



# WANZEK

Heavy/Industrial Constructors

## Larry Lacher

### Senior Project Manager, Wind Energy Group

#### Education

North Dakota State University  
Bachelor of Science, 1991  
Electrical and Electronic Engineering

#### Project Management Software

Primavera (P3)  
Microsoft Project  
Timberline Estimating & Accounting  
Microsoft Office 03

#### Project Management Responsibilities

Responsible for overall design, planning, direction and coordination of heavy industrial projects.

Comprehensive review of Plans & Specifications.

Estimation of job costs, finalizing major sub-contracts and suppliers.

Contract review / administration.

Establish project procedures, procurement and staffing requirements.

Daily Supervision of construction management/site staff to assure Quality Management.

Coordinate project management with Quality Control Manager (QC).

Establish critical path of project to ensure all client goals are achieved to the fullest extent.

Larry Lacher joined Wanzek Construction, Inc. in the fall of 2006. Prior to joining Wanzek, Larry worked as President for Ventus Energy Systems Inc. (Renewable Energy Electrical Contractor), and owned a company specializing in electrical systems, water works and site work. He has extensive experience in the field as a control electrician, equipment operator and lineman, all of which brings hands-on experience, knowledge and understanding to his projects. Mr. Lacher has been involved in over 1,600 MW of wind energy construction as both an electrical and General Contractor.

The focus of Mr. Lacher's experience the past five years has been in the electrical areas of power systems and controls. He also has experience with underground construction. Larry's current focus is on the renewable market, primarily electrical systems and overall Project Management. His experience at Ventus Energy allowed him to network with many professionals in the renewable market industry, including those in the fields of engineering, procurement and construction.

Larry believes that the success of a project relies on an in-depth knowledge of the work to be performed, proper and applicable designs, project controls, extensive pre-planning and dependable suppliers and subcontractors.

#### Key Projects

As former president of Ventus Energy, Larry has worked on numerous wind and ethanol projects and will continue to do so as a Senior Project Manager for Wanzek. Some of his recent project experience includes:

- ▶ 30 MW Top of Iowa III Wind Farm, Madison Gas & Electric, Kensett, IA
- ▶ 80 MW Top of Iowa II Wind Farm, Iberdrola, Kensett, IA
- ▶ 90 MW Century/Charles City Wind Farm, MidAmerican Energy, Charles City, IA
- ▶ 150 MW Goat Mountain Wind, Edison Mission, Robert Lee, TX
- ▶ 175 MW Adair Wind, MidAmerican Energy, Adair, IA

#### Additional Project Experience (Ventus Energy Systems):

- ▶ 200 MW Century Wind Farm, Intrepid Expansion, MidAmerican Energy, Blairsburg, IA
- ▶ 150 MW Chanarambie Phase IV/Moraine, enXco/PPM, Pipestone, MN
- ▶ 100 MW Trimont Wind Farm, PPM Energy, Trimont, MN



# WANZEK

---

## Heavy/Industrial Constructors

## Brian Johnston

---

### Project Manager Wind Energy Group

#### □ Education

North Dakota State University  
Fargo, ND  
Bachelor of Science, 2002  
Civil Engineering

#### □ Project Management Software

Primavera Project Planner (P3 EC)  
Microsoft Project  
Bid 2Win Estimating  
Timberline Estimating & Accounting  
Microsoft Office 00  
Expedition  
Adobe Software

#### □ PM Responsibilities

Responsible for assisting in the design, planning, direction and coordination of heavy civil projects.

Estimation of job costs, finalizing major sub-contracts and suppliers.

Contract review / administration.

Assist in establishing project procedures and staffing requirements.

Coordinate project management with Quality Control Manager (QC).

Establish critical path of project to ensure all client goals are achieved to the fullest extent.

#### □ Certifications

US. Army Corps of Engineers  
Construction Quality Management for Contractors 2008

Stormwater Management During  
Construction and Erosion Control  
Supervisor Training 2004

Design and Operation of Work Zone  
Traffic Control 2005

Prior to joining Wanzek Construction in February of 2008, Brian was a Project Engineer at Kiewit Western Company for five years. At Wanzek, Brian focuses on the management of materials, schedules and budgets for wind energy construction projects. He takes a practical approach to problem-solving and is especially skilled in addressing issues immediately to find a resolution and keep the project running smoothly.

Brian's current responsibilities at Wanzek include assisting onsite superintendents with personnel supervision, managing and coordinating subcontractors, sequencing of operations and materials expediting. He is an integral member of Wanzek's Wind Energy Construction Group.

#### □ Key Project Experience

Here are some of Brian's recent project highlights:

- ▶ 50 MW Wessington Springs Wind Farm, Babcock & Brown, Wessington Springs, SD
- ▶ 40 MW Langdon II Wind Farm, FPL Energy, Langdon, ND
- ▶ 50 MW Buffalo Ridge Wind Farm, Iberdrola, White, SD
- ▶ 50 MW Rugby Wind Farm, Iberdrola, Rugby, ND
- ▶ Diversion Chanel Erosion Repair Project, US Army Corps of Engineers, West Fargo, ND

#### Additional Project Experience (Kiewit Western Company):

- ▶ \$500,000 Erie Municipal Airport, Erie, CO
- ▶ \$4,000,000 I-25 Bridge Replacement, Pueblo County, CO
- ▶ \$9,000,000 I-25 and Eagleridge Road, Pueblo, CO
- ▶ \$10,000,000 Rocky Mountain National Park Roadway, Estes Park, CO

TREFOIL CULTURAL AND ENVIRONMENTAL HERITAGE  
 1965 W. HIGHVIEW DR. SAUK RAPIDS, MN 56379  
 PHONE 320-761-9090 • E-MAIL rothaus@trefoilcultural.com

## RICHARD M. ROTH AUS, Ph.D

### PROFESSIONAL QUALIFICATIONS

- Nearly two decades of research and management experience in North America, Central America, Europe, Asia and the Middle East.
- Meet Secretary of the Interior qualification standards for Prehistoric Archaeology, Historic Archaeology and History.
- Leadership in projects ranging from archaeological surveys to wetland restoration.
- Project management ranging from grass-roots endeavors to international multi-institutional field project. Principal Investigator on over \$1.5 million in grants and contracts
- Administrative oversight of over \$60 million in grants and contracts

### ARCHAEOLOGICAL SPECIALTIES

Regional and Site Archaeological Survey.	NHPA (National Historic Preservation Act—Section 106).	Geomorphology.
Archaeological Excavation.		GIS and GPS.
Palaeoseismology.	NEPA (National Environmental Policy Act).	Remote Sensing
Palaeoenvironmental Sampling and Analysis.	NAGPRA (North American Graves Protection and Repatriation Act).	Oral History
Cultural Resource Management.	TCP (Traditional Cultural Properties).	Education
Cemetery Excavation and Mitigation.		

### EDUCATION

1993	Ph.D.	The Ohio State University.
1989	M.A.	Vanderbilt University.
1985	B.A.	The Florida State University.

### PROFESSIONAL EXPERIENCE

2005-present	<i>Trefoil Cultural and Environmental Heritage.</i> President and Principal Investigator. Cultural Resource Management and Environmental History.
2006-present	<i>Consulting Archaeologist.</i> Mille Lacs Band of Ojibwe. Provide independent evaluation of archaeological and cultural resource issues.
1998-present	<i>Registered Professional Archaeologist.</i> Hold advanced qualifications and agree to abide by a code of ethics.
2000-2008	<i>Assistant Vice-President for Research and Faculty Development.</i> St. Cloud State University. Administer and provide oversight for all externally and internally funded research projects (\$5-6 million/year). Compliance responsibility for all federal and state-funded research. (Currently on leave of absence).
2003-2008	<i>Professor.</i> Department of History. St. Cloud State University. Undergraduate and Graduate level teaching and research. (Currently on leave of absence).
1997-2008	<i>Director.</i> Cultural and Environmental Landscapes Laboratory. St. Cloud State University. Cultivate and administer environmental and cultural research projects and outreach

EXHIBIT

3

activities in partnership with the Minnesota Department of Natural Resources. Maintain field station and research infrastructure. (Currently on leave of absence).

1999-2002 *Associate Professor.* Department of History. St. Cloud State University. Undergraduate and Graduate level teaching and research.

1995-1999 *Assistant Professor.* Department of History. St. Cloud State University. Undergraduate and Graduate level teaching and research.

## SELECT CULTURAL RESOURCE MANAGEMENT REPORTS

---

- 2008 **R. Rothaus.** *Class III Cultural Resources Inventory, Preliminary Report—Bryant Township, Just Wind Wind Farm, Logan County, North Dakota.* Report Prepared for Houston Engineering, Inc and Just Wind, LLC.
- 2008 **R. Rothaus.** *Phase I Cultural Resources Survey Browns Valley Flood Mitigation Project Minnesota and South Dakota.* Report Prepared for Houston Engineering, Inc.
- 2008 **R. Rothaus.** *Phase I Cultural Resources Survey and Preliminary Visual Reconnaissance. West Central Telephone Association Fiber Optic Project, Verndale and Nimrod Exchanges (MN 564).* Report Prepared for CC&I Engineering, Inc. and West Central Telephone Association.
- 2008 **R. Rothaus.** *Phase Ia Cultural Resources Survey, Consolidated Telecommunications Company (Mission and Pillager Exchanges)--MN537.* Report Prepared for CC&I Engineering, Inc. and Consolidated Telecommunications Company.
- 2008 **R. Rothaus.** *Phase I Cultural Resources Survey, CTC Fiber Optic Project 24537-05-008, Cass and Crow Wing County, Minnesota. Background and Visual Reconnaissance, 2007 Installation Area, 2008 Installation Area.* Reported Prepared for Consolidated Telecommunications Company
- 2008 J. McFarlane and **R. Rothaus.** *Phase I Archaeological Survey of the Story County I Wind Farm Project, Iowa.* Report prepared for Tetra Tech EC, Inc.
- 2008 J. McFarlane and **R. Rothaus.** *Phase I Archaeological Survey of the Crystal Lake I WRA Wind Energy Development Project Hancock County, Iowa.* Report prepared for Tetra Tech EC, Inc.
- 2008 A. Aymond, J. McFarlane, and **R. Rothaus.** *Phase Ia Cultural Resources Survey, Algona Wind Farm, Algona, Iowa.* Report prepared for Tetra Tech EC, Inc.
- 2008 **R. Rothaus.** *Wild Rice Restoration Feasibility Study, Lake Ogechie, Minnesota: Environmental and Cultural Issues.* Report prepared for the Mille Lacs Band of Ojibwe.
- 2008 **R. Rothaus.** *Phase Ia Cultural Resources Survey, West Central Telephone Association (MN 564).* Report Prepared for CC&I Engineering, Inc. and West Central Telephone Association.
- 2007 **R. Rothaus.** *Select Comments on the Keystone Pipeline Cultural Resource Surveys.* Report prepared for the Mille Lacs Band of Ojibwe.
- 2007 **R. Rothaus.** *Preliminary Archaeological Evaluation, Just Wind Wind Farm, North Dakota.* Report prepared for Houston Engineering, Inc.
- 2007 **R. Rothaus** and J. McFarlane. *Phase I Cultural Resources Survey CSAH 25 (SAP 48-625-16) Mille Lacs County, Minnesota.* Reported Prepared for Mille Lacs County Highway Department
- 2007 **R. Rothaus.** *Phase I Cultural Resources Survey, Kraemer Lake Acquisition, Stearns County, Minnesota.* Report prepared for Stearns County Parks.
- 2007 **R. Rothaus.** *Phase Ia Cultural Resources Survey and Route Section Analysis, Lake Yankton to Marshall 115kV Transmission Line.* Report prepared for Xcel Energy.
- 2007 **R. Rothaus.** *Phase I Archaeological Survey of Wilson Lake 115kV Project, Crow Wing County, Minnesota.*

Report prepared for Houston Engineering, Inc.

- 2007 **R. Rothaus.** *Phase I Archaeological Survey of the Peck Farm Property, Rockville Township, Minnesota.* Report prepared for Stearns County Parks.
- 2007 J. McFarlane and **R. Rothaus.** *Phase I Archaeological Survey for the Taconite Ridge Wind Farm, Mt. Iron, Minnesota.* Report prepared for Tetra Tech EC, Inc.
- 2007 J. McFarlane and **R. Rothaus.** *Phase I Archaeological Survey of the High Prairie Wind Farm II, Mower County, Minnesota.* Report prepared for Tetra Tech EC, Inc.
- 2007 J. McFarlane and **R. Rothaus.** *Phase Ia Archaeological Survey of Hermitage Shores, Minnetonka, Minnesota.* Report prepared for Lakewest Development, LLC.
- 2007 **R. Rothaus.** *Phase I Archaeological Survey of CarMax Site, Maple Grove, Minnesota.* Report prepared for Houston Engineering, Inc.
- 2007 **R. Rothaus.** *Phase I Archaeological Survey of Fiber Optic Project 24537-05-008, Nisswa Area, Minnesota.* Report prepared for Consolidated Telecommunications Corporation.
- 2006 **R. Rothaus** and J. McFarlane. *Phase Ia Archaeological Survey of Fiber Optic Cable Project 24537-05-008.* Report prepared for Consolidated Telecommunications Corporation.
- 2006 **R. Rothaus.** *Phase I Archaeological Survey. Mill Town Trail Expansion, Northfield, Minnesota.* Report prepared for the City of Northfield.
- 2006 **R. Rothaus.** *Phase I Archaeological Survey of the Gohman Property.* Report prepared for the Sherburne County Parks Department.
- 2006 J. McFarlane and **R. Rothaus.** *Phase I Archaeological Survey of ENS Upgrade.* Report prepared for the Mille Lacs Band of Ojibwe.
- 2006 J. McFarlane and **R. Rothaus.** *Phase Ia Archaeological Survey for the Aurora Wind Farm.* Report prepared for Tetra Tech EC, Inc.
- 2006 J. McFarlane and **R. Rothaus.** *Phase Ia Archaeological Survey for the Mt. Iron Wind Farm.* Report prepared for Tetra Tech EC, Inc.
- 2006 J. McFarlane and **R. Rothaus.** *Phase I Archaeological Survey for MINP Sandstone.* Report prepared for Tetra Tech EC, Inc.
- 2006 J. McFarlane and **R. Rothaus.** *Phase I Archaeological Survey for MET Towers, Mower County.* Report prepared for Tetra Tech EC, Inc.
- 2006 **R. Rothaus** and J. McFarlane. *Phase Ia Archaeological Survey of Wilson Lake 115kV Project.* Report prepared for Houston Engineering, Inc.
- 2006 J. McFarlane and **R. Rothaus.** *Phase I Archaeological Survey of the High Prairie Wind Farm I, Mower County, Minnesota.* Report prepared for Tetra Tech EC, Inc.
- 2006 J. McFarlane and **R. Rothaus.** *Phase I Archaeological Survey of the Grand Casino Mille Lacs Parking Lot Expansion.* Report prepared for the Mille Lacs Band of Ojibwe.
- 2006 D. Mather and **R. Rothaus.** *Phase II Archaeological Evaluation of Area D, Allotments Project.* Report prepared for the Mille Lacs Band of Ojibwe.
- 2005 J. McFarlane and **R. Rothaus.** *Phase Ia Archaeological Investigation for the High Prairie Wind Farm in Mower County, Minnesota.* Report prepared for Tetra Tech EC, Inc.
- 2005 **R. Rothaus,** D. Gold and D. Mather. *Mille Lacs Indian Museum Data Recovery Project (21ML06).* With D. Gold and D. Mather. Report prepared for the Minnesota Historical Society.

- 2005 **R. Rothaus** and J. McFarlane. *2005 Excavations at the Hoebelheinrich Site (21SH0052)*. Report prepared for the City of Elk River.
- 2005 **R. Rothaus**. *Life Stages and Design Parameters for Wild Rice Restoration*. Report prepared for the Mille Lacs Band of Ojibwe.
- 2005 **R. Rothaus** and J. McFarlane. *Phase I Archaeological Survey of the Potter Purchase*. With J. McFarlane. Report prepared for Wright County, Minnesota.
- 2004 **R. Rothaus**, J. McFarlane and J. Haug. *Prehistoric and Euroamerican Archaeology of Elk River Township, Minnesota: Probability Modeling and Reconnaissance Survey*. Report prepared for the City of Elk River.
- 2003 **R. Rothaus**. *Depression Era Mille Lacs Kathio State Park: A Gazetteer of Homesteads and Sites*. Report prepared for the Minnesota Department of Natural Resources.
- 2001 **R. Rothaus**. *The Buck Moore Dam in Mille Lacs Kathio State Park*. Report prepared for the Minnesota Department of Natural Resources.
- 2002 **R. Rothaus**. *Excavation of the St. Cloud State University Pioneer Cemetery (21 SN-136)*. Report prepared for the St. Cloud State University.
- 2000 **R. Rothaus**. *Phase I Archaeological Survey of the Hartmann Homestead, St. Michael, Minnesota*. Report prepared for the Hartmann family.

## SELECT GRANTS AND CONTRACTS

---

- 2008 *North Dakota Public Services Commission Energy Project Review*. North Dakota Public Services Commission. With Houston Engineering, Inc.
- 2007 *Land Management Services at Camp Ripley and Arden Hills Army Training Site*. Minnesota Department of Military Affairs.
- 2007 *Phase III/Public Archaeology Excavation, Hoebelheinrich Site, Elk River, Minnesota*. City of Elk River.
- 2007 *Wild Rice Restoration and Environmental Services*. Mille Lacs Band of Ojibwe.
- 2007 *LiDAR and Digital Orthoimagery Survey of Crow Wing County and Camp Ripley*. Crow Wing County, Minnesota Department of Military Affairs, MnDOT.
- 2006 *Land Management Services at Camp Ripley and Arden Hills Army Training Site*. Minnesota Department of Military Affairs.
- 2006 *Phase III Excavation of 21 ML 6 (Mille Lacs Indian School Site)*. Minnesota Historical Society.
- 2006 *Phase III/Public Archaeology Excavation, Hoebelheinrich Site, Elk River, Minnesota*. City of Elk River.
- 2005 *Phase III/Public Archaeology Excavation, Hoebelheinrich Site, Elk River, Minnesota*. City of Elk River.
- 2005 *Lake Ogechie Wild Rice Restoration Study*. Mille Lacs Band of Ojibwe.
- 2005 *Mille Lacs Indian School Data Recovery Project*. Minnesota Historical Society.
- 2004 *Field Testing an Archaeological Predictive Model for Elk River, Minnesota*. City of Elk River.
- 2003 *An Archaeological Predictive Model for Elk River, Minnesota*. City of Elk River.
- 2002 *Cultural and Environmental Landscapes Lab: A Learning Community*. Minnesota State Colleges and Universities Center for Teaching Excellence. M. Julius, co-P.I.
- 2002 *Cultural and Environmental Landscapes Lab: A Learning Community*. St. Cloud State University Foundation. M. Julius, co-P.I.

- 2000 *Prehistoric and Ancient Harbors in the Eastern Korinthia (Greece): A Geoarchaeological Approach for Determining Maritime Trade Patterns.* Foundation for the Exploration and Research on Cultural Origins. T. Tartaron and E. Reinhardt, co-P.I.'s.
- 1999 *Prehistoric and Ancient Harbors in the Eastern Korinthia (Greece): A Geoarchaeological Approach for Determining Maritime Trade Patterns.* Foundation for the Exploration and Research on Cultural Origins. T. Tartaron and E. Reinhardt, co-P.I.'s.
- 1998 *Human Environmental Landscape Project: Rio Plátano Biosphere, Honduras.* St. Cloud State University Foundation.
- 1997 *Remote Sensing in Archaeology Conference.* St. Cloud State University Foundation.
- 1996 *Study and Evaluation of Cultural Landscapes. European Union-U.S. Dept. of Education/FIPSE.* With T. Gregory, P.I.
- 1994 *Conservation Analysis of Kenchreai (Greece) Glass Opus Sectile Panesl.* Samuel H. Kress Foundation.
- 1990 *Gennadeion Fellowship.* The American School of Classical Studies at Athens.

## MAJOR SYNERGISTIC RESEARCH PROJECTS

---

- 2003-present *Archaeology and Palaeoenvironmental Study of Maritime Trade on the Southern Arabian Coast.* Oman.
- 2005-present *Saronic Harbors Archaeological Research Project.* Korphos, Greece.
- 1997-present *Cultural and Environmental Landscapes Laboratory.* Mille Lacs, Minnesota.
- 1997-present *Purdue University Rough Cilicia Regional Survey Project.* Gazipasha, Turkey.
- 1998-2002 *Eastern Korinthia Archaeological Survey.* Corinth, Greece.
- 1994-present *The Ohio State University Excavations at Isthmia.* Corinth, Greece.
- 2000 *Earthquake Damage and Landscape Change Evaluation.* Gujarat, India.
- 1999 *Earthquake Damage and Landscape Change Evaluation.* Duzçe, Turkey.
- 1999 *Earthquake Damage and Landscape Change Evaluation.* Golçuk, Turkey.

