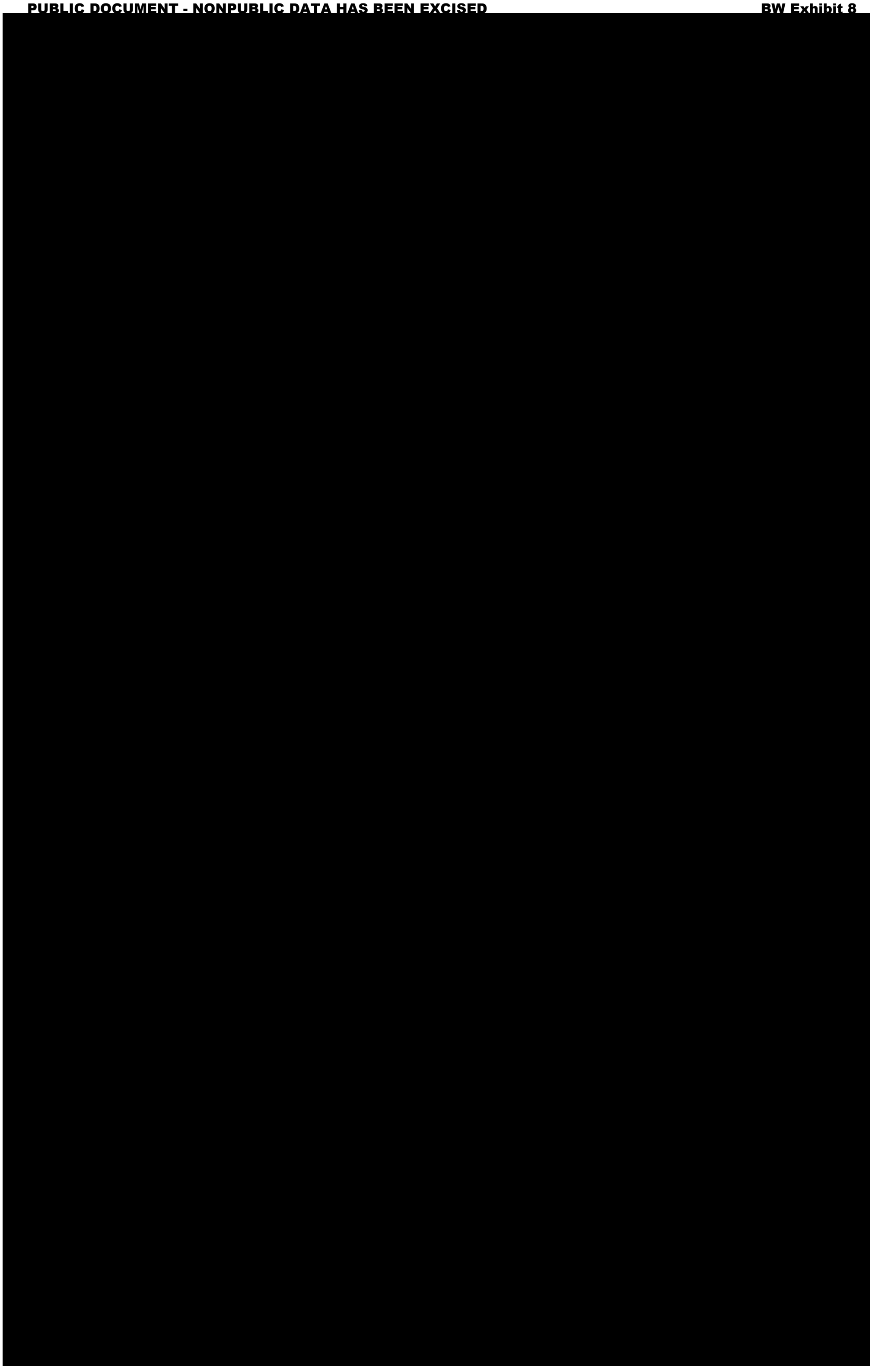

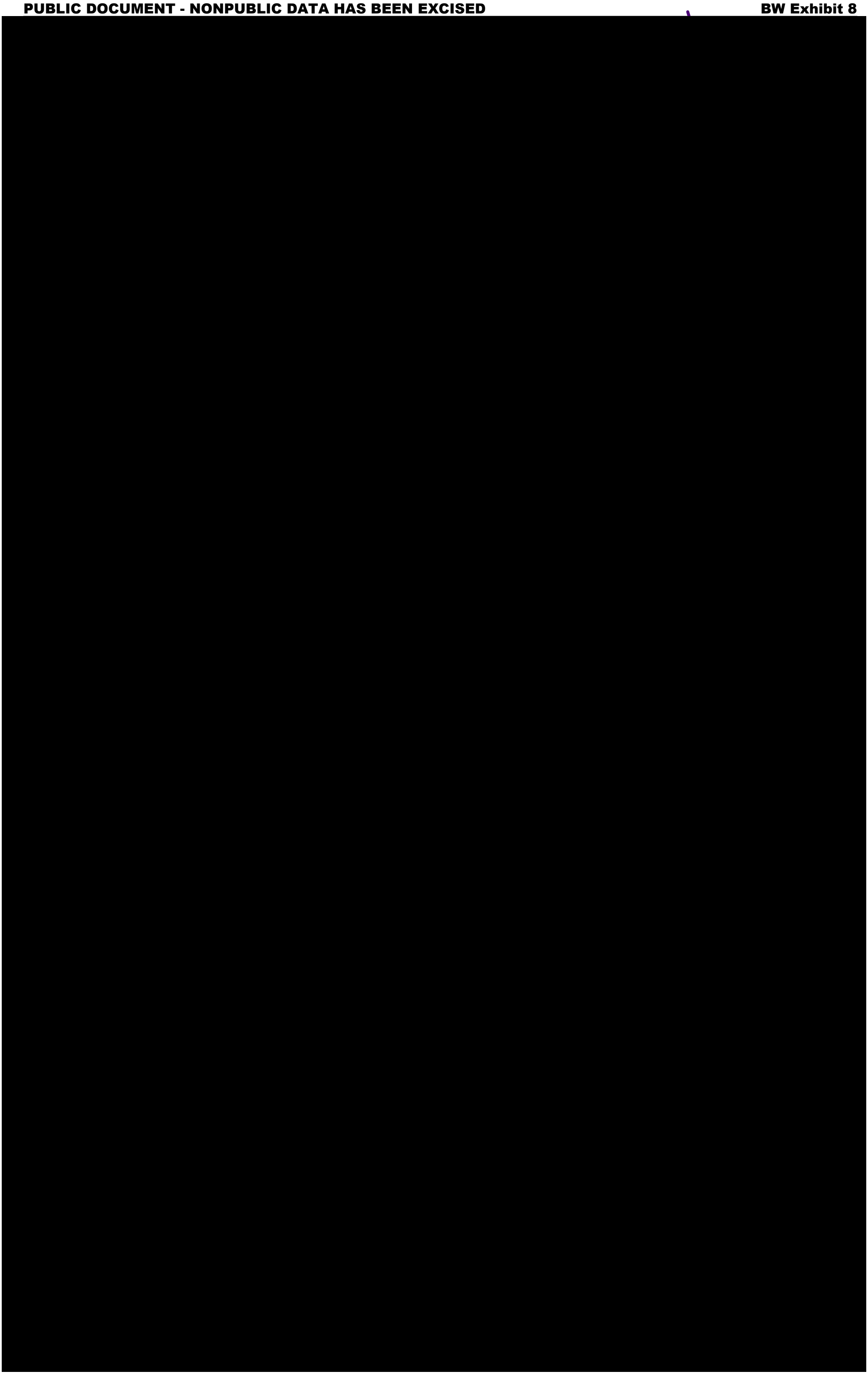

APPENDIX A

Representative Photos of the Project Area

Badger Wind Project – 2024 Expansion Areas
Logan and McIntosh Counties, North Dakota

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Photo 1: Overview of the northern Project Area, facing southeast.

Photo 2: Overview of the northern Project Area, facing southwest.

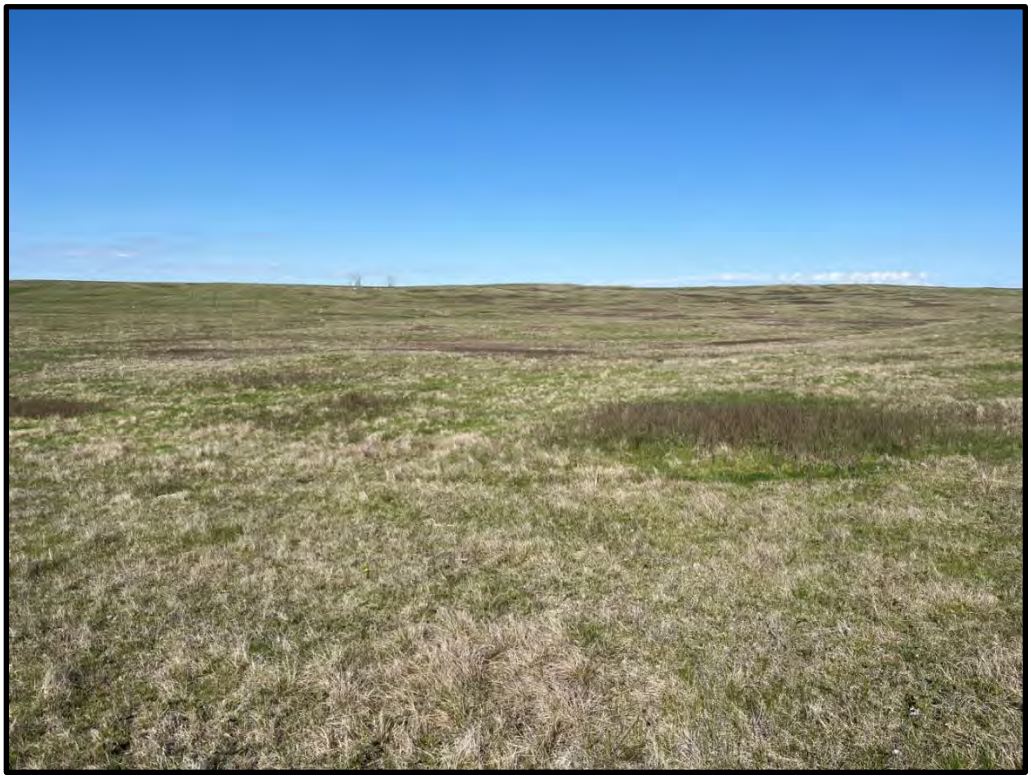

Photo 3: Overview of the eastern Project Area, facing west.

Photo 4: Overview of the eastern Project Area, facing south.

Photo 5: Overview of the southern Project Area, facing north.

Photo 6: Overview of the southern Project Area, facing southeast.

Photo 7: Overview of the western Project Area, facing northeast.

Photo 8: Overview of the western Project Area, facing southwest.

Photo 9: Overview of the central Project Area, facing north.

Photo 10: Overview of the central Project Area, facing south.

Photo 11: Representative GSV (80-90%) - eastern Project Area.

Photo 12: Representative GSV (60%) - western Project Area.