## SELECT SCHOLARLY PUBLICATIONS

---

- 2008 **R. Rothaus**, E.G. Reinhardt, and J.S. Noller. "Earthquakes and Subsidence at Kenchreai: Using Recent Earthquakes to Reconsider the Archaeological and Literary Evidence." In W.R. Caraher, L.J. Hall, and R. S. Moore (eds.), *Archaeology and History in Medieval and Post-Medieval Greece: Studies on Method and Meaning in Honor of Timothy E. Gregory*, Ashgate.
- 2008 S.V. Donato, E.G. Reinhardt, J.L. Boyce, **R. Rothaus**, and T. Vosmer. "Identifying tsunami deposits using bivalve shell taphonomy." *Geology* 36.3: 199-202.
- 2006 N.K. Rauh and **R. Rothaus**. "Caveat Emptor: Ceramic Collection Procedures in the Rough Cilicia Survey." In D. Malfitana, J. Lund, J. Poblome (eds.), *Old Pottery. Innovating Perspectives on Roman Pottery Studies*. Rome: L'Erma di Bretschneider.
- 2006 N. K. Rauh, M. J. Dillon, C. Dore, **R. Rothaus**, and M. Korsholm. "Viticulture, Oleoculture, and Economic Development in Roman Rough Cilicia." *Münstersche Beiträge zur antiken Handelsgeschichte* 25: 49-98.
- 2006 T. Tartaron, T.E. Gregory, D.S. Pullen, J.S. Noller, **R. Rothaus**, L. Diacopoulos, J. Rife, R. Schon, W. Caraher, D. Pettegrew, and D. Nakassis, "The Eastern Korinthia Archaeological Survey:

Integrated Methods for a Dynamic Landscape.” *Hesperia* 75: 435-505.

- 2004 **R. Rothaus**, J. Haug, and J. McFarlane, “Prehistoric and Early Historic Heritage of Elk River, Minnesota: Current Knowledge and Probability Modeling.” *Minnesota Archaeologist*. 63: 97-117.
- 2004 **R. Rothaus**, E. Reinhardt and J. Noller, “Regional Considerations of Coastline Change, Tsunami Damage and Recovery along the Southern Coast of the Bay of Izmit (The Kocaeli (Turkey) Earthquake of 17 August 1999).” *Natural Hazards* 31: 233-252.
- 2003 **R. Rothaus**, T. Tartaron, E. Reinhardt and J. Noller, “A Geoarchaeological Approach for Detecting Prehistoric Aegean Harbors.” *Metron: Measuring the Aegean Bronze Age. Aegaeum* 24.
- 2003 T. Tartaron, **R. Rothaus**, and D. Pullen, “Searching for Prehistoric Aegean Harbors with GIS, Geomorphology, and Archaeology.” *Athena Review* 4: 27-36.
- 2002 **R. Rothaus** and D. Gold, “‘The Grave Was Unmarked And Had Long Been Forgotten’: The First Protestant Cemetery Of St. Cloud, Minnesota (21-SN-0136).” *Minnesota Archaeologist* 60: 23-50.
- 2002 **R. Rothaus**, “The Kenchreai Glass Opus Sectile Panels and the Culture of Late Antique Greece.” *Hyalos, Vitrum, Glass: History, Technology and Conservation of Glass and Vitreous Materials in the Hellenic World*, ed. G. Kordas, 205-208. Athens: Glasnet.
- 2001 **R. Rothaus**, “Surface Survey and Landscape Archaeology at Mille Lacs Kathio.” *Minnesota Archaeologist* 60: 45-54.
- 2001 **R. Rothaus** and A. DeMorett, “Site Detection, Land Cover Mapping, and Archaeological Modeling with Landsat TM Multispectral Imagery.” *Remote Sensing in Archaeology*, ed. S. Campana and M. Forte, 149-180. Firenze: Edizioni All’Insegna Del Giglio.
- 2000 **R. Rothaus**, *Corinth, The First City of Greece: An Urban History of Late Antique Cult and Religion*. Leiden: E.J. Brill.
- 1996 S. Stiros, P. Pirazzoli, S. Papageorgiou, J. Laborel, **R. Rothaus** and M. Arnold, “On the Date of the Construction of Lechaion, Western Harbour of Ancient Corinth, Greece.” *Geoarchaeology* 11.3: 251-263.
- 1995 **R. Rothaus**, “Earthquakes and Temples in Late Antique Corinth.” *Earthquakes in the Archaeological Record: Palaeoseismological and Archaeological Aspects, 1991*. British School at Athens.
- 1995 **R. Rothaus**, “Lechaion, Western Port of Corinth: A Brief Archaeology and History.” *Oxford Journal of Archaeology* 14.3: 293-306.
- 1993 **R. Rothaus**, “Urban Space, Agricultural Space and Villas in Late Roman Corinth.” *Structures rurales et sociétés antiques*. Actes du Colloque de Corfou (14-16 Mai 1992). Annales littéraires de l’Université de Besançon. Paris: Les Belles Lettres.
- 1992 **R. Rothaus**, “Omne Ignotum Pro Sacro: Gameboards and Religious Graffiti.” *Oxford Journal of Archaeology* 11.3: 365-368.

## SELECT SCHOLARLY PRESENTATIONS

---

- 2006 S. Donato, E. Reinhardt, **R. Rothaus**, and J. Boyce. “Identifying Tsunami Deposits Using Shell Taphonomy.” Geological Society of America Annual Meeting.
- 2004 **R. Rothaus**. “Prehistoric and Early Historic Heritage of Elk River, Minnesota: Current Knowledge and Probability Modeling.” Preserve Minnesota: 25th Annual Statewide Historic Preservation Conference.

- 2004 D. Pullen, T. Tartaron, J. Noller, and **R. Rothaus**. "Vayia - A Fortified Early Bronze Age Harbor Site." Archaeological Institute of America.
- 2002 **R. Rothaus**, J. Cummings and D. Mather. "Partnerships in Public Archaeology: Research, Education and Interpretation at Mille Lacs Kathio State Park." Midwest Archaeological Conference.
- 2002 **R. Rothaus**, E. Reinhardt and T. Tartaron. "A Geoarchaeological Approach for Detecting Prehistoric Aegean Harbors." Metron: Measuring the Aegean Bronze Age. Yale University.
- 2002 T. Tartaron, D. Pullen, **R. Rothaus**, D. Nakassis and A. Dill. "Patterns in the Later Prehistory of the Korinthia." Archaeological Institute of America
- 2001 **R. Rothaus**, "Modeling the Prehistoric Landscape of the Ancient Corinthia." Anthropology Department. Yale University.
- 2001 E. Reinhardt, K. Chomicki and **R. Rothaus**, "Foraminiferal Applications in Coastal Archaeology." Geological Society of America.
- 2001 **R. Rothaus**, "The Kenchreai Glass Opus Sectile Panels and the Culture of Late Antique Greece." Hyalos-Glass-Vitrum Conference. Rhodes, Greece.
- 2001 N. Rauh, K. Slane, E. Lyding Will and **R. Rothaus**, "Amphora Production in Western Rough Cilicia." Archaeological Institute of America.
- 2000 **R. Rothaus**, "Archaeological Surface Survey at Lake Ogechie: Prehistoric and Historic Results." Midwest Archaeological Conference.
- 2000 **R. Rothaus**, "Anthropogenic and Geomorphic Harbor Sequences in the Korinthia of Greece." American Association for the Advancement of Science Annual Meeting.
- 1999 **R. Rothaus**, "Site Detection, Land Cover Mapping, and Archaeological Modeling with Landsat TM Multispectral Imagery." Remote Sensing in Archaeology Seminar. Certosa di Pontignano – Siena (Italy).
- 1998 **R. Rothaus**, J. Noller, L. Wells and E. Reinhardt. "On the Subsidence of Kenchreai." IGCP 367. Corinth, Greece.
- 1998 **R. Rothaus**, "GIS Applications for the Study of Cultural Landscapes." Perceptions of the Cultural Landscape. Corfu, Greece.
- 1997 **R. Rothaus**, "GIS and Database Applications in Minnesota Archaeology." Archaeological Institute of America.
- 1997 J. Noller, L. Wells, E. Reinhardt and **R. Rothaus**, "Subsidence of the harbor at Kenchreai, Saronic Gulf, Greece, during the earthquakes of AD 400 and AD 1928." EOS.
- 1996 **R. Rothaus**, "The Greek Harbors of the Corinthia: Geophysical and Archaeological Considerations." Archaeological Institute of America.
- 1996 **R. Rothaus**, "Mutilation of Sculpture in Late Antiquity: Images and Power." 22<sup>nd</sup> Annual Byzantine Studies Conference.
- 1995 **R. Rothaus**, "Kenchreai Excavations 1994-1996." Archaeological Institute of America.
- 1995 **R. Rothaus**, "The Early Christian Basilica at Kenchreai." 21<sup>st</sup> Annual Byzantine Studies Conference.
- 1994 **R. Rothaus**, "The so-called "Aphrodision" and "Isacum" of Kenchreai, Greece." Archaeological Institute of America.

## PROFESSIONAL ORGANIZATIONS

---

American Association for the Advancement of Science      Society for American Archaeology  
Archaeological Institute of America                      Register of Professional Archaeologists  
Council for Minnesota Archaeology

## REFERENCES

---

- Scott Anfinson. State Archaeologist. Office of the State Archaeologist. Office of the State Archaeologist Fort Snelling History Center. St. Paul, MN 55111-4061. (612) 725-2411
- Dr. Mark Deutschmann. Vice President. Houston Engineering. 6901 East Fish Lake Road, Suite 140, Maple Grove, MN 55369. (763) 493-4522.
- Jim Jones. Cultural Resource Specialist. Minnesota Indian Affairs Council. (218) 755-3223. 3801 Bemidji Ave., Suite 5, Bemidji, MN 56601
- Prof. Matt Julius. Department of Biology. St. Cloud State University. St. Cloud, MN 56301. (320) 308-6689.
- Scott Hansen. Environmental Supervisor. Mille Lacs Band of Ojibwe. 43408 Oodena Drive Onamia, MN 56359. (320) 532-4181.
- Kevin T. Larson. CEO/General Manager. Consolidated Telecommunications Co. 1102 Madison Street Brainerd, MN. 56401. (218) 454-1234.
- David Mather. National Register Archaeologist. State Historic Preservation Office. Minnesota Historical Society. 345 W. Kellogg Blvd., St. Paul, MN 55102-1906. (651) 296-6126.
- Prof. Eduard G. Reinhardt. School of Geography and Geology. McMaster University. West Hamilton, ON, Canada L8S 4M1. (905) 525-9140.
- Marty Skoglund. Environmental Supervisor. Camp Ripley Environmental Office Minnesota Department of Military Affairs, P.O. Box 150 Little Falls, MN 56345. (320) 616-2722
- Natalie Weyaus. Tribal Historic Preservation Officer. Mille Lacs Band of Ojibwe. 43408 Oodena Drive Onamia, MN 56359. (320) 532-4181.

# Barton L. Schultz, P.E.

## Project Manager

---



### Education:

B.S., Civil & Environmental Engineering, University of Wisconsin, 1980

### Registration:

Professional Engineer in Minnesota, Iowa, Indiana, South Dakota and Wisconsin

### Professional Experience:

Houston Engineering, Inc., 1999 – Present

Orr-Schelen-Mayeron & Associates, Inc., 1995 – 1999

HDR Engineering, Inc., 1986 – 1995

Wisconsin Department of Natural Resources, Bureau of Solid Waste Management, 1980 – 1986

### Professional Organizations:

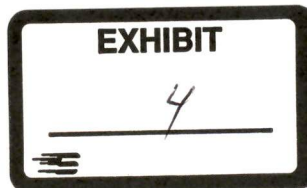
Consulting Engineers Council of Minnesota

SWANA

Bart Schultz has 27 years of experience in the Civil and Environmental Engineering field. Mr. Schultz's experience includes the preparation of engineering drawings and specifications, preparation of technical reports, planning documents, and permitting documents, and performing construction observation. His experience includes a variety of projects including comprehensive planning and siting studies for single or multiple public entities, environmental permitting, environmental site assessments, feasibility studies, development of SPCC Plans, corridor studies associated with routing new transmission lines, design of solid waste facilities and the associated storm water control structures, design of material handling facilities, quality control review of facility design projects, construction observation, third party review of contested projects, and technical input to legislative subcommittees during the rule making process.

### Relevant Experience:

- **Just Wind, LLC, Logan County Wind Farm, North Dakota.** Project Manager for a proposed wind farm located near Napoleon, North Dakota. The project will include 160 Wind Turbines and have a nameplate generating capacity of approximately 368 megawatts. The project includes the preparation of environmental documents to support applications to the Public Service Commission, Western Area Power Administration, and Basin Electric Power Cooperative.
- **Great River Energy, Wilson Lake 115 kV Transmission Line Certificate of Need and Route Permit.** Project Manager for the GRE Wilson Lake Project which includes a 115 kV transmission line connecting the Wilson Lake Substation with the Mud Lake Substation in Crow Wing County. The project included the preparation of the environmental documents which support the Certificate of Need and the Route Permit for approximately 12 miles of a 115 kV transmission line.
- **Great River Energy/Xcel Energy, Phase I Environmental Assessment, property transfer for three substations located in Minnesota.** Project Manager for Phase I Environmental Site Assessments prepared for the Balta Substation, Crow River Substation, and Traverse Switching Substation, in accordance with the scope and limitation of ASTM Practice E1527-00.
- **Minnkota Power Cooperative Substation Reviews.** Worked with Minnkota Power Cooperative to evaluate and prepare Spill Prevention Control and Countermeasures (SPCC) Plans for approximately 200 electrical substations. Conducted field evaluations whereby the sites and adjacent areas were investigated and any navigable waters or wetlands were identified. Analyzed background and field data and modeled various spills using MOSES (Mineral Oil Spill Evaluation System).



# Barton L. Schultz, P.E.

## Project Manager

---

### Utility Industry

- **Xcel Energy, Lake Yankton to Marshall Transmission Line Route Permit, Public Utility Commission.** Project Manager for the Xcel Energy Lake Yankton to Marshall Transmission Line Project which includes a 115 kV transmission line connecting the Lake Yankton Substation with the Marshall Substation in Lyon County, Minnesota. The project included routing assistance and assistance preparing the Route Permit for approximately 16 miles of a 115 kV transmission line.
- **Alliant Energy Emery to Lime Creek 161 kV Transmission Line.** Project Manager for the Alliant Energy Emery to Lime Creek Transmission Line Project which includes a 161 kV transmission line connecting the Emery Substation with the Lime Creek Substation in Cerro Gordo County, Iowa. The project included the preparation of environmental documents which support the required permits for the preferred route encompassing approximately 20 miles of 161 kV transmission line.
- **Great River Energy, Environmental Documentation for PSC Application.** Project Manager for a Great River Energy transmission line project that included the preparation of an application to the North Dakota Public Service Commission for a Certificate of Corridor Compatibility and Route Permit for a 37-mile transmission corridor. Field studies were conducted to identify cover types, state rare species habitat and natural communities, locations and types of jurisdictional wetlands, land uses and any existing structures. A biological report was prepared following the field studies and submitted as part of the PSC application.
- **Great River Energy, Environmental Documentation for the Certificate of Need and the Environmental Quality Board Route Permit: Plymouth-Maple Grove 115 kV Transmission Line Project.** Project Manager for a Great River Energy/Wright-Hennepin Cooperative Electric Association transmission line project. The Plymouth-Maple Grove Project included the preparation of an environmental report as part of the Certificate of Need application to the Minnesota Public Utilities Commission. Field studies were conducted to identify cover types, state rare species habitat and natural communities, locations and types of jurisdictional wetlands, land uses and any existing structures.
- **Great River Energy, Phase I Environmental Assessment, property transfer in Scanlon, Minnesota.** Project Manager for a Phase I Environmental Site Assessment prepared in accordance with the scope and limitation of ASTM Practice E1527-00.
- **Great River Energy, Phase I Environmental Assessment, property transfer in Maple Grove, Minnesota.** Project Manager for a Phase I Environmental Site Assessment was prepared in accordance with the scope and limitation of ASTM Practice E1527-00.
- **Otter Tail Power, Spill Prevention, Control and Countermeasures Plans.** Project Manager for the SPCC Plan development for Otter Tail Power's electrical substations in accordance with the Clean Water Act and 40 CFR 112, as amended, February 17, 2006. Approximately 125 electrical substation sites were evaluated. Additional SPCC plans were prepared for new substation sites and for substation sites with equipment changes in 2007.
- **Otter Tail Power, Spill Prevention, Control and Countermeasures Plans.** Project Manager for the SPCC Plan development for Otter Tail Power's electrical substations in accordance with the Clean Water Act and 40 CFR 112, as amended on July 17, 2002. Six electrical substation sites were evaluated in 2003. Currently, forty-two (42) electrical substation sites are being evaluated and the Hoot Lake Plant site.

# Barton L. Schultz, P.E.

## Project Manager

---

- **Connexus Energy Spill Prevention Control and Countermeasures Plan.** Project Manager for the SPCC Plan development for Connexus Energy's Operations Center located in Ramsey Minnesota.
- **Central Power Electric Cooperative, Inc. Spill Prevention Control and Countermeasures Plan.** Project Manager for the SPCC development for CPEC's Headquarters Facility and eighteen substation sites located North Dakota. Additional SPCC plans were prepared for new substation sites and for substations with equipment changes in 2007.
- **Minnkota Power Cooperative Substation Reviews.** Worked with Minnkota Power Cooperative to evaluate and prepare Spill Prevention Control and Countermeasures (SPCC) Plans for approximately 200 electrical substations. Conducted field evaluations whereby the sites and adjacent areas were investigated and any navigable waters or wetlands were identified. Analyzed background and field data and modeled various spills using MOSES (Mineral Oil Spill Evaluation System). Additional SPCC plans were prepared for new substation sites and for substation sites with equipment changes in 2007.
- **Great River Energy, Spill Prevention, Control and Countermeasures Plans.** Project Manager for the SPCC Plan development for GRE's electrical substations jointly owned with their Cooperatives. The Clean Water Act and 40 CFR 112 require that certain non-transportation-related oil storage and consuming facilities maintain SPCC Plans. Electrical substations, with equipment containing oil in quantities greater than 1,320 gallons in the aggregate or in an individual container, are required to have a current SPCC Plan. Approximately ninety (90) substation facilities were evaluated in 2001.
- **Connexus Energy, Spill Prevention, Control and Countermeasures Plans.** Project Manager for the SPCC Plan development for Connexus Energy's electrical substations in accordance with the Clean Water Act and 40 CFR 112, as amended on July 17, 2002. The analyses were performed on approximately fifteen (15) substation sites (2003).
- **Connexus Energy, Spill Prevention, Control and Countermeasure Plan.** Project Manager for the SPCC Plan development for Connexus Energy's electrical substations (2001). The Clean Water Act and 40 CFR 112 require that certain non-transportation-related oil storage and consuming facilities maintain SPCC Plans.
- **Great River Energy, Spill Prevention, Control and Countermeasures Plans.** Project Manager for the SPCC Plan development for GRE's electrical substations in accordance with the Clean Water Act and 40 CFR 112, as amended on July 17, 2002. The analyses were performed on approximately fifty (50) substation sites (2002-2003).
- **Connexus Energy, Spill Prevention, Control and Countermeasures Plans.** Project Manager for the SPCC Plan development for Connexus Energy's electrical substations in accordance with the Clean Water Act and 40 CFR 112, as amended, February 17, 2006. The analyses were performed on approximately forty (40) substation sites.
- **Lake Country Power, Spill Prevention, Control and Countermeasures Plans.** Project Manager for the re-evaluation of select substation sites (twenty-eight sites) based on the July 17, 2002 amendments to 40 CFR, Part 112.
- **Crow Wing Power, Spill Prevention, Control and Countermeasures Plans.** Project Manager for the re-evaluation of select substation sites (sixteen sites) based on the July 17, 2002 amendments to 40 CFR, Part 112.

# Barton L. Schultz, P.E.

## Project Manager

---

- **Cass County Electric Cooperative, Spill Prevention, Control and Countermeasures Evaluation.** Project Manager for the SPCC Plan development for CCEC's facility locations and their remote distribution transformer installations (for example; West Acres Mall).
- **Eagle Creek Substation.** Project Manager for the SPCC Plan development for an electrical substation owned jointly by Minnesota Valley Electric Cooperative and Great River Energy in accordance with the Clean Water Act and 40 CFR 112, as amended on July 17, 2002.

### Design:

- **CROSS Building Project, Rogers Minnesota.** Project Manager for the CROSS Project which included engineering design and permitting services for site development. The site development services included a site grading plan, a storm water control plan, an erosion and sediment control plan, a site utility plan, and the parking lot design. Permitting services were also provided for the NPDES General Storm Water Permit for Construction and a Storm Water Pollution Prevention Plan. In addition to the design services, project coordination was provided between the client and the city, county, and state officials, and local watershed district personnel involved with the project.
- **Maple Grove Walgreens, Maple Grove Minnesota.** Project Manager for the development of a Walgreens located in Maple Grove. Provided engineering design and permitting services for site development. The site development services included a site grading plan, a storm water control plan, an erosion and sediment control plan, a site utility plan, and the parking lot design. In addition to the design services, project coordination was provided between the client and the adjacent developer, the City, County, and State officials, and local watershed district personnel involved with the project.
- **Barbarossa Site Development, Maple Grove Minnesota.** Project Manager for an industrial development located in Maple Grove. Provided engineering design, environmental and permitting services for site development. Prepared a Phase I Environmental Site Assessment in conjunction with the site purchase. The site development services included a site grading plan, a storm water control plan, an erosion and sediment control plan, a site utility plan, and the parking lot design. In addition to the design services, project coordination was provided between the client and the city, county, and state officials, and local watershed district personnel involved with the project.
- **MEER Towers, Maple Grove Minnesota.** Project Engineer for the development of an office complex located in Maple Grove. Provided engineering design and permitting services for site development. The site development services included a site grading plan, a storm water control plan, an erosion and sediment control plan, a site utility plan, and the parking lot design. In addition to the design services, project coordination was provided between the client and the city, county, and state officials, and local watershed district personnel involved with the project.
- **Premier Banks, Albertville Minnesota.** Project Manager for the expansion and redesign of a parking lot for Premier Banks. Access to the bank and storm water control issues prompted the need for the expansion and redesign. The site design services included a site grading plan, a storm water control plan, an erosion and sediment control plan, and the parking lot design. In addition to the design services, project coordination was provided between the client and the city, state and local watershed district personnel involved with the project.

### Waste Management:

- **Fergus Falls, MN Landfill Facility.** Project Manager for the landfill facility. The landfill facility includes an ash monofill, a construction and demolition landfill, a yard waste composting site, and a

# Barton L. Schultz, P.E.

## Project Manager

---

transfer station. Prepared design drawings and specifications for the respective fill areas. The design included storm water control features, ground water monitoring, and site access. Provided construction administration services.

- **Rapid City Regional Recovery and Landfill Facility.** Project Manager for the City of Rapid City Regional Recovery and Landfill Facility project, which includes a material recovery facility, a solid waste composting facility, and a regional landfill. A grading plan was prepared for the landfill to show the progression of filling and to identify controls needed to route surface water to the existing control structures. The \$16 million resource recovery facility was designed to accept co-mingled recyclables in blue bags and municipal solid waste. The recyclables will be separated by type and baled for shipment to market. The municipal solid waste will be processed and the organic fraction sent to a hangar for composting.
- **Otter Tail County.** Project Engineer during the construction phase of a recyclable processing facility for Otter Tail County. The facility was designed to process source separated recyclables and prepare them for delivery to market.
- **Fergus Falls, MN EAW.** Project Manager for the landfill expansion at the ash monofill and demolition debris landfill. Prepared an Environmental Assessment Worksheet for the proposed expansion to the ash monofill and demolition debris landfills on city-owned property located directly south of the existing disposal operations.
- **U.S. Highway 2, North Dakota Department of Transportation.** Assisted in the evaluations associated with the alternative analyses for the U.S. Highway 2 Environmental Impact Statement.
- **State of South Dakota, Solid Waste Management Plan.** Prepared a comprehensive solid waste management plan for the State of South Dakota as a result of the Governor's Centennial Legislation. Provided technical information and long-term cost information to a legislative subcommittee appointed to provide input during the planning process. Also, conducted numerous public meetings during the planning process.
- **City of Huntington, Indiana.** Project Manager for the City of Huntington landfill located in Huntington, Indiana. The project included the design of a vertical and lateral expansion of the landfill, and an evaluation of the existing storm water control basin to ensure that it was sized to handle the expansion area for the facility. A grading plan was developed to match the existing contours to the proposed filling plan for the vertical expansion. A clay equivalency analysis was performed on the in-situ clay beneath the existing landfill to support the proposed design for the vertical expansion. The lateral expansion area was designed with a recompacted clay/geomembrane composite liner and a leachate collection system. Additional ground water monitoring wells were installed as part of the detection-monitoring program for the facility. In addition, the expansion area impacted 1.5 acres of wetlands, which required review from the Corps and the state. Under the 404 permit review, the Corps determined that the project would not require an individual permit, but would require a wetland mitigation plan. The mitigation plan was developed in a forested area approximately three acres in size.
- **City of Muscatine, Iowa.** Project Manager for the City of Muscatine, Iowa and the Muscatine County Area Solid Waste Agency. Developed an implementation plan for a regional waste management facility to address the existing State mandates. The facility included a transfer station, a recycling area, and a household hazardous waste drop-off area. A site plan was developed for routing a mix of commercial and residential traffic through the facility. A storm water control plan was developed to route storm water away from the Muscatine slough and the Facility. The plan included a storm water control pond and a culvert for the access road, which crossed the Muscatine Slough.

# Barton L. Schultz, P.E.

## Project Manager

---

- **Landfill of North Iowa Solid Waste Agency.** Project Manager for the landfill of North Iowa Solid Waste Agency located in Clear Lake, Iowa. Prepared a comprehensive solid waste management plan for the landfill of North Iowa Solid Waste Agency. The Agency serves twenty communities located in six counties. Prepared a final grading plan for a vertical expansion at the existing landfill. Designed a clay liner and a leachate collection system for a 25-acre expansion to the existing landfill. Sized the leachate collection and storage system for the long-term needs of the facility throughout the operating and closure periods.
- **Confidential Client.** Provided technical assistance to the Respondent in an arbitration case pertaining to a failed composting facility located in southern Florida. The technical assistance included an evaluation of the general facility conditions, operations at the facility, and maintenance of the equipment. In addition, provided review comments regarding technical information provided by the Claimant's expert witnesses.
- **Ramsey/Washington County.** Performed an economic analysis for implementing a dual-pricing system at the Ramsey/Washington County RDF processing facility. The intent of the analysis was to project the economic impact, to the counties and to the haulers, of implementing a pricing system based on either the volume of waste or the tonnage of waste received.
- **Rapid City, South Dakota.** Performed an evaluation of the City of Rapid City, South Dakota regional landfill for the potential to generate landfill gas in quantities that would require the installation of a control system in accordance with the Federal Environmental Protection Agency's New Source Performance Standards as they relate to landfill gas emissions.

Relevant project experience for Environmental Compliance includes:

- **IDI CarMax Environmental Due Diligence.** Project Manager for environmental services provided to IDI and associated with the development of a proposed CarMax store in Burnsville Minnesota. The environmental services included a due diligence of the project site for Wetlands, Threatened and Endangered Species and Cultural Resources.
- **Border States Paving, Inc. Spill Prevention Control and Countermeasures Plan.** Project Manager for the SPCC Plan development for Border States' facilities located in Fargo and Jamestown, North Dakota, and for their mobile facilities. Border States Paving produces asphalt for paving roads and parking lots.
- **Farstad Oil, Inc. Spill Prevention Control and Countermeasures Plan.** Project Engineer for the SPCC Plan development for the Farstad Oil facility located in Minot North Dakota. Farstad Oil is a regional wholesale petroleum products distributor serving all of North Dakota and Montana, and also including northern Minnesota and northern Wyoming.

Planning Studies:

- **Gun Club Lake Watershed Management Organization, Comprehensive Water Resource Management Plan.** Assisted in updating the Gun Club Lake Watershed Management Organization Comprehensive Water Resource Management Plan in accordance with the Metropolitan Surface Water Management Act requirements.
- **St. Louis Park, Comprehensive Water Resource Management Plan.** Assisted in updating the City of St. Louis Park Comprehensive Water Resource Management Plan in accordance with the Metropolitan Surface Water Management Act requirements.

# Barton L. Schultz, P.E.

## Project Manager

---

- **Sioux Falls, South Dakota C&D Disposal Landfill.** Project Manager for the City of Sioux Falls, South Dakota Bruns C&D disposal facility. Prepared a final grading plan and specified a final cap configuration to minimize the erosion potential. In addition, prepared a Storm Water Pollution Prevention Plan for the facility as part of the final closure plan.
- **Southeast Iowa Regional Planning Commission, Comprehensive Solid Waste Management Plan.** Served as Project Manager during the preparation of a solid waste management plan for the Southeast Iowa Regional Planning Commission. The purpose of the plan was to develop alternatives to the existing solid waste management system in response to state requirements. The study included four counties in Iowa (Henry, Lee, Louisa and Van Buren), the Iowa Army Ammunition Plant in Des Moines County, and Hancock County, Illinois.
- **Regional Landfill, Northeastern North Dakota.** Prepared a feasibility/siting study for a regional landfill for an area encompassing eleven counties in northeast North Dakota. Worked with a solid waste subcommittee, which represented all the participating counties and evaluated the potential of developing a regional landfill facility to service the entire area.
- **Grays Harbor County.** Prepared a comprehensive countywide landfill site selection study for Grays Harbor County, Washington. Storm water control was a significant siting criterion due to the extremes in the topography and annual rainfall amounts. In addition, performed an investigation and evaluation of the existing conditions at the Grays Harbor County solid waste landfill to determine the feasibility of designing a vertical or horizontal expansion at the site. One of the key issues involved surface water routing and control at the facility because of the annual rainfall events and the extreme elevation differences across the site.

### Education:

B.S., Civil and Environmental Engineering, University of Wisconsin, 1980

### Registration:

Professional Engineer in Minnesota, Iowa, Indiana, South Dakota and Wisconsin

### Professional Experience:

Houston Engineering, Inc., 1999 – Present

Orr-Schelen-Mayeron & Associates, Inc., 1995 – 1999

HDR Engineering, Inc., 1986 – 1995

Wisconsin Department of Natural Resources, Bureau of Solid Waste Management, 1980 – 1986

### Professional Organizations:

Consulting Engineers Council of Minnesota

SWANA



# Location Map Phase I North

- ★ Substation
- Wind Turbines
- Existing 345kv Transmission Line
- Access Roads
- Roads
- ▭ Phase I Project Boundary
- ▭ Township Line
- ▭ Section Line
- Federal Land Ownership**
- US Fish & Wildlife**
- ▭ Waterfowl Production Area
- State Land Ownership**
- ▭ ND Land Department
- ▭ ND Game & Fish
- ▭ Corporate Boundary

**EXHIBIT**  
5-A



0 0.25 0.5 1 1.5 2 Miles

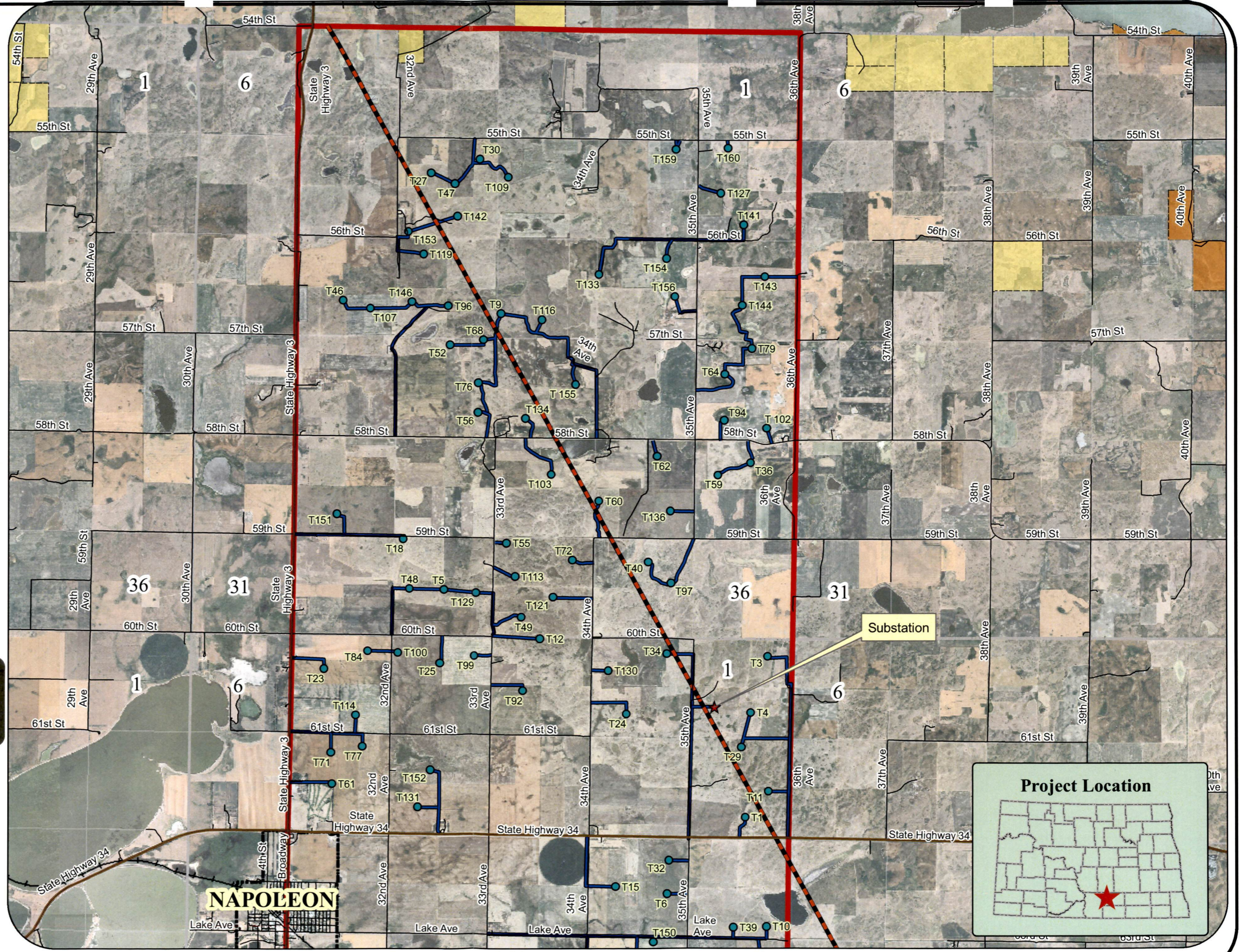
Location Map - Phase I North

Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:
--------------------	------------------	-------------	--------------------------	-------------------	--------

Map created by:  

**Houston Engineering, Inc.**  
 6901 E. Fish Lake Rd., Suite 140  
 Maple Grove, MN 55369  
 Bus: (763) 493-4522  
 Fax: (763) 493-5572

Data downloaded from the ND GIS Data Hub.  
 Background is 2006 USDA-FSA Aerial Photography.

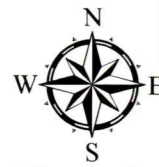




# Location Map Phase I South

- ★ Substation
- Wind Turbines
- Existing 345kv Transmission Line
- Access Roads
- Roads
- ▭ Phase I Project Boundary
- ▭ Township Line
- ▭ Section Line
- Federal Land Ownership**
- US Fish & Wildlife**
- ▭ Waterfowl Production Area
- State Land Ownership**
- ▭ ND Land Department
- ▭ ND Game & Fish
- ▭ Corporate Boundary

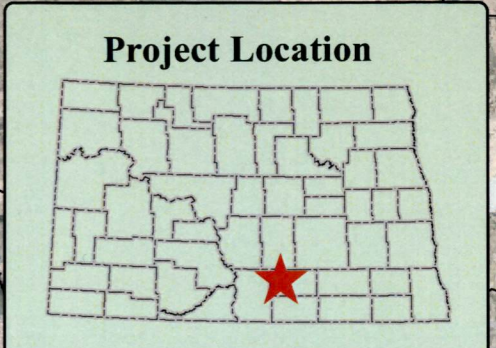
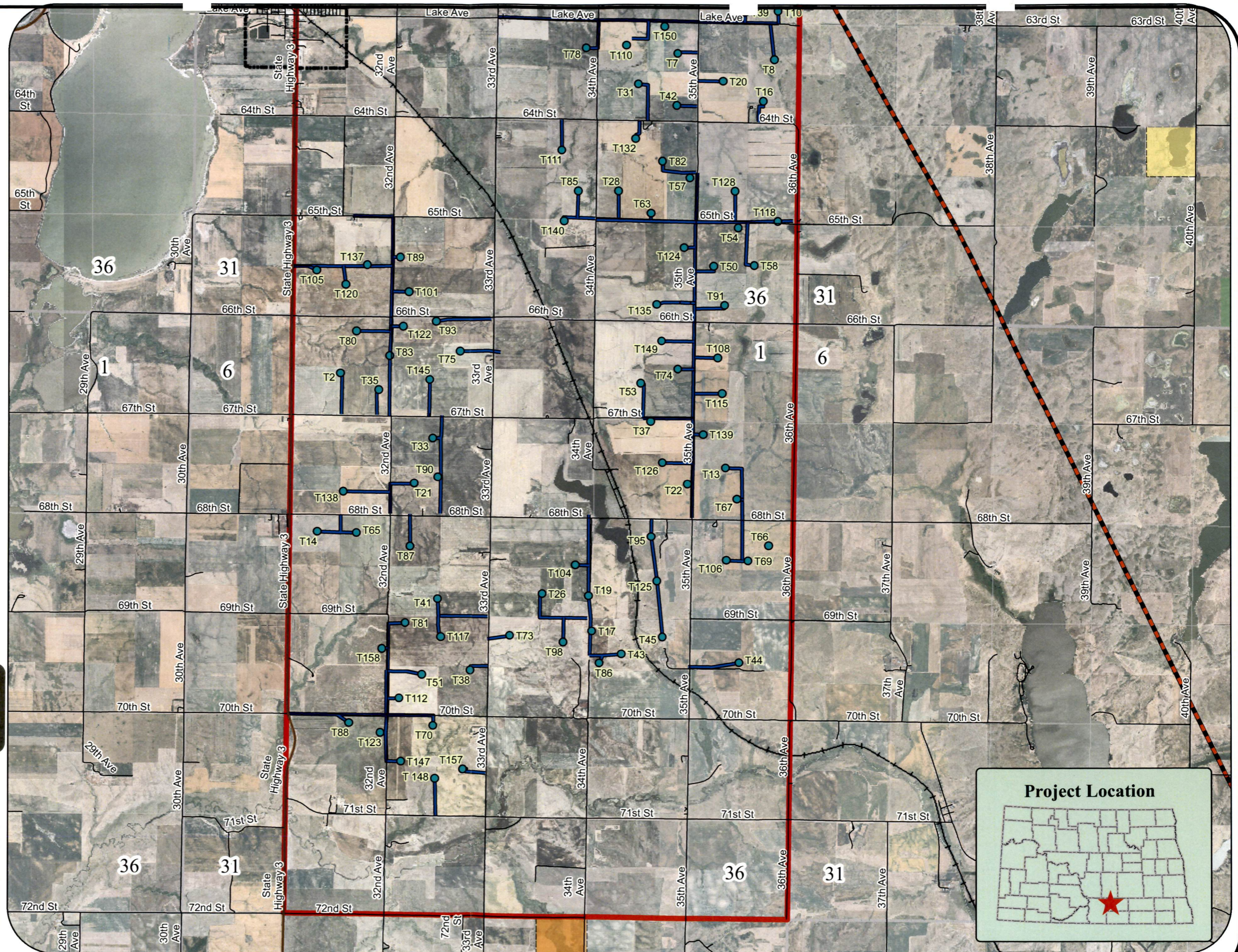
**EXHIBIT**  
S-B



0 0.25 0.5 1 1.5 2 Miles

Location - Phase I South					
Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:
Map created by: <b>Houston Engineering, Inc.</b> 6901 E. Fish Lake Rd., Suite 140 Maple Grove, MN 55369 Box: (763) 493-4522 Fax: (763) 493-5572					

Data downloaded from the ND GIS Data Hub.  
Background is 2006 USDA-FSA Aerial Photography.





# Historical & Archeological Phase I North

- ★ Substation
- Wind Turbines
- Isolated Finds October 2008
- Sites October 2008
- Cultural\_Res\_points\_12Mar08
- Cultural\_Res\_buffers\_12Mar08
- Existing 345kv Transmission Line
- Access Roads
- Roads
- Phase I Project Boundary
- Township Line
- Section Line

### Federal Land Ownership

### US Fish & Wildlife

- Waterfowl Production Area

### State Land Ownership

- ND Land Department
- ND Game & Fish
- Corporate Boundary

**EXHIBIT**  
5-6

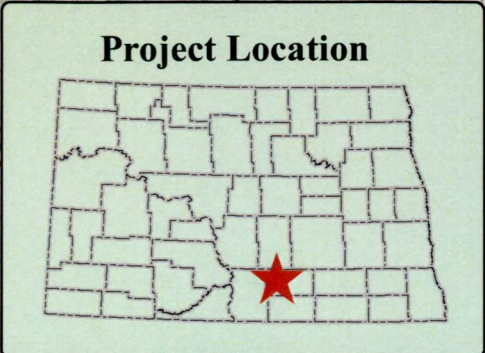
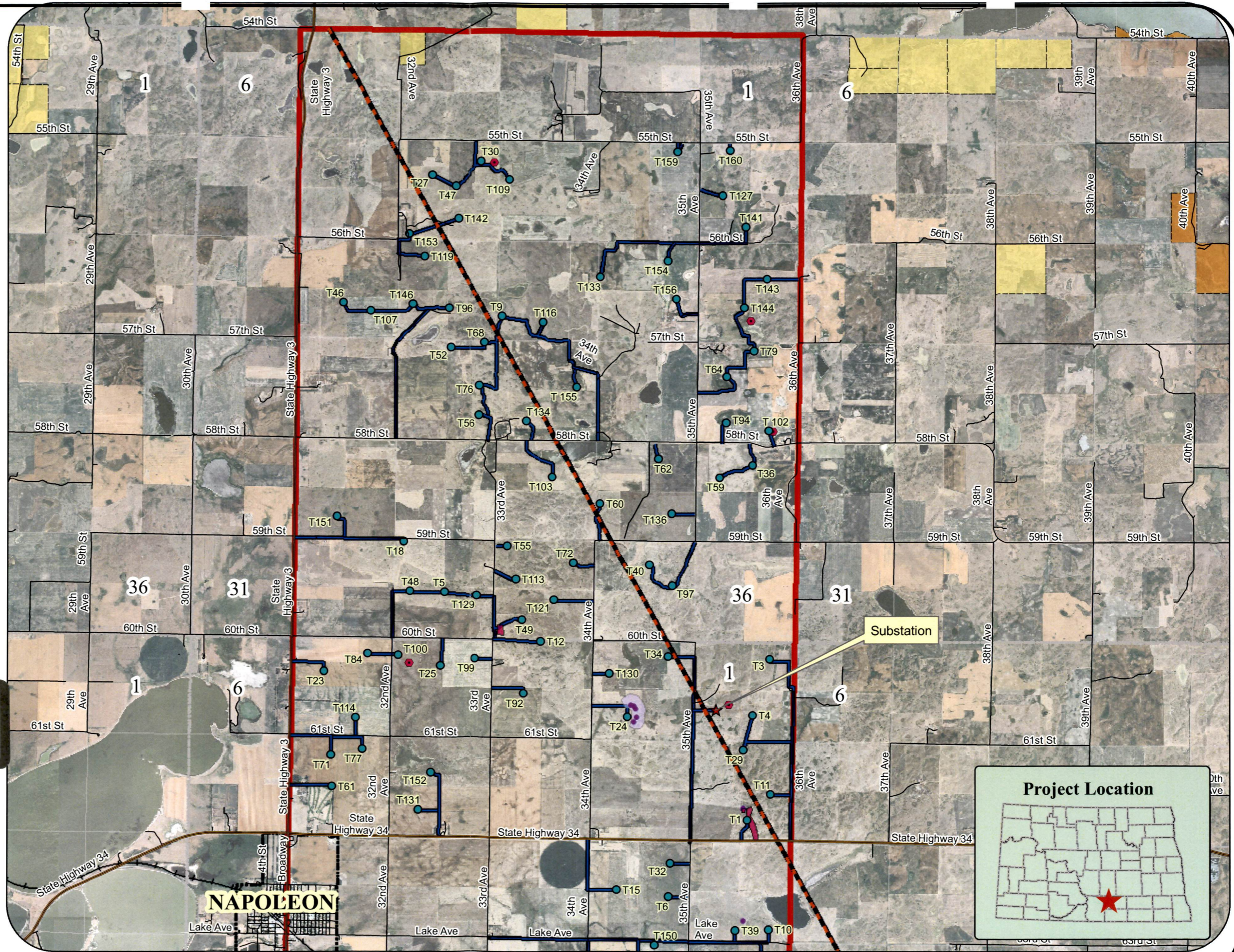
0 0.25 0.5 1 1.5 2 Miles

Historical & Archeological - Phase I North

Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:
-----------------	---------------	-------------	-----------------------	----------------	--------

Map created by:  
**Houston Engineering, Inc.**  
 6901 E. Fish Lake Rd., Suite 140  
 Maple Grove, MN 55369  
 Bus: (763) 493-4532  
 Fax: (763) 493-5572

Data downloaded from the ND GIS Data Hub. Background is 2006 USDA-FSA Aerial Photography.





# Historical & Archeological Phase I South


- ★ Substation
- Wind Turbines
- Isolated Finds October 2008
- Sites October 2008
- Cultural\_Res\_points\_12Mar08
- Cultural\_Res\_buffers\_12Mar08
- Existing 345kv Transmission Line
- Access Roads
- Roads
- Phase I Project Boundary
- Township Line
- Section Line
- Federal Land Ownership**
- US Fish & Wildlife**
- Waterfowl Production Area
- State Land Ownership**
- ND Land Department
- ND Game & Fish
- Corporate Boundary



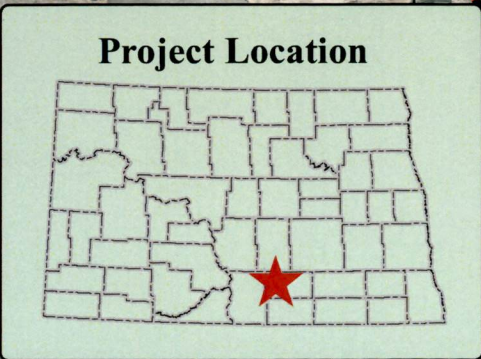
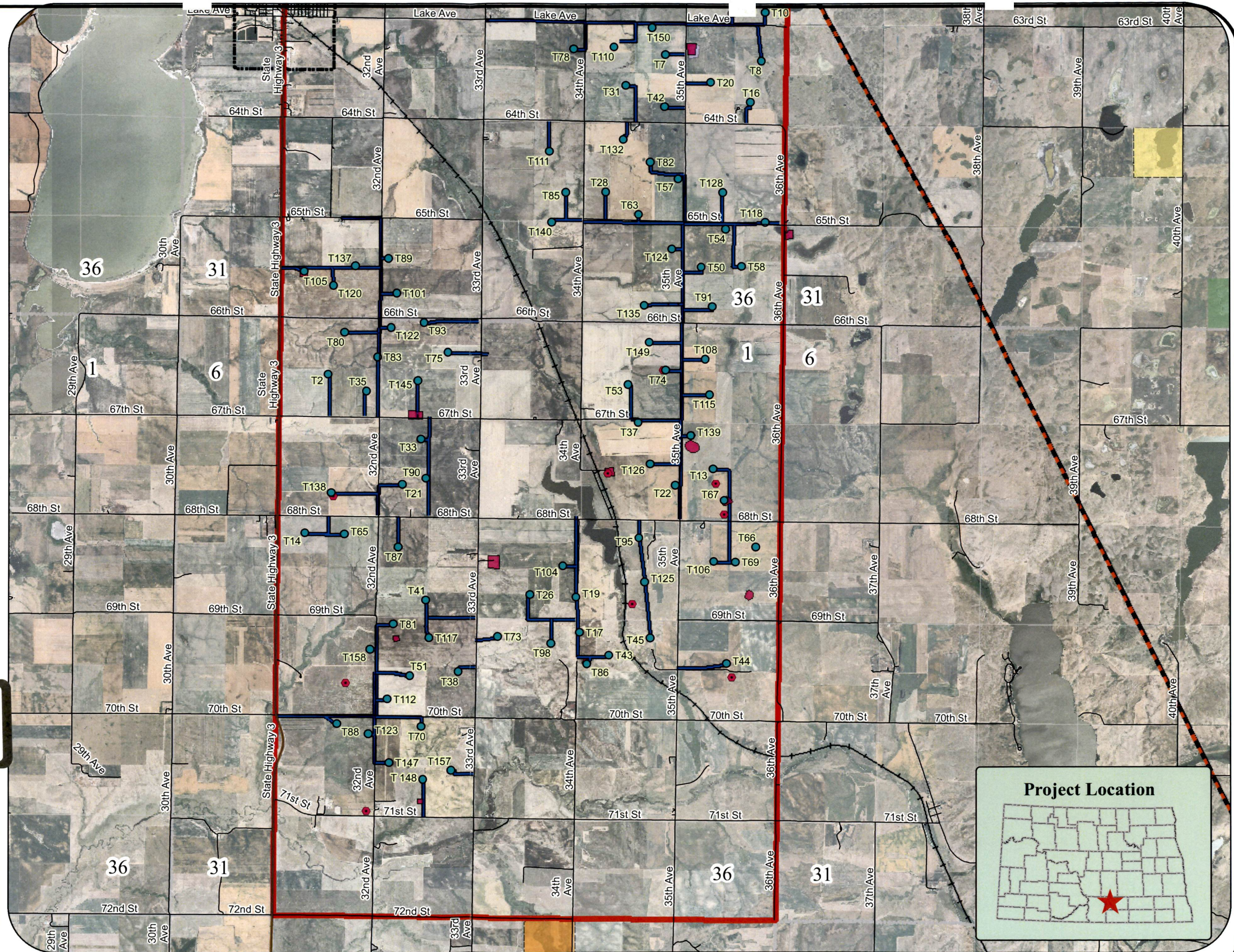
0 0.25 0.5 1 1.5 2 Miles

Historical & Archeological - Phase I South

Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:
--------------------	------------------	-------------	--------------------------	-------------------	--------

Map created by:  

**Houston Engineering, Inc.**  
 6901 E. Fish Lake Rd., Suite 140  
 Maple Grove, MN 55369  
 Bus: (763) 493-4522  
 Fax: (763) 493-5572

Data downloaded from the ND GIS Data Hub. Background is 2006 USDA-FSA Aerial Photography.





# Prime Farmland Phase I North

- ★ Substation
- Wind Turbines
- Existing 345kv Transmission Line
- Access Roads
- Roads

### Prime Farmland Classification

- Farmland of statewide importance
- Prime farmland if drained
- Not prime farmland
- Phase I Project Boundary
- Township Line
- Section Line

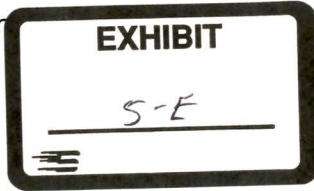
### Federal Land Ownership

### US Fish & Wildlife

- Waterfowl Production Area

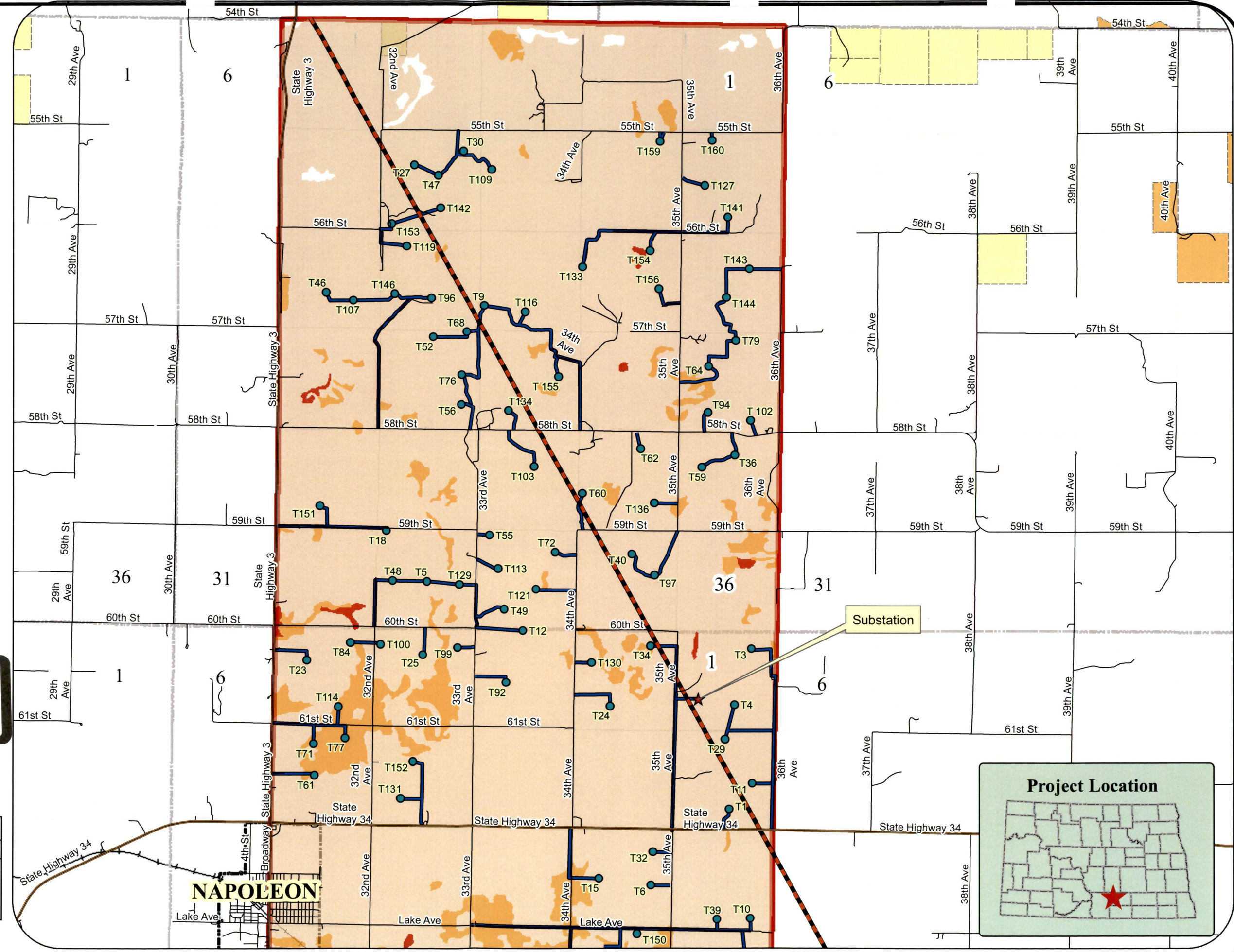
### State Land Ownership

- ND Land Department
- ND Game & Fish
- Corporate Bound



Prime Farmland - Phase I North					
Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:
Map created by: <b>Houston Engineering, Inc.</b> 6901 E. Fish Lake Rd., Suite 140 Maple Grove, MN 55369 Bus: (763) 493-4522 Fax: (763) 493-5572					

Data downloaded from the ND GIS Data Hub.



Substation





# Prime Farmland Phase I South

- ★ Substation
- Wind Turbines
- Existing 345kv Transmission Line
- Access Roads
- Roads

### Prime Farmland Classification

- Farmland of statewide importance
- Prime farmland if drained
- Not prime farmland
- Phase I Project Boundary
- Township Line
- Section Line

### Federal Land Ownership

### US Fish & Wildlife

- Waterfowl Production Area

### State Land Ownership

- ND Land Department
- ND Game & Fish
- Corporate Boundary

**EXHIBIT**

S-F



0 0.25 0.5 1 1.5 2 Miles

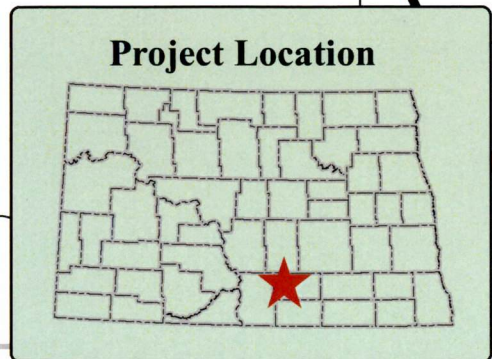
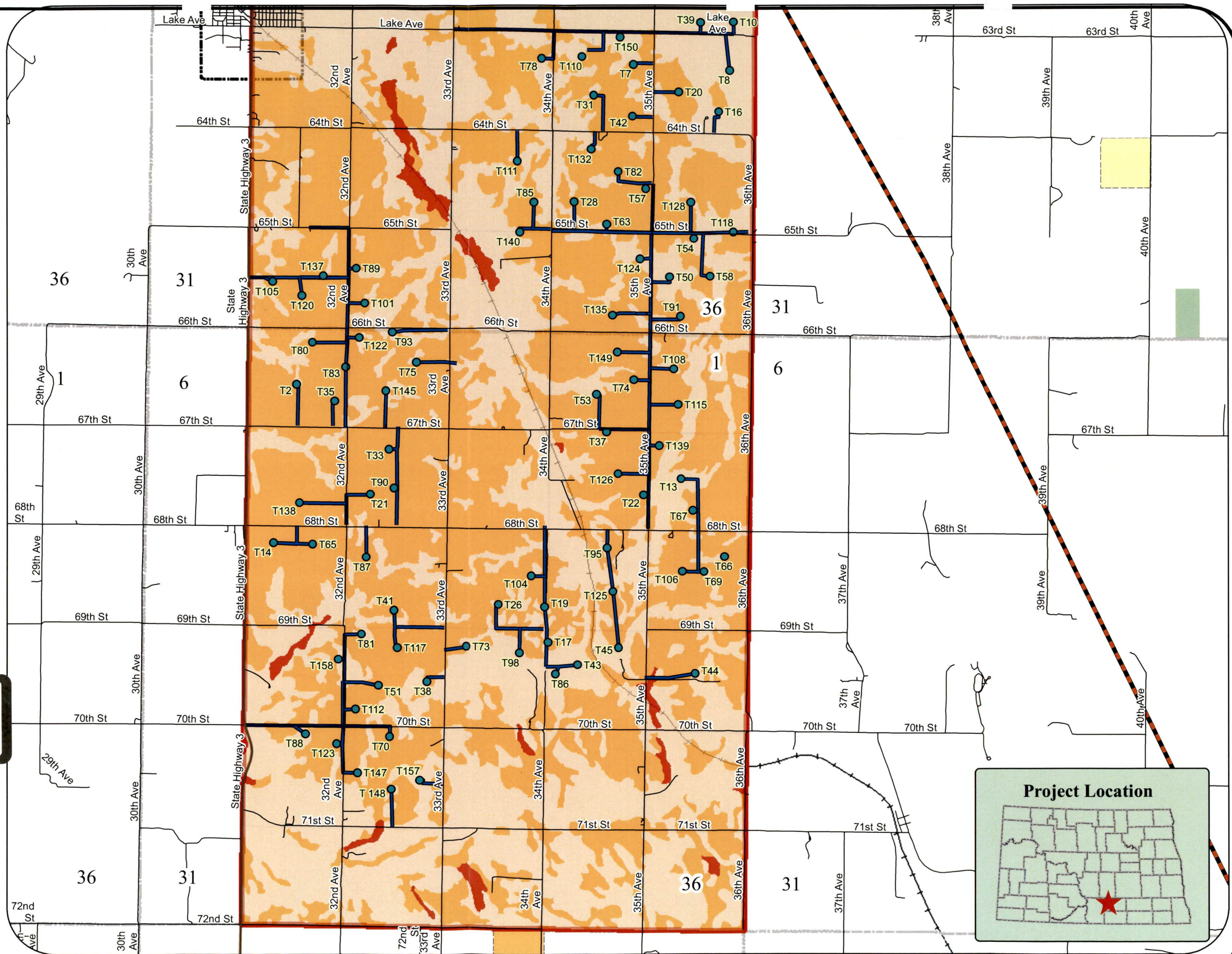
Prime Farmland - Phase I South

Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:
-----------------	---------------	-------------	-----------------------	----------------	--------

Map created by:  

**Houston Engineering, Inc.**  
 6901 E. Fish Lake Rd., Suite 140  
 Maple Grove, MN 55369  
 Bus: (763) 493-4522  
 Fax: (763) 493-5572

Data downloaded from the ND GIS Data Hub.





# Wetlands Phase I North

- ★ Substation
- Wind Turbines
- Existing 345kv Transmission Line
- Cable Lines
- Access Roads
- Roads

### Wetlands (NWI)

- P, PABF
- P, PABFX
- P, PEM/ABF
- P, PEMA
- P, PEMC
- P, PEMF
- P, PFO1A

Phase I Project Boundary

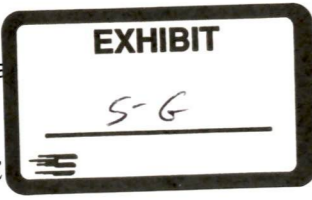
- Township Line
- Section Line

### Federal Land Ownership

- US Fish & Wildlife
- Waterfowl Production Area

### State Land Ownership

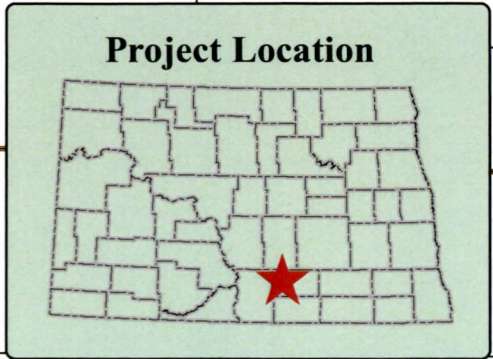
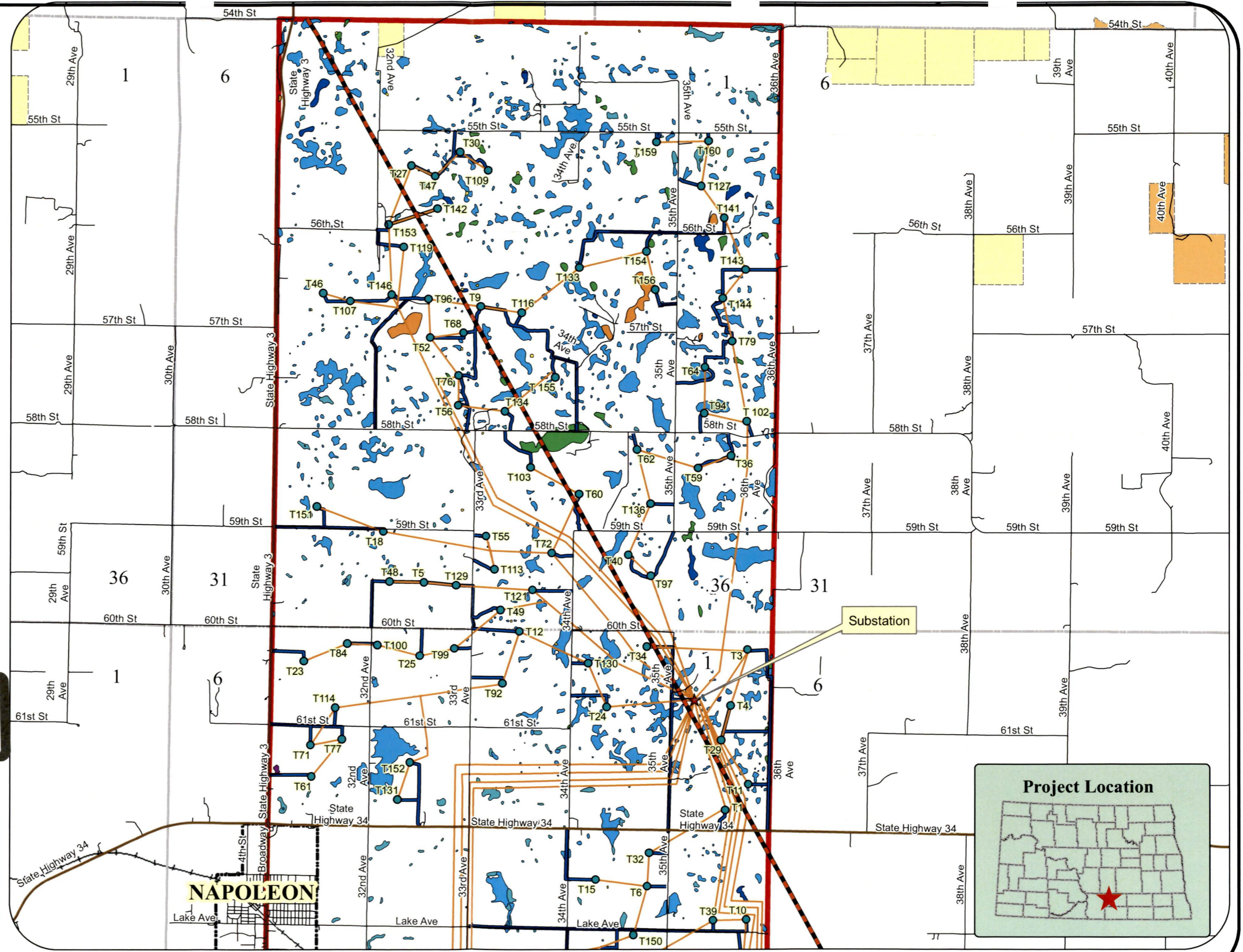
- ND Land Department
- ND Game & Fish
- Corporate Boundaries



Wetlands - Phase I North					
Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:

Map created by:  
**Houston Engineering, Inc.**  
 6901 E. Fish Lake Rd., Suite 140  
 Maple Grove, MN 55369  
 Bus: (763) 493-4522  
 Fax: (763) 493-5572

Data downloaded from the ND GIS Data Hub.





# Wetlands Phase I South

- ★ Substation
- Wind Turbines
- Existing 345kv Transmission Line
- Cable Lines
- Access Roads
- Roads

### Wetlands (NWI)

- P, PABF
- P, PABFX
- P, PEM/ABF
- P, PEMA
- P, PEMC
- P, PEMF
- P, PFO1A
- ▭ Phase I Project Boundary
- ▭ Township Line
- ▭ Section Line

### Federal Land Ownership

#### US Fish & Wildlife

- Waterfowl Production Area

### State Land Ownership

- ND Land Department
- ND Game & Fish
- ▭ Corporate Boundary

**EXHIBIT**

S-H



0 0.25 0.5 1 1.5 2 Miles

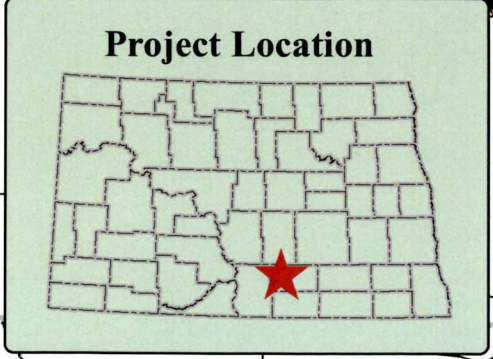
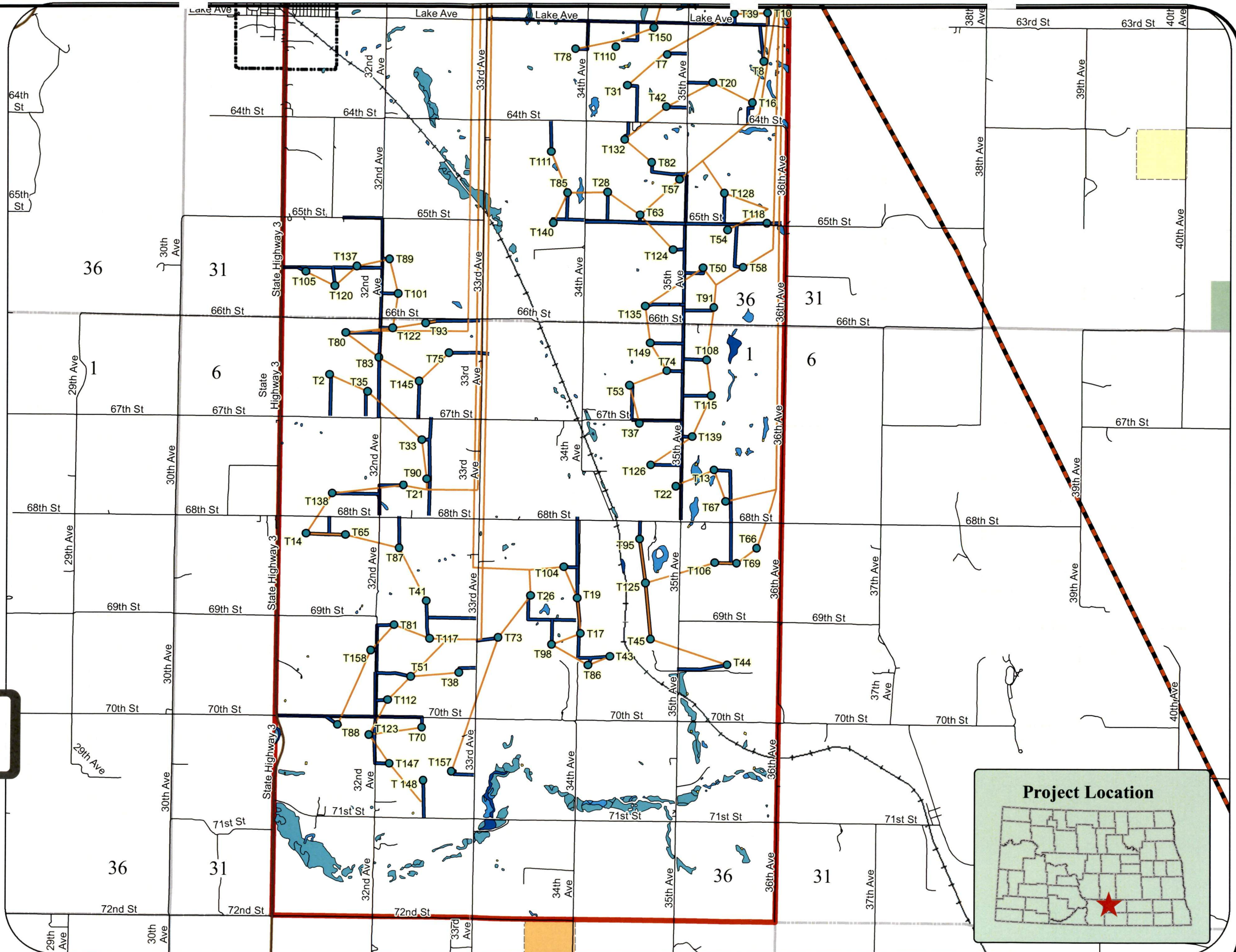
Wetlands - Phase I South

Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:
--------------------	------------------	-------------	--------------------------	-------------------	--------

Map created by:  

**Houston Engineering, Inc.**  
 6901 E. Fish Lake Rd., Suite 140  
 Maple Grove, MN 55369  
 Bus: (763) 493-4522  
 Fax: (763) 493-5572

Data downloaded from the ND GIS Data Hub.





# USFWS Easements Phase I North

- ★ Substation
  - Wind Turbines
  - Existing 345kv Transmission Line
  - Access Roads
  - Roads
  - ▭ Phase I Project Boundary
- Easements**
- ▭ Conservation Easement
  - ▭ Grassland Easement
  - ▭ Wetland Easements
  - ▭ Township Line
  - ▭ Section Line
- Federal Land Ownership**
- US Fish & Wildlife**
- ▭ Waterfowl Production Area
- State Land Ownership**
- ▭ ND Land Department
  - ▭ ND Game & Fish
  - ▭ Corporate Boundary

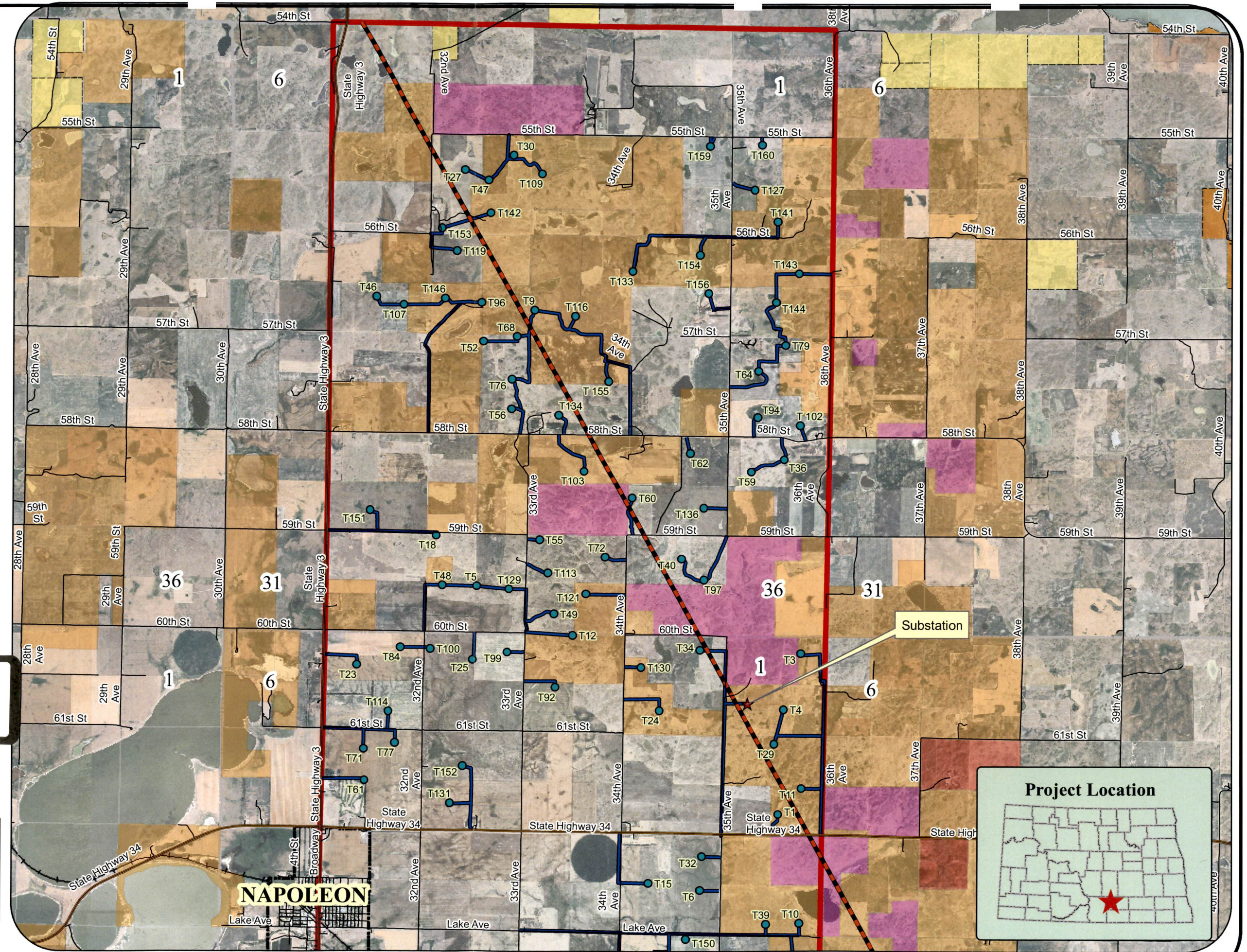
**EXHIBIT**  
S-I



0 0.25 0.5 1 1.5 2 Miles

USFWS Easements - Phase I North					
Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:
Map created by: <b>Houston Engineering, Inc.</b> 6901 E. Fish Lake Rd., Suite 140 Maple Grove, MN 55369 Bus: (763) 493-4522 Fax: (763) 493-5572					

Data downloaded from the ND GIS Data Hub.  
Background is 2006 USDA-FSA Aerial Photography.





# USFWS Easements Phase I South

- ★ Substation
- Wind Turbines
- Existing 345kv Transmission Line
- Access Roads
- Roads
- ▭ Phase I Project Boundary
- Easements**
- ▭ Conservation Easement
- ▭ Grassland Easement
- ▭ Wetland Easements
- ▭ Township Line
- ▭ Section Line
- Federal Land Ownership**
- US Fish & Wildlife**
- ▭ Waterfowl Production Area
- State Land Ownership**
- ▭ ND Land Department
- ▭ ND Game & Fish
- ▭ Corporate Boundary

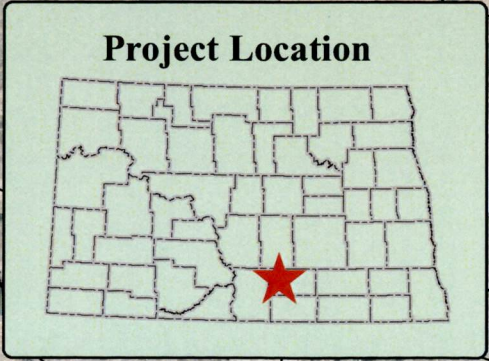
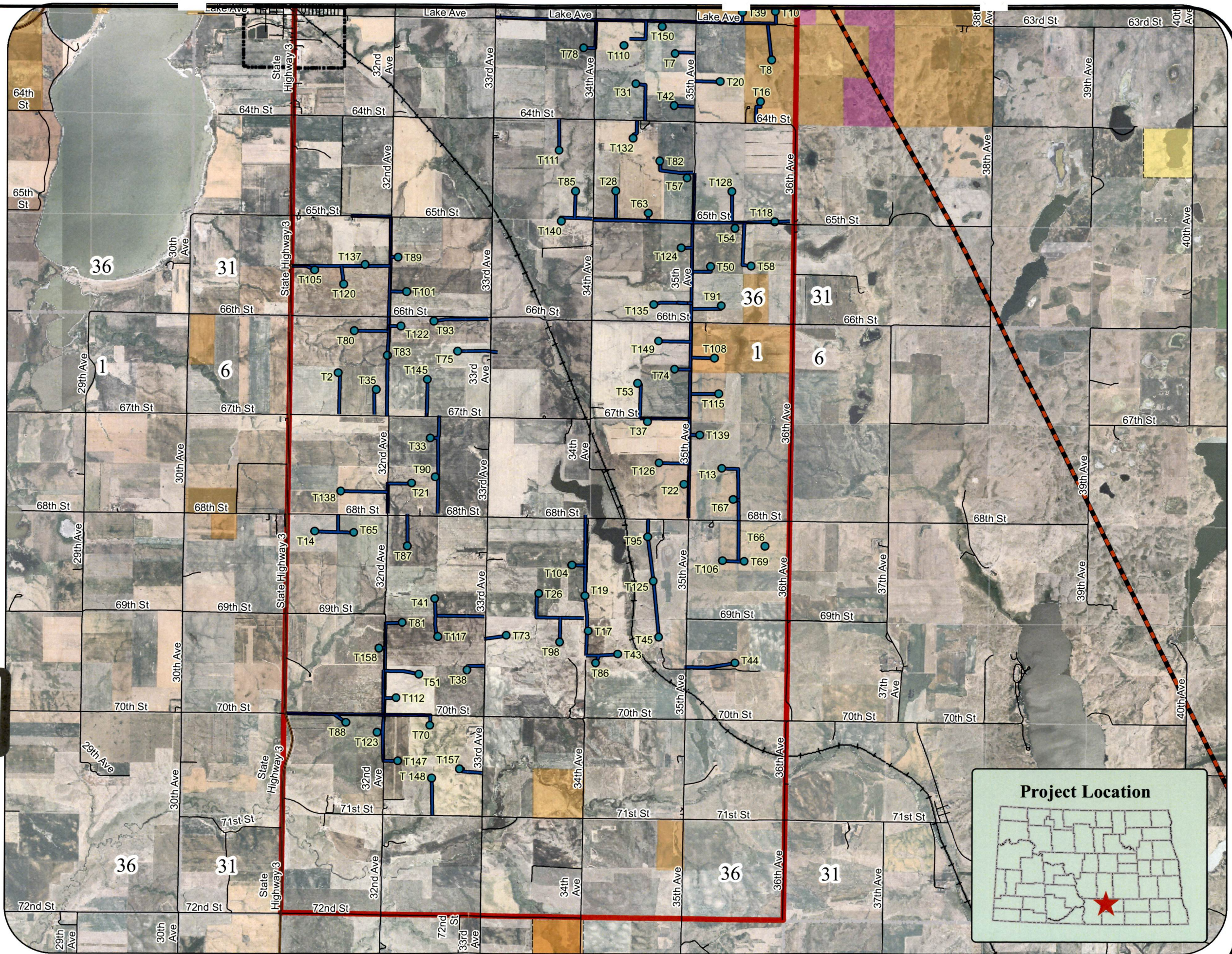
**EXHIBIT**  
S-5



0 0.25 0.5 1 1.5 2 Miles

USFWS Easements - Phase I South					
Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:
<b>Map created by:</b> <b>Houston Engineering, Inc.</b> 6901 E. Fish Lake Rd., Suite 140 Maple Grove, MN 55369 Bus: (763) 493-4522 Fax: (763) 493-5572					

Data downloaded from the ND GIS Data Hub.  
Background is 2006 USDA-FSA Aerial Photography.





# Setbacks Phase I North

- All Setbacks
- Substation
- Wind Turbines
- Existing 345kv Transmission Line
- Access Roads
- Roads
- Phase I Project Boundary
- Township Line
- Section Line
- Federal Land Ownership**
- US Fish & Wildlife**
- Waterfowl Production Area
- State Land Ownership**
- ND Land Department
- ND Game & Fish
- Corporate Boundary

**EXHIBIT**

S-K



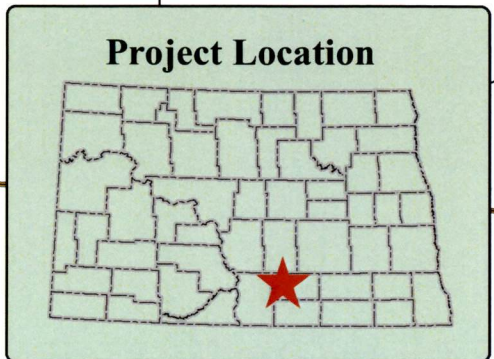
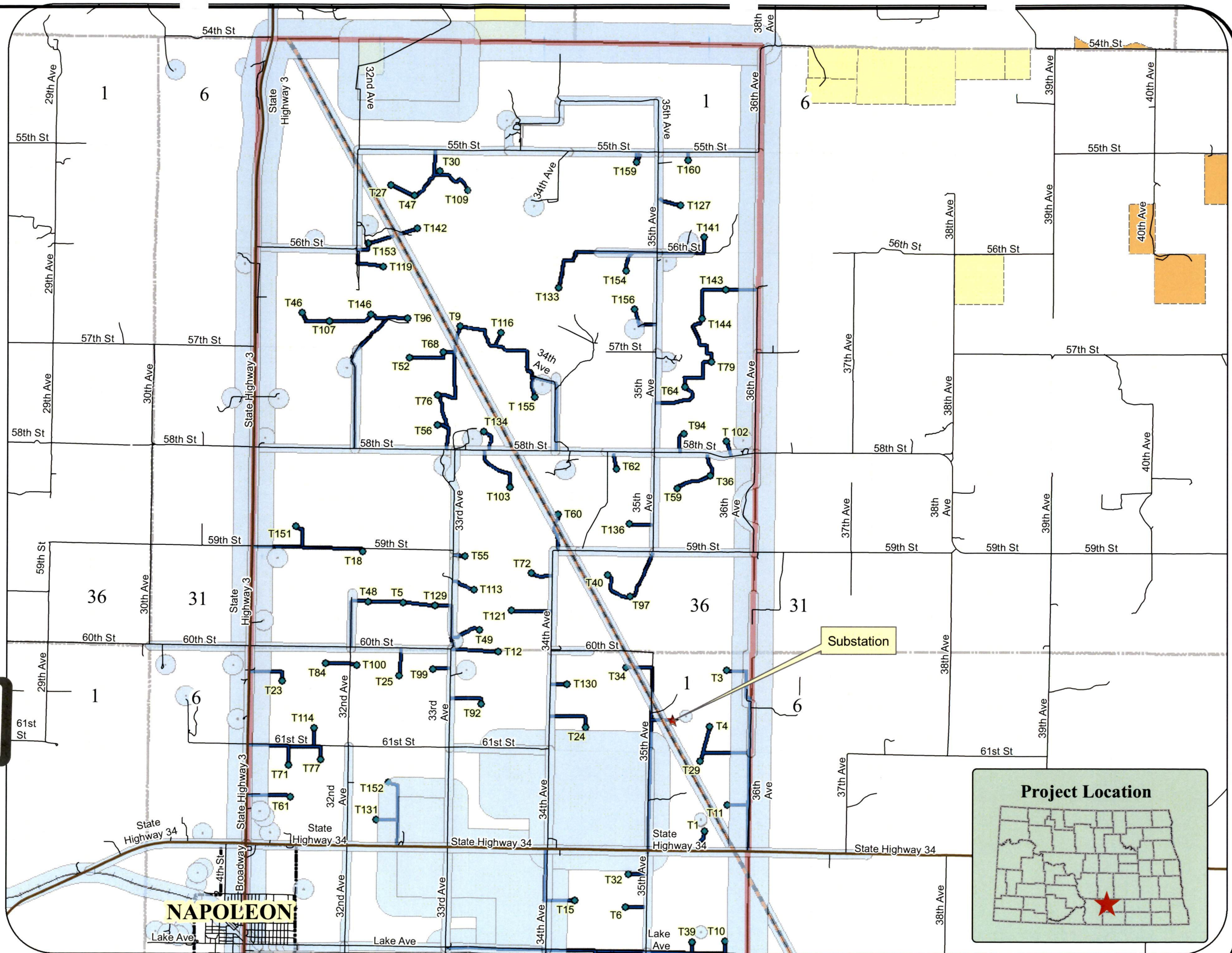
0 0.25 0.5 1 1.5 2 Miles

Setbacks - Phase I North

Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:
-----------------	---------------	-------------	-----------------------	----------------	--------



Data downloaded from the ND GIS Data Hub.  
Background is 2006 USDA-FSA Aerial Photography.



**NAPOLEON**



# Setbacks Phase I South

- All Setbacks
- Substation
- Wind Turbines
- Existing 345kv Transmission Line
- Access Roads
- Roads
- Phase I Project Boundary
- Township Line
- Section Line

### Federal Land Ownership

### US Fish & Wildlife

- Waterfowl Production Area

### State Land Ownership

- ND Land Department
- ND Game & Fish
- Corporate Boundary

**EXHIBIT**

S-2



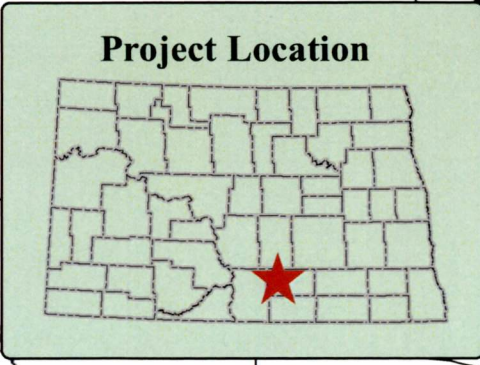
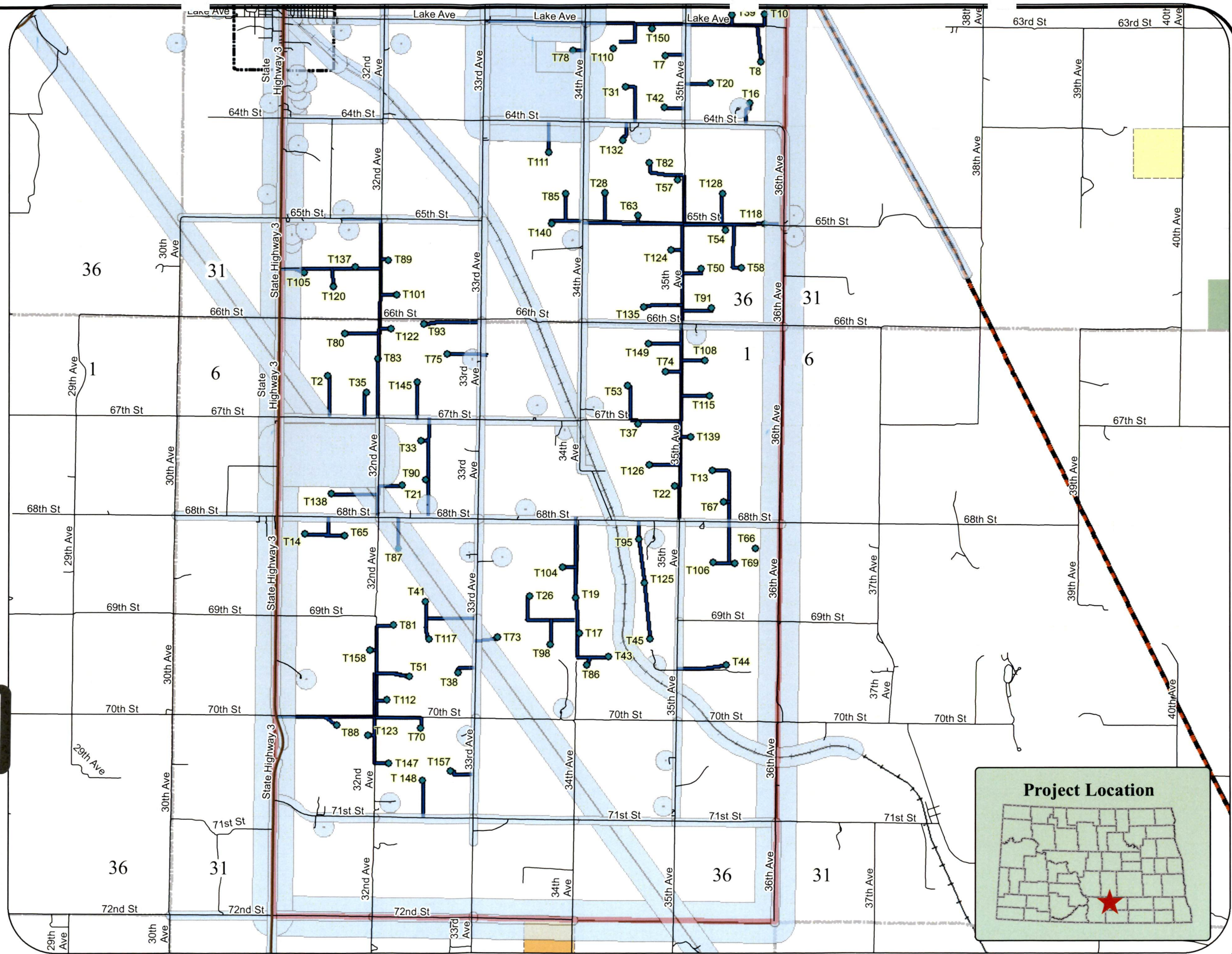
0 0.25 0.5 1 1.5 2 Miles

Setbacks - Phase I South

Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:
--------------------	------------------	-------------	--------------------------	-------------------	--------

Map created by:  
**Houston Engineering, Inc.**  
 6901 E. Fish Lake Rd., Suite 140  
 Maple Grove, MN 55369  
 Bus: (763) 493-4522  
 Fax: (763) 493-5572

Data downloaded from the ND GIS Data Hub.  
Background is 2006 USDA-FSA Aerial Photography.





# Airport Ring Phase I

- ★ Substation
- Wind Turbines
- Existing 345kv Transmission Line
- Access Roads
- Roads
- Airport Ring
- ▭ Phase I Project Boundary
- ▭ Township Line
- ▭ Section Line
- Federal Land Ownership**
- US Fish & Wildlife**
- ▭ Waterfowl Production Area
- State Land Ownership**
- ▭ ND Land Department
- ▭ ND Game & Fish
- ▭ Corporate Boundary

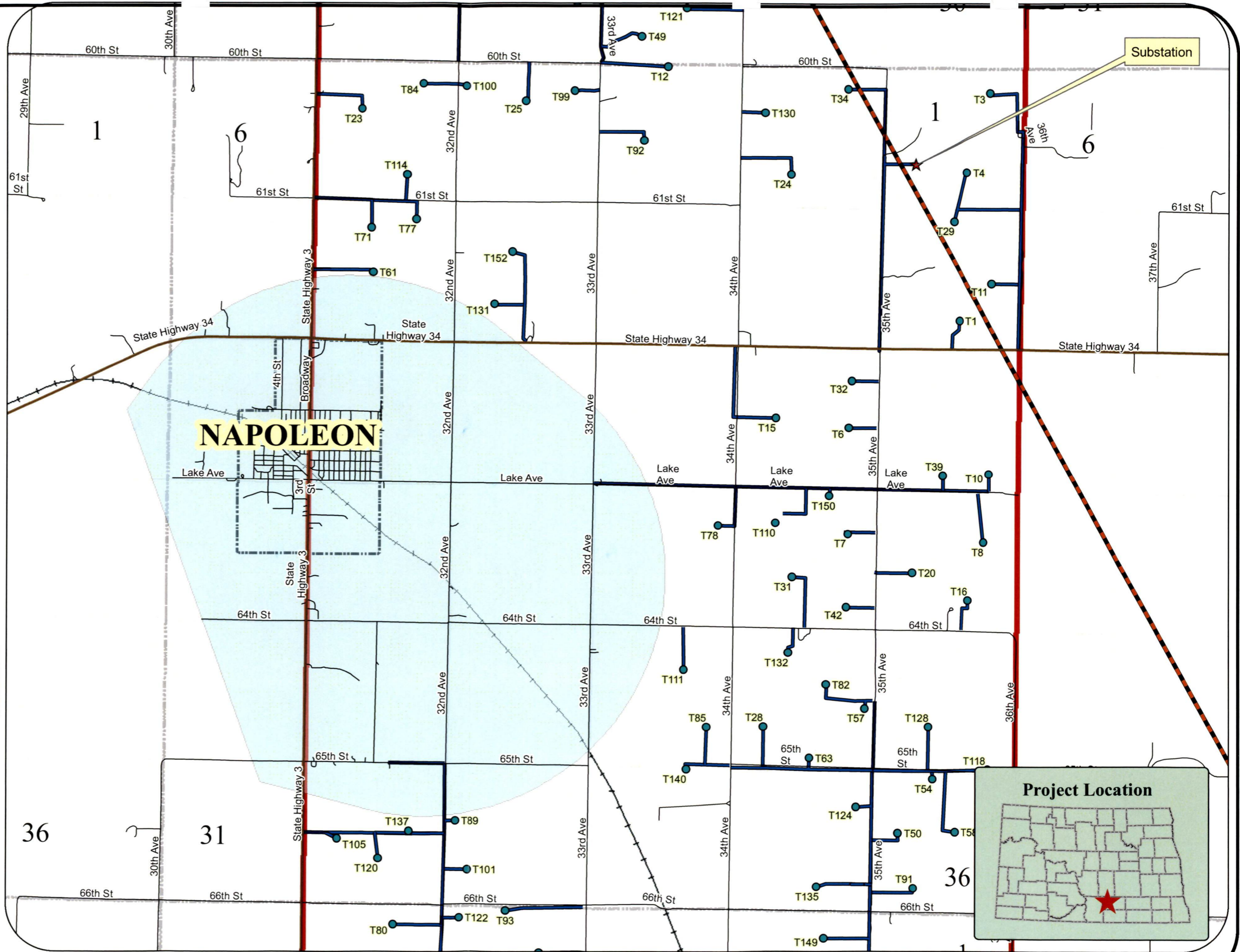
PENGAD 800-631-6888  
**DEPOSITION EXHIBIT**  
 5-M



0 0.2 0.4 0.8 1.2 1.6 Miles

Airport Ring- Phase I					
Scale: AS SHOWN	Drawn by: KZS	Checked by:	Project No.: 5192-000	Date: 10/17/08	Sheet:
Map created by: <b>Houston Engineering, Inc.</b> 6901 E. Fish Lake Rd., Suite 140 Maple Grove, MN 55369 Bus: (763) 493-4522 Fax: (763) 493-5572					

Data downloaded from the ND GIS Data Hub.



# Mark D. Aanenson

## Environmental Scientist

---



### Education:

B.S., Life Sciences/Biology,  
Moorhead State University,  
1990

### Professional Experience:

Houston Engineering, Inc.,  
1998 – Present  
Mahnomon Soil and Water  
Conservation District,  
1991-1998

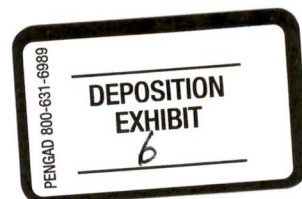


**Mark Aanenson**  
performing environmental  
work

Mark D. Aanenson's role at Houston Engineering, Inc. as an environmental scientist is to work in the areas of environmental review, wetland permitting and delineation, water quality and biological monitoring programs, as well as the preparation of water quality documents such as water quality protection plans.

### Relevant experience includes:

- **Just Wind, LLC, Logan County Wind Farm, North Dakota.** Environmental Scientist for the proposed wind farm project located near Napoleon, North Dakota. The project will include 160 wind turbines and have a nameplate generating capacity of approximately 368 megawatts. The project includes the preparation of environmental documents to support applications to the Public Service Commission, Western Area Power Administration, and Basin Electric Power Cooperative. Field investigations of the project area, and the proposed turbine and access road locations were conducted to identify any potential impacts to the US Fish and Wildlife easements (Conservation Easements, Grassland Easements and Wetland Easements).
- **Wetland Evaluation and Permitting, Big Cormorant Shoreland Development, Becker County, MN.** Conducted wetland inventory and permitting for a 28 unit Planned Unit Development (PUD) located on Big Cormorant Lake in Becker County. (November 2004)
- **Wetland Delineation, Becker County, MN.** Conducted an assessment of 19 acres of private property located approximately one mile east of the City of Detroit Lakes, for wetland identification and delineation. (October, 2002)
- **Wetland Delineation, Clay County, MN.** Conducted an assessment of 320 acres of private property for wetland identification and delineation. Conducted 13 delineations resulting in 31.6 acres of wetlands. (September 2001)
- **Wetland Delineation, Stearns and Benton Counties, MN.** Conducted wetland delineations for five residential subdivisions located in Stearns and Benton Counties. (2002)
- **Wetland Conservation Act (WCA).** As the WCA coordinator for Mahnomon County and the cities of Mahnomon and Waubun, Mark was responsible for administration of the WCA from 1991-1998.
- **Marsh Creek Wetland Mitigation, Wild Rice Watershed District, Norman County, MN.** Prepared a mitigation and monitoring plan for two mitigation sites consisting of the restoration of over 69 acres of wetlands. (2003)



# Mark D. Aanenson

## Environmental Scientist

---

- **U.S. Highway No. 2.** Served as lead for the wetlands team, in the proposed four-laning of U.S. Highway No. 2 for the North Dakota Department of Transportation. Performed approximately 450 field delineations within a 100-mile project corridor. (1999)
- **Wetland Delineations for Highway 10, Carver County, Minnesota.** Conducted field review and preparation of reports for the Carver County Highway Department that determined the location of wetlands for seven miles of roadway reconstruction. (2002)
- **Wetland Delineations for CSAH 27, Pennington County, Minnesota.** Conducted field review and preparation of reports for the Pennington County Highway Department that determined the location of wetlands for thirteen miles of roadway reconstruction. (2002)
- **Deerhorn Creek Flood Control Project.** Performed field delineation work for Buffalo-Red River Watershed District for permitting approximately 14 miles of flood control levees. (2000)
- **Administrator – Wild Rice Watershed District - 2005 to 2006.** Mr. Aanenson served as Administrator for the Wild Rice Watershed District from May 2005 to April 2006. Responsibilities included: acting as direct representative of the Board of Managers with authority to perform day to day administrative duties of the District; supervising and coordinating office operations; preparing meeting notices; providing supportive information to the Board; assisting with long-range policies of the District; coordinating with other local units of government and agencies on projects; providing recommendations on budgets and project financing; and, assisting in project development and scheduling.
- **Permitting Coordinator – Wild Rice Watershed District – April 2005 to Current.** Mr. Aanenson is responsible for coordination of the District Permitting program. Responsibilities include: oversight of the permit application, correspondence with permit applicants, GIS mapping of the permits, conducting field reviews of the applications, preparing technical materials for review by the board, and making technical recommendations on each permit for board review in consultation with the District Engineer.
- **Ordinary High Water Mark Delineation – ND State Water Commission.** Served as Lead Biologist for the delineation of the Ordinary High Water Mark (OHWM) for the North Dakota State Water Commission (NDSWC) on North Dakota's navigable waters. In 2007 three projects were completed, one on the Missouri River in Bismarck, one on the Missouri River in Mandan and one on the Missouri River south of Williston, North Dakota. The use of vegetative and soil indicators as well as hydrologic data in the delineation process was developed for the State Waters Commission by Houston Engineering along with delineation data forms. Responsibilities included: conducted and supervised fieldwork including the coordination of travel, transportation, lodging, field equipment and supplies, preparation of an OHWM report and participation in a field reviews by the NDSWC staff.
- **Permitting and EAW - Manston Slough Wetland Restoration Project, Buffalo-Red River Watershed District, Barnesville, Minnesota.** This project involves the design of a 1,100 acre wetland restoration on federal, state, and private land in Manston, Meadow, and Mitchell Townships of Wilkin County, Minnesota. Project restores wetlands to the 1950s level. Project provides 4,340 acre-feet of flood storage and restores over 350 acres of previously drained wetlands. Responsibilities included: conducted wetland delineation fieldwork and preparation of a delineation report, preparation of permitting forms and preparation of the Environmental Assessment Worksheet.
- **Sand Hill River Watershed District Plan Update, Fertile, Minnesota 2006 – 2008.** Served as lead staff person for the update of the District's plan under Minnesota Rules 103D. Evaluated both existing resources and local resource concerns. Incorporated unique aspects into the plan including sustainability, flood damage reduction goals, natural resource goal setting and an evaluation of goal compatibility and policies based on existing resource plans. Coordinated plan review with state agencies, local interest groups and local residents.

# Mark D. Aanenson

## Environmental Scientist

---

### Water Resources:

- **County Ditch 2, Big Stone County, Minnesota.** Houston Engineering was retained to support a legal action involving County Ditch 2 in Big Stone County. The focus of the dispute involved a proposed ditch repair downstream of a protected-water as defined by the Minnesota Department of Natural Resources (DNR). Prior to our involvement, an Environmental Worksheet Assessment (EAW) was performed for this project that resulted in a determination of no significant impacts due to the proposed project. The legal dispute emanated from an opinion that a significant impact exists in that the aforementioned ditch repair would drain the DNR protected water. Houston successfully demonstrated that the proposed ditch repair would not alter the “as-built” ditch condition. Houston also determined that the protected water in question would remain a wetland after the repair and would not lose its “protected water” status. Additionally, we concluded that potential wetland functions and values lost due to the proposed ditch repair could be returned through a restoration project. We also testified about our findings and conclusions.
- **Stearns County Lake Monitoring.** In 2002 Stearns County retained Houston Engineering, Inc. to complete the water quality sampling, conduct data analysis, and to develop implementation strategies to improve or maintain current water quality levels on the selected lakes. As project manager, Mark was responsible for all aspects of the project. Technical activities performed included all water quality sampling and fieldwork. Sampling was completed once per month from June to September. Each lake was sampled in two locations. The sample locations were identified using a GPS unit and the coordinates were included in the final report. The sampling included Secchi disc readings, temperature and dissolved oxygen profiles, and chlorophyll-a and total phosphorus samples.
- **Wild Rice/Marsh River Water Quality Basin Assessment, Wild Rice Watershed District, Northwestern Minnesota.** Provided technical support for a 2,080-mi<sup>2</sup>-watershed inventory and assessment project. Evaluated metrics to assess and prioritize mainstem and tributary flowages as well as recreational lakes in terms of water quality indicators. Stream metrics included sediment yield delivery, standard exceedances, stream stability and bank erosion, stream riparian area, and index of biotic integrity. Metric assessments were used to develop a ten-year implementation plan for improving water quality within the Wild Rice Watershed District.
- **Upper Minnesota River Watershed District Plan Update, Ortonville, Minnesota.** Served as lead technical person for the update of the District’s plan under Minnesota Rules 103D. Evaluated both existing resources and local resource concerns. Incorporated unique aspects into the plan including sustainability, natural resource goal setting and an evaluation of goal compatibility and policies based on existing resource plans. Coordinated plan review with state agencies, local interest groups and local residents.
- **Habitat Modeling of the Yellow Medicine and Minnesota Rivers.** Intern for the MN DNR Ecological Services, was responsible for assisting fisheries biologists in field work collecting data to be used in the Physical Habitat Simulation Model (PHABSIM) to be used in the establishment of protected flows relating to industrial and agricultural water use. Duties included identification of fish samples, evaluations of sample cell data, and organizing and maintaining research equipment.
- **Ottertail River Mussel Study.** Intern for the MN DNR Ecological Services, was responsible for assisting fisheries biologists in field work collecting data to be used in the establishment of population estimates and habitat information for the development of harvest limits. Duties included sample cell evaluations for substrate, species, population, and hydrologic characteristics.
- **Mahnomen County Well Sealing Project.** As project administrator was responsible for publicizing the grant program and the design of signup sheets. Also, involved the ranking of abandoned wells for pollution potential and developing criteria for using state funds to assist in the sealing of high priority wells. Other duties included budget oversight and coordination of sealing documents (MN Department of Health Well Records).

# Mark D. Aanenson

## Environmental Scientist

---

- **Mahnomen County Water Plan Five-Year Update.** Served as project manager and lead technical person for the update of the County's Water Resources Plan under MN Rules 103.B. Directed public meetings and incorporated water resource protection and management aspects, identified by a local water resources task force, into the plan. Coordinated plan review with other Local Government Units and State Agencies.
- **City of Maple Grove Wetland Monitoring.** Currently conducting wetland monitoring activities as outlined in the Administrative Manual for the Wetland Conservation Act for 33 wetland replacement sites. Conducted wetland monitoring activities as outlined in the Administrative Manual for the Wetland Conservation Act for 14 wetland replacement sites for a period of five years. Provided a yearly monitoring report for each development characterizing the hydrology and plant communities of the sites. Also determined recommendations for modifications or corrective actions for each site based on the designed wetland types and existing conditions. Activities involved monitoring water levels during the growing season and the identification of plant species and communities.

### Environmental:

- **Otter Tail Power Substation Reviews.** Prepared Spill Prevention Control and Countermeasure Plans for 18 substations sites in Minnesota and South Dakota and for the electrical equipment at the Hoot Lake Plant located in Fergus Falls, MN. Conducted site reviews for soils, topography, substation characteristics and evaluated the potential for surface flow to open water bodies. A report was prepared for each site, which includes the site review, modeling results, and recommendations to prevent mineral oil from reaching adjacent water bodies.
- **Christ Lutheran Church Transaction Screen.** Prepared an Environmental Site Assessment Transaction Screen for Christ Lutheran Church located in Otsego, Minnesota. The purpose of the Transaction Screen was to evaluate the potential and/or presence of recognized environmental conditions associated with the current property use. The Transaction Screen was requested by Thrivent Financial for Lutherans.
- **MEER Construction Phase I Environmental Site Assessment.** Prepared a Phase I Environmental Site Assessment for MEER Construction on a property located in Maple Grove, Minnesota. Currently, MEER Construction has an "Option to Purchase" the property, which is zoned for commercial development, from Barbarossa & Sons, Inc. The purpose of the Phase I was to identify any recognized environmental conditions that exist at the site through a process defined as ASTM's Standard Practice for Environmental Site Assessments.
- **Great River Energy Transmission Line Reroute.** Served as lead for the biological resources work, to prepare an application for a Certificate of Corridor Compatibility and Route Permit to be submitted to the North Dakota Public Service Commission. Performed approximately 130 wetland field determinations and 35 wetland delineations within a 37-mile project corridor. Also natural resources assessment of the corridor including: land use, vegetation, wetlands, riparian resources, geology and soil resources, and rare, threatened, and endangered species. Prepared a Biological Report used for completion of the Public Service Commission permitting application process. Conducted agency consultation on permitting issues as well as formal and informal consultation for the threatened and endangered species. Supervised fieldwork including: the coordination of travel, transportation, lodging, field equipment and supplies.
- **Alliant Energy-Emery to Lime Creek 161 kV Transmission Line.** Served as lead for the biological resources work for the Alliant Energy Project involving a new transmission line in Cerro Gordo County, Iowa. The Emery to Lime Creek Substations Transmission Line Project included field work and preparation of a Natural and Cultural Resources Corridor Report. In addition, Houston Engineering performed an analysis of the permit requirements for the construction of the 161 kV transmission line. The proposed transmission line is

# Mark D. Aanenson

## Environmental Scientist

---

approximately 25 miles in length and will connect a 161 kV source located at the Emery Substation in Emery, Iowa, to the Lime Creek Substation near Manly, Iowa.

- **Great River Energy, Environmental Documentation for the Certificate of Need and the Environmental Quality Board Route Permit: Plymouth-Maple Grove 115 kV Transmission Line Project.** Served as lead for the biological resources work for a Great River Energy/Wright-Hennepin Cooperative Electric Association transmission line project. The Plymouth-Maple Grove Project included the preparation of an environmental report as part of the Certificate of Need application to the Minnesota Public Utilities Commission. Field studies were conducted to identify cover types, state rare species habitat and natural communities, locations and types of jurisdictional wetlands, land uses and any existing structures.
- **SPCC Plans – Electrical Substations.** Worked cooperatively with Great River Energy and local Energy Cooperatives to evaluate and prepare Spill Prevention Control and Countermeasures (SPCC) Plans for over 50 electrical substations. Conducted field evaluations whereby the sites and adjacent areas were investigated and any navigable waters or wetlands were identified. Analyzed background and field data and modeled various spills using MOSES (Mineral Oil Spill Evaluation System), which was developed by the Electrical Power Research Institute. Developed the SPCC Plans following the analysis and modeling. (2002)
- **Great River Energy Substation Reviews.** Prepared Spill Prevention Control and Countermeasure Plans for 32 substations sites in Minnesota. Conducted site reviews for soils, topography, substation characteristics and evaluated the potential for surface flow to open water bodies. Used the field data to model various spill scenarios using the MOSES Model. A report was prepared for each site, which includes the site review, modeling results, and recommendations to prevent mineral oil from reaching adjacent open water bodies.
- **Connexus Energy Substation Reviews.** Prepared Spill Prevention Control and Countermeasure Plans for 3 substations sites in Minnesota. Conducted site reviews for soils, topography, substation characteristics and evaluated the potential for surface flow to open water bodies. Used the field data to model various spill scenarios using the MOSES Model. A report was prepared for each site, which includes the site review, modeling results, and recommendations to prevent mineral oil from reaching adjacent open water bodies.
- **Federal Farm Bill Compliance.** As the District Manager of the Mahnomon Soil and Water Conservation District, Mark was responsible for providing technical support to the Natural Resources Conservation Service in conducting compliance reviews for wetlands and highly erodible field reviews from 1991-1998. Field investigations as well as aerial photography and soil survey interpretations were completed to identify various vegetative and cropping histories as well as drainage activities. The results were compiled for regulatory decisions for agricultural program compliance.
- **White Earth River Bioengineering.** Responsible for implementing bioengineering techniques to stabilize the stream using native vegetation to improve water quality and aesthetics. The MN Board of Water and Soil Resources and the City of Mahnomon funded the project jointly through a special project grant. Mark was also responsible for the grant application and report.
- **Individual Sewage Treatment System Surveys.** As project administrator, was responsible for budget development and coordination with Lake Associations and property owners. Lakes surveyed include White Earth, Tulaby, North Twin, and South Twin Lakes. Also coordination with the County Board on shoreland ordinance enforcement concepts and the administration of a low interest loan program for ISTS upgrades with Farm Credit Services.
- **Legal Ditch System Research and Mapping of Benefiting Areas.** As project manager, was responsible for all aspects of the project, including research of ditch records, the establishment of benefiting area maps, and

# Mark D. Aanenson

## Environmental Scientist

---

presentation of findings to the County Board. Other duties included presentations on the use of the ditch maps and working with the county to facilitate the establishment of ditch inspection committees.

- **County Land Sale Environmental Review.** Coordinated with the County to establish a procedure for the environmental review of tax forfeited parcels for disclosure items to potential purchasers, as well as potential for wetland banking sites to be used as mitigation for future county road projects.
- **Manure Management Challenge Grant.** As administrator, responsible for budget oversight and coordination of manure testing with feedlot operators and assistance on a workshop dealing with innovative techniques to manage livestock nutrients, including direct injection systems and secondary injection systems. A Feedlot Challenge Grant through the Board of Water and Soil Resources funded the project. (1996)
- **AG Waste Systems – Mahnomon County.** As project administrator and county feedlot officer, was responsible for working with landowners in the completion of all relevant documents including feedlot and zoning permit applications. Was responsible for applications for state and federal cost share funds. Other duties included preproject site evaluations, survey work, preconstruction meetings with contractors, and assistance on manure management plans. Worked on approximately eleven agricultural waste systems, some of which included storage basins, runoff ponds, clean and dirty water diversions, and filter strips. (1995-1998)
- **Erosion Control Projects.** As District Manager of the Mahnomon County Soil and Water Conservation District, was responsible for working with landowners to implement erosion control projects. Projects include field windbreaks, grassed waterway, water and sediment basins, grade stabilization structures, critical area stabilizations, diversions, and side inlet structures. Implemented many of these projects through the state and federal cost share programs. Duties included planning, design, construction supervision, budget oversight and completion of all relevant cost share and permit applications. (1991-1998)

### Wetlands and Permitting:

- **Wetland Delineations for CSAH 24 and CSAH 7, Kittson and Roseau Counties, Minnesota.** Conducted field review and preparation of permitting documents that determined the location of wetlands for two roadway projects located on the boundary between Roseau and Kittson Counties. Reviewed six miles of roadway for wetlands within the construction corridor. Basins and waterways were delineated using a Trimble GPS unit to log wetland boundaries. Prepared permitting documents used in the Minnesota public transportation wetland replacement program. Information was used in the design of the proposed roadway for avoidance and mitigation of wetlands. (2005 – In progress)
- **Wetland Delineations for CSAH 2, Roseau County, Minnesota.** Conducted field review and preparation of permitting documents that determined the location of wetlands for a roadway project located in Roseau County. Reviewed 7.5 miles of roadway for wetlands within the construction corridor. Basins and waterways were delineated and staked in the field to identify wetland boundaries. Prepared permitting documents used in the Minnesota public transportation wetland replacement program. Information was used in the design of the proposed roadway for avoidance and mitigation of wetlands. (2005)
- **U.S. Highway No. 2.** Served as lead for the wetlands team, in the proposed four-laning of U.S. Highway No. 2 for the North Dakota Department of Transportation. Performed approximately 450 field delineations within a 100-mile project corridor. Also natural resources assessment of the corridor including cover types, native dry prairie sites, threatened and endangered species habitat inventory. Prepared a Wetland Delineation Report and Natural Resources Assessment Report used for permitting purposes and the NEPA (EIS) process. Conducted agency consultation on permitting issues as well as formal and informal consultation for the threatened and endangered species. Supervised fieldwork including the coordination of travel, transportation, lodging, field equipment and supplies.

# Mark D. Aanenson

## Environmental Scientist

---

- **Wetland Delineations for Highway 10, Carver County, Minnesota.** Conducted field review and preparation of reports that determined the location of wetlands for a roadway project. Reviewed seven miles of roadway for wetlands within 100 feet of the proposed centerline. Basins and waterways were delineated using a Trimble GPS unit to log sampling transects and wetland boundaries. Prepared a report with wetland data sheets, maps and an AutoCAD compatible drawing file using the Carver County coordinate system. Information was used in the design of the proposed roadway for avoidance and mitigation of wetlands.
- **Wetland Delineations for CSAH 27 Pennington County, Minnesota.** Conducted field review and preparation of permitting documents that determined the location of wetlands for two roadway projects (S.P. 57-627-10 and S.P. 57-627-11). Reviewed thirteen miles of roadway for wetlands within 150 feet of the proposed centerline. Basins and waterways were delineated using a Trimble GPS unit to log wetland boundaries. Prepared permitting documents used in the Minnesota public transportation wetland replacement program. Information was used in the design of the proposed roadway for avoidance and mitigation of wetlands.
- **Wetland Conservation Act (WCA).** As the WCA coordinator for Mahnomen County and the cities of Mahnomen and Waubun, Mark was responsible for administration of the WCA from 1991-1998. Duties included serving on the Technical Evaluation Panel and coordination between MNDNR Protected Waters, USDA Swampbuster, U.S. Army Corps of Engineers – Clean Water Act, and WCA jurisdictional programs. In addition, Mark worked to coordinate the regulatory program with the county highway projects and legal drainage systems. (1991-1998)
- **Lac qui Parle - Yellow Bank Watershed District Technical Evaluation Panel.** Currently serves as the local government unit Technical Evaluation Panel (TEP) representative for the Lac Qui Parle - Yellow Bank Watershed District. Mark provides technical guidance on projects affecting jurisdictional wetlands. In representing the LGU and conducting the TEP meetings, coordination is conducted with other regulatory agencies including the Board of Water and Soil Resources (BWSR), the MN DNR, the Natural Resources Conservation Service, and the US Army Corps of Engineers.
- **Wetland Banking Site, Wild Rice Watershed District, Norman County, MN.** Conducted a field and offsite assessment to develop a wetland restoration plan for the property. Compared site characteristics to the regulatory guidelines to develop an estimate of potential wetland credits. Conducted agency consultation with the local LGU and USCOE to verify the potential restoration credits and prepared a letter report to the Watershed District Board to be used in landowner negotiations on the purchase of the property. (1998)
- **Marsh Creek Wetland Mitigation, Wild Rice Watershed District, Norman County, MN.** Prepared a mitigation and monitoring plan for two mitigation sites consisting of the restoration of fifteen wetland basins resulting in over 69 acres of restored wetlands, approximately 126 acres of adjacent wetland buffers, five acres of native grassland, and six acres of woodlands. The buffers, grassland, and woodlands will be seeded to native vegetation. Prepared seeding and management plans, prepared a monitoring plan, and completed permitting documents for the project. Also conducted agency consultation with the USCOE and WCA LGU on various aspects of the project including potential banking credits. (Prepared plans in 2003)
- **Wetland Delineation, Cass County, ND.** Conducted an assessment of 80 acres of private property for wetland identification. Evaluated vegetative and hydrology parameters to be used as part of a Phase I investigation.
- **Wetland Delineation Clay County, MN.** Conducted an assessment of 320 acres of private property for wetland identification and delineation. Conducted 13 delineations resulting in 31.6 acres of wetlands. Wetland

# Mark D. Aanenson

## Environmental Scientist

---

delineation report was used by the Clay County Technical Evaluation Panel to determine wetland banking credits on the property.

- **Wetland Reviews for Roadway Projects, North Dakota Department of Transportation.** Conducted wetland identification and delineation work on nine roadway projects equaling over 290 miles of road right-of-way. Also conducted tree surveys and mitigation evaluations. Summarized data and assisted in the preparation of wetland inventory reports for use by the NDDOT in sequencing documents.
- **Deerhorn Creek Flood Control Project.** Served as authorized agent for the Buffalo-Red River Watershed District in permitting a flood control project consisting of approximately 14 miles of levee alignment. Performed field delineation work for the project corridor and site assessment for wetland replacement sites. Assembled permitting documentation and conducted agency consultation on necessary permits for the project.
- **Tri County Flood Control Project.** Conducted a wetland assessment project funded partially by the North Dakota State Water Commission on a proposed new drainage system consisting of 82 miles of new channel. Tasks included the evaluation of air photography and conducting a windshield survey to determine wetland areas potentially impacted. It also included gathering data on field variables for each wetland area to be used for ranking each area in terms of function and value for avoidance purposes. Developed methods to address avoidance and minimization for the project. Used the information gathered to develop target acreage, types, and locations of replacement sites. Developed a project permitting and mitigation budget based on agency consultation and the impact and replacement estimates. Presented findings during public meetings to the Tri-County Water Resource Board. (1999)
- **City of Waubun Flood Reduction Project.** Project involved the diversion of storm water runoff to provide protection for the city. Responsibilities included wetland delineation, determination of wetland impacts, wetland permitting, development of mitigation sites, and landowner negotiations on easements for wetland mitigation and project impacts.
- **Mahnomen County Wetland Banking Site – Domogolla Property.** As Wetland Conservation Act Coordinator was responsible for determinations of existing wetland on two wetland sites and credits gained by the restoration of the basins. Other duties included completing all relevant documents, including wetland-banking application and request for deposit documents, to register the new wetland credits into the State Wetland Bank. The project resulted in just over 12 wetland credits. (1995)
- **Lazarus Creek Floodwater Control Project.** As an Environmental Scientist was responsible for project permitting, wetland delineation, and a field investigation of the project site. Field investigation and wetland delineation results were compiled in a report used by all regulatory agencies for permitting decisions. As part of the permitting process a project review was completed and the wetland regulatory rules were examined for applicable exemptions. The results included the acquisition of necessary permits and an exemption determination from the Wetland Conservation Act.
- **Poplar River Wetland Banking Investigation.** Responsible for assessment of the property in terms of wetland banking restoration/creation potential. Conducted field investigations of the sites, and applied information to the state wetland banking procedures.

**Mark D. Aanenson**  
**Environmental Scientist**

---

**Education:**

B.S., Life Sciences/Biology, Moorhead State University, 1990

**Registration:**

Certified Wetland Delineator in Minnesota

**Professional Experience:**

Houston Engineering, Inc., - 1998 – Present  
Mahnomon Soil and Water Conservation District, 1991-1998

**Professional Organizations:**

Wetland Delineators Association



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ecological Services  
3425 Miriam Avenue  
Bismarck, North Dakota 58501



OCT 21 2008

OPTIONAL FORM 99 (7-90)

### FAX TRANSMITTAL

# of pages ▶ 3

Public Service Commission  
600 East Boulevard, Dept. 408  
Bismarck, North Dakota 58505

To	Jerry Lein	From	Terry Ellis
Dept./Agency	NO PSC	Phone #	355 8505
Fax #	701 328-2410	Fax #	<del>355-8573</del>
NSN 7540-01-317-7968		5099-101 GENERAL SERVICES ADMINISTRATION	

Dear Commissioners:

The U.S. Fish and Wildlife Service (Service) has reviewed the September 10, 2008, Notice of Filing and Notice of Hearing for Case No. PU-07-54, regarding the proposed Just Wind - Wind Farm Development near Napoleon, North Dakota.

The Service, in an April 4, 2008, letter, provided comments and recommendations to avoid, reduce, and mitigate potential impacts to fish and wildlife resources that may be adversely affected by the proposed wind development project. In general, wildlife resources and issues that warrant consideration during project planning for a wind energy facility include: migratory birds (e.g., potential for habitat fragmentation, collisions and electrocutions); federal land interests; wetlands, prairie, and woodland habitats; threatened and endangered species; and monitoring, research, and assessment.

Adequate consideration for avian resources early in wind power site evaluation can minimize impacts. Although current wind turbine technology and proper siting can help to minimize the incidence of avian death due to blade and tower strikes, the potential for direct mortality of some migratory birds remains. Wind power developers, in concert with the Service, can cooperatively ensure that projects proceed with as little impact to migratory birds as possible. This can be accomplished by gathering information on avian resources as they relate to project siting and by implementing measures to minimize impacts to migratory birds from the construction and operation of the wind facility. The Service's Interim Wind Turbine Siting Guidelines were enclosed with our letter to assist Just Wind in planning a project that would minimize the potential to impact bird and bat resources. We encouraged Just Wind to conduct a Potential Impact Index (PII) analysis to assist in the selection of a wind power site that minimizes the potential to impact migratory birds. To our knowledge, the PII analysis was not used as a planning tool for selecting the proposed project site.

To minimize the electrocution hazard to birds, the Service recommended that new or updated overhead power lines be constructed in accordance with the current guidelines for preventing raptor electrocutions. To increase power line visibility and reduce bird fatalities resulting from collisions with power lines, the Service recommended that new power lines be marked with state-of-the-art line marking devices.



The Service provided Just Wind with a list of federally threatened and endangered species that may occur within the proposed project's area of influence, including the endangered whooping crane. The Aransas Wood Buffalo Population (AWBP) of whooping cranes is the only self-sustaining migratory population of whooping cranes remaining in the wild. These birds breed in the wetlands of Wood Buffalo National Park in Alberta and the Northwest Territories of northern Canada, and spend winters on the Texas coast. Whooping cranes in the AWBP annually migrate through North Dakota during their spring and fall migrations.

Endangered whooping cranes may be present in the proposed project area. The proposed site is located within a 90 mile wide migration corridor that includes 75% of all confirmed whooping crane sightings in North Dakota. The presence of suitable roosting and feeding habitat for whooping cranes in the project area, and confirmed whooping crane sightings in the project vicinity document the potential for whooping crane presence in the proposed project area. Just Wind's proposed wind energy project has the potential to impact whooping cranes during their annual spring and fall migration through North Dakota. Impacts may be direct (e.g. collision mortality) or indirect (e.g. avoidance of the site resulting in cranes seeking alternate stopover habitat). The interactions of whooping cranes with wind turbines and wind farms are currently uncertain, although it is suspected that these large birds with relatively low maneuverability may be susceptible to mortality via collisions with turbines. Currently, collisions with power lines are the greatest known source of mortality for fledged whooping cranes, and have accounted for the death or serious injury of at least 46 whooping cranes since 1956.

The Service believes that the proposed project has the potential to affect listed species because of, but not limited to, the presence of migrating whooping cranes in the project area. Section 10(a)(1)(B) of the Endangered Species Act (ESA), (16 U.S.C. 1531 et seq.) allows non-Federal parties planning activities that have no Federal nexus (a Federal nexus exists whenever an activity is conducted, funded, or licensed or permitted by a Federal agency), but which could result in the incidental taking of listed animals, to apply for an incidental take permit (ITP) prior to project construction. The permit application must include a habitat conservation plan (HCP) that lays out the proposed actions, a determination of the effects of those actions on affected federally-listed fish and wildlife species and their habitats (often including proposed or candidate species), and a description of the measures that the applicant will take to avoid, minimize, and mitigate adverse effects.

Although we have had several conversations with Just Wind and their consultants over the past several months, to date we have received no formal response to our April 4<sup>th</sup> letter. Therefore, we do not know how Just Wind intends to construct their proposed project, nor how they intend to comply with the Federal laws that we implement; namely, the Endangered Species Act, the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. With respect to the ESA, until such time as a project proponent whose activities could result in take of a threatened or endangered species produces an HCP, submits that HCP and application for a Section 10 permit, and receives a permit to take, the responsible individuals or entity would be liable under

3

the enforcement provisions of the ESA for any unauthorized take of a whooping crane or other federally-listed species.

Thank you for the opportunity to comment on the Notice of Filing and Notice of Hearing. If you require further information, please contact Terry Ellsworth of my staff, or contact me directly, at (701) 250-4481, or at the letterhead address.

Sincerely,



Jeffrey K. Towner  
Field Supervisor  
North Dakota Field Office

cc: Project Leader, Kulm WMD  
Just Wind, Mound, MN  
Houston Engineering, Inc., Fargo  
(Attn: M. Aanenson)

# John W. Schulz, CWB

*Vice President / Senior Biologist*



## RELEVANT PROFESSIONAL EXPERIENCE

Mr. John W. Schulz is Western Plains Consulting, Inc.'s (WPC) Vice President and Senior Biologist. His technical responsibilities and expertise are in public relations, marketing, conservation easements, fee-title acquisitions, USDA Conservation Programs, environmental assessments of commercial properties, wildlife surveys/inventories and public and private land use programs. He is OSHA 1910.120 HAZWOPER-trained, and is a Certified Asbestos Inspector and Management Planner in the State of North Dakota and Minnesota..

Mr. Schulz has more than 30 years of work experience with the wildlife/natural resources field, Mr. Schulz has considerable expertise in a wide variety of wildlife/natural resource disciplines, public and private habitat management and private land programs. His background includes the development of several private land habitat development/maintenance programs, program marketing, upland game research and management, and upland game re-introduction programs. Mr. Schulz is highly qualified in completing the technical aspects of easements and fee-title acquisitions. Using these skills, he has worked with state and federal agencies, conservation organizations, elected and appointed government officials and private landowners.

Prior to joining WPC, he was a 28-year employee with the North Dakota Game and Fish Department, as an Upland Game Biologist, Regional Supervisor, Coverlocks / CREP Coordinator, and Private Land Section Leader.

## KEY PROJECTS

- **Project Manager - Fish Impingement Project.** Coordinate project at Minnkota M. R. Milton Young, Basin Electric Leland Olds, Great River Energy and MDU Heskett power plants to remove and identify fish impinged on screens from water intake events at the respective power plants. The current study is part of a state-mandated plan for multiple coal-fired plants situated on the Missouri River downstream of Garrison Dam through ENSR International to determine if they are causing significant fish mortality.
- **Project Manager - Forest Inventory / Revised Forest Stewardship Plans / "Firewise" Assessments.** Conduct field assessments of established and native forest stands to develop initial and revised Forest Stewardship Plans. Meet with forest landowners to discuss and provide "firewise" assessments regarding wildfire danger to the farmstead and livestock feed supplies and make recommendations towards improved fire protection. The project is a 319 funded through the North Dakota Forest Service and the Red River Basin Riparian Program.
- **Project Manager - Private Land Management Services.** Work with land managers, land companies and private landowners to provide private land management options to improve cash flow and habitat management. Develop land management options which includes potential enrollment in state and federal land management / conservation programs.
- **Project Manager - Biological Assessments / Evaluations of Oil Well Settings and Seismic Arrays - Western North Dakota.** Conduct wildlife and botanical surveys for oil companies for pre-development oil well settings on U.S. Forest Service lands. Provide recommendations / determinations of the potential effects on threatened, endangered and sensitive flora and fauna to the U.S. Forest Service.
- **Project Manager - Development of Farm Bill Easements.** Complete tasks towards conveyance of Wetland Reserve Program easements to private landowners in accordance with Natural Resource Conservation Service requirements and guidelines. These tasks include facilitating the development, preparation and conveyance of Wetland Reserve Program easements and maintenance of conservation easement records. The project is funded through the USDA-NRCS.



- **Project Manager - Hazardous Materials Surveys.** Completed asbestos surveys, limited lead-based paint surveys and hazardous materials surveys on property that the ND Department of Transportation was planning to demolish or remove for a planned road-widening project. This project included collecting samples for analysis for asbestos and lead-based paint, and for documenting the presence of all potentially hazardous materials at the Site.

- **Project Manager,** coordinating and conducting numerous Phase I Environmental Site Assessments involving pre-purchase and property transfer site assessments. These projects involve assessing properties for environmental liabilities, evaluating regulatory and historical records for properties, and recommendations, if any, with environmental liabilities on these properties.

- **Project Manager, Hazardous Wildlife Surveys.** Study proposed residential / wetland development around airports and provide an assessment of the developments status as a hazardous wildlife attractant to airport operations. Provide guidance and design and construction practices to eliminate or manage any hazardous wildlife attractants.

- **Project Manager, Sharp-tailed Grouse Surveys.** Conduct listening-stop surveys on a 70,000 acre area in the ND Badlands, US Forest Service lands, to identify established and new sharp-tailed grouse leks.

- **Project Manager, Avian Point-Count Surveys.** Select avian point count sites, describe avian habitat and conduct spring and fall surveys to record avian presence and density withing areas designated for wind turbine development in North Dakota and South Dakota through Tetra Tech, EC.

- **Project Manager, Prairie Grouse Lek Surveys.** Survey proposed wind farm project sites to locate sharp-tailed grouse and prairie chicken spring display leks and report the results to Tetra Tech, EC.

## **EMPLOYMENT EXPERIENCE**

- WPC, Inc. , Vice President / Senior Biologist / Certified Wildlife Biologist, Sept., 2004 to present
- N.D. Game and Fish Department., Private Land Section Ldr., 2002-2004
- N.D. Game and Fish Department, CREP/Cover Locks Coord., 2001-2002
- N.D. Game and Fish Department, Regional Supervisor, 1992-2001
- N.D. Game and Fish Department, Upland Game Biol., 1976-1992
- Dept. of Science and Math, North Dakota State University, Graduate Research Assistant, 1973-1976

## **EDUCATION AND CERTIFICATIONS**

- North Dakota State University, M.S., Zoology
- Dickinson State University, B.S., Earth Science and Biology
- Certified Wildlife Biologist, The Wildlife Society
- Certified Prescribed Burning Instructor, U.S. Fish and Wildlife Service
- Professional Educators License, Department of Public Instruction
- Certified Technical Service Provider, USDA-NRCS
- 1910.120 HAZWOPER 40-hours Certification
- North Dakota Certified Asbestos Inspector
- North Dakota Certified Asbestos Management Planner

## **SPECIALIZED TRAINING**

- Forest Legacy Program Acquisition Training, U.S. Forest Service
- Management and Supervisory Development Program, University of N.D.
- Statistical Analysis System Course, North Dakota State University
- Fire Behavior, prescribed burning training courses, S-130, S-190, S-390, and RXB3 Burn Boss qualified.
- Environmental Law in North Dakota, N.D. Attorney General's Office

- Noxious Weed Management short course, University of Montana
- Forest Land Enhancement Program (FLEP) certification, N.D. Forest Service
- Easement / Land Acquisition Training, Land Trust Alliance

### **PUBLICATIONS**

- Authored and co-authored thirty professional papers
- Served as the editor and co-editor of the bi-annual Perdix workshop proceedings from 1983 to 1992

### **AFFILIATIONS**

- Past President, Member, North Dakota Chapter – The Wildlife Society
- Past President, Member, North Dakota Chapter – Society of American Foresters
- Past President, Member, North Dakota Natural Science Society
- Past North Dakota President, Member, Rocky Mountain Elk Foundation
- Current Member RMEF State Leadership Team

October 2, 2008

Case No. PU-07-54

Name	Address	Phone	Testify?
1 Lorraine Reis	6412 33rd Ave SE	701-754-2523	Napoleon
2 LEO-ROSEMARY WALD	218 Broadway	701-754-2566	Napoleon N.D.
3 Dennis R. Kost	Box 1186 Washburn	527-3986	yes
4 Richard Gross	3321 58th St SE Napoleon ND	754-2701	no
5 Julia Horner	72 Broadway Napoleon, N.D.	754-2462	no
6 Kyle Haas Mayor	city of Napoleon Napoleon N.D.	58561 754-2334	no
7 John Schultz	1926 So. Grandview Bismarck, ND	255-9504	yes
8 Michael Fischer	901 N. 35th St. Bismarck, ND	701-390-3530	NO
9 Don Metzger	131 Crestridge Ln Bismarck ND	701-202-5662	NO
10 BRIAN JOHNSON	4224 41st AVE S. FARGO, ND	701-212-7235	no
11 Jason Hellerud	1215 Park Ave. Glenolen, MN	701-893-3685	NO
12 Larry Lacher	3117 55th NW West Fargo ND	701-212-3369	Yes
13 Lee Platz	3031 63rd St SE Napoleon	701-754-2353	no
14 Selma NORD	66 Broadway Box 117 Napoleon	701-754-2545	NO
15 Charlotte J. Platt	3211 71st St SE Napoleon	701-754-2413	NO
16 Rod Kleppe	114 AuBwist Napoleon, ND	701-754-2251	no
17 Curt Christofferson	423 4th SE Napoleon, ND	701-754-2390	NO
18 Floyd Wang	3151 56th St SE Napoleon, ND	701-754-2471	NO
19 John A. Bitz	63-62 Hwy 5. Napoleon ND	701-754-2515	no
20 Perry L. Hesch	2260 Wacortz Loop, Bsmk ND	58503 701-223-2442	NO
21 Patrick V. Jansen	2506 8th Ave SE Mandan, ND	58554 701-663-3361	-
22 Kevin Gross	5416 Walker Dr Bismarck ND	58501 258-6888	no
23 Gerald Johns	504 Ave. B E Napoleon ND	58561 754-2478	no
24 Clark Haas	518 Bldg Napoleon ND	58561 701-754-2831	NO
25 Dave Moser	302 Ave G W Napoleon ND	58561 701-754-2451	NO
26 Larry Jensen	520 Baeston Bismarck ND	58501 701-223-9094	NO
27 Clemens Gross Jr.	3152 75th St SE	701-332-6789	
28 Dan Pfeifle	418 Ave EE Napoleon ND	58561 701-754-2850	

	Name	Address	Phone	Testify?
29	Barry Wentz	316 3rd St Napoleon	754-2030	No
30	Amanda Wangler	1717 E Interstate Ave Bis	701-223-0441	NO
31	Robert Colton	<sup>Carpenters Local 1091</sup> 217 S Mandan St. Bis.	701-255-3700	
32	Keith Kessler	<sup>Carpenters Local 1091</sup> 217 S. Mandan St, Bis	701-255-3700	
33	Jerry Ratzei	5531 3rd Avenue S Nap.	701-754-2875	
34	Joan Swartz	1088 Parkway Ln, West Fargo, ND	701.866.8668	No
35	Andrew Bakken	3591 58th St SE Napoleon, ND	701 754 2690	NO
36	Kathy G. Jajla	6142 40th Ave SE Napoleon	754-2729	no
37	Blanche Schumacher	301 Broadway, Napoleon	701-754-2425	No
38	Steve Engelhardt	301 Bldg. Napoleon.	701-754-2495	No
39	Richard L. Sperle	515 5th St. Napoleon	701-754-2706	NO
40	Brian L. Jangda	521 Broadway Napoleon	701-754-2340	NO
41	Ryan Kumerow	31500 22nd Ave SE Sterling ND.	701-890-9477	NO
42	Steven T. Fettig	3792 68th St SE Wishek ND	701-452-2813	NO
43	Ann Dammal	4960-41st St S.E. Medina ND.	701-486-3429	NO
44	Christine Hartzel	2572 33 Ave S.E. Napoleon ND	701-754-2405	1/22
45	Thomas A. Kambeitz	148 Redstone Dr. Bismarck ND.	701-255-4295	NO
46	Phil Kambeitz	104 Seminole Ave Bismarck ND	701 258 3516	NO
47	Clara Kambeitz	106 Seminole Ave. Bismarck	701 258-3516	NO
48	Joan Weiss	Box 462 Hazelton	701-782-4224	No
49	Keith Norman	Justin Sun	701-952-8452	No
50	Carolyn Sperle	215 E 2nd St	701-754-2598	
51	Tom Louik	PO Box 466 Wishek	701-452-2371	
52	Chris J. Leier	NAPOLEON N.D.A	701-754-2379	
53	ALEX BITZ	342 13th St NE Valley City ND	701 845 2389	NO
54	Randy Schumacher	807 Broadway Napoleon ND	701-754-2242	
55	Peter Cook	229 LAKE ST., MANDAN, ND	701-527-2851	
56	Bill Adams	121 4th St NW Steele ND	701-475-2617	NO

Name	Address	Phone	Testify?
57 Gary Aikhele	2485 43 <sup>rd</sup> SE Steele	701-475-2658	NO
58 Athena Dunn	501 2 <sup>nd</sup> St. W. Napoleon	701-754-2648	NO
59 Celeste Kleppe	400 Ave AE. Napoleon	701-754-2802	?
60 Mary Horner	5190 Hwy #3 Dawson	901-327-8154	No
61 Kym Glatt	6252 Hwy #3 Napoleon	701-754-2818	NO
62 Bert Schultz	18514 85 <sup>th</sup> Ave. N MG, MN	763-494-6681	Yes
63 Mark D. Aauenson	1731 6 <sup>th</sup> St. E. Waf Fargo <sup>55311</sup>	701-237-5065	Yes
64 CHAD NISSEW	<sup>SUITE 308</sup> 5201 E RIVER ROAD, MINNEAPOLIS, MN 55421	763-277-6310	?
65 Brad Danielson	3300 38 <sup>th</sup> Ave Se Fargo ND 58104	701-806-4850	?
66 Richard Rothaus	1965 W. Highway Dr. Sault Rapids, MN <sup>56379</sup>	320-761-9090	Yes
67 Jeff Metzger	2470 Fairview Ln. Mound MN.	612-245-6608	
68 Rick Schumacher	310 E 3 <sup>rd</sup> Napoleon N.D	701-754-2842	NO
69 Michael Schumacher	5881 28th Ave SE Napoleon ND.	701-332-6740	NO
70 Alfred Schumacher.	618 Bldwy. Napoleon ND	701-754-2237	NO
71 Florence Schumacher	618 Bldwy Napoleon ND	701-754-2237	NO
72 Tina Schumacher	5881 28th Ave SE Napoleon ND	701-332-6740	NO
73 Mark Rau	3643 58 <sup>th</sup> St SE Napoleon ND	701-754-2280	NO
74 Wenan Doll	3142 65 <sup>th</sup> St. SE Napoleon ND	701-471-0666	NO
75 Harley Crowe	Box 41 Napoleon ND	701-754-2891	NO
76 James A Strand	P.O. Box 295 Hazelton ND	701-782-3333	No
77 Karen J. Strand	PO Box 295 Hazelton, ND	701-782-3333	NO
78 Chuck T Weigl	6364 Hwy 3 Napoleon ND	701-754-2993	NO
79 Anton Zauner	15 Knollwood Dr. Greenwich, CT	203-505-0802	NO
80 ROBERT A SPERLE	P.O. Box 1 NAPOLEON ND	701 332 6748	NO
81 Phyllis Nygaard	121 E Sweet Ave #3 Bismarck, ND	701-226-7878	NO
82 DONALD Schumacher	2872 74 <sup>th</sup> ST SE Napoleon, ND	701-332-6785	NO
83 Anton Braun	514 Broadway Napoleon ND.	701-754-2281	NO
84 DARRYL Rau	3641 58 <sup>th</sup> St SE Napoleon, ND	701-754-2101	NO

- 85 Elmer Batsch 5431H 10456 Mackle 785-3647  
86 Robert Weigl 2651 66th St SE. Kintyre 332-6615  
87 John W Wald 415 2nd St West Napoleon, 754-2317  
88 Jerome Schwatzenberger 410 main ave - Napoleon  
89 Carmen J. Rath-Wald 415 2nd St. West, Napoleon <sup>58561</sup> 701-254-2317  
90 Sheldon Gerhardt 316 Lake Ave E Napoleon 793-6020  
91 Troy Mathiesen 1855 Harding Place Bis 400-2406